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**HUMAN
RESOURCES**

**ADVANCED ON-THE-JOB TRAINING SYSTEM:
EVALUATION COMPUTER PROGRAM CONFIGURATION ITEM**

Douglas Aircraft Company
A Division of McDonnell Douglas Corporation
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Aurora, Colorado 80014

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LABORATORY

**AIR FORCE SYSTEMS COMMAND
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This paper has been reviewed and is approved for publication.

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Reviewed and submitted for publication by

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This publication is primarily a working paper. It is published solely to document work performed.

SUMMARY

The Advanced On-the-job Training System (AOTS) was an Air Staff directed, AFHRL developed, prototype system which designed, developed, and tested a proof-of-concept prototype AOTS within the operational environment of selected work centers at Bergstrom AFB, Texas and Ellington ANGB, Texas from August 1985 through 31 July 1989. This report provides the requirements for the complete identification of the Evaluation Computer Program Configuration Item (CPCI) of the software component of the AOTS. The CPCI provides support for the four components of the Evaluation Subsystem: Manage Evaluation Instrumentation; Evaluate Performance; Apply Training Quality Control; and Evaluate System.

The software provides support to each component of the Evaluation Subsystem. Software support for Manage Evaluation Instrumentation consists of the development and maintenance of terminal and supporting behavioral objectives. Evaluate Performance software support consists of the on-line presentation and scoring of test material. Training Quality Control component software consists of the generation of Quality Control Evaluation and also the generation of Quality Control Follow-up Reports. The fourth component, Evaluation System, consists of software support for the generation of report recipient records and Unit Training Reports.

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PREFACE

This specification report establishes the requirements for complete identification of the Evaluation Computer Program Configuration Item (CPCI) for the software component of the Advanced On-the-job Training System (AOTS) Computer Support System. This document was developed by the contractors on the project, Douglas Aircraft Company (Contract No. F33615-84-C-0059). The AFHRL Work Unit number for the project is 2557-00-02. The primary office of responsibility for management of the work unit is the Air Force Human Resources Laboratory, Training Systems Division, and the Air Force AOTS manager is Major Jack Blackhurst.

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1. SCOPE

1.1 Identification. This specification establishes the requirements for complete identification of the Evaluation Computer Program Configuration Item (CPCI) of the software component of the Advanced On-the-job Training System (AOTS) Computer Support Subsystem.

1.2 Functional Summary. The Evaluation CPCI shall provide automated support for the AOTS Management Subsystem, described in 70S647300. Software support shall be provided for developing and maintaining evaluation instrumentation, evaluating performance of tasks by airmen, performing quality control functions, and evaluating effectiveness of the AOTS system.

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2. APPLICABLE DOCUMENTS

2.1 Government Documents. The following documents of the exact issue shown form a part of this specification to the extent specified herein. In the event of conflict between the documents referenced and the contents of this specification, the contents of this specification shall be the superceding requirement, with the exception of the AOTS System Specification.

SPECIFICATIONS:

70S647000	System Specification for the Advanced On-the-job Training System
70S647100	Prime Item Development Specification for the Management Subsystem of the Advanced On-the-job Training System
70S647200	Prime Item Development Specification for the AOTS Training Development and Delivery Subsystem
70S647202	Critical Item Development Specification for the Training Delivery Component of the AOTS Training Development and Delivery Subsystem
70S647300	Prime Item Development Specification for the AOTS Evaluation Subsystem
70S647400	Prime Item Development Specification for the Computer Support Subsystem of the Advanced On-the-job Training System
70S647401	Critical Item Development Specification for the Hardware Component of the Advanced On-the-job Training System
70S647411	AOTS Management Computer Program Configuration Item Development Specification
70S647412	AOTS Training Development and Delivery Computer Program Configuration Item Development Specification
70S647414	AOTS System Support Computer Program Configuration Item Development Specification
STAND-109 23 April 85	Computer Program Product Specification for the ISS Support Environment

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STANDARDS:

MIL-STD-483 Configuration Management Practices for
(USAF) Systems, Equipment, Munitions, and Computer
21 March 79 Programs
MIL-STD-1815A Reference Manual for the ADA Programming
1983 Language

OTHER PUBLICATIONS:

AOTS Software Development Plan
AOTS Software Test Plan
AOTS Human Engineering Program Plan

Manuals and Regulations:

AFR 12-35 Air Force Privacy Act Program
3 Jun 85

2.2 Non-Government Documents

OTHER PUBLICATIONS:

Gane, Chris and Sarson, Trish
Structured Systems Analysis: Tools and
Techniques, October 1977
International Business Machines Corporation
HIPO - A Design Aid and Documentation
Technique, May 1975

3. REQUIREMENTS

This section contains performance and design requirements for the AOTS Evaluation CPCI.

3.1 CPCI Structural Description. This CPCI shall provide support for the four components of the Evaluation Subsystem: Manage Evaluation Instrumentation; Evaluate Performance; Apply Training Quality Control; and Evaluate System. Software support for Manage Evaluation Instrumentation shall consist of the development and maintenance of terminal and supporting behavioral objectives; the development and maintenance of test items in the test item bank; the generation of tests from items in the test item bank; and the analysis of test items.

Software support for Evaluate Performance shall consist of the online presentation and scoring of test material; the generation of tests for offline administration; and the capability to score tests which are administered offline.

Software support for Apply Training Quality Control shall consist of the generation of Quality Control Evaluation and also the generation of Quality Control Follow-up Reports.

Software support for Evaluate System shall consist of the generation of report recipient records; and the generation of Unit Training Reports.

These four components are identified in figure 1 in a hierarchial manner. This Hierarchy plus Input-Processing-Output (HIPO) diagram provides a visual table of contents for the CPCI (see HIPO - A Design Aid and Documentation Technique, IBM, 1975). Only the highest level of HIPO diagram is used here: the Visual Table of Contents.

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3.1.1 CPC Descriptions. The four components of the Evaluation CPCI are described below by specifying the further breakdown of the CPCI into the individual CPCs that comprise the CPCI. These CPCs are listed by CPC number to provide the reference to the detail design in 3.10. The configuration management (CM) identification and the actual Ada name is also supplied for each CPC. The CM identifications are based on the format specified in the AOTS Configuration Management Plan.

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3.1.1.1 Manage Evaluation Instrumentation. The Manage Evaluation Instrumentation component is composed of the following CPCs:

CPC No	CM Id	Name
1	EVL001S, EVL001B	BOE
2	EVL002S, EVL002B	VERB_CHECK
3	EVL003S	OBJ_TYPES
4	EVL005S, EVL005B	TEST_EDITOR
5	EVL006S, EVL006B	TIB_TYPE
6	EVL007S, EVL007B	TEST_ITEM_BANK_EDITOR
7	EVL008S, EVL008B	QUESTION
8	EVL009S, EVL009B	PM_OTG
9	EVL012S, EVL012B	GRAFIX
10	EVL016S, EVL016B	CR_QUES
11	EVL017S, EVL017B	TEST_PRES
12	EVL019S, EVL019B	ALTS
13	EVL024P	TEST_PRINT
01	MGT002S, MGT002B	TASK_PP
55	MGT009P	IMEDIT

3.1.1.2 Evaluate Performance. The Evaluate Performance component is composed of the following CPCs:

CPC No	CM Id	Name
14	EVL018S, EVL018B	OFFLINE_TEST
15	EVL020S	FORM_DEFINITION
16	EVL021S, EVL021B	FORM_UTILITIES
17	EVL022S, EVL022B	FORM_PROCESSING
18	EVL023P	SCANTRON
19	EVL025S	TIETYPES
20	EVL026P	TIE
21	EVL027S, EVL027B	TIETIE
22	EVL028S, EVL028B	DOTIE

3.1.1.3 Apply Training Quality Control. The Apply Training Quality Control component is implemented within the Management CPCI by the following CPCs:

CPC No	CM Id	Name
13	MGT048S, MGT048B	QC_Eval
14	MGT049S, MGT049B	MQC_Eval
99	MGT122S, MGT122B	QCADMIN

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3.1.1.4 Evaluate System. The Evaluate System component is composed of the following CPCs:

<u>CPC No</u>	<u>CM Id</u>	<u>Name</u>
50	MGT114P	REPORTS
78-92	MGT071X-MGT084X, MGT119X	Create Unit Training Records
98	MGT121X	
101	MGT123C	Ad Hoc
102	MGT124X	Reports

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3.1.2 CPC Relationships. The functional requirements of the Evaluation CPCI as specified in the Part I Evaluation CPCI Specification shall be accomplished via the CPCs identified in 3.1.1. Table 1 contains a list of these requirements and the CPC that will accomplish them. The relationship of the Evaluation CPCI and its CPCs is described in 3.2.

3.2 Functional Flow Diagrams/Charts. The ADL included in the Unit Development Folder (UDF) describes the functional flow of the Evaluation CPCI. Appendix B contains graphic charts depicting the CPCs referenced by each CPC in the CPCI and showing the CPCs referencing each CPC. These charts provide a quick index into the detailed design provided in the ADL of the UDF.

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3.3 Interfaces

3.3.1 Interface Requirements.

3.3.2 Detailed Interface Definition. The functional interfaces between the Evaluation CPCI and the other software CPCIs (Management CPCI, Training Development and Delivery CPCI, and System Support CPCI) are described below.

3.3.2.1 Evaluation CPCI to Management CPCI. The Evaluation CPCI shall have interfaces with the Management CPCI. The following subparagraphs describe the interfaces between these two CPCIs.

3.3.2.1.1 Task Information. The Evaluation CPCI shall be able to access task information using three different functions provided by the Management CPCI. MTL and Local/New task data shall be accessible using the Task List Access Function; performance and proficiency data for a given task shall be retrieved via the Performance and Proficiency Access Function; evaluation requirements shall be accessed using the Training/Evaluation Requirements Access Function. All of these task functions shall require task identification as input to provide the requested task data, task performance and proficiency data, or task evaluation requirements.

3.3.2.1.2 Evaluation Data Referenced by Tasks. The Evaluation CPCI shall provide a function to the Management CPCI for accessing information associated with task objectives and task test instruments. This function shall be provided by the Evaluation Materials Task Reference Program (3.2.1.8). Task identification shall be input from the Management CPCI to this function; the resultant output to the Management CPCI shall be objective data and test instrument data of a given task.

3.3.2.1.3 Evaluation Data Concerning Airmen. The Evaluation CPCI shall utilize the Progress Tracking Function provided by the Management CPCI to update the evaluation data for individual airmen. This data shall include progress information, evaluation results, and quality control results of individual airmen. Input from the Evaluation CPCI shall be airman identification, event identification, and data specifically describing the event. This data shall include information such as performance evaluation data, training and evaluation status on tasks related to position qualification and other training, such as ancillary training and CDC, and the status of quality control evaluations, such as decertification recommendation. Output from the function shall be the recognition of the successful recording of the event for the airman.

3.3.2.1.4 Airman Information. The Evaluation CPCI shall utilize the Airman Data Access Function provided by the Management CPCI for accessing information concerning trainees, trainers, and evaluators. Input to the function shall be identification of airman and type of data required, such as ATR data, ITR data, etc. Output from the function shall be the information requested.

3.3.2.1.5 Resource Information. The Evaluation CPCI shall utilize the Resource Data Access Function and Resource Allocation Support provided by the Management CPCI for accessing and recording resource information associated with task training and evaluation. Input to the functions shall identify the request type and data particular to the request. Request type shall include recording resource requirements for an evaluation or training activity; checking availability of a resource; requesting allocation for a resource; deallocating a resource; and recording utilization of resources. Data particular to the request shall include resource identification, evaluation activity it is associated with, etc. Output of the functions shall be the request status.

3.3.2.1.6 Schedule Information. The Evaluation CPCI shall utilize the Schedule Access Function of the Management CPCI for accessing schedule information concerning evaluation, training, and quality control events. Input to the function shall include identification of the airman to be trained or evaluated. Output of the function shall include identification of the training, evaluation, or quality control event for the airman and identification of the resources required for the event.

3.3.2.1.7 System Evaluation Information. The Evaluation CPCI shall utilize functions of the Management CPCI for gathering data concerning system performance. This data shall be used in generating Unit Training Reports and System Effectiveness Reports. The ITR Summary Data Gathering Function shall provide group and system level summary data for training management information. The Resource Summary Data Gathering Function shall provide group and system level summary data for resource availability and utilization. Input to both of these functions shall identify the level of data desired - group or system - and any necessary group identification. Output shall consist of the requested summary data.

3.3.2.2 Evaluation CPCI to Training Development and Delivery CPCI. The Evaluation CPCI shall have interfaces with the Training Development and Delivery CPCI. The following subparagraphs describe the interfaces between these two CPCIs.

3.3.2.2.1 Training and Evaluation Development Data. The Evaluation CPCI shall utilize a function from the Training Development and Delivery CPCI to obtain this data for generating system reports. The System Effectiveness Report (3.2.4.2 - Evaluation CPCI) shall use the Training and Evaluation Development Data in determining actual costs involved in training materials development.

3.3.2.2.2 Processed Training Delivery Data. The Evaluation CPCI shall use a function from the Training Development and Delivery CPCI to obtain this data for generating system reports. Both the System Effectiveness Report (3.2.4.2 - Evaluation CPCI) and the Unit Training Report (3.2.4.3 - Evaluation CPCI) shall use the processed training delivery data in determining both development and delivery costs and effectiveness.

3.3.2.3 Evaluation CPCI to System Support CPCI. The Evaluation CPCI shall have interfaces with the System Support CPCI. The following subparagraphs describe the interfaces between these two CPCIs.

3.3.2.3.1 Terminal Input/Output. The Evaluation CPCI shall utilize the services of the System Support CPCI, communication interface software, to perform terminal input/output functions. The functions shall include the following:

- A. Accepting input from a terminal keyboard;
- B. Accepting coordinate data from a digitizer tablet;
- C. Sending text data to a terminal screen;
- D. Sending graphics data to a terminal screen;
- E. Accepting mark reader input.

3.3.2.3.2 Data Base Input/Output. The Evaluation CPCI shall utilize the services of the System Support CPCI, file manager interface software, to perform data base input/output functions. The services shall fall into two categories: file level and record level functions. File level services shall include the following.

- A. Allocation and deallocation of indexed sequential, direct access, and sequential files;
- B. Logically attaching (opening) and detaching (closing) files to/from a program;
- C. Removing (purging) all existing data from a file.

Record level input/output services shall include the following:

- A. Reading a record;
- B. Writing a record;
- C. Deleting a record;
- D. Reserving and releasing a record for/from exclusive use;
- E. Updating an existing record.

3.3.2.3.3 System Services. The Evaluation CPCI shall utilize the services of the System Support CPCI, system services interface software, to perform the following miscellaneous functions:

- A. Initiating and terminating program execution;
- B. Communicating between programs;
- C. Allocating and deallocating memory;
- D. Clock and timer services;
- E. Printer output functions.

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3.3.2.3.4 Access Control. The Evaluation CPCI shall utilize the services of the System Support CPCI, security interface software, to perform access control functions. The functions shall include identifying and validating a person as a user of the AOTS and determining the authorization characteristics of the user, e.g. trainee, trainer, evaluator, AFSC, etc.

3.3.2.3.5 Text Editing. The Evaluation CPCI shall utilize the services of the System Services CPCI, Text Editor, to perform software source editing functions during software development and testing.

3.3.2.3.6 Compilations. The Evaluation CPCI shall utilize the services of the System Services CPCI, Compilers, to perform software compilation functions during software development and testing.

3.4 Program Interrupts. Not applicable.

3.5 Timing and Sequencing Description. Sequencing of the programs is not dynamically controlled. As such no special considerations, other than the sequencing described in section 3.10 is needed.

3.6 Special Control Features. Not applicable.

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3.7 Storage Allocation

3.7.1 Data Base Definition

3.7.1.1 File Description.

<u>CPC Name</u>	<u>Access</u>	<u>Record Type Assoc</u>
1 BOE		
EVL001QD	IN/OUT	BOE.BEHAVIORAL_OBJECTIVE_TYPE
EVL001BD	IN/OUT	BOE.BEH_COND_STD_TYPE
ACAICAI	IN	CAGEN.CAI_KEY_TYPE
2 VERB_CHECK		
EVL002VI	IN/OUT	STRING
3 OBJ_TYPES		
4 TEST_EDITOR		
EVL005TI	IN/OUT	TIB_TYPE.TEST_TYPE
EVL007BD	IN	TIB_TYPE.BO_TIB_REC_TYPE
5 TIB_TYPE		
6 TEST_ITEM_BANK_EDITOR		
EVL007BD	IN/OUT	TIB_TYPE.BO_TIB_REC_TYPE
7 QUESTION		
EVL008RD	IN/OUT	QUESTION.QUEST_TYPE
8 PM_OTG		
EVL009QD	IN/OUT	PM_OTG.PERFORMANCE_MEASURE_TYPE
EVL009OD	IN/OUT	PM_OTG.ORAL_TEST_GUIDE_TYPE
9 GRAFIX		
ADAGRAPH	IN	GRTYPES.DRAWING_TYPE
10 CR_QUES		
EVL016DA	IN/OUT	CTCR.ALT_TYPE

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CPC Name	Access	Record Type Assoc
11 TEST PRES		
EVL005TI	IN/OUT	TIB_TYPE.TEST_TYPE
EVL018LI	IN	OFFLINE_TEST.LOG_REC_TYPE
EVL017RI	IN/OUT	TEST PRES.RESTART_TYPE
VCM I	OUT	TSOTYPES.CMI_TEST_REC_TYPE
12 ALTS		
13 TEST PRINT		
EVL005TI	IN	TIB_TYPE.TEST_TYPE
EVL007BD	IN	TIB_TYPE.BO_TIB_REC_TYPE
14 OFFLINE TEST		
EVL018BD	IN/OUT	OFFLINE_TEST.BITCONTROL_TYPE
EVL018LI	IN/OUT	OFFLINE_TEST.LOG_REC_TYPE
EVL018AI	IN/OUT	OFFLINE_TEST.ANSWERKEY_TYPE
EVL005TI	IN	TIB_TYPE.TEST_TYPE
15 FORM_DEFINITION		
16 FORM UTILITIES		
SCANTRON.FRMS	IN	STRING
17 FORM PROCESSING		
EVL018AI	IN	OFFLINE_TEST.ANSWERKEY_TYPE
EVL005TI	IN/OUT	TIB_TYPE.TEST_TYPE
VCM I	OUT	TSOTYPES.CMI_TEST_REC_TYPE
18 SCANTRON		
19 TIETYPES		
20 TIE		
VTKF	IN	TSOTYPES.CMI_TEST_KEY_REC_TYPE
VCM I	IN	TSOTYPES.CMI_TEST_REC_TYPE
21 TIETIE		
EVL005TI	IN	TIB_TYPE.TEST_TYPE
22 DOTIE		

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3.7.1.2 Table Description. Not applicable.

3.7.1.3 Item Description. The composite structures in the data base are identified in 3.7.1.1 with direct references to the CPC defining the structure. The structures and thus the items in the structure are described in the ADL included in the Unit Development Folder (UDF).

3.7.1.4 Graphic Table Description. Not applicable.

3.7.1.5 CPCI Constants. There are no global CPCI constants. The Ada visibility rules determine the extent of the visibility of the constants defined in the individual CPCs. The CPC detailed descriptions in section 3.10 identify the constants defined and the scope of the visibility of these constants. The ADL provided should be reviewed for proper end usage of any constant.

3.8 Object Code Creation. Object code shall be created using the hardware identified in the Evaluation CPCI Part I specification in section 3.1.1. The computer programs required, hardware information, and procedures required are as shown in the documentation for the related government furnished hardware and software.

3.9 Adaptation Data. Not applicable.

3.10 Detail Design Description

3.10.1 Identification of CPC No. 1. This CPC is composed of the Ada package designated by CM identification code EVL001S and EVL001B and named BOE.

3.10.1.1 CPC No. 1 Description. The Behavioral Objective Editor shall be called from the MTL and accessed through a given task/subtask. The user specifies a task/ subtask id for which he wants to access behavioral objectives. The Behavioral Objective Editor provides the user with the capability to display objective information, to revise an objective, to develop a new objective, to delete an objective, and to revise resources for an objective. Along with displaying the behavioral objective which contains the id, behavior, conditions, standards, and complete statement, the user can view the task/subtask statement for which the behavioral objective is being written, the task performance proficiency data, and/or the resources associated with that objective. When developing or revising behavioral objectives a user may be in either novice or expert mode. If a novice, the user creates a behavior, conditions, standards, and a complete statement. The user is able to copy the task/subtask statement into the behavior field. After the user enters the complete statement, (which should be a combination of the behavior, conditions, and standards) the individual fields that consist of the behavior, conditions, and standards are deleted. If a user is an expert, he develops only the complete statement. An expert has the capability to copy the task/subtask statement into the complete statement field. Key words can be specified in the complete statement field. The verb used in writing the statement is checked against an invalid verb list. The user is prompted for a new one until an acceptable verb is designated. The user may also breakdown task performance proficiency data by sections, chapters, and paragraphs while building or revising an objective. Publication information is associated with a specific behavioral objective. The user may revise/build the resources associated with that behavioral objective. When an objective is deleted, all unique tests, test items, and graphic cross-references are also deleted. An array of test ids (developed in the Test Editor) is stored in the behavioral objective record in order to associated tests with behavioral objectives.

3.10.1.2 CPC No. 1 Charts. This CPC is defined by the design language included in it's Unit Development Folder (UDF).

3.10.1.3 CPC No. 1 Interfaces. The interfaces to other CPCs

from this CPC are shown in the UDF. Appendix B contains graphics showing the structure of this interface. The interface to this CPC from other AOTS CPCs is defined by the specification portion of the CPC included in the UDF. Appendix B also contains cross reference tables identifying the CPCs that interface to this CPC.

3.10.1.4 CPC No. 1 Data Organization. The data organization of this CPC is detailed in the Ada source code provided in the UDF. The specification portion of the Ada source code defines the externally available data elements. The internally defined constants, symbols, and variables together with their definitions are also described in the UDF.

3.10.1.5 CPC No. 1 Limitations. The limitations of this CPC or items in this CPC are described where appropriate in the Ada source code provided in the UDF. No other limitations exist for this CPC except those defined in the Ada source code.

3.10.1.6 CPC No. 1 Listing. The current listing of this CPC is provided in the UDF.

3.10.2 Identification of CPC No. 2. This CPC is composed of the Ada package designated by CM identification code EVL002S and EVL002B and named VERB_CHECK.

3.10.2.1 CPC No. 2 Description. This package allows an authorized user to build the list of unacceptable verbs, add verbs to the list, or delete verbs from the list. This list of verbs is used in the building of the complete statement portion of the behavioral objectives.

3.10.2.2 CPC No. 2 Charts. This CPC is defined by the design language included in it's Unit Development Folder (UDF).

3.10.2.3 CPC No. 2 Interfaces. The interfaces to other CPCs from this CPC are shown in the UDF. Appendix B contains graphics showing the structure of this interface. The interface to this CPC from other AOTS CPCs is defined by the specification portion of the CPC included in the UDF. Appendix B also contains cross reference tables identifying the CPCs that interface to this CPC.

3.10.2.4 CPC No. 2 Data Organization. The data organization of this CPC is detailed in the Ada source code provided in the UDF. The specification portion of the Ada source code defines the externally available data elements. The internally defined constants, symbols, and variables together with their definitions

are also described in the UDF.

3.10.2.5 CPC No. 2 Limitations. The limitations of this CPC or items in this CPC are described where appropriate in the Ada source code provided in the UDF. No other limitations exist for this CPC except those defined in the Ada source code.

3.10.2.6 CPC No. 2 Listing. The current listing of this CPC is provided in the UDF.

3.10.3 Identification of CPC No. 3. This CPC is composed of the Ada package designated by CM identification code EVL003S and named OBJ_TYPES.

3.10.3.1 CPC No. 3 Description. This package contains types common to the Test Editor and Behavioral Objectives Editor.

3.10.3.2 CPC No. 3 Charts. This CPC is defined by the design language included in it's Unit Development Folder (UDF).

3.10.3.3 CPC No. 3 Interfaces. The interfaces to other CPCs from this CPC are shown in the UDF. Appendix B contains graphics showing the structure of this interface. The interface to this CPC from other AOTS CPCs is defined by the specification portion of the CPC included in the UDF. Appendix B also contains cross reference tables identifying the CPCs that interface to this CPC.

3.10.3.4 CPC No. 3 Data Organization. The data organization of this CPC is detailed in the Ada source code provided in the UDF. The specification portion of the Ada source code defines the externally available data elements. The internally defined constants, symbols, and variables together with their definitions are also described in the UDF.

3.10.3.5 CPC No. 3 Limitations. The limitations of this CPC or items in this CPC are described where appropriate in the Ada source code provided in the UDF. No other limitations exist for this CPC except those defined in the Ada source code.

3.10.3.6 CPC No. 3 Listing. The current listing of this CPC is provided in the UDF.

3.10.4 Identification of CPC No. 4. This CPC is composed of the Ada package designated by CM identification code EVL005S and EVL005B and named TEST_EDITOR.

3.10.4.1 CPC No. 4 Description. This package shall provide the user with the capabilities to create, revise, delete, and display tests. The user is able to copy an existing test and update it in the creation of a new test. The user may display an entire test or a list of test ids associated with a behavioral objective or a task/subtask. There are two different types of tests available; knowledge tests and performance measures (which contain oral test guides). Knowledge tests contain true/false, matching, multiple choice, touch, and constructed response questions. Knowledge tests can be administered on- or off-line. Performance measures contain activities which are administered off-line.

3.10.4.2 CPC No. 4 Charts. This CPC is defined by the design language included in it's Unit Development Folder (UDF).

3.10.4.3 CPC No. 4 Interfaces. The interfaces to other CPCs from this CPC are shown in the UDF. Appendix B contains graphics showing the structure of this interface. The interface to this CPC from other AOTS CPCs is defined by the specification portion of the CPC included in the UDF. Appendix B also contains cross reference tables identifying the CPCs that interface to this CPC.

3.10.4.4 CPC No. 4 Data Organization. The data organization of this CPC is detailed in the Ada source code provided in the UDF. The specification portion of the Ada source code defines the externally available data elements. The internally defined constants, symbols, and variables together with their definitions are also described in the UDF.

3.10.4.5 CPC No. 4 Limitations. The limitations of this CPC or items in this CPC are described where appropriate in the Ada source code provided in the UDF. No other limitations exist for this CPC except those defined in the Ada source code.

3.10.4.6 CPC No. 4 Listing. The current listing of this CPC is provided in the UDF.

3.10.5 Identification of CPC No. 5. This CPC is composed of the Ada package designated by CM identification code EVL006S and EVL006B and named TIB_TYPE.

3.10.5.1 CPC No. 5 Description. This package shall provide access to the common types needed by packages of the test item bank editor.

3.10.5.2 CPC No. 5 Charts. This CPC is defined by the design language included in it's Unit Development Folder (UDF).

3.10.5.3 CPC No. 5 Interfaces. The interfaces to other CPCs from this CPC are shown in the UDF. Appendix B contains graphics showing the structure of this interface. The interface to this CPC from other AOTS CPCs is defined by the specification portion of the CPC included in the UDF. Appendix B also contains cross reference tables identifying the CPCs that interface to this CPC.

3.10.5.4 CPC No. 5 Data Organization. The data organization of this CPC is detailed in the Ada source code provided in the UDF. The specification portion of the Ada source code defines the externally available data elements. The internally defined constants, symbols, and variables together with their definitions are also described in the UDF.

3.10.5.5 CPC No. 5 Limitations. The limitations of this CPC or items in this CPC are described where appropriate in the Ada source code provided in the UDF. No other limitations exist for this CPC except those defined in the Ada source code.

3.10.5.6 CPC No. 5 Listing. The current listing of this CPC is provided in the UDF.

3.10.6 Identification of CPC No. 6. This CPC is composed of the Ada package designated by CM identification code EVL007S and EVL007B and named TEST_ITEM_BANK_EDITOR.

3.10.6.1 CPC No. 6 Description. This package shall be the main package for the Test Item Bank Editor, and allows the user to display, create, modify, and delete test item bank records. These records include Task_Knowledge_Items (Questions), Performance Measures, and Oral Test Guides. Task_Knowledge_Items consist of either multiple choice, true/false, matching, touch, or constructed response questions. Test items are developed for specific behavioral objectives, and in addition to being accessed directly via a test item id, they can be accessed indirectly with a objective id. This package can be called by the Test Editor program to allow a user to randomly select or specify test items to be included on a test and also display test items on a test.

3.10.6.2 CPC No. 6 Charts. This CPC is defined by the design language included in it's Unit Development Folder (UDF).

3.10.6.3 CPC No. 6 Interfaces. The interfaces to other CPCs

from this CPC are shown in the UDF. Appendix B contains graphics showing the structure of this interface. The interface to this CPC from other AOTS CPCs is defined by the specification portion of the CPC included in the UDF. Appendix B also contains cross reference tables identifying the CPCs that interface to this CPC.

3.10.6.4 CPC No. 6 Data Organization. The data organization of this CPC is detailed in the Ada source code provided in the UDF. The specification portion of the Ada source code defines the externally available data elements. The internally defined constants, symbols, and variables together with their definitions are also described in the UDF.

3.10.6.5 CPC No. 6 Limitations. The limitations of this CPC or items in this CPC are described where appropriate in the Ada source code provided in the UDF. No other limitations exist for this CPC except those defined in the Ada source code.

3.10.6.6 CPC No. 6 Listing. The current listing of this CPC is provided in the UDF.

3.10.7 Identification of CPC No. 7. This CPC is composed of the Ada package designated by CM identification code EVL008S and EVL008B and named QUESTION.

3.10.7.1 CPC No. 7 Description. This package shall provide the routines necessary to display, create, modify, and delete task knowledge items (true/false, multiple choice, matching, touch, and constructed response questions).

3.10.7.2 CPC No. 7 Charts. This CPC is defined by the design language included in it's Unit Development Folder (UDF).

3.10.7.3 CPC No. 7 Interfaces. The interfaces to other CPCs from this CPC are shown in the UDF. Appendix B contains graphics showing the structure of this interface. The interface to this CPC from other AOTS CPCs is defined by the specification portion of the CPC included in the UDF. Appendix B also contains cross reference tables identifying the CPCs that interface to this CPC.

3.10.7.4 CPC No. 7 Data Organization. The data organization of this CPC is detailed in the Ada source code provided in the UDF. The specification portion of the Ada source code defines the externally available data elements. The internally defined constants, symbols, and variables together with their definitions are also described in the UDF.

3.10.7.5 CPC No. 7 Limitations. The limitations of this CPC or items in this CPC are described where appropriate in the Ada source code provided in the UDF. No other limitations exist for this CPC except those defined in the Ada source code.

3.10.7.6 CPC No. 7 Listing. The current listing of this CPC is provided in the UDF.

3.10.8 Identification of CPC No. 8. This CPC is composed of the Ada package designated by CM identification code EVL009S and EVL009B and named PM_OTG.

3.10.8.1 CPC No. 8 Description. This package shall provide the necessary routines used to display, create, modify, and delete performance measures and oral test guides. Performance measures and oral test guides are needed for the administration of performance tests. Routines in this package are called from the test editor to select performance measures and oral test guides for performance tests. The test item bank calls routines in this package to display, create, and modify performance measures and oral test guides. The performance measures consist of steps on which an airman is evaluated to be certified on a task/subtask. The oral test guide is textual information provided to the evaluator to guide him in the evaluation of the airman.

3.10.8.2 CPC No. 8 Charts. This CPC is defined by the design language included in it's Unit Development Folder (UDF).

3.10.8.3 CPC No. 8 Interfaces. The interfaces to other CPCs from this CPC are shown in the UDF. Appendix B contains graphics showing the structure of this interface. The interface to this CPC from other AOTS CPCs is defined by the specification portion of the CPC included in the UDF. Appendix B also contains cross reference tables identifying the CPCs that interface to this CPC.

3.10.8.4 CPC No. 8 Data Organization. The data organization of this CPC is detailed in the Ada source code provided in the UDF. The specification portion of the Ada source code defines the externally available data elements. The internally defined constants, symbols, and variables together with their definitions are also described in the UDF.

3.10.8.5 CPC No. 8 Limitations. The limitations of this CPC or items in this CPC are described where appropriate in the Ada

source code provided in the UDF. No other limitations exist for this CPC except those defined in the Ada source code.

3.10.8.6 CPC No. 8 Listing. The current listing of this CPC is provided in the UDF.

3.10.9 Identification of CPC No. 9. This CPC is composed of the Ada package designated by CM identification code EVL012S and EVL012B and named GRAFIX.

3.10.9.1 CPC No. 9 Description. This package shall provide the routines needed to display, modify, and draw graphics. These routines shall interface with the ISS graphics library routines to draw the graphics and to allow use of the same graphic drawings in ISS and AOTS.

3.10.9.2 CPC No. 9 Charts. This CPC is defined by the design language included in it's Unit Development Folder (UDF).

3.10.9.3 CPC No. 9 Interfaces. The interfaces to other CPCs from this CPC are shown in the UDF. Appendix B contains graphics showing the structure of this interface. The interface to this CPC from other AOTS CPCs is defined by the specification portion of the CPC included in the UDF. Appendix B also contains cross reference tables identifying the CPCs that interface to this CPC.

3.10.9.4 CPC No. 9 Data Organization. The data organization of this CPC is detailed in the Ada source code provided in the UDF. The specification portion of the Ada source code defines the externally available data elements. The internally defined constants, symbols, and variables together with their definitions are also described in the UDF.

3.10.9.5 CPC No. 9 Limitations. The limitations of this CPC or items in this CPC are described where appropriate in the Ada source code provided in the UDF. No other limitations exist for this CPC except those defined in the Ada source code.

3.10.9.6 CPC No. 9 Listing. The current listing of this CPC is provided in the UDF.

3.10.10 Identification of CPC No. 10. This CPC is composed of the Ada package designated by CM identification code EVL016S and EVL016B and named CR_QUES.

3.10.10.1 CPC No. 10 Description. This package shall provide

the routines necessary to interface to the ISS constructed response processing packages for both authoring of a constructed response question and presenting and judging the question.

3.10.10.2 CPC No. 10 Charts. This CPC is defined by the design language included in it's Unit Development Folder (UDF).

3.10.10.3 CPC No. 10 Interfaces. The interfaces to other CPCs from this CPC are shown in the UDF. Appendix B contains graphics showing the structure of this interface. The interface to this CPC from other AOTS CPCs is defined by the specification portion of the CPC included in the UDF. Appendix B also contains cross reference tables identifying the CPCs that interface to this CPC.

3.10.10.4 CPC No. 10 Data Organization. The data organization of this CPC is detailed in the Ada source code provided in the UDF. The specification portion of the Ada source code defines the externally available data elements. The internally defined constants, symbols, and variables together with their definitions are also described in the UDF.

3.10.10.5 CPC No. 10 Limitations. The limitations of this CPC or items in this CPC are described where appropriate in the Ada source code provided in the UDF. No other limitations exist for this CPC except those defined in the Ada source code.

3.10.10.6 CPC No. 10 Listing. The current listing of this CPC is provided in the UDF.

3.10.11 Identification of CPC No. 11. This CPC is composed of the Ada package designated by CM identification code EVL017S and EVL017B and named TEST_PRES.

3.10.11.1 CPC No. 11 Description. This package will present a test to the trainee then score it. This package will keep a re-start record around in case the system goes down while the user is in the process of taking a test. When the system comes back up the user is positioned where he left off. When the test has been scored, results will be reported to the airman's ITR and a print out will be generated for his training manager.

3.10.11.2 CPC No. 11 Charts. This CPC is defined by the design language included in it's Unit Development Folder (UDF).

3.10.11.3 CPC No. 11 Interfaces. The interfaces to other CPCs from this CPC are shown in the UDF. Appendix B contains graphics

showing the structure of this interface. The interface to this CPC from other AOTS CPCs is defined by the specification portion of the CPC included in the UDF. Appendix B also contains cross reference tables identifying the CPCs that interface to this CPC.

3.10.11.4 CPC No. 11 Data Organization. The data organization of this CPC is detailed in the Ada source code provided in the UDF. The specification portion of the Ada source code defines the externally available data elements. The internally defined constants, symbols, and variables together with their definitions are also described in the UDF.

3.10.11.5 CPC No. 11 Limitations. The limitations of this CPC or items in this CPC are described where appropriate in the Ada source code provided in the UDF. No other limitations exist for this CPC except those defined in the Ada source code.

3.10.11.6 CPC No. 11 Listing. The current listing of this CPC is provided in the UDF.

3.10.12 Identification of CPC No. 12. This CPC is composed of the Ada package designated by CM identification code EVL019S and EVL019B and named ALTS.

3.10.12.1 CPC No. 12 Description. This package shall provide the routines necessary to display, create, modify, and delete the alternatives, feedback, and correct answer for task knowledge items (true/false, multiple choice, matching, touch, and constructed response questions).

3.10.12.2 CPC No. 12 Charts. This CPC is defined by the design language included in it's Unit Development Folder (UDF).

3.10.12.3 CPC No. 12 Interfaces. The interfaces to other CPCs from this CPC are shown in the UDF. Appendix B contains graphics showing the structure of this interface. The interface to this CPC from other AOTS CPCs is defined by the specification portion of the CPC included in the UDF. Appendix B also contains cross reference tables identifying the CPCs that interface to this CPC.

3.10.12.4 CPC No. 12 Data Organization. The data organization of this CPC is detailed in the Ada source code provided in the UDF. The specification portion of the Ada source code defines the externally available data elements. The internally defined constants, symbols, and variables together with their definitions are also described in the UDF.

3.10.12.5 CPC No. 12 Limitations. The limitations of this CPC or items in this CPC are described where appropriate in the Ada source code provided in the UDF. No other limitations exist for this CPC except those defined in the Ada source code.

3.10.12.6 CPC No. 12 Listing. The current listing of this CPC is provided in the UDF.

3.10.13 Identification of CPC No. 13. This CPC is composed of the Ada procedure designated by CM identification code EVL024P and named TEST_PRINT.

3.10.13.1 CPC No. 13 Description. This package shall support the printing of test items via the test item bank editor and the test editor as a background process using the interface supplied by the background monitor.

3.10.13.2 CPC No. 13 Charts. This CPC is defined by the design language included in it's Unit Development Folder (UDF).

3.10.13.3 CPC No. 13 Interfaces. The interfaces to other CPCs from this CPC are shown in the UDF. Appendix B contains graphics showing the structure of this interface. The interface to this CPC from other AOTS CPCs is defined by the specification portion of the CPC included in the UDF. Appendix B also contains cross reference tables identifying the CPCs that interface to this CPC.

3.10.13.4 CPC No. 13 Data Organization. The data organization of this CPC is detailed in the Ada source code provided in the UDF. The internally defined constants, symbols, and variables together with their definitions are also described in the UDF.

3.10.13.5 CPC No. 13 Limitations. The limitations of this CPC or items in this CPC are described where appropriate in the Ada source code provided in the UDF. No other limitations exist for this CPC except those defined in the Ada source code.

3.10.13.6 CPC No. 13 Listing. The current listing of this CPC is provided in the UDF.

3.10.14 Identification of CPC No. 14. This CPC is composed of the Ada package designated by CM identification code EVL018S and EVL018B and named OFFLINE_TEST.

3.10.14.1 CPC No. 14 Description. This package will generate

off-line knowledge and performance tests. It keeps a log file for each set of tests generated and allows authorized users to update and/or print all or part of the log file. The suspense date and destroyed notices can be updated by authorized users. The test is automatically indicated as taken when the Scantron reads and scores a test. Once all tests having the same control number have been destroyed the log record is deleted.

3.10.14.2 CPC No. 14 Charts. This CPC is defined by the design language included in it's Unit Development Folder (UDF).

3.10.14.3 CPC No. 14 Interfaces. The interfaces to other CPCs from this CPC are shown in the UDF. Appendix B contains graphics showing the structure of this interface. The interface to this CPC from other AOTS CPCs is defined by the specification portion of the CPC included in the UDF. Appendix B also contains cross reference tables identifying the CPCs that interface to this CPC.

3.10.14.4 CPC No. 14 Data Organization. The data organization of this CPC is detailed in the Ada source code provided in the UDF. The specification portion of the Ada source code defines the externally available data elements. The internally defined constants, symbols, and variables together with their definitions are also described in the UDF.

3.10.14.5 CPC No. 14 Limitations. The limitations of this CPC or items in this CPC are described where appropriate in the Ada source code provided in the UDF. No other limitations exist for this CPC except those defined in the Ada source code.

3.10.14.6 CPC No. 14 Listing. The current listing of this CPC is provided in the UDF.

3.10.15 Identification of CPC No. 15. This CPC is composed of the Ada package designated by CM identification code EVL020S and named FORM_DEFINITION.

3.10.15.1 CPC No. 15 Description. This package provides visibility of the form buffer for packages processing scantron forms. The form buffer contains fields of information converted from the binary data read off the scantron forms.

3.10.15.2 CPC No. 15 Charts. This CPC is defined by the design language included in it's Unit Development Folder (UDF).

3.10.15.3 CPC No. 15 Interfaces. The interfaces to other CPCs

from this CPC are shown in the UDF. Appendix B contains graphics showing the structure of this interface. The interface to this CPC from other AOTS CPCs is defined by the specification portion of the CPC included in the UDF. Appendix B also contains cross reference tables identifying the CPCs that interface to this CPC.

3.10.15.4 CPC No. 15 Data Organization. The data organization of this CPC is detailed in the Ada source code provided in the UDF. The specification portion of the Ada source code defines the externally available data elements. The internally defined constants, symbols, and variables together with their definitions are also described in the UDF.

3.10.15.5 CPC No. 15 Limitations. The limitations of this CPC or items in this CPC are described where appropriate in the Ada source code provided in the UDF. No other limitations exist for this CPC except those defined in the Ada source code.

3.10.15.6 CPC No. 15 Listing. The current listing of this CPC is provided in the UDF.

3.10.16 Identification of CPC No. 16. This CPC is composed of the Ada package designated by CM identification code EVL021S and EVL021B and named FORM_UTILITIES.

3.10.16.1 CPC No. 16 Description. This package provides support for the optical mark reader program. It provides routines to define forms and store them in a linked list, find the form just read in the list, and convert the array of characters read off the form to the fields they represent on the form.

3.10.16.2 CPC No. 16 Charts. This CPC is defined by the design language included in it's Unit Development Folder (UDF).

3.10.16.3 CPC No. 16 Interfaces. The interfaces to other CPCs from this CPC are shown in the UDF. Appendix B contains graphics showing the structure of this interface. The interface to this CPC from other AOTS CPCs is defined by the specification portion of the CPC included in the UDF. Appendix B also contains cross reference tables identifying the CPCs that interface to this CPC.

3.10.16.4 CPC No. 16 Data Organization. The data organization of this CPC is detailed in the Ada source code provided in the UDF. The specification portion of the Ada source code defines the externally available data elements. The internally defined constants, symbols, and variables together with their definitions

are also described in the UDF.

3.10.16.5 CPC No. 16 Limitations. The limitations of this CPC or items in this CPC are described where appropriate in the Ada source code provided in the UDF. No other limitations exist for this CPC except those defined in the Ada source code.

3.10.16.6 CPC No. 16 Listing. The current listing of this CPC is provided in the UDF.

3.10.17 Identification of CPC No. 17. This CPC is composed of the Ada package designated by CM identification code EVL022S and EVL022B and named FORM_PROCESSING.

3.10.17.1 CPC No. 17 Description. This package reads and processes scantron forms. It validates/checks data read in from the scantron, grades knowledge tests or performance tests, stores information for test item analysis, displays and records results, and marks form as processed.

3.10.17.2 CPC No. 17 Charts. This CPC is defined by the design language included in it's Unit Development Folder (UDF).

3.10.17.3 CPC No. 17 Interfaces. The interfaces to other CPCs from this CPC are shown in the UDF. Appendix B contains graphics showing the structure of this interface. The interface to this CPC from other AOTS CPCs is defined by the specification portion of the CPC included in the UDF. Appendix B also contains cross reference tables identifying the CPCs that interface to this CPC.

3.10.17.4 CPC No. 17 Data Organization. The data organization of this CPC is detailed in the Ada source code provided in the UDF. The specification portion of the Ada source code defines the externally available data elements. The internally defined constants, symbols, and variables together with their definitions are also described in the UDF.

3.10.17.5 CPC No. 17 Limitations. The limitations of this CPC or items in this CPC are described where appropriate in the Ada source code provided in the UDF. No other limitations exist for this CPC except those defined in the Ada source code.

3.10.17.6 CPC No. 17 Listing. The current listing of this CPC is provided in the UDF.

3.10.18 Identification of CPC No. 18. This CPC is composed of

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the Ada procedure designated by CM identification code EVL023P and named SCANTRON.

3.10.18.1 CPC No. 18 Description. This procedure provides optical mark reading and processing functions. It sets up the Optical Mark Reader, reads binary data, calls routines to find which form it is and to convert data to fields needed for processing, and calls routines to process the form (Grade Test, Store Results).

3.10.18.2 CPC No. 18 Charts. This CPC is defined by the design language included in it's Unit Development Folder (UDF).

3.10.18.3 CPC No. 18 Interfaces. The interfaces to other CPCs from this CPC are shown in the UDF. Appendix B contains graphics showing the structure of this interface. The interface to this CPC from other AOTS CPCs is defined by the specification portion of the CPC included in the UDF. Appendix B also contains cross reference tables identifying the CPCs that interface to this CPC.

3.10.18.4 CPC No. 18 Data Organization. The data organization of this CPC is detailed in the Ada source code provided in the UDF. The internally defined constants, symbols, and variables together with their definitions are also described in the UDF.

3.10.18.5 CPC No. 18 Limitations. The limitations of this CPC or items in this CPC are described where appropriate in the Ada source code provided in the UDF. No other limitations exist for this CPC except those defined in the Ada source code.

3.10.18.6 CPC No. 18 Listing. The current listing of this CPC is provided in the UDF.

3.10.19 Identification of CPC No. 19. This CPC is composed of the Ada package designated by CM identification code EVL025S and named TIETYPES.

3.10.19.1 CPC No. 19 Description. This package contains global variables needed by the TIE program.

3.10.19.2 CPC No. 19 Charts. This CPC is defined by the design language included in it's Unit Development Folder (UDF).

3.10.19.3 CPC No. 19 Interfaces. The interfaces to other CPCs from this CPC are shown in the UDF. Appendix B contains graphics showing the structure of this interface. The interface to this

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CPC from other AOTS CPCs is defined by the specification portion of the CPC included in the UDF. Appendix B also contains cross reference tables identifying the CPCs that interface to this CPC.

3.10.19.4 CPC No. 19 Data Organization. The data organization of this CPC is detailed in the Ada source code provided in the UDF. The specification portion of the Ada source code defines the externally available data elements. The internally defined constants, symbols, and variables together with their definitions are also described in the UDF.

3.10.19.5 CPC No. 19 Limitations. The limitations of this CPC or items in this CPC are described where appropriate in the Ada source code provided in the UDF. No other limitations exist for this CPC except those defined in the Ada source code.

3.10.19.6 CPC No. 19 Listing. The current listing of this CPC is provided in the UDF.

3.10.20 Identification of CPC No. 20. This CPC is composed of the Ada procedure designated by CM identification code EVL026P and named TIE.

3.10.20.1 CPC No. 20 Description. TIE is the batch job processing portion of TIE (Test Item Evaluation). Automatic input and initiation is provided by TIETie.

3.10.20.2 CPC No. 20 Charts. This CPC is defined by the design language included in it's Unit Development Folder (UDF).

3.10.20.3 CPC No. 20 Interfaces. The interfaces to other CPCs from this CPC are shown in the UDF. Appendix B contains graphics showing the structure of this interface. The interface to this CPC from other AOTS CPCs is defined by the specification portion of the CPC included in the UDF. Appendix B also contains cross reference tables identifying the CPCs that interface to this CPC.

3.10.20.4 CPC No. 20 Data Organization. The data organization of this CPC is detailed in the Ada source code provided in the UDF. The internally defined constants, symbols, and variables together with their definitions are also described in the UDF.

3.10.20.5 CPC No. 20 Limitations. The limitations of this CPC or items in this CPC are described where appropriate in the Ada source code provided in the UDF. No other limitations exist for this CPC except those defined in the Ada source code.

3.10.20.6 CPC No. 20 Listing. The current listing of this CPC is provided in the UDF.

3.10.21 Identification of CPC No. 21. This CPC is composed of the Ada package designated by CM identification code EVL027S and EVL027B and named TIETIE.

3.10.21.1 CPC No. 21 Description. This package shall interface the nightly AOTS run to the TIE (Test Item Evaluation) package for monthly analysis of test results.

3.10.21.2 CPC No. 21 Charts. This CPC is defined by the design language included in it's Unit Development Folder (UDF).

3.10.21.3 CPC No. 21 Interfaces. The interfaces to other CPCs from this CPC are shown in the UDF. Appendix B contains graphics showing the structure of this interface. The interface to this CPC from other AOTS CPCs is defined by the specification portion of the CPC included in the UDF. Appendix B also contains cross reference tables identifying the CPCs that interface to this CPC.

3.10.21.4 CPC No. 21 Data Organization. The data organization of this CPC is detailed in the Ada source code provided in the UDF. The specification portion of the Ada source code defines the externally available data elements. The internally defined constants, symbols, and variables together with their definitions are also described in the UDF.

3.10.21.5 CPC No. 21 Limitations. The limitations of this CPC or items in this CPC are described where appropriate in the Ada source code provided in the UDF. No other limitations exist for this CPC except those defined in the Ada source code.

3.10.21.6 CPC No. 21 Listing. The current listing of this CPC is provided in the UDF.

3.10.22 Identification of CPC No. 22. This CPC is composed of the Ada package designated by CM identification code EVL028S and EVL028B and named DOTIE.

3.10.22.1 CPC No. 22 Description. This is the Test Item Evaluation (TIE) program. DoTIE is the user interface to TIE, the actual processing is done by the TIE program. TIE reports student performance for online and offline tests. The report includes the following items: Input parameters for TIE run, Test

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and subscale statistics, Question statistics by subscale, and Item choice distribution.

3.10.22.2 CPC No. 22 Charts. This CPC is defined by the design language included in it's Unit Development Folder (UDF).

3.10.22.3 CPC No. 22 Interfaces. The interfaces to other CPCs from this CPC are shown in the UDF. Appendix B contains graphics showing the structure of this interface. The interface to this CPC from other AOTS CPCs is defined by the specification portion of the CPC included in the UDF. Appendix B also contains cross reference tables identifying the CPCs that interface to this CPC.

3.10.22.4 CPC No. 22 Data Organization. The data organization of this CPC is detailed in the Ada source code provided in the UDF. The specification portion of the Ada source code defines the externally available data elements. The internally defined constants, symbols, and variables together with their definitions are also described in the UDF.

3.10.22.5 CPC No. 22 Limitations. The limitations of this CPC or items in this CPC are described where appropriate in the Ada source code provided in the UDF. No other limitations exist for this CPC except those defined in the Ada source code.

3.10.22.6 CPC No. 22 Listing. The current listing of this CPC is provided in the UDF.

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4. QUALITY ASSURANCE
N/A
5. PREPARATION FOR DELIVERY
N/A

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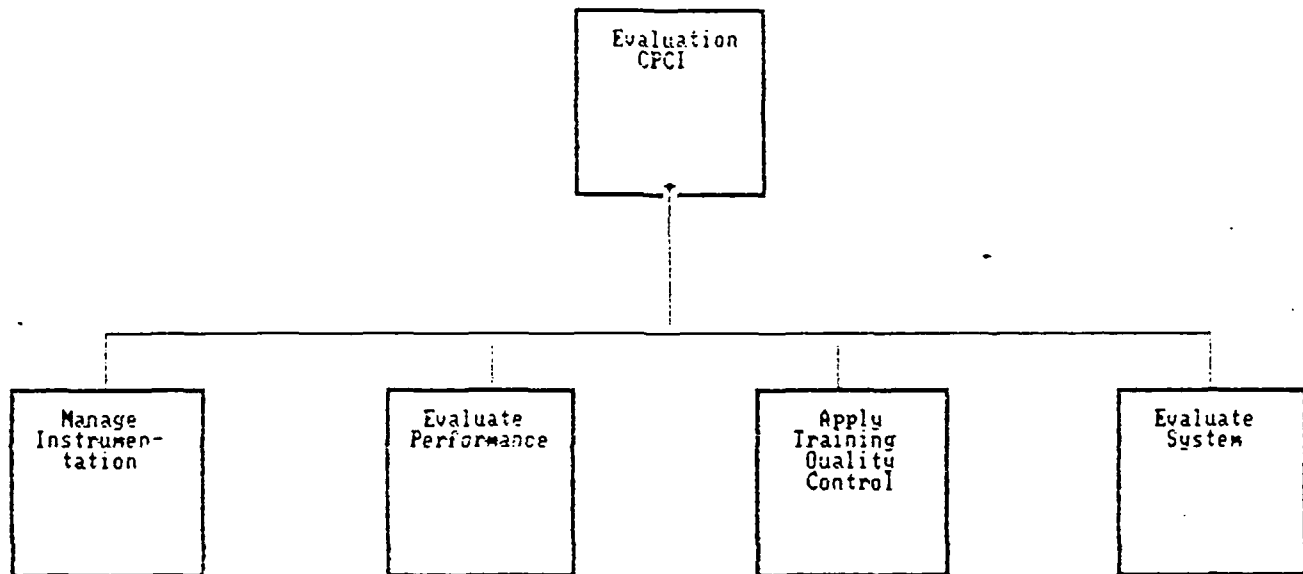


Figure 1
AOTS Visual Table of Contents
Evaluation CPCI

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 Date: 23 June 1989

CPC Number

Part I Paragraphs (DFD Processes)											1	1	1	1	1	1	1	1	1	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2
3.2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3.2.1	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3.2.1.1	*		*	*		*						*										
3.2.1.1(1)	*																					
3.2.1.1(2)	*		*																			
3.2.1.1(3)	*		*																			
3.2.1.1(4)	*		*																			
3.2.1.1(5)	*		*																			
3.2.1.1(6)	*		*	*		*																
3.2.1.2			*	*	*	*	*	*	*													
3.2.1.2(1)			*	*	*	*	*	*	*													
3.2.1.2(2)			*	*	*	*	*	*	*													
3.2.1.2(3)								*	*													
3.2.1.2(4)																						
3.2.1.2(5)			*	*	*	*	*	*	*													
3.2.1.3	*		*	*	*	*	*	*	*													
3.2.1.3(1)	*		*																			
3.2.1.3(2)			*																			
3.2.1.3(3)	*		*			*																
3.2.1.3(4)			*																			
3.2.1.3(5)			*																			
3.2.1.3(6)			*																			
3.2.1.3(7)							*															
3.2.1.3(8)		*	*	*	*	*	*	*	*													
3.2.1.3(9)							*															
3.2.1.3(10)							*															
3.2.1.4																						
3.2.1.5																						
3.2.1.5(1)																						
3.2.1.5(2)																						
3.2.1.5(3)																						
3.2.1.5(4)																						
3.2.1.5(5)																						

Table 1 - Part I Paragraph to Part II CPC Cross Reference Matrix

Specification Number 70S647413
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CPC Number

Part I Paragraphs (DFD Processes)										1	1	1	1	1	1	1	1	1	2	2	2
1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2
3.2.1.6																					
3.2.1.6(1)																					
3.2.1.6(2)																					
3.2.1.6(3)																					
3.2.1.6(4)																					
3.2.1.6(5)																					
3.2.1.6(6)																					
3.2.1.7																					
3.2.1.7(1)																					
3.2.1.7(2)																					
3.2.1.7(3)																					
3.2.1.7(4)																					
3.2.1.7(5)																					
3.2.1.7(6)																					
3.2.1.8																					
3.2.1.8(1)																					
3.2.1.8(2)																					
3.2.1.8(3)																					
3.2.2																					
3.2.2.1																					
3.2.2.1(1)																					
3.2.2.1(2)																					
3.2.2.1(3)																					
3.2.2.2																					
3.2.2.2(1)																					
3.2.2.2(2)																					
3.2.2.2(3)																					
3.2.2.3																					
3.2.2.3(1)																					
3.2.2.3(2)																					
3.2.2.3(3)																					

Table 1 - Part I Paragraph to Part II CPC Cross Reference Matrix
 (Cont'd)

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Part I Paragraphs (DFD Processes)	CPC Number (Management)										
	0	5	1	1	9	7	9	9	0	0	5
	1	5	3	4	9	8	2	8	1	2	0
3.2.1.6											
3.2.1.6(1)											
3.2.1.6(2)											
3.2.1.6(3)											
3.2.1.6(4)											
3.2.1.6(5)											
3.2.1.6(6)											
3.2.1.7											
3.2.1.7(1)											
3.2.1.7(2)											
3.2.1.7(3)											
3.2.1.7(4)											
3.2.1.7(5)											
3.2.1.7(6)											
3.2.1.8											
3.2.1.8(1)											
3.2.1.8(2)											
3.2.1.8(3)											
3.2.2											
3.2.2.1											
3.2.2.1(1)											
3.2.2.1(2)											
3.2.2.1(3)											
3.2.2.2											
3.2.2.2(1)											
3.2.2.2(2)											
3.2.2.2(3)											
3.2.2.3											
3.2.2.3(1)											
3.2.2.3(2)											
3.2.2.3(3)											

Table 1 - Part I Paragraph to Part II CPC Cross Reference Matrix
 (Cont'd)

CPC Number

N/A

41

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Part I Paragraphs (DFD Processes)	CPC Number (Management)										
											1 1
	0	5	1	1	9	7	9	9	0	0	5
	1	5	3	4	9	8	2	8	1	2	0
3.2.3			*	*							
3.2.3.1			*	*							
3.2.3.1(1)			*	*							
3.2.3.1(2)			*	*							
3.2.3.1(3)			*	*							
3.2.3.2			*	*							
3.2.3.2(1)			*	*							
3.2.3.2(2)			*	*							
3.2.3.2(3)			*	*							
3.2.3.2(4)			*	*							
3.2.4					*	*			*		
3.2.4.1									*		
3.2.4.2					*	*					
3.2.4.2(1)					*	*					
3.2.4.2(2)					*	*					
3.2.4.2(3)					*	*					
3.2.4.2(4)					*	*					
3.2.4.3											N/A
3.2.4.4											N/A

Table 1 - Part I Paragraph to Part II CPC Cross Reference Matrix
 (Cont'd)

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10. APPENDIX A - CPC TABLES. The following tables represent lists of specific source packages. The tables are ordered by CPC Number, CM identification, and Ada package name.

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INDEX BY CPC NUMBER

<u>CPC</u>	<u>CM</u>	<u>Id</u>	<u>Package Name</u>
1	EVL001S	BOE	
1	EVL001B	BOE	
2	EVL002S	VERB_CHECK	
2	EVL002B	VERB_CHECK	
3	EVL003S	OBJ_TYPES	
4	EVL005S	TEST_EDITOR	
4	EVL005B	TEST_EDITOR	
5	EVL006S	TIB_TYPE	
5	EVL006B	TIB_TYPE	
6	EVL007S	TEST_ITEM_BANK_EDITOR	
6	EVL007B	TEST_ITEM_BANK_EDITOR	
7	EVL008S	QUESTION	
7	EVL008B	QUESTION	
8	EVL009S	PM_OTG	
8	EVL009B	PM_OTG	
9	EVL012S	GRAFIX	
9	EVL012B	GRAFIX	
10	EVL016S	CR_QUES	
10	EVL016B	CR_QUES	
11	EVL017S	TEST_PRES	
11	EVL017B	TEST_PRES	
12	EVL019S	ALTS	
12	EVL019B	ALTS	
13	EVL024P	TEST_PRINT	
14	EVL018S	OFFLINE_TEST	
14	EVL018B	OFFLINE_TEST	
15	EVL020S	FORM_DEFINITION	
16	EVL021S	FORM_UTILITIES	
16	EVL021B	FORM_UTILITIES	
17	EVL022S	FORM_PROCESSING	
17	EVL022B	FORM_PROCESSING	
18	EVL023P	SCANTRON	
19	EVL025S	TIETYPES	
20	EVL026P	TIE	
21	EVL027S	TIETIE	
21	EVL027B	TIETIE	
22	EVL028S	DOTIE	
22	EVL028B	DOTIE	

Specification Number 70S647413
Code Ident 76301
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INDEX BY CM IDENTIFICATION NUMBER

CPC CM Id Package Name

1	EVL001S	BOE
1	EVL001B	BOE
2	EVL002S	VERB_CHECK
2	EVL002B	VERB_CHECK
3	EVL003S	OBJ_TYPES
4	EVL005S	TEST_EDITOR
4	EVL005B	TEST_EDITOR
5	EVL006S	TIB_TYPE
5	EVL006B	TIB_TYPE
6	EVL007S	TEST_ITEM_BANK_EDITOR
6	EVL007B	TEST_ITEM_BANK_EDITOR
7	EVL008S	QUESTION
7	EVL008B	QUESTION
8	EVL009S	PM_OTG
8	EVL009B	PM_OTG
9	EVL012S	GRAFIX
9	EVL012B	GRAFIX
10	EVL016S	CR_QUES
10	EVL016B	CR_QUES
11	EVL017S	TEST_PRES
11	EVL017B	TEST_PRES
14	EVL018S	OFFLINE_TEST
14	EVL018B	OFFLINE_TEST
12	EVL019S	ALTS
12	EVL019B	ALTS
15	EVL020S	FORM_DEFINITION
16	EVL021S	FORM_UTILITIES
16	EVL021B	FORM_UTILITIES
17	EVL022S	FORM_PROCESSING
17	EVL022B	FORM_PROCESSING
18	EVL023P	SCANTRON
13	EVL024P	TEST_PRINT
19	EVL025S	TIETYPES
20	EVL026P	TIE
21	EVL027S	TIETIE
21	EVL027B	TIETIE
22	EVL028S	DOTIE
22	EVL028B	DOTIE

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Code Ident 76301
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INDEX BY PACKAGE NAME

<u>CPC CM Id</u>	<u>Package Name</u>
12	EVL019S ALTS
12	EVL019B ALTS
1	EVL001S BOE
1	EVL001B BOE
10	EVL016S CR_QUES
10	EVL016B CR_QUES
22	EVL028S DOTIE
22	EVL028B DOTIE
15	EVL020S FORM_DEFINITION
17	EVL022S FORM_PROCESSING
17	EVL022B FORM_PROCESSING
16	EVL021S FORM_UTILITIES
16	EVL021B FORM_UTILITIES
9	EVL012S GRAFIX
9	EVL012B GRAFIX
3	EVL003S OBJ_TYPES
14	EVL018S OFFLINE_TEST
14	EVL018B OFFLINE_TEST
8	EVL009S PM_OTG
8	EVL009B PM_OTG
7	EVL008S QUESTION
7	EVL008B QUESTION
18	EVL023P SCANTRON
4	EVL005S TEST_EDITOR
4	EVL005B TEST_EDITOR
6	EVL007S TEST_ITEM_BANK_EDITOR
6	EVL007B TEST_ITEM_BANK_EDITOR
11	EVL017S TEST_PRES
11	EVL017B TEST_PRES
13	EVL024P TEST_PRINT
5	EVL006S TIB_TYPE
5	EVL006B TIB_TYPE
20	EVL026P TIE
21	EVL027S TIETIE
21	EVL027B TIETIE
19	EVL025S TIETYPES
2	EVL002S VERB_CHECK
2	EVL002B VERB_CHECK

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Code Ident 76301
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20. APPENDIX B - CPC REFERENCE LIST AND CHARTS. The following pages detail for each CPC the list of AOTS CPCs that reference the CPC and the interdependencies of the CPC with other CPCs. The CM Identifications are shown on the chart as 'x' to represent an Ada package (both specification and body portions). Due to space limitations the package name is limited to ten characters, the CPCs from a different CPCI are not expanded, CPCs that appear multiple times are only expanded once, and not all ISS references are shown.

CPC No. 1
CM Id EVL001S
Package BOE

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989

CPC No. 1 Reference List.

The following list represents all AOTS CPCs that reference this CPC:

CPC	CM ID	PACKAGE NAME
4	EVL005B	TEST EDITOR
6	EVL007B	TEST-ITEM BANK_EDITOR
2	MGT003B	MTL SUPPORT
7	MGT018B	SUBTASKS
18	MGT055B	MAP TASK
19	MGT057P	FINAL MTL GEN
22	MGT060S	FINAL MTL FUNCTIONS
22	MGT060B	FINAL MTL FUNCTIONS
27	MGT092B	MTL COMMON
28	MGT093B	MTL-INFREQUENT
29	MGT094B	MTL-PRINT
31	MGT096B	SUB-FUNC
32	MGT097B	SUB-ITEMS
33	MGT098B	SUB-PRINT
52	MGT116B	VALIDATE_PKG
54	MGT007B	ITEM
56	MGT030B	ITR
57	MGT031B	EVENTS
61	MGT040S	EVENT TYPES
69	MGT054B	ITR EVENTS
71	MGT063P	ITR-BG
72	MGT064B	MAP_DISPLAY

CPC No. 2
CM Id EVL002S
Package VERB_CHECK

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989

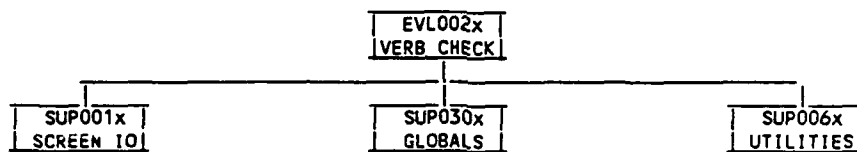
CPC No. 2 Reference List.

The following list represents all AOTS CPCs that reference this
CPC:

CPC	CM ID	PACKAGE NAME
1	EVL001B	BOE

CPC No. 2
CM Id EVL002S
Package VERB_CHECK

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989



CPC No. 3
CM Id EVL003S
Package OBJ_TYPES

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989

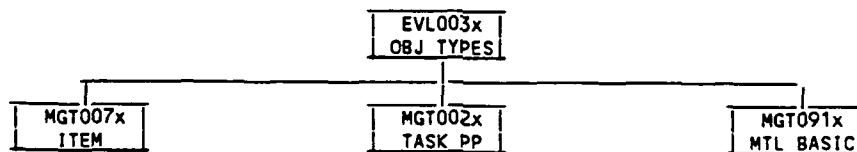
CPC No. 3 Reference List.

The following list represents all AOTS CPCs that reference this CPC:

CPC	CM ID	PACKAGE NAME
1	EVL001S	BOE
1	EVL001B	BOE
4	EVL005S	TEST EDITOR
4	EVL005B	TEST EDITOR
5	EVL006S	TIB TYPE
5	EVL006B	TIB TYPE
6	EVL007S	TEST ITEM BANK EDITOR
6	EVL007B	TEST ITEM BANK EDITOR
7	EVL008S	QUESTION
7	EVL008B	QUESTION
8	EVL009S	PM OTG
8	EVL009B	PM OTG
11	EVL017S	TEST PRES
11	EVL017B	TEST PRES
12	EVL019S	ALTS
12	EVL019B	ALTS
14	EVL018S	OFFLINE TEST
14	EVL018B	OFFLINE TEST
2	MGT003B	MTL SUPPORT
7	MGT018B	SUBTASKS
18	MGT055S	MAP TASK
18	MGT055B	MAP TASK
22	MGT060S	FINAL MTL FUNCTIONS
22	MGT060B	FINAL MTL FUNCTIONS
27	MGT092B	MTL COMMON
28	MGT093B	MTL INFREQUENT
29	MGT094B	MTL PRINT
30	MGT095S	MTL TYPES
31	MGT096S	SUB_FUNC
31	MGT096B	SUB_FUNC
32	MGT097B	SUB_ITEMS
33	MGT098B	SUB_PRINT
34	MGT099S	SUB_TYPES
52	MGT116B	VALIDATE_PKG
54	MGT007B	ITEM
56	MGT030B	ITR
57	MGT031B	EVENTS
69	MGT054B	ITR EVENTS
72	MGT064B	MAP_DISPLAY
73	MGT065S	ITR_TYPES

CPC No. 3
CM Id EVL003S
Package OBJ_TYPES

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989



CPC No. 4
CM Id EVL005S
Package TEST_EDITOR

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989

CPC No. 4 Reference List.

The following list represents all AOTS CPCs that reference this CPC:

CPC	CM ID	PACKAGE NAME
1	EVL001B	BOE
2	MGT003B	MTL SUPPORT
7	MGT018B	SUBTASKS

CPC No. 4
 CM Id EVL005S
 Package TEST_EDITOR

Specification Number 70S647413
 Code Ident 76301
 Date: 23 Jun 1989

EVL005x TEST EDITO												
REFER TO TIB TYPE	MGT091x MTL BASIC	SUP031x PRINT SUPP	MGT015x AFSC	REFER TO TEST ITEM	EVL008x QUESTION	SUP007x DATE TIME	EVL003x OBJ J TYPES	EVL009x PM OTG	EVL001x BOE	SUP030x GLOBALS	MGT093x MTL INFREQ	SUP026x USER TYPE
						SUP001x SCREEN IO						

CPC No. 5
CM Id EVL006S
Package TIB_TYPE

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989

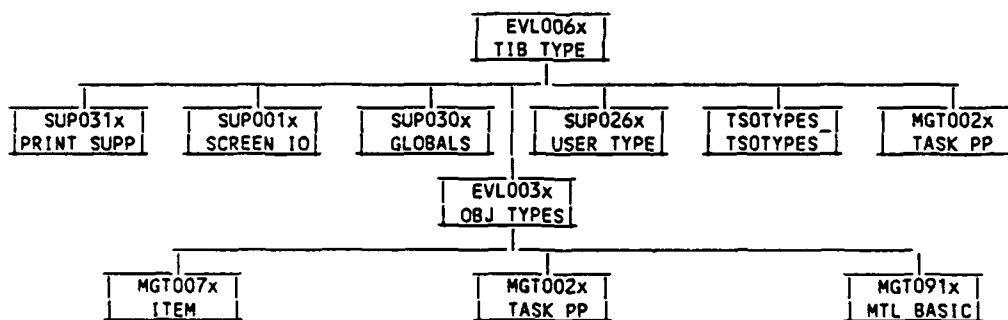
CPC No. 5 Reference List.

The following list represents all AOTS CPCs that reference this CPC:

CPC	CM ID	PACKAGE NAME
1	EVL001S	BOE
1	EVL001B	BOE
4	EVL005S	TEST EDITOR
4	EVL005B	TEST EDITOR
6	EVL007S	TEST ITEM BANK EDITOR
6	EVL007B	TEST ITEM BANK EDITOR
7	EVL008S	QUESTION
7	EVL008B	QUESTION
8	EVL009S	PM OTG
8	EVL009B	PM OTG
11	EVL017S	TEST PRES
11	EVL017B	TEST PRES
12	EVL019S	ALTS
12	EVL019B	ALTS
13	EVL024P	TEST PRINT
14	EVL018S	OFFLINE TEST
14	EVL018B	OFFLINE TEST
15	EVL020S	FORM DEFINITION
16	EVL021B	FORM UTILITIES
17	EVL022B	FORM PROCESSING
18	EVL023P	SCANTRON
21	EVL027B	TIETIE
22	EVL028B	DOTIE
18	MGT055S	MAP TASK
18	MGT055B	MAP TASK
19	MGT057P	FINAL MTL GEN
22	MGT060B	FINAL MTL FUNCTIONS
28	MGT093B	MTL INFREQUENT
52	MGT116B	VALIDATE_PKG
54	MGT007B	ITEM
56	MGT030B	ITR
61	MGT040S	EVENT TYPES
69	MGT054B	ITR_EVENTS

CPC No. 5
CM Id EVL006S
Package TIB_TYPE

Specification Number 70S647413
Code Ident 76301
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CPC No. 6
CM ID EVL007S
Package TEST_ITEM_BANK_EDITOR

Specification N
Code Ident 763
Date: 23 Jun 1969

70S647413

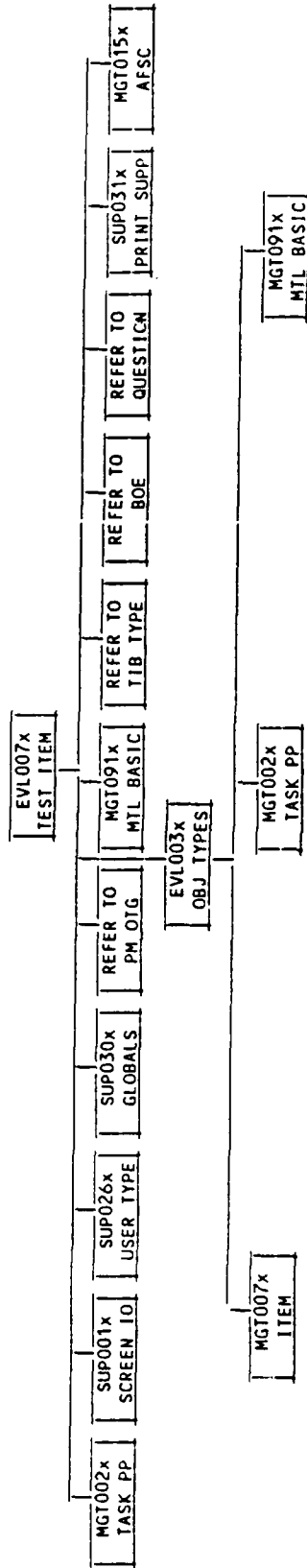
CPC No. 6 Reference List.

The following list represents all AOTS CPCs that reference this CPC:

CPC	CM ID	PACKAGE NAME
4	EVL005B	TEST EDITOR
11	EVL017B	TEST-PRES
14	EVL018B	OFFLINE TEST
2	MGT003B	MTL SUPPORT
7	MGT018B	SUBTASKS
28	MGT093B	MTL_INFREQUENT

CPC No. 6
CM Id EVL007S
Package TEST_ITEM_BANK_EDITOR

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989



CPC No. 7
CM Id EVL008S
Package QUESTION

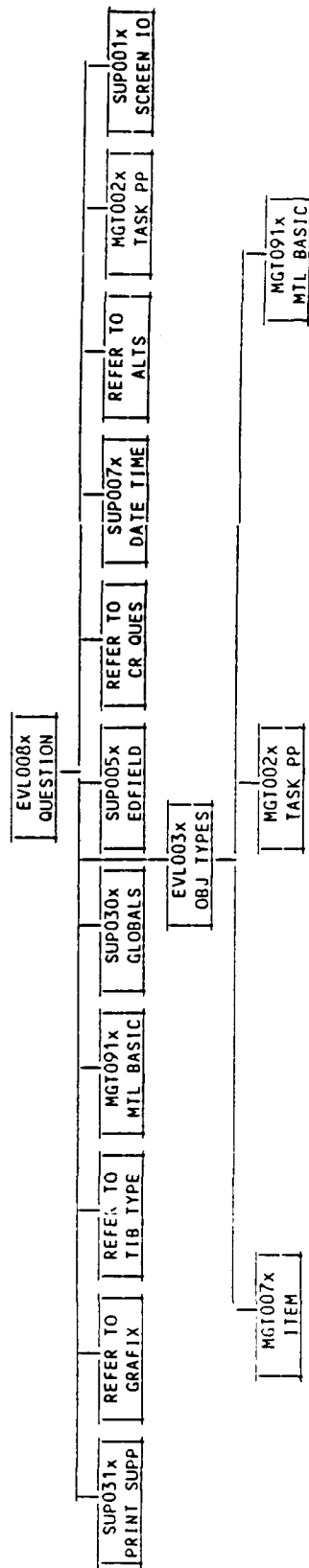
Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989

CPC No. 7 Reference List.

The following list represents all AOTS CPCs that reference this CPC:

CPC	CM ID	PACKAGE NAME
4	EVL005B	TEST EDITOR
6	EVL007B	TEST-ITEM BANK_EDITOR
11	EVL017S	TEST-PRES-
11	EVL017B	TEST-PRES
13	EVL024P	TEST-PRINT
14	EVL018B	OFFLINE TEST
17	EVL022B	FORM PROCESSING
22	MGT060B	FINAL MTL FUNCTIONS
28	MGT093B	MTL INFREQUENT
52	MGT116B	VALIDATE_PKG

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989



CPC No. 8
CM Id EVL009S
Package PM_OTG

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989

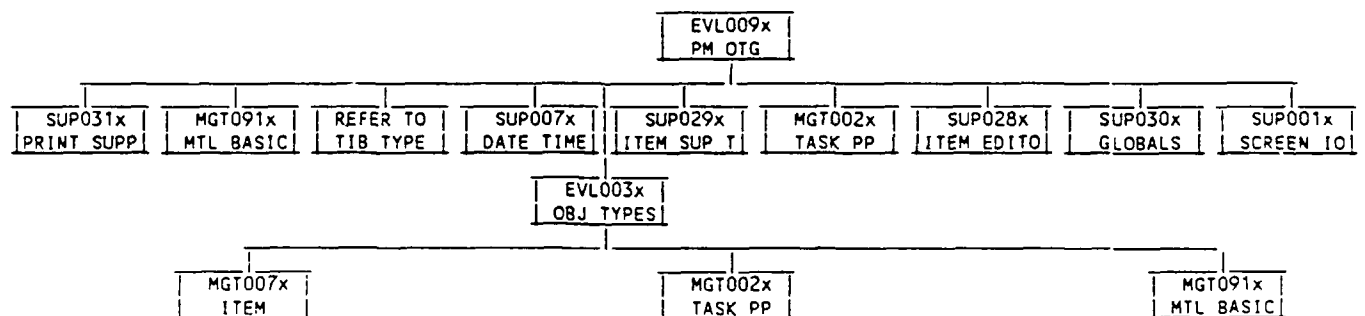
CPC No. 8 Reference List.

The following list represents all AOTS CPCs that reference this CPC:

CPC	CM ID	PACKAGE NAME
4	EVL005B	TEST EDITOR
6	EVL007B	TEST-ITEM BANK_EDITOR
13	EVL024P	TEST-PRINT
14	EVL018B	OFFLINE TEST
17	EVL022B	FORM PROCESSING
22	MGT060B	FINAL MTL FUNCTIONS
28	MGT093B	MTL INFREQUENT
52	MGT116B	VALIDATE_PKG

CPC No. 8
CM Id EVL009S
Package PM_OTG

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989



CPC No. 9
CM Id EVL012S
Package GRAFIX

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989

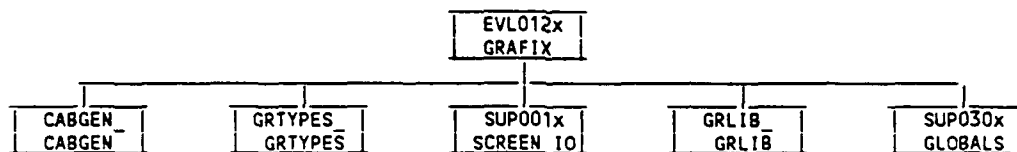
CPC No. 9 Reference List.

The following list represents all AOTS CPCs that reference this CPC:

CPC	CM ID	PACKAGE NAME
7	EVL008S	QUESTION
7	EVL008B	QUESTION
12	EVL019S	ALTS
12	EVL019B	ALTS

CPC No. 9
CM Id EVL012S
Package GRAFIX

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989



CPC No. 10
CM Id EVL016S
Package CR_QUES

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989

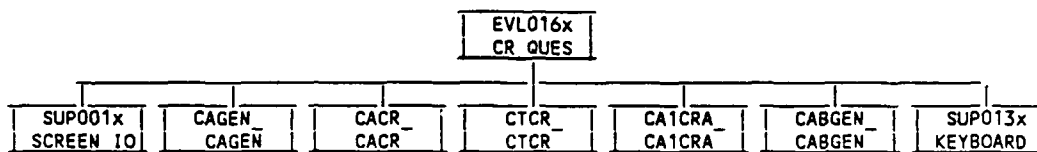
CPC No. 10 Reference List.

The following list represents all AOTS CPCs that reference this
CPC:

CPC	CM ID	PACKAGE NAME
7	EVL008S	QUESTION
7	EVL008B	QUESTION
12	EVL019S	ALTS
12	EVL019B	ALTS

CPC No. 10
CM Id EVL016S
Package CR_QUES

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989



CPC No. 11
CM Id EVL017S
Package TEST_PRES

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989

CPC No. 11 Reference List.

The following list represents all AOTS CPCs that reference this CPC:

CPC	CM ID	PACKAGE NAME
17	EVL022B	FORM_PROCESSING
56	MGT030B	ITR

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989

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CPC No. 12
CM Id EVL019S
Package ALTS

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989

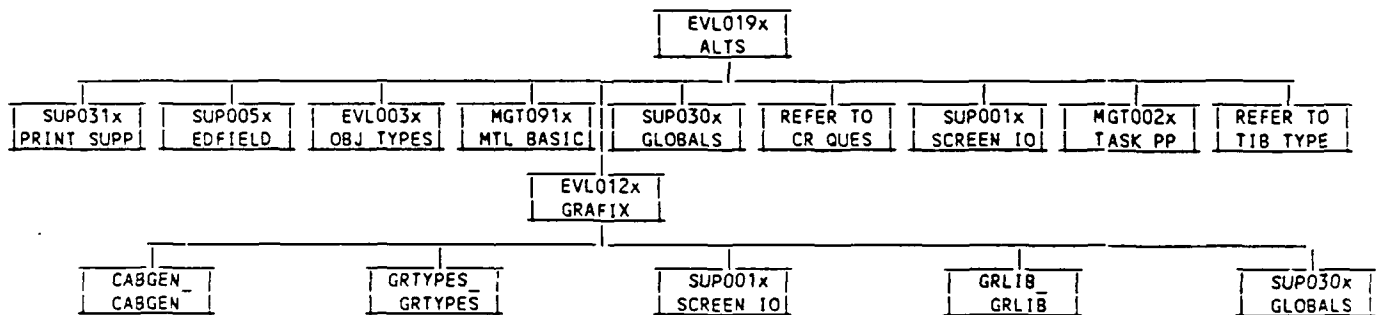
CPC No. 12 Reference List.

The following list represents all AOTS CPCs that reference this CPC:

CPC	CM ID	PACKAGE NAME
7	EVL008S	QUESTION
7	EVL008B	QUESTION
11	EVL017B	TEST PRES
14	EVL018S	OFFLINE TEST
14	EVL018B	OFFLINE TEST
15	EVL020S	FORM DEFINITION
16	EVL021B	FORM UTILITIES
17	EVL022B	FORM PROCESSING
18	EVL023P	SCANTRON
22	MGT060B	FINAL_MTL_FUNCTIONS

CPC No. 12
CM Id EVL019S
Package ALTS

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989



CPC No. 13
CM Id EVL024P
Package TEST_PRINT

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989

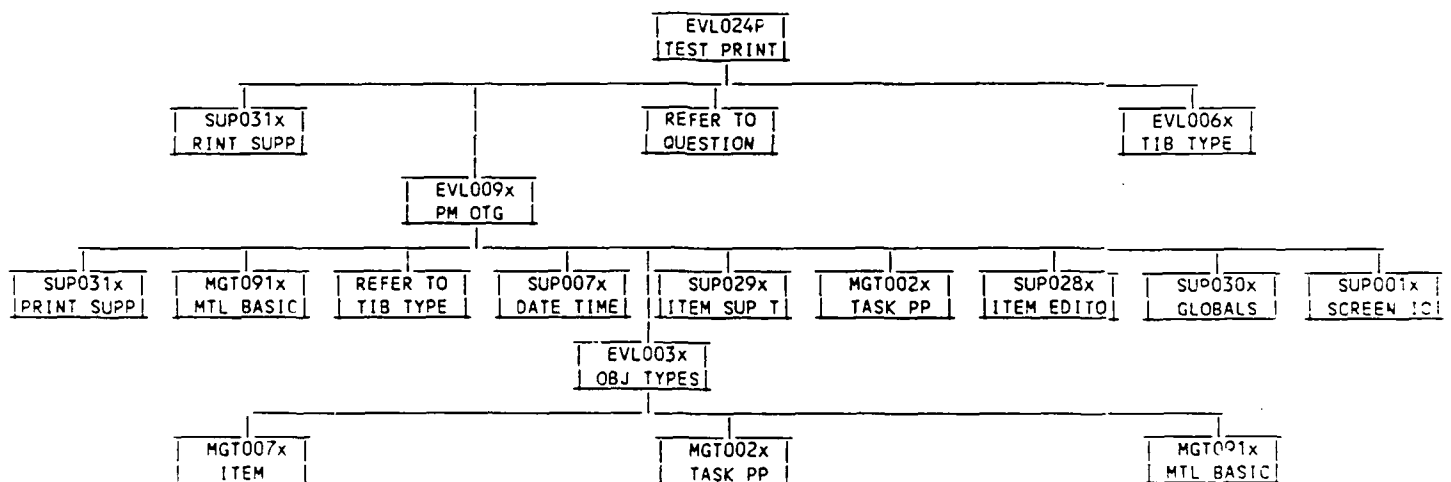
CPC No. 13 Reference List.

The following list represents all AOTS CPCs that reference this
CPC:

CPC	CM ID	PACKAGE NAME
None		

CPC No. 13
CM Id EVL024P
Package TEST_PRINT

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989



CPC No. 14
CM Id EVL018S
Package OFFLINE_TEST

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989

CPC No. 14 Reference List.

The following list represents all AOTS CPCs that reference this CPC:

CPC	CM ID	PACKAGE NAME
11	EVL017B	TEST PRES
17	EVL022B	FORM PROCESSING
18	EVL023P	SCANTRON
18	MGT055B	MAP TASK
56	MGT030B	ITR
57	MGT031B	EVENTS
69	MGT054B	ITR EVENTS
10	SUP027P	AOTS_LOGON

Specification Number 70S647413
 Code Ident 76301
 Date: 23 Jun 1989

CPC No. 14
 CM Id EVL018S
 Package OFFLINE_TEST

EVL018x OFFLINE TEST												
SUP030x GLOBALS	MGT099x SUB TYPES	MGT054x ITR EVENTS	SUP033x DMSF	EVL008x QUESTION	MGT015x AFSC	MGT091x MTL BASIC	SUP031x PRINT SUPP	EVL009x PM OTG	REFER TO TEST ITEM	MGT065x ITR TYPES	MGT122x QCADMIN	MGT040x EVENT TYPE
REFER TO OBJ TYPES			REFER TO ALTS			REFER TO UTILITIES			REFER TO DATE TIME			
SUP026x USER TYPE			SUP001x SCREEN IO			EVL006x TIB TYPE			SUP007x DATE TIME			

CPC No. 15
CM Id EVL020S
Package FORM_DEFINITION

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989

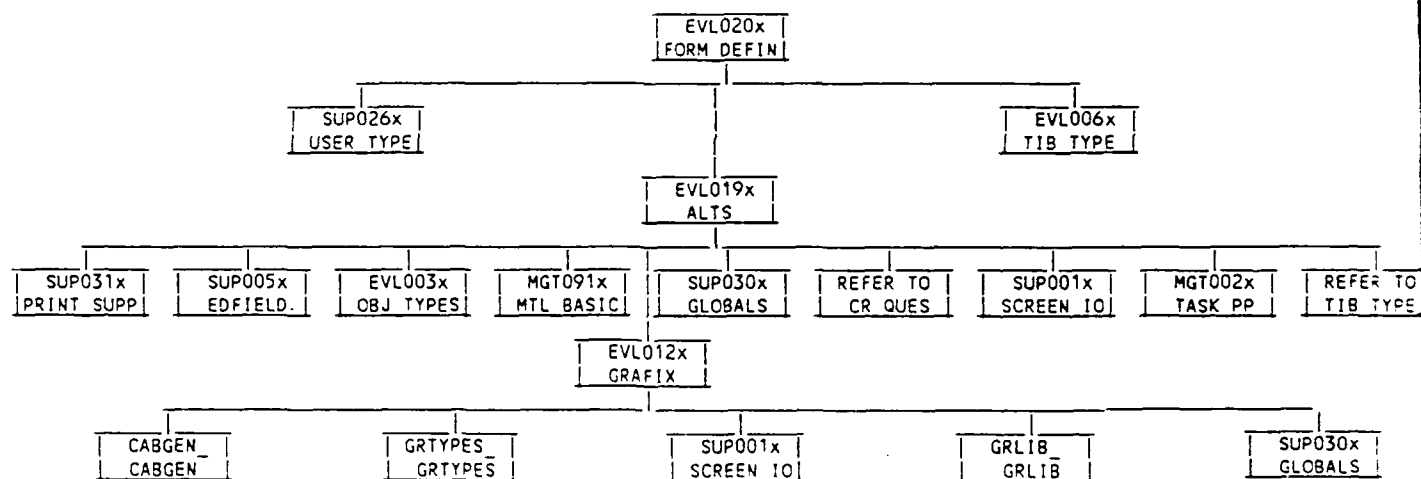
CPC No. 15 Reference List.

The following list represents all AOTS CPCs that reference this CPC:

CPC	CM ID	PACKAGE NAME
16	EVL021S	FORM UTILITIES
16	EVL021B	FORM UTILITIES
17	EVL022S	FORM PROCESSING
17	EVL022B	FORM PROCESSING
18	EVL023P	SCANTRON

CPC No. 15
CM Id EVL020S
Package FORM_DEFINITION

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989



CPC No. 16
CM Id EVL021S
Package FORM_UTILITIES

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989

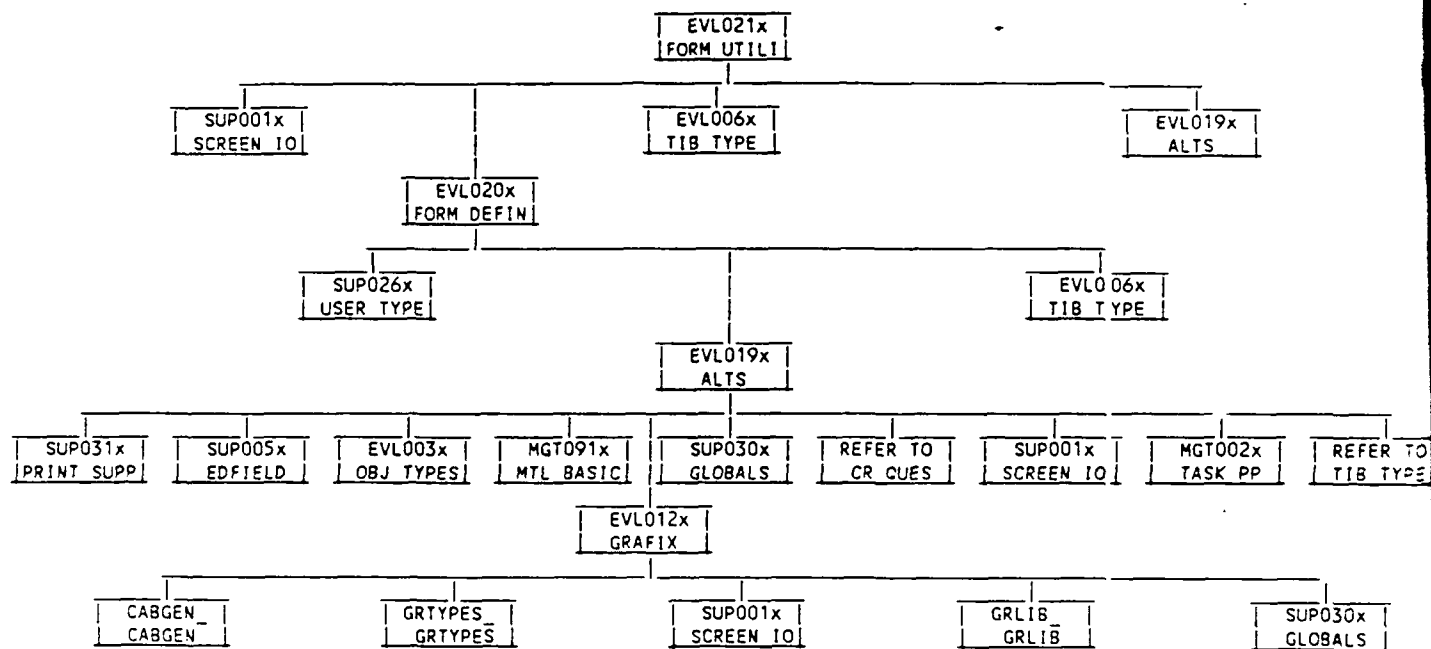
CPC No. 16 Reference List.

The following list represents all AOTS CPCs that reference this CPC:

CPC	CM ID .	PACKAGE NAME
18	EVL023P	SCANTRON

CPC No. 16
CM Id EVL021S
Package FORM UTILITIES

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989



CPC No. 17
CM Id EVL022S
Package FORM_PROCESSING

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989

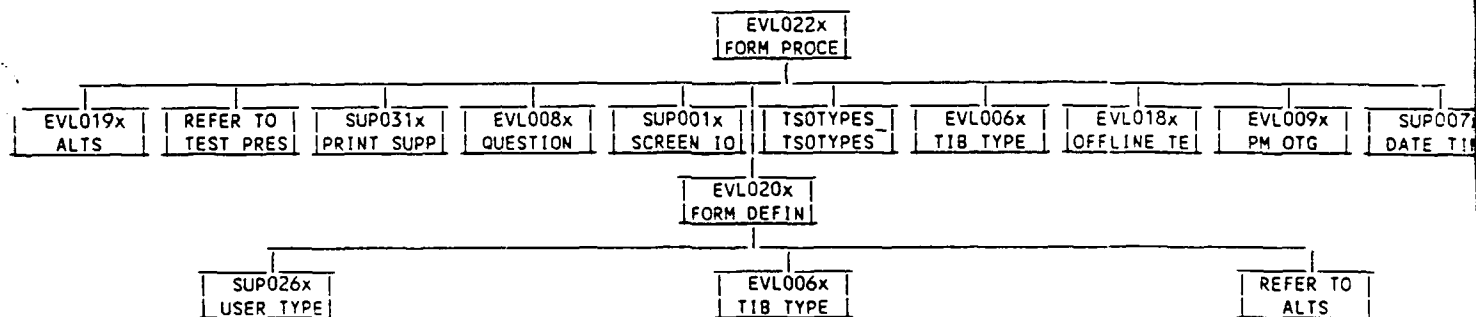
CPC No. 17 Reference List.

The following list represents all AOTS CPCs that reference this CPC:

CPC	CM ID	PACKAGE NAME
18	EVL023P	SCANTRON

CPC No. 17
CM Id EVL022S
Package FORM_PROCESSING

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989



CPC No. 18
CM ID EVL023P
Package SCANTRON

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989

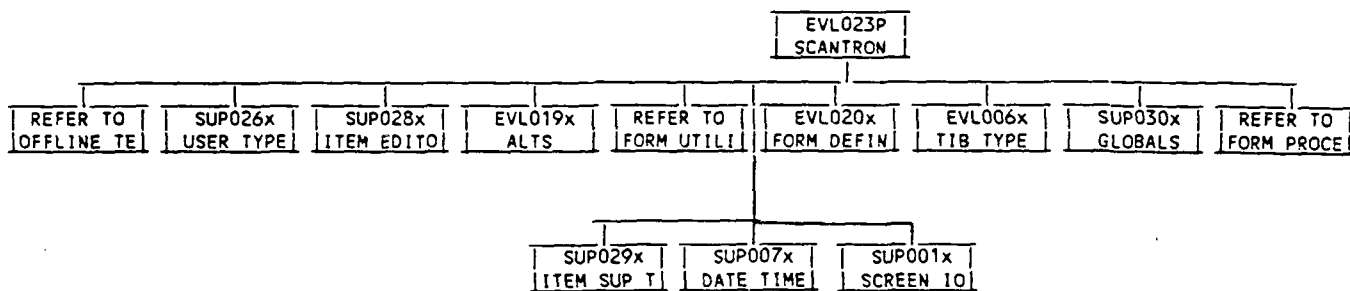
CPC No. 18 Reference List.

The following list represents all AOTS CPCs that reference this
CPC:

CPC	CM ID	PACKAGE NAME
10	SUP027P	AOTS_LOGON

CPC No. 18
CM Id EVL023P
Package SCANTRON

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989



CPC No. 19
CM Id EVL025S
Package TIETYPES

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989

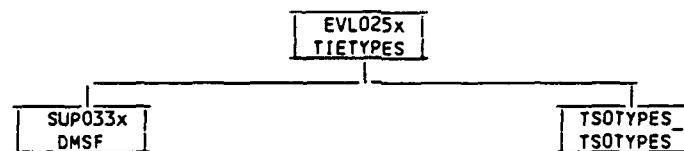
CPC No. 19 Reference List.

The following list represents all AOTS CPCs that reference this CPC:

CPC	CM ID	PACKAGE NAME
20	EVL026P	TIE
21	EVL027B	TIETIE
22	EVL028B	DOTIE

CPC No. 19
CM Id EVL025S
Package TIETYPES

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989



CPC No. 20
CM Id EVL026P
Package TIE

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989

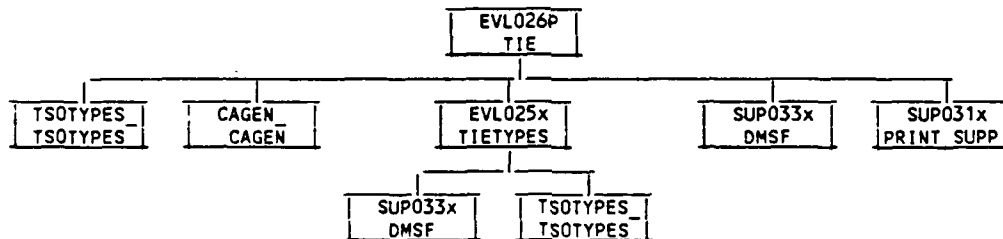
CPC No. 20 Reference List.

The following list represents all AOTS CPCs that reference this
CPC:

CPC	CM ID	PACKAGE NAME
None		

CPC No. 20
CM Id EVL026P
Package TIE

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989



CPC No. 21
CM Id EVL027S
Package TIETIE

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989

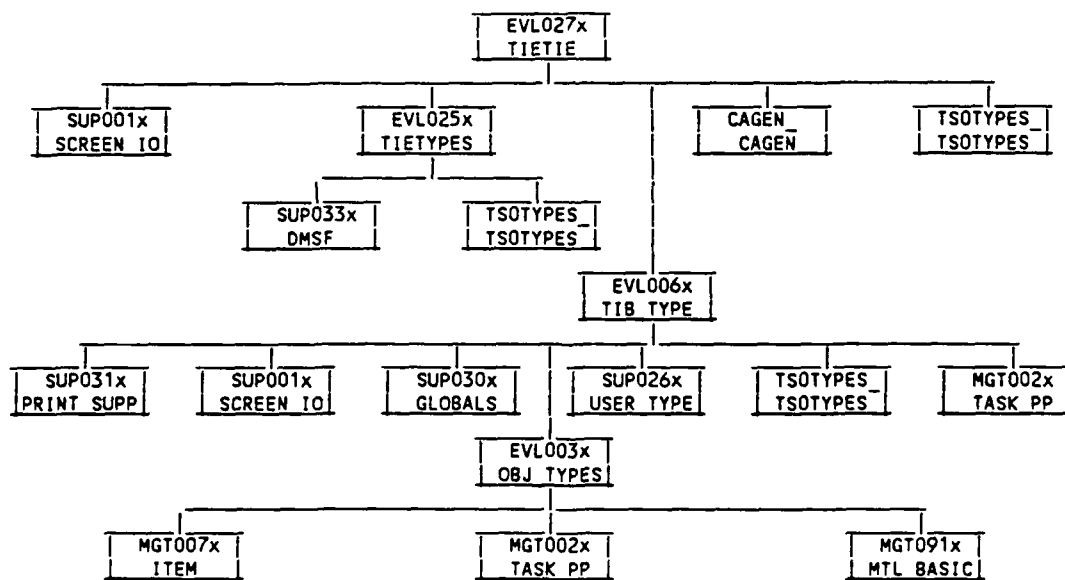
CPC No. 21 Reference List.

The following list represents all AOTS CPCs that reference this
CPC:

CPC	CM ID	PACKAGE NAME
93	MGT085P	DAILY_RUN

CPC No. 21
CM Id EVL027S
Package TIETIE

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989



CPC No. 22
CM Id EVL028S
Package DOTIE

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989

CPC No. 22 Reference List.

The following list represents all AOTS CPCs that reference this CPC:

CPC	CM ID	PACKAGE NAME
10	SUP027P	AOTS_LOGON

CPC No. 22
CM Id EVL028S
Package DOTIE

Specification Number 70S647413
Code Ident 76301
Date: 23 Jun 1989

