

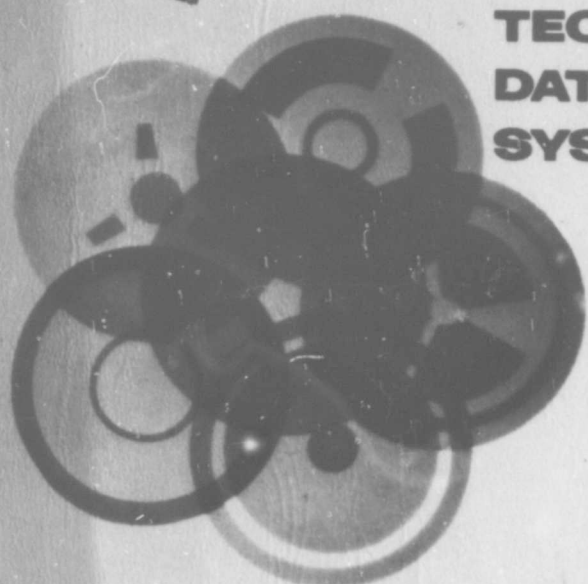
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INTEGRATED TECHNICAL DATA SYSTEM



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COMPUTER SUBSYSTEM: DATA PROCESSING CENTER OPERATOR'S MANUAL

JUNE 1969

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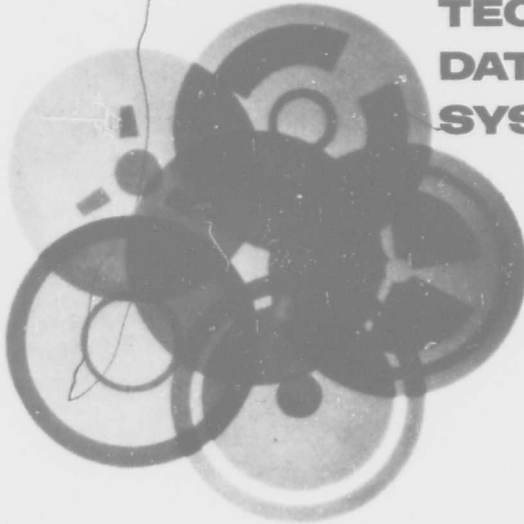
PREPARED FOR
U.S. ARMY MATERIEL COMMAND
CONTRACT NO. DA-49-186-AMC-324 (X)

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TRW
SYSTEMS GROUP
WASHINGTON OPERATIONS
1735 I STREET N.W. • WASHINGTON, D.C. 20006

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SET I

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TECHNICAL
DATA
SYSTEM**



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FOREWORD

TRW Systems was awarded a contract [Contract Number DA-49-186-AMC-324 (X)] by the U.S. Army Materiel Command to develop an Integrated Technical Data System (ITDS). The ITDS is intended to assist the Army Systems Manager in performing his management and technical tasks by operating on relevant data to produce, summarize, and condense information. This allows the manager and technical support personnel to a) determine status and monitor technical progress, b) identify and predict system technical/management problems and their impact, c) comprehend and evaluate proposed system changes, and d) assign and maintain awareness of responsibility for action.

The ITDS is composed of personnel, procedures, equipment and computer programs. The organization of these elements provides a capability for the processing of systems program data, including the following junctions:

- Data receipt and indexing
- Validation and verification for authenticity
- Storage
- Manipulation
- Retrieval
- Display and dissemination

The organization is divided into three major subsystems: the Functional Disciplines Subsystem, the Data Operations Subsystem, and the Computer Subsystem. ITDS user documentation, of which this manual is a part, is oriented to the above subsystems, with the exception of an overall System User's Guide and a Configuration Management Plan.

Following is a tabulation of ITDS user documentation (title of this document is heavily underscored).

ITDS - overall:

- System User's Guide
- Configuration Management Plan

Functional Disciplines Subsystem:

- Administrative Manual

- Operations Manual
- Personnel Position Descriptions

Data Operations Subsystem:

- Administrative Manual
- Operations Manual
- Equipment Description
- Personnel Position Descriptions

Computer Subsystem:

These 12 manuals, in general, cover administration of the subsystem, operating and maintenance instructions for the programs, computing equipment descriptions, and personnel position descriptions.

- Administrative Manual
- Generalized Processing Program, General Description
- Applications Programs, General Description
- Peripheral Programs, General Description
- Computer Programs Maintenance Manual
- Computer Programs Operations Manual
- Data Processing Center Operator's Manual
- Equipment Description
- Personnel Position Descriptions
- Generalized Processing Program, Programming Documentation
- Applications Programs, Programming Documentation
- Peripheral Programs, Programming Documentation

This manual covers the data processing center operator's instructions for the programs of the Computer Subsystem. The emphasis is on operator actions at the Field Installation necessary to produce the expected outputs of the ITDS. You will be referred to other manuals in the ITDS documentation structure for specific details about some of the subjects covered herein.

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1. INTRODUCTION

1.1 PURPOSE

This manual provides operating personnel with the information necessary to set up and in general to execute whatever tasks are required to produce the expected output of the ITDS. Information contained herein is sufficient to permit intelligent decisions to be made in cases where options may exist, permit correct decisions to be made in the event of programmed halts, and provide continuity of operation from run to run, and in some cases from operator to operator.

1.2 SCOPE

This manual contains:

- a general overview of the ITDS;
- the ITDS Computer Service Request Form and a description of its usage;
- operator procedures for batch and remote terminal usage;
- references to specific operating system publications;
- summary of operator-related security procedures.

NOTE

Since the interaction of the console operator with the ITDS software is primarily by means of the "operating system" of the computer on which the ITDS is running, it is necessary to prepare operating instructions with a particular computer/operating system in mind. This manual has been prepared for ITDS system implemented on IBM 360 series computers using Version 16 of the IBM System/360 Operating System. Although some sections are general and will apply to any implementation, the bulk of this manual will require replacement or revision for ITDS implementation on other computer/operating system environments. Sections requiring such modification are identified by an asterisk(*) .

It is assumed in this manual that basic procedures are already in effect at the field installations regarding job submission, file retention and release, priorities, etc., and that these procedures will be followed without modification for all ITDS jobs.

2. BASIC OPERATING SYSTEM

Throughout this manual it is assumed that the data center operations personnel have a basic familiarity with the computer used and with its operating system. Thus, no attempt is made to provide instructions for the elements of the ITDS operation relating directly to these components.

*2.1 CONTROL PROGRAM PROCEDURES

The IBM System/360 Operating System is designed to provide an orderly transition between programs executed in a stacked-job environment. In order that the time interval between the execution of jobs be kept to a minimum, a control program remains in main storage during the execution of all programs in the system. One of the principal functions of the control program is to transfer control from one job or job step to the next. A job may consist of either the execution of a single program in the system or the execution of more than one program. Each execution is called a job step. Thus, a job may consist of a series of one or more job steps.

In preparing to execute a job, the operator must be sure that:

- a) Input for the control program is on the correct device. This can be a card reader, magnetic tape unit, or disk. These job statements are usually supplied in card form when the job is submitted to Computer Operations.
- b) Input for the processing program is on the correct device. This can be a card reader, magnetic tape unit, or disk. This information is available on the INPUT portion of the ITDS Computer Service Request Form provided with every job.
- c) Any output devices referenced by the processing program must be readied. This information is available on the OUTPUT portion of the IRDS Computer Service Request Form provided with every job.

After the operator has checked the preceding items, his primary function is to monitor messages that may appear on the operator's console, and to service, as required, card readers and punches, printers, magnetic tapes, disk units, etc. IBM System/360 Operating System: Operators Guide, Form C28-6540, will provide the operator with detailed instructions for starting, stopping, and restarting the system; controlling input and output; and controlling jobs through commands and statements.

*2.2 OPERATING SYSTEM/360 DOCUMENTATION REFERENCES

This section provides a list of IBM System/360 publications containing information which is necessary or may be helpful to the operator. Abstracts of the contents of the documents are included.

- IBM System/360 System Summary, Form A22-6810.

This publication provides basic information about the IBM System/360, with the objective of helping readers to achieve a general understanding of this data processing system and the interrelationships of its models and parts. Broad system concepts, basic and optional features, and specific input/output devices are briefly discussed.

- IBM System/360 Model 40 Operating Procedures, Form A22-6911.

This manual describes operator procedures for an IBM 2040 Processing Unit, operating with or without an associated IBM 1052 Printer-Keyboard. The manual has sections devoted to system control panel functions, system procedures, program-oriented procedures, operator-intervention procedures, and command examples. An appendix of reference material and a complete index is also included.

- IBM System/360 Operating System: Introduction, Form C28-6534.

This publication describes the general organization, function, and application of the IBM System/360 Operating System. The operating system is designed to extend the performance and application of Computer System/360 and to assist the manager, programmer, and operator of the system. The operating system consists of a comprehensive set of language translators and service programs operating under the supervisory control and coordination of an integrated set of control routines. It is designed to be used with Models 30, 40, 50, 65, and 75 of Computing System/360. The operating system is located in direct-access storage, such as disk or drum, and operates on computing systems that have 32,768 bytes or more of main storage.

- IBM System/360 Operating System: System Operating Training Manual, Form C20-1680.

This publication must be used together with the publication IBM System/360 Operating System: System Operation Training Manual - Book of Illustrations, Form C20-1681. These two publications introduce the student to many of the procedures to be followed when operating an IBM System/360 under control of the IBM System/360 Operating System. These publications describe the Operating System and various input/output devices and illustrate how personnel operate the System/360 under control of the Operating System.

- IBM System/360 Operating System: System Training Manual - Book of Illustrations, Form C20-1681.

This publication contains the illustrations for IBM System/360 Operating System: System Operation Training Manual, Form C20-1680.

- IBM System/360 Operating System: Operator's Guide, Form C28-6540.

This publication tells how to run the IBM System/360 Operating System. After summarizing how the system works, it describes the three major system types: systems with the primary control program (PCP); systems that provide multiprogramming with a fixed number of tasks (MFT or Option 2); and systems that provide multiprogramming with a variable number of tasks (MVT or Option 4). Instructions are given telling:

- a) how to start, stop, and restart the system;
- b) how to control input and output;
- c) how to control jobs through commands and statements;
- d) how to understand messages.

General operating techniques are discussed, as well as the meaning of many technical terms.

- IBM System/360 Operating System: Messages and Codes, Form C28-6631.

This publication lists and explains the messages, completion codes, and wait state codes produced by all IBM-supplied components of the IBM System/360 Operating System. The introduction shows the formats of the messages and codes, and gives certain information not given in the individual message and code descriptions. The messages and codes are presented in alphabetic order.

3. GENERAL OVERVIEW OF ITDS OPERATION

Before going into more detailed operating instructions it may be helpful to present a general view of some of the overall processing considerations of the ITDS.

The purpose of the ITDS is to build, maintain, and report from a centralized integrated data base containing technical and management oriented information. Two kinds of programs are used to access this integrated data base: 1) a "Generalized Program" and 2) a set of "applications programs". A third category is represented by "peripheral programs," which supplement the other kinds but use their own data bases.

3.1 REMOTE TERMINAL USAGE

The Generalized Processing Program is designed to be used directly by management and administrative personnel from remote terminal consoles to update and to query the data base. To enable this remote access mode, the appropriate job is loaded into the computer after the data and terminal interface units have been appropriately enabled. If no other programs are being run simultaneously (more detail on this possibility is given later), no operator intervention will be required until the time of termination of the on-line mode. This termination is usually scheduled but occasionally may result from error conditions.

3.2 BATCH USAGE

The Generalized Processing Program can also be used in the "batch mode" if all of the input is entered via punched cards at the data processing center rather than through the remote terminals. In this case, the job will be an "ordinary" batch job with the appropriate job control statements included in the deck, and setup and run instructions given on the ITDS Computer Service Request Form.

The applications programs are also batch programs which use the centralized integrated data base. These programs are of two distinct subtypes: those used to procure highly formatted reports, and those used to extract data from other data bases and prepare appropriately formatted input statements to the Generalized Processing Program. Each of the applications programs can have its own setup and operating instructions

(which will be indicated on the ITDS Computer Service Request Form) and will have its own set of possible error messages (see Appendix A). Since each of the applications programs incorporates the Generalized Processing Program in one or more of its job steps, all of the error conditions and messages that can be encountered with the batch mode operation of the Generalized Processing Program may also occur.

A set of peripheral data bases has been set up for the data that is not convenient to include in the centralized integrated data base. The programs that use these data bases are termed "peripheral programs" and are run in the batch mode as "ordinary" batch programs. These programs do not use the generalized processing system and so the error conditions and messages associated with this system cannot occur. Error messages associated with peripheral programs are found in Appendix A.

It should be noted, however, that peripheral programs can be run in a job stream with an applications program (extract/load) and the Generalized Processing Program. That is, after running a peripheral program, the resulting updated peripheral data base is examined by an applications program (extract-load subtype), appropriate "ADD" statements prepared, and the data entered into the centralized files by the Generalized Processing Program - all in one job setup. If such a job stream is setup, no other programs accessing the centralized integrated data base can be run simultaneously with the processing of the entire job stream.

In addition to the above ITDS programs, the Data Processing Center may run "foreign programs" in the batch mode that are not a part of the ITDS.

3.3 MULTIPROGRAMMING

If the computer/operating system configuration can support multiprogramming, the question arises as to which programs can be run simultaneously. In this regard, the prime consideration is that the integrity of the ITDS centralized integrated data base be protected. This integrity can be ensured if only one program is running that has access to this data base. Since the generalized processing system in both remote access mode and batch mode, and each of the applications programs can access the centralized integrated data base, it is necessary to prevent more than one of

these running at a time. The use of standard job control statements associated with each of the programs has been designed to avoid simultaneous access to the integrated data base by more than one program, and no special operator action is required.

Except as explained above for a complex job stream, peripheral and foreign programs do not use the centralized integrated data base, and so no special instructions need be placed on their simultaneous use with each other or with those programs which access this data base.

4. ITDS COMPUTER SERVICE REQUEST FORM

The basic means of communication with Data Processing Center personnel is the ITDS Computer Service Request Form. This form has been designed to permit the transmission of all information and instructions pertinent to the running of an ITDS job as well as certain basic information that may be required for an installation's administrative procedures.

Figure 4-1 illustrates the ITDS Computer Service Request Form. The information elements of this form are defined below with the categories of special interest to the operator indicated by a plus sign (+) to the left.

1. Date
Current day's date (MM/DD/Y).
2. Organization Code
Submitter's organization code number.
3. ID Number
Submitter's identification number.
4. Submitter's Name
Submitter's last name and first initial.
5. Run Number
An identification number for the run submitted.
6. Job Number
Job number to which the run will be charged.
- + 7. Extension
Telephone extension where submitter may be reached.
- + 8. Attend
Operator should call submitter to attend this run if the box is checked.
- + 9. Approval
The initials of the person approving the priority.

COMPUTER SERVICE REQUEST

DATE	COST CODE	BADGE #	NAME

SEQ. #	JOB #	EXT	ATTD.	APPROVAL	PRI

EST. TIME MIN.	
MAX. TIME MIN.	

CONF.	P R I N T	EST. PAGES	
SECRET		FORM	
T. SEC.		TN TRAIN	

I N T E R	C O U N T	
	I N T E R.	

CANCEL WITH DUMP	
------------------	--

INPUT

UNIT	REEL	VOLUME SERIAL	DISK TAPE

SYSTEM

STANDARD O.S. SYSTEM:
(SYSTEM ON 130, WORK
PACKS ON 131, 132 AND
133)

SPECIAL SYSTEM

OS <input type="checkbox"/>	DOS <input type="checkbox"/>	OTHER <input type="checkbox"/>
-----------------------------	------------------------------	--------------------------------

OUTPUT

UNIT	REEL	VOLUME SERIAL	DISK TAPE	FILE NAME

SPECIAL INSTRUCTIONS OR OPERATOR COMMENTS:

Figure 4-1. ITDS Computer Service Request Form

+ 10. Priority

The priority level for this job.

+ 11. Estimated Time in Minutes

Estimated computer run time in minutes.

+ 12. Maximum Time in Minutes

Maximum run time in minutes. Operator is to terminate job if run time exceeds this figure.

+ 13. Confidential, Secret, Top Secret

Operator should check the security level and follow the proper procedures for classified runs found in ITDS Computer Subsystem: Administrative Manual and summarized in Section 6 of this manual.

+ 14. Print

- Estimated number of pages the submitter intends to print.
- Unless specified, use the Form 1-J (11x14 7/8) paper.
- Unless specified, the QN train is to be used. The TN train will be used on request only.

+ 15. Punch

This box will be checked if the submitter wants his output interpreted. The estimated number of cards will also be included. Operator should take appropriate action.

+ 16. Cancel with DUMP

If this box is checked, the operators will specify that an abnormal-end-of-task storage dump is to be taken if he finds it necessary to CANCEL the job.

+ 17. Input

- The unit # for each tape or disk: This does not include those tape/disks used by the standard OS system.
- Reel: The tape or disk reel number required.
- Volume Serial: The volume serial label, if required.
- Disk/Tape: A "D" for disk or a "T" for tape will be entered.

+ 18. System

The standard system will be OS with the system on 130, and three work packs on 131, 132, and 133.

+ 19. Special System

Any variation to #18 will be considered a special system and will be checked in this area.

+ 20. Usage

If BATCH is checked, the operator should refer to Section 5.1 of this manual for additional instructions. If REMOTE TERMINALS is checked, the operator should refer to Section 5.2 of this manual for additional instructions.

+ 21. Output

UNIT, REEL, VOLUME SERIAL, and DISK/TAPE will be completed in the same manner as INPUT.

+ 22. File Name

A file name used by the submitter for retention purposes. Operator should follow normal procedures in use at his installation.

+ 23. Special Instructions or Operator Comments

If any special instructions exist for the operator, they will be entered in this area - e.g., carriage tape needed in conjunction with the form size, etc. The operator should use this space if he has any problems with the run or if he notices anything unusual.

5. OPERATING INSTRUCTIONS FOR BATCH AND REMOTE TERMINALS

The following paragraphs provide additional instructions to the operator on ITDS stacked-job processing and teleprocessing procedures. Each ITDS job will always be accompanied by the ITDS Computer Service Request Form. In addition to the accounting data and input/output information on this form, the following run-dependent operating considerations are provided, for use as applicable:

- Messages: A list of messages put out by the ITDS programs.

NOTE

Standard operating system messages will appear on the operator's console. If this information is sufficient to guide operator responses, it will not be repeated on the ITDS Computer Service Request Form or in this document.

- Error Situations: Any error situations not covered by a message will be discussed, if applicable. This includes any programmed halts or entries into the wait-state, and the operator action to be taken in such cases.
- Checkpoints: The use of the checkpoint procedure will be described if it is included in the program.
- Terminating Run Before Normal EOJ: A description of what is involved if the run is terminated before normal end of job will be provided.
- Restart Procedure: The restart or reconstruction procedures will be described. If restart requires that the job be started over, this will be stated.
- Disposition of Input/Output: The routing of input/output data - particularly those outputs that reenter the system in another run - will be discussed, if applicable.
- Manual Operations Associated with the Run: Manual operations such as decollating printer output or sorting card files will be described, if applicable.

5.1 ITDS STACKED-JOB PROCESSING PROCEDURES

Any job which uses only the local facilities of the computer (i.e., no teleprocessing equipment) is considered a batch job. The standard operating system provides an orderly transition between jobs in this stacked-job environment. Information concerning standard (i.e., pre-defined) ITDS batch jobs is included in this manual on the following pages.

***5.1.1 Generalized Processing Program - Special Considerations**

The following considerations apply to the Generalized Processing Program:

- Messages: Not applicable.
- Error Situations: Not applicable.
- Checkpoints: Not applicable.
- Terminating Run before Normal EOJ: The ITDS Generalized Processing Program has only normal system ABENDS.
- Restart Procedures: There are no automatic restart procedures provided with the ITDS. Operators should never restart a job: it may possibly result in destruction of the data base. Reconstruction procedures will be performed by system maintenance personnel only.
- Disposition of Input/Output: Not applicable.
- Manual Operations Associated with the Run: Not applicable.

***5.1.2 Applications Programs - Special Considerations**

Not applicable.

***5.1.3 Peripheral Programs - Special Considerations**

Not applicable.

***5.2 TELEPROCESSING JOB PROCEDURES**

Any job which uses the teleprocessing capabilities of the ITDS requires special operator consideration. Like the batch jobs, the teleprocessing jobs operate under the IBM System/360 Operating System Control Program. In addition to the information provided on the ITDS Computer Service Request Form, the following special considerations apply:

- Messages

The following messages can be issued by the ITDS generalized software on the operator's console:

XX TYPE ANY GPP STATEMENT OR * TO TERMINATE
XX TERMINAL YY DOWN DUE TO OPEN/CLOSE ERROR

(XX is the identification number preceding the message. The same number must be used when the operator responds to the system. YY is the number of the terminal being used.)

The operator can enter one of the following replies whenever he wants to communicate with the generalized software:

- a) 'XX START-GPP device' or
 'XX STOP-GPP device'

where the following device names are acceptable:

1050 These terms are synonymous.
1050-1

1050-2 Acceptable if two or more terminals are accessible.

1050-3 Acceptable if three or more terminals are accessible.

1050-4 Acceptable if four terminals are accessible.

If the statement is given in error one of the following messages should appear:

430. THE DEVICE NAME CANNOT BE IDENTIFIED

431. DEVICE NOT PRESENT GPPUnn

- b) The operator should enter '*' when he wishes to terminate the job. The operator should avoid terminating the job using the IBM System/360 Operating System CANCEL command.

- Error Situations

Even though this job may appear to be idle, it should not be terminated unless directed to do so by the Computer Operations Manager or by the person(s) who requested this run.

- Checkpoints - Not applicable.

- Terminating Run before Normal EOJ

Before cancelling the job, the operator should enter '*' in an attempt to force the program to terminate itself. If the program does not end normally within a few minutes after the '*' is entered, the operator should cancel using the IBM System/360 Operating System CANCEL command and request a DUMP.

NOTE

The Computer Operations Manager and/or the person requesting the run should establish criteria (e.g., maximum time exceeded) for when the program may be terminated.

- Restart Procedures - Not applicable.
- Disposition of Input/Output - Not applicable.
- Manual Operations Associated with the Run

The operator should "ENABLE" the Transmission Control Unit (IBM 2701) and set the telephone Modem Dataset on "AUTO."

6. SECURITY PROCEDURES

Operators are responsible for knowing the required security procedures and for following these procedures in their classified operations. Section 5.4 of ITDS Computer Subsystem: Administrative Manual contains detailed procedures for the storage, dispatch, and control of all classified material. Those of special significance to the operators are listed below:

- Classified Magnetic Tape

Classified magnetic tapes shall be stored under conditions as to eliminate any possibility of unauthorized or improperly cleared personnel gaining access to them.

- Classified Waste

All classified waste must be segregated and secured to the extent that personnel with a clearance lower than the classification of the material cannot have access.

- Classified Work Areas

When equipment in peripheral areas is engaged in classified work, the equipment must be covered to indicate to those persons without proper clearance to avoid that area. Operating personnel assigned to classified jobs are charged with the responsibility of safeguarding the classified materials assigned to them for processing.

- Computer Processing

Upon completion of a classified job, all data remaining in core must be cleared before the next job is initiated. Also, all classified tapes must be either dismounted or their units put off-line to disconnect them for the computer.

- Disk Usage

Security regulations governing the usage of disk files are very stringent. Therefore, jobs with classified input or output should be processed in such a way as to avoid the use of disk storage whenever possible. If disk storage must be used, it will be necessary to obtain the consent of the Computer Operations Manager.

If portions of the centralized integrated data base are to be classified, this data will be stored on a separate, clearly-marked disk pack which will only physically be available under authorized conditions similar to those employed for classified magnetic tape.

- Tape Usage

Computer operators with CONFIDENTIAL clearances are permitted to handle SECRET tapes in the normal performance of their duties, but are not allowed to enter peripheral equipment areas. The rule concerning tape handling is due to a recognition by security officials that a physical reel of tape is not classified; it is the data recorded on the tape which is sensitive.

- Remote Terminal Usage

During the processing of a classified job, all connections between a computer and its remote terminals must be disabled by the console operator.

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APPENDIX A
ITDS ERROR MESSAGES

PART I. GENERALIZED PROCESSING PROGRAM

The Generalized Processing Program error messages have been divided into four different categories: format errors, data errors, system errors, and nonreactive diagnostics. Some of the error messages will overlap and be repeated. Each category is explained on the following pages with its corresponding list of errors.

The following symbols may be printed with the error message:

- E Found at the beginning of the message. It will print the message number and the data to the record mark (\neg).
- \neg Record mark which is used to indicate the end of the data.
- H Found at the beginning of a message and usually marks messages containing information only. It will print the following data to the record mark.
- A An insert variable.
- L Line control.

Category I - Format Errors

Format errors are generally due to mistakes in the structure and/or content of input statements. They are usually attributed to a misunderstanding of the data base and/or non-compliance with established procedures. These errors can generally be resolved by the Functional Disciplines without assistance from other agencies.

1. EIMPROPER USE OF VALUE IDENTIFIER MARK.
2. EUNEVEN NUMBER OF ITEM OR VALUE DELIMITERS.
3. EPROGRAM VERB NOT RECOGNIZABLE.
4. EIMPROPER FORMAT FOR FILE/DICT STATEMENT.
5. ESECOND VER " \neg A \neg H" IS NOT ALLOWED.
6. ESECOND DATA LIST NAME " \neg A \neg H" IS NOT ALLOWED.
8. EA DATA LIST ATTRIBUTE MUST NOT HAVE THE SAME NAME AS A DICT ATTRIBUTE.

10. ENO DATA LIST NAME CAN BE FOUND IN THE STATEMENT.
12. EM/DICT ILLEGAL IN A FILE/DICT INPUT.
13. ETHERE IS NO DL/ID ENTRY IN THE USER DICTIONARY.
14. EA DATA LIST NAME MUST BE THE FIRST ELEMENT IN A FILE/DATA INPUT.
15. ETHE DATA LIST NAME IS PRECEDED BY AN ILLEGAL CONNECTIVE.
16. ETHE WORK "TO" MAY ONLY PRECEDE A DATA LIST NAME IN AN ADD STATEMENT.
17. ETHE WORD "INN" MAY ONLY BE USED IN A LIST OR COUNT STATEMENT.
18. EA CONNECTIVE MAY NOT OCCUR AS THE LAST ELEMENT(S) IN A STATEMENT.
19. EA VALUE WITHOUT AN ASSOCIATED ATTRIBUTE NAME IS MEANINGLESS.
20. ETHERE IS A MEANINGLESS ITEM ID CONTAINED IN THE STATEMENT.
21. ETHERE IS A CONFLICT BETWEEN A USER NAME AND A SYSTEM NAME.
22. ETHE WORD "TO" FOLLOWED BY AN ITEM ID MAY ONLY BE USED IN A CHANGE STATEMENT.
23. ETHE WORD "TO" FOLLOWED BY AN ITEM ID MUST ALSO BE PRECEDED BY AN ITEM ID.
24. ETHE WORD "A H" CANNOT BE IDENTIFIED.
25. ETHE WORD "WITH" MAY NOT PRECEDE A VALUE.
26. EATTRIBUTE VALUES MAY NOT BOTH PRECEDE AND FOLLOW AN ATTRIBUTE NAME.
29. ETHIS INN STATEMENT IS MISSING EITHER AN ITEM ID OR AN ATTRIBUTE NAME.
30. EA NON-IMPLEMENTED VERB HAS BEEN USED.
31. ETHERE ARE NO VALUES TO BE ADDED TO A CONDITIONAL ITEM ID.
32. EA REQUIRED ITEM ID IS MISSING IN THE ADD STATEMENT.
33. ESTATEMENT IS MEANINGLESS. "TO" IMPLIES THAT THE ITEM ALREADY EXISTS.
36. EAN ILLEGAL CONNECTIVE WAS USED PRECEDING AN ITEM ID.
37. EILLEGAL CONNECTIVES PRECEDE AN ITEM ID OR THE FIRST CONDITIONAL ATTRIBUTE.
38. EA CHANGE STATEMENT THAT DOES NOT HAVE ATTRIBUTE VALUE CHANGES MUST BE OF THE FORMAT "CHANGE ITEM ID TO ITEM ID".
40. EAN ILLEGAL CONNECTIVE PRECEDES THE FIRST ITEM ID IN A "CHANGE ITEM ID TO ITEM ID" FORMAT.
41. ETHE WORD "TO" MUST PRECEDE THE SECOND ITEM ID IN A "CHANGE ITEM ID TO ITEM ID" FORMAT.
42. EILLEGAL MULTIPLE CONNECTIVES PRECEDE EITHER THE SECOND ITEM ID OR THE FIRST CONDITIONAL ATTRIBUTE.
53. ETHIS INN STATEMENT HAS AN ILLEGAL CONNECTIVE PRECEDING THE ITEM ID.
54. ETHIS INN STATEMENT HAS ILLEGAL WORDS BETWEEN THE ITEM ID AND THE FIRST ATTRIBUTE NAME.
55. EA CHANGE STATEMENT REQUIRES AN ITEM ID AND/OR A CONDITIONAL ATTRIBUTE.

57. ESIMULTANEOUS CHANGES TO ITEM IDS AND ATTRIBUTE VALUES ARE ILLEGAL.
58. ETHE WORD "TO" IS THE ONLY ALLOWABLE CONNECTIVE PRECEDING A VALUE IN A CHANGE STATEMENT.
59. EEVERY ATTRIBUTE NAME IN A CHANGE STATEMENT REQUIRES A CORRESPONDING "TO V", WHERE V IS A VALUE.
60. EAN ADD STATEMENT REQUIRES AN ITEM ID OR A CONDITIONAL ATTRIBUTE.
62. EAN ILLEGAL CONNECTIVE PRECEDES THE VALUE " $\neg A \neg H$ " IN THIS ADD STATEMENT.
63. EEVERY ATTRIBUTE IN AN ADD STATEMENT REQUIRES A CORRESPONDING VALUE.
64. EIF AN ADD STATEMENT, THE WORD "TO" PRECEDES ANY ATTRIBUTES, IT MUST PRECEDE ALL ATTRIBUTES.
65. ETHE WORD "TO" MAY NOT PRECEDE BOTH THE DATA LIST NAME AND ATTRIBUTE NAMES IN THE SAME ADD STATEMENT.
66. EAN ATTRIBUTE HAS AN ILLEGAL CONNECTIVE IN AN ADD STATEMENT.
71. ETHE VALUE " $\neg A \neg H$ " HAS AN IMPROPER CONNECTIVE.
72. ETHE VALUE " $\neg A \neg H$ " IS MEANINGLESS.
74. ETHE NUMBER OF CONCATENATED PARTS OF " $\neg A \neg H$ " IS NOT CONSISTENT WITH ITS DICTIONARY SPECIFICATIONS.
75. E " $\neg A \neg H$ " FAILS TO PASS ITS MAXIMUM SIZE RESTRICTIONS.
76. E " $\neg A \neg H$ " FAILS TO PASS ITS MINIMUM SIZE RESTRICTIONS.
77. E " $\neg A \neg H$ " FAILS TO PASS ITS TYPE RESTRICTIONS.
78. E " $\neg A \neg H$ " FAILS TO PASS ITS PATTERN AUDIT.
79. ETHE NUMBER OF SEPARATE "ANDD" CLAUSES MAY NOT EXCEED 9.
81. ESECURITY CODE VIOLATION.
82. ECONDITIONAL ADDS ARE ONLY PERMITTED IN STATEMENTS OF THE "ADD TO" FORMAT.
83. E " $\neg A \neg H$ " HAS AN ILLEGAL CONCATENATED FORMAT.
108. ETHIS REQUEST CONTAINS MORE D1-D2 ATTRIBUTES THAN THE SYSTEM CAN HANDLE. PLEASE SPLIT THE REQUEST AND CONTINUE.
109. ETHERE ARE NON-PARALLEL D1-D2S IN THE ASSOCIATED DATA LISTS.
112. ESIMULTANEOUS CHANGES TO D1 AND CORRESPONDING D2 ATTRIBUTES ARE NOT PERMITTED.
113. ETHE FORMAT "CHANGE VALUE TO VALUE" MUST BE USED FOR A D1 ATTRIBUTE IN A CHANGE STATEMENT.
117. EA DELETE STATEMENT MUST CONTAIN EITHER ITEM IDS OR CONDITIONAL ATTRIBUTES.
118. EUNCONDITIONAL ATTRIBUTE "ANDD" CLAUSES ARE NOT OPERATIVE IN THIS CONFIGURATION.
123. E " $\neg A \neg H$ " CONTAINS TWO CORRELATIVES.
128. ETHE ATTRIBUTE " $\neg A \neg H$ " CONTAINS TWO D-CORRELATIVES WHICH IS ILLEGAL.

- 133. ETHIS "INN" STATEMENT DOES NOT CCNTAIN AN ATTRIBUTE NECESSARY FOR ITS EXECUTION.
- 137. EA CONDITIONAL ATTRIBUTE IS MODIFIED BY THE WORD "NO" AND THE ATTRIBUTE ALSO HAS A VALUE, WHICH IS ILLEGAL.
- 139. EA D2 HAS BEEN REQUESTED WITHOUT ITS CORRESPONDING D1 IN A REFERENCED DATA LIST.
- 143. E " \neg A \neg H" IS A MULTIPLE RETRIEVAL SYNONYM AND CANNOT BE USED AS AN UPDATE OR CONDITIONAL ATTRIBUTE.
- 158. EAN ILLEGAL CONNECTIVE OF THE FORM " \neg A \neg H" MODIFIES " \neg A \neg H".
- 160. EIF THE D1 ATTRIBUTE ' \neg A \neg H' IS USED IN ANY "ANDD" CLAUSE, IT MAY BE USED AGAIN ONLY IN ANOTHER "ANDD" CLAUSE,
- 334. ESIGN ON BY TYPING REQUEST FOLLOWED BY USER NO.
- 336. EINVALID USER NO.
- 339. E IMPROPER OR UNDEFINED FORMAT FOR DATE CONVERSION.
- 351. EILLEGAL COMBINATION OF PARAMETERS USED.
- 352. EILLEGAL COMBINATIONS OF D, I, AND R CLAUSES.
- 353. EEQUAL SIGN MISSING WHEN EXPECTED.
- 354. EPARAMETER VALUE IS ALPHA WHEN NUMERIC EXPECTED.
- 355. E " \neg A \neg H" IS A NONEXISTENT PARAMETER.
- 386. EINVALID DELIMITER ENCOUNTERED.
- 402. EITEM ID IN SECONDARY DATA LIST HAS MORE THAN ONE MULTI-VALUED SEGMENT.
- 406. ECOUNT VERB NOT APPLICABLE.
- 414. EILLEGAL MODIFIER USED IN DEFINING THE DATA LIST OR DICTIONARY AREAS.
- 424. EDICTIONARY NOT VALIDATED FOR PROCESSING.
- 721. E TOTAL VERB CANNOT HANDLE D-CORRELATIVE FOR THIS CONFIGURATION.
- 722. E MORE THAN THE MAXIMUM OF 6 SIMULTANEOUS TCTALS IS CALLED FOR.
- 1005. EALL PRIMARY D1 ATTRIBUTES MUST HAVE A VALUE INPUT UNLESS IN A DELETE STATEMENT.
- 1006. EIN PRIMARY ITEM ' \neg A \neg H' THE ATTRIBUTE WHOSE SYNONYM IS " \neg A \neg H" HAS CONFLICTING FILE DELETE VALUES AND INPUT "CHANGE TO" VALUES. STATEMENT MAY BE BROKEN INTO A DELETE AND ADD.
- 2052. EBULK ADD TAPE NOT PROPERLY IDENTIFIED.
- 2053. ESKELETON ATTRIBUTE IDENTIFIER NOT NUMERIC.
- 2060. EAN UNCONDITIONAL UPDATE WITHOUT AN ITEM ID IS NOT PERMITTED.

Category II - Data Errors

Data errors are generally due to major procedural problems involving the user dictionaries and their associated data base maps and to minor

problems involving the system dictionary. With few exceptions, data errors can be resolved by Data Operations without assistance from Computer Operations.

33. ESTATEMENT IS MEANINGLESS. "TO" IMPLIES THAT THE ITEM ALREADY EXISTS.
38. EA CHANGE STATEMENT THAT DOES NOT HAVE ATTRIBUTE VALUE CHANGES MUST BE OF THE FORMAT "CHANGE ITEM 1D TO ITEM 1D."
72. ETHE VALUE " \neg A \neg H" IS MEANINGLESS.
74. ETHE NUMBER OF CONCATENATED PARTS OF " \neg A \neg H" IS NOT CONSISTENT WITH ITS DICTIONARY SPECIFICATIONS.
75. E " \neg A \neg H" FAILS TO PASS ITS MINIMUM SIZE RESTRICTIONS.
76. E " \neg A \neg H" FAILS TO PASS ITS MINIMUM SIZE RESTRICTIONS.
77. E " \neg A \neg H" FAILS TO PASS ITS TYPE RESTRICTIONS.
78. E " \neg A \neg H" FAILS TO PASS ITS PATTERN AUDIT.
104. EAN ATTRIBUTE'S CORRELATIVE CONTAINS THE DATA LIST NAME " \neg A \neg H" WHICH CANNOT BE FOUND IN THE BRIDGE CORRELATIVES. CALL SYSTEMS.
110. ETAPE LABEL IS NOT CORRECT \neg L \neg H LABEL REQUESTED IS \neg \neg A \neg H REEL NO. \neg A \neg L \neg H TAPE LABEL IS \neg A \neg H REEL NO. \neg A \neg
121. ETHERE IS A D-CORRELATIVE ON AN ATTRIBUTE REFERENCED FOR AUTOMATIC DATING.
122. EA PRIMARY D1 IS BEING MADE A D2 IN A SECONDARY DATA LIST.
123. E \neg A \neg H CONTAINS TWO CORRELATIVES.
128. ETHE ATTRIBUTE " \neg A \neg H" CONTAINS TWO D-CORRELATIVES WHICH IS ILLEGAL.
129. EAN ATTRIBUTE'S CORRELATIVE CONTAINS THE DATA LIST NAME " \neg A \neg H" SINCE NONE OF ITS ATTRIBUTES ARE REQUESTED BY THE DICTIONARY.
132. ETHE DICTIONARY OF THE DATA LIST IN THIS "INN" STATEMENT DOES NOT HAVE THE REQUIRED CORRELATIVE DEFINITIONS.
133. ETHIS "INN" STATEMENT DOES NOT CONTAIN AN ATTRIBUTE NECESSARY FOR ITS EXECUTION.
136. EAN ATTRIBUTE VALUE OF ITEM " \neg A \neg H" DOES NOT MEET THE REQUIREMENTS OF ITS G CORRELATIVE.
137. EA CONDITIONAL ATTRIBUTE IS MODIFIED BY THE WORD "NO" AND THE ATTRIBUTE ALSO HAS A VALUE, WHICH IS ILLEGAL.
148. EONE OR MORE OF THE ITEM IDS IS NONEXISTENT.
161. EAN ATTRIBUTE MAY NOT BE UPDATED USING DIFFERENT CORRELATIVES UNLESS THEY ARE POSTS.
162. ETHE SECONDARY ATTRIBUTE ' \neg A \neg H' MAY NOT BE UPDATED FROM MORE THAN ONE PRIMARY ATTRIBUTE UNLESS THEY ARE BOTH POSTS.
163. ETHE "FROM" AND "TO" VALUES OF THE ATTRIBUTE ' \neg A \neg H' CONTAIN EQUALITIES.
164. ETHE ATTRIBUTE ' \neg A \neg H' IS A SINGLE VALUE REJECT AND MAY NOT ACCEPT MORE THAN ONE INPUT VALUE.

165. ETHE D1 ATTRIBUTE 'A H' MUST HAVE UNIQUE CHANGE "FROM" AND "TO" VALUES.
166. ETHE PRIMARY ATTRIBUTE 'A H' IS USED IN "ANDD" CLAUSES, EACH OF ITS VALUES MUST BE UNIQUE.
167. ETHE PRIMARY ATTRIBUTE 'A H' MAY NOT HAVE A DELETE IGNORE CORRELATIVE.
168. ETHE PRIMARY ATTRIBUTE "A H" DOES NOT HAVE A Y CORRELATIVE.
170. ETHE ATTRIBUTE "A H" IS A D2 AND MAY NOT BE USED AS AN ACT DATE.
171. ETHE ATTRIBUTE "A H" MAY BE A D2 TO ONLY ONE D1.
172. ETHE ATTRIBUTE "A H" IS A D1 AND MUST BE A NON-REDUNDANT STORE OR SINGLE VALUE REJECT.
173. ETHE SECONDARY ATTRIBUTE (DATA LIST) "A H" MUST STORE (BRIDGE) FROM PRIMARY ATTRIBUTES WITH CORRELATIVES OF A NON-REDUNDANT STORE OR A SINGLE VALUE REJECT.
174. ETHE PRIMARY ATTRIBUTE "A H" IS A CONCATENATED NON-REDUNDANT STORE, AND IF USED AS A SECONDARY BRIDGE OR STORE MUST BE TAKEN IN WHOLE.
175. ETHE ATTRIBUTE "A H" IS A POST AND THEREFORE MUST HAVE A TYPE OF NUMERIC.
176. ETHE SECONDARY ATTRIBUTE "A H" MAY NOT BE A NON-STORE.
177. ETHE SECONDARY ATTRIBUTE "A H" IS A NON-REDUNDANT STORE, AND ILLEGALLY STORES FROM A PRIMARY THAT IS A REDUNDANT STORE.
178. ETHE SECONDARY ATTRIBUTE "A H" STORES FROM A SINGLE VALUE REPLACE AND THEREFORE MUST BE A SINGLE VALUE REPLACE, IGNORE, OR REJECT OR A POST.
179. ETHE SECONDARY ATTRIBUTE "A H" STORES FROM A POST AND THEREFORE MAY NOT BE CONCATENATED.
180. ETHE SECONDARY ATTRIBUTE "A H" IS A D1 AND MAY NOT BE A DELETE IGNORE.
181. ETHE PRIMARY ATTRIBUTE "A H" IS A D2 AND MAY ONLY BE USED IN A SECONDARY AS A PARALLEL D2.
183. EA UNIT POST CORRELATIVE IS INCORRECTLY USED WITH ATTRIBUTE "A H."
184. ETHE ATTRIBUTE "A H" IS A POST AND MAY NOT BE CONCATENATED.
185. ETHE SECONDARY ATTRIBUTE "A H" IS A D2 AND MAY NOT STORE FROM A PRIMARY D1.
186. ETHE SECONDARY ATTRIBUTE "A H" IS A NON-REDUNDANT STORE AND MAY NOT STORE FROM A NON-STORE.
301. EIS OS REGISTER HAS OVERFLOWED. STATEMENT MAY REQUIRE TOO MUCH STORAGE.
302. ETHE BMS REGISTER HAS OVERFLOWED. EITHER A STORED ITEM 1D OR A PART OF THE INPUT STATEMENT EXCEEDS THE MAXIMUM LENGTH PERMITTED IN THIS CONFIGURATION.
333. ELENGTH OF USER SECURITY CODES EXCEEDS 100 CHARACTER MAXIMUM.

- 338. EINVALID VALUE FOR OUTPUT DATE CONVERSION. CALL SYSTEMS.
- 339. EIMPROPER OR UNDEFINED FORMAT FOR DATE CONVERSION.
- 354. EPARAMETER VALUE IS ALPHA WHEN NUMERIC EXPECTED.
- 355. E "┌ A ┐ H" IS A NONEXISTENT PARAMETER.
- 356. EFOR DATA LIST "┌ A ┐ H" NAME OR DICTIONARY NOT FOUND.
- 357. EFOR DATA LIST "┌ A ┐ H" NAME FOUND BUT IS NOT A D TYPE ITEM.
- 358. EFOR DATA LIST "┌ A ┐ H" DICTIONARY B, M, OR S IS NON-NUMERIC.
- 359. EITEM ID "┌ A ┐ H" NOT LOCATED.
- 360. ES CLAUSE INCOMPATIBLE WITH E CLAUSE OR WITH END OF ITEM OR RECORD.
- 361. EITEM ID IS TOO LARGE.
- 362. EDATA LIST NAME TOO LARGE.
- 363. ESYSTEM ERROR IN PROGRAM ID. CALL SYSTEMS.
- 364. EL AND V CLAUSES BOTH PRESENT OR BOTH ABSENT.
- 365. ES CLAUSE MISSING WHEN EXPECTED.
- 366. EN CLAUSE MISSING WHEN EXPECTED.
- 367. EITEM "┌ A ┐ H" TO BE ADDED ALREADY EXISTS.
- 368. EIN V CLAUSE, CHARACTER FOLLOWING \$ IS INCORRECT.
- 369. ES FIELD MUST BE BEYOND ID FIELD.
- 370. ES CLAUSE EXCEEDS ITEM SIZE OF ┌ A ┐ H.
- 371. EN CLAUSE INCOMPATIBLE WITH ITEM SIZE OF ┌ A ┐ H.
- 372. ES AND N CLAUSES INCOMPATIBLE WITH SIZE OF RECORD.
- 373. EITEM SIZE IS ZERO.
- 374. ENUMBER OF REPLACEMENT CHARACTERS MUST EQUAL N CLAUSE IN RECORD FIX.
- 375. EDATA LIST DICT ┌ A ┐ H HAS NO DL/ID ENTRY.
- 381. EPARAMETER ┌ A ┐ H CANNOT BE IDENTIFIED.
- 382. EPARAMETER MISSING.
- 387. EDATA BASE TOO SMALL. AVAILABLE SPACE EXHAUSTED.
- 402. EITEM ID IN SECONDARY DATA LIST HAS MORE THAN ONE MULTI-VALUED SEGMENT.
- 403. ESECONDARY ITEM ID NOT FOUND.
- 404. EAN INPUT ITEM ID HAS EXCEEDED THE MAXIMUM LENGTH PERMITTED IN THIS CONFIGURATION.
- 408. EONE OF THE ATTRIBUTE VALUES HAS EXCEEDED ITS MAXIMUM SIZE.
- 410. ETHE MAXIMUM NUMBER OF LEVELS HAS BEEN EXCEEDED.
- 412. ETHE DATA BASE IS TOO SMALL TO ACCOMMODATE THE DATA LIST.
- 413. ETHE DATA LIST NAME IS ALREADY IN MDICT.
- 416. ETHE DATA LIST CANNOT BE FOUND IN MDICT.

- 417. ETHE DL/ID ENTRY IN THE DATA LIST DICTIONARY IS MISSING.
- 418. EDATA LIST DELETED. DICTIONARY B, M, S = \neg A \neg H DATA LIST B, M, S = \neg A \neg
- 419. EBASE, MODULO, OR SEPAR IS ZERO OR ALPHA.
- 420. E \neg A \neg H IS AN ILLEGAL ATTRIBUTE NAME.
- 421. E \neg A \neg H AMC \neg A \neg H SYNONYM CREATED.
- 422. EATTRIBUTE FOR AMC \neg A \neg H MISSING.
- 423. E \neg A \neg H HAS AMC OF ZERO.
- 424. EDICTIONARY NOT VALIDATED FOR PROCESSING.
- 425. E \neg A \neg H HAS DUPLICATE AMC.
- 427. E \neg A \neg H MISSING DL/MAX.
- 428. E \neg A \neg H MISSING DL/TYPE.
- 429. E \neg A \neg H MISSING DL/CORRELATIVES.
- 700. ETHE FORMAT OF THE F-CORRELATIVE IS INCORRECT.
- 701. EINVALID OPERATOR FOR THE F-CORRELATIVE.
- 702. EFOR F-CORRELATIVE OPERATORS "+X/" ONLY ONE ATTRIBUTE MAY HAVE MULTIPLE VALUES.
- 705. ENON-IMPLEMENTED CONVERSION CODE.
- 706. EM/DICT ENTRY FOR T-CONVERSION NOT FOUND.
- 707. EDL/ID ENTRY FOR T-CONVERSION NOT FOUND.
- 708. EITEM ID OR VALUE FOR T-CONVERSION NOT FOUND.
- 709. ECONFLICT IN T-CONV DEFINITION; REQUESTS VERIFY BUT THERE IS A NULL AMC.
- 710. EVALUE HAS INVALID CHARACTER FOR MASK CONVERSION.
- 711. EVALUE " \neg A \neg H" WAS NOT TRANSLATED BY T-CONVERSION.
- 721. ETOTAL VERB CANNOT HANDLE D-CORRELATIVE FOR THIS CONFIGURATION.
- 724. ENON-NUMERIC FIELD ENCOUNTERED IN PERFORMING TOTAL VERB.
- 726. EDIVIDE CHECK ERROR OCCURRED IN F CORRELATIVE.
- 780. E ' \neg A \neg H' NOT FOUND.
- 801. ETHE M/DICT ITEM IN THE M/DICT IS MISSING.
- 802. ETHE DISK SPACE ALLOCATED IS NOT SUFFICIENT TO HANDLE THIS REORGANIZATION.
- 1002. EIN PRIMARY ITEM \neg A \neg H' THE ATTRIBUTE WHOSE SYNONYM IS " \neg A \neg H" MAY NOT EXCEED 999 VALUES.
- 1003. ETHE ITEM ID \neg A \neg H' EXCEEDS THE MAXIMUM OF 99 CHARACTERS.
- 1004. ETHE ITEM ID \neg A \neg H' IS NOT ON THE FILE.
- 1010. ETHE PRIMARY ITEM ID OF THE "ADD TO" STATEMENT IS NOT ON THE FILE."
- 1011. ETHE PRIMARY D1 "FROM" VALUE " \neg A \neg H" IS NOT ON THE FILE.
- 1012. ETHE PRIMARY D1 "TO" VALUE " \neg A \neg H" ALREADY EXISTS.

1013. ETHE PRIMARY ATTRIBUTE "A H" HAS A NON-EXISTENT DELETE OR CHANGE "FROM" VALUE.
1014. EAN IDENTIFYING D1 VALUE OF PRIMARY ATTRIBUTE 'A H' IS NON-EXISTENT.
1020. ETHE "TO" ITEM ID 'A H' OF THIS CHANGE OR RECREATE STATEMENT ALREADY EXISTS.
1021. EIN ITEM ID 'A H' THE ATTRIBUTE WHOSE SYNONYM IS "A H" IS A SINGLE VALUE REJECT AND ALREADY HAS A VALUE ON THE FILE.
1022. EIN ITEM ID 'A H' THE ATTRIBUTE WHOSE SYNONYM IS "A H" IS A D2 SINGLE VALUE REJECT AND ALREADY HAS A VALUE ON THE FILE.
1023. EIN ITEM ID 'A H' THE ATTRIBUTE WHOSE SYNONYM IS "A H" MAY NOT EXCEED THE MAXIMUM OF 999 VALUES.
1025. EIN ITEM ID 'A H' THE ATTRIBUTE WHOSE SYNONYM IS "A H" HAS AN ILLEGAL NEGATIVE BALANCE.
1030. ETHE SECONDARY ITEM ID 'A H' IS NOT ON THE FILE.
1031. EIN SECONDARY ITEM ID 'A H' THE ATTRIBUTE WHOSE SYNONYM IS "A H" HAS A DELETE OR CHANGE "FROM" VALUE THAT IS NOT ON THE FILE.
1032. EIN A SECONDARY DATA LIST OF WHICH 'A H' HAS BEEN GENERATED AS AN ITEM ID, THE ATTRIBUTE WHOSE SYNONYM IS "A H" IS DEFINED TO PERMIT MORE THAN ONE MULTI-VALUED SEGMENT.
1033. EA SECONDARY VALUE EXCEEDS THE SYSTEM MAXIMUM SIZE, WHICH IS THE SIZE OF A DISK RECORD. THE VALUE THROUGH THE ALLOWED SIZE IS "A H".
1034. EIN THE SECONDARY DATA LIST 'A H', THERE IS MORE THAN ONE MULTI-VALUED SEGMENT FORMING THE ITEM ID.
1035. EIN THE SECONDARY ITEM WHOSE ID IS 'A H' THE ATTRIBUTE WHOSE SYNONYM IS "A H" HAS MORE THAN ONE MULTI-VALUED SEGMENT.
1036. EA SECONDARY ITEM ID EXCEEDS THE MAXIMUM OF 99 CHARACTERS. THE ID THROUGH THE ALLOWED SIZE IS 'A H'.
1037. ETHE NUMBER OF REFERENCED VALUES IN SECONDARY ITEM ID 'A H' EXCEEDS THE AMOUNT OF CORE NECESSARY TO KEEP TRACK OF THEM.
1040. ETHE SECONDARY ID 'A H' IS A BRIDGE AND VERIFY, BUT IS NOT ON THE FILE.
1041. EIN THE SECONDARY DATA LIST 'A H' THE ITEM ID HAS BEEN DEFINED TO PERMIT MORE THAN ONE MULTI-VALUED SEGMENT.
1042. ETHE NUMBER OF SECONDARY D1-D2 RELATIONSHIPS REFERENCED BY ITEM ID 'A H' IS TOO LARGE TO BE KEPT TRACK OF IN CORE.
2001. ENON-EXISTENT DATA LIST REQUESTED.
2050. EATTRIBUTE NAME EXCEEDS BUFFER.
2051. ESKELETON STATEMENT EXCEEDS BUFFER.
2054. EA NULL DATA LIST EXISTS.
2100. EEXTRACT RECORD EXCEEDS MAXIMUM ALLOWABLE LENGTH - 3500.

Category III - System Errors

System errors are generally due to operational difficulties or to inconsistencies between the computer programs and the established dictionaries and data base maps. With few exceptions, the system errors can only be resolved by Computer Operations with assistance from the Data Operations Department and the Functional Disciplines.

80. EA SYSTEM ERROR HAS OCCURRED IN MODE $\neg A \neg H$. YOU MAY PROCEED WITH THE NEXT STATEMENT. CALL SYSTEMS.
102. EA D1-D2 RELATIONSHIP IS INCORRECTLY STATED IN THE DICTIONARY. CALL SYSTEMS.
103. ETHIS UPDATE STATEMENT CONTAINS A D2 ATTRIBUTE, BUT NO CORRESPONDING D1.
104. EAN ATTRIBUTE'S CORRELATIVE CONTAINS THE DATA LIST NAME " $\neg A \neg H$ " WHICH CANNOT BE FOUND IN THE BRIDGE CORRELATIVES. CALL SYSTEMS.
105. EDEVICE TABLE IS MISSING $\neg A \neg$.
106. EA DICTIONARY WITH BASE $\neg A \neg H$ DOES NOT CONTAIN THE SYSTEM SYNONYM " $\neg A \neg H$."
107. EIN THE DICTIONARY WHOSE BASE IS $\neg A \neg H$, THE SYSTEM SYNONYM " $\neg A \neg H$ " IS NOT COMPLETE.
111. EDEVICE REQUESTED IS INOPERATIVE $\neg A \neg$.
118. EUNCONDITIONAL ATTRIBUTE "ANDD" CLAUSES ARE NOT OPERATIVE IN THIS CONFIGURATION.
129. EAN ATTRIBUTE'S CORRELATIVE CONTAINS THE DATA LIST NAME " $\neg A \neg H$ " WHICH IS INCORRECTLY DEFINED. CALL SYSTEMS.
130. ETHIS STATEMENT REQUESTS A MEANINGLESS REFERENCE TO DATA LIST " $\neg A \neg H$," SINCE NONE OF ITS ATTRIBUTES ARE REQUESTED BY DICTIONARY.
132. ETHE DICTIONARY OF THE DATA LIST IN THIS "INN" STATEMENT DOES NOT HAVE THE REQUIRED CORRELATIVE DEFINITIONS.
144. E " $\neg A \neg H$ " CONTAINS A CORRELATIVE IN ITS DICTIONARY WHICH IS NOT OPERATIVE IN THIS CONFIGURATION.
300. ESELECTION LIMITS ERROR. ENDING LIMIT SMALLER THAN STARTING LIMIT.
301. E IS OR OS REGISTER HAS OVERFLOWED. STATEMENT MAY REQUIRE TOO MUCH STORAGE.
302. ETHE BMS REGISTER HAS OVERFLOWED. EITHER A STORED ITEM ID OR A PART OF THE INPUT STATEMENT EXCEEDS THE MAXIMUM LENGTH PERMITTED IN THIS CONFIGURATION.
338. EINVALID VALUE FOR OUTPUT DATA CONVERSION. CALL SYSTEMS.
363. ESYSTEM ERROR IN PROGRAM ID. CALL SYSTEMS.
377. EHISTORY TRANSACTION MISSING TRANSACTION ITEM.
380. H FORMAT MISSING. CALL SYSTEMS STAFF.

- 384. ESYSTEM TAPE LABELS MISSING IN SYSI DATA LIST. CALL SYSTEMS STAFF.
- 385. EDELETED ITEM MISSING \neg H KEY = \neg A \neg L \neg RECORD = \neg A \neg L \neg H CALL SYSTEMS.
- 387. EDATA BASE TOO SMALL. AVAILABLE SPACE EXHAUSTED.
- 389. EFOLLOWING DECKS NOT FOUND \neg L \neg A \neg .
- 396. EISTORY TAPE FORMAT ERROR. CALL SYSTEMS.
- 397. ETRANSACTION ITEM MISSING.
- 412. ETHE DATA BASE IS TOO SMALL TO ACCOMODATE THE DATA LIST.
- 419. EBASE, MODULO, OR SEPAR IS ZERO OR ALPHA.
- 430. EDEVICE NAME CANNOT BE IDENTIFIED - -
- 431. EDEVICE NOT PRESENT GPPU - \neg A \neg .
- 705. ENON-IMPLEMENTED CONVERSION CODE.
- 706. EM/DICT ENTRY FOR T-CONVERSION NOT FOUND.
- 707. EDL/ID ENTRY FOR T-CONVERSION NOT FOUND.
- 708. EITEM ID OR VALUE FOR T-CONVERSION NOT FOUND.
- 709. ECONFLICT IN T-CONV DEFINITION; REQUESTS VERIFY BUT THERE IS A NULL AMC.
- 802. ETHE DISK SPACE ALLOCATED IS NOT SUFFICIENT TO HANDLE THIS REORGANIZATION.
- 900. ESTATEMENT NOT PROCESSED.
- 901. EAN INACCURATE ITEM COUNT HAS BEEN FOUND. CALL SYSTEMS.
- 902. EAN ILLEGAL DISK STRUCTURE HAS BEEN DISCOVERED. CALL SYSTEMS.
- 903. EAN ILLEGAL BOOTSTRAP STRUCTURE HAS BEEN DISCOVERED. CALL SYSTEMS.
- 1001. ETHIS UPDATE STATEMENT CONTAINS TOO MANY VALUES TO BE PROCESSED IN CORE.
- 1009. EDATA LIST OR ITEM ID UNABLE TO BE FOUND IN PROGRAMMED INPUT STRING BY UPDATE PROGRAM. CALL SYSTEMS.
- 1010. ETHE PRIMARY ITEM ID OF THE "ADD TO" STATEMENT IS NOT ON THE FILE.
- 1011. ETHE PRIMARY D1 "FROM" VALUE " \neg A \neg H" IS NOT ON THE FILE.
- 1017. EMODE 53 HAS FOUND AN UNANTICIPATED ERROR. CALL SYSTEMS.
- 2050. EATTRIBUTE NAME EXCEEDS BUFFER.
- 2051. ESKELETON STATEMENT EXCEEDS BUFFER.
- 2054. EA NULL DATA LIST EXISTS.

Category IV - Non Reactive Diagnostics

The messages in this group are informative in nature, and with few exceptions require no reaction, resolution, or response to Computer

Operations. They are intended primarily to provide valuable and useful information to the user and to the operator of the system.

- 334. ESIGN ON BY TYPING REQUEST FOLLOWED BY USER NO.
- 335. HSIGNOFF ACKNOWLEDGED TIME \neg A \neg X3 HNO. STATEMENTS \neg A \neg X3 \neg
HPROCESSOR TIME \neg A \neg X3 \neg HELAPSED TIME \neg A \neg .
- 337. HREQUEST ACKNOWLEDGED \neg L \neg HDATE \neg A \neg X3 \neg HTIME \neg A \neg X3 \neg
HUSER \neg A \neg X2 \neg A \neg .
- 340. HID = " \neg A \neg H" DL = " \neg A \neg H".
- 341. HRECORD = " \neg A \neg H".
- 342. H" \neg A \neg H" ADDED.
- 343. H" \neg A \neg H" REPLACES OLD VALUE OF " \neg A \neg H".
- 344. H" \neg A \neg H" DELETED.
- 345. HNEW LINK OF " \neg A \neg H" REPLACES OLD LINK OF " \neg A \neg H".
- 350. EDUMP TYPE MUST EQUAL ITEM, RECORD, OR GROUP.
- 373. EITEM SIZE IS ZERO.
- 378. HHISTORY TAPE TERMINATED \neg X2 \neg HREEL NO. \neg A \neg .
- 379. HHISTORY TAPE LABELED \neg A \neg X3 \neg . HCHECKPOINT \neg A \neg X3 \neg
HREEL \neg A \neg .
- 395. A \neg X2 HINPUT STATEMENT SELECTED TO REPROCESS.
- 398. L \neg HSTATEMENT NOT REPROCESSED \neg X2 \neg HTRANSACTION \neg A \neg X2 \neg
HDATE \neg A \neg X2 \neg HTIME \neg A \neg L \neg L1 \neg .
- 399. HSELECT PROGRAM COMPLETE. NO ITEMS EXTRACTED = \neg A \neg .
- 401. HNO ITEMS TO BE LISTED.
- 407. HNUMBER OF ACCEPTABLE ITEMS = \neg A \neg .
- 409. HONE OR MORE VALUES WAS CUTOFF AT 300 CHARACTERS.
- 415. EDATA LIST STRUCTURED. DICTIONARY B,M,S = \neg A \neg H DATA LIST
B, M, S = \neg A \neg .
- 418. EDATA LIST DELETED. DICTIONARY B, M, S = \neg A \neg H DATA-LIST
B, M, S = \neg A \neg .
- 426. EDICTIONARY ENABLE IS COMPLETE AND CORRECT.
- 720. H NO ITEMS TO BE TOTALED. .
- 730. E NO. ITEMS TO BE UPDATED.
- 780. E' \neg A \neg H' NOT FOUND.
- 781. H' \neg A \neg H' ADDED.
- 782. H' \neg A \neg H' UPDATED.
- 783. H' \neg A \neg H' DELETED.
- 784. H' \neg A \neg H' RECREATED AS ' — A — H'.
- 785. H' \neg A \neg H' CHANGED TO ' — A — H'.

- 900. ESTATEMENT NOT PROCESSED.
- 1015. HNO ACTION WAS NECESSARY IN THIS UPDATE STATEMENT.
- 1024. H** NOTE ** - IN ITEM ID ' A H' ONE OR MORE ATTRIBUTES HAS A NEGATIVE BALANCE. THE SYNONYM OF THE LAST ONE FOUND IS " A H."
- 2101. E'0 ITEMS TO BE EXTRACTED.

PART II: APPLICATIONS PROGRAMS

The following error messages could occur during execution of the Applications Programs:

Program Ident. No.	Title	Error Message No.	Message	Explanation
W001	CEI Configuration Index	E001	ERROR IN CEI-FILE - - THIS RECORD OUT OF SEQUENCE NO. 9 9 9 CEI NO. 9 9 9 9 9 9 9, JOB ENDED.* * * * * * * * * * * *	Self-explanatory
W001	CEI Configuration Index	E002	* * * * * * * * ERROR FOUND IN DATE CARD, EITHER NO DATE CARD WAS SUBMITTED OR DATE CARD FOUND HAS INVALID FORMAT.*	Self-explanatory
W002	Description & Specification Index/Status	E001	PROGRAM NUMBER - ERROR NUMBER 'PROPAGATION CODE IN FIRST KEYFIELD.'	The first record read did not have its key-field prefixed with an 'N'. The program is aborted.
W002	Description & Specification Index/Status	E002	PROGRAM NUMBER - ERROR NUMBER 'MASTER FILE IS OUT OF SEQUENCE KEY=', KEYWORD.	The file is not in sequence. The program is abortive.
W002	Drawing Index/Status	E003	PROGRAM NUMBER - ERROR NUMBER 'THERE IS A DUPLICATE MSTR RCD: KEY=' . KEYWORD	There is a duplicate master record, i.e., keyfields the same and preceded by an 'N'. A new record is read.

Program Ident. No.	Title	Error Message No.	Message	Explanation
W003	Drawing Index/ Status	E001	* * * * * ERROR FOUND IN DATE CARD, EITHER NO DATE CARD WAS SUBMITTED OR DATE CARD FOUND HAS INVALID FORMAT * * * * * * * *	Self-explanatory
W003	Drawing Index/ Status	E002	* * * * * ERROR IN DRAWING FILE - - THIS RECORD OUT OF SEQUENCE - - - SEQ. NO.- 9 9 9 9 DRAWING NO.- 9 9 9 9 9 9 9 9 9 9 9 9 9 9 * * * * * * *	Self-explanatory
W004	ICD Index/ Status	E001	* * * * * ERROR FOUND IN DATE CARD, EITHER NO DATE CARD WAS SUB- MITTED OR DATE CARD FOUND HAS INVALID FORMAT * * * * * * *	Self-explanatory
W004	ICD Index/ Status	E002	* * * * * ERROR IN ICD FILE - - - - - THIS RECORD IS OUT OF SEQUENCE - - - SEQ. NO. 9 9 9 9 ICD NO 9 9 9 9 9 9 9 9 9 9 9 9 9 * * * * * * * *	Self-explanatory
W005	ECP Index/ Status	E001	CODE OTHER THAN N FOUND AT START OF A NEW GROUP IN RECORDS: XXXXXXXXXXXXXXXX	Self-explanatory
W006	ICWG Action Status	E001	INVALID OR MISSING DATE CARD	Self-explanatory. Refer to the ITDS Data Card Layout in Appendix B-2 of <u>Computer Subsystem: Applications Programs, Pro- gramming Doc- umentation.</u>

Program Ident. No.	Title	Error Message No.	Message	Explanation
W006	ICWG Action Status	E001	GROUP EXCEEDS PROGRAM STORAGE GROUP CONTAINS nnnn	This size of the tables for storing multi-value items within a group must be increased to allow the size group indicated. Program must be recompiled.
W007	ECP/Waiver Processing Audit	E001	ALL FIELDS CONTAIN PROPAGATION CODE IN THIS RECORD. XXXXXXXX XXXXXXXXXX	Self-explanatory.
W008	Technical Publication Index/Status	E001	OUT OF SEQUENCE RECORD KEY=(KEY AND SEQUENCE NO.).	Self-explanatory. Re-sort input file.
W008	Technical Publication Index/Status	E002	FIRST N INVALID FOR KEY=(KEY AND SEQUENCE NO.)	Two successive records with the same key are designated as new. Check with analyst and software programmer.
W008	Technical Publication Index/Status	E003	DUPLICATE RECORD KEY=(KEY AND SEQUENCE NO.)	Self-explanatory. Check with analyst.
W008	Technical Publication Index/Status	E004	DATE CARD MISSING OR IT HAS INVALID FORMAT.	Self-explanatory. Rerun job with appropriate date card.
W009	Test Requirements - DTP Status		No error messages	
W010	Requirements for Contractor Test-Status Report		No error messages	

Program Ident. No.	Title	Error Message No.	Message	Explanation
W011	Specifications Equipment Test-Status Report	E001	NO DATE CARD	Self-explanatory.
W012	Development Test Status Report	E001	OUT OF SEQUENCE RECORD KEY- (KEY-SEQUENCE NO.)	Self-explanatory. Tape must be resorted.
W012	Development Test Status Report	E002	FIRST NO INVALID FOR KEY -(KEY-SEQUENCE NO.)	The second or later record of a group is designated as new instead of propagated. Analyst must examine ITDS data base.
W012	Development Test Status Report	E003	DUPLICATE RECORD KEY - (KEY-SEQUENCE NO.)	Self-explanatory. Analyst must examine data base.
W012	Development Test Status Report	E004	ATT (3, 5, 7, 11, 12, 14)OF KEY-SEQUENCE) HAS NO DECIMAL POINT.	Self-explanatory. Analyst must examine data base.
W013	Maintainability Problem Reports-HI 25	E001	PROGRAM NUMBER - ERROR - NUMBER 'ALL FIELDS CONTAIN PROPAGATION CODE IN THIS RECORD'. KEYWORD	For a given FGC number listed in the FGC-VAL-File there were no corresponding N values. A new record is then read.
W014	Reliability Problem Reports-HI/LO 25	E001	DATA CARD MISSING OR BAD.	Data card either missing or in wrong format. Correct card and resubmit run.
W015	Maintenance Man-Hour per Usage Unit-Mos	E001	DATE CARD MISSING OR INCORRECT	Date card is missing.

Program Ident. No.	Title	Error Message No.	Message	Explanation
W015	Maintenance Man-Hour Per Usage Unit-Mos	E002	MOS OVERFLOW HAS OCCURRED, A FGC= XXXXXX	If the array size limit is exceeded this message is printed.
W016	GFM/GSE Func- tion and Status		Refer to error messages in <u>Computer Subsystem: Generalized Processing Program, Programming Documentation.</u>	
W017	Master Detail Milestones	E001	DATE CARD MISSING OR INVALID	Self- explanatory
W018	Time Status Report		Refer to error messages in <u>Computer Subsystem: Generalized Processing Program, Programming Documentation.</u>	
W019	Cost Status Report		Refer to error messages in <u>Computer Subsystem: Generalized Processing Program, Programming Documentation.</u>	
W020	Funding Status Report		Refer to error messages in <u>Computer Subsystem: Generalized Processing Program, Programming Documentation.</u>	
W021	Key Word- DAI Cross Reference Index		NONE	
W022	Document List	E001	OUT OF SEQUENCE RECORD KEY=(KEY AND SEQUENCE NO.)	Self-explana- tory. Re-sort input file.
W022	Document List	E002	FIRST N INVALID FOR KEY= (KEY AND SEQUENCE NO.)	Two success- ive records with same key are designated as new. Check with analyst and software programmer.

Program Ident. No.	Title	Error Message No.	Message	Explanation
W022	Document List	E003	DUPLICATE RECORD KEY- (KEY AND SFQUENCE NO.)	Self-explanatory. Check with analyst.
W022	Document List	E004	DATE CARD MISSING OR IT HAS INVALID FORMAT.	Self-explanatory. Rerun job with appropriate date card.
W024	Contractor Data Requirements List	E001	DATE CARD HAS INVALID FORMAT.	Date card either missing or in wrong format. Correct card and resubmit run.
W024	Contractor Data Requirements List	E002	OUT OF SEQUENCE RECORD. KEY = XXXX SEQ. NO. = XXXX	Extract tape records not in correct sequence. Resort extract tape and re-submit run.
W024	Contractor Data Requirements List	E004	INVALID N FOR KEY XXXX SEQ. NO: XXXX	Two records found on extract tape with the same ADL item number and title and both flagged as N. Resubmit run with corrected extract tape.
W025	Government Data Requirements List - Contractor Required Data	E001	DATE CARD MISSING OR BAD	Date card either missing or in wrong format. Correct card and resubmit run.

Program Ident. No.	Title	Error Message No.	Message	Explanation
W026	Generalized Input	1	INPUT RECORD HAS IMPROPER CODE	A code of 1, 2, or 3 did not appear in the position indicated on the C-control card. The next record is read and processing continues.
W026	Generalized Input	2	BLANK KEY	A blank key has been found. This record is ignored and processing continues.
W026	Generalized Input	3	CONCATENATION HAS BLANK AND NON-BLANK FIELDS. RMC=NN, KEY=XXXXXXXX	ITDS will not accept a concatenated value with a blank segment; therefore, if a segment of a concatenated value is blank, this attribute value is not output. Pro- cessing con- tinues with the next record mark count.

NOTE

There are several conditions which cause anabend termination. The user condition code indicates the problem which causes the termination. A dump will be given when the sysudump control is present.

W026	Generalized Input	100		C-Control card is missing
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Program Ident. No.	Title	Error Message No.	Message	Explanation
W026	Generalized Input	101		Record tape code in table card is not equal to 1, 2, or 3.
W026	Generalized Input	102		The first table card does not have record mark count of '00'
W026	Generalized Input	103		Incorrect concatenation code found in table card.
W026	Generalized Input	104		Internal table is incorrect - see programmer.
W026	Generalized Input	200		Input file is not specified as fixed or undefined record form- check DD card for TIN.
W027C	PERT/Time Extract/Load	E001	SELECT KEY OUT OF SEQUENCE = (SELECT EVENT NO.)	Self-explana- tory. Select file must be sorted.
W027C	PERT/Time Extract/Load	E002	EXTRACT KEY OUT OF SEQUENCE = (EXTRACT EVENT NO.)	Self-explana- tory. Extract file must be sorted.
W027C	PERT/Time Extract/Load	E003	MATCH KEY (SELECT EVENT NO.) NOT ON PMS TIME TAPE.	A selection card was pre- pared for an event that does not exist in the PERT network.

Program Ident. No.	Title	Error Message No.	Message	Explanation
W028B	PERT/Cost Extract/Load	E001	SELECT KEY OUT OF SEQUENCE = (SELECT CHARGE NO.)	Self- explanatory.
W028B	PERT/Cost Extract/Load	E002	EXTRACT KEY OUT OF SEQUENCE = (EXTRACT CHARGE NO.)	Self- explanatory.
W028B	PERT/Cost Extract/Load	E003	MATCH KEY (SELECT CHANGE NO.) NOT ON PMS COST TAPE	A selection card was pre- pared for a charge number that does not exist in the PERT Cost network.
W029	Sciolist Extract/Load	E001	GEXT KEY (SELECTED CCS NO.) NOT ON SCIOLIST TAPE	Selection card prepared for a CCS No. not in SCIOLIST Reports.
W029	Sciolist Extract/Load	E002	GEXT KEY (SELECTED CCS NO., COMMAND) NOT ON SCIOLIST TAPE	Selection card prepared for a CCS No., Command com- bination not in SCIOLIST Report 6.
W029	Sciolist Extract/Load	E003	CONTROL CARD MISSING OR IT HAS WRONG CARDS.	Self- explanatory.
W030	MAST Extract/ Load		ERROR MESSAGES ARE DESCRIBED IN "COMPUTER SUBSYSTEM: APPLICA- TIONS PROGRAMS, PROGRAMMING DOCUMENTATION".	
W031	Action Item System Extract/ Load		ERROR MESSAGES ARE DESCRIBED IN "COMPUTER SUBSYSTEM: APPLICATIONS PROGRAMS, PROGRAMMING DOCUMENTATION".	

Program Ident. No.	Title	Error Message No.	Message	Explanation
W032	MEADS Extract/Load		ERROR MESSAGES ARE DESCRIBED IN "COMPUTER SUBSYSTEM: APPLICATIONS PROGRAMS, PROGRAMMING DOCUMENTATION".	
Miscellaneous		1.	INCORRECT CODE	Job terminated.
		2.	INCORRECT SPACE CODE	Job terminated.
		3.	CARD OUT OF SEQUENCE	Job terminated.

PART III - PERIPHERAL PROGRAMS

The following error messages could occur during execution of the peripheral programs:

Identification No.	Message	Explanation
X001 MEADS	REFER TO TEXT IN COMPUTER SUBSYSTEM: PERIPHERAL PROGRAMS, PROGRAMMING DOCUMENTATION.	
X002 Engineering Fact Sheets	REFER TO IBM FORM C35-002.	
X003 Engineering Problem Narratives	REFER TO IBM FORM C35-002.	
X004 PERT/Time	REFER TO REFERENCED IBM DOCUMENTATION.	
X005 PERT/Cost	REFER TO REFERENCED IBM DOCUMENTATION.	
X005 PERT/Cost		Records in error are listed by the Printer.
X007 - 001 Sciolist	DUPLICATE TRANSACTIONS	Self-explanatory.
X007 - 002 Sciolist	INVALID FISCAL YEAR	
X007 - 003 Sciolist	INVALID CCS	

Identification	Message	Explanation
Sciolist - 004	INVALID COMMAND	
" - 005	INVALID TRANSACTION	
" - 006	DUPLICATE MASTERS	
" - 007	UNMATCHED CHANGE	
" - 008	UNMATCHED DELETE	
" - 009	"CONTROL CARD MISSING, JOB HALTED"	
" - 010	"TABLE CARDS INVALID OR MISSING".	
" - 011	TRANSACTIONS OUT OF SEQUENCE	
" - 012	MASTER FILE OUT OF SEQUENCE	
" - 013	MATCHING ADD	

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APPENDIX A - ITDS ERROR MESSAGES

PART I - GENERALIZED PROCESSING PROGRAM

The Generalized Processing Program error messages have been divided into four different categories: format errors, data errors, system errors, and non-reactive diagnostics. Some of the error messages will overlap and be repeated. Each category is explained on the following pages with its corresponding list of errors.

The following symbols may be printed with the error message:

- E Found at the beginning of the message. It will print the message number and the data to the record mark (↵).
- ↵ Record mark which is used to indicate the end of the data.
- H Found at the beginning of a message and usually marks messages containing information only. It will print the following data to the record mark.
- A An insert variable.
- L Line control.

Category I - Format Errors

Format errors are generally due to mistakes in the structure and/or content of input statements. They are usually attributed to a misunderstanding of the data base and/or non compliance with established procedures. These errors can generally be resolved by the Functional Departments without assistance from other agencies.

1. EIMPROPER USE OF VALUE IDENTIFIER MARK.
2. EUNEVEN NUMBER OF ITEM OR VALUE DELIMITERS.
3. EPROGRAM VERB NOT RECOGNIZABLE.
4. EIMPROPER FORMAT FOR FILE/DICT STATEMENT.
5. ESECOND VERB "↵A↵H" IS NOT ALLOWED.

6. ESECOND DATA LIST NAME "¬A¬H" IS NOT ALLOWED.
8. EA DATA LIST ATTRIBUTE MUST NOT HAVE THE SAME NAME AS A DICT ATTRIBUTE.
10. ENC DATA LIST NAME CAN BE FOUND IN THE STATEMENT.
12. EM/DICT ILLEGAL IN A FILE/DICT INPUT.
13. ETHERE IS NO DL/ID ENTRY IN THE USER DICTIONARY.
14. EA DATA LIST NAME MUST BE THE FIRST ELEMENT IN A FILE/DATA INPUT.
15. ETHE DATA LIST NAME IS PRECEDED BY AN ILLEGAL CONNECTIVE.
16. ETHE WORD "TO" MAY ONLY PRECEDE A DATA LIST NAME IN AN ADD STATEMENT.
17. ETHE WORD "INN" MAY ONLY BE USED IN A LIST OR COUNT STATEMENT.
18. EA CONNECTIVE MAY NOT OCCUR AS THE LAST ELEMENT(S) IN A STATEMENT.
19. EA VALUE WITHOUT AN ASSOCIATED ATTRIBUTE NAME IS MEANINGLESS.
20. ETHERE IS A MEANINGLESS ITEM ID CONTAINED IN THE STATEMENT.
21. ETHERE IS A CONFLICT BETWEEN A USER NAME AND A SYSTEM NAME.
22. ETHE WORD "TO" FOLLOWED BY AN ITEM ID MAY ONLY BE USED IN A CHANGE STATEMENT.
23. ETHE WORD "TO" FOLLOWED BY AN ITEM ID MUST ALSO BE PRECEDED BY AN ITEM ID.
24. ETHE WORD "¬A¬H" CANNOT BE IDENTIFIED.
25. ETHE WORD "WITH" MAY NOT PRECEDE A VALUE.
26. EATTRIBUTE VALUES MAY NOT BOTH PRECEDE AND FOLLOW AN ATTRIBUTE NAME.
29. ETHIS INN STATEMENT IS MISSING EITHER AN ITEM ID OR AN ATTRIBUTE NAME.

30. EA NON-IMPLEMENTED VERB HAS BEEN USED.
31. ETHERE ARE NO VALUES TO BE ADDED TO A CONDITIONAL ITEM ID.
32. EA REQUIRED ITEM ID IS MISSING IN THE ADD STATEMENT.
33. ESTATEMENT IS MEANINGLESS. "TO" IMPLIES THAT THE ITEM ALREADY EXISTS.
36. EAN ILLEGAL CONNECTIVE WAS USED PRECEDING AN ITEM ID.
37. EILLEGAL CONNECTIVES PRECEDE AN ITEM ID OR THE FIRST CONDITIONAL ATTRIBUTE.
38. EA CHANGE STATEMENT THAT DOES NOT HAVE ATTRIBUTE VALUE CHANGES MUST BE OF THE FORMAT "CHANGE ITEM ID TO ITEM ID".
40. EAN ILLEGAL CONNECTIVE PRECEDES THE FIRST ITEM ID IN A "CHANGE ITEM ID TO ITEM ID" FORMAT.
41. ETHE WORD "TO" MUST PRECEDE THE SECOND ITEM ID IN A "CHANGE ITEM ID TO ITEM ID" FORMAT.
42. EILLEGAL MULTIPLE CONNECTIVES PRECEDE EITHER THE SECOND ITEM ID OR THE FIRST CONDITIONAL ATTRIBUTE.
53. ETHIS INN STATEMENT HAS AN ILLEGAL CONNECTIVE PRECEDING THE ITEM ID.
54. ETHIS INN STATEMENT HAS ILLEGAL WORDS BETWEEN THE ITEM ID AND THE FIRST ATTRIBUTE NAME.
55. EA CHANGE STATEMENT REQUIRES AN ITEM ID AND/OR A CONDITIONAL ATTRIBUTE.
57. ESIMULTANEOUS CHANGES TO ITEM IDS AND ATTRIBUTE VALUES ARE ILLEGAL.
58. ETHE WORD "TO" IS THE ONLY ALLOWABLE CONNECTIVE PRECEDING A VALUE IN A CHANGE STATEMENT.
59. EEVERY ATTRIBUTE NAME IN A CHANGE STATEMENT REQUIRES A CORRESPONDING "TO V", WHERE V IS A VALUE.
60. EAN ADD STATEMENT REQUIRES AN ITEM ID OR A CONDITIONAL ATTRIBUTE.

- 62. EAN ILLEGAL CONNECTIVE PRECEDES THE VALUE "¬A¬H" IN THIS ADD STATEMENT.
- 63. EEVERY ATTRIBUTE IN AN ADD STATEMENT REQUIRES A CORRESPONDING VALUE.
- 64. EIF AN ADD STATEMENT, THE WORD "TO" PRECEDES ANY ATTRIBUTES, IT MUST PRECEDE ALL ATTRIBUTES.
- 65. ETHE WORD "TO" MAY NOT PRECEDE BOTH THE DATA LIST NAME AND ATTRIBUTE NAMES IN THE SAME ADD STATEMENT.
- 66. EAN ATTRIBUTE HAS AN ILLEGAL CONNECTIVE IN AN ADD STATEMENT.
- 71. ETHE VALUE "¬A¬H" HAS AN IMPROPER CONNECTIVE.
- 72. ETHE VALUE "¬A¬H" IS MEANINGLESS.
- 74. ETHE NUMBER OF CONCATENATED PARTS OF "¬A¬H" IS NOT CONSISTENT WITH ITS DICTIONARY SPECIFICATIONS.
- 75. E "¬A¬H" FAILS TO PASS ITS MAXIMUM SIZE RESTRICTIONS.
- 76. E "¬A¬H" FAILS TO PASS ITS MINIMUM SIZE RESTRICTIONS.
- 77. E "¬A¬H" FAILS TO PASS ITS TYPE RESTRICTIONS.
- 78. E "¬A¬H" FAILS TO PASS ITS PATTERN AUDIT.
- 79. ETHE NUMBER OF SEPARATE "ANDD" CLAUSES MAY NOT EXCEED 9.
- 81. ESECURITY CODE VIOLATION.
- 82. ECONDITIONAL ADDS ARE ONLY PERMITTED IN STATEMENTS OF THE "ADD TO" FORMAT.
- 83. E "¬A¬H" HAS AN ILLEGAL CONCATENATED FORMAT.
- 108. ETHIS REQUEST CONTAINS MORE D1-D2 ATTRIBUTES THAN THE SYSTEM CAN HANDLE. PLEASE SPLIT THE REQUEST AND CONTINUE.
- 109. ETHERE ARE NON-PARALLEL D1-D2S IN THE ASSOCIATED DATA LISTS.
- 112. ESIMULTANEOUS CHANGES TO D1 AND CORRESPONDING D2 ATTRIBUTES ARE NOT PERMITTED.
- 113. ETHE FORMAT "CHANGE VALUE TO VALUE" MUST BE USED FOR A D1 ATTRIBUTE IN A CHANGE STATEMENT.

- 117. EA DELETE STATEMENT MUST CONTAIN EITHER ITEM IDS OR CONDITIONAL ATTRIBUTES.
- 118. EUNCONDITIONAL ATTRIBUTE "ANDD" CLAUSES ARE NOT OPERATIVE IN THIS CONFIGURATION.
- 123. E $\neg A \neg H$ CONTAINS TWO CORRELATIVES.
- 128. ETHE ATTRIBUTE " $\neg A \neg H$ " CONTAINS TWO D-CORRELATIVES WHICH IS ILLEGAL.
- 133. ETHIS "INN" STATEMENT DOES NOT CONTAIN AN ATTRIBUTE NECESSARY FOR ITS EXECUTION.
- 137. EA CONDITIONAL ATTRIBUTE IS MODIFIED BY THE WORD "NO" AND THE ATTRIBUTE ALSO HAS A VALUE, WHICH IS ILLEGAL.
- 139. EA D2 HAS BEEN REQUESTED WITHOUT ITS CORRESPONDING D1 IN A REFERENCED DATA LIST.
- 143. E " $\neg A \neg H$ " IS A MULTIPLE RETRIEVAL SYNONYM AND CANNOT BE USED AS AN UPDATE OR CONDITIONAL ATTRIBUTE.
- 158. EAN ILLEGAL CONNECTIVE OF THE FORM $\neg A \neg H$ MODIFIES " $\neg A \neg H$ ".
- 160. EIF THE D1 ATTRIBUTE ' $\neg A \neg H$ ' IS USED IN ANY "ANDD" CLAUSE, IT MAY BE USED AGAIN ONLY IN ANOTHER "ANDD" CLAUSE.
- 334. ESIGN ON BY TYPING REQUEST FOLLOWED BY USER NO.
- 336. EINVALID USER NO.
- 339. E IMPROPER OR UNDEFINED FORMAT FOR DATE CONVERSION.
- 351. EILLEGAL COMBINATION OF PARAMETERS USED.
- 352. EILLEGAL COMBINATIONS OF D, I, AND R CLAUSES.
- 353. EEQUAL SIGN MISSING WHEN EXPECTED.
- 354. EPARAMETER VALUE IS ALPHA WHEN NUMERIC EXPECTED.
- 355. E " $\neg A \neg H$ " IS A NONEXISTENT PARAMETER.
- 386. EINVALID DELIMITER ENCOUNTERED.
- 402. EITEM ID IN SECONDARY DATA LIST HAS MORE THAN ONE MULTIVALUED SEGMENT.
- 406. ECOUNT VERB NOT APPLICABLE.

- 414. EILLEGAL MODIFIER USED IN DEFINING THE DATA LIST OR DICTIONARY AREAS.
- 424. EDICTIONARY NOT VALIDATED FOR PROCESSING.
- 721. E TOTAL VERB CANNOT HANDLE D-CORRELATIVE FOR THIS CONFIGURATION.
- 722. E MORE THAN THE MAXIMUM OF 6 SIMULTANEOUS TOTALS IS CALLED FOR.
- 1005. EALL PRIMARY D1 ATTRIBUTES MUST HAVE A VALUE INPUT UNLESS IN A DELETE STATEMENT.
- 1006. EIN PRIMARY ITEM 'A-H' THE ATTRIBUTE WHOSE SYNONYM IS "A-H" HAS CONFLICTING FILE DELETE VALUES AND INPUT "CHANGE TO" VALUES. STATEMENT MAY BE BROKEN IN TO A DELETE AND ADD.
- 2052. EBULK ADD TAPE NOT PROPERLY IDENTIFIED.
- 2053. ESKELETON ATTRIBUTE IDENTIFIER NOT NUMERIC.
- 2060. EAN UNCONDITIONAL UPDATE WITHOUT AN ITEM ID IS NOT PERMITTED.

Category II - Data Errors

Data errors are generally due to major procedural problems involving the user dictionaries and their associated data base maps and to minor problems involving the system dictionary. With few exceptions, data errors can be resolved by the Data Operations Department without assistance from Computer Operations.

- 33. ESTATEMENT IS MEANINGLESS. "TO" IMPLIES THAT THE ITEM ALREADY EXISTS.
- 38. EA CHANGE STATEMENT THAT DOES NOT HAVE ATTRIBUTE VALUE CHANGES MUST BE OF THE FORMAT "CHANGE ITEM ID TO ITEM ID."
- 72. ETHE VALUE "A-H" IS MEANINGLESS.
- 74. ETHE NUMBER OF CONCATENATED PARTS OF "A-H" IS NOT CONSISTENT WITH ITS DICTIONARY SPECIFICATIONS.
- 75. E "A-H" FAILS TO PASS ITS MINIMUM SIZE RESTRICTIONS.
- 76. E "A-H" FAILS TO PASS ITS MINIMUM SIZE RESTRICTIONS.
- 77. E "A-H" FAILS TO PASS ITS TYPE RESTRICTIONS.

78. E "A-H" FAILS TO PASS ITS PATTERN AUDIT.
104. EAN ATTRIBUTE'S CORRELATIVE CONTAINS THE DATA LIST NAME "A-H" WHICH CANNOT BE FOUND IN THE BRIDGE CORRELATIVES. CALL SYSTEMS.
110. ETAPE LABEL IS NOT CORRECT L-H LABEL REQUESTED IS
 A-H REEL NO. A-L-H TAPE LABEL IS
 A-H REEL NO. A
121. ETHERE IS A D-CORRELATIVE ON AN ATTRIBUTE REFERENCED FOR AUTOMATIC DATING.
122. EA PRIMARY D1 IS BEING MADE A D2 IN A SECONDARY DATA LIST.
123. E A-H CONTAINS TWO CORRELATIVES.
128. ETHE ATTRIBUTE "A-H" CONTAINS TWO D-CORRELATIVES WHICH IS ILLEGAL.
129. EAN ATTRIBUTE'S CORRELATIVE CONTAINS THE DATA LIST NAME "A-H" SINCE NONE OF ITS ATTRIBUTES ARE REQUESTED BY THE DICTIONARY.
132. ETHE DICTIONARY OF THE DATA LIST IN THIS "INN" STATEMENT DOES NOT HAVE THE REQUIRED CORRELATIVE DEFINITIONS.
133. ETHIS "INN" STATEMENT DOES NOT CONTAIN AN ATTRIBUTE NECESSARY FOR ITS EXECUTION.
136. EAN ATTRIBUTE VALUE OF ITEM "A-H" DOES NOT MEET THE REQUIREMENTS OF ITS G CORRELATIVE.
137. EA CONDITIONAL ATTRIBUTE IS MODIFIED BY THE WORD "NO" AND THE ATTRIBUTE ALSO HAS A VALUE, WHICH IS ILLEGAL.
148. EONE OR MORE OF THE ITEM IDS IS NONEXISTENT.
161. EAN ATTRIBUTE MAY NOT BE UPDATED USING DIFFERENT CORRELATIVES UNLESS THEY ARE POSTS.
162. ETHE SECONDARY ATTRIBUTE 'A-H' MAY NOT BE UPDATED FROM MORE THAN ONE PRIMARY ATTRIBUTE UNLESS THEY ARE BOTH POSTS.
163. ETHE "FROM" AND "TO" VALUES OF THE ATTRIBUTE 'A-H' CONTAIN EQUALITIES.

164. ETHE ATTRIBUTE '¬A¬H' IS A SINGLE VALUE REJECT AND MAY NOT ACCEPT MORE THAN ONE INPUT VALUE.
165. ETHE D1 ATTRIBUTE '¬A¬H' MUST HAVE UNIQUE CHANGE "FROM" AND "TO" VALUES.
166. ETHE PRIMARY ATTRIBUTE '¬A¬H' IS USED IN "ANDD" CLAUSES, EACH OF ITS VALUES MUST BE UNIQUE.
167. ETHE PRIMARY ATTRIBUTE '¬A¬H' MAY NOT HAVE A DELETE IGNORE CORRELATIVE.
168. ETHE PRIMARY ATTRIBUTE "¬A¬H" DOES NOT HAVE A Y CORRELATIVE.
170. ETHE ATTRIBUTE "¬A¬H" IS A D2 AND MAY NOT BE USED AS AN ACT DATE.
171. ETHE ATTRIBUTE "¬A¬H" MAY BE A D2 TO ONLY ONE D1.
172. ETHE ATTRIBUTE "¬A¬H" IS A D1 AND MUST BE A NON-REDUNDANT STORE OR SINGLE VALUE REJECT.
173. ETHE SECONDARY ATTRIBUTE (DATA LIST) "¬A¬H" MUST STORE (BRIDGE) FROM PRIMARY ATTRIBUTES WITH CORRELATIVES OF A NON-REDUNDANT STORE OR A SINGLE VALUE REJECT.
174. ETHE PRIMARY ATTRIBUTE "¬A¬H" IS A CONCATENATED NON-REDUNDANT STORE, AND IF USED AS A SECONDARY BRIDGE OR STORE MUST BE TAKEN IN WHOLE.
175. ETHE ATTRIBUTE "¬A¬H" IS A POST AND THEREFORE MUST HAVE A TYPE OF NUMERIC.
176. ETHE SECONDARY ATTRIBUTE "¬A¬H" MAY NOT BE A NON-STORE.
177. ETHE SECONDARY ATTRIBUTE "¬A¬H" IS A NON-REDUNDANT STORE, AND ILLEGALLY STORES FROM A PRIMARY THAT IS A REDUNDANT STORE.
178. ETHE SECONDARY ATTRIBUTE "¬A¬H" STORES FROM A SINGLE VALUE REPLACE AND THEREFORE MUST BE A SINGLE VALUE REPLACE, IGNORE, OR REJECT OR A POST.
179. ETHE SECONDARY ATTRIBUTE "¬A¬H" STORES FROM A POST AND THEREFORE MAY NOT BE CONCATENATED.
180. ETHE SECONDARY ATTRIBUTE "¬A¬H" IS A D1 AND MAY NOT BE A DELETE IGNORE.

181. ETHE PRIMARY ATTRIBUTE "A-H" IS A D2 AND MAY ONLY BE USED IN A SECONDARY AS A PARALLEL D2.
183. EA UNIT POST CORRELATIVE IS INCORRECTLY USED WITH ATTRIBUTE "A-H".
184. ETHE ATTRIBUTE "A-H" IS A POST AND MAY NOT BE CONCATENATED.
185. ETHE SECONDARY ATTRIBUTE "A-H" IS A D2 AND MAY NOT STORE FROM A PRIMARY D1.
186. ETHE SECONDARY ATTRIBUTE "A-H" IS A NON-REDUNDANT STORE AND MAY NOT STORE FROM A NON-STORE.
301. EIS OR OS REGISTER HAS OVERFLOWED. STATEMENT MAY REQUIRE TOO MUCH STORAGE.
302. ETHE BMS REGISTER HAS OVERFLOWED. EITHER A STORED ITEM ID OR A PART OF THE INPUT STATEMENT EXCEEDS THE MAXIMUM LENGTH PERMITTED IN THIS CONFIGURATION.
333. ELENGTH OF USER SECURITY CODES EXCEEDS 100 CHARACTER MAXIMUM.
338. EINVALID VALUE FOR OUTPUT DATA CONVERSION. CALL SYSTEMS.
339. EIMPROPER OR UNDEFINED FORMAT FOR DATA CONVERSION.
354. EPARAMETER VALUE IS ALPHA WHEN NUMERIC EXPECTED.
355. E "A-H" IS A NONEXISTENT PARAMETER.
356. EFOR DATA LIST "A-H" NAME OR DICTIONARY NOT FOUND.
357. EFOR DATA LIST "A-H" NAME FOUND BUT IS NOT A D TYPE ITEM.
358. EFOR DATA LIST "A-H" DICTIONARY B, M, OR S IS NON-NUMERIC.
359. EITEM ID "A-H" NOT LOCATED.
360. ES CLAUSE INCOMPATIBLE WITH E CLAUSE OR WITH END OF ITEM OR RECORD.
361. EITEM ID IS TOO LARGE.
362. EDATA LIST NAME TOO LARGE.

- 363. ESYSTEM ERROR IN PROGRAM ID. CALL SYSTEMS.
- 364. EL AND V CLAUSES BOTH PRESENT OR BOTH ABSENT.
- 365. ES CLAUSE MISSING WHEN EXPECTED.
- 366. EN CLAUSE MISSING WHEN EXPECTED.
- 367. EITEM "¬A¬H" TO BE ADDED ALREADY EXISTS.
- 368. EIN V CLAUSE, CHARACTER FOLLOWING \$ IS INCORRECT.
- 369. ES FIELD MUST BE BEYOND ID FIELD.
- 370. ES CLAUSE EXCEEDS ITEM SIZE OF¬A¬H.
- 371. EN CLAUSE INCOMPATIBLE WITH ITEM SIZE OF¬A¬H.
- 372. ES AND N CLAUSES INCOMPATIBLE WITH SIZE OF RECORD.
- 373. EITEM SIZE IS ZERO.
- 374. ENUMBER OF REPLACEMENT CHARACTERS MUST EQUAL N CLAUSE IN RECORD FIX.
- 375. EDATA LIST DICT ¬A¬H HAS NO DL/ID ENTRY.
- 381. EPARAMETER ¬A¬H CANNOT BE IDENTIFIED.
- 382. EPARAMETER MISSING.
- 387. EDATA BASE TOO SMALL. AVAILABLE SPACE EXHAUSTED.
- 402. EITEM ID IN SECONDARY DATA LIST HAS MORE THAN ONE MULTI-VALUED SEGMENT.
- 403. ESECONDARY ITEM ID NOT FOUND.
- 404. EAN INPUT ITEM ID HAS EXCEEDED THE MAXIMUM LENGTH PERMITTED IN THIS CONFIGURATION.
- 408. EONE OF THE ATTRIBUTE VALUES HAS EXCEEDED ITS MAXIMUM SIZE.
- 410. ETHE MAXIMUM NUMBER OF LEVELS HAS BEEN EXCEEDED.
- 412. ETHE DATA BASE IS TOO SMALL TO ACCOMMODATE THE DATA LIST.
- 413. ETHE DATA LIST NAME IS ALREADY IN MDICT.

- 416. ETHE DATA LIST CANNOT BE FOUND IN MDICT.
- 417. ETHE DL/ID ENTRY IN THE DATA LIST DICTIONARY IS MISSING.
- 418. EDATA LIST DELETED. DICTIONARY B, M, S = -A-H DATA LIST B, M, S = -A-
- 419. EBASE, MODULO, OR SEPAR IS ZERO OR ALPHA.
- 420. E-A-H IS AN ILLEGAL ATTRIBUTE NAME.
- 421. E-A-H AMC -A-H SYNONYM CREATED.
- 422. EATTRIBUTE FOR AMC -A-H MISSING.
- 423. E-A-H HAS AMC OF ZERO.
- 424. EDICTIONARY NOT VALIDATED FOR PROCESSING.
- 425. E-A-H HAS DUPLICATE AMC.
- 427. E-A-H MISSING DL/MAX.
- 428. E-A-H MISSING DL/TYPE.
- 429. E-A-H MISSING DL/CORRELATIVES.
- 700. ETHE FORMAT OF THE F-CORRELATIVE IS INCORRECT.
- 701. EINVALID OPERATOR FOR THE F-CORRELATIVE.
- 702. EFOR F-CORRELATIVE OPERATORS "+-X/" ONLY ONE ATTRIBUTE MAY HAVE MULTIPLE VALUES.
- 705. ENON-IMPLEMENTED CONVERSION CODE.
- 706. EM/DICT ENTRY FOR T-CONVERSION NOT FOUND.
- 707. EDL/ID ENTRY FOR T-CONVERSION NOT FOUND.
- 708. EITEM ID OR VALUE FOR T-CONVERSION NOT FOUND.
- 709. ECONFLICT IN T-CONV DEFINITION; REQUESTS VERIFY BUT THERE IS A NULL AMC.
- 710. EVALUE HAS INVALID CHARACTER FOR MASK CONVERSION.
- 711. EVALUE "-A-H" WAS NOT TRANSLATED BY T-CONVERSION.
- 721. ETOTAL VERB CANNOT HANDLE D-CORRELATIVE FOR THIS CONFIGURATION.

724. ENON-NUMERIC FIELD ENCOUNTERED IN PERFORMING TOTAL VERB.
726. EDIVIDE CHECK ERROR OCCURRED IN F CORRELATIVE.
780. E' A H' NOT FOUND.
801. ETHE M/DICT ITEM IN THE M/DICT IS MISSING.
802. ETHE DISK SPACE ALLOCATED IS NOT SUFFICIENT TO HANDLE THIS REORGANIZATION.
1002. EIN PRIMARY ITEM ' A H' THE ATTRIBUTE WHOSE SYNONYM " A H" MAY NOT EXCEED 999 VALUES.
1003. ETHE ITEM ID ' A H' EXCEEDS THE MAXIMUM OF 99 CHARACTERS.
1004. ETHE ITEM ID ' A .H' IS NOT ON THE FILE.
1010. ETHE PRIMARY ITEM ID OF THE "ADD TO" STATEMENT IS NOT ON THE FILE.
1011. ETHE PRIMARY D1 "FROM" VALUE " A H" IS NOT ON THE FILE.
1012. ETHE PRIMARY D1 "TO" VALUE " A H" ALREADY EXISTS.
1013. ETHE PRIMARY ATTRIBUTE ' A H' HAS A NON-EXISTENT DELETE OR CHANGE "FROM" VALUE.
1014. EAN IDENTIFYING D1 VALUE OF PRIMARY ATTRIBUTE ' A H' IS NON-EXISTENT.
1020. ETHE "TO" ITEM ID ' A H' OF THIS CHANGE OR RECREATE STATEMENT ALREADY EXISTS.
1021. EIN ITEM ID ' A H' THE ATTRIBUTE WHOSE SYNONYM IS " A H" IS A SINGLE VALUE REJECT AND ALREADY HAS A VALUE ON THE FILE.
1022. EIN ITEM ID ' A H' THE ATTRIBUTE WHOSE SYNONYM IS " A H" IS A D2 SINGLE VALUE REJECT AND ALREADY HAS A VALUE ON THE FILE.
1023. EIN ITEM ID ' A H' THE ATTRIBUTE WHOSE SYNONYM IS " A H" MAY NOT EXCEED THE MAXIMUM OF 999 VALUES.
1025. EIN ITEM ID ' A H' THE ATTRIBUTE WHOSE SYNONYM IS " A H" HAS AN ILLEGAL NEGATIVE BALANCE.

1030. ETHE SECONDARY ITEM ID ' A H' IS NOT ON THE FILE.
1031. EIN SECONDARY ITEM ID 'A-H' THE ATTRIBUTE WHOSE SYNONYM IS "A-H" HAS A DELETE OR CHANGE "FROM" VALUE THAT IS NOT ON THE FILE.
1032. EIN A SECONDARY DATA LIST OF WHICH 'A-H' HAS BEEN GENERATED AS AN ITEM ID, THE ATTRIBUTE WHOSE SYNONYM IS "A-H" IS DEFINED TO PERMIT MORE THAN ONE MULTI-VALUED SEGMENT.
1033. EA SECONDARY VALUE EXCEEDS THE SYSTEM MAXIMUM SIZE, WHICH IS THE SIZE OF A DISK RECORD. THE VALUE THROUGH THE ALLOWED SIZE IS "A-H"
1034. EIN THE SECONDARY DATA LIST 'A-H', THERE IS MORE THAN ONE MULTI-VALUED SEGMENT FORMING THE ITEM ID.
1035. EIN THE SECONDARY ITEM WHOSE ID IS 'A-H' THE ATTRIBUTE WHOSE SYNONYM IS "A-H" HAS MORE THAN 0 1 MULTI-VALUED SEGMENT.
1036. EA SECONDARY ITEM ID EXCEEDS THE MAXIMUM OF 99 CHARACTERS. THE ID THROUGH THE ALLOWED SIZE IS 'A-H'.
1037. ETHE NUMBER OF REFERENCED VALUES IN SECONDARY ITEM ID 'A-H' EXCEEDS THE AMOUNT OF CORE NECESSARY TO KEEP TRACK OF THEM.
1040. ETHE SECONDARY ID 'A-H' IS A BRIDGE AND VERIFY, BUT IS NOT ON THE FILE.
1041. EIN THE SECONDARY DATA LIST 'A-H' THE ITEM ID HAS BEEN DEFINED TO PERMIT MORE THAN ONE MULTI-VALUED SEGMENT.
1042. ETHE NUMBER OF SECONDARY D1-D2 RELATIONSHIPS REFERENCED BY ITEM ID 'A-H' IS TOO LARGE TO BE KEPT TRACK OF IN CORE.
2001. ENON-EXISTENT DATA LIST REQUESTED.
2050. EATTRIBUTE NAME EXCEEDS BUFFER.
2051. ESKELETON STATEMENT EXCEEDS BUFFER.
2054. EA NULL DATA LIST EXISTS.
2100. EEXTRACT RECORD EXCEEDS MAXIMUM ALLOWABLE LENGTH - 3500.

Category III - System Errors

System errors are generally due to operational difficulties or to inconsistencies between the computer programs and the established dictionaries and data base maps. With few exceptions, the system errors can only be resolved by Computer Operations with assistance from the Data Operations Department and the Functional Disciplines.

80. EA SYSTEM ERROR HAS OCCURRED IN MODE $\neg A \neg H$. YOU MAY PROCEED WITH THE NEXT STATEMENT. CALL SYSTEMS.
102. EA D1-D2 RELATIONSHIP IS INCORRECTLY STATED IN THE DICTIONARY. CALL SYSTEMS.
103. ETHIS UPDATE STATEMENT CONTAINS A D2 ATTRIBUTE, BUT NO CORRESPONDING D1.
104. EAN ATTRIBUTE'S CORRELATIVE CONTAINS THE DATA LIST NAME " $\neg A \neg H$ " WHICH CANNOT BE FOUND IN THE BRIDGE CORRELATIVES. CALL SYSTEMS.
105. EDEVICE TABLE IS MISSING $\neg A \neg$.
106. EA DICTIONARY WITH BASE $\neg A \neg H$ DOES NOT CONTAIN THE SYSTEM SYNONYM " $\neg A \neg H$ ".
107. EIN THE DICTIONARY WHOSE BASE IS $\neg A \neg H$, THE SYSTEM SYNONYM " A H" IS NOT COMPLETE.
111. EDEVICE REQUESTED IS INOPERATIVE $\neg A \neg$.
118. EUNCONDITIONAL ATTRIBUTE "ANDD" CLAUSES ARE NOT OPERATIVE IN THIS CONFIGURATION.
129. EAN ATTRIBUTE'S CORRELATIVE CONTAINS THE DATA LIST NAME " $\neg A \neg H$ " WHICH IS INCORRECTLY DEFINED. CALL SYSTEMS.
130. ETHIS STATEMENT REQUESTS A MEANINGLESS REFERENCE TO DATA LIST " $\neg A \neg H$ ", SINCE NONE OF ITS ATTRIBUTES ARE REQUESTED BY DICTIONARY.
132. ETHE DICTIONARY OF THE DATA LIST IN THIS "INN" STATEMENT DOES NOT HAVE THE REQUIRED CORRELATIVE DEFINITIONS.
144. E" $\neg A \neg H$ " CONTAINS A CORRELATIVE IN ITS DICTIONARY WHICH IS NOT OPERATIVE IN THIS CONFIGURATION.

- 300. ESELECTION LIMITS ERROR. ENDING LIMIT SMALLER THAN STARTING LIMIT.
- 301. E IS OR OS REGISTER HAS OVERFLOWED. STATEMENT MAY REQUIRE TOO MUCH STORAGE.
- 302. ETHE BMS REGISTER HAS OVERFLOWED. EITHER A STORED ITEM ID OR A PART OF THE INPUT STATEMENT EXCEEDS THE MAXIMUM LENGTH PERMITTED IN THIS CONFIGURATION.
- 338. EINVALID VALUE FOR OUTPUT DATA CONVERSION. CALL SYSTEMS.
- 363. ESYSTEM ERROR IN PROGRAM ID. CALL SYSTEMS.
- 377. EISTORY TRANSACTION MISSING TRANSACTION ITEM.
- 380. H FORMAT MISSING. CALL SYSTEMS STAFF.
- 384. ESYSTEM TAPE LABELS MISSING IN SYSI DATA LIST. CALL SYSTEMS STAFF.
- 385. EDELETED ITEM MISSING -H KEY = -A-L- HRECORD = -A-L-H. CALL SYSTEMS.
- 387. EDATA BASE TOO SMALL. AVAILABLE SPACE EXHAUSTED.
- 389. EFOLLOWING DECKS NOT FOUND -L-A-.
- 396. EISTORY TAPE FORMAT ERROR. CALL SYSTEMS.
- 397. ETRANSACTION ITEM MISSING.
- 412. ETHE DATA BASE IS TOO SMALL TO ACCOMMODATE THE DATA LIST.
- 419. EBASE, MODULO, OR SEPAR IS ZERO OR ALPHA.
- 430. EDEVICE NAME CANNOT BE IDENTIFIED.
- 431. EDEVICE NOT PRESENT GPPU--A--.
- 705. ENON-IMPLEMENTED CONVERSION CODE.
- 706. EM/DICT ENTRY FOR T-CONVERSION NOT FOUND.
- 707. EDL/ID ENTRY FOR T-CONVERSION NOT FOUND.
- 708. EITEM ID OR VALUE FOR T-CONVERSION NOT FOUND.
- 709. ECONFFLICT IN T-CONV DEFINITION; REQUESTS VERIFY BUT THERE IS A NULL AMC.

- 802. ETHE DISK SPACE ALLOCATED IS NOT SUFFICIENT TO HANDLE THIS REORGANIZATION.
- 900. ESTATEMENT NOT PROCESSED.
- 901. EAN INACCURATE ITEM COUNT HAS BEEN FOUND. CALL SYSTEMS.
- 902. EAN ILLEGAL DISK STRUCTURE HAS BEEN DISCOVERED. CALL SYSTEMS.
- 903. EAN ILLEGAL BOOTSTRAP STRUCTURE HAS BEEN DISCOVERED. CALL SYSTEMS.
- 1001. ETHIS UPDATE STATEMENT CONTAINS TOO MANY VALUES TO BE PROCESSED IN CORE.
- 1009. EDATA LIST OR ITEM ID UNABLE TO BE FOUND IN PROGRAMMED INPUT STRING BY UPDATE PROGRAM. CALL SYSTEMS.
- 1010. ETHE PRIMARY ITEM ID OF THE "ADD TO" STATEMENT IS NOT ON THE FILE.
- 1011. ETHE PRIMARY D1 "FROM" VALUE "→A→H" IS NOT ON THE FILE.
- 1017. EMODE 53 HAS FOUND AN UNANTICIPATED ERROR. CALL SYSTEMS.
- 2050. EATTRIBUTE NAME EXCEEDS BUFFER.
- 2051. ESKELETON STATEMENT EXCEEDS BUFFER.
- 2054. EA NULL DATA LIST EXISTS.

Category IV - Non Reactive Diagnostics

The messages in this group are informative in nature, and with few exceptions, require no reaction, resolution, or response to Computer Operations. They are intended primarily to provide valuable and useful information to the user and to the operator of the system.

- 334. ESIGN ON BY TYPING REQUEST FOLLOWED BY USER NO.
- 335. HSIGNOFF ACKNOWLEDGED TIME →A→X3→ HNO. STATEMENTS
→A→X3→ HPROCESSOR TIME →A→X3→ HELAPSED TIME
→A→.

- 337. HREQUEST ACKNOWLEDGED →L→HDATE→A→X3→
HTIME →A→X3→ HUSER →A→X2→A→.
- 340. HID = "→A→H" DL = "→A→H".
- 341. HRECORD = "→A→H".
- 342. H'→A→H' ADDED.
- 343. H"→A→H" REPLACES OLD VALUE OF "→A→H".
- 344. H"→A→H" DELETED.
- 345. HNEW LINK OF"→A→H" REPLACES OLD LINK OF "→A→H".
- 350. EDUMP TYPE MUST EQUAL ITEM, RECORD, OR GROUP.
- 373. EITEM SIZE IS ZERO.
- 378. HHISTORY TAPE TERMINATED →X2→ HREEL NO. →A→.
- 379. HHISTORY TAPE LABELED →A→X3→ HCHECKPOINT→A→X3→
HREEL →A→.
- 395. A→X2 HINPUT STATEMENTS SELECTED TO REPROCESS.
- 398. L→HSTATEMENT NOT REPROCESSED→X2→ HTRANSACTION
→A→X2→ HDATE →A→X2→ HTIME →A→L→L1→.
- 399. HSELECT PROGRAM COMPLETE. NO ITEMS EXTRACTED
= →A→.
- 401. HNO ITEMS TO BE LISTED.
- 407. HNUMBER OF ACCEPTABLE ITEMS = →A→.
- 409. HONE OR MORE VALUES WAS CUTOFF AT 300 CHARACTERS.
- 415. EDATA LIST STRUCTURED. DICTIONARY B, M, S = →A→H
DATA LIST B, M, S = →A→.
- 418. EDATA LIST DELETED. DICTIONARY B, M, S = →A→H
DATA-LIST B, M, S = →A→.
- 426. EDICTIONARY ENABLE IS COMPLETE AND CORRECT.
- 720. H NO ITEMS TO BE TOTALED.
- 730. E NO ITEMS TO BE UPDATED.
- 780. E'→A→H' NOT FOUND.

- 781. H'→A→H' ADDED.
- 782. H'→A→H' UPDATED.
- 783. H'→A→H' DELETED.
- 784. H'→A→H' RECREATED AS '→A→H'.
- 785. H'→A→H' CHANGED TO '→A→H'.
- 900. ESTATEMENT NOT PROCESSED.
- 1015. HNO ACTION WAS NECESSARY IN THIS UPDATE STATEMENT.
- 1024. H** NOTE ** - IN ITEM ID '→A→H' ONE OR MORE ATTRIBUTES HAS A NEGATIVE BALANCE. THE SYNONYM OF THE LAST ONE FOUND IS "→A→H".
- 2101. ENO ITEMS TO BE EXTRACTED.

PART II - APPLICATIONS PROGRAMS

The following error messages could occur during execution of the Applications Programs:

<u>Identification No.</u>	<u>Message</u>	<u>Explanation</u>
	* * * * *	
W001 - E001 TITLE: CEI Configuration Index	ERROR IN CEI-FILE - - THIS RECORD OUT OF SEQUENCE NO. 9 9 9 9 CEI NO. 9 9 9 9 9 9, JOB ENDED.* * * * *	Self-Explanatory
	* * * * *	
W001 - E002 TITLE: CEI Configuration Index	* * * * * ERROR FOUND IN DATE CARD, EITHER NO DATE CARD, EITHER NO DATE CARD WAS SUBMITTED OR DATE CARD FOUND HAS INVALID FORMAT.*	Self-Explanatory
W002 - E001 TITLE: Description and Specification Index/Status	PROGRAM NUMBER - ERROR NUMBER 'PROPAGATION CODE IN FIRST KEYFIELD'. KEYWORD.	The first record read did not have its key- field prefixed with an 'N'. The program is aborted.

<u>Identification No.</u>	<u>Message</u>	<u>Explanation</u>
E002 TITLE: Description and Specification Index/Status	PROGRAM NUMBER - ERROR NUMBER 'MASTER FILE IS OUT OF SEQUENCE KEY=',KEYWORD.	The file is not in sequence. The program is abortal.
E003 Drawing Index/ Status	PROGRAM NUMBER - ERROR NUMBER 'THERE IS A DUPLI- CATE MSTR RCD: KEY='. KEYWORD.	There is a duplicate master record i.e. keyfields the same and preceded by an 'N'. A new record is read.
W003 - E001 Drawing Index/ Status	***** ERROR FOUND IN DATE CARD, EITHER NO DATE CARD WAS SUBMITTED OR DATE CARD FOUND HAS INVALID INVALID FORMAT * * *****	Self-explanatory
W003 - E002 Drawing Index/ Status	***** ERROR IN DRAW- ING FILE - - THIS RECORD OUT OF SEQUENCE - - - SEQ. NO. - 9 9 9 9 DRAWING NO. 9 9 9 9 9 9 9 9 9 9 9 9 9. *****	Self-explanatory
W004 - E001 ICD Index/Status	***** ERROR FOUND IN DATE CARD, EITHER NO DATE CARD WAS SUBMITTED OR DATE CARD FOUND HAS INVALID FORMAT ***** *****	Self-explanatory
W004 - E002 ICD Index/Status	***** ERROR IN IDC FILE - - - - - THIS RECORD IS OUT OF SEQUENCE - - - SEQ. NO. 9 9 9 9 ICD NO. 9 9 9 9 9 9 9 9 9 9 9 9 9 *****	Self-explanatory
W005 - E001 ECP Index/Status	CODE OTHER THAN N FOUND AT START OF A NEW GROUP IN RECORDS: XXXXXXXXXXXXXXXX	Self-explanatory
W006 - E001 ICWG Action Status	INVALID OR MISSING DATE CARD	Self-explanatory. Refer to the ITDS Data Card Layout in Appen- dix B-2 of "Computer Subsystem: Applications Programs, Programming Documentation.

<u>Identification No.</u>	<u>Message</u>	<u>Explanation</u>
W006-E001 ICWG Action Status	GROUP EXCEEDS PROGRAM STORAGE GROUP CONTAINS nnnn	This size of the tables for storing multi-value items within a group must be increased to allow the size group indicated. Program must be recompiled.
W007 - E001 ECP/Waiver Processing Audit	ALL FIELDS CONTAIN PROPAGATION CODE IN THIS RECORD: XXXXXXXXXXXXXXXXXXXX	Self-explanatory
W008 - E001 Technical Publication Index/Status	OUT OF SEQUENCE RECORD KEY=(KEY AND SEQUENCE NO.).	Self-explanatory. Resort input file.
W008 - E002 Technical Publication Index/Status	FIRST N INVALID FOR KEY=(KEY AND SEQUENCE NO.)	Two successive records with the same key are designated as new. Check with analyst and software programmer.
W008 - E003 Technical Publication Index/Status	DUPLICATE RECORD KEY=(KEY AND SEQUENCE NO.)	Self-explanatory. Check with analyst.
W008 - E004 Technical Publication Index/Status	DATE CARD MISSION OR IT HAS INVALID FORMAT.	Self-explanatory. Rerun job with appropriate date card.
W009 Test Requirements - DTP Status	No error messages	
W010 Requirements for Contractor Test- Status Report	No error messages	
W011 - E001 Specifications Equipment Test- Status Report	NO DATE CARD	Self-explanatory.
W012 - E001 Development Test Status Report	OUT OF SEQUENCE RECORD KEY= (KEY-SEQUENCE NO.)	Self-explanatory. Tape must be resorted.

<u>Identification No.</u>	<u>Message</u>	<u>Explanation</u>

W012 - E002 Development Test Status Report	FIRST NO INVALID FOR KEY =(KEY-SEQUENCE NO.)	The second or later record of a group is designated as new instead of propagated. Analyst must examine ITDS data base.
W012 - E003 Development Test Status Report	DUPLICATE RECORD KEY = (KEY-SEQUENCE NO.)	Self-explanatory. Analyst must examine data base.
W012 - E004 Development Test Status Report	ATT (3,5,7,11,12,14)OF (KEY-SEQUENCE) HAS NO DECIMAL POINT.	Self-explanatory. Analyst must examine data base.
W013 - E001 Maintainability Problem Reports- HI 25	PROGRAM NUMBER - ERROR - NUMBER 'ALL FIELDS CON- TAIN PROPAGATION CODE IN THIS RECORD'. KEYWORD	For a given FGC number listed in the FGC-VAL- File there were no corresponding N values. A new record is then read.
W014 - E001 Reliability Problem Reports-HI/LO 25	DATE CARD MISSING OR BAD.	Date card either miss- ing or in wrong format. Correct card and resub- mit run.
W015 - E001 Maintenance Man- Hour Per Usage Unit- Mos	DATE CARD MISSING OR INCORRECT	Date card is missing.
W015 - E002 Maintenance Man- Hour Per Usage Unit- Mos	MOS OVERFLOW HAS OCCURRED, FGC=XXXXXX	If the array size limit is exceeded this message is printed.
W016 GPM/GSE Function and Status	Refer to Error Messages in "Computer Subsystem: Generalized Processing Program, Programming Documentation".	
W017 - E001 Master Detail Milestones	DATE CARD MISSING OR INVALID	Self-explanatory

<u>Identification No.</u>	<u>Message</u>	<u>Explanation</u>

W018 Time Status Report	Refer to Error Messages in "Computer Subsystem: Generalized Processing Program, Programming Documentation".	
W019 Cost Status Report	Refer to Error Messages in "Computer Subsystem: Generalized Processing Program, Programming Documentation".	
W020 Funding Status Report	Refer to Error Messages in "Computer Subsystem: Generalized Processing Program, Programming Documentation".	
W021 Key Word-DAI Cross Reference Index	NONE	
W022 - E001 Document List	OUT OF SEQUENCE RECORD KEY=(KEY AND SEQUENCE NO.)	Self-explanatory. Resort input file.
W022 - E002 Document List	FIRST N INVALID FOR KEY=(KEY AND SEQUENCE NO.)	Two successive records with same key are designated as new. Check with analyst and software programmer.
W022 - E003 Document List	DUPLICATE RECORD KEY=(KEY AND SEQUENCE NO.)	Self-explanatory. Check with analyst.
W022 - E004 Document List	DATE CARD MISSING OR IT HAS INVALID FORMAT.	Self-explanatory, rerun job with appropriate date card.
W024 - E001 Contractor Data Requirements List	DATE CARD HAS INVALID FORMAT	Date card either missing or in wrong format. Correct card and resubmit run.
W024 - E00? Contractor Data Requirements List	OUT OF SEQUENCE RECORD. KEY = XXXX SEQ. NO. = XXXX	Extract tape records not in correct sequence. Re-sort extract tape and resubmit run.

<u>Identification No.</u>	<u>Message</u>	<u>Explanation</u>

W024 - E004 Contractor Data Requirements List	INVALID N FOR KEY XXXX SEQ. NO: XXXX	Two records found on extract tape with the same ADL item number and title and both flagged as N. Resub- mit run with corrected extract tape.
W025 - E001 Government Data Requirements List- Contractor Required Data	DATE CARD MISSING OR BAD	Date card either miss- ing or in wrong format. Correct card and resub- mit run.
W026 - 1 Generalized Input	INPUT RECORD HAS IMPROPER CODE	A code of 1, 2, or 3 did not appear in the position indicated on the C-control card. The next record is read and processing continues.
W026 - 2 Generalized Input	BLANK KEY	A blank key has been found. This record is ignored and processing continues.
W026 - 3 Generalized Input	CONCATENATION HAS BLANK AND NON BLANK FIELDS. RMC-NN, KEY-XXXXXXXX	ITDS will not accept a concatenated value with a blank segment; there- fore, if a segment of a concatenated value is blank, this attribute value is not output. Processing continues with the next record mark count.

THERE ARE SEVERAL CONDITIONS WHICH CAUSE AN ABEND TERMINATION. THE USER CONDITION CODE INDICATES THE PROBLEM WHICH CAUSED THE TERMINATION. A DUMP WILL BE GIVEN WHEN THE SYSUDUMP CONTROL IS PRESENT.

W026 Generalized Input	100	C - Control card is missing
W026 Generalized Input	101	Record type code in table card is not equal to 1, 2 or 3.

<u>Identification No.</u>	<u>Message</u>	<u>Explanation</u>

W026 Generalized Input	102	The first table card does not have record mark count of '00'
W026 Generalized Input	103	Incorrect concatenation code found in table card.
W026 Generalized Input	104	Internal table is incorrect - see Programmer.
W026 Generalized Input	200	Input file is not specified as fixed or undefined record form-check DD card for TIN.
W027C - E001 PERT/Time Extract/ Load	SELECT KEY OUT OF SEQUENCE =(SELECT EVENT NO.)	Self-explanatory. Select file must be sorted.
W027C - E002 PERT/Time Extract/ Load	EXTRACT KEY OUT OF SEQUENCE =(EXTRACT EVENT NO.)	Self-explanatory. Extract file must be sorted.
W027C - E003 PERT/Time Extract/ Load	MATCH KEY (SELECT EVENT NO.) NOT ON PMS TIME TAPE.	A selection card was prepared for an event that does not exist in the PERT network.
W028B - E001 PERT/Cost Extract/ Load	SELECT KEY OUT OF SEQUENCE=(SELECT CHARGE NO.)	Self-explanatory
W028B - E002 PERT/Cost Extract/ Load	EXTRACT KEY OUT OF SEQUENCE=(EXTRACT CHARGE NO.)	Self-explanatory
W028B - E003 PERT/Cost Extract/ Load	MATCH KEY (SELECT CHARGE NO.) NOT ON PMS COST TAPE	A selection card was prepared for a charge no. that does not exist in the PERT COST network.
W029 - E001 Sciolist Extract/ Load	GEXT KEY (SELECTED CCS NO.) NOT ON SCIOLIST TAPE	Selection card prepared for a CCS No. not in SCIOLIST Reports.

<u>Identification No.</u>	<u>Message</u>	<u>Explanation</u>

W029 - E002 Sciolist Extract/ Load	GEXT KEY (SELECTED CCS NO. COMMAND) NOT ON SCIOLIST TAPE	Selection card prepared for a CCS No., Command combination not in SCIOLIST Report 6.
W029 - E003 Sciolist Extract/ Load	CONTROL CARD MISSING OR IT HAS WRONG CARDS.	Self-explanatory.
W030 Mast Extract/Load	ERROR MESSAGES ARE DESCRIBED IN "COMPUTER SUBSYSTEM: APPLICATIONS PROGRAMS, PROGRAMMING DOCUMENTATION".	
W031 Action Item System Extract/Load	ERROR MESSAGES ARE DESCRIBED IN "COMPUTER SUBSYSTEM: APPLICATIONS PROGRAMS, PROGRAMMING DOCUMENTATION".	
W032 Meads Extract/Load	ERROR MESSAGES ARE DESCRIBED IN "COMPUTER SUBSYSTEM: APPLICATIONS PROGRAMS, PROGRAMMING DOCUMENTATION".	
Reader/Cover	1. INCORRECT CODE	Job terminated
Reader/Cover	2. INCORRECT SPACE CODE	Job Terminated
Reader/Cover	3. CARD OUT OF SEQUENCE	Job Terminated

PART III - PERIPHERAL PROGRAMS

The following error messages could occur during execution of the Peripheral Programs:

<u>Identification No.</u>	<u>Message</u>	<u>Explanation</u>
X001 MEADS	REFER TO TEXT IN "COMPUTER SUBSYSTEM: PERIPHERAL PROGRAMS PROGRAMMING DOCUMENTATION.	
X002 Engineering Fact Sheets	REFER TO IBM FORM C35-002.	
X003 Engineering Problem Narratives	REFER TO IBM FORM C35-002.	
X004 PERT/Time	REFER TO REFERENCED IBM DOCUMENTATION.	

<u>Identification No.</u>	<u>Message</u>	<u>Explanation</u>
X005 PERT/Coast	REFER TO REFERENCED IBM DOCUMENTATION.	
X005 PERT/Coast		Records in error are listed by the Printer.
X007 - 001 Sciolist	DUPLICATE TRANSACTIONS	Self-explanation
X007 - 002 Sciolist	INVALID FISCAL YEAR	
Sciolist - 003	INVALID CCS	
Sciolist - 004	INVALID COMMAND	
Sciolist - 005	INVALID TRANSACTION	
Sciolist - 006	DUPLICATE MASTERS	
Sciolist - 007	UNMATCHED CHANGE	
Sciolist - 008	UNMATCHED DELETE	
Sciolist - 009	"CONTROL CARD MISSING, JOB HALTED"	
Sciolist - 010	"TABLE CARDS INVALID OR MISSING".	
Sciolist - 011	TRANSACTIONS OUT OF SEQUENCE	
Sciolist - 012	MASTER FILE OUT OF SEQUENCE	
Sciolist - 013	MATCHING ADD	