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Ada Compiler Performance Test Suite and Test
Evaluation Capability (ACPS) User's Guide

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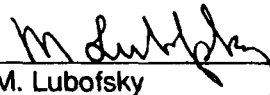
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The purpose of this document is to describe the set of software tests which is designed to assist users in evaluating the performance of run-time environments provided by Ada compilation systems. The Ada computer programs, primarily designed and written at The Aerospace Corporation, and augmented by JOVIAL and FORTRAN benchmarks, provide tools to display the results of test executions and comparisons among the three languages. Output from the tests includes compile-time and run-time statistics, such as elapsed time, CPU time, code and data sizes, and virtual and physical memory usage. This document describes how to (a) install the test suite, (b) set up the test environment, (c) execute the tests, and (d) compare the test results for executions on different compilers or for those on the same compiler using different compilation options.					
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EXECUTIVE SUMMARY

The Ada Compiler Performance Test Suite and Test Evaluation Capability (ACPS) is a collection of programs designed to assist users in evaluating the performance of run-time environments provided by Ada compilation systems. A unique feature of the ACPS is that it provides an extensive set of JOVIAL and FORTRAN benchmarks to aid assessment of the likely performance impact of transitioning programs from JOVIAL or FORTRAN to Ada. The ACPS test suite includes programs to test both single language features (e.g., type conversion) and multiple language features (e.g., the Whetstone benchmark) written in Ada, JOVIAL, and FORTRAN. The suite also provides software to gather and report performance statistics in a format common to all three test languages.

The Ada programs of the ACPS are written in standard Ada (ANSI/MIL-STD-1815A), were designed to be easily rehostable, and are not restricted to a particular machine environment. The user's guide supplied with the ACPS describes the steps necessary to rehost the ACPS and identifies the types of source code modifications that may be necessary when applying the ACPS to a different compiler.

The ACPS also provides tools to display the results of test executions, and to automatically compare corresponding results from Ada, JOVIAL, and FORTRAN test executions. Tool output includes compile-time and run time statistics such as elapsed time, CPU time, code and data sizes, virtual and physical memory usage, etc., in order to facilitate complete and objective comparisons.

The ACPS is available on tape in either Digital Equipment Corporation (DEC) VAX/VMS BACKUP format or in ANSI tape format for users wishing to rehost the ACPS. The user should have a working understanding of the host operating system and command language if the ACPS is to be installed on a system other than DEC VAX/VMS.

The ACPS is primarily intended for users who are familiar with Ada and who wish to get detailed information on the run-time efficiency of an Ada implementation for a particular application. The ACPS is not intended to be the only instrument for measuring the efficiency of Ada run-time environments. Performance issues and selection criteria for Ada run-time environments must be developed in accordance with the requirements of specific applications. The primary benefit of using the ACPS will be in its support of applications planning. It can be used to demonstrate which features of Ada are inefficiently implemented through comparison of equivalent Ada, JOVIAL, and FORTRAN test program executions. This information can be used in several ways. It can be used as justification for avoiding certain language features or processing options. It can focus attention to those areas of the compiler that must be improved and provide a mechanism for measuring improvements or degradations in run-time performance as a compiler implementation evolves. The ACPS can also be used to assist determination as to whether existing JOVIAL or FORTRAN modules should be converted to Ada by showing the probable performance impact of straightforward translation to Ada as would likely be obtained through use of a language translation tool.

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Program Element 64740F is the Air Force engineering development program to develop and transfer into active use the technology, tools, and techniques needed to cope with the explosive growth in Air Force systems that use computer resources. The goals of the program are to: (a) provide for the transition of computer system developments from laboratories, industry, and academia to Air Force systems; (b) develop and apply software acquisition management techniques to reduce life-cycle costs; (c) provide improved software design tools; (d) address the various problems associated with computer security; (e) develop advanced software engineering tools, techniques, and systems; (f) support the implementation of high-order languages (e.g., Ada); (g) address human engineering for computer systems; and (h) develop and apply computer simulation techniques for the acquisition process.

The Ada Compiler Performance Test Suite and Test Evaluation Capability was developed at The Aerospace Corporation by the following team of software engineers: Allen R. Adams, Kathleen M. Bruckert, Richard E. Kayfes, Michael J. McLaughlin, and Beverly L. Parmelee. Team members involved in development of each software module are noted by initials in commentary prologue in each module.

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1. INTRODUCTION

The Ada Compiler Performance Test Suite and Test Evaluation Capability (ACPS) is a set of programs designed to assist users in evaluating the performance of run-time environments provided by Ada compilation systems. The ACPS is primarily composed of test cases designed and coded at The Aerospace Corporation. The ACPS has also been augmented by public domain benchmarks where appropriate. These tests have been modified to run in the ACPS test environment and annotated to identify their origin. The ACPS tests were designed to execute within the framework of a test evaluation system consisting of test coding techniques, test result reporting conventions, and tools for automated test result comparisons. The VAX/VMS version of the ACPS test evaluation system is delivered on tape in VAX/VMS BACKUP format. A rehostable version of the ACPS is delivered in ANSI tape format.

The purpose of this document is to describe how to (a) install the ACPS test suite, (b) set up the ACPS test environment, (c) execute the tests, and (d) automatically compare the test results for executions on different compilers or for executions on the same compiler using different compilation options. In addition, this document provides guidance on how to make use of the ACPS test results in evaluation of Ada run-time environments.

The primary objective of the ACPS test suite is to provide information useful to the evaluation of Ada run-time environments for real-time space applications. In our view, an Ada run-time environment is composed of the entire hardware/software configuration that permits execution of Ada-compiled programs. Figure 1-1 depicts the components of an Ada run-time environment. Each layer in the figure is implemented by features or capabilities provided by lower layers. The Ada run-time system implements features of Ada programs that cannot be or are not placed directly in the compiled program. The target operating system, if present, provides capabilities beyond the scope of the Ada language and may also be required to assist implementation of some of the features of Ada such as tasking and input/output. The functionality of an Ada run-time environment is largely dependent on the presence or absence of an underlying target operating system. It is highly likely, for example, that stand-alone Ada run-time environments for the Digital Equipment Corporation (DEC) VAX computer will provide significantly fewer capabilities to Ada programmers than Ada run-time environments for the VAX, which permits interface to the VMS operating system. It is, therefore, important to realize that the ACPS only applies to features appearing in the Ada Language Reference Manual (ANSI/MIL-STD-1815A-1983). It includes tests of mandatory as well as compiler-dependent features (not including `LOW_LEVEL_IO`) of Ada. It does not, however, include tests of special packages provided by an Ada compiler or of capabilities provided by a target operating system. As a result, the ACPS does not address many of the capabilities of an Ada run-time environment that may be extensively used in a real-time application and that as a result can have a significant impact on performance.

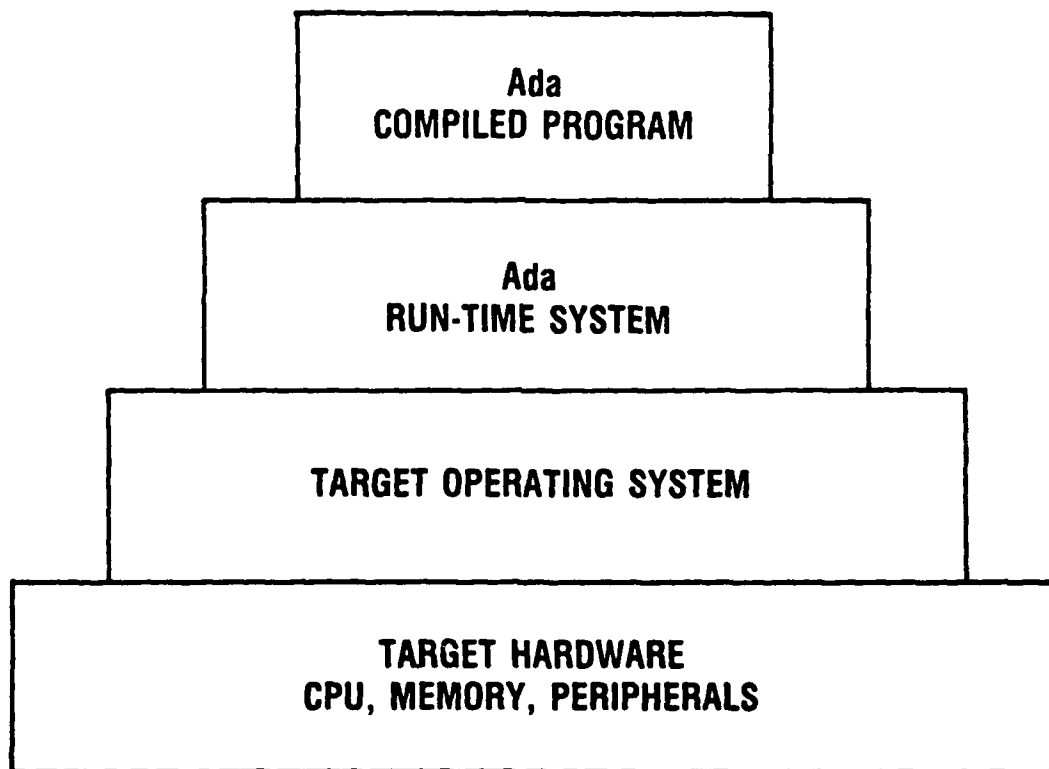


Figure 1-1. Ada Run-Time Environment Components

The forthcoming sections of this document describe the major components of the overall ACPS system and their application within the ACPS capability. Section 2 details the contents of ACPS, describing the seven types of ACPS tests and their interrelationships within the system. Section 3 discusses some of the test measurement concerns that were considered in development of the ACPS. To ensure that test results gathered and reported are accurate, repeatable, and well-focused, test measurement and coding techniques were developed and are discussed in Section 4. This section also describes sample test templates that illustrate the various forms of ACPS tests, and provides necessary data to users wishing to add more tests to the ACPS test roster. The common language test environment architecture is described in Section 5. To facilitate development of JOVIAL and FORTRAN programs from Ada programs, a set of naming conventions was devised and is detailed in Section 6. Section 7 describes the actions necessary to rehost the ACPS and also discusses the types of machine- and compiler-dependent modifications that may be necessary when rehosting the ACPS or applying the system to a different compiler. Section 8 describes methods of using the ACPS in evaluating the performance impact of entire Ada run-time environments.

The appendices are comprised of additional descriptions of key ACPS components and their functions. Appendices A and B describe the format and content of ACPS delivery tapes. Appendix C discusses methods of installing the DEC VAX/VMS version of the ACPS and provides lists of command procedures and other information useful when applying the ACPS to other compilers hosted on VAX/VMS.

To facilitate rehosting of the ACPS, almost all use of machine- and compiler-dependent language features is isolated to the test support software modules. Appendix D lists the package specifications of the Ada test support software packages. To ease comparison of test execution results, a common language report format was used and tools were developed to automatically compare the compile-time and run-time performance of Ada, JOVIAL, and FORTRAN test executions. Appendix E discusses how to use the DEC VAX/VMS version of these tools and describes with examples the format of all tool input/output files.

There are three classes of ACPS tests: (1) those unique to Ada, (2) those unique to both Ada and JOVIAL, and (3) those that can be represented in Ada, JOVIAL, and FORTRAN. To assist users in assessing the performance impact of transitioning JOVIAL and FORTRAN applications to Ada, Appendix F describes the function of each Ada test and indicates for each test whether JOVIAL and FORTRAN tests are provided. The tables in Appendix G contain Ada test program and source code file data broken down by Ada types A, C, E, S, and T. The latter tables G-6 and G-7 contain test program and source code data for JOVIAL and FORTRAN, respectively.

1.1 TEST SUITE

The core of the ACPS is the test suite. The test suite is a collection of programs each written to test a specific feature of Ada, such as the case statement or the record aggregate. For each test, the elapse time and memory usage is recorded for both the compilation and linkage stage and the execution

stage. Additionally, the support software can be customized to collect other data that is significant for the given configuration, such as the page fault rate or buffered input/output count.

To ease the conversion to new configurations, the test suite software is divided into two groups: Test Software and Test Support Software (TSS). The Test Software simply consists of the individual programs that use the language features. This group is meant to be machine and operating system-independent. The TSS is divided into the Operating System Specific Test Support Software (OTSS) and the Language Specific Test Support Software (LTSS). Figures 1-2, 1-3, and 1-4 show how the various groups merge to generate the test programs.

Five versions of the Ada test suite exist. The first is the baseline suite. The second is compiled without constraint checking, which should make the code faster and smaller. The third suite includes exception handlers in each procedure. The fourth and fifth versions are compiled with the OPTIMIZE pragma set memory optimization and speed optimization, respectively.

When taken collectively, the data for the five suites provide a thorough and detailed performance profile. This profile can be used to estimate the performance of an algorithm on a given configuration or to assist in optimizing a program. A small set of multi-featured benchmarks could not give this level of detail nor this degree of completeness. However, to allow comparison with published benchmark results, two public domain benchmarks, the Dhrystone and Whetstone tests, have been added.

The compilation and linkage data give an indication of how heavily the compiler uses the configuration's resources and the suitability of the compiler for software development. A compiler that produces exceptionally fast executable code might be too much of a burden on the system to be used constantly. In this case, a second compiler might be used during the earlier phases of development.

Since Ada is meant to replace the other languages currently in use by DoD, it was decided that the ACPS should include JOVIAL and FORTRAN versions of the test suite. JOVIAL J73 was chosen because it was the Air Force's previous standard high-order language (HOL) for embedded systems. FORTRAN, in turn, has many mature compilers that can be used for comparison of efficiency and performance.

The OTSS provides a common access path to the system data such as the system clock and the current memory usage. Its routines are shared between all of the test suites used on a particular operating system and must be provided in object code form before the tests can be run. Usually, the OTSS software will be FORTRAN or assembly language subroutines.

The LTSS is a set of procedures and data definitions that permit the test software to remain machine-independent by hiding the details of OTSS, such as what data are being collected and how the timing is being done. In addition, compiler-dependent features are isolated in the LTSS. The Ada versions of the LTSS define the default floating point and integer data types. The majority of the global variables used in the tests are defined in the LTSS files.

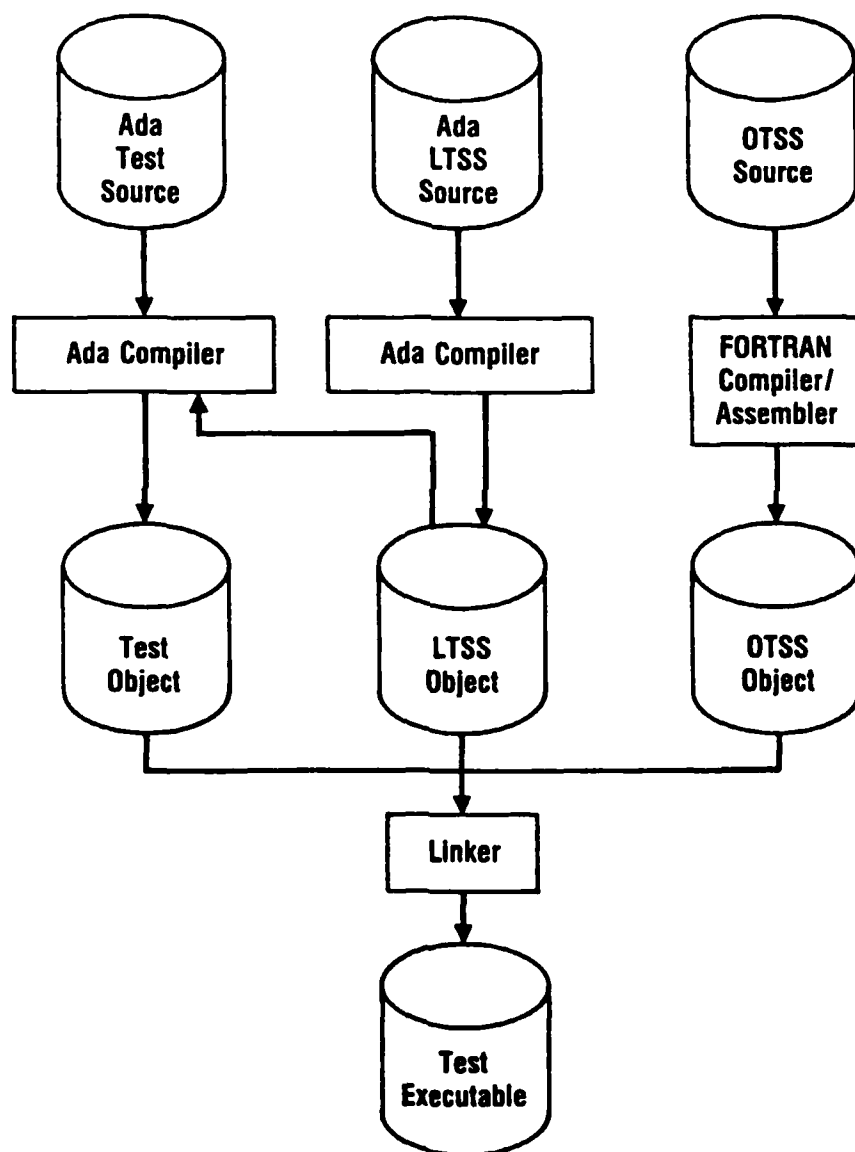


Figure 1-2. Ada Test Suite Generation

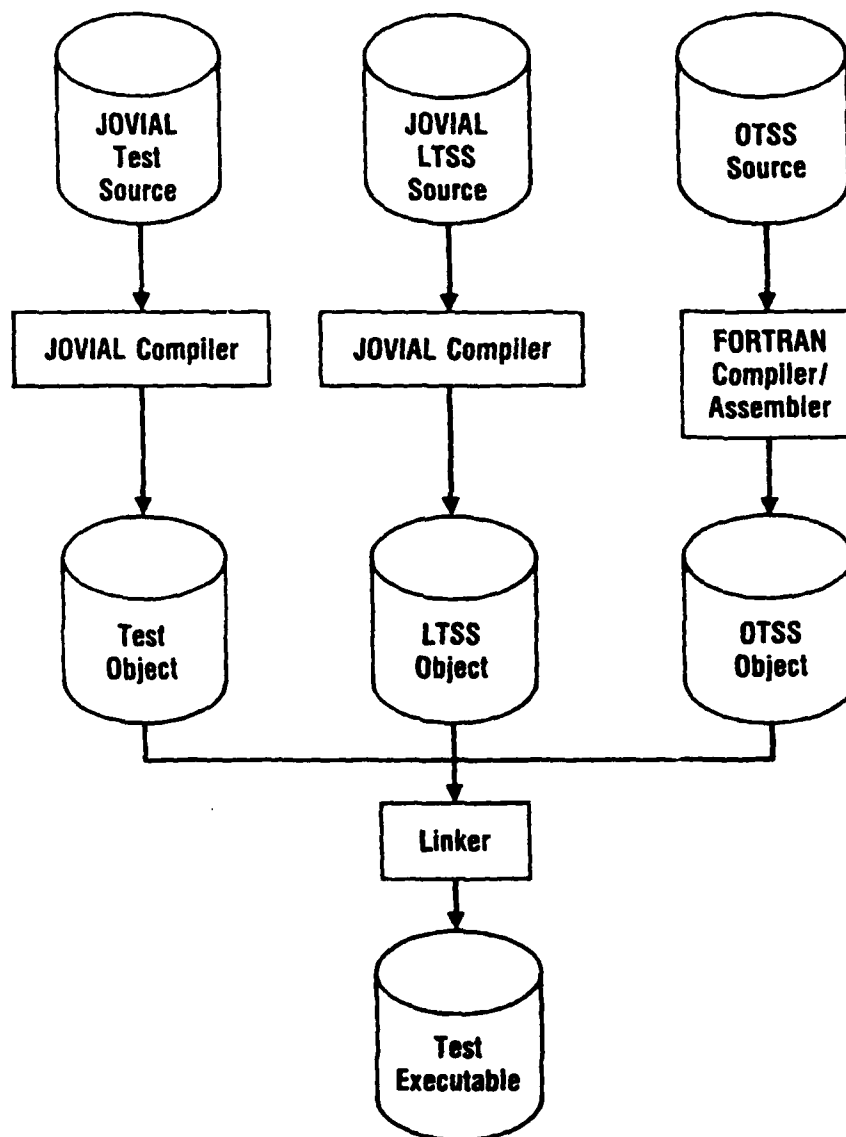


Figure 1-3. JOVIAL Test Suite Generation

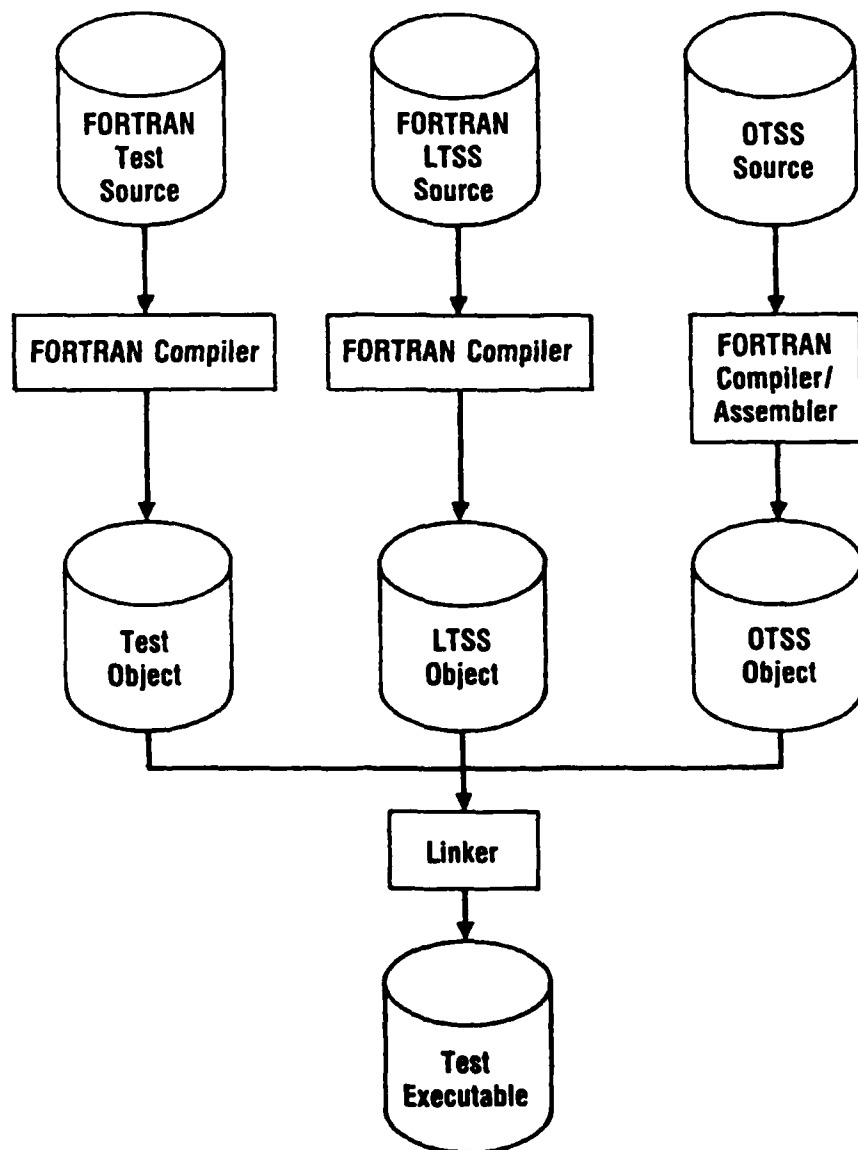


Figure 1-4. FORTRAN Test Suite Generation

1.2 TEST EVALUATION CAPABILITY

The base Ada test suite is comprised of 459 programs. Thus, it was felt that an automated method was needed to process the test suite and the resulting data. The Test Evaluation Capability (TEC) is a set of procedures written in the operating system's job control language and FORTRAN programs written to handle these functions. The TEC job control language procedures, called scripts, are divided into those that control the compilation and linkage and those that execute the test programs. The two FORTRAN programs included in the TEC take the raw data and produce formatted data files and a formatted comparison file. One program compares two compilation and linkage results, and the other program compares execution results.

2. TEST CATEGORIES

The ACPS consists of seven types of tests whose execution results are to be compared:

- Ada tests
- Ada tests with constraint checks suppressed
- Ada tests with an exception handler in every procedure
- Ada tests with space optimization pragmas
- Ada tests with time optimization pragmas
- JOVIAL J73 tests
- FORTRAN 77 tests

Almost all Ada tests use numeric data types that are defined in separate test support software packages. Two versions of these packages are supplied: one with numeric types defined with range constraints and one with numeric types defined without range constraints. All Ada tests should be executed with both packages.

Each type of test is divided into four categories: single language feature tests, multiple language feature tests, multiple task loading tests, and compiler optimization tests.

The ACPS only tests features of Ada that are described in the ANSI/MIL-STD-1815A reference manual (LRM) for Ada. The ACPS does not include tests of additional compiler-dependent pragmas or packages that are not described in the LRM. (Use of the DEC VAX Ada pragma `TIME_SLICE` and the package `MATH_LIB` are the only exceptions.) The tests are designed to measure only the performance of code generated by Ada compilers. They are not designed to measure the capacities of compilers and their associated run-time systems.

Single language feature tests, as their name implies, exercise specific language features of Ada (e.g., data type conversion). If other language features are needed in order to construct a test of this type, then an additional test is developed to account for the overhead introduced. These tests are useful in determining which features of Ada are implemented inefficiently and consequently which features of Ada could have the greatest impact on application performance.

Multiple language feature tests are designed to test a composite of language features to either perform an application-specific algorithm (e.g., Fourier transform) or to represent the frequency of language feature use for types of applications (e.g., the Whetstone and Dhrystone tests).

Multiple task loading tests are designed to stress the task scheduling, input/output and memory management capabilities of Ada implementations. Three types of tasks are used: CPU intensive, CPU and memory intensive, and input/output intensive. Task loading tests consist of a varying number of tasks of identical type (e.g., input/output intensive). They are differentiated by the type of the task and by the number of tasks executing.

Compiler optimization tests are designed to test well-known, machine-independent, code-generation optimization algorithms used in compilers (e.g., constant folding). Most of the tests are composed of two parts: a version coded to test a particular type of compiler optimization technique and a functionally equivalent hand-optimized version. Separate test results are generated for each version of the test and for the comparison of the two versions.

The ACPS is composed of single language feature tests rather than multi-language or application specific tests. This bias is due to the developer's perception that it is very difficult to draw conclusions from performance data obtained from execution of any multi-language feature tests. Unless the execution time of each statement of an application is known, one cannot understand the performance results obtained, cannot recommend changes in coding techniques to improve performance, and cannot predict the performance of other applications which use similar language features. By containing a comprehensive set of single language feature tests, the ACPS can supply sufficient detailed performance data to (a) permit informed interpretation of application test execution results and (b) provide a basis for recommendation of remedial action to the compiler vendor or to the application coder in order to improve application performance.

3. TEST MEASUREMENT CONCERNS

This section discusses the test measurement concerns that drove selection of the test measurement techniques described in Section 4 and Appendix C.

The ACPS was designed for use in evaluating the efficiency of Ada compilers for ground applications as well as spaceborne applications. The ACPS and its support software were created on a host and target machine that used a general purpose operating system (DEC VAX/VMS) which supports both real-time and nonreal-time applications. As a result, some of the test measurement techniques employed were selected due only to the fact that a general purpose target operating system would be used.

Test measurement concerns that were addressed in development of the ACPS are as follows:

a. Source of test data.

There are several aspects to test performance: test execution time (elapsed time, idle-time, run-time system overhead), memory usage (physical, virtual, compiled code, data, run-time system, page-fault rate), input/output operations (both intended and unintended) and size of input/output files. The only compiler-independent performance measurements that can be made directly within the Ada programming language are:

- Size of compiled code
- Size of data objects
- Number of input/output statements executed
- Number of times the test code is executed
- Elapsed time of a test

The other performance statistics (e.g., physical memory usage) must be obtained in a machine and run-time system-dependent manner.

b. How to take measurements.

Performance data can be obtained both from within and outside the executing program. Measurements taken outside the executing program are made before and after the program executes and include the time to load the program into memory as well as the time to remove the program from memory. For real-time applications, one is only concerned with the execution characteristics of a test, since program loading and initialization operations are performed before real-time processing begins.

There are three approaches that can be used to measure the execution time of test code from within the test program:

1. Take a single measurement before and after a test executes.
2. Enclose the test code in a loop and take measurements for each iteration through the loop and record the maximum, median, and minimum execution times.
3. Enclose the test code in a loop and take a single measurement for multiple iterations through the test code.

The first two approaches assume existence of a clock with greater resolution than the time to execute the test code. For general-purpose operating systems, the Ada clock resolution can be as high as 1 sec. For VAX/VMS, the operating system clock resolution is 10 ms. Since test code execution times were expected to be as low as 20 μ s, the third approach was used for ACPS tests.

The second approach was used in special tests (e.g., time to wake up from a DELAY statement) that cannot be timed using a single measurement for a multiple iteration test loop. For DEC VAX/VMS, this approach required development of a machine-dependent routine to compute microsecond level elapsed times. The routine used privileged code and had to be installed in the operating system.

c. How to isolate measurements to the code tested.

It is important ensure that test measurements can be isolated to the test code itself. Any overhead introduced by the measurement process should be separately measurable and taken into account. It should also be possible to separate the time to load the test code and data into memory from the time to execute the test code. To the extent possible, execution of the test measurement code should not be affected by the test code. Conversely, the test code itself should not be affected by the test measurement code. Since test code is executed within test measurement loops, one has to make sure that compiler optimization techniques do not cause removal of test code from the test measurement loops. In addition, care should be taken in constructing tests so that compiler optimization logic does not affect the intent of the test (e.g., common subexpression elimination).

d. How to determine the accuracy and repeatability of test execution time measurements.

The accuracy of test elapsed time measurements is largely determined by the resolution of the clock used (i.e., smallest nonzero difference in clock values) in relation to the duration of a test. If the clock resolution time is 10 ms and the test execution time is greater than 1 sec, then the error in the execution time measurement is less than $\pm 1\%$. There are a number of factors, however, which affect the repeatability of test measurements. These are primarily caused by

run-time system and target operating system operations which are discussed in Section 3.1. For a desired level of measurement accuracy, one must be able to measure the repeatability of test measurements and be aware of what factors affect test measurement accuracy and how they can be controlled. Separate tests are contained within the ACPS to measure clock resolution and test measurement repeatability. For some machine architectures, it may be necessary to repeatably execute every test and only use the maximum or minimum test statistics for comparison.

- e. How to ensure, to the extent possible, that consistent run-time environments for Ada, JOVIAL, and FORTRAN implementations are used for fair comparison.

Certainly, within a single machine and target operating system configuration, conventions can be established and measurement techniques employed to ensure consistent execution environments for comparison. A problem arises, however, whenever the underlying machines or target operating systems are different. For example, one may want to compare the performance of an Ada implementation on a VAX-11/785 using VMS to another Ada implementation on a VAX-8600 using VMS. It would be difficult to draw any conclusions about the comparison of test results, because it is not possible to determine to what extent the difference in performance is due to the effect of the Ada implementation and to what extent the difference can be attributed to the effect of the target machine. In situations such as these, one could use a third implementation (e.g., FORTRAN) executing on both machines to provide a reference point for the comparison.

3.1 OPERATING SYSTEM EFFECT

As mentioned above, the underlying target operating system and Ada run-time system can have a significant impact on the repeatability of test measurements. Complex operating systems such as DEC VAX/VMS can impact a test measurement in numerous ways:

- a. Other user programs on a time-shared machine can interrupt test program executions.
- b. Special network and distributed database software products can interrupt test program executions either on a time scheduled basis for status and node polling activities or on an intermittent basis dependent upon activity throughout the network.
- c. Operating system processes and routines can interrupt test programs on a scheduled or intermittent basis for accounting, time management, terminal polling, physical memory allocation adjustment, test program priority adjustment, printing, etc.
- d. Ada run-time systems can distort test measurements through task scheduling activities and unexpected storage management garbage collections.

The user typically has a good deal of control over the effect of the operating system. The tests can be run stand-alone on a computer with no other user program or batch process executing. Network, distributed database, and system processes used for accounting and printing can be disabled. However, no matter how well the ACPS user constrains the run-time environment, the ACPS test repeatability program must still be run to determine the potential variance in test measurements.

3.2 HARDWARE EFFECT

The computer system hardware can affect the test measurement and test evaluation process in two ways: It can affect the repeatability of test measurements on a single machine, and it can impact the comparisons of test executions on different machines.

The effect on test measurement repeatability will primarily be seen in input/output tests. Input/output throughput can be affected by the positioning and fragmentation of files on a single disk. The ACPS test languages do not provide mechanisms for controlling how files are stored on disks. As a result, the user may wish to run ACPS input/output tests several times and use the minimum test measurements obtained for comparison. It is also possible that hardware memory caches can also impact test repeatability. On DEC VAX, use of the high-speed memory cache is determined by physical address location. For DEC VAX/VMS, the virtual to physical address mapping will be different each time a test program is executed. For large ACPS test programs (e.g., loading tests), memory cache use could impact program performance and the user may wish to run these tests several times and use the minimum of test measurements made. Instruction pipelining can also impact test repeatability on computers for which separate memory modules can be accessed simultaneously and for which the user has no control over how his program is stored in physical memory.

The computer hardware configuration has a significant impact on evaluations of compiler implementations on different machines even for machines with the same hardware architecture. Instruction set capabilities and execution times can vary significantly. Memory access time, cache memory size and access time, disk seek and throughput times can also vary tremendously among machines supporting the same instruction set architecture. Ideally, different compiler implementations should be compared through test executions in the same hardware/software environment. If this is not practical, then a third compiler (e.g., FORTRAN) should be used on both machines to provide a point of reference for the comparison.

4. TEST MEASUREMENT AND CODING TECHNIQUES

This section discusses the techniques used to gather data that measure the performance and resource utilization of Ada, JOVIAL, and FORTRAN compilers at compile-time and of compiled ACPS tests at run-time.

Examples of the different methods used in developing ACPS tests are presented and described, which should be useful to users wishing to augment the ACPS with tests of their own.

4.1 COMPILE-TIME MEASUREMENT TECHNIQUES

Data at compile time can be derived from either the host operating system or the compiler. The ACPS compile time data processor, described in detail in Appendix E, assumes that all data are presented in a single file which consists of separate sections in the following order: compilation processing data, post-compilation processing or linkage edit processing data, source module size data, object module size data and load module size data. The expected formats for these sections, along with sample outputs, are also described in Appendix E. For the VAX/VMS version of ACPS, all data were gathered through use of operating system commands. Operating system commands were also used to display the test environment (user quotas, system activity) to ensure that the data gathered for comparison are accumulated in test environments as similar as possible.

4.2 RUN-TIME MEASUREMENT TECHNIQUES

Data are gathered at run-time by test support procedures whose Ada, JOVIAL, and FORTRAN versions are functionally equivalent in the sense that they gather the same data and report them in exactly the same format. The ACPS run-time data processor assumes that all run-time data accumulated for processing are contained on a single file in a sorted order, as described in Appendix E.

In gathering run-time test data, two problems must be addressed. The first problem is concerned with determining which data are available and how to gather them. The second problem addresses the methodology for controlling test execution such that the data gathered are accurate and measure only execution of the test code itself.

Two types of data are gathered by ACPS tests: language-specific and operating system/compiler-dependent.

Language-specific data measure the size of test code, data objects, and the elapsed time of a test. In Ada tests, the address attribute of labels is used to measure the size of test code, and the size attribute of data objects is used to compute their size. In a single test, up to five values can be output for the size of test code and data objects. Two types of elapsed time data are computed. For tests timed through repetitive execution of a test loop, the elapsed time of the test and the number of loop iterations executed are computed and output. For tests timed through single executions of test

code, multiple microsecond level measurements are made and the maximum, minimum, and median timings are computed and output. To collect language-specific data, test support procedures are used to the maximum extent possible. Their use in gathering test data is described in detail and illustrated with examples in Section 4.3.

Operating system and compiler-dependent data are additional performance measures that may be provided by an Ada run-time environment through access to special compiler-dependent run-time procedures or to accounting procedures within an underlying operating system. They may include such data as actual time spent executing machine instructions, number of input/output operations, physical memory usage, etc. The data are collected by ACPS test support software in a manner that is transparent to the test programs. Up to nine data of this type can be collected and output for processing by the ACPS run-time data comparison tool.

To ensure that the test data collected at run-time are accurate and repeatable and only measure execution of the test code itself, various coding techniques were adopted both within ACPS test programs and within the test support software.

The following coding techniques were employed to ensure to the maximum extent possible that the run-time data collected during a test apply only to the code being tested:

- a. All ACPS tests call test support software to start and stop tests and to gather and report performance data.
- b. Special tests (Table 4-1, page 4-8) were created to measure the overhead of the test support software and the test code loop. The ACPS run-time data processor uses these measurements to remove any overhead not associated with the code being tested.
- c. For some tests, the test overhead cannot be determined by the special test program in Table 4-1. For these tests, the overhead is determined directly in the program containing the test by using a special test support procedure (TCOMP). An example of this approach is discussed in Section 4.3.
- d. For nonmicrosecond level tests, two sets of data are gathered: one for the first iteration through the test loop and the second for subsequent test loop iterations. In this manner, the time to load the test code and its data into memory is isolated and removed from test measurements.
- e. All ACPS tests call a test support initialization procedure which ensures that all test support code and data are in memory before test execution begins.
- f. All ACPS tests call a test support procedure at the end of execution to output test results. This guarantees that the effect of outputting the results from one test execution does not affect execution of subsequent tests.

- g. A separate test support procedure (NOOPTM) is called within each test loop to ensure that test code is not removed from the loop by compiler optimization algorithms. The support procedure suppresses compiler optimization logic by referencing but not executing code that sets and uses all global variables used in test loops. If a test is designed to use local variables only, then these variables are by convention assigned to test support global variables within the test loop.

The following coding techniques were used to ensure the accuracy and repeatability of timing measurements:

- a. A separate test program (ADAPARM) was created to measure the resolution of the Ada clock and the representation of predefined data types. It is discussed in more detail in Section 7 and Appendix C.
- b. A separate test program (AFIRST) was created for use in measuring the repeatability of test measurements. Its use is described in more detail in Section 7 and Appendix C.
- c. The test support software outputs an error message if the test execution time is less than a predetermined value. To achieve 99% accuracy in test measurements, the test execution time should be at least 100 times greater than the resolution of the Ada clock (Sec. 7.3.2.1).
- d. The test support software does not allow a test to start until the Ada clock changes value. For microsecond level tests, this removes the effect of operating system overhead for operating systems whose overhead occurs at the change of Ada clock values. (This is true for DEC Ada on VAX/VMS.) This convention also reduces the amount of time necessary to execute tests by maximizing the accuracy of the start time of a test.
- e. To enhance repeatability of test measurements, WHILE loops rather than FOR loops are used to ensure that the loop control code does not vary with the complexity of the code tested within the loop. To control test duration, a global variable (LITERS) is used in the WHILE loop condition that is also incremented by a test support procedure (NOOPTM) within each test loop.

4.3 ACPS CODING TECHNIQUE EXAMPLES

This section describes through example several coding techniques used in developing ACPS test programs. It also shows how Ada programs are mapped into equivalent JOVIAL and FORTRAN programs.

Table 4-1 shows a line numbered example of prototype test loops for multiple iteration tests and single iteration microsecond level tests. This example can serve as a template for development of additional ACPS tests. The following description of the contents of Table 4-1 is ordered by line number:

Lines 1-13	Each ACPS test file is preceded by commentary prologue that describes the contents of the file.
Line 3	Lists the test names to which this file applies.
Line 4	Gives the name of the file.
Line 6	Lists the initials of the person(s) responsible for development and modification of the file and the date(s) the file was inserted into the ACPS or was modified.
Lines 10-12	Describe the purpose of the file.
Line 14	Allows use of test support procedures (TINIT, T2VALU, TSTART, NOOPTM, TSTOP, MSTART, MSTOP, TSTOPM, TPRINT) and test support global variables (LITERS) and constants (MICITR).
Line 15	Allows use of test support procedures (DUMPT) to print the contents of test support global variables.
Line 16	Allows use of loop iteration parameters (100000) externally defined in a package. These parameters define the duration of tests. They are grouped into packages according to test category to minimize the file editing required to change test durations.
Line 18	Notice that the main program procedure name is the same as the last six characters of the file name.
Line 20	Each ACPS test must call the procedure OURSYS.TINIT to initialize test support software.
Lines 21-28	Contain a template for development of multiple iteration tests. All test code would be inserted after line 25.
Line 21	Uses procedure OURSYS.T2VALU to compute the size of the test loop as the difference in addresses of labels which surround the test loop.

- Line 22 Uses procedure OURSYS.TSTART to start execution of the test whose name is supplied as an argument. This procedure initializes global variables that can be used by the test code. If initial values different from those set by TSTART are to be specified, then the initialization statements should be inserted between lines 20 and 22 along with the following statement:
- ```
set_tmp: = true;
```
- Lines 23, 27 Define the start and end of the test loop.
- Line 24 Contains the test loop control statement. The variable LITERS is defined in the package OURSYS, initialized by TSTART to one, and incremented by NOOPTM within the loop. Notice that the loop iteration parameter is a six character name that begins with a "l" and has the same last five characters as the test name.
- Line 25 Invokes procedure OURSYS.NOOPTM for several purposes:
- a. To increment the loop control parameter LITERS
  - b. To prevent compiler optimization logic from removing test code involving calculations which use or set test support global variables
  - c. To force two sets of test results to be generated: one for the first iteration through the loop and the second for subsequent iterations through the loop
- Line 28 Uses procedure OURSYS.TSTOP to stop test execution and to compute and save all run-time test data for subsequent printing.
- Lines 33-40 Contain a template for development of microsecond level tests. The test code to be timed would be inserted before line 36 and between the calls to OURSYS.MSTART and OURSYS.MSTOP. The calls to MSTART and MSTOP needn't appear immediately within the test loop but can appear in a procedure or task invoked from within the test loop. In addition, calls to MSTART and TSTART needn't be made from the same procedure or task.
- Line 33 Invokes OURSYS.TSTART to start test execution.
- Line 34 Contains the test loop control statement. The variable LITERS is defined in the package OURSYS, initialized by procedure TSTART, and incremented by procedure MSTART. The test loop iteration parameter MICITR is defined in OURSYS as the maximum number of microsecond level measurements that can be made for a test.

- Line 35    Invokes OURSYS.MSTART to start a microsecond level test measurement.
  
- Line 36    Invokes OURSYS.MSTOP to compute the elapsed time of a microsecond level measurement and store the result in a test support data buffer.
  
- Line 38    Uses OURSYS.TSTOPM to stop a microsecond level test and compute and save all microsecond level run-time test data for subsequent printing. TSTOPM computes the maximum, median, and minimum value of all microsecond level measurements made during the test.
  
- Line 39    Invokes OURSYS.TPRINT to output test results previously saved by TSTOP and TSTOPM. Up to 50 test results can be saved for printing by TPRINT. If more than 50 tests are executed, then TSTOP and TSTOPM will call TPRINT whenever the data buffers become full.
  
- Line 40    Invokes OURDMP.DUMPT to output the contents of all global variables defined in package OURSYS. The global variable OURSYS.DEBUG controls whether printing occurs when DUMPT is called. By default, printing does not occur. To force printing, OURSYS.DEBUG can be set to boolean true in the test program or in default initialization in package OURSYS.

Table 4-2 contains an example of a template for a package defining test iteration counts. A package of this type is developed for each test category. As shown at line 16, the iteration counts are defined as constants.

Tables 4-3 and 4-4 show JOVIAL and FORTRAN versions of the Ada program in Table 4-1. These tables illustrate the following Ada coding conventions that were adopted to facilitate conversion of Ada tests to JOVIAL and FORTRAN:

- a.    Only six characters are used for procedure and data object names in Ada. As a result, all procedure and data object names in Ada tests are identical to those in JOVIAL and FORTRAN.
  
- b.    Ada, JOVIAL, and FORTRAN test names and file names only differ in the first character.
  
- c.    Ada comments are suffixed with two dashes to facilitate translation to JOVIAL.
  
- d.    Ada executable statements begin with at least six blanks to facilitate translation to FORTRAN.

As a result of the use of Ada coding conventions for ACPs tests, much of the work necessary to translate Ada tests to JOVIAL and FORTRAN equivalents was automated with VAX/VMS edit command procedures. The examples shown in Tables 4-1, 4-3, and 4-4 illustrate the following Ada language feature mappings to JOVIAL and FORTRAN:

- a. The use of an address attribute for a label can be implemented in JOVIAL with the LOC function and in FORTRAN with the ASSIGN statement (whose implementation is compiler-dependent).
- b. WHILE statements must be translated to DO statements in FORTRAN. Since a global variable is used as the loop control variable and is referenced by the routine NOOPTM, FORTRAN compilers must generate code to store into the variable for each iteration through the test loop. However, FORTRAN compilers may generate different loop control compiled code depending on the complexity of the test statements which can result in test measurements that are too high.
- c. WITH statements are translated to COMPOOL statements in JOVIAL and to VAX FORTRAN INCLUDE statements in FORTRAN.

As discussed in Section 4.2, for some tests, the test loop overhead cannot be determined by the special test program shown in Table 4-1. For these tests, the overhead is accounted for directly in the program containing the test. This kind of test program is composed of three types of packages: a test overhead package, one or more test code packages, and a test driver package. Examples of these package types are shown in Tables 4-5, 4-6, and 4-7.

Table 4-5 shows a package containing a single procedure that measures the test loop overhead for the IF statement test contained in Table 4-6. This procedure contains all statements (both executed and not executed) that are not part of the test but are necessary for its construction. It must be the first procedure executed in the test program. The following description of the features of the test overhead package shown in Table 4-5 is ordered by line number:

- |              |                                                                                                                                                                                                                                                 |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Line 29      | The procedure OURSYS.TINIT is called to initialize test support software variables and ensure that the support software procedures are read into memory.                                                                                        |
| Lines 32, 61 | OURSYS.TSTART and OURSYS.TSTOP are called to gather data from execution of the overhead test and to save the results for subsequent use and printing.                                                                                           |
| Line 34      | The loop iteration count (105305) used in the overhead test should have the same value as the loop iteration counts used in test code packages.                                                                                                 |
| Line 65      | The procedure OURSYS.TSAVE must be called to identify the previous test executed as an overhead test so that run-time data can be saved for use in subsequent tests executed within the same Ada program to account for the test loop overhead. |

Table 4-6 shows an example of a test code package in which the test loop overhead has been previously computed and saved through invocation of OURSYS.TSAVE. The test support procedure OURSYS.TCOMP is called (line 27) to indicate that previously saved test loop overhead data are to be subtracted from the next test executed. Two sets of test results are generated by the procedure OURSYS.TSTOP: one including test loop overhead (AF05306) followed by one without test loop overhead (AF55306). The test name supplied to OURSYS.TCOMP must contain an "S" in the third character position.

Table 4-7 shows the test driver for tests in Table 4-5 and 4-6. The driver first calls the test that computes the test loop overhead and then calls all other tests to be executed. It finally calls OURSYS.TPRINT to output the run-time data for each test.

The test program structure shown in Tables 4-5, 4-6, and 4-7 is identical to the one used in the ACPS to determine whether machine-independent optimization algorithms are employed by a compiler. In this situation, the performance of a hand optimized version of a test is executed first and is compared with the performance of the compiler optimized version of a test. The run-time data comparison is computed as a fraction  $[100 * (\text{hand\_optimized} / \text{compiler\_optimized})]$ . To identify the comparison as fractional, a "C" must be used in the third character position of the test name argument to OURSYS.TCOMP [e.g., OURSYS.TCOMP ("AOC0508")].

Table 4-1. Ada Test Loop Overhead Program

```

1 -- Ada Real Time/Run Time Environment Test Aerospace Corporation --
2 --
3 -- Test: AA00000,AA00000
4 -- File: AA00000
5 --
6 -- REK 2/1/88
7 --
8 -- Description:
9 --
10 -- XXXX This test establishes the run time system dependent statistic --
11 -- XXXX overhead of the test support software(oursys.euramp). This test --
12 -- XXXX should be the first test run in any test sequence.
13 --
14 with oursys; use oursys;
15 with euramp; use euramp;
16 with aa0p000; use aa0p000;
17
18 procedure AA00000 is
19 begin
20 oursys.tinit;
21 oursys.t2valu(top'address,bottom'address);
22 oursys.tstart("AA00000");
23 <<top>> null;
24 while liters <= 100000 loop
25 oursys.noeptm;
26 end loop;
27 <<bottom>> null;
28 oursys.tstop;
29
30 -- execute test to determine overhead in accessing microsecond level --
31 -- time. --
32
33 oursys.tstart("AA00000");
34 while liters <= micitr loop
35 oursys.mstart;
36 oursys.mstop;
37 end loop;
38 oursys.tstopm;
39 oursys.tprint;
40 euramp.dumpr;
41 end;
```

Table 4-2. Sample Test Iteration Count Package

```

1 -- Ada Real Time/Run Time Environment Test Aerospace Corporation --
2 --
3 -- Test:
4 -- File: AAOP000
5 --
6 -- REK 2/1/88
7 --
8 -- Description:
9 --
10 -- XXXX this package defines test loop iteration counts for test --
11 -- XXXX overhead tests --
12
13 with OURSYS; use OURSYS;
14 package AAOP000 is
15
16 100000 : constant our_integer := 300000;
17 end AAOP000;

```

Table 4-3. JOVIAL Test Loop Overhead Program

```

1 start
2 " Ada Real Time/Run Time Environment Test Aerospace Corporation "
3 "
4 " Test: JA00000,JAM0000
5 " File: JA00000
6 "
7 " REK 2/1/88
8 "
9 " Description:
10 "
11 " This test establishes the run time system dependent statistic
12 " overhead of the test support software(oursys,ourdmp). This test
13 " should be the first test run in any test sequence.
14 "
15 !compool ('ourjov');
16 !compool ('jovdmp');
17 !compool ('ja0p000');
18 program a00000;
19 begin
20 tinit;
21 t2valu(loc(top),loc(bottom));
22 tstart('JA00000');
23 top;
24 while liters <= 100000;
25 nooptm;
26 bottom;
27 tstop;
28
29 " execute test to determine overhead in accessing microsecond level "
30 " time."
31
32 tstart('JAM0000');
33 while liters <= micitr;
34 begin
35 mstart;
36 mstop;
37 end"loop;"
38 tstopm;
39 tprint;
40 dumpt;
41 end
42 term

```

Table 4-4. FORTRAN Test Loop Overhead Program

```

1 c Ada Real Time/Run Time Environment Test Aerospace Corporation c
2 c
3 c Test: FA00000,FAM0000 c
4 c File: FA00000 c
5 c
6 c REK 2/1/88 c
7 c
8 c Description: c
9 c
10 c This test establishes the run time system dependent statistic c
11 c overhead of the test support software(oursys,ourdmp). This test c
12 c should be the first test run in any test sequence. c
13 c
14 c program a00000
15 c include 'ourfor.cmn'
16 c include 'fa0p000.cmn'
17 c call tinit
18 c assign 100 to tmpis1
19 c assign 200 to tmpis2
20 c call t2valu(tmpis1,tmpis2)
21 c call tstart('FA00000')
22 c 100 do 10 liters=1,100000
23 c call nooptm
24 c 10 continue
25 c 200 continue
26 c call tstop
27 c
28 c execute test to determine overhead in accessing microsecond level
29 c time.
30 c
31 c
32 c call tstart('FAM0000')
33 c do 299 liters =1,micitr
34 c call mstart
35 c call mstop
36 c 299 continue
37 c call tstopm
38 c call tprint
39 c call dumpt
40 c stop
41 c end

```

Table 4-5. Example IF Statement Test Overhead Package

```

1 -- Ada Real Time/Run Time Environment Test Aerospace Corporation --
2 --
3 -- Test: AF05305
4 -- File: AF05305
5 --
6 -- ARA,REK 2/1/88
7 --
8 -- Description:
9 --
10 -- XXXX This package measures the test loop overhead for tests:
11 -- XXXX
12 -- XXXX af05306
13 -- XXXX af05307
14 --
15 -- run statistic #1 = size of the test loop code
16 --
17 with oursys; use oursys;
18 with AF0P000; use AF0P000;
19 with ourdmp; use ourdmp;
20 package AF05305 is
21 procedure F05305;
22 end AF05305;
23 package body AF05305 is
24 procedure F05305 is
25
26 begin
27
28 -- initialize for the test sequence --
29 oursys.tinit;
30
31 oursys.t2valu(top'address,bottom'address);
32 oursys.tstart("AF05305");
33 <<top>> null;
34 while liters <= 105305 loop
35 oursys.nooptm;
36 if (tmpbs) then
37 tmpbal(1) := false;
38 tmpbal(2) := false;
39 tmpbal(3) := false;
40 tmpbal(4) := false;
41 tmpbal(5) := false;
42 tmpbal(6) := false;
43 tmpbal(7) := false;
44 tmpbal(8) := false;
45 tmpbal(9) := false;
46 tmpbal(10) := false;
47 tmpbs2(1) := false;
48 end if;
49 tmpbs1 := false;
50 tmpbs2 := false;
51 tmpbs3 := false;
52 tmpbs4 := false;
53 tmpbs5 := false;
54 tmpbs6 := false;
55 tmpbs7 := false;
56 tmpbs8 := false;
57 tmpbs9 := false;
58 tmpbsa := false;
59 end loop;
60 <<bottom>> null;
61 oursys.tstop;
62 ourdmp.dumpr;
63
64 -- save test results for later use as base value --
65 oursys.tsave;
66 return;
67 end;
68 end AF05305;

```

Table 4-6. Example IF Statement Test

```

1 -- Ada Real Time/Run Time Environment Test Aerospace Corporation --
2 --
3 -- Test: AF05306,AFS5306 --
4 -- File: AF05306 --
5 --
6 -- ARA,REK 2/1/88 --
7 --
8 -- Description: --
9 --
10 -- xxxx This test measures the execution time of
11 -- xxxx 10 if statements with the then part executed.
12 --
13 -- run statistic 01 = size of test loop code
14 --
15 --
16 with oursys; use oursys;
17 with AFOP000; use AFOP000;
18 with ourdmp; use ourdmp;
19 package AF05306 is
20 procedure F05306;
21 end AF05306;
22 package body AF05306 is
23 procedure F05306 is
24
25 begin
26
27 oursys.tcomp("AFS5306");
28 oursys.t2valu(top'address,bottom'address);
29 oursys.tatart("AF05306");
30 <<top>> null;
31 while liters <= 105306 loop
32 oursys.nooptm;
33 if (tmpba2(1)) then
34 tmpbs1 := false;
35 else
36 tmpbal(1) := false;
37 end if;
38 if (tmpba2(2)) then
39 tmpbs2 := false;
40 else
41 tmpbal(2) := false;
42 end if;
43 if (tmpba2(3)) then
44 tmpbs3 := false;
45 else
46 tmpbal(3) := false;
47 end if;
48 if (tmpba2(4)) then
49 tmpbs4 := false;
50 else
51 tmpbal(4) := false;
52 end if;
53 if (tmpba2(5)) then
54 tmpbs5 := false;
55 else
56 tmpbal(5) := false;
57 end if;
58 if (tmpba2(6)) then
59 tmpbs6 := false;
60 else
61 tmpbal(6) := false;
62 end if;
63 if (tmpba2(7)) then
64 tmpbs7 := false;
65 else
66 tmpbal(7) := false;
67 end if;
68 if (tmpba2(8)) then
69 tmpbs8 := false;

```



Table 4-6. Example IF Statement Test (Continued)

```

70 else
71 tmpbal(8) := false;
72 end if;
73 if (tmpba2(9)) then
74 tmpbs9 := false;
75 else
76 tmpbal(9) := false;
77 end if;
78 if (tmpba2(10)) then
79 tmpbsa := false;
80 else
81 tmpbal(10) := false;
82 end if;
83 if (tmpbsa) then
84 tmpba3(1) := true;
85 end if;
86 end loop;
87 <<bottom>> null;
88 oursys.tstop;
89 ourdmp.dumpr;
90 return;
91 end;
92 end AF05306;
```

Table 4-7. Example IF Statement Test Driver

```

1 -- Ada Real Time/Run Time Environment Test Aerospace Corporation --
2 --
3 -- Test:
4 -- File: AF05308
5 --
6 -- ARA,REK 2/1/88
7 --
8 -- Description:
9 --
10 -- **** This is the driver for tests:
11 --
12 -- af05305
13 -- af05306
14 -- af05307
15 --
16 with oursys; use oursys;
17 with AF05305; use AF05305;
18 with AF05306; use AF05306;
19 with AF05307; use AF05307;
20 procedure AF05308 is
21
22 begin
23
24 -- execute the test sequence --
25 f05305;
26 f05306;
27 F05307;
28 oursys.tprint;
29 end AF05308;
```

## 5. ACPS EVALUATION TESTING SOFTWARE ARCHITECTURE

The ACPS evaluation testing capability design, as depicted in Figure 5-1, is structured around the desire to test and evaluate several different Ada implementations as well as JOVIAL and FORTRAN capabilities. As such, a common language test and evaluation environment was designed to permit automated comparisons of results from Ada, JOVIAL, and FORTRAN test executions. This section describes the basic test and evaluation architecture and how the three languages fit into the overall capability.

Each language has its own environment and restrictions which must be addressed in order to get a working system. Those areas which are common across all three languages are collected into common capabilities within the test and evaluation capability. Those areas which are specific to a given language, implementation, or host operating system are identified and isolated to the maximum extent possible.

The test and evaluation capability is further divided into specific implementation areas of: compile and link operations, run-time evaluation operations, and result comparison operations.

The compile and link operations comprise the set of steps necessary to compile and link the application for each of the specific test cases and the different languages. Some of the tests are targeted for all three languages, others for Ada, and one for JOVIAL or FORTRAN, and some for Ada only. Initially, the DEC VAX/VMS operating system was chosen, so all of the current procedures are for this specific implementation environment. The basic design requires the correct and consistent usage of compilation/linking options and identification of specified system support files for running the test cases. The compile-time testing evaluation architecture is shown in Figure 5-2. Common language command procedure conventions were established to ensure that compile time statistic files generated for each language are in the same format for presentation to the test result comparator. Example command procedures are discussed in detail in Appendix C for DEC VAX/VMS. Appendix E describes the test statistic and comparison outputs in detail.

The run-time evaluation operations comprise the basis for the run-time test and evaluation capability. These operations define a common set of run-time operations and interfaces for use by the test programs during execution. These operations have been packaged together to form what is known as the OURSYS interface. This interface is constructed, to the extent possible, for Ada, JOVIAL, and FORTRAN. It basically provides a set of procedures and functions for timing and measuring a test case as well as a common set of data definitions and other utilities. Figure 5-3 graphically depicts the ACPS run-time testing evaluation architecture. Each set of language tests is supported by a common test interface (OURSYS) implemented in each language and buttressed by an inner target operating system-specific interface implemented in assembly language or FORTRAN. The common test interface generates test results in a common language format for presentation to the test comparator. Appendix E contains a detailed description of the test data and comparison output formats.

The result comparison operations comprise the set of steps necessary to interpret and present the results of the test execution. Data gathered from the compile, link, and execution phases of the tests are brought together from the various language and implementation environments for comparison and presentation. The ACPS test comparison tool is used to present formatted test results and comparisons to the user. It consists of two separate programs: the test compilation comparator (CCOMP) and the test execution comparator (CEXEC). As shown in Figures 5-4 and 5-5, each tool has a similar architecture. The tools take as input two unformatted test result files and generate formatted output for each input file as well as output that compares the results from common tests within each input file. Appendix E describes the format of all comparison tool interface files in detail.

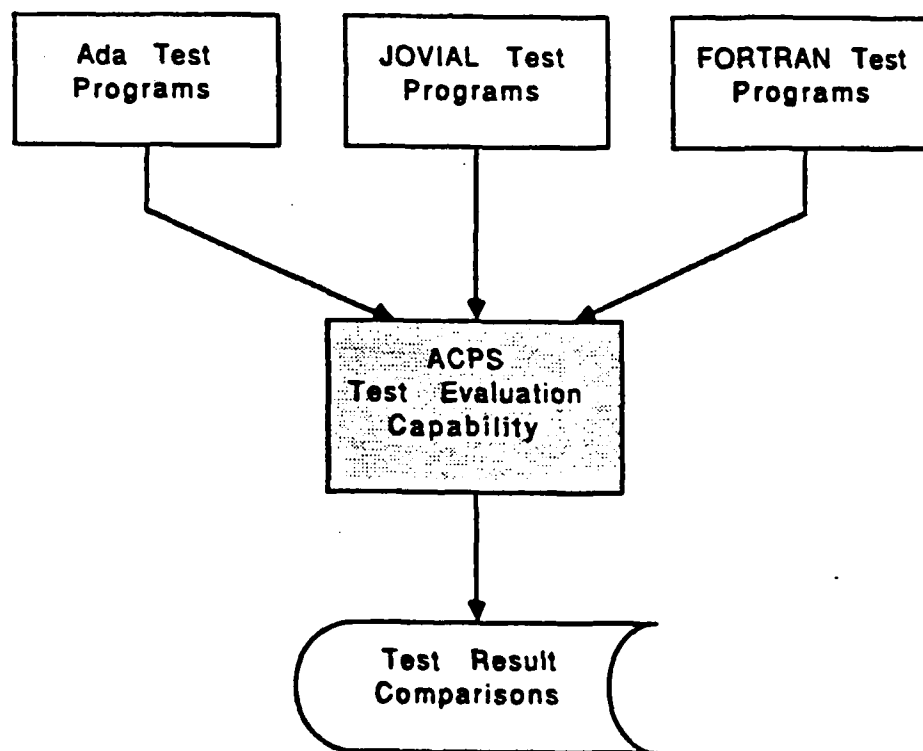


Figure 5-1. ACPS Test Evaluation Architecture



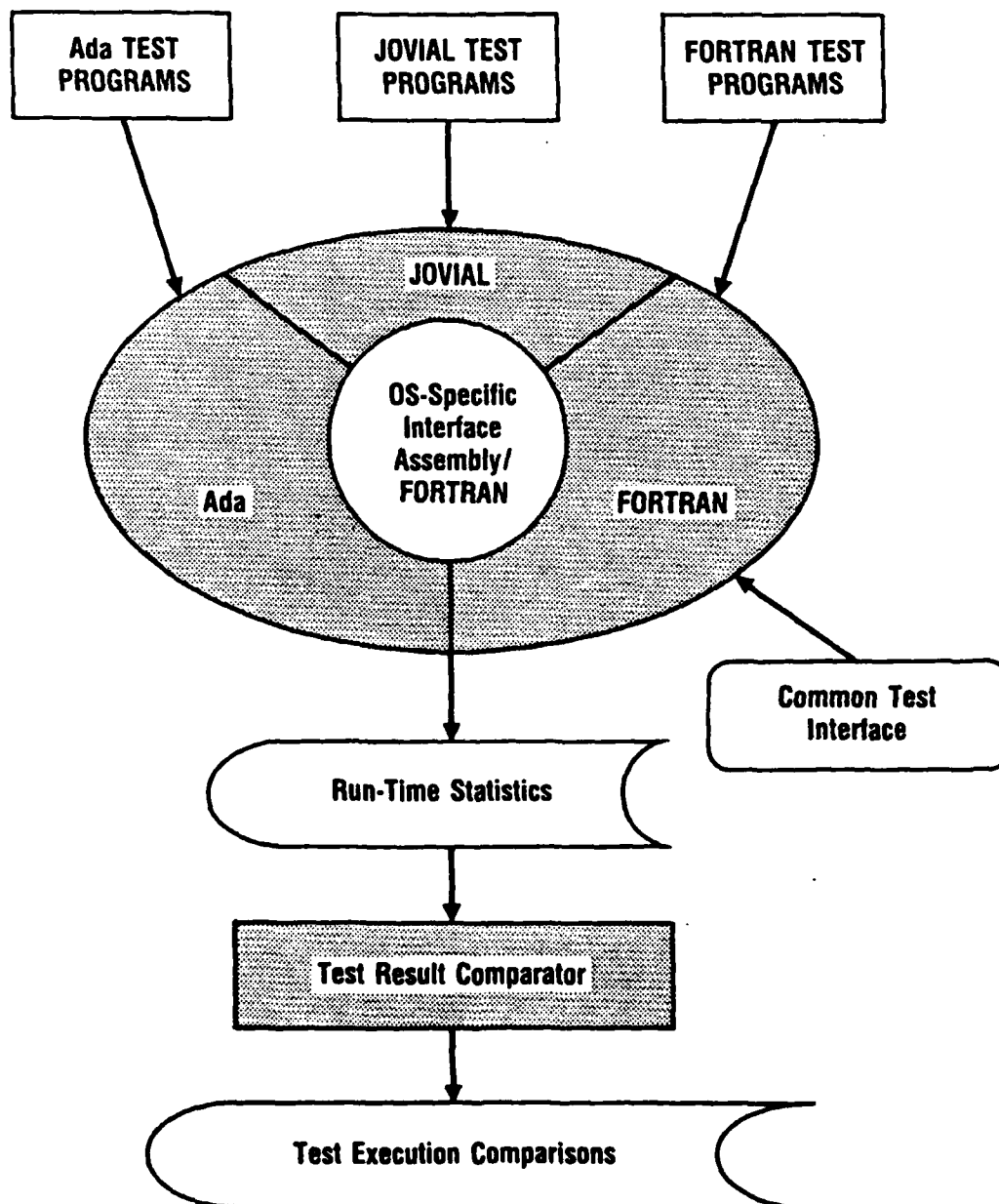


Figure 5-3. Run-Time Evaluation Architecture

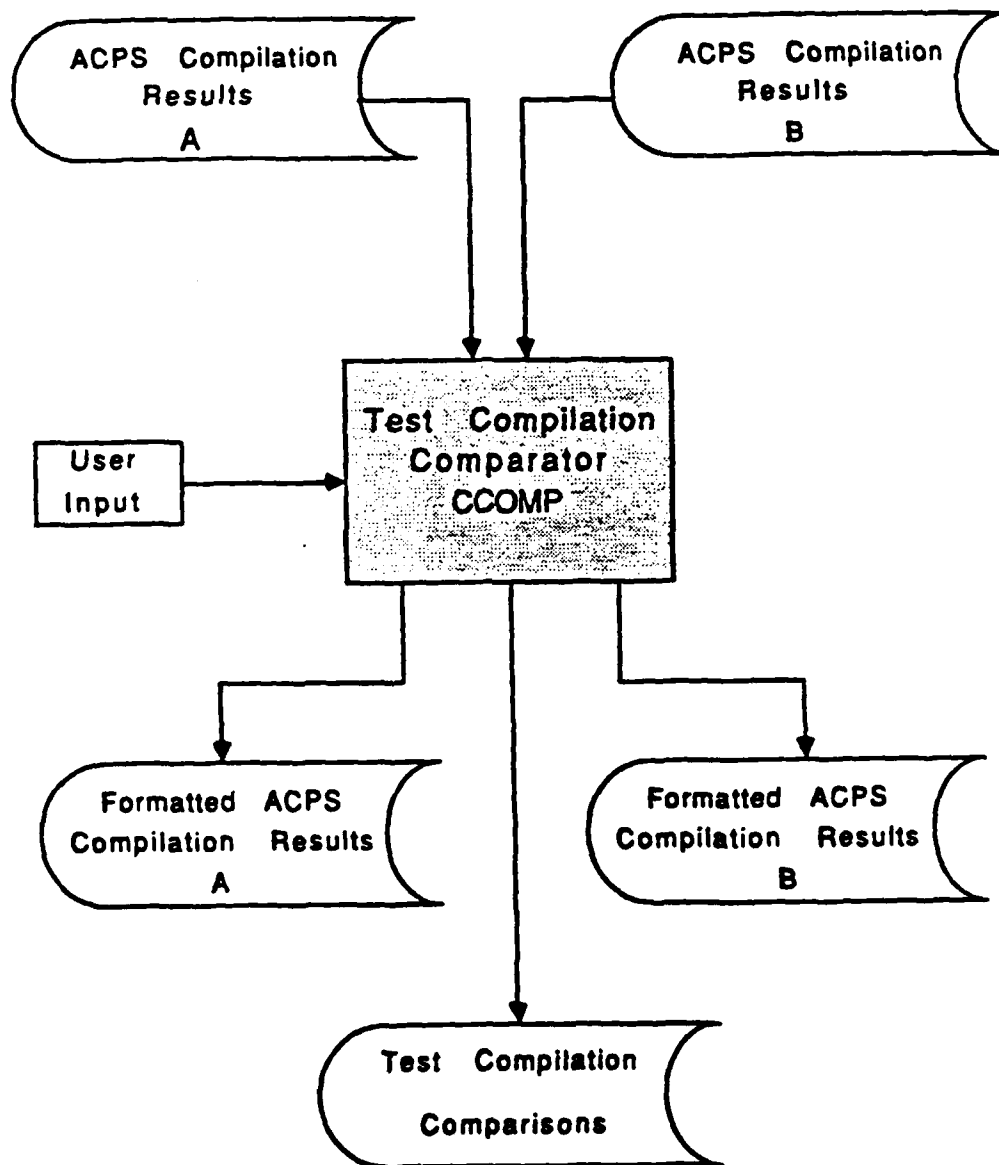


Figure 5-4. Test Compilation Comparator Interfaces

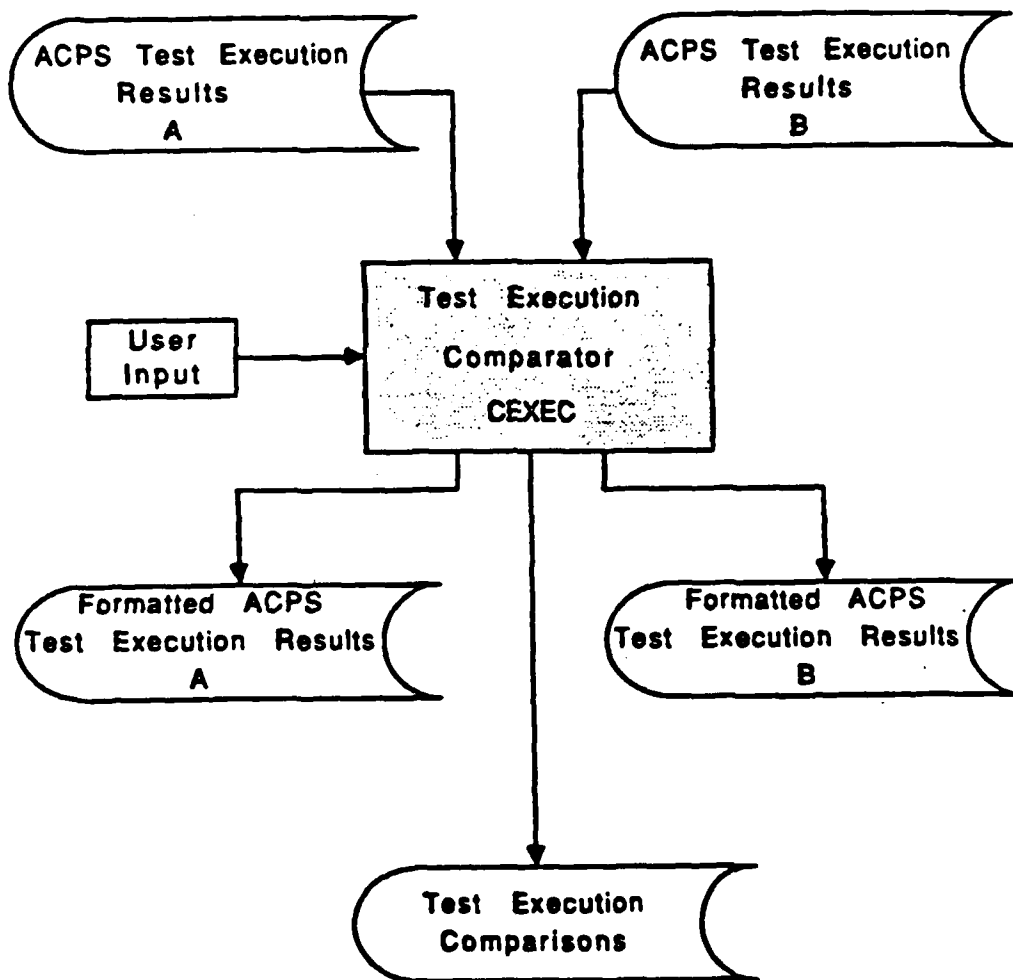


Figure 5-5. Test Execution Comparator Interfaces



## 6. NAMING CONVENTIONS

The primary objectives in the development of the ACPS were to ease conversion of Ada test programs to JOVIAL and FORTRAN and to minimize the effort needed to rehost the ACPS. To facilitate these objectives, three types of naming conventions were formulated: file name, test name, and programming language identifier.

File name conventions were selected so that ACPS file names would be compatible with all host computer operating systems commonly used in Department of Defense (DoD) applications. The ACPS file name syntax is identical to that of the Control Data Corporation Cyber series of computers executing the NOS BE operating system. ACPS file names are restricted to seven characters in length. The characters may be capital letters or digits. The file name must begin with a letter. Since the ACPS was developed in a VAX/VMS environment, each ACPS file also has a file type appropriate to the VMS file type conventions used by DEC VAX Ada, ECSPO JOVIAL, and DEC VAX FORTRAN compilers. Table 6-1 lists all ACPS file types. For almost all ACPS files, the file names, however, are unique and the file type field is not necessary to distinguish ACPS files within a language or between languages. However, in certain situations, multiple versions of a files may be present. The versions are distinguished by file type. For Ada test support software, file types are employed to distinguish files according to their use of optimization pragmas (SPACE, TIME). For other files, the need for additional file types arises whenever a compiler used in development of an ACPS test cannot compile single or multiple statements within the file. This can occur for statements which (a) are too complicated, (b) that invoke noncompilable procedures, or (c) that test capabilities not supported by the compiler, but which may be provided by other host environments or other compilers. In these situations, the file type USE is used for the file that includes the noncompilable statements, and compiler-specific file type (e.g., JOV) is used for the file with noncompilable statements either deleted or transferred into comments.

The conventions and formats for ACPS test names are identical to those for file names and as a result, the correspondence between test names and file names is predetermined by the naming conventions. The format of ACPS test names is similar to the format of test names used in the Ada Compiler Validation Capability (ACVC) test suite. ACPS test names are divided into fields whose contents describe much of what must be known about a test: the language the test is written in; the category of the test; which language feature is being tested; whether the test is compiler-dependent, etc. The detailed formats for ACPS file names and test names are described in Sections 6.1 and 6.2, respectively.

To facilitate conversion of Ada test programs to JOVIAL and FORTRAN, Ada identifier conventions were established. Ada identifiers in newly developed tests (i.e., tests not acquired from other sources) were restricted to conform to FORTRAN 77 syntax: containing only six or less characters; containing only letters and digits; and beginning with a letter. Therefore, all data object and procedure names in corresponding Ada, JOVIAL, and FORTRAN tests are identical.

#### 6.1 FILE NAME FORMAT

ACPS file names are comprised of seven characters divided into five fields. The name description following is ordered by fields according to their character positions:

Character 1: indicates the type of file as follows:

- A - an Ada source file
- C - an Ada source file with constraint checks suppressed
- E - an Ada source file with exception handlers in every procedure
- F - a FORTRAN source file
- I - an input data file
- J - a JOVIAL source file
- M - a machine language source file (not currently used)
- O - an output data file
- S - an Ada source file with a space optimization pragma
- T - an Ada source file with a time optimization pragma

Character 2: indicates the test category as follows:

- A - test loop overhead test
- F - language feature test
- G - general or application specific test involving multiple language features
- L - multi-task loading test either CPU or input/output intensive
- O - compiler optimization test

Character 3: dependent on test category and indicates the following:

- D - the file is involved in a test of compiler-dependent language features
- F - the file contains FORTRAN modules used by JOVIAL test programs
- J - the file contains a JOVIAL compool or FORTRAN common block definition
- M - the file contains a microsecond level language feature test
- N - the file contains a microsecond level language feature test involving compiler-dependent language features
- zero - has no special significance

Character 4: dependent on test category as follows:

- zero - for test categories A, G, and O

LRM Chapter - for test categories F and L. The character is in hexadecimal notation and indicates that the file is involved in a test that applies to this chapter in the Ada language standard (MIL-STD 1815A).

P - for all test categories. The character indicates that the file contains test loop iteration parameters.

Characters 5-7: used as test number identification. The characters may be numeric or alphabetic.

## 6.2 TEST NAME FORMAT

ACPS test names contain seven characters divided into five fields. The name description that follows is ordered by fields according to their character positions:

Character 1: indicates the type of test as follows:

- A - an Ada test
- C - an Ada test with constraint checks suppressed
- E - an Ada test with exception handlers in every procedure
- F - a FORTRAN test
- J - a JOVIAL test
- M - a machine language test
- S - an Ada test with space optimization pragmas
- T - an Ada test with time optimization pragmas

Character 2: indicates the test category as follows:

- A - a test loop overhead test
- F - a language feature test
- G - a general or application specific test involving multiple language features
- L - a multi-task loading test that is either CPU or input/output intensive
- O - a compiler optimization test

Character 3: dependent on test category and indicates the following:

- C - an optimization comparison test
- D - a test involving compiler-dependent language features
- I - an information test. The run statistics fields contain the test information
- M - a microsecond level language feature test
- N - a microsecond level language feature test involving compiler-dependent language features
- S - a language feature test with test loop overhead statistics removed
- zero - has no special significance

Character 4: dependent on test category as follows:

- zero - for test categories A, G, and O
- LRM Chapter - for test categories F and L. The character is in hexadecimal notation and indicates that the test applies to this chapter in the Ada language standard (MIL-STD 1815A).
- Characters 5-7: used as test number identification. These characters containing either a capital letter or a numeric digit. For many language features tests, character 5 indicates that the test applies to this section of the LRM chapter specified by character 4.

Table 6-1. ACPS File Types

| File Type | Purpose                                                                                                                                                                                                                                                                                                                                           |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ada       | Used for Ada source code modules. Each file contains either a main program, a package, a package specification, or a package body.                                                                                                                                                                                                                |
| CMN       | Used for FORTRAN common definition modules that are referenced by machine-specific INCLUDE statements in FORTRAN source code files. Each file corresponds to an Ada package specification.                                                                                                                                                        |
| CPL       | Used for JOVIAL compool definition modules. Each file corresponds to an Ada package specification.                                                                                                                                                                                                                                                |
| DAT       | Used for ACPS test program input/output files and for files referenced by JOVIAL !COPY directives.                                                                                                                                                                                                                                                |
| DEC       | Used for Ada source code modules that contain the DEC VAX Ada-specific language pragmas VOLATILE and TIME_SLICE.                                                                                                                                                                                                                                  |
| FOR       | Used for FORTRAN source code modules. Each file is either a main program, BLOCK DATA program, or collection of FORTRAN routines.                                                                                                                                                                                                                  |
| JOV       | Used for JOVIAL source code modules. Each file corresponds to an Ada main program or an Ada package body.                                                                                                                                                                                                                                         |
| SPA       | Used for Ada test support software modules that contain the pragma OPTIMIZE(SPACE).                                                                                                                                                                                                                                                               |
| TIM       | Used for Ada test support software modules that contain the pragma OPTIMIZE(TIME).                                                                                                                                                                                                                                                                |
| USE       | Used for Ada, JOVIAL, or FORTRAN source code modules that were not used on DEC VAX/VMS because either the files were not compilable or executable or because an equivalent VAX version of the file was used. The FORTRAN files with this type may contain common definition modules, and the JOVIAL files may contain compool definition modules. |
| VAX       | Used for modules that test VAX-specific language features. These files are not placed on the ANSI tape.                                                                                                                                                                                                                                           |
| VAXSPA    | Used for test support software modules that contain VAX-specific language features and the pragma OPTIMIZE(SPACE). These files are not placed on the ANSI tape.                                                                                                                                                                                   |
| VAXTIM    | Used for test support software modules that contain VAX-specific language features and the pragma OPTIMIZE(TIME). These files are not placed on the ANSI tape.                                                                                                                                                                                    |

## 7. ACPS INSTALLATION AND TEST EXECUTION

This section discusses installation and execution of the various parts of the test and evaluation capability. As described earlier, the testing process involves three basic phases: compilation, execution, and comparison. Each phase involves a number of different aspects about the test capability depending on the language(s) and environment being addressed. For the initial release of the test capability, the DEC VAX/VMS operating system is the execution environment used.

The compilation and execution phases are controlled by command procedures which invoke the specific compiler(s) for the specified test cases, link the results together, and invoke execution of the test cases. Results are then processed by the comparison programs for presentation to the user. For DEC VAX/VMS, these command procedures and comparator programs are already provided. For other operating systems, the user will need to construct similar operations to provide the same functionality. In addition, some low-level operating system interface operations will have to be supplied in order to access operating system dependent statistics.

The following subsections describe the tasks necessary to install, compile, and execute the ACPS tests and to use the test comparison programs. The discussion will be as general as possible and will be oriented toward users needing to execute the ACPS tests on operating systems other than DEC VAX/VMS. References will be given as appropriate to appendices for detailed descriptions and examples of outputs. Appendix C describes what must be done to use the ACPS test and evaluation capability for DEC VAX/VMS.

### 7.1 INSTALLATION OF ACPS SOURCE FILES

The ACPS source files are delivered on an ANSI formatted tape generated on a DEC VAX/VMS system using the COPY command. The tape format and content are described in detail in Appendix A. The procedures to read the tape are host machine dependent. The tape contains four types of files: Ada test files, JOVIAL test files, FORTRAN test files, and comparison tool source files.

All ACPS test files were developed to compile and execute properly on the DEC VAX/VMS 4.X operating system using the DEC VAX Ada V1.4-33 compiler, the ECSP0 JOVIAL FV-03.000 compiler hosted and targeted to VAX/VMS, and the DEC VAX FORTRAN V4.7-271 compiler. The language-specific test support software references external procedures that gather target operating system dependent performance statistics. These procedures as well as command procedures to compile and execute ACPS programs are not provided on the ANSI delivery tape.

As discussed in Section 6.1, the file type USE for a source file indicates that the file was not used in the DEC VAX/VMS version of the ACPS but should be used when rehosting the ACPS. In some situations, another version of the file (e.g., with file type ADA) is provided on the ANSI tape. This version of the file was used on DEC VAX/VMS because the USE version wasn't compilable or executable. Tables G-1 to G-7 in Appendix G list all test program files contained on the ANSI tape and indicate which files are supplied with multiple versions.

Subsequent subsections discuss the machine-dependent modifications that must be made to the supplied files and the additional software and command procedures that must be created to fully utilize the ACPS test and evaluation capability.

## 7.2 CREATION OF COMMAND PROCEDURES

Test compilation and execution command procedures are not supplied with the ACPS. Tables G-1 to G-7 in Appendix G list the programs and supporting files for all ACPS test types and test languages. The file names of input/output files for all ACPS tests are constructed by the language-specific test support procedures FINAME and FIFORM. Table 7-1 lists the file names of input/output files used by all type A(Ada) tests. The same file names are used by corresponding tests in other test types (types C, E, F, J, S, and T). Table 7-2 lists the FORTRAN unit numbers assigned to files in input/output tests. All Ada tests write test result data output to the default output device. All JOVIAL and FORTRAN tests write test data output to unit 6, which is not connected to an external file.

ACPS test comparison programs use up to eight input/output files. Appendix E describes the purpose, format, and FORTRAN unit number of each comparison program input/output file. FORTRAN OPEN statements are only used to assert whether the file is formatted or not and whether it is to be read or written. OPEN statements are not used for terminal input/output units.

If the ACPS test comparison programs are to be used, compilation and execution command procedures must be constructed so that the test result files generated can be processed by the comparison programs. Appendix E describes the content and format expected by the comparison programs for compile-time and run-time test result files with operating system-dependent records and data specific to DEC VAX/VMS. The comparison programs not only expect input test result files to be in a specific format; they also expect file compilations, program linkage edits, file size computations, and test executions to appear in a specific order. This ordering is defined in Section E.3. Tables G-1 to G-7 in Appendix G show the order that programs should be compiled and executed.

There are seven types of ACPS tests supplied. Separate compilation and execution command procedures should be created for each type of test in order to perform comparisons (e.g., type A versus type J, type A versus type C, etc.). There are two versions of each of the packages OURSYS and OURTYP: one with range constraints on numeric types (files OURSYSR and OURTYPR) and one without (files OURSYS and OURTYP); all Ada tests should be compiled and executed with both versions. Several of the Ada test support software files are supplied with the file types SPA and TIM. These files should be used for the S and T type Ada tests, respectively. Table 7-3 lists the file types of all language-specific test support software files supplied on the ANSI tape.

### 7.3 MACHINE-DEPENDENT SOFTWARE MODIFICATIONS

This section discusses the machine- and compiler-dependent language features that are used in ACPS source code files and also the kinds of source code modifications that may need to be made when rehosting the ACPS. The ACPS was designed so that almost all statements using machine-dependent language features are placed in the test support software. If a particular feature used in a test support package is not supported, Tables 7-1 through 7-4, can be used to assist identification of the programs which must be deleted, since these figures list which test support packages are used by each test program.

#### 7.3.1 Machine-Specific Test Support Software

Several target machine and target operating system-dependent external procedures are called by language-specific test support software to access microsecond level time and run-time environment performance data. These procedures are not supplied with the ACPS and must be developed. A description of the purpose of and arguments to these procedures is contained in Appendix D. All JOVIAL and FORTRAN tests assume that the function SECS (described in Appendix D) will be supplied to permit test support software to compute elapsed execution times. If the capability to access microsecond level time cannot be provided, then none of the microsecond level tests (i.e., tests names with M or N in character position three) can be executed. If additional run-time environment data can be supplied, then modifications are required to the run-time test comparator to process and output these data.

#### 7.3.2 Language-Specific Test Support Software

The language-specific test support software is used by ACPS tests to control the gathering and reporting of test result data. Functionally equivalent capabilities are provided for each test language. Table 7-4 describes all language-specific test support software files and shows the correspondence of files among the three test languages. Compiler- and machine-dependent statements are identified in the Ada test support software by special comment strings (--\*) placed at the end of the statement. The user must manually identify the corresponding statements in the functionally equivalent JOVIAL and FORTRAN files. The modifications that may need to be made to the test support software are as follows:

- a. Interface to machine-specific test support software. If machine-specific test support software (Sec. 7.3.1) cannot be developed or an Ada compiler does not permit interface to them, then stubs for each of the requisite procedures should be developed and integrated into the test support software.
- b. ACPS input/output. File name dependencies are encapsulated in the procedure FINAME. Ada FORM parameter dependencies are handled by the procedure FIFORM. If a FORTRAN compiler is not available, then the FORTRAN routines in files SYSJOV and TMPDMP that perform input/output for JOVIAL test support software must be redeveloped. Ada test support software uses the predefined Ada generic package TEXT\_IO for reporting test results. If this package is not supported, then Ada statements that output test results must be changed to invoke equivalent functions in another language.



- c. Numeric data types. ACPS tests were developed on the DEC VAX computer which has numerous machine level integer and floating point data types. Section C.5 discusses the mapping between ACPS numeric types and Ada predefined types. (Note: The ACPS type OUR\_D\_FLOAT is only used for the DEC VAX/VMS version of the ACPS.) The range constraints supplied for these data types in packages OURSYSR and OURTYPR are based on the corresponding size of the underlying VAX data type (as shown in Section C.5) and may need to be changed. The FORTRAN version of OURTYP contains nonstandard FORTRAN syntax for data type specification statements. These statements may have to be modified for each machine-specific FORTRAN compiler. Some of the ACPS data types (e.g., OUR\_SHORT\_SHORT\_INTEGER) may not be supported by each language specific compiler. This may be resolved by either changing the machine data type mappings, or by modifying or deleting the ACPS tests that use the unsupported data types. However, in order to obtain meaningful comparisons between ACPS test execution for different compilers on the same machine, the underlying machine data type for each ACPS data type should be the same for all compilers used.
- d. Representation specifications. The bit level storage allocation statements in package OURSPC are machine and compiler dependent and may need to be changed, or the associated ACPS tests may have to be deleted or modified.
- e. Pragma PACK. Support of the PACK pragma is compiler-dependent. It is used by package OURSPC. Its use may have to be deleted in OURSPC and the associated ACPS tests modified or deleted as well.
- f. Address arithmetic. The procedure T2VALU is used to compute the difference in address values of its arguments. This computation is compiler-dependent and may have to be deleted. Since every Ada test program references address attributes of labels, many files may need to be modified. One approach that may be used is to declare objects (e.g., top, bottom) in package OURSYS that have the same name as program labels. For a given machine, the address value calculation should be expressed in the same units for all compilers. For DEC VAX, results from address calculations are expressed in units of bytes.
- g. Elapsed time calculations. The accuracy of elapsed time calculations should be consistent across compilers. JOVIAL and FORTRAN test support software reference the machine-specific function SECS, which returns the current value of time as a floating point value in units of seconds. If the resolution of the Ada clock is worse than the resolution of values returned by SECS, then SECS should be used in Ada support software to access time. SECS will be invoked by Ada support software if the value OS is assigned to the variable TCLOCK in the file ADASYS.

- h. Test loop overhead statistics. The test execution comparison program is intended for use in accounting for the overhead introduced by the test support software in controlling test executions. If this tool cannot be used (e.g., on machines that do not support FORTRAN); then variables in the test support software must be set to allow the test support software itself to account for the overhead it introduces into test executions. A special program in each test language (AFIRST, FFIRST, JFIRST) is used to measure the values to be assigned to these variables. A more detailed description of these variables and the test programs used to calculate their values is contained in Section C.7.
- i. FORTTRAN global common reference. In FORTRAN test support software, Ada package specifications are implemented in separate nonexecutable source files. These source files are then referenced by VAX FORTRAN INCLUDE statements where necessary. These INCLUDE statements will need to be modified for each FORTRAN compiler used.
- j. Multiple FORTRAN program units per file. Several FORTRAN test support software files contain more than one program unit or subroutine. These files will need to be partitioned into separate files for compilers that allow only one program unit per file.
- k. Math function names. The Whetstone test exercises numerous mathematical functions while other tests exercise the same functions individually. The package MATHFUN is used to make these functions available for ACPS data types with the same names used in the Whetstone test. This package is compiler-dependent and may need to be modified. If the run-time environment does not support access to math functions, then all tests using them should be deleted.

7.3.2.1 Determination of Ada Compiler Dependent Parameters. The program ADAPARM is used to compute the resolution of the Ada clock, the minimum delay interval in a DELAY statement, the size of predefined data types, and the name of the standard output file. Section C.5 discusses the use of this program and shows sample output from it for DEC VAX Ada.

### 7.3.3 ACPS Tests

Many ACPS tests involve the use of compiler-dependent features of Ada which may not be supported or which may require source language changes in order to execute. All ACPS files which are involved in tests of Ada language features that are known to be compiler-dependent contain the symbol D or N in the third character position of the file name (Sec. 6.1). Any statements in an Ada source file directly using compiler-dependent features that may require modification will be identified with a comment appearing at the end of the statement (--\*). Location of the corresponding statements in the equivalent FORTRAN and JOVIAL source files must be determined manually. Tables G-1 through G-5 in Appendix G underline all Ada test files that may require source code modifications to compile or execute properly. Other machine-dependent test files use features that may not be supported (e.g., input/output) and

that cannot be made to work through modification of the source code. For these files, to the extent possible, the use of compiler-dependent features has been placed in the test support software. Compiler-dependent language features used include the following:

- input/output statements
- pragmas `INLINE`, `OPTIMIZE`, `PACK`, `PRIORITY`, `SHARED`, `SUPPRESS`
- task scheduling algorithms
- use of a special pragma (`TIME_SLICE` for DEC VAX Ada) to force timed sliced scheduling of tasks of equal priority
- use of predefined numeric data types other than integer and float
- address and `storage_size` attributes
- representation specifications
- math function names
- change of representation
- nonstandard data type conversions
- unchecked storage deallocation

All values computed in integer calculations are less than 16 bits in magnitude. Test iteration counts can be greater than  $2^{16}$  and may need to be modified for execution on 16-bit machines.

All tasking tests that use the priority pragma assume that three priority levels are available and that a preemptive task scheduling algorithm is used by the Ada run-time system. Many tests use a `DELAY` statement in a high priority task to allow lower priority task(s) to be executed and the assumption is made that at the end of the delay interval the high priority task will preempt any lower priority tasks from executing. In addition, task loading tests assume that task execution can be completed within `OURSPC.max_time` seconds. If a task in a type A multi-tasking test aborts, the user will not be notified as to why the task aborted. The user should therefore execute the type E version of all Ada tasking tests first. Since these tests contain exception handlers in all procedures, the user will be notified about the type of any error that occurs for corrective action (e.g., increasing the `storage_size` attribute for a task).

For JOVIAL tests, FORTRAN subroutines are used for input and output operations. If a FORTRAN compiler is not available, then the FORTRAN subroutines in files `SYSJOV` and `TMPDMP` will have to be redeveloped.

For FORTRAN tests, all executable source files use VAX FORTRAN INCLUDE statements to reference global common definitions. These statements will have to be modified for each FORTRAN compiler used. In addition, some test files contain more than one program unit or subroutine. These files will need to be divided into separate files for compilers that allow only one program unit per source code file. For these compilers, all local procedure tests (see Appendix F) can be deleted.

#### 7.3.4 ACPS Test Comparison Tool

The ACPS test comparison tool consists of two programs: a compile-time test result comparator and a run-time test result comparator. Both programs are implemented in FORTRAN 77 and utilize the VAX FORTRAN INCLUDE statement to import global common specifications. The programs are divided into operating system-dependent modules and operating system-independent modules. The target operating system-dependent modules for VAX/VMS are included and identified in the source files and must be redeveloped for each new host and target operating system. The comparison tool consists of the following source files: CCOMP, CCOMPA, CCOMPV, CEEXEC, CEEXECA, CEEXECV. The files CCOMPV and CEEXECV are VAX/VMS-specific and are provided to ease rehosting of the comparison tool.

#### 7.4 DETERMINATION OF TEST DURATION

Test durations are determined by test iteration counts which are grouped into files according to test category (Sec. 6.1). The iteration counts were set so that most type A Ada tests execute for at least 1 sec exclusive of test overhead using DEC VAX Ada on a VAX-11/8600.

The duration of a test is essentially driven by the desired accuracy of test measurements. For a desired measurement accuracy of 99%, tests (exclusive of loop overhead) must be executed for a duration at least 100 times greater than the resolution of the clock used. In addition, this measurement accuracy must be achieved for every test execution. As discussed in Section 3, the repeatability of elapsed time measurements is impacted by the run-time system architecture. A separate test program, AFIRST, is used to measure the repeatability of test measurements. The use of AFIRST in demonstrating test measurement accuracy for DEC VAX/VMS is discussed in Section C.8. AFIRST should be executed at least 50 times so that approximately 1000 test measurements are made for the same test code. The variance in test measurements made determine the length of time required to run a test to achieve an expected level of test measurement accuracy. The test iteration counts can then be adjusted accordingly.

#### 7.5 DETERMINATION OF TEST MEASUREMENT ACCURACY

Section 7.4 discusses varying the test durations of a single program (AFIRST) to ensure test repeatability. Although this process does account for inaccuracies in the clock used and for scheduled or intermittent interference from the run-time system or underlying operating system, it does not account for all factors that impact program performance for all machine architectures. For the DEC VAX computer, it has been seen that the amount of physical memory

can have a significant impact on the execution efficiency of test programs. Single test program execution speeds have varied by more than 30% irrespective of test duration for large memory configurations (e.g., 48 Mbyte). It is believed that this variance is due to the combined effect of instruction pipelining and how programs are mapped to physical memory. For some machine architectures, therefore, it is necessary to compute the variability of each test measurement made.

As shown in Sections C.10 and E.24, the run-time test comparator tool can be used to determine the accuracy of test measurements by computing the maximum and minimum values of test execution data for each test which is repeatedly executed. The test should be repeatedly run until the maximum and minimum run data do not change. Only the maximum or minimum data for each test should be used for comparison.

## 7.6 PERFORMANCE OF TEST COMPARISONS

The ACPS was designed to encourage the user to perform as many test execution comparisons as possible. For a single Ada compiler, over 10,000 test comparisons can be made among ACPS test programs processed by that compiler. To fully utilize the capabilities of the ACPS, it is imperative that the ACPS test comparison tools are installed and used.

The ACPS consists of seven types of benchmark test programs as described in Section 2. The ACPS test evaluation capability was designed for comparison of sets of tests of each type. Appendix F describes each individual test for each test type. These test descriptions also suggest additional comparisons (e.g., see the description for test AFD4135) that can be made by the user but currently not automatically by the test execution comparison tool. Five sets of Ada tests are provided. Five additional sets of executable Ada tests should be created by compiling each Ada test program using two versions of the Ada packages OURSYS (files OURSYS, OURSYSR) and OURTYP (files OURTYP and OURTYPR). Compiler options can also be used to increase the number of comparisons that can be made. For example, DEC VAX Ada permits suppression of compiler optimization algorithms. By using this, option, ten additional sets of Ada tests can be generated. Also, DEC VAX FORTRAN not only allows suppression of optimization algorithms but also permits inclusion of run-time array bound checks. For DEC VAX FORTRAN, one could therefore easily create four different test sets from a single set of test programs.

When comparing the performance of two different Ada compilers, ten different comparison options are available (comparison of type A, C, E, S, and T tests which are compiled both with and without range constraints on numeric data types). For a given Ada compiler, numerous comparison options are available to determine the effect of using range constraints on numeric types, of suppressing constraint checks, of using space or time optimization pragmas, and of using exception handlers in procedures.

When comparing the performance of different compilers for a given set of tests, it is important to make sure that the machine representation of each numeric data type used is the same for both compilers and also that the size

of components of corresponding record structures is the same. ACPS language feature tests for Section 13.7 of the LRM (tests AFOD720 to AFDD72I) display the size of all numeric data types used, the size of all composite data types used and the size of all record data type components. These data are processed for comparison by the test execution comparison tool. The Ada program ADAPARM determines the internal representation of all numeric data types used in ACPS test programs, as described in Section C.5.

The most difficult and time consuming task in generating test comparisons is to ensure that each test executes for the necessary amount of time to guarantee a desired level of test measurement accuracy. In construction of some test programs, little concern was given as to how long each test would have to be executed to ensure accurate test measurements. As a result, some of the difference tests (e.g., AFS5406) may require exorbitant computer time to achieve the desired test duration. The test iteration counts supplied on the ACPS ANSI tape were generated as follows. First, the A type tests were executed using DEC VAX Ada on a VAX 8600. A software tool was then used to adjust the iteration counts based on the execution times obtained, with the constraint that no test should be required to execute for more than 30 sec. These iteration counts were then used for all of the other test types.

Table 7-1. Ada Type A Test Program Input/Output Files

| <u>PROGRAM</u> | <u>INPUT/OUTPUT FILES</u>                |                               |                               |                               |                               |
|----------------|------------------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| AFDE220        | OFDE201<br>OFDE206<br>OFDE211<br>OFDE216 | OFDE202<br>OFDE207<br>OFDE212 | OFDE203<br>OFDE208<br>OFDE213 | OFDE204<br>OFDE209<br>OFDE214 | OFDE205<br>OFDE20A<br>OFDE215 |
| AFDE250        | IFDE231<br>IFDE236<br>IFDE241<br>IFDE246 | IFDE232<br>IFDE237<br>IFDE242 | IFDE233<br>IFDE238<br>IFDE243 | IFDE234<br>IFDE239<br>IFDE244 | IFDE235<br>IFDE23A<br>IFDE245 |
| AFDE420        | OFDE401<br>OFDE406<br>OFDE411<br>OFDE416 | OFDE402<br>OFDE407<br>OFDE412 | OFDE403<br>OFDE408<br>OFDE413 | OFDE404<br>OFDE409<br>OFDE414 | OFDE405<br>OFDE40A<br>OFDE415 |
| AFDE450        | IFDE431<br>IFDE436<br>IFDE441<br>IFDE446 | IFDE432<br>IFDE437<br>IFDE442 | IFDE433<br>IFDE438<br>IFDE443 | IFDE434<br>IFDE439<br>IFDE444 | IFDE435<br>IFDE43A<br>IFDE445 |
| ALDE2C1        | OLE2001                                  |                               |                               |                               |                               |
| ALDE2C2        | OLE2001<br>OLE2006                       | OLE2002<br>OLE2007            | OLE2003<br>OLE2008            | OLE2004<br>OLE2009            | OLE2005<br>OLE2010            |
| ALDE2C3        | OLE2001                                  |                               |                               |                               |                               |
| ALDE2C4        | OLE2001<br>OLE2006                       | OLE2002<br>OLE2007            | OLE2003<br>OLE2008            | OLE2004<br>OLE2009            | OLE2005<br>OLE2010            |
| ALDE2C5        | ILE2001                                  |                               |                               |                               |                               |
| ALDE2C6        | ILE2001<br>ILE2006                       | ILE2002<br>ILE2007            | ILE2003<br>ILE2008            | ILE2004<br>ILE2009            | ILE2005<br>ILE2010            |
| ALDE2C7        | ILE2001                                  |                               |                               |                               |                               |
| ALDE2C8        | ILE2001<br>ILE2006                       | ILE2002<br>ILE2007            | ILE2003<br>ILE2008            | ILE2004<br>ILE2009            | ILE2005<br>ILE2010            |
| ALDE4C1        | OLE4001                                  |                               |                               |                               |                               |
| ALDE4C2        | OLE4001<br>OLE4006                       | OLE4002<br>OLE4007            | OLE4003<br>OLE4008            | OLE4004<br>OLE4009            | OLE4005<br>OLE4010            |
| ALDE4C3        | OLE4001                                  |                               |                               |                               |                               |
| ALDE4C4        | OLE4001<br>OLE4006                       | OLE4002<br>OLE4007            | OLE4003<br>OLE4008            | OLE4004<br>OLE4009            | OLE4005<br>OLE4010            |
| ALDE4C5        | ILE4001                                  |                               |                               |                               |                               |
| ALDE4C6        | ILE4001<br>ILE4006                       | ILE4002<br>ILE4007            | ILE4003<br>ILE4008            | ILE4004<br>ILE4009            | ILE4005<br>ILE4010            |
| ALDE4C7        | ILE4001                                  |                               |                               |                               |                               |
| ALDE4C8        | ILE4001<br>ILE4006                       | ILE4002<br>ILE4007            | ILE4003<br>ILE4008            | ILE4004<br>ILE4009            | ILE4005<br>ILE4010            |

Table 7-2. FORTRAN Test Program Input/Output Files

| <u>PROGRAM</u> | <u>INPUT/OUTPUT FILES(FILENAME-UNIT NUMBER)</u> |            |            |            |            |
|----------------|-------------------------------------------------|------------|------------|------------|------------|
| FFDE220        | OFDE201-11                                      | OFDE202-12 | OFDE203-13 | OFDE204-14 | OFDE205-15 |
|                | OFDE206-16                                      | OFDE207-17 | OFDE208-18 | OFDE209-19 | OFDE20A-20 |
|                | OFDE211-21                                      | OFDE212-22 | OFDE213-23 | OFDE214-24 | OFDE215-25 |
|                | OFDE216-26                                      |            |            |            |            |
| FFDE250        | IFDE231-11                                      | IFDE232-12 | IFDE233-13 | IFDE234-14 | IFDE235-15 |
|                | IFDE236-16                                      | IFDE237-17 | IFDE238-18 | IFDE239-19 | IFDE23A-20 |
|                | IFDE241-21                                      | IFDE242-22 | IFDE243-23 | IFDE244-24 | IFDE245-25 |
|                | IFDE246-26                                      |            |            |            |            |
| FFDE420        | OFDE401-11                                      | OFDE402-12 | OFDE403-13 | OFDE404-14 | OFDE405-15 |
|                | OFDE406-16                                      | OFDE407-17 | OFDE408-18 | OFDE409-19 | OFDE40A-20 |
|                | OFDE411-21                                      | OFDE412-22 | OFDE413-23 | OFDE414-24 | OFDE415-25 |
|                | OFDE416-26                                      |            |            |            |            |
| FFDE450        | IFDE431-11                                      | IFDE432-12 | IFDE433-13 | IFDE434-14 | IFDE435-15 |
|                | IFDE436-16                                      | IFDE437-17 | IFDE438-18 | IFDE439-19 | IFDE43A-20 |
|                | IFDE441-21                                      | IFDE442-22 | IFDE443-23 | IFDE444-24 | IFDE445-25 |
|                | IFDE446-26                                      |            |            |            |            |



Table 7-3. Test Support Software File Types

| File Name                         | File Type |     |     |     |     |     |     |     |     |     |
|-----------------------------------|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|                                   | Ada       | CMN | CPL | DAT | DEC | FOR | JOV | SPA | TIM | USE |
| <u>Ada Test Support Files</u>     |           |     |     |     |     |     |     |     |     |     |
| ADADMP                            | X         |     |     |     |     |     |     |     |     |     |
| ADASPC                            |           |     |     |     |     |     |     |     |     |     |
| ADASYS                            |           |     |     |     |     |     |     |     |     | X   |
| ADATYP                            |           |     |     |     |     |     |     |     |     | X   |
| MATHFUN                           |           |     |     |     | X   |     |     |     |     |     |
| OURDMP                            | X         |     |     |     |     |     |     |     |     |     |
| OURSPC                            |           |     |     |     |     |     |     | X   | X   |     |
| OURSYS                            | X         |     |     |     |     |     |     | X   | X   |     |
| OURSYSR                           | X         |     |     |     |     |     |     | X   | X   |     |
| OURTYP                            |           |     |     |     |     |     |     | X   | X   |     |
| OURTYPR                           |           |     |     |     |     |     |     | X   | X   |     |
| <u>JOVIAL Test Support Files</u>  |           |     |     |     |     |     |     |     |     |     |
| DMPJOV                            |           |     |     |     |     |     | X   |     |     |     |
| JOVDMP                            |           |     | X   |     |     |     |     |     |     |     |
| JOVMATH                           |           |     |     | X   |     |     |     |     |     |     |
| JOVSPC                            |           |     | X   |     |     |     |     |     |     |     |
| JOVSYS                            |           |     |     |     |     |     | X   |     |     |     |
| JOVTYP                            |           |     |     |     |     |     |     |     |     | X   |
| OURJOV                            |           |     | X   |     |     |     |     |     |     |     |
| SPCJOV                            |           |     |     |     |     |     | X   |     |     |     |
| SYSJOV                            |           |     |     |     |     | X   |     |     |     |     |
| TMPDMP                            |           |     |     |     |     | X   |     |     |     |     |
| TYPJOV                            |           |     |     |     |     |     |     |     |     | X   |
| <u>FORTRAN Test Support Files</u> |           |     |     |     |     |     |     |     |     |     |
| FORDMP                            |           |     |     |     |     | X   |     |     |     |     |
| FORSYS                            |           |     |     |     |     | X   |     |     |     |     |
| FORTYP                            |           |     |     |     |     |     |     |     |     | X   |
| OURFOR                            |           | X   |     |     |     |     |     |     |     |     |
| SYSBLK                            |           |     |     |     |     | X   |     |     |     |     |
| SYSFOR                            |           | X   |     |     |     |     |     |     |     |     |
| TYPFOR                            |           |     |     |     |     |     |     |     |     | X   |

Table 7-4. Language-Specific Test Support Software Files

| <u>File Name</u> |                  |                  | <u>Description</u>                                                                                           |
|------------------|------------------|------------------|--------------------------------------------------------------------------------------------------------------|
| <u>Ada</u>       | <u>JOVIAL</u>    | <u>FORTRAN</u>   |                                                                                                              |
| OURSYS           | OURJOV           | OURFOR<br>SYSBLK | Package specification for numeric types, test control and reporting procedures, and scalar global variables. |
| ADASYS           | JOVSYS<br>SYSJOV | SYSFOR<br>FORSYS | Package body implementing procedures defined in OURSYS.                                                      |
| OURSYSR          |                  |                  | Same as OURSYS except range constraints are supplied for each numeric data type.                             |
| OURDMP           | JOVDMP           |                  | Package specification for global variable dump procedures.                                                   |
| ADADMP           | DMPJOV<br>TMPDMP | FORDMP           | Package body implementing procedures defined in OURDMP.                                                      |
| OURTYP           | JOVTYP           | FORTYP           | Package specifications for special numeric types and global variables, and for procedures that set/use them. |
| OURTYPR          |                  |                  | Same as OURTYP except range constraints are supplied for each numeric data type.                             |
| ADATYP           | TYPJOV           | TYPFOR           | Package body implementing procedures defined in OURTYP.                                                      |
| OURSPC           | JOVSPC           |                  | Package specification for composite data types and global variables and procedures that set/use them.        |
| ADASPC           | SPCJOV           |                  | Package body implementing procedures defined in OURSPC                                                       |
| MATHFUN          | JOVMATH          |                  | Package specifying standard names for math functions as referenced in the WHETSTONE benchmark.               |

## 8. Ada RUN-TIME ENVIRONMENT PERFORMANCE EVALUATION

The purpose of the ACPS test evaluation capability is to provide a mechanism to assist assessment of the performance impact of Ada run-time environments. An extensive set of test cases is provided in Ada along with a fewer number of functionally equivalent JOVIAL and FORTRAN tests. Five versions of each Ada test are supplied to reveal the effect of constraint checking, of exception handlers, and of various optimization options. The majority of tests are designed to exercise individual features of the Ada language. A consistent test methodology was developed and used to ensure to the extent possible that performance measurements taken are complete, accurate, repeatable, and isolated from irrelevant factors. A common language test support interface was defined which permitted development of a capability to automatically compare the run-time performance of different compilers across the three test languages.

Performance evaluations of Ada run-time environments must be made in accordance with the requirements of specific applications. Performance issues and selection criteria for Ada run-time environments are dependent not only upon the specific application concerns but on the general type of application. For example, for applications on computers with general purpose operating systems, the performance of Ada tasking may be of little concern. For DEC VAX/VMS, commonly available Ada implementations map all Ada tasks in an executing program into the same VMS process. Due to the virtual memory nature of VMS, this is an inherently inefficient implementation in that a single disk page-fault will halt all Ada tasks from executing until the fault is satisfied. The key performance concern will not be how efficiently tasking is implemented within a single VMS process but whether the Ada compiler permits use of VMS tasking system services. On the other hand, for Ada implementations on target machines such as the MIL-STD 1750A with no underlying executive or operating system, the implementation of Ada tasking will be of paramount concern.

Functionality and space/time requirements of capabilities provided are two aspects of run-time performance. There are many compiler-dependent features in Ada which are tested in isolation by the ACPS. If these features (e.g., INLINE pragma, representation specifications) are not supported by a compiler, then for certain applications, that compiler can be considered on an a priori basis to be too inefficient to be used. The ACPS only tests features of Ada that are described in the LRM. Some compilers may provide additional pragmas and packages that could have a significant positive impact on performance for specific applications. These compiler-dependent performance enhancements must be considered in any performance evaluation of Ada run-time environments.

The ACPS consists of black box tests designed to test language feature implementation rather than compiler implementation. Just as it is practically impossible to develop black box tests to debug compilers, it is also practically impossible to develop black box benchmarks to explore all performance concerns for a given Ada compiler. Additional tests will need to be developed to investigate the performance ramifications of individual run-time system architectures.

In light of the above comments, it is still our perception that the ACPS test evaluation capability can play an important role in Ada run-time environment evaluations. The performance measures provided can give the user a good first cut estimate of the run-time efficiency of an Ada implementation. They can also furnish the user with a basis for understanding the performance behavior of application oriented benchmarks. Numerous comparison options are provided. One can automatically compare Ada implementations for the same machine architecture to provide quantifiable evidence to justify selection of a clearly superior implementation or to identify several implementations for detailed consideration. One can also get rough estimates of the resource impact of using Ada versus FORTRAN and JOVIAL for those language features for which functionally equivalent tests exist within the ACPS.

In relating performance evaluation to a specific application, a user can select various tests from the ACPS and by varying the test duration can generate a composite test sequence modeling the expected frequency of language feature usage within the application. This composite test sequence can then be used with the test comparison capability to compare the performance of different Ada implementations. The ACPS can also be used in applications planning to demonstrate which features of Ada are inefficiently implemented. This information can then be used in several ways. It can be used as justification for avoiding certain language features or processing options. It can focus attention to those areas of the compiler that must be improved and provide a mechanism for measuring improvements or degradations in run-time performance as a compiler implementation evolves. The ACPS can also be used to assist determination as to whether existing JOVIAL or FORTRAN modules should be converted to Ada by showing the probable performance impact of straightforward translation to Ada as would likely be obtained through use of a language translation tool.

APPENDIX A  
ANSI TAPE FORMAT

Four tapes are written in ANSI ASCII "a" character format as volumes ACPS, ACPS02, ACPS03, ACPS04, and ACPS05. The tapes are structured as a multi-file, multi-volume configuration. The different files represent collections of ACPS test programs. Each collection of similar files is grouped together on the tape. Tables A-1 through A-5 contain a complete list of the files in the order they appear on each tape. The ordering of files in a row of each figure is from left to right.

The tapes were written in a VAX/VMS environment at a density of 1600 bpi using the copy command.

Each tape has the following format:

14 - 18 feet of blank tape  
BOT (Beginning Of Tape) mark  
VOL1 label = ACPS

HDR1 label  
HDR2 label  
TM (Tape Mark) - start of file  
<<file 1 block described below>>  
TM - end of file  
EOF1 label  
EOF2 label

TM - inter-file

HDR1 label  
HDR2 label  
TM - end of file  
EOF1 label  
EOF2 label

TM - inter-file  
... other file blocks ...  
TM - inter-file

HDR1 label  
HDR2 label  
TM  
<<file n blocks described below>>  
TM  
EOF1 label  
EOF2 label

TM - end of tape 1  
TM - end of tape 2  
Scratch Tape  
EOT (End Of Tape) mark

The HDR1 label is a file description block providing file identifier information and creation dates.

The HDR2 label is a record description block describing the record format of the specific file.

The file blocks are at most 1024 characters in length. Each record within a file block represents a line of text. The first four characters of each record indicate the length of the record. This length includes the four-character length count. For example, a blank line would be represented as "0004" and a line containing the characters "ADA" would be represented as "0007ADA."

The files on the tapes are organized as follows:

Ada test files on volumes ACPS, ACPS02, APC503, and ACPS04  
FORTRAN test files on volumes ACPS04 and ACPS05  
JOVIAL test files on volume ACPS05  
Test comparison tool files on volume ACPS05

**Table A-1 ACPS ANSI Tape Contents Volume ACPS**

|             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|
| AA00000.ADA | AA0P000.ADA | ADADMP.ADA  | ADAPARM.ADA | ADASPC.ADA  | AF03500.ADA |
| AF03501.ADA | AF03502.ADA | AF03503.ADA | AF03504.ADA | AF03509.ADA | AF03510.ADA |
| AF03511.ADA | AF03512.ADA | AF03513.ADA | AF03514.ADA | AF03517.ADA | AF03518.ADA |
| AF03519.ADA | AF03550.ADA | AF03600.ADA | AF03601.ADA | AF03602.ADA | AF03603.ADA |
| AF03604.ADA | AF03605.ADA | AF03606.ADA | AF03607.ADA | AF03608.ADA | AF03609.ADA |
| AF03610.ADA | AF03611.ADA | AF03612.ADA | AF03613.ADA | AF03614.ADA | AF03615.ADA |
| AF03616.ADA | AF03617.ADA | AF03618.ADA | AF03619.ADA | AF03620.ADA | AF03630.ADA |
| AF03631.ADA | AF03632.ADA | AF03633.ADA | AF03634.ADA | AF03635.ADA | AF03636.ADA |
| AF03637.ADA | AF03638.ADA | AF03639.ADA | AF03641.ADA | AF03642.ADA | AF03643.ADA |
| AF03644.ADA | AF03645.ADA | AF03646.ADA | AF03647.ADA | AF03648.ADA | AF03649.ADA |
| AF03650.ADA | AF03700.ADA | AF03701.ADA | AF03702.ADA | AF03703.ADA | AF03704.ADA |
| AF03800.ADA | AF03801.ADA | AF03802.ADA | AF03803.ADA | AF03804.ADA | AF03805.ADA |
| AF04120.ADA | AF04121.ADA | AF04122.ADA | AF04123.ADA | AF04124.ADA | AF04125.ADA |
| AF04126.ADA | AF04127.ADA | AF04129.ADA | AF0412B.ADA | AF04130.ADA | AF04131.ADA |
| AF04132.ADA | AF04133.ADA | AF0413D.ADA | AF0413H.ADA | AF0413I.ADA | AF0413J.ADA |
| AF0413K.ADA | AF04310.ADA | AF04311.ADA | AF04312.ADA | AF04510.ADA | AF04511.ADA |
| AF04512.ADA | AF04513.ADA | AF04514.ADA | AF04515.ADA | AF04516.ADA | AF04517.ADA |
| AF04518.ADA | AF04519.ADA | AF0451A.ADA | AF0451B.ADA | AF0451C.ADA | AF0451D.ADA |
| AF0451E.ADA | AF0451F.ADA | AF0451G.ADA | AF0451H.ADA | AF0451I.ADA | AF0451J.ADA |
| AF0451V.ADA | AF0451W.ADA | AF0451X.ADA | AF0451Y.ADA | AF0451Z.ADA | AF04520.ADA |
| AF04521.ADA | AF04522.ADA | AF04527.ADA | AF04529.ADA | AF04530.ADA | AF04531.ADA |
| AF04532.ADA | AF04533.ADA | AF04534.ADA | AF04535.ADA | AF04536.ADA | AF04537.ADA |
| AF04538.ADA | AF04539.ADA | AF0453A.ADA | AF0453B.ADA | AF0453C.ADA | AF04540.ADA |
| AF04541.ADA | AF04550.ADA | AF04551.ADA | AF04552.ADA | AF04553.ADA | AF04554.ADA |
| AF04555.ADA | AF04556.ADA | AF04557.ADA | AF04558.ADA | AF04559.ADA | AF0455N.ADA |
| AF04550.ADA | AF04560.ADA | AF04562.ADA | AF04563.ADA | AF04600.ADA | AF04601.ADA |
| AF04602.ADA | AF0460E.ADA | AF0460F.ADA | AF0460G.ADA | AF0460H.ADA | AF0460I.ADA |
| AF0460J.ADA | AF0460M.ADA | AF05200.ADA | AF05201.ADA | AF05202.ADA | AF05203.ADA |
| AF05204.ADA | AF05205.ADA | AF05206.ADA | AF05207.ADA | AF05208.ADA | AF05209.ADA |
| AF0520A.ADA | AF0520B.ADA | AF0520M.ADA | AF05200.ADA | AF0520R.ADA | AF0520S.ADA |
| AF05210.ADA | AF05211.ADA | AF05212.ADA | AF05213.ADA | AF05214.ADA | AF05215.ADA |
| AF0521H.ADA | AF0521I.ADA | AF0521J.ADA | AF0521K.ADA | AF0521L.ADA | AF0521N.ADA |
| AF05300.ADA | AF05301.ADA | AF05302.ADA | AF05303.ADA | AF05304.ADA | AF05305.ADA |
| AF05306.ADA | AF05307.ADA | AF05308.ADA | AF05400.ADA | AF05401.ADA | AF05402.ADA |
| AF05403.ADA | AF05404.ADA | AF05405.ADA | AF05406.ADA | AF05407.ADA | AF05408.ADA |
| AF05501.ADA | AF05502.ADA | AF05503.ADA | AF05504.ADA | AF05505.ADA | AF05506.ADA |
| AF05507.ADA | AF05508.ADA | AF05509.ADA | AF0550A.ADA | AF0550B.ADA | AF0550C.ADA |
| AF0550D.ADA | AF0550E.ADA | AF0550F.ADA | AF06001.ADA | AF06009.ADA | AF06010.ADA |
| AF06011.ADA | AF06013.ADA | AF06014.ADA | AF06015.ADA | AF06016.ADA | AF06017.ADA |
| AF06018.ADA | AF06019.ADA | AF06022.ADA | AF06023.ADA | AF06024.ADA | AF06025.ADA |
| AF06026.ADA | AF06027.ADA | AF06028.ADA | AF06029.ADA | AF06030.ADA | AF06031.ADA |
| AF06032.ADA | AF06033.ADA | AF06043.ADA | AF06044.ADA | AF06045.ADA | AF06046.ADA |
| AF06047.ADA | AF06048.ADA | AF06049.ADA | AF06050.ADA | AF06051.ADA | AF06052.ADA |
| AF06053.ADA | AF06060.ADA | AF06061.ADA | AF06062.ADA | AF06063.ADA | AF06064.ADA |
| AF06065.ADA | AF06066.ADA | AF06067.ADA | AF06068.ADA | AF06069.ADA | AF06070.ADA |
| AF06071.ADA | AF06072.ADA | AF06073.ADA | AF06074.ADA | AF06075.ADA | AF06076.ADA |
| AF06077.ADA | AF06078.ADA | AF06079.ADA | AF06100.ADA | AF06101.ADA | AF06108.ADA |
| AF06109.ADA | AF06110.ADA | AF06111.ADA | AF06112.ADA | AF06113.ADA | AF06114.ADA |
| AF06115.ADA | AF06116.ADA | AF06117.ADA | AF06118.ADA | AF06119.ADA | AF06122.ADA |
| AF06132.ADA | AF06133.ADA | AF06134.ADA | AF06135.ADA | AF06136.ADA | AF06137.ADA |
|             |             |             |             |             |             |

Table A-1 ACPS ANSI Tape Contents Volume ACPS (continued)

|             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|
| AF06817.ADA | AF06818.ADA | AF06819.ADA | AF06820.ADA | AF06821.ADA | AF06822.ADA |
| AF06823.ADA | AF06824.ADA | AF06825.ADA | AF09500.ADA | AF09501.ADA | AF09502.ADA |
| AF09503.ADA | AF09504.ADA | AF09505.ADA | AF09506.ADA | AF09507.ADA | AF09508.ADA |
| AF09509.ADA | AF09600.ADA | AF09601.ADA | AF09602.ADA | AF09603.ADA | AF09604.ADA |
| AF09605.ADA | AF09606.ADA | AF09607.ADA | AF09710.ADA | AF09711.ADA | AF09712.ADA |
| AF09713.ADA | AF09720.ADA | AF09721.ADA | AF09731.ADA | AF09900.ADA | AF09901.ADA |
| AF09902.ADA | AF09903.ADA | AF09B01.ADA | AF0C100.ADA | AF0C101.ADA | AF0C102.ADA |
| AF0C103.ADA | AF0C300.ADA | AF0C301.ADA | AF0C302.ADA | AF0C303.ADA | AF0C304.ADA |
| AF0C305.ADA | AF0C306.ADA | AF0C307.ADA | AF0D720.ADA | AF0D721.ADA | AF0D727.ADA |
| AF0D728.ADA | AF0D729.ADA | AF0D72D.ADA | AF0P000.ADA | AFD3551.ADA | AFD412A.ADA |
| AFD412C.ADA | AFD412D.ADA | AFD4135.ADA | AFD4136.ADA | AFD4137.ADA | AFD4138.ADA |
| AFD4139.ADA | AFD413A.ADA | AFD413B.ADA | AFD413C.ADA | AFD413E.ADA | AFD413G.ADA |
| AFD451K.ADA | AFD451L.ADA | AFD451M.ADA | AFD451N.ADA | AFD451O.ADA | AFD451P.ADA |
| AFD451Q.ADA | AFD451R.ADA | AFD451S.ADA | AFD4523.ADA | AFD4524.ADA | AFD4525.ADA |
| AFD4526.ADA | AFD4528.ADA | AFD452A.ADA | AFD455D.ADA | AFD455E.ADA | AFD455F.ADA |
| AFD455G.ADA | AFD455I.ADA | AFD455J.ADA | AFD455K.ADA | AFD455L.ADA | AFD4556.ADA |
| AFD4567.ADA | AFD4568.ADA | AFD4569.ADA | AFD4603.ADA | AFD4604.ADA | AFD4605.ADA |
| AFD4606.ADA | AFD4607.ADA | AFD4608.ADA | AFD4609.ADA | AFD460A.ADA | AFD460B.ADA |
| AFD460K.ADA | AFD460L.ADA | AFD460N.ADA | AFD460O.ADA | AFD4800.ADA | AFD4801.ADA |
| AFD4802.ADA | AFD4803.ADA | AFD4804.ADA | AFD520C.ADA | AFD520D.ADA | AFD520E.ADA |
| AFD520F.ADA | AFD520G.ADA | AFD520H.ADA | AFD520I.ADA | AFD520J.ADA | AFD520N.ADA |
| AFD520P.ADA | AFD520Q.ADA | AFD5218.ADA | AFD5219.ADA | AFD521A.ADA | AFD521B.ADA |
| AFD521C.ADA | AFD521D.ADA | AFD521E.ADA | AFD521F.ADA | AFD521K.ADA | AFD521M.ADA |
| AFD521O.ADA | AFD521P.ADA | AFD6201.ADA | AFD6209.ADA | AFD6210.ADA | AFD6211.ADA |
| AFD6213.ADA | AFD6214.ADA | AFD6215.ADA | AFD6216.ADA | AFD6217.ADA | AFD6218.ADA |
| AFD6219.ADA | AFD6222.ADA | AFD6223.ADA | AFD6224.ADA | AFD6225.ADA | AFD6226.ADA |
| AFD6227.ADA | AFD6228.ADA | AFD6229.ADA | AFD6230.ADA | AFD6231.ADA | AFD6232.ADA |
| AFD6233.ADA | AFD6243.ADA | AFD6244.ADA | AFD6245.ADA | AFD6246.ADA | AFD6247.ADA |
| AFD6248.ADA | AFD6249.ADA | AFD6250.ADA | AFD6251.ADA | AFD6252.ADA | AFD6253.ADA |
| AFD6260.ADA | AFD6261.ADA | AFD6262.ADA | AFD6263.ADA | AFD6264.ADA | AFD6265.ADA |
| AFD6266.ADA | AFD6267.ADA | AFD6268.ADA | AFD6269.ADA | AFD6270.ADA | AFD6271.ADA |
| AFD6272.ADA | AFD6273.ADA | AFD6274.ADA | AFD6275.ADA | AFD6276.ADA | AFD6277.ADA |
| AFD6278.ADA | AFD6279.ADA | AFD6300.ADA | AFD6301.ADA | AFD6308.ADA | AFD6309.ADA |
| AFD6310.ADA | AFD6311.ADA | AFD6312.ADA | AFD6313.ADA | AFD6314.ADA | AFD6315.ADA |
| AFD6316.ADA | AFD6317.ADA | AFD6318.ADA | AFD6319.ADA | AFD6322.ADA | AFD6323.ADA |
| AFD6333.ADA | AFD6334.ADA | AFD6335.ADA | AFD6336.ADA | AFD6337.ADA | AFD6338.ADA |
| AFD6339.ADA | AFD6340.ADA | AFD6342.ADA | AFD6343.ADA | AFD6344.ADA | AFD6345.ADA |
| AFD6346.ADA | AFD6347.ADA | AFD6348.ADA | AFD6349.ADA | AFD6350.ADA | AFD6352.ADA |
| AFD6353.ADA | AFD6354.ADA | AFD6355.ADA | AFD6356.ADA | AFD6357.ADA | AFD6358.ADA |
| AFD6359.ADA | AFD6360.ADA | AFD6362.ADA | AFD6363.ADA | AFD6364.ADA | AFD6365.ADA |
| AFD6366.ADA | AFD6367.ADA | AFD6368.ADA | AFD6369.ADA | AFD6370.ADA | AFD6372.ADA |
| AFD6373.ADA | AFD6374.ADA | AFD6375.ADA | AFD6376.ADA | AFD6377.ADA | AFD6378.ADA |
| AFD6379.ADA | AFD6380.ADA | AFD6382.ADA | AFD6383.ADA | AFD6384.ADA | AFD6385.ADA |
| AFD6386.ADA | AFD6387.ADA | AFD6388.ADA | AFD6389.ADA | AFD6390.ADA | AFD680G.ADA |
| AFD680H.ADA | AFD680I.ADA | AFD680J.ADA | AFD9000.ADA | AFD9200.ADA | AFD9C00.ADA |
| AFD9C01.ADA | AFD9C02.ADA | AFDC104.ADA | AFDC105.ADA | AFDC106.ADA | AFDC107.ADA |
| AFDC310.ADA | AFDC311.ADA | AFDC313.ADA | AFDC314.ADA | AFDD600.ADA | AFDD601.ADA |
| AFDD602.ADA | AFDD603.ADA | AFDD604.ADA | AFDD605.ADA | AFDD606.ADA | AFDD607.ADA |
| AFDD609.ADA | AFDD610.ADA | AFDD611.ADA | AFDD722.ADA | AFDD723.ADA | AFDD724.ADA |
| AFDD725.ADA | AFDD72A.ADA | AFDD72B.ADA | AFDD72C.ADA | AFDD72E.ADA | AFDD72F.ADA |
| AFDD72G.ADA | AFDD72H.ADA | AFDD72I.ADA | AFDDA01.ADA | AFDDA02.ADA | AFDE000.ADA |
| AFDE201.ADA | AFDE202.ADA | AFDE203.ADA | AFDE204.ADA | AFDE205.ADA | AFDE206.ADA |
| AFDE207.ADA | AFDE208.ADA | AFDE209.ADA | AFDE20A.ADA | AFDE211.ADA | AFDE212.ADA |
| AFDE213.ADA | AFDE214.ADA | AFDE215.ADA | AFDE216.ADA | AFDE220.ADA | AFDE231.ADA |
| AFDE232.ADA | AFDE233.ADA | AFDE234.ADA | AFDE235.ADA | AFDE236.ADA | AFDE237.ADA |
| AFDE238.ADA | AFDE239.ADA | AFDE23A.ADA | AFDE241.ADA | AFDE242.ADA | AFDE243.ADA |
| AFDE244.ADA | AFDE245.ADA | AFDE246.ADA | AFDE250.ADA | AFDE401.ADA | AFDE402.ADA |
| AFDE403.ADA | AFDE404.ADA | AFDE405.ADA | AFDE406.ADA | AFDE407.ADA | AFDE408.ADA |
| AFDE409.ADA | AFDE40A.ADA | AFDE411.ADA | AFDE412.ADA | AFDE413.ADA | AFDE414.ADA |
| AFDE415.ADA | AFDE416.ADA | AFDE420.ADA | AFDE431.ADA | AFDE432.ADA | AFDE433.ADA |
| AFDE434.ADA | AFDE435.ADA | AFDE436.ADA | AFDE437.ADA | AFDE438.ADA | AFDE439.ADA |
| AFDE43A.ADA | AFDE441.ADA | AFDE442.ADA | AFDE443.ADA | AFDE444.ADA | AFDE445.ADA |
| AFDE446.ADA | AFDE450.ADA | AFDF000.ADA | AFDF001.ADA | AFDF002.ADA | AFDF003.ADA |
| AFDF004.ADA | AFDF005.ADA | AFIRST.ADA  | AFM9A00.ADA | AFM9A01.ADA | AFM9A02.ADA |
| AFM9A03.ADA | AFMB000.ADA | AFMB001.ADA | AFMB002.ADA | AFMB003.ADA | AFMB004.ADA |
| AFMB005.ADA | AFMB006.ADA | AFMB007.ADA | AFMB008.ADA | AFMB009.ADA | AFMB010.ADA |
| AFMB011.ADA | AFMB012.ADA | AFMB013.ADA | AFMB014.ADA | AFMB015.ADA | AFMB016.ADA |



Table A-1 ACPS ANSI Tape Contents Volume ACPS (continued)

|             |             |              |             |             |             |
|-------------|-------------|--------------|-------------|-------------|-------------|
| AFMB017.ADA | AFMB018.ADA | AFMB019.ADA  | AFMB020.ADA | AFMB021.ADA | AFMB022.ADA |
| AFMB023.ADA | AFMB024.ADA | AFMB025.ADA  | AFMB026.ADA | AFMB027.ADA | AFMB028.ADA |
| AFMB029.ADA | AFMB030.ADA | AFMB031.ADA  | AFMB032.ADA | AFMB033.ADA | AFMB034.ADA |
| AFMB035.ADA | AFMB036.ADA | AFMB037.ADA  | AFMB038.ADA | AFMB039.ADA | AFMB040.ADA |
| AFMB041.ADA | AFMB042.ADA | AFMB043.ADA  | AFMB044.ADA | AFN9300.ADA | AFN9301.ADA |
| AFN9302.ADA | AFN9303.ADA | AFN9510.ADA  | AFN9511.ADA | AFN9610.ADA | AFN9611.ADA |
| AFN9612.ADA | AFN9613.ADA | AGD0000C.ADA | AGD0000.ADA | AGD0000.ADA | AGD0001.ADA |
| AGD0002.ADA | AGD0003.ADA | AGD0004.ADA  | AGD0005.ADA | AGD0006.ADA | AGD0007.ADA |
| AGD0008.ADA | AGD0009.ADA | AGD000D.ADA  | AGD000E.ADA | AGD0019.ADA | AGD0029.ADA |
| AGD0039.ADA | AGD0049.ADA | AGN000F.ADA  | AGN000G.ADA | AGN000H.ADA | AGN000I.ADA |
| AGN000J.ADA | AGN000K.ADA | AL09000.ADA  | AL09100.ADA | AL09101.ADA | AL09111.ADA |
| AL09121.ADA | AL09131.ADA | AL0P000.ADA  | ALD9200.ADA | ALD9202.ADA | ALD9203.ADA |
| ALD9212.ADA | ALD9213.ADA | ALD9222.ADA  | ALD9223.ADA | ALD9232.ADA | ALD9233.ADA |
| ALDE000.ADA | ALDE2B1.ADA | ALDE2B2.ADA  | ALDE2C1.ADA | ALDE2C2.ADA | ALDE2C5.ADA |
| ALDE2C6.ADA | ALDE4B1.ADA | ALDE4B2.ADA  | ALDE4C1.ADA | ALDE4C2.ADA | ALDE4C5.ADA |
| ALDE4C6.ADA | A000001.ADA | A000002.ADA  | A000102.ADA | A000103.ADA | A000104.ADA |
| A000107.ADA | A000108.ADA | A000109.ADA  | A000112.ADA | A000113.ADA | A000114.ADA |
| A000202.ADA | A000203.ADA | A000204.ADA  | A000207.ADA | A000208.ADA | A000209.ADA |
| A000300.ADA | A000305.ADA | A000310.ADA  | A000311.ADA | A000312.ADA | A000313.ADA |
| A000314.ADA | A000315.ADA | A000316.ADA  | A000317.ADA | A000318.ADA | A000319.ADA |
| A000320.ADA | A000321.ADA | A000322.ADA  | A000323.ADA | A000324.ADA | A000325.ADA |
| A000326.ADA | A000327.ADA | A000328.ADA  | A000329.ADA | A000330.ADA | A000331.ADA |
| A000332.ADA | A000333.ADA | A000334.ADA  | A000335.ADA | A000336.ADA | A000337.ADA |
| A000338.ADA | A000339.ADA | A000340.ADA  | A000341.ADA | A000342.ADA | A000343.ADA |
| A000347.ADA | A000348.ADA | A000349.ADA  | A000350.ADA | A000351.ADA | A000352.ADA |
| A000353.ADA | A000354.ADA | A000355.ADA  | A000356.ADA | A000357.ADA | A000358.ADA |
| A000359.ADA | A000360.ADA | A000361.ADA  | A000362.ADA | A000363.ADA | A000364.ADA |
| A000365.ADA | A000366.ADA | A000367.ADA  | A000368.ADA | A000369.ADA | A00036A.ADA |
| A00036B.ADA | A00036F.ADA | A00036G.ADA  | A00036H.ADA | A00036I.ADA | A00036J.ADA |
| A00036K.ADA | A00036L.ADA | A00036M.ADA  | A00036N.ADA | A00036U.ADA | A00036V.ADA |
| A00036W.ADA | A000374.ADA | A000375.ADA  | A000376.ADA | A000377.ADA | A000378.ADA |
| A000390.ADA | A000391.ADA | A000402.ADA  | A000403.ADA | A000404.ADA | A000500.ADA |
| A000502.ADA | A000503.ADA | A000504.ADA  | A000507.ADA | A000508.ADA | A000509.ADA |
| A000512.ADA | A000513.ADA | A000514.ADA  | A000517.ADA | A000518.ADA | A000519.ADA |
| A000602.ADA | A000603.ADA | A000604.ADA  | A000605.ADA | A000606.ADA | A000607.ADA |
| A000702.ADA | A000703.ADA | A000704.ADA  | A000705.ADA | A000706.ADA | A000707.ADA |
| A000708.ADA | A000709.ADA | A000710.ADA  | A000711.ADA | A000713.ADA | A000714.ADA |
| A000715.ADA | A000716.ADA | A000717.ADA  | A000718.ADA | A000719.ADA | A000720.ADA |
| A000721.ADA | A00P000.ADA | A0D0344.ADA  | A0D0345.ADA | A0D0346.ADA | A0D036C.ADA |
| A0D036D.ADA | A0D036E.ADA | A0D0360.ADA  | A0D036P.ADA | A0D036Q.ADA | A0D036R.ADA |
| A0D036S.ADA | A0D036T.ADA | A0D036X.ADA  | A0D036Y.ADA | A0D036Z.ADA | A0D0370.ADA |
| A0D0371.ADA | A0D0372.ADA | A0D0373.ADA  | A0D0380.ADA | A0D0381.ADA | A0D0382.ADA |
| A0D0383.ADA | A0D0523.ADA | A0D0524.ADA  | A0D0525.ADA | A0D0526.ADA | A0D0527.ADA |
| A0D0528.ADA | A0D0529.ADA | CA00000.ADA  | CA0P000.ADA | CF03500.ADA | CF03501.ADA |
| CF03502.ADA | CF03503.ADA | CF03504.ADA  | CF03509.ADA | CF03510.ADA | CF03511.ADA |
| CF03512.ADA | CF03513.ADA | CF03514.ADA  | CF03517.ADA | CF03518.ADA | CF03519.ADA |
| CF03550.ADA | CF03600.ADA | CF03601.ADA  | CF03602.ADA | CF03603.ADA | CF03604.ADA |
| CF03605.ADA | CF03606.ADA | CF03607.ADA  | CF03608.ADA | CF03609.ADA | CF03610.ADA |
| CF03611.ADA | CF03612.ADA | CF03613.ADA  | CF03614.ADA | CF03615.ADA | CF03616.ADA |
| CF03617.ADA | CF03618.ADA | CF03619.ADA  | CF03620.ADA | CF03630.ADA | CF03631.ADA |
| CF03632.ADA | CF03633.ADA | CF03634.ADA  | CF03635.ADA | CF03636.ADA | CF03637.ADA |
| CF03638.ADA | CF03639.ADA | CF03641.ADA  | CF03642.ADA | CF03643.ADA | CF03644.ADA |
| CF03645.ADA | CF03646.ADA | CF03647.ADA  | CF03648.ADA | CF03649.ADA | CF03650.ADA |
| CF03700.ADA | CF03701.ADA | CF03702.ADA  | CF03703.ADA | CF03704.ADA | CF03800.ADA |
| CF03801.ADA | CF03802.ADA | CF03803.ADA  | CF03804.ADA | CF03805.ADA | CF04120.ADA |
| CF04121.ADA | CF04122.ADA | CF04123.ADA  | CF04124.ADA | CF04125.ADA | CF04126.ADA |
| CF04127.ADA | CF04129.ADA | CF0412B.ADA  | CF04130.ADA | CF04131.ADA | CF04132.ADA |
| CF04133.ADA | CF0413D.ADA | CF0413H.ADA  | CF0413I.ADA | CF0413J.ADA | CF0413K.ADA |
| CF04310.ADA | CF04311.ADA | CF04312.ADA  | CF04510.ADA | CF04511.ADA | CF04512.ADA |
| CF04513.ADA | CF04514.ADA | CF04515.ADA  | CF04516.ADA | CF04517.ADA | CF04518.ADA |
| CF04519.ADA | CF0451A.ADA | CF0451B.ADA  | CF0451C.ADA | CF0451D.ADA | CF0451E.ADA |
| CF0451F.ADA | CF0451G.ADA | CF0451H.ADA  | CF0451I.ADA | CF0451J.ADA | CF0451V.ADA |
| CF0451W.ADA | CF0451X.ADA | CF0451Y.ADA  | CF0451Z.ADA | CF04520.ADA | CF04521.ADA |
| CF04522.ADA | CF04527.ADA | CF04529.ADA  | CF04530.ADA | CF04531.ADA | CF04532.ADA |
| CF04533.ADA | CF04534.ADA | CF04535.ADA  | CF04536.ADA | CF04537.ADA | CF04538.ADA |
| CF04539.ADA | CF0453A.ADA | CF0453B.ADA  | CF0453C.ADA | CF04540.ADA | CF04541.ADA |
| CF04550.ADA | CF04551.ADA | CF04552.ADA  | CF04553.ADA | CF04554.ADA | CF04555.ADA |

Table A-1 ACPS ANSI Tape Contents Volume ACPS (continued)

[illegible]

Table A-1 ACPS ANSI Tape Contents Volume ACPS (continued)

|             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|
| CFD6222.ADA | CFD6223.ADA | CFD6224.ADA | CFD6225.ADA | CFD6226.ADA | CFD6227.ADA |
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| CFD6249.ADA | CFD6250.ADA | CFD6251.ADA | CFD6252.ADA | CFD6253.ADA | CFD6260.ADA |
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| CFDE239.ADA | CFDE23A.ADA | CFDE241.ADA | CFDE242.ADA | CFDE243.ADA | CFDE244.ADA |
| CFDE245.ADA | CFDE246.ADA | CFDE250.ADA | CFDE401.ADA | CFDE402.ADA | CFDE403.ADA |
| CFDE404.ADA | CFDE405.ADA | CFDE406.ADA | CFDE407.ADA | CFDE408.ADA | CFDE409.ADA |
| CFDE40A.ADA | CFDE411.ADA | CFDE412.ADA | CFDE413.ADA | CFDE414.ADA | CFDE415.ADA |
| CFDE416.ADA | CFDE420.ADA | CFDE431.ADA | CFDE432.ADA | CFDE433.ADA | CFDE434.ADA |
| CFDE435.ADA | CFDE436.ADA | CFDE437.ADA | CFDE438.ADA | CFDE439.ADA | CFDE43A.ADA |
| CFDE441.ADA | CFDE442.ADA | CFDE443.ADA | CFDE444.ADA | CFDE445.ADA | CFDE446.ADA |
| CFDE450.ADA | CFDF000.ADA | CFDF001.ADA | CFDF002.ADA | CFDF003.ADA | CFDF004.ADA |
| CFDF005.ADA | CFM9A00.ADA | CFM9A01.ADA | CFM9A02.ADA | CFM9A03.ADA | CFM9A04.ADA |
| CFMB001.ADA | CFMB002.ADA | CFMB003.ADA | CFMB004.ADA | CFMB005.ADA | CFMB010.ADA |
| CFMB011.ADA | CFMB012.ADA | CFMB013.ADA | CFMB014.ADA | CFMB015.ADA | CFMB016.ADA |
| CFMB017.ADA | CFMB018.ADA | CFMB019.ADA | CFMB020.ADA | CFMB029.ADA | CFMB030.ADA |
| CFMB031.ADA | CFMB032.ADA | CFMB033.ADA | CFMB034.ADA | CFMB035.ADA | CFMB036.ADA |
| CFMB041.ADA | CFMB042.ADA | CFMB043.ADA | CFMB044.ADA | CFN9300.ADA | CFN9301.ADA |
| CFN9302.ADA | CFN9303.ADA | CFN9510.ADA | CFN9511.ADA | CFN9610.ADA | CFN9611.ADA |
| CFN9612.ADA | CFN9613.ADA | CG0000C.ADA | CG0P000.ADA | CGD0000.ADA | CGD0001.ADA |
| CGD0002.ADA | CGD0003.ADA | CGD0004.ADA | CGD0005.ADA | CGD0006.ADA | CGD0007.ADA |
| CGD0008.ADA | CGD0009.ADA | CGD000D.ADA | CGD000E.ADA | CGD0019.ADA | CGD0029.ADA |
| CGD0039.ADA | CGD0049.ADA | CGN000F.ADA | CGN000G.ADA | CGN000H.ADA | CGN000I.ADA |
| CGN000J.ADA | CGN000K.ADA | CL09000.ADA | CL09100.ADA | CL09101.ADA | CL09111.ADA |
| CL09121.ADA | CL09131.ADA | CL0P000.ADA | CLD9200.ADA | CLD9202.ADA | CLD9203.ADA |
| CLD9212.ADA | CLD9213.ADA | CLD9222.ADA | CLD9223.ADA | CLD9232.ADA | CLD9233.ADA |
| CLDE000.ADA | CLDE2B1.ADA | CLDE2B2.ADA | CLDE2C1.ADA | CLDE2C2.ADA | CLDE2C5.ADA |
| CLDE2C6.ADA | CLDE4B1.ADA | CLDE4B2.ADA | CLDE4C1.ADA | CLDE4C2.ADA | CLDE4C5.ADA |
| CLDE4C6.ADA | C000001.ADA | C000002.ADA | C000102.ADA | C000103.ADA | C000104.ADA |
| C000107.ADA | C000108.ADA | C000109.ADA | C000112.ADA | C000113.ADA | C000114.ADA |
| C000202.ADA | C000203.ADA | C000204.ADA | C000207.ADA | C000208.ADA | C000209.ADA |
| C000300.ADA | C000305.ADA | C000310.ADA | C000311.ADA | C000312.ADA | C000313.ADA |
| C000314.ADA | C000315.ADA | C000316.ADA | C000317.ADA | C000318.ADA | C000319.ADA |
| C000320.ADA | C000321.ADA | C000322.ADA | C000323.ADA | C000324.ADA | C000325.ADA |
| C000326.ADA | C000327.ADA | C000328.ADA | C000329.ADA | C000330.ADA | C000331.ADA |
| C000332.ADA | C000333.ADA | C000334.ADA | C000335.ADA | C000336.ADA | C000337.ADA |
| C000338.ADA | C000339.ADA | C000340.ADA | C000341.ADA | C000342.ADA | C000343.ADA |
| C000347.ADA | C000348.ADA | C000349.ADA | C000350.ADA | C000351.ADA | C000352.ADA |
| C000353.ADA | C000354.ADA | C000355.ADA | C000356.ADA | C000357.ADA | C000358.ADA |
| C000359.ADA | C000360.ADA | C000361.ADA | C000362.ADA | C000363.ADA | C000364.ADA |
| C000365.ADA | C000366.ADA | C000367.ADA | C000368.ADA | C000369.ADA | C00036A.ADA |
| C00036B.ADA | C00036F.ADA | C00036G.ADA | C00036H.ADA | C00036I.ADA | C00036J.ADA |
| C00036K.ADA | C00036L.ADA | C00036M.ADA | C00036N.ADA | C00036U.ADA | C00036V.ADA |

Table A-1 ACPS ANSI Tape Contents Volume ACPS (continued)

|             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|
| C00036H.ADA | C000374.ADA | C000375.ADA | C000376.ADA | C000377.ADA | C000378.ADA |
| C000390.ADA | C000391.ADA | C000402.ADA | C000403.ADA | C000404.ADA | C000500.ADA |
| C000502.ADA | C000503.ADA | C000504.ADA | C000507.ADA | C000508.ADA | C000509.ADA |
| C000512.ADA | C000513.ADA | C000514.ADA | C000517.ADA | C000518.ADA | C000519.ADA |
| C000602.ADA | C000603.ADA | C000604.ADA | C000605.ADA | C000606.ADA | C000607.ADA |
| C000702.ADA | C000703.ADA | C000704.ADA | C000705.ADA | C000706.ADA | C000707.ADA |
| C000708.ADA | C000709.ADA | C000710.ADA | C000711.ADA | C000713.ADA | C000714.ADA |
| C000715.ADA | C000716.ADA | C000717.ADA | C000718.ADA | C000719.ADA | C000720.ADA |
| C000721.ADA | C00P000.ADA | C0D0344.ADA | C0D0345.ADA | C0D0346.ADA | C0D036C.ADA |
| C0D036D.ADA | C0D036E.ADA | C0D0360.ADA | C0D036P.ADA | C0D036Q.ADA | C0D036R.ADA |
| C0D036S.ADA | C0D036T.ADA | C0D036X.ADA | C0D036Y.ADA | C0D036Z.ADA | C0D0370.ADA |
| C0D0371.ADA | C0D0372.ADA | C0D0373.ADA | C0D0380.ADA | C0D0381.ADA | C0D0382.ADA |
| C0D0383.ADA | C0D0523.ADA | C0D0524.ADA | C0D0525.ADA | C0D0526.ADA | C0D0527.ADA |
| C0D0528.ADA | C0D0529.ADA | EA00000.ADA | EA0P000.ADA | EF03500.ADA | EF03501.ADA |
| EF03502.ADA | EF03503.ADA | EF03504.ADA | EF03509.ADA | EF03510.ADA | EF03511.ADA |
| EF03512.ADA | EF03513.ADA | EF03514.ADA | EF03517.ADA | EF03518.ADA | EF03519.ADA |
| EF03550.ADA | EF03600.ADA | EF03601.ADA | EF03602.ADA | EF03603.ADA | EF03604.ADA |
| EF03605.ADA | EF03606.ADA | EF03607.ADA | EF03608.ADA | EF03609.ADA | EF03610.ADA |
| EF03611.ADA | EF03612.ADA | EF03613.ADA | EF03614.ADA | EF03615.ADA | EF03616.ADA |
| EF03617.ADA | EF03618.ADA | EF03619.ADA | EF03620.ADA | EF03630.ADA | EF03631.ADA |
| EF03632.ADA | EF03633.ADA | EF03634.ADA | EF03635.ADA | EF03636.ADA | EF03637.ADA |
| EF03638.ADA | EF03639.ADA | EF03641.ADA | EF03642.ADA | EF03643.ADA | EF03644.ADA |
| EF03645.ADA | EF03646.ADA | EF03647.ADA | EF03648.ADA | EF03649.ADA | EF03650.ADA |
| EF03700.ADA | EF03701.ADA | EF03702.ADA | EF03703.ADA | EF03704.ADA | EF03800.ADA |
| EF03801.ADA | EF03802.ADA | EF03803.ADA | EF03804.ADA | EF03805.ADA | EF04120.ADA |
| EF04121.ADA | EF04122.ADA | EF04123.ADA | EF04124.ADA | EF04125.ADA | EF04126.ADA |
| EF04127.ADA | EF04129.ADA | EF0412B.ADA | EF04130.ADA | EF04131.ADA | EF04132.ADA |
| EF04133.ADA | EF0413D.ADA | EF0413H.ADA | EF0413I.ADA | EF0413J.ADA | EF0413K.ADA |
| EF04310.ADA | EF04311.ADA | EF04312.ADA | EF04510.ADA | EF04511.ADA | EF04512.ADA |
| EF04513.ADA | EF04514.ADA | EF04515.ADA | EF04516.ADA | EF04517.ADA | EF04518.ADA |
| EF04519.ADA | EF0451A.ADA | EF0451B.ADA | EF0451C.ADA | EF0451D.ADA | EF0451E.ADA |
| EF0451F.ADA | EF0451G.ADA | EF0451H.ADA | EF0451I.ADA | EF0451J.ADA | EF0451V.ADA |
| EF0451W.ADA | EF0451X.ADA | EF0451Y.ADA | EF0451Z.ADA | EF04520.ADA | EF04521.ADA |
| EF04522.ADA | EF04527.ADA | EF04529.ADA | EF04530.ADA | EF04531.ADA | EF04532.ADA |
| EF04533.ADA | EF04534.ADA | EF04535.ADA | EF04536.ADA | EF04537.ADA | EF04538.ADA |
| EF04539.ADA | EF0453A.ADA | EF0453B.ADA | EF0453C.ADA | EF04540.ADA | EF04541.ADA |
| EF04550.ADA | EF04551.ADA | EF04552.ADA | EF04553.ADA | EF04554.ADA | EF04555.ADA |
| EF04556.ADA | EF04557.ADA | EF04558.ADA | EF04559.ADA | EF0455N.ADA | EF04550.ADA |
| EF04560.ADA | EF04562.ADA | EF04563.ADA | EF04600.ADA | EF04601.ADA | EF04602.ADA |
| EF0460E.ADA | EF0460F.ADA | EF0460G.ADA | EF0460H.ADA | EF0460I.ADA | EF0460J.ADA |
| EF0460M.ADA | EF05200.ADA | EF05201.ADA | EF05202.ADA | EF05203.ADA | EF05204.ADA |
| EF05205.ADA | EF05206.ADA | EF05207.ADA | EF05208.ADA | EF05209.ADA | EF0520A.ADA |
| EF0520B.ADA | EF0520M.ADA | EF0520N.ADA | EF0520R.ADA | EF0520S.ADA | EF05210.ADA |
| EF05211.ADA | EF05212.ADA | EF05213.ADA | EF05214.ADA | EF05215.ADA | EF0521H.ADA |
| EF0521I.ADA | EF0521J.ADA | EF0521K.ADA | EF0521L.ADA | EF0521N.ADA | EF05300.ADA |
| EF05301.ADA | EF05302.ADA | EF05303.ADA | EF05304.ADA | EF05305.ADA | EF05306.ADA |
| EF05307.ADA | EF05308.ADA | EF05400.ADA | EF05401.ADA | EF05402.ADA | EF05403.ADA |
| EF05404.ADA | EF05405.ADA | EF05406.ADA | EF05407.ADA | EF05408.ADA | EF05501.ADA |
| EF05502.ADA | EF05503.ADA | EF05504.ADA | EF05505.ADA | EF05506.ADA | EF05507.ADA |
| EF05508.ADA | EF05509.ADA | EF0550A.ADA | EF0550B.ADA | EF0550C.ADA | EF0550D.A   |

Table A-1 ACPS ANSI Tape Contents Volume ACPS (continued)

|             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|
| EF06166.ADA | EF06167.ADA | EF06168.ADA | EF06169.ADA | EF06170.ADA | EF06172.ADA |
| EF06173.ADA | EF06174.ADA | EF06175.ADA | EF06176.ADA | EF06177.ADA | EF06178.ADA |
| EF06179.ADA | EF06180.ADA | EF06182.ADA | EF06183.ADA | EF06184.ADA | EF06185.ADA |
| EF06186.ADA | EF06187.ADA | EF06188.ADA | EF06189.ADA | EF06190.ADA | EF06191.ADA |
| EF06192.ADA | EF06193.ADA | EF06194.ADA | EF06195.ADA | EF06196.ADA | EF06197.ADA |
| EF06198.ADA | EF06199.ADA | EF0619A.ADA | EF0619B.ADA | EF0619C.ADA | EF0619D.ADA |
| EF0619E.ADA | EF0619F.ADA | EF0619G.ADA | EF0619H.ADA | EF0619I.ADA | EF0619J.ADA |
| EF0619K.ADA | EF0619L.ADA | EF0619M.ADA | EF0619N.ADA | EF0619O.ADA | EF0619P.ADA |
| EF0619Q.ADA | EF0619R.ADA | EF06422.ADA | EF06423.ADA | EF06424.ADA | EF06425.ADA |
| EF06426.ADA | EF06427.ADA | EF06428.ADA | EF06429.ADA | EF0642A.ADA | EF0642B.ADA |
| EF06802.ADA | EF06803.ADA | EF06806.ADA | EF06807.ADA | EF06808.ADA | EF06809.ADA |
| EF0680A.ADA | EF0680B.ADA | EF0680C.ADA | EF0680D.ADA | EF0680E.ADA | EF0680F.ADA |
| EF06810.ADA | EF06811.ADA | EF06814.ADA | EF06815.ADA | EF06816.ADA | EF06817.ADA |
| EF06818.ADA | EF06819.ADA | EF06820.ADA | EF06821.ADA | EF06822.ADA | EF06823.ADA |
| EF06824.ADA | EF06825.ADA | EF09500.ADA | EF09501.ADA | EF09502.ADA | EF09503.ADA |
| EF09504.ADA | EF09505.ADA | EF09506.ADA | EF09507.ADA | EF09508.ADA | EF09509.ADA |
| EF09600.ADA | EF09601.ADA | EF09602.ADA | EF09603.ADA | EF09604.ADA | EF09605.ADA |
| EF09606.ADA | EF09607.ADA | EF09710.ADA | EF09711.ADA | EF09712.ADA | EF09713.ADA |
| EF09720.ADA | EF09721.ADA | EF09731.ADA | EF09900.ADA | EF09901.ADA | EF09902.ADA |
| EF09903.ADA | EF09B01.ADA | EF0C100.ADA | EF0C101.ADA | EF0C102.ADA | EF0C103.ADA |
| EF0C300.ADA | EF0C301.ADA | EF0C302.ADA | EF0C303.ADA | EF0C304.ADA | EF0C305.ADA |
| EF0C306.ADA | EF0C307.ADA | EF0P000.ADA | EFD3551.ADA | EFD412A.ADA | EFD412C.ADA |
| EFD412D.ADA | EFD4135.ADA | EFD4136.ADA | EFD4137.ADA | EFD4138.ADA | EFD4139.ADA |
| EFD413A.ADA | EFD413B.ADA | EFD413C.ADA | EFD413E.ADA | EFD413G.ADA | EFD451K.ADA |
| EFD451L.ADA | EFD451M.ADA | EFD451N.ADA | EFD451O.ADA | EFD451P.ADA | EFD451Q.ADA |
| EFD451R.ADA | EFD451S.ADA | EFD4523.ADA | EFD4524.ADA | EFD4525.ADA | EFD4526.ADA |
| EFD4528.ADA | EFD452A.ADA | EFD455D.ADA | EFD455E.ADA | EFD455F.ADA | EFD455G.ADA |
| EFD455I.ADA | EFD455J.ADA | EFD455K.ADA | EFD455L.ADA | EFD4566.ADA | EFD4567.ADA |
| EFD4568.ADA | EFD4569.ADA | EFD4603.ADA | EFD4604.ADA | EFD4605.ADA | EFD4606.ADA |
| EFD4607.ADA | EFD4608.ADA | EFD4609.ADA | EFD460A.ADA | EFD460B.ADA | EFD460K.ADA |
| EFD460L.ADA | EFD460N.ADA | EFD4600.ADA | EFD520C.ADA | EFD520D.ADA | EFD520E.ADA |
| EFD520F.ADA | EFD520G.ADA | EFD520H.ADA | EFD520I.ADA | EFD520J.ADA | EFD520N.ADA |
| EFD520P.ADA | EFD520Q.ADA | EFD5218.ADA | EFD5219.ADA | EFD521A.ADA | EFD521B.ADA |
| EFD521C.ADA | EFD521D.ADA | EFD521E.ADA | EFD521F.ADA | EFD521K.ADA | EFD521M.ADA |
| EFD5210.ADA | EFD521P.ADA | EFD6201.ADA | EFD6209.ADA | EFD6210.ADA | EFD6211.ADA |
| EFD6213.ADA | EFD6214.ADA | EFD6215.ADA | EFD6216.ADA | EFD6217.ADA | EFD6218.ADA |
| EFD6219.ADA | EFD6222.ADA | EFD6223.ADA | EFD6224.ADA | EFD6225.ADA | EFD6226.ADA |
| EFD6227.ADA | EFD6228.ADA | EFD6229.ADA | EFD6230.ADA | EFD6231.ADA | EFD6232.ADA |
| EFD6233.ADA | EFD6243.ADA | EFD6244.ADA | EFD6245.ADA | EFD6246.ADA | EFD6247.ADA |
| EFD6248.ADA | EFD6249.ADA | EFD6250.ADA | EFD6251.ADA | EFD6252.ADA | EFD6253.ADA |
| EFD6260.ADA | EFD6261.ADA | EFD6262.ADA | EFD6263.ADA | EFD6264.ADA | EFD6265.ADA |
| EFD6266.ADA | EFD6267.ADA | EFD6268.ADA | EFD6269.ADA | EFD6270.ADA | EFD6271.ADA |
| EFD6272.ADA | EFD6273.ADA | EFD6274.ADA | EFD6275.ADA | EFD6276.ADA | EFD6277.ADA |
| EFD6278.ADA | EFD6279.ADA | EFD6300.ADA | EFD6301.ADA | EFD6308.ADA | EFD6309.ADA |
| EFD6310.ADA | EFD6311.ADA | EFD6312.ADA | EFD6313.ADA | EFD6314.ADA | EFD6315.ADA |
| EFD6316.ADA | EFD6317.ADA | EFD6318.ADA | EFD6319.ADA | EFD6322.ADA | EFD6332.ADA |
| EFD6333.ADA | EFD6334.ADA | EFD6335.ADA | EFD6336.ADA | EFD6337.ADA | EFD6338.ADA |
| EFD6339.ADA | EFD6340.ADA | EFD6342.ADA | EFD6343.ADA | EFD6344.ADA | EFD6345.ADA |
| EFD6346.ADA | EFD6347.ADA | EFD6348.ADA | EFD6349.ADA | EFD6350.ADA | EFD6352.ADA |
| EFD6353.ADA | EFD6354.ADA | EFD6355.ADA | EFD6356.ADA | EFD6357.ADA | EFD6358.ADA |
| EFD6359.ADA | EFD6360.ADA | EFD6362.ADA | EFD6363.ADA | EFD6364.ADA | EFD6365.ADA |
| EFD6366.ADA | EFD6367.ADA | EFD6368.ADA | EFD6369.ADA | EFD6370.ADA | EFD6372.ADA |
| EFD6373.ADA | EFD6374.ADA | EFD6375.ADA | EFD6376.ADA | EFD6377.ADA | EFD6378.ADA |
| EFD6379.ADA | EFD6380.ADA | EFD6382.ADA | EFD6383.ADA | EFD6384.ADA | EFD6385.ADA |
| EFD6386.ADA | EFD6387.ADA | EFD6388.ADA | EFD6389.ADA | EFD6390.ADA | EFD680G.ADA |
| EFD680H.ADA | EFD680I.ADA | EFD680J.ADA | EFD9000.ADA | EFD9200.ADA | EFD9C00.ADA |
| EFD9C01.ADA | EFD9C02.ADA | EFDC104.ADA | EFDC105.ADA | EFDC106.ADA | EFDC107.ADA |
| EFDC310.ADA | EFDC311.ADA | EFDC313.ADA | EFDC314.ADA | EFDD600.ADA | EFDD601.ADA |
| EFDD602.ADA | EFDD603.ADA | EFDD604.ADA | EFDD605.ADA | EFDD606.ADA | EFDD607.ADA |
| EFDD609.ADA | EFDD610.ADA | EFDD611.ADA | EFDDA01.ADA | EFDDA02.ADA | EFDE000.ADA |
| EFDE201.ADA | EFDE202.ADA | EFDE203.ADA | EFDE204.ADA | EFDE205.ADA | EFDE206.ADA |
| EFDE207.ADA | EFDE208.ADA | EFDE209.ADA | EFDE20A.ADA | EFDE211.ADA | EFDE212.ADA |
| EFDE213.ADA | EFDE214.ADA | EFDE215.ADA | EFDE216.ADA | EFDE220.ADA | EFDE231.ADA |
| EFDE232.ADA | EFDE233.ADA | EFDE234.ADA | EFDE235.ADA | EFDE236.ADA | EFDE237.ADA |
| EFDE238.ADA | EFDE239.ADA | EFDE23A.ADA | EFDE241.ADA | EFDE242.ADA | EFDE243.ADA |
| EFDE244.ADA | EFDE245.ADA | EFDE246.ADA | EFDE250.ADA | EFDE401.ADA | EFDE402.ADA |
| EFDE403.ADA | EFDE404.ADA | EFDE405.ADA | EFDE406.ADA | EFDE407.ADA | EFDE408.ADA |

Table A-1 ACPS ANSI Tape Contents Volume ACPS (continued)

|             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|
| EFDE409.ADA | EFDE40A.ADA | EFDE411.ADA | EFDE412.ADA | EFDE413.ADA | EFDE414.ADA |
| EFDE415.ADA | EFDE416.ADA | EFDE420.ADA | EFDE431.ADA | EFDE432.ADA | EFDE433.ADA |
| EFDE434.ADA | EFDE435.ADA | EFDE436.ADA | EFDE437.ADA | EFDE438.ADA | EFDE439.ADA |
| EFDE43A.ADA | EFDE441.ADA | EFDE442.ADA | EFDE443.ADA | EFDE444.ADA | EFDE445.ADA |
| EFDE446.ADA | EFDE450.ADA | EFDF000.ADA | EFDF001.ADA | EFDF002.ADA | EFDF003.ADA |
| EFDF004.ADA | EFDF005.ADA | EFM9A00.ADA | EFM9A01.ADA | EFM9A02.ADA | EFM9A03.ADA |
| EFN9300.ADA | EFN9301.ADA | EFN9302.ADA | EFN9303.ADA | EFN9510.ADA | EFN9511.ADA |
| EFN9610.ADA | EFN9611.ADA | EFN9612.ADA | EFN9613.ADA | EG0000C.ADA | EG0P000.ADA |
| EGD0000.ADA | EGD0001.ADA | EGD0002.ADA | EGD0003.ADA | EGD0004.ADA | EGD0005.ADA |
| EGD0006.ADA | EGD0007.ADA | EGD0008.ADA | EGD0009.ADA | EGD000D.ADA | EGD000E.ADA |
| EGD0019.ADA | EGD0029.ADA | EGD0039.ADA | EGD0049.ADA | EGN000F.ADA | EGN000G.ADA |
| EGN000H.ADA | EGN000I.ADA | EGN000J.ADA | EGN000K.ADA | EL09000.ADA | EL09100.ADA |
| EL09101.ADA | EL09111.ADA | EL09121.ADA | EL09131.ADA | EL0P000.ADA | ELD9200.ADA |
| ELD9202.ADA | ELD9203.ADA | ELD9212.ADA | ELD9213.ADA | ELD9222.ADA | ELD9223.ADA |
| ELD9232.ADA | ELD9233.ADA | ELDE000.ADA | ELDE2B1.ADA | ELDE2B2.ADA | ELDE2C1.ADA |
| ELDE2C2.ADA | ELDE2C5.ADA | ELDE2C6.ADA | ELDE4B1.ADA | ELDE4B2.ADA | ELDE4C1.ADA |
| ELDE4C2.ADA | ELDE4C5.ADA | ELDE4C6.ADA | E000001.ADA | E000002.ADA | E000102.ADA |
| E000103.ADA | E000104.ADA | E000107.ADA | E000108.ADA | E000109.ADA | E000112.ADA |
| E000113.ADA | E000114.ADA | E000202.ADA | E000203.ADA | E000204.ADA | E000207.ADA |
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| E000312.ADA | E000313.ADA | E000314.ADA | E000315.ADA | E000316.ADA | E000317.ADA |
| E000318.ADA | E000319.ADA | E000320.ADA | E000321.ADA | E000322.ADA | E000323.ADA |
| E000324.ADA | E000325.ADA | E000326.ADA | E000327.ADA | E000328.ADA | E000329.ADA |
| E000330.ADA | E000331.ADA | E000332.ADA | E000333.ADA | E000334.ADA | E000335.ADA |
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| E000357.ADA | E000358.ADA | E000359.ADA | E000360.ADA | E000361.ADA | E000362.ADA |
| E000363.ADA | E000364.ADA | E000365.ADA | E000366.ADA | E000367.ADA | E000368.ADA |
| E000369.ADA | E00036A.ADA | E00036B.ADA | E00036F.ADA | E00036G.ADA | E00036H.ADA |
| E00036I.ADA | E00036J.ADA | E00036K.ADA | E00036L.ADA | E00036M.ADA | E00036N.ADA |
| E00036U.ADA | E00036V.ADA | E00036W.ADA | E000374.ADA | E000375.ADA | E000376.ADA |
| E000377.ADA | E000378.ADA | E000390.ADA | E000391.ADA | E000402.ADA | E000403.ADA |
| E000404.ADA | E000500.ADA | E000502.ADA | E000503.ADA | E000504.ADA | E000507.ADA |
| E000508.ADA | E000509.ADA | E000512.ADA | E000513.ADA | E000514.ADA | E000517.ADA |
| E000518.ADA | E000519.ADA | E000602.ADA | E000603.ADA | E000604.ADA | E000605.ADA |
| E000606.ADA | E000607.ADA | E000702.ADA | E000703.ADA | E000704.ADA | E000705.ADA |
| E000706.ADA | E000707.ADA | E000708.ADA | E000709.ADA | E000710.ADA | E000711.ADA |
| E000713.ADA | E000714.ADA | E000715.ADA | E000716.ADA | E000717.ADA | E000718.ADA |
| E000719.ADA | E000720.ADA | E000721.ADA | E00P000.ADA | E0D0344.ADA | E0D0345.ADA |
| E0D0346.ADA | E0D036C.ADA | E0D036D.ADA | E0D036E.ADA | E0D0360.ADA | E0D036P.ADA |
| E0D036Q.ADA | E0D036R.ADA | E0D036S.ADA | E0D036T.ADA | E0D036X.ADA | E0D036Y.ADA |
| E0D036Z.ADA | E0D0370.ADA | E0D0371.ADA | E0D0372.ADA | E0D0373.ADA | E0D0380.ADA |
| E0D0381.ADA | E0D0382.ADA | E0D0383.ADA | E0D0523.ADA | E0D0524.ADA | E0D0525.ADA |
| E0D0526.ADA | E0D0527.ADA | E0D0528.ADA | E0D0529.ADA | OURDMP.ADA  | OURSYS.ADA  |
| OURSYSR.ADA | SA00000.ADA | SA0P000.ADA | SF03500.ADA | SF03501.ADA | SF03502.ADA |
| SF03503.ADA | SF03504.ADA | SF03509.ADA | SF03510.ADA | SF03511.ADA | SF03512.ADA |
| SF03513.ADA | SF03514.ADA | SF03517.ADA | SF03518.ADA | SF03519.ADA | SF03550.ADA |
| SF03600.ADA | SF03601.ADA | SF03602.ADA | SF03603.ADA | SF03604.ADA | SF03605.ADA |
| SF03606.ADA | SF03607.ADA | SF03608.ADA | SF03609.ADA | SF03610.ADA | SF03611.ADA |
| SF03612.ADA | SF03613.ADA | SF03614.ADA | SF03615.ADA | SF03616.ADA | SF03617.ADA |
| SF03618.ADA | SF03619.ADA | SF03620.ADA | SF03630.ADA | SF03631.ADA | SF03632.ADA |
| SF03633.ADA | SF03634.ADA | SF03635.ADA | SF03636.ADA | SF03637.ADA | SF03638.ADA |
| SF03639.ADA | SF03641.ADA | SF03642.ADA | SF03643.ADA | SF03644.ADA | SF03645.ADA |
| SF03646.ADA | SF03647.ADA | SF03648.ADA | SF03649.ADA | SF03650.ADA | SF03700.ADA |
| SF03701.ADA | SF03702.ADA | SF03703.ADA | SF03704.ADA | SF03800.ADA | SF03801.ADA |
| SF03802.ADA | SF03803.ADA | SF03804.ADA | SF03805.ADA | SF04120.ADA | SF04121.ADA |
| SF04122.ADA | SF04123.ADA | SF04124.ADA | SF04125.ADA | SF04126.ADA | SF04127.ADA |
| SF04129.ADA | SF0412B.ADA | SF04130.ADA | SF04131.ADA | SF04132.ADA | SF04133.ADA |
| SF0413D.ADA | SF0413H.ADA | SF0413I.ADA | SF0413J.ADA | SF0413K.ADA | SF04310.ADA |
| SF04311.ADA | SF04312.ADA | SF04310.ADA | SF04511.ADA | SF04512.ADA | SF04513.ADA |
| SF04514.ADA | SF04515.ADA | SF04516.ADA | SF04517.ADA | SF04518.ADA | SF04519.ADA |
| SF0451A.ADA | SF0451B.ADA | SF0451C.ADA | SF0451D.ADA | SF0451E.ADA | SF0451F.ADA |
| SF0451G.ADA | SF0451H.ADA | SF0451I.ADA | SF0451J.ADA | SF0451V.ADA | SF0451W.ADA |
| SF0451X.ADA | SF0451Y.ADA | SF0451Z.ADA | SF04520.ADA | SF04521.ADA | SF04522.ADA |
| SF04527.ADA | SF04529.ADA | SF04530.ADA | SF04531.ADA | SF04532.ADA | SF04533.ADA |
| SF04534.ADA | SF04535.ADA | SF04536.ADA | SF04537.ADA | SF04538.ADA | SF04539.ADA |

Table A-1 ACPS ANSI Tape Contents Volume ACPS (continued)

[illegible]



Table A-1 ACPS ANSI Tape Contents Volume ACPS (continued)

|             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|
| SFD521E.ADA | SFD521F.ADA | SFD521K.ADA | SFD521M.ADA | SFD521O.ADA | SFD521P.ADA |
| SFD6201.ADA | SFD6209.ADA | SFD6210.ADA | SFD6211.ADA | SFD6213.ADA | SFD6214.ADA |
| SFD6215.ADA | SFD6216.ADA | SFD6217.ADA | SFD6218.ADA | SFD6219.ADA | SFD6222.ADA |
| SFD6223.ADA | SFD6224.ADA | SFD6225.ADA | SFD6226.ADA | SFD6227.ADA | SFD6228.ADA |
| SFD6229.ADA | SFD6230.ADA | SFD6231.ADA | SFD6232.ADA | SFD6233.ADA | SFD6243.ADA |
| SFD6244.ADA | SFD6245.ADA | SFD6246.ADA | SFD6247.ADA | SFD6248.ADA | SFD6249.ADA |
| SFD6250.ADA | SFD6251.ADA | SFD6252.ADA | SFD6253.ADA | SFD6260.ADA | SFD6261.ADA |
| SFD6262.ADA | SFD6263.ADA | SFD6264.ADA | SFD6265.ADA | SFD6266.ADA | SFD6267.ADA |
| SFD6268.ADA | SFD6269.ADA | SFD6270.ADA | SFD6271.ADA | SFD6272.ADA | SFD6273.ADA |
| SFD6274.ADA | SFD6275.ADA | SFD6276.ADA | SFD6277.ADA | SFD6278.ADA | SFD6279.ADA |
| SFD6300.ADA | SFD6301.ADA | SFD6308.ADA | SFD6309.ADA | SFD6310.ADA | SFD6311.ADA |
| SFD6312.ADA | SFD6313.ADA | SFD6314.ADA | SFD6315.ADA | SFD6316.ADA | SFD6317.ADA |
| SFD6318.ADA | SFD6319.ADA | SFD6322.ADA | SFD6332.ADA | SFD6333.ADA | SFD6334.ADA |
| SFD6335.ADA | SFD6336.ADA | SFD6337.ADA | SFD6338.ADA | SFD6339.ADA | SFD6340.ADA |
| SFD6342.ADA | SFD6343.ADA | SFD6344.ADA | SFD6345.ADA | SFD6346.ADA | SFD6347.ADA |
| SFD6348.ADA | SFD6349.ADA | SFD6350.ADA | SFD6352.ADA | SFD6353.ADA | SFD6354.ADA |
| SFD6355.ADA | SFD6356.ADA | SFD6357.ADA | SFD6358.ADA | SFD6359.ADA | SFD6360.ADA |
| SFD6362.ADA | SFD6363.ADA | SFD6364.ADA | SFD6365.ADA | SFD6366.ADA | SFD6367.ADA |
| SFD6368.ADA | SFD6369.ADA | SFD6370.ADA | SFD6372.ADA | SFD6373.ADA | SFD6374.ADA |
| SFD6375.ADA | SFD6376.ADA | SFD6377.ADA | SFD6378.ADA | SFD6379.ADA | SFD6380.ADA |
| SFD6382.ADA | SFD6383.ADA | SFD6384.ADA | SFD6385.ADA | SFD6386.ADA | SFD6387.ADA |
| SFD6388.ADA | SFD6389.ADA | SFD6390.ADA | SFD680G.ADA | SFD680H.ADA | SFD680I.ADA |
| SFD680J.ADA | SFD9000.ADA | SFD9200.ADA | SFD9C00.ADA | SFD9C01.ADA | SFD9C02.ADA |
| SFDC104.ADA | SFDC105.ADA | SFDC106.ADA | SFDC107.ADA | SFDC310.ADA | SFDC311.ADA |
| SFDC313.ADA | SFDC314.ADA | SFDD600.ADA | SFDD601.ADA | SFDD602.ADA | SFDD603.ADA |
| SFDD604.ADA | SFDD605.ADA | SFDD606.ADA | SFDD607.ADA | SFDD609.ADA | SFDD610.ADA |
| SFDD611.ADA | SFDD722.ADA | SFDD723.ADA | SFDD724.ADA | SFDD725.ADA | SFDD72A.ADA |
| SFDD72B.ADA | SFDD72C.ADA | SFDD72E.ADA | SFDD72F.ADA | SFDD72G.ADA | SFDD72H.ADA |
| SFDD72I.ADA | SFDDA01.ADA | SFDDA02.ADA | SFDE000.ADA | SFDE201.ADA | SFDE202.ADA |
| SFDE203.ADA | SFDE204.ADA | SFDE205.ADA | SFDE206.ADA | SFDE207.ADA | SFDE208.ADA |
| SFDE209.ADA | SFDE20A.ADA | SFDE211.ADA | SFDE212.ADA | SFDE213.ADA | SFDE214.ADA |
| SFDE215.ADA | SFDE216.ADA | SFDE220.ADA | SFDE231.ADA | SFDE232.ADA | SFDE233.ADA |
| SFDE234.ADA | SFDE235.ADA | SFDE236.ADA | SFDE237.ADA | SFDE238.ADA | SFDE239.ADA |
| SFDE23A.ADA | SFDE241.ADA | SFDE242.ADA | SFDE243.ADA | SFDE244.ADA | SFDE245.ADA |
| SFDE246.ADA | SFDE250.ADA | SFDE401.ADA | SFDE402.ADA | SFDE403.ADA | SFDE404.ADA |
| SFDE405.ADA | SFDE406.ADA | SFDE407.ADA | SFDE408.ADA | SFDE409.ADA | SFDE40A.ADA |
| SFDE411.ADA | SFDE412.ADA | SFDE413.ADA | SFDE414.ADA | SFDE415.ADA | SFDE416.ADA |
| SFDE420.ADA | SFDE431.ADA | SFDE432.ADA | SFDE433.ADA | SFDE434.ADA | SFDE435.ADA |
| SFDE436.ADA | SFDE437.ADA | SFDE438.ADA | SFDE439.ADA | SFDE43A.ADA | SFDE441.ADA |
| SFDE442.ADA | SFDE443.ADA | SFDE444.ADA | SFDE445.ADA | SFDE446.ADA | SFDE450.ADA |
| SFDF000.ADA | SFDF001.ADA | SFDF002.ADA | SFDF003.ADA | SFDF004.ADA | SFDF005.ADA |
| SFM9A00.ADA | SFM9A01.ADA | SFM9A02.ADA | SFM9A03.ADA | SFMB000.ADA | SFMB001.ADA |
| SFMB002.ADA | SFMB003.ADA | SFMB004.ADA | SFMB005.ADA | SFMB006.ADA | SFMB007.ADA |
| SFMB008.ADA | SFMB009.ADA | SFMB010.ADA | SFMB011.ADA | SFMB012.ADA | SFMB013.ADA |
| SFMB014.ADA | SFMB015.ADA | SFMB016.ADA | SFMB017.ADA | SFMB018.ADA | SFMB019.ADA |
| SFMB020.ADA | SFMB021.ADA | SFMB022.ADA | SFMB023.ADA | SFMB024.ADA | SFMB025.ADA |
| SFMB026.ADA | SFMB027.ADA | SFMB028.ADA | SFMB029.ADA | SFMB030.ADA | SFMB031.ADA |
| SFMB032.ADA | SFMB033.ADA | SFMB034.ADA | SFMB035.ADA | SFMB036.ADA | SFMB037.ADA |
| SFMB038.ADA | SFMB039.ADA | SFMB040.ADA | SFMB041.ADA | SFMB042.ADA | SFMB043.ADA |
| SFMB044.ADA | SFN9300.ADA | SFN9301.ADA | SFN9302.ADA | SFN9303.ADA | SFN9510.ADA |
| SFN9511.ADA | SFN9610.ADA | SFN9611.ADA | SFN9612.ADA | SFN9613.ADA | SG0000C.ADA |
| SG0P000.ADA | SGD0000.ADA | SGD0001.ADA | SGD0002.ADA | SGD0003.ADA | SGD0004.ADA |
| SGD0005.ADA | SGD0006.ADA | SGD0007.ADA | SGD0008.ADA | SGD0009.ADA | SGD000D.ADA |
| SGD000E.ADA | SGD0019.ADA | SGD0029.ADA | SGD0039.ADA | SGD0049.ADA | SGN000F.ADA |
| SGN000G.ADA | SGN000H.ADA | SGN000I.ADA | SGN000J.ADA | SGN000K.ADA | SL09000.ADA |
| SL09100.ADA | SL09101.ADA | SL09111.ADA | SL09121.ADA | SL09131.ADA | SL0P000.ADA |
| SLD9200.ADA | SLD9202.ADA | SLD9203.ADA | SLD9212.ADA | SLD9213.ADA | SLD9222.ADA |
| SLD9223.ADA | SLD9232.ADA | SLD9233.ADA | SLDE000.ADA | SLDE2B1.ADA | SLDE2B2.ADA |
| SLDE2C1.ADA | SLDE2C2.ADA | SLDE2C5.ADA | SLDE2C6.ADA | SLDE4B1.ADA | SLDE4B2.ADA |
| SLDE4C1.ADA | SLDE4C2.ADA | SLDE4C5.ADA | SLDE4C6.ADA | S000001.ADA | S000002.ADA |
| S000102.ADA | S000103.ADA | S000104.ADA | S000107.ADA | S000108.ADA | S000109.ADA |
| S000112.ADA | S000113.ADA | S000114.ADA | S000202.ADA | S000203.ADA | S000204.ADA |
| S000207.ADA | S000208.ADA | S000209.ADA | S000300.ADA | S000305.ADA | S000310.ADA |
| S000311.ADA | S000312.ADA | S000313.ADA | S000314.ADA | S000315.ADA | S000316.ADA |
| S000317.ADA | S000318.ADA | S000319.ADA | S000320.ADA | S000321.ADA | S000322.ADA |
| S000323.ADA | S000324.ADA | S000325.ADA | S000326.ADA | S000327.ADA | S000328.ADA |
| S000329.ADA | S000330.ADA | S000331.ADA | S000332.ADA | S000333.ADA | S000334.ADA |



**Table A-1 ACPS ANSI Tape Contents Volume ACPS (continued)**

|             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|
| S000335.ADA | S000336.ADA | S000337.ADA | S000338.ADA | S000339.ADA | S000340.ADA |
| S000341.ADA | S000342.ADA | S000343.ADA | S000347.ADA | S000348.ADA | S000349.ADA |
| S000350.ADA | S000351.ADA | S000352.ADA | S000353.ADA | S000354.ADA | S000355.ADA |
| S000356.ADA | S000357.ADA | S000358.ADA | S000359.ADA | S000360.ADA | S000361.ADA |
| S000362.ADA | S000363.ADA | S000364.ADA | S000365.ADA | S000366.ADA | S000367.ADA |
| S000368.ADA | S000369.ADA | S00036A.ADA | S00036B.ADA | S00036F.ADA | S00036G.ADA |
| S00036H.ADA | S00036I.ADA | S00036J.ADA | S00036K.ADA | S00036L.ADA | S00036M.ADA |
| S00036N.ADA | S00036U.ADA | S00036V.ADA | S00036W.ADA | S000374.ADA | S000375.ADA |
| S000376.ADA | S000377.ADA | S000378.ADA | S000390.ADA | S000391.ADA | S000402.ADA |
| S000403.ADA | S000404.ADA | S000500.ADA | S000502.ADA | S000503.ADA | S000504.ADA |
| S000507.ADA | S000508.ADA | S000509.ADA | S000512.ADA | S000513.ADA | S000514.ADA |
| S000517.ADA | S000518.ADA | S000519.ADA | S000602.ADA | S000603.ADA | S000604.ADA |
| S000605.ADA | S000606.ADA | S000607.ADA | S000702.ADA | S000703.ADA | S000704.ADA |
| S000705.ADA | S000706.ADA | S000707.ADA | S000708.ADA | S000709.ADA | S000710.ADA |
| S000711.ADA | S000713.ADA | S000714.ADA | S000715.ADA | S000716.ADA | S000717.ADA |
| S000718.ADA | S000719.ADA | S000720.ADA | S000721.ADA | S00P000.ADA | S0D0344.ADA |
| S0D0345.ADA | S0D0346.ADA | S0D036C.ADA | S0D036D.ADA | S0D036E.ADA | S0D0360.ADA |
| S0D036P.ADA | S0D036Q.ADA | S0D036R.ADA | S0D036S.ADA | S0D036T.ADA | S0D036X.ADA |
| S0D036Y.ADA | S0D036Z.ADA | S0D0370.ADA | S0D0371.ADA | S0D0372.ADA | S0D0373.ADA |
| S0D0380.ADA | S0D0381.ADA | S0D0382.ADA | S0D0383.ADA | S0D0523.ADA | S0D0524.ADA |
| S0D0525.ADA | S0D0526.ADA | S0D0527.ADA | S0D0528.ADA | S0D0529.ADA | TA00000.ADA |
| TA0P000.ADA | TF03500.ADA | TF03501.ADA | TF03502.ADA | TF03503.ADA | TF03504.ADA |
| TF03509.ADA | TF03510.ADA | TF03511.ADA | TF03512.ADA | TF03513.ADA | TF03514.ADA |
| TF03517.ADA | TF03518.ADA | TF03519.ADA | TF03550.ADA | TF03600.ADA | TF03601.ADA |
| TF03602.ADA | TF03603.ADA | TF03604.ADA | TF03605.ADA | TF03606.ADA | TF03607.ADA |
| TF03608.ADA | TF03609.ADA | TF03610.ADA | TF03611.ADA | TF03612.ADA | TF03613.ADA |
| TF03614.ADA | TF03615.ADA | TF03616.ADA | TF03617.ADA | TF03618.ADA | TF03619.ADA |
| TF03620.ADA | TF03630.ADA | TF03631.ADA | TF03632.ADA | TF03633.ADA | TF03634.ADA |
| TF03635.ADA | TF03636.ADA | TF03637.ADA | TF03638.ADA | TF03639.ADA | TF03641.ADA |
| TF03642.ADA | TF03643.ADA | TF03644.ADA | TF03645.ADA | TF03646.ADA | TF03647.ADA |
| TF03648.ADA | TF03649.ADA | TF03650.ADA | TF03700.ADA | TF03701.ADA | TF03702.ADA |
| TF03703.ADA | TF03704.ADA | TF03800.ADA | TF03801.ADA | TF03802.ADA | TF03803.ADA |
| TF03804.ADA | TF03805.ADA | TF04120.ADA | TF04121.ADA | TF04122.ADA | TF04123.ADA |
| TF04124.ADA | TF04125.ADA | TF04126.ADA | TF04127.ADA | TF04129.ADA | TF0412B.ADA |
| TF04130.ADA | TF04131.ADA | TF04132.ADA | TF04133.ADA | TF0413D.ADA | TF0413H.ADA |
| TF0413I.ADA | TF0413J.ADA | TF0413K.ADA | TF04310.ADA | TF04311.ADA | TF04312.ADA |
| TF04510.ADA | TF04511.ADA | TF04512.ADA | TF04513.ADA | TF04514.ADA | TF04515.ADA |
| TF04516.ADA | TF04517.ADA | TF04518.ADA | TF04519.ADA | TF0451A.ADA | TF0451B.ADA |
| TF0451C.ADA | TF0451D.ADA | TF0451E.ADA | TF0451F.ADA | TF0451G.ADA | TF0451H.ADA |
| TF0451I.ADA | TF0451J.ADA | TF0451V.ADA | TF0451W.ADA | TF0451X.ADA | TF0451Y.ADA |
| TF0451Z.ADA | TF04520.ADA | TF04521.ADA | TF04522.ADA | TF04527.ADA | TF04529.ADA |
| TF04530.ADA | TF04531.ADA | TF04532.ADA | TF04533.ADA | TF04534.ADA | TF04535.ADA |
| TF04536.ADA | TF04537.ADA | TF04538.ADA | TF04539.ADA | TF0453A.ADA | TF0453B.ADA |
| TF0453C.ADA | TF04540.ADA | TF04541.ADA | TF04550.ADA | TF04551.ADA | TF04552.ADA |
| TF04553.ADA | TF04554.ADA | TF04555.ADA | TF04556.ADA | TF04557.ADA | TF04558.ADA |
| TF04559.ADA | TF0455N.ADA | TF04550.ADA | TF04560.ADA | TF04562.ADA | TF04563.ADA |
| TF04600.ADA | TF04601.ADA | TF04602.ADA | TF0460E.ADA | TF0460F.ADA | TF0460G.ADA |
| TF0460H.ADA | TF0460I.ADA | TF0460J.ADA | TF0460M.ADA | TF05200.ADA | TF05201.ADA |
| TF05202.ADA | TF05203.ADA | TF05204.ADA | TF05205.ADA | TF05206.ADA | TF05207.ADA |
| TF05208.ADA | TF05209.ADA | TF0520A.ADA | TF0520B.ADA | TF0520M.ADA | TF05200.A   |

Table A-1 ACPS ANSI Tape Contents Volume ACPS (continued)

|              |              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|--------------|
| TF06101.ADA  | TF06108.ADA  | TF06109.ADA  | TF06110.ADA  | TF06111.ADA  | TF06112.ADA  |
| TF06113.ADA  | TF06114.ADA  | TF06115.ADA  | TF06116.ADA  | TF06117.ADA  | TF06118.ADA  |
| TF06119.ADA  | TF06122.ADA  | TF06132.ADA  | TF06133.ADA  | TF06134.ADA  | TF06135.ADA  |
| TF06136.ADA  | TF06137.ADA  | TF06138.ADA  | TF06139.ADA  | TF06140.ADA  | TF06142.ADA  |
| TF06143.ADA  | TF06144.ADA  | TF06145.ADA  | TF06146.ADA  | TF06147.ADA  | TF06148.ADA  |
| TF06149.ADA  | TF06150.ADA  | TF06152.ADA  | TF06153.ADA  | TF06154.ADA  | TF06155.ADA  |
| TF06156.ADA  | TF06157.ADA  | TF06158.ADA  | TF06159.ADA  | TF06160.ADA  | TF06162.ADA  |
| TF06163.ADA  | TF06164.ADA  | TF06165.ADA  | TF06166.ADA  | TF06167.ADA  | TF06168.ADA  |
| TF06169.ADA  | TF06170.ADA  | TF06172.ADA  | TF06173.ADA  | TF06174.ADA  | TF06175.ADA  |
| TF06176.ADA  | TF06177.ADA  | TF06178.ADA  | TF06179.ADA  | TF06180.ADA  | TF06182.ADA  |
| TF06183.ADA  | TF06184.ADA  | TF06185.ADA  | TF06186.ADA  | TF06187.ADA  | TF06188.ADA  |
| TF06189.ADA  | TF06190.ADA  | TF06191.ADA  | TF06192.ADA  | TF06193.ADA  | TF06194.ADA  |
| TF06195.ADA  | TF06196.ADA  | TF06197.ADA  | TF06198.ADA  | TF06199.ADA  | TF0619A.ADA  |
| TF0619B.ADA  | TF0619C.ADA  | TF0619D.ADA  | TF0619E.ADA  | TF0619F.ADA  | TF0619G.ADA  |
| TF0619H.ADA  | TF0619I.ADA  | TF0619J.ADA  | TF0619K.ADA  | TF0619L.ADA  | TF0619M.ADA  |
| TF0619N.ADA  | TF0619O.ADA  | TF0619P.ADA  | TF0619Q.ADA  | TF0619R.ADA  | TF06422.ADA  |
| TF06423.ADA  | TF06424.ADA  | TF06425.ADA  | TF06426.ADA  | TF06427.ADA  | TF06428.ADA  |
| TF06429.ADA  | TF0642A.ADA  | TF0642B.ADA  | TF06802.ADA  | TF06803.ADA  | TF06806.ADA  |
| TF06807.ADA  | TF06808.ADA  | TF06809.ADA  | TF0680A.ADA  | TF0680B.ADA  | TF0680C.ADA  |
| TF0680D.ADA  | TF0680E.ADA  | TF0680F.ADA  | TF06810.ADA  | TF06811.ADA  | TF06814.ADA  |
| TF06815.ADA  | TF06816.ADA  | TF06817.ADA  | TF06818.ADA  | TF06819.ADA  | TF06820.ADA  |
| TF06821.ADA  | TF06822.ADA  | TF06823.ADA  | TF06824.ADA  | TF06825.ADA  | TF09500.ADA  |
| TF09501.ADA  | TF09502.ADA  | TF09503.ADA  | TF09504.ADA  | TF09505.ADA  | TF09506.ADA  |
| TF09507.ADA  | TF09508.ADA  | TF09509.ADA  | TF09600.ADA  | TF09601.ADA  | TF09602.ADA  |
| TF09603.ADA  | TF09604.ADA  | TF09605.ADA  | TF09606.ADA  | TF09607.ADA  | TF09710.ADA  |
| TF09711.ADA  | TF09712.ADA  | TF09713.ADA  | TF09720.ADA  | TF09721.ADA  | TF09731.ADA  |
| TF09900.ADA  | TF09901.ADA  | TF09902.ADA  | TF09903.ADA  | TF09B01.ADA  | TF0C100.ADA  |
| TF0C101.ADA  | TF0C102.ADA  | TF0C103.ADA  | TF0C300.ADA  | TF0C301.ADA  | TF0C302.ADA  |
| TF0C303.ADA  | TF0C304.ADA  | TF0C305.ADA  | TF0C306.ADA  | TF0C307.ADA  | TF0D720.ADA  |
| TF0D721.ADA  | TF0D727.ADA  | TF0D728.ADA  | TF0D729.ADA  | TF0D72D.ADA  | TF0P000.ADA  |
| TFD3551.ADA  | TFD412A.ADA  | TFD412C.ADA  | TFD412D.ADA  | TFD4135.ADA  | TFD4136.ADA  |
| TFD4137.ADA  | TFD4138.ADA  | TFD4139.ADA  | TFD413A.ADA  | TFD413B.ADA  | TFD413C.ADA  |
| TFD413E.ADA  | TFD413G.ADA  | TFD451K.ADA  | TFD451L.ADA  | TFD451M.ADA  | TFD451N.ADA  |
| TFD451O.ADA  | TFD451P.ADA  | TFD451Q.ADA  | TFD451R.ADA  | TFD451S.ADA  | TFD4523.ADA  |
| TFD4524.ADA  | TFD4525.ADA  | TFD4526.ADA  | TFD4528.ADA  | TFD452A.ADA  | TFD455D.ADA  |
| TFD455E.ADA  | TFD455F.ADA  | TFD455G.ADA  | TFD455I.ADA  | TFD455J.ADA  | TFD455K.ADA  |
| TFD455L.ADA  | TFD4567.ADA  | TFD4567.ADA  | TFD4568.ADA  | TFD4569.ADA  | TFD4603.ADA  |
| TFD4604.ADA  | TFD4605.ADA  | TFD4606.ADA  | TFD4607.ADA  | TFD4608.ADA  | TFD4609.ADA  |
| TFD460A.ADA  | TFD460B.ADA  | TFD460K.ADA  | TFD460L.ADA  | TFD460N.ADA  | TFD4600.ADA  |
| TFD4800.ADA  | TFD4801.ADA  | TFD4802.ADA  | TFD4803.ADA  | TFD4804.ADA  | TFD520C.ADA  |
| TFD520D.ADA  | TFD520E.ADA  | TFD520F.ADA  | TFD520G.ADA  | TFD520H.ADA  | TFD520I.ADA  |
| TFD520J.ADA  | TFD520N.ADA  | TFD520P.ADA  | TFD520Q.ADA  | TFD5218.ADA  | TFD5219.ADA  |
| TFD521A.ADA  | TFD521B.ADA  | TFD521C.ADA  | TFD521D.ADA  | TFD521E.ADA  | TFD521F.ADA  |
| TFD521K.ADA  | TFD521M.ADA  | TFD521O.ADA  | TFD521P.ADA  | TFD6201.ADA  | TFD6209.ADA  |
| TFD6210.ADA  | TFD6211.ADA  | TFD6213.ADA  | TFD6214.ADA  | TFD6215.ADA  | TFD6216.ADA  |
| TFD6217.ADA  | TFD6218.ADA  | TFD6219.ADA  | TFD6222.ADA  | TFD6223.ADA  | TFD6224.ADA  |
| TFD6225.ADA  | TFD6226.ADA  | TFD6227.ADA  | TFD6228.ADA  | TFD6229.ADA  | TFD6230.ADA  |
| TFD6231.ADA  | TFD6232.ADA  | TFD6233.ADA  | TFD6243.ADA  | TFD6244.ADA  | TFD6245.ADA  |
| TFD6246.ADA  | TFD6247.ADA  | TFD6248.ADA  | TFD6249.ADA  | TFD6250.ADA  | TFD6251.ADA  |
| TFD6252.ADA  | TFD6253.ADA  | TFD6260.ADA  | TFD6261.ADA  | TFD6262.ADA  | TFD6263.ADA  |
| TFD6264.ADA  | TFD6265.ADA  | TFD6266.ADA  | TFD6267.ADA  | TFD6268.ADA  | TFD6269.ADA  |
| TFD6270.ADA  | TFD6271.ADA  | TFD6272.ADA  | TFD6273.ADA  | TFD6274.ADA  | TFD6275.ADA  |
| TFD6276.ADA  | TFD6277.ADA  | TFD6278.ADA  | TFD6279.ADA  | TFD6300.ADA  | TFD6301.ADA  |
| TFD6308.ADA  | TFD6309.ADA  | TFD6310.ADA  | TFD6311.ADA  | TFD6312.ADA  | TFD6313.ADA  |
| TFD6314.ADA  | TFD6315.ADA  | TFD6316.ADA  | TFD6317.ADA  | TFD6318.ADA  | TFD6319.ADA  |
| TFD6322.ADA  | TFD6332.ADA  | TFD6333.ADA  | TFD6334.ADA  | TFD6335.ADA  | TFD6336.ADA  |
| TFD6337.ADA  | TFD6338.ADA  | TFD6339.ADA  | TFD6340.ADA  | TFD6342.ADA  | TFD6343.ADA  |
| TFD6344.ADA  | TFD6345.ADA  | TFD6346.ADA  | TFD6347.ADA  | TFD6348.ADA  | TFD6349.ADA  |
| TFD6350.ADA  | TFD6352.ADA  | TFD6353.ADA  | TFD6354.ADA  | TFD6355.ADA  | TFD6356.ADA  |
| TFD6357.ADA  | TFD6358.ADA  | TFD6359.ADA  | TFD6360.ADA  | TFD6362.ADA  | TFD6363.ADA  |
| TFD6364.ADA  | TFD6365.ADA  | TFD6366.ADA  | TFD6367.ADA  | TFD6368.ADA  | TFD6369.ADA  |
| TFD6370.ADA  | TFD6372.ADA  | TFD6373.ADA  | TFD6374.ADA  | TFD6375.ADA  | TFD6376.ADA  |
| TFD6377.ADA  | TFD6378.ADA  | TFD6379.ADA  | TFD6380.ADA  | TFD6382.ADA  | TFD6383.ADA  |
| TFD6384.ADA  | TFD6385.ADA  | TFD6386.ADA  | TFD6387.ADA  | TFD6388.ADA  | TFD6389.ADA  |
| TFD6390.ADA  | TFD680G.ADA  | TFD680H.ADA  | TFD680I.ADA  | TFD680J.ADA  | TFD9000.ADA  |
| TFD9200.ADA  | TFD9C00.ADA  | TFD9C01.ADA  | TFD9C02.ADA  | TFD9C03.ADA  | TFD9C04.ADA  |
| TFD9C106.ADA | TFD9C107.ADA | TFD9C310.ADA | TFD9C311.ADA | TFD9C313.ADA | TFD9C314.ADA |

Table A-1 ACPS ANSI Tape Contents Volume ACPS (continued)

|             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|
| TFDD600.ADA | TFDD601.ADA | TFDD602.ADA | TFDD603.ADA | TFDD604.ADA | TFDD605.ADA |
| TFDD606.ADA | TFDD607.ADA | TFDD609.ADA | TFDD610.ADA | TFDD611.ADA | TFDD722.ADA |
| TFDD723.ADA | TFDD724.ADA | TFDD725.ADA | TFDD72A.ADA | TFDD72B.ADA | TFDD72C.ADA |
| TFDD72E.ADA | TFDD72F.ADA | TFDD72G.ADA | TFDD72H.ADA | TFDD72I.ADA | TFDDA01.ADA |
| TFDDA02.ADA | TFDE000.ADA | TFDE201.ADA | TFDE202.ADA | TFDE203.ADA | TFDE204.ADA |
| TFDE205.ADA | TFDE206.ADA | TFDE207.ADA | TFDE208.ADA | TFDE209.ADA | TFDE20A.ADA |
| TFDE211.ADA | TFDE212.ADA | TFDE213.ADA | TFDE214.ADA | TFDE215.ADA | TFDE216.ADA |
| TFDE220.ADA | TFDE231.ADA | TFDE232.ADA | TFDE233.ADA | TFDE234.ADA | TFDE235.ADA |
| TFDE236.ADA | TFDE237.ADA | TFDE238.ADA | TFDE239.ADA | TFDE23A.ADA | TFDE241.ADA |
| TFDE242.ADA | TFDE243.ADA | TFDE244.ADA | TFDE245.ADA | TFDE246.ADA | TFDE250.ADA |
| TFDE401.ADA | TFDE402.ADA | TFDE403.ADA | TFDE404.ADA | TFDE405.ADA | TFDE406.ADA |
| TFDE407.ADA | TFDE408.ADA | TFDE409.ADA | TFDE40A.ADA | TFDE411.ADA | TFDE412.ADA |
| TFDE413.ADA | TFDE414.ADA | TFDE415.ADA | TFDE416.ADA | TFDE420.ADA | TFDE431.ADA |
| TFDE432.ADA | TFDE433.ADA | TFDE434.ADA | TFDE435.ADA | TFDE436.ADA | TFDE437.ADA |
| TFDE438.ADA | TFDE439.ADA | TFDE43A.ADA | TFDE441.ADA | TFDE442.ADA | TFDE443.ADA |
| TFDE444.ADA | TFDE445.ADA | TFDE446.ADA | TFDE450.ADA | TFDF000.ADA | TFDF001.ADA |
| TFDF002.ADA | TFDF003.ADA | TFDF004.ADA | TFDF005.ADA | TFM9A00.ADA | TFM9A01.ADA |
| TFM9A02.ADA | TFM9A03.ADA | TFMB000.ADA | TFMB001.ADA | TFMB002.ADA | TFMB003.ADA |
| TFMB004.ADA | TFMB005.ADA | TFMB006.ADA | TFMB007.ADA | TFMB008.ADA | TFMB009.ADA |
| TFMB010.ADA | TFMB011.ADA | TFMB012.ADA | TFMB013.ADA | TFMB014.ADA | TFMB015.ADA |
| TFMB016.ADA | TFMB017.ADA | TFMB018.ADA | TFMB019.ADA | TFMB020.ADA | TFMB021.ADA |
| TFMB022.ADA | TFMB023.ADA | TFMB024.ADA | TFMB025.ADA | TFMB026.ADA | TFMB027.ADA |
| TFMB028.ADA | TFMB029.ADA | TFMB030.ADA | TFMB031.ADA | TFMB032.ADA | TFMB033.ADA |
| TFMB034.ADA | TFMB035.ADA | TFMB036.ADA | TFMB037.ADA | TFMB038.ADA | TFMB039.ADA |
| TFMB040.ADA | TFMB041.ADA | TFMB042.ADA | TFMB043.ADA | TFMB044.ADA | TFN9300.ADA |
| TFN9301.ADA | TFN9302.ADA | TFN9303.ADA | TFN9510.ADA | TFN9511.ADA | TFN9610.ADA |
| TFN9611.ADA | TFN9612.ADA | TFN9613.ADA | TG0000C.ADA | TG0P000.ADA | TGD0000.ADA |
| TGD0001.ADA | TGD0002.ADA | TGD0003.ADA | TGD0004.ADA | TGD0005.ADA | TGD0006.ADA |
| TGD0007.ADA | TGD0008.ADA | TGD0009.ADA | TGD000D.ADA | TGD000E.ADA | TGD0019.ADA |
| TGD0029.ADA | TGD0039.ADA | TGD0049.ADA | TGN000F.ADA | TGN000G.ADA | TGN000H.ADA |
| TGN000I.ADA | TGN000J.ADA | TGN000K.ADA | TL09000.ADA | TL09100.ADA | TL09101.ADA |
| TL09111.ADA | TL09121.ADA | TL09131.ADA | TLOP000.ADA | TLD9200.ADA | TLD9202.ADA |
| TLD9203.ADA | TLD9212.ADA | TLD9213.ADA | TLD9222.ADA | TLD9223.ADA | TLD9232.ADA |
| TLD9233.ADA | TLDE000.ADA | TLDE2B1.ADA | TLDE2B2.ADA | TLDE2C1.ADA | TLDE2C2.ADA |
| TLDE2C5.ADA | TLDE2C6.ADA | TLDE4B1.ADA | TLDE4B2.ADA | TLDE4C1.ADA | TLDE4C2.ADA |
| TLDE4C5.ADA | TLDE4C6.ADA | T000001.ADA | T000002.ADA | T000102.ADA | T000103.ADA |
| T000104.ADA | T000107.ADA | T000108.ADA | T000109.ADA | T000112.ADA | T000113.ADA |
| T000114.ADA | T000202.ADA | T000203.ADA | T000204.ADA | T000207.ADA | T000208.ADA |
| T000209.ADA | T000300.ADA | T000305.ADA | T000310.ADA | T000311.ADA | T000312.ADA |
| T000313.ADA | T000314.ADA | T000315.ADA | T000316.ADA | T000317.ADA | T000318.ADA |
| T000319.ADA | T000320.ADA | T000321.ADA | T000322.ADA | T000323.ADA | T000324.ADA |
| T000325.ADA | T000326.ADA | T000327.ADA | T000328.ADA | T000329.ADA | T000330.ADA |
| T000331.ADA | T000332.ADA | T000333.ADA | T000334.ADA | T000335.ADA | T000336.ADA |
| T000337.ADA | T000338.ADA | T000339.ADA | T000340.ADA | T000341.ADA | T000342.ADA |
| T000343.ADA | T000347.ADA | T000348.ADA | T000349.ADA | T000350.ADA | T000351.ADA |
| T000352.ADA | T000353.ADA | T000354.ADA | T000355.ADA | T000356.ADA | T000357.ADA |
| T000358.ADA | T000359.ADA | T000360.ADA | T000361.ADA | T000362.ADA | T000363.ADA |
| T000364.ADA | T000365.ADA | T000366.ADA | T000367.ADA | T000368.ADA | T000369.ADA |
| T00036A.ADA | T00036B.ADA | T00036F.ADA | T00036G.ADA | T00036H.ADA | T00036I.ADA |
| T00036J.ADA | T00036K.ADA | T00036L.ADA | T00036M.ADA | T00036N.ADA | T00036U.ADA |
| T00036V.ADA | T00036W.ADA | T000374.ADA | T000375.ADA | T000376.ADA | T000377.ADA |
| T000378.ADA | T000390.ADA | T000391.ADA | T000402.ADA | T000403.ADA | T000404.ADA |
| T000500.ADA | T000502.ADA | T000503.ADA | T000504.ADA | T000507.ADA | T000508.ADA |
| T000509.ADA | T000512.ADA | T000513.ADA | T000514.ADA | T000517.ADA | T000518.ADA |
| T000519.ADA | T000602.ADA | T000603.ADA | T000604.ADA | T000605.ADA | T000606.ADA |
| T000607.ADA | T000702.ADA | T000703.ADA | T000704.ADA | T000705.ADA | T000706.ADA |
| T000707.ADA | T000708.ADA | T000709.ADA | T000710.ADA | T000711.ADA | T000713.ADA |
| T000714.ADA | T000715.ADA | T000716.ADA | T000717.ADA | T000718.ADA | T000719.ADA |
| T000720.ADA | T000721.ADA | T00P000.ADA | TOD0344.ADA | TOD0345.ADA | TOD0346.ADA |
| TOD036C.ADA | TOD036D.ADA | TOD036E.ADA | TOD036O.ADA | TOD036P.ADA | TOD036Q.ADA |
| TOD036R.ADA | TOD036S.ADA | TOD036T.ADA | TOD036X.ADA | TOD036Y.ADA | TOD036Z.ADA |
| TOD0370.ADA | TOD0371.ADA | TOD0372.ADA | TOD0373.ADA | TOD0380.ADA | TOD0381.ADA |
| TOD0382.ADA | TOD0383.ADA | TOD0523.ADA | TOD0524.ADA | TOD0525.ADA | TOD0526.ADA |
| TOD0527.ADA | TOD0528.ADA | TOD0529.ADA | MATHFUN.DEC | ALD9204.DEC | ALD9214.DEC |
| ALD9224.DEC | ALD9234.DEC | ALDE2C3.DEC | ALDE2C4.DEC | ALDE2C7.DEC | ALDE2C8.DEC |
| ALDE4C3.DEC | ALDE4C4.DEC | ALDE4C7.DEC | ALDE4C8.DEC | CLD9204.DEC | CLD9214.DEC |
| CLD9224.DEC | CLD9234.DEC | CLDE2C3.DEC | CLDE2C4.DEC | CLDE2C7.DEC | CLDE2C8.DEC |

Table A-1 ACPS ANSI Tape Contents Volume ACPS (continued)

|             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|
| CLDE4C3.DEC | CLDE4C4.DEC | CLDE4C7.DEC | CLDE4C8.DEC | ELD9204.DEC | ELD9214.DEC |
| ELD9224.DEC | ELD9234.DEC | ELDE2C3.DEC | ELDE2C4.DEC | ELDE2C7.DEC | ELDE2C8.DEC |
| ELDE4C3.DEC | ELDE4C4.DEC | ELDE4C7.DEC | ELDE4C8.DEC | SLD9204.DEC | SLD9214.DEC |
| SLD9224.DEC | SLD9234.DEC | SLDE2C3.DEC | SLDE2C4.DEC | SLDE2C7.DEC | SLDE2C8.DEC |
| SLDE4C3.DEC | SLDE4C4.DEC | SLDE4C7.DEC | SLDE4C8.DEC | TLD9204.DEC | TLD9214.DEC |
| TLD9224.DEC | TLD9234.DEC | TLDE2C3.DEC | TLDE2C4.DEC | TLDE2C7.DEC | TLDE2C8.DEC |
| TLDE4C3.DEC | TLDE4C4.DEC | TLDE4C7.DEC | TLDE4C8.DEC | AGD0059.DEC | CGD0059.DEC |
| EGD0059.DEC | SGD0059.DEC | TGD0059.DEC | AFD9C03.DEC | AFD9C04.DEC | CFD9C03.DEC |
| CFD9C04.DEC | EFD9C03.DEC | EFD9C04.DEC | SFD9C03.DEC | SFD9C04.DEC | TFD9C03.DEC |
| TFD9C04.DEC | OURSPC.SPA  | OURSYS.SPA  | OURSYSR.SPA | OURTYP.SPA  | OURTYPR.SPA |
| OURSPC.TIM  | OURSYS.TIM  | OURSYSR.TIM | OURTYP.TIM  | OURTYPR.TIM | ADASY.SUSE  |
| ADATYP.USE  | AFD4128.USE | AFD451U.USE | AFD4803.USE | AFDC107.USE | AFDD608.USE |
| CFD4128.USE | CFD451U.USE | CFD4803.USE | CFDC107.USE | CFDD608.USE | EFD4128.USE |
| EFD451U.USE | EFDC107.USE | EFDD608.USE | OURSPC.USE  | OURTYP.USE  | OURTYPR.USE |
| SFD4128.USE | SFD451U.USE | SFD4803.USE | SFDC107.USE | SFDD608.USE | TFD4128.USE |
| TFD451U.USE | TFD4803.USE | TFDC107.USE | TFDD608.USE |             |             |
| FA0P000.CMN | FF0P000.CMN | FFDE000.CMN | FG0P000.CMN | FGD0000.CMN | FO00002.CMN |
| FO0P000.CMN | OURFOR.CMN  | SYSFOR.CMN  | FA00000.FOR | FF03500.FOR | FF03502.FOR |
| FF03503.FOR | FF03504.FOR | FF03514.FOR | FF03519.FOR | FF03600.FOR | FF03602.FOR |
| FF03603.FOR | FF03605.FOR | FF03606.FOR | FF03608.FOR | FF03609.FOR | FF03620.FOR |
| FF04120.FOR | FF04121.FOR | FF04122.FOR | FF04123.FOR | FF04124.FOR | FF04125.FOR |
| FF04126.FOR | FF04127.FOR | FF04129.FOR | FF04510.FOR | FF04511.FOR | FF04512.FOR |
| FF04513.FOR | FF04514.FOR | FF04515.FOR | FF04516.FOR | FF04517.FOR | FF04518.FOR |
| FF04519.FOR | FF0451A.FOR | FF0451B.FOR | FF0451C.FOR | FF0451D.FOR | FF0451E.FOR |
| FF0451F.FOR | FF0451G.FOR | FF0451H.FOR | FF0451I.FOR | FF0451J.FOR | FF0451V.FOR |
| FF0451W.FOR | FF0451X.FOR | FF0451Y.FOR | FF0451Z.FOR | FF04520.FOR | FF04521.FOR |
| FF04522.FOR | FF04529.FOR | FF04530.FOR | FF04531.FOR | FF04532.FOR | FF04533.FOR |
| FF04534.FOR | FF04535.FOR | FF04536.FOR | FF04537.FOR | FF04538.FOR | FF04539.FOR |
| FF0453A.FOR | FF04540.FOR | FF04541.FOR | FF04550.FOR | FF04551.FOR | FF04552.FOR |
| FF04553.FOR | FF04554.FOR | FF04555.FOR | FF04556.FOR | FF04557.FOR | FF04558.FOR |
| FF04559.FOR | FF04560.FOR | FF04562.FOR | FF04563.FOR | FF04600.FOR | FF04601.FOR |
| FF04602.FOR | FF04601.FOR | FF05200.FOR | FF05201.FOR | FF05202.FOR | FF05203.FOR |
| FF05204.FOR | FF05205.FOR | FF05206.FOR | FF05207.FOR | FF05208.FOR | FF05209.FOR |
| FF0520A.FOR | FF05210.FOR | FF05211.FOR | FF05212.FOR | FF05213.FOR | FF05214.FOR |
| FF05215.FOR | FF0521H.FOR | FF0521I.FOR | FF0521J.FOR | FF0521K.FOR | FF05300.FOR |
| FF05301.FOR | FF05302.FOR | FF05303.FOR | FF05304.FOR | FF05305.FOR | FF05306.FOR |
| FF05307.FOR | FF05308.FOR | FF05400.FOR | FF05401.FOR | FF05402.FOR | FF05403.FOR |
| FF05404.FOR | FF05405.FOR | FF05406.FOR | FF05407.FOR | FF05408.FOR | FF05501.FOR |
| FF05502.FOR | FF05503.FOR | FF05504.FOR | FF05505.FOR | FF05506.FOR | FF05507.FOR |
| FF05508.FOR | FF05509.FOR | FF0550A.FOR | FF0550B.FOR | FF0550C.FOR | FF0550D.FOR |
| FF0550E.FOR | FF0550F.FOR | FF06001.FOR | FF06009.FOR | FF06010.FOR | FF06011.FOR |
| FF06013.FOR | FF06014.FOR | FF06015.FOR | FF06016.FOR | FF06017.FOR | FF06018.FOR |
| FF06019.FOR | FF06022.FOR | FF06023.FOR | FF06024.FOR | FF06025.FOR | FF06026.FOR |
| FF06027.FOR | FF06028.FOR | FF06029.FOR | FF06030.FOR | FF06031.FOR | FF06032.FOR |
| FF06033.FOR | FF06043.FOR | FF06044.FOR | FF06045.FOR | FF06046.FOR | FF06047.FOR |
| FF06048.FOR | FF06049.FOR | FF06050.FOR | FF06051.FOR | FF06052.FOR | FF06053.FOR |
| FF06060.FOR | FF06061.FOR | FF06062.FOR | FF06063.FOR | FF06064.FOR | FF06065.FOR |
| FF06066.FOR | FF06067.FOR | FF06068.FOR | FF06069.FOR | FF06070.FOR | FF06071.FOR |
| FF06072.FOR | FF06073.FOR | FF06074.FOR | FF06075.FOR | FF06076.FOR | FF06077.FOR |
| FF06078.FOR | FF06079.FOR | FF06100.FOR | FF06101.FOR | FF06108.FOR | FF06109.FOR |
| FF06110.FOR | FF06111.FOR | FF06112.FOR | FF06113.FOR | FF06114.FOR | FF06115.FOR |
| FF06116.FOR | FF06117.FOR | FF06118.FOR | FF06119.FOR | FF06122.FOR | FF06132.FOR |
| FF06133.FOR | FF06134.FOR | FF06135.FOR | FF06136.FOR | FF06137.FOR | FF06138.FOR |
| FF06139.FOR | FF06140.FOR | FF06142.FOR | FF06143.FOR | FF06144.FOR | FF06145.FOR |
| FF06146.FOR | FF06147.FOR | FF06148.FOR | FF06149.FOR | FF06150.FOR | FF06152.FOR |
| FF06153.FOR | FF06154.FOR | FF06155.FOR | FF06156.FOR | FF06157.FOR | FF06158.FOR |
| FF06159.FOR | FF06160.FOR | FF06162.FOR | FF06163.FOR | FF06164.FOR | FF06165.FOR |
| FF06166.FOR | FF06167.FOR | FF06168.FOR | FF06169.FOR | FF06170.FOR | FF06172.FOR |
| FF06173.FOR | FF06174.FOR | FF06175.FOR | FF06176.FOR | FF06177.FOR | FF06178.FOR |
| FF06179.FOR | FF06180.FOR | FF06182.FOR | FF06183.FOR | FF06184.FOR | FF06185.FOR |
| FF06186.FOR | FF06187.FOR | FF06188.FOR | FF06189.FOR | FF06190.FOR | FF06802.FOR |
| FF06803.FOR | FF06806.FOR | FF06807.FOR | FF06816.FOR | FF06817.FOR | FF06818.FOR |
| FF06819.FOR | FF06820.FOR | FF06821.FOR | FF0D720.FOR | FF0D721.FOR | FF0D727.FOR |
| FF0D728.FOR | FFD451K.FOR | FFD451L.FOR | FFD451M.FOR | FFD451N.FOR | FFD451O.FOR |
| FFD451P.FOR | FFD451Q.FOR | FFD451R.FOR | FFD451S.FOR | FFD4523.FOR | FFD4524.FOR |
| FFD4525.FOR | FFD4526.FOR | FFD455D.FOR | FFD455E.FOR | FFD455F.FOR | FFD455G.FOR |
| FFD455I.FOR | FFD455J.FOR | FFD455K.FOR | FFD455L.FOR | FFD4567.FOR | FFD4568.FOR |

Table A-1 ACPS ANSI Tape Contents Volume ACPS (continued)

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FFD4569.FOR FFD4603.FOR FFD4604.FOR FFD4605.FOR FFD4606.FOR FFD4607.FOR
FFD4608.FOR FFD4609.FOR FFD460A.FOR FFD460B.FOR FFD520C.FOR FFD520D.FOR
FFD520E.FOR FFD520F.FOR FFD520G.FOR FFD520H.FOR FFD520I.FOR FFD520J.FOR
FFD521E.FOR FFD521F.FOR FFD521G.FOR FFD521H.FOR FFD521I.FOR FFD521J.FOR
FFDE201.FOR FFDE202.FOR FFDE203.FOR FFDE204.FOR FFDE205.FOR FFDE206.FOR
FFDE207.FOR FFDE208.FOR FFDE209.FOR FFDE20A.FOR FFDE211.FOR FFDE212.FOR
FFDE213.FOR FFDE214.FOR FFDE215.FOR FFDE216.FOR FFDE220.FOR FFDE231.FOR
FFDE232.FOR FFDE233.FOR FFDE234.FOR FFDE235.FOR FFDE236.FOR FFDE237.FOR
FFDE238.FOR FFDE239.FOR FFDE23A.FOR FFDE241.FOR FFDE242.FOR FFDE243.FOR
FFDE244.FOR FFDE245.FOR FFDE246.FOR FFDE250.FOR FFDE401.FOR FFDE402.FOR
FFDE403.FOR FFDE404.FOR FFDE405.FOR FFDE406.FOR FFDE407.FOR FFDE408.FOR
FFDE409.FOR FFDE40A.FOR FFDE411.FOR FFDE412.FOR FFDE413.FOR FFDE414.FOR
FFDE415.FOR FFDE416.FOR FFDE420.FOR FFDE431.FOR FFDE432.FOR FFDE433.FOR
FFDE434.FOR FFDE435.FOR FFDE436.FOR FFDE437.FOR FFDE438.FOR FFDE439.FOR
FFDE43A.FOR FFDE441.FOR FFDE442.FOR FFDE443.FOR FFDE444.FOR FFDE445.FOR
FFDE446.FOR FFDE450.FOR FFDF000.FOR FFDF001.FOR FFDF002.FOR FFDF003.FOR
FFDF004.FOR FFDF005.FOR FFIRST.FOR FGDD001.FOR FGDD00D.FOR FGDD00E.FOR
FO00102.FOR FO00103.FOR FO00104.FOR FO00202.FOR FO00203.FOR FO00204.FOR
FO00300.FOR FO00305.FOR FO00310.FOR FO00311.FOR FO00312.FOR FO00313.FOR
FO00314.FOR FO00315.FOR FO00316.FOR FO00317.FOR FO00318.FOR FO00319.FOR
FO00320.FOR FO00321.FOR FO00322.FOR FO00323.FOR FO00324.FOR FO00325.FOR
FO00326.FOR FO00327.FOR FO00328.FOR FO00329.FOR FO00330.FOR FO00331.FOR
FO00332.FOR FO00333.FOR FO00334.FOR FO00335.FOR FO00336.FOR FO00337.FOR
FO00338.FOR FO00339.FOR FO00340.FOR FO00341.FOR FO00342.FOR FO00343.FOR
FO00347.FOR FO00348.FOR FO00349.FOR FO00350.FOR FO00351.FOR FO00352.FOR
FO00353.FOR FO00354.FOR FO00355.FOR FO00356.FOR FO00357.FOR FO00358.FOR
FO00359.FOR FO00360.FOR FO00361.FOR FO00362.FOR FO00363.FOR FO00364.FOR
FO00402.FOR FO00403.FOR FO00404.FOR FO00508.FOR FO00509.FOR FO00510.FOR
FO00514.FOR FO00517.FOR FO00518.FOR FO00519.FOR FO00602.FOR FO00603.FOR
FO00604.FOR FO00605.FOR FO00606.FOR FO00607.FOR FO00702.FOR FO00703.FOR
FO00704.FOR FO00705.FOR FO00706.FOR FO00707.FOR FO00708.FOR FO00709.FOR
FO00710.FOR FO00711.FOR FO00713.FOR FO00714.FOR FO00715.FOR FO00716.FOR
FO00717.FOR FO00718.FOR FO00719.FOR FO00720.FOR FO00721.FOR FOD0344.FOR
FOD0345.FOR FOD0346.FOR FOD036X.FOR FOD036Y.FOR FOD036Z.FOR FORDMP.FOR
FORSYS.FOR SYSBLK.FOR FFD451U.USE FFD456Y.USE FORTYP.USE TYPPOR.USE
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Table A-1 ACPS ANSI Tape Contents Volume ACPS (continued)

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|-------------|--------------|-------------|-------------|-------------|-------------|
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| JFJ619D.CPL | JFJ619E.CPL  | JFJ619F.CPL | JFJ619G.CPL | JFJ619H.CPL | JFJ619J.CPL |
| JFJ619K.CPL | JFJ619L.CPL  | JFJ619M.CPL | JFJ619N.CPL | JFJ619O.CPL | JFJ619P.CPL |
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| JFJ6218.CPL | JFJ6219.CPL  | JFJ6223.CPL | JFJ6224.CPL | JFJ6225.CPL | JFJ6226.CPL |
| JFJ6227.CPL | JFJ6228.CPL  | JFJ6229.CPL | JFJ6230.CPL | JFJ6231.CPL | JFJ6232.CPL |
| JFJ6243.CPL | JFJ6244.CPL  | JFJ6245.CPL | JFJ6246.CPL | JFJ6247.CPL | JFJ6248.CPL |
| JFJ6249.CPL | JFJ6250.CPL  | JFJ6251.CPL | JFJ6252.CPL | JFJ6802.CPL | JFJ6806.CPL |
| JFJ6808.CPL | JFJ680A.CPL  | JFJ680C.CPL | JFJ680E.CPL | JFJ680G.CPL | JFJ680I.CPL |
| JFJ6810.CPL | JFJ6814.CPL  | JFJ6816.CPL | JFJ6818.CPL | JFJ6820.CPL | JFJ6822.CPL |
| JFJ6824.CPL | JGD0P000.CPL | JGD0000.CPL | JGD0004.CPL | JGD0005.CPL | JGD0006.CPL |
| JGJ000D.CPL | JGN000F.CPL  | JGN000G.CPL | JGN000H.CPL | J000002.CPL | J00P000.CPL |
| JOJ0102.CPL | JOJ0103.CPL  | JOJ0202.CPL | JOJ0203.CPL | JOJ0311.CPL | JOJ0312.CPL |
| JOJ0314.CPL | JOJ0315.CPL  | JOJ0323.CPL | JOJ0324.CPL | JOJ0326.CPL | JOJ0327.CPL |
| JOJ0329.CPL | JOJ0330.CPL  | JOJ0332.CPL | JOJ0333.CPL | JOJ0335.CPL | JOJ0336.CPL |
| JOJ0338.CPL | JOJ0339.CPL  | JOJ0341.CPL | JOJ0342.CPL | JOJ0344.CPL | JOJ0345.CPL |
| JOJ0347.CPL | JOJ0348.CPL  | JOJ0349.CPL | JOJ0351.CPL | JOJ0352.CPL | JOJ0363.CPL |
| JOJ0364.CPL | JOJ036I.CPL  | JOJ036J.CPL | JOJ036L.CPL | JOJ036M.CPL | JOJ036O.CPL |
| JOJ036P.CPL | JOJ036R.CPL  | JOJ036S.CPL | JOJ036U.CPL | JOJ036V.CPL | JOJ036X.CPL |
| JOJ036Y.CPL | JOJ0390.CPL  | JOJ0402.CPL | JOJ0403.CPL | JOJ0502.CPL | JOJ0503.CPL |
| JOJ0507.CPL | JOJ0508.CPL  | JOJ0512.CPL | JOJ0513.CPL | JOJ0517.CPL | JOJ0518.CPL |
| JOJ0523.CPL | JOJ0524.CPL  | JOJ0602.CPL | JOJ0603.CPL | JOJ0702.CPL | JOJ0703.CPL |
| JOJ0706.CPL | JOJ0707.CPL  | JOJ0709.CPL | JOJ0710.CPL | JOJ0719.CPL | JOJ0720.CPL |
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| JF03501.JOV | JF03502.JOV  | JF03503.JOV | JF03504.JOV | JF03513.JOV | JF03514.JOV |
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| JF03805.JOV | JF04120.JOV  | JF04121.JOV | JF04122.JOV | JF04123.JOV | JF04124.JOV |
| JF04125.JOV | JF04126.JOV  | JF04127.JOV | JF04129.JOV | JF0412B.JOV | JF04130.JOV |
| JF04131.JOV | JF04132.JOV  | JF04133.JOV | JF0413D.JOV | JF0413H.JOV | JF0413I.JOV |
| JF0413J.JOV | JF0413K.JOV  | JF04310.JOV | JF04311.JOV | JF04312.JOV | JF04510.JOV |
| JF04511.JOV | JF04512.JOV  | JF04513.JOV | JF04514.JOV | JF04515.JOV | JF04516.JOV |
| JF04517.JOV | JF04518.JOV  | JF04519.JOV | JF0451A.JOV | JF0451B.JOV | JF0451C.JOV |
| JF0451D.JOV | JF0451E.JOV  | JF0451F.JOV | JF0451G.JOV | JF0451J.JOV | JF0451V.JOV |
| JF0451H.JOV | JF0451X.JOV  | JF0451Y.JOV | JF0451Z.JOV | JF04520.JOV | JF04521.JOV |
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| JF04539.JOV | JF0453A.JOV  | JF0453B.JOV | JF0453C.JOV | JF04540.JOV | JF04541.JOV |
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| JF04556.JOV | JF04557.JOV  | JF04558.JOV | JF04559.JOV | JF0455N.JOV | JF0455O.JOV |
| JF04560.JOV | JF04562.JOV  | JF04563.JOV | JF04600.JOV | JF04601.JOV | JF04602.JOV |
| JF0460E.JOV | JF0460F.JOV  | JF0460G.JOV | JF0460H.JOV | JF0460I.JOV | JF0460J.JOV |
| JF0460M.JOV | JF05200.JOV  | JF05201.JOV | JF05202.JOV | JF05203.JOV | JF05204.JOV |
| JF05205.JOV | JF05206.JOV  | JF05207.JOV | JF05208.JOV | JF05209.JOV | JF0520A.JOV |
| JF0520B.JOV | JF0520M.JOV  | JF05200.JOV | JF0520R.JOV | JF0520S.JOV | JF05210.JOV |
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| JF0521I.JOV | JF0521J.JOV  | JF0521K.JOV | JF0521L.JOV | JF0521N.JOV | JF05300.JOV |
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| JF05307.JOV | JF05308.JOV  | JF05400.JOV | JF05401.JOV | JF05402.JOV | JF05403.JOV |
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| JF05508.JOV | JF05509.JOV  | JF0550A.JOV | JF0550B.JOV | JF0550C.JOV | JF0550D.JOV |
| JF0550E.JOV | JF0550F.JOV  | JF06001.JOV | JF06009.JOV | JF06010.JOV | JF06011.JOV |
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| JF06019.JOV | JF06022.JOV  | JF06023.JOV | JF06024.JOV | JF06025.JOV | JF06026.JOV |
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| JF06060.JOV | JF06061.JOV  | JF06062.JOV | JF06063.JOV | JF06064.JOV | JF06065.JOV |
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Table A-1 ACPS ANSI Tape Contents Volume ACPS (continued)

|              |             |             |             |             |             |
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| JF06192.JOV  | JF06193.JOV | JF06194.JOV | JF06195.JOV | JF06196.JOV | JF06197.JOV |
| JF06198.JOV  | JF06199.JOV | JF0619A.JOV | JF0619B.JOV | JF0619C.JOV | JF0619D.JOV |
| JF0619E.JOV  | JF0619F.JOV | JF0619G.JOV | JF0619H.JOV | JF0619I.JOV | JF0619J.JOV |
| JF0619K.JOV  | JF0619L.JOV | JF0619M.JOV | JF0619N.JOV | JF0619O.JOV | JF0619P.JOV |
| JF0619Q.JOV  | JF0619R.JOV | JF06802.JOV | JF06803.JOV | JF06806.JOV | JF06807.JOV |
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| JF06822.JOV  | JF06823.JOV | JF06824.JOV | JF06825.JOV | JF0D720.JOV | JF0D721.JOV |
| JF0D727.JOV  | JF0D728.JOV | JF0D729.JOV | JF0D72D.JOV | JFD3551.JOV | JFD4128.JOV |
| JFD412A.JOV  | JFD412C.JOV | JFD412D.JOV | JFD4135.JOV | JFD4136.JOV | JFD4137.JOV |
| JFD4138.JOV  | JFD4139.JOV | JFD413A.JOV | JFD413B.JOV | JFD413C.JOV | JFD413E.JOV |
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| JFD455J.JOV  | JFD4566.JOV | JFD4567.JOV | JFD4603.JOV | JFD4604.JOV | JFD4605.JOV |
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| JFD521M.JOV  | JFD521O.JOV | JFD521P.JOV | JFD6201.JOV | JFD6209.JOV | JFD6210.JOV |
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| JFDD72G.JOV  | JFDD72H.JOV | JFDD72I.JOV | JFDDA01.JOV | JFDDA02.JOV | JFDF000.JOV |
| JFDF001.JOV  | JFDF002.JOV | JFDF003.JOV | JFDF004.JOV | JFDF005.JOV | JFIRST.JOV  |
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| J000104.JOV  | J000202.JOV | J000203.JOV | J000204.JOV | J000300.JOV | J000305.JOV |
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| J000364.JOV  | J000365.JOV | J00036I.JOV | J00036J.JOV | J00036K.JOV | J00036L.JOV |
| J00036M.JOV  | J00036N.JOV | J00036U.JOV | J00036V.JOV | J00036W.JOV | J000390.JOV |
| J000391.JOV  | J000402.JOV | J000403.JOV | J000404.JOV | J000500.JOV | J000502.JOV |
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| J000709.JOV  | J000710.JOV | J000711.JOV | J000713.JOV | J000714.JOV | J000715.JOV |
| J000716.JOV  | J000717.JOV | J000718.JOV | J000719.JOV | J000720.JOV | J000721.JOV |
| J0D0344.JOV  | J0D0345.JOV | J0D0346.JOV | J0D0360.JOV | J0D036P.JOV | J0D036Q.JOV |
| J0D036R.JOV  | J0D036S.JOV | J0D036T.JOV | J0D036X.JOV | J0D036Y.JOV | J0D036Z.JOV |
| J0D0523.JOV  | J0D0524.JOV | J0D0525.JOV | J0VSYS.JOV  | SPCJOV.JOV  | JF03701.USE |
| JF04311.USE  | JF0451H.USE | JF0451I.USE | JF0451J.USE | JF0619A.USE | JF06822.USE |
| JFD451N.USE  | JFD451O.USE | JFD451R.USE | JFD451S.USE | JFD451U.USE | JFD4525.USE |
| JFD4526.USE  | JFD4528.USE | JFD455F.USE | JFD455G.USE | JFD455K.USE | JFD455L.USE |
| JFD4568.USE  | JFD4569.USE | JFD4608.USE | JFD4609.USE | JFD460A.USE | JFD460B.USE |
| JFD460C.USE  | JFD460D.USE | JFD520G.USE | JFD520H.USE | JFD520I.USE | JFD520J.USE |
| JFD521C.USE  | JFD521D.USE | JFD521E.USE | JFD521F.USE | JFD6260.USE | JFD6261.USE |
| JFD6262.USE  | JFD6263.USE | JFD6264.USE | JFD6265.USE | JFD6266.USE | JFD6267.USE |
| JFD6268.USE  | JFD6269.USE | JFD6270.USE | JFD6271.USE | JFD6272.USE | JFD6273.USE |

Table A-1 ACPS ANSI Tape Contents Volume ACPS (concluded)

|             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|
| JFD6274.USE | JFD6275.USE | JFD6276.USE | JFD6277.USE | JFD6278.USE | JFD6279.USE |
| JFDD602.USE | JFDD603.USE | JFDD610.USE | JFDD611.USE | JFDD724.USE | JFDD725.USE |
| JFJ451H.USE | JFJ451I.USE | JFJ451N.USE | JFJ451O.USE | JFJ451R.USE | JFJ451S.USE |
| JFJ6260.USE | JFJ6261.USE | JFJ6262.USE | JFJ6263.USE | JFJ6264.USE | JFJ6265.USE |
| JFJ6266.USE | JFJ6267.USE | JFJ6268.USE | JFJ6270.USE | JFJ6271.USE | JFJ6272.USE |
| JFJ6273.USE | JFJ6274.USE | JFJ6275.USE | JFJ6276.USE | JFJ6277.USE | JFJ6278.USE |
| JGD0008.USE | JGN000J.USE | J000317.USE | J000318.USE | J000319.USE | J000320.USE |
| J000321.USE | J000322.USE | JOJ0317.USE | JOJ0318.USE | JOJ0320.USE | JOJ0321.USE |
| JOVTYP.USE  | TYPJOV.USE  | JGF0001.FOR | JGF000E.FOR | SYSJOV.FOR  | TMPDMP.FOR  |
| JOVMATH.DAT |             |             |             |             |             |
| CCOMPA.CMN  | CCOMPV.CMN  | CEXECA.CMN  | CEXECV.CMN  | CCOMP.FOR   | CEXEC.FOR   |



**Table A-2. ACPS ANSI Tape Contents Volume ACPS02**

|             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|
| CF06178.ADA | CF06179.ADA | CF06180.ADA | CF06182.ADA | CF06183.ADA | CF06184.ADA |
| CF06185.ADA | CF06186.ADA | CF06187.ADA | CF06188.ADA | CF06189.ADA | CF06190.ADA |
| CF06191.ADA | CF06192.ADA | CF06193.ADA | CF06194.ADA | CF06195.ADA | CF06196.ADA |
| CF06197.ADA | CF06198.ADA | CF06199.ADA | CF0619A.ADA | CF0619B.ADA | CF0619C.ADA |
| CF0619D.ADA | CF0619E.ADA | CF0619F.ADA | CF0619G.ADA | CF0619H.ADA | CF0619I.ADA |
| CF0619J.ADA | CF0619K.ADA | CF0619L.ADA | CF0619M.ADA | CF0619N.ADA | CF0619O.ADA |
| CF0619P.ADA | CF0619Q.ADA | CF0619R.ADA | CF06422.ADA | CF06423.ADA | CF06424.ADA |
| CF06425.ADA | CF06426.ADA | CF06427.ADA | CF06428.ADA | CF06429.ADA | CF0642A.ADA |
| CF0642B.ADA | CF06802.ADA | CF06803.ADA | CF06806.ADA | CF06807.ADA | CF06808.ADA |
| CF06809.ADA | CF0680A.ADA | CF0680B.ADA | CF0680C.ADA | CF0680D.ADA | CF0680E.ADA |
| CF0680F.ADA | CF06810.ADA | CF06811.ADA | CF06814.ADA | CF06815.ADA | CF06816.ADA |
| CF06817.ADA | CF06818.ADA | CF06819.ADA | CF06820.ADA | CF06821.ADA | CF06822.ADA |
| CF06823.ADA | CF06824.ADA | CF06825.ADA | CF09500.ADA | CF09501.ADA | CF09502.ADA |
| CF09503.ADA | CF09504.ADA | CF09505.ADA | CF09506.ADA | CF09507.ADA | CF09508.ADA |
| CF09509.ADA | CF09600.ADA | CF09601.ADA | CF09602.ADA | CF09603.ADA | CF09604.ADA |
| CF09605.ADA | CF09606.ADA | CF09607.ADA | CF09710.ADA | CF09711.ADA | CF09712.ADA |
| CF09713.ADA | CF09720.ADA | CF09721.ADA | CF09731.ADA | CF09900.ADA | CF09901.ADA |
| CF09902.ADA | CF09903.ADA | CF09801.ADA | CF0C100.ADA | CF0C101.ADA | CF0C102.ADA |
| CF0C103.ADA | CF0C300.ADA | CF0C301.ADA | CF0C302.ADA | CF0C303.ADA | CF0C304.ADA |
| CF0C305.ADA | CF0C306.ADA | CF0C307.ADA | CF0P000.ADA | CFD3551.ADA | CFD412A.ADA |
| CF04139.ADA | CFD412D.ADA | CFD4135.ADA | CFD4136.ADA | CFD4137.ADA | CFD4138.ADA |
| CFD4139.ADA | CFD413A.ADA | CFD413B.ADA | CFD413C.ADA | CFD413E.ADA | CFD413G.ADA |
| CFD451K.ADA | CFD451L.ADA | CFD451M.ADA | CFD451N.ADA | CFD451O.ADA | CFD451P.ADA |
| CFD451Q.ADA | CFD451R.ADA | CFD451S.ADA | CFD4523.ADA | CFD4524.ADA | CFD4525.ADA |
| CFD4526.ADA | CFD4528.ADA | CFD452A.ADA | CFD455D.ADA | CFD455E.ADA | CFD455F.ADA |
| CFD455G.ADA | CFD455I.ADA | CFD455J.ADA | CFD455K.ADA | CFD455L.ADA | CFD4566.ADA |
| CFD4567.ADA | CFD4568.ADA | CFD4569.ADA | CFD4603.ADA | CFD4604.ADA | CFD4605.ADA |
| CFD4606.ADA | CFD4607.ADA | CFD4608.ADA | CFD4609.ADA | CFD460A.ADA | CFD460B.ADA |
| CFD460K.ADA | CFD460L.ADA | CFD460N.ADA | CFD460O.ADA | CFD4800.ADA | CFD4801.ADA |
| CFD4802.ADA | CFD4803.ADA | CFD4804.ADA | CFD520C.ADA | CFD520D.ADA | CFD520E.ADA |
| CFD520F.ADA | CFD520G.ADA | CFD520H.ADA | CFD520I.ADA | CFD520J.ADA | CFD520N.ADA |
| CFD520P.ADA | CFD520Q.ADA | CFD5218.ADA | CFD5219.ADA | CFD521A.ADA | CFD521B.ADA |
| CFD521C.ADA | CFD521D.ADA | CFD521E.ADA | CFD521F.ADA | CFD521K.ADA | CFD521M.ADA |
| CFD521O.ADA | CFD521P.ADA | CFD6201.ADA | CFD6209.ADA | CFD6210.ADA | CFD6211.ADA |
| CFD6213.ADA | CFD6214.ADA | CFD6215.ADA | CFD6216.ADA | CFD6217.ADA | CFD6218.ADA |
| CFD6219.ADA | CFD6222.ADA | CFD6223.ADA | CFD6224.ADA | CFD6225.ADA | CFD6226.ADA |
| CFD6227.ADA | CFD6228.ADA | CFD6229.ADA | CFD6230.ADA | CFD6231.ADA | CFD6232.ADA |
| CFD6233.ADA | CFD6243.ADA | CFD6244.ADA | CFD6245.ADA | CFD6246.ADA | CFD6247.ADA |
| CFD6248.ADA | CFD6249.ADA | CFD6250.ADA | CFD6251.ADA | CFD6252.ADA | CFD6253.ADA |
| CFD6260.ADA | CFD6261.ADA | CFD6262.ADA | CFD6263.ADA | CFD6264.ADA | CFD6265.ADA |
| CFD6266.ADA | CFD6267.ADA | CFD6268.ADA | CFD6269.ADA | CFD6270.ADA | CFD6271.ADA |
| CFD6272.ADA | CFD6273.ADA | CFD6274.ADA | CFD6275.ADA | CFD6276.ADA | CFD6277.ADA |
| CFD6278.ADA | CFD6279.ADA | CFD6300.ADA | CFD6301.ADA | CFD6308.ADA | CFD6309.ADA |
| CFD6310.ADA | CFD6311.ADA | CFD6312.ADA | CFD6313.ADA | CFD6314.ADA | CFD6315.ADA |
| CFD6316.ADA | CFD6317.ADA | CFD6318.ADA | CFD6319.ADA | CFD6322.ADA | CFD6332.ADA |
| CFD6333.ADA | CFD6334.ADA | CFD6335.ADA | CFD6336.ADA | CFD6337.ADA | CFD6338.ADA |
| CFD6339.ADA | CFD6340.ADA | CFD6342.ADA | CFD6343.ADA | CFD6344.ADA | CFD6345.ADA |
| CFD6346.ADA | CFD6347.ADA | CFD6348.ADA | CFD6349.ADA | CFD6350.ADA | CFD6352.ADA |
| CFD6353.ADA | CFD6354.ADA | CFD6355.ADA | CFD6356.ADA | CFD6357.ADA | CFD6358.ADA |
| CFD6359.ADA | CFD6        |             |             |             |             |

Table A-2. ACPS ANSI Tape Contents Volume ACPS02 (Continued)

|             |             |             |              |              |              |
|-------------|-------------|-------------|--------------|--------------|--------------|
| CFDE43A.ADA | CFDE441.ADA | CFDE442.ADA | CFDE443.ADA  | CFDE444.ADA  | CFDE445.ADA  |
| CFDE446.ADA | CFDE450.ADA | CFDF000.ADA | CFDF001.ADA  | CFDF002.ADA  | CFDF003.ADA  |
| CFDF004.ADA | CFDF005.ADA | CFM9A00.ADA | CFM9A01.ADA  | CFM9A02.ADA  | CFM9A03.ADA  |
| CFMB000.ADA | CFMB001.ADA | CFMB002.ADA | CFMB003.ADA  | CFMB004.ADA  | CFMB005.ADA  |
| CFMB010.ADA | CFMB011.ADA | CFMB012.ADA | CFMB013.ADA  | CFMB014.ADA  | CFMB015.ADA  |
| CFMB016.ADA | CFMB017.ADA | CFMB018.ADA | CFMB019.ADA  | CFMB020.ADA  | CFMB029.ADA  |
| CFMB030.ADA | CFMB031.ADA | CFMB032.ADA | CFMB033.ADA  | CFMB034.ADA  | CFMB035.ADA  |
| CFMB036.ADA | CFMB041.ADA | CFMB042.ADA | CFMB043.ADA  | CFMB044.ADA  | CFN9300.ADA  |
| CFN9301.ADA | CFN9302.ADA | CFN9303.ADA | CFN9510.ADA  | CFN9511.ADA  | CFN9610.ADA  |
| CFN9611.ADA | CFN9612.ADA | CFN9613.ADA | CGD0000C.ADA | CGD0000D.ADA | CGD0000E.ADA |
| CGD0001.ADA | CGD0002.ADA | CGD0003.ADA | CGD0004.ADA  | CGD0005.ADA  | CGD0006.ADA  |
| CGD0007.ADA | CGD0008.ADA | CGD0009.ADA | CGD000D.ADA  | CGD000E.ADA  | CGD0019.ADA  |
| CGD0029.ADA | CGD0039.ADA | CGD0049.ADA | CGN000F.ADA  | CGN000G.ADA  | CGN000H.ADA  |
| CGN000I.ADA | CGN000J.ADA | CGN000K.ADA | CL09000.ADA  | CL09100.ADA  | CL09101.ADA  |
| CL09111.ADA | CL09121.ADA | CL09131.ADA | CL09000.ADA  | CLD9200.ADA  | CLD9202.ADA  |
| CLD9203.ADA | CLD9212.ADA | CLD9213.ADA | CLD9222.ADA  | CLD9223.ADA  | CLD9232.ADA  |
| CLD9233.ADA | CLDE000.ADA | CLDE2B1.ADA | CLDE2B2.ADA  | CLDE2C1.ADA  | CLDE2C2.ADA  |
| CLDE2C5.ADA | CLDE2C6.ADA | CLDE4B1.ADA | CLDE4B2.ADA  | CLDE4C1.ADA  | CLDE4C2.ADA  |
| CLDE4C5.ADA | CLDE4C6.ADA | C000001.ADA | C000002.ADA  | C000102.ADA  | C000103.ADA  |
| C000104.ADA | C000107.ADA | C000108.ADA | C000109.ADA  | C000112.ADA  | C000113.ADA  |
| C000114.ADA | C000202.ADA | C000203.ADA | C000204.ADA  | C000207.ADA  | C000208.ADA  |
| C000209.ADA | C000300.ADA | C000305.ADA | C000310.ADA  | C000311.ADA  | C000312.ADA  |
| C000313.ADA | C000314.ADA | C000315.ADA | C000316.ADA  | C000317.ADA  | C000318.ADA  |
| C000319.ADA | C000320.ADA | C000321.ADA | C000322.ADA  | C000323.ADA  | C000324.ADA  |
| C000325.ADA | C000326.ADA | C000327.ADA | C000328.ADA  | C000329.ADA  | C000330.ADA  |
| C000331.ADA | C000332.ADA | C000333.ADA | C000334.ADA  | C000335.ADA  | C000336.ADA  |
| C000337.ADA | C000338.ADA | C000339.ADA | C000340.ADA  | C000341.ADA  | C000342.ADA  |
| C000343.ADA | C000347.ADA | C000348.ADA | C000349.ADA  | C000350.ADA  | C000351.ADA  |
| C000352.ADA | C000353.ADA | C000354.ADA | C000355.ADA  | C000356.ADA  | C000357.ADA  |
| C000358.ADA | C000359.ADA | C000360.ADA | C000361.ADA  | C000362.ADA  | C000363.ADA  |
| C000364.ADA | C000365.ADA | C000366.ADA | C000367.ADA  | C000368.ADA  | C000369.ADA  |
| C00036A.ADA | C00036B.ADA | C00036F.ADA | C00036G.ADA  | C00036H.ADA  | C00036I.ADA  |
| C00036J.ADA | C00036K.ADA | C00036L.ADA | C00036M.ADA  | C00036N.ADA  | C00036O.ADA  |
| C00036V.ADA | C00036W.ADA | C000374.ADA | C000375.ADA  | C000376.ADA  | C000377.ADA  |
| C000378.ADA | C000390.ADA | C000391.ADA | C000402.ADA  | C000403.ADA  | C000404.ADA  |
| C000500.ADA | C000502.ADA | C000503.ADA | C000504.ADA  | C000507.ADA  | C000508.ADA  |
| C000509.ADA | C000512.ADA | C000513.ADA | C000514.ADA  | C000517.ADA  | C000518.ADA  |
| C000519.ADA | C000602.ADA | C000603.ADA | C000604.ADA  | C000605.ADA  | C000606.ADA  |
| C000607.ADA | C000702.ADA | C000703.ADA | C000704.ADA  | C000705.ADA  | C000706.ADA  |
| C000707.ADA | C000708.ADA | C000709.ADA | C000710.ADA  | C000711.ADA  | C000713.ADA  |
| C000714.ADA | C000715.ADA | C000716.ADA | C000717.ADA  | C000718.ADA  | C000719.ADA  |
| C000720.ADA | C000721.ADA | C00P000.ADA | C0D0344.ADA  | C0D0345.ADA  | C0D0346.ADA  |
| C0D036C.ADA | C0D036D.ADA | C0D036E.ADA | C0D0360.ADA  | C0D036P.ADA  | C0D036Q.ADA  |
| C0D036R.ADA | C0D036S.ADA | C0D036T.ADA | C0D036X.ADA  | C0D036Y.ADA  | C0D036Z.ADA  |
| C0D0370.ADA | C0D0371.ADA | C0D0372.ADA | C0D0373.ADA  | C0D0380.ADA  | C0D0381.ADA  |
| C0D0382.ADA | C0D0383.ADA | C0D0523.ADA | C0D0524.ADA  | C0D0525.ADA  | C0D0526.ADA  |
| C0D0527.ADA | C0D0528.ADA | C0D0529.ADA | EA00000.ADA  | EA0P000.ADA  | EF03500.ADA  |
| EF03501.ADA | EF03502.ADA | EF03503.ADA | EF03504.ADA  | EF03509.ADA  | EF03510.ADA  |
| EF03511.ADA | EF03512.ADA | EF03513.ADA | EF03514.ADA  | EF03517.ADA  | EF03518.ADA  |
| EF03519.ADA | EF03550.ADA | EF03600.ADA | EF03601.ADA  | EF03602.ADA  | EF03603.ADA  |
| EF03604.ADA | EF03605.ADA | EF03606.ADA | EF03607.ADA  | EF03608.ADA  | EF03609.ADA  |
| EF03610.ADA | EF03611.ADA | EF03612.ADA | EF03613.ADA  | EF03614.ADA  | EF03615.ADA  |
| EF03616.ADA | EF03617.ADA | EF03618.ADA | EF03619.ADA  | EF03620.ADA  | EF03630.ADA  |
| EF03631.ADA | EF03632.ADA | EF03633.ADA | EF03634.ADA  | EF03635.ADA  | EF03636.ADA  |
| EF03637.ADA | EF03638.ADA | EF03639.ADA | EF03641.ADA  | EF03642.ADA  | EF03643.ADA  |
| EF03644.ADA | EF03645.ADA | EF03646.ADA | EF03647.ADA  | EF03648.ADA  | EF03649.ADA  |
| EF03650.ADA | EF03700.ADA | EF03701.ADA | EF03702.ADA  | EF03703.ADA  | EF03704.ADA  |
| EF03800.ADA | EF03801.ADA | EF03802.ADA | EF03803.ADA  | EF03804.ADA  | EF03805.ADA  |
| EF04120.ADA | EF04121.ADA | EF04122.ADA | EF04123.ADA  | EF04124.ADA  | EF04125.ADA  |
| EF04126.ADA | EF04127.ADA | EF04129.ADA | EF0412B.ADA  | EF04130.ADA  | EF04131.ADA  |
| EF04132.ADA | EF04133.ADA | EF0413D.ADA | EF0413H.ADA  | EF0413I.ADA  | EF0413J.ADA  |
| EF0413K.ADA | EF04310.ADA | EF04311.ADA | EF04312.ADA  | EF04510.ADA  | EF04511.ADA  |
| EF04512.ADA | EF04513.ADA | EF04514.ADA | EF04515.ADA  | EF04516.ADA  | EF04517.ADA  |
| EF04518.ADA | EF04519.ADA | EF0451A.ADA | EF0451B.ADA  | EF0451C.ADA  | EF0451D.ADA  |
| EF0451E.ADA | EF0451F.ADA | EF0451G.ADA | EF0451H.ADA  | EF0451I.ADA  | EF0451J.ADA  |
| EF0451V.ADA | EF0451W.ADA | EF0451X.ADA | EF0451Y.ADA  | EF0451Z.ADA  | EF04520.ADA  |
| EF04521.ADA | EF04522.ADA | EF04527.ADA | EF04529.ADA  | EF04530.ADA  | EF04531.ADA  |
| EF04532.ADA | EF04533.ADA | EF04534.ADA | EF04535.ADA  | EF04536.ADA  | EF04537.ADA  |
| EF04538.ADA | EF04539.ADA | EF0453A.ADA | EF0453B.ADA  | EF0453C.ADA  | EF04540.ADA  |
| EF04541.ADA | EF04550.ADA | EF04551.ADA | EF04552.ADA  | EF04553.ADA  | EF04554.ADA  |

**Table A-2. ACPS ANSI Tape Contents Volume ACPS02 (Continued)**

|             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|
| EF04555.ADA | EF04556.ADA | EF04557.ADA | EF04558.ADA | EF04559.ADA | EF0455N.ADA |
| EF04550.ADA | EF04560.ADA | EF04562.ADA | EF04563.ADA | EF04600.ADA | EF04601.ADA |
| EF04602.ADA | EF0460E.ADA | EF0460F.ADA | EF0460G.ADA | EF0460H.ADA | EF0460I.ADA |
| EF0460J.ADA | EF0460M.ADA | EF05200.ADA | EF05201.ADA | EF05202.ADA | EF05203.ADA |
| EF05204.ADA | EF0520S.ADA | EF05206.ADA | EF05207.ADA | EF05208.ADA | EF05209.ADA |
| EF0520A.ADA | EF0520B.ADA | EF0520M.ADA | EF0520O.ADA | EF0520R.ADA | EF0520S.ADA |
| EF05210.ADA | EF05211.ADA | EF05212.ADA | EF05213.ADA | EF05214.ADA | EF0521S.ADA |
| EF0521H.ADA | EF0521I.ADA | EF0521J.ADA | EF0521K.ADA | EF0521L.ADA | EF0521N.ADA |
| EF05300.ADA | EF05301.ADA | EF05302.ADA | EF05303.ADA | EF05304.ADA | EF0530S.ADA |
| EF05306.ADA | EF05307.ADA | EF05308.ADA | EF05400.ADA | EF05401.ADA | EF05402.ADA |
| EF05403.ADA | EF05404.ADA | EF0540S.ADA | EF05406.ADA | EF05407.ADA | EF05408.ADA |
| EF05501.ADA | EF05502.ADA | EF05503.ADA | EF05504.ADA | EF0550S.ADA | EF05506.ADA |
| EF05507.ADA | EF05508.ADA | EF05509.ADA | EF0550A.ADA | EF0550B.ADA | EF0550C.ADA |
| EF0550D.ADA | EF0550E.ADA | EF0550F.ADA | EF06001.ADA | EF06009.ADA | EF06010.ADA |
| EF06011.ADA | EF06013.ADA | EF06014.ADA | EF0601S.ADA | EF06016.ADA | EF06017.ADA |
| EF06018.ADA | EF06019.ADA | EF06022.ADA | EF06023.ADA | EF06024.ADA | EF0602S.ADA |
| EF06026.ADA | EF06027.ADA | EF06028.ADA | EF06029.ADA | EF06030.ADA | EF06031.ADA |
| EF06032.ADA | EF06033.ADA | EF06043.ADA | EF06044.ADA | EF0604S.ADA | EF06046.ADA |
| EF06047.ADA | EF06048.ADA | EF06049.ADA | EF06050.ADA | EF06051.ADA | EF06052.ADA |
| EF06053.ADA | EF06060.ADA | EF06061.ADA | EF06062.ADA | EF06063.ADA | EF06064.ADA |
| EF0606S.ADA | EF06066.ADA | EF06067.ADA | EF06068.ADA | EF06069.ADA | EF06070.ADA |
| EF06071.ADA | EF06072.ADA | EF06073.ADA | EF06074.ADA | EF0607S.ADA | EF06076.ADA |
| EF06077.ADA | EF06078.ADA | EF06079.ADA | EF06100.ADA | EF06101.ADA | EF06108.ADA |
| EF06109.ADA | EF06110.ADA | EF06111.ADA | EF06112.ADA | EF06113.ADA | EF06114.ADA |
| EF0611S.ADA | EF06116.ADA | EF06117.ADA | EF06118.ADA | EF06119.ADA | EF06122.ADA |
| EF06132.ADA | EF06133.ADA | EF06134.ADA | EF0613S.ADA | EF06136.ADA | EF06137.ADA |
| EF06138.ADA | EF06139.ADA | EF06140.ADA | EF06142.ADA | EF06143.ADA | EF06144.ADA |
| EF0614S.ADA | EF06146.ADA | EF06147.ADA | EF06148.ADA | EF06149.ADA | EF06150.ADA |
| EF06152.ADA | EF06153.ADA | EF06154.ADA | EF0615S.ADA | EF06156.ADA | EF06157.ADA |
| EF06158.ADA | EF06159.ADA | EF06160.ADA | EF06162.ADA | EF06163.ADA | EF06164.ADA |
| EF0616S.ADA | EF06166.ADA | EF06167.ADA | EF06168.ADA | EF06169.ADA | EF06170.ADA |
| EF06172.ADA | EF06173.ADA | EF06174.ADA | EF0617S.ADA | EF06176.ADA | EF06177.ADA |
| EF06178.ADA | EF06179.ADA | EF06180.ADA | EF06182.ADA | EF06183.ADA | EF06184.ADA |
| EF0618S.ADA | EF06186.ADA | EF06187.ADA | EF06188.ADA | EF06189.ADA | EF06190.ADA |
| EF06191.ADA | EF06192.ADA | EF06193.ADA | EF06194.ADA | EF0619S.ADA | EF06196.ADA |
| EF06197.ADA | EF06198.ADA | EF06199.ADA | EF0619A.ADA | EF0619B.ADA | EF0619C.ADA |
| EF0619D.ADA | EF0619E.ADA | EF0619F.ADA | EF0619G.ADA | EF0619H.ADA | EF0619I.ADA |
| EF0619J.ADA | EF0619K.ADA | EF0619L.ADA | EF0619M.ADA | EF0619N.ADA | EF0619O.ADA |
| EF0619P.ADA | EF0619Q.ADA | EF0619R.ADA | EF06422.ADA | EF06423.ADA | EF06424.ADA |
| EF0642S.ADA | EF06426.ADA | EF06427.ADA | EF06428.ADA | EF06429.ADA | EF0642A.ADA |
| EF0642B.ADA | EF06802.ADA | EF06803.ADA | EF06806.ADA | EF06807.ADA | EF06808.ADA |
| EF06809.ADA | EF0680A.ADA | EF0680B.ADA | EF0680C.ADA | EF0680D.ADA | EF0680E.ADA |
| EF0680F.ADA | EF06810.ADA | EF06811.ADA | EF06814.ADA | EF0681S.ADA | EF06816.ADA |
| EF06817.ADA | EF06818.ADA | EF06819.ADA | EF06820.ADA | EF06821.ADA | EF06822.ADA |
| EF06823.ADA | EF06824.ADA | EF0682S.ADA | EF09500.ADA | EF09501.ADA | EF09502.ADA |
| EF09503.ADA | EF09504.ADA | EF0950S.ADA | EF09506.ADA | EF09507.ADA | EF09508.ADA |
| EF09509.ADA | EF09600.ADA | EF09601.ADA | EF09602.ADA | EF09603.ADA | EF09604.ADA |
| EF0960S.ADA | EF09606.ADA | EF09607.ADA | EF09710.ADA | EF09711.ADA | EF09712.ADA |
| EF09713.ADA | EF09720.ADA | EF09721.ADA | EF09731.ADA | EF09900.ADA | EF09901.ADA |
| EF09902.ADA | EF09903.ADA | EF09B01.ADA | EF0C100.ADA | EF0C101.ADA | EF0C102.A   |

**Table A-2. ACPS ANSI Tape Contents Volume ACPS02 (Continued)**

[illegible]

Table A-2. ACPS ANSI Tape Contents Volume ACPS02 (Concluded)

|             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|
| EFD6253.ADA | EFD6260.ADA | EFD6261.ADA | EFD6262.ADA | EFD6263.ADA | EFD6264.ADA |
| EFD6265.ADA | EFD6266.ADA | EFD6267.ADA | EFD6268.ADA | EFD6269.ADA | EFD6270.ADA |
| EFD6271.ADA | EFD6272.ADA | EFD6273.ADA | EFD6274.ADA | EFD6275.ADA | EFD6276.ADA |
| EFD6277.ADA | EFD6278.ADA | EFD6279.ADA | EFD6300.ADA | EFD6301.ADA | EFD6308.ADA |
| EFD6309.ADA | EFD6310.ADA | EFD6311.ADA | EFD6312.ADA | EFD6313.ADA | EFD6314.ADA |
| EFD6315.ADA | EFD6316.ADA | EFD6317.ADA | EFD6318.ADA | EFD6319.ADA | EFD6322.ADA |
| EFD6332.ADA | EFD6333.ADA | EFD6334.ADA | EFD6335.ADA | EFD6336.ADA | EFD6337.ADA |
| EFD6338.ADA | EFD6339.ADA | EFD6340.ADA | EFD6342.ADA | EFD6343.ADA | EFD6344.ADA |
| EFD6345.ADA | EFD6346.ADA | EFD6347.ADA | EFD6348.ADA | EFD6349.ADA | EFD6350.ADA |
| EFD6352.ADA | EFD6353.ADA | EFD6354.ADA | EFD6355.ADA | EFD6356.ADA | EFD6357.ADA |
| EFD6358.ADA | EFD6359.ADA | EFD6360.ADA | EFD6362.ADA | EFD6363.ADA | EFD6364.ADA |
| EFD6365.ADA | EFD6366.ADA | EFD6367.ADA | EFD6368.ADA | EFD6369.ADA | EFD6370.ADA |
| EFD6372.ADA | EFD6373.ADA | EFD6374.ADA | EFD6375.ADA | EFD6376.ADA | EFD6377.ADA |
| EFD6378.ADA | EFD6379.ADA | EFD6380.ADA | EFD6382.ADA | EFD6383.ADA | EFD6384.ADA |
| EFD6385.ADA | EFD6386.ADA | EFD6387.ADA | EFD6388.ADA | EFD6389.ADA | EFD6390.ADA |
| EFD680G.ADA | EFD680H.ADA | EFD680I.ADA | EFD680J.ADA | EFD9000.ADA | EFD9200.ADA |
| EFD9C00.ADA | EFD9C01.ADA | EFD9C02.ADA | EFDC104.ADA | EFDC105.ADA | EFDC106.ADA |
| EFDC107.ADA | EFDC310.ADA | EFDC311.ADA | EFDC313.ADA | EFDC314.ADA | EFDD600.ADA |
| EFDD601.ADA | EFDD602.ADA | EFDD603.ADA | EFDD604.ADA | EFDD605.ADA | EFDD606.ADA |
| EFDD607.ADA |             |             |             |             |             |

Total of 1369 files.

Figure A-3. ACPS ANSI Tape Contents Volume ACPS03

|             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|
| EFDD609.ADA | EFDD610.ADA | EFDD611.ADA | EFDDA01.ADA | EFDDA02.ADA | EFDE000.ADA |
| EFDE201.ADA | EFDE202.ADA | EFDE203.ADA | EFDE204.ADA | EFDE205.ADA | EFDE206.ADA |
| EFDE207.ADA | EFDE208.ADA | EFDE209.ADA | EFDE20A.ADA | EFDE211.ADA | EFDE212.ADA |
| EFDE213.ADA | EFDE214.ADA | EFDE215.ADA | EFDE216.ADA | EFDE220.ADA | EFDE231.ADA |
| EFDE232.ADA | EFDE233.ADA | EFDE234.ADA | EFDE235.ADA | EFDE236.ADA | EFDE237.ADA |
| EFDE238.ADA | EFDE239.ADA | EFDE23A.ADA | EFDE241.ADA | EFDE242.ADA | EFDE243.ADA |
| EFDE244.ADA | EFDE245.ADA | EFDE246.ADA | EFDE250.ADA | EFDE401.ADA | EFDE402.ADA |
| EFDE403.ADA | EFDE404.ADA | EFDE405.ADA | EFDE406.ADA | EFDE407.ADA | EFDE408.ADA |
| EFDE409.ADA | EFDE40A.ADA | EFDE411.ADA | EFDE412.ADA | EFDE413.ADA | EFDE414.ADA |
| EFDE415.ADA | EFDE416.ADA | EFDE420.ADA | EFDE431.ADA | EFDE432.ADA | EFDE433.ADA |
| EFDE434.ADA | EFDE435.ADA | EFDE436.ADA | EFDE437.ADA | EFDE438.ADA | EFDE439.ADA |
| EFDE43A.ADA | EFDE441.ADA | EFDE442.ADA | EFDE443.ADA | EFDE444.ADA | EFDE445.ADA |
| EFDE446.ADA | EFDE450.ADA | EFDF000.ADA | EFDF001.ADA | EFDF002.ADA | EFDF003.ADA |
| EFDF004.ADA | EFDF005.ADA | EFM9A00.ADA | EFM9A01.ADA | EFM9A02.ADA | EFM9A03.ADA |
| EFN9300.ADA | EFN9301.ADA | EFN9302.ADA | EFN9303.ADA | EFN9510.ADA | EFN9511.ADA |
| EFN9610.ADA | EFN9611.ADA | EFN9612.ADA | EFN9613.ADA | EG0000C.ADA | EG0P000.ADA |
| EGD0000.ADA | EGD0001.ADA | EGD0002.ADA | EGD0003.ADA | EGD0004.ADA | EGD0005.ADA |
| EGD0006.ADA | EGD0007.ADA | EGD0008.ADA | EGD0009.ADA | EGD000D.ADA | EGD000E.ADA |
| EGD0019.ADA | EGD0029.ADA | EGD0039.ADA | EGD0049.ADA | EGN000F.ADA | EGN000G.ADA |
| EGN000H.ADA | EGN000I.ADA | EGN000J.ADA | EGN000K.ADA | EL09000.ADA | EL09100.ADA |
| EL09101.ADA | EL09111.ADA | EL09121.ADA | EL09131.ADA | EL0P000.ADA | ELD9200.ADA |
| ELD9202.ADA | ELD9203.ADA | ELD9212.ADA | ELD9213.ADA | ELD9222.ADA | ELD9223.ADA |
| ELD9232.ADA | ELD9233.ADA | ELDE000.ADA | ELDE2B1.ADA | ELDE2B2.ADA | ELDE2C1.ADA |
| ELDE2C2.ADA | ELDE2C5.ADA | ELDE2C6.ADA | ELDE4B1.ADA | ELDE4B2.ADA | ELDE4C1.ADA |
| ELDE4C2.ADA | ELDE4C5.ADA | ELDE4C6.ADA | E000001.ADA | E000002.ADA | E000102.ADA |
| E000103.ADA | E000104.ADA | E000107.ADA | E000108.ADA | E000109.ADA | E000112.ADA |
| E000113.ADA | E000114.ADA | E000202.ADA | E000203.ADA | E000204.ADA | E000207.ADA |
| E000208.ADA | E000209.ADA | E000305.ADA | E000305.ADA | E000310.ADA | E000311.ADA |
| E000312.ADA | E000313.ADA | E000314.ADA | E000315.ADA | E000316.ADA | E000317.ADA |
| E000318.ADA | E000319.ADA | E000320.ADA | E000321.ADA | E000322.ADA | E000323.ADA |
| E000324.ADA | E000325.ADA | E000326.ADA | E000327.ADA | E000328.ADA | E000329.ADA |
| E000330.ADA | E000331.ADA | E000332.ADA | E000333.ADA | E000334.ADA | E000335.ADA |
| E000336.ADA | E000337.ADA | E000338.ADA | E000339.ADA | E000340.ADA | E000341.ADA |
| E000342.ADA | E000343.ADA | E000347.ADA | E000348.ADA | E000349.ADA | E000350.ADA |
| E000351.ADA | E000352.ADA | E000353.ADA | E000354.ADA | E000355.ADA | E000356.ADA |
| E000357.ADA | E000358.ADA | E000359.ADA | E000360.ADA | E000361.ADA | E000362.ADA |
| E000363.ADA | E000364.ADA | E000365.ADA | E000366.ADA | E000367.ADA | E000368.ADA |
| E000369.ADA | E00036A.ADA | E00036B.ADA | E00036F.ADA | E00036G.ADA | E00036H.ADA |
| E00036I.ADA | E00036J.ADA | E00036K.ADA | E00036L.ADA | E00036M.ADA | E00036N.ADA |
| E00036U.ADA | E00036V.ADA | E00036W.ADA | E000374.ADA | E000375.ADA | E000376.ADA |
| E000377.ADA | E000378.ADA | E000390.ADA | E000391.ADA | E000402.ADA | E000403.ADA |
| E000404.ADA | E000500.ADA | E000502.ADA | E000503.ADA | E000504.ADA | E000507.ADA |
| E000508.ADA | E000509.ADA | E000512.ADA | E000513.ADA | E000514.ADA | E000517.ADA |
| E000518.ADA | E000519.ADA | E000602.ADA | E000603.ADA | E000604.ADA | E000605.ADA |
| E000606.ADA | E000607.ADA | E000702.ADA | E000703.ADA | E000704.ADA | E000705.ADA |
| E000706.ADA | E000707.ADA | E000708.ADA | E000709.ADA | E000710.ADA | E000711.ADA |
| E000713.ADA | E000714.ADA | E000715.ADA | E000716.ADA | E000717.ADA | E000718.ADA |
| E000719.ADA | E000720.ADA | E000721.ADA | E00P000.ADA | E0D0344.ADA | E0D0345.ADA |
| E0D0346.ADA | E0D036C.ADA | E0D036D.ADA | E0D036E.ADA | E0D036D.ADA | E0D036P.ADA |
| E0D036Q.ADA | E0D036R.ADA | E0D036S.ADA | E0D036T.ADA | E0D036X.ADA | E0D036Y.ADA |
| E0D036Z.ADA | E0D0370.ADA | E0D0371.ADA | E0D0372.ADA | E0D0373.ADA | E0D0380.ADA |
| E0D0381.ADA | E0D0382.ADA | E0D0383.ADA | E0D0523.ADA | E0D0524.ADA | E0D0525.ADA |
| E0D0526.ADA | E0D0527.ADA | E0D0528.ADA | E0D0529.ADA | OURDMP.ADA  | OURSYS.ADA  |
| OURSYSR.ADA | SA00000.ADA | SA0P000.ADA | SF03500.ADA | SF03501.ADA | SF03502.ADA |
| SF03503.ADA | SF03504.ADA | SF03509.ADA | SF03510.ADA | SF03511.ADA | SF03512.ADA |
| SF03513.ADA | SF03514.ADA | SF03517.ADA | SF03518.ADA | SF03519.ADA | SF03550.ADA |
| SF03600.ADA | SF03601.ADA | SF03602.ADA | SF03603.ADA | SF03604.ADA | SF03605.ADA |
| SF03606.ADA | SF03607.ADA | SF03608.ADA | SF03609.ADA | SF03610.ADA | SF03611.ADA |
| SF03612.ADA | SF03613.ADA | SF03614.ADA | SF03615.ADA | SF03616.ADA | SF03617.ADA |
| SF03618.ADA | SF03619.ADA | SF03620.ADA | SF03630.ADA | SF03631.ADA | SF03632.ADA |
| SF03633.ADA | SF03634.ADA | SF03635.ADA | SF03636.ADA | SF03637.ADA | SF03638.ADA |
| SF03639.ADA | SF03641.ADA | SF03642.ADA | SF03643.ADA | SF03644.ADA | SF03645.ADA |
| SF03646.ADA | SF03647.ADA | SF03648.ADA | SF03649.ADA | SF03650.ADA | SF03700.ADA |
| SF03701.ADA | SF03702.ADA | SF03703.ADA | SF03704.ADA | SF03800.ADA | SF03801.ADA |
| SF03802.ADA | SF03803.ADA | SF03804.ADA | SF03805.ADA | SF04120.ADA | SF04121.ADA |
| SF04122.ADA | SF04123.ADA | SF04124.ADA | SF04125.ADA | SF04126.ADA | SF04127.ADA |
| SF04129.ADA | SF0412B.ADA | SF04130.ADA | SF04131.ADA | SF04132.ADA | SF04133.ADA |
| SF0413D.ADA | SF0413H.ADA | SF0413I.ADA | SF0413J.ADA | SF0413K.ADA | SF04310.ADA |
| SF04311.ADA | SF04312.ADA | SF04510.ADA | SF04511.ADA | SF04512.ADA | SF04513.ADA |

**Figure A-3. ACPS ANSI Tape Contents Volume ACPS03 (Continued)**

[illegible]



Figure A-3. ACPS ANSI Tape Contents Volume ACPS03 (Continued)

|             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|
| SFD4804.ADA | SFD520C.ADA | SFD520D.ADA | SFD520E.ADA | SFD520F.ADA | SFD520G.ADA |
| SFD520H.ADA | SFD520I.ADA | SFD520J.ADA | SFD520N.ADA | SFD520P.ADA | SFD520Q.ADA |
| SFD5218.ADA | SFD5219.ADA | SFD521A.ADA | SFD521B.ADA | SFD521C.ADA | SFD521D.ADA |
| SFD521E.ADA | SFD521F.ADA | SFD521K.ADA | SFD521M.ADA | SFD521O.ADA | SFD521P.ADA |
| SFD6201.ADA | SFD6209.ADA | SFD6210.ADA | SFD6211.ADA | SFD6213.ADA | SFD6214.ADA |
| SFD6215.ADA | SFD6216.ADA | SFD6217.ADA | SFD6218.ADA | SFD6219.ADA | SFD6222.ADA |
| SFD6223.ADA | SFD6224.ADA | SFD6225.ADA | SFD6226.ADA | SFD6227.ADA | SFD6228.ADA |
| SFD6229.ADA | SFD6230.ADA | SFD6231.ADA | SFD6232.ADA | SFD6233.ADA | SFD6243.ADA |
| SFD6244.ADA | SFD6245.ADA | SFD6246.ADA | SFD6247.ADA | SFD6248.ADA | SFD6249.ADA |
| SFD6250.ADA | SFD6251.ADA | SFD6252.ADA | SFD6253.ADA | SFD6260.ADA | SFD6261.ADA |
| SFD6262.ADA | SFD6263.ADA | SFD6264.ADA | SFD6265.ADA | SFD6266.ADA | SFD6267.ADA |
| SFD6268.ADA | SFD6269.ADA | SFD6270.ADA | SFD6271.ADA | SFD6272.ADA | SFD6273.ADA |
| SFD6274.ADA | SFD6275.ADA | SFD6276.ADA | SFD6277.ADA | SFD6278.ADA | SFD6279.ADA |
| SFD6300.ADA | SFD6301.ADA | SFD6308.ADA | SFD6309.ADA | SFD6310.ADA | SFD6311.ADA |
| SFD6312.ADA | SFD6313.ADA | SFD6314.ADA | SFD6315.ADA | SFD6316.ADA | SFD6317.ADA |
| SFD6318.ADA | SFD6319.ADA | SFD6322.ADA | SFD6332.ADA | SFD6333.ADA | SFD6334.ADA |
| SFD6335.ADA | SFD6336.ADA | SFD6337.ADA | SFD6338.ADA | SFD6339.ADA | SFD6340.ADA |
| SFD6342.ADA | SFD6343.ADA | SFD6344.ADA | SFD6345.ADA | SFD6346.ADA | SFD6347.ADA |
| SFD6348.ADA | SFD6349.ADA | SFD6350.ADA | SFD6352.ADA | SFD6353.ADA | SFD6354.ADA |
| SFD6355.ADA | SFD6356.ADA | SFD6357.ADA | SFD6358.ADA | SFD6359.ADA | SFD6360.ADA |
| SFD6362.ADA | SFD6363.ADA | SFD6364.ADA | SFD6365.ADA | SFD6366.ADA | SFD6367.ADA |
| SFD6368.ADA | SFD6369.ADA | SFD6370.ADA | SFD6372.ADA | SFD6373.ADA | SFD6374.ADA |
| SFD6375.ADA | SFD6376.ADA | SFD6377.ADA | SFD6378.ADA | SFD6379.ADA | SFD6380.ADA |
| SFD6382.ADA | SFD6383.ADA | SFD6384.ADA | SFD6385.ADA | SFD6386.ADA | SFD6387.ADA |
| SFD6388.ADA | SFD6389.ADA | SFD6390.ADA | SFD680G.ADA | SFD680H.ADA | SFD680I.ADA |
| SFD680J.ADA | SFD9000.ADA | SFD9200.ADA | SFD9C00.ADA | SFD9C01.ADA | SFD9C02.ADA |
| SFDC104.ADA | SFDC105.ADA | SFDC106.ADA | SFDC107.ADA | SFDC310.ADA | SFDC311.ADA |
| SFDC313.ADA | SFDC314.ADA | SFDD600.ADA | SFDD601.ADA | SFDD602.ADA | SFDD603.ADA |
| SFDD604.ADA | SFDD605.ADA | SFDD606.ADA | SFDD607.ADA | SFDD609.ADA | SFDD610.ADA |
| SFDD611.ADA | SFDD722.ADA | SFDD723.ADA | SFDD724.ADA | SFDD725.ADA | SFDD72A.ADA |
| SFDD72B.ADA | SFDD72C.ADA | SFDD72E.ADA | SFDD72F.ADA | SFDD72G.ADA | SFDD72H.ADA |
| SFDD72I.ADA | SFDDA01.ADA | SFDDA02.ADA | SFDE000.ADA | SFDE201.ADA | SFDE202.ADA |
| SFDE203.ADA | SFDE204.ADA | SFDE205.ADA | SFDE206.ADA | SFDE207.ADA | SFDE208.ADA |
| SFDE209.ADA | SFDE20A.ADA | SFDE211.ADA | SFDE212.ADA | SFDE213.ADA | SFDE214.ADA |
| SFDE215.ADA | SFDE216.ADA | SFDE220.ADA | SFDE231.ADA | SFDE232.ADA | SFDE233.ADA |
| SFDE234.ADA | SFDE235.ADA | SFDE236.ADA | SFDE237.ADA | SFDE238.ADA | SFDE239.ADA |
| SFDE23A.ADA | SFDE241.ADA | SFDE242.ADA | SFDE243.ADA | SFDE244.ADA | SFDE245.ADA |
| SFDE246.ADA | SFDE250.ADA | SFDE401.ADA | SFDE402.ADA | SFDE403.ADA | SFDE404.ADA |
| SFDE405.ADA | SFDE406.ADA | SFDE407.ADA | SFDE408.ADA | SFDE409.ADA | SFDE40A.ADA |
| SFDE411.ADA | SFDE412.ADA | SFDE413.ADA | SFDE414.ADA | SFDE415.ADA | SFDE416.ADA |
| SFDE420.ADA | SFDE431.ADA | SFDE432.ADA | SFDE433.ADA | SFDE434.ADA | SFDE435.ADA |
| SFDE436.ADA | SFDE437.ADA | SFDE438.ADA | SFDE439.ADA | SFDE43A.ADA | SFDE441.ADA |
| SFDE442.ADA | SFDE443.ADA | SFDE444.ADA | SFDE445.ADA | SFDE446.ADA | SFDE450.ADA |
| SFDF000.ADA | SFDF001.ADA | SFDF002.ADA | SFDF003.ADA | SFDF004.ADA | SFDF005.ADA |
| SFM9A00.ADA | SFM9A01.ADA | SFM9A02.ADA | SFM9A03.ADA | SFMB000.ADA | SFMB001.ADA |
| SFMB002.ADA | SFMB003.ADA | SFMB004.ADA | SFMB005.ADA | SFMB006.ADA | SFMB007.ADA |
| SFMB008.ADA | SFMB009.ADA | SFMB010.ADA | SFMB011.ADA | SFMB012.ADA | SFMB013.ADA |
| SFMB014.ADA | SFMB015.ADA | SFMB016.ADA | SFMB017.ADA | SFMB018.ADA | SFMB019.ADA |
| SFMB020.ADA | SFMB021.ADA | SFMB022.ADA | SFMB023.ADA | SFMB024.ADA | SFMB025.ADA |
| SFMB026.ADA | SFMB027.ADA | SFMB028.ADA | SFMB029.ADA | SFMB030.ADA | SFMB031.ADA |
| SFMB032.ADA | SFMB033.ADA | SFMB034.ADA | SFMB035.ADA | SFMB036.ADA | SFMB037.ADA |
| SFMB038.ADA | SFMB039.ADA | SFMB040.ADA | SFMB041.ADA | SFMB042.ADA | SFMB043.ADA |
| SFMB044.ADA | SFN9300.ADA | SFN9301.ADA | SFN9302.ADA | SFN9303.ADA | SFN9510.ADA |
| SFN9511.ADA | SFN9610.ADA | SFN9611.ADA | SFN9612.ADA | SFN9613.ADA | SG0000C.ADA |
| SG0P000.ADA | SGD0000.ADA | SGD0001.ADA | SGD0002.ADA | SGD0003.ADA | SGD0004.ADA |
| SGD0005.ADA | SGD0006.ADA | SGD0007.ADA | SGD0008.ADA | SGD0009.ADA | SGD000D.ADA |
| SGD000E.ADA | SGD0019.ADA | SGD0029.ADA | SGD0039.ADA | SGD0049.ADA | SGN000F.ADA |
| SGN000G.ADA | SGN000H.ADA | SGN000I.ADA | SGN000J.ADA | SGN000K.ADA | SL09000.ADA |
| SL09100.ADA | SL09101.ADA | SL09111.ADA | SL09121.ADA | SL09131.ADA | SL0P000.ADA |
| SLD9200.ADA | SLD9202.ADA | SLD9203.ADA | SLD9212.ADA | SLD9213.ADA | SLD9222.ADA |
| SLD9223.ADA | SLD9232.ADA | SLD9233.ADA | SLDE000.ADA | SLDE2B1.ADA | SLDE2B2.ADA |
| SLDE2C1.ADA | SLDE2C2.ADA | SLDE2C5.ADA | SLDE2C6.ADA | SLDE4B1.ADA | SLDE4B2.ADA |
| SLDE4C1.ADA | SLDE4C2.ADA | SLDE4C5.ADA | SLDE4C6.ADA | S000001.ADA | S000002.ADA |
| S000102.ADA | S000103.ADA | S000104.ADA | S000107.ADA | S000108.ADA | S000109.ADA |
| S000112.ADA | S000113.ADA | S000114.ADA | S000202.ADA | S000203.ADA | S000204.ADA |
| S000207.ADA | S000208.ADA | S000209.ADA | S000300.ADA | S000305.ADA | S000310.ADA |
| S000311.ADA | S000312.ADA | S000313.ADA | S000314.ADA | S000315.ADA | S000316.ADA |
| S000317.ADA | S000318.ADA | S000319.ADA | S000320.ADA | S000321.ADA | S000322.ADA |
| S000323.ADA | S000324.ADA | S000325.ADA | S000326.ADA | S000327.ADA | S000328.ADA |
| S000329.ADA | S000330.ADA | S000331.ADA | S000332.ADA | S000333.ADA | S000334.ADA |



Figure A-3. ACPS ANSI Tape Contents Volume ACPS03 (Concluded)

|             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|
| S000335.ADA | S000336.ADA | S000337.ADA | S000338.ADA | S000339.ADA | S000340.ADA |
| S000341.ADA | S000342.ADA | S000343.ADA | S000347.ADA | S000348.ADA | S000349.ADA |
| S000350.ADA | S000351.ADA | S000352.ADA | S000353.ADA | S000354.ADA | S000355.ADA |
| S000356.ADA | S000357.ADA | S000358.ADA | S000359.ADA | S000360.ADA | S000361.ADA |
| S000362.ADA | S000363.ADA | S000364.ADA | S000365.ADA | S000366.ADA | S000367.ADA |
| S000368.ADA | S000369.ADA | S00036A.ADA | S00036B.ADA | S00036F.ADA | S00036G.ADA |
| S00036H.ADA | S00036I.ADA | S00036J.ADA | S00036K.ADA | S00036L.ADA | S00036M.ADA |
| S00036N.ADA | S00036U.ADA | S00036V.ADA | S00036W.ADA | S000374.ADA | S000375.ADA |
| S000376.ADA | S000377.ADA | S000378.ADA | S000390.ADA | S000391.ADA | S000402.ADA |
| S000403.ADA | S000404.ADA | S000500.ADA | S000502.ADA | S000503.ADA | S000504.ADA |
| S000507.ADA | S000508.ADA | S000509.ADA | S000512.ADA | S000513.ADA | S000514.ADA |
| S000517.ADA | S000518.ADA | S000519.ADA | S000602.ADA | S000603.ADA | S000604.ADA |
| S000605.ADA | S000606.ADA | S000607.ADA | S000702.ADA | S000703.ADA | S000704.ADA |
| S000705.ADA | S000706.ADA | S000707.ADA | S000708.ADA | S000709.ADA | S000710.ADA |
| S000711.ADA | S000713.ADA | S000714.ADA | S000715.ADA | S000716.ADA | S000717.ADA |
| S000718.ADA | S000719.ADA | S000720.ADA | S000721.ADA | S00P000.ADA | S0D0344.ADA |
| S0D0345.ADA | S0D0346.ADA | S0D036C.ADA | S0D036D.ADA | S0D036E.ADA | S0D0360.ADA |
| S0D036P.ADA | S0D036Q.ADA | S0D036R.ADA | S0D036S.ADA | S0D036T.ADA | S0D036X.ADA |
| S0D036Y.ADA | S0D036Z.ADA | S0D0370.ADA | S0D0371.ADA | S0D0372.ADA | S0D0373.ADA |
| S0D0380.ADA | S0D0381.ADA | S0D0382.ADA | S0D0383.ADA | S0D0523.ADA | S0D0524.ADA |
| S0D0525.ADA | S0D0526.ADA | S0D0527.ADA | S0D0528.ADA | S0D0529.ADA | TA00000.ADA |
| TA0P000.ADA | TF03500.ADA | TF03501.ADA | TF03502.ADA | TF03503.ADA | TF03504.ADA |
| TF03509.ADA | TF03510.ADA | TF03511.ADA | TF03512.ADA | TF03513.ADA | TF03514.ADA |
| TF03517.ADA | TF03518.ADA | TF03519.ADA | TF03550.ADA |             |             |

Total of 1396 files.

**Figure A-4. ACPS ANSI Tape Contents Volume ACPS04**

[illegible]

Figure A-4. ACPS ANSI Tape Contents Volume ACPS04 (Continued)

|             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|
| TF09721.ADA | TF09731.ADA | TF09900.ADA | TF09901.ADA | TF09902.ADA | TF09903.ADA |
| TF09801.ADA | TF0C100.ADA | TF0C101.ADA | TF0C102.ADA | TF0C103.ADA | TF0C300.ADA |
| TF0C301.ADA | TF0C302.ADA | TF0C303.ADA | TF0C304.ADA | TF0C305.ADA | TF0C306.ADA |
| TF0C307.ADA | TF0D720.ADA | TF0D721.ADA | TF0D727.ADA | TF0D728.ADA | TF0D729.ADA |
| TF0D72D.ADA | TF0P000.ADA | TFD3551.ADA | TFD412A.ADA | TFD412C.ADA | TFD412D.ADA |
| TFD4135.ADA | TFD4136.ADA | TFD4137.ADA | TFD4138.ADA | TFD4139.ADA | TFD413A.ADA |
| TFD413B.ADA | TFD413C.ADA | TFD413E.ADA | TFD413G.ADA | TFD451K.ADA | TFD451L.ADA |
| TFD451M.ADA | TFD451N.ADA | TFD4510.ADA | TFD451P.ADA | TFD451Q.ADA | TFD451R.ADA |
| TFD451S.ADA | TFD4523.ADA | TFD4524.ADA | TFD4525.ADA | TFD4526.ADA | TFD4528.ADA |
| TFD452A.ADA | TFD455D.ADA | TFD455E.ADA | TFD455F.ADA | TFD455G.ADA | TFD455I.ADA |
| TFD455J.ADA | TFD455K.ADA | TFD455L.ADA | TFD4566.ADA | TFD4567.ADA | TFD4568.ADA |
| TFD4569.ADA | TFD4603.ADA | TFD4604.ADA | TFD4605.ADA | TFD4606.ADA | TFD4607.ADA |
| TFD4608.ADA | TFD4609.ADA | TFD460A.ADA | TFD460B.ADA | TFD460K.ADA | TFD460L.ADA |
| TFD460N.ADA | TFD4600.ADA | TFD4800.ADA | TFD4801.ADA | TFD4802.ADA | TFD4803.ADA |
| TFD4804.ADA | TFD520C.ADA | TFD520D.ADA | TFD520E.ADA | TFD520F.ADA | TFD520G.ADA |
| TFD520H.ADA | TFD520I.ADA | TFD520J.ADA | TFD520N.ADA | TFD520P.ADA | TFD520Q.ADA |
| TFD5218.ADA | TFD5219.ADA | TFD521A.ADA | TFD521B.ADA | TFD521C.ADA | TFD521D.ADA |
| TFD521E.ADA | TFD521F.ADA | TFD521K.ADA | TFD521M.ADA | TFD5210.ADA | TFD521P.ADA |
| TFD6201.ADA | TFD6209.ADA | TFD6210.ADA | TFD6211.ADA | TFD6213.ADA | TFD6214.ADA |
| TFD6215.ADA | TFD6216.ADA | TFD6217.ADA | TFD6218.ADA | TFD6219.ADA | TFD6222.ADA |
| TFD6223.ADA | TFD6224.ADA | TFD6225.ADA | TFD6226.ADA | TFD6227.ADA | TFD6228.ADA |
| TFD6229.ADA | TFD6230.ADA | TFD6231.ADA | TFD6232.ADA | TFD6233.ADA | TFD6243.ADA |
| TFD6244.ADA | TFD6245.ADA | TFD6246.ADA | TFD6247.ADA | TFD6248.ADA | TFD6249.ADA |
| TFD6250.ADA | TFD6251.ADA | TFD6252.ADA | TFD6253.ADA | TFD6260.ADA | TFD6261.ADA |
| TFD6262.ADA | TFD6263.ADA | TFD6264.ADA | TFD6265.ADA | TFD6266.ADA | TFD6267.ADA |
| TFD6268.ADA | TFD6269.ADA | TFD6270.ADA | TFD6271.ADA | TFD6272.ADA | TFD6273.ADA |
| TFD6274.ADA | TFD6275.ADA | TFD6276.ADA | TFD6277.ADA | TFD6278.ADA | TFD6279.ADA |
| TFD6300.ADA | TFD6301.ADA | TFD6308.ADA | TFD6309.ADA | TFD6310.ADA | TFD6311.ADA |
| TFD6312.ADA | TFD6313.ADA | TFD6314.ADA | TFD6315.ADA | TFD6316.ADA | TFD6317.ADA |
| TFD6318.ADA | TFD6319.ADA | TFD6322.ADA | TFD6332.ADA | TFD6333.ADA | TFD6334.ADA |
| TFD6335.ADA | TFD6336.ADA | TFD6337.ADA | TFD6338.ADA | TFD6339.ADA | TFD6340.ADA |
| TFD6342.ADA | TFD6343.ADA | TFD6344.ADA | TFD6345.ADA | TFD6346.ADA | TFD6347.ADA |
| TFD6348.ADA | TFD6349.ADA | TFD6350.ADA | TFD6352.ADA | TFD6353.ADA | TFD6354.ADA |
| TFD6355.ADA | TFD6356.ADA | TFD6357.ADA | TFD6358.ADA | TFD6359.ADA | TFD6360.ADA |
| TFD6362.ADA | TFD6363.ADA | TFD6364.ADA | TFD6365.ADA | TFD6366.ADA | TFD6367.ADA |
| TFD6368.ADA | TFD6369.ADA | TFD6370.ADA | TFD6372.ADA | TFD6373.ADA | TFD6374.ADA |
| TFD6375.ADA | TFD6376.ADA | TFD6377.ADA | TFD6378.ADA | TFD6379.ADA | TFD6380.ADA |
| TFD6382.ADA | TFD6383.ADA | TFD6384.ADA | TFD6385.ADA | TFD6386.ADA | TFD6387.ADA |
| TFD6388.ADA | TFD6389.ADA | TFD6390.ADA | TFD680G.ADA | TFD680H.ADA | TFD680I.ADA |
| TFD680J.ADA | TFD9000.ADA | TFD9200.ADA | TFD9C00.ADA | TFD9C01.ADA | TFD9C02.ADA |
| TFDC104.ADA | TFDC105.ADA | TFDC106.ADA | TFDC107.ADA | TFDC310.ADA | TFDC311.ADA |
| TFDC313.ADA | TFDC314.ADA | TFDD600.ADA | TFDD601.ADA | TFDD602.ADA | TFDD603.ADA |
| TFDD604.ADA | TFDD605.ADA | TFDD606.ADA | TFDD607.ADA | TFDD609.ADA | TFDD610.ADA |
| TFDD611.ADA | TFDD722.ADA | TFDD723.ADA | TFDD724.ADA | TFDD725.ADA | TFDD72A.ADA |
| TFDD72B.ADA | TFDD72C.ADA | TFDD72E.ADA | TFDD72F.ADA | TFDD72G.ADA | TFDD72H.ADA |
| TFDD72I.ADA | TFDDA01.ADA | TFDDA02.ADA | TFDE000.ADA | TFDE201.ADA | TFDE202.ADA |
| TFDE203.ADA | TFDE204.ADA | TFDE205.ADA | TFDE206.ADA | TFDE207.ADA | TFDE208.ADA |
| TFDE209.ADA | TFDE20A.ADA | TFDE211.ADA | TFDE212.ADA | TFDE213.ADA | TFDE214.ADA |
| TFDE215.ADA | TFDE216.ADA | TFDE220.ADA | TFDE231.ADA | TFDE232.ADA | TFDE233.ADA |
| TFDE234.ADA | TFDE235.ADA | TFDE236.ADA | TFDE237.ADA | TFDE238.ADA | TFDE239.ADA |
| TFDE23A.ADA | TFDE241.ADA | TFDE242.ADA | TFDE243.ADA | TFDE244.ADA | TFDE245.ADA |
| TFDE246.ADA | TFDE250.ADA | TFDE401.ADA | TFDE402.ADA | TFDE403.ADA | TFDE404.ADA |
| TFDE405.ADA | TFDE406.ADA | TFDE407.ADA | TFDE408.ADA | TFDE409.ADA | TFDE40A.ADA |
| TFDE411.ADA | TFDE412.ADA | TFDE413.ADA | TFDE414.ADA | TFDE415.ADA | TFDE416.ADA |
| TFDE420.ADA | TFDE431.ADA | TFDE432.ADA | TFDE433.ADA | TFDE434.ADA | TFDE435.ADA |
| TFDE436.ADA | TFDE437.ADA | TFDE438.ADA | TFDE439.ADA | TFDE43A.ADA | TFDE441.ADA |
| TFDE442.ADA | TFDE443.ADA | TFDE444.ADA | TFDE445.ADA | TFDE446.ADA | TFDE450.ADA |
| TFDF000.ADA | TFDF001.ADA | TFDF002.ADA | TFDF003.ADA | TFDF004.ADA | TFDF005.ADA |
| TFM9A00.ADA | TFM9A01.ADA | TFM9A02.ADA | TFM9A03.ADA | TFMB000.ADA | TFMB001.ADA |
| TFMB002.ADA | TFMB003.ADA | TFMB004.ADA | TFMB005.ADA | TFMB006.ADA | TFMB007.ADA |
| TFMB008.ADA | TFMB009.ADA | TFMB010.ADA | TFMB011.ADA | TFMB012.ADA | TFMB013.ADA |
| TFMB014.ADA | TFMB015.ADA | TFMB016.ADA | TFMB017.ADA | TFMB018.ADA | TFMB019.ADA |
| TFMB020.ADA | TFMB021.ADA | TFMB022.ADA | TFMB023.ADA | TFMB024.ADA | TFMB025.ADA |
| TFMB026.ADA | TFMB027.ADA | TFMB028.ADA | TFMB029.ADA | TFMB030.ADA | TFMB031.ADA |
| TFMB032.ADA | TFMB033.ADA | TFMB034.ADA | TFMB035.ADA | TFMB036.ADA | TFMB037.ADA |
| TFMB038.ADA | TFMB039.ADA | TFMB040.ADA | TFMB041.ADA | TFMB042.ADA | TFMB043.ADA |
| TFMB044.ADA | TFN9300.ADA | TFN9301.ADA | TFN9302.ADA | TFN9303.ADA | TFN9510.ADA |
| TFN9511.ADA | TFN9610.ADA | TFN9611.ADA | TFN9612.ADA | TFN9613.ADA | TG0000C.ADA |
| TG0P000.ADA | TGD0000.ADA | TGD0001.ADA | TGD0002.ADA | TGD0003.ADA | TGD0004.ADA |
| TGD0005.ADA | TGD0006.ADA | TGD0007.ADA | TGD0008.ADA | TGD0009.ADA | TGD000D.ADA |

Figure A-4. ACPS ANSI Tape Contents Volume ACPS04 (Continued)

|             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|
| TGD000E.ADA | TGD0019.ADA | TGD0029.ADA | TGD0039.ADA | TGD0049.ADA | TGN000F.ADA |
| TGN000G.ADA | TGN000H.ADA | TGN000I.ADA | TGN000J.ADA | TGN000K.ADA | TL09000.ADA |
| TL09100.ADA | TL09101.ADA | TL09111.ADA | TL09121.ADA | TL09131.ADA | TLOP000.ADA |
| TLD9200.ADA | TLD9202.ADA | TLD9203.ADA | TLD9212.ADA | TLD9213.ADA | TLD9222.ADA |
| TLD9223.ADA | TLD9232.ADA | TLD9233.ADA | TLDE000.ADA | TLDE2B1.ADA | TLDE2B2.ADA |
| TLDE2C1.ADA | TLDE2C2.ADA | TLDE2C5.ADA | TLDE2C6.ADA | TLDE4B1.ADA | TLDE4B2.ADA |
| TLDE4C1.ADA | TLDE4C2.ADA | TLDE4C5.ADA | TLDE4C6.ADA | T000001.ADA | T000002.ADA |
| T000102.ADA | T000103.ADA | T000104.ADA | T000107.ADA | T000108.ADA | T000109.ADA |
| T000112.ADA | T000113.ADA | T000114.ADA | T000202.ADA | T000203.ADA | T000204.ADA |
| T000207.ADA | T000208.ADA | T000209.ADA | T000300.ADA | T000305.ADA | T000310.ADA |
| T000311.ADA | T000312.ADA | T000313.ADA | T000314.ADA | T000315.ADA | T000316.ADA |
| T000317.ADA | T000318.ADA | T000319.ADA | T000320.ADA | T000321.ADA | T000322.ADA |
| T000323.ADA | T000324.ADA | T000325.ADA | T000326.ADA | T000327.ADA | T000328.ADA |
| T000329.ADA | T000330.ADA | T000331.ADA | T000332.ADA | T000333.ADA | T000334.ADA |
| T000335.ADA | T000336.ADA | T000337.ADA | T000338.ADA | T000339.ADA | T000340.ADA |
| T000341.ADA | T000342.ADA | T000343.ADA | T000347.ADA | T000348.ADA | T000349.ADA |
| T000350.ADA | T000351.ADA | T000352.ADA | T000353.ADA | T000354.ADA | T000355.ADA |
| T000356.ADA | T000357.ADA | T000358.ADA | T000359.ADA | T000360.ADA | T000361.ADA |
| T000362.ADA | T000363.ADA | T000364.ADA | T000365.ADA | T000366.ADA | T000367.ADA |
| T000368.ADA | T000369.ADA | T00036A.ADA | T00036B.ADA | T00036F.ADA | T00036G.ADA |
| T00036H.ADA | T00036I.ADA | T00036J.ADA | T00036K.ADA | T00036L.ADA | T00036M.ADA |
| T00036N.ADA | T00036U.ADA | T00036V.ADA | T00036W.ADA | T000374.ADA | T000375.ADA |
| T000376.ADA | T000377.ADA | T000378.ADA | T000390.ADA | T000391.ADA | T000402.ADA |
| T000403.ADA | T000404.ADA | T000500.ADA | T000502.ADA | T000503.ADA | T000504.ADA |
| T000507.ADA | T000508.ADA | T000509.ADA | T000512.ADA | T000513.ADA | T000514.ADA |
| T000517.ADA | T000518.ADA | T000519.ADA | T000602.ADA | T000603.ADA | T000604.ADA |
| T000605.ADA | T000606.ADA | T000607.ADA | T000702.ADA | T000703.ADA | T000704.ADA |
| T000705.ADA | T000706.ADA | T000707.ADA | T000708.ADA | T000709.ADA | T000710.ADA |
| T000711.ADA | T000713.ADA | T000714.ADA | T000715.ADA | T000716.ADA | T000717.ADA |
| T000718.ADA | T000719.ADA | T000720.ADA | T000721.ADA | T00P000.ADA | T000344.ADA |
| TOD0345.ADA | TOD0346.ADA | TOD036C.ADA | TOD036D.ADA | TOD036E.ADA | TOD0360.ADA |
| TOD036P.ADA | TOD036Q.ADA | TOD036R.ADA | TOD036S.ADA | TOD036T.ADA | TOD036X.ADA |
| TOD036Y.ADA | TOD036Z.ADA | TOD0370.ADA | TOD0371.ADA | TOD0372.ADA | TOD0373.ADA |
| TOD0380.ADA | TOD0381.ADA | TOD0382.ADA | TOD0383.ADA | TOD0523.ADA | TOD0524.ADA |
| TOD0525.ADA | TOD0526.ADA | TOD0527.ADA | TOD0528.ADA | TOD0529.ADA | MATHFUN.DEC |
| ALD9204.DEC | ALD9214.DEC | ALD9224.DEC | ALD9234.DEC | ALDE2C3.DEC | ALDE2C4.DEC |
| ALDE2C7.DEC | ALDE2C8.DEC | ALDE4C3.DEC | ALDE4C4.DEC | ALDE4C7.DEC | ALDE4C8.DEC |
| CLD9204.DEC | CLD9214.DEC | CLD9224.DEC | CLD9234.DEC | CLDE2C3.DEC | CLDE2C4.DEC |
| CLDE2C7.DEC | CLDE2C8.DEC | CLDE4C3.DEC | CLDE4C4.DEC | CLDE4C7.DEC | CLDE4C8.DEC |
| ELD9204.DEC | ELD9214.DEC | ELD9224.DEC | ELD9234.DEC | ELDE2C3.DEC | ELDE2C4.DEC |
| ELDE2C7.DEC | ELDE2C8.DEC | ELDE4C3.DEC | ELDE4C4.DEC | ELDE4C7.DEC | ELDE4C8.DEC |
| SLD9204.DEC | SLD9214.DEC | SLD9224.DEC | SLD9234.DEC | SLDE2C3.DEC | SLDE2C4.DEC |
| SLDE2C7.DEC | SLDE2C8.DEC | SLDE4C3.DEC | SLDE4C4.DEC | SLDE4C7.DEC | SLDE4C8.DEC |
| TLD9204.DEC | TLD9214.DEC | TLD9224.DEC | TLD9234.DEC | TLDE2C3.DEC | TLDE2C4.DEC |
| TLDE2C7.DEC | TLDE2C8.DEC | TLDE4C3.DEC | TLDE4C4.DEC | TLDE4C7.DEC | TLDE4C8.DEC |
| AGD0059.DEC | CGD0059.DEC | EGD0059.DEC | SGD0059.DEC | TGD0059.DEC | AFD9C03.DEC |
| AFD9C04.DEC | CFD9C03.DEC | CFD9C04.DEC | efd9C03.DEC | efd9C04.DEC | SFD9C03.DEC |
| SFD9C04.DEC | TFD9C03.DEC | TFD9C04.DEC | OURSYS.SPA  | OURSYSR.SPA | OURSYSR.SPA |
| OURTYP.SPA  | OURTYPR.SPA | OURSPC.TIM  | OURSYS.TIM  | OURSYSR.TIM | OURTYP.TIM  |
| OURTYPR.TIM | ADASYS.USE  | ADATYP.USE  | AFD4128.USE | AFD451U.USE | AFD4803.USE |
| AFDC107.USE | AFDD608.USE | CFD4128.USE | CFD451U.USE | CFD4803.USE | CFDC107.USE |
| CFDD608.USE | efd4128.USE | efd451U.USE | efd4128.USE | efd451U.USE | OURSYSR.USE |
| OURTYP.USE  | OURTYPR.USE | SFD4128.USE | SFD451U.USE | SFD4803.USE | SFDC107.USE |
| SFDD608.USE | TFD4128.USE | TFD451U.USE | TFD4803.USE | TFDC107.USE | TFDD608.USE |
| FA0P000.CMN | FF0P000.CMN | FFDE000.CMN | FG0P000.CMN | FGD0000.CMN | F000002.CMN |
| F00P000.CMN | OURFOR.CMN  | SYSFOR.CMN  | FA00000.FOR | FF03500.FOR | FFC3502.FOR |
| FF03503.FOR | FF03504.FOR | FFC3514.FOR | FF03519.FOR | FF03600.FOR | FF03602.FOR |
| FF03603.FOR | FF03605.FOR | FF03606.FOR | FF03608.FOR | FF03609.FOR | FF03620.FOR |
| FF04120.FOR | FF04121.FOR | FF04122.FOR | FF04123.FOR | FF04124.FOR | FF04125.FOR |
| FF04126.FOR | FF04127.FOR | FF04129.FOR | FF04510.FOR | FF04511.FOR | FF04512.FOR |
| FF04513.FOR | FF04514.FOR | FF04515.FOR | FF04516.FOR | FF04517.FOR | FF04518.FOR |
| FF04519.FOR | FF0451A.FOR | FF0451B.FOR | FF0451C.FOR | FF0451D.FOR | FF0451E.FOR |
| FF0451F.FOR | FF0451G.FOR | FF0451H.FOR | FF0451I.FOR | FF0451J.FOR | FF0451V.FOR |
| FF0451W.FOR | FF0451X.FOR | FF0451Y.FOR | FF0451Z.FOR | FF04520.FOR | FF04521.FOR |
| FF04522.FOR | FF04529.FOR | FF04530.FOR | FF04531.FOR | FF04532.FOR | FF04533.FOR |
| FF04534.FOR | FF04535.FOR | FF04536.FOR | FF04537.FOR | FF04538.FOR | FF04539.FOR |
| FF0453A.FOR | FF04540.FOR | FF04541.FOR | FF04550.FOR | FF04551.FOR | FF04552.FOR |
| FF04553.FOR | FF04554.FOR | FF04555.FOR | FF04556.FOR | FF04557.FOR | FF04558.FOR |
| FF04559.FOR | FF04560.FOR | FF04562.FOR | FF04563.FOR | FF04600.FOR | FF04601.FOR |
| FF04602.FOR | FF04601.FOR | FF05200.FOR | FF05201.FOR | FF05202.FOR | FF05203.FOR |

Figure A-4. ACPS ANSI Tape Contents Volume ACPS04 (Concluded)

|             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|
| FF05204.FOR | FF05205.FOR | FF05206.FOR | FF05207.FOR | FF05208.FOR | FF05209.FOR |
| FF0520A.FOR | FF05210.FOR | FF05211.FOR | FF05212.FOR | FF05213.FOR | FF05214.FOR |
| FF05215.FOR | FF0521H.FOR | FF0521I.FOR | FF0521J.FOR | FF0521K.FOR | FF05300.FOR |
| FF05301.FOR | FF05302.FOR | FF05303.FOR | FF05304.FOR | FF05305.FOR | FF05306.FOR |
| FF05307.FOR | FF05308.FOR | FF05400.FOR | FF05401.FOR | FF05402.FOR | FF05403.FOR |
| FF05404.FOR | FF05405.FOR | FF05406.FOR | FF05407.FOR | FF05408.FOR | FF05501.FOR |
| FF05502.FOR | FF05503.FOR | FF05504.FOR | FF05505.FOR | FF05506.FOR | FF05507.FOR |
| FF05508.FOR | FF05509.FOR | FF0550A.FOR | FF0550B.FOR | FF0550C.FOR | FF0550D.FOR |
| FF0550E.FOR | FF0550F.FOR | FF06001.FOR | FF06009.FOR | FF06010.FOR | FF06011.FOR |
| FF06013.FOR | FF06014.FOR | FF06015.FOR | FF06016.FOR | FF06017.FOR | FF06018.FOR |
| FF06019.FOR | FF06022.FOR | FF06023.FOR | FF06024.FOR | FF06025.FOR | FF06026.FOR |
| FF06027.FOR | FF06028.FOR | FF06029.FOR | FF06030.FOR | FF06031.FOR | FF06032.FOR |
| FF06033.FOR | FF06043.FOR | FF06044.FOR | FF06045.FOR | FF06046.FOR | FF06047.FOR |
| FF06048.FOR | FF06049.FOR | FF06050.FOR | FF06051.FOR | FF06052.FOR | FF06053.FOR |
| FF06060.FOR | FF06061.FOR | FF06062.FOR | FF06063.FOR | FF06064.FOR | FF06065.FOR |
| FF06066.FOR | FF06067.FOR | FF06068.FOR | FF06069.FOR | FF06070.FOR | FF06071.FOR |
| FF06072.FOR | FF06073.FOR | FF06074.FOR | FF06075.FOR | FF06076.FOR | FF06077.FOR |
| FF06078.FOR | FF06079.FOR | FF06100.FOR | FF06101.FOR | FF06108.FOR | FF06109.FOR |
| FF06110.FOR | FF06111.FOR | FF06112.FOR | FF06113.FOR | FF06114.FOR | FF06115.FOR |
| FF06116.FOR | FF06117.FOR | FF06118.FOR | FF06119.FOR | FF06122.FOR | FF06132.FOR |
| FF06133.FOR | FF06134.FOR | FF06135.FOR | FF06136.FOR | FF06137.FOR | FF06138.FOR |
| FF06139.FOR | FF06140.FOR | FF06142.FOR | FF06143.FOR | FF06144.FOR | FF06145.FOR |
| FF06146.FOR | FF06147.FOR | FF06148.FOR | FF06149.FOR | FF06150.FOR | FF06152.FOR |
| FF06153.FOR | FF06154.FOR | FF06155.FOR | FF06156.FOR | FF06157.FOR | FF06158.FOR |
| FF06159.FOR | FF06160.FOR | FF06162.FOR | FF06163.FOR | FF06164.FOR | FF06165.FOR |

Total of 1404 files.

Table A-5. ACPS ANSI Tape Contents Volume APCSOS

|             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|
| FF06166.FOR | FF06167.FOR | FF06168.FOR | FF06169.FOR | FF06170.FOR | FF06172.FOR |
| FF06173.FOR | FF06174.FOR | FF06175.FOR | FF06176.FOR | FF06177.FOR | FF06178.FOR |
| FF06179.FOR | FF06180.FOR | FF06182.FOR | FF06183.FOR | FF06184.FOR | FF06185.FOR |
| FF06186.FOR | FF06187.FOR | FF06188.FOR | FF06189.FOR | FF06190.FOR | FF06802.FOR |
| FF06803.FOR | FF06806.FOR | FF06807.FOR | FF06816.FOR | FF06817.FOR | FF06818.FOR |
| FF06819.FOR | FF06820.FOR | FF06821.FOR | FF0D720.FOR | FF0D721.FOR | FF0D727.FOR |
| FF0D728.FOR | FFD451K.FOR | FFD451L.FOR | FFD451M.FOR | FFD451N.FOR | FFD451O.FOR |
| FFD451P.FOR | FFD451Q.FOR | FFD451R.FOR | FFD451S.FOR | FFD4523.FOR | FFD4524.FOR |
| FFD4525.FOR | FFD4526.FOR | FFD455D.FOR | FFD455E.FOR | FFD455F.FOR | FFD455G.FOR |
| FFD455I.FOR | FFD455J.FOR | FFD455K.FOR | FFD455L.FOR | FFD4567.FOR | FFD4568.FOR |
| FFD4569.FOR | FFD4603.FOR | FFD4604.FOR | FFD4605.FOR | FFD4606.FOR | FFD4607.FOR |
| FFD4608.FOR | FFD4609.FOR | FFD460A.FOR | FFD460B.FOR | FFD520C.FOR | FFD520D.FOR |
| FFD520E.FOR | FFD520F.FOR | FFD520G.FOR | FFD520H.FOR | FFD520I.FOR | FFD520J.FOR |
| FFD5218.FOR | FFD5219.FOR | FFD521A.FOR | FFD521B.FOR | FFD521C.FOR | FFD521D.FOR |
| FFD521E.FOR | FFD521F.FOR | FFDD722.FOR | FFDD723.FOR | FFDD724.FOR | FFDD725.FOR |
| FFDE201.FOR | FFDE202.FOR | FFDE203.FOR | FFDE204.FOR | FFDE205.FOR | FFDE206.FOR |
| FFDE207.FOR | FFDE208.FOR | FFDE209.FOR | FFDE20A.FOR | FFDE211.FOR | FFDE212.FOR |
| FFDE213.FOR | FFDE214.FOR | FFDE215.FOR | FFDE216.FOR | FFDE220.FOR | FFDE231.FOR |
| FFDE232.FOR | FFDE233.FOR | FFDE234.FOR | FFDE235.FOR | FFDE236.FOR | FFDE237.FOR |
| FFDE238.FOR | FFDE239.FOR | FFDE23A.FOR | FFDE241.FOR | FFDE242.FOR | FFDE243.FOR |
| FFDE244.FOR | FFDE245.FOR | FFDE246.FOR | FFDE250.FOR | FFDE401.FOR | FFDE402.FOR |
| FFDE403.FOR | FFDE404.FOR | FFDE405.FOR | FFDE406.FOR | FFDE407.FOR | FFDE408.FOR |
| FFDE409.FOR | FFDE40A.FOR | FFDE411.FOR | FFDE412.FOR | FFDE413.FOR | FFDE414.FOR |
| FFDE415.FOR | FFDE416.FOR | FFDE420.FOR | FFDE431.FOR | FFDE432.FOR | FFDE433.FOR |
| FFDE434.FOR | FFDE435.FOR | FFDE436.FOR | FFDE437.FOR | FFDE438.FOR | FFDE439.FOR |
| FFDE43A.FOR | FFDE441.FOR | FFDE442.FOR | FFDE443.FOR | FFDE444.FOR | FFDE445.FOR |
| FFDE446.FOR | FFDE450.FOR | FFDF000.FOR | FFDF001.FOR | FFDF002.FOR | FFDF003.FOR |
| FFDF004.FOR | FFDF005.FOR | FFIRST.FOR  | FGD0001.FOR | FGD000D.FOR | FGD000E.FOR |
| F000102.FOR | F000103.FOR | F000104.FOR | F000202.FOR | F000203.FOR | F000204.FOR |
| F000300.FOR | F000305.FOR | F000310.FOR | F000311.FOR | F000312.FOR | F000313.FOR |
| F000314.FOR | F000315.FOR | F000316.FOR | F000317.FOR | F000318.FOR | F000319.FOR |
| F000320.FOR | F000321.FOR | F000322.FOR | F000323.FOR | F000324.FOR | F000325.FOR |
| F000326.FOR | F000327.FOR | F000328.FOR | F000329.FOR | F000330.FOR | F000331.FOR |
| F000332.FOR | F000333.FOR | F000334.FOR | F000335.FOR | F000336.FOR | F000337.FOR |
| F000338.FOR | F000339.FOR | F000340.FOR | F000341.FOR | F000342.FOR | F000343.FOR |
| F000347.FOR | F000348.FOR | F000349.FOR | F000350.FOR | F000351.FOR | F000352.FOR |
| F000353.FOR | F000354.FOR | F000355.FOR | F000356.FOR | F000357.FOR | F000358.FOR |
| F000359.FOR | F000360.FOR | F000361.FOR | F000362.FOR | F000390.FOR | F000391.FOR |
| F000402.FOR | F000403.FOR | F000404.FOR | F000500.FOR | F000502.FOR | F000503.FOR |
| F000504.FOR | F000507.FOR | F000508.FOR | F000509.FOR | F000512.FOR | F000513.FOR |
| F000514.FOR | F000517.FOR | F000518.FOR | F000519.FOR | F000602.FOR | F000603.FOR |
| F000604.FOR | F000605.FOR | F000606.FOR | F000607.FOR | F000702.FOR | F000703.FOR |
| F000704.FOR | F000705.FOR | F000706.FOR | F000707.FOR | F000708.FOR | F000709.FOR |
| F000710.FOR | F000711.FOR | F000713.FOR | F000714.FOR | F000715.FOR | F000716.FOR |
| F000717.FOR | F000718.FOR | F000719.FOR | F000720.FOR | F000721.FOR | F0D0344.FOR |
| F0D0345.FOR | F0D0346.FOR | F0D036X.FOR | F0D036Y.FOR | F0D036Z.FOR | FORDMP.FOR  |
| FORSYS.FOR  | SYSBLK.FOR  | FFD451U.USE | FFD4566.USE | FORTYP.USE  | TYPFOR.USE  |
| JAOP000.CPL | JFOP000.CPL | JFJ3500.CPL | JFJ3501.CPL | JFJ3502.CPL | JFJ3503.CPL |
| JFJ3504.CPL | JFJ3513.CPL | JFJ3514.CPL | JFJ3600.CPL | JFJ3601.CPL | JFJ3602.CPL |
| JFJ3603.CPL | JFJ3604.CPL | JFJ3605.CPL | JFJ3606.CPL | JFJ3607.CPL | JFJ3608.CPL |
| JFJ3609.CPL | JFJ3610.CPL | JFJ3700.CPL | JFJ3701.CPL | JFJ3702.CPL | JFJ3703.CPL |
| JFJ3800.CPL | JFJ3801.CPL | JFJ3802.CPL | JFJ3803.CPL | JFJ3804.CPL | JFJ4518.CPL |
| JFJ4519.CPL | JFJ451A.CPL | JFJ451B.CPL | JFJ451C.CPL | JFJ451D.CPL | JFJ451E.CPL |
| JFJ451F.CPL | JFJ451G.CPL | JFJ451K.CPL | JFJ451L.CPL | JFJ451M.CPL | JFJ451P.CPL |
| JFJ451Q.CPL | JFJ451V.CPL | JFJ451W.CPL | JFJ451X.CPL | JFJ451Y.CPL | JFJ5300.CPL |
| JFJ5301.CPL | JFJ5302.CPL | JFJ5303.CPL | JFJ5305.CPL | JFJ5306.CPL | JFJ5307.CPL |
| JFJ5400.CPL | JFJ5401.CPL | JFJ5402.CPL | JFJ5403.CPL | JFJ5404.CPL | JFJ5405.CPL |
| JFJ5406.CPL | JFJ5407.CPL | JFJ5501.CPL | JFJ5502.CPL | JFJ5503.CPL | JFJ5504.CPL |
| JFJ5506.CPL | JFJ5507.CPL | JFJ5508.CPL | JFJ5509.CPL | JFJ550A.CPL | JFJ550B.CPL |
| JFJ6013.CPL | JFJ6014.CPL | JFJ6015.CPL | JFJ6016.CPL | JFJ6017.CPL | JFJ6018.CPL |
| JFJ6019.CPL | JFJ6023.CPL | JFJ6024.CPL | JFJ6025.CPL | JFJ6026.CPL | JFJ6027.CPL |
| JFJ6028.CPL | JFJ6029.CPL | JFJ6030.CPL | JFJ6031.CPL | JFJ6032.CPL | JFJ6033.CPL |
| JFJ6044.CPL | JFJ6045.CPL | JFJ6046.CPL | JFJ6047.CPL | JFJ6048.CPL | JFJ6049.CPL |
| JFJ6050.CPL | JFJ6051.CPL | JFJ6052.CPL | JFJ6060.CPL | JFJ6061.CPL | JFJ6062.CPL |
| JFJ6063.CPL | JFJ6064.CPL | JFJ6065.CPL | JFJ6066.CPL | JFJ6067.CPL | JFJ6068.CPL |
| JFJ6070.CPL | JFJ6071.CPL | JFJ6072.CPL | JFJ6073.CPL | JFJ6074.CPL | JFJ6075.CPL |
| JFJ6076.CPL | JFJ6077.CPL | JFJ6078.CPL | JFJ6100.CPL | JFJ6108.CPL | JFJ6112.CPL |
| JFJ6113.CPL | JFJ6114.CPL | JFJ6115.CPL | JFJ6116.CPL | JFJ6117.CPL | JFJ6118.CPL |
| JFJ6119.CPL | JFJ6132.CPL | JFJ6133.CPL | JFJ6134.CPL | JFJ6135.CPL | JFJ6136.CPL |

Table A-5. ACPS ANSI Tape Contents Volume APCSOS (Continued)

|             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|
| JFJ6137.CPL | JFJ6138.CPL | JFJ6139.CPL | JFJ6142.CPL | JFJ6143.CPL | JFJ6144.CPL |
| JFJ6145.CPL | JFJ6146.CPL | JFJ6147.CPL | JFJ6148.CPL | JFJ6149.CPL | JFJ6152.CPL |
| JFJ6153.CPL | JFJ6154.CPL | JFJ6155.CPL | JFJ6156.CPL | JFJ6157.CPL | JFJ6158.CPL |
| JFJ6159.CPL | JFJ6162.CPL | JFJ6163.CPL | JFJ6164.CPL | JFJ6165.CPL | JFJ6166.CPL |
| JFJ6167.CPL | JFJ6168.CPL | JFJ6169.CPL | JFJ6172.CPL | JFJ6173.CPL | JFJ6174.CPL |
| JFJ6175.CPL | JFJ6176.CPL | JFJ6177.CPL | JFJ6178.CPL | JFJ6179.CPL | JFJ6182.CPL |
| JFJ6183.CPL | JFJ6184.CPL | JFJ6185.CPL | JFJ6186.CPL | JFJ6187.CPL | JFJ6188.CPL |
| JFJ6189.CPL | JFJ6191.CPL | JFJ6192.CPL | JFJ6193.CPL | JFJ6194.CPL | JFJ6195.CPL |
| JFJ6196.CPL | JFJ6197.CPL | JFJ6198.CPL | JFJ619A.CPL | JFJ619B.CPL | JFJ619C.CPL |
| JFJ619D.CPL | JFJ619E.CPL | JFJ619F.CPL | JFJ619G.CPL | JFJ619H.CPL | JFJ619J.CPL |
| JFJ619K.CPL | JFJ619L.CPL | JFJ619M.CPL | JFJ619N.CPL | JFJ619O.CPL | JFJ619P.CPL |
| JFJ619Q.CPL | JFJ6213.CPL | JFJ6214.CPL | JFJ6215.CPL | JFJ6216.CPL | JFJ6217.CPL |
| JFJ6218.CPL | JFJ6219.CPL | JFJ6223.CPL | JFJ6224.CPL | JFJ6225.CPL | JFJ6226.CPL |
| JFJ6227.CPL | JFJ6228.CPL | JFJ6229.CPL | JFJ6230.CPL | JFJ6231.CPL | JFJ6232.CPL |
| JFJ6243.CPL | JFJ6244.CPL | JFJ6245.CPL | JFJ6246.CPL | JFJ6247.CPL | JFJ6248.CPL |
| JFJ6249.CPL | JFJ6250.CPL | JFJ6251.CPL | JFJ6252.CPL | JFJ6802.CPL | JFJ6806.CPL |
| JFJ6808.CPL | JFJ680A.CPL | JFJ680C.CPL | JFJ680E.CPL | JFJ680G.CPL | JFJ680I.CPL |
| JFJ6810.CPL | JFJ6814.CPL | JFJ6816.CPL | JFJ6818.CPL | JFJ6820.CPL | JFJ6822.CPL |
| JFJ6824.CPL | JG0P000.CPL | JGD0000.CPL | JGD0004.CPL | JGD0005.CPL | JGD0006.CPL |
| JGJ000D.CPL | JGN000F.CPL | JGN000G.CPL | JGN000H.CPL | J000002.CPL | J00P000.CPL |
| JOJ0102.CPL | JOJ0103.CPL | JOJ0202.CPL | JOJ0203.CPL | JOJ0311.CPL | JOJ0312.CPL |
| JOJ0314.CPL | JOJ0315.CPL | JOJ0323.CPL | JOJ0324.CPL | JOJ0326.CPL | JOJ0327.CPL |
| JOJ0329.CPL | JOJ0330.CPL | JOJ0332.CPL | JOJ0333.CPL | JOJ0335.CPL | JOJ0336.CPL |
| JOJ0338.CPL | JOJ0339.CPL | JOJ0341.CPL | JOJ0342.CPL | JOJ0344.CPL | JOJ0345.CPL |
| JOJ0347.CPL | JOJ0348.CPL | JOJ0349.CPL | JOJ0351.CPL | JOJ0352.CPL | JOJ0363.CPL |
| JOJ0364.CPL | JOJ036I.CPL | JOJ036J.CPL | JOJ036L.CPL | JOJ036M.CPL | JOJ036O.CPL |
| JOJ036P.CPL | JOJ036R.CPL | JOJ036S.CPL | JOJ036U.CPL | JOJ036V.CPL | JOJ036X.CPL |
| JOJ036Y.CPL | JOJ0390.CPL | JOJ0402.CPL | JOJ0403.CPL | JOJ0502.CPL | JOJ0503.CPL |
| JOJ0507.CPL | JOJ0508.CPL | JOJ0512.CPL | JOJ0513.CPL | JOJ0517.CPL | JOJ0518.CPL |
| JOJ0523.CPL | JOJ0524.CPL | JOJ0602.CPL | JOJ0603.CPL | JOJ0702.CPL | JOJ0703.CPL |
| JOJ0706.CPL | JOJ0707.CPL | JOJ0709.CPL | JOJ0710.CPL | JOJ0719.CPL | JOJ0720.CPL |
| JOVDMP.CPL  | JOVSPC.CPL  | OURJOV.CPL  | DMPJOV.CPL  | JA00000.JOV | JF03500.JOV |
| JF03501.JOV | JF03502.JOV | JF03503.JOV | JF03504.JOV | JF03513.JOV | JF03514.JOV |
| JF03519.JOV | JF03550.JOV | JF03600.JOV | JF03601.JOV | JF03602.JOV | JF03603.JOV |
| JF03604.JOV | JF03605.JOV | JF03606.JOV | JF03607.JOV | JF03608.JOV | JF03609.JOV |
| JF03610.JOV | JF03620.JOV | JF03700.JOV | JF03701.JOV | JF03702.JOV | JF03703.JOV |
| JF03704.JOV | JF03800.JOV | JF03801.JOV | JF03802.JOV | JF03803.JOV | JF03804.JOV |
| JF03805.JOV | JF04120.JOV | JF04121.JOV | JF04122.JOV | JF04123.JOV | JF04124.JOV |
| JF04125.JOV | JF04126.JOV | JF04127.JOV | JF04129.JOV | JF0412B.JOV | JF04130.JOV |
| JF04131.JOV | JF04132.JOV | JF04133.JOV | JF0413D.JOV | JF0413H.JOV | JF0413I.JOV |
| JF0413J.JOV | JF0413K.JOV | JF04310.JOV | JF04311.JOV | JF04312.JOV | JF04510.JOV |
| JF04511.JOV | JF04512.JOV | JF04513.JOV | JF04514.JOV | JF04515.JOV | JF04516.JOV |
| JF04517.JOV | JF04518.JOV | JF04519.JOV | JF0451A.JOV | JF0451B.JOV | JF0451C.JOV |
| JF0451D.JOV | JF0451E.JOV | JF0451F.JOV | JF0451G.JOV | JF0451J.JOV | JF0451V.JOV |
| JF0451W.JOV | JF0451X.JOV | JF0451Y.JOV | JF0451Z.JOV | JF04520.JOV | JF04521.JOV |
| JF04522.JOV | JF04527.JOV | JF04529.JOV | JF04530.JOV | JF04531.JOV | JF04532.JOV |
| JF04533.JOV | JF04534.JOV | JF04535.JOV | JF04536.JOV | JF04537.JOV | JF04538.JOV |
| JF04539.JOV | JF0453A.JOV | JF0453B.JOV | JF0453C.JOV | JF04540.JOV | JF04541.JOV |
| JF04550.JOV | JF04551.JOV | JF04552.JOV | JF04553.JOV | JF04554.JOV | JF04555.JOV |
| JF04556.JOV | JF04557.JOV | JF04558.JOV | JF04559.JOV | JF0455N.JOV | JF0455O.JOV |
| JF04560.JOV | JF04562.JOV | JF04563.JOV | JF04600.JOV | JF04601.JOV | JF04602.JOV |
| JF0460E.JOV | JF0460F.JOV | JF0460G.JOV | JF0460H.JOV | JF0460I.JOV | JF0460J.JOV |
| JF0460M.JOV | JF05200.JOV | JF05201.JOV | JF05202.JOV | JF05203.JOV | JF05204.JOV |
| JF05205.JOV | JF05206.JOV | JF05207.JOV | JF05208.JOV | JF05209.JOV | JF0520A.JOV |
| JF0520B.JOV | JF0520M.JOV | JF05200.JOV | JF0520R.JOV | JF0520S.JOV | JF05210.JOV |
| JF05211.JOV | JF05212.JOV | JF05213.JOV | JF05214.JOV | JF05215.JOV | JF0521H.JOV |
| JF0521I.JOV | JF0521J.JOV | JF0521K.JOV | JF0521L.JOV | JF0521N.JOV | JF05300.JOV |
| JF05301.JOV | JF05302.JOV | JF05303.JOV | JF05304.JOV | JF05305.JOV | JF05306.JOV |
| JF05307.JOV | JF05308.JOV | JF05400.JOV | JF05401.JOV | JF05402.JOV | JF05403.JOV |
| JF05404.JOV | JF05405.JOV | JF05406.JOV | JF05407.JOV | JF05408.JOV | JF05501.JOV |
| JF05502.JOV | JF05503.JOV | JF05504.JOV | JF05505.JOV | JF05506.JOV | JF05507.JOV |
| JF05508.JOV | JF05509.JOV | JF0550A.JOV | JF0550B.JOV | JF0550C.JOV | JF0550D.JOV |
| JF0550E.JOV | JF0550F.JOV | JF06001.JOV | JF06009.JOV | JF06010.JOV | JF06011.JOV |
| JF06013.JOV | JF06014.JOV | JF06015.JOV | JF06016.JOV | JF06017.JOV | JF06018.JOV |
| JF06019.JOV | JF06022.JOV | JF06023.JOV | JF06024.JOV | JF06025.JOV | JF06026.JOV |
| JF06027.JOV | JF06028.JOV | JF06029.JOV | JF06030.JOV | JF06031.JOV | JF06032.JOV |
| JF06033.JOV | JF06043.JOV | JF06044.JOV | JF06045.JOV | JF06046.JOV | JF06047.JOV |
| JF06048.JOV | JF06049.JOV | JF06050.JOV | JF06051.JOV | JF06052.JOV | JF06053.JOV |
| JF06060.JOV | JF06061.JOV | JF06062.JOV | JF06063.JOV | JF06064.JOV | JF06065.JOV |
| JF06066.JOV | JF06067.JOV | JF06068.JOV | JF06069.JOV | JF06070.JOV | JF06071.JOV |

Table A-5. ACPS ANSI Tape Contents Volume APCSOS (Continued)

|             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|
| JF06072.JOV | JF06073.JOV | JF06074.JOV | JF06075.JOV | JF06076.JOV | JF06077.JOV |
| JF06078.JOV | JF06079.JOV | JF06100.JOV | JF06101.JOV | JF06108.JOV | JF06109.JOV |
| JF06110.JOV | JF06111.JOV | JF06112.JOV | JF06113.JOV | JF06114.JOV | JF06115.JOV |
| JF06116.JOV | JF06117.JOV | JF06118.JOV | JF06119.JOV | JF06122.JOV | JF06132.JOV |
| JF06133.JOV | JF06134.JOV | JF06135.JOV | JF06136.JOV | JF06137.JOV | JF06138.JOV |
| JF06139.JOV | JF06140.JOV | JF06142.JOV | JF06143.JOV | JF06144.JOV | JF06145.JOV |
| JF06146.JOV | JF06147.JOV | JF06148.JOV | JF06149.JOV | JF06150.JOV | JF06152.JOV |
| JF06153.JOV | JF06154.JOV | JF06155.JOV | JF06156.JOV | JF06157.JOV | JF06158.JOV |
| JF06159.JOV | JF06160.JOV | JF06162.JOV | JF06163.JOV | JF06164.JOV | JF06165.JOV |
| JF06166.JOV | JF06167.JOV | JF06168.JOV | JF06169.JOV | JF06170.JOV | JF06172.JOV |
| JF06173.JOV | JF06174.JOV | JF06175.JOV | JF06176.JOV | JF06177.JOV | JF06178.JOV |
| JF06179.JOV | JF06180.JOV | JF06182.JOV | JF06183.JOV | JF06184.JOV | JF06185.JOV |
| JF06186.JOV | JF06187.JOV | JF06188.JOV | JF06189.JOV | JF06190.JOV | JF06191.JOV |
| JF06192.JOV | JF06193.JOV | JF06194.JOV | JF06195.JOV | JF06196.JOV | JF06197.JOV |
| JF06198.JOV | JF06199.JOV | JF0619A.JOV | JF0619B.JOV | JF0619C.JOV | JF0619D.JOV |
| JF0619E.JOV | JF0619F.JOV | JF0619G.JOV | JF0619H.JOV | JF0619I.JOV | JF0619J.JOV |
| JF0619K.JOV | JF0619L.JOV | JF0619M.JOV | JF0619N.JOV | JF0619O.JOV | JF0619P.JOV |
| JF0619Q.JOV | JF0619R.JOV | JF06802.JOV | JF06803.JOV | JF06806.JOV | JF06807.JOV |
| JF06808.JOV | JF06809.JOV | JF0680A.JOV | JF0680B.JOV | JF0680C.JOV | JF0680D.JOV |
| JF0680E.JOV | JF0680F.JOV | JF06810.JOV | JF06811.JOV | JF06814.JOV | JF06815.JOV |
| JF06816.JOV | JF06817.JOV | JF06818.JOV | JF06819.JOV | JF06820.JOV | JF06821.JOV |
| JF06822.JOV | JF06823.JOV | JF06824.JOV | JF06825.JOV | JF0D720.JOV | JF0D721.JOV |
| JF0D727.JOV | JF0D728.JOV | JF0D729.JOV | JF0D72D.JOV | JFD3551.JOV | JFD4128.JOV |
| JFD412A.JOV | JFD412C.JOV | JFD412D.JOV | JFD4135.JOV | JFD4136.JOV | JFD4137.JOV |
| JFD4138.JOV | JFD4139.JOV | JFD413A.JOV | JFD413B.JOV | JFD413C.JOV | JFD413E.JOV |
| JFD413G.JOV | JFD451K.JOV | JFD451L.JOV | JFD451M.JOV | JFD451P.JOV | JFD451Q.JOV |
| JFD4523.JOV | JFD4524.JOV | JFD452A.JOV | JFD455D.JOV | JFD455E.JOV | JFD455I.JOV |
| JFD455J.JOV | JFD4566.JOV | JFD4567.JOV | JFD4603.JOV | JFD4604.JOV | JFD4605.JOV |
| JFD4606.JOV | JFD4607.JOV | JFD460K.JOV | JFD460L.JOV | JFD460N.JOV | JFD460O.JOV |
| JFD520C.JOV | JFD520D.JOV | JFD520E.JOV | JFD520F.JOV | JFD520N.JOV | JFD520P.JOV |
| JFD520Q.JOV | JFD5218.JOV | JFD5219.JOV | JFD521A.JOV | JFD521B.JOV | JFD521K.JOV |
| JFD521M.JOV | JFD521O.JOV | JFD521P.JOV | JFD6201.JOV | JFD6209.JOV | JFD6210.JOV |
| JFD6211.JOV | JFD6213.JOV | JFD6214.JOV | JFD6215.JOV | JFD6216.JOV | JFD6217.JOV |
| JFD6218.JOV | JFD6219.JOV | JFD6222.JOV | JFD6223.JOV | JFD6224.JOV | JFD6225.JOV |
| JFD6226.JOV | JFD6227.JOV | JFD6228.JOV | JFD6229.JOV | JFD6230.JOV | JFD6231.JOV |
| JFD6232.JOV | JFD6233.JOV | JFD6243.JOV | JFD6244.JOV | JFD6245.JOV | JFD6246.JOV |
| JFD6247.JOV | JFD6248.JOV | JFD6249.JOV | JFD6250.JOV | JFD6251.JOV | JFD6252.JOV |
| JFD6253.JOV | JFD680G.JOV | JFD680H.JOV | JFD680I.JOV | JFD680J.JOV | JFDD600.JOV |
| JFDD601.JOV | JFDD602.JOV | JFDD603.JOV | JFDD604.JOV | JFDD605.JOV | JFDD606.JOV |
| JFDD607.JOV | JFDD608.JOV | JFDD609.JOV | JFDD610.JOV | JFDD611.JOV | JFDD722.JOV |
| JFDD723.JOV | JFDD72A.JOV | JFDD72B.JOV | JFDD72C.JOV | JFDD72E.JOV | JFDD72F.JOV |
| JFDD72G.JOV | JFDD72H.JOV | JFDD72I.JOV | JFDDA01.JOV | JFDDA02.JOV | JFDF000.JOV |
| JFDF001.JOV | JFDF002.JOV | JFDF003.JOV | JFDF004.JOV | JFDF005.JOV | JFIRST.JOV  |
| JGD000C.JOV | JGD0001.JOV | JGD0007.JOV | JGD0008.JOV | JGD0009.JOV | JGD000D.JOV |
| JGD000E.JOV | JGN0001.JOV | JGN000J.JOV | JGN000K.JOV | J000102.JOV | J000103.JOV |
| J000104.JOV | J000202.JOV | J000203.JOV | J000204.JOV | J000300.JOV | J000305.JOV |
| J000310.JOV | J000311.JOV | J000312.JOV | J000313.JOV | J000314.JOV | J000315.JOV |
| J000316.JOV | J000323.JOV | J000324.JOV | J000325.JOV | J000326.JOV | J000327.JOV |
| J000328.JOV | J000329.JOV | J000330.JOV | J000331.JOV | J000332.JOV | J000333.JOV |
| J000334.JOV | J000335.JOV | J000336.JOV | J000337.JOV | J000338.JOV | J000339.JOV |
| J000340.JOV | J000341.JOV | J000342.JOV | J000343.JOV | J000347.JOV | J000348.JOV |
| J000349.JOV | J000350.JOV | J000351.JOV | J000352.JOV | J000353.JOV | J000363.JOV |
| J000364.JOV | J000365.JOV | J00036I.JOV | J00036J.JOV | J00036K.JOV | J00036L.JOV |
| J00036M.JOV | J00036N.JOV | J00036O.JOV | J00036V.JOV | J00036W.JOV | J000390.JOV |
| J000391.JOV | J000402.JOV | J000403.JOV | J000404.JOV | J000500.JOV | J000502.JOV |
| J000503.JOV | J000504.JOV | J000507.JOV | J000508.JOV | J000509.JOV | J000512.JOV |
| J000513.JOV | J000514.JOV | J000517.JOV | J000518.JOV | J000519.JOV | J000602.JOV |
| J000603.JOV | J000604.JOV | J000605.JOV | J000606.JOV | J000607.JOV | J000702.JOV |
| J000703.JOV | J000704.JOV | J000705.JOV | J000706.JOV | J000707.JOV | J000708.JOV |
| J000709.JOV | J000710.JOV | J000711.JOV | J000713.JOV | J000714.JOV | J000715.JOV |
| J000716.JOV | J000717.JOV | J000718.JOV | J000719.JOV | J000720.JOV | J000721.JOV |
| J0D0344.JOV | J0D0345.JOV | J0D0346.JOV | J0D0360.JOV | J0D036P.JOV | J0D036Q.JOV |
| J0D036R.JOV | J0D036S.JOV | J0D036T.JOV | J0D036X.JOV | J0D036Y.JOV | J0D036Z.JOV |
| J0D0523.JOV | J0D0524.JOV | J0D0525.JOV | J0VSYS.JOV  | SPCJOV.JOV  | JF03701.USE |
| JF04311.USE | JF0451H.USE | JF0451I.USE | JF0451J.USE | JF0619A.USE | JF06822.USE |
| JF0451N.USE | JF0451O.USE | JF0451R.USE | JF0451S.USE | JFD451U.USE | JFD4525.USE |
| JFD4526.USE | JFD4528.USE | JFD455F.USE | JFD455G.USE | JFD455K.USE | JFD455L.USE |
| JFD4568.USE | JFD4569.USE | JFD4608.USE | JFD4609.USE | JFD460A.USE | JFD460B.USE |
| JFD460C.USE | JFD460D.USE | JFD520G.USE | JFD520H.USE | JFD520I.USE | JFD520J.USE |
| JFD521C.USE | JFD521D.USE | JFD521E.USE | JFD521F.USE | JFD6260.USE | JFD6261.USE |



Table A-5. ACPS ANSI Tape Contents Volume APCSO5 (Concluded)

|             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|
| JFD6262.USE | JFD6263.USE | JFD6264.USE | JFD6265.USE | JFD6266.USE | JFD6267.USE |
| JFD6268.USE | JFD6269.USE | JFD6270.USE | JFD6271.USE | JFD6272.USE | JFD6273.USE |
| JFD6274.USE | JFD6275.USE | JFD6276.USE | JFD6277.USE | JFD6278.USE | JFD6279.USE |
| JFDD602.USE | JFDD603.USE | JFDD610.USE | JFDD611.USE | JFDD724.USE | JFDD725.USE |
| JFJ451H.USE | JFJ451I.USE | JFJ451N.USE | JFJ451O.USE | JFJ451R.USE | JFJ451S.USE |
| JFJ6260.USE | JFJ6261.USE | JFJ6262.USE | JFJ6263.USE | JFJ6264.USE | JFJ6265.USE |
| JFJ6266.USE | JFJ6267.USE | JFJ6268.USE | JFJ6270.USE | JFJ6271.USE | JFJ6272.USE |
| JFJ6273.USE | JFJ6274.USE | JFJ6275.USE | JFJ6276.USE | JFJ6277.USE | JFJ6278.USE |
| JGD0008.USE | JGN000J.USE | J000317.USE | J000318.USE | J000319.USE | J000320.USE |
| J000321.USE | J000322.USE | J0J0317.USE | J0J0318.USE | J0J0320.USE | J0J0321.USE |
| JOVTYP.USE  | TYPJOV.USE  | JGF0001.FOR | JGF000E.FOR | SYSJOV.FOR  | TMPDMP.FOR  |
| JOVMATH.DAT | CCOMPA.CMN  | CCOMPV.CMN  | CEXECA.CMN  | CEXECV.CMN  | CCOMP.FOR   |
| CEXEC.FOR   |             |             |             |             |             |

Total of 1327 files.

## APPENDIX B

### DEC VAX/VMS BACKUP TAPE FORMAT

This appendix describes the delivery tape format and directory file organization for the DEC VAX/VMS version of the ACPS.

One tape is written in DEC VAX/VMS BACKUP format as volume ACPS, save set ACPS.BCK. Refer to the DEC VAX/VMS Backup Utility Reference Manual for details on BACKUP formatted tapes. The tape is structured as a multi-file, multi-directory, single-volume configuration. The different files represent collections of ACPS test programs and command procedures. Each collection of similar files is grouped together in specific directories on the tape. The organization of the files on this tape according to directory is as follows:

|                                               |                                                                                                                                                                                                 |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [acps]                                        | Top-level ACPS directory containing command procedures to establish a common language test environment and to display the VAX/VMS software environment.                                         |
| [acps.results]                                | Contains output files from ACPS compilations and test executions and from ACPS test comparison tool executions.                                                                                 |
| [acps.support]                                | Contains common language test support software and command procedures.                                                                                                                          |
| [acps.tools]                                  | Contains ACPS test comparison tool program source and command procedures files.                                                                                                                 |
| [acps.ada]                                    | Top-level directory for Ada tests.                                                                                                                                                              |
| [acps.ada.dec]                                | Contains Ada test files and command procedures for use with the DEC VAX Ada compiler.                                                                                                           |
| [acps.ada.dec.lib],<br>[acps.ada.dec.lib.sub] | Reserved for program library files generated by VAX Ada compilations of Ada tests.                                                                                                              |
| [acps.fortran]                                | Contains FORTRAN test files and command procedures for use with the DEC VAX FORTRAN compiler.                                                                                                   |
| [acps.jovial]                                 | Contains JOVIAL test files and command procedures for use with the ECSPO JOVIAL compiler hosted and targeted to VAX/VMS.                                                                        |
| [acps.jovial.com.user]                        | Contains a command procedure to define logical names and global symbols for execution of the ECSPO JOVIAL compiler as described in Appendix A of the EMAD ITS JOVIAL J73 Compiler User's Guide. |

## APPENDIX C

### VAX/VMS SAMPLE COMMAND PROCEDURES

This appendix describes use of a set of VAX/VMS 4.X command procedures that are provided on the ACPS BACKUP formatted delivery tape to perform the tasks necessary to compile/execute ACPS tests and to use the ACPS test comparison tools. Listings are provided for each command procedure discussed. The test compilation and execution command procedures shown are for DEC VAX Ada and were used to generate the output examples discussed in Appendix E. Table C-1 lists the file names (using ACPS logical name conventions) and purpose of all VAX/VMS command procedures provided with the ACPS.

This appendix assumes familiarity with the VAX/VMS command language (DCL). The information presented should be useful to those desiring to either rehost the ACPS or to use it for an Ada compiler other than DEC VAX Ada.

#### C.1 INSTALLATION OF ACPS SOURCE AND COMMAND FILES

For VAX/VMS users, the ACPS delivery tape is written in BACKUP utility format and contains the single save set ACPS.BCK.

To install the tape the user should type the following:

```
$MOUNT/FOREIGN MTA0:
$BACKUP/LOG MTA0:ACPS.BCK MYDISK:[MYDIRECTORY...]*
```

where:

MTA0 is the tape drive on which the ACPS tape is mounted.  
MYDISK is a user disk.  
MYDIRECTORY is a VMS directory to contain the ACPS.

The directory [MYDIRECTORY.ACPS] will be created as the top-level ACPS directory. The following global symbol definition must be placed in the user's LOGIN.COM file:

```
$acps:==@MYDISK:[MYDIRECTORY.ACPS]LOGICALS MYDISK MYDIRECTORY
```

All ACPS batch command procedures use the symbol ACPS to establish an initial test environment state common to all ACPS test languages. Its use causes invocation of the ACPS command procedure LOGICALS.COM which defines all ACPS logical names and test environment global symbols, and sets the default directory to the top-level ACPS directory. Table C-2 contains a listing of LOGICALS.COM. Subsequent sections in this appendix will refer to the logical names defined in this command procedure.

## C.2 INSTALLATION OF COMMON LANGUAGE SUPPORT SOFTWARE

A separate directory in ACPS is reserved for common language test support software which is used to gather VMS run-time performance statistics and to access microsecond level time. To install this software the user should type the following:

```
$ ACPS
$ SET DEF DSUP
$ @SUPPORT
```

Table C-3 contains a listing of DSUP:SUPPORT.COM.

To execute ACPS microsecond level tests, the MACRO routine contained in file DSUP:USSDISP.MAR must be installed as a user written system service in the VMS directory SYS\$SHARE as file USS.OLB. A template for developing user written system services is contained in file USSDISP.MAR in the VMS directory SYS\$EXAMPLES. If the user is unable to create the necessary system service, then the following must be done in order to execute any of the ACPS tests:

- a. Remove the call to USER\_GET\_ICR in file DSUP:GETICR.MAR and reexecute DSUP:SUPPORT.
- b. Remove references to SYS\$SHARE:USS.OLB in the following command procedures: DDEC:SETUP.COM, DFOR:SETUP.COM and DJOV:SETUP.COM.

## C.3 INSTALLATION OF ACPS TEST COMPARISON TOOLS

To install the ACPS test comparison tools, the following should be typed:

```
$ ACPS
$ SET DEF DTOOL
$ @TOOLS
```

Table C-4 contains a listing of DTOOL:TOOLS.COM.

## C.4 DETERMINATION OF VAX/VMS SOFTWARE ENVIRONMENT

In order to draw conclusions about the results of execution of ACPS tests for a given compiler, one must know the VAX/VMS software environment under which the tests are executed. Table C-5 shows a listing of the command procedure DACPS:VAXVMS which is used to display all relevant information about the VMS software environment.

### C.5 DETERMINATION OF ADA COMPILER-DEPENDENT PARAMETERS

The Ada run-time command procedures and Ada tests supplied with the ACPS are dependent upon several compiler-specific parameters. The values chosen for these parameters are specific to the DEC VAX Ada compiler. The program that displays these parameters is contained in file DDEC:ADAPARM.ADA and is executed by the command procedure DDEC:ADAPARM.COM which is shown in Table C-6. Table C-7 shows the output from ADAPARM for DEC VAX Ada. The Ada test support packages OURSYS.ADA, ADASYS.ADA, OURTYP.ADA, OURSYSR.ADA and OURTYPR.ADA make the following assumptions:

- a. The resolution of the Ada clock (i.e., the Ada clock cycle or smallest nonzero difference in Ada clock values) is not worse than 10 ms.

In order to minimize test execution times, it is desirable to keep the clock granularity as low as possible. If it is greater than 10 ms, then the variable TCLOCK in package ADASYS.ADA should be initialized to the value "OS".

- b. Run-time statistics are written to the standard output file in Ada which is assumed to be SYS\$OUTPUT.

If this assumption is invalid, then either the approach used in recording run statistics within the ACPS Ada command procedures provided must be changed or all PUT and NEW\_LINE statements in the packages ADASYS.ADA and ADADMP.ADA must be changed to output to file SYS\$OUTPUT.

- c. ACPS numeric data types defined in packages OURSYS.ADA, OURSYSR.ADA, OURTYP.ADA, and OURTYPR.ADA are mapped to VAX data types as follows:

| <u>ACPS Type</u>        | <u>VAX Ada Type</u> | <u>VAX Type-Size</u> |
|-------------------------|---------------------|----------------------|
| OUR_INTEGER             | INTEGER             | Longword-32 bits     |
| OUR_FLOAT               | FLOAT               | F_float-32 bits      |
| OUR_POSITIVE            | POSITIVE            | Longword-32 bits     |
| OUR_SHORT_INTEGER       | SHORT_INTEGER       | Word-16 bits         |
| OUR_SHORT_SHORT_INTEGER | SHORT_SHORT_INTEGER | Byte-8 bits          |
| OUR_LONG_FLOAT          | LONG_FLOAT          | G_float-64 bits      |
| OUR_LONG_LONG_FLOAT     | LONG_LONG_FLOAT     | H_float-128 bits     |
| OUR_D_FLOAT             | D_FLOAT             | D_float-64 bits      |

If the Ada compiler mapping between predefined ADA numeric types and VAX data types is not as shown in the above table, then the corresponding ACPS type statements in packages OURSYS.ADA, OURSYSR.ADA, OURTYP.ADA, and OURTYPR.ADA must be modified to ensure the correct VAX data type representation for each ACPS numeric type.

- d. The minimum time used in a DELAY statement to force invocation of a lower priority task is assumed to be ten milliseconds. This value establishes the minimum time that will be used in DELAY statements by ACPS tests. Its value is contained in the named constant `minimum_delay_interval` defined in package OURSYS.

## C.6 ACPS COMMAND PROCEDURE TECHNIQUES

This section discusses command procedure techniques common to all ACPS test languages and compilers. The discussion refers to the command procedure shown in Table C-6 which compiles and executes the Ada program ADAPARM using DEC VAX Ada compiler.

- a. Creation of compiler-specific test environments. ACPS compilation and execution command procedures are assumed to be executed in batch mode. To create an initial compiler-independent test environment, the first command (shown on line 46 of Fig. C-6) uses the symbol "ACPS" to invoke the command procedure DACPS:LOGICALS.COM which does the following:
  - 1. It defines logical names for each ACPS directory.
  - 2. It defines global symbols (e.g., `USE_DEC`) which are used to establish compiler-specific test environments.
  - 3. It sets the batch output buffer update interval to one day to ensure that VMS batch output buffer flushes do not impact test measurements.
  - 4. It sets the default directory to DACPS.

To create a compiler-specific test environment, the next command (shown on line 47 of Table C-17) uses the symbol `USE_DEC` to invoke the command procedure DDEC:SETUP.COM which completes establishment of the test environment for DEC VAX Ada compiler. As shown in Table C-8, DDEC:SETUP.COM does the following:

- 1. It defines global symbols used by all ACPS compilation and execution command procedures by executing the procedure DSUP:SYMBOLS.COM shown in Table C-9.
- 2. It defines symbols which are used in ACPS compilation command procedures to specify compiler options and common language test support software object modules.
- 3. It sets the current directory to the one containing the command procedures and test cases for a specific compiler.

- b. Creation of compile-time test environment. A common language test environment is created to begin each ACPS compile-time test. All extraneous files are deleted (as shown in lines 38-42 of Table C-6). The working set parameters are set to the specific values shown in line 59 of Table C-6 and are also displayed in the compile-time test statistic file. The system activity before and after the test is also displayed to verify that the compilations are made in a stand-alone environment and are not impacted by other VMS processes.
- c. Creation of run-time test environment. A common language test environment is created for each ACPS run-time test. The working set parameters are set to the specific values shown in line 57 of Table C-6 and are also output to the run-time statistic file. The parameters as shown are used for all single task tests to ensure that VAX automatic working set adjustment logic does not affect test measurement repeatability by interrupting test executions. The system activity before and after the tests is displayed to ensure that test measurements are not affected by other VMS processes or system users.
- d. Recording of run-time test statistics. All ACPS run-time command procedures assume that run-time statistics from test executions are written to the file with logical name SYS\$OUTPUT.

To ensure that an output operation from one test execution does not impact (due to output completion or file extension) another test, a separate command procedure is used to execute each test and to append the results to a single permanent file. As shown in lines 68 and 69 of Table C-6, the logical name RESULTS is assigned to the permanent file that will contain the performance statistics from all test executions. The symbol OUR\_RUN (defined by DSUP:SYMBOLS) is used to invoke the command procedure DSUP:RUN which executes a test and appends the results to the file with logical name RESULTS.

Table C-10 contains a listing of DSUP:RUN.COM. As shown at line 32 of Table C-10, DSUP:RUN uses the command procedure DSUP:EXEC, shown in Table C-11, to execute the test program and directs the output to a temporary file. It then uses the APPEND command to append the temporary file to the file RESULTS and finally deletes the temporary file.

To ensure that completion of output from a DCL SHOW command does not impact a test execution, a separate command procedure, DSUP:SHOW, is used to execute each show command and append the output to the file with logical name RESULTS. Table C-12 contains a listing of DSUP:SHOW.COM. As shown at line 26, DSUP:SHOW uses the command procedure SHOW\_, shown in Table C-13, to execute the SHOW command and directs the output to a temporary file. The APPEND command is then used to add the temporary file to the end of the file RESULTS. The temporary file is then deleted.

### C.7 DETERMINATION OF TEST LOOP OVERHEAD PARAMETERS

The ACPS test comparison tool is used to account for test loop overhead in ACPS tests. For host machines that do not support execution of the tool (i.e., host computers not supporting FORTRAN 77), a special test program in each ACPS test language is used to compute the test overhead. These overhead measurements can then be used to set variables in the test support software so that test loop overhead (except for operating system statistics) can be accounted for directly in each test execution. Table C-14 shows the command procedure which executes the program AFIRST which is the Ada version of the overhead test. Table C-15 contains output from execution of AFIRST. The output contains 20 executions (ADAFRST) of nonmicrosecond level tests and 10 executions of microsecond level tests (TOVR). The format of the output is described in Appendix E. Based on data from Table C-15, the following initial values would be given to variables in DDEC:ADASY.S.ADA:

- a. For microsecond level tests, the test loop overhead time is contained in variable TOVR. It would be initialized to 213.
- b. For nonmicrosecond level tests:
  1. LOOPN contains the number of test loop iterations. It would be set to 99998.
  2. LOOPTM contains the measured elapsed time for LOOPN iterations through the test loop. It is set to the median of values measured which would be 3.299988.
  3. LOOPZ contains the size in bytes of the test loop compiled code. The preset value for DEC VAX Ada is 0 since the compiler does not support the address attribute for labels.

### C.8 DETERMINATION OF TEST REPEATABILITY

As a result of the coding and command procedure conventions adopted in the VAX/VMS ACPS, the elapsed time and CPU time measurements made at run-time can be made accurate to within  $\pm 10$  ms. To achieve a test measurement accuracy of 99%, one needs only to ensure that each test (exclusive of test overhead) executes for at least 1 sec.

The special command procedure DDEC:REPEAT, shown in Table C-16, is used in the ACPS to verify measurement accuracy by repeatedly executing the test loop overhead program AFIRST so that 1000 test measurements are made. The run-time test statistic file is then manually inspected to determine the variance in test measurements. If the minimum and maximum measurements differ by more than 20 ms, then to achieve a test measurement accuracy of 99%, the ACPS test durations must be increased accordingly [e.g., for a 40 ms variance, tests must be executed (exclusive of test loop overhead) for at least 3 sec].



Typically, these large test measurement variances are caused by scheduled events within VMS (e.g., VAX cluster and DECNET polling activities or periodic processing by the system process ERRFMT). They can be eliminated by restriction of the VMS software environment. Table C-15 shows an example of a test measurement (3.349976) which was impacted by VMS batch processing logic that flushes batch output buffers at 1 min intervals even if they are empty. ACPS command procedures were subsequently modified to set this interval to one day.

For VAX computers with either large memory configurations (greater than 16 Mbytes) or which have memory modules that have different access times, test measurements cannot be made to be repeatable through varying test durations. Test measurement variances greater than 30% have been obtained in such configurations. These variances are due to the effect of instruction pipelining in which multiple memory accesses may be made simultaneously. The efficiency of memory access for these configurations is dependent upon where programs are located in physical memory. Since the user has no control over how his or her program is loaded into physical memory, any tests run in these configurations are not repeatable and the user must measure the variance of execution time for all tests executed as discussed in Section C.10.

#### C.9 COMPILATION AND EXECUTION OF ACPS TESTS

Several command procedures are used to compile and execute ACPS tests. As shown in Table C-1, for each common language test (not including type C, E, S, or T tests) functionally equivalent command procedures of similar form are used for each ACPS test language. The batch procedure to compile and execute tests for DEC VAX Ada compiler is shown in Table C-17. It invokes two command procedures: DDEC:ACOMP to compile ACPS tests and DDEC:AEXEC to execute ACPS tests. Compile-time statistics are written to the file DRESULT:ACOMP.DAT and run-time statistics are written to the file DRESULT:AEXEC.DAT.

Table C-18 shows a shortened version of the command procedure DDEC:ACOMP which was used to compile selected ACPS VAX Ada tests for demonstration of ACPS compile-time output which is described in Appendix E. The command procedure is divided into five sections: compilation of tests (lines 44-83), creation of executable modules (lines 86-92), determination of source file size (lines 96-114), determination of object module size (lines 117-134), and determination of executable module size (lines 137-144). The command procedure generates start and end records (e.g., lines 44 and 86) on the output statistic file for use by the ACPS comparison tool to identify where each of these test output sections begins and ends. The symbol < is used to indicate the start of a test record or test section. ACOMP uses the command procedure DDEC:ACOM to compile and generate test output records for single compilation units. As shown in Table C-19, ACOM first uses the symbol PMSG to write a test identification record and then uses the DCL SHOW STATUS command (invoked by symbol SHW defined by DSUP:SYMBOLS) to measure system resource use before and after the compilation. ACOMP uses the command procedure DDEC:ALNK, shown in Table C-20, to form executable modules for single Ada programs and to generate test records showing the resources consumed. ALNK generates test identification and performance statistic records in the same way as ACOM does. ACOMP uses the following command procedures to calculate and display

the size of VAX Ada test files: DDEC:ASRC, shown in Table C-21, for source files; DDEC:AOBJ, shown in Table C-22, for object files; and DDEC:AEXE, shown in Table C-23, for executable files. These command procedures set global symbols (source\_size, object\_size, executable\_size) that are used by ACOMP for output of the total size of each type of Ada file.

Table C-24 shows a shortened version of the command procedure DDEC:AEEXEC which was used to execute selected ACPS tests compiled by VAX Ada for demonstration of ACPS run-time statistic output which is described in Appendix E. The DCL SHOW STATUS command is used to measure the execution and program loading time of the test loop overhead test (aa00000) and of the entire test suite.

The ACPS test comparison tool assumes that test records within compile-time and run-time test statistic files appear in a specific sorted order which is described in Appendix E Section E.3. All test compilation and execution command procedures provided with the VAX/VMS version of the ACPS comply with this ordering.

#### C.10 EXECUTION OF ACPS TEST RESULT COMPARISON TOOL

The ACPS test result comparison tool consists of two separate programs: one to compare compile-time test results and one to compare run-time execution results.

The command procedures DTOOL:CCOMP is used to interactively execute the ACPS compile-time test result comparator. Table C-25 contains a listing of DTOOL:CCOMP which describes how to invoke the command procedure, the logical names created, and the filename and filetype conventions used. To compare compile-time test results generated through execution of ACPS command procedures provided for ECSPO JOVIAL and VAX Ada, one would type the following:

```
$ @DTOOL:CCOMP DRESULT:ACOMP DRESULT:JCOMP DRESULT:COMPILE_A_J
```

The comparator tool prompts the user for information to control the comparison. This input is described in Appendix E. At the end of execution the following files would be created:

|                         |   |                                                                              |
|-------------------------|---|------------------------------------------------------------------------------|
| DRESULT:COMPILE_A_J.U09 | - | Output comparing VAX Ada and ECSPO JOVIAL compile-time test statistic files. |
| DRESULT:COMPILE_A_J.U10 | - | Formatted output for VAX Ada compile-time test statistic input file.         |
| DRESULT:COMPILE_A_J.U11 | - | Formatted output for ESPO JOVIAL compile-time test statistic input file.     |

The command procedure DTOOL:CEXEC is used to interactively execute the ACPS run-time test result comparator. The comparator tool prompts the user for information to control processing. This input is described in Appendix E. The listing for DTOOL:CEXEC is contained in Table C-26. It describes how the command procedure is invoked, which logical names it uses, and the filename and filetype conventions employed. To compare run-time test results from execution of ACPS command procedures for ECSP0 JOVIAL and VAX Ada, one would enter the following command:

```
$ @DTOOL:CEXEC DRESULT:AEEXEC DRESULT:JEXEC DRESULT:RUN_A_J
```

At the end of execution, CEXEC would generate the following files:

```
DRESULT:RUN_A_J.U09 - Output comparing VAX Ada and ECSP0 JOVIAL run-time
test statistic files.

DRESULT:RUN_A_J.U10 - Formatted output for VAX Ada run-time test statistic
input file.

DRESULT:RUN_A_J.U11 - Formatted output for ECSP0 JOVIAL run-time test
statistic input file.
```

To measure test repeatability, the execution comparator tool can be used to calculate the maximum and minimum execution statistics for each test. The tool can optionally compare results of successive executions of ACPS test execution command procedures and generate maximum or minimum test statistic files (see lines 42-45 in Table C-26). These test statistic files can be continually updated by comparison with subsequent test executions until the maximum and minimum statistic values for every test do not change. The resultant maximum or minimum test statistic files could then be used for comparison to corresponding maximum or minimum test result files for other test types.

Table C-1. ACPS VAX/VMS Command Procedures

| Description                                  | FILE NAMES     |              |             |
|----------------------------------------------|----------------|--------------|-------------|
|                                              | VAX Ada        | ECSPD JOVIAL | VAX FORTRAN |
| Display VAX/VMS Software Environment         | BACPS:VAXVMS   | *            | *           |
| Define Logical Names and Environment Symbols | BACPS:LOGICALS | *            | *           |
| Install Common Language Support Software     | DSUP:SUPPORT   | *            | *           |
| Install ACPS Test Comparison Tools           | BTOL:TOOLS     | *            | *           |
| Setup Language Test Environment              | BDEC:SETUP     | BJOV:SETUP   | BFOR:SETUP  |
| Define Common Language Command Symbols       | DSUP:SYMBOLS   | *            | *           |
| Execute Program and Record Test Results      | DSUP:RUN       | *            | *           |
| Execute Program                              | DSUP:EXEC      | *            | *           |
| Execute Show Command and Record Results      | DSUP:SHOW      | *            | *           |
| Execute Show Command                         | DSUP:SHOW_     | *            | *           |
| Display Ada Compiler Dependent Parameters    | BDEC:ADAPARM   |              |             |
| Compile/Execute Test Loop Overhead Test      |                |              |             |
| - common language tests                      | BDEC:AFIRST    | BJOV:FIRST   | BFOR:FFIRST |
| - Ada type C tests                           | BDEC:CFIRST    |              |             |
| - Ada type E tests                           | BDEC:EFIRST    |              |             |
| - Ada type S tests                           | BDEC:SFIRST    |              |             |
| - Ada type T tests                           | BDEC:TFIRST    |              |             |
| Determine Run Time Measurement Repeatability | BDEC:REPEAT    |              |             |
| Compile/Execute ACPS tests                   |                |              |             |
| - common language tests                      | BDEC:ABATCH    | BJOV:JBATCH  | BFOR:FBATCH |
| - Ada type C tests                           | BDEC:CBATCH    |              |             |
| - Ada type E tests                           | BDEC:EBATCH    |              |             |
| - Ada type S tests                           | BDEC:SBATCH    |              |             |
| - Ada type T tests                           | BDEC:TBATCH    |              |             |
| Compile ACPS tests                           |                |              |             |
| - common language tests                      | BDEC:ACOMP     | BJOV:JCOMP   | BFOR:FCOMP  |
| - Ada type C tests                           | BDEC:CCOMP     |              |             |
| - Ada type E tests                           | BDEC:ECOMP     |              |             |
| - Ada type S tests                           | BDEC:SCOMP     |              |             |
| - Ada type T tests                           | BDEC:TCOMP     |              |             |
| Compile Individual ACPS Files                | BDEC:ACOM      | BJOV:JCOM    | BFOR:FCOM   |
| Link ACPS Programs                           | BDEC:ALNK      | BJOV:JLNK    | BFOR:FLNK   |
| Determine Size of ACPS Source Files          | BDEC:ASRC      | BJOV:JSRC    | BFOR:FSRC   |
| Determine Size of ACPS Object Files          | BDEC:AOBJ      | BJOV:JOB     | BFOR:FOBJ   |
| Determine Size of ACPS Executable Files      | BDEC:AEXE      | BJOV:JEXE    | BFOR:FEXE   |
| Execute ACPS Tests                           |                |              |             |
| - common language tests                      | BDEC:AEXEC     | BJOV:JEXEC   | BFOR:FEEXEC |
| - Ada type C tests                           | BDEC:CEEXEC    |              |             |
| - Ada type E tests                           | BDEC:EEEXEC    |              |             |
| - Ada type S tests                           | BDEC:SEEXEC    |              |             |
| - Ada type T tests                           | BDEC:TEEXEC    |              |             |
| Execute ACPS Compilation Comparator          | BTOL:CCOMP     | *            | *           |
| Execute ACPS Test Execution Comparator       | BTOL:CEEXEC    | *            | *           |
| * - common for all languages                 |                |              |             |

Table C-2. Command Procedure DACPS:LOGICALS.COM

```

1 $! Ada Real Time/Run Time Environment Test Aerospace Corporation $!
2 $!
3 $! Test:
4 $! File: LOGICALS.COM
5 $!
6 $! REK 2/1/88
7 $!
8 $! Description:
9 $!
10 $! This command procedure is used to define logical names for
11 $! ACPS Ada/FORTRAN/JOVIAL test directories and is invoked as follows:
12 $!
13 $! @logicals p1 p2
14 $!
15 $! where:
16 $!
17 $! p1 - is the device containing the ACPS test suite
18 $! (e.g. sysfdisk)
19 $! p2 - is the name of the ACPS test suite top level
20 $! directory (e.g. user.acps)
21 $!
22 $! At the end of execution the default directory is set to the top
23 $! level directory of the ACPS test suite and the batch output
24 $! rate is set to 1 day.
25 $!
26 $!
27 $! assign logical directory names
28 $!
29 $ assign 'p1':['p2'] dacps
30 $ assign 'p1':['p2'.ada] dada
31 $ assign 'p1':['p2'.fortran] dfor
32 $ assign 'p1':['p2'.jovial] djov
33 $ assign 'p1':['p2'.tools] dtool
34 $ assign 'p1':['p2'.support] dsup
35 $ assign 'p1':['p2'.data] data
36 $ assign 'p1':['p2'.ada.telesoft] dtele
37 $ assign 'p1':['p2'.ada.dec] ddec
38 $ assign 'p1':['p2'.ada.als] dals
39 $ assign 'p1':['p2'.results] dresult
40 $!
41 $! define symbols to set up compiler specific test environments
42 $!
43 $ use_als == @dals:setup.com
44 $ use_fortran == @dfor:setup.com
45 $ use_ddec == @ddec:setup.com
46 $ use_jovial == @djov:setup.com
47 $ use_ttelesoft == @dtele:setup.com
48 $!
49 $! set default directory to top level acps directory and set batch
50 $! output rate to 1 day
51 $!
52 $ set def dacps
53 $ set output_rate=1-0:0:0
54 $!

```

# Table C-3 Command Procedure DSUP:SUPPORT.COM

```

1 $! Ada Real Time/Run Time Environment Test Aerospace Corporation
2 $!
3 $! Test:
4 $! File: SUPPORT.COM
5 $!
6 $! REK 2/1/88
7 $!
8 $! Description:
9 $!
10 $! **** compile/assemble Ada/FORTRAN/JOVIAL test support software
11 $! **** create object module library file SUPPORT.OLB to contain the
12 $! **** test support software object modules.
13 $!
14 $! assumed logical names:
15 $!
16 $! dsup - directory containing test support software
17 $!
18 $ for/check=bounds gettim
19 $ for/check=bounds gstats
20 $ macro geticr
21 $!
22 $ library/object/create support.olb gettim,gstats,geticr
23 $!

```

Table C-4 Command Procedure DT00L:TOOLS.COM

```

1 $! Ada Real Time/Run Time Environment Test Aerospace Corporation
2 $!
3 $! Test:
4 $! File: TOOLS.COM
5 $!
6 $! REK 2/1/88
7 $!
8 $! Description:
9 $!
10 $! **** compile/link Ada/FORTRAN/JOVIAL compilation, execution result
11 $! **** comparison tools
12 $! **** The current directory is changed to dtool and left there on exit
13 $!
14 $! assumed logical names:
15 $!
16 $! dtool - directory containing comparison tool source,
17 $! object, executable files and execution procedures
18 $!
19 $ set def dtool
20 $ for/check=bounds ccomp
21 $ for/check=bounds cexec
22 $ link ccomp
23 $ link cexec
24 $!

```

Table C-5 Command Procedure DACPS:VAXVMS.COM

```

1 $! Ada Real Time/Run Time Environment Test Aerospace Corporation $!
2 $!
3 $! Test: $!
4 $! File: VAXVMS.COM $!
5 $!
6 $! REK 2/1/88 $!
7 $!
8 $! Description: $!
9 $!
10 $! This command procedure displays VAX/VMS system and process parameters
11 $! which define the software environment under which ACPS tests are
12 $! compiled and executed. $!
13 $!
14 $! The working set parameters are set and displayed separately by each
15 $! ACPS compilation and execution command procedure. $!
16 $!
17 $! display system processes
18 $!
19 $ show system
20 $!
21 $! display process/quotas
22 $!
23 $ show process/quotas
24 $!
25 $! display RMS multi-block and multi-buffer defaults for FORTRAN I/O
26 $!
27 $ show rms_default
28 $!
29 $! display system parameters
30 $!
31 $ run sys$system:sysgen
32 show/all
33 show/special
34 exit

```



### Table C-6 Command Procedure DDEC:ADAPARM.COM

```

1 Ada Real Time/Run Time Environment Test Aerospace Corporation
2
3 Test:
4 File: ADAPARM.COM
5
6 REK 2/1/88
7
8 Description:
9
10 **** batch procedure to compile/link/execute Ada ACPS test ADAPARM
11 **** output will be written to data set dresult:adaparm.dat
12
13
14 assumptions:
15
16 assumed logical names:
17
18 dacps - top level directory of ACPS test suite
19 dresult - directory that contains ACPS test result output
20 dsup - directory containing common language support
21 software and command procedures
22
23 assumed symbol values:
24
25 acps - executes command procedure dacps:logicals
26 to define logical names, global symbols and
27 set the default directory to dacps:
28
29 aopt - Ada compiler execution options
30 asys - list of object modules common to all tests
31 our_run - invokes dsup:run.com which executes the
32 program in the parameter field and appends
33 the test results to the file with logical
34 name results.
35
36 use_dec - invokes a command procedure that defines
37 global symbols used to compile and execute
38 test programs and sets the current
39 directory to the one containing
40 the Ada ACPS test programs
41
42 assumed program library directory: [.lib]
43
44 other assumptions:
45 - support routines have been compiled, assembled
46
47 set up DEC Ada test environment
48
49 $ acps
50 $ use_dec
51 $ show system
52 $----- delete extraneous files -----
53 $ del [.lib]*.*
54 $ acs create library [.lib]
55 $ acs set library [.lib]
56 $-----
57
58 ----- compile/link test programs -----
59
60 $ set work /quota=4096/extent=8152/adjust
61 $ show work
62 $ @acom adaparm
63 $ acs link/nomap/command=adaparm.tmp adaparm
64 $ @adaparm.tmp
65 $ del adaparm.tmp
66
67 ----- run adaparm -----
68
69 $ set work /noadjust/quota=850/extent=850
70 $ show work

```

Table C-6 Command Procedure DDEC:ADAPARM.COM (concluded)

```
68 # assign dresult:adaparm.dat results
69 # copy dresult:empty.dat results:
70 # our_run adaparm
71 # show system
```

Table C-7 ADAPARM Output for DEC VAX Ada

```

minimun delay time interval = 1.00000E-02
ada clock granularity(seconds)= 0.009949
ada clock granularity(seconds)= 0.009949
ada clock granularity(seconds)= 0.009949
ada clock granularity(seconds)= 0.009949
ada clock granularity(seconds)= 0.009949
ada clock granularity(seconds)= 0.009949
ada clock granularity(seconds)= 0.009949
ada clock granularity(seconds)= 0.009949
ada clock granularity(seconds)= 0.009949
duration'small= 6.10352E-05
system.tick= 1.00000E-02
system.fine_delta= 9.31323E-10
system.min_int=-2147483648
system.max_int= 2147483647
system.max_digits= 33
system.max_mantissa= 31
standard_input file name=SYS$INPUT.;
standard_output file name=SYS$OUTPUT.;
integer'size= 32
integer'first=-2147483648
integer'last= 2147483647
short_integer'size= 16
short_integer'first= -32768
short_integer'last= 32767
short_short_integer'size= 8
short_short_integer'first= -128
short_short_integer'last= 127
positive'size= 31
positive'first= 1
positive'last= 2147483647
float'size= 32
float'digits= 6
float'emax= 84
long_float'size= 64
long_float'digits= 15
long_float'emax= 204
long_long_float'size= 128
long_long_float'digits= 33
long_long_float'emax= 444

```

Table C-8 Command Procedure DDEC:SETUP.COM

```

1 $! Ada Real Time/Run Time Environment Test Aerospace Corporation $!
2 $!
3 $! Test:
4 $! File: SETUP.COM
5 $!
6 $! REK 2/1/88
7 $!
8 $! Description:
9 $!
10 $!
11 $! **** defines DEC Ada compile/link global symbols and sets the default
12 $! **** directory to ddec. It also defines global symbols to invoke command
13 $! **** procedures in directory dsup.
14 $!
15 $! assumed logical names:
16 $! ddec - points to directory containing DEC Ada ACPS tests
17 $! dsup - points to directory containing test support
18 $! object modules
19 $! sys$share - directory containing a user written system
20 $! service to access microsecond level time
21 $!
22 $! command procedures used:
23 $! dsup:symbols - defines global symbols our_run,our_show to invoke
24 $! command procedures in directory dsup:
25 $!
26 $! define DCI symbols used in Ada/JOVIAL/FORTRAN command procedures
27 $!
28 $! @dsup:symbols
29 $!
30 $! define compile/link symbols
31 $!
32 $! copt :== aopt :== "/nowarn/nolist/nocheck"
33 $! nopt :== aopt :== "/nowarn/nolist"
34 $! sopt :== aopt :== "/nowarn/nolist/optimize=space"
35 $! topt :== aopt :== "/nowarn/nolist/optimize=time"
36 $! anoopt :== aopt :== "/nowarn/nolist/noopt"
37 $! alist :== aopt :== "/nowarn/list"
38 $! aopt :== /nowarn/nolist
39 $! asys :== dsup:support.olb/library,sys$share:uss.olb/library
40 $!
41 $! set the default directory for DEC Ada
42 $!
43 $! sd ddec
44 $! assign [ul5554.acps.adc.results] dresult

```

Table C-9 Command Procedure DSUP:SYMBOLS.COM

```

1 $! Ada Real Time/Run Time Environment Test Aerospace Corporation $!
2 $!
3 $! Test:
4 $! File: SYMBOLS.COM
5 $!
6 $! REK 2/1/88
7 $!
8 $! Description:
9 $!
10 $!
11 $! Defines symbols which invoke language independent command procedures
12 $! and which abbreviate commonly used VAX DCL commands. These symbols
13 $! are used in ACPS compile/execute command procedures.
14 $! This procedure is invoked by each language's setup.com command procedure
15 $! which is used to set up compiler specific compile-time/
16 $! run-time test environments
17 $!
18 $!
19 $! assumptions:
20 $!
21 $! assumed logical names:
22 $!
23 $! dsup - directory for Ada/JOVIAL/FORTRAN common support
24 $! routines/command procedures
25 $!
26 $ our_r$run == "dsup:run"
27 $ our_s$how == "dsup:show"
28 $ sd == set default
29 $ shw == show status
30 $ pmsg == write sys$output

```

Table C-10 Command Procedure DSUP:RUN.COM

```

1 $! Ada Real Time/Run Time Environment Test Aerospace Corporation $!
2 $!
3 $! Test:
4 $! File: RUN.COM
5 $!
6 $! REK 2/1/88
7 $!
8 $! Description:
9 $!
10 $! **** This command procedure is used to execute Ada/JOVIAL/FORTRAN
11 $! **** main programs and append the test results to the file with
12 $! **** logical names results: . It uses the command procedure
13 $! **** dsup:exec.com to do the actual execution. RUN is invoked as
14 $! **** follows:
15 $!
16 $! @run pl
17 $!
18 $! where 'pl' is the Ada/JOVIAL/FORTRAN program to be executed
19 $!
20 $!
21 $! assumptions:
22 $!
23 $! assumed logical names:
24 $!
25 $! results - file to contain test result output
26 $! dsup - directory for Ada/JOVIAL/FORTRAN common support
27 $! routines/command procedures
28 $!
29 $!
30 $! execute the program and direct the results to a temporary file
31 $!
32 $! @dsup:exec/output=dsup:temp.dat 'pl'
33 $! append dsup:temp.dat results:
34 $! del dsup:temp.dat;*

```

Table C-11 Command Procedure DSUP:EXEC.COM

```

1 $! Ada Real Time/Run Time Environment Test Aerospace Corporation $!
2 $!
3 $! Test:
4 $! File: EXEC.COM
5 $!
6 $! REK 2/1/88
7 $!
8 $! Description:
9 $!
10 $! ***** This command procedure is common to Ada/FORTRAN/JOVIAL tests
11 $! ***** and is used to execute main programs. It is invoked as follows:
12 $!
13 $! @exec 'p1'
14 $!
15 $! this procedure executes program 'p1'
16 $!
17 $ run 'p1'

```

# Table C-12 Command Procedure DSUP:SHOW.COM

```

1 $! Ada Real Time/Run Time Environment Test Aerospace Corporation $!
2 $!
3 $! Test:
4 $! File: SHOW.COM
5 $!
6 $! REK 2/1/88
7 $!
8 $! Description:
9 $!
10 $! This procedure executes a specified show command and appends its output
11 $! to the file with the logical name results: . It is invoked as follows:
12 $!
13 $! @show 'pl'
14 $!
15 $! where 'pl' is the show command to be executed
16 $!
17 $! assumptions:
18 $!
19 $! assumed logical names:
20 $!
21 $! results - file to contain test result output
22 $! dsup - directory for Ada/JOVIAL/FORTRAN common support
23 $! routines/command procedures
24 $!
25 $!
26 $ @dsup:show_/output=dsup:temp.dat 'pl'
27 $ append dsup:temp.dat results:
28 $ del dsup:temp.dat;*

```



Table C-13 Command Procedure DSUP:SHOW\_.COM

```

1 $! Ada Real Time/Run Time Environment Test Aerospace Corporation $!
2 $!
3 $! Test: COM
4 $! File: SHOW_.COM
5 $!
6 $! REK 2/1/88
7 $!
8 $! Description:
9 $!
10 $! This procedure executes a specified show command and is invoked as follows:
11 $!
12 $! @show_ 'p1'
13 $!
14 $! where 'p1' is the show command to be executed
15 $!
16 $!
17 $ show 'p1'

```

# Table C-14 Command Procedure DDEC:AFIRST.COM

```

1 $! Ada Real Time/Run Time Environment Test Aerospace Corporation $!
2 $!
3 $! Test:
4 $! File: AFIRST.COM
5 $!
6 $! REK 2/1/88
7 $!
8 $! Description:
9 $!
10 $! **** batch procedure to compile/link/execute Ada ACPS test AFIRST
11 $! **** output of AFIRST will be written to file dresult:afirst.dat
12 $!
13 $!
14 $! assumptions:
15 $!
16 $! assumed logical names:
17 $!
18 $! dacps - top level directory of ACPS test suite
19 $! dresult - directory that contains ACPS test result output
20 $! dsup - directory for Ada/JOVIAL/FORTRAN common support
21 $! routines/command procedures
22 $!
23 $! assumed symbol values:
24 $! acps - executes command procedure dacps:logicals
25 $! to define logical names, global symbols and
26 $! set the default directory to dacps:
27 $! aoapt - Ada compiler execution options
28 $! asys - list of object modules common to all tests
29 $! our_run - invokes dsup:run.com which executes the
30 $! program in the parameter field and appends
31 $! the test results to the file with logical
32 $! name results.
33 $! our_show - invokes dsup:show.com which executes the
34 $! show command in the parameter field and
35 $! appends the show command output to the file
36 $! with the logical name results.
37 $! use_dec - invokes a command procedure that defines
38 $! global symbols used to compile and execute
39 $! test programs and sets the current
40 $! directory to the one containing
41 $! the Ada ACPS test programs
42 $!
43 $! assumed program library directory: [.lib]
44 $!
45 $! other assumptions:
46 $!
47 $! - dsup support routines have been compiled,assembled
48 $!
49 $! set up DEC Ada test environment
50 $!
51 $! acps
52 $! use_dec
53 $! show system
54 $! ----- delete extraneous files -----
55 $! del [.lib]*.*;
56 $! acs create library [.lib]
57 $! acs set library [.lib]
58 $!
59 $! ----- compile test support routines -----
60 $!
61 $! ada'aoapt oursys
62 $! ada'aoapt ourspc.dec ! for non VAX Ada use ourspc.use
63 $! ada'aoapt ourdmp
64 $! ada'aoapt ourtyp.vax
65 $! ada'aoapt adasys.dec ! for non VAX Ada use adasys.use
66 $! ada'aoapt adaspc
67 $! ada'aoapt adadmp

```

Table C-14 Command Procedure DDEC:AFIRST.COM (concluded)

```

68 $ ada'aopt adatyp.vax
69 $ ada'aopt mathfun.dec !for non VAX Ada - redevelop
70 $!
71 $! ----- compile/link test programs -----
72 $!
73 $ @acom afirst
74 $ @alink afirst
75 $!
76 $! ----- run afirst -----
77 $!
78 $ copy dresult:empty.dat dresult:afirst.dat
79 $ assign dresult:afirst.dat results
80 $ set work /noadjust/quota=850/extent=850
81 $ our_show work
82 $ our_run afirst
83 $ show system

```

Table C-15 AFIRST Output for DEC VAX Ada

|           |               |        |     |   |   |   |   |
|-----------|---------------|--------|-----|---|---|---|---|
| <adafirst | 0.000000      | 1      | 0   | 0 | 0 | 0 | 5 |
| 2         | <sup>-1</sup> | 1      |     |   |   |   |   |
| <adafirst | 1.939941      | 149999 | 194 | 0 | 0 | 0 | 5 |
| <adafirst | 0.000000      | 1      | 0   | 0 | 0 | 0 | 5 |
| 2         | <sup>-1</sup> | 2      |     |   |   |   |   |
| <adafirst | 1.929993      | 149999 | 191 | 0 | 0 | 0 | 5 |
| <adafirst | 0.000000      | 1      | 0   | 0 | 0 | 0 | 5 |
| 2         | <sup>-1</sup> | 3      |     |   |   |   |   |
| <adafirst | 1.939941      | 149999 | 192 | 0 | 0 | 0 | 5 |
| <adafirst | 0.000000      | 1      | 0   | 0 | 0 | 0 | 5 |
| 2         | <sup>-1</sup> | 4      |     |   |   |   |   |
| <adafirst | 1.939941      | 149999 | 194 | 0 | 0 | 0 | 5 |
| <adafirst | 0.000000      | 1      | 0   | 0 | 0 | 0 | 5 |
| 2         | <sup>-1</sup> | 5      |     |   |   |   |   |
| <adafirst | 1.939941      | 149999 | 194 | 0 | 0 | 0 | 5 |
| <adafirst | 0.000000      | 1      | 0   | 0 | 0 | 0 | 5 |
| 2         | <sup>-1</sup> | 6      |     |   |   |   |   |
| <adafirst | 1.939941      | 149999 | 194 | 0 | 0 | 0 | 5 |
| <adafirst | 0.000000      | 1      | 0   | 0 | 0 | 0 | 5 |
| 2         | <sup>-1</sup> | 7      |     |   |   |   |   |
| <adafirst | 1.929993      | 149999 | 193 | 0 | 0 | 0 | 5 |
| <adafirst | 0.000000      | 1      | 0   | 0 | 0 | 0 | 5 |
| 2         | <sup>-1</sup> | 8      |     |   |   |   |   |
| <adafirst | 1.939941      | 149999 | 193 | 0 | 0 | 0 | 5 |
| <adafirst | 0.000000      | 1      | 0   | 0 | 0 | 0 | 5 |
| 2         | <sup>-1</sup> | 9      |     |   |   |   |   |
| <adafirst | 1.939941      | 149999 | 193 | 0 | 0 | 0 | 5 |
| <adafirst | 0.000000      | 1      | 0   | 0 | 0 | 0 | 5 |
| 2         | <sup>-1</sup> | 10     |     |   |   |   |   |
| <adafirst | 1.939941      | 149999 | 193 | 0 | 0 | 0 | 5 |
| <adafirst | 0.000000      | 1      | 0   | 0 | 0 | 0 | 5 |
| 2         | <sup>-1</sup> | 11     |     |   |   |   |   |
| <adafirst | 1.939941      | 149999 | 194 | 0 | 0 | 0 | 5 |
| <adafirst | 0.000000      | 1      | 0   | 0 | 0 | 0 | 5 |
| 2         | <sup>-1</sup> | 12     |     |   |   |   |   |
| <adafirst | 1.939941      | 149999 | 193 | 0 | 0 | 0 | 5 |
| <adafirst | 0.000000      | 1      | 0   | 0 | 0 | 0 | 5 |
| 2         | <sup>-1</sup> | 13     |     |   |   |   |   |
| <adafirst | 1.939941      | 149999 | 194 | 0 | 0 | 0 | 5 |
| <adafirst | 0.000000      | 1      | 0   | 0 | 0 | 0 | 5 |
| 2         | <sup>-1</sup> | 14     |     |   |   |   |   |
| <adafirst | 1.929993      | 149999 | 193 | 0 | 0 | 0 | 5 |
| <adafirst | 0.000000      | 1      | 0   | 0 | 0 | 0 | 5 |
| 2         | <sup>-1</sup> | 15     |     |   |   |   |   |
| <adafirst | 1.939941      | 149999 | 194 | 0 | 0 | 0 | 5 |
| <adafirst | 0.000000      | 1      | 0   | 0 | 0 | 0 | 5 |
| 2         | <sup>-1</sup> | 16     |     |   |   |   |   |
| <adafirst | 1.929993      | 149999 | 193 | 0 | 0 | 0 | 5 |
| <adafirst | 0.000000      | 1      | 0   | 0 | 0 | 0 | 5 |
| 2         | <sup>-1</sup> | 17     |     |   |   |   |   |
| <adafirst | 1.939941      | 149999 | 194 | 0 | 0 | 0 | 5 |

Table C-15 AFIRST Output for DEC VAX Ada (concluded)

|           |          |        |     |    |   |   |   |
|-----------|----------|--------|-----|----|---|---|---|
| <adafirst | 0.000000 | 1      | 0   | 0  | 0 | 0 | 5 |
| 2         | -1       | 18     |     |    |   |   |   |
| <adafirst | 1.939941 | 149999 | 193 | 0  | 0 | 0 | 5 |
| <adafirst | 0.000000 | 1      | 0   | 0  | 0 | 0 | 5 |
| 2         | -1       | 19     |     |    |   |   |   |
| <adafirst | 1.939941 | 149999 | 194 | 0  | 0 | 0 | 5 |
| <adafirst | 0.000000 | 1      | 0   | 0  | 0 | 0 | 5 |
| 2         | -1       | 20     |     |    |   |   |   |
| <adafirst | 1.949951 | 149999 | 194 | 0  | 0 | 0 | 5 |
| <tovr     | 0.000109 | 0      | 50  | 45 | 0 | 0 | 5 |
| 2         | 136      | 119    |     |    |   |   |   |
| <tovr     | 0.000107 | 0      | 50  | 44 | 0 | 0 | 5 |
| 2         | 146      | 115    |     |    |   |   |   |
| <tovr     | 0.000107 | 0      | 50  | 45 | 0 | 0 | 5 |
| 2         | 135      | 123    |     |    |   |   |   |
| <tovr     | 0.000106 | 0      | 50  | 45 | 0 | 0 | 5 |
| 2         | 134      | 116    |     |    |   |   |   |
| <tovr     | 0.000107 | 0      | 50  | 44 | 0 | 0 | 5 |
| 2         | 144      | 122    |     |    |   |   |   |
| <tovr     | 0.000108 | 0      | 50  | 45 | 0 | 0 | 5 |
| 2         | 145      | 123    |     |    |   |   |   |
| <tovr     | 0.000108 | 0      | 50  | 45 | 0 | 0 | 5 |
| 2         | 134      | 115    |     |    |   |   |   |
| <tovr     | 0.000109 | 0      | 50  | 44 | 0 | 0 | 5 |
| 2         | 150      | 119    |     |    |   |   |   |
| <tovr     | 0.000107 | 0      | 50  | 46 | 0 | 0 | 5 |
| 2         | 138      | 115    |     |    |   |   |   |
| <tovr     | 0.000110 | 0      | 50  | 45 | 0 | 0 | 5 |
| 2         | 144      | 125    |     |    |   |   |   |

Table C-16 Command Procedure DDEC:REPEAT.COM

```

1 $! Ada Real Time/Run Time Environment Test Aerospace Corporation $!
2 $!
3 $! Test:
4 $! File: REPEAT.COM
5 $!
6 $! REK 2/1/88
7 $!
8 $! Description:
9 $!
10 $! This command procedure is used to execute AFIRST 50 times
11 $! The output will be placed on DRESULT:REPEAT.DAT and should be inspected
12 $! to see how the execution time varies for each AFIRST execution
13 $! in order to determine how long each ACPS test should be executed
14 $!
15 $!
16 $! assumptions:
17 $!
18 $! assumed logical names:
19 $!
20 $! dacps - top level directory of ACPS test suite
21 $! ddec - directory containing DEC Ada ACPS tests
22 $! dresult - directory that contains ACPS test result output
23 $! dsup - directory containing common language support
24 $! software and command procedures
25 $!
26 $! assumed symbol values:
27 $! acps - executes command procedure dacps:logicals
28 $! to define logical names, global symbols and
29 $! set the default directory to dacps:
30 $! our_run - invokes dsup:run.com which executes the
31 $! program in the parameter field and appends
32 $! the test results to the file with logical
33 $! name results.
34 $! our_show - invokes dsup:show.com which executes the
35 $! show command in the parameter field and
36 $! appends the show command output to the file
37 $! with the logical name results.
38 $! use_dec - invokes a command procedure that defines
39 $! global symbols used to compile and execute
40 $! test programs and sets the current
41 $! directory to the one containing
42 $! the Ada ACPS test programs
43 $!
44 $! other assumptions:
45 $!
46 $! - AFIRST has been compiled/linked
47 $!
48 $! get to appropriate directory
49 $!
50 $! acps
51 $! use_dec
52 $! show system
53 $!
54 $! ensure that the output is written to REPEAT.DAT
55 $!
56 $! copy dresult:empty.dat dresult:repeat.dat
57 $! assign dresult:repeat.dat results
58 $!
59 $! set the working set size appropriately
60 $!
61 $! set work /noadjust/quota=850/limit=850
62 $! our_show work
63 $!
64 $! execute AFIRST 50 times
65 $!
66 $! count = 0
67 $! loop:

```

Table C-16 Command Procedure DDEC:REPEAT.COM (concluded)

```
68 $ our_run AFIRST
69 $ count = count + 1
70 $ if(count .lt. 50) then goto loop
71 $!
72 $ show system
```

Table C-17 Command Procedure DDEC:ABATCH.COM

```

1 $! Ada Real Time/Run Time Environment Test Aerospace Corporation $!
2 $!
3 $! Test:
4 $! File: ABATCH.COM
5 $!
6 $! REK 2/1/88
7 $!
8 $! Description:
9 $!
10 $! **** batch procedure to compile/link/execute Ada ACPS test suite
11 $! **** compilation result output will be on file dresult:acomp.dat
12 $! **** execution result output will be on file dresult:aexec.dat
13 $!
14 $!
15 $! assumptions:
16 $!
17 $! assumed logical names:
18 $!
19 $! dacps - top level directory of ACPS test suite
20 $! dresult - directory that contains ACPS test result output
21 $!
22 $! assumed symbol values:
23 $! acps - executes command procedure dacps:logicals
24 $! to define logical names, global symbols and
25 $! set the default directory to dacps:
26 $! use_dec - invokes a command procedure that defines
27 $! global symbols used to compile and execute
28 $! test programs and sets the current
29 $! directory to the one containing
30 $! the Ada ACPS test programs
31 $!
32 $! other assumptions:
33 $!
34 $! - dsup support routines have been compiled,assembled
35 $!
36 $!
37 $! set up DEC Ada test environment
38 $!
39 $! acps
40 $! use_dec
41 $! show system
42 $!
43 $! ----- compile/link test programs -----
44 $!
45 $! @acomp/output=dresult:acomp.dat
46 $!
47 $! ----- execute test programs -----
48 $!
49 $! copy dresult:empty.dat dresult:aexec.dat
50 $! assign dresult:aexec.dat results
51 $! @aexec
52 $! show system

```



# Table C-18 Command Procedure DDEC:ACOMP.COM

```

1 $! Ada Real Time/Run Time Environment Test Aerospace Corporation $!
2 $!
3 $! Test:
4 $! File: ACOMP.COM
5 $!
6 $! REK 2/1/88
7 $!
8 $! Description:
9 $!
10 $!
11 $! **** compile/link ADA test programs
12 $!
13 $! assumed logical names:
14 $! dsup - ADA/JOVIAL/ADA common support routines
15 $! assumed symbol values:
16 $! aopt - ADA compiler options
17 $! asys - list of object modules common to all tests
18 $! pmsg - outputs parameter on systoutput
19 $! shw - show status
20 $!
21 $! command procedures used:
22 $! acom - compiles program/package modules and
23 $! generates show status records
24 $! alnk - links Ada programs and generates show status
25 $! records
26 $! asrc - calculates/prints/sums source module sizes
27 $! aobj - calculates/prints/sums object module sizes
28 $! aexe - calculates/prints/sums load module sizes
29 $!
30 $! assumed program library directory:
31 $! [.lib]
32 $!
33 $! -----
34 $! set work set limits
35 $! set work /quota=4096/extent=8152/adjust
36 $! show work
37 $! ----- delete extraneous files -----
38 $! del [.lib...].*.x;*.x
39 $! acs create library [.lib]
40 $! acs set library [.lib]
41 $! purge *.x
42 $! del *.obj;*.x;*.exe;*.x
43 $! -----
44 $! pmsg "<start compiles"
45 $! compile ADA test programs and support routines
46 $! pmsg "<system"
47 $! shw
48 $! ada'aopt oursys
49 $! ada'aopt ourspc.dec ! for non VAX Ada use ourspc.use
50 $! ada'aopt ourdmp
51 $! ada'aopt ourtyp.vax
52 $! ada'aopt adasys.dec ! for non VAX Ada use adasys.use
53 $! ada'aopt adaspc
54 $! ada'aopt adadmp
55 $! ada'aopt adatyp.vax
56 $! ada'aopt mathfun.dec !for non VAX Ada - redevelop
57 $! shw
58 $! acs create sublibrary/parent=[.lib] [.lib.sub]
59 $! @acom AA0P000
60 $! @acom AA00000
61 $! @acom AA0P000
62 $! @acom AA00000
63 $! @acom AF0P000
64 $! @acom AF05305
65 $! @acom AF05306
66 $! @acom AF05307
67 $! @acom AF05308

```

Table C-18 Command Procedure DDEC:ACOMP.COM (continued)

```

68 $ @acom AG0P000
69 $ pmsg "<AG00008"
70 $ shw
71 $ ada'aopt AG00003
72 $ ada'aopt AG00004
73 $ ada'aopt AG00005
74 $ ada'aopt AG00006
75 $ ada'aopt AG00007
76 $ ada'aopt AG00008
77 $ shw
78 $ @acom AGM0008
79 $ @acom A00P000
80 $ @acom A00505
81 $ @acom A00506
82 $ @alnk AF05308
83 $ pmsg "<end compiles"
84 $!-----
85 $! link programs
86 $ pmsg "<start links"
87 $ acs set library [.lib]
88 $ @alnk AA00000
89 $ @alnk AG00008
90 $ @alnk AGM0008
91 $ @alnk A00506
92 $ pmsg "<end links"
93 $!-----
94 $! source file storage
95 $ source_size == 0
96 $ pmsg "<start source size"
97 $ @asrc "system" oursys,ourdmp,ourtyp,adasys,adadmp,adatyp,mathfun,ourspc,adasp
98 $ @asrc "" AA0P000
99 $ @asrc "" AA00000
100 $ @asrc "system" oursys,ourdmp,adasys,adadmp
101 $ @asrc "" AA0P000
102 $ @asrc "" AA00000
103 $ @asrc "" AF0P000
104 $ @asrc "" AF05305
105 $ @asrc "" AF05306
106 $ @asrc "" AF05307
107 $ @asrc "" AF05308
108 $ @asrc "" AG0P000
109 $ @asrc AG00008 AG00003,AG00004,AG00005,AG00006,AG00007,AG00008
110 $ @asrc "" AGM0008
111 $ @asrc "" A00P000
112 $ @asrc "" A00505
113 $ @asrc "" A00506
114 $ pmsg "<end source size = 'source_size'"
115 $!-----
116 $! object file storage
117 $ object_size == 0
118 $ pmsg "<start object size"
119 $ assign [.lib] objlib
120 $ @aobj "system" oursys,ourdmp,ourtyp,adasys,adadmp,adatyp,mathfun,ourspc,adasp
121 $ @aobj "" AA0P000
122 $ @aobj "" AA00000
123 $ @aobj "" AF0P000
124 $ @aobj "" AF05305
125 $ @aobj "" AF05306
126 $ @aobj "" AF05307
127 $ @aobj "" AF05308
128 $ @aobj "" AG0P000
129 $ @aobj AG00008 AG00003,AG00004,AG00005,AG00006,AG00007,AG00008
130 $ @aobj "" AGM0008
131 $ @aobj "" A00P000
132 $ @aobj "" A00505
133 $ @aobj "" A00506
134 $ pmsg "<end object size = 'object_size'"

```

Table C-18 Command Procedure DDEC:ACOMP.COM (concluded)

```

135 $!-----
136 $! load module file storage
137 $ executable_size == 0
138 $ pmsg "<start executable size"
139 $ @aexe AA00000
140 $ @aexe AF05308
141 $ @aexe AG00008
142 $ @aexe AGM0008
143 $ @aexe A000506
144 $ pmsg "<end executable size = 'executable_size'"
145 $ deassign objlib
146 $!-----

```

Table C-19. Command Procedure DDEC:ACOM.COM

```

1 $! Ada Real Time/Run Time Environment Test Aerospace Corporation $!
2 $!
3 $! Test:
4 $! File: ACOM.COM
5 $!
6 $! REK 2/1/88
7 $!
8 $! Description:
9 $!
10 $! This command procedure compiles DEC Ada ACPS tests
11 $! It is invoked by the DEC Ada ACPS compile/link command procedure
12 $! with a single parameter that identifies the file to be compiled
13 $! It assumes that the source file is contained in a file with 1 of
14 $! 3 different file types which are searched in the following order:
15 $! .ada, .vax, .dec
16 $! It outputs status records to sys$output that show the cpu/io impact
17 $! of the compilation
18 $!
19 $ if f$search(pl + ".ada") .nes. "" then goto cont_2
20 $ if f$search(pl + ".vax") .nes. "" then goto cont_1
21 $ if f$search(pl + ".dec") .nes. "" then goto cont_0
22 $ goto exit
23 $cont_0: file_name = pl + ".dec"
24 $ goto cont_3
25 $cont_1: file_name = pl + ".vax"
26 $ goto cont_3
27 $cont_2: file_name = pl + ".ada"
28 $cont_3:
29 $ PMSG "<'pl'"
30 $ SHW
31 $ ADA'ADPT 'file_name'
32 $ SHW
33 $ exit:

```

Table C-20 Command Procedure DDEC:ALNK.COM

```

1 $! Ada Real Time/Run Time Environment Test Aerospace Corporation $!
2 $!
3 $! Test: $!
4 $! File: ALNK.COM $!
5 $!
6 $! REK 2/1/88 $!
7 $!
8 $! Description: $!
9 $!
10 $! This command procedure links DEC Ada ACPS tests $!
11 $! It is invoked by the DEC Ada ACPS compile/link command procedure $!
12 $! with a single parameter that identifies the main program name $!
13 $! It outputs status records to sys$output that show the cpu/io impact $!
14 $! of the link $!
15 $!
16 $ PMSG "<'P1'"
17 $ SHW
18 $ ACS LINK/NOMAP/COMMAND='P1'.TMP 'P1' 'ASYS
19 $ @'P1'.TMP
20 $ SHW
21 $ DEL 'P.'.TMP;x

```

Table C-21 Command Procedure DDEC:ASRC.COM

```

1 $! Ada Real Time/Run Time Environment Test Aerospace Corporation $!
2 $!
3 $! Test: $!
4 $! File: ASRC.COM $!
5 $!
6 $! REK 2/1/88 $!
7 $!
8 $! Description: $!
9 $!
10 $!
11 $! This command procedure is used by the DEC Ada ACPS compile/link
12 $! command procedure and is invoked as follows:
13 $!
14 $! @asrc p1 p2
15 $!
16 $! The command procedure determines the size of source files for
17 $! filenames specified in argument p2 and outputs a message to
18 $! sys$output as follows:
19 $!
20 $! <p1 siz
21 $!
22 $! where siz is the size of the source files
23 $! for filenames in parameter p2
24 $! If p1 is null, then the last filename in p2
25 $! is used for p1.
26 $! The procedure also adds the size of the source files to the global
27 $! symbol source_size.
28 $!
29 $! total_size = 0
30 $!
31 $! loop:
32 $! comma_location = f$locate(", ", p2)
33 $! file_length = f$length(p2)
34 $! if comma_location .eq. file_length then goto last_file
35 $! file_name = f$extract(0 , comma_location , p2)
36 $! if f$search(file_name + ".ada") .nes. "" then goto loop_2
37 $! if f$search(file_name + ".vax") .nes. "" then goto loop_1
38 $! if f$search(file_name + ".dec") .nes. "" then goto loop_0
39 $! goto loop
40 $! loop_0: file_name = file_name + ".dec"
41 $! goto loop_3
42 $! loop_1: file_name = file_name + ".vax"
43 $! goto loop_3
44 $! loop_2: file_name = file_name + ".ada"
45 $! goto loop_3
46 $! loop_3:
47 $! total_size = total_size + f$file_attributes(file_name , "eof")
48 $! p2 = f$extract(comma_location + 1 , f$length(p2) , p2)
49 $! goto loop
50 $! last_file:
51 $! file_name = p2
52 $! if f$search(file_name + ".ada") .nes. "" then goto last_2
53 $! if f$search(file_name + ".vax") .nes. "" then goto last_1
54 $! if f$search(file_name + ".dec") .nes. "" then goto last_0
55 $! goto exit
56 $! last_0: file_name = file_name + ".dec"
57 $! goto last_3
58 $! last_1: file_name = file_name + ".vax"
59 $! goto last_3
60 $! last_2: file_name = file_name + ".ada"
61 $! goto last_3
62 $! last_3:
63 $! total_size = total_size + f$file_attributes(file_name , "eof")
64 $! if p1 .eqs. "" then p1 = p2
65 $!
66 $! exit:
67 $! write sys$output "C'p1' 'total_size'"
68 $! source_size += source_size + total_size

```

Table C-22 Command Procedure DDEC:AOBJ.COM

```

1 $! Ada Real Time/Run Time Environment Test Aerospace Corporation $!
2 $!
3 $! Test:
4 $! File: AOBJ.COM
5 $!
6 $! REK 2/1/88
7 $!
8 $! Description:
9 $!
10 $!
11 $! This command procedure is used by the DEC Ada ACPS compile/link
12 $! command procedure and is invoked as follows:
13 $!
14 $! @aoj p1 p2
15 $!
16 $! The command procedure determines the size of object files for
17 $! filenames specified in argument p2 and outputs a message to
18 $! systoutput as follows:
19 $!
20 $! <p1 siz
21 $!
22 $! where siz is the size of the object files
23 $! for filenames in parameter p2.
24 $! If p1 is null, then the last filename in p2
25 $! is used for p1.
26 $! The procedure also adds the size of the object files to the global
27 $! symbol object_size.
28 $!
29 $! assumed logical names:
30 $! objlib - points to the directory containing the object
31 $! modules for the input filename
32 $!
33 $! total_size = 0
34 $!
35 $! loop:
36 $! comma_location = f$locate(", ", p2)
37 $! file_length = f$length(p2)
38 $! if comma_location .eq. file_length then goto last_file
39 $! temp_name = f$extract(0 , comma_location , p2)
40 $! under = ""
41 $! $cont_1: file_name = "objlib:" + temp_name + under + ".obj"
42 $! if f$search(file_name) .eqs. "" then goto cont_2
43 $! total_size = total_size + f$file_attributes(file_name , "eof")
44 $! file_name = "objlib:" + temp_name + under + ".adc"
45 $! total_size = total_size + f$file_attributes(file_name , "eof")
46 $! file_name = "objlib:" + temp_name + under + ".acu"
47 $! total_size = total_size + f$file_attributes(file_name , "eof")
48 $! $cont_2: if(under .eqs. "_") then goto cont_3
49 $! under = ""
50 $! goto cont_1
51 $! $cont_3: p2 = f$extract(comma_location + 1 , f$length(p2) , p2)
52 $! goto loop
53 $! last_file:
54 $! under = ""
55 $! $cont_4: file_name = "objlib:" + p2 + under + ".obj"
56 $! if f$search(file_name) .eqs. "" then goto cont_5
57 $! total_size = total_size + f$file_attributes(file_name , "eof")
58 $! file_name = "objlib:" + p2 + under + ".acu"
59 $! total_size = total_size + f$file_attributes(file_name , "eof")
60 $! file_name = "objlib:" + p2 + under + ".adc"
61 $! total_size = total_size + f$file_attributes(file_name , "eof")
62 $! $cont_5: if(under .eqs. "_") then goto cont_6
63 $! under = ""
64 $! goto cont_4
65 $! $cont_6: if p1 .eqs. "" then p1 = p2
66 $! write systoutput "<'p1' 'total_size'"
67 $! object_size = object_size + total_size

```

# Table C-23 Command Procedure DDEC:AEXE.COM

```

1 $! Ada Real Time/Run Time Environment Test Aerospace Corporation $!
2 $!
3 $! Test:
4 $! File: AEXE.COM
5 $!
6 $! REK 2/1/88
7 $!
8 $! Description:
9 $!
10 $!
11 $! This command procedure is used by the DEC Ada ACPS compile/link
12 $! command procedure and is invoked as follows:
13 $!
14 $! @aexe pl
15 $!
16 $! The command procedure determines the size of the load module file
17 $! for the file specified in argument pl and outputs a message to
18 $! sys$output as follows:
19 $! <pl siz
20 $! where siz is the size of the load files
21 $! for the filename in parameter pl
22 $! The procedure also adds the size of the load files to the global
23 $! symbol executable_size.
24 $!
25 $ file_name = "'pl'" + ".exe"
26 $ total_size == f$file_attributes(file_name , "eof")
27 $ write sys$output "<'pl' 'total_size'"
28 $ executable_size == executable_size + total_size

```



Table C-24 Command Procedure DDEC:AEEXEC.COM

```

1 $! Ada Real Time/Run Time Environment Test Aerospace Corporation $!
2 $!
3 $! Test: COM
4 $! File: AEEXEC.COM
5 $!
6 $! REK 2/1/88
7 $!
8 $! Description:
9 $!
10 $!
11 $! this command procedure executes DEC Ada versions of ACPS test programs
12 $!
13 $! assumed logical names:
14 $! data - points to directory containing test input data
15 $! files
16 $! dsup - directory containing common language support
17 $! software and command procedures
18 $!
19 $! assumed symbol values:
20 $! our_run - invokes dsup:run.com which executes the
21 $! program in the parameter field and appends
22 $! the test results to the file with logical
23 $! name results.
24 $! our_show - invokes dsup:show.com which executes the
25 $! show command in the parameter field and
26 $! appends the show command output to the file
27 $! with the logical name results.
28 $!
29 $ set work/limit=850/quota=850/noadjust
30 $ our_show work
31 $!
32 $! use show status to time aa00000 and all test program loading time
33 $!
34 $ our_show status
35 $ our_run AA00000
36 $ our_show status
37 $ our_show status
38 $ our_run af05308
39 $ our_run ag00008
40 $ our_run agm0008
41 $ our_run ao00506
42 $ our_show status
43 $ set work/adjust
44 $ our_show status
45 $ set work/adjust

```

Table C-25. Command Procedure DTOOL:CCOMP.COM

```

1 $! Ada Real Time/Run Time Environment Test Aerospace Corporation c
2 $!
3 $! Test:
4 $! File: CCOMP.COM c
5 $!
6 $! REK 2/1/88 c
7 $!
8 $! Description: c
9 $!
10 $! This file contains the command procedure to execute the ACPS
11 $! compilation comparison program CCOMP and is invoked as follows:
12 $!
13 $! @ccomp p1 p2 p3 p4
14 $!
15 $! where
16 $!
17 $! p1 - gives the filename of the compilation result file
18 $! assigned to logical unit 7
19 $! p2 - gives the filename of the compilation result file
20 $! assigned to logical unit 8
21 $! p3 - gives the filename of CCOMP outputs on logical units
22 $! 9,10,11
23 $! p4 - gives the filename of command input. If absent, then
24 $! command input is read from the terminal
25 $!
26 $! The following shows logical name assignments and complete file
27 $! names for all input/output files to CCOMP:
28 $!
29 $! name type filename description
30 $! ---- --- -
31 $!
32 $! for005 input 'p4'.dat User command input
33 $! for006 output sys$output Terminal output for prompts and error
34 $! messages
35 $! for007 input 'p1'.dat Unformatted ACPS compilation result file
36 $! for008 input 'p2'.dat Unformatted ACPS compilation result file
37 $! for009 output 'p3'.u09 ACPS compilation comparison file
38 $! for010 output 'p3'.u10 Unit 7 formatted with headings and with
39 $! VMS status records processed
40 $! for011 output 'p3'.u11 Unit 8 formatted with headings and with
41 $! VMS status records processed
42 $!
43 $! assumptions:
44 $!
45 $! assumed logical names:
46 $!
47 $! dtool - directory containing ACPS compilation/test result
48 $! comparison tools
49 $!
50 $! if p4 .nes. "" then assign 'p4'.dat for005
51 $! if p4 .eqs. "" then assign sys$command for005
52 $! assign 'p1'.dat for007
53 $! assign 'p2'.dat for008
54 $! assign 'p3'.u09 for009
55 $! assign 'p3'.u10 for010
56 $! assign 'p3'.u11 for011
57 $! assign sys$output for006
58 $! run dtool:ccomp
59 $! deassign for005
60 $! deassign for006
61 $! deassign for007
62 $! deassign for008
63 $! deassign for009
64 $! deassign for010
65 $! deassign for011

```

Table C-26. Command Procedure DTOOL:CEXEC.COM

```

1 $! Ada Real Time/Run Time Environment Test Aerospace Corporation c
2 $!
3 $! Test:
4 $! File: CEXEC.COM c
5 $!
6 $! REK 2/1/88 c
7 $!
8 $! Description: c
9 $!
10 $! This file contains the command procedure to execute the ACPS
11 $! test result comparison program CEXEC and is invoked as follows:
12 $!
13 $! @ccomp p1 p2 p3 p4
14 $!
15 $! where
16 $!
17 $! p1 - gives the filename of the test result file to be
18 $! assigned to logical unit 7
19 $! p2 - gives the filename of the test result file to be
20 $! assigned to logical unit 8
21 $! p3 - gives the filename of CEXEC outputs on logical units
22 $! 9,10,11,12
23 $! p4 - gives the filename of command input. If absent, then
24 $! command input is read from the terminal
25 $!
26 $! The following shows logical name assignments and complete file
27 $! names for all input/output files to CEXEC:
28 $!
29 $! name type filename description
30 $! ---- -
31 $!
32 $! for005 input 'p4'.dat User command input
33 $! for006 output systoutput Terminal output for prompts and error
34 $! messages
35 $! for007 input 'p1'.dat Unformatted ACPS test result file
36 $! for008 input 'p2'.dat Unformatted ACPS test result file
37 $! for009 output 'p3'.u09 ACPS test result comparison file
38 $! for010 output 'p3'.u10 Unit 7 formatted with headings and with
39 $! test overhead values subtracted
40 $! for011 output 'p3'.u11 Unit 8 formatted with headings and with
41 $! test overhead values subtracted
42 $! for012 output 'p3'.u12 Optionally generated file that contains
43 $! the minimum or maximum run statistics
44 $! for corresponding test results output on
45 $! units for010,for011
46 $!
47 $! assumptions:
48 $!
49 $! assumed logical names:
50 $!
51 $! dtool - directory containing ACPS compilation/test result
52 $! comparison tools
53 $!
54 $! if p4 .nes. "" then assign 'p4'.dat for005
55 $! if p4 .eqs. "" then assign systcommand for005
56 $! assign 'p1'.dat for007
57 $! assign 'p2'.dat for008
58 $! assign 'p3'.u09 for009
59 $! assign 'p3'.u10 for010
60 $! assign 'p3'.u11 for011
61 $! assign 'p3'.u12 for012
62 $! assign systoutput for006
63 $! run dtool:cexec
64 $! deassign for005
65 $! deassign for006
66 $! deassign for007
67 $! deassign for008
68 $! deassign for009
69 $! deassign for010
70 $! deassign for011
71 $! deassign for012

```

## APPENDIX D

### Ada TEST INTERFACE PACKAGE SPECIFICATIONS

This appendix lists the Ada package specifications for the common language test support software. It also lists the Ada specifications for non-Ada procedures that access target operating system-dependent performance statistics. All compiler-dependent statements (i.e., those suffixed with the string `--*`) are specific to the DEC VAX Ada compiler and may have to be changed for other Ada compilers.

Tables D-1 and D-2 list the specifications for the package OURSYS which defines test support procedures, data types, and global variables for use by all Ada tests. Table D-3 lists the specification for the package OURSPC which defines numerous composite data types and global variables that are used by many ACPS tests. Test descriptions in Appendix F refer to these types by name using capital letters (e.g., RECORDS and RECORD\_POINTER). Table D-4 lists the specification for the package OURTYP which defines compiler- and machine-dependent numeric data types and global variables declared with these types. Test descriptions in Appendix F refer to these types by name if the test uses any of the types or global variables declared in OURTYP. The package specification for test support software procedures that dump global variables contained in packages OURSYS and OURSPC is shown in Table D-5. The package MATHFUN, shown in Table D-6, is used by tests to access compiler-dependent mathematics function libraries. Rename statements are used to standardize names of mathematics routines to those used in the Whetstone test.

The package body of OURSYS implements the test support procedures defined in the package specification shown in Table D-1. To provide the ability to read time to the microsecond level and to access additional performance statistics, procedures within the body of OURSYS reference operating system-dependent procedures to perform these tasks. The Ada specification for these procedures is shown in Table D-2 which lists the declarative part of the package body for OURSYS. As shown in the interface pragma statements contained in lines 281 to 285 of Table D-2, these procedures are: GETTIM, GSTATS, INITIM, ISTATS, and SECS. For the VAX/VMS version of ACPS, these procedures are provided in the directory [acps.support] as FORTRAN and MACRO subroutines. As can be seen in Appendix A, these routines are not supplied on the ACPS delivery tape in ANSI format. New versions of these routines must be implemented for each new target operating system.

The following provides further clarifications on the function of these external procedures:

- a. Microsecond level time is assumed to be a floating point number expressed in units of seconds to microsecond level accuracy.
- b. The value returned by the external function SECS is assumed to be in floating point format in units of seconds.

- c. The operating system statistic array set by procedure GSTATS is assumed to contain OURSYS.NCPUT (i.e., 9) elements. The first OURSYS.NTOSUB (i.e., 4) elements are assumed to increase and the difference of the values from the start to the end of a test will be output on the test result file. For the remaining elements in the array, the value at the end of test execution is output to the test result file.

Table D-1 OURSYS Package Specification

```

1 -- Ada Real time/Run time Environment Test Aerospace Corporation --
2 --
3 -- Test:
4 -- File: OURSYS
5 --
6 -- REK,MJM,KMB 2/1/88
7 --
8 -- Description:
9 --
10 -- **** This package defines the language independent --
11 -- **** test statistic interface routines used by all ACPS tests. --
12 -- **** OURSYS defines various numeric datatypes(e.g our_integer) to --
13 -- **** ensure that for each test the size of datatypes manipulated --
14 -- **** is compiler independent for a single machine (e.g. VAX). Global--
15 -- **** variables of various datatypes are defined for use by each test--
16 -- **** program.
17 -- ****
18 -- **** Note: In the Ada version of OURSYS,statements followed by --* --
19 -- **** are implementation dependent and may need to be changed --
20 -- **** for each compiler and for each machine.
21 -- **** Changes may also be required to the corresponding --
22 -- **** statements in the JOVIAL and FORTRAN versions of OURSYS.--
23 -- ****
24
25 with system; use system;
26 with calendar; use calendar;
27 with text_io; use text_io;
28 with unchecked_conversion;
29 package oursys is
30
31
32 -- ****
33 -- **** data types (machine word length integer, float) used in tests --
34 -- ****
35
36
37
38 subtype our_string is string; --*
39 type our_fixed is delta 0.125 range 0.0 .. 1024.0;
40
41 subtype our_integer is integer ;--*
42 subtype our_positive is positive ;--*
43 subtype our_natural is natural ;--*
44 subtype our_float is float ;--*
45 subtype one_to_3 is integer range 1..3;
46
47 -- file management definitions --
48 subtype file_name is our_string(1..11) ;--*
49 subtype file_form is our_string(1..80) ;--*
50 subtype fin_fo is our_string(1..8) ;--*
51 subtype test_id is our_string(1..7) ;--*
52 subtype test_ext is our_string(1..3) ;--*
53
54
55 -- ****
56 -- **** unchecked conversions
57 -- ****
58
59
60 function address_to_integer is new
61 unchecked_conversion(address,our_integer); --*
62
63
64 -- ****
65 -- **** generic I/O instantiations,one per base type --
66 -- ****
67

```

Table D-1 OURSYS Package Specification (continued)

```

68 package ourfixed_io is new fixed_io (our_fixed);
69 package ourfloat_io is new float_io (our_float);
70 package ourinteger_io is new integer_io (our_integer);
71
72 use ourfixed_io;
73 use ourfloat_io;
74 use ourinteger_io;
75
76
77 -- ***** --
78 -- global test timing interface procedures --
79 -- ***** --
80
81 -- finame (testid, fname) - constructs a --
82 -- implementation dependent --
83 -- file name --
84
85 -- fiorm (finfo, fform) - constructs a --
86 -- implementation dependent --
87 -- file form --
88
89
90 -- mstart - start a microsecond level test iteration --
91
92 -- mstop - stop a microsecond level test iteration --
93 -- and record the elapsed time --
94
95 -- nooptm - used to prevent optimization of test code --
96 -- within test loops. Also causes output of test --
97 -- statistics after first test iteration --
98
99 -- tcomp - cause comparison of the next test execution --
100 -- to the saved test execution --
101
102 -- tfail (errcod) - outputs a test failure error message with --
103 -- error code errcod --
104
105 -- tinit - initialize test environment --
106 -- call istats to initialize non-ada routines --
107 -- determine overhead of normal test loop --
108 -- determine overhead of microsecond level test --
109 -- loop --
110
111 -- tprint - print test results stored by tstop and tstopm --
112
113 -- tsave - save test statistics for later comparison --
114
115 -- tstart (td) - start a test using ada time (if possible)
116 -- td - test identification (7 characters)
117
118 -- tstopm - retrieve & store test statistics at end of --
119 -- microsecond tests. --
120
121 -- tstop - retrieve & store test statistics at end of --
122 -- a test --
123
124 -- tlvalu (val) - store val into print buffers
125
126 -- t2valu (tv1, tv2) - stores test values tv1, tv2 into test print --
127 -- buffers for output with test results --
128
129 procedure finame (testid : in test_id;
130 fname : out our_string
131);
132
133 procedure fiorm (finfo : in finfo;
134 fform : out our_string

```

Table D-1 OURSYS Package Specification (continued)

```

135);
136
137 procedure mstart;
138
139 procedure mstop;
140
141 procedure nooptm;
142
143 procedure tcomp (testn : test_id);
144
145 procedure tsave;
146
147 procedure tfail (errcod : in our_integer);
148
149 procedure tinit;
150
151 procedure tprint;
152
153 procedure tstart (td : in test_id);
154
155 procedure tstopm;
156
157 procedure tstop;
158
159 procedure tlvalu (val : in our_integer);
160
161 procedure t2valu (vall, val2 : in address);
162
163 -- ***** --
164 -- test iteration parameters--
165 -- ***** --
166
167 -- maxitr - maximum # of loop iterations in tests --
168 -- micitr - maximum # of iterations in microsecond level tests --
169
170 maxitr : constant our_integer := 150000; --X
171 micitr : constant our_integer := 50;
172
173 -- ***** --
174 -- test global variables--
175 -- ***** --
176
177
178 -- all global variables are initialized by tinit --
179 -- global variables are reset by test start procedures --
180 -- (tstart, mstart) and are conditionally set/used by nooptm --
181 -- to prevent removal of test code from the test loops. --
182
183 -- debug - used to control whether print is generated from routines --
184 -- in package ourdmp that are called by test programs to dump --
185 -- global variables for debugging purposes. --
186
187 type debug_type is (OFF,ON);
188 debug : debug_type := OFF;
189
190 -- delay_test - used to indicate in microsecond level tests whether the
191 -- Ada delay statement is being tested
192
193 delay_test : boolean := false;
194
195 -- max_memory - this is the maximum memory unit size used in the
196 -- memory management tests. The largest amount of memory
197 -- created dynamically will be an array of 1 .. max_memory.
198
199 max_memory : constant our_integer := 2**16; --X
200
201

```



Table D-1 OURSYS Package Specification (continued)

```

202 -- minimum_delay_interval - this is the minimum delay time supplied in
203 -- an Ada delay statement to force invocation
204 -- of a lower priority task. It is determined
205 -- automatically by the program ADAPARM.
206
207 minimum_delay_interval : constant duration := 0.01; --X
208
209 -- our_delay - the delay interval used in microsecond level tasking tests
210 -- (e.g. time to wake up after a delay, time to activate
211 -- a lower priority task after a delay). It should
212 -- be greater than the minimum delay interval supported
213 -- by an Ada run time environment and >= duration'small,
214 -- system.tick.
215
216 our_delay : constant duration := 10 * minimum_delay_interval; --X
217
218 -- liters - used by all test loops as the test iteration count--
219 -- initialized by tinit, tstart --
220 -- incremented by nooptm, mstart --
221
222 liters : our_integer := 0;
223
224
225
226 -- set_tmp - used to determine whether mstart and --
227 -- tstart are to reset the tmp* global variables. set_tmp is set by --
228 -- test programs before calling tstart to indicate that initial --
229 -- values are being given to the tmp* variables. tstop and tstopm --
230 -- always reset set_tmp --
231
232 set_tmp : boolean := false;
233
234 -- integer variables (all variables = 3 except tmpis0 which is 0) --
235 -- set/used --
236
237 tmpis0 : our_integer;
238 tmpis1 : our_integer;
239 tmpis2 : our_integer;
240 tmpis3 : our_integer;
241 tmpis4 : our_integer;
242 tmpis5 : our_integer;
243 tmpis6 : our_integer;
244 tmpis7 : our_integer;
245 tmpis8 : our_integer;
246 tmpis9 : our_integer;
247 tmpisa : our_integer;
248 tmpisb : our_integer;
249 tmpisc : our_integer;
250 tmpisd : our_integer;
251 tmpise : our_integer;
252 tempi : our_integer;
253
254 type max_mem is array(our_integer range <>) of our_integer;
255 type array_pointer is access max_mem;
256 type integer_vector is array (our_integer range <>) of our_integer;
257 type integer_matrix is array (our_integer range <>,
258 our_integer range <>) of our_integer;
259 type integer_3d is array (our_integer range <>,
260 our_integer range <>,
261 our_integer range <>) of our_integer;
262 subtype integer_array_50 is integer_vector (1..50) ;
263 subtype integer_array_3_3 is integer_matrix (1..3, 1..3) ;
264 subtype integer_array_3_3_3 is integer_3d (1..3, 1..3, 1..3) ;
265 subtype integer_array_10 is integer_vector (1..10) ;
266 tmpia1 : integer_array_50;
267 tmpia2 : integer_array_3_3;
268 tmpia3 : integer_array_3_3_3;

```

Table D-1 OURSYS Package Specification (continued)

```

269 tmpia4,tmpia5,tmpia6 : integer_array_10;
270 mem : array_pointer;
271
272 -- arrays not defined in type statements --
273
274 tmpau1 : array (our_integer range 1..50) of our_integer;
275 tmpau2 : array (our_integer range 1..3, our_integer range 1..3)
276 of our_integer;
277 tmpau3 : array (our_integer range 1..3, our_integer range 1..3,
278 our_integer range 1..3) of our_integer;
279
280 --
281 used only --
282
283 tmpiu1 : our_integer;
284 tmpiu2 : our_integer;
285 tmpiu3 : our_integer;
286 tmpiu4 : our_integer;
287 tmpiu5 : our_integer;
288
289 -- integer variables range 1..3 --
290 -- set/used --
291 tmpi1 : one_to_3;
292 tmpi2 : one_to_3;
293 tmpi3 : one_to_3;
294 tmpi4 : one_to_3;
295 tmpi5 : one_to_3;
296 tmpi6 : one_to_3;
297 tmpi7 : one_to_3;
298 tmpi8 : one_to_3;
299 tmpi9 : one_to_3;
300 tmpia : one_to_3;
301
302 -- positive variables --
303 -- set/used --
304 tmpn1 : our_positive;
305 tmpn2 : our_positive;
306 tmpn3 : our_positive;
307 tmpn4 : our_positive;
308 tmpn5 : our_positive;
309 tmpn6 : our_positive;
310 tmpn7 : our_positive;
311 tmpn8 : our_positive;
312 tmpn9 : our_positive;
313 tmpna : our_positive;
314
315 -- boolean variables --
316 -- set/used --
317 tmpbs1 : boolean;
318 tmpbs2 : boolean;
319 tmpbs3 : boolean;
320 tmpbs4 : boolean;
321 tmpbs5 : boolean;
322 tmpbs6 : boolean;
323 tmpbs7 : boolean;
324 tmpbs8 : boolean;
325 tmpbs9 : boolean;
326 tmpbsa : boolean;
327 tmpbsb : boolean;
328 tmpbsc : boolean;
329 tmpbsd : boolean;
330 tmpbse : boolean;
331 type boolean_vector is array (our_integer range <>) of boolean;
332 type boolean_matrix is array (our_integer range <>,
333 our_integer range <>) of boolean;
334 type boolean_3d is array (our_integer range <>,
335 our_integer range <>,
336 our_integer range <>) of boolean;

```

Table D-1 OURSYS Package Specification (concluded)

```

336 subtype boolean_array_10 is boolean_vector(1..10) ;
337 subtype boolean_array_3_3 is boolean_matrix(1..3, 1..3) ;
338 subtype boolean_array_3_3_3 is boolean_3d(1..3, 1..3, 1..3) ;
339 tmpba1,tmpba2,tmpba3 : boolean_array_10;
340 tmpba4 : boolean_array_3_3;
341 tmpba5 : boolean_array_3_3_3;
342
343
344 -- fixed point variables --
345 tmpfs0 : our_fixed;
346 tmpfs1 : our_fixed;
347 tmpfs2 : our_fixed;
348 tmpfs3 : our_fixed;
349 tmpfs4 : our_fixed;
350 tmpfs5 : our_fixed;
351 tmpfs6 : our_fixed;
352 tmpfs7 : our_fixed;
353 tmpfs8 : our_fixed;
354 tmpfs9 : our_fixed;
355 tmpfsa : our_fixed;
356
357
358 -- float variables --
359 -- set/used --
360 tmprs0 : our_float;
361 tmprs1 : our_float;
362 tmprs2 : our_float;
363 tmprs3 : our_float;
364 tmprs4 : our_float;
365 tmprs5 : our_float;
366 tmprs6 : our_float;
367 tmprs7 : our_float;
368 tmprs8 : our_float;
369 tmprs9 : our_float;
370 tmprsa : our_float;
371 tmprsb : our_float;
372 tmprsc : our_float;
373 tmprsd : our_float;
374 tmprse : our_float;
375 tempr : our_float;
376 type float_vector is array (our_integer range <>) of our_float;
377 type float_matrix is array (our_integer range <>,
378 our_integer range <>) of our_float;
379 type float_3d is array (our_integer range <>,
380 our_integer range <>,
381 our_integer range <>) of our_float;
382 subtype float_array_3_3 is float_matrix (1..3, 1..3) ;
383 subtype float_array_3_3_3 is float_3d (1..3, 1..3, 1..3) ;
384 subtype float_array_10 is float_vector (1..10) ;
385 tmpra1,tmpra2,tmpra3 : float_array_10;
386 tmpra4 : float_array_3_3;
387 tmpra5 : float_array_3_3_3;
388
389 tempf : our_fixed;
390
391 -- string variables --
392 -- set/used --
393 tmpcs1 : our_string(1..10);
394 tmpcs2 : our_string(1..20);
395 tmpcs3 : our_string(1..30);
396 tmpcs4 : our_string(1..10);
397 tmpcs5 : our_string(1..10);
398
399 end oursys;

```

Table D-2. OURSYS Package Body Declarations

```

1 -- Ada Real Time/Run Time Environment Test Aerospace Corporation --
2 --
3 -- Test:
4 -- File: ADASYS
5 --
6 -- REK,MJM,KMB 2/1/88
7 --
8 -- Description:
9 --
10 -- **** This file contains the package body for OURSYS. It implements --
11 -- **** test statistic interface routines used by all ACPs tests. It --
12 -- **** references machine dependent routines (see pragma interface --
13 -- **** statements within the package body) to access machine dependent--
14 -- **** performance statistics and read time to the microsecond level. --
15 -- ****
16 -- **** Note: In the Ada version of OURSYS, statements followed by --X --
17 -- **** are implementation dependent and may need to be changed --
18 -- **** for each compiler and for each machine.
19 -- **** Changes may also be required to the corresponding
20 -- **** statements in the JOVIAL and FORTRAN versions of OURSYS. --
21 -- ****
22
23 with ourdmp; use ourdmp;
24 with ourtyp; use ourtyp;
25 with ourspc; use ourspc;
26
27 package body oursys is
28 --
29 -- ****
30 -- data types used in the package body of oursys --
31 -- ****
32 --
33 subtype our_duration is our_float ;--X
34 subtype our_micro is our_float ;--X
35 subtype our_stat is integer ;--X
36 subtype our_time is time; --X
37
38 -- ****
39 -- machine dependent test parameters
40 -- ****
41
42 -- ntosub - # of statistics returned by gstats that always increase --
43 -- and for which the difference (end-start) will be output --
44 -- ncpust - # of machine statistics set by gstats --
45 -- mintim - minimum test period in seconds --
46 -- tclock - type of clock (Ada, operating system) to be read in --
47 -- non-microsecond level tests. --
48 -- If the operating system clock is used, then the subtype --
49 -- our_time should be set appropriately (for VAX/VMS, --
50 -- use our_float) and the function wclock modified if necessary --
51
52 ncpust : constant our_integer := 9; --X
53 type mach_stats is array (our_integer range 1..ncpust) of our_stat; --X
54
55 ntosub : constant our_integer := 4; --X
56 mintim : constant our_duration := 1.0; --X
57
58 type clock_type is (Ada, OS);
59 tclock : constant clock_type := Ada; --X
60
61 -- ****
62 -- local test timing interface variables and procedures --
63 -- ****
64
65
66
67 -- cstore - stores comparison of previous/saved test results --
68 -- for optimization tests in which testcp(3,3) = C --
69 -- The comparison is done by division --

```

Table D-2. OURSYS Package Body Declarations (Continued)

```

70
71 -- sstore - stores comparison of previous/saved test results --
72 -- for tests in which testcp(3:3) = S. --
73 -- The comparison is done by subtraction --
74
75 -- stotal - stores test results in totX arrays --
76
77 -- tmpref - called by nooptm to reference global variables --
78
79 -- tmpset - called by test start procedures to set all --
80 -- set/used global variables made visible by oursys --
81
82 -- tstore - store test results. calls gstats to get machine --
83 -- dependent statistics and stotal to store results --
84
85 -- gettim (tm) - non-Ada procedure that stores microsecond level --
86 -- time into tm --
87
88 -- gstats (stary,retcod) - non-Ada procedure which acquires non-Ada--
89 -- run statistics and stores them into array stary --
90 -- retcod is a status return code. The value 1 --
91 -- signifies success --
92
93 -- initim - non-Ada procedure that stores an initial time for --
94 -- microsecond level tests so that test durations --
95 -- can be computed to microsecond level accuracy --
96
97 -- istats - non-Ada procedure to initialize non-Ada run --
98 -- statistics --
99
100 -- secs - non-Ada function that returns time in seconds --
101 -- it is used if the value OS is assigned to tclock --
102
103 -- wclock - returns time (Ada, OS) based on value of tclock --
104
105 procedure cstore;
106
107 procedure sstore;
108
109 procedure stotal;
110
111 procedure tmpref;
112
113 procedure tmpset;
114
115 procedure tstore;
116
117 procedure gettim (tm : out our_micro);
118
119 procedure gstats (stary : out mach_stats; retcod : out our_integer);
120
121 procedure initim;
122
123 procedure istats;
124
125 function secs return our_time;
126
127 function wclock return our_time;
128
129
130 -- individual test statistic variables --
131
132 -- testc - flag if set signals that the next test is to be compared --
133 -- with a saved test --
134
135 -- testcp - name of test that compares results of two previous tests --
136
137 -- testnm - name of test --
138
139 -- initok - set if time related routines have been executed once --

```

Table D-2. OURSYS Package Body Declarations (Continued)

```

140
141 -- niters - counter for number of loop iterations executed in a test --
142
143 -- niter1 - contains niters for the previous test --
144
145 -- niter2 - contains niters for the saved test --
146
147 -- once - indicates whether test code has been executed at least once --
148
149 -- ntstat - # of possible entries in tstatv --
150
151 -- tstat1 - index to last entry stored into tstatv --
152
153 -- tstatv - print buffer for test values inserted by t2valu&tlvalu --
154
155 -- tstat1 - contains tstat1 for the previous test --
156
157 -- tstat2 - contains tstat1 for the saved test --
158
159 -- tstatv - contains tstatv values for the previous test --
160
161 -- tstatb - contains tstatv values for the saved test --
162
163 -- strtim - time at start of test --
164
165 -- endtim - time at end of test --
166
167 -- strmic - microsecond level time at start of test --
168
169 -- endmic - microsecond level time at end of test --
170
171 -- elaptm - elapsed time of test in seconds --
172
173 -- elapt1 - elapsed time for the previous test --
174
175 -- elapt2 - elapsed time for the saved test --
176
177 -- micbuf - buffer to hold microsecond elapsed times for a test --
178
179 -- micind - index to last entry stored into micbuf --
180
181 -- loopn - # of iterations in loop timed by loopn --
182
183 -- loopsz - size of test loop overhead code(bytes) --
184
185 -- looptm - elapsed time overhead of test loop for loopn iterations --
186
187 -- tovr - elapsed time overhead in calling gettim for microsecond --
188 -- level tests --
189
190 -- ststat - machine dependent statistics at start of test --
191
192 -- estat - machine dependent statistics at end of test --
193
194 -- estat1 - machine test statistics of the previous test --
195
196 -- estat2 - machine test statistics of the saved test --
197
198
199 initok : boolean := false;
200 once : boolean := false;
201 testc : boolean;
202
203 testcp : test_id;
204 testnm : test_id;
205
206 micind : our_integer := 0;
207 niters : our_integer := 0;
208 niter1 : our_integer := 0;
209 niter2 : our_integer := 0;

```

Table D-2. OURSYS Package Body Declarations (Continued)

```

210 tstati : our_integer := 0;
211 tstat1 : our_integer;
212 tstat2 : our_integer;
213
214 ntstat : constant our_integer := 5;
215 tstatv : array (our_integer range 1..ntstat) of our_integer;
216 tstat : array (our_integer range 1..ntstat) of our_integer;
217 tstatb : array (our_integer range 1..ntstat) of our_integer;
218
219 strtim : our_time;
220 endtim : our_time;
221
222 strmic : our_micro;
223 endmic : our_micro;
224
225 elaptm : our_duration;
226 elapt1 : our_duration;
227 elapt2 : our_duration;
228
229 loopn : our_integer := 0; -- preset determined by AFIRST --
230 loopnz : our_integer := 0; -- preset determined by AFIRST --
231 loopm : our_duration := 1.665000; -- preset determined by AFIRST --
232 tovr : our_duration := 0.000000; -- preset determined by AFIRST --
233
234 type tvector is array (our_integer range 1..micitr) of our_duration;
235 micbuf : tvector;
236
237 sstat : mach_stats;
238 estat : mach_stats;
239 estat1 : mach_stats;
240 estat2 : mach_stats;
241
242 -- accumulation test statistic variables --
243
244 -- ntot - # of test results saved before printing --
245 -- - used as a dimension limit in totX arrays --
246
247 -- totind - index of last entry in totX arrays --
248
249 -- totelp - contains elaptm for all tests run --
250
251 -- totitr - contains niters for all tests run --
252
253 -- totmac - contains estat for all tests run --
254
255 -- totnm - contains testnm for all tests run --
256
257 -- totrun - contains tstatv for all tests run --
258
259 -- totsti - contains tstati for all tests run --
260
261 ntot : constant our_integer := 75;
262
263 totind : our_integer := 0;
264
265 totelp : array (our_integer range 1..ntot) of our_duration;
266 totitr : array (our_integer range 1..ntot) of our_integer;
267 totmac : array (our_integer range 1..ncpust, our_integer range 1..ntot)
268 of our_stat;
269 totnm : array (our_integer range 1..ntot) of test_id;
270 totrun : array (our_integer range 1..ntstat, our_integer range 1..ntot)
271 of our_integer;
272 totsti : array (our_integer range 1..ntot) of our_integer;
273
274 -- variables that are shared between tasks in microsecond level tasking tests
275 -- this occurs in tests where mstop is called in a different task than
276 -- tinit, tstart, tstopm and tprint
277
278 pragma shared(micind); --X
279 pragma shared(strmic); --X

```

Table D-2. OURSYS Package Body Declarations (Continued)

```

280
281 pragma interface (FORTRAN, gettim); --X
282 pragma interface (FORTRAN, gstats); --X
283 pragma interface (FORTRAN, initim); --X
284 pragma interface (FORTRAN, istats); --X
285 pragma interface (FORTRAN, secs); --X
286
287
288 -- XXXXX oursys procedures follow in alphabetical order XXXXX --
289
290 -- XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX --
291

```



Table D-3 OURSPC Package Specification

```

1 -- Ada Real time/Run time Environment Test Aerospace Corporation --
2 --
3 -- Test:
4 -- File: OURSPC
5 --
6 -- REK 2/1/88
7 --
8 -- Description:
9 --
10 -- **** This package defines datatypes and objects used in tests for --
11 -- **** access/enumeration/record types, representation specifications, --
12 -- **** unchecked programming, shared variables and tasking features. --
13 -- **** It also defines procedures which set/reference the objects --
14 -- **** defined --
15 -- ****
16 -- **** Note: In the Ada version of OURSPC, statements followed by --X
17 -- **** are implementation dependent and may need to be changed --
18 -- **** for each compiler and for each target machine. --
19 -- **** Changes may also be required to the corresponding --
20 -- **** statements in the JOVIAL and FORTRAN versions of OURSPC. --
21 -- ****
22
23 with system;
24 with unchecked_conversion;
25 with calendar; use calendar;
26 with oursys; use oursys;
27 package ourspc is
28 --
29 -- ****
30 -- data types used in tests --
31 -- ****
32 --
33 type packed_boolean is new boolean;
34 type packed_bool_array is new boolean_vector (1..10);
35
36 type months is (Jan, Feb, Mar, Apr, May, Jun,
37 Jul, Aug, Sep, Oct, Nov, Dec);
38 type rep_months is new months;
39
40 type five_bit_integer is range 0..31;
41 type packed_months is new months;
42
43 type records is
44 record
45 comp_i1 : five_bit_integer;
46 comp_i2 : five_bit_integer;
47 comp_b1 : packed_boolean;
48 comp_b2 : packed_boolean;
49 comp_e : packed_months;
50 end record;
51 type packed_records is new records;
52 type rep_records is new records;
53
54 type variant_records(discr : months := Jun) is
55 record
56 case discr is
57 when jan =>
58 first : our_integer;
59 when mar =>
60 second : our_float;
61 when others =>
62 comp_i1 : five_bit_integer;
63 comp_i2 : five_bit_integer;
64 comp_b1 : packed_boolean;
65 comp_b2 : packed_boolean;
66 comp_e : packed_months;
67 end case;

```

Table D-3 OURSPC Package Specification (continued)

```

68 end record;
69 type packed_variant is new variant_records;
70
71 type records_array is array(our_integer range 1..10) of records;
72 type packed_records_array is array(our_integer range 1..10)
73 of packed_records;
74 type rep_records_array is array(our_integer range 1..10) of rep_records;
75
76 type Enumeration is (Ident_1,
77 Ident_2,
78 Ident_3,
79 Ident_4,
80 Ident_5);
81
82 subtype One_To_Fifty is our_integer range 1 .. 50;
83
84 type String_10 is array(our_integer range 1..10) of character;
85 type String_20 is array(our_integer range 1..20) of character;
86 type String_30 is array(our_integer range 1..30) of character;
87
88 type Record_Type;
89
90 type Record_Pointer is access Record_Type;
91
92 type Record_Type is
93 record
94 Pointer_Comp : Record_Pointer;
95 Enum_Comp : Enumeration;
96 Int_Comp : One_To_Fifty;
97 String_Comp : String_30;
98 end record;
99
100 -- ***** --
101 -- representation specifications for declared types(placed before object --
102 -- declarations) --
103
104 pragma pack(packed_bool_array); --X
105 for packed_boolean use (0,1); --X
106 for packed_boolean'size use 1; --X
107
108 for rep_months use (1,2,4,8,16,32,64,128,
109 256,512,1024,2048); --X
110 for rep_months'size use 12; --X
111
112 pragma pack(packed_records); --X
113 pragma pack(packed_variant); --X
114 pragma pack(String_10); --X
115 pragma pack(String_20); --X
116 pragma pack(String_30); --X
117
118 for five_bit_integer'size use 5; --X
119 for packed_months'size use 4; --X
120
121 -- define rep-records to be sixteen bits in size --
122 -- align rep-records on a 16 bit boundary --
123 for rep_records use
124 record at mod (16 / system.storage_unit); --X
125 comp_i1 at 0 range 0..4; --X
126 comp_i2 at 0 range 5..9; --X
127 comp_b1 at 0 range 10..10; --X
128 comp_b2 at 0 range 11..11; --X
129 comp_e at 0 range 12..15; --X
130 end record;
131
132 pragma pack(packed_records_array); --X
133 for rep_records_array'size use 10 * 16; --X
134 --

```

Table D-3 OURSPC Package Specification (continued)

```

135 -- ***** --
136 -- unchecked conversions --
137 -- ***** --
138
139 function float_to_integer is new unchecked_conversion(
140 our_float,our_integer); --X
141 function records_to_integer is new unchecked_conversion(
142 rep_records,our_integer); --X
143 --
144 -- ***** --
145 -- test constants --
146 -- ***** --
147
148 -- aggregate constants used in array,record tests and to initialize --
149 -- array,record variables --
150
151 string_30_con : constant String_30 := "123456789012345678901234567890";
152
153 record_type_con : constant record_type := (null,Ident_1,50,
154 string_30_con);
155 records_con_1 : constant records := (1,1,false,true,Jan);
156 records_con_2 : constant records := (2,2,false,false,Feb);
157 records_con_3 : constant records := (3,3,true,false,Mar);
158 pack_records_con_1 : constant packed_records := (2,2,false,false,Feb);
159 pack_records_con_2 : constant packed_records := (1,1,false,true,Jan);
160 pack_records_con_3 : constant packed_records := (3,3,true,false,Mar);
161 rep_records_con_1 : constant rep_records := (3,3,true,false,Mar);
162 rep_records_con_2 : constant rep_records := (2,2,false,false,Feb);
163 rep_records_con_3 : constant rep_records := (1,1,false,true,Jan);
164 variant_con_1 : constant variant_records := (Jun,1,1,false,true,Jan);
165 variant_con_2 : constant variant_records := (Jun,2,2,false,false,Feb);
166 pack_variant_con_1 : constant packed_variant := (Jun,2,2,false,
167 false,Feb);
168 pack_variant_con_2 : constant packed_variant := (Jun,1,1,false,
169 True,Jan);
170 bool_array_con_1 : constant boolean_array_10 := (1..10 => true);
171 bool_array_con_2 : constant boolean_array_10 := (1..10 => false);
172 pack_bool_con_1 : constant packed_bool_array := (1..10 => true);
173 pack_bool_con_2 : constant packed_bool_array := (1..10 => false);
174
175 -- max_time - delay time used in MASTER task timed entry calls. It
176 -- contains the maximum time that a task test should take
177 -- in seconds.
178 max_time : constant duration := 60.0; --X
179
180 -- time_slice_interval - the forced time slice interval used in tasking
181 -- tests. It should be consistent across Ada
182 -- run-time environments for each target machine
183 -- (for the VAX = .01secs)
184 time_slice_interval : constant duration := 0.01; --X
185
186 -- driver_priority - priority of driver tasks in tasking tests --
187 -- master_priority - priority of master tasks in tasking tests --
188 -- slave_priority - priority of slave or master created tasks in
189 -- tasking tests --
190
191 driver_priority : constant our_integer := 3; --X
192 master_priority : constant our_integer := 2; --X
193 slave_priority : constant our_integer := 1; --X
194
195 -- ***** --
196 -- procedure definitions used by oursys --
197 -- ***** --
198
199 -- spcset - sets all ourspc.shrX shared global variables to oursys.tmpX
200 -- equivalents and also sets ourspc.tmpX variables.
201

```

Table D-3 OURSPC Package Specification (continued)

```

202 -- spcref - references all ourspc.shr*,tmp* global variables
203
204 procedure spcset;
205
206 procedure spcref;
207
208
209 -- ***** --
210 -- global variable definitions --
211 -- ***** --
212
213 -- non-shared record structure variables
214
215 tmper0,tmper1,tmper2,tmper3,tmper4,tmper5,
216 tmper6,tmper7,tmper8,tmper9,tmpera : rep_months;
217 tmpes0,tmpes1,tmpes2,tmpes3,tmpes4,tmpes5,
218 tmpes6,tmpes7,tmpes8,tmpes9,tmpesa : months;
219 tmppp0,tmppp1,tmppp2,tmppp3,tmppp4,tmppp5,
220 tmppp6,tmppp7,tmppp8,tmppp9,tmpppa : record_pointer;
221 tmppr0,tmppr1,tmppr2,tmppr3,tmppr4,tmppr5,
222 tmppr6,tmppr7,tmppr8,tmppr9,tmppra : record_type;
223 tmprc0,tmprc1,tmprc2,tmprc3,tmprc4,tmprc5,
224 tmprc6,tmprc7,tmprc8,tmprc9,tmprca : records;
225 tmprp0,tmprp1,tmprp2,tmprp3,tmprp4,tmprp5,
226 tmprp6,tmprp7,tmprp8,tmprp9,tmprpa : packed_records;
227 tmprr0,tmprr1,tmprr2,tmprr3,tmprr4,tmprr5,
228 tmprr6,tmprr7,tmprr8,tmprr9,tmprra : rep_records;
229 tmpvs0,tmpvs1,tmpvs2,tmpvs3,tmpvs4,tmpvs5,
230 tmpvs6,tmpvs7,tmpvs8,tmpvs9,tmpvsa : variant_records;
231 tmpvp0,tmpvp1,tmpvp2,tmpvp3,tmpvp4,tmpvp5,
232 tmpvp6,tmpvp7,tmpvp8,tmpvp9,tmpvpa : packed_variant;
233
234 -- non-shared arrays --
235
236 tmcp1,tmcp4,tmcp5 : String_10;
237 tmcp2 : String_20;
238 tmcp3 : String_30;
239
240 tmpras : records_array;
241 tmprap : packed_records_array;
242 tmprar : rep_records_array;
243
244 tmppb1,tmppb2,tmppb3 : packed_bool_array;
245
246 -- shared integer variables (all variables = 3 except shris0 which is 0) --
247 -- set/used --
248
249 -- task test work counter --
250 total_work : our_integer;
251 pragma shared(total_work); --X
252 shris0 : our_integer;
253 shris1 : our_integer;
254 shris2 : our_integer;
255 shris3 : our_integer;
256 shris4 : our_integer;
257 shris5 : our_integer;
258 shris6 : our_integer;
259 shris7 : our_integer;
260 shris8 : our_integer;
261 shris9 : our_integer;
262 shrisa : our_integer;
263 shrisb : our_integer;
264 shrisc : our_integer;
265 shrisd : our_integer;
266 shrise : our_integer;
267 pragma shared(shris0); --X
268 pragma shared(shris1); --X

```

Table D-3 OURSPC Package Specification (concluded)

```

269 pragma shared(shris2); --X
270 pragma shared(shris3); --X
271 pragma shared(shris4); --X
272 pragma shared(shris5); --X
273 pragma shared(shris6); --X
274 pragma shared(shris7); --X
275 pragma shared(shris8); --X
276 pragma shared(shris9); --X
277 pragma shared(shrisa); --X
278 pragma shared(shrisb); --X
279 pragma shared(shrisc); --X
280 pragma shared(shrisd); --X
281 pragma shared(shrise); --X
282
283 -- variables of type time and duration --
284
285 time_0,time_1,time_2,time_3,time_4,time_5 : time;
286 time_6,time_7,time_8,time_9,time_a : time;
287 duration_0,duration_1,duration_2,duration_3 : duration;
288 duration_4,duration_5,duration_6,duration_7 : duration;
289 duration_8,duration_9,duration_a : duration;
290 end ourspec;

```

Table D-4 OURTYP Package Specification

```

1 -- Ada Real Time/Run Time Environment Test Aerospace Corporation --
2 -- --
3 -- Test: --
4 -- File: OURTYP --
5 -- --
6 -- ARA,REX 2/1/88 --
7 -- --
8 -- Description: --
9 -- --
10 -- XXXX This package declares compiler specific non-standard integer --
11 -- XXXX and floating point data types . It --
12 -- XXXX also declares global variables with these datatypes that are --
13 -- XXXX used by relevant benchmark programs. --
14 -- --
15 with system; use system;
16 with oursys; use oursys;
17 package ourtyp is
18
19 subtype our_short_integer is short_integer ;--X
20 subtype our_short_short_integer is short_short_integer ;--X
21 subtype our_long_float is long_float ;--X
22 subtype our_long_long_float is long_long_float ;--X
23
24 -- typset - initialize the non-32 bit standard variables --
25 -- --
26 -- typref - reference the non-32 bit standard variables --
27 -- --
28 procedure typset;
29
30 procedure typref;
31
32
33 tsi0 : our_short_integer;
34 tsi1 : our_short_integer;
35 tsi2 : our_short_integer;
36 tsi3 : our_short_integer;
37 tsi4 : our_short_integer;
38 tsi5 : our_short_integer;
39 tsi6 : our_short_integer;
40 tsi7 : our_short_integer;
41 tsi8 : our_short_integer;
42 tsi9 : our_short_integer;
43 tsia : our_short_integer;
44 type s_int_ary_10 is array(our_integer range 1..10)
45 of our_short_integer;
46 type s_int_ary_10_10 is array(our_integer range 1..10,
47 our_integer range 1..10) of our_short_integer;
48 pragma pack(s_int_ary_10); --X
49 pragma pack(s_int_ary_10_10); --X
50 tsia1,tsia2,tsia3 : s_int_ary_10;
51 tsia4 : s_int_ary_10_10;
52
53 tssi0 : our_short_short_integer;
54 tssi1 : our_short_short_integer;
55 tssi2 : our_short_short_integer;
56 tssi3 : our_short_short_integer;
57 tssi4 : our_short_short_integer;
58 tssi5 : our_short_short_integer;
59 tssi6 : our_short_short_integer;
60 tssi7 : our_short_short_integer;
61 tssi8 : our_short_short_integer;
62 tssi9 : our_short_short_integer;
63 tssia : our_short_short_integer;
64 type s_s_int_ary_10 is array(our_integer range 1..10)
65 of our_short_short_integer;
66 type s_s_int_ary_10_10 is array(our_integer range 1..10,
67 our_integer range 1..10) of our_short_short_integer;

```

Table D-4 DURTYP Package Specification (concluded)

```

68 pragma pack(s_s_int_ary_10_10); --x
69 pragma pack(s_s_int_ary_10); --x
70 tssia1,tssia2,tssia3 : s_s_int_ary_10;
71 tssia4 : s_s_int_ary_10_10;
72
73 tlf0 : our_long_float;
74 tlf1 : our_long_float;
75 tlf2 : our_long_float;
76 tlf3 : our_long_float;
77 tlf4 : our_long_float;
78 tlf5 : our_long_float;
79 tlf6 : our_long_float;
80 tlf7 : our_long_float;
81 tlf8 : our_long_float;
82 tlf9 : our_long_float;
83 tlfa : our_long_float;
84 type lflt_ary_10 is array(our_integer range 1..10)
85 of our_long_float;
86 type lflt_ary_10_10 is array(our_integer range 1..10,
87 our_integer range 1..10) of our_long_float;
88 tlfa1,tlfa2,tlfa3 : lflt_ary_10;
89 tlfa4 : lflt_ary_10_10;
90
91 tllf0 : our_long_long_float;
92 tllf1 : our_long_long_float;
93 tllf2 : our_long_long_float;
94 tllf3 : our_long_long_float;
95 tllf4 : our_long_long_float;
96 tllf5 : our_long_long_float;
97 tllf6 : our_long_long_float;
98 tllf7 : our_long_long_float;
99 tllf8 : our_long_long_float;
100 tllf9 : our_long_long_float;
101 tllfa : our_long_long_float;
102 type l_lflt_ary_10 is array(our_integer range 1..10)
103 of our_long_long_float;
104 type l_lflt_ary_10_10 is array(our_integer range 1..10,
105 our_integer range 1..10) of our_long_long_float;
106 tllfa1,tllfa2,tllfa3 : l_lflt_ary_10;
107 tllfa4 : l_lflt_ary_10_10;
108
109
110 end ourtyp;

```

Table D-5 OURDMP Package Specification

```

1 -- Ada Real Time/Run Time Environment Test Aerospace Corporation --
2 -- --
3 -- Test: --
4 -- File: OURDMP --
5 -- --
6 -- REK 2/1/88 --
7 -- --
8 -- Description: --
9 -- --
10 -- **** This package defines procedures used by test programs to --
11 -- **** dump the contents of various global variables defined by OURSYS--
12 -- **** If global variable DEBUG is OFF, then no print is generated --
13
14 with OURSYS; use OURSYS;
15 with OURSPC; use OURSPC;
16 package OURDMP is
17 --
18 --
19 -- dumpb(num,a1,a2,a3,a4,a5) - print a record of its boolean arguments --
20 -- - num specifies the number of arguments to print --
21 --
22 -- dumpi(num,a1,a2,a3,a4,a5,a6,a7,a8,a9,a10) -
23 -- - print a record of its integer arguments --
24 -- - num specifies the number of arguments to print --
25 --
26 -- dumpr(num,a1,a2,a3,a4,a5) - print a record of its real arguments --
27 -- - num specifies the number of arguments to print --
28 --
29 -- dumpt - print global test variables tmpX --
30 --
31 procedure dumpb(num : in our_integer;a1,a2,a3,a4,a5 : in boolean);
32 procedure dumpi(num,a1,a2,a3,a4,a5,a6,a7,a8,a9,a10 : in our_integer);
33 procedure dumpr(num : in our_integer;a1,a2,a3,a4,a5 : in our_float);
34 procedure dumpt;
35 end OURDMP;

```



Table D-6 MATHFUN Package Specification

```

1 -- Ada Real Time/Run Time Environment Test Aerospace Corporation --
2 --
3 -- Test:
4 -- File: MATHFUN
5 --
6 -- REK 2/1/88
7 --
8 -- Description:
9 --
10 -- **** This file makes standard math functions used by the WHETSTONE
11 -- **** benchmark available to test programs. This is done by
12 -- **** instantiation of generic program libraries with the type
13 -- **** our_float. The names of any library routines which are different
14 -- **** from those used in the WHETSTONE benchmark (sin,cos,arctan,sqrt,
15 -- **** exp,ln) should be renamed
16
17 with math_lib;
18 WITH OURSYS; USE OURSYS;
19 PACKAGE MATHFUN IS
20 package ourfloat_lib is new math_lib(our_float); --x
21 use ourfloat_lib;
22 function arctan(x : our_float) return our_float renames atan; --x
23 function ln(x : our_float) return our_float renames log; --x
24 END MATHFUN;

```

## APPENDIX E

### ACPS TEST COMPARISON TOOL

The ACPS test comparison tool automatically compares ACPS compile-time and run-time test statistic files and generates formatted outputs of the input files and of the comparison results. The tool consists of two programs which compare compile-time and run-time test results. The programs were developed using a VAX/VMS host and were designed to process ACPS test result output specific to VAX/VMS. Appendix C describes the VAX/VMS command procedures used to execute the tool. The programs are written in FORTRAN 77 and use the VAX FORTRAN INCLUDE statement for reference to FORTRAN common block definitions. The input/output files are read/written with FORTRAN formatted read/write statements. The target operating system dependencies are separated into separate common block include files and subroutines. The input/output logical unit assignments for the tools are shown in Tables E-1 and E-2.

This appendix describes the format and target operating system dependencies of all comparison tool input and output files. It also describes the required order in which test records must appear within the input test statistic files. The discussion is illustrated with sample input and output files generated from execution of the VAX/VMS version of the ACPS using command procedures described in Appendix C.

#### E.1 ACPS COMPILE-TIME TEST RESULT COMPARATOR (CCOMP)

##### E.1.1 Compile-Time Test Result Input File Formats

CCOMP takes as input two files containing compile-time generated test records augmented by compiler and linker diagnostic and informational messages. Table E-3 shows output generated using DEC VAX Ada compiler and Table E-4 shows output generated using the ECSPO JOVIAL compiler. The output contains two types of records that are processed by the comparison tool:

- a. operating system-independent test records which begin with the symbol < in column 1
- b. operating system-dependent statistic records for VAX/VMS, which are generated by the DCL SHOW STATUS command

The output is divided into the following five sections: compilation test records, linkage edit test records, source module size test records, object module size test records, and executable module test records. These sections are formatted as follows:

a. Compilation Test Record Section Format

The compilation test record section contains records in the following order:

```
<start compiles
<FILE-NAME
 DCL SHOW STATUS RECORD 1
 DCL SHOW STATUS RECORD 2
 o
 o
 o
<FILE-NAME
 DCL SHOW STATUS RECORD 1
 DCL SHOW STATUS RECORD 2
<end compiles
```

where:

FILE-NAME - is either the name "system" or an ACPS file name whose syntax is described in Section 6.1. The name "system" is used to represent the compilation of the language-specific test support software.

b. Linkage Edit Test Record Section Format

The linkage edit test record section format consists of records in the following order:

```
<start links
<FILE-NAME
 DCL SHOW STATUS RECORD 1
 DCL SHOW STATUS RECORD 2
 o
 o
 o
<FILE-NAME
 DCL SHOW STATUS RECORD 1
 DCL SHOW STATUS RECORD 2
<end links
```

where:

FILE-NAME - is an ACPS filename whose syntax is described in Section 6.1.

c. Source Module Size Test Record Section Format

The source module size test record section contains records in the following order:

```
<start source size
<FILE-NAME #
 o
 o
<FILE-NAME #
<end source size = ###
```

where:

FILE-NAME - is either the name "system" or an ACPS filename whose syntax is in Section 6.1. The name "system" is used for all source files in the language-specific test support software.

# - is the source module size. For VAX/VMS, it is expressed in 512 byte disk blocks.

## - is the total size of source modules. For VAX/VMS, it is expressed in 512 byte blocks.

d. Object Module Size Test Record Section Format

The object module size test record section contains records in the following order:

```
<start object size
<FILE-NAME #
 o
 o
<FILE-NAME #
<end object size = ###
```

where:

FILE-NAME - is either the name "system" or an ACPS filename whose syntax is in Section 6.1. The name "system" is used for all object files in the language-specific test support software.

# - is the object module size. For VAX/VMS, it is expressed in 512 byte disk blocks

## - is the total size of object modules for VAX/VMS, it is expressed in 512 byte blocks.

e. Executable Module Size Test Record Section Format

The executable module size test record section contains records in the following order:

```
<start executable size
<FILE-NAME 1 #
 o
 o
<FILE-NAME N #
<end executable size = ###
```

where:

FILE-NAME - is an ACPS filename whose syntax is section in Section 6.1.

# - is the executable module size. For VAX/VMS, it is expressed in 512 byte disk blocks

## - is the total size of executable modules. For VAX/VMS, it is expressed in 512 byte blocks.

E.1.2 User Input

CCOMP interacts with the user by requesting user responses to the following questions:

- a. What title should be placed on the comparison output listings?
- b. Which host operating system was used to generate the input files?  
The tool currently only supports output generated by VAX/VMS.

E.1.3 CCOMP Output File Formats

CCOMP generates two types of output files: one containing formatted versions of the input files and one containing the results of the comparison of the input files. The formats of these files are as follows:

a. Formatted Input File Format

Figures E-3 and E-4 contain formatted output files generated by CCOMP from the VAX Ada and ECSP0 JOVIAL compilation statistics shown in Figures E-1 and E-2. As can be seen from these figures, the CCOMP outputs for different test languages have the same content and format. The outputs are divided into five sections: compilation statistics, linkage edit statistics, source module size statistics, object module size statistics, and executable or load module size statistics. The heading for each output shows the logical unit number (e.g., UNIT 8 in Figure E-3) of the input file from which the output is derived.

The compilation and linkage edit outputs have identical formats. The outputs are in tabular form. The separate entry "totals" is used to contain the summation by column of the values of all other entries in the table. These outputs are operating system-dependent since they contain statistics generated by the DCL SHOW STATUS command. The meanings of the output headings are as follows:

FILE(S)        - the name of a single file or group of files. The name "system" corresponds to the files associated with the language-specific test support software

WALL-CLOCK    - the elapsed time expressed in units of seconds

CPU-TIME      - the VMS CPU time statistics expressed in units of seconds

BUFIO         - the number of VMS buffered input/output operations

DIRIO         - the number of VMS direct input/output operations

PAGE-FAULTS   - the VMS working set page fault statistic

The source, object, and executable module size statistics section have identical format and contain data which is operating system-independent (albeit obtained from operating system-dependent commands). The file sizes are expressed in units of 512 byte disk blocks.

b. Comparison Result File Format

The comparison result file contains output that compares the compile-time statistics from the two input files supplied to CCOMP. Table E-7 shows an example comparison output file for the input files shown in Tables E-3 and E-4. The output comparison results are presented in fractional form as a ratio of the test statistic from input logical unit 8 divided by the corresponding test statistic from input logical unit 7. The file names appearing on the output are the same as those appearing on logical unit 8. Test statistics that appear on one input file but not on the other are not compared and do not affect the comparison output. The output is divided into six sections: the user/tool dialogue, the compilation comparison, the linkage edit comparisons, the source module size comparison, the object module size comparison, and the load or executable module size comparison.

The first page of Table E-7 shows the dialogue between the user and CCOMP. User responses follow the record containing the prompt character < while CCOMP requests precede the prompt record.

The comparison output sections are in the same format as the corresponding sections in the formatted input file outputs described above, the only difference being that the tabular data contains fractional comparisons between corresponding input file statistics. For example, in the compilation comparison output, the total compile time was 5% less in Ada than in JOVIAL even though the number of page faults generated was 1.8 times greater in Ada than in JOVIAL.

## E.2 ACPS RUN-TIME RESULT COMPARATOR (CEXEC)

### E.2.1 Run-Time Test Result Input File Formats

CEXEC takes as input two files containing run-time generated test records optionally augmented by target operating system-dependent records that measure the program loading time as well as the program execution time. Tables E-8 and E-9 show sample output generated by run-time execution of ACPS tests compiled by the VAX Ada compiler and the ECSPO JOVIAL compiler, respectively. As can be seen from these outputs, the run-time statistic files generated by different ACPS test languages have identical formats. The run-time output file contains two types of records that are processed by CEXEC:

- a. Optional target operating system-dependent records. These are optionally processed based on user response to questions posed by CEXEC. Their intent is to permit measurement of the program loading time of the test overhead programs and of the entire test suite.

Three records are generated by the ACPS VAX/VMS run-time execution command procedure using the DCL SHOW STATUS command. The records appear immediately before and after the overhead test record and also after the last test record as shown in Table E-8.

- b. Test support-software test records. These are generated by the language-specific test support software and may contain operating system-dependent statistic fields. They begin with the symbol < preceded by either one or two blanks (dependent upon how Ada compilers generate output to the standard output file. For both FORTRAN and JOVIAL, the < symbol is preceded by a single blank).

Each test record contains two logical records. The first logical record contains the test name, the elapsed time, and operating system dependent records as follows:

| <u>Column</u> | <u>Contents</u>                                                                        |
|---------------|----------------------------------------------------------------------------------------|
| 2             | <                                                                                      |
| 3-9           | Test name (described in Section 6.2).                                                  |
| 10-19         | Elapsed time expressed in units of seconds to microsecond level accuracy.              |
| 20-29         | Number of test iterations (an integer). The field is zero for microsecond level tests. |

30-119     Nine target operating system-dependent statistics expressed as integers. For VAX/VMS, the statistics appear in the following order:

1. CPU time expressed in units of 10 ms
2. number of page faults
3. number of buffered input/output operations
4. number of direct input/output operations
5. number of open files
6. P0 virtual address space used expressed in bytes
7. P1 virtual address space used expressed in bytes
8. process page count
9. global page count

The second logical record contains data dependent on the type of the test. The record contains up to six 10-column fields. The first field always specifies the number of data fields that follow. For nonmicrosecond level tests (e.g., AA00000), the first data field always contains the size of the compiled test code in bytes. Subsequent data fields contain test-specific statistics that are only defined in the test source code prologue. If a data field contains a -1, CEEXEC ignores the field since the statistic represented involves a language feature that is not supported by the corresponding compiler (e.g., VAX Ada run-time tests do not include the size of the compiled test code, since the VAX Ada compiler does not support the address attribute for labels). For microsecond level tests (e.g., AAM0000), the data records correspond to the maximum and median elapsed time measurements made and are expressed in units of microseconds.

There are five types of test records: informational tests, microsecond level tests, self-measured overhead tests; optimization comparison tests, single iteration tests, and multiple iteration tests. Tables E-8 and E-9 contain examples of each type of test record.

The informational test records are identified by name (i.e., I in character position three) and contain informational rather than execution performance statistics. The data in these records is used to describe the size of data objects and data types, and the distribution of work in task loading tests. The data is entirely contained in the second logical record. Records of this type are not compared by CEEXEC but are written to the corresponding formatted output file.

The microsecond level tests are identified by test name (i.e., M or N in character position three) and contain zero in the test iteration field.

The self-measured overhead test records are identified by name (i.e., S in character position three) and are records in which the test overhead has been subtracted from every statistic in the first and second logical records. The test record appearing immediately before the self-measured test record corresponds to the same test with the test overhead included in the statistics.



The optimization comparison test record is also identified by name (i.e., C in character position three) and corresponds to the comparison of hand-optimized tests to compiler-optimized tests. All statistics are fractional and are computed as a ratio of 100 times the compiler-optimized test statistics divided by the corresponding hand-optimized test statistics. Values of 100 correspond to statistics that are the same (see the record for A0C0508 in Figure E-6 which compares A000508 to A000507).

The single iteration test record has a one in the test iteration field of the first logical record (columns 20-29). It corresponds to execution of the first iteration through the test loop. The multiple iteration test record is used for the remaining iterations of the test loop. For this type of test record, the second logical record is blank and contains no data fields. All code and data object sizes for the multiple iteration tests appear in the second logical record of the corresponding single-iteration test. (e.g., see test JA00000 in Table E-9.

As shown in Table E-8, the run-time statistic files input to CEXEC also contain diagnostic and informational messages generated by the test support software. These messages are preceded by four asterisks (\*) and are output by the test support procedure tfail. The messages that can be generated are as follows:

\*\*\*\* Elapsed time in above test is too short (< 100 times clock granularity).

This message occurs if test durations are not long enough to ensure that the error in elapsed time measurements is less than 1%.

For corrective action, the user can increase the corresponding test iteration count.

\*\*\*\* Test <test-name> fails - incorrect value computed.

This message occurs in self-monitoring tests that compare computed values against expected values.

For corrective action, the user should examine the test source and compiled code to determine the cause of the error.

\*\*\*\* Test <test-name> fails - incorrect path taken.

This message occurs in self-monitoring tests when a test statement is unexpectedly executed.

For corrective action, the user should examine the test source and compiled code to determine the cause of the error.

\*\*\*\* Test <test-name> fails - error in reading operating system statistics.

This message occurs in VAX/VMS test support software whenever the system service SYS\$GETJPI returns an error condition.

This message should not be generated and signals that a fatal error has occurred in the test support software.

\*\*\*\* Test <test-name> fails - comparison tests are improperly used.

For corrective action, the user should make sure that the test name conforms to the test naming conventions described in Section 6 and that the test support software was also used properly. Optimization comparison tests are discussed in Section 4.3.

\*\*\*\* Test <test-name> fails - difference tests should have the same number of iterations as the loop overhead test.

This message occurs when test names or self-measuring overhead tests are improperly used.

For corrective action, the user should make sure the test name follows the test naming convention described in Section 6 and that the test coding conventions described in Section 4 are followed.

\*\*\*\* Test <test-name> fails - pragma priority is not supported with enough distinct priority levels.

This message occurs in tasking tests that require three different task priority levels to work properly.

No corrective action can be taken.

\*\*\*\* Test <test-name> fails - task test does not complete within ourspc.max\_time seconds.

This message is generated in task loading test drivers which assume that the test can complete within a specified time (60 sec for DEC VAX).

For corrective action increase ourspc.max\_time. If this does not correct the problem, then the run-time environment probably does not support preemptive task scheduling and no further corrective action is recommended.

\*\*\*\* Test <test-name> fails - change of representation between objects does not preserve the values.

This message is generated in self-monitoring tests which check the results of operations which change representation between record objects.

For corrective action, the user should examine the source and compiled code to determine the cause of the error.

\*\*\*\* Test <test-name> fails - unchecked conversion incorrectly converted a floating point value (3.0) to an integer value (3).

For corrective action, examine the source and compiled code to determine the cause of the error.

\*\*\*\* Test <test-name> fails - constraint error

\*\*\*\* Test <test-name> fails - numeric error

\*\*\*\* Test <test-name> fails - program error

\*\*\*\* Test <test-name> fails - storage-error

\*\*\*\* Test <test-name> fails - tasking-error

\*\*\*\* Test <test-name> fails - nonpredefined exception

The above messages are generated in Ada type E tests that fail as stated in the message.

For corrective action, the user should examine the test source code for the cause of the error.

All of the above messages are ignored by CEXEC.

### E.2.2 User Input

CEXEC is an interactive program that requests information from the user to direct processing of the input files and to affect how the output files are generated. CEXEC requests user responses to supply the following information:

- a. Whether or not to generate a maximum or minimum test result file.
- b. Whether or not to process operating system status records. These records should not be processed in executions involving maximum or minimum test result files.
- c. Whether or not to process operating system-dependent statistics in test records.

- d. Which target operating system was used. This request is only made if operating system-dependent data are to be processed. Currently, CEXEC only supports the VMS operating system.
- e. Whether or not to subtract the operating statistics obtained from the test overhead record from corresponding statistics in subsequent tests.
- f. The title to be placed on all output files generated by CEXEC.
- g. The minimum test execution time. CEXEC generates an error message in the formatted output file for multiple iteration tests if the test execution time exclusive of test loop overhead is less than the minimum time specified by the user.

The first page of Tables E-12 and E-15 show sample dialogues between the user and CEXEC. The CEXEC prompt record contains a single < symbol. CEXEC requests for information immediately precede the prompt record while user responses follow the prompt record.

### E.2.3 CEXEC Output File Formats

CEXEC generates two types of output files: one containing formatted versions of the input files and one containing the results of the input file comparisons. There are two formats for each type of output: one with and one without target operating system dependent information. The formats of these two types of output files are as follows:

- a. Formatted input file format. Tables E-10 and E-11 show formatted input files generated by CEXEC from the VAX Ada and ECSPO JOVIAL input files shown in Tables E-8 and E-9. The outputs shown contain only operating system-independent statistics and are generated by compiler-independent source code within the language-specific test support software. As can be seen from these tables, E-10 and E-11, the format and content of these outputs are the same for each test language. The listing heading shows the test language associated with the output and the logical unit numbers [e.g., unit (8) in Table E-10] of the input file from which the output is derived. The output is presented in tabular form with one entry per test record. An "elapsed time too short" error message can appear in the output whenever the elapsed time in the immediately preceding multiple iteration test is less than a user specified minimum value. The meanings of the column headings are as follows:

- TEST-ID - Contains the name of the test whose syntax is described in Section 6.2.
- WALL-TIME - Contains the elapsed test execution time in seconds. The effect of the test loop overhead (tests AA00000, AAM0000) has been removed from all tests except the optimization comparison (e.g., AOC0508) and self-measuring overhead (e.g., AFS5307) tests.
- ITERATIONS - Contains the number of test loop iterations executed.
- RUN STATISTICS - Contains five entries corresponding to the data fields appearing in the second logical record of each test input record. An entry containing 0\* indicates that the data field does not apply to this test. The effect of the test loop overhead has been removed for microsecond level tests (e.g., AGM0008) and for single-iteration tests.

Tables E-13 and E-14 show formatted input files generated by CEEXEC that also contain VAX/VMS operating system statistics. Each output test record contains two logical records: the first record contains nonoperating dependent data and the second record contains operating system-specific data. The effect of the test loop overhead is optionally subtracted from the operating system-dependent statistics. The meanings of the column headings for VAX/VMS statistics are as follows:

- CPUTIM - the VMS CPU time statistic expressed in units of 10 ms
- PAGEFLT - the number of working set page faults
- BUFIO - the number of buffered input/output operations
- DIRIO - the number of direct input/output operations
- FILCNT - the number of open input/output files
- POSPACE - the amount of P0 virtual address space used
- PISPACE - the amount of P1 virtual address space used
- PPGCNT - the process page count
- GPGCNT - the global page count

b. Comparison result file format. The comparison result file contains output that compares the run-time statistics contained on the two input files (e.g., Tables E-8 and E-9) read by CEEXEC. Test statistics that appear on one input file but not on another are not compared and do not affect the comparison output. The output comparison results are presented in fractional form as the ratios of the test statistics from input on logical unit 8 divided by test statistics from input on logical unit 7. The effect of the number of iterations is taken into account in both the elapsed time and CPU time (if present) statistics. The test names appearing on the outputs are the same as those contained on logical unit 8.

Table E-15 shows a comparison output file that does not contain target operating system-specific data. The first page shows the tool/user dialogue which causes suppression of processing of operating system-dependent records and fields. The meanings of the output headings are the same as for the formatted input file output shown in Table E-10 and described previously. Test comparison totals, which appear at the end of the output, present accumulated comparisons of all but the test overhead tests and the optimization comparison tests. The meanings of the entries appearing in the test total output are as follows:

|         |   |                                                                              |
|---------|---|------------------------------------------------------------------------------|
| micro   | - | microsecond level test totals                                                |
| 1 iter  | - | single-iteration test totals                                                 |
| >1 iter | - | multiple-iteration test totals (not including self-measuring overhead tests) |
| diff.   | - | self-measuring overhead test totals                                          |

Table E-15 shows a comparison output file that contains VMS status record and VMS statistic field comparisons. The first page of the output shows the dialogue between the tool and user that selected the form of output. The rest of the output is divided into three sections: benchmark test comparisons, SHOW STATUS statistics, and SHOW STATUS comparisons.

The benchmark test comparison section contains the individual test comparisons. The meanings of the output headings are the same as for the formatted input file output shown in Table E-13 and described above. The results are expressed as the ratio of the processed statistics from input logical unit 8 divided by the corresponding processed statistics from input logical unit 7. The values of the processed statistics used are contained in the formatted input file outputs shown in Tables E-13 and E-14. Test comparison totals appear at the end of the output. The entries have the same meaning as those in Table E-12 which were previously described.

The VMS SHOW STATUS statistics section displays the result of processing the VMS SHOW STATUS records that are inserted into the run-time data file to measure both the program loading and test execution time of the overhead test and of the entire test suite. The meanings of the output headings are as follows:

|             |   |                                                                                                                                                                                                                                                                                                        |
|-------------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I/O-UNIT    | - | input logical unit containing the data                                                                                                                                                                                                                                                                 |
| NUMBER      | - | specifies the pair of status records processed as follows:<br><br>a. corresponds to the first pair which measure the execution and program loading time of the overhead test<br><br>b. corresponds to the second pair which measure the execution and program loading time of all other tests executed |
| WALL-CLOCK  | - | elapsed time in seconds                                                                                                                                                                                                                                                                                |
| CPU-TIME    | - | VMS CPU time statistic in seconds                                                                                                                                                                                                                                                                      |
| BUFIO       | - | number of buffered input/output operations                                                                                                                                                                                                                                                             |
| DIRIO       | - | number of direct input/output operations                                                                                                                                                                                                                                                               |
| PAGE-FAULTS | - | number of working set page faults                                                                                                                                                                                                                                                                      |

The VMS SHOW STATUS comparison section compares the results contained in the SHOW STATUS statistics section for corresponding statistic records contained on input logical units 8 and 7. The comparison results are expressed as the ratios of the test statistics from logical unit 8 divided by the corresponding test statistics on logical unit 7. The meanings of the output column headings are the same as those in the SHOW STATUS statistics section previously described.

#### E.2.4 Measurement of Test Repeatability

For target machines for which the run-time environment cannot be constrained to permit repeatable measurements of test execution times, CEEXEC can be used to measure the repeatability or variance of test statistics for all ACPS tests. By responding with maximum or minimum to the first CEEXEC prompt which is shown in Table E-15, the user can cause CEEXEC to generate a file (on unit 12) containing the maximum or minimum test statistics from corresponding tests in the two test result input files. The user should keep a set of maximum and minimum test result files for each type of ACPS test execution set. Each time a new set of test results is generated, CEEXEC can then be used to update the corresponding maximum and minimum result files. This process should be repeated until all maximum and minimum values do not

change. The maximum and minimum result files can then be compared by CEEXEC to determine the test variance. Only corresponding maximum or minimum result files of different test types should be compared.

### E.3 TEST NAME AND FILE NAME ORDER

In order to compare corresponding test records in test statistic input files, each ACPS comparison program assumes that test records (i.e., those records prefixed by the symbol <) appear in a sorted order as follows:

- a. For test and program names, the order is determined by sorting logic applied to character fields in the following sequence:

| <u>Character Position</u> | <u>Sorting Order</u>   |
|---------------------------|------------------------|
| 2                         | A,F,G,L,O              |
| 4                         | 0,1,....,9,A,B,C,D,E,F |
| 5                         | 0,1,....,9,A,B,....,Z  |
| 6                         | 0,1,....,9,A,B,....,Z  |
| 7                         | 0,1,....,9,A,B,....,Z  |
| 3                         | 0,D,I,M,N,S,C          |

Program names appear on linkage edit test records in compile-time statistic files and test names appear on test records in run-time statistic files.

- b. For file names, the sorting logic is applied to character fields in the following order:

| <u>Character Position</u> | <u>Sorting Order</u>     |
|---------------------------|--------------------------|
| 2                         | A,F,G,L,O                |
| 4                         | P,0,1,....,9,A,B,C,D,E,F |
| 5                         | 0,1,....,9,A,B,....,Z    |
| 6                         | 0,1,....,9,A,B,....,Z    |
| 7                         | D,1,....,9,A,B,....,Z    |
| 3                         | J,D,F,M,N                |

File names appear in compilation and file size test records in compile-time statistic files.



Table E-1. CCOMP Interface File Specifications

| FORTRAN           |        |                                                 |
|-------------------|--------|-------------------------------------------------|
| Input/Output Unit | Type   | Description                                     |
| 5                 | Input  | User terminal input                             |
| 6                 | Output | Terminal output for prompts and error messages  |
| 7                 | Input  | Unformatted compile-time test result input file |
| 8                 | Input  | Unformatted compile-time test result input file |
| 9                 | Output | Test result comparison output file              |
| 10                | Output | Formatted output file for input from unit 7     |
| 11                | Output | Formatted output file for input from unit 8     |

Table E-2. CEEXEC Interface File Specifications

| FORTRAN           |        |                                                                                                                                        |
|-------------------|--------|----------------------------------------------------------------------------------------------------------------------------------------|
| Input/Output Unit | Type   | Description                                                                                                                            |
| 5                 | Input  | User terminal input                                                                                                                    |
| 6                 | Output | Terminal output for prompts and error messages                                                                                         |
| 7                 | Input  | Unformatted run-time test result input file                                                                                            |
| 8                 | Input  | Unformatted run-time test result input file                                                                                            |
| 9                 | Output | Test result comparison output file                                                                                                     |
| 10                | Output | Formatted output file for input from unit 7                                                                                            |
| 11                | Output | Formatted output file for input from unit 8                                                                                            |
| 12                | Output | Optionally generated file that contains the minimum or maximum test statistics for corresponding test results input from units 7 and 8 |

Table E-3. DEC VAX Ada Compile-time Test Statistic File

```

Marking Set /Limit= 150 /Quota= 1500 /Extent= 2500
Adjustment enabled Authorized Quota= 1500 Authorized Extent= 2500
*start samples
*system
Status on 17-DEC-1984 04:24:34.16 Elapsed CPU : 0 00:00:10.52 Buff. I/O : 229 Car. us. : 150 Open files :
Status on 17-DEC-1984 04:24:35.43 Elapsed CPU : 0 00:01:49.03 Buff. I/O : 302 Car. us. : 150 Open files :
*ADDP000
Status on 17-DEC-1984 04:24:35.66 Elapsed CPU : 0 00:01:49.92 Buff. I/O : 304 Car. us. : 300 Open files :
Status on 17-DEC-1984 04:24:42.07 Elapsed CPU : 0 00:01:55.51 Buff. I/O : 420 Car. us. : 150 Open files :
*ADDP000
Status on 17-DEC-1984 04:24:43.20 Elapsed CPU : 0 00:01:55.69 Buff. I/O : 424 Car. us. : 300 Open files :
XADAC-M-EMDIACS, Ada compilation completed with 2 diagnostics
Status on 17-DEC-1984 04:24:52.65 Elapsed CPU : 0 00:01:56.43 Buff. I/O : 669 Car. us. : 150 Open files :
*ADDP000
Status on 17-DEC-1984 04:24:52.97 Elapsed CPU : 0 00:01:56.61 Buff. I/O : 672 Car. us. : 150 Open files :
Status on 17-DEC-1984 04:27:05.12 Elapsed CPU : 0 00:02:04.74 Buff. I/O : 810 Car. us. : 150 Open files :
*ADDP000
Status on 17-DEC-1984 04:27:05.30 Elapsed CPU : 0 00:02:04.94 Buff. I/O : 814 Car. us. : 300 Open files :
XADAC-M-EMDIACS, Ada compilation completed with 2 diagnostics
Status on 17-DEC-1984 04:27:21.46 Elapsed CPU : 0 00:02:15.06 Buff. I/O : 809 Car. us. : 150 Open files :
*ADDP000
Status on 17-DEC-1984 04:27:21.73 Elapsed CPU : 0 00:02:15.24 Buff. I/O : 893 Car. us. : 300 Open files :
XADAC-M-EMDIACS, Ada compilation completed with 2 diagnostics
Status on 17-DEC-1984 04:27:37.70 Elapsed CPU : 0 00:02:24.09 Buff. I/O : 644 Car. us. : 150 Open files :
*ADDP000
Status on 17-DEC-1984 04:27:38.05 Elapsed CPU : 0 00:02:24.29 Buff. I/O : 670 Car. us. : 300 Open files :
XADAC-M-EMDIACS, Ada compilation completed with 2 diagnostics
Status on 17-DEC-1984 04:27:54.42 Elapsed CPU : 0 00:02:33.41 Buff. I/O : 743 Car. us. : 150 Open files :
*ADDP000
Status on 17-DEC-1984 04:27:54.67 Elapsed CPU : 0 00:02:33.61 Buff. I/O : 747 Car. us. : 300 Open files :
Status on 17-DEC-1984 04:28:01.47 Elapsed CPU : 0 00:02:37.89 Buff. I/O : 793 Car. us. : 300 Open files :
*ADDP000
Status on 17-DEC-1984 04:28:01.67 Elapsed CPU : 0 00:02:37.72 Buff. I/O : 797 Car. us. : 300 Open files :
Status on 17-DEC-1984 04:28:11.40 Elapsed CPU : 0 00:02:41.52 Buff. I/O : 834 Car. us. : 150 Open files :
*ADDP000
Status on 17-DEC-1984 04:28:11.60 Elapsed CPU : 0 00:02:41.65 Buff. I/O : 836 Car. us. : 300 Open files :
Status on 17-DEC-1984 04:29:14.44 Elapsed CPU : 0 00:03:20.61 Buff. I/O : 1076 Car. us. : 150 Open files :
*ADDP000
Status on 17-DEC-1984 04:29:14.62 Elapsed CPU : 0 00:03:20.72 Buff. I/O : 1078 Car. us. : 300 Open files :
Status on 17-DEC-1984 04:29:23.26 Elapsed CPU : 0 00:03:25.14 Buff. I/O : 1120 Car. us. : 150 Open files :
*ADDP000
Status on 17-DEC-1984 04:29:23.50 Elapsed CPU : 0 00:03:25.37 Buff. I/O : 1124 Car. us. : 150 Open files :
Status on 17-DEC-1984 04:29:31.04 Elapsed CPU : 0 00:03:29.52 Buff. I/O : 1161 Car. us. : 150 Open files :
*ADDP000
Status on 17-DEC-1984 04:29:32.11 Elapsed CPU : 0 00:03:29.60 Buff. I/O : 1165 Car. us. : 300 Open files :
XADAC-M-EMDIACS, Ada compilation completed with 2 diagnostics
Status on 17-DEC-1984 04:29:52.94 Elapsed CPU : 0 00:03:43.70 Buff. I/O : 1230 Car. us. : 150 Open files :
*ADDP000
Status on 17-DEC-1984 04:29:53.27 Elapsed CPU : 0 00:03:43.94 Buff. I/O : 1243 Car. us. : 300 Open files :
XADAC-M-EMDIACS, Ada compilation completed with 2 diagnostics
Status on 17-DEC-1984 04:30:02.09 Elapsed CPU : 0 00:03:49.41 Buff. I/O : 1289 Car. us. : 150 Open files :
*end samples
*start links
*ADDP000

```

Table E-3. DEC VAX Ada Compile-time Test Statistic File (Continued)

```

Status on 17-DEC-1986 04:30:03.19 Elapsed CPU : 0 00:03:49.54 Buff. I/O : 1293 Cur. ws. : 300 Open files :
ZACS-I-CL LINKING, invoking the VAX/VMS linker
in module A400000 file PUBLIC:U15554.ALAM.ADA.DEC1A400000.OBJ:1
Status on 17-DEC-1986 04:30:20.01 Elapsed CPU : 0 00:03:51.26 Buff. I/O : 1346 Cur. ws. : 300 Open files :
<AF05306
Status on 17-DEC-1986 04:30:21.00 Elapsed CPU : 0 00:03:51.58 Buff. I/O : 1350 Cur. ws. : 300 Open files :
ZACS-I-CL LINKING, invoking the VAX/VMS linker
in module AF05307 file PUBLIC:U15554.ALAM.ADA.DEC1AF05307.OBJ:1
ZLINK-M-WARNERS, compilation warnings in module AF05306 file PUBLIC:U15554.ALAM.ADA.DEC1AF05306.OBJ:1
ZLINK-M-WARNERS, compilation warnings in module AF05305 file PUBLIC:U15554.ALAM.ADA.DEC1AF05305.OBJ:1
Status on 17-DEC-1986 04:30:39.50 Elapsed CPU : 0 00:03:53.61 Buff. I/O : 1421 Cur. ws. : 150 Open files :
<AD00000
Status on 17-DEC-1986 04:30:39.61 Elapsed CPU : 0 00:03:53.59 Buff. I/O : 1425 Cur. ws. : 150 Open files :
ZACS-I-CL LINKING, invoking the VAX/VMS linker
Status on 17-DEC-1986 04:30:50.53 Elapsed CPU : 0 00:03:55.62 Buff. I/O : 1404 Cur. ws. : 150 Open files :
<AD00000
Status on 17-DEC-1986 04:30:50.79 Elapsed CPU : 0 00:03:55.77 Buff. I/O : 1406 Cur. ws. : 150 Open files :
ZACS-I-CL LINKING, invoking the VAX/VMS linker
Status on 17-DEC-1986 04:31:17.10 Elapsed CPU : 0 00:03:57.71 Buff. I/O : 1545 Cur. ws. : 150 Open files :
<AD00506
Status on 17-DEC-1986 04:31:17.42 Elapsed CPU : 0 00:03:57.88 Buff. I/O : 1553 Cur. ws. : 300 Open files :
ZACS-I-CL LINKING, invoking the VAX/VMS linker
in module AD00505 file PUBLIC:U15554.ALAM.ADA.DEC1AD00505.OBJ:1
ZLINK-M-WARNERS, compilation warnings in module AD00506 file PUBLIC:U15554.ALAM.ADA.DEC1AD00506.OBJ:1
Status on 17-DEC-1986 04:31:34.91 Elapsed CPU : 0 00:03:59.69 Buff. I/O : 1612 Cur. ws. : 150 Open files :
cond links
total source size
system 109
<AA00000 2
<AA00000 4
<AF00000 20
<AF05305 6
<AF05306 7
<AF05307 7
<AF05308 3
<AC00000 2
<AC00000 17
<AD00000 2
<AD00000 4
<AD00505 8
<AD00506 4
cond source size = 215
total object size
system 368
<AA00000 7
<AA00000 10
<AF00000 62
<AF05305 17
<AF05306 20
<AF05307 20
<AF05308 8
<AC00000 7
<AC00000 122
<AD00000 8
<AD00000 13

```

Table E-3. DEC VAX Ada Compile-time Test Statistic File (Concluded)

```
<A000505 26
<A000506 11
<end object size = 699
<start executable size
<AA00000 59
<AF05308 64
<AG00008 68
<AGM0008 67
<A000506 64
<end executable size = 322
```

Table E-4. ECSPO JOVIAL Compile-time Test Statistic File

```

Working Set /Limit: 150 /Queue: 1500 /Extent: 2500
Argument enabled Authorized Queue: 1500 Authorized Extent: 2500
start compile
system
Status on 17-DEC-1966 04:16:26.60 Elapsed CPU : 0 00:00:06.47 Buff. I/O : 146 Cur. no. : 150 Open files :
File Usage Creation Date/Time

HSC0000DUAS: (JOVIAL.COMTIC.TOOLS.FV.EXT JOVIAL.EXT) Compiler Image 15-FEB-1966 23:20:13
PUBLIC: (UISS54.ALAN.JOVIAL.JOURJOV.CPL:04 Source Module 16-DEC-1966 16:01:04
PUBLIC: (UISS54.ALAN.JOVIAL.JOURJOV.OBJ:11 Object Output 17-DEC-1966 04:16:36
PUBLIC: (UISS54.ALAN.JOVIAL.JOURJOV.CMP:25 Compile Output 17-DEC-1966 04:16:37
256 Source Lines. 145 JOVIAL Statements.
NO MESSAGES.
Compilation Time: CPU TIME = 0:00:07.31 ELAPSED TIME = 00:00:11.20
File Usage Creation Date/Time

HSC0000DUAS: (JOVIAL.COMTIC.TOOLS.FV.EXT JOVIAL.EXT) Compiler Image 15-FEB-1966 23:20:13
PUBLIC: (UISS54.ALAN.JOVIAL.JOVSYS.JOV:121 Source Module 16-DEC-1966 16:01:04
PUBLIC: (UISS54.ALAN.JOVIAL.JOURJOV.CMP:23 Compile Input 17-DEC-1966 04:16:37
PUBLIC: (UISS54.ALAN.JOVIAL.JOVSYS.CMP:13 Compile Input 16-DEC-1966 16:01:04
PUBLIC: (UISS54.ALAN.JOVIAL.JOVSYS.OBJ:11 Object Output 17-DEC-1966 04:17:21
984 Source Lines. 619 JOVIAL Statements.
3 MESSAGES: 3 WARNING
Compilation Time: CPU TIME = 0:00:46.07 ELAPSED TIME = 00:00:45.06
File Usage Creation Date/Time

HSC0000DUAS: (JOVIAL.COMTIC.TOOLS.FV.EXT JOVIAL.EXT) Compiler Image 15-FEB-1966 23:20:13
PUBLIC: (UISS54.ALAN.JOVIAL.JOVSYS.CPL:16 Source Module 16-DEC-1966 16:01:04
PUBLIC: (UISS54.ALAN.JOVIAL.JOURJOV.CMP:23 Compile Input 17-DEC-1966 04:16:37
PUBLIC: (UISS54.ALAN.JOVIAL.JOVSYS.OBJ:11 Object Output 17-DEC-1966 04:17:33
PUBLIC: (UISS54.ALAN.JOVIAL.JOVSYS.CMP:14 Compile Output 17-DEC-1966 04:17:33
60 Source Lines. 42 JOVIAL Statements.
NO MESSAGES.
Compilation Time: CPU TIME = 0:00:04.55 ELAPSED TIME = 00:00:08.15
File Usage Creation Date/Time

HSC0000DUAS: (JOVIAL.COMTIC.TOOLS.FV.EXT JOVIAL.EXT) Compiler Image 15-FEB-1966 23:20:13
PUBLIC: (UISS54.ALAN.JOVIAL.JOVSYS.JOV:19 Source Module 16-DEC-1966 16:01:04
PUBLIC: (UISS54.ALAN.JOVIAL.JOURJOV.CMP:23 Compile Input 17-DEC-1966 04:16:37
PUBLIC: (UISS54.ALAN.JOVIAL.JOVSYS.CMP:14 Compile Input 17-DEC-1966 04:17:33
PUBLIC: (UISS54.ALAN.JOVIAL.JOVSYS.OBJ:11 Object Output 17-DEC-1966 04:17:47
50 Source Lines. 21 JOVIAL Statements.
NO MESSAGES.
Compilation Time: CPU TIME = 0:00:06.02 ELAPSED TIME = 00:00:12.70
Status on 17-DEC-1966 04:17:54.34 Elapsed CPU : 0 00:01:15.45 Buff. I/O : 445 Cur. no. : 150 Open files :
cJADP000
Status on 17-DEC-1966 04:17:54.57 Elapsed CPU : 0 00:01:15.06 Buff. I/O : 447 Cur. no. : 150 Open files :
File Usage Creation Date/Time

HSC0000DUAS: (JOVIAL.COMTIC.TOOLS.FV.EXT JOVIAL.EXT) Compiler Image 15-FEB-1966 23:20:13
PUBLIC: (UISS54.ALAN.JOVIAL.JADP000.CPL:17 Source Module 16-DEC-1966 16:01:04
PUBLIC: (UISS54.ALAN.JOVIAL.JOURJOV.CMP:23 Compile Input 17-DEC-1966 04:16:37
PUBLIC: (UISS54.ALAN.JOVIAL.JADP000.OBJ:11 Object Output 17-DEC-1966 04:18:03
PUBLIC: (UISS54.ALAN.JOVIAL.JADP000.CMP:13 Compile Output 17-DEC-1966 04:18:04

```

Table E-4. ECSP0 JOVIAL Compile-time Test Statistic File (Continued)

```

WSC00010UAS:(JOVIAL.COMFIG.TOOLS.FV.(XHE JOVIAL.(XHE:1 Compiler Image 15-FEB-1966 23:20:13
PUBLIC:U15554.ALAN.JOVIAL.IJ00P000.CPL:114 Source Module 15-DEC-1966 04:16:53
PUBLIC:U15554.ALAN.JOVIAL.IJ00P000.CMP:23 Compiler Input 17-DEC-1966 04:16:57
PUBLIC:U15554.ALAN.JOVIAL.IJ00P000.OBJ:1 Object Output 17-DEC-1966 04:21:40
PUBLIC:U15554.ALAN.JOVIAL.IJ00P000.CMP:18 Compiler Input 17-DEC-1966 04:21:40
34 Source Lines. 20 JOVIAL Statements.
NO MESSAGES.
Compilation Time: CPU TIME = 0:00:05.15 ELAPSED TIME = 00:00:06.06
Status on 17-DEC-1966 04:21:42.90 Elapsed CPU : 0 00:03:34.50 Buff. I/O : 1944 Cur. us. : 150 Open files :
CJ000505
Status on 17-DEC-1966 04:21:43.27 Elapsed CPU : 0 00:03:34.71 Buff. I/O : 1948 Cur. us. : 300 Open files :
File Usage Creation Date/Time

WSC00010UAS:(JOVIAL.COMFIG.TOOLS.FV.(XHE JOVIAL.(XHE:1 Compiler Image 15-FEB-1966 23:20:13
PUBLIC:U15554.ALAN.JOVIAL.IJ000505.JOV:23 Source Module 15-DEC-1966 17:11:55
PUBLIC:U15554.ALAN.JOVIAL.IJ00P000.CMP:23 Compiler Input 17-DEC-1966 04:16:57
PUBLIC:U15554.ALAN.JOVIAL.IJ00P000.CMP:18 Compiler Input 17-DEC-1966 04:21:40
PUBLIC:U15554.ALAN.JOVIAL.IJ00P000.CMP:14 Compiler Input 17-DEC-1966 04:17:53
PUBLIC:U15554.ALAN.JOVIAL.IJ000505.OBJ:1 Object Output 17-DEC-1966 04:21:54
92 Source Lines. 47 JOVIAL Statements.
9 MESSAGES: 9 INFORMATION
Compilation Time: CPU TIME = 0:00:10.00 ELAPSED TIME = 00:00:10.09
Status on 17-DEC-1966 04:21:50.99 Elapsed CPU : 0 00:03:47.79 Buff. I/O : 2025 Cur. us. : 150 Open files :
CJ000506
Status on 17-DEC-1966 04:21:59.23 Elapsed CPU : 0 00:03:47.95 Buff. I/O : 2029 Cur. us. : 300 Open files :
File Usage Creation Date/Time

WSC00010UAS:(JOVIAL.COMFIG.TOOLS.FV.(XHE JOVIAL.(XHE:1 Compiler Image 15-FEB-1966 23:20:13
PUBLIC:U15554.ALAN.JOVIAL.IJ000506.JOV:14 Source Module 15-DEC-1966 17:11:59
PUBLIC:U15554.ALAN.JOVIAL.IJ00P000.CMP:23 Compiler Input 17-DEC-1966 04:16:57
PUBLIC:U15554.ALAN.JOVIAL.IJ00P000.CMP:18 Compiler Input 17-DEC-1966 04:21:40
PUBLIC:U15554.ALAN.JOVIAL.IJ00P000.CMP:14 Compiler Input 17-DEC-1966 04:17:53
PUBLIC:U15554.ALAN.JOVIAL.IJ000506.OBJ:1 Object Output 17-DEC-1966 04:22:00
78 Source Lines. 40 JOVIAL Statements.
9 MESSAGES: 9 INFORMATION
Compilation Time: CPU TIME = 0:00:06.39 ELAPSED TIME = 00:00:10.34
Status on 17-DEC-1966 04:22:11.20 Elapsed CPU : 0 00:03:55.53 Buff. I/O : 2104 Cur. us. : 150 Open files :
card compiler
card linker
CJ000000
Status on 17-DEC-1966 04:22:11.50 Elapsed CPU : 0 00:03:55.47 Buff. I/O : 2110 Cur. us. : 300 Open files :
Status on 17-DEC-1966 04:22:20.05 Elapsed CPU : 0 00:03:59.07 Buff. I/O : 2109 Cur. us. : 150 Open files :
CJ000500
Status on 17-DEC-1966 04:22:21.12 Elapsed CPU : 0 00:04:00.00 Buff. I/O : 2193 Cur. us. : 300 Open files :
Status on 17-DEC-1966 04:22:30.04 Elapsed CPU : 0 00:04:05.01 Buff. I/O : 2200 Cur. us. : 150 Open files :
CJ000000
Status on 17-DEC-1966 04:22:30.79 Elapsed CPU : 0 00:04:05.15 Buff. I/O : 2292 Cur. us. : 300 Open files :
Status on 17-DEC-1966 04:22:40.03 Elapsed CPU : 0 00:04:10.12 Buff. I/O : 2302 Cur. us. : 150 Open files :
CJ000000
Status on 17-DEC-1966 04:22:40.37 Elapsed CPU : 0 00:04:10.27 Buff. I/O : 2307 Cur. us. : 300 Open files :
Status on 17-DEC-1966 04:22:49.61 Elapsed CPU : 0 00:04:15.31 Buff. I/O : 2477 Cur. us. : 150 Open files :
CJ000506
Status on 17-DEC-1966 04:22:49.91 Elapsed CPU : 0 00:04:15.20 Buff. I/O : 2481 Cur. us. : 300 Open files :
Status on 17-DEC-1966 04:22:50.53 Elapsed CPU : 0 00:04:19.72 Buff. I/O : 2555 Cur. us. : 150 Open files :
card linker

```

Table E-4. ECSP0 JOVIAL Compile-time Test Statistic File (Concluded)

```
<start source size
<system 104
<JA0P000 2
<JA00000 3
<JF0P000 21
<JF05305 7
<JF05306 9
<JF05307 9
<JF05308 3
<JG0P000 2
<JG00008 43
<JGM0008 2
<J00P000 4
<J000505 8
<J000506 4
<end source size = 221
<start object size
<system 52
<JA0P000 3
<JA00000 2
<JF0P000 23
<JF05305 5
<JF05306 6
<JF05307 6
<JF05308 1
<JG0P000 3
<JG00008 20
<JGM0008 1
<J00P000 4
<J000505 5
<J000506 2
<end object size = 133
<start executable size
<JA00000 29
<JF05308 31
<JG00008 32
<JGM0008 32
<J000506 31
<end executable size = 155
```



Table E-5. ACPS Compilation Comparator Formatted Ada File

```

COMPILATION - SHOW STATUS STATISTICS(UNIT 8)

FILES(S) WALL-CLOCK CPU-TIME BUFIO DIRIO PAGE-FAULTS

system 121.27 99.31 153 238 13661
AADP000 7.31 3.59 36 49 1982
AA00000 9.37 4.74 45 60 2281
AF0P000 12.15 8.11 37 58 2521
AF05305 16.08 8.11 75 113 3175
AF05306 16.05 8.85 73 100 3215
AF05307 16.37 8.95 73 104 3305
AF05308 8.80 4.18 46 60 2168
AG0P000 7.73 3.80 37 53 2574
AG00008 62.84 38.96 240 335 15671
AGM0008 8.64 4.42 42 59 2277
ADDP000 8.26 4.15 37 63 2440
AD00505 20.85 14.10 73 109 3636
AD00506 9.62 5.47 46 62 2306

totals 325.34 216.74 1013 1463 61212

```

```

LINKAGE EDIT - SHOW STATUS STATISTICS(UNIT 8)

FILES(S) WALL-CLOCK CPU-TIME BUFIO DIRIO PAGE-FAULTS

AA00000 17.62 1.70 53 49 489
AF05308 18.50 2.03 71 58 484
AG00008 18.72 2.03 59 49 701
AGM0008 18.31 1.94 60 51 493
AD00506 17.49 1.81 59 49 499

totals 90.64 9.51 302 256 2666

```

Table E-5. ACPS Compilation Comparator Formatted Ada File (Continued)

SOURCE MODULE- FILE SIZE STATISTICS(UNIT 8)

FILE(S) SIZE(BLOCKS)

|         |     |
|---------|-----|
| system  | 109 |
| AA0P000 | 2   |
| AA00000 | 4   |
| AF0P000 | 20  |
| AF05305 | 6   |
| AF05306 | 7   |
| AF05307 | 7   |
| AF05308 | 3   |
| AG0P000 | 2   |
| AG00008 | 37  |
| AGM0008 | 2   |
| A00P000 | 4   |
| A000505 | 8   |
| A000506 | 4   |
| totals  | 215 |

OBJECT MODULE- FILE SIZE STATISTICS(UNIT 8)

FILE(S) SIZE(BLOCKS)

|         |     |
|---------|-----|
| system  | 368 |
| AA0P000 | 7   |
| AA00000 | 10  |
| AF0P000 | 62  |
| AF05305 | 17  |
| AF05306 | 20  |
| AF05307 | 20  |
| AF05308 | 8   |
| AG0P000 | 7   |
| AG00008 | 122 |
| AGM0008 | 8   |
| A00P000 | 13  |
| A000505 | 26  |
| A000506 | 11  |
| totals  | 699 |

Table E-5. ACPS Compilation Comparator Formatted Ada File (Concluded)

| LOAD MODULE - FILE SIZE STATISTICS(UNIT 8) |              |
|--------------------------------------------|--------------|
| FILE(S)                                    | SIZE(BLOCKS) |
| AA00000                                    | 59           |
| AF05308                                    | 64           |
| AG00008                                    | 68           |
| AGM0008                                    | 67           |
| AD00506                                    | 64           |
| totals                                     | 322          |

Table E-6. ACPS Compilation Comparator Formatted JOVIAL File

```

COMPILATION - SHOW STATUS STATISTICS(UNIT 7)

FILES(S) WALL-CLOCK CPU-TIME BUFIO DIRIO PAGE-FAULTS

system 89.76 68.98 319 302 6410
JA0P000 9.65 5.07 73 56 1064
JA00000 10.47 6.05 78 57 1323
JF0P000 21.81 17.00 73 62 1093
JF05305 21.28 12.68 149 105 2472
JF05306 22.69 13.99 150 109 3071
JF05307 22.87 13.80 149 106 2537
JF05308 9.80 5.67 82 51 1386
JG0P000 9.35 5.17 73 54 1120
JG00008 75.97 48.44 470 328 8218
JGM0008 10.23 5.78 82 50 1326
J00P000 10.43 6.10 73 52 1293
J000505 15.72 11.08 77 55 1436
J000506 11.97 7.40 77 51 1212

totals 342.00 227.21 1925 1438 33961

```

```

LINKAGE EDIT - SHOW STATUS STATISTICS(UNIT 7)

FILES(S) WALL-CLOCK CPU-TIME BUFIO DIRIO PAGE-FAULTS

JA00000 9.35 4.40 79 140 696
JF05308 9.42 5.01 95 137 742
JG00008 9.24 4.97 90 137 747
JGM0008 9.24 4.84 90 137 722
J000506 8.62 4.44 74 127 828

totals 45.87 23.66 428 678 3735

```

Table E-6. ACPS Compilation Comparator Formatted JOVIAL File (Continued)

SOURCE MODULE- FILE SIZE STATISTICS(UNIT 7)

FILE(S) SIZE(BLOCKS)

|         |     |
|---------|-----|
| system  | 104 |
| JAOP000 | 2   |
| JA00000 | 3   |
| JFOP000 | 21  |
| JF05305 | 7   |
| JF05306 | 9   |
| JF05307 | 9   |
| JF05308 | 3   |
| JG0P000 | 2   |
| JG00008 | 43  |
| JGM0008 | 2   |
| JOOP000 | 4   |
| JO00505 | 8   |
| JO00506 | 4   |
| totals  | 221 |

OBJECT MODULE- FILE SIZE STATISTICS(UNIT 7)

FILE(S) SIZE(BLOCKS)

|         |     |
|---------|-----|
| system  | 52  |
| JAOP000 | 3   |
| JA00000 | 2   |
| JFOP000 | 23  |
| JF05305 | 5   |
| JF05306 | 6   |
| JF05307 | 6   |
| JF05308 | 1   |
| JG0P000 | 3   |
| JG00008 | 20  |
| JGM0008 | 1   |
| JOOP000 | 4   |
| JO00505 | 5   |
| JO00506 | 2   |
| totals  | 133 |

Table E-6. ACPS Compilation Comparator Formatted JOVIAL File (Concluded)

| LOAD MODULE - FILE SIZE STATISTICS(UNIT 7) |              |
|--------------------------------------------|--------------|
| FILE(S)                                    | SIZE(BLOCKS) |
| JA00000                                    | 29           |
| JF05308                                    | 31           |
| JG00008                                    | 32           |
| JGM0008                                    | 32           |
| JO00506                                    | 31           |
| totals                                     | 155          |

**Table E-7. ACPS Compilation Comparator Comparison Output File**

**The Aerospace Corporation**

**input test identification(< 55 characters):**

**>**

**VAX Ada vs ECSPD JOVIAL(opt on)**

**which operating system(vms,...)?**

**>**

**vms**

Table E-7. ACPS Compilation Comparator Comparison Output File (Continued)

VAX Ada vs ECSPD JOVIAL(apt on)

FILES(S) WALL-CLOCK CPU-TIME BUFIO DIRIO PAGE-FAULTS

|         |      |      |      |      |      |
|---------|------|------|------|------|------|
| system  | 1.35 | 1.44 | 0.48 | 0.79 | 2.13 |
| AAOP000 | 0.76 | 0.71 | 0.49 | 0.88 | 1.86 |
| AAO0000 | 0.89 | 0.78 | 0.58 | 1.05 | 1.72 |
| AFOP000 | 0.56 | 0.68 | 0.51 | 0.94 | 2.31 |
| AF05305 | 0.76 | 0.64 | 0.50 | 1.08 | 1.28 |
| AF05306 | 0.71 | 0.63 | 0.49 | 0.92 | 1.05 |
| AF05307 | 0.72 | 0.65 | 0.49 | 0.98 | 1.30 |
| AF05308 | 0.90 | 0.74 | 0.56 | 1.18 | 1.56 |
| AGOP000 | 0.83 | 0.74 | 0.51 | 0.98 | 2.30 |
| AG00008 | 0.83 | 0.80 | 0.51 | 1.02 | 1.91 |
| AGH0008 | 0.84 | 0.76 | 0.51 | 1.18 | 1.72 |
| ADOP000 | 0.79 | 0.68 | 0.51 | 1.21 | 1.89 |
| AD00505 | 1.33 | 1.27 | 0.95 | 1.98 | 2.53 |
| AD00506 | 0.80 | 0.74 | 0.60 | 1.22 | 1.90 |

COMPILATION totals:

0.95 0.95 0.53 1.02 1.80

COMPILATION COMPARISONS(UNIT 8 / UNIT 7)



Table E-7. ACPS Compilation Comparator Comparison Output File (Continued)

VAX Ada vs ECSPD JOVIAL (opt on)

FILES(S) WALL-CLOCK CPU-TIME BUFIO DIRIO PAGE-FAULTS

|          |      |      |      |      |      |
|----------|------|------|------|------|------|
| AA00000  | 1.88 | 0.39 | 0.67 | 0.35 | 0.70 |
| AF05308  | 1.96 | 0.41 | 0.75 | 0.42 | 0.65 |
| AG00008  | 2.03 | 0.41 | 0.66 | 0.36 | 0.94 |
| AGP00008 | 1.98 | 0.40 | 0.67 | 0.37 | 0.68 |
| AD00506  | 2.03 | 0.41 | 0.80 | 0.39 | 0.60 |

LINKAGE EDIT totals:

|      |      |      |      |      |
|------|------|------|------|------|
| 1.98 | 0.40 | 0.71 | 0.38 | 0.71 |
|------|------|------|------|------|

LINKAGE EDIT COMPARISONS (UNIT 8 / UNIT 7)

Table E-7. ACPS Compilation Comparator Comparison Output File (Continued)

VAX Ada vs ECSPD JOVIAL(apt on)

| FILE(S) | SIZE(BLOCKS) |
|---------|--------------|
| system  | 1.05         |
| AA0P000 | 1.00         |
| AA00000 | 1.33         |
| AF0P000 | 0.95         |
| AF05305 | 0.04         |
| AF05306 | 0.78         |
| AF05307 | 0.78         |
| AF05308 | 1.00         |
| AG0P000 | 1.00         |
| AG00000 | 0.04         |
| AGM0000 | 1.00         |
| AD0P000 | 1.00         |
| AD00505 | 1.00         |
| AD00506 | 1.00         |

SOURCE MODULE totals:

0.97

SOURCE MODULE FILE SIZE COMPARISONS: UNIT 6 / UNIT 71

Table E-7. ACPS Compilation Comparator Comparison Output File (Continued)

VAX Ada vs ECSPD JOVIAL(eps) m)

| FILE(S) | SIZE(BLOCKS) |
|---------|--------------|
| system  | 7.00         |
| AA0P000 | 2.33         |
| AA00000 | 5.00         |
| AF0P000 | 2.70         |
| AF05105 | 3.40         |
| AF05106 | 3.33         |
| AF05107 | 3.33         |
| AF05108 | 0.00         |
| AG0P000 | 2.33         |
| AG00000 | 6.10         |
| AG00008 | 0.00         |
| AD0P000 | 3.25         |
| AD00505 | 5.20         |
| AD00506 | 5.50         |

OBJECT MODULE totals:

5.26

Table E-7. ACPS Compilation Comparator Comparison Output File (Concluded)

```

VAX Ada vs ECSPD JOVIAL (opt on)

FILE(S) SIZE(BLOCKS)

AA00000 2.03
AF05100 2.06
AC00000 2.13
AD00000 2.09
AD00500 2.06

LOAD MODULE totals:

 2.00

```

Table E-8. DEC VAX Ada Run-time Test Statistic File

```

Marking Set /Limit: 850 /Quota: 850 /Extent: 2500
Adjustment disabled Authorized Quota: 3500 Authorized Extent: 2500
Status on 24-DEC-1986 04:53:21.19 Elapsed CPU : 0 00:17:37.75 Buff. I/O : 2922 Cur. no. : 850 Open files :
<A000000 0.000000 1 0 0 0 0 3 317640 007623 277 90
1 -1
<A000000 3.319946 9990 332 0 0 0 3 317640 007623 277 90
<A000000 0.000213 0 30 0 0 0 3 317640 007623 277 90
2 216
Status on 24-DEC-1986 04:53:28.07 Elapsed CPU : 0 00:17:43.52 Buff. I/O : 2981 Cur. no. : 850 Open files :
<A705305 0.000000 1 0 0 0 0 3 310976 007623 277 99
1 -1
<A705305 3.559940 7690 354 0 0 0 3 310976 007623 277 99
<A705306 0.000000 1 0 0 0 0 3 310976 007623 277 99
1 -1
<A705306 5.739940 7690 573 0 0 0 3 310976 007623 277 99
<A755306 2.379943 7690 217 0 0 0 0 0 0 0 0
1 -1
<A705307 0.000000 1 0 0 0 0 3 310976 007623 277 99
1 -1
<A705307 5.019946 7690 302 0 0 0 3 310976 007623 277 99
<A755307 2.259949 7690 224 0 0 0 0 0 0 0 0
1 -1
<A000000 0.000000 1 0 0 0 0 3 310976 007623 277 99
<A000000 1.419943 1290 342 225 0 0 3 327340 007623 243 50
<A000000 0.001211 0 30 15 0 0 3 310976 007623 277 99
2 1231
<A000507 0.000000 1 0 0 0 0 3 310976 007623 297 00
1 -1
<A000507 0.439941 9990 45 0 0 0 3 310976 007623 297 00

*** Elapsed time in above test is too short (< 100 times clock granularity)
<A000500 0.000000 1 0 0 0 0 3 310976 007623 297 00
1 -1
<A000500 3.759949 9990 375 0 0 0 3 310976 007623 297 00
<A0C0500 0.506676 0 033 100 100 100 100 100 100 100
1 -1
Status on 24-DEC-1986 04:54:01.22 Elapsed CPU : 0 00:18:10.39 Buff. I/O : 3144 Cur. no. : 850 Open files :

```

Table E-9. ECSP0 JOVIAL Run-time Test Statistic File

```

Working Set /Limit= 850 /Quota= 850 /Extent= 2500
Adjustment disabled Authorized Quota= 1500 Authorized Extent= 2500
Status on 74-DEC-1964 04:54:06.27 Elapsed CPU : 0 00:10:12.03 Buff. I/O : 3216 Cur. no. : 850 Open files :
CJ000000 0.000000 1 0 0 0 0 3 119296 005007 259 67
1 22
CJ000000 1.030000 9998 193 0 0 0 3 119296 005007 259 67
CJ000000 0.000203 0 20 0 0 0 3 119296 005007 259 67
2 210 216
JOVIAL STOP -- TERMINATION CODE IS 0
Status on 74-DEC-1964 04:54:12.28 Elapsed CPU : 0 00:10:16.95 Buff. I/O : 3275 Cur. no. : 850 Open files :
CJ05305 0.000000 1 0 0 0 0 3 120320 005007 270 69
1 159
CJ05305 2.570000 7998 257 0 0 0 3 120320 005007 270 69
CJ05306 0.000000 1 0 0 0 0 3 120320 005007 270 69
1 250
CJ05306 3.020000 7998 302 0 0 0 3 120320 005007 270 69
CJ05306 0.450000 7998 45 0 0 0 0 0 0 0 0
1 91
*** elapsed time in above test is too short(100 times clock granularity)
CJ05307 0.000000 1 0 0 0 0 3 120320 005007 270 69
1 249
CJ05307 2.040000 7998 204 0 0 0 3 120320 005007 270 69
CJ05307 0.209999 7998 29 0 0 0 0 0 0 0 0
1 90
*** elapsed time in above test is too short(100 times clock granularity)
JOVIAL STOP -- TERMINATION CODE IS 0
CJ000000 0.000000 1 0 4 0 0 3 131072 005007 272 58
CJ000000 0.050000 1798 85 0 0 0 3 131072 005007 272 58
*** elapsed time in above test is too short(100 times clock granularity)
JOVIAL STOP -- TERMINATION CODE IS 0
CJ000000 0.000000 0 10 4 0 0 3 131072 005007 280 57
2 2396 241
JOVIAL STOP -- TERMINATION CODE IS 0
CJ000507 0.000000 1 0 0 0 0 3 120320 005007 269 61
1 81
CJ000507 0.690000 9998 69 0 0 0 3 120320 005007 269 61
*** elapsed time in above test is too short(100 times clock granularity)
CJ000508 0.000000 1 0 0 0 0 3 120320 005007 269 61
1 795
CJ000508 2.780000 9998 278 0 0 0 3 120320 005007 269 61
CJ000508 4.020906 0 402 100 100 100 100 100 100 100
1 870
JOVIAL STOP -- TERMINATION CODE IS 0
Status on 74-DEC-1964 04:54:36.09 Elapsed CPU : 0 00:10:35.14 Buff. I/O : 3420 Cur. no. : 850 Open files :

```

Table E-10. CEEXEC Formatted VAX Ada Input File without VMS Statistics

| VAX Ada vs ECSPD JOVIAL(opt on,no VMS)       |           |            | BENCHMARK TEST RESULTS: ADA       |      |    |    |    | UNIT( 8 ) |
|----------------------------------------------|-----------|------------|-----------------------------------|------|----|----|----|-----------|
| TEST-ID                                      | WALL-TIME | ITERATIONS | RUN STATISTICS(0*=NOT APPLICABLE) |      |    |    |    |           |
| AA00000                                      | 0.000000  | 1          | 0*                                | 0*   | 0* | 0* | 0* | 0*        |
| AA00000                                      | 3.319946  | 99998      | 0*                                | 0*   | 0* | 0* | 0* | 0*        |
| AA00000                                      | 0.000213  | 0          | 263                               | 214  | 0* | 0* | 0* | 0*        |
| AF05305                                      | 0.000000  | 1          | 0*                                | 0*   | 0* | 0* | 0* | 0*        |
| AF05305                                      | 1.070055  | 74998      | 0*                                | 0*   | 0* | 0* | 0* | 0*        |
| AF05306                                      | 0.000000  | 1          | 0*                                | 0*   | 0* | 0* | 0* | 0*        |
| AF05306                                      | 3.250047  | 74998      | 0*                                | 0*   | 0* | 0* | 0* | 0*        |
| AFS5306                                      | 2.179993  | 74998      | 0*                                | 0*   | 0* | 0* | 0* | 0*        |
| AF05307                                      | 0.000000  | 1          | 0*                                | 0*   | 0* | 0* | 0* | 0*        |
| AF05307                                      | 3.330003  | 74998      | 0*                                | 0*   | 0* | 0* | 0* | 0*        |
| AFS5307                                      | 2.259949  | 74998      | 0*                                | 0*   | 0* | 0* | 0* | 0*        |
| AG00008                                      | 0.000000  | 1          | 0*                                | 0*   | 0* | 0* | 0* | 0*        |
| AG00008                                      | 1.376889  | 1298       | 0*                                | 0*   | 0* | 0* | 0* | 0*        |
| AGM0008                                      | 0.000998  | 0          | 3264                              | 1017 | 0* | 0* | 0* | 0*        |
| AO00507                                      | 0.000000  | 1          | 0*                                | 0*   | 0* | 0* | 0* | 0*        |
| AO00507                                      | 0.108006  | 9998       | 0*                                | 0*   | 0* | 0* | 0* | 0*        |
| **** elapsed time in above test is too short |           |            |                                   |      |    |    |    |           |
| AO00508                                      | 0.000000  | 1          | 0*                                | 0*   | 0* | 0* | 0* | 0*        |
| AO00508                                      | 3.428014  | 9998       | 0*                                | 0*   | 0* | 0* | 0* | 0*        |
| AOC0508                                      | 8.546476  | 0          | 0*                                | 0*   | 0* | 0* | 0* | 0*        |

Table E-11. CEEXEC Formatted ECSPO JOVIAL Input File without VMS Statistics

VAX Ada vs ECSPO JOVIAL(opt on,no VMS)

BENCHMARK TEST RESULTS: JOVIAL UNIT( 7)

| TEST-ID                                      | WALL-TIME | ITERATIONS | RUN STATISTICS(0*=NOT APPLICABLE) |     |    |    |    |  |
|----------------------------------------------|-----------|------------|-----------------------------------|-----|----|----|----|--|
| JA00000                                      | 0.000000  | 1          | 22                                | 0*  | 0* | 0* | 0* |  |
| JA00000                                      | 1.930000  | 99998      | 0*                                | 0*  | 0* | 0* | 0* |  |
| JAM0000                                      | 0.000203  | 0          | 218                               | 214 | 0* | 0* | 0* |  |
| JF05305                                      | 0.000000  | 1          | 137                               | 0*  | 0* | 0* | 0* |  |
| JF05305                                      | 1.122510  | 74998      | 0*                                | 0*  | 0* | 0* | 0* |  |
| JF05306                                      | 0.000000  | 1          | 228                               | 0*  | 0* | 0* | 0* |  |
| JF05306                                      | 1.572510  | 74998      | 0*                                | 0*  | 0* | 0* | 0* |  |
| JFS5306                                      | 0.450000  | 74998      | 91                                | 0*  | 0* | 0* | 0* |  |
| **** elapsed time in above test is too short |           |            |                                   |     |    |    |    |  |
| JF05307                                      | 0.000000  | 1          | 227                               | 0*  | 0* | 0* | 0* |  |
| JF05307                                      | 1.412510  | 74998      | 0*                                | 0*  | 0* | 0* | 0* |  |
| JFS5307                                      | 0.289999  | 74998      | 90                                | 0*  | 0* | 0* | 0* |  |
| **** elapsed time in above test is too short |           |            |                                   |     |    |    |    |  |
| JG00008                                      | 0.000000  | 1          | 0*                                | 0*  | 0* | 0* | 0* |  |
| JG00008                                      | 0.824948  | 1298       | 0*                                | 0*  | 0* | 0* | 0* |  |
| **** elapsed time in above test is too short |           |            |                                   |     |    |    |    |  |
| JGM0008                                      | 0.000637  | 0          | 2178                              | 627 | 0* | 0* | 0* |  |
| JO00507                                      | 0.000000  | 1          | 59                                | 0*  | 0* | 0* | 0* |  |
| JO00507                                      | 0.497035  | 9998       | 0*                                | 0*  | 0* | 0* | 0* |  |
| **** elapsed time in above test is too short |           |            |                                   |     |    |    |    |  |
| JO00508                                      | 0.000000  | 1          | 683                               | 0*  | 0* | 0* | 0* |  |
| JO00508                                      | 2.587035  | 9998       | 0*                                | 0*  | 0* | 0* | 0* |  |
| JOC0508                                      | 4.028986  | 0          | 870                               | 0*  | 0* | 0* | 0* |  |



Table E-12. CEXEC Comparison Output File without VMS Statistics

The Aerospace Corporation

```
read operating system dependent status records(yes/no)?
>
no
read operating system dependent fields(yes/no)?
>
no
input test title
>
VAX Ada vs ECSPD JOVIAL(opt on,no VMS)
input minimum test time in seconds(e.g. 1.1):
>
1.0
```

Table E-12. CEXEC Comparison Output File without VMS Statistics  
(Continued)

| VAX Ada vs ECSP0 JOVIAL (opt on, no VMS)                  |           |                                     |      |      |      |      |
|-----------------------------------------------------------|-----------|-------------------------------------|------|------|------|------|
| BENCHMARK TEST COMPARISON: UNIT 01ADA 1 / UNIT 71JOVIAL 1 |           |                                     |      |      |      |      |
| TEST-ID                                                   | WALL-TIME | RUN STATISTICS (1.0=NOT APPLICABLE) |      |      |      |      |
| AA00000                                                   | 1.00      | 1.00                                | 1.00 | 1.00 | 1.00 | 1.00 |
| AA00000                                                   | 1.72      | 1.00                                | 1.00 | 1.00 | 1.00 | 1.00 |
| AA00000                                                   | 1.05      | 1.21                                | 1.00 | 1.00 | 1.00 | 1.00 |
| AF05305                                                   | 1.00      | 1.00                                | 1.00 | 1.00 | 1.00 | 1.00 |
| AF05305                                                   | 0.95      | 1.00                                | 1.00 | 1.00 | 1.00 | 1.00 |
| AF05306                                                   | 1.00      | 1.00                                | 1.00 | 1.00 | 1.00 | 1.00 |
| AF05306                                                   | 2.07      | 1.00                                | 1.00 | 1.00 | 1.00 | 1.00 |
| AF05306                                                   | 4.04      | 1.00                                | 1.00 | 1.00 | 1.00 | 1.00 |
| AF05307                                                   | 1.00      | 1.00                                | 1.00 | 1.00 | 1.00 | 1.00 |
| AF05307                                                   | 2.36      | 1.00                                | 1.00 | 1.00 | 1.00 | 1.00 |
| AF05307                                                   | 7.79      | 1.00                                | 1.00 | 1.00 | 1.00 | 1.00 |
| AG00000                                                   | 1.00      | 1.00                                | 1.00 | 1.00 | 1.00 | 1.00 |
| AG00000                                                   | 1.67      | 1.00                                | 1.00 | 1.00 | 1.00 | 1.00 |
| AG00000                                                   | 1.57      | 1.50                                | 1.62 | 1.00 | 1.00 | 1.00 |
| AO00507                                                   | 1.00      | 1.00                                | 1.00 | 1.00 | 1.00 | 1.00 |
| AO00507                                                   | 0.22      | 1.00                                | 1.00 | 1.00 | 1.00 | 1.00 |
| AO00508                                                   | 1.00      | 1.00                                | 1.00 | 1.00 | 1.00 | 1.00 |
| AO00508                                                   | 1.33      | 1.00                                | 1.00 | 1.00 | 1.00 | 1.00 |
| AO00508                                                   | 2.12      | 1.00                                | 1.00 | 1.00 | 1.00 | 1.00 |
| test comparison totals:                                   |           |                                     |      |      |      |      |
| micro                                                     | 1.57      | 1.50                                | 1.62 | 1.00 | 1.00 | 1.00 |
| 1 iter                                                    | 1.00      | 1.00                                | 1.00 | 1.00 | 1.00 | 1.00 |
| >1 iter                                                   | 1.52      | 1.00                                | 1.00 | 1.00 | 1.00 | 1.00 |
| diff.                                                     | 0.00      | 1.00                                | 1.00 | 1.00 | 1.00 | 1.00 |

Table E-13. EXEC Formatted VAX Ada Input File with VMS Statistics

| VAX Ada vs ECSPD JOVIAL (impl on)            |           |            | BENCHMARK TEST RESULTS: ADA (UNIT 8) |         |       |       |     |                |         |         |       |       |
|----------------------------------------------|-----------|------------|--------------------------------------|---------|-------|-------|-----|----------------|---------|---------|-------|-------|
| TEST-ID                                      | WALL-TIME | ITERATIONS | RUN STATISTICS (00=NOT APPLICABLE)   |         |       |       |     | VMS STATISTICS |         |         |       |       |
|                                              |           |            | CPUTIM                               | PAGEFLT | BUFI0 | DIRI0 |     | FILENT         | PDSpace | PISpace | PPCMT | SPCMT |
| AA00000                                      | 0.000000  | 1          | 00                                   | 00      | 00    | 00    | 00  | 3              | 317440  | 007423  | 277   | 90    |
| AA00000                                      | 3.319946  | 99998      | 00                                   | 00      | 00    | 00    | 00  | 3              | 317440  | 007423  | 277   | 90    |
| AA00000                                      | 0.000213  | 0          | 263                                  | 332     | 00    | 00    | 00  | 3              | 317440  | 007423  | 277   | 90    |
| AF05305                                      | 0.000000  | 1          | 00                                   | 214     | 00    | 00    | 00  | 3              | 317440  | 007423  | 277   | 90    |
| AF05305                                      | 0.000000  | 1          | 00                                   | 50      | 00    | 00    | 00  | 0              | 1536    | 0       | 0     | 1     |
| AF05305                                      | 1.070055  | 74998      | 00                                   | 00      | 00    | 00    | 00  | 0              | 1536    | 0       | 0     | 1     |
| AF05306                                      | 0.000000  | 1          | 00                                   | 108     | 00    | 00    | 00  | 0              | 1536    | 0       | 0     | 1     |
| AF05306                                      | 0.000000  | 1          | 00                                   | 00      | 00    | 00    | 00  | 0              | 1536    | 0       | 0     | 1     |
| AF05306                                      | 3.250047  | 74998      | 00                                   | 00      | 00    | 00    | 00  | 0              | 1536    | 0       | 0     | 1     |
| AF05306                                      | 2.179993  | 74998      | 00                                   | 325     | 00    | 00    | 00  | 0              | 1536    | 0       | 0     | 1     |
| AF05307                                      | 0.000000  | 1          | 00                                   | 217     | 00    | 00    | 00  | 0              | 0       | 0       | 0     | 0     |
| AF05307                                      | 0.000000  | 1          | 00                                   | 00      | 00    | 00    | 00  | 0              | 1536    | 0       | 0     | 1     |
| AF05307                                      | 3.330003  | 74998      | 00                                   | 00      | 00    | 00    | 00  | 0              | 1536    | 0       | 0     | 1     |
| AF05307                                      | 2.259949  | 74998      | 00                                   | 334     | 00    | 00    | 00  | 0              | 1536    | 0       | 0     | 1     |
| AG00000                                      | 0.000000  | 1          | 00                                   | 226     | 00    | 00    | 00  | 0              | 0       | 0       | 0     | 0     |
| AG00000                                      | 1.376889  | 1298       | 00                                   | 00      | 00    | 00    | 00  | 0              | 70848   | 0       | 44    | -33   |
| AG00000                                      | 0.000998  | 0          | 3264                                 | 110     | 255   | 00    | 00  | 0              | 209920  | 0       | 264   | -40   |
| AG00000                                      | 0.000998  | 0          | 3264                                 | 1017    | 15    | 00    | 00  | 0              | 70336   | 0       | 70    | 4     |
| AG00507                                      | 0.000000  | 1          | 00                                   | 00      | 00    | 00    | 00  | 0              | 2048    | 0       | 20    | -10   |
| AG00507                                      | 0.108006  | 9998       | 00                                   | 00      | 00    | 00    | 00  | 0              | 2048    | 0       | 20    | -10   |
| **** elapsed time in above test is too short |           |            |                                      |         |       |       |     |                |         |         |       |       |
| AG00508                                      | 0.000000  | 1          | 00                                   | 00      | 00    | 00    | 00  | 0              | 2048    | 0       | 20    | -10   |
| AG00508                                      | 3.428014  | 9998       | 00                                   | 00      | 00    | 00    | 00  | 0              | 2048    | 0       | 20    | -10   |
| AG00508                                      | 0.546476  | 0          | 00                                   | 342     | 00    | 00    | 00  | 0              | 2048    | 0       | 20    | -10   |
|                                              |           |            | 031                                  | 100     | 100   | 100   | 100 | 100            | 100     | 100     | 100   | 100   |

Table E-14. CEEXEC Formatted ECSPO JOVIAL Output File with VMS Statistics

| VAX Ada vs ECSPO JOVIAL(opt on)             |           |            | BENCHMARK TEST RESULTS: JOVIAL (UNIT 7) |         |       |       |                |         |         |        |        |     |
|---------------------------------------------|-----------|------------|-----------------------------------------|---------|-------|-------|----------------|---------|---------|--------|--------|-----|
| TEST-ID                                     | WALL-TIME | ITERATIONS | RUN STATISTICS(0=NOT APPLICABLE)        |         |       |       | VMS STATISTICS |         |         |        |        |     |
|                                             |           |            | CPUTIM                                  | PAGEFLT | BUFIO | DIRIO | FILCNT         | PUSPACE | PISPACE | PPGCNT | SPGCNT |     |
| J400000                                     | 0.000000  | 1          | 22                                      | 0       | 0     | 0     | 0              |         |         |        |        |     |
| J400000                                     | 1.930000  | 9998       | 0                                       | 0       | 0     | 0     | 0              | 3       | 119296  | 005087 | 259    | 67  |
| J400000                                     | 0.000203  | 0          | 218                                     | 193     | 0     | 0     | 0              | 3       | 119296  | 005087 | 259    | 67  |
| J705305                                     | 0.000000  | 1          | 137                                     | 214     | 0     | 0     | 0              | 3       | 119296  | 005087 | 259    | 67  |
| J705305                                     | 1.122510  | 74998      | 0                                       | 20      | 0     | 0     | 0              | 0       | 1024    | 0      | 11     | 2   |
| J705306                                     | 0.000000  | 1          | 228                                     | 113     | 0     | 0     | 0              | 0       | 1024    | 0      | 11     | 2   |
| J705306                                     | 1.572510  | 74998      | 0                                       | 0       | 0     | 0     | 0              | 0       | 1024    | 0      | 11     | 2   |
| J735306                                     | 0.450000  | 74998      | 91                                      | 158     | 0     | 0     | 0              | 0       | 1024    | 0      | 11     | 2   |
| *** elapsed time in above test is too short |           |            | 45                                      | 0       | 0     | 0     | 0              | 0       | 0       | 0      | 0      | 0   |
| J705307                                     | 0.000000  | 1          | 227                                     | 0       | 0     | 0     | 0              | 0       | 1024    | 0      | 11     | 2   |
| J705307                                     | 1.412510  | 74998      | 0                                       | 0       | 0     | 0     | 0              | 0       | 1024    | 0      | 11     | 2   |
| J735307                                     | 0.289999  | 74998      | 90                                      | 142     | 0     | 0     | 0              | 0       | 1024    | 0      | 11     | 2   |
| *** elapsed time in above test is too short |           |            | 29                                      | 0       | 0     | 0     | 0              | 0       | 0       | 0      | 0      | 0   |
| J800000                                     | 0.000000  | 1          | 0                                       | 0       | 0     | 0     | 0              | 0       | 11776   | 0      | 13     | -9  |
| J800000                                     | 0.024948  | 1298       | 0                                       | 0       | 0     | 0     | 0              | 0       | 11776   | 0      | 13     | -9  |
| *** elapsed time in above test is too short |           |            | 83                                      | 0       | 0     | 0     | 0              | 0       | 0       | 0      | 0      | 0   |
| J000008                                     | 0.000637  | 0          | 2178                                    | 627     | 0     | 0     | 0              | 0       | 11776   | 0      | -1     | -10 |
| J000507                                     | 0.000000  | 1          | 59                                      | -10     | 0     | 0     | 0              | 0       | 1024    | 0      | 10     | -6  |
| J000507                                     | 0.497035  | 9998       | 0                                       | 0       | 0     | 0     | 0              | 0       | 1024    | 0      | 10     | -6  |
| *** elapsed time in above test is too short |           |            | 50                                      | 0       | 0     | 0     | 0              | 0       | 1024    | 0      | 10     | -6  |
| J000508                                     | 0.000000  | 1          | 683                                     | 0       | 0     | 0     | 0              | 0       | 1024    | 0      | 10     | -6  |
| J000508                                     | 2.587035  | 9998       | 0                                       | 0       | 0     | 0     | 0              | 0       | 1024    | 0      | 10     | -6  |
| J000508                                     | 4.028984  | 0          | 870                                     | 259     | 0     | 0     | 0              | 0       | 1024    | 0      | 10     | -6  |
| J000508                                     |           |            | 402                                     | 100     | 100   | 100   | 100            | 100     | 100     | 100    | 100    | 100 |

Table E-15. CEEXEC Comparison Output File with VMS Statistics

```
read operating system dependant status records(yes/no)?
>
yes
read operating system dependant fields(yes/no)?
>
yes
subtract test routine overhead from operating system stats(yes/no)?
>
yes
which operating system(vms,...)?
>
vms
input test title
>
VAX Ada vs ECSPD JOVIAL(opt on)
input minimum test time in seconds(e.g. 1.1): .
>
1.0
```

Table E-15. CEEXEC Comparison Output File with VMS Statistics (Continued)

| VAX Ada vs ECSP0 JOVIAL(opt on) |           |                                     |         |       |       |        | BENCHMARK TEST COMPARISONS: UNIT SIADA 1 / UNIT 71JOVIAL 1 |                |        |        |      |       |      |       |       |
|---------------------------------|-----------|-------------------------------------|---------|-------|-------|--------|------------------------------------------------------------|----------------|--------|--------|------|-------|------|-------|-------|
| TEST-ID                         | WALL-TIME | RUN STATISTICS(1.00=NOT APPLICABLE) |         |       |       |        |                                                            | VMS STATISTICS |        |        |      |       |      |       |       |
|                                 |           | CPUTIM                              | PAGEFLY | BUFIO | DIRIO | FILENT | POSPACE                                                    | PISPACE        | PPGENT | SPGENT |      |       |      |       |       |
| AA00000                         | 1.00      | 1.00                                | 1.00    | 1.00  | 1.00  | 1.00   | 1.00                                                       | 1.00           | 1.00   | 1.00   | 1.00 | 2.66  | 1.00 | 1.07  | 1.46  |
| AA00000                         | 1.72      | 1.00                                | 1.00    | 1.00  | 1.00  | 1.00   | 1.00                                                       | 1.00           | 1.00   | 1.00   | 1.00 | 2.66  | 1.00 | 1.07  | 1.46  |
| AA00000                         | 1.05      | 1.21                                | 1.00    | 1.00  | 1.00  | 1.00   | 2.50                                                       | 1.00           | 1.00   | 1.00   | 1.00 | 2.66  | 1.00 | 1.07  | 1.46  |
| AF05105                         | 1.00      | 1.00                                | 1.00    | 1.00  | 1.00  | 1.00   | 1.00                                                       | 1.00           | 1.00   | 1.00   | 1.00 | 1.50  | 1.00 | 0.01  | 0.50  |
| AF05105                         | 0.95      | 1.00                                | 1.00    | 1.00  | 1.00  | 1.00   | 1.00                                                       | 1.00           | 1.00   | 1.00   | 1.00 | 1.50  | 1.00 | 0.01  | 0.50  |
| AF05106                         | 1.00      | 1.00                                | 1.00    | 1.00  | 1.00  | 1.00   | 1.00                                                       | 1.00           | 1.00   | 1.00   | 1.00 | 1.50  | 1.00 | 0.01  | 0.50  |
| AF05106                         | 2.07      | 1.00                                | 1.00    | 1.00  | 1.00  | 1.00   | 1.00                                                       | 1.00           | 1.00   | 1.00   | 1.00 | 1.50  | 1.00 | 0.01  | 0.50  |
| AF35106                         | 4.04      | 1.00                                | 1.00    | 1.00  | 1.00  | 1.00   | 1.00                                                       | 1.00           | 1.00   | 1.00   | 1.00 | 1.00  | 1.00 | 1.00  | 1.00  |
| AF05107                         | 1.00      | 1.00                                | 1.00    | 1.00  | 1.00  | 1.00   | 1.00                                                       | 1.00           | 1.00   | 1.00   | 1.00 | 1.50  | 1.00 | 0.01  | 0.50  |
| AF05107                         | 2.36      | 1.00                                | 1.00    | 1.00  | 1.00  | 1.00   | 1.00                                                       | 1.00           | 1.00   | 1.00   | 1.00 | 1.50  | 1.00 | 0.01  | 0.50  |
| AF35107                         | 7.79      | 1.00                                | 1.00    | 1.00  | 1.00  | 1.00   | 1.00                                                       | 1.00           | 1.00   | 1.00   | 1.00 | 1.00  | 1.00 | 1.00  | 1.00  |
| AG00000                         | 1.00      | 1.00                                | 1.00    | 1.00  | 1.00  | 1.00   | 1.00                                                       | 1.50           | 1.00   | 1.00   | 1.00 | 6.70  | 1.00 | 2.64  | 1.00  |
| AG00000                         | 1.67      | 1.00                                | 1.00    | 1.00  | 1.00  | 1.00   | 1.00                                                       | 1.00           | 1.00   | 1.00   | 1.00 | 17.03 | 1.00 | 20.46 | 1.00  |
| AG00000                         | 1.57      | 1.50                                | 1.62    | 1.00  | 1.00  | 1.00   | 1.00                                                       | 3.75           | 1.00   | 1.00   | 1.00 | 6.65  | 1.00 | 99.99 | 1.00  |
| AD00507                         | 1.00      | 1.00                                | 1.00    | 1.00  | 1.00  | 1.00   | 1.00                                                       | 1.00           | 1.00   | 1.00   | 1.00 | 2.00  | 1.00 | 2.00  | 1.00  |
| AD00507                         | 0.22      | 1.00                                | 1.00    | 1.00  | 1.00  | 1.00   | 1.00                                                       | 1.00           | 1.00   | 1.00   | 1.00 | 2.00  | 1.00 | 2.00  | 1.00  |
| AD00508                         | 1.00      | 1.00                                | 1.00    | 1.00  | 1.00  | 1.00   | 1.00                                                       | 1.00           | 1.00   | 1.00   | 1.00 | 2.00  | 1.00 | 2.00  | 1.00  |
| AD00508                         | 1.33      | 1.00                                | 1.00    | 1.00  | 1.00  | 1.00   | 1.00                                                       | 1.00           | 1.00   | 1.00   | 1.00 | 2.00  | 1.00 | 2.00  | 1.00  |
| AD00508                         | 2.12      | 1.00                                | 1.00    | 1.00  | 1.00  | 1.00   | 2.07                                                       | 1.00           | 1.00   | 1.00   | 1.00 | 1.00  | 1.00 | 1.00  | 1.00  |
| test comparison totals:         |           |                                     |         |       |       |        |                                                            |                |        |        |      |       |      |       |       |
| micro                           | 1.57      | 1.50                                | 1.62    | 1.00  | 1.00  | 1.00   | 1.00                                                       | 3.75           | 1.00   | 1.00   | 1.00 | 6.65  | 1.00 | 1.00  | 99.99 |
| 1 iter                          | 1.00      | 1.00                                | 1.00    | 1.00  | 1.00  | 1.00   | 1.00                                                       | 1.50           | 1.00   | 1.00   | 1.00 | 5.10  | 1.00 | 1.30  | 1.00  |
| >1 iter                         | 1.52      | 1.00                                | 1.00    | 1.00  | 1.00  | 1.00   | 1.00                                                       | 1.00           | 1.00   | 1.00   | 1.00 | 12.94 | 1.00 | 4.64  | 1.00  |
| diff.                           | 6.00      | 1.00                                | 1.00    | 1.00  | 1.00  | 1.00   | 1.00                                                       | 1.00           | 1.00   | 1.00   | 1.00 | 1.00  | 1.00 | 1.00  | 1.00  |

Table E-15. CEEXEC Comparison Output File with VMS Statistics (Continued)

| VAX Ada vs ECSPD JOVIAL(opt on) |        |            |          | VMS SHOW STATUS STATISTICS |       |             |
|---------------------------------|--------|------------|----------|----------------------------|-------|-------------|
| I/O-UNIT                        | NUMBER | WALL-CLOCK | CPU-TIME | BUFIO                      | DIRIO | PAGE-FAULTS |
| 7                               | 1      | 6.01       | 4.12     | 57                         | 34    | 736         |
| 8                               | 1      | 7.68       | 5.77     | 59                         | 34    | 792         |
| 7                               | 2      | 23.81      | 18.19    | 155                        | 93    | 1896        |
| 8                               | 2      | 32.35      | 26.87    | 163                        | 93    | 2580        |

Table E-15. CEEXEC Comparison Output File with VMS Statistics (Concluded)

| VAX Ada vs ECSPD JOVIAL (opt on) |            |          | VMS SHOW STATUS COMPARISONS: UNIT 61ADA |       |             | 1 / UNIT 7 (JOVIAL 1 |
|----------------------------------|------------|----------|-----------------------------------------|-------|-------------|----------------------|
| NUMBER                           | MALL-CLOCK | CPU-TIME | DIFFER                                  | DIFR0 | PAGE-FAULTS |                      |
| 1                                | 1.28       | 1.40     | 1.04                                    | 1.00  | 1.00        |                      |
| 2                                | 1.36       | 1.48     | 1.05                                    | 1.00  | 1.36        |                      |



## APPENDIX F

### TEST DESCRIPTIONS

This appendix describes the function of every ACPS test. These test descriptions are contained in Table F-1 and are ordered according to the ACPS test name sorting conventions described in Section E.3. Many entries in the TEST NAME field of Table F-1 are followed by a comma and an alphabetic character (C, I, M, or S) to indicate that an additional version of the test exists. These additional test names contain this character as the third character in the test name. For example, the test description entry AF03501, S corresponds to two tests: AF03501 and AFS3501. For some tests (e.g., AFD520K) an asterisk is placed to the right of the test name. This signifies that the test is VAX specific, and the test program is not placed on the ACPS ANSI formatted delivery tape. The VERSIONS field of Table F-1 lists any other versions of a test based on test type. For example, the following versions of test AF03500 exist within the ACPS: CF03500, EF03500, SF03500, TF03500, JF03500, FF03500. The test description field in Table F-1 describes what is being measured in each test. The descriptions were derived from commentary prologue contained in each test file. The descriptions were condensed, and corrected for grammatical and descriptive errors. However, these corrections were not made to the corresponding test file prologues.

Table F-1 ACPS Test Descriptions

| TEST NAME | VERSIONS    | DESCRIPTION                                                                                                                                                                               |
|-----------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AA00000,M | C/E/S/T/J/F | establishes the run time system dependent statistic overhead of support software(oursys,ourspc,ourtyp,ourdmp). The test should be the first test run in any test sequence.                |
| AF03500   | C/E/S/T/J/F | test loop overhead for tests: AF03501,AF03502,AF03503,AF03504,AF03509,AF03510, AF05311,AF05312,AF05313,AF05314,AF05317,AF05318.                                                           |
| AF03501,S | C/E/S/T/J   | allocation/deallocation of 10 integer variables declared in a procedure.                                                                                                                  |
| AF03502,S | C/E/S/T/J/F | allocation/deallocation/initialization to 0 of 10 integer variables declared in a procedure.                                                                                              |
| AF03503,S | C/E/S/T/J/F | allocation/deallocation/initialization to non-zero constants of 10 integer variables declared in a procedure.                                                                             |
| AF03504,S | C/E/S/T/J/F | allocation/deallocation/initialization to global variables of 10 integer variables declared in a procedure.                                                                               |
| AF03509,S | C/E/S/T     | allocation/deallocation of 10 integer variables declared in a block statement.                                                                                                            |
| AF03510,S | C/E/S/T     | allocation/deallocation/initialization to 0 of 10 integer variables declared in a block statement.                                                                                        |
| AF03511,S | C/E/S/T     | allocation/deallocation/initialization to non-zero constants of 10 integer variables declared in a block statement.                                                                       |
| AF03512,S | C/E/S/T     | allocation/deallocation/initialization to global variables of 10 integer variables declared in a block statement.                                                                         |
| AF03513,S | C/E/S/T/J   | allocation/deallocation of 10 string variables declared in a procedure.                                                                                                                   |
| AF03514,S | C/E/S/T/J/F | allocation/deallocation/initialization of 10 string variables declared in a procedure.                                                                                                    |
| AF03517,S | C/E/S/T     | allocation/deallocation of 10 string variables declared in a block statement.                                                                                                             |
| AF03518,S | C/E/S/T     | allocation/deallocation/initialization to a constant of 10 string variables declared in a block statement.                                                                                |
| AF03550   | C/E/S/T/J   | execution of PRED,SUCC functions for enumeration type MONTHS in 10 statements of the form: TMPESi := months'X(TMPESj); where X is PRED or SUCC.                                           |
| AFD3551   | C/E/S/T/J   | execution of PRED,SUCC functions for enumeration type REP_MONTHS in 10 statements of the form: TMPERi := rep_months'X(TMPERj); where X is PRED or SUCC.                                   |
| AF03600   | C/E/S/T/J/F | test loop overhead for tests: AF03601,AF03602,AF03603,AF03604,AF03605,AF03606, AF03607,AF03608,AF03609,AF03610, AF03611,AF03612,AF03613,AF03614,AF03615,AF03616, AF03617,AF03618,AF03619. |
| AF03601,S | C/E/S/T/J   | allocation/deallocation of 10 1 dimensional(10) integer arrays declared in a procedure.                                                                                                   |
| AF03602,S | C/E/S/T/J/F | allocation/deallocation/initialization to 0 of 10 1 dimensional(10) integer arrays declared in a procedure.                                                                               |
| AF03603,S | C/E/S/T/J/F | allocation/deallocation/initialization to non-zero constants of 10 1 dimensional(10) integer arrays declared in a procedure.                                                              |
| AF03604,S | C/E/S/T/J   | allocation/deallocation of 10 2 dimensional(3,3) integer arrays declared in a procedure.                                                                                                  |
| AF03605,S | C/E/S/T/J/F | allocation/deallocation/initialization to 0 of 10 2 dimensional(3,3) integer arrays declared in a procedure.                                                                              |
| AF03606,S | C/E/S/T/J/F | allocation/deallocation/initialization to non-zero constants of 10 2 dimensional(3,3) integer arrays declared in a procedure.                                                             |
| AF03607,S | C/E/S/T/J   | allocation/deallocation of 10 3 dimensional(3,3,3) integer arrays declared in a procedure.                                                                                                |
| AF03608,S | C/E/S/T/J/F | allocation/deallocation/initialization to 0 of 10 3 dimensional(3,3,3) integer arrays declared in a procedure.                                                                            |
| AF03609,S | C/E/S/T/J/F | allocation/deallocation/initialization to non-zero                                                                                                                                        |

Table F-1 ACPS Test Descriptions (continued)

| <u>TEST NAME</u> | <u>VERSIONS</u> | <u>DESCRIPTION</u>                                                                                                                                                                                                                                            |
|------------------|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AF03610,S        | C/E/S/T/J       | constants of 10 3 dimensional(3,3,3) integer arrays declared in a procedure.<br>allocation/deallocation of 10 3 dimensional(3,3,3) integer arrays declared in a procedure. The variables are not referenced and should not be allocated (compare to AF03607). |
| AF03611,S        | C/E/S/T         | allocation/deallocation of 10 1 dimensional(10) integer arrays declared in a block statement.                                                                                                                                                                 |
| AF03612,S        | C/E/S/T         | allocation/deallocation/initialization to 0 of 10 1 dimensional(10) integer arrays declared in a block statement.                                                                                                                                             |
| AF03613,S        | C/E/S/T         | allocation/deallocation/initialization to non-zero constants of 10 1 dimensional(10) integer arrays declared in a block statement.                                                                                                                            |
| AF03614,S        | C/E/S/T         | allocation/deallocation of 10 2 dimensional(3,3) integer arrays declared in a block statement.                                                                                                                                                                |
| AF03615,S        | C/E/S/T         | allocation/deallocation/initialization to 0 of 10 2 dimensional(3,3) integer arrays declared in a block statement.                                                                                                                                            |
| AF03616,S        | C/E/S/T         | allocation/deallocation/initialization to non-zero constants of 10 2 dimensional(3,3) integer arrays declared in a block statement.                                                                                                                           |
| AF03617,S        | C/E/S/T         | allocation/deallocation of 10 3 dimensional(3,3,3) integer arrays declared in a block statement.                                                                                                                                                              |
| AF03618,S        | C/E/S/T         | allocation/deallocation/initialization to 0 of 10 3 dimensional(3,3,3) integer arrays declared in a block statement.                                                                                                                                          |
| AF03619,S        | C/E/S/T         | allocation/deallocation/initialization to non-zero constants of 10 3 dimensional(3,3,3) integer arrays declared in a block statement.                                                                                                                         |
| AF03630          | C/E/S/T         | test loop overhead for tests: AF03631,AF03632,AF03633,AF03634,AF03635,AF03636, AF03637,AF03638,AF03639,AF03641,AF03642,AF03643,AF03644,AF03645,AF03646,AF03647,AF03648,AF03649.                                                                               |
| AF03631,S        | C/E/S/T         | allocation/deallocation of 10 dynamically sized 1 dimensional(10) integer arrays declared in a procedure.                                                                                                                                                     |
| AF03632,S        | C/E/S/T         | allocation/deallocation/initialization to 0 of 10 dynamically sized 1 dimensional(10) integer arrays declared in a procedure.                                                                                                                                 |
| AF03633,S        | C/E/S/T         | allocation/deallocation/initialization to non-zero constants of 10 dynamically sized 1 dimensional(10) integer arrays declared in a procedure.                                                                                                                |
| AF03634,S        | C/E/S/T         | allocation/deallocation of 10 dynamically sized 2 dimensional(3,3) integer arrays declared in a procedure.                                                                                                                                                    |
| AF03635,S        | C/E/S/T         | allocation/deallocation/initialization to 0 of 10 dynamically sized 2 dimensional(3,3) integer arrays declared in a procedure.                                                                                                                                |
| AF03636,S        | C/E/S/T         | allocation/deallocation/initialization to non-zero constants of 10 dynamically sized 2 dimensional(3,3) integer arrays declared in a procedure.                                                                                                               |
| AF03637,S        | C/E/S/T         | allocation/deallocation of 10 dynamically sized 3 dimensional(3,3,3) integer arrays declared in a procedure.                                                                                                                                                  |
| AF03638,S        | C/E/S/T         | allocation/deallocation/initialization to 0 of 10 dynamically sized 3 dimensional(3,3,3) integer arrays declared in a procedure.                                                                                                                              |
| AF03639,S        | C/E/S/T         | allocation/deallocation/initialization to non-zero constants of 10 dynamically sized 3 dimensional(3,3,3) integer arrays declared in a procedure.                                                                                                             |
| AF03641,S        | C/E/S/T         | allocation/deallocation of 10 dynamically sized 1 dimensional(10) integer arrays declared in a block statement.                                                                                                                                               |
| AF03642,S        | C/E/S/T         | allocation/deallocation/initialization to 0 of 10 dynamically sized 1 dimensional(10) integer arrays declared in a block statement.                                                                                                                           |

Table F-1 ACPs Test Descriptions (continued)

| TEST NAME | VERSIONS    | DESCRIPTION                                                                                                                                                                                                                                                                                                                |
|-----------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AF03643,S | C/E/S/T     | allocation/deallocation/initialization to non-zero constants of 10 dynamically sized 1 dimensional(10) integer arrays declared in a block statement.                                                                                                                                                                       |
| AF03644,S | C/E/S/T     | allocation/deallocation of 10 dynamically sized 2 dimensional(3,3) integer arrays declared in a block statement.                                                                                                                                                                                                           |
| AF03645,S | C/E/S/T     | allocation/deallocation/initialization to 0 of 10 dynamically sized 2 dimensional(3,3) integer arrays declared in a block statement.                                                                                                                                                                                       |
| AF03646,S | C/E/S/T     | allocation/deallocation/initialization to non-zero constants of 10 dynamically sized 2 dimensional(3,3) integer arrays declared in a block statement.                                                                                                                                                                      |
| AF03647,S | C/E/S/T     | allocation/deallocation of 10 dynamically sized 3 dimensional(3,3,3) integer arrays declared in a block statement.                                                                                                                                                                                                         |
| AF03648,S | C/E/S/T     | allocation/deallocation/initialization to 0 of 10 dynamically sized 3 dimensional(3,3,3) integer arrays declared in a block statement.                                                                                                                                                                                     |
| AF03649,S | C/E/S/T     | allocation/deallocation/initialization to non-zero constants of 10 dynamically sized 3 dimensional(3,3,3) integer arrays declared in a block statement.                                                                                                                                                                    |
| AF03700   | C/E/S/T/J   | test loop overhead for tests: af03701,AF03702,AF03703.                                                                                                                                                                                                                                                                     |
| AF03701,S | C/E/S/T/J   | allocation/deallocation of 10 1 dimensional(10) arrays with discriminated record components(type VARIANT_RECORDS) declared in a procedure. A variable is used as the record discriminant.                                                                                                                                  |
| AF03702,S | C/E/S/T/J   | allocation/deallocation of 10 1 dimensional(10) arrays with discriminated record components(type VARIANT_RECORDS) declared in a procedure. A constant is used as the record discriminant.                                                                                                                                  |
| AF03703,S | C/E/S/T/J   | allocation/deallocation/initialization to a record aggregate of 10 1 dimensional(10) arrays with discriminated record components(type VARIANT_RECORDS) declared in a procedure. A constant is used as the record discriminant.                                                                                             |
| AF03800   | C/E/S/T/J   | test loop overhead for tests: AF03801,AF03802,AF03803,AF03804.                                                                                                                                                                                                                                                             |
| AF03801,S | C/E/S/T/J   | allocation/deallocation of 10 1 dimensional(10) arrays with record access components declared in a procedure. The access type(RECORD_POINTER) is globally defined in package ourspc.                                                                                                                                       |
| AF03802,S | C/E/S/T/J   | allocation/deallocation/initialization to a record aggregate of 10 1 dimensional(10) arrays with record access components declared in a procedure. The access type(RECORD_POINTER) is globally defined in package ourspc.                                                                                                  |
| AF03803,S | C/E/S/T/J   | allocation/deallocation of 10 1 dimensional(10) arrays with record access components declared in a procedure. The access type used is declared within the procedure and the test includes the time to create/remove the collection of access objects associated with the access type.                                      |
| AF03804,S | C/E/S/T/J   | allocation/deallocation/initialization to a record aggregate of 10 1 dimensional(10) arrays with record access components declared in a procedure. The access type used is declared within the procedure and the test includes the time to create/remove the collection of access objects associated with the access type. |
| AF04120   | C/E/S/T/J/F | 3 assignment statements using integer array slices with constant slice ranges.                                                                                                                                                                                                                                             |
| AF04121   | C/E/S/T/J/F | 3 assignment statements using integer array slices with scalar variable slice ranges. Compare to AF04120.                                                                                                                                                                                                                  |
| AF04122   | C/E/S/T/J/F | 3 assignment statements using character string slices with constant slice ranges.                                                                                                                                                                                                                                          |
| AF04123   | C/E/S/T/J/F | 3 assignment statements using character string slices                                                                                                                                                                                                                                                                      |

Table F-1 ACPS Test Descriptions (continued)

| TEST NAME | VERSIONS    | DESCRIPTION                                                                                                                                                                         |
|-----------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AF04124   | C/E/S/T/J/F | with scalar variable slice ranges. Compare to AF04122.                                                                                                                              |
| AF04125   | C/E/S/T/J/F | 3 assignment statements of constant aggregates to integer array slices with constant slice ranges.                                                                                  |
| AF04126   | C/E/S/T/J/F | 3 assignment statements of constant aggregates to integer array slices with variable slice ranges. Compare to AF04124.                                                              |
| AF04127   | C/E/S/T/J/F | 3 assignment statements of constant aggregates to slices of string variables with constant slice indices.                                                                           |
| AFD4128   | C/E/S/T/J   | 3 assignment statements of constant aggregates to slices of string variables using variable slice and aggregate named association ranges. Compare to AF04126.                       |
| AF04129   | C/E/S/T/J/F | 3 assignment statements of constant aggregates to slices of packed string variables using non-constant slice and aggregate named association ranges. Compare to AF04127.            |
| AFD412A   | C/E/S/T/J   | 3 assignment statements using boolean array slices with constant slice ranges.                                                                                                      |
| AF0412B   | C/E/S/T/J   | 3 assignment statements using record array slices with constant slice ranges.                                                                                                       |
| AFD412C   | C/E/S/T/J   | 3 assignment statements using packed record(type PACKED_RECORDS) array slices with constant slice ranges. Compare to AF0412B.                                                       |
| AFD412D   | C/E/S/T/J   | 3 assignment statements using packed record(type REP_RECORDS) array slices with constant slice ranges. Compare to AF0412B, AFD412C.                                                 |
| AF04130   | C/E/S/T/J   | references to integer components of records (type RECORDS) in 10 statements of the form: TMPRCi.COMP_I1 := TMPRCj.COMP_I1;.                                                         |
| AF04131   | C/E/S/T/J   | references to integer components of records (type RECORDS) in 10 statements of the form: TMPRCi.COMP_I2 := TMPRCj.COMP_I2;.                                                         |
| AF04132   | C/E/S/T/J   | references to boolean components of records (type RECORDS) in 10 statements of the form: TMPRCi.COMP_B1 := TMPRCj.COMP_B1;.                                                         |
| AF04133   | C/E/S/T/J   | references to enumeration components of records (type RECORDS) in 10 statements of the form: TMPRCi.COMP_E := TMPRCj.COMP_E;.                                                       |
| AFD4135   | C/E/S/T/J   | references to integer components of packed records (type PACKED_RECORDS) in 10 statements of the form: TMPRPi.COMP_I1 := TMPRPj.COMP_I1;. Compare to AF04130.                       |
| AFD4136   | C/E/S/T/J   | references to integer components of packed records (type PACKED_RECORDS) in 10 statements of the form: TMPRPi.COMP_I2 := TMPRPj.COMP_I2;. Compare to AF04131.                       |
| AFD4137   | C/E/S/T/J   | references to boolean components of packed records (type PACKED_RECORDS) in 10 statements of the form: TMPRPi.COMP_B1 := TMPRPj.COMP_B1;. Compare to AF04132.                       |
| AFD4138   | C/E/S/T/J   | references to enumeration components of packed records (type PACKED_RECORDS) in 10 statements of the form: TMPRPi.COMP_E := TMPRPj.COMP_E;. Compare to AF04133.                     |
| AFD4139   | C/E/S/T/J   | references to integer components of records packed by rep.specs. (type REP_RECORDS, bits 0..4) in 10 statements of the form: TMPRRi.COMP_I1 := TMPRRj.COMP_I1;. Compare to AFD4135. |
| AFD413A   | C/E/S/T/J   | references to integer components of records packed by rep.specs. (type REP_RECORDS, bits 5..9) in 10 statements of the form: TMPRRi.COMP_I2 := TMPRRj.COMP_I2;. Compare to AFD4136. |
| AFD413B   | C/E/S/T/J   | references to boolean components of records packed by rep.specs. (type REP_RECORDS, bit 10) in 10 statements of the form: TMPRRi.COMP_B1 := TMPRRj.COMP_B1;. Compare to AFD4137.    |
| AFD413C   | C/E/S/T/J   | references to enumeration components of records packed by rep.specs. (type REP_RECORDS, bits 12..15) in 10 statements of the form: TMPRRi.COMP_E :=                                 |

Table F-1 ACPS Test Descriptions (continued)

| TEST NAME | VERSIONS    | DESCRIPTION                                                                                                                                                                                                                             |
|-----------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AF0413D   | C/E/S/T/J   | TMPPRj.COMP_E; Compare to AFD4138. references to integer components of unconstrained record variants (type VARIANT_RECORDS) in 10 statements of the form: TMPVSi.COMP_I1 := TMPVSj.COMP_I1;.                                            |
| AFD413E   | C/E/S/T/J   | references to integer components of packed unconstrained record variants (type PACKED_VARIANT) in 10 statements of the form: TMPVPi.COMP_I1 := TMPVPj.COMP_I1; Compare to AF0413D.                                                      |
| AFD413G   | C/E/S/T/J   | references to packed string components of records (type RECORD_TYPE) in 10 statements of the form: TMPPRi.String_Comp := TMPPRj.String_Comp;.                                                                                           |
| AF0413H   | C/E/S/T/J   | references to access type components of record access objects (type RECORD_POINTER) in 10 statements of the form: TMPPPi.Pointer_Comp := TMPPPj.Pointer_Comp;.                                                                          |
| AF0413I   | C/E/S/T/J   | references to integer components of records (type RECORD_TYPE) in 10 statements of the form: TMPPRi.Int_Comp := TMPPRj.Int_Comp;.                                                                                                       |
| AF0413J   | C/E/S/T/J   | references to integer components of record access objects (type RECORD_POINTER) in 10 statements of the form: TMPPPi.Int_Comp := TMPPPj.Int_Comp; Compare to AF0413I.                                                                   |
| AF0413K   | C/E/S/T/J   | references to integer components of record access objects (type RECORD_POINTER) in 10 statements of the form: TMPPPi.Pointer_Comp.Int_Comp := TMPPPj.Pointer_Comp.Int_Comp; Compare to AF0413J, AF0413I.                                |
| AF04310   | C/E/S/T/J   | 10 statements assigning a record aggregate to a record variable (type RECORDS).                                                                                                                                                         |
| AF04311   | C/E/S/T/J   | 10 statements assigning a record aggregate to an unconstrained variant record variable (type VARIANT_RECORDS).                                                                                                                          |
| AF04312   | C/E/S/T/J   | 10 statements assigning a record aggregate to a record access variable using the qualifier .all (type RECORD_POINTER).                                                                                                                  |
| AF04510   | C/E/S/T/J/F | 9 logical ANDs all true in one IF statement.                                                                                                                                                                                            |
| AF04511   | C/E/S/T/J/F | 9 logical ANDs all false in one IF statement. It is permissible if an elapsed time too short error message is generated for this test.                                                                                                  |
| AF04512   | C/E/S/T/J/F | 9 logical ORs all true in one IF statement. It is permissible if an elapsed time too short error message is generated for this test.                                                                                                    |
| AF04513   | C/E/S/T/J/F | 9 logical ORs all false in one IF statement.                                                                                                                                                                                            |
| AF04514   | C/E/S/T/J/F | 9 logical XORs all false in one IF statement.                                                                                                                                                                                           |
| AF04515   | C/E/S/T/J/F | 1 10 element boolean array AND assignment.                                                                                                                                                                                              |
| AF04516   | C/E/S/T/J/F | 1 10 element boolean array relational (equality) assignment.                                                                                                                                                                            |
| AF04517   | C/E/S/T/J/F | 1 10 element boolean array relational (>=) assignment.                                                                                                                                                                                  |
| AF04518   | C/E/S/T/J/F | test loop overhead for tests: AF04519 AF0451a AF0451b AF0451c AF0451d AF0451e AF0451f AF0451g AF0451h AF0451i. The overhead includes all logical operations and statements that are not part of the test but only used to construct it. |
| AF04519,S | C/E/S/T/J/F | 10 relational = in one IF statement (all true) with integer operands.                                                                                                                                                                   |
| AF0451A,S | C/E/S/T/J/F | 10 relational = in one IF statement (all true) with float operands.                                                                                                                                                                     |
| AF0451B,S | C/E/S/T/J/F | 10 relational /= in one IF statement (all true) with integer operands.                                                                                                                                                                  |
| AF0451C,S | C/E/S/T/J/F | 10 relational < in one IF statement (all true) with integer operands.                                                                                                                                                                   |
| AF0451D,S | C/E/S/T/J/F | 10 relational <= in one IF statement (all true) with integer operands.                                                                                                                                                                  |
| AF0451E,S | C/E/S/T/J/F | 10 relational > in one IF statement (all true) with integer operands.                                                                                                                                                                   |
| AF0451F,S | C/E/S/T/J/F | 10 relational >= in one IF statement (all true) with integer operands.                                                                                                                                                                  |

Table F-1 ACPS Test Descriptions (continued)

| TEST NAME  | VERSIONS    | DESCRIPTION                                                                                                                                                                                                                     |
|------------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AF0451G,S  | C/E/S/T/J/F | integer operands.<br>10 logical negations in one IF statement (all true) with boolean operands.                                                                                                                                 |
| AF0451H,S  | C/E/S/T/F   | 10 membership in tests in one IF statement (all true) with integer operands.                                                                                                                                                    |
| AF0451I,S  | C/E/S/T/F   | 10 membership not in tests in one IF statement (all true) with integer operands.                                                                                                                                                |
| AFD451K    | C/E/S/T/J/F | test loop overhead for tests: AFD451L AFD451M AFD451N AFD451O AFD451P AFD451Q AFD451R AFD451S AFD451T. The overhead includes all logical operations and statements that are not part of the test but only used to construct it. |
| AFD451L,S  | C/E/S/T/J/F | 10 relational = in one IF statement (all true) with short_short_integer operands.                                                                                                                                               |
| AFD451M,S  | C/E/S/T/J/F | 10 relational = in one IF statement (all true) with short_integer operands.                                                                                                                                                     |
| AFD451N,S  | C/E/S/T/F   | 10 relational = in one IF statement (all true) with long_float operands.                                                                                                                                                        |
| AFD451O,S  | C/E/S/T/F   | 10 relational = in one IF statement (all true) with long_long_float operands.                                                                                                                                                   |
| AFD451P,S  | C/E/S/T/J/F | 10 relational < in one IF statement (all true) with short_short_integer operands.                                                                                                                                               |
| AFD451Q,S  | C/E/S/T/J/F | 10 relational < in one IF statement (all true) with short_integer operands.                                                                                                                                                     |
| AFD451R,S  | C/E/S/T/F   | 10 relational < in one IF statement (all true) with long_float operands.                                                                                                                                                        |
| AFD451S,S  | C/E/S/T/F   | 10 relational < in one IF statement (all true) with long_long_float operands.                                                                                                                                                   |
| AFD451T,S* | C/E/S/T/J/F | 10 relational = in one IF statement (all true) with d_float operands.                                                                                                                                                           |
| AF0451V    | C/E/S/T/J/F | test loop overhead for tests: AF0451W AF0451X AF0451Y. The overhead includes all logical operations and statements that are not part of the test but only used to construct it.                                                 |
| AF0451W,S  | C/E/S/T/J/F | 10 relational /= in one IF statement (all false) with integer operands.                                                                                                                                                         |
| AF0451X,S  | C/E/S/T/J/F | 10 relational /= in one IF statement (all false) with float operands.                                                                                                                                                           |
| AF0451Y,S  | C/E/S/T/J/F | 10 relational < in one IF statement (all false) with integer operands.                                                                                                                                                          |
| AF04520    | C/E/S/T/J/F | 10 element integer array = test in one IF statement (True). Includes execution of the if + the then part (tmpisl := 100).                                                                                                       |
| AF04521    | C/E/S/T/J/F | 10 element integer array >= test in one IF statement (True). Includes execution of the if + the then part (tmpisl := 100).                                                                                                      |
| AF04522    | C/E/S/T/J/F | 10 element integer array = test in one IF statement (False). Includes execution of the if + the else part (tmpis2 := 100).                                                                                                      |
| AFD4523    | C/E/S/T/J/F | 10 element short_short_integer array = test in one IF statement (true). Includes execution of the if + the then part (tmpisl := 100). Compare to AFD451L.                                                                       |
| AFD4524    | C/E/S/T/J/F | 10 element short_integer array = test in one IF statement (true). Includes execution of the if + the then part (tmpisl := 100). Compare to AFD451M.                                                                             |
| AFD4525    | C/E/S/T/F   | 10 element long_float array = test in one IF statement (true). Includes execution of the if + the then part (tmpisl := 100). Compare to AFD451N.                                                                                |
| AFD4526    | C/E/S/T/F   | 10 element long_long_float array = test in one IF statement (true). Includes execution of the if + the then part (tmpisl := 100). Compare to AFD451O.                                                                           |
| AF04527    | C/E/S/T/J   | 10 element boolean array = test in one IF statement (true). Includes execution of the if + the then part (tmpisl := 100).                                                                                                       |
| AFD4528    | C/E/S/T     | 10 element packed boolean array = test in one IF                                                                                                                                                                                |

Table F-1 ACPS Test Descriptions (continued)

| TEST NAME | VERSIONS    | DESCRIPTION                                                                                                                 |
|-----------|-------------|-----------------------------------------------------------------------------------------------------------------------------|
| AF04529   | C/E/S/T/J/F | statement (true). Includes execution of the if + the then part(tmpisl := 100). Compare to AF04527.                          |
| AFD452A   | C/E/S/T/J   | 10 character string = test in one IF statement (true). Includes execution of the if + the then part(tmpisl := 100).         |
| AF04530   | C/E/S/T/J/F | 1 assignment statement assigning an expression with 9 integer additions of scalar variables to a scalar variable.           |
| AF04531   | C/E/S/T/J/F | 1 assignment statement assigning an expression with 9 integer subtractions of scalar variables from a scalar variable.      |
| AF04532   | C/E/S/T/J/F | 1 assignment statement assigning an expression with 9 float additions of scalar variables to a scalar variable.             |
| AF04533   | C/E/S/T/J/F | 1 assignment statement assigning an expression with 9 float subtractions of scalar variables from a scalar variable.        |
| AF04534   | C/E/S/T/J/F | 1 assignment statement assigning an expression with 9 constant character concatenations to a string variable.               |
| AF04535   | C/E/S/T/J/F | 1 assignment statement assigning an expression with 9 constant concatenations of strings of length 3 to a string variable.  |
| AF04536   | C/E/S/T/J/F | 1 assignment statement assigning an expression with 9 integer array element concatenations to an array slice.               |
| AF04537   | C/E/S/T/J/F | 10 integer increments by 1. Ten assignment statements using scalar variable operands were used to construct the test.       |
| AF04538   | C/E/S/T/J/F | 10 integer increments by 10. Ten assignment statements using scalar variable operands were used to construct the test.      |
| AF04539   | C/E/S/T/J/F | 10 integer decrements by 1. Ten assignment statements using scalar variable operands were used to construct the test.       |
| AF0453A   | C/E/S/T/J/F | 10 integer decrements by 10. Ten assignment statements using scalar variable operands were used to construct the test.      |
| AF0453B   | C/E/S/T/J   | 1 assignment statement assigning an expression with 9 fixed point additions of scalar variables to a scalar variable.       |
| AF0453C   | C/E/S/T/J   | 1 assignment statement assigning an expression with 9 fixed point subtractions of scalar variables from a scalar variable.  |
| AF04540   | C/E/S/T/J/F | 10 assignment statements assigning a negated integer scalar variable to a scalar variable.                                  |
| AF04541   | C/E/S/T/J/F | 10 assignment statements assigning a negated float scalar variable to a scalar variable.                                    |
| AF04550   | C/E/S/T/J/F | 3 assignment statements of the form $x := x \bmod y$ where $x$ , $y$ and $z$ are scalar variables and $x$ is 0.             |
| AF04551   | C/E/S/T/J/F | 3 assignment statements of the form $x := y \bmod z$ where $x$ , $y$ and $z$ are positive scalar variables.                 |
| AF04552   | C/E/S/T/J/F | 3 assignment statements of the form $x := y \bmod z$ where $x$ , $y$ and $z$ are scalar variables and only $z$ is negative. |
| AF04553   | C/E/S/T/J/F | 3 assignment statements of the form $x := y \bmod z$ where $x$ , $y$ and $z$ are scalar variables and $y$ is zero.          |
| AF04554   | C/E/S/T/J/F | 3 assignment statements of the form $x := y \bmod z$ where $x$ , $y$ and $z$ are scalar variables and are $>0$ .            |
| AF04555   | C/E/S/T/J/F | 3 assignment statements of the form $x := y \bmod z$ where $x$ , $y$ and $z$ are scalar variables and only $z$ is negative. |
| AF04556   | C/E/S/T/J/F | 1 assignment statement assigning an expression with 7 integer multiplies of scalar variables to a scalar variable.          |
| AF04557   | C/E/S/T/J/F | 1 assignment statement assigning an expression with 7                                                                       |



Table F-1 ACPs Test Descriptions (continued)

| TEST NAME | VERSIONS    | DESCRIPTION                                                                                                              |
|-----------|-------------|--------------------------------------------------------------------------------------------------------------------------|
|           |             | integer divides of scalar variables to a scalar variable.                                                                |
| AF04558   | C/E/S/T/J/F | 1 assignment statement assigning an expression with 7 float multiplies of scalar variables to a scalar variable.         |
| AF04559   | C/E/S/T/J/F | 1 assignment statement assigning an expression with 7 float divides of scalar variables to a scalar variable.            |
| AFD455D   | C/E/S/T/J/F | 3 short_short_integer multiplies in 1 assignment statement using scalar variable operands.                               |
| AFD455E   | C/E/S/T/J/F | 7 short_integer multiplies in 1 assignment statement using scalar variable operands.                                     |
| AFD455F   | C/E/S/T/F   | 7 long_float multiplies in 1 assignment statement using scalar variable operands.                                        |
| AFD455G   | C/E/S/T/F   | 7 long_long_float multiplies in 1 assignment statement using scalar variable operands.                                   |
| AFD455H*  | C/E/S/T/J/F | 7 d_float multiplies in 1 assignment statement using scalar variable operands.                                           |
| AFD455I   | C/E/S/T/J/F | 3 short_short_integer divides in 1 assignment statement using scalar variable operands.                                  |
| AFD455J   | C/E/S/T/J/F | 7 short_integer divides in 1 assignment statement using scalar variable operands.                                        |
| AFD455K   | C/E/S/T/F   | 7 long_float multiplies in 1 assignment statement using scalar variable operands.                                        |
| AFD455L   | C/E/S/T/F   | 7 long_long_float divides in 1 assignment statement using scalar variable operands.                                      |
| AFD455M*  | C/E/S/T/J/F | 7 d_float divides in 1 assignment statement using scalar variable operands.                                              |
| AF0455N   | C/E/S/T/J   | 1 assignment statement assigning an expression with 7 fixed point multiplies of scalar variables to a scalar variable.   |
| AF0455O   | C/E/S/T/J   | 1 assignment statement assigning an expression with 7 fixed point divides of scalar variables to a scalar variable.      |
| AF04560   | C/E/S/T/J/F | 6 assignment statements of the form $x := \text{abs}(y)$ where x and y are scalar variables.                             |
| AF04562   | C/E/S/T/J/F | 1 assignment statement assigning an expression with 2 integer exponentiations of scalar variables to a scalar variable.  |
| AF04563   | C/E/S/T/J/F | 1 assignment statement assigning an expression with 2 float exponentiations of scalar variables to a scalar variable.    |
| AFD4566   | C/E/S/T/J   | 3 short_short_integer exponentiations. Three assignment statements with scalar operands were used to construct the test. |
| AFD4567   | C/E/S/T/J/F | 3 short_integer exponentiations. Three assignment statements with scalar operands were used to construct the test.       |
| AFD4568   | C/E/S/T/F   | 3 long_float exponentiations. Three assignment statements with scalar operands were used to construct the test.          |
| AFD4569   | C/E/S/T/F   | 3 long_long_float exponentiations. Three assignment statements with scalar operands were used to construct the test.     |
| AFD456A*  | C/E/S/T/J/F | 3 d_float exponentiations. Three assignment statements with scalar operands were used to construct the test.             |
| AF04600   | C/E/S/T/J/F | 10 type conversions (integer to float).                                                                                  |
| AF04601   | C/E/S/T/J/F | 10 type conversions (float to integer).                                                                                  |
| AF04602   | C/E/S/T/J/F | 10 type conversions of an integer quantity to one with a smaller range(integer to one_to_3).                             |
| AFD4603   | C/E/S/T/J/F | 10 type conversions (short_short_integer to short_integer).                                                              |
| AFD4604   | C/E/S/T/J/F | 10 type conversions (short_short_integer to integer).                                                                    |
| AFD4605   | C/E/S/T/J/F | 10 type conversions (short_integer to integer).                                                                          |
| AFD4606   | C/E/S/T/J/F | 10 type conversions (integer to short_integer).                                                                          |
| AFD4607   | C/E/S/T/J/F | 10 type conversions (integer to short_short_integer).                                                                    |

Table F-1 ACPS Test Descriptions (continued)

| TEST NAME | VERSIONS    | DESCRIPTION                                                                                                                                                                                                                                                                              |
|-----------|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AFD4608   | C/E/S/T/F   | 10 type conversions (float to long_float).                                                                                                                                                                                                                                               |
| AFD4609   | C/E/S/T/F   | 10 type conversions (float to long_long_float).                                                                                                                                                                                                                                          |
| AFD460A   | C/E/S/T/F   | 10 type conversions (long_long_float to long_float).                                                                                                                                                                                                                                     |
| AFD460B   | C/E/S/T/F   | 10 type conversions (long_long_float to float).                                                                                                                                                                                                                                          |
| AFD460C*  | C/E/S/T     | 10 type conversions (long_float to d_float).                                                                                                                                                                                                                                             |
| AFD460D*  | C/E/S/T     | 10 type conversions (d_float to long_float).                                                                                                                                                                                                                                             |
| AF0460E   | C/E/S/T/J   | 10 type conversions (fixed point to float).                                                                                                                                                                                                                                              |
| AF0460F   | C/E/S/T/J   | 10 type conversions (float to fixed point).                                                                                                                                                                                                                                              |
| AF0460G   | C/E/S/T/J   | 10 type conversions (integer to fixed point).                                                                                                                                                                                                                                            |
| AF0460H   | C/E/S/T/J   | 10 type conversions (fixed point to integer).                                                                                                                                                                                                                                            |
| AF0460I   | C/E/S/T/J/F | 10 type conversions (integer to positive).                                                                                                                                                                                                                                               |
| AF0460J   | C/E/S/T/J   | 10 type conversions (five_bit_integer to integer). The five_bit_integer is contained in a component(comp_il) of a record(type RECORDS).                                                                                                                                                  |
| AFD460K   | C/E/S/T/J   | 10 type conversions (five_bit_integer to integer). The five_bit_integer is contained in a component(comp_il) of a packed record(type PACKED_RECORDS). Compare to AFD460J.                                                                                                                |
| AFD460L   | C/E/S/T/J   | 10 type conversions (five_bit_integer to integer). The five_bit_integer is contained in a component(comp_il) of a packed record(type REP_RECORDS). Compare to AFD460J.                                                                                                                   |
| AF0460M   | C/E/S/T/J   | 10 type conversions (integer to five_bit_integer). The five_bit_integer object is contained in a component(comp_il) of a record(type RECORDS).                                                                                                                                           |
| AFD460N   | C/E/S/T/J   | 10 type conversions (integer to five_bit_integer). The five_bit_integer object is contained in a component(comp_il) of a packed record(type PACKED_RECORDS). Compare to AFD460M.                                                                                                         |
| AFD4600   | C/E/S/T/J   | 10 type conversions (integer to five_bit_integer). The five_bit_integer object is contained in a component(comp_il) of a packed record(type REP_RECORDS). Compare to AFD460M.                                                                                                            |
| AFD4800   | C/S/T       | test loop overhead for tests: AFD4801, AFD4802, AFD4803. The overhead includes all statements that are not part of the test but only used to construct it.                                                                                                                               |
| AFD4801,S | C/S/T       | 100 statements dynamically allocating/initializing a record object(type RECORDS) and assigning the access value for it to an access variable whose type is locally defined. The storage_size attribute for the access type is determined by the compiler and placed in run statistic 82. |
| AFD4802,S | C/S/T       | test AFD4801 plus 100 statements to use unchecked storage deallocation to reclaim previously allocated storage. Compare to AFD4801.                                                                                                                                                      |
| AFD4803,S | C/S/T       | same test as AFD4802 except the storage_size attribute of the access type used is set by the test program to an implementation dependent value.                                                                                                                                          |
| AF05200   | C/E/S/T/J/F | 10 integer assignments. The test assigns a scalar variable to a scalar variable.                                                                                                                                                                                                         |
| AF05201   | C/E/S/T/J/F | 10 integer assignments. A scalar constant is assigned to a scalar variable.                                                                                                                                                                                                              |
| AF05202   | C/E/S/T/J/F | 10 float assignments. The test assigns a scalar variable to a scalar variable.                                                                                                                                                                                                           |
| AF05203   | C/E/S/T/J/F | 10 float assignments. A scalar constant is assigned to a scalar variable.                                                                                                                                                                                                                |
| AF05204   | C/E/S/T/J/F | 10 boolean assignments. The test assigns a scalar variable to a scalar variable.                                                                                                                                                                                                         |
| AF05205   | C/E/S/T/J/F | 10 boolean assignments. A scalar constant is assigned to a scalar variable.                                                                                                                                                                                                              |
| AF05206   | C/E/S/T/J/F | 10 relational = assignments using scalar integer operands with the result being true.                                                                                                                                                                                                    |
| AF05207   | C/E/S/T/J/F | 10 relational = assignments using scalar integer operands with the result being false.                                                                                                                                                                                                   |
| AF05208   | C/E/S/T/J/F | 10 assignments statements of the form x := not y where x,                                                                                                                                                                                                                                |

Table F-1 ACPs Test Descriptions (continued)

| <u>TEST NAME</u> | <u>VERSIONS</u> | <u>DESCRIPTION</u>                                                                                                                                                 |
|------------------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AF05209          | C/E/S/T/J/F     | y are scalar variables.<br>10 logical AND assignment statements using scalar boolean operands.                                                                     |
| AF0520A          | C/E/S/T/J/F     | 10 logical OR assignment statements using scalar boolean operands.                                                                                                 |
| AF0520B          | C/E/S/T/J       | 10 fixed point assignments. The test assigns a scalar variable to a scalar variable.                                                                               |
| AFD520C          | C/E/S/T/J/F     | 10 short_short_integer assignments. The test assigns a scalar variable to a scalar variable.                                                                       |
| AFD520D          | C/E/S/T/J/F     | 10 short_short_integer assignments. The test assigns a scalar constant to a scalar variable.                                                                       |
| AFD520E          | C/E/S/T/J/F     | 10 short_integer assignments. The test assigns a scalar variable to another scalar variable.                                                                       |
| AFD520F          | C/E/S/T/J/F     | 10 short_integer assignments. The test assigns a scalar constant to a scalar variable.                                                                             |
| AFD520G          | C/E/S/T/F       | 10 long_float assignments. The test assigns a scalar variable to a scalar variable.                                                                                |
| AFD520H          | C/E/S/T/F       | 10 long_float assignments. The test assigns a scalar constant to a scalar variable.                                                                                |
| AFD520I          | C/E/S/T/F       | 10 long_long_float assignments. The test assigns a scalar variable to a scalar variable.                                                                           |
| AFD520J          | C/E/S/T/F       | 10 long_long_float assignments. The test assigns a scalar constant to a scalar variable.                                                                           |
| AFD520K*         | C/E/S/T/J/F     | 10 d_float assignments. The test assigns a scalar variable to a scalar variable.                                                                                   |
| AFD520L*         | C/E/S/T/J/F     | 10 d_float assignments. The test assigns a scalar constant to a scalar variable.                                                                                   |
| AF0520M          | C/E/S/T/J       | 10 enumeration assignments. The test assigns a scalar variable to a scalar variable.                                                                               |
| AFD520N          | C/E/S/T/J       | 10 enumeration assignments. The test assigns a scalar variable to a scalar variable. The variables are of type REP_MONTHS. Compare to AF0520M.                     |
| AF0520O          | C/E/S/T/J       | 10 record assignments. The test assigns a record object to a record object.                                                                                        |
| AFD520P          | C/E/S/T/J       | 10 record assignments. The test assigns a packed record object to a packed record object. The record objects are of type PACKED_RECORDS. Compare to AF0520O.       |
| AFD520Q          | C/E/S/T/J       | 10 record assignments. The test assigns a packed record object to a packed record object. The record objects are of type REP_RECORDS. Compare to AF0520O, AFD520P. |
| AF0520R          | C/E/S/T/J       | 10 record access variable assignments of the form: TMPPPj := TMPPPj;.                                                                                              |
| AF0520S          | C/E/S/T/J       | 10 record access variable assignments of the form: TMPPPj.ALL := TMPPPj.ALL;.                                                                                      |
| AF05210          | C/E/S/T/J/F     | 10 integer array assignments with the subscript a variable. A constant is assigned to an array element.                                                            |
| AF05211          | C/E/S/T/J/F     | 10 integer array assignments with the subscript a constant. A constant is assigned to an array element.                                                            |
| AF05212          | C/E/S/T/J/F     | 10 float array assignments with the subscript a variable. A scalar variable is assigned to an array element.                                                       |
| AF05213          | C/E/S/T/J/F     | 10 float array assignments with the subscript a constant. A scalar variable is assigned to an array element.                                                       |
| AF05214          | C/E/S/T/J/F     | 10 boolean array assignments with the subscript a variable. A scalar variable is assigned to an array element.                                                     |
| AF05215          | C/E/S/T/J/F     | 10 boolean array assignments with the subscript a constant. A scalar variable is assigned to an array element.                                                     |
| AFD5218          | C/E/S/T/J/F     | 10 short_short_integer array assignments with the subscript a scalar variable. A scalar variable is assigned to an array element.                                  |
| AFD5219          | C/E/S/T/J/F     | 10 short_short_integer array assignments with the subscript a scalar constant. A scalar variable is                                                                |

Table F-1 ACPS Test Descriptions (continued)

| TEST NAME | VERSIONS    | DESCRIPTION                                                                                                                                                                          |
|-----------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AFD521A   | C/E/S/T/J/F | assigned to an array element.<br>10 short_integer array assignments with the subscript a scalar variable. A scalar variable is assigned to an array element.                         |
| AFD521B   | C/E/S/T/J/F | 10 short_integer array assignments with the subscript a scalar constant. A scalar variable is assigned to an array element.                                                          |
| AFD521C   | C/E/S/T/F   | 10 long_float array assignments with the subscript a scalar variable. A scalar variable is assigned to an array element.                                                             |
| AFD521D   | C/E/S/T/F   | 10 long_float array assignments with the subscript a scalar constant. A scalar variable is assigned to an array element.                                                             |
| AFD521E   | C/E/S/T/F   | 10 long_long_float array assignments with the subscript a scalar variable. A scalar variable is assigned to an array element.                                                        |
| AFD521F   | C/E/S/T/F   | 10 long_long_float array assignments with the subscript a scalar constant. A scalar variable is assigned to an array element.                                                        |
| AF0521H   | C/E/S/T/J/F | 5 2-dimensional integer array assignments with the subscript a variable. A scalar variable is assigned to an array element.                                                          |
| AF0521I   | C/E/S/T/J/F | 5 3-dimensional integer array assignments with the subscript a variable. A scalar variable is assigned to an array element.                                                          |
| AF0521J   | C/E/S/T/J/F | 10 integer array assignments with the subscript a variable typed with the range the same as the dimensions (compare to AF0521G). A constant is assigned to an array element.         |
| AF0521K   | C/E/S/T/J/F | 5 2-dimensional integer array assignments with the subscript variables typed with ranges the same as the dimension (compare to AF0521H). A constant is assigned to an array element. |
| AFD521K   | C/E/S/T/J   | 10 packed boolean array assignments with the subscript a variable. Compare to AF05214.                                                                                               |
| AF0521L   | C/E/S/T/J   | 10 character array assignments with the subscript a variable(TMPCSI(TMPISi) := TMPCS4(j);).                                                                                          |
| AFD521M   | C/E/S/T/J   | 10 packed character array assignments with the subscript a variable(TMPCP1(TMPISi) := TMPCP4(j);). Compare to AF0521L.                                                               |
| AF0521N   | C/E/S/T/J   | 10 record array assignments with the subscript a variable(TMPRAS(TMPISi) := TMPRCj;).                                                                                                |
| AFD521O   | C/E/S/T/J   | 10 packed record(type PACKED RECORDS) array assignments with the subscript a variable(TMPRAP(TMPISi) := TMPRPj;). Compare to AF0521N.                                                |
| AFD521P   | C/E/S/T/J   | 10 packed record(type REP RECORDS) array assignments with the subscript a variable(TMPRAR(TMPISi) := TMPRRj;). Compare to AFD521O.                                                   |
| AF05300   | C/E/S/T/J/F | test loop overhead for tests: AF05301 AF05302 AF05303. The overhead includes all statements that are not part of the test but only used to construct it.                             |
| AF05301,S | C/E/S/T/J/F | 10 IF statements with no else part. The if condition fails.                                                                                                                          |
| AF05302,S | C/E/S/T/J/F | 10 nested IF statements. The if condition fails.                                                                                                                                     |
| AF05303,S | C/E/S/T/J/F | 1 IF and 9 ELSIF statements. The if condition fails.                                                                                                                                 |
| AF05305   | C/E/S/T/J/F | test loop overhead for tests: AF05306 AF05307. The overhead includes all statements that are not part of the test but only used to construct it.                                     |
| AF05306,S | C/E/S/T/J/F | 10 IF statements with the then part executed.                                                                                                                                        |
| AF05307,S | C/E/S/T/J/F | 10 IF statements with the else part executed.                                                                                                                                        |
| AF05400   | C/E/S/T/J/F | test loop overhead for tests: AF05401 AF05402 AF05403 AF05404 AF05405 AF05406 AF05407. The overhead includes statements that are not part of the test but only used to construct it. |
| AF05401,S | C/E/S/T/J/F | 1 case statement with 10 alternatives in increasing                                                                                                                                  |

Table F-1 ACPs Test Descriptions (continued)

| TEST NAME | VERSIONS    | DESCRIPTION                                                                                                                                                                                          |
|-----------|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AF05402,S | C/E/S/T/J/F | sequential numerical order. The last alternative is executed.                                                                                                                                        |
| AF05403,S | C/E/S/T/J/F | 1 case statement with 10 alternatives in decreasing sequential numerical order. The last alternative is executed.                                                                                    |
| AF05404,S | C/E/S/T/J/F | 1 case statement with 10 alternatives in increasing sequential numerical order. The (others) alternative is executed.                                                                                |
| AF05405,S | C/E/S/T/J/F | 1 case statement with 10 alternatives increasing by 2. The last alternative is executed.                                                                                                             |
| AF05406,S | C/E/S/T/J/F | 1 case statement with 10 alternatives with large non-contiguous ranges. The last alternative is executed.                                                                                            |
| AF05407,S | C/E/S/T/J/F | 1 case statement with 10 alternatives with large non-contiguous ranges. The (others) alternative is executed.                                                                                        |
| AF05501   | C/E/S/T/J/F | 1 case statement with 10 alternatives with large contiguous ranges. The last alternative is executed.                                                                                                |
| AF05502,S | C/E/S/T/J/F | test loop overhead for tests: AF05502 AF05503 AF05504 AF05505 AF05506 AF05507 AF05508 AF05509 AF0550a AF0550b. The overhead includes all statements that are not part of the loop control statement. |
| AF05503,S | C/E/S/T/J/F | 10 0-iteration FOR loops(loop control => for i in 1..tmpis0).                                                                                                                                        |
| AF05504,S | C/E/S/T/J/F | 10 0-iteration FOR loops in reverse order( loop control =>for i in reverse 1..tmpis0).                                                                                                               |
| AF05506   | C/E/S/T/J/F | 10 0-iteration while loops(loop control=> while tmpisX <= tmpis0).                                                                                                                                   |
| AF05507,S | C/E/S/T/J/F | test loop overhead for tests: AF05507 AF05508 AF05509 AF0550A AF0550B. The overhead includes all statements that are not part of the loop control statement.                                         |
| AF05508,S | C/E/S/T/J/F | 10 1-iteration FOR loops(loop control => for i in 1..tmpisl).                                                                                                                                        |
| AF05509,S | C/E/S/T/J/F | 10 1-iteration FOR loops in reverse order(loop control => for i in reverse 1..tmpisl).                                                                                                               |
| AF0550A,S | C/E/S/T/J/F | 5 2-level 1-iteration nested FOR loops(loop control => for i in 1..tmpisl).                                                                                                                          |
| AF0550B,S | C/E/S/T/J/F | 5 2-level 1-iteration nested FOR loops with loop control variable referenced but not used(loop control => for i in 1..tmpisl).                                                                       |
| AF0550D   | C/E/S/T/J/F | 1 10 level nested loop with 1 iteration per loop. references to a 1-dimensional array within a FOR loop using the loop iterative as array index(tmpial(i) :=tmpial(i+1)).                            |
| AF0550E   | C/E/S/T/J/F | references to a 2-dimensional (3,3) array within a 2-level nested FOR loop using the loop iteratives as array indices (tmpia2(i,j):=tmpia2(j,i)).                                                    |
| AF0550F   | C/E/S/T/J/F | references to a 3-dimensional (3,3,3) array within a 3-level nested FOR loop using the loop iteratives as array indices (tmpia3(i,j,k):=tmpia3(k,i,j)).                                              |
| AF06001   | C/E/S/T/J/F | invocation of a local procedure with no arguments.                                                                                                                                                   |
| AF06009   | C/E/S/T/J/F | invocation of a local procedure with 1 scalar integer input argument.                                                                                                                                |
| AF06010   | C/E/S/T/J/F | invocation of a local procedure with 1 scalar integer output argument.                                                                                                                               |
| AF06011   | C/E/S/T/J/F | invocation of a local procedure with 1 scalar integer input/output argument.                                                                                                                         |
| AF06013   | C/E/S/T/J/F | loop overhead for subsequent tests for local procedure calls with 10 scalar integer arguments, which are tests AF06014 AF06015 AF06016.                                                              |
| AF06014,S | C/E/S/T/J/F | invocation of a local procedure with 10 scalar integer input arguments.                                                                                                                              |
| AF06015,S | C/E/S/T/J/F | invocation of a local procedure with 10 scalar integer output arguments.                                                                                                                             |
| AF06016,S | C/E/S/T/J/F | invocation of a local procedure with 10 scalar integer                                                                                                                                               |

Table F-1 ACPs Test Descriptions (continued)

| TEST NAME | VERSIONS    | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AF06017   | C/E/S/T/J/F | input/output arguments.<br>\$reference in a local procedure to 10 scalar integer input arguments with references to the arguments in 10 statements of the form TMPISi := ARGi.                                                                                                                                                                                                                       |
| AF06018   | C/E/S/T/J/F | \$reference in a local procedure to 10 scalar integer output arguments with references to the arguments in 10 statements of the form ARGi := TMPISi.                                                                                                                                                                                                                                                 |
| AF06019   | C/E/S/T/J/F | \$reference in a local procedure to 10 scalar integer input/output arguments with references to the arguments in 10 statements of the form ARGi := ARGj.                                                                                                                                                                                                                                             |
| AF06023   | C/E/S/T/J/F | loop overhead for subsequent tests for local procedure calls to procedures declared with 10 constrained 1-dimensional integer array arguments, which are tests AF06024 AF06025 AF06026 AF06027 AF06028 AF06029 AF06030 AF06031 AF06032. The overhead includes all statements (including the invocation of a 0 argument local procedure) that are not part of the test but only used to construct it. |
| AF06024,S | C/E/S/T/J/F | invocation of a local procedure with 10 constrained 1-dimensional integer array input arguments.                                                                                                                                                                                                                                                                                                     |
| AF06025,S | C/E/S/T/J/F | invocation of a local procedure with 10 constrained 1-dimensional integer array output arguments.                                                                                                                                                                                                                                                                                                    |
| AF06026,S | C/E/S/T/J/F | invocation of a local procedure with 10 constrained 1-dimensional integer array input/output arguments.                                                                                                                                                                                                                                                                                              |
| AF06027,S | C/E/S/T/J/F | invocation of a local procedure with 10 constrained 2-dimensional integer array input arguments.                                                                                                                                                                                                                                                                                                     |
| AF06028,S | C/E/S/T/J/F | invocation of a local procedure with 10 constrained 2-dimensional integer array output arguments.                                                                                                                                                                                                                                                                                                    |
| AF06029,S | C/E/S/T/J/F | invocation of a local procedure with 10 constrained 2-dimensional integer array input/output arguments.                                                                                                                                                                                                                                                                                              |
| AF06030,S | C/E/S/T/J/F | invocation of a local procedure with 10 constrained 3-dimensional integer array input arguments.                                                                                                                                                                                                                                                                                                     |
| AF06031,S | C/E/S/T/J/F | invocation of a local procedure with 10 constrained 3-dimensional integer array output arguments.                                                                                                                                                                                                                                                                                                    |
| AF06032,S | C/E/S/T/J/F | invocation of a local procedure with 10 constrained 3-dimensional integer array input/output arguments.                                                                                                                                                                                                                                                                                              |
| AF06043   | C/E/S/T/J/F | loop overhead for subsequent tests for local procedure calls declared with 10 unconstrained integer array arguments, which are tests AF06044 AF06045 AF06046 AF06047 AF06048 AF06049 AF06050 AF06051 AF06052. The overhead includes all statements (including the invocation of a 0 argument local procedure) that are not part of the test but only used to construct it.                           |
| AF06044,S | C/E/S/T/J/F | invocation of a local procedure with 10 constrained 1-dimensional integer array input arguments.                                                                                                                                                                                                                                                                                                     |
| AF06045,S | C/E/S/T/J/F | invocation of a local procedure with 10 constrained 1-dimensional integer array output arguments.                                                                                                                                                                                                                                                                                                    |
| AF06046,S | C/E/S/T/J/F | invocation of a local procedure with 10 constrained 1-dimensional integer array input/output arguments.                                                                                                                                                                                                                                                                                              |
| AF06047,S | C/E/S/T/J/F | invocation of a local procedure with 10 constrained 2-dimensional integer array input arguments.                                                                                                                                                                                                                                                                                                     |
| AF06048,S | C/E/S/T/J/F | invocation of a local procedure with 10 constrained 2-dimensional integer array output arguments.                                                                                                                                                                                                                                                                                                    |
| AF06049,S | C/E/S/T/J/F | invocation of a local procedure with 10 constrained 2-dimensional integer array input/output arguments.                                                                                                                                                                                                                                                                                              |
| AF06050,S | C/E/S/T/J/F | invocation of a local procedure with 10 constrained 3-dimensional integer array input arguments.                                                                                                                                                                                                                                                                                                     |
| AF06051,S | C/E/S/T/J/F | invocation of a local procedure with 10 constrained 3-dimensional integer array output arguments.                                                                                                                                                                                                                                                                                                    |
| AF06052,S | C/E/S/T/J/F | invocation of a local procedure with 10 constrained 3-dimensional integer array input/output arguments.                                                                                                                                                                                                                                                                                              |
| AF06060   | C/E/S/T/J/F | \$reference in a local procedure declared with 10 constrained 1-dimensional integer array input arguments to an argument in 10 statements of the form TMPISi :=                                                                                                                                                                                                                                      |

\* run statistic #2 = size of return statement code

Table F-1 ACPS Test Descriptions (continued)

| TEST NAME | VERSIONS    | DESCRIPTION                                                                                                                                                                                                          |
|-----------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AF06061   | C/E/S/T/J/F | ARG(TMPISj).<br>\$reference in a local procedure declared with 10 constrained 1-dimensional integer array output arguments to an argument in 10 statements of the form ARG(TMPISi) := constant (compare to AF05210). |
| AF06062   | C/E/S/T/J/F | \$reference in a local procedure declared with 10 constrained 1-dimensional integer array input/output arguments to an argument in 10 statements of the form ARG(TMPISi) := ARG(TMPISj).                             |
| AF06063   | C/E/S/T/J/F | \$reference in a local procedure declared with 10 constrained 2-dimensional integer array input arguments to an argument in 10 statements of the form TMPISi := ARG(TMPISj,TMPISj).                                  |
| AF06064   | C/E/S/T/J/F | \$reference in a local procedure declared with 10 constrained 2-dimensional integer array output arguments to an argument in 5 statements of the form ARG(TMPISi,TMPISi) := constant (compare to AF0521H).           |
| AF06065   | C/E/S/T/J/F | \$reference in a local procedure declared with 10 constrained 2-dimensional integer array input/output arguments to an argument in 10 statements of the form ARG(TMPISi,TMPISi) := ARG(TMPISj,TMPISj).               |
| AF06066   | C/E/S/T/J/F | \$reference in a local procedure declared with 10 constrained 3-dimensional integer array input arguments to an argument in 10 statements of the form TMPISi := ARG(TMPISj,TMPISj,TMPISj).                           |
| AF06067   | C/E/S/T/J/F | \$reference in a local procedure declared with 10 constrained 3-dimensional integer array output arguments to an argument in 5 statements of the form ARG(TMPISi,TMPISi,TMPISi) := constant (compare to AF0521I).    |
| AF06068   | C/E/S/T/J/F | \$reference in a local procedure declared with 10 constrained 3-dimensional integer array input/output arguments to an argument in 10 statements of the form ARG(TMPISi,TMPISi,TMPISi) := ARG(TMPISj,TMPISj,TMPISj). |
| AF06070   | C/E/S/T/J/F | \$reference in a local procedure declared with 10 unconstrained 1-dimensional integer array input arguments to an argument in 10 statements of the form TMPISi := ARG(TMPISj).                                       |
| AF06071   | C/E/S/T/J/F | \$reference in a local procedure declared with 10 unconstrained 1-dimensional integer array output arguments to an argument in 10 statements of the form ARG(TMPISi) := constant (compare to AF05210).               |
| AF06072   | C/E/S/T/J/F | \$reference in a local procedure declared with 10 unconstrained 1-dimensional integer array input/output arguments to an argument in 10 statements of the form ARG(TMPISi) := ARG(TMPISj).                           |
| AF06073   | C/E/S/T/J/F | \$reference in a local procedure declared with 10 unconstrained 2-dimensional integer array input arguments to an argument in 10 statements of the form TMPISi := ARG(TMPISj,TMPISj).                                |
| AF06074   | C/E/S/T/J/F | \$reference in a local procedure declared with 10 unconstrained 2-dimensional integer array output arguments to an argument in 5 statements of the form ARG(TMPISi,TMPISi) := constant (compare to AF0521H).         |
| AF06075   | C/E/S/T/J/F | \$reference in a local procedure declared with 10 unconstrained 2-dimensional integer array input/output arguments to an argument in 10 statements of the form ARG(TMPISi,TMPISi) := ARG(TMPISj,TMPISj).             |
| AF06076   | C/E/S/T/J/F | \$reference in a local procedure declared with 10 unconstrained 3-dimensional integer array input arguments to an argument in 10 statements of the form TMPISi := ARG(TMPISj,TMPISj,TMPISj).                         |
| AF06077   | C/E/S/T/J/F | \$reference in a local procedure declared with 10 unconstrained 3-dimensional integer array output                                                                                                                   |

\$ run statistic #2 = size of return statement code

Table F-1 ACPS Test Descriptions (continued)

| TEST NAME | VERSIONS    | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                |
|-----------|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|           |             | arguments to an argument in 5 statements of the form ARG(TMPISi,TMPISi,TMPISi) := constant (compare to AF05211).                                                                                                                                                                                                                                           |
| AF06078   | C/E/S/T/J/F | \$reference in a local procedure declared with 10 unconstrained 3-dimensional integer array input/output arguments to an argument in 10 statements of the form ARG(TMPISi,TMPISi,TMPISi) := ARG(TMPISj,TMPISj,TMPISj).                                                                                                                                     |
| AF06101   | C/E/S/T/J/F | external procedure call with 0 arguments.                                                                                                                                                                                                                                                                                                                  |
| AF06109   | C/E/S/T/J/F | external procedure call with 1 scalar integer input argument.                                                                                                                                                                                                                                                                                              |
| AF06110   | C/E/S/T/J/F | external procedure call with 1 scalar integer output argument.                                                                                                                                                                                                                                                                                             |
| AF06111   | C/E/S/T/J/F | external procedure call with 1 scalar integer input/output argument.                                                                                                                                                                                                                                                                                       |
| AF06113   | C/E/S/T/J/F | loop overhead for subsequent tests for external procedure calls of procedures declared with 10 scalar integer arguments, which are tests AF06114 AF06115 AF06116. The overhead includes all statements (including the invocation of a 0 argument external procedure) that are not part of the test but only used to construct it.                          |
| AF06114,S | C/E/S/T/J/F | call of an external procedure with 10 integer input arguments.                                                                                                                                                                                                                                                                                             |
| AF06115,S | C/E/S/T/J/F | call of an external procedure with 10 integer output arguments.                                                                                                                                                                                                                                                                                            |
| AF06116,S | C/E/S/T/J/F | call of an external procedure with 10 integer input/output arguments.                                                                                                                                                                                                                                                                                      |
| AF06117   | C/E/S/T/J/F | \$reference in an external procedure to 10 scalar integer input arguments with references to the arguments in 10 statements of the form TMPISi := ARGi.                                                                                                                                                                                                    |
| AF06118   | C/E/S/T/J/F | \$reference in an external procedure to 10 scalar integer output arguments with references to the arguments in 10 statements of the form ARGi := TMPISi.                                                                                                                                                                                                   |
| AF06119   | C/E/S/T/J/F | \$reference in an external procedure to 10 scalar integer input/output arguments with references to the arguments in 10 statements of the form ARGi := ARGj.                                                                                                                                                                                               |
| AF06133   | C/E/S/T/J/F | loop overhead for subsequent tests for external procedure calls of procedures declared with 10 constrained 1-dimensional integer array arguments, which are tests AF06134 AF06135 AF06136. The overhead includes all statements (including the invocation of a 0 argument external procedure) that are not part of the test but only used to construct it. |
| AF06134,S | C/E/S/T/J/F | call of an external procedure with 10 constrained 1-dimensional integer array input arguments.                                                                                                                                                                                                                                                             |
| AF06135,S | C/E/S/T/J/F | call of an external procedure with 10 constrained 1-dimensional integer array output arguments.                                                                                                                                                                                                                                                            |
| AF06136,S | C/E/S/T/J/F | call of an external procedure with 10 constrained 1-dimensional integer array input/output arguments.                                                                                                                                                                                                                                                      |
| AF06137   | C/E/S/T/J/F | \$reference in an external procedure declared with 10 constrained 1-dimensional integer array input arguments to an argument in 10 statements of the form TMPISi := ARG(TMPISj).                                                                                                                                                                           |
| AF06138   | C/E/S/T/J/F | \$reference in an external procedure declared with 10 constrained 1-dimensional integer array output arguments to an argument in 10 statements of the form ARG(TMPISi) := constant (compare to AF05210).                                                                                                                                                   |
| AF06139   | C/E/S/T/J/F | \$reference in an external procedure declared with 10 constrained 1-dimensional integer array input/output arguments to an argument in 10 statements of the form ARG(TMPISi) := ARG(TMPISj).                                                                                                                                                               |
| AF06143   | C/E/S/T/J/F | loop overhead for subsequent tests for external procedure calls of procedures declared with 10 constrained 2-dimensional array arguments, which are                                                                                                                                                                                                        |

\$ run statistic #2 = size of return statement code



Table F-1 ACPs Test Descriptions (continued)

| TEST NAME | VERSIONS    | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                   |
|-----------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|           |             | tests AF06144 AF06145 AF06146 . The overhead includes all statements (including the invocation of a 0 argument external procedure) that are not part of the test but only used to construct it.                                                                                                                                                               |
| AF06144,S | C/E/S/T/J/F | call of an external procedure with 10 constrained 2-dimensional integer array input arguments.                                                                                                                                                                                                                                                                |
| AF06145,S | C/E/S/T/J/F | call of an external procedure with 10 constrained 2-dimensional integer array output arguments.                                                                                                                                                                                                                                                               |
| AF06146,S | C/E/S/T/J/F | call of an external procedure with 10 constrained 2-dimensional integer array input/output arguments.                                                                                                                                                                                                                                                         |
| AF06147   | C/E/S/T/J/F | \$reference in an external procedure declared with 10 constrained 2-dimensional integer array input arguments to an argument in 10 statements of the form TMPISi := ARG(TMPISj,TMPISj).                                                                                                                                                                       |
| AF06148   | C/E/S/T/J/F | \$reference in an external procedure declared with 10 constrained 2-dimensional integer array output arguments to an argument in 5 statements of the form ARG(TMPISi,TMPISi) := constant (compare to AF0521H).                                                                                                                                                |
| AF06149   | C/E/S/T/J/F | \$reference in an external procedure declared with 10 constrained 2-dimensional integer array input/output arguments to an argument in 10 statements of the form ARG(TMPISi,TMPISi) := ARG(TMPISj,TMPISj).                                                                                                                                                    |
| AF06153   | C/E/S/T/J/F | loop overhead for subsequent tests for external procedure calls of procedures declared with 10 constrained 3-dimensional integer array arguments, which are tests AF06154 AF06155 AF06156 . The overhead includes all statements (including the invocation of a 0 argument external procedure) that are not part of the test but only used to construct it.   |
| AF06154,S | C/E/S/T/J/F | call of an external procedure with 10 constrained 3-dimensional integer array input arguments.                                                                                                                                                                                                                                                                |
| AF06155,S | C/E/S/T/J/F | call of an external procedure with 10 constrained 3-dimensional integer array output arguments.                                                                                                                                                                                                                                                               |
| AF06156,S | C/E/S/T/J/F | call of an external procedure with 10 constrained 3-dimensional integer array input/output arguments.                                                                                                                                                                                                                                                         |
| AF06157   | C/E/S/T/J/F | \$reference in an external procedure with 10 constrained 3-dimensional integer array input arguments to an argument in 10 statements of the form TMPISi := ARG(TMPISj,TMPISj,TMPISj).                                                                                                                                                                         |
| AF06158   | C/E/S/T/J/F | \$reference in an external procedure with 10 constrained 3-dimensional integer array output arguments to an argument in 5 statements of the form ARG(TMPISi,TMPISi,TMPISi) := constant (compare to AF0521I).                                                                                                                                                  |
| AF06159   | C/E/S/T/J/F | \$reference in an external procedure with 10 constrained 3-dimensional integer array input/output arguments to an argument in 10 statements of the form ARG(TMPISi,TMPISi,TMPISi) := ARG(TMPISj,TMPISj,TMPISj).                                                                                                                                               |
| AF06163   | C/E/S/T/J/F | loop overhead for subsequent tests for external procedure calls of procedures declared with 10 unconstrained 1-dimensional integer array arguments, which are tests AF06164 AF06165 AF06166 . The overhead includes all statements (including the invocation of a 0 argument external procedure) that are not part of the test but only used to construct it. |
| AF06164,S | C/E/S/T/J/F | call of an external procedure with 10 constrained 1-dimensional integer array input arguments.                                                                                                                                                                                                                                                                |
| AF06165,S | C/E/S/T/J/F | call of an external procedure with 10 constrained 1-dimensional integer array output arguments.                                                                                                                                                                                                                                                               |
| AF06166,S | C/E/S/T/J/F | call of an external procedure with 10 constrained 1-dimensional integer array input/output arguments.                                                                                                                                                                                                                                                         |
| AF06167   | C/E/S/T/J/F | \$reference in an external procedure declared with 10 unconstrained 1-dimensional integer array input arguments to an argument in 10 statements of the form TMPISi := ARG(TMPISj).                                                                                                                                                                            |

\$ run statistic 02 = size of return statement code

Table F-1 ACPS Test Descriptions (continued)

| TEST NAME | VERSIONS    | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                  |
|-----------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AF06168   | C/E/S/T/J/F | \$reference in an external procedure declared with 10 unconstrained 1-dimensional integer array output arguments to an argument in 10 statements of the form ARG(TMPISi) := constant (compare to AF05210).                                                                                                                                                   |
| AF06169   | C/E/S/T/J/F | \$reference in an external procedure declared with 10 unconstrained 1-dimensional integer array input/output arguments to an argument in 10 statements of the form ARG(TMPISi) := ARG(TMPISj).                                                                                                                                                               |
| AF06173   | C/E/S/T/J/F | loop overhead for subsequent tests for external procedure calls of procedures declared with 10 unconstrained 2-dimensional integer array arguments, which are tests AF06174 AF06175 AF06176. The overhead includes all statements (including the invocation of a 0 argument external procedure) that are not part of the test but only used to construct it. |
| AF06174,S | C/E/S/T/J/F | call of an external procedure with 10 constrained 2-dimensional integer array input arguments.                                                                                                                                                                                                                                                               |
| AF06175,S | C/E/S/T/J/F | call of an external procedure with 10 constrained 2-dimensional integer array output arguments.                                                                                                                                                                                                                                                              |
| AF06176,S | C/E/S/T/J/F | call of an external procedure with 10 constrained 2-dimensional integer array input/output arguments.                                                                                                                                                                                                                                                        |
| AF06177   | C/E/S/T/J/F | \$reference in an external procedure declared with 10 unconstrained 2-dimensional integer array input arguments to an argument in 10 statements of the form TMPISi := ARG(TMPISj,TMPISj).                                                                                                                                                                    |
| AF06178   | C/E/S/T/J/F | \$reference in an external procedure declared with 10 unconstrained 2-dimensional integer array output arguments to an argument in 5 statements of the form ARG(TMPISi,TMPISi) := constant (compare to AF0521H).                                                                                                                                             |
| AF06179   | C/E/S/T/J/F | \$reference in an external procedure declared with 10 unconstrained 2-dimensional integer array input/output arguments to an argument in 10 statements of the form ARG(TMPISi,TMPISi) := ARG(TMPISj,TMPISj).                                                                                                                                                 |
| AF06183   | C/E/S/T/J/F | loop overhead for subsequent tests for external procedure calls of procedures declared with 10 unconstrained 3-dimensional integer array arguments, which are tests AF06184 AF06185 AF06186. The overhead includes all statements (including the invocation of a 0 argument external procedure) that are not part of the test but only used to construct it. |
| AF06184,S | C/E/S/T/J/F | call of an external procedure with 10 constrained 3-dimensional integer array input arguments.                                                                                                                                                                                                                                                               |
| AF06185,S | C/E/S/T/J/F | call of an external procedure with 10 constrained 3-dimensional integer array output arguments.                                                                                                                                                                                                                                                              |
| AF06186,S | C/E/S/T/J/F | call of an external procedure with 10 constrained 3-dimensional integer array input/output arguments.                                                                                                                                                                                                                                                        |
| AF06187   | C/E/S/T/J/F | \$reference in an external procedure declared with 10 unconstrained 3-dimensional integer array input arguments to an argument in 10 statements of the form TMPISi := ARG(TMPISj,TMPISj,TMPISj).                                                                                                                                                             |
| AF06188   | C/E/S/T/J/F | \$reference in an external procedure declared with 10 unconstrained 3-dimensional integer array output arguments to an argument in 5 statements of the form ARG(TMPISi,TMPISi,TMPISi) := constant (compare to AF0521I).                                                                                                                                      |
| AF06189   | C/E/S/T/J/F | \$reference in an external procedure declared with 10 unconstrained 3-dimensional integer array input/output arguments to an argument in 10 statements of the form ARG(TMPISi,TMPISi,TMPISi) := ARG(TMPISj,TMPISj,TMPISj).                                                                                                                                   |
| AF06192   | C/E/S/T/J   | loop overhead for subsequent tests for external procedure calls of procedures declared with 10 enumeration arguments, which are tests AF06193 AF06194 AF06195. The overhead includes all statements (including the invocation of a 0 argument external                                                                                                       |

\$ run statistic #2 = size of return statement code

Table F-1 ACPs Test Descriptions (continued)

| <u>TEST NAME</u> | <u>VERSIONS</u> | <u>DESCRIPTION</u>                                                                                                                                                                                                                                                                                                                                     |
|------------------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                  |                 | procedure) that are not part of the test but only used to construct it.                                                                                                                                                                                                                                                                                |
| AF06193,S        | C/E/S/T/J       | call of an external procedure with 10 enumeration input arguments.                                                                                                                                                                                                                                                                                     |
| AF06194,S        | C/E/S/T/J       | call of an external procedure with 10 enumeration output arguments.                                                                                                                                                                                                                                                                                    |
| AF06195,S        | C/E/S/T/J       | call of an external procedure with 10 enumeration input/output arguments.                                                                                                                                                                                                                                                                              |
| AF06196          | C/E/S/T/J       | reference in an external procedure to 10 enumeration input arguments with references to the arguments in 10 statements of the form TMPESi := ARGi.                                                                                                                                                                                                     |
| AF06197          | C/E/S/T/J       | reference in an external procedure to 10 enumeration output arguments with references to the arguments in 10 statements of the form ARGi := TMPESi.                                                                                                                                                                                                    |
| AF06198          | C/E/S/T/J       | reference in an external procedure to 10 enumeration input/output arguments with references to the arguments in 10 statements of the form ARGi := ARGj.                                                                                                                                                                                                |
| AF0619B          | C/E/S/T/J       | loop overhead for subsequent tests for external procedure calls of procedures declared with 10 unconstrained variant record arguments, which are tests AF0619C AF0619D AF0619E. The overhead includes all statements (including the invocation of a 0 argument external procedure) that are not part of the test but only used to construct it.        |
| AF0619C,S        | C/E/S/T/J       | call of an external procedure with 10 unconstrained variant record input arguments.                                                                                                                                                                                                                                                                    |
| AF0619D,S        | C/E/S/T/J       | call of an external procedure with 10 unconstrained variant record output arguments.                                                                                                                                                                                                                                                                   |
| AF0619E,S        | C/E/S/T/J       | call of an external procedure with 10 unconstrained variant record input/output arguments.                                                                                                                                                                                                                                                             |
| AF0619F          | C/E/S/T/J       | reference in an external procedure to 10 unconstrained variant record input arguments with references to the arguments in 10 statements of the form TMPVSi := ARGi.                                                                                                                                                                                    |
| AF0619G          | C/E/S/T/J       | reference in an external procedure to 10 unconstrained variant record output arguments with references to the arguments in 10 statements of the form ARGi := TMPVSi.                                                                                                                                                                                   |
| AF0619H          | C/E/S/T/J       | reference in an external procedure to 10 unconstrained variant record input/output arguments with references to the arguments in 10 statements of the form ARGi := ARGj.                                                                                                                                                                               |
| AF0619K          | C/E/S/T/J       | loop overhead for subsequent tests for external procedure calls of procedures declared with 10 record access arguments (type RECORD_POINTER), which are tests AF0619L AF0619M AF0619N. The overhead includes all statements (including the invocation of a 0 argument external procedure) that are not part of the test but only used to construct it. |
| AF0619L,S        | C/E/S/T/J       | call of an external procedure with 10 record access input arguments.                                                                                                                                                                                                                                                                                   |
| AF0619M,S        | C/E/S/T/J       | call of an external procedure with 10 record access output arguments.                                                                                                                                                                                                                                                                                  |
| AF0619N,S        | C/E/S/T/J       | call of an external procedure with 10 record access input/output arguments.                                                                                                                                                                                                                                                                            |
| AF0619O          | C/E/S/T/J       | reference in an external procedure to 10 record access input arguments with references to the arguments in 10 statements of the form TMPPPi := ARGi.                                                                                                                                                                                                   |
| AF0619P          | C/E/S/T/J       | reference in an external procedure to 10 record access output arguments with references to the arguments in 10 statements of the form ARGi := TMPPPi.                                                                                                                                                                                                  |
| AF0619Q          | C/E/S/T/J       | reference in an external procedure to 10 record access input/output arguments with references to the arguments in 10 statements of the form ARGi := ARGj.                                                                                                                                                                                              |
| AFD6201          | C/E/S/T/J       | call of a local pragma inline procedure with no arguments.                                                                                                                                                                                                                                                                                             |
| AFD6209          | C/E/S/T/J       | call of a local pragma inline procedure with 1 integer                                                                                                                                                                                                                                                                                                 |

Table F-1 ACPS Test Descriptions (continued)

| TEST NAME | VERSIONS  | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                         |
|-----------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AFD6210   | C/E/S/T/J | input argument.<br>call of a local pragma inline procedure with 1 integer output argument.                                                                                                                                                                                                                                                                                                                          |
| AFD6211   | C/E/S/T/J | call of a local pragma inline procedure with 1 integer input/output argument.                                                                                                                                                                                                                                                                                                                                       |
| AFD6213   | C/E/S/T/J | loop overhead for subsequent tests for pragma inline procedure calls of procedures declared with 10 scalar integer arguments, which are tests AFD6214 AFD6215 AFD6216 . The overhead includes all statements( including the invocation of a 0 argument local pragma inline procedure) that are not part of the test but only used to construct it.                                                                  |
| AFD6214,S | C/E/S/T/J | call of a local pragma inline procedure with 10 integer input arguments.                                                                                                                                                                                                                                                                                                                                            |
| AFD6215,S | C/E/S/T/J | call of a local pragma inline procedure with 10 integer output arguments.                                                                                                                                                                                                                                                                                                                                           |
| AFD6216,S | C/E/S/T/J | call of a local pragma inline procedure with 10 integer input/output arguments.                                                                                                                                                                                                                                                                                                                                     |
| AFD6217   | C/E/S/T/J | *reference in a local pragma inline procedure to 10 integer input arguments with references to the arguments in 10 statements of the form TMPISi := ARGi.                                                                                                                                                                                                                                                           |
| AFD6218   | C/E/S/T/J | *reference in a local pragma inline procedure to 10 integer output arguments with references to the arguments in 10 statements of the form ARGi := TMPISi.                                                                                                                                                                                                                                                          |
| AFD6219   | C/E/S/T/J | *reference in a local pragma inline procedure to 10 integer input/output arguments with references to the arguments in 10 statements of the form ARGi := ARGj.                                                                                                                                                                                                                                                      |
| AFD6223   | C/E/S/T/J | loop overhead for subsequent tests for local pragma inline procedure calls of procedures declared with 10 constrained integer array arguments, which are tests AFD6224 AFD6225 AFD6226 AFD6227 AFD6228 AFD6229 AFD6230 AFD6231 AFD6232 . The overhead includes all statements( including the invocation of a 0 argument local pragma inline procedure) that are not part of the test but only used to construct it. |
| AFD6224,S | C/E/S/T/J | invocation of a local pragma inline procedure with 10 constrained 1-dimensional integer array input arguments.                                                                                                                                                                                                                                                                                                      |
| AFD6225,S | C/E/S/T/J | invocation of a local pragma inline procedure with 10 constrained 1-dimensional integer array output arguments.                                                                                                                                                                                                                                                                                                     |
| AFD6226,S | C/E/S/T/J | invocation of a local pragma inline procedure with 10 constrained 1-dimensional integer array input/output arguments.                                                                                                                                                                                                                                                                                               |
| AFD6227,S | C/E/S/T/J | invocation of a local pragma inline procedure with 10 constrained 2-dimensional integer array input arguments.                                                                                                                                                                                                                                                                                                      |
| AFD6228,S | C/E/S/T/J | invocation of a local pragma inline procedure with 10 constrained 2-dimensional integer array output arguments.                                                                                                                                                                                                                                                                                                     |
| AFD6229,S | C/E/S/T/J | invocation of a local pragma inline procedure with 10 constrained 2-dimensional integer array input/output arguments.                                                                                                                                                                                                                                                                                               |
| AFD6230,S | C/E/S/T/J | invocation of a local pragma inline procedure with 10 constrained 3-dimensional integer array input arguments.                                                                                                                                                                                                                                                                                                      |
| AFD6231,S | C/E/S/T/J | invocation of a local pragma inline procedure with 10 constrained 3-dimensional integer array output arguments.                                                                                                                                                                                                                                                                                                     |
| AFD6232,S | C/E/S/T/J | invocation of a local pragma inline procedure with 10 constrained 3-dimensional integer array input/output arguments.                                                                                                                                                                                                                                                                                               |
| AFD6243   | C/E/S/T/J | loop overhead for subsequent tests for local pragma inline procedure calls of procedures declared with 10 unconstrained integer array arguments, which are tests AFD6244 AFD6245 AFD6246 AFD6247 AFD6248 AFD6249 AFD6250 AFD6251 AFD6252 . The overhead includes all statements(                                                                                                                                    |

\* run statistic #2 = size of return statement code

Table F-1 ACPS Test Descriptions (continued)

| TEST NAME | VERSIONS  | DESCRIPTION                                                                                                                                                                                                                     |
|-----------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|           |           | including the invocation of a 0 argument local pragma inline procedure) that are not part of the test but only used to construct it.                                                                                            |
| AFD6244,S | C/E/S/T/J | invocation of a local pragma inline procedure with 10 constrained 1-dimensional integer array input arguments.                                                                                                                  |
| AFD6245,S | C/E/S/T/J | invocation of a local pragma inline procedure with 10 constrained 1-dimensional integer array output arguments.                                                                                                                 |
| AFD6246,S | C/E/S/T/J | invocation of a local pragma inline procedure with 10 constrained 1-dimensional integer array input/output arguments.                                                                                                           |
| AFD6247,S | C/E/S/T/J | invocation of a local pragma inline procedure with 10 constrained 2-dimensional integer array input arguments.                                                                                                                  |
| AFD6248,S | C/E/S/T/J | invocation of a local pragma inline procedure with 10 constrained 2-dimensional integer array output arguments.                                                                                                                 |
| AFD6249,S | C/E/S/T/J | invocation of a local pragma inline procedure with 10 constrained 2-dimensional integer array input/output arguments.                                                                                                           |
| AFD6250,S | C/E/S/T/J | invocation of a local pragma inline procedure with 10 constrained 3-dimensional integer array input arguments.                                                                                                                  |
| AFD6251,S | C/E/S/T/J | invocation of a local pragma inline procedure with 10 constrained 3-dimensional integer array output arguments.                                                                                                                 |
| AFD6252,S | C/E/S/T/J | invocation of a local pragma inline procedure with 10 constrained 3-dimensional integer array input/output arguments.                                                                                                           |
| AFD6260   | C/E/S/T   | \$reference in a local pragma inline procedure declared with 10 constrained 1-dimensional integer array input arguments to an argument in 10 statements of the form TMPISi := ARG(TMPISj).                                      |
| AFD6261   | C/E/S/T   | \$reference in a local pragma inline procedure declared with 10 constrained 1-dimensional integer array output arguments to an argument in 10 statements of the form ARG(TMPISi) := constant (compare to AF05210).              |
| AFD6262   | C/E/S/T   | \$reference in a local pragma inline procedure declared with 10 constrained 1-dimensional integer array input/output arguments to an argument in 10 statements of the form ARG(TMPISi) := ARG(TMPISj).                          |
| AFD6263   | C/E/S/T   | \$reference in a local pragma inline procedure declared with 10 constrained 2-dimensional integer array input arguments to an argument in 10 statements of the form TMPISi := ARG(TMPISj,TMPISj).                               |
| AFD6264   | C/E/S/T   | \$reference in a local pragma inline procedure declared with 10 constrained 2-dimensional integer array output arguments to an argument in 5 statements of the form ARG(TMPISi,TMPISi) := constant (compare to AF0521H).        |
| AFD6265   | C/E/S/T   | \$reference in a local pragma inline procedure declared with 10 constrained 2-dimensional integer array input/output arguments to an argument in 10 statements of the form ARG(TMPISi,TMPISi) := ARG(TMPISj,TMPISj).            |
| AFD6266   | C/E/S/T   | \$reference in a local pragma inline procedure declared with 10 constrained 3-dimensional integer array input arguments to an argument in 10 statements of the form TMPISi := ARG(TMPISj,TMPISj,TMPISj).                        |
| AFD6267   | C/E/S/T   | \$reference in a local pragma inline procedure declared with 10 constrained 3-dimensional integer array output arguments to an argument in 5 statements of the form ARG(TMPISi,TMPISi,TMPISi) := constant (compare to AF0521I). |
| AFD6268   | C/E/S/T   | \$reference in a local pragma inline procedure declared with 10 constrained 3-dimensional integer array input/output arguments to an argument in 10 statements of the form ARG(TMPISi,TMPISi,TMPISi) := ARG(TMPISj,             |

\$ run statistic 82 = size of return statement code

Table F-1 ACPs Test Descriptions (continued)

| TEST NAME | VERSIONS | DESCRIPTION                                                                                                                                                                                                                                                                                                                                    |
|-----------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AFD6270   | C/E/S/T  | TMPIsj,TMPIsj).<br>\$reference in a local pragma inline procedure declared with 10 unconstrained 1-dimensional integer array input arguments to an argument in 10 statements of the form TMPIsi := ARG(TMPIsj).                                                                                                                                |
| AFD6271   | C/E/S/T  | \$reference in a local pragma inline procedure declared with 10 unconstrained 1-dimensional integer array output arguments to an argument in 10 statements of the form ARG(TMPIsi) := constant (compare to AF05210).                                                                                                                           |
| AFD6272   | C/E/S/T  | \$reference in a local pragma inline procedure declared with 10 unconstrained 1-dimensional integer array input/output arguments to an argument in 10 statements of the form ARG(TMPIsi) := ARG(TMPIsj).                                                                                                                                       |
| AFD6273   | C/E/S/T  | \$reference in a local pragma inline procedure declared with 10 unconstrained 2-dimensional integer array input arguments to an argument in 10 statements of the form TMPIsi := ARG(TMPIsj,TMPIsj).                                                                                                                                            |
| AFD6274   | C/E/S/T  | \$reference in a local pragma inline procedure declared with 10 unconstrained 2-dimensional integer array output arguments to an argument in 5 statements of the form ARG(TMPIsi,TMPIsi) := constant (compare to AF0521H).                                                                                                                     |
| AFD6275   | C/E/S/T  | \$reference in a local pragma inline procedure declared with 10 unconstrained 2-dimensional integer array input/output arguments to an argument in 10 statements of the form ARG(TMPIsi,TMPIsi) := ARG(TMPIsj,TMPIsj).                                                                                                                         |
| AFD6276   | C/E/S/T  | \$reference in a local pragma inline procedure declared with 10 unconstrained 3-dimensional integer array input arguments to an argument in 10 statements of the form TMPIsi := ARG(TMPIsj,TMPIsj,TMPIsj).                                                                                                                                     |
| AFD6277   | C/E/S/T  | \$reference in a local pragma inline procedure declared with 10 unconstrained 3-dimensional integer array output arguments to an argument in 5 statements of the form ARG(TMPIsi,TMPIsi,TMPIsi) := constant (compare to AF0521I).                                                                                                              |
| AFD6278   | C/E/S/T  | \$reference in a local pragma inline procedure declared with 10 unconstrained 3-dimensional integer array input/output arguments to an argument in 10 statements of the form ARG(TMPIsi,TMPIsi,TMPIsi) := ARG(TMPIsj,TMPIsj,TMPIsj).                                                                                                           |
| AFD6301   | C/E/S/T  | invocation of an external pragma inline procedure with 0 arguments.                                                                                                                                                                                                                                                                            |
| AFD6309   | C/E/S/T  | invocation of an external pragma inline procedure with 1 scalar integer input argument.                                                                                                                                                                                                                                                        |
| AFD6310   | C/E/S/T  | invocation of an external pragma inline procedure with 1 scalar integer output argument.                                                                                                                                                                                                                                                       |
| AFD6311   | C/E/S/T  | invocation of an external pragma inline procedure with 1 scalar integer input/output argument.                                                                                                                                                                                                                                                 |
| AFD6313   | C/E/S/T  | test loop overhead for external pragma inline procedure calls of procedures declared with 10 scalar integer arguments, which are tests AFD6314 AFD6315 AFD6316 . The overhead includes all statements (including the invocation of a 0 argument external pragma inline procedure) that are not part of the test but only used to construct it. |
| AFD6314,S | C/E/S/T  | invocation of an external pragma inline procedure with 10 scalar integer input arguments.                                                                                                                                                                                                                                                      |
| AFD6315,S | C/E/S/T  | invocation of an external pragma inline procedure with 10 scalar integer output arguments.                                                                                                                                                                                                                                                     |
| AFD6316,S | C/E/S/T  | invocation of an external pragma inline procedure with 10 scalar integer input/output arguments.                                                                                                                                                                                                                                               |
| AFD6317   | C/E/S/T  | \$reference in an external pragma inline procedure to 10 scalar integer input arguments with references to the arguments in 10 statements of the form TMPIsi := ARGi.                                                                                                                                                                          |
| AFD6318   | C/E/S/T  | \$reference in an external pragma inline procedure to 10                                                                                                                                                                                                                                                                                       |

\$ run statistic #2 = size of return statement code

Table F-1 ACPS Test Descriptions (continued)

| TEST NAME | VERSIONS | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AFD6319   | C/E/S/T  | scalar integer output arguments with references to the arguments in 10 statements of the form ARGi := TMPISi.                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| AFD6333   | C/E/S/T  | \$reference in an external pragma inline procedure to 10 scalar integer input/output arguments with references to the arguments in 10 statements of the form ARGi := ARGj.<br>loop overhead for subsequent tests for external pragma inline procedure calls of procedures declared with 10 constrained 1-dimensional integer array arguments, which are tests AFD6334 AFD6335 AFD6336. The overhead includes all statements (including the invocation of a 0 argument external pragma inline procedure) that are not part of the test but only used to construct it. |
| AFD6334,S | C/E/S/T  | call of an external pragma inline procedure with 10 constrained 1-dimensional integer array input arguments.                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| AFD6335,S | C/E/S/T  | call of an external pragma inline procedure with 10 constrained 1-dimensional integer array output arguments.                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| AFD6336,S | C/E/S/T  | call of an external pragma inline procedure with 10 constrained 1-dimensional integer array input/output arguments.                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| AFD6337   | C/E/S/T  | \$reference in an external pragma inline procedure declared with 10 constrained 1-dimensional integer array input arguments to an argument in 10 statements of the form TMPISi := ARG(TMPISj).                                                                                                                                                                                                                                                                                                                                                                       |
| AFD6338   | C/E/S/T  | \$reference in an external pragma inline procedure declared with 10 constrained 1-dimensional integer array output arguments to an argument in 10 statements of the form ARG(TMPISi) := constant (compare to AF05210).                                                                                                                                                                                                                                                                                                                                               |
| AFD6339   | C/E/S/T  | \$reference in an external pragma inline procedure declared with 10 constrained 1-dimensional integer array input/output arguments to an argument in 10 statements of the form ARG(TMPISi) := ARG(TMPISj).                                                                                                                                                                                                                                                                                                                                                           |
| AFD6343   | C/E/S/T  | loop overhead for subsequent tests for external pragma inline procedure calls of procedures declared with 10 constrained 2-dimensional integer array arguments, which are tests AFD6344 AFD6345 AFD6346. The overhead includes all statements (including the invocation of a 0 argument external pragma inline procedure) that are not part of the test but only used to construct it.                                                                                                                                                                               |
| AFD6344,S | C/E/S/T  | call of an external pragma inline procedure with 10 constrained 2-dimensional integer array input arguments.                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| AFD6345,S | C/E/S/T  | call of an external pragma inline procedure with 10 constrained 2-dimensional integer array output arguments.                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| AFD6346,S | C/E/S/T  | call of an external pragma inline procedure with 10 constrained 2-dimensional integer array input/output arguments.                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| AFD6347   | C/E/S/T  | \$reference in an external pragma inline procedure with 10 constrained 2-dimensional integer array input arguments to an argument in 10 statements of the form TMPISi := ARG(TMPISj,TMPISj).                                                                                                                                                                                                                                                                                                                                                                         |
| AFD6348   | C/E/S/T  | \$reference in an external pragma inline procedure declared with 10 constrained 2-dimensional integer array output arguments to an argument in 5 statements of the form ARG(TMPISi,TMPISi) := constant (compare to AF0521H).                                                                                                                                                                                                                                                                                                                                         |
| AFD6349   | C/E/S/T  | \$reference in an external pragma inline procedure declared with 10 constrained 2-dimensional integer array input/output arguments to an argument in 10 statements of the form ARG(TMPISi,TMPISi) := ARG(TMPISj,TMPISj).                                                                                                                                                                                                                                                                                                                                             |
| AFD6353   | C/E/S/T  | loop overhead for subsequent tests for external pragma inline procedure calls of procedures declared with 10                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

\$ run statistic 02 = size of return statement code

Table F-1 ACPS Test Descriptions (continued)

| TEST NAME | VERSIONS | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                               |
|-----------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|           |          | constrained 3-dimensional integer array arguments, which are tests AFD6354 AFD6355 AFD6356 . The overhead includes all statements (including the invocation of a 0 argument external pragma inline procedure) that are not part of the test but only used to construct it.                                                                                                                |
| AFD6354,S | C/E/S/T  | call of an external pragma inline procedure with 10 constrained 3-dimensional integer array input arguments.                                                                                                                                                                                                                                                                              |
| AFD6355,S | C/E/S/T  | call of an external pragma inline procedure with 10 constrained 3-dimensional integer array output arguments.                                                                                                                                                                                                                                                                             |
| AFD6356,S | C/E/S/T  | call of an external pragma inline procedure with 10 constrained 3-dimensional integer array input/output arguments.                                                                                                                                                                                                                                                                       |
| AFD6357   | C/E/S/T  | reference in an external pragma inline procedure declared with 10 constrained 3-dimensional integer array input arguments to an argument in 10 statements of the form TMPISi := ARG(TMPISj,TMPISj,TMPISj).                                                                                                                                                                                |
| AFD6358   | C/E/S/T  | reference in an external pragma inline procedure declared with 10 constrained 3-dimensional integer array output arguments to an argument in 5 statements of the form ARG(TMPISi,TMPISi,TMPISi) := constant( compare to AF05211).                                                                                                                                                         |
| AFD6359   | C/E/S/T  | reference in an external pragma inline procedure declared with 10 constrained 3-dimensional integer array input/output arguments to an argument in 10 statements of the form ARG(TMPISi,TMPISi,TMPISi) := ARG(TMPISj,TMPISj,TMPISj).                                                                                                                                                      |
| AFD6363   | C/E/S/T  | loop overhead for subsequent tests for external pragma inline procedure calls of procedures declared with 10 unconstrained 1-dimensional integer array arguments, which are tests AFD6364 AFD6365 AFD6366 . The overhead includes all statements (including the invocation of a 0 argument external pragma inline procedure) that are not part of the test but only used to construct it. |
| AFD6364,S | C/E/S/T  | call of an external pragma inline procedure with 10 constrained 1-dimensional integer array input arguments.                                                                                                                                                                                                                                                                              |
| AFD6365,S | C/E/S/T  | call of an external pragma inline procedure with 10 constrained 1-dimensional integer array output arguments.                                                                                                                                                                                                                                                                             |
| AFD6366,S | C/E/S/T  | call of an external pragma inline procedure with 10 constrained 1-dimensional integer array input/output arguments.                                                                                                                                                                                                                                                                       |
| AFD6367   | C/E/S/T  | reference in an external pragma inline procedure declared with 10 unconstrained 1-dimensional integer array input arguments to an argument in 10 statements of the form TMPISi := ARG(TMPISj).                                                                                                                                                                                            |
| AFD6368   | C/E/S/T  | reference in an external pragma inline procedure declared with 10 unconstrained 1-dimensional integer array output arguments to an argument in 10 statements of the form ARG(TMPISi) := constant( compare to AF05210)                                                                                                                                                                     |
| AFD6369   | C/E/S/T  | reference in an external pragma inline procedure declared with 10 unconstrained 1-dimensional integer array input/output arguments to an argument in 10 statements of the form ARG(TMPISi) := ARG(TMPISj).                                                                                                                                                                                |
| AFD6373   | C/E/S/T  | loop overhead for subsequent tests for external pragma inline procedure calls of procedures declared with 10 unconstrained 2-dimensional integer array arguments, which are tests AFD6374 AFD6375 AFD6376 . The overhead includes all statements (including the invocation of a 0 argument external pragma inline procedure) that are not part of the test but only used to construct it. |
| AFD6374,S | C/E/S/T  | call of an external pragma inline procedure with 10 constrained 2-dimensional integer array input arguments.                                                                                                                                                                                                                                                                              |
| AFD6375,S | C/E/S/T  | call of an external pragma inline procedure with 10                                                                                                                                                                                                                                                                                                                                       |

\* run statistic #2 = size of return statement code



Table F-1 ACPS Test Descriptions (continued)

| TEST NAME | VERSIONS | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                      |
|-----------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AFD6376,S | C/E/S/T  | constrained 2-dimensional integer array output arguments.<br>call of an external pragma inline procedure with 10 constrained 2-dimensional integer array input/output arguments.                                                                                                                                                                                                 |
| AFD6377   | C/E/S/T  | \$reference in an external pragma inline procedure declared with 10 unconstrained 2-dimensional integer array input arguments to an argument in 10 statements of the form TMPISi := ARG(TMPISj,TMPISj).                                                                                                                                                                          |
| AFD6378   | C/E/S/T  | \$reference in an external pragma inline procedure declared with 10 unconstrained 2-dimensional integer array output arguments to an argument in 5 statements of the form ARG(TMPISi,TMPISi) := constant (compare to AF0521H).                                                                                                                                                   |
| AFD6379   | C/E/S/T  | \$reference in an external pragma inline procedure declared with 10 unconstrained 2-dimensional integer array input/output arguments to an argument in 10 statements of the form ARG(TMPISi,TMPISi) := ARG(TMPISj,TMPISj).                                                                                                                                                       |
| AFD6383   | C/E/S/T  | loop overhead for subsequent tests for external pragma inline procedure calls of procedures with 10 unconstrained 3-dimensional integer array arguments, which are tests AFD6384 AFD6385 AFD6386 . The overhead includes all statements (including the invocation of a 0 argument external pragma inline procedure) that are not part of the test but only used to construct it. |
| AFD6384,S | C/E/S/T  | call of an external pragma inline procedure with 10 constrained 3-dimensional integer array input arguments.                                                                                                                                                                                                                                                                     |
| AFD6385,S | C/E/S/T  | call of an external pragma inline procedure with 10 constrained 3-dimensional integer array output arguments.                                                                                                                                                                                                                                                                    |
| AFD6386,S | C/E/S/T  | call of an external pragma inline procedure with 10 constrained 3-dimensional integer array input/output arguments.                                                                                                                                                                                                                                                              |
| AFD6387   | C/E/S/T  | \$reference in an external pragma inline procedure declared with 10 unconstrained 3-dimensional integer array input arguments to an argument in 10 statements of the form TMPISi := ARG(TMPISj,TMPISj,TMPISj).                                                                                                                                                                   |
| AFD6388   | C/E/S/T  | \$reference in an external pragma inline procedure declared with 10 unconstrained 3-dimensional integer array output arguments to an argument in 5 statements of the form ARG(TMPISi,TMPISi,TMPISi) := constant (compare to AF0521I).                                                                                                                                            |
| AFD6389   | C/E/S/T  | \$reference in an external pragma inline procedure declared with 10 unconstrained 3-dimensional integer array input/output arguments to an argument in 10 statements of the form ARG(TMPISi,TMPISi,TMPISi) := ARG(TMPISj,TMPISj,TMPISj).                                                                                                                                         |
| AF06423   | C/E/S/T  | loop overhead for subsequent tests for external procedure calls with 10 arguments with default parameter values. The tests are AF06424,AF06425,AF06426, AF06427, AF06428,AF06429,AF0642A. The overhead includes all statements (including the invocation of a 0 argument external procedure) that are not part of the test but only used to construct it.                        |
| AF06424,S | C/E/S/T  | call of an external procedure declared with 10 integer input arguments with default values. The procedure is called with 10 actual arguments. Compare to AF06114.                                                                                                                                                                                                                |
| AF06425,S | C/E/S/T  | call of an external procedure declared with 10 integer input arguments with default values. The procedure is called with 0 actual arguments. Compare to AF06114, AF06424.                                                                                                                                                                                                        |
| AF06426,S | C/E/S/T  | call of an external procedure declared with 10 constrained 1-dimensional integer array input arguments                                                                                                                                                                                                                                                                           |

\$ run statistic #2 = size of return statement code

Table F-1 ACPS Test Descriptions (continued)

| TEST NAME | VERSIONS    | DESCRIPTION                                                                                                                                                                                                                                                                                      |
|-----------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AF06427,S | C/E/S/T     | with default values. The procedure is called with 10 actual arguments. Compare to AF06134.                                                                                                                                                                                                       |
| AF06428,S | C/E/S/T     | call of an external procedure declared with 10 constrained 1-dimensional integer array input arguments with default values. The procedure is called with 0 actual arguments. Compare to AF06134,AF06426.                                                                                         |
| AF06429,S | C/E/S/T     | call of an external procedure declared with 10 record input arguments with default values. The procedure is called with 10 actual arguments.                                                                                                                                                     |
| AF0642A   | C/E/S/T     | call of an external procedure declared with 10 record input arguments with default values. The procedure is called with 0 actual arguments. Compare to AF06428.                                                                                                                                  |
| AF06802   | C/E/S/T/J/F | reference in an external procedure to 10 integer input arguments with references to the arguments in 10 statements of the form TMPISi := ARGi. The arguments are declared with default values. The procedure is called with 0 arguments. Compare to AF06117.                                     |
| AF06806   | C/E/S/T/J/F | global scalar integer variable reference from within a called procedure(compare to AF05200).                                                                                                                                                                                                     |
| AF06808   | C/E/S/T/J   | local scalar integer variable reference from within a called procedure(compare to AF06802).                                                                                                                                                                                                      |
| AF0680A   | C/E/S/T/J   | local record access variable reference from within a called procedure in 10 statements of the form ARGi := ARGj. The access variable type is globally declared( RECORD_POINTER). Compare to AF0520R.                                                                                             |
| AF0680C   | C/E/S/T/J   | local record access variable reference from within a called procedure in 10 statements of the form LOCi.all := LOCj.all. The access variable type is globally declared(RECORD_POINTER). Compare to AF0520S.                                                                                      |
| AF0680E   | C/E/S/T/J   | local record access variable reference from within a called procedure in 10 statements of the form LOCi := LOCj. The access type used is locally declared. The storage_size attribute for the access type is determined by the compiler and placed in run statistic #2. Compare to AF06808.      |
| AFD680G   | C/E/S/T/J   | local record access variable reference from within a called procedure in 10 statements of the form LOCi.all := LOCj.all. The access type used is locally declared. The storage_size attribute for the access type is determined by the compiler and placed in run statistic #2.                  |
| AFD680I   | C/E/S/T/J   | local record access variable reference from within a called procedure in 10 statements of the form LOCi := LOCj. The access type used is locally declared. The storage_size attribute for the access type is set by the test program and placed in run statistic #2. Compare to AF0680C.         |
| AF06810   | C/E/S/T/J   | local record access variable reference from within a called procedure in 10 statements of the form LOCi.all := LOCj.all. The access type used is locally declared. The storage_size attribute for the access type is set by the test program and placed in run statistic #2. Compare to AF0680E. |
| AF06814   | C/E/S/T/J   | local scalar integer variable reference - 1 procedure level up (compare to AF06806).                                                                                                                                                                                                             |
| AF06816   | C/E/S/T/J/F | local scalar integer variable reference - 2 procedure levels up (compare to AF06806).                                                                                                                                                                                                            |
| AF06818   | C/E/S/T/J/F | local 1-dimensional array element references(compare to AF05210).                                                                                                                                                                                                                                |
| AF06820   | C/E/S/T/J/F | local 2-dimensional array element references(compare to AF0521H).                                                                                                                                                                                                                                |
| AF06822   | C/E/S/T/J   | local 3-dimensional array element references(compare to AF0521I).                                                                                                                                                                                                                                |
|           |             | local unconstrained variant record reference from within a called procedure in 10 statements of the form                                                                                                                                                                                         |

Table F-1 ACPs Test Descriptions (continued)

| TEST NAME | VERSIONS  | DESCRIPTION                                                                                                                                                                                                         |
|-----------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AF06824   | C/E/S/T/J | LOCi.COMP_11 = LOCj.COMP_11. Compare to AF0413D.<br>local constrained variant record reference from within a<br>a called procedure in 10 statements of the form<br>LOCi.COMP_11 = LOCj.COMP_11. Compare to AF06822. |
| AFN9301   | C/E/S/T   | declaration/activation of a single low priority task<br>within a block statement. Control is not transferred to<br>the low priority task.                                                                           |
| AFN9302   | C/E/S/T   | declaration/activation of a single high priority task<br>within a block statement. Control is transferred to the<br>high priority task.                                                                             |
| AFN9303   | C/E/S/T   | declaration/activation of 10 low priority tasks within a<br>a block statement. Control is not transferred to the<br>low priority task(compare to AFN9301).                                                          |
| AF09501   | C/E/S/T   | rendezvous with a 0-argument task entry. Run statistic<br>#2 = storage_size attribute of the called task.                                                                                                           |
| AF09502   | C/E/S/T   | rendezvous with a 0-argument task entry that is the last<br>5th) accept alternative in a select statement(compare<br>to AF09501). Run statistic #2 = storage_size attribute<br>of the called task.                  |
| AF09503   | C/E/S/T   | rendezvous with a task entry with 10 integer scalar<br>input arguments. Run statistic #2 = storage_size<br>attribute of the called task.                                                                            |
| AF09504   | C/E/S/T   | rendezvous with a task entry with 10 integer scalar<br>output arguments. Run statistic #2 = storage_size<br>attribute of the called task.                                                                           |
| AF09505   | C/E/S/T   | rendezvous with a task entry with 10 1-dimensional<br>integer array output arguments. Run statistic #2 =<br>storage_size attribute of the called task.                                                              |
| AF09506   | C/E/S/T   | reference in a task accept statement to 10 integer<br>scalar input arguments with references to the arguments<br>in 10 statements of the form TMPISi := ARGi(compare to<br>AF06117).                                |
| AF09507   | C/E/S/T   | reference in a task accept statement with 10<br>1-dimensional integer array output arguments to an<br>argument in 10 statements of the form ARG(TMPISi) :=<br>constant. Compare to AF06168.                         |
| AF09508   | C/E/S/T   | local scalar integer variable reference from within a<br>task accept statement(compare to AF06806).                                                                                                                 |
| AF09509   | C/E/S/T   | global scalar integer variable reference from within a<br>task accept statement(compare to AF06802,AF09508).                                                                                                        |
| AFN9511   | C/E/S/T   | queue an entry call to a suspended task,suspend the<br>caller and transfer control to a lower priority task.                                                                                                        |
| AF09600   | C/E/S/T   | references to the clock function in 10 assignment<br>statements of the form: time_i := clock.                                                                                                                       |
| AF09601   | C/E/S/T   | references to the seconds function in 10 assignment<br>statements of the form: DURATION_i := seconds(TIME_i).                                                                                                       |
| AF09602   | C/E/S/T   | references to the split procedure in 5 statements of the<br>form: split(TIME_i,TMPISi,TMPISj,TMPISK,DURATION_i).                                                                                                    |
| AF09603   | C/E/S/T   | references to the time of function in 10 assignment<br>statements of the form: TIME_i := time_of(TMPISi,TMPISj,<br>TMPISK,DURATION_i).                                                                              |
| AF09604   | C/E/S/T   | 10 assignment statements that add values of type<br>duration to those of type time(TIME_i := TIME_i +<br>DURATION_i).                                                                                               |
| AF09605   | C/E/S/T   | 10 assignment statements involving subtraction of values<br>of type time(DURATION_i := TIME_i - TIME_0).                                                                                                            |
| AF09606   | C/E/S/T   | 10 boolean assignments involving values of type time in<br>statements of the following form: TMPBSi := TIME_i <<br>TIME_j.                                                                                          |
| AF09607   | C/E/S/T   | 10 conversions of type duration to type float in 10<br>statements of the form: TMPRSi := our_float(DURATION_i).                                                                                                     |
| AFN9611   | C/E/S/T   | wake up from a delay statement with no other tasks<br>executing (test_time = time_awaken - time_delay_expires)                                                                                                      |
| AFN9612   | C/E/S/T   | wake up from a delay statement with 5 low priority tasks<br>executing in an interleaved fashion through use of                                                                                                      |

Table F-1 ACPS Test Descriptions (continued)

| TEST NAME | VERSIONS | DESCRIPTION                                                                                                                                                                                                                                                                            |
|-----------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AFN9613   | C/E/S/T  | delay statements (test_time = time_awaken - time_delay_expires). transfer control to a low priority task not in a wait state after execution of a delay statement in a high priority task. The test time includes the time to execute the delay statement.                             |
| AF09710   | C/E/S/T  | execution of a selective wait statement with 4 select alternatives (accept statements) and an else part. The else part is executed. Run statistic #2 = storage_size attribute of the test task.                                                                                        |
| AF09712   | C/E/S/T  | execution of a selective wait statement with 4 select alternatives (accept statements) and an else part. Each accept statement is guarded with a test of the count attribute of an entry queue. The else part is executed. Run statistic #2 = storage_size attribute of the test task. |
| AF09720   | C/E/S/T  | conditional entry call, call immediately taken. Compare to AF09501. Run statistic #2 = storage_size attribute of the called task.                                                                                                                                                      |
| AF09721   | C/E/S/T  | conditional entry call, else part(null) taken. Run statistic #2 = storage_size attribute of the called task.                                                                                                                                                                           |
| AF09731   | C/E/S/T  | timed entry call, call immediately taken. Compare to AF09501, AF09720. Run statistic #2 = storage_size attribute of the called task.                                                                                                                                                   |
| AF09901   | C/E/S/T  | references to the callable attribute of tasks in 10 assignment statements of the form: TMPBSi := tasks(i) 'callable.                                                                                                                                                                   |
| AF09902   | C/E/S/T  | references to the terminated attribute of tasks in 10 assignment statements of the form: TMPBSi := tasks(i) 'terminated.                                                                                                                                                               |
| AF09903   | C/E/S/T  | references to the count attribute of task entries in 10 assignment statements of the form: TMPBSi := entry_i'count.                                                                                                                                                                    |
| AFM9A01   | C/E/S/T  | 1 abort statement issued from within a block statement aborting a single task created within the block. The task is waiting at an accept statement.                                                                                                                                    |
| AFM9A02   | C/E/S/T  | 1 abort statement issued from within a block statement aborting 10 tasks created within the block. The tasks are waiting at accept statements. Compare to AFM9A01.                                                                                                                     |
| AFM9A03   | C/E/S/T  | execution of 1 abort statement from within a block and exit from the block. The abort statement aborts 10 tasks waiting at accept statements. Compare to AFM9A02.                                                                                                                      |
| AF09B01   | C/E/S/T  | shared global scalar integer variable reference from within a task accept statement (compare to AF09509).                                                                                                                                                                              |
| AFD9C00   | C/E/S/T  | execution of a work-load from a main program with no subordinate tasks and without a priority pragma.                                                                                                                                                                                  |
| AFD9C01   | C/E/S/T  | execution of a work-load by a single subordinate task. Compare to AFD9C00 to see the effect of task scheduling overhead. (run statistic #1 = storage_size attribute of the subordinate task type).                                                                                     |
| AFD9C02,1 | C/E/S/T  | execution of a work-load by 5 subordinate tasks. Compare to AFD9C00, AFD9C01 to see the effect of task scheduling overhead (run statistics 1-5 in AFI9C02 contain the task iteration counts in the order the tasks were created).                                                      |
| AFD9C03,1 | C/E/S/T  | execution of a work-load by 5 subordinate tasks with a forced time-slice interval (VAX=.01secs). Compare to AFD9C02 to see the effect of forced time-slicing (run statistics 1-5 in AFI9C03 contain the task iteration counts in the order the tasks were created).                    |
| AFD9C04,1 | C/E/S/T  | execution of a work-load by 20 subordinate tasks with a forced time-slice interval (VAX=.01secs). Compare to AFD9C03 to see the effect of task-scheduling overhead. (run statistics 1-4 in AFI9C04 contain the total, maximum, minimum and median task iteration counts).              |

Table F-1 ACPS Test Descriptions (continued)

| TEST NAME | VERSIONS | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                        |
|-----------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AFMB001   | C/S/T    | raise/deliver a user defined exception and test for it with the exception choice others.                                                                                                                                                                                                                                                                           |
| AFMB003   | C/S/T    | raise/deliver a user defined exception and test for 5 predefined exceptions and then for the user defined exception (compare to AFMB001).                                                                                                                                                                                                                          |
| AFMB005   | C/S/T    | raise/deliver a numeric error pre-defined exception( divide by zero: tmpis1:=tmpis2/tmpis0).                                                                                                                                                                                                                                                                       |
| AFMB007   | S/T      | raise/deliver a numeric range constraint error exception (tmpil:=tmpis0).                                                                                                                                                                                                                                                                                          |
| AFMB009   | S/T      | raise/deliver an index range constraint error exception( tmpial(tmpis0) := 0).                                                                                                                                                                                                                                                                                     |
| AFMB012   | C/S/T    | raise/deliver a user defined exception which is automatically propagated 1 procedure level upward( propagation time=AFMB012-AFMB001).                                                                                                                                                                                                                              |
| AFMB016   | C/S/T    | raise/deliver a user defined exception which is automatically propagated 2 procedure levels upward( propagation time=AFMB016-AFMB001).                                                                                                                                                                                                                             |
| AFMB020   | C/S/T    | raise/deliver a user defined exception. Use raise statements to propagate the exception to a handler 2 procedure levels upward(compare to AFMB016).                                                                                                                                                                                                                |
| AFMB024   | S/T      | detect/deliver a numeric error exception(divide by 0) which is automatically propagated 2 procedure levels upward (propagation time=AFMB024-AFMB005. Compare to AFMB016).                                                                                                                                                                                          |
| AFMB028   | S/T      | detect/deliver a numeric error exception(divide by 0). Use raise statements to propagate the exception to a handler 2 procedure levels upward(compare to AFMB024).                                                                                                                                                                                                 |
| AFMB032   | C/S/T    | raise/deliver a user defined exception which is automatically propagated 2 procedure levels upward( propagation time=AFMB032-AFMB001). Each procedure has 10 scalar output arguments(compare to AFMB016).                                                                                                                                                          |
| AFMB036   | C/S/T    | raise/deliver a user defined exception. Use raise statements to propagate the exception to a handler 2 procedure levels upward. Each procedure has 10 scalar output arguments(compare to AFMB020, AFMB032).                                                                                                                                                        |
| AFMB040   | S/T      | detect/deliver a numeric error exception(divide by 0) which is automatically propagated 2 procedure levels upward (propagation time=AFMB040-AFMB005). Each procedure has 10 scalar output arguments(compare to AFMB024, AFMB032).                                                                                                                                  |
| AFMB044   | C/S/T    | detect/deliver a numeric error exception(divide by 0). Use raise statements to propagate the exception to a handler 2 procedure levels upward. Each procedure has 10 scalar output arguments(compare to AFMB028, AFMB040).                                                                                                                                         |
| AF0C300   | C/E/S/T  | non-generic version of test AF0C301 with which its compared (AFCC301 = AF0C301/AF0C300).                                                                                                                                                                                                                                                                           |
| AF0C301.C | C/E/S/T  | tests execution of a procedure derived from instantiation of a generic package containing a procedure whose compiled code should be the same for each instantiation (only instantiate for unconstrained floating point vectors).                                                                                                                                   |
| AF0C302   | C/E/S/T  | same test as AF0C301, except the generic package is instantiated with 3 different numeric types(integer, float, boolean). All three instantiations are referenced. Only the floating point procedure is timed. Compare to AF0C301 to see if memory requirements are greater (i.e. are separate copies of the generic procedure generated for each instantiation?). |
| AF0C303   | C/E/S/T  | non-generic version of test AF0C304 with which its compared (AFCC304 = AF0C304/AF0C303).                                                                                                                                                                                                                                                                           |
| AF0C304.C | C/E/S/T  | tests execution of a function derived from instantiation of a generic package containing vector functions(+,-,*, /) whose compiled code should be different for each instantiation (only instantiate for unconstrained floating point vectors). Only the + function is                                                                                             |

Table F-1 ACPS Test Descriptions (continued)

| TEST NAME | VERSIONS  | DESCRIPTION                                                                                                                                                                                                                                                                                                                      |
|-----------|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AF0C305   | C/E/S/T   | referenced or executed.<br>same test as AF0C304, except all functions in the instantiated package are referenced but only the + function is timed. Compare to AF0C304 to see if the memory requirements are greater in this test(i.e. are unreferenced instantiated functions included in the load module).                      |
| AF0C306   | C/E/S/T   | same test as AF0C305, except the generic package is instantiated for 2 datatypes (integer, floating point). Only the floating point instantiation is referenced or timed. Compare memory requirements to AF0C305(i.e. are unreferenced instantiations included in the load module)                                               |
| AF0C307   | C/E/S/T   | same test as AF0C306, except all package instantiations are referenced. Compare to AF0C306, AF0C305(note: execution time and memory requirements will differ depending on whether or not a new copy of a function is generated for each instantiation).                                                                          |
| AFDC310   | C/E/S/T   | non-generic version of test AFDC311 with which its compared (AFCC311 = AFDC311/AFDC310).                                                                                                                                                                                                                                         |
| AFDC311,C | C/E/S/T   | tests execution of an inline procedure derived from instantiation of a generic package containing an inline procedure whose compiled code should be the same for each instantiation (only instantiate for unconstrained floating point vectors). Compare to AF0C301.                                                             |
| AFDC313   | C/E/S/T   | non-generic version of test AFDC314 with which its compared (AFCC314 = AFDC314/AFDC313).                                                                                                                                                                                                                                         |
| AFDC314,C | C/E/S/T   | tests execution of an inline function derived from instantiation of a generic package containing inline vector functions(+,-,*,/) whose compiled code should be different for each instantiation (only instantiate for unconstrained floating point vectors). Only the + function is referenced or executed. Compare to AF0C304. |
| AFDD600   | C/E/S/T/J | 3 statements changing representation of unpacked boolean arrays (1..10) to packed boolean arrays.                                                                                                                                                                                                                                |
| AFDD601   | C/E/S/T/J | 3 statements changing representation of packed boolean arrays (1..10) to unpacked boolean arrays.                                                                                                                                                                                                                                |
| AFDD602   | C/E/S/T/J | 10 statements changing representation from objects of enumeration type REP_MONTHS to values of type MONTHS.                                                                                                                                                                                                                      |
| AFDD603   | C/E/S/T/J | 10 statements changing representation from objects of enumeration type MONTHS to values of type REP_MONTHS.                                                                                                                                                                                                                      |
| AFDD604   | C/E/S/T/J | 10 statements changing representation of packed records( type PACK_RECORDS) to unpacked records(type RECORDS).                                                                                                                                                                                                                   |
| AFDD605   | C/E/S/T/J | 10 statements changing representation of unpacked records(type RECORDS) to packed records(type PACK_RECORDS).                                                                                                                                                                                                                    |
| AFDD606   | C/E/S/T/J | 10 statements changing representation of unpacked records(type RECORDS) to packed records(type REP_RECORDS).                                                                                                                                                                                                                     |
| AFDD607   | C/E/S/T/J | 10 statements changing representation of packed records( type REP_RECORDS) to unpacked records(type RECORDS).                                                                                                                                                                                                                    |
| AFDD608   | C/E/S/T/J | 10 statements changing representation of packed records( type REP_RECORDS) to packed records(type PACK_RECORDS).                                                                                                                                                                                                                 |
| AFDD609   | C/E/S/T/J | 10 statements changing representation of packed records( type PACK_RECORDS) to packed records(type REP_RECORDS).                                                                                                                                                                                                                 |
| AFDD610   | C/E/S/T/J | 10 statements changing representation of unpacked record variants(type VARIANT_RECORDS) to packed variant records (type PACKED_VARIANT).                                                                                                                                                                                         |
| AFDD611   | C/E/S/T/J | 10 statements changing representation of packed record variants(type PACKED_VARIANT) to unpacked record variants (type VARIANT_RECORDS).                                                                                                                                                                                         |
| AF0D720   | S/T/J/F   | displays in run statistic fields the size of objects used in tests and defined in package OURSYS. Run statistic 01 = bit size of objects of type integer. Run statistic 02 = bit size of objects which are 1-dimensional(10) integer arrays. Run statistic 03 =                                                                  |

Table F-1 ACPS Test Descriptions (continued)

| TEST NAME | VERSIONS | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AFDD721   | S/T/J/F  | bit size of objects which are 2-dimensional(3,3) integer arrays. Run statistic #4 = bit size of objects which are 3-dimensional(3,3,3) integer arrays. Run statistic #5 = bit size of objects of type positive. displays in run statistic fields the size of objects used in tests and defined in package OURSYS. Run statistic #1 = bit size of objects of type float. Run statistic #2 = bit size of objects which are 1-dimensional(10) float arrays. Run statistic #3 = bit size of objects which are 2-dimensional(3,3) float arrays. Run statistic #4 = bit size of objects which are 3-dimensional(3,3,3) float arrays. |
| AFDD722   | S/T/J/F  | displays in run statistic fields the size of objects used in tests and defined in package OURTYP. Run statistic #1 = bit size of objects of type short_integer. Run statistic #2 = bit size of objects which are 1-dimensional(10) short_integer arrays. Run statistic #3 = bit size of objects which are 2-dimensional(10,10) short_integer arrays.                                                                                                                                                                                                                                                                           |
| AFDD723   | S/T/J/F  | displays in run statistic fields the size of objects used in tests and defined in package OURTYP. Run statistic #1 = bit size of objects of type short_short_integer. Run statistic #2 = bit size of objects which are 1-dimensional(10) short_short_integer arrays. Run statistic #3 = bit size of objects which are 2-dimensional(10,10) short_short_integer arrays.                                                                                                                                                                                                                                                         |
| AFDD724   | S/T/F    | displays in run statistic fields the size of objects used in tests and defined in package OURTYP. Run statistic #1 = bit size of objects of type long_float. Run statistic #2 = bit size of objects which are 1-dimensional(10) long_float arrays. Run statistic #3 = bit size of objects which are 2-dimensional(10,10) long_float arrays.                                                                                                                                                                                                                                                                                    |
| AFDD725   | S/T/F    | displays in run statistic fields the size of objects used in tests and defined in package OURTYP. Run statistic #1 = bit size of objects of type long_long_float. Run statistic #2 = bit size of objects which are 1-dimensional(10) long_long_float arrays. Run statistic #3 = bit size of objects which are 2-dimensional(10,10) long_long_float arrays.                                                                                                                                                                                                                                                                     |
| AFDD726x  | S/T/J/F  | displays in run statistic fields the size of objects used in tests and defined in package OURTYP. Run statistic #1 = bit size of objects of type d_float. Run statistic #2 = bit size of objects which are 1-dimensional(10) d_float arrays. Run statistic #3 = bit size of objects which are 2-dimensional(10,10) d_float arrays.                                                                                                                                                                                                                                                                                             |
| AFDD727   | S/T/J/F  | displays in run statistic fields the size of objects used in tests and defined in package OURSYS. Run statistic #1 = bit size of objects of type boolean. Run statistic #2 = bit size of objects which are 1-dimensional(1..10) boolean arrays. Run statistic #3 = bit size of objects which are 2-dimensional(3,3) boolean arrays. Run statistic #4 = bit size of objects which are 3-dimensional(3,3,3) boolean arrays.                                                                                                                                                                                                      |
| AFDD728   | S/T/J/F  | displays in run statistic fields the size of objects used in tests and defined in packages OURSYS, OURSPC. Run statistic #1 = bit size of objects which are 10 character strings. Run statistic #2 = bit size of objects which are 20 character strings. Run statistic #3 = bit size of objects which are 30 character strings. Run statistic #4 = bit size of objects of type MONTHS.                                                                                                                                                                                                                                         |
| AFDD729   | S/T/J    | displays in run statistic fields the size of objects used in tests and defined in package OURSPC. Run                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

Table F-1 ACPS Test Descriptions (continued)

| TEST NAME | VERSIONS | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AFDD72A   | S/T/J    | <p>statistic #1 = bit size of objects which are records of type RECORDS. Run statistic #2 = bit size of objects which are 1-dimensional arrays whose components are of type RECORDS. Run statistic #3 = bit size of objects which are unconstrained variants of the discriminated record type VARIANT_RECORDS. Run statistic #4 = bit size of objects which are records of type RECORD_TYPE. Run statistic #5 = bit size of objects which are access variables of type RECORD_POINTER.</p> <p>displays in run statistic fields the size of objects used in tests and defined in package OURSPC. Run statistic #1 = bit size of objects which are packed records of type PACKED_RECORDS. Compare to run statistic #1 in AFDD729. Run statistic #2 = bit size of objects which are 1-dimensional arrays whose components are of type PACKED_RECORDS. Compare to run statistic #2 in AFDD729. Run statistic #3 = bit size of objects which are unconstrained variants of the discriminated record type PACKED_VARIANT. Compare to run statistic #3 in AFDD729. Run statistic #4 = bit size of objects which are packed 30 character strings. Compare to run statistic #3 in AFDD728. Run statistic #5 = bit size of objects which are packed 1-dimensional(1..10) boolean arrays. Compare to run statistic #2 in AFDD727.</p> |
| AFDD72B   | S/T/J    | <p>displays in run statistic fields the size of objects used in tests and defined in package OURSPC. Run statistic #1 = bit size of objects which are packed records of type REP_RECORDS. Compare to run statistic #1 in AFDD72A, AFDD729. Run statistic #2 = bit size of objects which are 1-dimensional arrays whose components are of type REP_RECORDS. Compare to run statistic #2 in AFDD72A, AFDD729. Run statistic #3 = bit size of objects of type REP_MONTHS. Compare to run statistic #4 in AFDD728.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| AFDD72C   | S/T/J    | <p>displays in run statistic fields the size of objects used in tests and defined in package OURSPC. Run statistic #1 = bit size of Pointer Comp component of objects of type RECORD_TYPE. Run statistic #2 = bit size of Enum Comp component of objects of type RECORD_TYPE. Run statistic #3 = bit size of Int Comp component of objects of type RECORD_TYPE. Run statistic #4 = bit size of String_30 component of objects of type RECORD_TYPE. Run statistic #5 = Storage'size attribute for access type RECORD_POINTER.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| AFDD72D   | S/T/J    | <p>displays in run statistic fields the size of components of record objects of type RECORDS used in tests and defined in package OURSPC. Run statistic #1 = bit size of comp_i1 component. Run statistic #2 = bit size of comp_i2 component. Run statistic #3 = bit size of comp_b1 component. Run statistic #4 = bit size of comp_b2 component. Run statistic #5 = bit size of comp_e component.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| AFDD72E   | S/T/J    | <p>displays in run statistic fields the size of components of record objects of type PACKED_RECORDS used in tests and defined in package OURSPC. Run statistic #1 = bit size of comp_i1 component. Run statistic #2 = bit size of comp_i2 component. Run statistic #3 = bit size of comp_b1 component. Run statistic #4 = bit size of comp_b2 component. Run statistic #5 = bit size of comp_e component. Compare to corresponding statistics in AFDD72D.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| AFDD72F   | S/T/J    | <p>displays in run statistic fields the size of components of record objects of type REP_RECORDS used in tests and defined in package OURSPC. Run statistic #1 = bit size of comp_i1 component. Run statistic #2 = bit size of</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |



Table F-1 ACPS Test Descriptions (continued)

| <u>TEST NAME</u> | <u>VERSIONS</u> | <u>DESCRIPTION</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AFDD72G          | S/T/J           | comp_i2 component. Run statistic #3 = bit size of comp_b1 component. Run statistic #4 = bit size of comp_b2 component. Run statistic #5 = bit size of comp_e component. Compare to corresponding statistics in AFDD72D, AFDD72E.<br>displays in run statistic fields the size of components of record objects of type VARIANT RECORDS used in tests and defined in package OURSPC. Run statistic #1 = bit size of comp_i1 component. Run statistic #2 = bit size of comp_i2 component. Run statistic #3 = bit size of comp_b1 component. Run statistic #4 = bit size of comp_b2 component. Run statistic #5 = bit size of comp_e component. |
| AFDD72H          | S/T/J           | displays in run statistic fields the size of components of record objects of type PACKED VARIANT used in tests and defined in package OURSPC. Run statistic #1 = bit size of comp_i1 component. Run statistic #2 = bit size of comp_i2 component. Run statistic #3 = bit size of comp_b1 component. Run statistic #4 = bit size of comp_b2 component. Run statistic #5 = bit size of comp_e component. Compare to corresponding statistics in AFDD72G.                                                                                                                                                                                      |
| AFDD72I          | S/T/J           | displays in run statistic fields the size of objects used in tests and defined in package OURSYS, OURSPC. Run statistic #1 = bit size of objects which are packed 10 character strings. Run statistic #2 = bit size of objects which are packed 20 character strings. Run statistic #3 = bit size of objects which are packed 30 character strings. Run statistic #4 = bit size of objects of type REP_MONTHS. Compare to corresponding statistics in AFDD728.                                                                                                                                                                              |
| AFDDA01          | C/E/S/T/J       | 10 unchecked conversions of floating point operands to integer in 10 statements of the form: TMPISi := float_to_integer(TMPSi).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| AFDDA02          | C/E/S/T/J       | 10 unchecked conversions of record objects of type REP RECORDS to integer in 10 statements of the form: TMPISi := records_to_integer(TMPSi).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| AFDE201          | C/E/S/T/F       | 1968 sequential file writes using an operand that is a scalar character variable. Output to the file is 1968 characters (including carriage control) per iteration which fills a DEC VT100 terminal screen (by default 24 x 80).                                                                                                                                                                                                                                                                                                                                                                                                            |
| AFDE202          | C/E/S/T/F       | 1968 sequential file writes using an operand that is a 1 element character array. Output to the file is 1968 characters (including carriage control) per iteration which fills a DEC VT100 terminal screen (by default 24 x 80).                                                                                                                                                                                                                                                                                                                                                                                                            |
| AFDE203          | C/E/S/T/F       | 240 sequential file writes using an operand that is an 8 element array with character components. Output to the file is 1968 characters (including carriage control) per iteration which fills a DEC VT100 terminal screen (by default 24 x 80).                                                                                                                                                                                                                                                                                                                                                                                            |
| AFDE204          | C/E/S/T/F       | 24 sequential file writes using an operand that is an 82 element array of characters with embedded carriage control. Output to the file is 1968 characters (including carriage control) per iteration which fills a DEC VT100 terminal screen (by default 24 x 80).                                                                                                                                                                                                                                                                                                                                                                         |
| AFDE205          | C/E/S/T/F       | 1 sequential file write using an operand that is a 1968 element array with character components. Output to the file is 1968 characters (including carriage control) per iteration which fills a DEC VT100 terminal screen (by default 24 x 80).                                                                                                                                                                                                                                                                                                                                                                                             |
| AFDE206          | C/E/S/T/F       | 8040 sequential file writes using an operand that is a scalar character variable. Output to the file is 8040 characters per iteration which fills a standard page of                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

Table F-1 ACPs Test Descriptions (continued)

| TEST NAME | VERSIONS  | DESCRIPTION                                                                                                                                                                                                                                                       |
|-----------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AFDE207   | C/E/S/T/F | computer paper (by default 60 x 132). 8040 sequential file writes using an operand that is a 1 element character array. Output to the file is 8040 characters per iteration which fills a standard page of computer paper (by default 60 x 132).                  |
| AFDE208   | C/E/S/T/F | 960 sequential file writes using an operand that is an 8 element array with character components. Output to the file is 7800 characters per iteration (including carriage control) which fills a standard page of computer paper (by default 60 x 132).           |
| AFDE209   | C/E/S/T/F | 60 sequential file writes using an operand that is an 82 element array of characters with embedded carriage control. Output to the file is 8040 characters per iteration which fills a standard page of computer paper (by default 60 x 132).                     |
| AFDE20A   | C/E/S/T/F | 1 sequential file write using an operand that is a 8040 element array with character components. Output to the file is 8040 characters per iteration which fills a standard page of computer paper (by default 60 x 132).                                         |
| AFDE211   | C/E/S/T/F | 1 sequential file write using an operand that is a 512 element array with integer components. The output to the file consists of 512 integers per iteration.                                                                                                      |
| AFDE212   | C/E/S/T/F | 512 sequential file writes using an operand that is a scalar integer variable. Output to the file consists of 512 integers per iteration.                                                                                                                         |
| AFDE213   | C/E/S/T/F | 1 sequential file write using an operand that is a 512 element array with floating point components. The output to the file consists of 512 floating point numbers per iteration.                                                                                 |
| AFDE214   | C/E/S/T/F | 512 sequential file writes using an operand that is a floating point scalar variable. Output to the file consists of 512 floating point numbers per iteration.                                                                                                    |
| AFDE215   | C/E/S/T/F | 1 sequential file write using an operand that is a 512 element array with character components. The output to the file consists of 512 characters per iteration.                                                                                                  |
| AFDE216   | C/E/S/T/F | 512 sequential file writes using an operand that is a scalar character variable. Output to the file consists of 512 characters per iteration.                                                                                                                     |
| AFDE231   | C/E/S/T/F | 1968 sequential file reads using an operand that is a scalar character variable. Input to the file is 1968 characters (including carriage control) per iteration which fills a DEC VT100 terminal screen (by default 24 x 80).                                    |
| AFDE232   | C/E/S/T/F | 1968 sequential file reads using an operand that is a 1 element character array. Input from the file is 1968 characters (including carriage control) per iteration which fills a DEC VT100 terminal screen (by default 24 x 80).                                  |
| AFDE233   | C/E/S/T/F | 240 sequential file reads using an operand that is an 8 element array with character components. Input from the file is 1968 characters (including carriage control) per iteration which fills a DEC VT100 terminal screen (by default 24 x 80).                  |
| AFDE234   | C/E/S/T/F | 24 sequential file reads using an operand that is an 82 element array of characters with embedded carriage control. Input to the file is 1968 characters (including carriage control) per iteration which fills a DEC VT100 terminal screen (by default 24 x 80). |
| AFDE235   | C/E/S/T/F | 1 sequential file read using an operand that is a 1968 element array with character components. Input from the file is 1968 characters (including carriage control) per iteration which fills a DEC VT100 terminal screen (by default 24 x 80).                   |
| AFDE236   | C/E/S/T/F | 8040 sequential file reads using an operand that is a scalar character variable. Input to the file is 8040                                                                                                                                                        |

Table F-1 ACPS Test Descriptions (continued)

| TEST NAME | VERSIONS  | DESCRIPTION                                                                                                                                                                                                                                                                                                 |
|-----------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AFDE237   | C/E/S/T/F | characters per iteration which fills a standard page of computer paper (by default 60 x 132).<br>8040 sequential file reads using an operand that is a 1 element character array. Input from the file is 8040 characters per iteration which fills a standard page of computer paper (by default 60 x 132). |
| AFDE238   | C/E/S/T/F | 960 sequential file reads using an operand that is an 8 element array with character components. Input from the file is 7800 characters per iteration (including carriage control) which fills a standard page of computer paper (by default 60 x 132).                                                     |
| AFDE239   | C/E/S/T/F | 60 sequential file reads using an operand that is an 82 element array of characters with embedded carriage control. Input to the file is 8040 characters per iteration which fills a standard page of computer paper (by default 60 x 132).                                                                 |
| AFDE23A   | C/E/S/T/F | 1 sequential file read using an operand that is a 8040 element array with character components. Input from the file is 8040 characters per iteration which fills a standard page of computer paper (by default 60 x 132).                                                                                   |
| AFDE241   | C/E/S/T/F | 1 sequential file read using an operand that is a 512 element array with integer components. Input from the file is a block of integers per iteration.                                                                                                                                                      |
| AFDE242   | C/E/S/T/F | 512 sequential file reads using an operand that is a scalar integer variable. Input from the file consists of 512 integers per iteration.                                                                                                                                                                   |
| AFDE243   | C/E/S/T/F | 1 sequential file read using an operand that is a 512 element array with floating point components. Input from the file consists of 512 floating point numbers per iteration.                                                                                                                               |
| AFDE244   | C/E/S/T/F | 512 sequential file reads using an operand that is a floating point scalar variable. Input from the file consists of 512 floating point numbers per iteration.                                                                                                                                              |
| AFDE245   | C/E/S/T/F | 1 sequential file read using an operand that is a 512 element array with character components. Input from the file consists of 512 characters per iteration.                                                                                                                                                |
| AFDE246   | C/E/S/T/F | 512 sequential file reads using an operand that is a scalar character variable. Input from the file consists of 512 characters per iteration.                                                                                                                                                               |
| AFDE401   | C/E/S/T/F | 1968 direct file writes using an operand that is a scalar character variable. Output to the file is 1968 characters (including carriage control) per iteration which fills a DEC VT100 terminal screen (by default 24 x 80).                                                                                |
| AFDE402   | C/E/S/T/F | 1968 direct file writes using an operand that is a 1 element character array. Output to the file is 1968 characters (including carriage control) per iteration which fills a DEC VT100 terminal screen (by default 24 x 80).                                                                                |
| AFDE403   | C/E/S/T/F | 240 direct file writes using an operand that is an 8 element array with character components. Output to the file is 1968 characters (including carriage control) per iteration which fills a DEC VT100 terminal screen (by default 24 x 80).                                                                |
| AFDE404   | C/E/S/T/F | 24 direct file writes using an operand that is an 82 element array of characters with embedded carriage control. Output to the file is 1968 characters (including carriage control) per iteration which fills a DEC VT100 terminal screen (by default 24 x 80).                                             |
| AFDE405   | C/E/S/T/F | 1 direct file write using an operand that is a 1968 element array with character components. Output to the file is 1968 characters (including carriage control) per iteration which fills a DEC VT100 terminal screen (by default 24 x 80).                                                                 |
| AFDE406   | C/E/S/T/F | 8040 direct file writes using an operand that is a                                                                                                                                                                                                                                                          |

Table F-1 ACPS Test Descriptions (continued)

| <u>TEST NAME</u> | <u>VERSIONS</u> | <u>DESCRIPTION</u>                                                                                                                                                                                                                                                                                                                                            |
|------------------|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AFDE407          | C/E/S/T/F       | scalar character variable. Output to the file is 8040 characters per iteration which fills a standard page of computer paper (by default 60 x 132).<br>8040 direct file writes using an operand that is a 1 element character array. Output to the file is 8040 characters per iteration which fills a standard page of computer paper (by default 60 x 132). |
| AFDE408          | C/E/S/T/F       | 960 direct file writes using an operand that is an 8 element array with character components. Output to the file is 7800 characters per iteration (including carriage control) which fills a standard page of computer paper (by default 60 x 132).                                                                                                           |
| AFDE409          | C/E/S/T/F       | 60 direct file writes using an operand that is an 82 element array of characters with embedded carriage control. Output to the file is 8040 characters per iteration which fills a standard page of computer paper (by default 60 x 132).                                                                                                                     |
| AFDE40A          | C/E/S/T/F       | 1 direct file write using an operand that is a 8040 element array with character components. Output to the file is 8040 characters per iteration which fills a standard page of computer paper (by default 60 x 132).                                                                                                                                         |
| AFDE411          | C/E/S/T/F       | 1 direct file write using an operand that is a 512 element array with integer components. The output to the file consists of 512 integers per iteration.                                                                                                                                                                                                      |
| AFDE412          | C/E/S/T/F       | 512 direct file writes using an operand that is a scalar integer variable. Output to the file consists of 512 integers per iteration.                                                                                                                                                                                                                         |
| AFDE413          | C/E/S/T/F       | 1 direct file write using an operand that is a 512 element array with floating point components. The output to the file consists of 512 floating point numbers per iteration.                                                                                                                                                                                 |
| AFDE414          | C/E/S/T/F       | 512 direct file writes using an operand that is a floating point scalar variable. Output to the file consists of 512 floating point numbers per iteration.                                                                                                                                                                                                    |
| AFDE415          | C/E/S/T/F       | 1 direct file write using an operand that is a 512 element array with character components. The output to the file consists of 512 characters per iteration.                                                                                                                                                                                                  |
| AFDE416          | C/E/S/T/F       | 512 direct file writes using an operand that is a scalar character variable. Output to the file consists of 512 characters per iteration.                                                                                                                                                                                                                     |
| AFDE431          | C/E/S/T/F       | 1968 direct file reads using an operand that is a scalar character variable. Input to the file is 1968 characters (including carriage control) per iteration which fills a DEC VT100 terminal screen (by default 24 x 80).                                                                                                                                    |
| AFDE432          | C/E/S/T/F       | 1968 direct file reads using an operand that is a 1 element character array. Input from the file is 1968 characters (including carriage control) per iteration which fills a DEC VT100 terminal screen (by default 24 x 80).                                                                                                                                  |
| AFDE433          | C/E/S/T/F       | 240 direct file reads using an operand that is an 8 element array with character components. Input from the file is 1968 characters (including carriage control) per iteration which fills a DEC VT100 terminal screen (by default 24 x 80).                                                                                                                  |
| AFDE434          | C/E/S/T/F       | 24 direct file reads using an operand that is an 82 element array of characters with embedded carriage control. Input to the file is 1968 characters (including carriage control) per iteration which fills a DEC VT100 terminal screen (by default 24 x 80).                                                                                                 |
| AFDE435          | C/E/S/T/F       | 1 direct file read using an operand that is a 1968 element array with character components. Input from the file is 1968 characters (including carriage control) per iteration which fills a DEC VT100 terminal screen (by default 24 x 80).                                                                                                                   |

Table F-1 ACPS Test Descriptions (continued)

| <u>TEST NAME</u> | <u>VERSIONS</u> | <u>DESCRIPTION</u>                                                                                                                                                                                                                                                                                                                      |
|------------------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AFDE436          | C/E/S/T/F       | 8040 direct file reads using an operand that is a scalar character variable. Input to the file is 8040 characters per iteration which fills a standard page of computer paper (by default 60 x 132).                                                                                                                                    |
| AFDE437          | C/E/S/T/F       | 8040 direct file reads using an operand that is a 1 element character array. Input from the file is 8040 characters per iteration which fills a standard page of computer paper (by default 60 x 132).                                                                                                                                  |
| AFDE438          | C/E/S/T/F       | 960 direct file reads using an operand that is an 8 element array with character components. Input from the file is 7800 characters per iteration (including carriage control) which fills a standard page of computer paper (by default 60 x 132).                                                                                     |
| AFDE439          | C/E/S/T/F       | 60 direct file reads using an operand that is an 82 element array of characters with embedded carriage control. Input to the file is 8040 characters per iteration which fills a standard page of computer paper (by default 60 x 132).                                                                                                 |
| AFDE43A          | C/E/S/T/F       | 1 direct file read using an operand that is a 8040 element array with character components. Input from the file is 8040 characters per iteration which fills a standard page of computer paper (by default 60 x 132).                                                                                                                   |
| AFDE441          | C/E/S/T/F       | 1 direct file read using an operand that is a 512 element array with integer components. Input from the file is a block of integers per iteration.                                                                                                                                                                                      |
| AFDE442          | C/E/S/T/F       | 512 direct file reads using an operand that is a scalar integer variable. Input from the file consists of 512 integers per iteration.                                                                                                                                                                                                   |
| AFDE443          | C/E/S/T/F       | 1 direct file read using an operand that is a 512 element array with floating point components. Input from the file consists of 512 floating point numbers per iteration.                                                                                                                                                               |
| AFDE444          | C/E/S/T/F       | 512 direct file reads using an operand that is a floating point scalar variable. Input from the file consists of 512 floating point numbers per iteration.                                                                                                                                                                              |
| AFDE445          | C/E/S/T/F       | 1 direct file read using an operand that is a 512 element array with character components. Input from the file consists of 512 characters per iteration.                                                                                                                                                                                |
| AFDE446          | C/E/S/T/F       | 512 direct file reads using an operand that is a scalar character variable. Input from the file consists of 512 characters per iteration.                                                                                                                                                                                               |
| AFDF000          | C/E/S/T/J/F     | 2 assignment statements of the form $x := \sin(y)$ where $x, y$ are scalar variables.                                                                                                                                                                                                                                                   |
| AFDF001          | C/E/S/T/J/F     | 2 assignment statements of the form $x := \operatorname{atan}(y)$ where $x, y$ are scalar variables.                                                                                                                                                                                                                                    |
| AFDF002          | C/E/S/T/J/F     | 2 assignment statements of the form $x := \cos(y)$ where $x, y$ are scalar variables.                                                                                                                                                                                                                                                   |
| AFDF003          | C/E/S/T/J/F     | 2 assignment statements of the form $x := \operatorname{sqrt}(y)$ where $x, y$ are scalar variables.                                                                                                                                                                                                                                    |
| AFDF004          | C/E/S/T/J/F     | 2 assignment statements of the form $x := \exp(y)$ where $x, y$ are scalar variables.                                                                                                                                                                                                                                                   |
| AFDF005          | C/E/S/T/J/F     | 2 assignment statements of the form $x := \ln(y)$ where $x, y$ are scalar variables.                                                                                                                                                                                                                                                    |
| AGD0001          | C/E/S/T/J/F     | the Whetstone test as defined in the paper A Synthetic Benchmark published in the Computer Journal, Feb 1976 by Curnow and Michmann. Input/Output statements are not executed.                                                                                                                                                          |
| AGD0003          | C/E/S/T         | the Whetstone test as defined in the paper A Synthetic Benchmark published in the Computer Journal, Feb 1976 by Curnow and Michmann. The test uses predefined types integer and float for numeric types (compare to AGD0001 which uses <code>our_integer</code> and <code>our_float</code> ). Input/Output statements are not executed. |
| AGD0009          | C/E/S/T/J       | the Dhrystone test as defined in the paper DHRYSTONE: A Synthetic Benchmark published in the CACM, Oct 1984 by                                                                                                                                                                                                                          |

Table F-1 ACPs Test Descriptions (continued)

| TEST NAME | VERSIONS    | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AG0000C   | C/E/S/T/J   | R.Micker. Run statistic #1 = size in bits of objects of type Record_Type(default discriminant).                                                                                                                                                                                                                                                                                                |
| AGD000E   | C/E/S/T/J/F | ackermann's function as modified from the AdaTec Ada Fair test suite.                                                                                                                                                                                                                                                                                                                          |
| AGN000K   | C/E/S/T/J   | the Whetstone test as defined in the paper A Synthetic Benchmark published in the Computer Journal, Feb 1976 by Curnow and Michmann. Input/Output statements are not executed. external procedures are used rather than local procedures. Compare to AGD0001.                                                                                                                                  |
| AGD0039,I | C/E/S/T     | the Dhrystone test as defined in the paper DHRYSTONE: A Synthetic Benchmark published in the CACM, Oct 1984 by R.Micker. The test makes multiple microsecond level measurements of the Dhrystone test without initialization.                                                                                                                                                                  |
| AGD0049,I | C/E/S/T     | execution of the Dhrystone test by 10 subordinate tasks. Run statistic #1 = storage_size attribute of the subordinate task type. Compare to AGD0009 to see the effect of multi-tasking. Run statistics 1-4 in AGI0039 contain the total, maximum, minimum, median task iteration counts.                                                                                                       |
| AGD0059,I | C/E/S/T     | execution of the Dhrystone test by 100 subordinate tasks. Run statistic #1 = storage_size attribute of the subordinate task type. Compare to AGD0009 to see the effect of multi-tasking. Run statistics 1-4 in AGI0049 contain the total, maximum, minimum, median task iteration counts.                                                                                                      |
| AL09101   | C/E/S/T     | execution of the Dhrystone test by 100 subordinate tasks with forced time-slicing(VAX=.01 secs.). Compare to AGD0049 to see the effect of forced time-slicing. Compare to AGD0009 to see the effect of multi-tasking. Run statistic #1 = storage_size attribute of the subordinate task type. Run statistics 1-4 in AGI0049 contain the total, maximum, minimum, median task iteration counts. |
| AL09111   | C/E/S/T     | execution of a workload to randomly access a 128 element integer array with no subordinate tasks and without a priority pragma.                                                                                                                                                                                                                                                                |
| AL09121   | C/E/S/T     | execution of a workload to randomly access a 12800 element integer array with no subordinate tasks and without a priority pragma.                                                                                                                                                                                                                                                              |
| AL09131   | C/E/S/T     | execution of a workload to randomly access a 64000 element integer array with no subordinate tasks and without a priority pragma. Compare to test AL09101.                                                                                                                                                                                                                                     |
| ALD9202   | C/E/S/T     | execution of a workload to randomly access a 128000 element integer array with no subordinate tasks and without a priority pragma. Compare to test AL09101.                                                                                                                                                                                                                                    |
| ALD9203,I | C/E/S/T     | execution of a workload to randomly access a 128 element integer array by 1 subordinate task. Compare to test AL09101 to see the effect of task scheduling. Run statistic #1 = storage_size attribute of the subordinate task type.                                                                                                                                                            |
| ALD9204,I | C/E/S/T     | execution of a workload to randomly access a 128 element integer array by 10 subordinate tasks. Compare to AL09101,ALD9202 to see the effect of multi-tasking. Run statistic #1 = storage_size attribute of the subordinate task type. Run statistics 1-4 of ALI9203 contain the total, maximum, minimum, median task iteration counts.                                                        |
|           |             | execution of a workload to randomly access a 128 element integer array by 10 subordinate tasks with forced time-slicing. Compare to ALD9203 to see the effect of forced time-slicing. Run statistic #1 = storage_size attribute of the subordinate task type. Run statistics 1-4 of ALI9204 contain the total, maximum, minimum, median task iteration counts.                                 |

Table F-1 ACPS Test Descriptions (continued)

| <u>TEST NAME</u> | <u>VERSIONS</u> | <u>DESCRIPTION</u>                                                                                                                                                                                                                                                                                                                                             |
|------------------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ALD9212          | C/E/S/T         | execution of a workload to randomly access a 12800 element integer array by 1 subordinate task. Compare to test AL09111 to see the effect of task scheduling. Run statistic #1 = storage_size attribute of the subordinate task type.                                                                                                                          |
| ALD9213,I        | C/E/S/T         | execution of a workload to randomly access a 12800 element integer array by 10 subordinate tasks. Compare to AL09111,ALD9212 to see the effect of multi-tasking. Run statistic #1 = storage_size attribute of the subordinate task type. Run statistics 1-4 of ALI9213 contain the total,maximum,mininum,median task iteration counts.                         |
| ALD9214,I        | C/E/S/T         | execution of a workload to randomly access a 12800 element integer array by 10 subordinate tasks with forced time-slicing. Compare to ALD9213 to see the effect of forced time-slicing. Run statistic #1 = storage_size attribute of the subordinate task type. Run statistics 1-4 of ALI9214 contain the total,maximum,mininum,median task iteration counts.  |
| ALD9222          | C/E/S/T         | execution of a workload to randomly access a 64000 element integer array by 1 subordinate task. Compare to test AL09121 to see the effect of task scheduling. Run statistic #1 = storage_size attribute of the subordinate task type.                                                                                                                          |
| ALD9223,I        | C/E/S/T         | execution of a workload to randomly access a 64000 element integer array by 10 subordinate tasks. Compare to AL09121,ALD9222 to see the effect of multi-tasking. Run statistic #1 = storage_size attribute of the subordinate task type. Run statistics 1-4 of ALI9223 contain the total,maximum,mininum,median task iteration counts.                         |
| ALD9224,I        | C/E/S/T         | execution of a workload to randomly access a 64000 element integer array by 10 subordinate tasks with forced time-slicing. Compare to ALD9223 to see the effect of forced time-slicing. Run statistic #1 = storage_size attribute of the subordinate task type. Run statistics 1-4 of ALI9224 contain the total,maximum,mininum,median task iteration counts.  |
| ALD9232          | C/E/S/T         | execution of a workload to randomly access a 128000 element integer array by 1 subordinate task. Compare to test AL09131 to see the effect of task scheduling. Run statistic #1 = storage_size attribute of the subordinate task type.                                                                                                                         |
| ALD9233,I        | C/E/S/T         | execution of a workload to randomly access a 128000 element integer array by 10 subordinate tasks. Compare to AL09131,ALD9232 to see the effect of multi-tasking. Run statistic #1 = storage_size attribute of the subordinate task type. Run statistics 1-4 of ALI9233 contain the total,maximum,mininum,median task iteration counts.                        |
| ALD9234,I        | C/E/S/T         | execution of a workload to randomly access a 128000 element integer array by 10 subordinate tasks with forced time-slicing. Compare to ALD9233 to see the effect of forced time-slicing. Run statistic #1 = storage_size attribute of the subordinate task type. Run statistics 1-4 of ALI9234 contain the total,maximum,mininum,median task iteration counts. |
| ALDE2C1          | C/E/S/T         | execution of a work-load by 1 subordinate task. The work load outputs 1968 characters to a sequential file of character type. (run statistic #1 = storage_size attribute of the subordinate task type).                                                                                                                                                        |
| ALDE2C2,I        | C/E/S/T         | execution of a work-load by 10 subordinate tasks. Compare to ALDE2C1 to see the effect of task scheduling overhead. The work load outputs 1968 characters to a sequential file of character type. Run statistics 1-4                                                                                                                                           |

Table F-1 ACPs Test Descriptions (continued)

| TEST NAME | VERSIONS | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ALDE2C3   | C/E/S/T  | in ALIE2C2 contain the total, maximum, minimum, and median task iteration counts. (run statistic #1 = storage_size attribute of the subordinate task type). execution of a work-load by 1 subordinate task with a forced timeslice interval (VAX=.01 secs). Compare to ALDE2C1 to see the effect of forced time-slicing. The work load outputs 1968 characters to a sequential file of character type. (run statistic #1 = storage_size attribute of the subordinate task type). |
| ALDE2C4,I | C/E/S/T  | execution of a work-load by 10 subordinate tasks with a forced time-slice interval (VAX .01 secs). Compare to ALDE2C2 to see the effect of forced time-slicing. The work load outputs 1968 characters to a sequential file of character type. Run statistics 1-4 in ALIE2C4 contain the total, maximum, minimum, and median task iteration counts. (run statistic #1 = storage_size attribute of the subordinate task type).                                                     |
| ALDE2C5   | C/E/S/T  | execution of a work-load by 1 subordinate task. The work load inputs 1968 characters from a sequential file of character type. (run statistic #1 = storage_size attribute of the subordinate task type).                                                                                                                                                                                                                                                                         |
| ALDE2C6,I | C/E/S/T  | execution of a work-load by 10 subordinate tasks. Compare to ALDE2C5 to see the effect of task scheduling overhead. The work load inputs 1968 characters from a sequential file of character type. Run statistics 1-4 in ALIE2C6 contain the total, maximum, minimum, and median task iteration counts. (run statistic #1 = storage_size attribute of the subordinate task type).                                                                                                |
| ALDE2C7   | C/E/S/T  | execution of a work-load by 1 subordinate task with a forced timeslice interval (VAX=.01 secs). Compare to ALDE2C5 to see the effect of forced time-slicing. The work load inputs 1968 characters from a sequential file of character type. (run statistic #1 = storage_size attribute of the subordinate task type).                                                                                                                                                            |
| ALDE2C8,I | C/E/S/T  | execution of a work-load by 10 subordinate tasks with a forced time-slice interval (VAX .01 secs). Compare to ALDE2C6 to see the effect of forced time-slicing. The work load inputs 1968 characters from a sequential file of character type. Run statistics 1-4 in ALIE2C8 contain the total, maximum, minimum, and median task iteration counts. (run statistic #1 = storage_size attribute of the subordinate task type).                                                    |
| ALDE4C1   | C/E/S/T  | execution of a work-load by 1 subordinate task. to ALDE4C1 to see the effect of task scheduling overhead. The work load outputs 1968 characters to a direct file of character type. (run statistic #1 = storage_size attribute of the subordinate task type).                                                                                                                                                                                                                    |
| ALDE4C2,I | C/E/S/T  | execution of a work-load by 10 subordinate tasks. Compare to ALDE4C1 to see the effect of task scheduling overhead. The work load outputs 1968 characters to a direct file of character type. Run statistics 1-4 in ALIE4C2 contain the total, maximum, minimum, and median task iteration counts. (run statistic #1 = storage_size attribute of the subordinate task type).                                                                                                     |
| ALDE4C3   | C/E/S/T  | execution of a work-load by 1 subordinate task with a forced timeslice interval (VAX=.01 secs). Compare to ALDE4C1 to see the effect of forced time-slicing. The work load outputs 1968 characters to a direct file of character type. (run statistic #1 = storage_size attribute of the subordinate task type).                                                                                                                                                                 |
| ALDE4C4,I | C/E/S/T  | execution of a work-load by 10 subordinate tasks with a forced time-slice interval (VAX .01 secs). Compare to ALDE4C2 to see the effect of forced time-slicing. The work load outputs 1968 characters to a direct file of character type. Run statistics 1-4 in ALIE4C4 contain                                                                                                                                                                                                  |



Table F-1 ACPS Test Descriptions (continued)

| TEST NAME | VERSIONS    | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ALDE4C5   | C/E/S/T     | the total, maximum, minimum, and median task iteration counts. (run statistic #1 = storage_size attribute of the subordinate task type). execution of a work-load by 1 subordinate task. The work load inputs 1968 characters from a direct file of character type. (run statistic #1 = storage_size attribute of the subordinate task type).                                                                             |
| ALDE4C6,I | C/E/S/T     | execution of a work-load by 10 subordinate tasks. Compare to ALDE4C5 to see the effect of task scheduling overhead. The work load inputs 1968 characters from a direct file of character type. Run statistics 1-4 in ALDE4C6 contain the total, maximum, minimum, and median task iteration counts. (run statistic #1 = storage_size attribute of the subordinate task type).                                             |
| ALDE4C7   | C/E/S/T     | execution of a work-load by 1 subordinate task with a forced timeslice interval (VAX=.01 secs). Compare to ALDE4C5 to see the effect of forced time-slicing. The work load inputs 1968 characters from a direct file of character type. (run statistic #1 = storage_size attribute of the subordinate task type).                                                                                                         |
| ALDE4C8,I | C/E/S/T     | execution of a work-load by 10 subordinate tasks with a forced time-slice interval (VAX .01 secs). Compare to ALDE4C6 to see the effect of forced time-slicing. The work load inputs 1968 characters from a direct file of character type. Run statistics 1-4 in ALDE4C8 contain the total, maximum, minimum, and median task iteration counts. (run statistic #1 = storage_size attribute of the subordinate task type). |
| A000102   | C/E/S/T/J/F | hand-optimized version of test A000103.                                                                                                                                                                                                                                                                                                                                                                                   |
| A000103,C | C/E/S/T/J/F | tests constant folding optimization logic for constant scalar and character expressions within assignment statements.                                                                                                                                                                                                                                                                                                     |
| A000107   | C/E/S/T     | hand-optimized version of test A000108.                                                                                                                                                                                                                                                                                                                                                                                   |
| A000108,C | C/E/S/T     | tests constant folding/propagation optimization logic for constant aggregate expressions within/between assignment statements.                                                                                                                                                                                                                                                                                            |
| A000112   | C/E/S/T     | hand-optimized version of test A000113.                                                                                                                                                                                                                                                                                                                                                                                   |
| A000113,C | C/E/S/T     | tests constant folding optimization logic for constant predefined attribute expressions within assignment statements.                                                                                                                                                                                                                                                                                                     |
| A000202   | C/E/S/T/J/F | hand-optimized version of test A000203.                                                                                                                                                                                                                                                                                                                                                                                   |
| A000203,C | C/E/S/T/J/F | tests constant propagation optimization logic for scalar and character constant expressions within and between assignment and control structure statements by providing opportunities for removal of statements at compile-time.                                                                                                                                                                                          |
| A000207   | C/E/S/T     | hand-optimized version of test A000208.                                                                                                                                                                                                                                                                                                                                                                                   |
| A000208,C | C/E/S/T     | tests constant propagation optimization logic for aggregate constant expressions within and between assignment and control structure statements by providing opportunities for removal of statements at compile-time.                                                                                                                                                                                                     |
| A000300   | C/E/S/T/J/F | tests common array address expression optimization logic for 1-dimensional integer arrays.                                                                                                                                                                                                                                                                                                                                |
| A000305   | C/E/S/T/J/F | tests common array address expression optimization logic for 2 dimensional integer arrays.                                                                                                                                                                                                                                                                                                                                |
| A000310   | C/E/S/T/J/F | tests common array address expression optimization logic for 3 dimensional integer arrays.                                                                                                                                                                                                                                                                                                                                |
| A000311   | C/E/S/T/J/F | hand-optimized version of test A000312.                                                                                                                                                                                                                                                                                                                                                                                   |
| A000312,C | C/E/S/T/J/F | tests common subexpression optimization logic within/between assignment statements for arithmetic expressions with integer scalar operands.                                                                                                                                                                                                                                                                               |
| A000314   | C/E/S/T/J/F | hand-optimized version of test A000315.                                                                                                                                                                                                                                                                                                                                                                                   |
| A000315,C | C/E/S/T/J/F | tests common subexpression optimization logic within/between assignment statements for arithmetic                                                                                                                                                                                                                                                                                                                         |

Table F-1 ACPS Test Descriptions (continued)

| TEST NAME            | VERSIONS                   | DESCRIPTION                                                                                                                                                                                                                                                                                                                    |
|----------------------|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A000317<br>A000318,C | C/E/S/T/F<br>C/E/S/T/F     | expressions with 1-dimensional integer array element operands.<br>hand-optimized version of test A000318.<br>tests common subexpression optimization logic within/between assignment statements for arithmetic expressions with 2-dimensional integer array element operands.                                                  |
| A000320<br>A000321,C | C/E/S/T/F<br>C/E/S/T/F     | hand-optimized version of test A000321.<br>tests common subexpression optimization logic within/between assignment statements for arithmetic expressions with 3-dimensional integer array element operands.                                                                                                                    |
| A000323<br>A000324,C | C/E/S/T/J/F<br>C/E/S/T/J/F | hand-optimized version of test A000324.<br>tests common subexpression optimization logic within and between assignment and control statements for arithmetic expressions with integer scalar operands.                                                                                                                         |
| A000326<br>A000327,C | C/E/S/T/J/F<br>C/E/S/T/J/F | hand-optimized version of test A000327.<br>tests common subexpression optimization logic across short-circuit operators in IF statements for arithmetic expressions involving integer scalar operands.                                                                                                                         |
| A000329<br>A000330,C | C/E/S/T/J/F<br>C/E/S/T/J/F | hand-optimized version of test A000330.<br>tests common subexpression optimization logic for common 1-dimensional array element references within a FOR loop with the loop iteration parameter used as index.                                                                                                                  |
| A000332<br>A000333,C | C/E/S/T/J/F<br>C/E/S/T/J/F | hand-optimized version of test A000333.<br>tests common subexpression optimization logic for common 2-dimensional array element references within a 2-level nested FOR loop with the loop iteration parameters used as indices.                                                                                                |
| A000335<br>A000336,C | C/E/S/T/J/F<br>C/E/S/T/J/F | hand-optimized version of test A000336.<br>tests common subexpression optimization logic for common 3-dimensional array element references within a 3-level nested FOR loop with the loop iteration parameters used as array indices.                                                                                          |
| A000338<br>A000339,C | C/E/S/T/J/F<br>C/E/S/T/J/F | hand-optimized version of test A000339.<br>tests common subexpression optimization logic within and between assignment and control statements for relational and logical operators with integer scalar operands.                                                                                                               |
| A000341<br>A000342,C | C/E/S/T/J/F<br>C/E/S/T/J/F | hand-optimized version of test A000342.<br>tests common subexpression optimization logic within/between assignment statements for expressions using the mod,rem and abs operators.                                                                                                                                             |
| A000344<br>A000345,C | C/E/S/T/J/F<br>C/E/S/T/J/F | hand-optimized version of test A000345.<br>tests common subexpression optimization logic within/between assignment statements for expressions using the math functions sin,cos,tan.                                                                                                                                            |
| A000348<br>A000349,C | C/E/S/T/J/F<br>C/E/S/T/J/F | hand-optimized version of test A000349.<br>tests common subexpression optimization logic between assignment statements and across a call to an external procedure. The expressions involve local variables that are not referenced by nor passed as arguments to the called procedure.                                         |
| A000351<br>A000352,C | C/E/S/T/J/F<br>C/E/S/T/J/F | hand-optimized version of test A000352.<br>tests common subexpression optimization logic between assignment statements and across a call to an external procedure. The expressions involve global variables that are not referenced by nor passed as arguments to the called procedure.                                        |
| A000354<br>A000355,C | C/E/S/T/F<br>C/E/S/T/F     | the test requires range checks for all indices of array element references. It is compared to test A000355.<br>tests array index range check optimization logic by assigning constants (within separate paths of an IF statement) to variables used in subsequent array references. No array index range checks are necessary. |

Table F-1 ACPS Test Descriptions (continued)

| <u>TEST NAME</u> | <u>VERSIONS</u> | <u>DESCRIPTION</u>                                                                                                                                                                                                                                                                                                                                                                                                      |
|------------------|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A000357          | C/E/S/T/F       | If optimized, A000355 should be < 1.<br>the test requires range checks for all indices of array element references. It is compared to test A000358.<br>tests array index range check optimization logic by assigning positive valued variables (within an IF statement) to variables used in subsequent array references. Only lower bound array index range checks are necessary. If optimized, A000358 should be < 1. |
| A000358,C        | C/E/S/T/F       |                                                                                                                                                                                                                                                                                                                                                                                                                         |
| A000360          | C/E/S/T/F       | the test requires range checks for all indices of array element references. It is compared to test A000361.<br>tests array index range check optimization logic by assigning (from within an IF statement) variables typed with ranges to variables typed without ranges which are used in subsequent array references. No array index range checks are necessary. If optimized, A000361 should be < 1.                 |
| A000361,C        | C/E/S/T/F       |                                                                                                                                                                                                                                                                                                                                                                                                                         |
| A000363          | C/E/S/T/J       | hand-optimized version of test A000364. Tests A000364, A000367, A00036A, A00036D, A00036G, A00036J, A00036M, A00036P, A00036S, A00036V, A00036Y all have the same structure and may be compared to one another to see whether the type of the operand used in the tests affects optimization.                                                                                                                           |
| A000364,C        | C/E/S/T/J       | tests common subexpression optimization logic within and between assignment and control statements for relational and logical operators with enumeration scalar operands.                                                                                                                                                                                                                                               |
| A000366          | C/E/S/T         | hand-optimized version of test A000367.<br>tests common subexpression optimization logic within and between assignment and control statements for relational and logical operators with integer - array slice operands.                                                                                                                                                                                                 |
| A000367,C        | C/E/S/T         |                                                                                                                                                                                                                                                                                                                                                                                                                         |
| A000369          | C/E/S/T         | hand-optimized version of test A00036A.<br>tests common subexpression optimization logic within and between assignment and control statements for relational and logical operators with boolean - array slice operands.                                                                                                                                                                                                 |
| A00036A,C        | C/E/S/T         |                                                                                                                                                                                                                                                                                                                                                                                                                         |
| A00036C          | C/E/S/T         | hand-optimized version of test A00036D.<br>tests common subexpression optimization logic within and between assignment and control statements for relational and logical operators with packed boolean - array slice operands.                                                                                                                                                                                          |
| A00036D,C        | C/E/S/T         |                                                                                                                                                                                                                                                                                                                                                                                                                         |
| A00036F          | C/E/S/T         | hand-optimized version of test A00036G.<br>tests common subexpression optimization logic within and between assignment and control statements for relational and logical operators with record object operands (type RECORDS).                                                                                                                                                                                          |
| A00036G,C        | C/E/S/T         |                                                                                                                                                                                                                                                                                                                                                                                                                         |
| A00036I          | C/E/S/T/J       | hand-optimized version of test A00036J.<br>tests common subexpression optimization logic within and between assignment and control statements for relational and logical operators with operands that are access type components of record access objects (type RECORD_POINTER).                                                                                                                                        |
| A00036J,C        | C/E/S/T/J       |                                                                                                                                                                                                                                                                                                                                                                                                                         |
| A00036L          | C/E/S/T/J       | hand-optimized version of test A00036M.<br>tests common subexpression optimization logic within and between assignment and control statements for relational and logical operators with operands that are integer components of record objects (type RECORDS).                                                                                                                                                          |
| A00036M,C        | C/E/S/T/J       |                                                                                                                                                                                                                                                                                                                                                                                                                         |
| A00036O          | C/E/S/T/J       | hand-optimized version of test A00036P.<br>tests common subexpression optimization logic within and between assignment and control statements for relational and logical operators with operands that are integer components of record objects (type PACKED_RECORDS).                                                                                                                                                   |
| A00036P,C        | C/E/S/T/J       |                                                                                                                                                                                                                                                                                                                                                                                                                         |
| A00036R          | C/E/S/T/J       | hand-optimized version of test A00036S.<br>tests common subexpression optimization logic within and                                                                                                                                                                                                                                                                                                                     |
| A00036S,C        | C/E/S/T/J       |                                                                                                                                                                                                                                                                                                                                                                                                                         |

Table F-1 ACPS Test Descriptions (continued)

| TEST NAME            | VERSIONS                   | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A00036U<br>A00036V,C | C/E/S/T/J<br>C/E/S/T/J     | between assignment and control statements for relational and logical operators with operands that are integer components of record objects (type REP_RECORDS). hand-optimized version of test A00036V. tests common subexpression optimization logic within and between assignment and control statements for relational and logical operators with operands that are string components of record access objects (type RECORD_TYPE). |
| A00036X<br>A00036Y,C | C/E/S/T/J/F<br>C/E/S/T/J/F | hand-optimized version of test A00036Y. tests common subexpression optimization logic within and between assignment and control statements for relational and logical operators with short_integer scalar operands.                                                                                                                                                                                                                  |
| A000370<br>A000371,C | C/E/S/T<br>C/E/S/T         | non-shared global variable version of test A000371. tests common subexpression optimization logic within/between assignment statements for arithmetic expressions with integer scalar operands. The test is executed within an Ada task and the variables in the expressions are declared as shared variables. A000371 compares optimization logic for non-shared variables to that for shared variables.                            |
| A000375<br>A000376,C | C/E/S/T<br>C/E/S/T         | hand-optimized version of test A000376. tests common subexpression optimization logic for arithmetic expressions with integer scalar operands across a call to a task entry. The variables in the expressions are not referenced by the rendezvous. The test is executed within an Ada task and the variables in the expressions are declared as global variables.                                                                   |
| A000380<br>A000381,C | C/E/S/T<br>C/E/S/T         | hand-optimized version of test A000381. tests common subexpression optimization logic for arithmetic expressions with integer scalar operands across a call to a task entry. The variables in the expressions are not referenced by the rendezvous. The test is executed within an Ada task and the variables in the expressions are declared as shared variables. Compare A000381 to A000376.                                       |
| A000391              | C/E/S/T/J/F                | tests optimization logic to recognize common argument lists in external procedure calls and to eliminate any redundant code/data. The test contains 5 procedure calls with identical argument lists consisting of 10 1-dimensional integer array input/output arguments. The extent of optimization is best determined through examination of the compiled code.                                                                     |
| A000402<br>A000403,C | C/E/S/T/J/F<br>C/E/S/T/J/F | hand-optimized version of test A000403. tests code motion space optimization logic to conserve space by moving code common to all paths in IF statements.                                                                                                                                                                                                                                                                            |
| A000500              | C/E/S/T/J/F                | tests dead assignment optimization logic by providing opportunities to eliminate assignment statements to local variables whose values are only used within the assignment statements. All statements in the test loop can be removed.                                                                                                                                                                                               |
| A000502<br>A000503,C | C/E/S/T/J/F<br>C/E/S/T/J/F | hand-optimized version of test A000503. tests dead assignment optimization logic by providing opportunities to eliminate assignment statements to global variables that are not used but always set in a local procedure called within the test loop.                                                                                                                                                                                |
| A000507<br>A000508,C | C/E/S/T/J/F<br>C/E/S/T/J/F | hand-optimized version of test A000508. tests dead assignment optimization logic by providing opportunities to eliminate assignment statements to global variables that are not used but always set as output parameters to a local procedure called within the test loop.                                                                                                                                                           |
| A000512              | C/E/S/T/J/F                | hand-optimized version of test A000513.                                                                                                                                                                                                                                                                                                                                                                                              |

**Table F-1 ACPS Test Descriptions (continued)**

| <u>TEST NAME</u>     | <u>VERSIONS</u>            | <u>DESCRIPTION</u>                                                                                                                                                                                                                                                         |
|----------------------|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A000513,C            | C/E/S/T/J/F                | tests dead assignment optimization logic by providing opportunities to eliminate redundant assignment statements within a sequential set of assignment and control structure statements.                                                                                   |
| A000517<br>A000518,C | C/E/S/T/J/F<br>C/E/S/T/J/F | hand-optimized version of test A000518.<br>tests dead assignment optimization logic by providing opportunities to eliminate redundant assignment statements within a sequential set of assignment statements.                                                              |
| A0D0523<br>A0D0524,C | C/E/S/T/J<br>C/E/S/T/J     | hand-optimized version of test A0D0524.<br>tests dead assignment optimization logic by providing opportunities to eliminate assignment statements to global variables that are not used but always set in a local pragma inline procedure called within the test loop.     |
| A0D0527<br>A0D0528,C | C/E/S/T<br>C/E/S/T         | hand-optimized version of test A0D0528.<br>tests dead assignment optimization logic by providing opportunities to eliminate assignment statements to global variables that are not used but always set in an external pragma inline procedure called within the test loop. |
| A000602<br>A000603,C | C/E/S/T/J/F<br>C/E/S/T/J/F | hand-optimized version of test A000603.<br>tests algebraic identity recognition optimization logic by providing opportunities to simplify arithmetic and relational expressions within assignment statements.                                                              |
| A000605              | C/E/S/T/J/F                | tests target dependent operator strength reduction optimization logic for integer expressions within assignment statements(see test code for run statistic description).                                                                                                   |
| A000606              | C/E/S/T/J/F                | tests target dependent operator strength reduction logic for multiplication/division by powers of 2(e.g. 4,8,...).                                                                                                                                                         |
| A000607              | C/E/S/T/J/F                | tests target dependent operator strength reduction logic for exponentiation by constant exponents(e.g. 2,3,4,8).                                                                                                                                                           |
| A000702<br>A000703,C | C/E/S/T/J/F<br>C/E/S/T/J/F | hand-optimized version of test A000703.<br>tests optimization logic to remove loop invariant code( expression,assignment statement,control statement) from for loops.                                                                                                      |
| A000705              | C/E/S/T/J/F                | tests optimization logic to remove loop invariant array index calculations from FOR loops.                                                                                                                                                                                 |
| A000706<br>A000707,C | C/E/S/T/J/F<br>C/E/S/T/J/F | hand-optimized version of test A000707.<br>tests optimization logic to remove loop invariant expressions involving array references from FOR loops.                                                                                                                        |
| A000709<br>A000710,C | C/E/S/T/J/F<br>C/E/S/T/J/F | hand-optimized version of test A000710.<br>tests loop fusion optimization logic by providing an opportunity to combine 2 loops into 1.                                                                                                                                     |
| A000713              | C/E/S/T/J/F                | tests target machine dependent optimization logic to use block move instructions to implement FOR loops that transfer data between 1-dimensional arrays.                                                                                                                   |
| A000714              | C/E/S/T/J/F                | tests target machine dependent optimization logic to use block move instructions to implement FOR loops that transfer data between 2-dimensional arrays.                                                                                                                   |
| A000715              | C/E/S/T/J/F                | tests target machine dependent optimization logic to use block move instructions to implement FOR loops that transfer data between 3-dimensional arrays.                                                                                                                   |
| A000716              | C/E/S/T/J/F                | tests target machine dependent optimization logic to use block move instructions to implement FOR loops that initialize 1-dimensional arrays to a constant.                                                                                                                |
| A000717              | C/E/S/T/J/F                | tests target machine dependent optimization logic to use block move instructions to implement FOR loops that initialize 2-dimensional arrays to a constant.                                                                                                                |
| A000718              | C/E/S/T/J/F                | tests target machine dependent optimization logic to use block move instructions to implement FOR loops that initialize 3-dimensional arrays to a constant.                                                                                                                |
| A000719<br>A000720,C | C/E/S/T/J/F<br>C/E/S/T/J/F | hand-optimized version of test A000720.<br>tests time optimization logic to unroll a 3-iteration FOR loop.                                                                                                                                                                 |

**APPENDIX G**  
**TEST PROGRAMS AND SOURCE CODE FILES**

Table G-1 Ada Type A Test Programs and Source Code Files

| PROGRAM  | SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED) |         |         |         |         |         |
|----------|--------------------------------------------------------|---------|---------|---------|---------|---------|
| AA00000  | OURSYS*                                                | OURDMP* | AA0P000 |         |         |         |
| AF03519  | OURSYS*                                                | OURDMP* | AF03500 | AF03501 | AF03502 | AF03503 |
|          | AF03504                                                | AF03509 | AF03510 | AF03511 | AF03512 | AF03513 |
|          | AF03514                                                | AF03517 | AF03518 | AF0P000 |         |         |
| AF03550  | OURSPC*                                                | OURSYS* | OURDMP* | AF0P000 |         |         |
| AFD3551  | OURSPC*                                                | OURSYS* | OURDMP* | AF0P000 |         |         |
| AF03620  | OURSYS*                                                | OURDMP* | AF03600 | AF03601 | AF03602 | AF03603 |
|          | AF03604                                                | AF03605 | AF03606 | AF03607 | AF03608 | AF03609 |
|          | AF03610                                                | AF03611 | AF03612 | AF03613 | AF03614 | AF03615 |
|          | AF03616                                                | AF03617 | AF03618 | AF03619 | AF0P000 |         |
| AF03650  | OURSYS*                                                | OURDMP* | AF03630 | AF03631 | AF03632 | AF03633 |
|          | AF03634                                                | AF03635 | AF03636 | AF03637 | AF03638 | AF03639 |
|          | AF03641                                                | AF03642 | AF03643 | AF03644 | AF03645 | AF03646 |
|          | AF03647                                                | AF03648 | AF03649 | AF0P000 |         |         |
| AF03704  | OURSPC*                                                | OURSYS* | OURDMP* | AF03700 | AF03701 | AF03702 |
|          | AF03703                                                | AF0P000 |         |         |         |         |
| AF03805  | OURSPC*                                                | OURSYS* | OURDMP* | AF03800 | AF03801 | AF03802 |
|          | AF03803                                                | AF03804 | AF0P000 |         |         |         |
| AF04120  | OURSYS*                                                | OURDMP* | AF0P000 |         |         |         |
| AF04121  | OURSYS*                                                | OURDMP* | AF0P000 |         |         |         |
| AF04122  | OURSYS*                                                | OURDMP* | AF0P000 |         |         |         |
| AF04123  | OURSYS*                                                | OURDMP* | AF0P000 |         |         |         |
| AF04124  | OURSYS*                                                | OURDMP* | AF0P000 |         |         |         |
| AF04125  | OURSYS*                                                | OURDMP* | AF0P000 |         |         |         |
| AF04126  | OURSYS*                                                | OURDMP* | AF0P000 |         |         |         |
| AF04127  | OURSYS*                                                | OURDMP* | AF0P000 |         |         |         |
| AFD4128* | OURSPC*                                                | OURSYS* | OURDMP* | AF0P000 |         |         |
| AF04129  | OURSYS*                                                | OURDMP* | AF0P000 |         |         |         |
| AFD412A  | OURSPC*                                                | OURSYS* | OURDMP* | AF0P000 |         |         |
| AF0412B  | OURSPC*                                                | OURSYS* | OURDMP* | AF0P000 |         |         |
| AFD412C  | OURSPC*                                                | OURSYS* | OURDMP* | AF0P000 |         |         |
| AFD412D  | OURSPC*                                                | OURSYS* | OURDMP* | AF0P000 |         |         |
| AF04130  | OURSPC*                                                | OURSYS* | OURDMP* | AF0P000 |         |         |
| AF04131  | OURSPC*                                                | OURSYS* | OURDMP* | AF0P000 |         |         |
| AF04132  | OURSPC*                                                | OURSYS* | OURDMP* | AF0P000 |         |         |
| AF04133  | OURSPC*                                                | OURSYS* | OURDMP* | AF0P000 |         |         |
| AFD4135  | OURSPC*                                                | OURSYS* | OURDMP* | AF0P000 |         |         |
| AFD4136  | OURSPC*                                                | OURSYS* | OURDMP* | AF0P000 |         |         |
| AFD4137  | OURSPC*                                                | OURSYS* | OURDMP* | AF0P000 |         |         |
| AFD4138  | OURSPC*                                                | OURSYS* | OURDMP* | AF0P000 |         |         |
| AFD4139  | OURSPC*                                                | OURSYS* | OURDMP* | AF0P000 |         |         |
| AFD413A  | OURSPC*                                                | OURSYS* | OURDMP* | AF0P000 |         |         |
| AFD413B  | OURSPC*                                                | OURSYS* | OURDMP* | AF0P000 |         |         |
| AFD413C  | OURSPC*                                                | OURSYS* | OURDMP* | AF0P000 |         |         |
| AF0413D  | OURSPC*                                                | OURSYS* | OURDMP* | AF0P000 |         |         |
| AFD413E  | OURSPC*                                                | OURSYS* | OURDMP* | AF0P000 |         |         |
| AFD413G  | OURSPC*                                                | OURSYS* | OURDMP* | AF0P000 |         |         |
| AF0413H  | OURSPC*                                                | OURSYS* | OURDMP* | AF0P000 |         |         |
| AF0413I  | OURSPC*                                                | OURSYS* | OURDMP* | AF0P000 |         |         |
| AF0413J  | OURSPC*                                                | OURSYS* | OURDMP* | AF0P000 |         |         |
| AF0413K  | OURSPC*                                                | OURSYS* | OURDMP* | AF0P000 |         |         |
| AF04310  | OURSPC*                                                | OURSYS* | OURDMP* | AF0P000 |         |         |
| AF04311  | OURSPC*                                                | OURSYS* | OURDMP* | AF0P000 |         |         |
| AF04312  | OURSPC*                                                | OURSYS* | OURDMP* | AF0P000 |         |         |
| AF04510  | OURSYS*                                                | OURDMP* | AF0P000 |         |         |         |
| AF04511  | OURSYS*                                                | OURDMP* | AF0P000 |         |         |         |
| AF04512  | OURSYS*                                                | OURDMP* | AF0P000 |         |         |         |
| AF04513  | OURSYS*                                                | OURDMP* | AF0P000 |         |         |         |
| AF04514  | OURSYS*                                                | OURDMP* | AF0P000 |         |         |         |
| AF04515  | OURSYS*                                                | OURDMP* | AF0P000 |         |         |         |
| AF04516  | OURSYS*                                                | OURDMP* | AF0P000 |         |         |         |
| AF04517  | OURSYS*                                                | OURDMP* | AF0P000 |         |         |         |
| AF0451J  | OURSYS*                                                | OURDMP* | AF04518 | AF04519 | AF0451A | AF0451B |
|          | AF0451C                                                | AF0451D | AF0451E | AF0451F | AF0451G | AF0451H |
|          | AF0451I                                                | AF0P000 |         |         |         |         |

\* Source file supplied with USE file type only

Table G-1 Ada Type A Test Programs and Source Code Files (continued)

| <u>PROGRAM</u> | <u>SUPPORT FILES(X - TEST SUPPORT SOFTWARE PACKAGES USED)</u> |                    |                    |                    |                    |                    |
|----------------|---------------------------------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| AFD451U†       | OURSYSX<br>AFD451M<br>AFD451S                                 | OURDMPX<br>AFD451N | OURTYPX<br>AFD451O | AFOP000<br>AFD451P | AFD451K<br>AFD451Q | AFD451L<br>AFD451R |
| AF0451Z        | OURSYSX<br>AFOP000                                            | OURDMPX            | AF0451V            | AF0451W            | AF0451X            | AF0451Y            |
| AF04520        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AF04521        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AF04522        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AFD4523        | OURSYSX                                                       | OURDMPX            | OURTYPX            | AFOP000            |                    |                    |
| AFD4524        | OURSYSX                                                       | OURDMPX            | OURTYPX            | AFOP000            |                    |                    |
| AFD4525        | OURSYSX                                                       | OURDMPX            | OURTYPX            | AFOP000            |                    |                    |
| AFD4526        | OURSYSX                                                       | OURDMPX            | OURTYPX            | AFOP000            |                    |                    |
| AF04527        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AFD4528        | OURSPCX                                                       | OURSYSX            | OURDMPX            | AFOP000            |                    |                    |
| AF04529        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AFD452A        | OURSPCX                                                       | OURSYSX            | OURDMPX            | AFOP000            |                    |                    |
| AF04530        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AF04531        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AF04532        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AF04533        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AF04534        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AF04535        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AF04536        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AF04537        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AF04538        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AF04539        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AF0453A        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AF0453B        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AF0453C        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AF04540        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AF04541        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AF04550        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AF04551        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AF04552        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AF04553        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AF04554        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AF04555        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AF04556        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AF04557        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AF04558        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AF04559        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AFD455D        | OURSYSX                                                       | OURDMPX            | OURTYPX            | AFOP000            |                    |                    |
| AFD455E        | OURSYSX                                                       | OURDMPX            | OURTYPX            | AFOP000            |                    |                    |
| AFD455F        | OURSYSX                                                       | OURDMPX            | OURTYPX            | AFOP000            |                    |                    |
| AFD455G        | OURSYSX                                                       | OURDMPX            | OURTYPX            | AFOP000            |                    |                    |
| AFD455I        | OURSYSX                                                       | OURDMPX            | OURTYPX            | AFOP000            |                    |                    |
| AFD455J        | OURSYSX                                                       | OURDMPX            | OURTYPX            | AFOP000            |                    |                    |
| AFD455K        | OURSYSX                                                       | OURDMPX            | OURTYPX            | AFOP000            |                    |                    |
| AFD455L        | OURSYSX                                                       | OURDMPX            | OURTYPX            | AFOP000            |                    |                    |
| AF0455N        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AF0455O        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AF04560        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AF04562        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AF04563        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AFD4566        | OURSYSX                                                       | OURDMPX            | OURTYPX            | AFOP000            |                    |                    |
| AFD4567        | OURSYSX                                                       | OURDMPX            | OURTYPX            | AFOP000            |                    |                    |
| AFD4568        | OURSYSX                                                       | OURDMPX            | OURTYPX            | AFOP000            |                    |                    |
| AFD4569        | OURSYSX                                                       | OURDMPX            | OURTYPX            | AFOP000            |                    |                    |
| AF04600        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AF04601        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AF04602        | OURSYSX                                                       | OURDMPX            | AFOP000            |                    |                    |                    |
| AFD4603        | OURSYSX                                                       | OURDMPX            | OURTYPX            | AFOP000            |                    |                    |
| AFD4604        | OURSYSX                                                       | OURDMPX            | OURTYPX            | AFOP000            |                    |                    |
| AFD4605        | OURSYSX                                                       | OURDMPX            | OURTYPX            | AFOP000            |                    |                    |
| AFD4606        | OURSYSX                                                       | OURDMPX            | OURTYPX            | AFOP000            |                    |                    |

† Source file supplied with USE file type only



Table G-1 Ada Type A Test Programs and Source Code Files (continued)

| <u>PROGRAM</u> | <u>SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED)</u> |           |         |         |         |         |
|----------------|---------------------------------------------------------------|-----------|---------|---------|---------|---------|
| AFD4607        | OURSYS*                                                       | OURDMP*   | OURTYP* | AFOP000 |         |         |
| AFD4608        | OURSYS*                                                       | OURDMP*   | OURTYP* | AFOP000 |         |         |
| AFD4609        | OURSYS*                                                       | OURDMP*   | OURTYP* | AFOP000 |         |         |
| AFD460A        | OURSYS*                                                       | OURDMP*   | OURTYP* | AFOP000 |         |         |
| AFD460B        | OURSYS*                                                       | OURDMP*   | OURTYP* | AFOP000 |         |         |
| AF0460E        | OURSYS*                                                       | OURDMP*   | OURTYP* | AFOP000 |         |         |
| AF0460F        | OURSYS*                                                       | OURDMP*   | AFOP000 |         |         |         |
| AF0460G        | OURSYS*                                                       | OURDMP*   | AFOP000 |         |         |         |
| AF0460H        | OURSYS*                                                       | OURDMP*   | AFOP000 |         |         |         |
| AF0460I        | OURSYS*                                                       | OURDMP*   | AFOP000 |         |         |         |
| AF0460J        | OURSPC*                                                       | OURSYS*   | OURDMP* | AFOP000 |         |         |
| AFD460K        | OURSPC*                                                       | OURSYS*   | OURDMP* | AFOP000 |         |         |
| AFD460L        | OURSPC*                                                       | OURSYS*   | OURDMP* | AFOP000 |         |         |
| AF0460M        | OURSPC*                                                       | OURSYS*   | OURDMP* | AFOP000 |         |         |
| AFD460N        | OURSPC*                                                       | OURSYS*   | OURDMP* | AFOP000 |         |         |
| AFD460O        | OURSPC*                                                       | OURSYS*   | OURDMP* | AFOP000 |         |         |
| AFD4804        | OURSPC*                                                       | OURSYS*   | OURDMP* | AFOP000 | AFD4800 | AFD4801 |
|                | AFD4802                                                       | AFD4803** |         |         |         |         |
| AF05200        | OURSYS*                                                       | OURDMP*   | AFOP000 |         |         |         |
| AF05201        | OURSYS*                                                       | OURDMP*   | AFOP000 |         |         |         |
| AF05202        | OURSYS*                                                       | OURDMP*   | AFOP000 |         |         |         |
| AF05203        | OURSYS*                                                       | OURDMP*   | AFOP000 |         |         |         |
| AF05204        | OURSYS*                                                       | OURDMP*   | AFOP000 |         |         |         |
| AF05205        | OURSYS*                                                       | OURDMP*   | AFOP000 |         |         |         |
| AF05206        | OURSYS*                                                       | OURDMP*   | AFOP000 |         |         |         |
| AF05207        | OURSYS*                                                       | OURDMP*   | AFOP000 |         |         |         |
| AF05208        | OURSYS*                                                       | OURDMP*   | AFOP000 |         |         |         |
| AF05209        | OURSYS*                                                       | OURDMP*   | AFOP000 |         |         |         |
| AF0520A        | OURSYS*                                                       | OURDMP*   | AFOP000 |         |         |         |
| AF0520B        | OURSYS*                                                       | OURDMP*   | AFOP000 |         |         |         |
| AFD520C        | OURSYS*                                                       | OURDMP*   | OURTYP* | AFOP000 |         |         |
| AFD520D        | OURSYS*                                                       | OURDMP*   | OURTYP* | AFOP000 |         |         |
| AFD520E        | OURSYS*                                                       | OURDMP*   | OURTYP* | AFOP000 |         |         |
| AFD520F        | OURSYS*                                                       | OURDMP*   | OURTYP* | AFOP000 |         |         |
| AFD520G        | OURSYS*                                                       | OURDMP*   | OURTYP* | AFOP000 |         |         |
| AFD520H        | OURSYS*                                                       | OURDMP*   | OURTYP* | AFOP000 |         |         |
| AFD520I        | OURSYS*                                                       | OURDMP*   | OURTYP* | AFOP000 |         |         |
| AFD520J        | OURSYS*                                                       | OURDMP*   | OURTYP* | AFOP000 |         |         |
| AF0520M        | OURSPC*                                                       | OURSYS*   | OURDMP* | AFOP000 |         |         |
| AFD520N        | OURSPC*                                                       | OURSYS*   | OURDMP* | AFOP000 |         |         |
| AF0520O        | OURSPC*                                                       | OURSYS*   | OURDMP* | AFOP000 |         |         |
| AFD520P        | OURSPC*                                                       | OURSYS*   | OURDMP* | AFOP000 |         |         |
| AFD520Q        | OURSPC*                                                       | OURSYS*   | OURDMP* | AFOP000 |         |         |
| AF0520R        | OURSPC*                                                       | OURSYS*   | OURDMP* | AFOP000 |         |         |
| AF0520S        | OURSPC*                                                       | OURSYS*   | OURDMP* | AFOP000 |         |         |
| AF05210        | OURSYS*                                                       | OURDMP*   | AFOP000 |         |         |         |
| AF05211        | OURSYS*                                                       | OURDMP*   | AFOP000 |         |         |         |
| AF05212        | OURSYS*                                                       | OURDMP*   | AFOP000 |         |         |         |
| AF05213        | OURSYS*                                                       | OURDMP*   | AFOP000 |         |         |         |
| AF05214        | OURSYS*                                                       | OURDMP*   | AFOP000 |         |         |         |
| AF05215        | OURSYS*                                                       | OURDMP*   | AFOP000 |         |         |         |
| AFD5218        | OURSYS*                                                       | OURDMP*   | OURTYP* | AFOP000 |         |         |
| AFD5219        | OURSYS*                                                       | OURDMP*   | OURTYP* | AFOP000 |         |         |
| AFD521A        | OURSYS*                                                       | OURDMP*   | OURTYP* | AFOP000 |         |         |
| AFD521B        | OURSYS*                                                       | OURDMP*   | OURTYP* | AFOP000 |         |         |
| AFD521C        | OURSYS*                                                       | OURDMP*   | OURTYP* | AFOP000 |         |         |
| AFD521D        | OURSYS*                                                       | OURDMP*   | OURTYP* | AFOP000 |         |         |
| AFD521E        | OURSYS*                                                       | OURDMP*   | OURTYP* | AFOP000 |         |         |
| AFD521F        | OURSYS*                                                       | OURDMP*   | OURTYP* | AFOP000 |         |         |
| AF0521H        | OURSYS*                                                       | OURDMP*   | AFOP000 |         |         |         |
| AF0521I        | OURSYS*                                                       | OURDMP*   | AFOP000 |         |         |         |
| AF0521J        | OURSYS*                                                       | OURDMP*   | AFOP000 |         |         |         |
| AF0521K        | OURSYS*                                                       | OURDMP*   | AFOP000 |         |         |         |
| AFD521K        | OURSPC*                                                       | OURSYS*   | OURDMP* | AFOP000 |         |         |

\*\* Multiple versions of source file supplied(USE and ADA file types)

Table G-1 Ada Type A Test Programs and Source Code Files (continued)

| PROGRAM | SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED) |         |         |         |         |         |
|---------|--------------------------------------------------------|---------|---------|---------|---------|---------|
| AF0521L | OURSPC*                                                | OURSYS* | OURDMP* | AF0P000 |         |         |
| AFD521M | OURSPC*                                                | OURSYS* | OURDMP* | AF0P000 |         |         |
| AF0521N | OURSPC*                                                | OURSYS* | OURDMP* | AF0P000 |         |         |
| AFD521O | OURSPC*                                                | OURSYS* | OURDMP* | AF0P000 |         |         |
| AFD521P | OURSPC*                                                | OURSYS* | OURDMP* | AF0P000 |         |         |
| AF05304 | OURSYS*                                                | OURDMP* | AF05300 | AF05301 | AF05302 | AF05303 |
|         | AF0P000                                                |         |         |         |         |         |
| AF05308 | OURSYS*                                                | OURDMP* | AF05305 | AF05306 | AF05307 | AF0P000 |
| AF05408 | OURSYS*                                                | OURDMP* | AF05400 | AF05401 | AF05402 | AF05403 |
|         | AF05404                                                | AF05405 | AF05406 | AF05407 | AF0P000 |         |
| AF05505 | OURSYS*                                                | OURDMP* | AF05501 | AF05502 | AF05503 | AF05504 |
|         | AF0P000                                                |         |         |         |         |         |
| AF0550C | OURSYS*                                                | OURDMP* | AF05506 | AF05507 | AF05508 | AF05509 |
|         | AF0550A                                                | AF0550B | AF0P000 |         |         |         |
| AF0550D | OURSYS*                                                | OURDMP* | AF0P000 |         |         |         |
| AF0550E | OURSYS*                                                | OURDMP* | AF0P000 |         |         |         |
| AF0550F | OURSYS*                                                | OURDMP* | AF0P000 |         |         |         |
| AF06001 | OURSYS*                                                | OURDMP* | AF0P000 |         |         |         |
| AF06009 | OURSYS*                                                | OURDMP* | AF0P000 |         |         |         |
| AF06010 | OURSYS*                                                | OURDMP* | AF0P000 |         |         |         |
| AF06011 | OURSYS*                                                | OURDMP* | AF0P000 |         |         |         |
| AF06022 | OURSYS*                                                | OURDMP* | AF06013 | AF06014 | AF06015 | AF06016 |
|         | AF06017                                                | AF06018 | AF06019 | AF0P000 |         |         |
| AF06033 | OURDMP*                                                | OURDMP* | AF06023 | AF06024 | AF06025 | AF06026 |
|         | AF06027                                                | AF06028 | AF06029 | AF06030 | AF06031 | AF06032 |
|         | AF0P000                                                |         |         |         |         |         |
| AF06053 | OURSYS*                                                | OURDMP* | AF06043 | AF06044 | AF06045 | AF06046 |
|         | AF06047                                                | AF06048 | AF06049 | AF06050 | AF06051 | AF06052 |
|         | AF0P000                                                |         |         |         |         |         |
| AF06069 | OURSYS*                                                | OURDMP* | AF06060 | AF06061 | AF06062 | AF06063 |
|         | AF06064                                                | AF06065 | AF06066 | AF06067 | AF06068 | AF0P000 |
| AF06079 | OURSYS*                                                | OURDMP* | AF06070 | AF06071 | AF06072 | AF06073 |
|         | AF06074                                                | AF06075 | AF06076 | AF06077 | AF06078 | AF0P000 |
| AF06101 | OURSYS*                                                | OURDMP* | AF06100 | AF0P000 |         |         |
| AF06109 | OURSYS*                                                | OURDMP* | AF06108 | AF0P000 |         |         |
| AF06110 | OURSYS*                                                | OURDMP* | AF06108 | AF0P000 |         |         |
| AF06111 | OURSYS*                                                | OURDMP* | AF06108 | AF0P000 |         |         |
| AF06122 | OURSYS*                                                | OURDMP* | AF06112 | AF06113 | AF06114 | AF06115 |
|         | AF06116                                                | AF06117 | AF06118 | AF06119 | AF0P000 |         |
| AF06140 | OURSYS*                                                | OURDMP* | AF06132 | AF06133 | AF06134 | AF06135 |
|         | AF06136                                                | AF06137 | AF06138 | AF06139 | AF0P000 |         |
| AF06150 | OURSYS*                                                | OURDMP* | AF06142 | AF06143 | AF06144 | AF06145 |
|         | AF06146                                                | AF06147 | AF06148 | AF06149 | AF0P000 |         |
| AF06160 | OURSYS*                                                | OURDMP* | AF06152 | AF06153 | AF06154 | AF06155 |
|         | AF06156                                                | AF06157 | AF06158 | AF06159 | AF0P000 |         |
| AF06170 | OURSYS*                                                | OURDMP* | AF06162 | AF06163 | AF06164 | AF06165 |
|         | AF06166                                                | AF06167 | AF06168 | AF06169 | AF0P000 |         |
| AF06180 | OURSYS*                                                | OURDMP* | AF06172 | AF06173 | AF06174 | AF06175 |
|         | AF06176                                                | AF06177 | AF06178 | AF06179 | AF0P000 |         |
| AF06190 | OURSYS*                                                | OURDMP* | AF06182 | AF06183 | AF06184 | AF06185 |
|         | AF06186                                                | AF06187 | AF06188 | AF06189 | AF0P000 |         |
| AF06199 | OURSPC*                                                | OURSYS* | OURDMP* | AF06191 | AF06192 | AF06193 |
|         | AF06194                                                | AF06195 | AF06196 | AF06197 | AF06198 | AF0P000 |
| AF0619I | OURSPC*                                                | OURSYS* | OURDMP* | AF0619A | AF0619B | AF0619C |
|         | AF0619D                                                | AF0619E | AF0619F | AF0619G | AF0619H | AF0P000 |
| AF0619R | OURSPC*                                                | OURSYS* | OURDMP* | AF0619J | AF0619K | AF0619L |
|         | AF0619M                                                | AF0619N | AF0619O | AF0619P | AF0619Q | AF0P000 |
| AFD6201 | OURSYS*                                                | OURDMP* | AF0P000 |         |         |         |
| AFD6209 | OURSYS*                                                | OURDMP* | AF0P000 |         |         |         |
| AFD6210 | OURSYS*                                                | OURDMP* | AF0P000 |         |         |         |
| AFD6211 | OURSYS*                                                | OURDMP* | AF0P000 |         |         |         |
| AFD6222 | OURSYS*                                                | OURDMP* | AF0P000 | AFD6213 | AFD6214 | AFD6215 |
|         | AFD6216                                                | AFD6217 | AFD6218 | AFD6219 |         |         |
| AFD6233 | OURSYS*                                                | OURDMP* | AF0P000 | AFD6223 | AFD6224 | AFD6225 |
|         | AFD6226                                                | AFD6227 | AFD6228 | AFD6229 | AFD6230 | AFD6231 |

Table G-1 Ada Type A Test Programs and Source Code Files (continued)

| PROGRAM | SUPPORT FILES(X - TEST SUPPORT SOFTWARE PACKAGES USED) |                    |                    |                    |                    |                    |
|---------|--------------------------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| AFD6253 | AFD6232<br>OURSYSX<br>AFD6246<br>AFD6252               | OURDMPX<br>AFD6247 | AF0P000<br>AFD6248 | AFD6243<br>AFD6249 | AFD6244<br>AFD6250 | AFD6245<br>AFD6251 |
| AFD6269 | OURSYSX<br>AFD6263                                     | OURDMPX<br>AFD6264 | AF0P000<br>AFD6265 | AFD6260<br>AFD6266 | AFD6261<br>AFD6267 | AFD6262<br>AFD6268 |
| AFD6279 | OURSYSX<br>AFD6273                                     | OURDMPX<br>AFD6274 | AF0P000<br>AFD6275 | AFD6270<br>AFD6276 | AFD6271<br>AFD6277 | AFD6272<br>AFD6278 |
| AFD6301 | OURSYSX                                                | OURDMPX            | AF0P000            | AFD6300            |                    |                    |
| AFD6309 | OURSYSX                                                | OURDMPX            | AF0P000            | AFD6308            |                    |                    |
| AFD6310 | OURSYSX                                                | OURDMPX            | AF0P000            | AFD6308            |                    |                    |
| AFD6311 | OURSYSX                                                | OURDMPX            | AF0P000            | AFD6308            |                    |                    |
| AFD6322 | OURSYSX<br>AFD6315                                     | OURDMPX<br>AFD6316 | AF0P000<br>AFD6317 | AFD6312<br>AFD6318 | AFD6313<br>AFD6319 | AFD6314            |
| AFD6340 | OURSYSX<br>AFD6335                                     | OURDMPX<br>AFD6336 | AF0P000<br>AFD6337 | AFD6332<br>AFD6338 | AFD6333<br>AFD6339 | AFD6334            |
| AFD6350 | OURSYSX<br>AFD6345                                     | OURDMPX<br>AFD6346 | AF0P000<br>AFD6347 | AFD6342<br>AFD6348 | AFD6343<br>AFD6349 | AFD6344            |
| AFD6360 | OURSYSX<br>AFD6355                                     | OURDMPX<br>AFD6356 | AF0P000<br>AFD6357 | AFD6352<br>AFD6358 | AFD6353<br>AFD6359 | AFD6354            |
| AFD6370 | OURSYSX<br>AFD6365                                     | OURDMPX<br>AFD6366 | AF0P000<br>AFD6367 | AFD6362<br>AFD6368 | AFD6363<br>AFD6369 | AFD6364            |
| AFD6380 | OURSYSX<br>AFD6375                                     | OURDMPX<br>AFD6376 | AF0P000<br>AFD6377 | AFD6372<br>AFD6378 | AFD6373<br>AFD6379 | AFD6374            |
| AFD6390 | OURSYSX<br>AFD6385                                     | OURDMPX<br>AFD6386 | AF0P000<br>AFD6387 | AFD6382<br>AFD6388 | AFD6383<br>AFD6389 | AFD6384            |
| AF0642B | OURSPCX<br>AF06425<br>AF0P000                          | OURSYSX<br>AF06426 | OURDMPX<br>AF06427 | AF06422<br>AF06428 | AF06423<br>AF06429 | AF06424<br>AF0642A |
| AF06803 | OURSYSX                                                | OURDMPX            | AF06802            | AF0P000            |                    |                    |
| AF06807 | OURSYSX                                                | OURDMPX            | AF06806            | AF0P000            |                    |                    |
| AF06809 | OURSPCX                                                | OURSYSX            | OURDMPX            | AF06808            | AF0P000            |                    |
| AF0680B | OURSPCX                                                | OURSYSX            | OURDMPX            | AF0680A            | AF0P000            |                    |
| AF0680D | OURSPCX                                                | OURSYSX            | OURDMPX            | AF0680C            | AF0P000            |                    |
| AF0680F | OURSPCX                                                | OURSYSX            | OURDMPX            | AF0680E            | AF0P000            |                    |
| AFD680H | OURSPCX                                                | OURSYSX            | OURDMPX            | AF0P000            | AFD680G            |                    |
| AFD680J | OURSPCX                                                | OURSYSX            | OURDMPX            | AF0P000            | AFD680I            |                    |
| AF06811 | OURSYSX                                                | OURDMPX            | AF06810            | AF0P000            |                    |                    |
| AF06815 | OURSYSX                                                | OURDMPX            | AF06814            | AF0P000            |                    |                    |
| AF06817 | OURSYSX                                                | OURDMPX            | AF06816            | AF0P000            |                    |                    |
| AF06819 | OURSYSX                                                | OURDMPX            | AF06818            | AF0P000            |                    |                    |
| AF06821 | OURSYSX                                                | OURDMPX            | AF06820            | AF0P000            |                    |                    |
| AF06823 | OURSPCX                                                | OURSYSX            | OURDMPX            | AF06822            | AF0P000            |                    |
| AF06825 | OURSPCX                                                | OURSYSX            | OURDMPX            | AF06824            | AF0P000            |                    |
| AFN9301 | OURSPCX                                                | OURSYSX            | AFN9300            |                    |                    |                    |
| AFN9302 | OURSPCX                                                | OURSYSX            | AFN9300            |                    |                    |                    |
| AFN9303 | OURSPCX                                                | OURSYSX            | AFN9300            |                    |                    |                    |
| AF09501 | OURSPCX                                                | OURSYSX            | OURDMPX            | AF09500            | AF0P000            |                    |
| AF09502 | OURSPCX                                                | OURSYSX            | OURDMPX            | AF09500            | AF0P000            |                    |
| AF09503 | OURSPCX                                                | OURSYSX            | OURDMPX            | AF09500            | AF0P000            |                    |
| AF09504 | OURSPCX                                                | OURSYSX            | OURDMPX            | AF09500            | AF0P000            |                    |
| AF09505 | OURSPCX                                                | OURSYSX            | OURDMPX            | AF09500            | AF0P000            |                    |
| AF09506 | OURSPCX                                                | OURSYSX            | OURDMPX            | AF09500            | AF0P000            |                    |
| AF09507 | OURSPCX                                                | OURSYSX            | OURDMPX            | AF09500            | AF0P000            |                    |
| AF09508 | OURSPCX                                                | OURSYSX            | OURDMPX            | AF09500            | AF0P000            |                    |
| AF09509 | OURSPCX                                                | OURSYSX            | OURDMPX            | AF09500            | AF0P000            |                    |
| AFN9511 | OURSPCX                                                | OURSYSX            | AFN9510            |                    |                    |                    |
| AF09600 | OURSPCX                                                | OURSYSX            | AF0P000            |                    |                    |                    |
| AF09601 | OURSPCX                                                | OURSYSX            | AF0P000            |                    |                    |                    |
| AF09602 | OURSPCX                                                | OURSYSX            | AF0P000            |                    |                    |                    |
| AF09603 | OURSPCX                                                | OURSYSX            | AF0P000            |                    |                    |                    |
| AF09604 | OURSPCX                                                | OURSYSX            | AF0P000            |                    |                    |                    |
| AF09605 | OURSPCX                                                | OURSYSX            | AF0P000            |                    |                    |                    |
| AF09606 | OURSPCX                                                | OURSYSX            | AF0P000            |                    |                    |                    |
| AF09607 | OURSPCX                                                | OURSYSX            | AF0P000            |                    |                    |                    |

Table G-1 Ada Type A Test Programs and Source Code Files (continued)

| PROGRAM   | SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED) |         |                |         |                          |
|-----------|--------------------------------------------------------|---------|----------------|---------|--------------------------|
| AFN9611   | OURSPC*                                                | OURSYS* |                |         |                          |
| AFN9612   | OURSPC*                                                | OURSYS* | <u>AFN9610</u> |         |                          |
| AFN9613   | OURSPC*                                                | OURSYS* | <u>AFN9610</u> |         |                          |
| AF09711   | OURSYS*                                                | AF09710 | AF0P000        |         |                          |
| AF09713   | OURSYS*                                                | AF09712 | AF0P000        |         |                          |
| AF09720   | OURSPC*                                                | OURSYS* | OURDMP*        | AF09500 | AF0P000                  |
| AF09721   | OURSPC*                                                | OURSYS* | OURDMP*        | AF09500 | AF0P000                  |
| AF09731   | OURSPC*                                                | OURSYS* | OURDMP*        | AF09500 | AF0P000                  |
| AF09901   | OURSYS*                                                | AF09900 | AF0P000        |         |                          |
| AF09902   | OURSYS*                                                | AF09900 | AF0P000        |         |                          |
| AF09903   | OURSYS*                                                | AF09900 | AF0P000        |         |                          |
| AFM9A01   | OURSPC*                                                | OURSYS* | AFM9A00        |         |                          |
| AFM9A02   | OURSPC*                                                | OURSYS* | AFM9A00        |         |                          |
| AFM9A03   | OURSPC*                                                | OURSYS* | AFM9A00        |         |                          |
| AF09B01   | OURSPC*                                                | OURSYS* | OURDMP*        | AF09500 | AF0P000                  |
| AFD9C00   | OURSPC*                                                | OURSYS* | AF0P000        | AFD9000 |                          |
| AFD9C01   | OURSPC*                                                | OURSYS* | AF0P000        | AFD9000 | <u>AFD9200</u>           |
| AFD9C02   | OURSPC*                                                | OURSYS* | AF0P000        | AFD9000 | <u>AFD9200</u>           |
| AFD9C03** | OURSPC*                                                | OURSYS* | AF0P000        | AFD9000 | <u>AFD9200</u>           |
| AFD9C04** | OURSPC*                                                | OURSYS* | AF0P000        | AFD9000 | <u>AFD9200</u>           |
| AFMB001   | OURSYS*                                                | AFMB000 |                |         |                          |
| AFMB003   | OURSYS*                                                | AFMB002 |                |         |                          |
| AFMB005   | OURSYS*                                                | AFMB004 |                |         |                          |
| AFMB007   | OURSYS*                                                | AFMB006 |                |         |                          |
| AFMB009   | OURSYS*                                                | AFMB008 |                |         |                          |
| AFMB012   | OURSYS*                                                | AFMB010 | AFMB011        |         |                          |
| AFMB016   | OURSYS*                                                | AFMB013 | AFMB014        | AFMB015 |                          |
| AFMB020   | OURSYS*                                                | AFMB017 | AFMB018        | AFMB019 |                          |
| AFMB024   | OURSYS*                                                | AFMB021 | AFMB022        | AFMB023 |                          |
| AFMB028   | OURSYS*                                                | AFMB025 | AFMB026        | AFMB027 |                          |
| AFMB032   | OURSYS*                                                | AFMB013 | AFMB014        | AFMB015 |                          |
| AFMB036   | OURSYS*                                                | AFMB033 | AFMB034        | AFMB035 |                          |
| AFMB040   | OURSYS*                                                | AFMB037 | AFMB038        | AFMB039 |                          |
| AFMB044   | OURSYS*                                                | AFMB041 | AFMB042        | AFMB043 |                          |
| AF0C301   | OURSYS*                                                | OURDMP* | AF0C100        | AF0C101 | AF0C300 AF0P000          |
| AF0C302   | OURSYS*                                                | OURDMP* | AF0C100        | AF0C101 | AF0C300 AF0P000          |
| AF0C304   | OURSYS*                                                | OURDMP* | AF0C102        | AF0C103 | AF0C303 AF0P000          |
| AF0C305   | OURSYS*                                                | OURDMP* | AF0C102        | AF0P000 |                          |
| AF0C306   | OURSYS*                                                | OURDMP* | AF0C102        | AF0P000 |                          |
| AF0C307   | OURSYS*                                                | OURDMP* | AF0C102        | AF0P000 |                          |
| AFDC311   | OURSYS*                                                | OURDMP* | AF0P000        | AFDC104 | AFDC105 AFDC310          |
| AFDC314   | OURSYS*                                                | OURDMP* | AF0P000        | AFDC106 | <u>AFDC107**</u> AFDC313 |
| AFDD600   | OURSPC*                                                | OURSYS* | AF0P000        |         |                          |
| AFDD601   | OURSPC*                                                | OURSYS* | AF0P000        |         |                          |
| AFDD602   | OURSPC*                                                | OURSYS* | AF0P000        |         |                          |
| AFDD603   | OURSPC*                                                | OURSYS* | AF0P000        |         |                          |
| AFDD604   | OURSPC*                                                | OURSYS* | AF0P000        |         |                          |
| AFDD605   | OURSPC*                                                | OURSYS* | AF0P000        |         |                          |
| AFDD606   | OURSPC*                                                | OURSYS* | AF0P000        |         |                          |
| AFDD607   | OURSPC*                                                | OURSYS* | AF0P000        |         |                          |
| AFDD608*  | OURSPC*                                                | OURSYS* | AF0P000        |         |                          |
| AFDD609   | OURSPC*                                                | OURSYS* | AF0P000        |         |                          |
| AFDD610   | OURSPC*                                                | OURSYS* | AF0P000        |         |                          |
| AFDD611   | OURSPC*                                                | OURSYS* | AF0P000        |         |                          |
| AF0D720   | OURSYS*                                                |         |                |         |                          |
| AF0D721   | OURSYS*                                                |         |                |         |                          |
| AFDD722   | OURSYS*                                                | OURTYP* |                |         |                          |
| AFDD723   | OURSYS*                                                | OURTYP* |                |         |                          |
| AFDD724   | OURSYS*                                                | OURTYP* |                |         |                          |
| AFDD725   | OURSYS*                                                | OURTYP* |                |         |                          |
| AF0D727   | OURSYS*                                                |         |                |         |                          |
| AF0D728   | OURSPC*                                                | OURSYS* |                |         |                          |
| AF0D729   | OURSPC*                                                | OURSYS* |                |         |                          |

\*\* Multiple versions of source file supplied(USE and ADA file types)

\* Source file supplied with DEC file type only

\* Source file supplied with USE file type only

Table G-1 Ada Type A Test Programs and Source Code Files (continued)

| PROGRAM   | SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED) |          |          |         |         |         |
|-----------|--------------------------------------------------------|----------|----------|---------|---------|---------|
| AFDD72A   | OURSPC*                                                | OURSYS*  |          |         |         |         |
| AFDD72B   | OURSPC*                                                | OURSYS*  |          |         |         |         |
| AFDD72C   | OURSPC*                                                | OURSYS*  |          |         |         |         |
| AFDD72D   | OURSPC*                                                | OURSYS*  |          |         |         |         |
| AFDD72E   | OURSPC*                                                | OURSYS*  |          |         |         |         |
| AFDD72F   | OURSPC*                                                | OURSYS*  |          |         |         |         |
| AFDD72G   | OURSPC*                                                | OURSYS*  |          |         |         |         |
| AFDD72H   | OURSPC*                                                | OURSYS*  |          |         |         |         |
| AFDD72I   | OURSPC*                                                | OURSYS*  |          |         |         |         |
| AFDDA01   | OURSPC*                                                | OURSYS*  | AFOP000  |         |         |         |
| AFDDA02   | OURSPC*                                                | OURSYS*  | AFOP000  |         |         |         |
| AFDE220   | OURSYS*                                                | OURDMP*  | AFOP000  | AFDE000 | AFDE201 | AFDE202 |
|           | AFDE203                                                | AFDE204  | AFDE205  | AFDE206 | AFDE207 | AFDE208 |
|           | AFDE209                                                | AFDE20A  | AFDE211  | AFDE212 | AFDE213 | AFDE214 |
|           | AFDE215                                                | AFDE216  |          |         |         |         |
| AFDE250   | OURSYS*                                                | OURDMP*  | AFOP000  | AFDE000 | AFDE231 | AFDE232 |
|           | AFDE233                                                | AFDE234  | AFDE235  | AFDE236 | AFDE237 | AFDE238 |
|           | AFDE239                                                | AFDE23A  | AFDE241  | AFDE242 | AFDE243 | AFDE244 |
|           | AFDE245                                                | AFDE246  |          |         |         |         |
| AFDE420   | OURSYS*                                                | OURDMP*  | AFOP000  | AFDE000 | AFDE401 | AFDE402 |
|           | AFDE403                                                | AFDE404  | AFDE405  | AFDE406 | AFDE407 | AFDE408 |
|           | AFDE409                                                | AFDE40A  | AFDE411  | AFDE412 | AFDE413 | AFDE414 |
|           | AFDE415                                                | AFDE416  |          |         |         |         |
| AFDE450   | OURSYS*                                                | OURDMP*  | AFOP000  | AFDE000 | AFDE431 | AFDE432 |
|           | AFDE433                                                | AFDE434  | AFDE435  | AFDE436 | AFDE437 | AFDE438 |
|           | AFDE439                                                | AFDE43A  | AFDE441  | AFDE442 | AFDE443 | AFDE444 |
|           | AFDE445                                                | AFDE446  |          |         |         |         |
| AFDF000   | OURSYS*                                                | OURDMP*  | MATHFUN* | AFOP000 |         |         |
| AFDF001   | OURSYS*                                                | OURDMP*  | MATHFUN* | AFOP000 |         |         |
| AFDF002   | OURSYS*                                                | OURDMP*  | MATHFUN* | AFOP000 |         |         |
| AFDF003   | OURSYS*                                                | OURDMP*  | MATHFUN* | AFOP000 |         |         |
| AFDF004   | OURSYS*                                                | OURDMP*  | MATHFUN* | AFOP000 |         |         |
| AFDF005   | OURSYS*                                                | OURDMP*  | MATHFUN* | AFOP000 |         |         |
| AGD0001   | OURSYS*                                                | MATHFUN* | AGOP000  | AGD0000 |         |         |
| AGD0003   | OURSYS*                                                | AGOP000  | AGD0002  |         |         |         |
| AGD0009   | OURSYS*                                                | AGOP000  | AGD0004  | AGD0005 | AGD0006 | AGD0007 |
|           | AGD0008                                                |          |          |         |         |         |
| AG0000C   | OURSYS*                                                | OURDMP*  | AGOP000  |         |         |         |
| AGD000E   | OURSYS*                                                | MATHFUN* | AGOP000  | AGD0000 | AGD000D |         |
| AGN000K   | OURSYS*                                                | AGN000F  | AGN000G  | AGN000H | AGN000I | AGN000J |
| AGD0039   | OURSPC*                                                | OURSYS*  | AGOP000  | AGD0004 | AGD0005 | AGD0006 |
|           | AGD0007                                                | AGD0008  | AGD0019  | AGD0029 |         |         |
| AGD0049   | OURSPC*                                                | OURSYS*  | AGOP000  | AGD0004 | AGD0005 | AGD0006 |
|           | AGD0007                                                | AGD0008  | AGD0019  | AGD0029 |         |         |
| AGD0059** | OURSPC*                                                | OURSYS*  | AGOP000  | AGD0004 | AGD0005 | AGD0006 |
|           | AGD0007                                                | AGD0008  | AGD0019  | AGD0029 |         |         |
| AL09101   | OURSPC*                                                | OURSYS*  | AL09000  | AL09100 | ALOP000 |         |
| AL09111   | OURSPC*                                                | OURSYS*  | AL09000  | AL09100 | ALOP000 |         |
| AL09121   | OURSPC*                                                | OURSYS*  | AL09000  | AL09100 | ALOP000 |         |
| AL09131   | OURSPC*                                                | OURSYS*  | AL09000  | AL09100 | ALOP000 |         |
| ALD9202   | OURSPC*                                                | OURSYS*  | AL09000  | AL09100 | ALOP000 | ALD9200 |
| ALD9203   | OURSPC*                                                | OURSYS*  | AL09000  | AL09100 | ALOP000 | ALD9200 |
| ALD9204** | OURSPC*                                                | OURSYS*  | AL09000  | AL09100 | ALOP000 | ALD9200 |
| ALD9212   | OURSPC*                                                | OURSYS*  | AL09000  | AL09100 | ALOP000 | ALD9200 |
| ALD9213   | OURSPC*                                                | OURSYS*  | AL09000  | AL09100 | ALOP000 | ALD9200 |
| ALD9214** | OURSPC*                                                | OURSYS*  | AL09000  | AL09100 | ALOP000 | ALD9200 |
| ALD9222   | OURSPC*                                                | OURSYS*  | AL09000  | AL09100 | ALOP000 | ALD9200 |
| ALD9223   | OURSPC*                                                | OURSYS*  | AL09000  | AL09100 | ALOP000 | ALD9200 |
| ALD9224** | OURSPC*                                                | OURSYS*  | AL09000  | AL09100 | ALOP000 | ALD9200 |
| ALD9232   | OURSPC*                                                | OURSYS*  | AL09000  | AL09100 | ALOP000 | ALD9200 |
| ALD9233   | OURSPC*                                                | OURSYS*  | AL09000  | AL09100 | ALOP000 | ALD9200 |
| ALD9234** | OURSPC*                                                | OURSYS*  | AL09000  | AL09100 | ALOP000 | ALD9200 |
| ALDE2C1   | OURSPC*                                                | OURSYS*  | ALOP000  | ALDE000 | ALDE2B1 |         |
| ALDE2C2   | OURSPC*                                                | OURSYS*  | ALOP000  | ALDE000 | ALDE2B1 |         |

\*\* Source file supplied with DEC file type only

Table G-1 Ada Type A Test Programs and Source Code Files (continued)

| PROGRAM   | SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED) |         |          |         |         |         |
|-----------|--------------------------------------------------------|---------|----------|---------|---------|---------|
| ALDE2C3** | OURSPC*                                                | OURSYS* | ALOP000  | ALDE000 | ALDE2B1 |         |
| ALDE2C4** | OURSPC*                                                | OURSYS* | ALOP000  | ALDE000 | ALDE2B1 |         |
| ALDE2C5   | OURSPC*                                                | OURSYS* | ALOP000  | ALDE000 | ALDE2B2 |         |
| ALDE2C6   | OURSPC*                                                | OURSYS* | ALOP000  | ALDE000 | ALDE2B2 |         |
| ALDE2C7** | OURSPC*                                                | OURSYS* | ALOP000  | ALDE000 | ALDE2B2 |         |
| ALDE2C8** | OURSPC*                                                | OURSYS* | ALOP000  | ALDE000 | ALDE2B2 |         |
| ALDE4C1   | OURSPC*                                                | OURSYS* | ALOP000  | ALDE000 | ALDE4B1 |         |
| ALDE4C2   | OURSPC*                                                | OURSYS* | ALOP000  | ALDE000 | ALDE4B1 |         |
| ALDE4C3** | OURSPC*                                                | OURSYS* | ALOP000  | ALDE000 | ALDE4B1 |         |
| ALDE4C4** | OURSPC*                                                | OURSYS* | ALOP000  | ALDE000 | ALDE4B1 |         |
| ALDE4C5   | OURSPC*                                                | OURSYS* | ALOP000  | ALDE000 | ALDE4B2 |         |
| ALDE4C6   | OURSPC*                                                | OURSYS* | ALOP000  | ALDE000 | ALDE4B2 |         |
| ALDE4C7** | OURSPC*                                                | OURSYS* | ALOP000  | ALDE000 | ALDE4B2 |         |
| ALDE4C8** | OURSPC*                                                | OURSYS* | ALOP000  | ALDE000 | ALDE4B2 |         |
| A000104   | OURSYS*                                                | OURDMP* | A000002  | A000102 | A000103 | A00P000 |
| A000109   | OURSYS*                                                | OURDMP* | A000001  | A000107 | A000108 | A00P000 |
| A000114   | OURSYS*                                                | OURDMP* | A000001  | A000112 | A000113 | A00P000 |
| A000204   | OURSYS*                                                | OURDMP* | A000202  | A000203 | A00P000 |         |
| A000209   | OURSYS*                                                | OURDMP* | A000001  | A000207 | A000208 | A00P000 |
| A000300   | OURSYS*                                                | A00P000 |          |         |         |         |
| A000305   | OURSYS*                                                | A00P000 |          |         |         |         |
| A000310   | OURSYS*                                                | A00P000 |          |         |         |         |
| A000313   | OURSYS*                                                | OURDMP* | A000311  | A000312 | A00P000 |         |
| A000316   | OURSYS*                                                | OURDMP* | A000314  | A000315 | A00P000 |         |
| A000319   | OURSYS*                                                | OURDMP* | A000317  | A000318 | A00P000 |         |
| A000322   | OURSYS*                                                | OURDMP* | A000320  | A000321 | A00P000 |         |
| A000325   | OURSYS*                                                | OURDMP* | A000323  | A000324 | A00P000 |         |
| A000328   | OURSYS*                                                | OURDMP* | A000326  | A000327 | A00P000 |         |
| A000331   | OURSYS*                                                | OURDMP* | A000329  | A000330 | A00P000 |         |
| A000334   | OURSYS*                                                | OURDMP* | A000332  | A000333 | A00P000 |         |
| A000337   | OURSYS*                                                | OURDMP* | A000335  | A000336 | A00P000 |         |
| A000340   | OURSYS*                                                | OURDMP* | A000338  | A000339 | A00P000 |         |
| A000343   | OURSYS*                                                | OURDMP* | A000341  | A000342 | A00P000 |         |
| A000346   | OURSYS*                                                | OURDMP* | MATHFUN* | A00P000 | A000344 | A000345 |
| A000350   | OURSYS*                                                | OURDMP* | A000347  | A000348 | A000349 | A00P000 |
| A000353   | OURSYS*                                                | OURDMP* | A000347  | A000351 | A000352 | A00P000 |
| A000356   | OURSYS*                                                | OURDMP* | A000354  | A000355 | A00P000 |         |
| A000359   | OURSYS*                                                | OURDMP* | A000357  | A000358 | A00P000 |         |
| A000362   | OURSYS*                                                | OURDMP* | A000360  | A000361 | A00P000 |         |
| A000365   | OURSPC*                                                | OURSYS* | OURDMP*  | A000363 | A000364 | A00P000 |
| A000368   | OURSPC*                                                | OURSYS* | OURDMP*  | A000366 | A000367 | A00P000 |
| A00036B   | OURSPC*                                                | OURSYS* | OURDMP*  | A000369 | A00036A | A00P000 |
| A00036E   | OURSPC*                                                | OURSYS* | OURDMP*  | A00P000 | A00036C | A00036D |
| A00036H   | OURSPC*                                                | OURSYS* | OURDMP*  | A00036F | A00036G | A00P000 |
| A00036K   | OURSPC*                                                | OURSYS* | OURDMP*  | A00036I | A00036J | A00P000 |
| A00036N   | OURSPC*                                                | OURSYS* | OURDMP*  | A00036L | A00036M | A00P000 |
| A00036Q   | OURSPC*                                                | OURSYS* | OURDMP*  | A00P000 | A00036O | A00036P |
| A00036T   | OURSPC*                                                | OURSYS* | OURDMP*  | A00P000 | A00036R | A00036S |
| A00036W   | OURSPC*                                                | OURSYS* | OURDMP*  | A00036U | A00036V | A00P000 |
| A00036Z   | OURSYS*                                                | OURDMP* | OURTYP*  | A00P000 | A00036X | A00036Y |
| A000373   | OURSPC*                                                | OURSYS* | OURDMP*  | A00P000 | A000370 | A000371 |
|           | A000372                                                |         |          |         |         |         |
| A000378   | OURSYS*                                                | OURDMP* | A000374  | A000375 | A000376 | A000377 |
|           | A00P000                                                |         |          |         |         |         |
| A000383   | OURSPC*                                                | OURSYS* | OURDMP*  | A000374 | A00P000 | A000380 |
|           | A000381                                                | A000382 |          |         |         |         |
| A000391   | OURSYS*                                                | OURDMP* | A000390  | A00P000 |         |         |
| A000404   | OURSYS*                                                | OURDMP* | A000402  | A000403 | A00P000 |         |
| A000500   | OURSYS*                                                | A00P000 |          |         |         |         |
| A000504   | OURSYS*                                                | OURDMP* | A000502  | A000503 | A00P000 |         |
| A000509   | OURSYS*                                                | OURDMP* | A000507  | A000508 | A00P000 |         |
| A000514   | OURSYS*                                                | OURDMP* | A000512  | A000513 | A00P000 |         |
| A000519   | OURSYS*                                                | OURDMP* | A000517  | A000518 | A00P000 |         |
| A000525   | OURSYS*                                                | OURDMP* | A00P000  | A000523 | A000524 |         |

\*\* Source file supplied with DEC file type only

Table G-1 Ada Type A Test Programs and Source Code Files (concluded)

| <u>PROGRAM</u> | <u>SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED)</u> |         |         |         |         |         |
|----------------|---------------------------------------------------------------|---------|---------|---------|---------|---------|
| A0D0529        | OURSYS*                                                       | OURDMP* | A00P000 | A0D0526 | A0D0527 | A0D0528 |
| A000604        | OURSYS*                                                       | OURDMP* | A000602 | A000603 | A00P000 |         |
| A000605        | OURSYS*                                                       | OURDMP* | A00P000 |         |         |         |
| A000606        | OURSYS*                                                       | OURDMP* | A00P000 |         |         |         |
| A000607        | OURSYS*                                                       | OURDMP* | A00P000 |         |         |         |
| A000704        | OURSYS*                                                       | OURDMP* | A000702 | A000703 | A00P000 |         |
| A000705        | OURSYS*                                                       | OURDMP* | A00P000 |         |         |         |
| A000708        | OURSYS*                                                       | OURDMP* | A000706 | A000707 | A00P000 |         |
| A000711        | OURSYS*                                                       | OURDMP* | A000709 | A000710 | A00P000 |         |
| A000713        | OURSYS*                                                       | OURDMP* | A00P000 |         |         |         |
| A000714        | OURSYS*                                                       | OURDMP* | A00P000 |         |         |         |
| A000715        | OURSYS*                                                       | OURDMP* | A00P000 |         |         |         |
| A000716        | OURSYS*                                                       | OURDMP* | A00P000 |         |         |         |
| A000717        | OURSYS*                                                       | OURDMP* | A00P000 |         |         |         |
| A000718        | OURSYS*                                                       | OURDMP* | A00P000 |         |         |         |
| A000721        | OURSYS*                                                       | OURDMP* | A000719 | A000720 | A00P000 |         |

Table G-2 Ada Type C Test Programs and Source Code Files

| PROGRAM  | SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED) |         |         |         |         |         |
|----------|--------------------------------------------------------|---------|---------|---------|---------|---------|
| CA00000  | OURSYS*                                                | OURDMP* | CA0P000 |         |         |         |
| CF03519  | OURSYS*                                                | OURDMP* | CF03500 | CF03501 | CF03502 | CF03503 |
|          | CF03504                                                | CF03509 | CF03510 | CF03511 | CF03512 | CF03513 |
|          | CF03514                                                | CF03517 | CF03518 | CF0P000 |         |         |
| CF03550  | OURSPC*                                                | OURSYS* | OURDMP* | CF0P000 |         |         |
| CFD3551  | OURSPC*                                                | OURSYS* | OURDMP* | CF0P000 |         |         |
| CF03620  | OURSYS*                                                | OURDMP* | CF03600 | CF03601 | CF03602 | CF03603 |
|          | CF03604                                                | CF03605 | CF03606 | CF03607 | CF03608 | CF03609 |
|          | CF03610                                                | CF03611 | CF03612 | CF03613 | CF03614 | CF03615 |
|          | CF03616                                                | CF03617 | CF03618 | CF03619 | CF0P000 |         |
| CF03650  | OURSYS*                                                | OURDMP* | CF03630 | CF03631 | CF03632 | CF03633 |
|          | CF03634                                                | CF03635 | CF03636 | CF03637 | CF03638 | CF03639 |
|          | CF03641                                                | CF03642 | CF03643 | CF03644 | CF03645 | CF03646 |
|          | CF03647                                                | CF03648 | CF03649 | CF0P000 |         |         |
| CF03704  | OURSPC*                                                | OURSYS* | OURDMP* | CF03700 | CF03701 | CF03702 |
|          | CF03703                                                | CF0P000 |         |         |         |         |
| CF03805  | OURSPC*                                                | OURSYS* | OURDMP* | CF03800 | CF03801 | CF03802 |
|          | CF03803                                                | CF03804 | CF0P000 |         |         |         |
| CF04120  | OURSYS*                                                | OURDMP* | CF0P000 |         |         |         |
| CF04121  | OURSYS*                                                | OURDMP* | CF0P000 |         |         |         |
| CF04122  | OURSYS*                                                | OURDMP* | CF0P000 |         |         |         |
| CF04123  | OURSYS*                                                | OURDMP* | CF0P000 |         |         |         |
| CF04124  | OURSYS*                                                | OURDMP* | CF0P000 |         |         |         |
| CF04125  | OURSYS*                                                | OURDMP* | CF0P000 |         |         |         |
| CF04126  | OURSYS*                                                | OURDMP* | CF0P000 |         |         |         |
| CF04127  | OURSYS*                                                | OURDMP* | CF0P000 |         |         |         |
| CFD4128* | OURSPC*                                                | OURSYS* | OURDMP* | CF0P000 |         |         |
| CF04129  | OURSYS*                                                | OURDMP* | CF0P000 |         |         |         |
| CFD412A  | OURSPC*                                                | OURSYS* | OURDMP* | CF0P000 |         |         |
| CF0412B  | OURSPC*                                                | OURSYS* | OURDMP* | CF0P000 |         |         |
| CFD412C  | OURSPC*                                                | OURSYS* | OURDMP* | CF0P000 |         |         |
| CFD412D  | OURSPC*                                                | OURSYS* | OURDMP* | CF0P000 |         |         |
| CF04130  | OURSPC*                                                | OURSYS* | OURDMP* | CF0P000 |         |         |
| CF04131  | OURSPC*                                                | OURSYS* | OURDMP* | CF0P000 |         |         |
| CF04132  | OURSPC*                                                | OURSYS* | OURDMP* | CF0P000 |         |         |
| CF04133  | OURSPC*                                                | OURSYS* | OURDMP* | CF0P000 |         |         |
| CFD4135  | OURSPC*                                                | OURSYS* | OURDMP* | CF0P000 |         |         |
| CFD4136  | OURSPC*                                                | OURSYS* | OURDMP* | CF0P000 |         |         |
| CFD4137  | OURSPC*                                                | OURSYS* | OURDMP* | CF0P000 |         |         |
| CFD4138  | OURSPC*                                                | OURSYS* | OURDMP* | CF0P000 |         |         |
| CFD4139  | OURSPC*                                                | OURSYS* | OURDMP* | CF0P000 |         |         |
| CFD413A  | OURSPC*                                                | OURSYS* | OURDMP* | CF0P000 |         |         |
| CFD413B  | OURSPC*                                                | OURSYS* | OURDMP* | CF0P000 |         |         |
| CFD413C  | OURSPC*                                                | OURSYS* | OURDMP* | CF0P000 |         |         |
| CF0413D  | OURSPC*                                                | OURSYS* | OURDMP* | CF0P000 |         |         |
| CFD413E  | OURSPC*                                                | OURSYS* | OURDMP* | CF0P000 |         |         |
| CFD413G  | OURSPC*                                                | OURSYS* | OURDMP* | CF0P000 |         |         |
| CF0413H  | OURSPC*                                                | OURSYS* | OURDMP* | CF0P000 |         |         |
| CF0413I  | OURSPC*                                                | OURSYS* | OURDMP* | CF0P000 |         |         |
| CF0413J  | OURSPC*                                                | OURSYS* | OURDMP* | CF0P000 |         |         |
| CF0413K  | OURSPC*                                                | OURSYS* | OURDMP* | CF0P000 |         |         |
| CF04310  | OURSPC*                                                | OURSYS* | OURDMP* | CF0P000 |         |         |
| CF04311  | OURSPC*                                                | OURSYS* | OURDMP* | CF0P000 |         |         |
| CF04312  | OURSPC*                                                | OURSYS* | OURDMP* | CF0P000 |         |         |
| CF04510  | OURSYS*                                                | OURDMP* | CF0P000 |         |         |         |
| CF04511  | OURSYS*                                                | OURDMP* | CF0P000 |         |         |         |
| CF04512  | OURSYS*                                                | OURDMP* | CF0P000 |         |         |         |
| CF04513  | OURSYS*                                                | OURDMP* | CF0P000 |         |         |         |
| CF04514  | OURSYS*                                                | OURDMP* | CF0P000 |         |         |         |
| CF04515  | OURSYS*                                                | OURDMP* | CF0P000 |         |         |         |
| CF04516  | OURSYS*                                                | OURDMP* | CF0P000 |         |         |         |
| CF04517  | OURSYS*                                                | OURDMP* | CF0P000 |         |         |         |
| CF0451J  | OURSYS*                                                | OURDMP* | CF04518 | CF04519 | CF0451A | CF0451B |
|          | CF0451C                                                | CF0451D | CF0451E | CF0451F | CF0451G | CF0451H |
|          | CF0451I                                                | CF0P000 |         |         |         |         |

\* Source file supplied with USE file type only



Table G-2 Ada Type C Test Programs and Source Code Files (continued)

| <u>PROGRAM</u> | <u>SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED)</u> |         |         |         |         |         |
|----------------|---------------------------------------------------------------|---------|---------|---------|---------|---------|
| CFD451U*       | OURSYS*                                                       | OURDMP* | OURTYP* | CF0P000 | CFD451K | CFD451L |
|                | CFD451M                                                       | CFD451N | CFD451O | CFD451P | CFD451Q | CFD451R |
|                | CFD451S                                                       |         |         |         |         |         |
| CF0451Z        | OURSYS*                                                       | OURDMP* | CF0451V | CF0451W | CF0451X | CF0451Y |
|                | CF0P000                                                       |         |         |         |         |         |
| CF04520        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CF04521        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CF04522        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CFD4523        | OURSYS*                                                       | OURDMP* | OURTYP* | CF0P000 |         |         |
| CFD4524        | OURSYS*                                                       | OURDMP* | OURTYP* | CF0P000 |         |         |
| CFD4525        | OURSYS*                                                       | OURDMP* | OURTYP* | CF0P000 |         |         |
| CFD4526        | OURSYS*                                                       | OURDMP* | OURTYP* | CF0P000 |         |         |
| CF04527        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CFD4528        | OURSPC*                                                       | OURSYS* | OURDMP* | CF0P000 |         |         |
| CF04529        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CFD452A        | OURSPC*                                                       | OURSYS* | OURDMP* | CF0P000 |         |         |
| CF04530        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CF04531        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CF04532        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CF04533        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CF04534        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CF04535        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CF04536        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CF04537        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CF04538        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CF04539        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CF0453A        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CF0453B        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CF0453C        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CF04540        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CF04541        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CF04550        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CF04551        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CF04552        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CF04553        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CF04554        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CF04555        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CF04556        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CF04557        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CF04558        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CF04559        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CFD455D        | OURSYS*                                                       | OURDMP* | OURTYP* | CF0P000 |         |         |
| CFD455E        | OURSYS*                                                       | OURDMP* | OURTYP* | CF0P000 |         |         |
| CFD455F        | OURSYS*                                                       | OURDMP* | OURTYP* | CF0P000 |         |         |
| CFD455G        | OURSYS*                                                       | OURDMP* | OURTYP* | CF0P000 |         |         |
| CFD455I        | OURSYS*                                                       | OURDMP* | OURTYP* | CF0P000 |         |         |
| CFD455J        | OURSYS*                                                       | OURDMP* | OURTYP* | CF0P000 |         |         |
| CFD455K        | OURSYS*                                                       | OURDMP* | OURTYP* | CF0P000 |         |         |
| CFD455L        | OURSYS*                                                       | OURDMP* | OURTYP* | CF0P000 |         |         |
| CF0455N        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CF0455O        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CF04560        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CF04562        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CF04563        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CFD4566        | OURSYS*                                                       | OURDMP* | OURTYP* | CF0P000 |         |         |
| CFD4567        | OURSYS*                                                       | OURDMP* | OURTYP* | CF0P000 |         |         |
| CFD4568        | OURSYS*                                                       | OURDMP* | OURTYP* | CF0P000 |         |         |
| CFD4569        | OURSYS*                                                       | OURDMP* | OURTYP* | CF0P000 |         |         |
| CF04600        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CF04601        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CF04602        | OURSYS*                                                       | OURDMP* | CF0P000 |         |         |         |
| CFD4603        | OURSYS*                                                       | OURDMP* | OURTYP* | CF0P000 |         |         |
| CFD4604        | OURSYS*                                                       | OURDMP* | OURTYP* | CF0P000 |         |         |
| CFD4605        | OURSYS*                                                       | OURDMP* | OURTYP* | CF0P000 |         |         |
| CFD4606        | OURSYS*                                                       | OURDMP* | OURTYP* | CF0P000 |         |         |

\* Source file supplied with USE file type only

Table G-2 Ada Type C Test Programs and Source Code Files (continued)

| <u>PROGRAM</u> | <u>SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED)</u> |           |         |         |         |         |
|----------------|---------------------------------------------------------------|-----------|---------|---------|---------|---------|
| CFD4607        | OURSYS*                                                       | OURDMP*   | OURTYP* | CFOP000 |         |         |
| CFD4608        | OURSYS*                                                       | OURDMP*   | OURTYP* | CFOP000 |         |         |
| CFD4609        | OURSYS*                                                       | OURDMP*   | OURTYP* | CFOP000 |         |         |
| CFD460A        | OURSYS*                                                       | OURDMP*   | OURTYP* | CFOP000 |         |         |
| CFD460B        | OURSYS*                                                       | OURDMP*   | OURTYP* | CFOP000 |         |         |
| CF0460E        | OURSYS*                                                       | OURDMP*   | CFOP000 |         |         |         |
| CF0460F        | OURSYS*                                                       | OURDMP*   | CFOP000 |         |         |         |
| CF0460G        | OURSYS*                                                       | OURDMP*   | CFOP000 |         |         |         |
| CF0460H        | OURSYS*                                                       | OURDMP*   | CFOP000 |         |         |         |
| CF0460I        | OURSYS*                                                       | OURDMP*   | CFOP000 |         |         |         |
| CF0460J        | OURSPC*                                                       | OURSYS*   | OURDMP* | CFOP000 |         |         |
| CFD460K        | OURSPC*                                                       | OURSYS*   | OURDMP* | CFOP000 |         |         |
| CFD460L        | OURSPC*                                                       | OURSYS*   | OURDMP* | CFOP000 |         |         |
| CF0460M        | OURSPC*                                                       | OURSYS*   | OURDMP* | CFOP000 |         |         |
| CFD460N        | OURSPC*                                                       | OURSYS*   | OURDMP* | CFOP000 |         |         |
| CFD460O        | OURSPC*                                                       | OURSYS*   | OURDMP* | CFOP000 |         |         |
| CFD4804        | OURSPC*                                                       | OURSYS*   | OURDMP* | CFOP000 | CFD4800 | CFD4801 |
|                | CFD4802                                                       | CFD4803** |         |         |         |         |
| CF05200        | OURSYS*                                                       | OURDMP*   | CFOP000 |         |         |         |
| CF05201        | OURSYS*                                                       | OURDMP*   | CFOP000 |         |         |         |
| CF05202        | OURSYS*                                                       | OURDMP*   | CFOP000 |         |         |         |
| CF05203        | OURSYS*                                                       | OURDMP*   | CFOP000 |         |         |         |
| CF05204        | OURSYS*                                                       | OURDMP*   | CFOP000 |         |         |         |
| CF05205        | OURSYS*                                                       | OURDMP*   | CFOP000 |         |         |         |
| CF05206        | OURSYS*                                                       | OURDMP*   | CFOP000 |         |         |         |
| CF05207        | OURSYS*                                                       | OURDMP*   | CFOP000 |         |         |         |
| CF05208        | OURSYS*                                                       | OURDMP*   | CFOP000 |         |         |         |
| CF05209        | OURSYS*                                                       | OURDMP*   | CFOP000 |         |         |         |
| CF0520A        | OURSYS*                                                       | OURDMP*   | CFOP000 |         |         |         |
| CF0520B        | OURSYS*                                                       | OURDMP*   | CFOP000 |         |         |         |
| CFD520C        | OURSYS*                                                       | OURDMP*   | OURTYP* | CFOP000 |         |         |
| CFD520D        | OURSYS*                                                       | OURDMP*   | OURTYP* | CFOP000 |         |         |
| CFD520E        | OURSYS*                                                       | OURDMP*   | OURTYP* | CFOP000 |         |         |
| CFD520F        | OURSYS*                                                       | OURDMP*   | OURTYP* | CFOP000 |         |         |
| CFD520G        | OURSYS*                                                       | OURDMP*   | OURTYP* | CFOP000 |         |         |
| CFD520H        | OURSYS*                                                       | OURDMP*   | OURTYP* | CFOP000 |         |         |
| CFD520I        | OURSYS*                                                       | OURDMP*   | OURTYP* | CFOP000 |         |         |
| CFD520J        | OURSYS*                                                       | OURDMP*   | OURTYP* | CFOP000 |         |         |
| CF0520M        | OURSPC*                                                       | OURSYS*   | OURDMP* | CFOP000 |         |         |
| CFD520N        | OURSPC*                                                       | OURSYS*   | OURDMP* | CFOP000 |         |         |
| CF0520O        | OURSPC*                                                       | OURSYS*   | OURDMP* | CFOP000 |         |         |
| CFD520P        | OURSPC*                                                       | OURSYS*   | OURDMP* | CFOP000 |         |         |
| CFD520Q        | OURSPC*                                                       | OURSYS*   | OURDMP* | CFOP000 |         |         |
| CF0520R        | OURSPC*                                                       | OURSYS*   | OURDMP* | CFOP000 |         |         |
| CF0520S        | OURSPC*                                                       | OURSYS*   | OURDMP* | CFOP000 |         |         |
| CF05210        | OURSYS*                                                       | OURDMP*   | CFOP000 |         |         |         |
| CF05211        | OURSYS*                                                       | OURDMP*   | CFOP000 |         |         |         |
| CF05212        | OURSYS*                                                       | OURDMP*   | CFOP000 |         |         |         |
| CF05213        | OURSYS*                                                       | OURDMP*   | CFOP000 |         |         |         |
| CF05214        | OURSYS*                                                       | OURDMP*   | CFOP000 |         |         |         |
| CF05215        | OURSYS*                                                       | OURDMP*   | CFOP000 |         |         |         |
| CFD5218        | OURSYS*                                                       | OURDMP*   | OURTYP* | CFOP000 |         |         |
| CFD5219        | OURSYS*                                                       | OURDMP*   | OURTYP* | CFOP000 |         |         |
| CFD521A        | OURSYS*                                                       | OURDMP*   | OURTYP* | CFOP000 |         |         |
| CFD521B        | OURSYS*                                                       | OURDMP*   | OURTYP* | CFOP000 |         |         |
| CFD521C        | OURSYS*                                                       | OURDMP*   | OURTYP* | CFOP000 |         |         |
| CFD521D        | OURSYS*                                                       | OURDMP*   | OURTYP* | CFOP000 |         |         |
| CFD521E        | OURSYS*                                                       | OURDMP*   | OURTYP* | CFOP000 |         |         |
| CF0521H        | OURSYS*                                                       | OURDMP*   | CFOP000 |         |         |         |
| CF0521I        | OURSYS*                                                       | OURDMP*   | CFOP000 |         |         |         |
| CF0521J        | OURSYS*                                                       | OURDMP*   | CFOP000 |         |         |         |
| CF0521K        | OURSYS*                                                       | OURDMP*   | CFOP000 |         |         |         |
| CFD521K        | OURSPC*                                                       | OURSYS*   | OURDMP* | CFOP000 |         |         |

\*\* Multiple versions of source file supplied(USE and ADA file types)

Table G-2 Ada Type C Test Programs and Source Code Files (continued)

| PROGRAM | SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED) |         |         |         |         |         |
|---------|--------------------------------------------------------|---------|---------|---------|---------|---------|
| CF0521L | OURSPC*                                                | OURSYS* | OURDMP* | CF0P000 |         |         |
| CF0521M | OURSPC*                                                | OURSYS* | OURDMP* | CF0P000 |         |         |
| CF0521N | OURSPC*                                                | OURSYS* | OURDMP* | CF0P000 |         |         |
| CF0521O | OURSPC*                                                | OURSYS* | OURDMP* | CF0P000 |         |         |
| CF0521P | OURSPC*                                                | OURSYS* | OURDMP* | CF0P000 |         |         |
| CF05304 | OURSYS*                                                | OURDMP* | CF05300 | CF05301 | CF05302 | CF05303 |
|         | CF0P000                                                |         |         |         |         |         |
| CF05308 | OURSYS*                                                | OURDMP* | CF05305 | CF05306 | CF05307 | CF0P000 |
| CF05408 | OURSYS*                                                | OURDMP* | CF05400 | CF05401 | CF05402 | CF05403 |
|         | CF05404                                                | CF05405 | CF05406 | CF05407 | CF0P000 |         |
| CF05505 | OURSYS*                                                | OURDMP* | CF05501 | CF05502 | CF05503 | CF05504 |
|         | CF0P000                                                |         |         |         |         |         |
| CF0550C | OURSYS*                                                | OURDMP* | CF05506 | CF05507 | CF05508 | CF05509 |
|         | CF0550A                                                | CF0550B | CF0P000 |         |         |         |
| CF0550D | OURSYS*                                                | OURDMP* | CF0P000 |         |         |         |
| CF0550E | OURSYS*                                                | OURDMP* | CF0P000 |         |         |         |
| CF0550F | OURSYS*                                                | OURDMP* | CF0P000 |         |         |         |
| CF06001 | OURSYS*                                                | OURDMP* | CF0P000 |         |         |         |
| CF06009 | OURSYS*                                                | OURDMP* | CF0P000 |         |         |         |
| CF06010 | OURSYS*                                                | OURDMP* | CF0P000 |         |         |         |
| CF06011 | OURSYS*                                                | OURDMP* | CF0P000 |         |         |         |
| CF06022 | OURSYS*                                                | OURDMP* | CF06013 | CF06014 | CF06015 | CF06016 |
|         | CF06017                                                | CF06018 | CF06019 | CF0P000 |         |         |
| CF06033 | OURSYS*                                                | OURDMP* | CF06023 | CF06024 | CF06025 | CF06026 |
|         | CF06027                                                | CF06028 | CF06029 | CF06030 | CF06031 | CF06032 |
|         | CF0P000                                                |         |         |         |         |         |
| CF06053 | OURSYS*                                                | OURDMP* | CF06043 | CF06044 | CF06045 | CF06046 |
|         | CF06047                                                | CF06048 | CF06049 | CF06050 | CF06051 | CF06052 |
|         | CF0P000                                                |         |         |         |         |         |
| CF06069 | OURSYS*                                                | OURDMP* | CF06060 | CF06061 | CF06062 | CF06063 |
|         | CF06064                                                | CF06065 | CF06066 | CF06067 | CF06068 | CF0P000 |
| CF06079 | OURSYS*                                                | OURDMP* | CF06070 | CF06071 | CF06072 | CF06073 |
|         | CF06074                                                | CF06075 | CF06076 | CF06077 | CF06078 | CF0P000 |
| CF06101 | OURSYS*                                                | OURDMP* | CF06100 | CF0P000 |         |         |
| CF06109 | OURSYS*                                                | OURDMP* | CF06108 | CF0P000 |         |         |
| CF06110 | OURSYS*                                                | OURDMP* | CF06108 | CF0P000 |         |         |
| CF06111 | OURSYS*                                                | OURDMP* | CF06108 | CF0P000 |         |         |
| CF06122 | OURSYS*                                                | OURDMP* | CF06112 | CF06113 | CF06114 | CF06115 |
|         | CF06116                                                | CF06117 | CF06118 | CF06119 | CF0P000 |         |
| CF06140 | OURSYS*                                                | OURDMP* | CF06132 | CF06133 | CF06134 | CF06135 |
|         | CF06136                                                | CF06137 | CF06138 | CF06139 | CF0P000 |         |
| CF06150 | OURSYS*                                                | OURDMP* | CF06142 | CF06143 | CF06144 | CF06145 |
|         | CF06146                                                | CF06147 | CF06148 | CF06149 | CF0P000 |         |
| CF06160 | OURSYS*                                                | OURDMP* | CF06152 | CF06153 | CF06154 | CF06155 |
|         | CF06156                                                | CF06157 | CF06158 | CF06159 | CF0P000 |         |
| CF06170 | OURSYS*                                                | OURDMP* | CF06162 | CF06163 | CF06164 | CF06165 |
|         | CF06166                                                | CF06167 | CF06168 | CF06169 | CF0P000 |         |
| CF06180 | OURSYS*                                                | OURDMP* | CF06172 | CF06173 | CF06174 | CF06175 |
|         | CF06176                                                | CF06177 | CF06178 | CF06179 | CF0P000 |         |
| CF06190 | OURSYS*                                                | OURDMP* | CF06182 | CF06183 | CF06184 | CF06185 |
|         | CF06186                                                | CF06187 | CF06188 | CF06189 | CF0P000 |         |
| CF06199 | OURSPC*                                                | OURSYS* | OURDMP* | CF06191 | CF06192 | CF06193 |
|         | CF06194                                                | CF06195 | CF06196 | CF06197 | CF06198 | CF0P000 |
| CF0619I | OURSPC*                                                | OURSYS* | OURDMP* | CF0619A | CF0619B | CF0619C |
|         | CF0619D                                                | CF0619E | CF0619F | CF0619G | CF0619H | CF0P000 |
| CF0619R | OURSPC*                                                | OURSYS* | OURDMP* | CF0619J | CF0619K | CF0619L |
|         | CF0619M                                                | CF0619N | CF0619O | CF0619P | CF0619Q | CF0P000 |
| CFD6201 | OURSYS*                                                | OURDMP* | CF0P000 |         |         |         |
| CFD6209 | OURSYS*                                                | OURDMP* | CF0P000 |         |         |         |
| CFD6210 | OURSYS*                                                | OURDMP* | CF0P000 |         |         |         |
| CFD6211 | OURSYS*                                                | OURDMP* | CF0P000 |         |         |         |
| CFD6222 | OURSYS*                                                | OURDMP* | CF0P000 | CFD6213 | CFD6214 | CFD6215 |
|         | CFD6216                                                | CFD6217 | CFD6218 | CFD6219 |         |         |
| CFD6233 | OURSYS*                                                | OURDMP* | CF0P000 | CFD6223 | CFD6224 | CFD6225 |
|         | CFD6226                                                | CFD6227 | CFD6228 | CFD6229 | CFD6230 | CFD6231 |

Table G-2 Ada Type C Test Programs and Source Code Files (continued)

| <u>PROGRAM</u> | <u>SUPPORT FILES(X - TEST SUPPORT SOFTWARE PACKAGES USED)</u> |                    |                    |                    |                    |                    |
|----------------|---------------------------------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| CFD6253        | CFD6232<br>OURSYSX<br>CFD6246<br>CFD6252                      | OURDMPX<br>CFD6247 | CF0P000<br>CFD6248 | CFD6243<br>CFD6249 | CFD6244<br>CFD6250 | CFD6245<br>CFD6251 |
| CFD6269        | OURSYSX<br>CFD6263                                            | OURDMPX<br>CFD6264 | CF0P000<br>CFD6265 | CFD6260<br>CFD6266 | CFD6261<br>CFD6267 | CFD6262<br>CFD6268 |
| CFD6279        | OURSYSX<br>CFD6273                                            | OURDMPX<br>CFD6274 | CF0P000<br>CFD6275 | CFD6270<br>CFD6276 | CFD6271<br>CFD6277 | CFD6272<br>CFD6278 |
| CFD6301        | OURSYSX                                                       | OURDMPX            | CF0P000            | CFD6300            |                    |                    |
| CFD6309        | OURSYSX                                                       | OURDMPX            | CF0P000            | CFD6308            |                    |                    |
| CFD6310        | OURSYSX                                                       | OURDMPX            | CF0P000            | CFD6308            |                    |                    |
| CFD6311        | OURSYSX                                                       | OURDMPX            | CF0P000            | CFD6308            |                    |                    |
| CFD6322        | OURSYSX<br>CFD6315                                            | OURDMPX<br>CFD6316 | CF0P000<br>CFD6317 | CFD6312<br>CFD6318 | CFD6313<br>CFD6319 | CFD6314            |
| CFD6340        | OURSYSX<br>CFD6335                                            | OURDMPX<br>CFD6336 | CF0P000<br>CFD6337 | CFD6332<br>CFD6338 | CFD6333<br>CFD6339 | CFD6334            |
| CFD6350        | OURSYSX<br>CFD6345                                            | OURDMPX<br>CFD6346 | CF0P000<br>CFD6347 | CFD6342<br>CFD6348 | CFD6343<br>CFD6349 | CFD6344            |
| CFD6360        | OURSYSX<br>CFD6355                                            | OURDMPX<br>CFD6356 | CF0P000<br>CFD6357 | CFD6352<br>CFD6358 | CFD6353<br>CFD6359 | CFD6354            |
| CFD6370        | OURSYSX<br>CFD6365                                            | OURDMPX<br>CFD6366 | CF0P000<br>CFD6367 | CFD6362<br>CFD6368 | CFD6363<br>CFD6369 | CFD6364            |
| CFD6380        | OURSYSX<br>CFD6375                                            | OURDMPX<br>CFD6376 | CF0P000<br>CFD6377 | CFD6372<br>CFD6378 | CFD6373<br>CFD6379 | CFD6374            |
| CFD6390        | OURSYSX<br>CFD6385                                            | OURDMPX<br>CFD6386 | CF0P000<br>CFD6387 | CFD6382<br>CFD6388 | CFD6383<br>CFD6389 | CFD6384            |
| CF0642B        | OURSPCX<br>CF06425<br>CF0P000                                 | OURSYSX<br>CF06426 | OURDMPX<br>CF06427 | CF06422<br>CF06428 | CF06423<br>CF06429 | CF06424<br>CF0642A |
| CF06803        | OURSYSX                                                       | OURDMPX            | CF06802            | CF0P000            |                    |                    |
| CF06807        | OURSYSX                                                       | OURDMPX            | CF06806            | CF0P000            |                    |                    |
| CF06809        | OURSPCX                                                       | OURSYSX            | OURDMPX            | CF06808            | CF0P000            |                    |
| CF0680B        | OURSPCX                                                       | OURSYSX            | OURDMPX            | CF0680A            | CF0P000            |                    |
| CF0680D        | OURSPCX                                                       | OURSYSX            | OURDMPX            | CF0680C            | CF0P000            |                    |
| CF0680F        | OURSPCX                                                       | OURSYSX            | OURDMPX            | CF0680E            | CF0P000            |                    |
| CFD680H        | OURSPCX                                                       | OURSYSX            | OURDMPX            | CF0P000            | CFD680G            |                    |
| CFD680J        | OURSPCX                                                       | OURSYSX            | OURDMPX            | CF0P000            | CFD680I            |                    |
| CF06811        | OURSYSX                                                       | OURDMPX            | CF06810            | CF0P000            |                    |                    |
| CF06815        | OURSYSX                                                       | OURDMPX            | CF06814            | CF0P000            |                    |                    |
| CF06817        | OURSYSX                                                       | OURDMPX            | CF06816            | CF0P000            |                    |                    |
| CF06819        | OURSYSX                                                       | OURDMPX            | CF06818            | CF0P000            |                    |                    |
| CF06821        | OURSYSX                                                       | OURDMPX            | CF06820            | CF0P000            |                    |                    |
| CF06823        | OURSPCX                                                       | OURSYSX            | OURDMPX            | CF06822            | CF0P000            |                    |
| CF06825        | OURSPCX                                                       | OURSYSX            | OURDMPX            | CF06824            | CF0P000            |                    |
| CFN9301        | OURSPCX                                                       | OURSYSX            | CFN9300            |                    |                    |                    |
| CFN9302        | OURSPCX                                                       | OURSYSX            | CFN9300            |                    |                    |                    |
| CFN9303        | OURSPCX                                                       | OURSYSX            | CFN9300            |                    |                    |                    |
| CF09501        | OURSPCX                                                       | OURSYSX            | OURDMPX            | CF09500            | CF0P000            |                    |
| CF09502        | OURSPCX                                                       | OURSYSX            | OURDMPX            | CF09500            | CF0P000            |                    |
| CF09503        | OURSPCX                                                       | OURSYSX            | OURDMPX            | CF09500            | CF0P000            |                    |
| CF09504        | OURSPCX                                                       | OURSYSX            | OURDMPX            | CF09500            | CF0P000            |                    |
| CF09505        | OURSPCX                                                       | OURSYSX            | OURDMPX            | CF09500            | CF0P000            |                    |
| CF09506        | OURSPCX                                                       | OURSYSX            | OURDMPX            | CF09500            | CF0P000            |                    |
| CF09507        | OURSPCX                                                       | OURSYSX            | OURDMPX            | CF09500            | CF0P000            |                    |
| CF09508        | OURSPCX                                                       | OURSYSX            | OURDMPX            | CF09500            | CF0P000            |                    |
| CF09509        | OURSPCX                                                       | OURSYSX            | OURDMPX            | CF09500            | CF0P000            |                    |
| CFN9511        | OURSPCX                                                       | OURSYSX            | CFN9510            |                    |                    |                    |
| CF09600        | OURSPCX                                                       | OURSYSX            | CF0P000            |                    |                    |                    |
| CF09601        | OURSPCX                                                       | OURSYSX            | CF0P000            |                    |                    |                    |
| CF09602        | OURSPCX                                                       | OURSYSX            | CF0P000            |                    |                    |                    |
| CF09603        | OURSPCX                                                       | OURSYSX            | CF0P000            |                    |                    |                    |
| CF09604        | OURSPCX                                                       | OURSYSX            | CF0P000            |                    |                    |                    |
| CF09605        | OURSPCX                                                       | OURSYSX            | CF0P000            |                    |                    |                    |
| CF09606        | OURSPCX                                                       | OURSYSX            | CF0P000            |                    |                    |                    |
| CF09607        | OURSPCX                                                       | OURSYSX            | CF0P000            |                    |                    |                    |

Table G-2 Ada Type C Test Programs and Source Code Files (continued)

| PROGRAM   | SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED) |         |         |         |           |         |
|-----------|--------------------------------------------------------|---------|---------|---------|-----------|---------|
| CFN9611   | OURSPC*                                                | OURSYS* | CFN9610 |         |           |         |
| CFN9612   | OURSPC*                                                | OURSYS* | CFN9610 |         |           |         |
| CFN9613   | OURSPC*                                                | OURSYS* | CFN9610 |         |           |         |
| CF09711   | OURSYS*                                                | CF09710 | CF0P000 |         |           |         |
| CF09713   | OURSYS*                                                | CF09712 | CF0P000 |         |           |         |
| CF09720   | OURSPC*                                                | OURSYS* | OURDMP* | CF09500 | CF0P000   |         |
| CF09721   | OURSPC*                                                | OURSYS* | OURDMP* | CF09500 | CF0P000   |         |
| CF09731   | OURSPC*                                                | OURSYS* | OURDMP* | CF09500 | CF0P000   |         |
| CF09901   | OURSYS*                                                | CF09900 | CF0P000 |         |           |         |
| CF09902   | OURSYS*                                                | CF09900 | CF0P000 |         |           |         |
| CF09903   | OURSYS*                                                | CF09900 | CF0P000 |         |           |         |
| CFM9A01   | OURSPC*                                                | OURSYS* | CFM9A00 |         |           |         |
| CFM9A02   | OURSPC*                                                | OURSYS* | CFM9A00 |         |           |         |
| CFM9A03   | OURSPC*                                                | OURSYS* | CFM9A00 |         |           |         |
| CF09B01   | OURSPC*                                                | OURSYS* | OURDMP* | CF09500 | CF0P000   |         |
| CFD9C00   | OURSPC*                                                | OURSYS* | CF0P000 | CFD9000 |           |         |
| CFD9C01   | OURSPC*                                                | OURSYS* | CF0P000 | CFD9000 | CFD9200   |         |
| CFD9C02   | OURSPC*                                                | OURSYS* | CF0P000 | CFD9000 | CFD9200   |         |
| CFD9C03** | OURSPC*                                                | OURSYS* | CF0P000 | CFD9000 | CFD9200   |         |
| CFD9C04** | OURSPC*                                                | OURSYS* | CF0P000 | CFD9000 | CFD9200   |         |
| CFMB001   | OURSYS*                                                | CFMB000 |         |         |           |         |
| CFMB003   | OURSYS*                                                | CFMB002 |         |         |           |         |
| CFMB005   | OURSYS*                                                | CFMB004 |         |         |           |         |
| CFMB012   | OURSYS*                                                | CFMB010 | CFMB011 |         |           |         |
| CFMB016   | OURSYS*                                                | CFMB013 | CFMB014 | CFMB015 |           |         |
| CFMB020   | OURSYS*                                                | CFMB017 | CFMB018 | CFMB019 |           |         |
| CFMB032   | OURSYS*                                                | CFMB013 | CFMB014 | CFMB015 |           |         |
| CFMB036   | OURSYS*                                                | CFMB033 | CFMB034 | CFMB035 |           |         |
| CFMB044   | OURSYS*                                                | CFMB041 | CFMB042 | CFMB043 |           |         |
| CF0C301   | OURSYS*                                                | OURDMP* | CF0C100 | CF0C101 | CF0C300   | CF0P000 |
| CF0C302   | OURSYS*                                                | OURDMP* | CF0C100 | CF0C101 | CF0C300   | CF0P000 |
| CF0C304   | OURSYS*                                                | OURDMP* | CF0C102 | CF0C103 | CF0C303   | CF0P000 |
| CF0C305   | OURSYS*                                                | OURDMP* | CF0C102 | CF0P000 |           |         |
| CF0C306   | OURSYS*                                                | OURDMP* | CF0C102 | CF0P000 |           |         |
| CF0C307   | OURSYS*                                                | OURDMP* | CF0C102 | CF0P000 |           |         |
| CFDC311   | OURSYS*                                                | OURDMP* | CF0P000 | CFDC104 | CFDC105   | CFDC310 |
| CFDC314   | OURSYS*                                                | OURDMP* | CF0P000 | CFDC106 | CFDC107** | CFDC313 |
| CFDD600   | OURSPC*                                                | OURSYS* | CF0P000 |         |           |         |
| CFDD601   | OURSPC*                                                | OURSYS* | CF0P000 |         |           |         |
| CFDD602   | OURSPC*                                                | OURSYS* | CF0P000 |         |           |         |
| CFDD603   | OURSPC*                                                | OURSYS* | CF0P000 |         |           |         |
| CFDD604   | OURSPC*                                                | OURSYS* | CF0P000 |         |           |         |
| CFDD605   | OURSPC*                                                | OURSYS* | CF0P000 |         |           |         |
| CFDD606   | OURSPC*                                                | OURSYS* | CF0P000 |         |           |         |
| CFDD607   | OURSPC*                                                | OURSYS* | CF0P000 |         |           |         |
| CFDD608*  | OURSPC*                                                | OURSYS* | CF0P000 |         |           |         |
| CFDD609   | OURSPC*                                                | OURSYS* | CF0P000 |         |           |         |
| CFDD610   | OURSPC*                                                | OURSYS* | CF0P000 |         |           |         |
| CFDD611   | OURSPC*                                                | OURSYS* | CF0P000 |         |           |         |
| CFDDA01   | OURSPC*                                                | OURSYS* | CF0P000 |         |           |         |
| CFDDA02   | OURSPC*                                                | OURSYS* | CF0P000 |         |           |         |
| CFDE220   | OURSYS*                                                | OURDMP* | CF0P000 | CFDE000 | CFDE201   | CFDE202 |
|           | CFDE203                                                | CFDE204 | CFDE205 | CFDE206 | CFDE207   | CFDE208 |
|           | CFDE209                                                | CFDE20A | CFDE211 | CFDE212 | CFDE213   | CFDE214 |
|           | CFDE215                                                | CFDE216 |         |         |           |         |
| CFDE250   | OURSYS*                                                | OURDMP* | CF0P000 | CFDE000 | CFDE231   | CFDE232 |
|           | CFDE233                                                | CFDE234 | CFDE235 | CFDE236 | CFDE237   | CFDE238 |
|           | CFDE239                                                | CFDE23A | CFDE241 | CFDE242 | CFDE243   | CFDE244 |
|           | CFDE245                                                | CFDE246 |         |         |           |         |
| CFDE420   | OURSYS*                                                | OURDMP* | CF0P000 | CFDE000 | CFDE401   | CFDE402 |
|           | CFDE403                                                | CFDE404 | CFDE405 | CFDE406 | CFDE407   | CFDE408 |
|           | CFDE409                                                | CFDE40A | CFDE411 | CFDE412 | CFDE413   | CFDE414 |
|           | CFDE415                                                | CFDE416 |         |         |           |         |

\*\* Multiple versions of source file supplied(USE and ADA file types)  
 \*\* Source file supplied with DEC file type only  
 \* Source file supplied with USE file type only

Table G-2 Ada Type C Test Programs and Source Code Files (continued)

| PROGRAM   | SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED) |          |          |         |         |         |
|-----------|--------------------------------------------------------|----------|----------|---------|---------|---------|
| CFDE450   | OURSYS*                                                | OURDMP*  | CFOP000  | CFDE000 | CFDE431 | CFDE432 |
|           | CFDE433                                                | CFDE434  | CFDE435  | CFDE436 | CFDE437 | CFDE438 |
|           | CFDE439                                                | CFDE43A  | CFDE441  | CFDE442 | CFDE443 | CFDE444 |
|           | CFDE445                                                | CFDE446  |          |         |         |         |
| CFDF000   | OURSYS*                                                | OURDMP*  | MATHFUN* | CFOP000 |         |         |
| CFDF001   | OURSYS*                                                | OURDMP*  | MATHFUN* | CFOP000 |         |         |
| CFDF002   | OURSYS*                                                | OURDMP*  | MATHFUN* | CFOP000 |         |         |
| CFDF003   | OURSYS*                                                | OURDMP*  | MATHFUN* | CFOP000 |         |         |
| CFDF004   | OURSYS*                                                | OURDMP*  | MATHFUN* | CFOP000 |         |         |
| CFDF005   | OURSYS*                                                | OURDMP*  | MATHFUN* | CFOP000 |         |         |
| CGD0001   | OURSYS*                                                | MATHFUN* | CGOP000  | CGD0000 |         |         |
| CGD0003   | OURSYS*                                                | CGOP000  | CGD0002  |         |         |         |
| CGD0009   | OURSYS*                                                | CGOP000  | CGD0004  | CGD0005 | CGD0006 | CGD0007 |
|           | CGD0008                                                |          |          |         |         |         |
| CG0000C   | OURSYS*                                                | OURDMP*  | CGOP000  |         |         |         |
| CGD000E   | OURSYS*                                                | MATHFUN* | CGOP000  | CGD0000 | CGD000D |         |
| CGN000K   | OURSYS*                                                | CGN000F  | CGN000G  | CGN000H | CGN000I | CGN000J |
| CGD0039   | OURSPC*                                                | OURSYS*  | CGOP000  | CGD0004 | CGD0005 | CGD0006 |
|           | CGD0007                                                | CGD0008  | CGD0019  | CGD0029 |         |         |
| CGD0049   | OURSPC*                                                | OURSYS*  | CGOP000  | CGD0004 | CGD0005 | CGD0006 |
|           | CGD0007                                                | CGD0008  | CGD0019  | CGD0029 |         |         |
| CGD0059** | OURSPC*                                                | OURSYS*  | CGOP000  | CGD0004 | CGD0005 | CGD0006 |
|           | CGD0007                                                | CGD0008  | CGD0019  | CGD0029 |         |         |
| CL09101   | OURSPC*                                                | OURSYS*  | CL09000  | CL09100 | CL0P000 |         |
| CL09111   | OURSPC*                                                | OURSYS*  | CL09000  | CL09100 | CL0P000 |         |
| CL09121   | OURSPC*                                                | OURSYS*  | CL09000  | CL09100 | CL0P000 |         |
| CL09131   | OURSPC*                                                | OURSYS*  | CL09000  | CL09100 | CL0P000 |         |
| CLD9202   | OURSPC*                                                | OURSYS*  | CL09000  | CL09100 | CL0P000 | CLD9200 |
| CLD9203   | OURSPC*                                                | OURSYS*  | CL09000  | CL09100 | CL0P000 | CLD9200 |
| CLD9204** | OURSPC*                                                | OURSYS*  | CL09000  | CL09100 | CL0P000 | CLD9200 |
| CLD9212   | OURSPC*                                                | OURSYS*  | CL09000  | CL09100 | CL0P000 | CLD9200 |
| CLD9213   | OURSPC*                                                | OURSYS*  | CL09000  | CL09100 | CL0P000 | CLD9200 |
| CLD9214** | OURSPC*                                                | OURSYS*  | CL09000  | CL09100 | CL0P000 | CLD9200 |
| CLD9222   | OURSPC*                                                | OURSYS*  | CL09000  | CL09100 | CL0P000 | CLD9200 |
| CLD9223   | OURSPC*                                                | OURSYS*  | CL09000  | CL09100 | CL0P000 | CLD9200 |
| CLD9224** | OURSPC*                                                | OURSYS*  | CL09000  | CL09100 | CL0P000 | CLD9200 |
| CLD9232   | OURSPC*                                                | OURSYS*  | CL09000  | CL09100 | CL0P000 | CLD9200 |
| CLD9233   | OURSPC*                                                | OURSYS*  | CL09000  | CL09100 | CL0P000 | CLD9200 |
| CLD9234** | OURSPC*                                                | OURSYS*  | CL09000  | CL09100 | CL0P000 | CLD9200 |
| CLDE2C1   | OURSPC*                                                | OURSYS*  | CL0P000  | CLDE000 | CLDE2B1 |         |
| CLDE2C2   | OURSPC*                                                | OURSYS*  | CL0P000  | CLDE000 | CLDE2B1 |         |
| CLDE2C3** | OURSPC*                                                | OURSYS*  | CL0P000  | CLDE000 | CLDE2B1 |         |
| CLDE2C4** | OURSPC*                                                | OURSYS*  | CL0P000  | CLDE000 | CLDE2B1 |         |
| CLDE2C5   | OURSPC*                                                | OURSYS*  | CL0P000  | CLDE000 | CLDE2B2 |         |
| CLDE2C6   | OURSPC*                                                | OURSYS*  | CL0P000  | CLDE000 | CLDE2B2 |         |
| CLDE2C7** | OURSPC*                                                | OURSYS*  | CL0P000  | CLDE000 | CLDE2B2 |         |
| CLDE2C8** | OURSPC*                                                | OURSYS*  | CL0P000  | CLDE000 | CLDE2B2 |         |
| CLDE4C1   | OURSPC*                                                | OURSYS*  | CL0P000  | CLDE000 | CLDE4B1 |         |
| CLDE4C2   | OURSPC*                                                | OURSYS*  | CL0P000  | CLDE000 | CLDE4B1 |         |
| CLDE4C3** | OURSPC*                                                | OURSYS*  | CL0P000  | CLDE000 | CLDE4B1 |         |
| CLDE4C4** | OURSPC*                                                | OURSYS*  | CL0P000  | CLDE000 | CLDE4B1 |         |
| CLDE4C5   | OURSPC*                                                | OURSYS*  | CL0P000  | CLDE000 | CLDE4B2 |         |
| CLDE4C6   | OURSPC*                                                | OURSYS*  | CL0P000  | CLDE000 | CLDE4B2 |         |
| CLDE4C7** | OURSPC*                                                | OURSYS*  | CL0P000  | CLDE000 | CLDE4B2 |         |
| CLDE4C8** | OURSPC*                                                | OURSYS*  | CL0P000  | CLDE000 | CLDE4B2 |         |
| C000104   | OURSYS*                                                | OURDMP*  | C000002  | C000102 | C000103 | C00P000 |
| C000109   | OURSYS*                                                | OURDMP*  | C000001  | C000107 | C000108 | C00P000 |
| C000114   | OURSYS*                                                | OURDMP*  | C000001  | C000112 | C000113 | C00P000 |
| C000204   | OURSYS*                                                | OURDMP*  | C000207  | C000203 | C00P000 |         |
| C000209   | OURSYS*                                                | OURDMP*  | C000001  | C000207 | C000208 | C00P000 |
| C000300   | OURSYS*                                                | C00P000  |          |         |         |         |
| C000305   | OURSYS*                                                | C00P000  |          |         |         |         |
| C000310   | OURSYS*                                                | C00P000  |          |         |         |         |
| C000313   | OURSYS*                                                | OURDMP*  | C000311  | C000312 | C00P000 |         |

\*\* Source file supplied with DEC file type only

Table G-2 Ada Type C Test Programs and Source Code Files (concluded)

| PROGRAM | SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED) |         |          |         |         |         |
|---------|--------------------------------------------------------|---------|----------|---------|---------|---------|
| C000316 | OURSYS*                                                | OURDMP* | C000314  | C000315 | C00P000 |         |
| C000319 | OURSYS*                                                | OURDMP* | C000317  | C000318 | C00P000 |         |
| C000322 | OURSYS*                                                | OURDMP* | C000320  | C000321 | C00P000 |         |
| C000325 | OURSYS*                                                | OURDMP* | C000323  | C000324 | C00P000 |         |
| C000328 | OURSYS*                                                | OURDMP* | C000326  | C000327 | C00P000 |         |
| C000331 | OURSYS*                                                | OURDMP* | C000329  | C000330 | C00P000 |         |
| C000334 | OURSYS*                                                | OURDMP* | C000332  | C000333 | C00P000 |         |
| C000337 | OURSYS*                                                | OURDMP* | C000335  | C000336 | C00P000 |         |
| C000340 | OURSYS*                                                | OURDMP* | C000338  | C000339 | C00P000 |         |
| C000343 | OURSYS*                                                | OURDMP* | C000341  | C000342 | C00P000 |         |
| C000346 | OURSYS*                                                | OURDMP* | MATHFUN* | C00P000 | C000344 | C000345 |
| C000350 | OURSYS*                                                | OURDMP* | C000347  | C000348 | C000349 | C00P000 |
| C000353 | OURSYS*                                                | OURDMP* | C000347  | C000351 | C000352 | C00P000 |
| C000356 | OURSYS*                                                | OURDMP* | C000354  | C000355 | C00P000 |         |
| C000359 | OURSYS*                                                | OURDMP* | C000357  | C000358 | C00P000 |         |
| C000362 | OURSYS*                                                | OURDMP* | C000360  | C000361 | C00P000 |         |
| C000365 | OURSPC*                                                | OURSYS* | OURDMP*  | C000363 | C000364 | C00P000 |
| C000368 | OURSPC*                                                | OURSYS* | OURDMP*  | C000366 | C000367 | C00P000 |
| C00036B | OURSPC*                                                | OURSYS* | OURDMP*  | C000369 | C00036A | C00P000 |
| C00036E | OURSPC*                                                | OURSYS* | OURDMP*  | C00P000 | C00036C | C00036D |
| C00036H | OURSPC*                                                | OURSYS* | OURDMP*  | C00036F | C00036G | C00P000 |
| C00036K | OURSPC*                                                | OURSYS* | OURDMP*  | C00036I | C00036J | C00P000 |
| C00036N | OURSPC*                                                | OURSYS* | OURDMP*  | C00036L | C00036M | C00P000 |
| C00036Q | OURSPC*                                                | OURSYS* | OURDMP*  | C00P000 | C00036O | C00036P |
| C00036T | OURSPC*                                                | OURSYS* | OURDMP*  | C00P000 | C00036R | C00036S |
| C00036W | OURSPC*                                                | OURSYS* | OURDMP*  | C00036U | C00036V | C00P000 |
| C00036Z | OURSYS*                                                | OURDMP* | OURTYP*  | C00P000 | C00036X | C00036Y |
| C000373 | OURSPC*                                                | OURSYS* | OURDMP*  | C00P000 | C000370 | C000371 |
| C000378 | C000372                                                | OURDMP* | C000374  | C000375 | C000376 | C000377 |
| C000383 | C00P000                                                | OURDMP* | OURDMP*  | C000374 | C00P000 | C000380 |
| C000391 | OURSPC*                                                | OURSYS* | C000390  | C00P000 | C00P000 |         |
| C000404 | OURSYS*                                                | OURDMP* | C000402  | C000403 | C00P000 |         |
| C000500 | OURSYS*                                                | C00P000 | C000502  | C000503 | C00P000 |         |
| C000504 | OURSYS*                                                | OURDMP* | C000507  | C000508 | C00P000 |         |
| C000509 | OURSYS*                                                | OURDMP* | C000512  | C000513 | C00P000 |         |
| C000514 | OURSYS*                                                | OURDMP* | C000517  | C000518 | C00P000 |         |
| C000519 | OURSYS*                                                | OURDMP* | C00P000  | C000523 | C000524 |         |
| C000525 | OURSYS*                                                | OURDMP* | C00P000  | C000526 | C000527 | C000528 |
| C000529 | OURSYS*                                                | OURDMP* | C000602  | C000603 | C00P000 |         |
| C000604 | OURSYS*                                                | OURDMP* | C00P000  |         |         |         |
| C000605 | OURSYS*                                                | OURDMP* | C00P000  |         |         |         |
| C000606 | OURSYS*                                                | OURDMP* | C00P000  |         |         |         |
| C000607 | OURSYS*                                                | OURDMP* | C00P000  |         |         |         |
| C000704 | OURSYS*                                                | OURDMP* | C000702  | C000703 | C00P000 |         |
| C000705 | OURSYS*                                                | OURDMP* | C00P000  |         |         |         |
| C000708 | OURSYS*                                                | OURDMP* | C000706  | C000707 | C00P000 |         |
| C000711 | OURSYS*                                                | OURDMP* | C000709  | C000710 | C00P000 |         |
| C000713 | OURSYS*                                                | OURDMP* | C00P000  |         |         |         |
| C000714 | OURSYS*                                                | OURDMP* | C00P000  |         |         |         |
| C000715 | OURSYS*                                                | OURDMP* | C00P000  |         |         |         |
| C000716 | OURSYS*                                                | OURDMP* | C00P000  |         |         |         |
| C000717 | OURSYS*                                                | OURDMP* | C00P000  |         |         |         |
| C000718 | OURSYS*                                                | OURDMP* | C00P000  |         |         |         |
| C000721 | OURSYS*                                                | OURDMP* | C000719  | C000720 | C00P000 |         |

Table 7-3 Ada Type E Test Programs and Source Code Files

| PROGRAM  | SUPPORT FILES(X - TEST SUPPORT SOFTWARE PACKAGES USED) |         |         |         |         |         |
|----------|--------------------------------------------------------|---------|---------|---------|---------|---------|
| EA00000  | OURSYSX                                                | OURDMPX | EA0P000 |         |         |         |
| EF03519  | OURSYSX                                                | OURDMPX | EF03500 | EF03501 | EF03502 | EF03503 |
|          | EF03504                                                | EF03509 | EF03510 | EF03511 | EF03512 | EF03513 |
|          | EF03514                                                | EF03517 | EF03518 | EF0P000 |         |         |
| EF03550  | OURSPCX                                                | OURSYSX | OURDMPX | EF0P000 |         |         |
| EFD3551  | OURSPCX                                                | OURSYSX | OURDMPX | EF0P000 |         |         |
| EF03620  | OURSYSX                                                | OURDMPX | EF03600 | EF03601 | EF03602 | EF03603 |
|          | EF03604                                                | EF03605 | EF03606 | EF03607 | EF03608 | EF03609 |
|          | EF03610                                                | EF03611 | EF03612 | EF03613 | EF03614 | EF03615 |
|          | EF03616                                                | EF03617 | EF03618 | EF03619 | EF0P000 |         |
| EF03650  | OURSYSX                                                | OURDMPX | EF03630 | EF03631 | EF03632 | EF03633 |
|          | EF03634                                                | EF03635 | EF03636 | EF03637 | EF03638 | EF03639 |
|          | EF03641                                                | EF03642 | EF03643 | EF03644 | EF03645 | EF03646 |
|          | EF03647                                                | EF03648 | EF03649 | EF0P000 |         |         |
| EF03704  | OURSPCX                                                | OURSYSX | OURDMPX | EF03700 | EF03701 | EF03702 |
|          | EF03703                                                | EF0P000 |         |         |         |         |
| EF03805  | OURSPCX                                                | OURSYSX | OURDMPX | EF03800 | EF03801 | EF03802 |
|          | EF03803                                                | EF03804 | EF0P000 |         |         |         |
| EF04120  | OURSYSX                                                | OURDMPX | EF0P000 |         |         |         |
| EF04121  | OURSYSX                                                | OURDMPX | EF0P000 |         |         |         |
| EF04122  | OURSYSX                                                | OURDMPX | EF0P000 |         |         |         |
| EF04123  | OURSYSX                                                | OURDMPX | EF0P000 |         |         |         |
| EF04124  | OURSYSX                                                | OURDMPX | EF0P000 |         |         |         |
| EF04125  | OURSYSX                                                | OURDMPX | EF0P000 |         |         |         |
| EF04126  | OURSYSX                                                | OURDMPX | EF0P000 |         |         |         |
| EF04127  | OURSYSX                                                | OURDMPX | EF0P000 |         |         |         |
| EFD4128* | OURSPCX                                                | OURSYSX | OURDMPX | EF0P000 |         |         |
| EF04129  | OURSYSX                                                | OURDMPX | EF0P000 | EF0P000 |         |         |
| EFD412A  | OURSPCX                                                | OURSYSX | OURDMPX | EF0P000 |         |         |
| EF0412B  | OURSPCX                                                | OURSYSX | OURDMPX | EF0P000 |         |         |
| EFD412C  | OURSPCX                                                | OURSYSX | OURDMPX | EF0P000 |         |         |
| EFD412D  | OURSPCX                                                | OURSYSX | OURDMPX | EF0P000 |         |         |
| EF04130  | OURSPCX                                                | OURSYSX | OURDMPX | EF0P000 |         |         |
| EF04131  | OURSPCX                                                | OURSYSX | OURDMPX | EF0P000 |         |         |
| EF04132  | OURSPCX                                                | OURSYSX | OURDMPX | EF0P000 |         |         |
| EF04133  | OURSPCX                                                | OURSYSX | OURDMPX | EF0P000 |         |         |
| EFD4135  | OURSPCX                                                | OURSYSX | OURDMPX | EF0P000 |         |         |
| EFD4136  | OURSPCX                                                | OURSYSX | OURDMPX | EF0P000 |         |         |
| EFD4137  | OURSPCX                                                | OURSYSX | OURDMPX | EF0P000 |         |         |
| EFD4138  | OURSPCX                                                | OURSYSX | OURDMPX | EF0P000 |         |         |
| EFD4139  | OURSPCX                                                | OURSYSX | OURDMPX | EF0P000 |         |         |
| EFD413A  | OURSPCX                                                | OURSYSX | OURDMPX | EF0P000 |         |         |
| EFD413B  | OURSPCX                                                | OURSYSX | OURDMPX | EF0P000 |         |         |
| EFD413C  | OURSPCX                                                | OURSYSX | OURDMPX | EF0P000 |         |         |
| EF0413D  | OURSPCX                                                | OURSYSX | OURDMPX | EF0P000 |         |         |
| EFD413E  | OURSPCX                                                | OURSYSX | OURDMPX | EF0P000 |         |         |
| EFD413G  | OURSPCX                                                | OURSYSX | OURDMPX | EF0P000 |         |         |
| EF0413H  | OURSPCX                                                | OURSYSX | OURDMPX | EF0P000 |         |         |
| EF0413I  | OURSPCX                                                | OURSYSX | OURDMPX | EF0P000 |         |         |
| EF0413J  | OURSPCX                                                | OURSYSX | OURDMPX | EF0P000 |         |         |
| EF0413K  | OURSPCX                                                | OURSYSX | OURDMPX | EF0P000 |         |         |
| EF04310  | OURSPCX                                                | OURSYSX | OURDMPX | EF0P000 |         |         |
| EF04311  | OURSPCX                                                | OURSYSX | OURDMPX | EF0P000 |         |         |
| EF04312  | OURSPCX                                                | OURSYSX | OURDMPX | EF0P000 |         |         |
| EF04510  | OURSYSX                                                | OURDMPX | EF0P000 |         |         |         |
| EF04511  | OURSYSX                                                | OURDMPX | EF0P000 |         |         |         |
| EF04512  | OURSYSX                                                | OURDMPX | EF0P000 |         |         |         |
| EF04513  | OURSYSX                                                | OURDMPX | EF0P000 |         |         |         |
| EF04514  | OURSYSX                                                | OURDMPX | EF0P000 |         |         |         |
| EF04515  | OURSYSX                                                | OURDMPX | EF0P000 |         |         |         |
| EF04516  | OURSYSX                                                | OURDMPX | EF0P000 |         |         |         |
| EF04517  | OURSYSX                                                | OURDMPX | EF0P000 |         |         |         |
| EF0451J  | OURSYSX                                                | OURDMPX | EF04518 | EF04519 | EF0451A | EF0451B |
|          | EF0451C                                                | EF0451D | EF0451E | EF0451F | EF0451G | EF0451H |
|          | EF0451I                                                | EF0P000 |         |         |         |         |

\* Source file supplied with USE file type only



Table 7-3 Ada Type E Test Programs and Source Code Files (continued)

| PROGRAM  | SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED) |         |         |         |         |         |
|----------|--------------------------------------------------------|---------|---------|---------|---------|---------|
| EFD451U* | OURSYS*                                                | OURDMP* | OURTYP* | EF0P000 | EFD451K | EFD451L |
|          | EFD451M                                                | EFD451N | EFD451O | EFD451P | EFD451Q | EFD451R |
| EF0451Z  | EFD451S                                                |         |         |         |         |         |
|          | OURSYS*                                                | OURDMP* | EF0451V | EF0451W | EF0451X | EF0451Y |
|          | EF0P000                                                |         |         |         |         |         |
| EF04520  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF04521  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF04522  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EFD4523  | OURSYS*                                                | OURDMP* | OURTYP* | EF0P000 |         |         |
| EFD4524  | OURSYS*                                                | OURDMP* | OURTYP* | EF0P000 |         |         |
| EFD4525  | OURSYS*                                                | OURDMP* | OURTYP* | EF0P000 |         |         |
| EFD4526  | OURSYS*                                                | OURDMP* | OURTYP* | EF0P000 |         |         |
| EF04527  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EFD4528  | OURSPC*                                                | OURSYS* | OURDMP* | EF0P000 |         |         |
| EF04529  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EFD452A  | OURSPC*                                                | OURSYS* | OURDMP* | EF0P000 |         |         |
| EF04530  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF04531  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF04532  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF04533  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF04534  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF04535  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF04536  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF04537  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF04538  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF04539  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF0453A  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF0453B  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF0453C  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF04540  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF04541  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF04550  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF04551  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF04552  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF04553  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF04554  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF04555  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF04556  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF04557  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF04558  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF04559  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EFD455D  | OURSYS*                                                | OURDMP* | OURTYP* | EF0P000 |         |         |
| EFD455E  | OURSYS*                                                | OURDMP* | OURTYP* | EF0P000 |         |         |
| EFD455F  | OURSYS*                                                | OURDMP* | OURTYP* | EF0P000 |         |         |
| EFD455G  | OURSYS*                                                | OURDMP* | OURTYP* | EF0P000 |         |         |
| EFD455I  | OURSYS*                                                | OURDMP* | OURTYP* | EF0P000 |         |         |
| EFD455J  | OURSYS*                                                | OURDMP* | OURTYP* | EF0P000 |         |         |
| EFD455K  | OURSYS*                                                | OURDMP* | OURTYP* | EF0P000 |         |         |
| EFD455L  | OURSYS*                                                | OURDMP* | OURTYP* | EF0P000 |         |         |
| EF0455N  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF0455O  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF04560  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF04562  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF04563  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EFD4566  | OURSYS*                                                | OURDMP* | OURTYP* | EF0P000 |         |         |
| EFD4567  | OURSYS*                                                | OURDMP* | OURTYP* | EF0P000 |         |         |
| EFD4568  | OURSYS*                                                | OURDMP* | OURTYP* | EF0P000 |         |         |
| EFD4569  | OURSYS*                                                | OURDMP* | OURTYP* | EF0P000 |         |         |
| EF04600  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF04601  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF04602  | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EFD4603  | OURSYS*                                                | OURDMP* | OURTYP* | EF0P000 |         |         |
| EFD4604  | OURSYS*                                                | OURDMP* | OURTYP* | EF0P000 |         |         |
| EFD4605  | OURSYS*                                                | OURDMP* | OURTYP* | EF0P000 |         |         |
| EFD4606  | OURSYS*                                                | OURDMP* | OURTYP* | EF0P000 |         |         |

\* Source file supplied with USE file type only

Table 7-3 Ada Type E Test Programs and Source Code Files (continued)

| <u>PROGRAM</u> | <u>SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED)</u> |         |         |         |
|----------------|---------------------------------------------------------------|---------|---------|---------|
| EFD4607        | OURSYS*                                                       | OURDMP* | OURTYP* | EFOP000 |
| EFD4608        | OURSYS*                                                       | OURDMP* | OURTYP* | EFOP000 |
| EFD4609        | OURSYS*                                                       | OURDMP* | OURTYP* | EFOP000 |
| EFD460A        | OURSYS*                                                       | OURDMP* | OURTYP* | EFOP000 |
| EFD460B        | OURSYS*                                                       | OURDMP* | OURTYP* | EFOP000 |
| EF0460E        | OURSYS*                                                       | OURDMP* | EFOP000 |         |
| EF0460F        | OURSYS*                                                       | OURDMP* | EFOP000 |         |
| EF0460G        | OURSYS*                                                       | OURDMP* | EFOP000 |         |
| EF0460H        | OURSYS*                                                       | OURDMP* | EFOP000 |         |
| EF0460I        | OURSYS*                                                       | OURDMP* | EFOP000 |         |
| EF0460J        | OURSPC*                                                       | OURSYS* | OURDMP* | EFOP000 |
| EFD460K        | OURSPC*                                                       | OURSYS* | OURDMP* | EFOP000 |
| EFD460L        | OURSPC*                                                       | OURSYS* | OURDMP* | EFOP000 |
| EF0460M        | OURSPC*                                                       | OURSYS* | OURDMP* | EFOP000 |
| EFD460N        | OURSPC*                                                       | OURSYS* | OURDMP* | EFOP000 |
| EFD460O        | OURSPC*                                                       | OURSYS* | OURDMP* | EFOP000 |
| EF05200        | OURSYS*                                                       | OURDMP* | EFOP000 |         |
| EF05201        | OURSYS*                                                       | OURDMP* | EFOP000 |         |
| EF05202        | OURSYS*                                                       | OURDMP* | EFOP000 |         |
| EF05203        | OURSYS*                                                       | OURDMP* | EFOP000 |         |
| EF05204        | OURSYS*                                                       | OURDMP* | EFOP000 |         |
| EF05205        | OURSYS*                                                       | OURDMP* | EFOP000 |         |
| EF05206        | OURSYS*                                                       | OURDMP* | EFOP000 |         |
| EF05207        | OURSYS*                                                       | OURDMP* | EFOP000 |         |
| EF05208        | OURSYS*                                                       | OURDMP* | EFOP000 |         |
| EF05209        | OURSYS*                                                       | OURDMP* | EFOP000 |         |
| EF0520A        | OURSYS*                                                       | OURDMP* | EFOP000 |         |
| EF0520B        | OURSYS*                                                       | OURDMP* | EFOP000 |         |
| EFD520C        | OURSYS*                                                       | OURDMP* | OURTYP* | EFOP000 |
| EFD520D        | OURSYS*                                                       | OURDMP* | OURTYP* | EFOP000 |
| EFD520E        | OURSYS*                                                       | OURDMP* | OURTYP* | EFOP000 |
| EFD520F        | OURSYS*                                                       | OURDMP* | OURTYP* | EFOP000 |
| EFD520G        | OURSYS*                                                       | OURDMP* | OURTYP* | EFOP000 |
| EFD520H        | OURSYS*                                                       | OURDMP* | OURTYP* | EFOP000 |
| EFD520I        | OURSYS*                                                       | OURDMP* | OURTYP* | EFOP000 |
| EFD520J        | OURSYS*                                                       | OURDMP* | OURTYP* | EFOP000 |
| EF0520M        | OURSPC*                                                       | OURSYS* | OURDMP* | EFOP000 |
| EFD520N        | OURSPC*                                                       | OURSYS* | OURDMP* | EFOP000 |
| EF0520O        | OURSPC*                                                       | OURSYS* | OURDMP* | EFOP000 |
| EFD520P        | OURSPC*                                                       | OURSYS* | OURDMP* | EFOP000 |
| EFD520Q        | OURSPC*                                                       | OURSYS* | OURDMP* | EFOP000 |
| EF0520R        | OURSPC*                                                       | OURSYS* | OURDMP* | EFOP000 |
| EF0520S        | OURSPC*                                                       | OURSYS* | OURDMP* | EFOP000 |
| EF05210        | OURSYS*                                                       | OURDMP* | EFOP000 |         |
| EF05211        | OURSYS*                                                       | OURDMP* | EFOP000 |         |
| EF05212        | OURSYS*                                                       | OURDMP* | EFOP000 |         |
| EF05213        | OURSYS*                                                       | OURDMP* | EFOP000 |         |
| EF05214        | OURSYS*                                                       | OURDMP* | EFOP000 |         |
| EF05215        | OURSYS*                                                       | OURDMP* | EFOP000 |         |
| EFD5218        | OURSYS*                                                       | OURDMP* | OURTYP* | EFOP000 |
| EFD5219        | OURSYS*                                                       | OURDMP* | OURTYP* | EFOP000 |
| EFD521A        | OURSYS*                                                       | OURDMP* | OURTYP* | EFOP000 |
| EFD521B        | OURSYS*                                                       | OURDMP* | OURTYP* | EFOP000 |
| EFD521C        | OURSYS*                                                       | OURDMP* | OURTYP* | EFOP000 |
| EFD521D        | OURSYS*                                                       | OURDMP* | OURTYP* | EFOP000 |
| EFD521E        | OURSYS*                                                       | OURDMP* | OURTYP* | EFOP000 |
| EFD521F        | OURSYS*                                                       | OURDMP* | OURTYP* | EFOP000 |
| EF0521H        | OURSYS*                                                       | OURDMP* | EFOP000 |         |
| EF0521I        | OURSYS*                                                       | OURDMP* | EFOP000 |         |
| EF0521J        | OURSYS*                                                       | OURDMP* | EFOP000 |         |
| EF0521K        | OURSYS*                                                       | OURDMP* | EFOP000 |         |
| EFD521K        | OURSPC*                                                       | OURSYS* | OURDMP* | EFOP000 |
| EF0521L        | OURSPC*                                                       | OURSYS* | OURDMP* | EFOP000 |
| EFD521M        | OURSPC*                                                       | OURSYS* | OURDMP* | EFOP000 |
| EF0521N        | OURSPC*                                                       | OURSYS* | OURDMP* | EFOP000 |

Table 7-3 Ada Type E Test Programs and Source Code Files (continued)

| PROGRAM | SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED) |         |         |         |         |         |
|---------|--------------------------------------------------------|---------|---------|---------|---------|---------|
| EFD5210 | OURSPC*                                                | OURSYS* | OURDMP* | EF0P000 |         |         |
| EFD521P | OURSPC*                                                | OURSYS* | OURDMP* | EF0P000 |         |         |
| EF05304 | OURSYS*                                                | OURDMP* | EF05300 | EF05301 | EF05302 | EF05303 |
|         | EF0P000                                                |         |         |         |         |         |
| EF05308 | OURSYS*                                                | OURDMP* | EF05305 | EF05306 | EF05307 | EF0P000 |
| EF05408 | OURDMP*                                                | EF05400 | EF05401 | EF05402 | EF05403 | EF05403 |
|         | EF05404                                                | EF05405 | EF05406 | EF05407 | EF0P000 |         |
| EF05505 | OURSYS*                                                | OURDMP* | EF05501 | EF05502 | EF05503 | EF05504 |
|         | EF0P000                                                |         |         |         |         |         |
| EF0550C | OURSYS*                                                | OURDMP* | EF05506 | EF05507 | EF05508 | EF05509 |
|         | EF0550A                                                | EF0550B | EF0P000 |         |         |         |
| EF0550D | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF0550E | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF0550F | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF06001 | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF06009 | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF06010 | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF06011 | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EF06022 | OURSYS*                                                | OURDMP* | EF06013 | EF06014 | EF06015 | EF06016 |
|         | EF06017                                                | EF06018 | EF06019 | EF0P000 |         |         |
| EF06033 | OURSYS*                                                | OURDMP* | EF06023 | EF06024 | EF06025 | EF06026 |
|         | EF06027                                                | EF06028 | EF06029 | EF06030 | EF06031 | EF06032 |
|         | EF0P000                                                |         |         |         |         |         |
| EF06053 | OURSYS*                                                | OURDMP* | EF06043 | EF06044 | EF06045 | EF06046 |
|         | EF06047                                                | EF06048 | EF06049 | EF06050 | EF06051 | EF06052 |
|         | EF0P000                                                |         |         |         |         |         |
| EF06069 | OURSYS*                                                | OURDMP* | EF06060 | EF06061 | EF06062 | EF06063 |
|         | EF06064                                                | EF06065 | EF06066 | EF06067 | EF06068 | EF0P000 |
| EF06079 | OURSYS*                                                | OURDMP* | EF06070 | EF06071 | EF06072 | EF06073 |
|         | EF06074                                                | EF06075 | EF06076 | EF06077 | EF06078 | EF0P000 |
| EF06101 | OURSYS*                                                | OURDMP* | EF06100 | EF0P000 |         |         |
| EF06109 | OURSYS*                                                | OURDMP* | EF06108 | EF0P000 |         |         |
| EF06110 | OURSYS*                                                | OURDMP* | EF06108 | EF0P000 |         |         |
| EF06111 | OURSYS*                                                | OURDMP* | EF06108 | EF0P000 |         |         |
| EF06122 | OURSYS*                                                | OURDMP* | EF06112 | EF06113 | EF06114 | EF06115 |
|         | EF06116                                                | EF06117 | EF06118 | EF06119 | EF0P000 |         |
| EF06140 | OURSYS*                                                | OURDMP* | EF06132 | EF06133 | EF06134 | EF06135 |
|         | EF06136                                                | EF06137 | EF06138 | EF06139 | EF0P000 |         |
| EF06150 | OURSYS*                                                | OURDMP* | EF06142 | EF06143 | EF06144 | EF06145 |
|         | EF06146                                                | EF06147 | EF06148 | EF06149 | EF0P000 |         |
| EF06160 | OURSYS*                                                | OURDMP* | EF06152 | EF06153 | EF06154 | EF06155 |
|         | EF06156                                                | EF06157 | EF06158 | EF06159 | EF0P000 |         |
| EF06170 | OURSYS*                                                | OURDMP* | EF06162 | EF06163 | EF06164 | EF06165 |
|         | EF06166                                                | EF06167 | EF06168 | EF06169 | EF0P000 |         |
| EF06180 | OURSYS*                                                | OURDMP* | EF06172 | EF06173 | EF06174 | EF06175 |
|         | EF06176                                                | EF06177 | EF06178 | EF06179 | EF0P000 |         |
| EF06190 | OURSYS*                                                | OURDMP* | EF06182 | EF06183 | EF06184 | EF06185 |
|         | EF06186                                                | EF06187 | EF06188 | EF06189 | EF0P000 |         |
| EF06199 | OURSPC*                                                | OURSYS* | OURDMP* | EF06191 | EF06192 | EF06193 |
|         | EF06194                                                | EF06195 | EF06196 | EF06197 | EF06198 | EF0P000 |
| EF0619I | OURSPC*                                                | OURSYS* | OURDMP* | EF0619A | EF0619B | EF0619C |
|         | EF0619D                                                | EF0619E | EF0619F | EF0619G | EF0619H | EF0P000 |
| EF0619R | OURSPC*                                                | OURSYS* | OURDMP* | EF0619J | EF0619K | EF0619L |
|         | EF0619M                                                | EF0619N | EF0619D | EF0619P | EF0619Q | EF0P000 |
| EFD6201 | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EFD6209 | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EFD6210 | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EFD6211 | OURSYS*                                                | OURDMP* | EF0P000 |         |         |         |
| EFD6222 | OURSYS*                                                | OURDMP* | EF0P000 | EFD6213 | EFD6214 | EFD6215 |
|         | EFD6216                                                | EFD6217 | EFD6218 | EFD6219 |         |         |
| EFD6233 | OURSYS*                                                | OURDMP* | EF0P000 | EFD6223 | EFD6224 | EFD6225 |
|         | EFD6226                                                | EFD6227 | EFD6228 | EFD6229 | EFD6230 | EFD6231 |
|         | EFD6232                                                |         |         |         |         |         |
| EFD6253 | OURSYS*                                                | OURDMP* | EF0P000 | EFD6243 | EFD6244 | EFD6245 |
|         | EFD6246                                                | EFD6247 | EFD6248 | EFD6249 | EFD6250 | EFD6251 |

Table 7-3 Ada Type E Test Programs and Source Code Files (continued)

| PROGRAM | SUPPORT FILES(X - TEST SUPPORT SOFTWARE PACKAGES USED) |         |         |                |         |         |
|---------|--------------------------------------------------------|---------|---------|----------------|---------|---------|
| EFD6269 | EFD6252                                                | OURSYSX | OURDMPX | EF0P000        | EFD6260 | EFD6261 |
|         | EFD6263                                                | OURSYSX | OURDMPX | EF0P000        | EFD6266 | EFD6267 |
| EFD6279 | EFD6273                                                | OURSYSX | OURDMPX | EF0P000        | EFD6270 | EFD6271 |
|         | EFD6274                                                | OURSYSX | OURDMPX | EF0P000        | EFD6276 | EFD6277 |
| EFD6301 | EFD6301                                                | OURSYSX | OURDMPX | EF0P000        | EFD6300 |         |
| EFD6309 | EFD6309                                                | OURSYSX | OURDMPX | EF0P000        | EFD6308 |         |
| EFD6310 | EFD6310                                                | OURSYSX | OURDMPX | EF0P000        | EFD6308 |         |
| EFD6311 | EFD6311                                                | OURSYSX | OURDMPX | EF0P000        | EFD6308 |         |
| EFD6322 | EFD6315                                                | OURSYSX | OURDMPX | EF0P000        | EFD6312 | EFD6313 |
|         | EFD6316                                                | OURSYSX | OURDMPX | EF0P000        | EFD6318 | EFD6319 |
| EFD6340 | EFD6335                                                | OURSYSX | OURDMPX | EF0P000        | EFD6332 | EFD6333 |
|         | EFD6336                                                | OURSYSX | OURDMPX | EF0P000        | EFD6338 | EFD6339 |
| EFD6350 | EFD6345                                                | OURSYSX | OURDMPX | EF0P000        | EFD6342 | EFD6343 |
|         | EFD6346                                                | OURSYSX | OURDMPX | EF0P000        | EFD6348 | EFD6349 |
| EFD6360 | EFD6355                                                | OURSYSX | OURDMPX | EF0P000        | EFD6352 | EFD6353 |
|         | EFD6356                                                | OURSYSX | OURDMPX | EF0P000        | EFD6358 | EFD6359 |
| EFD6370 | EFD6365                                                | OURSYSX | OURDMPX | EF0P000        | EFD6362 | EFD6363 |
|         | EFD6366                                                | OURSYSX | OURDMPX | EF0P000        | EFD6368 | EFD6369 |
| EFD6380 | EFD6375                                                | OURSYSX | OURDMPX | EF0P000        | EFD6372 | EFD6373 |
|         | EFD6376                                                | OURSYSX | OURDMPX | EF0P000        | EFD6378 | EFD6379 |
| EFD6390 | EFD6385                                                | OURSYSX | OURDMPX | EF0P000        | EFD6382 | EFD6383 |
|         | EFD6386                                                | OURSYSX | OURDMPX | EF0P000        | EFD6388 | EFD6389 |
| EF0642B | EF06425                                                | OURSYSX | OURDMPX | EF06422        | EF06429 | EF0642A |
|         | EF06426                                                | OURSYSX | OURDMPX | EF06427        | EF06428 | EF06429 |
|         | EF0P000                                                | OURSYSX | OURDMPX | EF06802        | EF0P000 |         |
| EF06803 | EF06807                                                | OURSYSX | OURDMPX | EF06806        | EF0P000 |         |
| EF06809 | EF06809                                                | OURSYSX | OURDMPX | EF06808        | EF0P000 |         |
| EF0680B | EF0680D                                                | OURSYSX | OURDMPX | EF0680A        | EF0P000 |         |
| EF0680F | EF0680H                                                | OURSYSX | OURDMPX | EF0680C        | EF0P000 |         |
| EFD680H | EF0680J                                                | OURSYSX | OURDMPX | EF0680E        | EF0P000 |         |
| EFD680J | EF06811                                                | OURSYSX | OURDMPX | EF0680G        | EF0P000 |         |
| EF06811 | EF06815                                                | OURSYSX | OURDMPX | <u>EF0680I</u> |         |         |
| EF06815 | EF06817                                                | OURSYSX | OURDMPX | EF06810        | EF0P000 |         |
| EF06817 | EF06819                                                | OURSYSX | OURDMPX | EF06814        | EF0P000 |         |
| EF06819 | EF06821                                                | OURSYSX | OURDMPX | EF06816        | EF0P000 |         |
| EF06821 | EF06823                                                | OURSYSX | OURDMPX | EF06818        | EF0P000 |         |
| EF06823 | EF06825                                                | OURSYSX | OURDMPX | EF06820        | EF0P000 |         |
| EF06825 | EFN9301                                                | OURSYSX | OURDMPX | EF06822        | EF0P000 |         |
| EFN9301 | EFN9302                                                | OURSYSX | OURDMPX | EF06824        | EF0P000 |         |
| EFN9302 | EFN9303                                                | OURSYSX | OURDMPX | EFN9300        |         |         |
| EFN9303 | EF09501                                                | OURSYSX | OURDMPX | EFN9300        |         |         |
| EF09501 | EF09502                                                | OURSYSX | OURDMPX | EFN9300        |         |         |
| EF09502 | EF09503                                                | OURSYSX | OURDMPX | EF09500        | EF0P000 |         |
| EF09503 | EF09504                                                | OURSYSX | OURDMPX | EF09500        | EF0P000 |         |
| EF09504 | EF09505                                                | OURSYSX | OURDMPX | EF09500        | EF0P000 |         |
| EF09505 | EF09506                                                | OURSYSX | OURDMPX | EF09500        | EF0P000 |         |
| EF09506 | EF09507                                                | OURSYSX | OURDMPX | EF09500        | EF0P000 |         |
| EF09507 | EF09508                                                | OURSYSX | OURDMPX | EF09500        | EF0P000 |         |
| EF09508 | EF09509                                                | OURSYSX | OURDMPX | EF09500        | EF0P000 |         |
| EF09509 | EFN9511                                                | OURSYSX | OURDMPX | EF09500        | EF0P000 |         |
| EFN9511 | EF09600                                                | OURSYSX | OURDMPX | EFN9510        |         |         |
| EF09600 | EF09601                                                | OURSYSX | OURDMPX | EF0P000        |         |         |
| EF09601 | EF09602                                                | OURSYSX | OURDMPX | EF0P000        |         |         |
| EF09602 | EF09603                                                | OURSYSX | OURDMPX | EF0P000        |         |         |
| EF09603 | EF09604                                                | OURSYSX | OURDMPX | EF0P000        |         |         |
| EF09604 | EF09605                                                | OURSYSX | OURDMPX | EF0P000        |         |         |
| EF09605 | EF09606                                                | OURSYSX | OURDMPX | EF0P000        |         |         |
| EF09606 | EF09607                                                | OURSYSX | OURDMPX | EF0P000        |         |         |
| EF09607 | EFN9611                                                | OURSYSX | OURDMPX | EF0P000        |         |         |
| EFN9611 | EFN9612                                                | OURSYSX | OURDMPX | EFN9610        |         |         |
| EFN9612 | EFN9613                                                | OURSYSX | OURDMPX | EFN9610        |         |         |
| EFN9613 |                                                        |         |         |                |         |         |

Table 7-3 Ada Type E Test Programs and Source Code Files (continued)

| PROGRAM   | SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED) |          |          |         |           |         |
|-----------|--------------------------------------------------------|----------|----------|---------|-----------|---------|
| EF09711   | OURSYS*                                                | EF09710  | EF0P000  |         |           |         |
| EF09713   | OURSYS*                                                | EF09712  | EF0P000  |         |           |         |
| EF09720   | OURSPC*                                                | OURSYS*  | OURDMP*  | EF09500 | EF0P000   |         |
| EF09721   | OURSPC*                                                | OURSYS*  | OURDMP*  | EF09500 | EF0P000   |         |
| EF09731   | OURSPC*                                                | OURSYS*  | OURDMP*  | EF09500 | EF0P000   |         |
| EF09901   | OURSYS*                                                | EF09900  | EF0P000  |         |           |         |
| EF09902   | OURSYS*                                                | EF09900  | EF0P000  |         |           |         |
| EF09903   | OURSYS*                                                | EF09900  | EF0P000  |         |           |         |
| EFM9A01   | OURSPC*                                                | OURSYS*  | EFM9A00  |         |           |         |
| EFM9A02   | OURSPC*                                                | OURSYS*  | EFM9A00  |         |           |         |
| EFM9A03   | OURSPC*                                                | OURSYS*  | EFM9A00  |         |           |         |
| EF09B01   | OURSPC*                                                | OURSYS*  | OURDMP*  | EF09500 | EF0P000   |         |
| EFD9C00   | OURSPC*                                                | OURSYS*  | EF0P000  | EFD9000 |           |         |
| EFD9C01   | OURSPC*                                                | OURSYS*  | EF0P000  | EFD9000 | EFD9200   |         |
| EFD9C02   | OURSPC*                                                | OURSYS*  | EF0P000  | EFD9000 | EFD9200   |         |
| EFD9C03** | OURSPC*                                                | OURSYS*  | EF0P000  | EFD9000 | EFD9200   |         |
| EFD9C04** | OURSPC*                                                | OURSYS*  | EF0P000  | EFD9000 | EFD9200   |         |
| EF0C301   | OURSYS*                                                | OURDMP*  | EF0C100  | EF0C101 | EF0C300   | EF0P000 |
| EF0C302   | OURSYS*                                                | OURDMP*  | EF0C100  | EF0C101 | EF0C300   | EF0P000 |
| EF0C304   | OURSYS*                                                | OURDMP*  | EF0C102  | EF0C103 | EF0C303   | EF0P000 |
| EF0C305   | OURSYS*                                                | OURDMP*  | EF0C102  | EF0P000 |           |         |
| EF0C306   | OURSYS*                                                | OURDMP*  | EF0C102  | EF0P000 |           |         |
| EF0C307   | OURSYS*                                                | OURDMP*  | EF0C102  | EF0P000 |           |         |
| EFDC311   | OURSYS*                                                | OURDMP*  | EF0P000  | EFDC104 | EFDC105   | EFDC310 |
| EFDC314   | OURSYS*                                                | OURDMP*  | EF0P000  | EFDC106 | EFDC107** | EFDC313 |
| EFDD600   | OURSPC*                                                | OURSYS*  | EF0P000  |         |           |         |
| EFDD601   | OURSPC*                                                | OURSYS*  | EF0P000  |         |           |         |
| EFDD602   | OURSPC*                                                | OURSYS*  | EF0P000  |         |           |         |
| EFDD603   | OURSPC*                                                | OURSYS*  | EF0P000  |         |           |         |
| EFDD604   | OURSPC*                                                | OURSYS*  | EF0P000  |         |           |         |
| EFDD605   | OURSPC*                                                | OURSYS*  | EF0P000  |         |           |         |
| EFDD606   | OURSPC*                                                | OURSYS*  | EF0P000  |         |           |         |
| EFDD607   | OURSPC*                                                | OURSYS*  | EF0P000  |         |           |         |
| EFDD608*  | OURSPC*                                                | OURSYS*  | EF0P000  |         |           |         |
| EFDD609   | OURSPC*                                                | OURSYS*  | EF0P000  |         |           |         |
| EFDD610   | OURSPC*                                                | OURSYS*  | EF0P000  |         |           |         |
| EFDD611   | OURSPC*                                                | OURSYS*  | EF0P000  |         |           |         |
| EFDDA01   | OURSPC*                                                | OURSYS*  | EF0P000  |         |           |         |
| EFDDA02   | OURSPC*                                                | OURSYS*  | EF0P000  |         |           |         |
| EFDE220   | OURSYS*                                                | OURDMP*  | EF0P000  | EFDE000 | EFDE201   | EFDE202 |
|           | EFDE203                                                | EFDE204  | EFDE205  | EFDE206 | EFDE207   | EFDE208 |
|           | EFDE209                                                | EFDE20A  | EFDE211  | EFDE212 | EFDE213   | EFDE214 |
|           | EFDE215                                                | EFDE216  |          |         |           |         |
| EFDE250   | OURSYS*                                                | OURDMP*  | EF0P000  | EFDE000 | EFDE231   | EFDE232 |
|           | EFDE233                                                | EFDE234  | EFDE235  | EFDE236 | EFDE237   | EFDE238 |
|           | EFDE239                                                | EFDE23A  | EFDE241  | EFDE242 | EFDE243   | EFDE244 |
|           | EFDE245                                                | EFDE246  |          |         |           |         |
| EFDE420   | OURSYS*                                                | OURDMP*  | EF0P000  | EFDE000 | EFDE401   | EFDE402 |
|           | EFDE403                                                | EFDE404  | EFDE405  | EFDE406 | EFDE407   | EFDE408 |
|           | EFDE409                                                | EFDE40A  | EFDE411  | EFDE412 | EFDE413   | EFDE414 |
|           | EFDE415                                                | EFDE416  |          |         |           |         |
| EFDE450   | OURSYS*                                                | OURDMP*  | EF0P000  | EFDE000 | EFDE431   | EFDE432 |
|           | EFDE433                                                | EFDE434  | EFDE435  | EFDE436 | EFDE437   | EFDE438 |
|           | EFDE439                                                | EFDE43A  | EFDE441  | EFDE442 | EFDE443   | EFDE444 |
|           | EFDE445                                                | EFDE446  |          |         |           |         |
| EFDF000   | OURSYS*                                                | OURDMP*  | MATHFUN* | EF0P000 |           |         |
| EFDF001   | OURSYS*                                                | OURDMP*  | MATHFUN* | EF0P000 |           |         |
| EFDF002   | OURSYS*                                                | OURDMP*  | MATHFUN* | EF0P000 |           |         |
| EFDF003   | OURSYS*                                                | OURDMP*  | MATHFUN* | EF0P000 |           |         |
| EFDF004   | OURSYS*                                                | OURDMP*  | MATHFUN* | EF0P000 |           |         |
| EFDF005   | OURSYS*                                                | OURDMP*  | MATHFUN* | EF0P000 |           |         |
| EGD0001   | OURSYS*                                                | MATHFUN* | EG0P000  | EGD0000 |           |         |
| EGD0003   | OURSYS*                                                | EG0P000  | EGD0002  |         |           |         |

\*\* Multiple versions of source file supplied(USE and ADA file types)

\*\* Source file supplied with DEC file type only

\* Source file supplied with USE file type only

Table 7-3 Ada Type E Test Programs and Source Code Files (continued)

| PROGRAM    | SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED) |          |          |          |          |          |
|------------|--------------------------------------------------------|----------|----------|----------|----------|----------|
| EGD0009    | OURSYS*                                                | EGOP000  | EGD0004  | EGD0005  | EGD0006  | EGD0007  |
| EG0000C    | OURSYS*                                                | OURDMP*  | EGOP000  |          |          |          |
| EGD0000E   | OURSYS*                                                | MATHFUN* | EGOP000  | EGD0000  | EGD0000D |          |
| EGN0000K   | OURSYS*                                                | EGN000F  | EGN0000G | EGN0000H | EGN0000I | EGN000J  |
| EGD00039   | OURSPC*                                                | OURSYS*  | EGOP000  | EGD00004 | EGD00005 | EGD00006 |
|            | EGD00007                                               | EGD00008 | EGD00019 | EGD00029 |          |          |
| EGD00049   | OURSPC*                                                | OURSYS*  | EGOP000  | EGD00004 | EGD00005 | EGD00006 |
|            | EGD00007                                               | EGD00008 | EGD00019 | EGD00029 |          |          |
| EGD00059** | OURSPC*                                                | OURSYS*  | EGOP000  | EGD00004 | EGD00005 | EGD00006 |
|            | EGD00007                                               | EGD00008 | EGD00019 | EGD00029 |          |          |
| EL09101    | OURSPC*                                                | OURSYS*  | EL09000  | EL09100  | EL0P000  |          |
| EL09111    | OURSPC*                                                | OURSYS*  | EL09000  | EL09100  | EL0P000  |          |
| EL09121    | OURSPC*                                                | OURSYS*  | EL09000  | EL09100  | EL0P000  |          |
| EL09131    | OURSPC*                                                | OURSYS*  | EL09000  | EL09100  | EL0P000  |          |
| ELD9202    | OURSPC*                                                | OURSYS*  | EL09000  | EL09100  | EL0P000  | ELD9200  |
| ELD9203    | OURSPC*                                                | OURSYS*  | EL09000  | EL09100  | EL0P000  | ELD9200  |
| ELD9204**  | OURSPC*                                                | OURSYS*  | EL09000  | EL09100  | EL0P000  | ELD9200  |
| ELD9212    | OURSPC*                                                | OURSYS*  | EL09000  | EL09100  | EL0P000  | ELD9200  |
| ELD9213    | OURSPC*                                                | OURSYS*  | EL09000  | EL09100  | EL0P000  | ELD9200  |
| ELD9214**  | OURSPC*                                                | OURSYS*  | EL09000  | EL09100  | EL0P000  | ELD9200  |
| ELD9222    | OURSPC*                                                | OURSYS*  | EL09000  | EL09100  | EL0P000  | ELD9200  |
| ELD9223    | OURSPC*                                                | OURSYS*  | EL09000  | EL09100  | EL0P000  | ELD9200  |
| ELD9224**  | OURSPC*                                                | OURSYS*  | EL09000  | EL09100  | EL0P000  | ELD9200  |
| ELD9232    | OURSPC*                                                | OURSYS*  | EL09000  | EL09100  | EL0P000  | ELD9200  |
| ELD9233    | OURSPC*                                                | OURSYS*  | EL09000  | EL09100  | EL0P000  | ELD9200  |
| ELD9234**  | OURSPC*                                                | OURSYS*  | EL09000  | EL09100  | EL0P000  | ELD9200  |
| ELDE2C1    | OURSPC*                                                | OURSYS*  | EL0P000  | ELDE000  | ELDE2B1  |          |
| ELDE2C2    | OURSPC*                                                | OURSYS*  | EL0P000  | ELDE000  | ELDE2B1  |          |
| ELDE2C3**  | OURSPC*                                                | OURSYS*  | EL0P000  | ELDE000  | ELDE2B1  |          |
| ELDE2C4**  | OURSPC*                                                | OURSYS*  | EL0P000  | ELDE000  | ELDE2B1  |          |
| ELDE2C5    | OURSPC*                                                | OURSYS*  | EL0P000  | ELDE000  | ELDE2B2  |          |
| ELDE2C6    | OURSPC*                                                | OURSYS*  | EL0P000  | ELDE000  | ELDE2B2  |          |
| ELDE2C7**  | OURSPC*                                                | OURSYS*  | EL0P000  | ELDE000  | ELDE2B2  |          |
| ELDE2C8**  | OURSPC*                                                | OURSYS*  | EL0P000  | ELDE000  | ELDE2B2  |          |
| ELDE4C1    | OURSPC*                                                | OURSYS*  | EL0P000  | ELDE000  | ELDE4B1  |          |
| ELDE4C2    | OURSPC*                                                | OURSYS*  | EL0P000  | ELDE000  | ELDE4B1  |          |
| ELDE4C3**  | OURSPC*                                                | OURSYS*  | EL0P000  | ELDE000  | ELDE4B1  |          |
| ELDE4C4**  | OURSPC*                                                | OURSYS*  | EL0P000  | ELDE000  | ELDE4B1  |          |
| ELDE4C5    | OURSPC*                                                | OURSYS*  | EL0P000  | ELDE000  | ELDE4B2  |          |
| ELDE4C6    | OURSPC*                                                | OURSYS*  | EL0P000  | ELDE000  | ELDE4B2  |          |
| ELDE4C7**  | OURSPC*                                                | OURSYS*  | EL0P000  | ELDE000  | ELDE4B2  |          |
| ELDE4C8**  | OURSPC*                                                | OURSYS*  | EL0P000  | ELDE000  | ELDE4B2  |          |
| E000104    | OURSYS*                                                | OURDMP*  | E000002  | E000102  | E000103  | E00P000  |
| E000109    | OURSYS*                                                | OURDMP*  | E000001  | E000107  | E000108  | E00P000  |
| E000114    | OURSYS*                                                | OURDMP*  | E000001  | E000112  | E000113  | E00P000  |
| E000204    | OURSYS*                                                | OURDMP*  | E000202  | E000203  | E00P000  |          |
| E000209    | OURSYS*                                                | OURDMP*  | E000001  | E000207  | E000208  | E00P000  |
| E000300    | OURSYS*                                                | E00P000  |          |          |          |          |
| E000305    | OURSYS*                                                | E00P000  |          |          |          |          |
| E000310    | OURSYS*                                                | E00P000  |          |          |          |          |
| E000313    | OURSYS*                                                | OURDMP*  | E000311  | E000312  | E00P000  |          |
| E000316    | OURSYS*                                                | OURDMP*  | E000314  | E000315  | E00P000  |          |
| E000319    | OURSYS*                                                | OURDMP*  | E000317  | E000318  | E00P000  |          |
| E000322    | OURSYS*                                                | OURDMP*  | E000320  | E000321  | E00P000  |          |
| E000325    | OURSYS*                                                | OURDMP*  | E000323  | E000324  | E00P000  |          |
| E000328    | OURSYS*                                                | OURDMP*  | E000326  | E000327  | E00P000  |          |
| E000331    | OURSYS*                                                | OURDMP*  | E000329  | E000330  | E00P000  |          |
| E000334    | OURSYS*                                                | OURDMP*  | E000332  | E000333  | E00P000  |          |
| E000337    | OURSYS*                                                | OURDMP*  | E000335  | E000336  | E00P000  |          |
| E000340    | OURSYS*                                                | OURDMP*  | E000338  | E000339  | E00P000  |          |
| E000343    | OURSYS*                                                | OURDMP*  | E000341  | E000342  | E00P000  |          |
| E000346    | OURSYS*                                                | OURDMP*  | MATHFUN* | E00P000  | E000344  | E000345  |
| E000350    | OURSYS*                                                | OURDMP*  | E000347  | E000348  | E000349  | E00P000  |

\*\* Source file supplied with DEC file type only

Table 7-3 Ada Type E Test Programs and Source Code Files (concluded)

| PROGRAM | SUPPORT FILES(X - TEST SUPPORT SOFTWARE PACKAGES USED) |         |         |         |         |         |
|---------|--------------------------------------------------------|---------|---------|---------|---------|---------|
| E000353 | OURSYSX                                                | OURDMPX | E000347 | E000351 | E000352 | E00P000 |
| E000356 | OURSYSX                                                | OURDMPX | E000354 | E000355 | E00P000 |         |
| E000359 | OURSYSX                                                | OURDMPX | E000357 | E000358 | E00P000 |         |
| E000362 | OURSYSX                                                | OURDMPX | E000360 | E000361 | E00P000 |         |
| E000365 | OURSPCX                                                | OURSYSX | OURDMPX | E000363 | E000364 | E00P000 |
| E000368 | OURSPCX                                                | OURSYSX | OURDMPX | E000366 | E000367 | E00P000 |
| E00036B | OURSPCX                                                | OURSYSX | OURDMPX | E000369 | E00036A | E00P000 |
| E0D036E | OURSPCX                                                | OURSYSX | OURDMPX | E00P000 | E0D036C | E0D036D |
| E00036H | OURSPCX                                                | OURSYSX | OURDMPX | E00036F | E00036G | E00P000 |
| E00036K | OURSPCX                                                | OURSYSX | OURDMPX | E00036I | E00036J | E00P000 |
| E00036N | OURSPCX                                                | OURSYSX | OURDMPX | E00036L | E00036M | E00P000 |
| E0D036Q | OURSPCX                                                | OURSYSX | OURDMPX | E00P000 | E0D036O | E0D036P |
| E0D036T | OURSPCX                                                | OURSYSX | OURDMPX | E00P000 | E0D036R | E0D036S |
| E00036W | OURSPCX                                                | OURSYSX | OURDMPX | E00036U | E00036V | E00P000 |
| E0D036Z | OURSYSX                                                | OURDMPX | OURTYPX | E00P000 | E0D036X | E0D036Y |
| E0D0373 | OURSPCX                                                | OURSYSX | OURDMPX | E00P000 | E0D0370 | E0D0371 |
|         | E0D0372                                                |         |         |         |         |         |
| E000378 | OURSYSX                                                | OURDMPX | E000374 | E000375 | E000376 | E000377 |
|         | E00P000                                                |         |         |         |         |         |
| E0D0383 | OURSPCX                                                | OURSYSX | OURDMPX | E000374 | E00P000 | E0D0380 |
|         | E0D0381                                                | E0D0382 |         |         |         |         |
| E000391 | OURSYSX                                                | OURDMPX | E000390 | E00P000 |         |         |
| E000404 | OURSYSX                                                | OURDMPX | E000402 | E000403 | E00P000 |         |
| E000500 | OURSYSX                                                | E00P000 |         |         |         |         |
| E000504 | OURSYSX                                                | OURDMPX | E000502 | E000503 | E00P000 |         |
| E000509 | OURSYSX                                                | OURDMPX | E000507 | E000508 | E00P000 |         |
| E000514 | OURSYSX                                                | OURDMPX | E000512 | E000513 | E00P000 |         |
| E000519 | OURSYSX                                                | OURDMPX | E000517 | E000518 | E00P000 |         |
| E0D0525 | OURSYSX                                                | OURDMPX | E00P000 | E0D0523 | E0D0524 |         |
| E0D0529 | OURSYSX                                                | OURDMPX | E00P000 | E0D0526 | E0D0527 | E0D0528 |
| E000604 | OURSYSX                                                | OURDMPX | E000602 | E000603 | E00P000 |         |
| E000605 | OURSYSX                                                | OURDMPX | E00P000 |         |         |         |
| E000606 | OURSYSX                                                | OURDMPX | E00P000 |         |         |         |
| E000607 | OURSYSX                                                | OURDMPX | E00P000 |         |         |         |
| E000704 | OURSYSX                                                | OURDMPX | E000702 | E000703 | E00P000 |         |
| E000705 | OURSYSX                                                | OURDMPX | E00P000 |         |         |         |
| E000708 | OURSYSX                                                | OURDMPX | E000706 | E000707 | E00P000 |         |
| E000711 | OURSYSX                                                | OURDMPX | E000709 | E000710 | E00P000 |         |
| E000713 | OURSYSX                                                | OURDMPX | E00P000 |         |         |         |
| E000714 | OURSYSX                                                | OURDMPX | E00P000 |         |         |         |
| E000715 | OURSYSX                                                | OURDMPX | E00P000 |         |         |         |
| E000716 | OURSYSX                                                | OURDMPX | E00P000 |         |         |         |
| E000717 | OURSYSX                                                | OURDMPX | E00P000 |         |         |         |
| E000718 | OURSYSX                                                | OURDMPX | E00P000 |         |         |         |
| E000721 | OURSYSX                                                | OURDMPX | E000719 | E000720 | E00P000 |         |

Table G-4. Ada Type S Test Programs and Source Code Files

| PROGRAM  | SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED) |         |         |         |         |         |
|----------|--------------------------------------------------------|---------|---------|---------|---------|---------|
| SA00000  | OURSYS*                                                | OURDMP* | SA0P000 |         |         |         |
| SF03519  | OURSYS*                                                | OURDMP* | SF03500 | SF03501 | SF03502 | SF03503 |
|          | SF03504                                                | SF03509 | SF03510 | SF03511 | SF03512 | SF03513 |
|          | SF03514                                                | SF03517 | SF03518 | SF0P000 |         |         |
| SF03550  | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SF03551  | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SF03620  | OURSYS*                                                | OURDMP* | SF03600 | SF03601 | SF03602 | SF03603 |
|          | SF03604                                                | SF03605 | SF03606 | SF03607 | SF03608 | SF03609 |
|          | SF03610                                                | SF03611 | SF03612 | SF03613 | SF03614 | SF03615 |
|          | SF03616                                                | SF03617 | SF03618 | SF03619 | SF0P000 |         |
| SF03650  | OURSYS*                                                | OURDMP* | SF03630 | SF03631 | SF03632 | SF03633 |
|          | SF03634                                                | SF03635 | SF03636 | SF03637 | SF03638 | SF03639 |
|          | SF03641                                                | SF03642 | SF03643 | SF03644 | SF03645 | SF03646 |
|          | SF03647                                                | SF03648 | SF03649 | SF0P000 |         |         |
| SF03704  | OURSPC*                                                | OURSYS* | OURDMP* | SF03700 | SF03701 | SF03702 |
|          | SF03703                                                | SF0P000 |         |         |         |         |
| SF03805  | OURSPC*                                                | OURSYS* | OURDMP* | SF03800 | SF03801 | SF03802 |
|          | SF03803                                                | SF03804 | SF0P000 |         |         |         |
| SF04120  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04121  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04122  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04123  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04124  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04125  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04126  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04127  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SFD4128* | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SF04129  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SFD412A  | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SF0412B  | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SFD412C  | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SFD412D  | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SF04130  | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SF04131  | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SF04132  | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SF04133  | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SFD4135  | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SFD4136  | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SFD4137  | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SFD4138  | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SFD4139  | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SFD413A  | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SFD413B  | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SFD413C  | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SF0413D  | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SFD413E  | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SFD413G  | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SF0413H  | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SF0413I  | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SF0413J  | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SF0413K  | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SF04310  | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SF04311  | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SF04312  | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SF04510  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04511  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04512  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04513  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04514  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04515  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04516  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04517  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF0451J  | OURSYS*                                                | OURDMP* | SF04518 | SF04519 | SF0451A | SF0451B |
|          | SF0451C                                                | SF0451D | SF0451E | SF0451F | SF0451G | SF0451H |
|          | SF0451I                                                | SF0P000 |         |         |         |         |

\* Source file supplied with USE file type only



Table G-4. Ada Type S Test Programs and Source Code Files (Continued)

| PROGRAM  | SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED) |         |         |         |         |         |
|----------|--------------------------------------------------------|---------|---------|---------|---------|---------|
| SFD451U* | OURSYS*                                                | OURDMP* | OURTYP* | SF0P000 | SFD451K | SFD451L |
|          | SFD451M                                                | SFD451N | SFD451O | SFD451P | SFD451Q | SFD451R |
|          | SFD451S                                                |         |         |         |         |         |
| SF0451Z  | OURSYS*                                                | OURDMP* | SF0451V | SF0451W | SF0451X | SF0451Y |
|          | SF0P000                                                |         |         |         |         |         |
| SF04520  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04521  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04522  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SFD4523  | OURSYS*                                                | OURDMP* | OURTYP* | SF0P000 |         |         |
| SFD4524  | OURSYS*                                                | OURDMP* | OURTYP* | SF0P000 |         |         |
| SFD4525  | OURSYS*                                                | OURDMP* | OURTYP* | SF0P000 |         |         |
| SFD4526  | OURSYS*                                                | OURDMP* | OURTYP* | SF0P000 |         |         |
| SF04527  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SFD4528  | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SF04529  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SFD452A  | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SF04530  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04531  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04532  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04533  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04534  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04535  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04536  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04537  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04538  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04539  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF0453A  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF0453B  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF0453C  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04540  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04541  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04550  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04551  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04552  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04553  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04554  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04555  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04556  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04557  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04558  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04559  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SFD455D  | OURSYS*                                                | OURDMP* | OURTYP* | SF0P000 |         |         |
| SFD455E  | OURSYS*                                                | OURDMP* | OURTYP* | SF0P000 |         |         |
| SFD455F  | OURSYS*                                                | OURDMP* | OURTYP* | SF0P000 |         |         |
| SFD455G  | OURSYS*                                                | OURDMP* | OURTYP* | SF0P000 |         |         |
| SFD455I  | OURSYS*                                                | OURDMP* | OURTYP* | SF0P000 |         |         |
| SFD455J  | OURSYS*                                                | OURDMP* | OURTYP* | SF0P000 |         |         |
| SFD455K  | OURSYS*                                                | OURDMP* | OURTYP* | SF0P000 |         |         |
| SFD455L  | OURSYS*                                                | OURDMP* | OURTYP* | SF0P000 |         |         |
| SF0455N  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF0455O  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04560  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04562  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04563  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SFD4566  | OURSYS*                                                | OURDMP* | OURTYP* | SF0P000 |         |         |
| SFD4567  | OURSYS*                                                | OURDMP* | OURTYP* | SF0P000 |         |         |
| SFL4568  | OURSYS*                                                | OURDMP* | OURTYP* | SF0P000 |         |         |
| SFD4569  | OURSYS*                                                | OURDMP* | OURTYP* | SF0P000 |         |         |
| SF04600  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04601  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF04602  | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SFD4603  | OURSYS*                                                | OURDMP* | OURTYP* | SF0P000 |         |         |
| SFD4604  | OURSYS*                                                | OURDMP* | OURTYP* | SF0P000 |         |         |
| SFD4605  | OURSYS*                                                | OURDMP* | OURTYP* | SF0P000 |         |         |
| SFD4606  | OURSYS*                                                | OURDMP* | OURTYP* | SF0P000 |         |         |

\* Source file supplied with USE file type only

Table G-4. Ada Type S Test Programs and Source Code Files (Continued)

| <u>PROGRAM</u> | <u>SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED)</u> |           |         |         |                 |
|----------------|---------------------------------------------------------------|-----------|---------|---------|-----------------|
| SFD4607        | OURSYS*                                                       | OURDMP*   | OURTYP* | SFOP000 |                 |
| SFD4608        | OURSYS*                                                       | OURDMP*   | OURTYP* | SFOP000 |                 |
| SFD4609        | OURSYS*                                                       | OURDMP*   | OURTYP* | SFOP000 |                 |
| SFD460A        | OURSYS*                                                       | OURDMP*   | OURTYP* | SFOP000 |                 |
| SFD460B        | OURSYS*                                                       | OURDMP*   | OURTYP* | SFOP000 |                 |
| SF0460E        | OURSYS*                                                       | OURDMP*   | SFOP000 |         |                 |
| SF0460F        | OURSYS*                                                       | OURDMP*   | SFOP000 |         |                 |
| SF0460G        | OURSYS*                                                       | OURDMP*   | SFOP000 |         |                 |
| SF0460H        | OURSYS*                                                       | OURDMP*   | SFOP000 |         |                 |
| SF0460I        | OURSYS*                                                       | OURDMP*   | SFOP000 |         |                 |
| SF0460J        | OURSPC*                                                       | OURSYS*   | OURDMP* | SFOP000 |                 |
| SFD460K        | OURSPC*                                                       | OURSYS*   | OURDMP* | SFOP000 |                 |
| SFD460L        | OURSPC*                                                       | OURSYS*   | OURDMP* | SFOP000 |                 |
| SF0460M        | OURSPC*                                                       | OURSYS*   | OURDMP* | SFOP000 |                 |
| SFD460N        | OURSPC*                                                       | OURSYS*   | OURDMP* | SFOP000 |                 |
| SFD460O        | OURSPC*                                                       | OURSYS*   | OURDMP* | SFOP000 |                 |
| SFD4804        | OURSPC*                                                       | OURSYS*   | OURDMP* | SFOP000 | SFD4800 SFD4801 |
|                | SFD4802                                                       | SFD4803** |         |         |                 |
| SF05200        | OURSYS*                                                       | OURDMP*   | SFOP000 |         |                 |
| SF05201        | OURSYS*                                                       | OURDMP*   | SFOP000 |         |                 |
| SF05202        | OURSYS*                                                       | OURDMP*   | SFOP000 |         |                 |
| SF05203        | OURSYS*                                                       | OURDMP*   | SFOP000 |         |                 |
| SF05204        | OURSYS*                                                       | OURDMP*   | SFOP000 |         |                 |
| SF05205        | OURSYS*                                                       | OURDMP*   | SFOP000 |         |                 |
| SF05206        | OURSYS*                                                       | OURDMP*   | SFOP000 |         |                 |
| SF05207        | OURSYS*                                                       | OURDMP*   | SFOP000 |         |                 |
| SF05208        | OURSYS*                                                       | OURDMP*   | SFOP000 |         |                 |
| SF05209        | OURSYS*                                                       | OURDMP*   | SFOP000 |         |                 |
| SF0520A        | OURSYS*                                                       | OURDMP*   | SFOP000 |         |                 |
| SF0520B        | OURSYS*                                                       | OURDMP*   | SFOP000 |         |                 |
| SFD520C        | OURSYS*                                                       | OURDMP*   | OURTYP* | SFOP000 |                 |
| SFD520D        | OURSYS*                                                       | OURDMP*   | OURTYP* | SFOP000 |                 |
| SFD520E        | OURSYS*                                                       | OURDMP*   | OURTYP* | SFOP000 |                 |
| SFD520F        | OURSYS*                                                       | OURDMP*   | OURTYP* | SFOP000 |                 |
| SFD520G        | OURSYS*                                                       | OURDMP*   | OURTYP* | SFOP000 |                 |
| SFD520H        | OURSYS*                                                       | OURDMP*   | OURTYP* | SFOP000 |                 |
| SFD520I        | OURSYS*                                                       | OURDMP*   | OURTYP* | SFOP000 |                 |
| SFD520J        | OURSYS*                                                       | OURDMP*   | OURTYP* | SFOP000 |                 |
| SF0520M        | OURSPC*                                                       | OURSYS*   | OURDMP* | SFOP000 |                 |
| SFD520N        | OURSPC*                                                       | OURSYS*   | OURDMP* | SFOP000 |                 |
| SF0520O        | OURSPC*                                                       | OURSYS*   | OURDMP* | SFOP000 |                 |
| SFD520P        | OURSPC*                                                       | OURSYS*   | OURDMP* | SFOP000 |                 |
| SFD520Q        | OURSPC*                                                       | OURSYS*   | OURDMP* | SFOP000 |                 |
| SF0520R        | OURSPC*                                                       | OURSYS*   | OURDMP* | SFOP000 |                 |
| SF0520S        | OURSPC*                                                       | OURSYS*   | OURDMP* | SFOP000 |                 |
| SF05210        | OURSYS*                                                       | OURDMP*   | SFOP000 |         |                 |
| SF05211        | OURSYS*                                                       | OURDMP*   | SFOP000 |         |                 |
| SF05212        | OURSYS*                                                       | OURDMP*   | SFOP000 |         |                 |
| SF05213        | OURSYS*                                                       | OURDMP*   | SFOP000 |         |                 |
| SF05214        | OURSYS*                                                       | OURDMP*   | SFOP000 |         |                 |
| SF05215        | OURSYS*                                                       | OURDMP*   | SFOP000 |         |                 |
| SFD5218        | OURSYS*                                                       | OURDMP*   | OURTYP* | SFOP000 |                 |
| SFD5219        | OURSYS*                                                       | OURDMP*   | OURTYP* | SFOP000 |                 |
| SFD521A        | OURSYS*                                                       | OURDMP*   | OURTYP* | SFOP000 |                 |
| SFD521B        | OURSYS*                                                       | OURDMP*   | OURTYP* | SFOP000 |                 |
| SFD521C        | OURSYS*                                                       | OURDMP*   | OURTYP* | SFOP000 |                 |
| SFD521D        | OURSYS*                                                       | OURDMP*   | OURTYP* | SFOP000 |                 |
| SFD521E        | OURSYS*                                                       | OURDMP*   | OURTYP* | SFOP000 |                 |
| SFD521F        | OURSYS*                                                       | OURDMP*   | OURTYP* | SFOP000 |                 |
| SF0521H        | OURSYS*                                                       | OURDMP*   | SFOP000 |         |                 |
| SF0521I        | OURSYS*                                                       | OURDMP*   | SFOP000 |         |                 |
| SF0521J        | OURSYS*                                                       | OURDMP*   | SFOP000 |         |                 |
| SF0521K        | OURSYS*                                                       | OURDMP*   | SFOP000 |         |                 |
| SFD521K        | OURSPC*                                                       | OURSYS*   | OURDMP* | SFOP000 |                 |

\*\* Multiple versions of source file supplied(USE and ADA file types)

Table G-4. Ada Type S Test Programs and Source Code Files (Continued)

| PROGRAM | SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED) |         |         |         |         |         |
|---------|--------------------------------------------------------|---------|---------|---------|---------|---------|
| SF0521L | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SFD521M | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SF0521N | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SFD521O | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SFD521P | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 |         |         |
| SF05304 | OURSYS*                                                | OURDMP* | SF05300 | SF05301 | SF05302 | SF05303 |
|         | SF0P000                                                |         |         |         |         |         |
| SF05308 | OURSYS*                                                | OURDMP* | SF05305 | SF05306 | SF05307 | SF0P000 |
| SF05408 | OURSYS*                                                | OURDMP* | SF05400 | SF05401 | SF05402 | SF05403 |
|         | SF05404                                                | SF05405 | SF05406 | SF05407 | SF0P000 |         |
| SF05505 | OURSYS*                                                | OURDMP* | SF05501 | SF05502 | SF05503 | SF05504 |
|         | SF0P000                                                |         |         |         |         |         |
| SF0550C | OURSYS*                                                | OURDMP* | SF05506 | SF05507 | SF05508 | SF05509 |
|         | SF0550A                                                | SF0550B | SF0P000 |         |         |         |
| SF0550D | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF0550E | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF0550F | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF06001 | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF06009 | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF06010 | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF06011 | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SF06022 | OURSYS*                                                | OURDMP* | SF06013 | SF06014 | SF06015 | SF06016 |
|         | SF06017                                                | SF06018 | SF06019 | SF0P000 |         |         |
| SF06033 | OURSYS*                                                | OURDMP* | SF06023 | SF06024 | SF06025 | SF06026 |
|         | SF06027                                                | SF06028 | SF06029 | SF06030 | SF06031 | SF06032 |
|         | SF0P000                                                |         |         |         |         |         |
| SF06053 | OURSYS*                                                | OURDMP* | SF06043 | SF06044 | SF06045 | SF06046 |
|         | SF06047                                                | SF06048 | SF06049 | SF06050 | SF06051 | SF06052 |
|         | SF0P000                                                |         |         |         |         |         |
| SF06069 | OURSYS*                                                | OURDMP* | SF06060 | SF06061 | SF06062 | SF06063 |
|         | SF06064                                                | SF06065 | SF06066 | SF06067 | SF06068 | SF0P000 |
| SF06079 | OURSYS*                                                | OURDMP* | SF06070 | SF06071 | SF06072 | SF06073 |
|         | SF06074                                                | SF06075 | SF06076 | SF06077 | SF06078 | SF0P000 |
| SF06101 | OURSYS*                                                | OURDMP* | SF06100 | SF0P000 |         |         |
| SF06109 | OURSYS*                                                | OURDMP* | SF06108 | SF0P000 |         |         |
| SF06110 | OURSYS*                                                | OURDMP* | SF06108 | SF0P000 |         |         |
| SF06111 | OURSYS*                                                | OURDMP* | SF06108 | SF0P000 |         |         |
| SF06122 | OURSYS*                                                | OURDMP* | SF06112 | SF06113 | SF06114 | SF06115 |
|         | SF06116                                                | SF06117 | SF06118 | SF06119 | SF0P000 |         |
| SF06140 | OURSYS*                                                | OURDMP* | SF06132 | SF06133 | SF06134 | SF06135 |
|         | SF06136                                                | SF06137 | SF06138 | SF06139 | SF0P000 |         |
| SF06150 | OURSYS*                                                | OURDMP* | SF06142 | SF06143 | SF06144 | SF06145 |
|         | SF06146                                                | SF06147 | SF06148 | SF06149 | SF0P000 |         |
| SF06160 | OURSYS*                                                | OURDMP* | SF06152 | SF06153 | SF06154 | SF06155 |
|         | SF06156                                                | SF06157 | SF06158 | SF06159 | SF0P000 |         |
| SF06170 | OURSYS*                                                | OURDMP* | SF06162 | SF06163 | SF06164 | SF06165 |
|         | SF06166                                                | SF06167 | SF06168 | SF06169 | SF0P000 |         |
| SF06180 | OURSYS*                                                | OURDMP* | SF06172 | SF06173 | SF06174 | SF06175 |
|         | SF06176                                                | SF06177 | SF06178 | SF06179 | SF0P000 |         |
| SF06190 | OURSYS*                                                | OURDMP* | SF06182 | SF06183 | SF06184 | SF06185 |
|         | SF06186                                                | SF06187 | SF06188 | SF06189 | SF0P000 |         |
| SF06199 | OURSPC*                                                | OURSYS* | OURDMP* | SF06191 | SF06192 | SF06193 |
|         | SF06194                                                | SF06195 | SF06196 | SF06197 | SF06198 | SF0P000 |
| SF0619I | OURSPC*                                                | OURSYS* | OURDMP* | SF0619A | SF0619B | SF0619C |
|         | SF0619D                                                | SF0619E | SF0619F | SF0619G | SF0619H | SF0P000 |
| SF0619R | OURSPC*                                                | OURSYS* | OURDMP* | SF0619J | SF0619K | SF0619L |
|         | SF0619M                                                | SF0619N | SF0619O | SF0619P | SF0619Q | SF0P000 |
| SFD6201 | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SFD6209 | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SFD6210 | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SFD6211 | OURSYS*                                                | OURDMP* | SF0P000 |         |         |         |
| SFD6222 | OURSYS*                                                | OURDMP* | SF0P000 | SFD6213 | SFD6214 | SFD6215 |
|         | SFD6216                                                | SFD6217 | SFD6218 | SFD6219 |         |         |
| SFD6233 | OURSYS*                                                | OURDMP* | SF0P000 | SFD6223 | SFD6224 | SFD6225 |
|         | SFD6226                                                | SFD6227 | SFD6228 | SFD6229 | SFD6230 | SFD6231 |

Table G-4. Ada Type S Test Programs and Source Code Files (Continued)

| PROGRAM | SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED) |         |         |         |         |         |
|---------|--------------------------------------------------------|---------|---------|---------|---------|---------|
| SFD6253 | SFD6232<br>OURSYS*                                     | OURDMP* | SF0P000 | SFD6243 | SFD6244 | SFD6245 |
|         | SFD6246                                                | SFD6247 | SFD6248 | SFD6249 | SFD6250 | SFD6251 |
|         | SFD6252                                                |         |         |         |         |         |
| SFD6269 | OURSYS*                                                | OURDMP* | SF0P000 | SFD6260 | SFD6261 | SFD6262 |
|         | SFD6263                                                | SFD6264 | SFD6265 | SFD6266 | SFD6267 | SFD6268 |
| SFD6279 | OURSYS*                                                | OURDMP* | SF0P000 | SFD6270 | SFD6271 | SFD6272 |
|         | SFD6273                                                | SFD6274 | SFD6275 | SFD6276 | SFD6277 | SFD6278 |
| SFD6301 | OURSYS*                                                | OURDMP* | SF0P000 | SFD6300 |         |         |
| SFD6309 | OURSYS*                                                | OURDMP* | SF0P000 | SFD6308 |         |         |
| SFD6310 | OURSYS*                                                | OURDMP* | SF0P000 | SFD6308 |         |         |
| SFD6311 | OURSYS*                                                | OURDMP* | SF0P000 | SFD6308 |         |         |
| SFD6322 | OURSYS*                                                | OURDMP* | SF0P000 | SFD6312 | SFD6313 | SFD6314 |
|         | SFD6315                                                | SFD6316 | SFD6317 | SFD6318 | SFD6319 |         |
| SFD6340 | OURSYS*                                                | OURDMP* | SF0P000 | SFD6332 | SFD6333 | SFD6334 |
|         | SFD6335                                                | SFD6336 | SFD6337 | SFD6338 | SFD6339 |         |
| SFD6350 | OURSYS*                                                | OURDMP* | SF0P000 | SFD6342 | SFD6343 | SFD6344 |
|         | SFD6345                                                | SFD6346 | SFD6347 | SFD6348 | SFD6349 |         |
| SFD6360 | OURSYS*                                                | OURDMP* | SF0P000 | SFD6352 | SFD6353 | SFD6354 |
|         | SFD6355                                                | SFD6356 | SFD6357 | SFD6358 | SFD6359 |         |
| SFD6370 | OURSYS*                                                | OURDMP* | SF0P000 | SFD6362 | SFD6363 | SFD6364 |
|         | SFD6365                                                | SFD6366 | SFD6367 | SFD6368 | SFD6369 |         |
| SFD6380 | OURSYS*                                                | OURDMP* | SF0P000 | SFD6372 | SFD6373 | SFD6374 |
|         | SFD6375                                                | SFD6376 | SFD6377 | SFD6378 | SFD6379 |         |
| SFD6390 | OURSYS*                                                | OURDMP* | SF0P000 | SFD6382 | SFD6383 | SFD6384 |
|         | SFD6385                                                | SFD6386 | SFD6387 | SFD6388 | SFD6389 |         |
| SF0642B | OURSPC*                                                | OURDMP* | OURDMP* | SF06422 | SF06423 | SF06424 |
|         | SF06425                                                | SF06426 | SF06427 | SF06428 | SF06429 | SF0642A |
|         | SF0P000                                                |         |         |         |         |         |
| SF06803 | OURSYS*                                                | OURDMP* | SF06802 | SF0P000 |         |         |
| SF06807 | OURSYS*                                                | OURDMP* | SF06806 | SF0P000 |         |         |
| SF06809 | OURSPC*                                                | OURSYS* | OURDMP* | SF06808 | SF0P000 |         |
| SF0680B | OURSPC*                                                | OURSYS* | OURDMP* | SF0680A | SF0P000 |         |
| SF0680D | OURSPC*                                                | OURSYS* | OURDMP* | SF0680C | SF0P000 |         |
| SF0680F | OURSPC*                                                | OURSYS* | OURDMP* | SF0680E | SF0P000 |         |
| SFD680H | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 | SFD680G |         |
| SFD680J | OURSPC*                                                | OURSYS* | OURDMP* | SF0P000 | SFD680I |         |
| SF06811 | OURSYS*                                                | OURDMP* | SF06810 | SF0P000 |         |         |
| SF06815 | OURSYS*                                                | OURDMP* | SF06814 | SF0P000 |         |         |
| SF06817 | OURSYS*                                                | OURDMP* | SF06816 | SF0P000 |         |         |
| SF06819 | OURSYS*                                                | OURDMP* | SF06818 | SF0P000 |         |         |
| SF06821 | OURSYS*                                                | OURDMP* | SF06820 | SF0P000 |         |         |
| SF06823 | OURSPC*                                                | OURSYS* | OURDMP* | SF06822 | SF0P000 |         |
| SF06825 | OURSPC*                                                | OURSYS* | OURDMP* | SF06824 | SF0P000 |         |
| SFN9301 | OURSPC*                                                | OURSYS* | SFN9300 |         |         |         |
| SFN9302 | OURSPC*                                                | OURSYS* | SFN9300 |         |         |         |
| SFN9303 | OURSPC*                                                | OURSYS* | SFN9300 |         |         |         |
| SF09501 | OURSPC*                                                | OURSYS* | OURDMP* | SF09500 | SF0P000 |         |
| SF09502 | OURSPC*                                                | OURSYS* | OURDMP* | SF09500 | SF0P000 |         |
| SF09503 | OURSPC*                                                | OURSYS* | OURDMP* | SF09500 | SF0P000 |         |
| SF09504 | OURSPC*                                                | OURSYS* | OURDMP* | SF09500 | SF0P000 |         |
| SF09505 | OURSPC*                                                | OURSYS* | OURDMP* | SF09500 | SF0P000 |         |
| SF09506 | OURSPC*                                                | OURSYS* | OURDMP* | SF09500 | SF0P000 |         |
| SF09507 | OURSPC*                                                | OURSYS* | OURDMP* | SF09500 | SF0P000 |         |
| SF09508 | OURSPC*                                                | OURSYS* | OURDMP* | SF09500 | SF0P000 |         |
| SF09509 | OURSPC*                                                | OURSYS* | OURDMP* | SF09500 | SF0P000 |         |
| SFN9511 | OURSPC*                                                | OURSYS* | SFN9510 |         |         |         |
| SF09600 | OURSPC*                                                | OURSYS* | SF0P000 |         |         |         |
| SF09601 | OURSPC*                                                | OURSYS* | SF0P000 |         |         |         |
| SF09602 | OURSPC*                                                | OURSYS* | SF0P000 |         |         |         |
| SF09603 | OURSPC*                                                | OURSYS* | SF0P000 |         |         |         |
| SF09604 | OURSPC*                                                | OURSYS* | SF0P000 |         |         |         |
| SF09605 | OURSPC*                                                | OURSYS* | SF0P000 |         |         |         |
| SF09606 | OURSPC*                                                | OURSYS* | SF0P000 |         |         |         |
| SF09607 | OURSPC*                                                | OURSYS* | SF0P000 |         |         |         |

Table G-4. Ada Type S Test Programs and Source Code Files (Continued)

| PROGRAM   | SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED) |         |         |         |           |         |
|-----------|--------------------------------------------------------|---------|---------|---------|-----------|---------|
| SFN9611   | OURSPC*                                                | OURSYS* |         |         |           |         |
| SFN9612   | OURSPC*                                                | OURSYS* | SFN9610 |         |           |         |
| SFN9613   | OURSPC*                                                | OURSYS* | SFN9610 |         |           |         |
| SF09711   | OURSYS*                                                | SF09710 | SF0P000 |         |           |         |
| SF09713   | OURSYS*                                                | SF09712 | SF0P000 |         |           |         |
| SF09720   | OURSPC*                                                | OURSYS* | OURDMP* | SF09500 | SF0P000   |         |
| SF09721   | OURSPC*                                                | OURSYS* | OURDMP* | SF09500 | SF0P000   |         |
| SF09731   | OURSPC*                                                | OURSYS* | OURDMP* | SF09500 | SF0P000   |         |
| SF09901   | OURSYS*                                                | SF09900 | SF0P000 |         |           |         |
| SF09902   | OURSYS*                                                | SF09900 | SF0P000 |         |           |         |
| SF09903   | OURSYS*                                                | SF09900 | SF0P000 |         |           |         |
| SFM9A01   | OURSPC*                                                | OURSYS* | SFM9A00 |         |           |         |
| SFM9A02   | OURSPC*                                                | OURSYS* | SFM9A00 |         |           |         |
| SFM9A03   | OURSPC*                                                | OURSYS* | SFM9A00 |         |           |         |
| SF09B01   | OURSPC*                                                | OURSYS* | OURDMP* | SF09500 | SF0P000   |         |
| SFD9C00   | OURSPC*                                                | OURSYS* | SF0P000 | SFD9000 |           |         |
| SFD9C01   | OURSPC*                                                | OURSYS* | SF0P000 | SFD9000 | SFD9200   |         |
| SFD9C02   | OURSPC*                                                | OURSYS* | SF0P000 | SFD9000 | SFD9200   |         |
| SFD9C03** | OURSPC*                                                | OURSYS* | SF0P000 | SFD9000 | SFD9200   |         |
| SFD9C04** | OURSPC*                                                | OURSYS* | SF0P000 | SFD9000 | SFD9200   |         |
| SFMB001   | OURSYS*                                                | SFMB000 |         |         |           |         |
| SFMB003   | OURSYS*                                                | SFMB002 |         |         |           |         |
| SFMB005   | OURSYS*                                                | SFMB004 |         |         |           |         |
| SFMB007   | OURSYS*                                                | SFMB006 |         |         |           |         |
| SFMB009   | OURSYS*                                                | SFMB008 |         |         |           |         |
| SFMB012   | OURSYS*                                                | SFMB010 | SFMB011 |         |           |         |
| SFMB016   | OURSYS*                                                | SFMB013 | SFMB014 | SFMB015 |           |         |
| SFMB020   | OURSYS*                                                | SFMB017 | SFMB018 | SFMB019 |           |         |
| SFMB024   | OURSYS*                                                | SFMB021 | SFMB022 | SFMB023 |           |         |
| SFMB028   | OURSYS*                                                | SFMB025 | SFMB026 | SFMB027 |           |         |
| SFMB032   | OURSYS*                                                | SFMB013 | SFMB014 | SFMB015 |           |         |
| SFMB036   | OURSYS*                                                | SFMB033 | SFMB034 | SFMB035 |           |         |
| SFMB040   | OURSYS*                                                | SFMB037 | SFMB038 | SFMB039 |           |         |
| SFMB044   | OURSYS*                                                | SFMB041 | SFMB042 | SFMB043 |           |         |
| SF0C301   | OURSYS*                                                | OURDMP* | SF0C100 | SF0C101 | SF0C300   | SF0P000 |
| SF0C302   | OURSYS*                                                | OURDMP* | SF0C100 | SF0C101 | SF0C300   | SF0P000 |
| SF0C304   | OURSYS*                                                | OURDMP* | SF0C102 | SF0C103 | SF0C303   | SF0P000 |
| SF0C305   | OURSYS*                                                | OURDMP* | SF0C102 | SF0P000 |           |         |
| SF0C306   | OURSYS*                                                | OURDMP* | SF0C102 | SF0P000 |           |         |
| SF0C307   | OURSYS*                                                | OURDMP* | SF0C102 | SF0P000 |           |         |
| SFDC311   | OURSYS*                                                | OURDMP* | SF0P000 | SFDC104 | SFDC105   | SFDC310 |
| SFDC314   | OURSYS*                                                | OURDMP* | SF0P000 | SFDC106 | SFDC107** | SFDC313 |
| SFDD600   | OURSPC*                                                | OURSYS* | SF0P000 |         |           |         |
| SFDD601   | OURSPC*                                                | OURSYS* | SF0P000 |         |           |         |
| SFDD602   | OURSPC*                                                | OURSYS* | SF0P000 |         |           |         |
| SFDD603   | OURSPC*                                                | OURSYS* | SF0P000 |         |           |         |
| SFDD604   | OURSPC*                                                | OURSYS* | SF0P000 |         |           |         |
| SFDD605   | OURSPC*                                                | OURSYS* | SF0P000 |         |           |         |
| SFDD606   | OURSPC*                                                | OURSYS* | SF0P000 |         |           |         |
| SFDD607   | OURSPC*                                                | OURSYS* | SF0P000 |         |           |         |
| SFDD608*  | OURSPC*                                                | OURSYS* | SF0P000 |         |           |         |
| SFDD609   | OURSPC*                                                | OURSYS* | SF0P000 |         |           |         |
| SFDD610   | OURSPC*                                                | OURSYS* | SF0P000 |         |           |         |
| SFDD611   | OURSPC*                                                | OURSYS* | SF0P000 |         |           |         |
| SF0D720   | OURSYS*                                                |         |         |         |           |         |
| SF0D721   | OURSYS*                                                |         |         |         |           |         |
| SFDD722   | OURSYS*                                                | OURTYP* |         |         |           |         |
| SFDD723   | OURSYS*                                                | OURTYP* |         |         |           |         |
| SFDD724   | OURSYS*                                                | OURTYP* |         |         |           |         |
| SFDD725   | OURSYS*                                                | OURTYP* |         |         |           |         |
| SF0D727   | OURSYS*                                                |         |         |         |           |         |
| SF0D728   | OURSPC*                                                | OURSYS* |         |         |           |         |
| SF0D729   | OURSPC*                                                | OURSYS* |         |         |           |         |

\*\* Multiple versions of source file supplied(USE and ADA file types)

\*\* Source file supplied with DEC file type only

\* Source file supplied with USE file type only

Table G-4. Ada Type S Test Programs and Source Code Files (Continued)

| PROGRAM | SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED) |                    |                    |                    |                    |                    |
|---------|--------------------------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| SFD6253 | SFD6232<br>OURSYS*<br>SFD6246<br>SFD6252               | OURDMP*<br>SFD6247 | SF0P000<br>SFD6248 | SFD6243<br>SFD6249 | SFD6244<br>SFD6250 | SFD6245<br>SFD6251 |
| SFD6269 | OURSYS*<br>SFD6263                                     | OURDMP*<br>SFD6264 | SF0P000<br>SFD6265 | SFD6260<br>SFD6266 | SFD6261<br>SFD6267 | SFD6262<br>SFD6268 |
| SFD6279 | OURSYS*<br>SFD6273                                     | OURDMP*<br>SFD6274 | SF0P000<br>SFD6275 | SFD6270<br>SFD6276 | SFD6271<br>SFD6277 | SFD6272<br>SFD6278 |
| SFD6301 | OURSYS*                                                | OURDMP*            | SF0P000            | SFD6300            |                    |                    |
| SFD6309 | OURSYS*                                                | OURDMP*            | SF0P000            | SFD6308            |                    |                    |
| SFD6310 | OURSYS*                                                | OURDMP*            | SF0P000            | SFD6308            |                    |                    |
| SFD6311 | OURSYS*                                                | OURDMP*            | SF0P000            | SFD6308            |                    |                    |
| SFD6322 | OURSYS*<br>SFD6315                                     | OURDMP*<br>SFD6316 | SF0P000<br>SFD6317 | SFD6312<br>SFD6318 | SFD6313<br>SFD6319 | SFD6314            |
| SFD6340 | OURSYS*<br>SFD6335                                     | OURDMP*<br>SFD6336 | SF0P000<br>SFD6337 | SFD6332<br>SFD6338 | SFD6333<br>SFD6339 | SFD6334            |
| SFD6350 | OURSYS*<br>SFD6345                                     | OURDMP*<br>SFD6346 | SF0P000<br>SFD6347 | SFD6342<br>SFD6348 | SFD6343<br>SFD6349 | SFD6344            |
| SFD6360 | OURSYS*<br>SFD6355                                     | OURDMP*<br>SFD6356 | SF0P000<br>SFD6357 | SFD6352<br>SFD6358 | SFD6353<br>SFD6359 | SFD6354            |
| SFD6370 | OURSYS*<br>SFD6365                                     | OURDMP*<br>SFD6366 | SF0P000<br>SFD6367 | SFD6362<br>SFD6368 | SFD6363<br>SFD6369 | SFD6364            |
| SFD6380 | OURSYS*<br>SFD6375                                     | OURDMP*<br>SFD6376 | SF0P000<br>SFD6377 | SFD6372<br>SFD6378 | SFD6373<br>SFD6379 | SFD6374            |
| SFD6390 | OURSYS*<br>SFD6385                                     | OURDMP*<br>SFD6386 | SF0P000<br>SFD6387 | SFD6382<br>SFD6388 | SFD6383<br>SFD6389 | SFD6384            |
| SF0642B | OURSPC*<br>SF06425<br>SF0P000                          | OURDMP*<br>SF06426 | OURDMP*<br>SF06427 | SF06422<br>SF06428 | SF06423<br>SF06429 | SF06424<br>SF0642A |
| SF06803 | OURSYS*                                                | OURDMP*            | SF06802            | SF0P000            |                    |                    |
| SF06807 | OURSYS*                                                | OURDMP*            | SF06806            | SF0P000            |                    |                    |
| SF06809 | OURSPC*                                                | OURSYS*            | OURDMP*            | SF06808            | SF0P000            |                    |
| SF0680B | OURSPC*                                                | OURSYS*            | OURDMP*            | SF0680A            | SF0P000            |                    |
| SF0680D | OURSPC*                                                | OURSYS*            | OURDMP*            | SF0680C            | SF0P000            |                    |
| SF0680F | OURSPC*                                                | OURSYS*            | OURDMP*            | SF0680E            | SF0P000            |                    |
| SFD680H | OURSPC*                                                | OURSYS*            | OURDMP*            | SF0P000            | <del>SFD680G</del> |                    |
| SFD680J | OURSPC*                                                | OURSYS*            | OURDMP*            | SF0P000            | <del>SFD680I</del> |                    |
| SF06811 | OURSYS*                                                | OURDMP*            | SF06810            | SF0P000            |                    |                    |
| SF06815 | OURSYS*                                                | OURDMP*            | SF06814            | SF0P000            |                    |                    |
| SF06817 | OURSYS*                                                | OURDMP*            | SF06816            | SF0P000            |                    |                    |
| SF06819 | OURSYS*                                                | OURDMP*            | SF06818            | SF0P000            |                    |                    |
| SF06821 | OURSYS*                                                | OURDMP*            | SF06820            | SF0P000            |                    |                    |
| SF06823 | OURSPC*                                                | OURSYS*            | OURDMP*            | SF06822            | SF0P000            |                    |
| SF06825 | OURSPC*                                                | OURSYS*            | OURDMP*            | SF06824            | SF0P000            |                    |
| SFN9301 | OURSPC*                                                | OURSYS*            | SFN9300            |                    |                    |                    |
| SFN9302 | OURSPC*                                                | OURSYS*            | SFN9300            |                    |                    |                    |
| SFN9303 | OURSPC*                                                | OURSYS*            | SFN9300            |                    |                    |                    |
| SF09501 | OURSPC*                                                | OURSYS*            | OURDMP*            | SF09500            | SF0P000            |                    |
| SF09502 | OURSPC*                                                | OURSYS*            | OURDMP*            | SF09500            | SF0P000            |                    |
| SF09503 | OURSPC*                                                | OURSYS*            | OURDMP*            | SF09500            | SF0P000            |                    |
| SF09504 | OURSPC*                                                | OURSYS*            | OURDMP*            | SF09500            | SF0P000            |                    |
| SF09505 | OURSPC*                                                | OURSYS*            | OURDMP*            | SF09500            | SF0P000            |                    |
| SF09506 | OURSPC*                                                | OURSYS*            | OURDMP*            | SF09500            | SF0P000            |                    |
| SF09507 | OURSPC*                                                | OURSYS*            | OURDMP*            | SF09500            | SF0P000            |                    |
| SF09508 | OURSPC*                                                | OURSYS*            | OURDMP*            | SF09500            | SF0P000            |                    |
| SF09509 | OURSPC*                                                | OURSYS*            | OURDMP*            | SF09500            | SF0P000            |                    |
| SFN9511 | OURSPC*                                                | OURSYS*            | SFN9510            |                    |                    |                    |
| SF09600 | OURSPC*                                                | OURSYS*            | SF0P000            |                    |                    |                    |
| SF09601 | OURSPC*                                                | OURSYS*            | SF0P000            |                    |                    |                    |
| SF09602 | OURSPC*                                                | OURSYS*            | SF0P000            |                    |                    |                    |
| SF09603 | OURSPC*                                                | OURSYS*            | SF0P000            |                    |                    |                    |
| SF09604 | OURSPC*                                                | OURSYS*            | SF0P000            |                    |                    |                    |
| SF09605 | OURSPC*                                                | OURSYS*            | SF0P000            |                    |                    |                    |
| SF09606 | OURSPC*                                                | OURSYS*            | SF0P000            |                    |                    |                    |
| SF09607 | OURSPC*                                                | OURSYS*            | SF0P000            |                    |                    |                    |

Table G-4. Ada Type S Test Programs and Source Code Files (Continued)

| PROGRAM   | SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED) |          |          |         |         |         |
|-----------|--------------------------------------------------------|----------|----------|---------|---------|---------|
| SFDD72A   | OURSPC*                                                | OURSYS*  |          |         |         |         |
| SFDD72B   | OURSPC*                                                | OURSYS*  |          |         |         |         |
| SFDD72C   | OURSPC*                                                | OURSYS*  |          |         |         |         |
| SFDD72D   | OURSPC*                                                | OURSYS*  |          |         |         |         |
| SFDD72E   | OURSPC*                                                | OURSYS*  |          |         |         |         |
| SFDD72F   | OURSPC*                                                | OURSYS*  |          |         |         |         |
| SFDD72G   | OURSPC*                                                | OURSYS*  |          |         |         |         |
| SFDD72H   | OURSPC*                                                | OURSYS*  |          |         |         |         |
| SFDD72I   | OURSPC*                                                | OURSYS*  |          |         |         |         |
| SFDDA01   | OURSPC*                                                | OURSYS*  | SF0P000  |         |         |         |
| SFDDA02   | OURSPC*                                                | OURSYS*  | SF0P000  |         |         |         |
| SFDE220   | OURSYS*                                                | OURDMP*  | SF0P000  | SFDE000 | SFDE201 | SFDE202 |
|           | SFDE203                                                | SFDE204  | SFDE205  | SFDE206 | SFDE207 | SFDE208 |
|           | SFDE209                                                | SFDE20A  | SFDE211  | SFDE212 | SFDE213 | SFDE214 |
|           | SFDE215                                                | SFDE216  |          |         |         |         |
| SFDE250   | OURSYS*                                                | OURDMP*  | SF0P000  | SFDE000 | SFDE231 | SFDE232 |
|           | SFDE233                                                | SFDE234  | SFDE235  | SFDE236 | SFDE237 | SFDE238 |
|           | SFDE239                                                | SFDE23A  | SFDE241  | SFDE242 | SFDE243 | SFDE244 |
|           | SFDE245                                                | SFDE246  |          |         |         |         |
| SFDE420   | OURSYS*                                                | OURDMP*  | SF0P000  | SFDE000 | SFDE401 | SFDE402 |
|           | SFDE403                                                | SFDE404  | SFDE405  | SFDE406 | SFDE407 | SFDE408 |
|           | SFDE409                                                | SFDE40A  | SFDE411  | SFDE412 | SFDE413 | SFDE414 |
|           | SFDE415                                                | SFDE416  |          |         |         |         |
| SFDE450   | OURSYS*                                                | OURDMP*  | SF0P000  | SFDE000 | SFDE431 | SFDE432 |
|           | SFDE433                                                | SFDE434  | SFDE435  | SFDE436 | SFDE437 | SFDE438 |
|           | SFDE439                                                | SFDE43A  | SFDE441  | SFDE442 | SFDE443 | SFDE444 |
|           | SFDE445                                                | SFDE446  |          |         |         |         |
| SFDF000   | OURSYS*                                                | OURDMP*  | MATHFUN* | SF0P000 |         |         |
| SFDF001   | OURSYS*                                                | OURDMP*  | MATHFUN* | SF0P000 |         |         |
| SFDF002   | OURSYS*                                                | OURDMP*  | MATHFUN* | SF0P000 |         |         |
| SFDF003   | OURSYS*                                                | OURDMP*  | MATHFUN* | SF0P000 |         |         |
| SFDF004   | OURSYS*                                                | OURDMP*  | MATHFUN* | SF0P000 |         |         |
| SFDF005   | OURSYS*                                                | OURDMP*  | MATHFUN* | SF0P000 |         |         |
| SGD0001   | OURSYS*                                                | MATHFUN* | SG0P000  | SGD0000 |         |         |
| SGD0003   | OURSYS*                                                | SG0P000  | SGD0002  |         |         |         |
| SGD0009   | OURSYS*                                                | SG0P000  | SGD0004  | SGD0005 | SGD0006 | SGD0007 |
|           | SGD0008                                                |          |          |         |         |         |
| SG0000C   | OURSYS*                                                | OURDMP*  | SG0P000  |         |         |         |
| SGD000E   | OURSYS*                                                | MATHFUN* | SG0P000  | SGD0000 | SGD000D |         |
| SGN000K   | OURSYS*                                                | SGN000F  | SGN000G  | SGN000H | SGN000I | SGN000J |
| SGD0039   | OURSPC*                                                | OURSYS*  | SG0P000  | SGD0004 | SGD0005 | SGD0006 |
|           | SGD0007                                                | SGD0008  | SGD0019  | SGD0029 |         |         |
| SGD0049   | OURSPC*                                                | OURSYS*  | SG0P000  | SGD0004 | SGD0005 | SGD0006 |
|           | SGD0007                                                | SGD0008  | SGD0019  | SGD0029 |         |         |
| SGD0059## | OURSPC*                                                | OURSYS*  | SG0P000  | SGD0004 | SGD0005 | SGD0006 |
|           | SGD0007                                                | SGD0008  | SGD0019  | SGD0029 |         |         |
| SL09101   | OURSPC*                                                | OURSYS*  | SL09000  | SL09100 | SL0P000 |         |
| SL09111   | OURSPC*                                                | OURSYS*  | SL09000  | SL09100 | SL0P000 |         |
| SL09121   | OURSPC*                                                | OURSYS*  | SL09000  | SL09100 | SL0P000 |         |
| SL09131   | OURSPC*                                                | OURSYS*  | SL09000  | SL09100 | SL0P000 |         |
| SLD9202   | OURSPC*                                                | OURSYS*  | SL09000  | SL09100 | SL0P000 | SLD9200 |
| SLD9203   | OURSPC*                                                | OURSYS*  | SL09000  | SL09100 | SL0P000 | SLD9200 |
| SLD9204## | OURSPC*                                                | OURSYS*  | SL09000  | SL09100 | SL0P000 | SLD9200 |
| SLD9212   | OURSPC*                                                | OURSYS*  | SL09000  | SL09100 | SL0P000 | SLD9200 |
| SLD9213   | OURSPC*                                                | OURSYS*  | SL09000  | SL09100 | SL0P000 | SLD9200 |
| SLD9214## | OURSPC*                                                | OURSYS*  | SL09000  | SL09100 | SL0P000 | SLD9200 |
| SLD9222   | OURSPC*                                                | OURSYS*  | SL09000  | SL09100 | SL0P000 | SLD9200 |
| SLD9223   | OURSPC*                                                | OURSYS*  | SL09000  | SL09100 | SL0P000 | SLD9200 |
| SLD9224## | OURSPC*                                                | OURSYS*  | SL09000  | SL09100 | SL0P000 | SLD9200 |
| SLD9232   | OURSPC*                                                | OURSYS*  | SL09000  | SL09100 | SL0P000 | SLD9200 |
| SLD9233   | OURSPC*                                                | OURSYS*  | SL09000  | SL09100 | SL0P000 | SLD9200 |
| SLD9234## | OURSPC*                                                | OURSYS*  | SL09000  | SL09100 | SL0P000 | SLD9200 |
| SLDE2C1   | OURSPC*                                                | OURSYS*  | SL0P000  | SLDE000 | SLDE2B1 |         |
| SLDE2C2   | OURSPC*                                                | OURSYS*  | SL0P000  | SLDE000 | SLDE2B1 |         |

## Source file supplied with DEC file type only

Table G-4. Ada Type S Test Programs and Source Code Files (Continued)

| PROGRAM   | SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED) |         |          |         |         |         |
|-----------|--------------------------------------------------------|---------|----------|---------|---------|---------|
| SLDE2C3## | OURSPC*                                                | OURSYS* | SLOP000  | SLDE000 | SLDE2B1 |         |
| SLDE2C4## | OURSPC*                                                | OURSYS* | SLOP000  | SLDE000 | SLDE2B1 |         |
| SLDE2C5   | OURSPC*                                                | OURSYS* | SLOP000  | SLDE000 | SLDE2B2 |         |
| SLDE2C6   | OURSPC*                                                | OURSYS* | SLOP000  | SLDE000 | SLDE2B2 |         |
| SLDE2C7## | OURSPC*                                                | OURSYS* | SLOP000  | SLDE000 | SLDE2B2 |         |
| SLDE2C8## | OURSPC*                                                | OURSYS* | SLOP000  | SLDE000 | SLDE2B2 |         |
| SLDE4C1   | OURSPC*                                                | OURSYS* | SLOP000  | SLDE000 | SLDE4B1 |         |
| SLDE4C2   | OURSPC*                                                | OURSYS* | SLOP000  | SLDE000 | SLDE4B1 |         |
| SLDE4C3## | OURSPC*                                                | OURSYS* | SLOP000  | SLDE000 | SLDE4B1 |         |
| SLDE4C4## | OURSPC*                                                | OURSYS* | SLOP000  | SLDE000 | SLDE4B1 |         |
| SLDE4C5   | OURSPC*                                                | OURSYS* | SLOP000  | SLDE000 | SLDE4B2 |         |
| SLDE4C6   | OURSPC*                                                | OURSYS* | SLOP000  | SLDE000 | SLDE4B2 |         |
| SLDE4C7## | OURSPC*                                                | OURSYS* | SLOP000  | SLDE000 | SLDE4B2 |         |
| SLDE4C8## | OURSPC*                                                | OURSYS* | SLOP000  | SLDE000 | SLDE4B2 |         |
| S000104   | OURSYS*                                                | OURDMP* | S000002  | S000102 | S000103 | S00P000 |
| S000109   | OURSYS*                                                | OURDMP* | S000001  | S000107 | S000108 | S00P000 |
| S000114   | OURSYS*                                                | OURDMP* | S000001  | S000112 | S000113 | S00P000 |
| S000204   | OURSYS*                                                | OURDMP* | S000202  | S000203 | S00P000 |         |
| S000209   | OURSYS*                                                | OURDMP* | S000001  | S000207 | S000208 | S00P000 |
| S000300   | OURSYS*                                                | S00P000 |          |         |         |         |
| S000305   | OURSYS*                                                | S00P000 |          |         |         |         |
| S000310   | OURSYS*                                                | S00P000 |          |         |         |         |
| S000313   | OURSYS*                                                | OURDMP* | S000311  | S000312 | S00P000 |         |
| S000316   | OURSYS*                                                | OURDMP* | S000314  | S000315 | S00P000 |         |
| S000319   | OURSYS*                                                | OURDMP* | S000317  | S000318 | S00P000 |         |
| S000322   | OURSYS*                                                | OURDMP* | S000320  | S000321 | S00P000 |         |
| S000325   | OURSYS*                                                | OURDMP* | S000323  | S000324 | S00P000 |         |
| S000328   | OURSYS*                                                | OURDMP* | S000326  | S000327 | S00P000 |         |
| S000331   | OURSYS*                                                | OURDMP* | S000329  | S000330 | S00P000 |         |
| S000334   | OURSYS*                                                | OURDMP* | S000332  | S000333 | S00P000 |         |
| S000337   | OURSYS*                                                | OURDMP* | S000335  | S000336 | S00P000 |         |
| S000340   | OURSYS*                                                | OURDMP* | S000338  | S000339 | S00P000 |         |
| S000343   | OURSYS*                                                | OURDMP* | S000341  | S000342 | S00P000 |         |
| S0D0346   | OURSYS*                                                | OURDMP* | MATHFUN* | S00P000 | S0D0344 | S0D0345 |
| S000350   | OURSYS*                                                | OURDMP* | S000347  | S000348 | S000349 | S00P000 |
| S000353   | OURSYS*                                                | OURDMP* | S000347  | S000351 | S000352 | S00P000 |
| S000356   | OURSYS*                                                | OURDMP* | S000354  | S000355 | S00P000 |         |
| S000359   | OURSYS*                                                | OURDMP* | S000357  | S000358 | S00P000 |         |
| S000362   | OURSYS*                                                | OURDMP* | S000360  | S000361 | S00P000 |         |
| S000365   | OURSPC*                                                | OURSYS* | OURDMP*  | S000363 | S000364 | S00P000 |
| S000368   | OURSPC*                                                | OURSYS* | OURDMP*  | S000366 | S000367 | S00P000 |
| S00036B   | OURSPC*                                                | OURSYS* | OURDMP*  | S000369 | S00036A | S00P000 |
| S0D036E   | OURSPC*                                                | OURSYS* | OURDMP*  | S00P000 | S0D036C | S0D036D |
| S00036H   | OURSPC*                                                | OURSYS* | OURDMP*  | S00036F | S00036G | S00P000 |
| S00036K   | OURSPC*                                                | OURSYS* | OURDMP*  | S00036I | S00036J | S00P000 |
| S00036N   | OURSPC*                                                | OURSYS* | OURDMP*  | S00036L | S00036M | S00P000 |
| S0D036Q   | OURSPC*                                                | OURSYS* | OURDMP*  | S00P000 | S0D036O | S0D036P |
| S0D036T   | OURSPC*                                                | OURSYS* | OURDMP*  | S00P000 | S0D036R | S0D036S |
| S00036W   | OURSPC*                                                | OURSYS* | OURDMP*  | S00036U | S00036V | S00P000 |
| S0D036Z   | OURSYS*                                                | OURDMP* | OURTYP*  | S00P000 | S0D036X | S0D036Y |
| S0D0373   | OURSPC*                                                | OURSYS* | OURDMP*  | S00P000 | S0D0370 | S0D0371 |
|           | S0D0372                                                |         |          |         |         |         |
| S000378   | OURSYS*                                                | OURDMP* | S000374  | S000375 | S000376 | S000377 |
|           | S00P000                                                |         |          |         |         |         |
| S0D0383   | OURSPC*                                                | OURSYS* | OURDMP*  | S000374 | S00P000 | S0D0380 |
|           | S0D0381                                                | S0D0382 |          |         |         |         |
| S000391   | OURSYS*                                                | OURDMP* | S000390  | S00P000 |         |         |
| S000404   | OURSYS*                                                | OURDMP* | S000402  | S000403 | S00P000 |         |
| S000500   | OURSYS*                                                | S00P000 |          |         |         |         |
| S000504   | OURSYS*                                                | OURDMP* | S000502  | S000503 | S00P000 |         |
| S000509   | OURSYS*                                                | OURDMP* | S000507  | S000508 | S00P000 |         |
| S000514   | OURSYS*                                                | OURDMP* | S000512  | S000513 | S00P000 |         |
| S000519   | OURSYS*                                                | OURDMP* | S000517  | S000518 | S00P000 |         |
| S0D0525   | OURSYS*                                                | OURDMP* | S00P000  | S0D0523 | S0D0524 |         |

## Source file supplied with DEC file type only



Table G-4. Ada Type S Test Programs and Source Code Files (Concluded)

| <u>PROGRAM</u> | <u>SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED)</u> |         |         |         |         |         |
|----------------|---------------------------------------------------------------|---------|---------|---------|---------|---------|
| SOD0529        | OURSYS*                                                       | OURDMP* | SODP000 | SOD0526 | SOD0527 | SOD0528 |
| S000604        | OURSYS*                                                       | OURDMP* | S000602 | S000603 | S00P000 |         |
| S000605        | OURSYS*                                                       | OURDMP* | S00P000 |         |         |         |
| S000606        | OURSYS*                                                       | OURDMP* | S00P000 |         |         |         |
| S000607        | OURSYS*                                                       | OURDMP* | S00P000 |         |         |         |
| S000704        | OURSYS*                                                       | OURDMP* | S000702 | S000703 | S00P000 |         |
| S000705        | OURSYS*                                                       | OURDMP* | S00P000 |         |         |         |
| S000708        | OURSYS*                                                       | OURDMP* | S000706 | S000707 | S00P000 |         |
| S000711        | OURSYS*                                                       | OURDMP* | S000709 | S000710 | S00P000 |         |
| S000713        | OURSYS*                                                       | OURDMP* | S00P000 |         |         |         |
| S000714        | OURSYS*                                                       | OURDMP* | S00P000 |         |         |         |
| S000715        | OURSYS*                                                       | OURDMP* | S00P000 |         |         |         |
| S000716        | OURSYS*                                                       | OURDMP* | S00P000 |         |         |         |
| S000717        | OURSYS*                                                       | OURDMP* | S00P000 |         |         |         |
| S000718        | OURSYS*                                                       | OURDMP* | S00P000 |         |         |         |
| S000721        | OURSYS*                                                       | OURDMP* | S000719 | S000720 | S00P000 |         |

Table G-5 Ada Type T test Programs and Source Code Files

| PROGRAM  | SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED) |         |         |         |         |         |
|----------|--------------------------------------------------------|---------|---------|---------|---------|---------|
| TA00000  | OURSYS*                                                | OURDMP* | TA0P000 |         |         |         |
| TF03519  | OURSYS*                                                | OURDMP* | TF03500 | TF03501 | TF03502 | TF03503 |
|          | TF03504                                                | TF03509 | TF03510 | TF03511 | TF03512 | TF03513 |
|          | TF03514                                                | TF03517 | TF03518 | TF0P000 |         |         |
| TF03550  | OURSPC*                                                | OURSYS* | OURDMP* | TF0P000 |         |         |
| TFD3551  | OURSPC*                                                | OURSYS* | OURDMP* | TF0P000 |         |         |
| TF03620  | OURSYS*                                                | OURDMP* | TF03600 | TF03601 | TF03602 | TF03603 |
|          | TF03604                                                | TF03605 | TF03606 | TF03607 | TF03608 | TF03609 |
|          | TF03610                                                | TF03611 | TF03612 | TF03613 | TF03614 | TF03615 |
|          | TF03616                                                | TF03617 | TF03618 | TF03619 | TF0P000 |         |
| TF03650  | OURSYS*                                                | OURDMP* | TF03630 | TF03631 | TF03632 | TF03633 |
|          | TF03634                                                | TF03635 | TF03636 | TF03637 | TF03638 | TF03639 |
|          | TF03641                                                | TF03642 | TF03643 | TF03644 | TF03645 | TF03646 |
|          | TF03647                                                | TF03648 | TF03649 | TF0P000 |         |         |
| TF03704  | OURSPC*                                                | OURSYS* | OURDMP* | TF03700 | TF03701 | TF03702 |
|          | TF03703                                                | TF0P000 |         |         |         |         |
| TF03805  | OURSPC*                                                | OURSYS* | OURDMP* | TF03800 | TF03801 | TF03802 |
|          | TF03803                                                | TF03804 | TF0P000 |         |         |         |
| TF04120  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04121  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04122  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04123  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04124  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04125  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04126  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04127  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TFD4128* | OURSPC*                                                | OURSYS* | OURDMP* | TF0P000 |         |         |
| TF04129  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TFD412A  | OURSPC*                                                | OURSYS* | OURDMP* | TF0P000 |         |         |
| TF0412B  | OURSPC*                                                | OURSYS* | OURDMP* | TF0P000 |         |         |
| TFD412C  | OURSPC*                                                | OURSYS* | OURDMP* | TF0P000 |         |         |
| TFD412D  | OURSPC*                                                | OURSYS* | OURDMP* | TF0P000 |         |         |
| TF04130  | OURSPC*                                                | OURSYS* | OURDMP* | TF0P000 |         |         |
| TF04131  | OURSPC*                                                | OURSYS* | OURDMP* | TF0P000 |         |         |
| TF04132  | OURSPC*                                                | OURSYS* | OURDMP* | TF0P000 |         |         |
| TF04133  | OURSPC*                                                | OURSYS* | OURDMP* | TF0P000 |         |         |
| TFD4135  | OURSPC*                                                | OURSYS* | OURDMP* | TF0P000 |         |         |
| TFD4136  | OURSPC*                                                | OURSYS* | OURDMP* | TF0P000 |         |         |
| TFD4137  | OURSPC*                                                | OURSYS* | OURDMP* | TF0P000 |         |         |
| TFD4138  | OURSPC*                                                | OURSYS* | OURDMP* | TF0P000 |         |         |
| TFD4139  | OURSPC*                                                | OURSYS* | OURDMP* | TF0P000 |         |         |
| TFD413A  | OURSPC*                                                | OURSYS* | OURDMP* | TF0P000 |         |         |
| TFD413B  | OURSPC*                                                | OURSYS* | OURDMP* | TF0P000 |         |         |
| TFD413C  | OURSPC*                                                | OURSYS* | OURDMP* | TF0P000 |         |         |
| TF0413D  | OURSPC*                                                | OURSYS* | OURDMP* | TF0P000 |         |         |
| TFD413E  | OURSPC*                                                | OURSYS* | OURDMP* | TF0P000 |         |         |
| TFD413G  | OURSPC*                                                | OURSYS* | OURDMP* | TF0P000 |         |         |
| TF0413H  | OURSPC*                                                | OURSYS* | OURDMP* | TF0P000 |         |         |
| TF0413I  | OURSPC*                                                | OURSYS* | OURDMP* | TF0P000 |         |         |
| TF0413J  | OURSPC*                                                | OURSYS* | OURDMP* | TF0P000 |         |         |
| TF0413K  | OURSPC*                                                | OURSYS* | OURDMP* | TF0P000 |         |         |
| TF04310  | OURSPC*                                                | OURSYS* | OURDMP* | TF0P000 |         |         |
| TF04311  | OURSPC*                                                | OURSYS* | OURDMP* | TF0P000 |         |         |
| TF04312  | OURSPC*                                                | OURSYS* | OURDMP* | TF0P000 |         |         |
| TF04510  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04511  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04512  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04513  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04514  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04515  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04516  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04517  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF0451J  | OURSYS*                                                | OURDMP* | TF04518 | TF04519 | TF0451A | TF0451B |
|          | TF0451C                                                | TF0451D | TF0451E | TF0451F | TF0451G | TF0451H |
|          | TF0451I                                                | TF0P000 |         |         |         |         |

\* Source file supplied with USE file type only

Table G-5 Ada Type T test Programs and Source Code Files (continued)

| PROGRAM  | SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED) |         |         |         |         |         |
|----------|--------------------------------------------------------|---------|---------|---------|---------|---------|
| TFD451U† | OURSYS*                                                | OURDMP* | OURTYP* | TF0P000 | TFD451K | TFD451L |
|          | TFD451M                                                | TFD451N | TFD451O | TFD451P | TFD451Q | TFD451R |
|          | TFD451S                                                |         |         |         |         |         |
| TF0451Z  | OURSYS*                                                | OURDMP* | TF0451V | TF0451W | TF0451X | TF0451Y |
|          | TF0P000                                                |         |         |         |         |         |
| TF04520  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04521  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04522  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TFD4523  | OURSYS*                                                | OURDMP* | OURTYP* | TF0P000 |         |         |
| TFD4524  | OURSYS*                                                | OURDMP* | OURTYP* | TF0P000 |         |         |
| TFD4525  | OURSYS*                                                | OURDMP* | OURTYP* | TF0P000 |         |         |
| TFD4526  | OURSYS*                                                | OURDMP* | OURTYP* | TF0P000 |         |         |
| TF04527  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TFD4528  | OURSPC*                                                | OURSYS* | OURDMP* | TF0P000 |         |         |
| TF04529  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TFD452A  | OURSPC*                                                | OURSYS* | OURDMP* | TF0P000 |         |         |
| TF04530  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04531  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04532  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04533  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04534  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04535  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04536  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04537  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04538  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04539  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF0453A  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF0453B  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF0453C  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04540  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04541  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04550  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04551  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04552  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04553  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04554  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04555  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04556  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04557  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04558  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04559  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TFD455D  | OURSYS*                                                | OURDMP* | OURTYP* | TF0P000 |         |         |
| TFD455E  | OURSYS*                                                | OURDMP* | OURTYP* | TF0P000 |         |         |
| TFD455F  | OURSYS*                                                | OURDMP* | OURTYP* | TF0P000 |         |         |
| TFD455G  | OURSYS*                                                | OURDMP* | OURTYP* | TF0P000 |         |         |
| TFD455I  | OURSYS*                                                | OURDMP* | OURTYP* | TF0P000 |         |         |
| TFD455J  | OURSYS*                                                | OURDMP* | OURTYP* | TF0P000 |         |         |
| TFD455K  | OURSYS*                                                | OURDMP* | OURTYP* | TF0P000 |         |         |
| TFD455L  | OURSYS*                                                | OURDMP* | OURTYP* | TF0P000 |         |         |
| TF0455N  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF0455O  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04560  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04562  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TFD4566  | OURSYS*                                                | OURDMP* | OURTYP* | TF0P000 |         |         |
| TFD4567  | OURSYS*                                                | OURDMP* | OURTYP* | TF0P000 |         |         |
| TFD4568  | OURSYS*                                                | OURDMP* | OURTYP* | TF0P000 |         |         |
| TFD4569  | OURSYS*                                                | OURDMP* | OURTYP* | TF0P000 |         |         |
| TF04600  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04601  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TF04602  | OURSYS*                                                | OURDMP* | TF0P000 |         |         |         |
| TFD4603  | OURSYS*                                                | OURDMP* | OURTYP* | TF0P000 |         |         |
| TFD4604  | OURSYS*                                                | OURDMP* | OURTYP* | TF0P000 |         |         |
| TFD4605  | OURSYS*                                                | OURDMP* | OURTYP* | TF0P000 |         |         |
| TFD4606  | OURSYS*                                                | OURDMP* | OURTYP* | TF0P000 |         |         |

† Source file supplied with USE file type only

Table G-5 Ada Type T test Programs and Source Code Files (continued)

| PROGRAM | SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED) |           |         |         |         |         |
|---------|--------------------------------------------------------|-----------|---------|---------|---------|---------|
| TFD4607 | OURSYS*                                                | OURDMP*   | OURTYP* | TFOP000 |         |         |
| TFD4608 | OURSYS*                                                | OURDMP*   | OURTYP* | TFOP000 |         |         |
| TFD4609 | OURSYS*                                                | OURDMP*   | OURTYP* | TFOP000 |         |         |
| TFD460A | OURSYS*                                                | OURDMP*   | OURTYP* | TFOP000 |         |         |
| TFD460B | OURSYS*                                                | OURDMP*   | OURTYP* | TFOP000 |         |         |
| TF0460E | OURSYS*                                                | OURDMP*   | TFOP000 |         |         |         |
| TF0460F | OURSYS*                                                | OURDMP*   | TFOP000 |         |         |         |
| TF0460G | OURSYS*                                                | OURDMP*   | TFOP000 |         |         |         |
| TF0460H | OURSYS*                                                | OURDMP*   | TFOP000 |         |         |         |
| TF0460I | OURSYS*                                                | OURDMP*   | TFOP000 |         |         |         |
| TF0460J | OURSPC*                                                | OURSYS*   | OURDMP* | TFOP000 |         |         |
| TFD460K | OURSPC*                                                | OURSYS*   | OURDMP* | TFOP000 |         |         |
| TFD460L | OURSPC*                                                | OURSYS*   | OURDMP* | TFOP000 |         |         |
| TF0460M | OURSPC*                                                | OURSYS*   | OURDMP* | TFOP000 |         |         |
| TFD460N | OURSPC*                                                | OURSYS*   | OURDMP* | TFOP000 |         |         |
| TFD460O | OURSPC*                                                | OURSYS*   | OURDMP* | TFOP000 |         |         |
| TFD4804 | OURSPC*                                                | OURSYS*   | OURDMP* | TFOP000 | TFD4800 | TFD4801 |
|         | TFD4802                                                | TFD4803** |         |         |         |         |
| TF05200 | OURSYS*                                                | OURDMP*   | TFOP000 |         |         |         |
| TF05201 | OURSYS*                                                | OURDMP*   | TFOP000 |         |         |         |
| TF05202 | OURSYS*                                                | OURDMP*   | TFOP000 |         |         |         |
| TF05203 | OURSYS*                                                | OURDMP*   | TFOP000 |         |         |         |
| TF05204 | OURSYS*                                                | OURDMP*   | TFOP000 |         |         |         |
| TF05205 | OURSYS*                                                | OURDMP*   | TFOP000 |         |         |         |
| TF05206 | OURSYS*                                                | OURDMP*   | TFOP000 |         |         |         |
| TF05207 | OURSYS*                                                | OURDMP*   | TFOP000 |         |         |         |
| TF05208 | OURSYS*                                                | OURDMP*   | TFOP000 |         |         |         |
| TF05209 | OURSYS*                                                | OURDMP*   | TFOP000 |         |         |         |
| TF0520A | OURSYS*                                                | OURDMP*   | TFOP000 |         |         |         |
| TF0520B | OURSYS*                                                | OURDMP*   | TFOP000 |         |         |         |
| TFD520C | OURSYS*                                                | OURDMP*   | OURTYP* | TFOP000 |         |         |
| TFD520D | OURSYS*                                                | OURDMP*   | OURTYP* | TFOP000 |         |         |
| TFD520E | OURSYS*                                                | OURDMP*   | OURTYP* | TFOP000 |         |         |
| TFD520F | OURSYS*                                                | OURDMP*   | OURTYP* | TFOP000 |         |         |
| TFD520G | OURSYS*                                                | OURDMP*   | OURTYP* | TFOP000 |         |         |
| TFD520H | OURSYS*                                                | OURDMP*   | OURTYP* | TFOP000 |         |         |
| TFD520I | OURSYS*                                                | OURDMP*   | OURTYP* | TFOP000 |         |         |
| TFD520J | OURSYS*                                                | OURDMP*   | OURTYP* | TFOP000 |         |         |
| TF0520M | OURSPC*                                                | OURSYS*   | OURDMP* | TFOP000 |         |         |
| TFD520N | OURSPC*                                                | OURSYS*   | OURDMP* | TFOP000 |         |         |
| TF0520O | OURSPC*                                                | OURSYS*   | OURDMP* | TFOP000 |         |         |
| TFD520P | OURSPC*                                                | OURSYS*   | OURDMP* | TFOP000 |         |         |
| TFD520Q | OURSPC*                                                | OURSYS*   | OURDMP* | TFOP000 |         |         |
| TF0520R | OURSPC*                                                | OURSYS*   | OURDMP* | TFOP000 |         |         |
| TF0520S | OURSPC*                                                | OURSYS*   | OURDMP* | TFOP000 |         |         |
| TF05210 | OURSYS*                                                | OURDMP*   | TFOP000 |         |         |         |
| TF05211 | OURSYS*                                                | OURDMP*   | TFOP000 |         |         |         |
| TF05212 | OURSYS*                                                | OURDMP*   | TFOP000 |         |         |         |
| TF05213 | OURSYS*                                                | OURDMP*   | TFOP000 |         |         |         |
| TF05214 | OURSYS*                                                | OURDMP*   | TFOP000 |         |         |         |
| TF05215 | OURSYS*                                                | OURDMP*   | TFOP000 |         |         |         |
| TFD5218 | OURSYS*                                                | OURDMP*   | OURTYP* | TFOP000 |         |         |
| TFD5219 | OURSYS*                                                | OURDMP*   | OURTYP* | TFOP000 |         |         |
| TFD521A | OURSYS*                                                | OURDMP*   | OURTYP* | TFOP000 |         |         |
| TFD521B | OURSYS*                                                | OURDMP*   | OURTYP* | TFOP000 |         |         |
| TFD521C | OURSYS*                                                | OURDMP*   | OURTYP* | TFOP000 |         |         |
| TFD521D | OURSYS*                                                | OURDMP*   | OURTYP* | TFOP000 |         |         |
| TFD521E | OURSYS*                                                | OURDMP*   | OURTYP* | TFOP000 |         |         |
| TFD521F | OURSYS*                                                | OURDMP*   | OURTYP* | TFOP000 |         |         |
| TF0521H | OURSYS*                                                | OURDMP*   | TFOP000 |         |         |         |
| TF0521I | OURSYS*                                                | OURDMP*   | TFOP000 |         |         |         |
| TF0521J | OURSYS*                                                | OURDMP*   | TFOP000 |         |         |         |
| TF0521K | OURSYS*                                                | OURDMP*   | TFOP000 |         |         |         |
| TFD521K | OURSPC*                                                | OURSYS*   | OURDMP* | TFOP000 |         |         |

\*\* Multiple versions of source file supplied(USE and ADA file types)

Table G-5 Ada Type T test Programs and Source Code Files (continued)

| <u>PROGRAM</u> | <u>SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED)</u> |         |         |         |         |         |
|----------------|---------------------------------------------------------------|---------|---------|---------|---------|---------|
| TF0521L        | OURSPC*                                                       | OURSYS* | OURDMP* | TF0P000 |         |         |
| TF0521M        | OURSPC*                                                       | OURSYS* | OURDMP* | TF0P000 |         |         |
| TF0521N        | OURSPC*                                                       | OURSYS* | OURDMP* | TF0P000 |         |         |
| TF0521O        | OURSPC*                                                       | OURSYS* | OURDMP* | TF0P000 |         |         |
| TF0521P        | OURSPC*                                                       | OURSYS* | OURDMP* | TF0P000 |         |         |
| TF05304        | OURSYS*                                                       | OURDMP* | TF05300 | TF05301 | TF05302 | TF05303 |
| TF05308        | TF0P000                                                       |         |         |         |         |         |
| TF05408        | OURSYS*                                                       | OURDMP* | TF05305 | TF05306 | TF05307 | TF0P000 |
|                | OURSYS*                                                       | OURDMP* | TF05400 | TF05401 | TF05402 | TF05403 |
|                | TF05404                                                       | TF05405 | TF05406 | TF05407 | TF0P000 |         |
| TF05505        | OURSYS*                                                       | OURDMP* | TF05501 | TF05502 | TF05503 | TF05504 |
|                | TF0P000                                                       |         |         |         |         |         |
| TF0550C        | OURSYS*                                                       | OURDMP* | TF05506 | TF05507 | TF05508 | TF05509 |
|                | TF0550A                                                       | TF0550B | TF0P000 |         |         |         |
| TF0550D        | OURSYS*                                                       | OURDMP* | TF0P000 |         |         |         |
| TF0550E        | OURSYS*                                                       | OURDMP* | TF0P000 |         |         |         |
| TF0550F        | OURSYS*                                                       | OURDMP* | TF0P000 |         |         |         |
| TF06001        | OURSYS*                                                       | OURDMP* | TF0P000 |         |         |         |
| TF06009        | OURSYS*                                                       | OURDMP* | TF0P000 |         |         |         |
| TF06010        | OURSYS*                                                       | OURDMP* | TF0P000 |         |         |         |
| TF06011        | OURSYS*                                                       | OURDMP* | TF0P000 |         |         |         |
| TF06022        | OURSYS*                                                       | OURDMP* | TF06013 | TF06014 | TF06015 | TF06016 |
|                | TF06017                                                       | TF06018 | TF06019 | TF0P000 |         |         |
| TF06033        | OURSYS*                                                       | OURDMP* | TF06023 | TF06024 | TF06025 | TF06026 |
|                | TF06027                                                       | TF06028 | TF06029 | TF06030 | TF06031 | TF06032 |
|                | TF0P000                                                       |         |         |         |         |         |
| TF06053        | OURSYS*                                                       | OURDMP* | TF06043 | TF06044 | TF06045 | TF06046 |
|                | TF06047                                                       | TF06048 | TF06049 | TF06050 | TF06051 | TF06052 |
|                | TF0P000                                                       |         |         |         |         |         |
| TF06069        | OURSYS*                                                       | OURDMP* | TF06060 | TF06061 | TF06062 | TF06063 |
|                | TF06064                                                       | TF06065 | TF06066 | TF06067 | TF06068 | TF0P000 |
| TF06079        | OURSYS*                                                       | OURDMP* | TF06070 | TF06071 | TF06072 | TF06073 |
|                | TF06074                                                       | TF06075 | TF06076 | TF06077 | TF06078 | TF0P000 |
| TF06101        | OURSYS*                                                       | OURDMP* | TF06100 | TF0P000 |         |         |
| TF06109        | OURSYS*                                                       | OURDMP* | TF06108 | TF0P000 |         |         |
| TF06110        | OURSYS*                                                       | OURDMP* | TF06108 | TF0P000 |         |         |
| TF06111        | OURSYS*                                                       | OURDMP* | TF06108 | TF0P000 |         |         |
| TF06122        | OURSYS*                                                       | OURDMP* | TF06112 | TF06113 | TF06114 | TF06115 |
|                | TF06116                                                       | TF06117 | TF06118 | TF06119 | TF0P000 |         |
| TF06140        | OURSYS*                                                       | OURDMP* | TF06132 | TF06133 | TF06134 | TF06135 |
|                | TF06136                                                       | TF06137 | TF06138 | TF06139 | TF0P000 |         |
| TF06150        | OURSYS*                                                       | OURDMP* | TF06142 | TF06143 | TF06144 | TF06145 |
|                | TF06146                                                       | TF06147 | TF06148 | TF06149 | TF0P000 |         |
| TF06160        | OURSYS*                                                       | OURDMP* | TF06152 | TF06153 | TF06154 | TF06155 |
|                | TF06156                                                       | TF06157 | TF06158 | TF06159 | TF0P000 |         |
| TF06170        | OURSYS*                                                       | OURDMP* | TF06162 | TF06163 | TF06164 | TF06165 |
|                | TF06166                                                       | TF06167 | TF06168 | TF06169 | TF0P000 |         |
| TF06180        | OURSYS*                                                       | OURDMP* | TF06172 | TF06173 | TF06174 | TF06175 |
|                | TF06176                                                       | TF06177 | TF06178 | TF06179 | TF0P000 |         |
| TF06190        | OURSYS*                                                       | OURDMP* | TF06182 | TF06183 | TF06184 | TF06185 |
|                | TF06186                                                       | TF06187 | TF06188 | TF06189 | TF0P000 |         |
| TF06199        | OURSPC*                                                       | OURSYS* | OURDMP* | TF06191 | TF06192 | TF06193 |
|                | TF06194                                                       | TF06195 | TF06196 | TF06197 | TF06198 | TF0P000 |
| TF0619I        | OURSPC*                                                       | OURSYS* | OURDMP* | TF0619A | TF0619B | TF0619C |
|                | TF0619D                                                       | TF0619E | TF0619F | TF0619G | TF0619H | TF0P000 |
| TF0619R        | OURSPC*                                                       | OURSYS* | OURDMP* | TF0619J | TF0619K | TF0619L |
|                | TF0619M                                                       | TF0619N | TF0619O | TF0619P | TF0619Q | TF0P000 |
| TFD6201        | OURSYS*                                                       | OURDMP* | TF0P000 |         |         |         |
| TFD6209        | OURSYS*                                                       | OURDMP* | TF0P000 |         |         |         |
| TFD6210        | OURSYS*                                                       | OURDMP* | TF0P000 |         |         |         |
| TFD6211        | OURSYS*                                                       | OURDMP* | TF0P000 |         |         |         |
| TFD6222        | OURSYS*                                                       | OURDMP* | TF0P000 |         |         |         |
|                | TFD6216                                                       | TFD6217 | TFD6218 | TFD6213 | TFD6214 | TFD6215 |
| TFD6233        | OURSYS*                                                       | OURDMP* | TF0P000 | TFD6219 |         |         |
|                | TFD6226                                                       | TFD6227 | TFD6228 | TFD6223 | TFD6224 | TFD6225 |
|                |                                                               |         |         | TFD6229 | TFD6230 | TFD6231 |

Table G-5 Ada Type T test Programs and Source Code Files (continued)

| <u>PROGRAM</u> | <u>SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED)</u> |         |         |         |         |         |
|----------------|---------------------------------------------------------------|---------|---------|---------|---------|---------|
| TFD6253        | TFD6232<br>OURSYS*                                            | OURDMP* | TFOP000 | TFD6243 | TFD6244 | TFD6245 |
|                | TFD6246                                                       | TFD6247 | TFD6248 | TFD6249 | TFD6250 | TFD6251 |
|                | TFD6252                                                       |         |         |         |         |         |
| TFD6269        | OURSYS*                                                       | OURDMP* | TFOP000 | TFD6260 | TFD6261 | TFD6262 |
|                | TFD6263                                                       | TFD6264 | TFD6265 | TFD6266 | TFD6267 | TFD6268 |
| TFD6279        | OURSYS*                                                       | OURDMP* | TFOP000 | TFD6270 | TFD6271 | TFD6272 |
|                | TFD6273                                                       | TFD6274 | TFD6275 | TFD6276 | TFD6277 | TFD6278 |
| TFD6301        | OURSYS*                                                       | OURDMP* | TFOP000 | TFD6300 |         |         |
| TFD6309        | OURSYS*                                                       | OURDMP* | TFOP000 | TFD6308 |         |         |
| TFD6310        | OURSYS*                                                       | OURDMP* | TFOP000 | TFD6308 |         |         |
| TFD6311        | OURSYS*                                                       | OURDMP* | TFOP000 | TFD6308 |         |         |
| TFD6322        | OURSYS*                                                       | OURDMP* | TFOP000 | TFD6312 | TFD6313 | TFD6314 |
|                | TFD6315                                                       | TFD6316 | TFD6317 | TFD6318 | TFD6319 |         |
| TFD6340        | OURSYS*                                                       | OURDMP* | TFOP000 | TFD6332 | TFD6333 | TFD6334 |
|                | TFD6335                                                       | TFD6336 | TFD6337 | TFD6338 | TFD6339 |         |
| TFD6350        | OURSYS*                                                       | OURDMP* | TFOP000 | TFD6342 | TFD6343 | TFD6344 |
|                | TFD6345                                                       | TFD6346 | TFD6347 | TFD6348 | TFD6349 |         |
| TFD6360        | OURSYS*                                                       | OURDMP* | TFOP000 | TFD6352 | TFD6353 | TFD6354 |
|                | TFD6355                                                       | TFD6356 | TFD6357 | TFD6358 | TFD6359 |         |
| TFD6370        | OURSYS*                                                       | OURDMP* | TFOP000 | TFD6362 | TFD6363 | TFD6364 |
|                | TFD6365                                                       | TFD6366 | TFD6367 | TFD6368 | TFD6369 |         |
| TFD6380        | OURSYS*                                                       | OURDMP* | TFOP000 | TFD6372 | TFD6373 | TFD6374 |
|                | TFD6375                                                       | TFD6376 | TFD6377 | TFD6378 | TFD6379 |         |
| TFD6390        | OURSYS*                                                       | OURDMP* | TFOP000 | TFD6382 | TFD6383 | TFD6384 |
|                | TFD6385                                                       | TFD6386 | TFD6387 | TFD6388 | TFD6389 |         |
| TF0642B        | OURSPC*                                                       | OURSYS* | OURDMP* | TF06422 | TF06423 | TF06424 |
|                | TF06425                                                       | TF06426 | TF06427 | TF06428 | TF06429 | TF0642A |
|                | TFOP000                                                       |         |         |         |         |         |
| TF06803        | OURSYS*                                                       | OURDMP* | TF06802 | TFOP000 |         |         |
| TF06807        | OURSYS*                                                       | OURDMP* | TF06806 | TFOP000 |         |         |
| TF06809        | OURSPC*                                                       | OURSYS* | OURDMP* | TF06808 | TFOP000 |         |
| TF0680B        | OURSPC*                                                       | OURSYS* | OURDMP* | TF0680A | TFOP000 |         |
| TF0680D        | OURSPC*                                                       | OURSYS* | OURDMP* | TF0680C | TFOP000 |         |
| TF0680F        | OURSPC*                                                       | OURSYS* | OURDMP* | TF0680E | TFOP000 |         |
| TFD680H        | OURSPC*                                                       | OURSYS* | OURDMP* | TFOP000 | TFD680G |         |
| TFD680J        | OURSPC*                                                       | OURSYS* | OURDMP* | TFOP000 | TFD680I |         |
| TF06811        | OURSYS*                                                       | OURDMP* | TF06810 | TFOP000 |         |         |
| TF06815        | OURSYS*                                                       | OURDMP* | TF06814 | TFOP000 |         |         |
| TF06817        | OURSYS*                                                       | OURDMP* | TF06816 | TFOP000 |         |         |
| TF06819        | OURSYS*                                                       | OURDMP* | TF06818 | TFOP000 |         |         |
| TF06821        | OURSYS*                                                       | OURDMP* | TF06820 | TFOP000 |         |         |
| TF06823        | OURSPC*                                                       | OURSYS* | OURDMP* | TF06822 | TFOP000 |         |
| TF06825        | OURSPC*                                                       | OURSYS* | OURDMP* | TF06824 | TFOP000 |         |
| TFN9301        | OURSPC*                                                       | OURSYS* | TFN9300 |         |         |         |
| TFN9302        | OURSPC*                                                       | OURSYS* | TFN9300 |         |         |         |
| TFN9303        | OURSPC*                                                       | OURSYS* | TFN9300 |         |         |         |
| TF09501        | OURSPC*                                                       | OURSYS* | OURDMP* | TF09500 | TFOP000 |         |
| TF09502        | OURSPC*                                                       | OURSYS* | OURDMP* | TF09500 | TFOP000 |         |
| TF09503        | OURSPC*                                                       | OURSYS* | OURDMP* | TF09500 | TFOP000 |         |
| TF09504        | OURSPC*                                                       | OURSYS* | OURDMP* | TF09500 | TFOP000 |         |
| TF09505        | OURSPC*                                                       | OURSYS* | OURDMP* | TF09500 | TFOP000 |         |
| TF09506        | OURSPC*                                                       | OURSYS* | OURDMP* | TF09500 | TFOP000 |         |
| TF09507        | OURSPC*                                                       | OURSYS* | OURDMP* | TF09500 | TFOP000 |         |
| TF09508        | OURSPC*                                                       | OURSYS* | OURDMP* | TF09500 | TFOP000 |         |
| TF09509        | OURSPC*                                                       | OURSYS* | OURDMP* | TF09500 | TFOP000 |         |
| TFN9511        | OURSPC*                                                       | OURSYS* | TFN9510 |         |         |         |
| TF09600        | OURSPC*                                                       | OURSYS* | TFOP000 |         |         |         |
| TF09601        | OURSPC*                                                       | OURSYS* | TFOP000 |         |         |         |
| TF09602        | OURSPC*                                                       | OURSYS* | TFOP000 |         |         |         |
| TF09603        | OURSPC*                                                       | OURSYS* | TFOP000 |         |         |         |
| TF09604        | OURSPC*                                                       | OURSYS* | TFOP000 |         |         |         |
| TF09605        | OURSPC*                                                       | OURSYS* | TFOP000 |         |         |         |
| TF09606        | OURSPC*                                                       | OURSYS* | TFOP000 |         |         |         |
| TF09607        | OURSPC*                                                       | OURSYS* | TFOP000 |         |         |         |

Table G-5 Ada Type T test Programs and Source Code Files (continued)

| PROGRAM   | SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED) |         |         |         |           |         |
|-----------|--------------------------------------------------------|---------|---------|---------|-----------|---------|
| TFN9611   | OURSPC*                                                | OURSYS* | TFN9610 |         |           |         |
| TFN9612   | OURSPC*                                                | OURSYS* | TFN9610 |         |           |         |
| TFN9613   | OURSPC*                                                | OURSYS* | TFN9610 |         |           |         |
| TF09711   | OURSYS*                                                | TF09710 | TF0P000 |         |           |         |
| TF09713   | OURSYS*                                                | TF09712 | TF0P000 |         |           |         |
| TF09720   | OURSPC*                                                | OURSYS* | OURDMP* | TF09500 | TF0P000   |         |
| TF09721   | OURSPC*                                                | OURSYS* | OURDMP* | TF09500 | TF0P000   |         |
| TF09731   | OURSPC*                                                | OURSYS* | OURDMP* | TF09500 | TF0P000   |         |
| TF09901   | OURSYS*                                                | TF09900 | TF0P000 |         |           |         |
| TF09902   | OURSYS*                                                | TF09900 | TF0P000 |         |           |         |
| TF09903   | OURSYS*                                                | TF09900 | TF0P000 |         |           |         |
| TFM9A01   | OURSPC*                                                | OURSYS* | TFM9A00 |         |           |         |
| TFM9A02   | OURSPC*                                                | OURSYS* | TFM9A00 |         |           |         |
| TFM9A03   | OURSPC*                                                | OURSYS* | TFM9A00 |         |           |         |
| TF09B01   | OURSPC*                                                | OURSYS* | OURDMP* | TF09500 | TF0P000   |         |
| TFD9C00   | OURSPC*                                                | OURSYS* | TF0P000 | TFD9000 |           |         |
| TFD9C01   | OURSPC*                                                | OURSYS* | TF0P000 | TFD9000 | TFD9200   |         |
| TFD9C02   | OURSPC*                                                | OURSYS* | TF0P000 | TFD9000 | TFD9200   |         |
| TFD9C03** | OURSPC*                                                | OURSYS* | TF0P000 | TFD9000 | TFD9200   |         |
| TFD9C04** | OURSPC*                                                | OURSYS* | TF0P000 | TFD9000 | TFD9200   |         |
| TFMB001   | OURSYS*                                                | TFMB000 |         |         |           |         |
| TFMB003   | OURSYS*                                                | TFMB002 |         |         |           |         |
| TFMB005   | OURSYS*                                                | TFMB004 |         |         |           |         |
| TFMB007   | OURSYS*                                                | TFMB006 |         |         |           |         |
| TFMB009   | OURSYS*                                                | TFMB008 |         |         |           |         |
| TFMB012   | OURSYS*                                                | TFMB010 | TFMB011 |         |           |         |
| TFMB016   | OURSYS*                                                | TFMB013 | TFMB014 | TFMB015 |           |         |
| TFMB020   | OURSYS*                                                | TFMB017 | TFMB018 | TFMB019 |           |         |
| TFMB024   | OURSYS*                                                | TFMB021 | TFMB022 | TFMB023 |           |         |
| TFMB028   | OURSYS*                                                | TFMB025 | TFMB026 | TFMB027 |           |         |
| TFMB032   | OURSYS*                                                | TFMB013 | TFMB014 | TFMB015 |           |         |
| TFMB036   | OURSYS*                                                | TFMB033 | TFMB034 | TFMB035 |           |         |
| TFMB040   | OURSYS*                                                | TFMB037 | TFMB038 | TFMB039 |           |         |
| TFMB044   | OURSYS*                                                | TFMB041 | TFMB042 | TFMB043 |           |         |
| TF0C301   | OURSYS*                                                | OURDMP* | TF0C100 | TF0C101 | TF0C300   | TF0P000 |
| TF0C302   | OURSYS*                                                | OURDMP* | TF0C100 | TF0C101 | TF0C300   | TF0P000 |
| TF0C304   | OURSYS*                                                | OURDMP* | TF0C102 | TF0C103 | TF0C303   | TF0P000 |
| TF0C305   | OURSYS*                                                | OURDMP* | TF0C102 | TF0P000 |           |         |
| TF0C306   | OURSYS*                                                | OURDMP* | TF0C102 | TF0P000 |           |         |
| TF0C307   | OURSYS*                                                | OURDMP* | TF0C102 | TF0P000 |           |         |
| TFDC311   | OURSYS*                                                | OURDMP* | TF0P000 | TFDC104 | TFDC105   | TFDC310 |
| TFDC314   | OURSYS*                                                | OURDMP* | TF0P000 | TFDC106 | TFDC107** | TFDC313 |
| TFDD600   | OURSPC*                                                | OURSYS* | TF0P000 |         |           |         |
| TFDD601   | OURSPC*                                                | OURSYS* | TF0P000 |         |           |         |
| TFDD602   | OURSPC*                                                | OURSYS* | TF0P000 |         |           |         |
| TFDD603   | OURSPC*                                                | OURSYS* | TF0P000 |         |           |         |
| TFDD604   | OURSPC*                                                | OURSYS* | TF0P000 |         |           |         |
| TFDD605   | OURSPC*                                                | OURSYS* | TF0P000 |         |           |         |
| TFDD606   | OURSPC*                                                | OURSYS* | TF0P000 |         |           |         |
| TFDD607   | OURSPC*                                                | OURSYS* | TF0P000 |         |           |         |
| TFDD608*  | OURSPC*                                                | OURSYS* | TF0P000 |         |           |         |
| TFDD609   | OURSPC*                                                | OURSYS* | TF0P000 |         |           |         |
| TFDD610   | OURSPC*                                                | OURSYS* | TF0P000 |         |           |         |
| TFDD611   | OURSPC*                                                | OURSYS* | TF0P000 |         |           |         |
| TF0D720   | OURSYS*                                                |         |         |         |           |         |
| TF0D721   | OURSYS*                                                |         |         |         |           |         |
| TFDD722   | OURSYS*                                                | OURTYP* |         |         |           |         |
| TFDD723   | OURSYS*                                                | OURTYP* |         |         |           |         |
| TFDD724   | OURSYS*                                                | OURTYP* |         |         |           |         |
| TFDD725   | OURSYS*                                                | OURTYP* |         |         |           |         |
| TF0D727   | OURSYS*                                                |         |         |         |           |         |
| TF0D728   | OURSPC*                                                | OURSYS* |         |         |           |         |
| TF0D729   | OURSPC*                                                | OURSYS* |         |         |           |         |

\*\* Multiple versions of source file supplied(USE and ADA file types)

\* Source file supplied with DEC file type only

\* Source file supplied with USE file type only

Table G-5 Ada Type T test Programs and Source Code Files (continued)

| PROGRAM   | SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED) |          |          |         |         |         |
|-----------|--------------------------------------------------------|----------|----------|---------|---------|---------|
| TFDD72A   | OURSPC*                                                | OURSYS*  |          |         |         |         |
| TFDD72B   | OURSPC*                                                | OURSYS*  |          |         |         |         |
| TFDD72C   | OURSPC*                                                | OURSYS*  |          |         |         |         |
| TFDD72D   | OURSPC*                                                | OURSYS*  |          |         |         |         |
| TFDD72E   | OURSPC*                                                | OURSYS*  |          |         |         |         |
| TFDD72F   | OURSPC*                                                | OURSYS*  |          |         |         |         |
| TFDD72G   | OURSPC*                                                | OURSYS*  |          |         |         |         |
| TFDD72H   | OURSPC*                                                | OURSYS*  |          |         |         |         |
| TFDD72I   | OURSPC*                                                | OURSYS*  |          |         |         |         |
| TFDDA01   | OURSPC*                                                | OURSYS*  | TFOP000  |         |         |         |
| TFDDA02   | OURSPC*                                                | OURSYS*  | TFOP000  |         |         |         |
| TFDE220   | OURSYS*                                                | OURDMP*  | TFOP000  | TFDE000 | TFDE201 | TFDE202 |
|           | TFDE203                                                | TFDE204  | TFDE205  | TFDE206 | TFDE207 | TFDE208 |
|           | TFDE209                                                | TFDE20A  | TFDE211  | TFDE212 | TFDE213 | TFDE214 |
|           | TFDE215                                                | TFDE216  |          |         |         |         |
| TFDE250   | OURSYS*                                                | OURDMP*  | TFOP000  | TFDE000 | TFDE231 | TFDE232 |
|           | TFDE233                                                | TFDE234  | TFDE235  | TFDE236 | TFDE237 | TFDE238 |
|           | TFDE239                                                | TFDE23A  | TFDE241  | TFDE242 | TFDE243 | TFDE244 |
|           | TFDE245                                                | TFDE246  |          |         |         |         |
| TFDE420   | OURSYS*                                                | OURDMP*  | TFOP000  | TFDE000 | TFDE401 | TFDE402 |
|           | TFDE403                                                | TFDE404  | TFDE405  | TFDE406 | TFDE407 | TFDE408 |
|           | TFDE409                                                | TFDE40A  | TFDE411  | TFDE412 | TFDE413 | TFDE414 |
|           | TFDE415                                                | TFDE416  |          |         |         |         |
| TFDE450   | OURSYS*                                                | OURDMP*  | TFOP000  | TFDE000 | TFDE431 | TFDE432 |
|           | TFDE433                                                | TFDE434  | TFDE435  | TFDE436 | TFDE437 | TFDE438 |
|           | TFDE439                                                | TFDE43A  | TFDE441  | TFDE442 | TFDE443 | TFDE444 |
|           | TFDE445                                                | TFDE446  |          |         |         |         |
| TFDF000   | OURSYS*                                                | OURDMP*  | MATHFUN* | TFOP000 |         |         |
| TFDF001   | OURSYS*                                                | OURDMP*  | MATHFUN* | TFOP000 |         |         |
| TFDF002   | OURSYS*                                                | OURDMP*  | MATHFUN* | TFOP000 |         |         |
| TFDF003   | OURSYS*                                                | OURDMP*  | MATHFUN* | TFOP000 |         |         |
| TFDF004   | OURSYS*                                                | OURDMP*  | MATHFUN* | TFOP000 |         |         |
| TFDF005   | OURSYS*                                                | OURDMP*  | MATHFUN* | TFOP000 |         |         |
| TGD0001   | OURSYS*                                                | MATHFUN* | TGOP000  | TGD0000 |         |         |
| TGD0003   | OURSYS*                                                | TGOP000  | TGD0002  |         |         |         |
| TGD0009   | OURSYS*                                                | TGOP000  | TGD0004  | TGD0005 | TGD0006 | TGD0007 |
|           | TGD0008                                                |          |          |         |         |         |
| TGD000C   | OURSYS*                                                | OURDMP*  | TGOP000  |         |         |         |
| TGD000E   | OURSYS*                                                | MATHFUN* | TGOP000  | TGD0000 | TGD000D |         |
| TGN000K   | OURSYS*                                                | TGN000F  | TGN000G  | TGN000H | TGN000I | TGN000J |
| TGD0039   | OURSPC*                                                | OURSYS*  | TGOP000  | TGD0004 | TGD0005 | TGD0006 |
|           | TGD0007                                                | TGD0008  | TGD0019  | TGD0029 |         |         |
| TGD0049   | OURSPC*                                                | OURSYS*  | TGOP000  | TGD0004 | TGD0005 | TGD0006 |
|           | TGD0007                                                | TGD0008  | TGD0019  | TGD0029 |         |         |
| TGD0059** | OURSPC*                                                | OURSYS*  | TGOP000  | TGD0004 | TGD0005 | TGD0006 |
|           | TGD0007                                                | TGD0008  | TGD0019  | TGD0029 |         |         |
| TL09101   | OURSPC*                                                | OURSYS*  | TL09000  | TL09100 | TL0P000 |         |
| TL09111   | OURSPC*                                                | OURSYS*  | TL09000  | TL09100 | TL0P000 |         |
| TL09121   | OURSPC*                                                | OURSYS*  | TL09000  | TL09100 | TL0P000 |         |
| TL09131   | OURSPC*                                                | OURSYS*  | TL09000  | TL09100 | TL0P000 |         |
| TL09202   | OURSPC*                                                | OURSYS*  | TL09000  | TL09100 | TL0P000 | TL09200 |
| TL09203   | OURSPC*                                                | OURSYS*  | TL09000  | TL09100 | TL0P000 | TL09200 |
| TL09204** | OURSPC*                                                | OURSYS*  | TL09000  | TL09100 | TL0P000 | TL09200 |
| TL09212   | OURSPC*                                                | OURSYS*  | TL09000  | TL09100 | TL0P000 | TL09200 |
| TL09213   | OURSPC*                                                | OURSYS*  | TL09000  | TL09100 | TL0P000 | TL09200 |
| TL09214** | OURSPC*                                                | OURSYS*  | TL09000  | TL09100 | TL0P000 | TL09200 |
| TL09222   | OURSPC*                                                | OURSYS*  | TL09000  | TL09100 | TL0P000 | TL09200 |
| TL09223   | OURSPC*                                                | OURSYS*  | TL09000  | TL09100 | TL0P000 | TL09200 |
| TL09224** | OURSPC*                                                | OURSYS*  | TL09000  | TL09100 | TL0P000 | TL09200 |
| TL09232   | OURSPC*                                                | OURSYS*  | TL09000  | TL09100 | TL0P000 | TL09200 |
| TL09233   | OURSPC*                                                | OURSYS*  | TL09000  | TL09100 | TL0P000 | TL09200 |
| TL09234** | OURSPC*                                                | OURSYS*  | TL09000  | TL09100 | TL0P000 | TL09200 |
| TLDE2C1   | OURSPC*                                                | OURSYS*  | TL0P000  | TLDE000 | TLDE2B1 |         |
| TLDE2C2   | OURSPC*                                                | OURSYS*  | TL0P000  | TLDE000 | TLDE2B1 |         |

\*\* Source file supplied with DEC file type only



Table G-5 Ada Type T test Programs and Source Code Files (continued)

| PROGRAM   | SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED) |         |          |         |         |         |
|-----------|--------------------------------------------------------|---------|----------|---------|---------|---------|
| TLDE2C3** | OURSPC*                                                | OURSYS* | TLOP000  | TLDE000 | TLDE2B1 |         |
| TLDE2C4** | OURSPC*                                                | OURSYS* | TLOP000  | TLDE000 | TLDE2B1 |         |
| TLDE2C5   | OURSPC*                                                | OURSYS* | TLOP000  | TLDE000 | TLDE2B2 |         |
| TLDE2C6   | OURSPC*                                                | OURSYS* | TLOP000  | TLDE000 | TLDE2B2 |         |
| TLDE2C7** | OURSPC*                                                | OURSYS* | TLOP000  | TLDE000 | TLDE2B2 |         |
| TLDE2C8** | OURSPC*                                                | OURSYS* | TLOP000  | TLDE000 | TLDE2B2 |         |
| TLDE4C1   | OURSPC*                                                | OURSYS* | TLOP000  | TLDE000 | TLDE4B1 |         |
| TLDE4C2   | OURSPC*                                                | OURSYS* | TLOP000  | TLDE000 | TLDE4B1 |         |
| TLDE4C3** | OURSPC*                                                | OURSYS* | TLOP000  | TLDE000 | TLDE4B1 |         |
| TLDE4C4** | OURSPC*                                                | OURSYS* | TLOP000  | TLDE000 | TLDE4B1 |         |
| TLDE4C5   | OURSPC*                                                | OURSYS* | TLOP000  | TLDE000 | TLDE4B2 |         |
| TLDE4C6   | OURSPC*                                                | OURSYS* | TLOP000  | TLDE000 | TLDE4B2 |         |
| TLDE4C7** | OURSPC*                                                | OURSYS* | TLOP000  | TLDE000 | TLDE4B2 |         |
| TLDE4C8** | OURSPC*                                                | OURSYS* | TLOP000  | TLDE000 | TLDE4B2 |         |
| T000104   | OURSYS*                                                | OURDMP* | T000002  | T000102 | T000103 | T00P000 |
| T000109   | OURSYS*                                                | OURDMP* | T000001  | T000107 | T000108 | T00P000 |
| T000114   | OURSYS*                                                | OURDMP* | T000001  | T000112 | T000113 | T00P000 |
| T000204   | OURSYS*                                                | OURDMP* | T000202  | T000203 | T00P000 |         |
| T000209   | OURSYS*                                                | OURDMP* | T000001  | T000207 | T000208 | T00P000 |
| T000300   | OURSYS*                                                | T00P000 |          |         |         |         |
| T000305   | OURSYS*                                                | T00P000 |          |         |         |         |
| T000310   | OURSYS*                                                | T00P000 |          |         |         |         |
| T000313   | OURSYS*                                                | OURDMP* | T000311  | T000312 | T00P000 |         |
| T000316   | OURSYS*                                                | OURDMP* | T000314  | T000315 | T00P000 |         |
| T000319   | OURSYS*                                                | OURDMP* | T000317  | T000318 | T00P000 |         |
| T000322   | OURSYS*                                                | OURDMP* | T000320  | T000321 | T00P000 |         |
| T000325   | OURSYS*                                                | OURDMP* | T000323  | T000324 | T00P000 |         |
| T000328   | OURSYS*                                                | OURDMP* | T000326  | T000327 | T00P000 |         |
| T000331   | OURSYS*                                                | OURDMP* | T000329  | T000330 | T00P000 |         |
| T000334   | OURSYS*                                                | OURDMP* | T000332  | T000333 | T00P000 |         |
| T000337   | OURSYS*                                                | OURDMP* | T000335  | T000336 | T00P000 |         |
| T000340   | OURSYS*                                                | OURDMP* | T000338  | T000339 | T00P000 |         |
| T000343   | OURSYS*                                                | OURDMP* | T000341  | T000342 | T00P000 |         |
| T000346   | OURSYS*                                                | OURDMP* | MATHFUN* | T00P000 | T000344 | T000345 |
| T000350   | OURSYS*                                                | OURDMP* | T000347  | T000348 | T000349 | T00P000 |
| T000353   | OURSYS*                                                | OURDMP* | T000347  | T000351 | T000352 | T00P000 |
| T000356   | OURSYS*                                                | OURDMP* | T000354  | T000355 | T00P000 |         |
| T000359   | OURSYS*                                                | OURDMP* | T000357  | T000358 | T00P000 |         |
| T000362   | OURSYS*                                                | OURDMP* | T000360  | T000361 | T00P000 |         |
| T000365   | OURSPC*                                                | OURSYS* | OURDMP*  | T000363 | T000364 | T00P000 |
| T000368   | OURSPC*                                                | OURSYS* | OURDMP*  | T000366 | T000367 | T00P000 |
| T00036B   | OURSPC*                                                | OURSYS* | OURDMP*  | T000369 | T00036A | T00P000 |
| T00036E   | OURSPC*                                                | OURSYS* | OURDMP*  | T00P000 | T00036C | T00036D |
| T00036H   | OURSPC*                                                | OURSYS* | OURDMP*  | T00036F | T00036G | T00P000 |
| T00036K   | OURSPC*                                                | OURSYS* | OURDMP*  | T00036I | T00036J | T00P000 |
| T00036N   | OURSPC*                                                | OURSYS* | OURDMP*  | T00036L | T00036M | T00P000 |
| T00036Q   | OURSPC*                                                | OURSYS* | OURDMP*  | T00P000 | T00036O | T00036P |
| T00036T   | OURSPC*                                                | OURSYS* | OURDMP*  | T00P000 | T00036R | T00036S |
| T00036W   | OURSPC*                                                | OURSYS* | OURDMP*  | T00036U | T00036V | T00P000 |
| T00036Z   | OURSYS*                                                | OURDMP* | OURTYP*  | T00P000 | T00036X | T00036Y |
| T000373   | OURSPC*                                                | OURSYS* | OURDMP*  | T00P000 | T000370 | T000371 |
|           | T000372                                                |         |          |         |         |         |
| T000378   | OURSYS*                                                | OURDMP* | T000374  | T000375 | T000376 | T000377 |
|           | T00P000                                                |         |          |         |         |         |
| T000383   | OURSPC*                                                | OURSYS* | OURDMP*  | T000374 | T00P000 | T000380 |
|           | T000381                                                | T000382 |          |         |         |         |
| T000391   | OURSYS*                                                | OURDMP* | T000390  | T00P000 |         |         |
| T000404   | OURSYS*                                                | OURDMP* | T000402  | T000403 | T00P000 |         |
| T000500   | OURSYS*                                                | T00P000 |          |         |         |         |
| T000504   | OURSYS*                                                | OURDMP* | T000502  | T000503 | T00P000 |         |
| T000509   | OURSYS*                                                | OURDMP* | T000507  | T000508 | T00P000 |         |
| T000514   | OURSYS*                                                | OURDMP* | T000512  | T000513 | T00P000 |         |
| T000519   | OURSYS*                                                | OURDMP* | T000517  | T000518 | T00P000 |         |
| T000525   | OURSYS*                                                | OURDMP* | T00P000  | T000523 | T000524 |         |

\*\* Source file supplied with DEC file type only

Table G-5 Ada Type T test Programs and Source Code Files (concluded)

| <u>PROGRAM</u> | <u>SUPPORT FILES(* - TEST SUPPORT SOFTWARE PACKAGES USED)</u> |         |         |         |         |         |
|----------------|---------------------------------------------------------------|---------|---------|---------|---------|---------|
| TOD0529        | OURSYS*                                                       | OURDMP* | T00P000 | TOD0526 | TOD0527 | TOD0528 |
| T000604        | OURSYS*                                                       | OURDMP* | T000602 | T000603 | T00P000 |         |
| T000605        | OURSYS*                                                       | OURDMP* | T00P000 |         |         |         |
| T000606        | OURSYS*                                                       | OURDMP* | T00P000 |         |         |         |
| T000607        | OURSYS*                                                       | OURDMP* | T00P000 |         |         |         |
| T000704        | OURSYS*                                                       | OURDMP* | T000702 | T000703 | T00P000 |         |
| T000705        | OURSYS*                                                       | OURDMP* | T00P000 |         |         |         |
| T000708        | OURSYS*                                                       | OURDMP* | T000706 | T000707 | T00P000 |         |
| T000711        | OURSYS*                                                       | OURDMP* | T000709 | T000710 | T00P000 |         |
| T000713        | OURSYS*                                                       | OURDMP* | T00P000 |         |         |         |
| T000714        | OURSYS*                                                       | OURDMP* | T00P000 |         |         |         |
| T000715        | OURSYS*                                                       | OURDMP* | T00P000 |         |         |         |
| T000716        | OURSYS*                                                       | OURDMP* | T00P000 |         |         |         |
| T000717        | OURSYS*                                                       | OURDMP* | T00P000 |         |         |         |
| T000718        | OURSYS*                                                       | OURDMP* | T00P000 |         |         |         |
| T000721        | OURSYS*                                                       | OURDMP* | T000719 | T000720 | T00P000 |         |

Table G-6 JOVIAL Test Programs and Source Code Files

| PROGRAM   | SUPPORT FILES(* - FILES NAMED IN COMPOOL AND COPY DIRECTIVES) |          |          |          |           |          |
|-----------|---------------------------------------------------------------|----------|----------|----------|-----------|----------|
| JA00000   | OURJOV*                                                       | JOVDMP*  | JA0P000* |          |           |          |
| JF03519   | OURJOV*                                                       | JOVDMP*  | JF03500  | JF03501  | JF03502   | JF03503  |
|           | JF03504                                                       | JF03513  | JF03514  | JF0P000* | JFJ3500*  | JFJ3501* |
|           | JFJ3502*                                                      | JFJ3503* | JFJ3504* | JFJ3513* | JFJ3514*  |          |
| JF03550   | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |           |          |
| JFD3551   | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |           |          |
| JF03620   | OURJOV*                                                       | JOVDMP*  | JF03600  | JF03601  | JF03602   | JF03603  |
|           | JF03604                                                       | JF03605  | JF03606  | JF03607  | JF03608   | JF03609  |
|           | JF03610                                                       | JF0P000* | JFJ3600* | JFJ3601* | JFJ3602*  | JFJ3603* |
|           | JFJ3604*                                                      | JFJ3605* | JFJ3606* | JFJ3607* | JFJ3608*  | JFJ3609* |
|           | JFJ3610*                                                      |          |          |          |           |          |
| JF03704   | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF03700  | JF03701** | JF03702  |
|           | JF03703                                                       | JF0P000* | JFJ3700* | JFJ3701* | JFJ3702*  | JFJ3703* |
| JF03805   | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF03800  | JF03801   | JF03802  |
|           | JF03803                                                       | JF03804  | JF0P000* | JFJ3800* | JFJ3801*  | JFJ3802* |
|           | JFJ3803*                                                      | JFJ3804* |          |          |           |          |
| JF04120   | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |           |          |
| JF04121   | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |           |          |
| JF04122   | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |           |          |
| JF04123   | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |           |          |
| JF04124   | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |           |          |
| JF04125   | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |           |          |
| JF04126   | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |           |          |
| JF04127   | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |           |          |
| JFD4128   | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |           |          |
| JF04129   | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |           |          |
| JFD412A   | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |           |          |
| JF0412B   | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |           |          |
| JFD412C   | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |           |          |
| JFD412D   | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |           |          |
| JF04130   | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |           |          |
| JF04131   | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |           |          |
| JF04132   | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |           |          |
| JF04133   | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |           |          |
| JFD4135   | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |           |          |
| JFD4136   | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |           |          |
| JFD4137   | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |           |          |
| JFD4138   | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |           |          |
| JFD4139   | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |           |          |
| JFD413A   | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |           |          |
| JFD413B   | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |           |          |
| JFD413C   | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |           |          |
| JF0413D   | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |           |          |
| JFD413E   | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |           |          |
| JFD413G   | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |           |          |
| JF0413H   | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |           |          |
| JF0413I   | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |           |          |
| JF0413J   | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |           |          |
| JF0413K   | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |           |          |
| JF04310   | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |           |          |
| JF04311** | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |           |          |
| JF04312   | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |           |          |
| JF04510   | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |           |          |
| JF04511   | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |           |          |
| JF04512   | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |           |          |
| JF04513   | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |           |          |
| JF04514   | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |           |          |
| JF04515   | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |           |          |
| JF04516   | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |           |          |
| JF04517   | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |           |          |
| JF0451J** | OURJOV*                                                       | JOVDMP*  | JF04518  | JF04519  | JF0451A   | JF0451B  |
|           | JF0451C                                                       | JF0451D  | JF0451E  | JF0451F  | JF0451G   | JF0451H* |

\* Source file supplied with USE file type only

\*\* Multiple versions of source file supplied(USE and JOV/CPL file types)

Table G-6 JOVIAL Test Programs and Source Code Files (continued)

| PROGRAM  | SUPPORT FILES(* - FILES NAMED IN COMPOOL AND COPY DIRECTIVES) |          |          |          |          |          |
|----------|---------------------------------------------------------------|----------|----------|----------|----------|----------|
|          | JF0451I*                                                      | JF0P000* | JFJ4518* | JFJ4519* | JFJ451A* | JFJ451B* |
|          | JFJ451C*                                                      | JFJ451D* | JFJ451E* | JFJ451F* | JFJ451G* | JFJ451H* |
|          | JFJ451I*                                                      |          |          |          |          |          |
| JFD451U* | OURJOV*                                                       | JOVDMP*  | JOVTYP*  | JF0P000* | JFD451K  | JFD451L  |
|          | JFD451M                                                       | JFD451N* | JFD451O* | JFD451P  | JFD451Q  | JFD451R* |
|          | JFD451S*                                                      | JFJ451K* | JFJ451L* | JFJ451M* | JFJ451N* | JFJ451O* |
|          | JFJ451P*                                                      | JFJ451Q* | JFJ451R* | JFJ451S* | JFJ451T* |          |
| JF0451Z  | OURJOV*                                                       | JOVDMP*  | JF0451V  | JF0451W  | JF0451X  | JF0451Y  |
|          | JF0P000*                                                      | JFJ451V* | JFJ451W* | JFJ451X* | JFJ451Y* |          |
| JF04520  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF04521  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF04522  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JFD4523  | OURJOV*                                                       | JOVDMP*  | JOVTYP*  | JF0P000* |          |          |
| JFD4524  | OURJOV*                                                       | JOVDMP*  | JOVTYP*  | JF0P000* |          |          |
| JFD4525* | OURJOV*                                                       | JOVDMP*  | JOVTYP*  | JF0P000* |          |          |
| JFD4526* | OURJOV*                                                       | JOVDMP*  | JOVTYP*  | JF0P000* |          |          |
| JF04527  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JFD4528* | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |          |          |
| JF04529  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JFD452A  | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |          |          |
| JF04530  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF04531  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF04532  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF04533  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF04534  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF04535  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF04536  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF04537  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF04538  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF04539  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF0453A  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF0453B  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF0453C  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF04540  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF04541  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF04550  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF04551  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF04552  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF04553  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF04554  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF04555  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF04556  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF04557  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF04558  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF04559  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JFD455D  | OURJOV*                                                       | JOVDMP*  | JOVTYP*  | JF0P000* |          |          |
| JFD455E  | OURJOV*                                                       | JOVDMP*  | JOVTYP*  | JF0P000* |          |          |
| JFD455F* | OURJOV*                                                       | JOVDMP*  | JOVTYP*  | JF0P000* |          |          |
| JFD455G* | OURJOV*                                                       | JOVDMP*  | JOVTYP*  | JF0P000* |          |          |
| JFD455I  | OURJOV*                                                       | JOVDMP*  | JOVTYP*  | JF0P000* |          |          |
| JFD455J  | OURJOV*                                                       | JOVDMP*  | JOVTYP*  | JF0P000* |          |          |
| JFD455K* | OURJOV*                                                       | JOVDMP*  | JOVTYP*  | JF0P000* |          |          |
| JFD455L* | OURJOV*                                                       | JOVDMP*  | JOVTYP*  | JF0P000* |          |          |
| JF0455N  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF0455O  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF04560  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF04562  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF04563  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JFD4566  | OURJOV*                                                       | JOVDMP*  | JOVTYP*  | JF0P000* |          |          |
| JFD4567  | OURJOV*                                                       | JOVDMP*  | JOVTYP*  | JF0P000* |          |          |
| JFD4568* | OURJOV*                                                       | JOVDMP*  | JOVTYP*  | JF0P000* |          |          |
| JFD4569* | OURJOV*                                                       | JOVDMP*  | JOVTYP*  | JF0P000* |          |          |
| JF04600  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |

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Table G-6 JOVIAL Test Programs and Source Code Files (continued)

| <u>PROGRAM</u> | <u>SUPPORT FILES(* - FILES NAMED IN COMPOOL AND COPY DIRECTIVES)</u> |         |          |          |
|----------------|----------------------------------------------------------------------|---------|----------|----------|
| JF04601        | OURJOV*                                                              | JOVDMP* | JF0P000* |          |
| JF04602        | OURJOV*                                                              | JOVDMP* | JF0P000* |          |
| JFD4603        | OURJOV*                                                              | JOVDMP* | JOVTYP*  | JF0P000* |
| JFD4604        | OURJOV*                                                              | JOVDMP* | JOVTYP*  | JF0P000* |
| JFD4605        | OURJOV*                                                              | JOVDMP* | JOVTYP*  | JF0P000* |
| JFD4606        | OURJOV*                                                              | JOVDMP* | JOVTYP*  | JF0P000* |
| JFD4607        | OURJOV*                                                              | JOVDMP* | JOVTYP*  | JF0P000* |
| JFD4608*       | OURJOV*                                                              | JOVDMP* | JOVTYP*  | JF0P000* |
| JFD4609*       | OURJOV*                                                              | JOVDMP* | JOVTYP*  | JF0P000* |
| JFD460A*       | OURJOV*                                                              | JOVDMP* | JOVTYP*  | JF0P000* |
| JFD460B*       | OURJOV*                                                              | JOVDMP* | JOVTYP*  | JF0P000* |
| JFD460C*       | OURJOV*                                                              | JOVDMP* | JOVTYP*  | JF0P000* |
| JFD460D*       | OURJOV*                                                              | JOVDMP* | JOVTYP*  | JF0P000* |
| JF0460E        | OURJOV*                                                              | JOVDMP* | JF0P000* |          |
| JF0460F        | OURJOV*                                                              | JOVDMP* | JF0P000* |          |
| JF0460G        | OURJOV*                                                              | JOVDMP* | JF0P000* |          |
| JF0460H        | OURJOV*                                                              | JOVDMP* | JF0P000* |          |
| JF0460I        | OURJOV*                                                              | JOVDMP* | JF0P000* |          |
| JF0460J        | OURJOV*                                                              | JOVDMP* | JOVSPC*  | JF0P000* |
| JFD460K        | OURJOV*                                                              | JOVDMP* | JOVSPC*  | JF0P000* |
| JFD460L        | OURJOV*                                                              | JOVDMP* | JOVSPC*  | JF0P000* |
| JF0460M        | OURJOV*                                                              | JOVDMP* | JOVSPC*  | JF0P000* |
| JFD460N        | OURJOV*                                                              | JOVDMP* | JOVSPC*  | JF0P000* |
| JFD460O        | OURJOV*                                                              | JOVDMP* | JOVSPC*  | JF0P000* |
| JF05200        | OURJOV*                                                              | JOVDMP* | JF0P000* |          |
| JF05201        | OURJOV*                                                              | JOVDMP* | JF0P000* |          |
| JF05202        | OURJOV*                                                              | JOVDMP* | JF0P000* |          |
| JF05203        | OURJOV*                                                              | JOVDMP* | JF0P000* |          |
| JF05204        | OURJOV*                                                              | JOVDMP* | JF0P000* |          |
| JF05205        | OURJOV*                                                              | JOVDMP* | JF0P000* |          |
| JF05206        | OURJOV*                                                              | JOVDMP* | JF0P000* |          |
| JF05207        | OURJOV*                                                              | JOVDMP* | JF0P000* |          |
| JF05208        | OURJOV*                                                              | JOVDMP* | JF0P000* |          |
| JF05209        | OURJOV*                                                              | JOVDMP* | JF0P000* |          |
| JF0520A        | OURJOV*                                                              | JOVDMP* | JF0P000* |          |
| JF0520B        | OURJOV*                                                              | JOVDMP* | JF0P000* |          |
| JFD520C        | OURJOV*                                                              | JOVDMP* | JOVTYP*  | JF0P000* |
| JFD520D        | OURJOV*                                                              | JOVDMP* | JOVTYP*  | JF0P000* |
| JFD520E        | OURJOV*                                                              | JOVDMP* | JOVTYP*  | JF0P000* |
| JFD520F        | OURJOV*                                                              | JOVDMP* | JOVTYP*  | JF0P000* |
| JFD520G*       | OURJOV*                                                              | JOVDMP* | JOVTYP*  | JF0P000* |
| JFD520H*       | OURJOV*                                                              | JOVDMP* | JOVTYP*  | JF0P000* |
| JFD520I*       | OURJOV*                                                              | JOVDMP* | JOVTYP*  | JF0P000* |
| JFD520J*       | OURJOV*                                                              | JOVDMP* | JOVTYP*  | JF0P000* |
| JF0520M        | OURJOV*                                                              | JOVDMP* | JOVSPC*  | JF0P000* |
| JFD520N        | OURJOV*                                                              | JOVDMP* | JOVSPC*  | JF0P000* |
| JF0520O        | OURJOV*                                                              | JOVDMP* | JOVSPC*  | JF0P000* |
| JFD520P        | OURJOV*                                                              | JOVDMP* | JOVSPC*  | JF0P000* |
| JFD520Q        | OURJOV*                                                              | JOVDMP* | JOVSPC*  | JF0P000* |
| JF0520R        | OURJOV*                                                              | JOVDMP* | JOVSPC*  | JF0P000* |
| JF0520S        | OURJOV*                                                              | JOVDMP* | JOVSPC*  | JF0P000* |
| JF05210        | OURJOV*                                                              | JOVDMP* | JF0P000* |          |
| JF05211        | OURJOV*                                                              | JOVDMP* | JF0P000* |          |
| JF05212        | OURJOV*                                                              | JOVDMP* | JF0P000* |          |
| JF05213        | OURJOV*                                                              | JOVDMP* | JF0P000* |          |
| JF05214        | OURJOV*                                                              | JOVDMP* | JF0P000* |          |
| JF05215        | OURJOV*                                                              | JOVDMP* | JF0P000* |          |
| JFD5218        | OURJOV*                                                              | JOVDMP* | JOVTYP*  | JF0P000* |
| JFD5219        | OURJOV*                                                              | JOVDMP* | JOVTYP*  | JF0P000* |
| JFD521A        | OURJOV*                                                              | JOVDMP* | JOVTYP*  | JF0P000* |
| JFD521B        | OURJOV*                                                              | JOVDMP* | JOVTYP*  | JF0P000* |
| JFD521C*       | OURJOV*                                                              | JOVDMP* | JOVTYP*  | JF0P000* |
| JFD521D*       | OURJOV*                                                              | JOVDMP* | JOVTYP*  | JF0P000* |

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Table G-6 JOVIAL Test Programs and Source Code Files (continued)

| PROGRAM  | SUPPORT FILES(* - FILES NAMED IN COMPOOL AND COPY DIRECTIVES) |          |          |          |          |          |
|----------|---------------------------------------------------------------|----------|----------|----------|----------|----------|
| JFD521E* | OURJOV*                                                       | JOVDMP*  | JOVTYP*  | JF0P000* |          |          |
| JFD521F* | OURJOV*                                                       | JOVDMP*  | JOVTYP*  | JF0P000* |          |          |
| JF0521H  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF0521I  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF0521J  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF0521K  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JFD521K  | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |          |          |
| JF0521L  | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |          |          |
| JFD521M  | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |          |          |
| JF0521N  | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |          |          |
| JFD521O  | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |          |          |
| JFD521P  | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | JF0P000* |          |          |
| JF05304  | OURJOV*                                                       | JOVDMP*  | JF05300  | JF05301  | JF05302  | JF05303  |
|          | JF0P000*                                                      | JFJ5300* | JFJ5301* | JFJ5302* | JFJ5303* |          |
| JF05308  | OURJOV*                                                       | JOVDMP*  | JF05305  | JF05306  | JF05307  | JF0P000* |
|          | JFJ5305*                                                      | JFJ5306* | JFJ5307* |          |          |          |
| JF05408  | OURJOV*                                                       | JOVDMP*  | JF05400  | JF05401  | JF05402  | JF05403  |
|          | JF05404                                                       | JF05405  | JF05406  | JF05407  | JF0P000* | JFJ5400* |
|          | JFJ5401*                                                      | JFJ5402* | JFJ5403* | JFJ5404* | JFJ5405* | JFJ5406* |
|          | JFJ5407*                                                      |          |          |          |          |          |
| JF05505  | OURJOV*                                                       | JOVDMP*  | JF05501  | JF05502  | JF05503  | JF05504  |
|          | JF0P000*                                                      | JFJ5501* | JFJ5502* | JFJ5503* | JFJ5504* |          |
| JF0550C  | OURJOV*                                                       | JOVDMP*  | JF05506  | JF05507  | JF05508  | JF05509  |
|          | JF0550A                                                       | JF0550B  | JF0P000* | JFJ5506* | JFJ5507* | JFJ5508* |
|          | JFJ5509*                                                      | JFJ550A* | JFJ550B* |          |          |          |
| JF0550D  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF0550E  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF0550F  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF06001  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF06009  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF06010  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF06011  | OURJOV*                                                       | JOVDMP*  | JF0P000* |          |          |          |
| JF06022  | OURJOV*                                                       | JOVDMP*  | JF06013  | JF06014  | JF06015  | JF06016  |
|          | JF06017                                                       | JF06018  | JF06019  | JF0P000* | JFJ6013* | JFJ6014* |
|          | JFJ6015*                                                      | JFJ6016* | JFJ6017* | JFJ6018* | JFJ6019* |          |
| JF06033  | OURJOV*                                                       | JOVDMP*  | JF06023  | JF06024  | JF06025  | JF06026  |
|          | JF06027                                                       | JF06028  | JF06029  | JF06030  | JF06031  | JF06032  |
|          | JF0P000*                                                      | JFJ6023* | JFJ6024* | JFJ6025* | JFJ6026* | JFJ6027* |
|          | JFJ6028*                                                      | JFJ6029* | JFJ6030* | JFJ6031* | JFJ6032* |          |
| JF06053  | OURJOV*                                                       | JOVDMP*  | JF06043  | JF06044  | JF06045  | JF06046  |
|          | JF06047                                                       | JF06048  | JF06049  | JF06050  | JF06051  | JF06052  |
|          | JF0P000*                                                      | JFJ6043* | JFJ6044* | JFJ6045* | JFJ6046* | JFJ6047* |
|          | JFJ6048*                                                      | JFJ6049* | JFJ6050* | JFJ6051* | JFJ6052* |          |
| JF06069  | OURJOV*                                                       | JOVDMP*  | JF06060  | JF06061  | JF06062  | JF06063  |
|          | JF06064                                                       | JF06065  | JF06066  | JF06067  | JF06068  | JF0P000* |
|          | JFJ6060*                                                      | JFJ6061* | JFJ6062* | JFJ6063* | JFJ6064* | JFJ6065* |
|          | JFJ6066*                                                      | JFJ6067* | JFJ6068* |          |          |          |
| JF06079  | OURJOV*                                                       | JOVDMP*  | JF06070  | JF06071  | JF06072  | JF06073  |
|          | JF06074                                                       | JF06075  | JF06076  | JF06077  | JF06078  | JF0P000* |
|          | JFJ6070*                                                      | JFJ6071* | JFJ6072* | JFJ6073* | JFJ6074* | JFJ6075* |
|          | JFJ6076*                                                      | JFJ6077* | JFJ6078* |          |          |          |
| JF06101  | OURJOV*                                                       | JOVDMP*  | JF06100  | JF0P000* | JFJ6100* |          |
| JF06109  | OURJOV*                                                       | JOVDMP*  | JF06108  | JF0P000* | JFJ6108* |          |
| JF06110  | OURJOV*                                                       | JOVDMP*  | JF06108  | JF0P000* | JFJ6108* |          |
| JF06111  | OURJOV*                                                       | JOVDMP*  | JF06108  | JF0P000* | JFJ6108* |          |
| JF06122  | OURJOV*                                                       | JOVDMP*  | JF06112  | JF06113  | JF06114  | JF06115  |
|          | JF06116                                                       | JF06117  | JF06118  | JF06119  | JF0P000* | JFJ6112* |
|          | JFJ6113*                                                      | JFJ6114* | JFJ6115* | JFJ6116* | JFJ6117* | JFJ6118* |
|          | JFJ6119*                                                      |          |          |          |          |          |
| JF06140  | OURJOV*                                                       | JOVDMP*  | JF06132  | JF06133  | JF06134  | JF06135  |
|          | JF06136                                                       | JF06137  | JF06138  | JF06139  | JF0P000* | JFJ6132* |
|          | JFJ6133*                                                      | JFJ6134* | JFJ6135* | JFJ6136* | JFJ6137* | JFJ6138* |
|          | JFJ6139*                                                      |          |          |          |          |          |

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Table G-6 JOVIAL Test Programs and Source Code Files (continued)

| PROGRAM  | SUPPORT FILES(* - FILES NAMED IN COMPOOL AND COPY DIRECTIVES) |           |           |           |           |           |
|----------|---------------------------------------------------------------|-----------|-----------|-----------|-----------|-----------|
| JF06150  | OURJOV*                                                       | JOVDMP*   | JF06142   | JF06143   | JF06144   | JF06145   |
|          | JF06146                                                       | JF06147   | JF06148   | JF06149   | JF0P000*  | JFJ6142*  |
|          | JFJ6143*                                                      | JFJ6144*  | JFJ6145*  | JFJ6146*  | JFJ6147*  | JFJ6148*  |
|          | JFJ6149*                                                      |           |           |           |           |           |
| JF06160  | OURJOV*                                                       | JOVDMP*   | JF06152   | JF06153   | JF06154   | JF06155   |
|          | JF06156                                                       | JF06157   | JF06158   | JF06159   | JF0P000*  | JFJ6152*  |
|          | JFJ6153*                                                      | JFJ6154*  | JFJ6155*  | JFJ6156*  | JFJ6157*  | JFJ6158*  |
|          | JFJ6159*                                                      |           |           |           |           |           |
| JF06170  | OURJOV*                                                       | JOVDMP*   | JF06162   | JF06163   | JF06164   | JF06165   |
|          | JF06166                                                       | JF06167   | JF06168   | JF06169   | JF0P000*  | JFJ6162*  |
|          | JFJ6163*                                                      | JFJ6164*  | JFJ6165*  | JFJ6166*  | JFJ6167*  | JFJ6168*  |
|          | JFJ6169*                                                      |           |           |           |           |           |
| JF06180  | OURJOV*                                                       | JOVDMP*   | JF06172   | JF06173   | JF06174   | JF06175   |
|          | JF06176                                                       | JF06177   | JF06178   | JF06179   | JF0P000*  | JFJ6172*  |
|          | JFJ6173*                                                      | JFJ6174*  | JFJ6175*  | JFJ6176*  | JFJ6177*  | JFJ6178*  |
|          | JFJ6179*                                                      |           |           |           |           |           |
| JF06190  | OURJOV*                                                       | JOVDMP*   | JF06182   | JF06183   | JF06184   | JF06185   |
|          | JF06186                                                       | JF06187   | JF06188   | JF06189   | JF0P000*  | JFJ6182*  |
|          | JFJ6183*                                                      | JFJ6184*  | JFJ6185*  | JFJ6186*  | JFJ6187*  | JFJ6188*  |
|          | JFJ6189*                                                      |           |           |           |           |           |
| JF06199  | OURJOV*                                                       | JOVDMP*   | JOVSPC*   | JF06191   | JF06192   | JF06193   |
|          | JF06194                                                       | JF06195   | JF06196   | JF06197   | JF06198   | JF0P000*  |
|          | JFJ6191*                                                      | JFJ6192*  | JFJ6193*  | JFJ6194*  | JFJ6195*  | JFJ6196*  |
|          | JFJ6197*                                                      | JFJ6198*  |           |           |           |           |
| JF0619I  | OURJOV*                                                       | JOVDMP*   | JOVSPC*   | JF0619A** | JF0619B   | JF0619C   |
|          | JF0619D                                                       | JF0619E   | JF0619F   | JF0619G   | JF0619H   | JF0P000*  |
|          | JFJ619A*                                                      | JFJ619B*  | JFJ619C*  | JFJ619D*  | JFJ619E*  | JFJ619F*  |
|          | JFJ619G*                                                      | JFJ619H*  |           |           |           |           |
| JF0619R  | OURJOV*                                                       | JOVDMP*   | JOVSPC*   | JF0619J   | JF0619K   | JF0619L   |
|          | JF0619M                                                       | JF0619N   | JF0619O   | JF0619P   | JF0619Q   | JF0P000*  |
|          | JFJ619J*                                                      | JFJ619K*  | JFJ619L*  | JFJ619M*  | JFJ619N*  | JFJ619O*  |
|          | JFJ619P*                                                      | JFJ619Q*  |           |           |           |           |
| JFD6201  | OURJOV*                                                       | JOVDMP*   | JF0P000*  |           |           |           |
| JFD6209  | OURJOV*                                                       | JOVDMP*   | JF0P000*  |           |           |           |
| JFD6210  | OURJOV*                                                       | JOVDMP*   | JF0P000*  |           |           |           |
| JFD6211  | OURJOV*                                                       | JOVDMP*   | JF0P000*  |           |           |           |
| JFD6222  | OURJOV*                                                       | JOVDMP*   | JF0P000*  | JFD6213   | JFD6214   | JFD6215   |
|          | JFD6216                                                       | JFD6217   | JFD6218   | JFD6219   | JFJ6213*  | JFJ6214*  |
|          | JFJ6215*                                                      | JFJ6216*  | JFJ6217*  | JFJ6218*  | JFJ6219*  |           |
| JFD6233  | OURJOV*                                                       | JOVDMP*   | JF0P000*  | JFD6223   | JFD6224   | JFD6225   |
|          | JFD6226                                                       | JFD6227   | JFD6228   | JFD6229   | JFD6230   | JFD6231   |
|          | JFD6232                                                       | JFJ6223*  | JFJ6224*  | JFJ6225*  | JFJ6226*  | JFJ6227*  |
|          | JFJ6228*                                                      | JFJ6229*  | JFJ6230*  | JFJ6231*  | JFJ6232*  |           |
| JFD6253  | OURJOV*                                                       | JOVDMP*   | JF0P000*  | JFD6243   | JFD6244   | JFD6245   |
|          | JFD6246                                                       | JFD6247   | JFD6248   | JFD6249   | JFD6250   | JFD6251   |
|          | JFD6252                                                       | JFJ6243*  | JFJ6244*  | JFJ6245*  | JFJ6246*  | JFJ6247*  |
|          | JFJ6248*                                                      | JFJ6249*  | JFJ6250*  | JFJ6251*  | JFJ6252*  |           |
| JFD6269* | OURJOV*                                                       | JOVDMP*   | JF0P000*  | JFD6260*  | JFD6261*  | JFD6262*  |
|          | JFD6263*                                                      | JFD6264*  | JFD6265*  | JFD6266*  | JFD6267*  | JFD6268*  |
|          | JFJ6260**                                                     | JFJ6261** | JFJ6262** | JFJ6263** | JFJ6264** | JFJ6265** |
|          | JFJ6266**                                                     | JFJ6267** | JFJ6268** |           |           |           |
| JFD6279* | OURJOV*                                                       | JOVDMP*   | JF0P000*  | JFD6270*  | JFD6271*  | JFD6272*  |
|          | JFD6273*                                                      | JFD6274*  | JFD6275*  | JFD6276*  | JFD6277*  | JFD6278*  |
|          | JFJ6270**                                                     | JFJ6271** | JFJ6272** | JFJ6273** | JFJ6274** | JFJ6275** |
|          | JFJ6276**                                                     | JFJ6277** | JFJ6278** |           |           |           |
| JF06803  | OURJOV*                                                       | JOVDMP*   | JF06802   | JF0P000*  | JFJ6802*  |           |
| JF06807  | OURJOV*                                                       | JOVDMP*   | JF06806   | JF0P000*  | JFJ6806*  |           |
| JF06809  | OURJOV*                                                       | JOVDMP*   | JOVSPC*   | JF06808   | JF0P000*  | JFJ6808*  |
| JF0680B  | OURJOV*                                                       | JOVDMP*   | JOVSPC*   | JF0680A   | JF0P000*  | JFJ680A*  |
| JF0680D  | OURJOV*                                                       | JOVDMP*   | JOVSPC*   | JF0680C   | JF0P000*  | JFJ680C*  |
| JF0680F  | OURJOV*                                                       | JOVDMP*   | JOVSPC*   | JF0680E   | JF0P000*  | JFJ680E*  |
| JFD680H  | OURJOV*                                                       | JOVDMP*   | JOVSPC*   | JF0P000*  | JFD680G   | JFJ680G*  |

\* Source file supplied with USE file type only

\*\* Multiple versions of source file supplied(USE and JOV/CPL file types)

Table G-6 JOVIAL Test Programs and Source Code Files (continued)

| PROGRAM   | SUPPORT FILES* - FILES NAMED IN COMPOOL AND COPY DIRECTIVES) |          |          |           |          |          |
|-----------|--------------------------------------------------------------|----------|----------|-----------|----------|----------|
| JFD680J   | OURJOV*                                                      | JOVDMP*  | JOVSPC*  | JF0P000*  | JFD680I  | JFJ680I* |
| JF06811   | OURJOV*                                                      | JOVDMP*  | JF06810  | JF0P000*  | JFJ6810* |          |
| JF06815   | OURJOV*                                                      | JOVDMP*  | JF06814  | JF0P000*  | JFJ6814* |          |
| JF06817   | OURJOV*                                                      | JOVDMP*  | JF06816  | JF0P000*  | JFJ6816* |          |
| JF06819   | OURJOV*                                                      | JOVDMP*  | JF06818  | JF0P000*  | JFJ6818* |          |
| JF06821   | OURJOV*                                                      | JOVDMP*  | JF06820  | JF0P000*  | JFJ6820* |          |
| JF06823   | OURJOV*                                                      | JOVDMP*  | JOVSPC*  | JF06822*† | JF0P000* | JFJ6822* |
| JF06825   | OURJOV*                                                      | JOVDMP*  | JOVSPC*  | JF06824   | JF0P000* | JFJ6824* |
| JFDD600   | OURJOV*                                                      | JOVSPC*  | JF0P000* |           |          |          |
| JFDD601   | OURJOV*                                                      | JOVSPC*  | JF0P000* |           |          |          |
| JFDD602*† | OURJOV*                                                      | JOVSPC*  | JF0P000* |           |          |          |
| JFDD603*† | OURJOV*                                                      | JOVSPC*  | JF0P000* |           |          |          |
| JFDD604   | OURJOV*                                                      | JOVSPC*  | JF0P000* |           |          |          |
| JFDD605   | OURJOV*                                                      | JOVSPC*  | JF0P000* |           |          |          |
| JFDD606   | OURJOV*                                                      | JOVSPC*  | JF0P000* |           |          |          |
| JFDD607   | OURJOV*                                                      | JOVSPC*  | JF0P000* |           |          |          |
| JFDD608   | OURJOV*                                                      | JOVSPC*  | JF0P000* |           |          |          |
| JFDD609   | OURJOV*                                                      | JOVSPC*  | JF0P000* |           |          |          |
| JFDD610*† | OURJOV*                                                      | JOVSPC*  | JF0P000* |           |          |          |
| JFDD611*† | OURJOV*                                                      | JOVSPC*  | JF0P000* |           |          |          |
| JF0D720   | OURJOV*                                                      |          |          |           |          |          |
| JF0D721   | OURJOV*                                                      |          |          |           |          |          |
| JFDD722   | OURJOV*                                                      | JOVTP*   |          |           |          |          |
| JFDD723   | OURJOV*                                                      | JOVTP*   |          |           |          |          |
| JFDD724*  | OURJOV*                                                      | JOVTP*   |          |           |          |          |
| JFDD725*  | OURJOV*                                                      | JOVTP*   |          |           |          |          |
| JF0D727   | OURJOV*                                                      |          |          |           |          |          |
| JF0D728   | OURJOV*                                                      | JOVSPC*  |          |           |          |          |
| JF0D729   | OURJOV*                                                      | JOVSPC*  |          |           |          |          |
| JFDD72A   | OURJOV*                                                      | JOVSPC*  |          |           |          |          |
| JFDD72B   | OURJOV*                                                      | JOVSPC*  |          |           |          |          |
| JFDD72C   | OURJOV*                                                      | JOVSPC*  |          |           |          |          |
| JF0D72D   | OURJOV*                                                      | JOVSPC*  |          |           |          |          |
| JFDD72E   | OURJOV*                                                      | JOVSPC*  |          |           |          |          |
| JFDD72F   | OURJOV*                                                      | JOVSPC*  |          |           |          |          |
| JFDD72G   | OURJOV*                                                      | JOVSPC*  |          |           |          |          |
| JFDD72H   | OURJOV*                                                      | JOVSPC*  |          |           |          |          |
| JFDD72I   | OURJOV*                                                      | JOVSPC*  |          |           |          |          |
| JFDDA01   | OURJOV*                                                      | JOVSPC*  | JF0P000* |           |          |          |
| JFDDA02   | OURJOV*                                                      | JOVSPC*  | JF0P000* |           |          |          |
| JFDF000   | OURJOV*                                                      | JOVDMP*  | JOVMATH* | JF0P000*  |          |          |
| JFDF001   | OURJOV*                                                      | JOVDMP*  | JOVMATH* | JF0P000*  |          |          |
| JFDF002   | OURJOV*                                                      | JOVDMP*  | JOVMATH* | JF0P000*  |          |          |
| JFDF003   | OURJOV*                                                      | JOVDMP*  | JOVMATH* | JF0P000*  |          |          |
| JFDF004   | OURJOV*                                                      | JOVDMP*  | JOVMATH* | JF0P000*  |          |          |
| JFDF005   | OURJOV*                                                      | JOVDMP*  | JOVMATH* | JF0P000*  |          |          |
| JGD0001   | OURJOV*                                                      | JOVMATH* | JG0P000* | JGD0000*  | JGF0001  |          |
| JGD0009   | OURJOV*                                                      | JG0P000* | JGD0004* | JGD0005*  | JGD0006* | JGD0007  |
|           | JGD0008*†                                                    |          |          |           |          |          |
| JG0000C   | OURJOV*                                                      | JOVDMP*  | JG0P000* |           |          |          |
| JGD000E   | OURJOV*                                                      | JG0P000* | JGD0000* | JGD000D   | JGF000E  | JGJ000D* |
| JGN000K   | OURJOV*                                                      | JG0P000* | JGN000F* | JGN000G*  | JGN000H* | JGN000I  |
|           | JGN000J*†                                                    |          |          |           |          |          |
| J000104   | OURJOV*                                                      | JOVDMP*  | J000002* | J000102   | J000103  | J00P000* |
|           | JOJ0102*                                                     | JOJ0103* |          |           |          |          |
| J000204   | OURJOV*                                                      | JOVDMP*  | J000202  | J000203   | J00P000* | JOJ0202* |
|           | JOJ0203*                                                     |          |          |           |          |          |
| J000300   | OURJOV*                                                      | J00P000* |          |           |          |          |
| J000305   | OURJOV*                                                      | J00P000* |          |           |          |          |
| J000310   | OURJOV*                                                      | J00P000* |          |           |          |          |
| J000313   | OURJOV*                                                      | JOVDMP*  | J000311  | J000312   | J00P000* | JOJ0311* |
|           | JOJ0312*                                                     |          |          |           |          |          |

\* Source file supplied with USE file type only

\*† Multiple versions of source file supplied(USE and JOV/CPL file types)



Table G-6 JOVIAL Test Programs and Source Code Files (continued)

| PROGRAM  | SUPPORT FILES(* - FILES NAMED IN COMPOOL AND COPY DIRECTIVES) |          |          |          |          |          |
|----------|---------------------------------------------------------------|----------|----------|----------|----------|----------|
| J000316  | OURJOV*                                                       | JOVDMP*  | J000314  | J000315  | J00P000* | JOJ0314* |
| J000319* | JOJ0315*                                                      |          |          |          |          |          |
| J000319* | OURJOV*                                                       | JOVDMP*  | J000317* | J000318* | J00P000* | JOJ0317* |
| J000322* | JOJ0318*                                                      |          |          |          |          |          |
| J000322* | OURJOV*                                                       | JOVDMP*  | J000320* | J000321* | J00P000* | JOJ0320* |
| J000325  | JOJ0321*                                                      |          |          |          |          |          |
| J000325  | OURJOV*                                                       | JOVDMP*  | J000323  | J000324  | J00P000* | JOJ0323* |
| J000328  | JOJ0324*                                                      |          |          |          |          |          |
| J000328  | OURJOV*                                                       | JOVDMP*  | J000326  | J000327  | J00P000* | JOJ0326* |
| J000331  | JOJ0327*                                                      |          |          |          |          |          |
| J000331  | OURJOV*                                                       | JOVDMP*  | J000329  | J000330  | J00P000* | JOJ0329* |
| J000334  | JOJ0330*                                                      |          |          |          |          |          |
| J000334  | OURJOV*                                                       | JOVDMP*  | J000332  | J000333  | J00P000* | JOJ0332* |
| J000337  | JOJ0333*                                                      |          |          |          |          |          |
| J000337  | OURJOV*                                                       | JOVDMP*  | J000335  | J000336  | J00P000* | JOJ0335* |
| J000340  | JOJ0336*                                                      |          |          |          |          |          |
| J000340  | OURJOV*                                                       | JOVDMP*  | J000338  | J000339  | J00P000* | JOJ0338* |
| J000343  | JOJ0339*                                                      |          |          |          |          |          |
| J000343  | OURJOV*                                                       | JOVDMP*  | J000341  | J000342  | J00P000* | JOJ0341* |
| J000346  | JOJ0342*                                                      |          |          |          |          |          |
| J000346  | OURJOV*                                                       | JOVDMP*  | J00P000* | J000344  | J000345  | JOJ0344* |
| J000350  | JOJ0345*                                                      |          |          |          |          |          |
| J000350  | OURJOV*                                                       | JOVDMP*  | J000347  | J000348  | J000349  | J00P000* |
| J000353  | JOJ0347*                                                      | JOJ0348* | JOJ0349* |          |          |          |
| J000353  | OURJOV*                                                       | JOVDMP*  | J000347  | J000351  | J000352  | J00P000* |
| J000365  | JOJ0347*                                                      | JOJ0351* | JOJ0352* |          |          |          |
| J000365  | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | J000363  | J000364  | J00P000* |
| J00036K  | JOJ0363*                                                      | JOJ0364* |          |          |          |          |
| J00036K  | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | J00036I  | J00036J  | J00P000* |
| J00036N  | JOJ036I*                                                      | JOJ036J* |          |          |          |          |
| J00036N  | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | J00036L  | J00036M  | J00P000* |
| J00036Q  | JOJ036L*                                                      | JOJ036M* |          |          |          |          |
| J00036Q  | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | J00P000* | J00036O  | J00036P  |
| J00036T  | JOJ036O*                                                      | JOJ036P* |          |          |          |          |
| J00036T  | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | J00P000* | J00036R  | J00036S  |
| J00036H  | JOJ036R*                                                      | JOJ036S* |          |          |          |          |
| J00036H  | OURJOV*                                                       | JOVDMP*  | JOVSPC*  | J00036U  | J00036V  | J00P000* |
| J00036Z  | JOJ036U*                                                      | JOJ036V* |          |          |          |          |
| J00036Z  | OURJOV*                                                       | JOVDMP*  | JOVTP*   | J00P000* | J00036X  | J00036Y  |
| J000391  | JOJ036X*                                                      | JOJ036Y* |          |          |          |          |
| J000391  | OURJOV*                                                       | JOVDMP*  | J000390  | J00P000* | JOJ0390* |          |
| J000404  | JOJ0403*                                                      |          | J000402  | J000403  | J00P000* | JOJ0402* |
| J000500  | OURJOV*                                                       | J00P000* |          |          |          |          |
| J000504  | OURJOV*                                                       | JOVDMP*  | J000502  | J000503  | J00P000* | JOJ0502* |
| J000509  | JOJ0503*                                                      |          |          |          |          |          |
| J000509  | OURJOV*                                                       | JOVDMP*  | J000507  | J000508  | J00P000* | JOJ0507* |
| J000514  | JOJ0508*                                                      |          |          |          |          |          |
| J000514  | OURJOV*                                                       | JOVDMP*  | J000512  | J000513  | J00P000* | JOJ0512* |
| J000519  | JOJ0513*                                                      |          |          |          |          |          |
| J000519  | OURJOV*                                                       | JOVDMP*  | J000517  | J000518  | J00P000* | JOJ0517* |
| J000525  | JOJ0518*                                                      |          |          |          |          |          |
| J000525  | OURJOV*                                                       | JOVDMP*  | J00P000* | J000523  | J000524  | JOJ0523* |
| J000604  | JOJ0524*                                                      |          |          |          |          |          |
| J000604  | OURJOV*                                                       | JOVDMP*  | J000602  | J000603  | J00P000* | JOJ0602* |
| J000605  | JOJ0603*                                                      |          |          |          |          |          |
| J000605  | OURJOV*                                                       | JOVDMP*  | J00P000* |          |          |          |
| J000606  | OURJOV*                                                       | JOVDMP*  | J00P000* |          |          |          |
| J000607  | OURJOV*                                                       | JOVDMP*  | J00P000* |          |          |          |
| J000704  | OURJOV*                                                       | JOVDMP*  | J000702  | J000703  | J00P000* | JOJ0702* |
| J000705  | JOJ0703*                                                      |          |          |          |          |          |
| J000705  | OURJOV*                                                       | JOVDMP*  | J00P000* |          |          |          |
| J000708  | OURJOV*                                                       | JOVDMP*  | J000706  | J000707  | J00P000* | JOJ0706* |

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Table G-6 JOVIAL Test Programs and Source Code Files (concluded)

| <u>PROGRAM</u> | <u>SUPPORT FILES(*) - FILES NAMED IN COMPOOL AND COPY DIRECTIVES)</u> |         |          |         |          |          |
|----------------|-----------------------------------------------------------------------|---------|----------|---------|----------|----------|
| J000711        | JOJ0707*                                                              |         | J000709  | J000710 | J00P000* | JOJ0709* |
|                | OURJOV*                                                               | JOVDMP* |          |         |          |          |
|                | JOJ0710*                                                              |         |          |         |          |          |
| J000713        | OURJOV*                                                               | JOVDMP* | J00P000* |         |          |          |
| J000714        | OURJOV*                                                               | JOVDMP* | J00P000* |         |          |          |
| J000715        | OURJOV*                                                               | JOVDMP* | J00P000* |         |          |          |
| J000716        | OURJOV*                                                               | JOVDMP* | J00P000* |         |          |          |
| J000717        | OURJOV*                                                               | JOVDMP* | J00P000* |         |          |          |
| J000718        | OURJOV*                                                               | JOVDMP* | J00P000* |         |          |          |
| J000721        | OURJOV*                                                               | JOVDMP* | J000719  | J000720 | J00P000* | JOJ0719* |
|                | JOJ0720*                                                              |         |          |         |          |          |

Table G-7. FORTRAN Test Programs and Source Code Files

| <u>PROGRAM</u> | <u>SUPPORT FILES(* - FILES NAMED IN INCLUDE STATEMENTS)</u> |          |          |         |         |          |
|----------------|-------------------------------------------------------------|----------|----------|---------|---------|----------|
| FA00000        | OURFOR*                                                     | FA0P000* |          |         |         |          |
| FF03519        | OURFOR*                                                     | FF03500  | FF03502  | FF03503 | FF03504 | FF03514  |
|                | FF0P000*                                                    |          |          |         |         |          |
| FF03620        | OURFOR*                                                     | FF03600  | FF03602  | FF03603 | FF03605 | FF03606  |
|                | FF03608                                                     | FF03609  | FF0P000* |         |         |          |
| FF04120        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04121        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04122        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04123        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04124        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04125        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04126        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04127        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04129        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04510        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04511        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04512        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04513        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04514        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04515        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04516        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04517        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF0451J        | OURFOR*                                                     | FF04518  | FF04519  | FF0451A | FF0451B | FF0451C  |
|                | FF0451D                                                     | FF0451E  | FF0451F  | FF0451G | FF0451H | FF0451I  |
|                | FF0P000*                                                    |          |          |         |         |          |
| FFD451U*       | OURFOR*                                                     | FORTYP*  | FF0P000* | FFD451K | FFD451L | FFD451M  |
|                | FFD451N                                                     | FFD451O  | FFD451P  | FFD451Q | FFD451R | FFD451S  |
| FF0451Z        | OURFOR*                                                     | FF0451V  | FF0451W  | FF0451X | FF0451Y | FF0P000* |
| FF04520        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04521        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04522        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FFD4523        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |         |          |
| FFD4524        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |         |          |
| FFD4525        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |         |          |
| FFD4526        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |         |          |
| FF04529        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04530        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04531        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04532        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04533        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04534        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04535        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04536        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04537        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04538        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04539        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF0453A        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04540        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04541        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04550        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04551        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04552        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04553        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04554        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04555        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04556        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04557        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04558        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FF04559        | OURFOR*                                                     | FF0P000* |          |         |         |          |
| FFD455D        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |         |          |
| FFD455E        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |         |          |
| FFD455F        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |         |          |
| FFD455G        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |         |          |
| FFD455I        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |         |          |

\* Source file supplied with USE file type only

Table G-7. FORTRAN Test Programs and Source Code Files (Continued)

| <u>PROGRAM</u> | <u>SUPPORT FILES(* - FILES NAMED IN INCLUDE STATEMENTS)</u> |          |          |         |          |          |
|----------------|-------------------------------------------------------------|----------|----------|---------|----------|----------|
| FFD455J        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |          |          |
| FFD455K        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |          |          |
| FFD455L        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |          |          |
| FF04560        | OURFOR*                                                     | FF0P000* |          |         |          |          |
| FF04562        | OURFOR*                                                     | FF0P000* |          |         |          |          |
| FF04563        | OURFOR*                                                     | FF0P000* |          |         |          |          |
| FFD4566*       | OURFOR*                                                     | FORTYP*  | FF0P000* |         |          |          |
| FFD4567        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |          |          |
| FFD4568        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |          |          |
| FFD4569        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |          |          |
| FF04600        | OURFOR*                                                     | FF0P000* |          |         |          |          |
| FF04601        | OURFOR*                                                     | FF0P000* |          |         |          |          |
| FF04602        | OURFOR*                                                     | FF0P000* |          |         |          |          |
| FFD4603        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |          |          |
| FFD4604        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |          |          |
| FFD4605        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |          |          |
| FFD4606        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |          |          |
| FFD4607        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |          |          |
| FFD4608        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |          |          |
| FFD4609        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |          |          |
| FFD460A        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |          |          |
| FFD460B        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |          |          |
| FF0460I        | OURFOR*                                                     | FF0P000* |          |         |          |          |
| FF05200        | OURFOR*                                                     | FF0P000* |          |         |          |          |
| FF05201        | OURFOR*                                                     | FF0P000* |          |         |          |          |
| FF05202        | OURFOR*                                                     | FF0P000* |          |         |          |          |
| FF05203        | OURFOR*                                                     | FF0P000* |          |         |          |          |
| FF05204        | OURFOR*                                                     | FF0P000* |          |         |          |          |
| FF05205        | OURFOR*                                                     | FF0P000* |          |         |          |          |
| FF05206        | OURFOR*                                                     | FF0P000* |          |         |          |          |
| FF05207        | OURFOR*                                                     | FF0P000* |          |         |          |          |
| FF05208        | OURFOR*                                                     | FF0P000* |          |         |          |          |
| FF05209        | OURFOR*                                                     | FF0P000* |          |         |          |          |
| FF0520A        | OURFOR*                                                     | FF0P000* |          |         |          |          |
| FFD520C        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |          |          |
| FFD520D        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |          |          |
| FFD520E        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |          |          |
| FFD520F        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |          |          |
| FFD520G        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |          |          |
| FFD520H        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |          |          |
| FFD520I        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |          |          |
| FFD520J        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |          |          |
| FF05210        | OURFOR*                                                     | FF0P000* |          |         |          |          |
| FF05211        | OURFOR*                                                     | FF0P000* |          |         |          |          |
| FF05212        | OURFOR*                                                     | FF0P000* |          |         |          |          |
| FF05213        | OURFOR*                                                     | FF0P000* |          |         |          |          |
| FF05214        | OURFOR*                                                     | FF0P000* |          |         |          |          |
| FF05215        | OURFOR*                                                     | FF0P000* |          |         |          |          |
| FFD5218        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |          |          |
| FFD5219        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |          |          |
| FFD521A        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |          |          |
| FFD521B        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |          |          |
| FFD521C        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |          |          |
| FFD521D        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |          |          |
| FFD521E        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |          |          |
| FFD521F        | OURFOR*                                                     | FORTYP*  | FF0P000* |         |          |          |
| FF0521H        | OURFOR*                                                     | FF0P000* |          |         |          |          |
| FF0521I        | OURFOR*                                                     | FF0P000* |          |         |          |          |
| FF0521J        | OURFOR*                                                     | FF0P000* |          |         |          |          |
| FF0521K        | OURFOR*                                                     | FF0P000* |          |         |          |          |
| FF05304        | OURFOR*                                                     | FF05300  | FF05301  | FF05302 | FF05303  | FF0P000* |
| FF05308        | OURFOR*                                                     | FF05305  | FF05306  | FF05307 | FF0P000* |          |
| FF05408        | OURFOR*                                                     | FF05400  | FF05401  | FF05402 | FF05403  | FF05404  |

\* Source file supplied with USE file type only

Table G-7. FORTRAN Test Programs and Source Code Files (Continued)

| <u>PROGRAM</u> | <u>SUPPORT FILES(* - FILES NAMED IN INCLUDE STATEMENTS)</u> |          |          |          |          |          |
|----------------|-------------------------------------------------------------|----------|----------|----------|----------|----------|
| FF05405        | FF05406                                                     | FF05407  | FF0P000* |          |          |          |
| FF05505        | OURFOR*                                                     | FF05501  | FF05502  | FF05503  | FF05504  | FF0P000* |
| FF0550C        | OURFOR*                                                     | FF05506  | FF05507  | FF05508  | FF05509  | FF0550A  |
|                | FF0550B                                                     | FF0P000* |          |          |          |          |
| FF0550D        | OURFOR*                                                     | FF0P000* |          |          |          |          |
| FF0550E        | OURFOR*                                                     | FF0P000* |          |          |          |          |
| FF0550F        | OURFOR*                                                     | FF0P000* |          |          |          |          |
| FF06001        | OURFOR*                                                     | FF0P000* |          |          |          |          |
| FF06009        | OURFOR*                                                     | FF0P000* |          |          |          |          |
| FF06010        | OURFOR*                                                     | FF0P000* |          |          |          |          |
| FF06011        | OURFOR*                                                     | FF0P000* |          |          |          |          |
| FF06022        | OURFOR*                                                     | FF06013  | FF06014  | FF06015  | FF06016  | FF06017  |
|                | FF06018                                                     | FF06019  | FF0P000* |          |          |          |
| FF06033        | OURFOR*                                                     | FF06023  | FF06024  | FF06025  | FF06026  | FF06027  |
|                | FF06028                                                     | FF06029  | FF06030  | FF06031  | FF06032  | FF0P000* |
| FF06053        | OURFOR*                                                     | FF06043  | FF06044  | FF06045  | FF06046  | FF06047  |
|                | FF06048                                                     | FF06049  | FF06050  | FF06051  | FF06052  | FF0P000* |
| FF06069        | OURFOR*                                                     | FF06060  | FF06061  | FF06062  | FF06063  | FF06064  |
|                | FF06065                                                     | FF06066  | FF06067  | FF06068  | FF0P000* |          |
| FF06079        | OURFOR*                                                     | FF06070  | FF06071  | FF06072  | FF06073  | FF06074  |
|                | FF06075                                                     | FF06076  | FF06077  | FF06078  | FF0P000* |          |
| FF06101        | OURFOR*                                                     | FF06100  | FF0P000* |          |          |          |
| FF06109        | OURFOR*                                                     | FF06108  | FF0P000* |          |          |          |
| FF06110        | OURFOR*                                                     | FF06108  | FF0P000* |          |          |          |
| FF06111        | OURFOR*                                                     | FF06108  | FF0P000* |          |          |          |
| FF06122        | OURFOR*                                                     | FF06112  | FF06113  | FF06114  | FF06115  | FF06116  |
|                | FF06117                                                     | FF06118  | FF06119  | FF0P000* |          |          |
| FF06140        | OURFOR*                                                     | FF06132  | FF06133  | FF06134  | FF06135  | FF06136  |
|                | FF06137                                                     | FF06138  | FF06139  | FF0P000* |          |          |
| FF06150        | OURFOR*                                                     | FF06142  | FF06143  | FF06144  | FF06145  | FF06146  |
|                | FF06147                                                     | FF06148  | FF06149  | FF0P000* |          |          |
| FF06160        | OURFOR*                                                     | FF06152  | FF06153  | FF06154  | FF06155  | FF06156  |
|                | FF06157                                                     | FF06158  | FF06159  | FF0P000* |          |          |
| FF06170        | OURFOR*                                                     | FF06162  | FF06163  | FF06164  | FF06165  | FF06166  |
|                | FF06167                                                     | FF06168  | FF06169  | FF0P000* |          |          |
| FF06180        | OURFOR*                                                     | FF06172  | FF06173  | FF06174  | FF06175  | FF06176  |
|                | FF06177                                                     | FF06178  | FF06179  | FF0P000* |          |          |
| FF06190        | OURFOR*                                                     | FF06182  | FF06183  | FF06184  | FF06185  | FF06186  |
|                | FF06187                                                     | FF06188  | FF06189  | FF0P000* |          |          |
| FF06803        | OURFOR*                                                     | FF06802  | FF0P000* |          |          |          |
| FF06807        | OURFOR*                                                     | FF06806  | FF0P000* |          |          |          |
| FF06817        | OURFOR*                                                     | FF06816  | FF0P000* |          |          |          |
| FF06819        | OURFOR*                                                     | FF06818  | FF0P000* |          |          |          |
| FF06821        | OURFOR*                                                     | FF06820  | FF0P000* |          |          |          |
| FF0D720        | OURFOR*                                                     |          |          |          |          |          |
| FF0D721        | OURFOR*                                                     |          |          |          |          |          |
| FFDD722        | OURFOR*                                                     | FORTYP*  |          |          |          |          |
| FFDD723        | OURFOR*                                                     | FORTYP*  |          |          |          |          |
| FFDD724        | OURFOR*                                                     | FORTYP*  |          |          |          |          |
| FFDD725        | OURFOR*                                                     | FORTYP*  |          |          |          |          |
| FF0D727        | OURFOR*                                                     |          |          |          |          |          |
| FF0D728        | OURFOR*                                                     |          |          |          |          |          |
| FFDE220        | OURFOR*                                                     | FF0P000* | FFDE000* | FFDE201  | FFDE202  | FFDE203  |
|                | FFDE204                                                     | FFDE205  | FFDE206  | FFDE207  | FFDE208  | FFDE209  |
|                | FFDE20A                                                     | FFDE211  | FFDE212  | FFDE213  | FFDE214  | FFDE215  |
|                | FFDE216                                                     |          |          |          |          |          |
| FFDE250        | OURFOR*                                                     | FF0P000* | FFDE000* | FFDE231  | FFDE232  | FFDE233  |
|                | FFDE234                                                     | FFDE235  | FFDE236  | FFDE237  | FFDE238  | FFDE239  |
|                | FFDE23A                                                     | FFDE241  | FFDE242  | FFDE243  | FFDE244  | FFDE245  |
|                | FFDE246                                                     |          |          |          |          |          |
| FFDE420        | OURFOR*                                                     | FF0P000* | FFDE000* | FFDE401  | FFDE402  | FFDE403  |
|                | FFDE404                                                     | FFDE405  | FFDE406  | FFDE407  | FFDE408  | FFDE409  |

Table G-7. FORTRAN Test Programs and Source Code Files (Concluded)

| <u>PROGRAM</u> | <u>SUPPORT FILES(* - FILES NAMED IN INCLUDE STATEMENTS)</u> |          |          |          |          |         |
|----------------|-------------------------------------------------------------|----------|----------|----------|----------|---------|
|                | FFDE40A                                                     | FFDE411  | FFDE412  | FFDE413  | FFDE414  | FFDE415 |
|                | FFDE416                                                     |          |          |          |          |         |
| FFDE450        | OURFOR*                                                     | FF0P000* | FFDE000* | FFDE431  | FFDE432  | FFDE433 |
|                | FFDE434                                                     | FFDE435  | FFDE436  | FFDE437  | FFDE438  | FFDE439 |
|                | FFDE43A                                                     | FFDE441  | FFDE442  | FFDE443  | FFDE444  | FFDE445 |
|                | FFDE446                                                     |          |          |          |          |         |
| FFDF000        | OURFOR*                                                     | FF0P000* |          |          |          |         |
| FFDF001        | OURFOR*                                                     | FF0P000* |          |          |          |         |
| FFDF002        | OURFOR*                                                     | FF0P000* |          |          |          |         |
| FFDF003        | OURFOR*                                                     | FF0P000* |          |          |          |         |
| FFDF004        | OURFOR*                                                     | FF0P000* |          |          |          |         |
| FFDF005        | OURFOR*                                                     | FF0P000* |          |          |          |         |
| FGD0001        | OURFOR*                                                     | FG0P000* | FGD0000* |          |          |         |
| FGD000E        | OURFOR*                                                     | FG0P000* | FGD0000* | FGD000D  |          |         |
| F000104        | OURFOR*                                                     | F000002* | F000102  | F000103  | F00P000* |         |
| F000204        | OURFOR*                                                     | F000202  | F000203  | F00P000* |          |         |
| F000300        | OURFOR*                                                     | F00P000* |          |          |          |         |
| F000305        | OURFOR*                                                     | F00P000* |          |          |          |         |
| F000310        | OURFOR*                                                     | F00P000* |          |          |          |         |
| F000313        | OURFOR*                                                     | F000311  | F000312  | F00P000* |          |         |
| F000316        | OURFOR*                                                     | F000314  | F000315  | F00P000* |          |         |
| F000319        | OURFOR*                                                     | F000317  | F000318  | F00P000* |          |         |
| F000322        | OURFOR*                                                     | F000320  | F000321  | F00P000* |          |         |
| F000325        | OURFOR*                                                     | F000323  | F000324  | F00P000* |          |         |
| F000328        | OURFOR*                                                     | F000326  | F000327  | F00P000* |          |         |
| F000331        | OURFOR*                                                     | F000329  | F000330  | F00P000* |          |         |
| F000334        | OURFOR*                                                     | F000332  | F000333  | F00P000* |          |         |
| F000337        | OURFOR*                                                     | F000335  | F000336  | F00P000* |          |         |
| F000340        | OURFOR*                                                     | F000338  | F000339  | F00P000* |          |         |
| F000343        | OURFOR*                                                     | F000341  | F000342  | F00P000* |          |         |
| F0D0346        | OURFOR*                                                     | F00P000* | F0D0344  | F0D0345  |          |         |
| F000350        | OURFOR*                                                     | F000347  | F000348  | F000349  | F00P000* |         |
| F000353        | OURFOR*                                                     | F000347  | F000351  | F000352  | F00P000* |         |
| F000356        | OURFOR*                                                     | F000354  | F000355  | F00P000* |          |         |
| F000359        | OURFOR*                                                     | F000357  | F000358  | F00P000* |          |         |
| F000362        | OURFOR*                                                     | F000360  | F000361  | F00P000* |          |         |
| F0D0362        | OURFOR*                                                     |          |          |          |          |         |
| F000391        | OURFOR*                                                     | F000390  | F00P000* |          |          |         |
| F000404        | OURFOR*                                                     | F000402  | F000403  | F00P000* |          |         |
| F000500        | OURFOR*                                                     | F00P000* |          |          |          |         |
| F000504        | OURFOR*                                                     | F000502  | F000503  | F00P000* |          |         |
| F000509        | OURFOR*                                                     | F000507  | F000508  | F00P000* |          |         |
| F000514        | OURFOR*                                                     | F000512  | F000513  | F00P000* |          |         |
| F000519        | OURFOR*                                                     | F000517  | F000518  | F00P000* |          |         |
| F000604        | OURFOR*                                                     | F000602  | F000603  | F00P000* |          |         |
| F000605        | OURFOR*                                                     | F00P000* |          |          |          |         |
| F000606        | OURFOR*                                                     | F00P000* |          |          |          |         |
| F000607        | OURFOR*                                                     | F00P000* |          |          |          |         |
| F000704        | OURFOR*                                                     | F000702  | F000703  | F00P000* |          |         |
| F000705        | OURFOR*                                                     | F00P000* |          |          |          |         |
| F000708        | OURFOR*                                                     | F000706  | F000707  | F00P000* |          |         |
| F000711        | OURFOR*                                                     | F000709  | F000710  | F00P000* |          |         |
| F000713        | OURFOR*                                                     | F00P000* |          |          |          |         |
| F000714        | OURFOR*                                                     | F00P000* |          |          |          |         |
| F000715        | OURFOR*                                                     | F00P000* |          |          |          |         |
| F000716        | OURFOR*                                                     | F00P000* |          |          |          |         |
| F000717        | OURFOR*                                                     | F00P000* |          |          |          |         |
| F000718        | OURFOR*                                                     | F00P000* |          |          |          |         |
| F000721        | OURFOR*                                                     | F000719  | F000720  | F00P000* |          |         |

Table G-8 Ada Type A Test Program Input/Output Files

| <u>PROGRAM</u> | <u>INPUT/OUTPUT FILES</u>                |                               |                               |                               |                               |
|----------------|------------------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| AFDE220        | OFDE201<br>OFDE206<br>OFDE211<br>OFDE216 | OFDE202<br>OFDE207<br>OFDE212 | OFDE203<br>OFDE208<br>OFDE213 | OFDE204<br>OFDE209<br>OFDE214 | OFDE205<br>OFDE20A<br>OFDE215 |
| AFDE250        | IFDE231<br>IFDE236<br>IFDE241<br>IFDE246 | IFDE232<br>IFDE237<br>IFDE242 | IFDE233<br>IFDE238<br>IFDE243 | IFDE234<br>IFDE239<br>IFDE244 | IFDE235<br>IFDE23A<br>IFDE245 |
| AFDE420        | OFDE401<br>OFDE406<br>OFDE411<br>OFDE416 | OFDE402<br>OFDE407<br>OFDE412 | OFDE403<br>OFDE408<br>OFDE413 | OFDE404<br>OFDE409<br>OFDE414 | OFDE405<br>OFDE40A<br>OFDE415 |
| AFDE450        | IFDE431<br>IFDE436<br>IFDE441<br>IFDE446 | IFDE432<br>IFDE437<br>IFDE442 | IFDE433<br>IFDE438<br>IFDE443 | IFDE434<br>IFDE439<br>IFDE444 | IFDE435<br>IFDE43A<br>IFDE445 |
| ALDE2C1        | OLE2001                                  |                               |                               |                               |                               |
| ALDE2C2        | OLE2001<br>OLE2006                       | OLE2002<br>OLE2007            | OLE2003<br>OLE2008            | OLE2004<br>OLE2009            | OLE2005<br>OLE2010            |
| ALDE2C3        | OLE2001                                  |                               |                               |                               |                               |
| ALDE2C4        | OLE2001<br>OLE2006                       | OLE2002<br>OLE2007            | OLE2003<br>OLE2008            | OLE2004<br>OLE2009            | OLE2005<br>OLE2010            |
| ALDE2C5        | ILE2001                                  |                               |                               |                               |                               |
| ALDE2C6        | ILE2001<br>ILE2006                       | ILE2002<br>ILE2007            | ILE2003<br>ILE2008            | ILE2004<br>ILE2009            | ILE2005<br>ILE2010            |
| ALDE2C7        | ILE2001                                  |                               |                               |                               |                               |
| ALDE2C8        | ILE2001<br>ILE2006                       | ILE2002<br>ILE2007            | ILE2003<br>ILE2008            | ILE2004<br>ILE2009            | ILE2005<br>ILE2010            |
| ALDE4C1        | OLE4001                                  |                               |                               |                               |                               |
| ALDE4C2        | OLE4001<br>OLE4006                       | OLE4002<br>OLE4007            | OLE4003<br>OLE4008            | OLE4004<br>OLE4009            | OLE4005<br>OLE4010            |
| ALDE4C3        | OLE4001                                  |                               |                               |                               |                               |
| ALDE4C4        | OLE4001<br>OLE4006                       | OLE4002<br>OLE4007            | OLE4003<br>OLE4008            | OLE4004<br>OLE4009            | OLE4005<br>OLE4010            |
| ALDE4C5        | ILE4001                                  |                               |                               |                               |                               |
| ALDE4C6        | ILE4001<br>ILE4006                       | ILE4002<br>ILE4007            | ILE4003<br>ILE4008            | ILE4004<br>ILE4009            | ILE4005<br>ILE4010            |
| ALDE4C7        | ILE4001                                  |                               |                               |                               |                               |
| ALDE4C8        | ILE4001<br>ILE4006                       | ILE4002<br>ILE4007            | ILE4003<br>ILE4008            | ILE4004<br>ILE4009            | ILE4005<br>ILE4010            |