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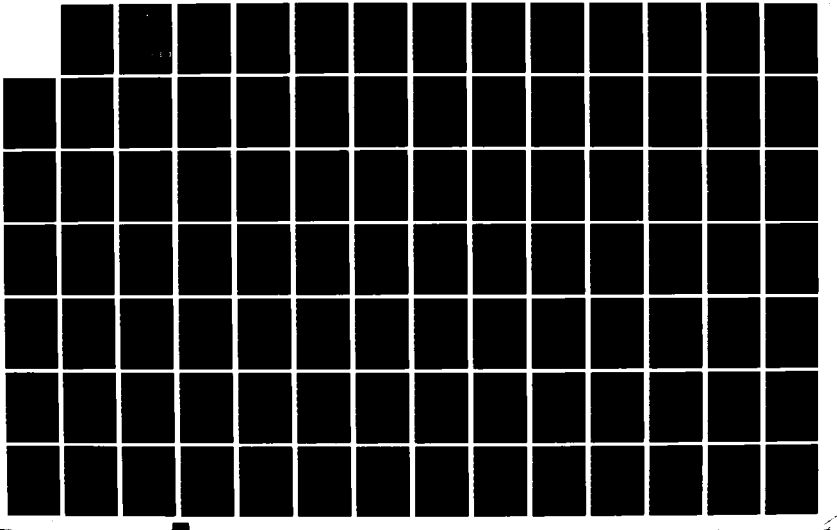

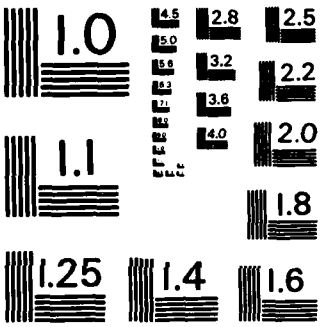

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A MODIFICATION TO THE COMPUTER GENERATED ACQUISITION DOCUMENTS SYSTEM (CGADS) FOR MICROCOMPUTER USE IN A PROGRAM OFFICE ENVIRONMENT

THESIS

Lynn M. Zabkar
Captain, USAF

Karen M. Zimmerman
Captain, USAF

AFIT/GSM/LSY/85S-33

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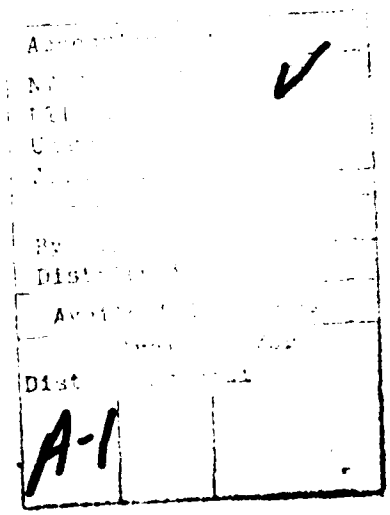

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A MODIFICATION TO THE COMPUTER GENERATED ACQUISITION DOCUMENTS SYSTEM (CGADS) FOR MICROCOMPUTER USE IN A PROGRAM OFFICE ENVIRONMENT

THESIS

Presented to the Faculty of the School of Systems and Logistics
of the Air Force Institute of Technology
Air University
In Partial Fulfillment of the
Requirements for the Degree of
Master of Science in Systems Management

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September 1985

Approved for public release; distribution unlimited

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Lynn M. Zabkar
Karen M. Zimmerman

Table of Contents

Acknowledgements ii

List of Figures v

Abstract vi

I. Introduction 1-1

Definitions 1-2
Research Objectives 1-3

II. Literature Review 2-1

Contracting Process 2-1
Contract Data Requirements List 2-4
Statement of Work and AFSC Policies 2-4
Concept Exploration, Type I 2-6
Demonstration and Validation, Type II 2-6
Full-Scale Development, Type III 2-7
Production and Deployment, Type IV 2-7
Nonpersonal Services Contracts, Type V 2-7
Computer Generated Acquisition Documents System . . . 2-8

III. Micro-Computer Generated Acquisition Documents System (MGADS) 3-1

Description 3-1
Preparation 3-2
Installing MGADS 3-2
Executing MGADS 3-3
Introduction 3-3
Main Menu 3-4
Option R 3-4
Option D 3-12
Option W 3-12
Option E 3-13

IV. File Descriptions 4-1

Document File 4-1
Standards File 4-3
Question File 4-3
Index Pointer File 4-5
Indexes File 4-5
First Field Value '1' 4-6
First Field Value 'A' 4-7
First Field Value '2','3',or '4' 4-8

First Field Value Alphabetic,'5',or '6' 4-8
Headings File 4-9
Task File 4-9
COBOL Source Program 4-10

V. Conclusion 5-1

Summary 5-1
Recommendations for Further Research 5-2

Appendix A: Document File A-1

Appendix B: Standards File B-1

Appendix C: Question File C-1

Appendix D: Indexes File D-1

Appendix E: Headings File E-1

Appendix F: Task File F-1

Appendix G: COBOL Source Code G-1

Appendix H: MGADS Output H-1

Appendix I: CGADS Output I-1

Appendix J: MGADS User's Manual J-1

Bibliography BIB-1

Vita V-1

List of Figures

Figure		Page
2-1.	Uniform Contract Format for IFB	2-2
2-2.	Uniform Contract Format for RFP	2-3
2-3.	Statement of Work Development	2-5
3-1.	Introduction	3-4
3-2.	Main Menu	3-5
3-3.	Filename Rules	3-6
3-4.	Area Menu	3-7
3-5.	Configuration and Data Tasks	3-8
3-6.	Question Screen	3-9
3-7.	Previously Answered Question Screen	3-9
3-8.	Answer Option Screen	3-10
3-9.	Task Menu with Completed Tasks	3-11
3-10.	Functional Tasks	3-14
4-1.	Document File - Section One	4-1
4-2.	Document File - Section Two	4-2
4-3.	Standards File	4-3
4-4.	Question File	4-4
4-5.	Index Pointer File	4-5
4-6.	Indexes File	4-6

Abstract

The Computer Generated Acquisition Documents System (CGADS) was developed by Electronic Systems Division. CGADS was designed to assist the program manager (PM) in developing acquisition documents including Statements of Work (SOWs) and Contract Data Requirements Lists (CDRLs) for all phases of the acquisition cycle. CGADS will produce draft versions of these documents which must then be tailored to meet the needs of the particular program.

The current CGADS has several shortfalls. PMs outside of ESD have difficulty accessing the system. The system must also be maintained on a mainframe computer since it requires too much disk space to be adapted to a micro-computer. Finally, the output obtained from CGADS is not in the Work Breakdown Structure (WBS) format required by the military handbook on SOW preparation.

The main objective of this research was to simplify the PM's job in writing a Full-Scale Development (FSD) SOW/CDRL. This was accomplished by developing a system called Micro-Computer Generated Acquisition Documents System or MGADS. The MGADS program was written in COBOL for an MSDOS operating system on a Zenith Z-100 micro-computer.

MGADS was developed to overcome the shortfalls of CGADS. Attention was focused only on the FSD SOW/CDRL to allow the program to fit onto a micro-computer. This also eliminates the problem of having to access CGADS over modem/telephone lines. The output of MGADS was restructured

into WBS format in accordance with the current military handbook.

MGADS is an interactive system used to develop a draft version of the FSD SOW/CDRL. The MGADS program asks the PM questions about his/her program in five functional areas: engineering, configuration and data, program management, logistics, and packaging and transportation. MGADS will produce a draft version of the SOW/CDRL based upon the PM's responses. A list of action messages will also be provided to assist the PM in tailoring the SOW/CDRL. The PM then uses the action messages and any additional information available to tailor the SOW/CDRL to his/her particular program.

A MODIFICATION TO THE COMPUTER GENERATED ACQUISITION DOCUMENTS SYSTEM (CGADS) FOR MICRO-COMPUTER USE IN A PROGRAM OFFICE ENVIRONMENT

I. Introduction

The program manager working in the product divisions of Air Force Systems Command (AFSC) has many responsibilities. These responsibilities range from making program decisions to preparing program documentation and writing everyday correspondence. One of the most important documents the program manager assists in preparing is the contract. Typically, a team consisting of personnel from contracting, engineering, program management, and other functional areas works on developing the contractual documents.

The Air Force is currently trying to automate as much of the program manager's work as possible. The Computer Generated Acquisition Documents System (CGADS) was developed by the Electronic Systems Division (ESD) to assist the program manager in developing contractual documents. More specifically, CGADS was designed to produce draft versions of Statements of Work (SOWs), Contract Data Requirements Lists (CDRLs), and other program documents such as the Program Management Plan (PMP).

The CGADS is resident on a mainframe computer at ESD. Other product divisions in AFSC do have access to the system via modem/telephone lines. However, the amount of time it takes to access the system and the inconvenience tends to limit its use.

A majority of program offices now have micro-computers available to them. Having CGADS available on these computers will make the program manager's job much easier. The main objective of this research is to modify the portion of the CGADS for generating full-scale development (FSD) SOWs and CDRLs for use on a micro-computer. Attention is focused on the full-scale development portion because FSD SOWs consume the majority of the program manager's SOW development time. Also, they are the most common, and they tend to require more unique tailoring.

Definitions

A list of applicable definitions is provided in this section.

Acquisition Management Systems and Data Requirements Control List (AMSDL)(6:3). A list of authorized acquisition management systems, source documents, and Data Item Descriptions.

Contract Data Requirements List (CDRL)(1:164; 6:3). The list of all deliverable data items for a specific contract. The list is usually prepared on the DD Form 1423, although other forms are sometimes used.

Data Item Description (DID)(1:195; 5:2). The data that may be required of a contractor as a part of the contract; DIDs are defined on completed DD Form 1664s. This form provides a definition of data content, preparation instructions, format, and intended use. As noted above, all approved DIDs are listed in the AMSDL.

Full-Scale Development Phase (FSD)(1:309). The third phase in the acquisition life cycle. This phase begins with authorization to initiate engineering development and testing of production design. It ends when development and testing of the production design has been completed.

Request for Proposal (RFP)(1:587). The document issued by the government to obtain a proposal from a contractor on a proposed acquisition. It is the means by which the government conveys to the contractor the work to be performed and the requirements to be met. The RFP is used to obtain a proposal which is evaluated to determine the contractor's capabilities and price.

Statement of Work (SOW)(6:4; 7). The detailed statement of task requirements. It is used when the work requirements for the contract are too long to be placed in the Contract Schedule as line items. Because of its length, the SOW is normally included as an attachment to the contract.

Tailoring(1:688; 6:4). The process by which the standards and specifications are evaluated to determine which sections, paragraphs, and/or sentences are applicable for the given contract. The tailored document states the minimum needs of the government.

Work Breakdown Structure (WBS)(1:745; 3:2; 6:6). A division of a system into components and subcomponents and the work effort into tasks and subtasks for cost and schedule tracking.

Research Objectives

The main objective of this thesis was to simplify the program manager's SOW preparation job by modifying a portion of CGADS for use on a micro-computer.

The following tasks were accomplished:

1. The full-scale development SOW/CDRL portion of CGADS program was written in COBOL (Common Business Oriented Language) using the MSDOS (Micro-Soft Disk Operating System) operating system.

2. A user's manual/guide was written to assist program managers in developing SOWs/CDRLs using the new program.

3. The output of the program was rearranged into WBS format.

4. The micro-computer program was validated by running CGADS in direct comparison with it. The resulting outputs were compared for consistency.

II. Literature Review

This chapter will cover background material on several topics: the contracting process, Contract Data Requirements List, Statement of Work including Air Force Systems Command policies, and the Computer Generated Acquisition Documents System.

Contracting Process

The Federal Acquisition Regulation (FAR) governs all contractual proceedings used by the Department of Defense (DOD) and other government agencies. The FAR came into effect 1 April 84. Prior to that date, the Air Force (AF) and other DOD agencies were governed by the Defense Acquisition Regulation (DAR). The FAR was designed to eliminate the differences that existed among the contracting processes of the various federal agencies.

The FAR presents two methods by which the AF can acquire new systems. The two methods were initially called formal advertising and negotiations. The Competition in Contracting Act (CICA) of 1984 changed the names of the methods to sealed bids and competitive proposals. Prior to the FAR, formal advertising was the preferred method of contracting. Negotiations were only permitted when one of the exceptions listed in the DAR was met. With the FAR and the CICA, however, sealed bidding and competitive proposals are equally acceptable.

In the sealed bidding method, the AF issues an Invitation for Bid (IFB). The IFB is developed in the uniform contract format provided in the FAR. Figure 2-1 shows the format. The IFB must clearly and

SECTION	TITLE
	Part I The Schedule
A	Solicitation/contract form
B	Supplies or services and prices
C	Description/specifications
D	Packaging and marking
E	Inspection and acceptance
F	Deliveries or performance
G	Contract administration data
H	Special contract requirements
	Part II Contract Clauses
I	Contract clauses
	Part III List of Documents, Exhibits, and Other Attachments
J	List of documents, exhibits, and other attachments
	Part IV Representations and Instructions
K	Representations, certifications, and other statements of bidders
L	Instructions, conditions, and notices to bidders
M	Evaluation factors for award

Figure 2-1. Uniform Contract Format for IFB (4:14-2).

completely state all of the requirements of the AF. It includes all of the information the contractor may require to develop a bid. Contractors respond within the allotted time period. The sealed bids are then opened by the AF and contract award goes to the lowest qualified bidder. The sealed bidding method is used when buying very simple items which are well defined and exactly specified.

When undertaking development or purchase of a complex system, such as an aircraft or missile, sealed bidding usually cannot be used. The complexity of the system and the related cost, schedule, performance, and logistics tradeoffs require proglonged dialogue between the parties to the contract before a decision can be made. In this type of

situation, the AF will use the competitive proposals method of selecting a contractor. A Request for Proposal (RFP) is sent out to the contractors. Contractors then submit their proposals which are evaluated by a Source Selection Evaluation Board in terms of key source selection criteria such as cost, schedule, performance, and logistics. A Source Selection Advisory Council makes its recommendation on the winner of the source selection. The final decision is made by the Source Selection Authority and the contract is awarded.

The RFP consists of four main parts. It must be structured according to the uniform contract format provided in the FAR and seen in Figure 2-2. This format is very similar to the uniform contract format for the IFB. The main difference is the use of offerors/quoters in

SECTION	TITLE
	Part I The Schedule
A	Solicitation/contract form
B	Supplies or services and prices/costs
C	Description/specifications/work statement
D	Packaging and marking
E	Inspection and acceptance
F	Deliveries or performance
G	Contract administration data
H	Special contract requirements
	Part II Contract Clauses
I	Contract clauses
	Part III List of Documents, Exhibits, and Other Attachments
J	List of attachments
	Part IV Representations and Instructions
K	Representations, certifications, and other statements of offerors or quoters
L	Instructions, conditions, and notices to offerors quoters
M	Evaluation factors for award

Figure 2-2. Uniform Contract Format for RFP (4:15-11).

place of bidders. Another difference is the addition of the work statement.

Contract Data Requirements List

The CDRL is governed by AFR 310-1, Management of Contractor Data. The main objective of this regulation is to "control the generation of data requirements, to ensure the selective application and acquisition of data on any given program, and to serve as a management tool at the program, functional, and operating levels"(5:2). Data, as used in the regulation, refers to "all administrative, management, financial, scientific, engineering, and logistic information and documentation"(5:2). The CDRL is thus the list of all deliverable data. It is usually written on the Contract Data Requirements List, DD Form 1423.

Statement of Work and AFSC Policies

The SOW developed by the program office is usually placed in Section J of the RFP because it is usually too long to place in Section C. See Figure 2-2. The SOW, as mentioned above, is a detailed listing of task requirements for the contractor. The development of the SOW will be explained in the next few pages.

The preparation of a SOW was initially governed by AFSCP 800-6, Statement of Work Preparation Guide. The main objective of the pamphlet was "to provide guidance in the establishment of statements of work which are:

a. Tailored to meet program needs.
b. Responsive to program planning and system definition requirements and constraints.
c. Compatible with the standard DOD work breakdown structure (WBS)(MIL-STD-881)"(6:1-1).

The pamphlet identified the basic steps to be taken in developing a SOW, which are shown in Figure 2-3. The phase of the acquisition cycle being entered and the type of system being developed/produced impact the type of SOW written. AFSCP 800-6 presented guidance on SOWs for research and technology, less than major systems and equipment, conceptual phase, validation phase, full-scale development phase and production phase. However, it only provided an outline of topics to be included in the SOW; it did not provide sample tasking paragraphs or list standards and specifications which might be tailored into the SOW. As such, it provided only minimal guidance for writing a SOW.

So, AFSCP 800-6 was rescinded. Air Force Systems Command (AFSC) is currently working on the replacement, AFSCR 800-XX, Statement of Work. As of 1 July 85, AFSCR 800-XX is still in draft form and in

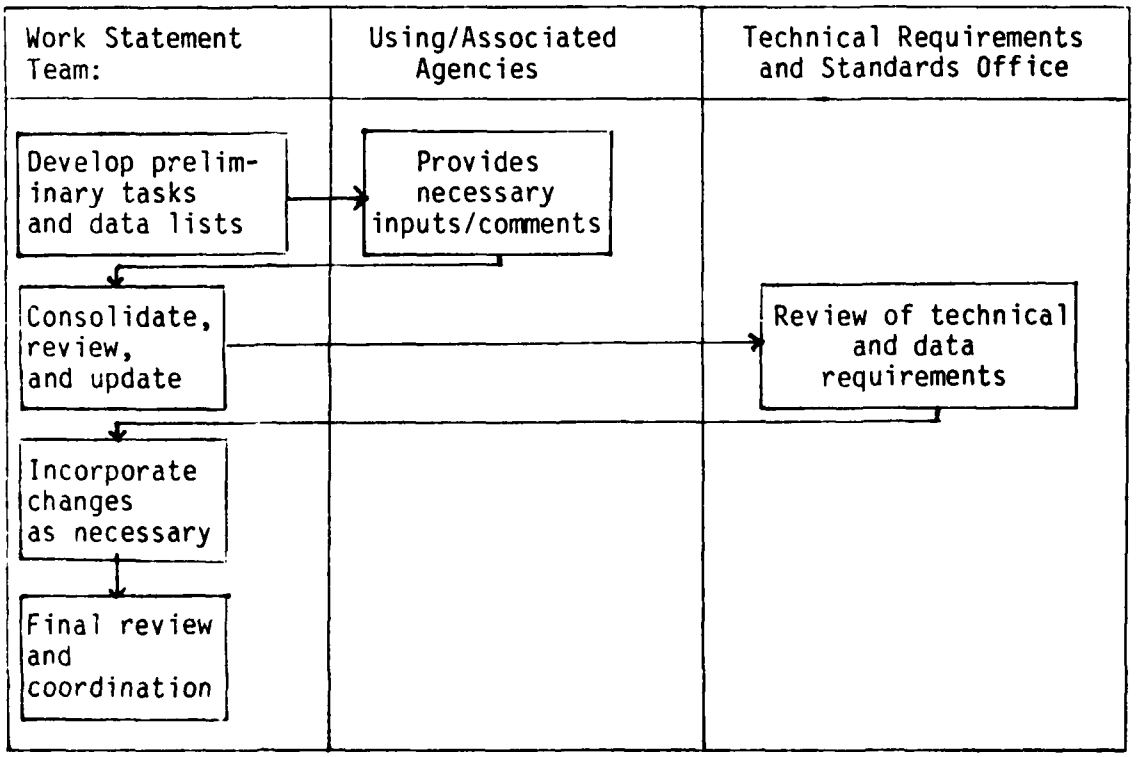

Figure 2-3. Statement of Work Development (7:2-5).

coordination at HQ AFSC. However, it does currently mandate the use of a computerized SOW generation program to aid the program manager in preparing an initial draft of the SOW. AFSCR 800-XX, if approved, will establish

> AFSC policy for the preparation of five types of contract Statements of Work. Type I (Concept Exploration), Type II (Demonstration and Validation), Type III (Full-Scale Development), Type IV (Production and Deployment), and Type V (Nonpersonal Services Contracts)(6:1).

AFSC product divisions are currently using MIL-HDBK-245B, Preparation of Statement of Work (SOW) until AFSCR 800-XX is approved for use. AFSCR 800-XX will be used in conjunction with MIL-HDBK-245B when it is approved. MIL-HDBK-245B was written to "provide guidance to the requiring activity to obtain a conclusive contract Statement of Work (SOW) for application to any life cycle phase of material acquisition"(2:iii). It also covers nonpersonal services contracts.

MIL-HDBK-245B addresses the contents of the same five types of SOWs which will be regulated by 800-XX, namely:

Concept Exploration, Type I. The concept exploration phase is the starting block for systems acquisition. The effort usually involves multiple contracts to study multiple alternatives which will meet the needs of the using command. The contract requirements, therefore, are normally not well-defined. They are stated in terms of objectives rather than specific requirements. A Type I SOW is used when the requirements are vague. Reports/data generated during this phase are included in the SOW, rather than the CDRL, because they are typically the only deliverable product of this phase.(2:1; 6:5)

Demonstration and Validation, Type II. During this phase, several

contractors may develop prototypes of the most promising alternatives for the system, or one contractor may develop prototypes of certain high risk components of the system. The requirements for the desired hardware/software are defined in the system specification. The Type II SOW is required in this situation. The technical data requirements are not a part of the SOW. Instead, data requirements are defined using the CDRL.(2:1; 6:5)

Full-Scale Development, Type III. In this phase, the contractor will usually develop several pre-production prototypes of the most promising alternative for the required systems. By this time, the system and item performance requirements are much better defined in system and development specifications. The SOW is used to "indicate the need for various system effectiveness program tasks, publications, training, integrated logistic support requirements, configuration management requirements, management systems, supply support tasks (provisioning), quality program requirements, metrology and contractor services"(2:1). The technical data is ordered with the CDRL.(2:1; 6:5)

Production and Deployment, Type IV. This is the final phase of the acquisition cycle during which production units of the actual system are bought and deployed. The tasks specified in the Type IV SOW relate to production and to control of the design of operational units. Technical data is ordered using the CDRL.(2:1; 6:5)

Nonpersonal Services Contracts, Type V. A Type V SOW is required when requesting contractor support outside the scope of the procurement contract. This support could include a product required to manage the program or expertise not available in the government.(2:1; 6:5)

Computer Generated Acquisition Documents System

CGADS was developed by ESD in 1983. The system is explained in a pamphlet, Computer Generated Acquisition Documents System (CGADS) - Description and Operation, written by ESD 1 October 83. CGADS was "designed to give the PM (Program Manager) a dynamic computerized tool to automate the generation of acquisition documents"(8:1). Its use was intended for all program managers, whether or not they possess a computer background.

CGADS was originally designed to draft a number of documents, the most important of which are the SOW and CDRL, which have been explained above. (CGADS thus provides the computer generation capability mandated by AFSCR 800-XX.) Other documents which can be generated by CGADS include an RCM (Reliability Centered Maintenance) Plan, which "establishes a uniform procedure to develop a structured and trackable scheduled maintenance program"(8:5), an EEO (Equal Opportunity and Affirmative Action Plans), which will "outline and track goals to encourage and insure maximum opportunity for advancement of minorities and females"(8:5), and a PMP (Program Management Plan), which "projects how the program office intends to comply with the Program Management Directive and other requirements of the PO (Program Office) system"(8:6). Other documents are also now available, such as the Test and Evaluation Master Plan (TEMP) and the Acquisition Plan.

The CGADS, as currently hosted on the ESD computer, will output two types of products:

a. a draft of the documents selected
b. a set of action messages intended to provide the user further assistance in refining the draft document.

The draft document developed using the CGADS must then be tailored

by the program manager for the specific program. In performing the tailoring task, the program manager would seek out sources identified in the action messages, consider alternatives/impacts cited in the action messages, and review the specific paragraphs and appendices of the documents listed by CGADS.

The current CGADS has several shortfalls. The entire program, including the data base, requires too much memory to be placed on a micro-computer. In order to compensate for this, the authors will focus only on the FSD SOW/CDRL portion of CGADS. This will allow the use of a micro-computer in the program office. A second problem with CGADS is that the output is not in the WBS format. Since MIL-STD-245B requires the SOW to be in WBS format, the output of the micro-computer version of CGADS will be in WBS format.

The remainder of this thesis will present a walk-through of the program, a description of the files, and related material developed by the authors to overcome the shortfalls of CGADS.

III. Micro-Computer Generated Acquisition Documents System (MGADS)

This chapter describes the micro-computer version of CGADS (hereafter called MGADS) for the full-scale development Statement of Work and Contract Data Requirements List. The chapter will assist the program manager in using MGADS to develop a draft SOW/CDRL.

Throughout the rest of this chapter, the program manager will be referred to as the user.

Description

The MGADS program is an interactive program. This means that questions will appear on the screen and the user will have to answer the questions. The output obtained from the program will be based on the answers the user provides.

MGADS will create two files which will hold all of the information applicable to the specific SOW/CDRL the user is working on. A working file with the name 'WFILENAME' will contain the answers supplied by the user. The file the user identifies with 'FILENAME' will contain the output in word processing format. More information on filenames and working files will be provided later.

The MGADS program was designed to be operated on a micro-computer with a disk having the capacity to store 570K bytes of data. (CGADS requires 1750K bytes.) The program and data files for MGADS require all 570K bytes. If the user wants to maintain the output and working files on the same disk, additional storage is needed. For this reason, it is recommended work be done on individual floppy disks. Floppy disks, provided by the user, will be called diskettes throughout the remainder

of the chapter. The term disk will refer to any disk having the capacity (570K bytes) to store MGADS.

Preparation

Before attempting to run the program, the user should be familiar with the Zenith Z-100 micro-computer and the MSDOS operating system. MGADS may be run on a micro-computer other than the Z-100 if the source code and data files are recreated for that specific system. The recreation is necessary because of hardware peculiarities that exist between micro-computers. If the user is not familiar with the MSDOS operating system, he should refer to the MSDOS user's manual. Although the user need not understand COBOL, a COBOL software package, which is used to execute COBOL programs, must already be loaded into the micro-computer.

The user should also be familiar with the direction/requirements relating to his project. This information can be obtained in existing acquisition documents such as the Program Management Directive (PMD) and AFSC Form 56.

Installing MGADS

There are ten main files needed to execute the program. They are:

1. DOCFILE.FSD
2. STDFILE.FSD
3. INDEXES.FSD
4. QUEST.FSD
5. INDEXPTR.FSD
6. HEADINGS.FSD
7. TASKFILE.FSD
8. FSD.BAT
9. FSD.EXE
10. COBRUN.EXE

The first nine files are MGADS distribution files. The files can be

recreated using Appendices A-G. The tenth file, 'COBRUN.EXE', is included in the COBOL software package when it is bought by the user. It must be transferred from the COBOL distribution diskette to the disk; because of copyrights, it cannot be provided with the MGADS files.

All ten of the above files must exist on a common disk (570K bytes) in order to execute the program. The MGADS distribution files are provided on two diskettes. To install the MGADS distribution files onto the common disk, the following steps must be taken:

1. Place the first MGADS distribution diskette into disk drive. Typically, this is referred to as disk drive 'A'.
2. Transfer the files on the MGADS distribution diskette to the common disk. This can be accomplished using the MSDOS 'COPY' command. The disk will already have a drive name. If it is drive 'E', enter the command:

   COPY A:*.* E:*.*

3. Steps one and two should be repeated for the second MGADS distribution diskette to transfer all nine MGADS distribution files to the disk.

Now, all ten main files are on the disk. The steps above need not be repeated for each execution of MGADS. The diskettes should be maintained as backup, in case something happens to destroy the files on the common disk. It may even be wise to create backup copies of the MGADS distribution diskettes.

Executing MGADS

The diskette drive should be empty at this time. The MGADS session is begun by typing 'FSD' and hitting <return>.

Introduction. The first screen which will appear is an introduction to MGADS. See Figure 3-1. Comment four recommends a

separate diskette be used for each new SOW/CDRL file generated. This will ensure that enough diskette space is available for the working file and the output (approximately 150K bytes). The amount of space required depends upon the responses provided by the user. All work could be accomplished on the disk and later transferred to the diskette, but it is recommended that the work be done directly on the diskette.

```
**************************************************************************
*   MICROCOMPUTER GENERATED ACQUISITION DOCUMENTS SYSTEM (MGADS)   *
**************************************************************************

1.  This program is designed to generate and/or modify a Statement of
Work (SOW) and/or Contract Data Requirements List (CDRL) for the Full
Scale Development phase of an acquisition.  A set of ACTION MESSAGES,
grouped by SOW paragraph, will follow the CDRL.

2.  The product created is a DRAFT document.  The draft must be
tailored for the specific acquisition.  The action messages are
intended to help you in your tailoring effort.
Tailoring can be accomplished using an MSDOS word processing package.

3.  You should be familiar with the program direction/requirements
at this point.  The requirements can be obtained from existing
acquisition documents such as the PMD and AFSC Fm 56.

4.  A word of advice -- you may wish to use a separate diskette for
each SOW/CDRL file generated.



              ****** PRESS ANY KEY TO CONTINUE ******
```

Figure 3-1. Introduction

Main Menu. After reading the introduction and hitting any key (<space bar> is recommended) the user proceeds to the main menu. See Figure 3-2. This menu lists the four main options available. The user proceeds by typing in the letter of the option desired. The options will be explained in order of their importance in developing a SOW/CDRL.

Option R. Selecting option R will permit the user to create a

new SOW/CDRL or modify a previously created one. If the user is creating a new SOW/CDRL, a new, correctly formatted diskette should be placed in diskette drive 'A'. This will store the working file and the output. (The session may be run on the disk, but use of the diskette is recommended.) If the user is modifying a previously created SOW/CDRL, the user should place the diskette with the working file and output into disk drive 'A'. The session can be conducted right on the diskette.

```
                              MAIN MENU
                              *********

There are four options available to you.  You may:


   D  Delete a previously created file

   R  Run functional tasks.  This option consists of
         answering questions in each of five functional
         areas to create a new SOW/CDRL or to modify a
         previously created one

   W  Produce a word processor file of completed
         tasks.  Use this option after you have run
         the functional tasks.  WARNING:  previously
         created files having the specified filename
         will be overwritten

   E  Exit to operating system.


Enter option:
```

Figure 3-2. Main Menu.

Upon entering the option letter R, the Filename Rules screen will appear requesting the name of the new/old file. See Figure 3-3. The rules for naming a file must be adhered to. Once the filename is entered, MGADS edits the filename to ensure that the nomenclature rules

```
OPTION SELECTED:


FILENAME RULES:

   1.  Filenames must be from 1 to 7 characters long
   2.  Each character in the filename must be either
       numeric or alphabetic
   3.  The first character in the filename must be
       alphabetic
   4.  Disk drive names may be specified -- simply type
       the drive name letter followed by a colon
   5.  Filenames may be followed by a decimal point and
       a three character extension
   6.  See user's manual for further clarification.

EXAMPLES OF VALID FILENAMES:

   1.  A:MYFILE
   2.  A:MYFILE.NAM
   3.  MYFILE.NAM

Enter filename followed by <return>:
```

Figure 3-3. Filename Rules.

are followed. If any of the rules are violated, the user will be directed to reenter the filename. (Note: an entry comprised of all spaces will return the user to the Main Menu.) Once the user has successfully entered a valid filename, MGADS will automatically either create a workfile named 'WFILENAME' or retrieve a previously created workfile named 'WFILENAME'. This workfile will contain the answers that the user supplies during Option R. The user should specify the disk drive in naming the file, such as 'A:FILENAME' so that the session will be conducted directly on the diskette in disk drive 'A'. (If the drive is not specified the session will be conducted on the hard disk. The files should be transferred to the diskette later.)

The user may wish to sequence the filenames such as

'A:TEST.1', 'A:TEST.2', and 'A:TEST.3'. This will be helpful if the user does not want to destroy a previous version of a SOW/CDRL. MGADS will overwrite previous versions of the same filename. This will also help in comparing outputs when questions are answered differently.

After entering the valid filename, the next screen to appear will be the Area Menu. See Figure 3-4. In the upper right hand corner, the Area Menu will tell the user which file is being worked on and whether it is an old file or a new one. This menu lists the five functional areas in which the user will answer questions related to the program. The user should type in the number of the functional area he wants to enter. All tasks in all functional areas should be answered so as to avoid omitting pertinent information from the SOW/CDRL.

```
                                                    OLD/NEW FILE:
                              AREA MENU
                              *********

All functional tasks have been grouped into one of the
following areas:


     Area 1  Engineering
     Area 2  Configuration and Data
     Area 3  Program Management
     Area 4  Logistics
     Area 5  Packaging and Transportation.



Notes:  1.  You may select areas and tasks in any order
        2.  You must answer all questions pertaining to each
            task
        3.  If you fail to answer any questions, pertinent
            information will be omitted from your document.


Enter area number <1-5> or M to return to the main menu:
```

Figure 3-4. Area Menu.

The next screen to appear, the Task Menu, will list the tasks for the selected functional area. For example, the configuration and data functional area consists of four tasks. See Figure 3-5. A list of all tasks in the five areas is provided at the end of this chapter in Figure 3-10. All of the task menus operate similarly.

```
                                                    OLD/NEW FILE:
CONFIGURATION AND DATA FUNCTIONAL TASKS:

 1.  CONFIGURATION MANAGEMENT                 NOTES:
 2.  DATA MANAGEMENT
 3.  ENGINEERING DATA
 4.  NOMENCLATURE                             1.  An '*' in column one
                                              indicates task completion.

                                              2.  There are three
                                              options available to you.
                                              You may enter:

                                              <1- 4>  To process a
                                                        particular task
                                                M     To return to the
                                                        main menu
                                                A     To select another
                                                        area


                                             Enter option fol
                                             lowed by <return> :
```

Figure 3-5. Configuration and Data Tasks

Upon entering the task number, questions concerning that specific task will appear one at a time. See Figure 3-6. If the question was answered in a previous session, the question screen will give the previous answer. See Figure 3-7. The user should answer the question 'Y', 'N', or 'U'.

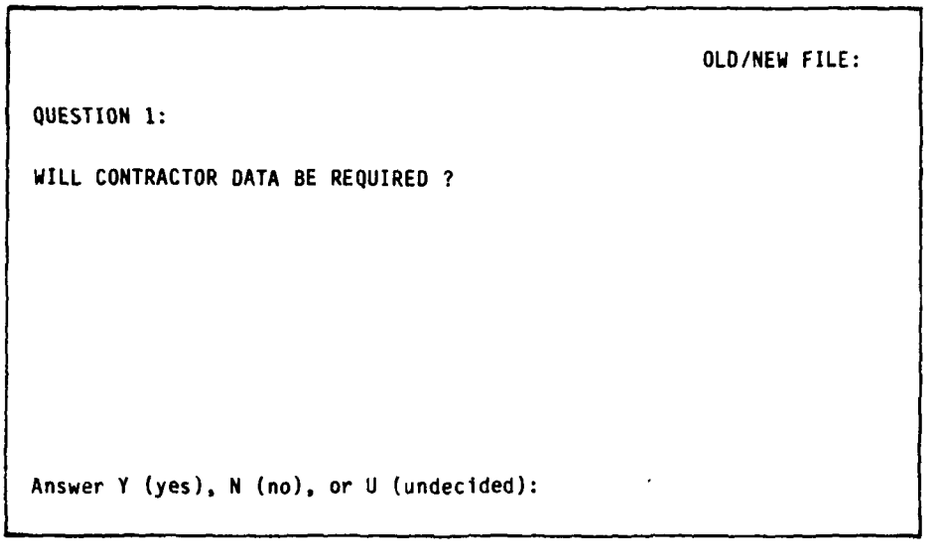

Figure 3-6. Question Screen.

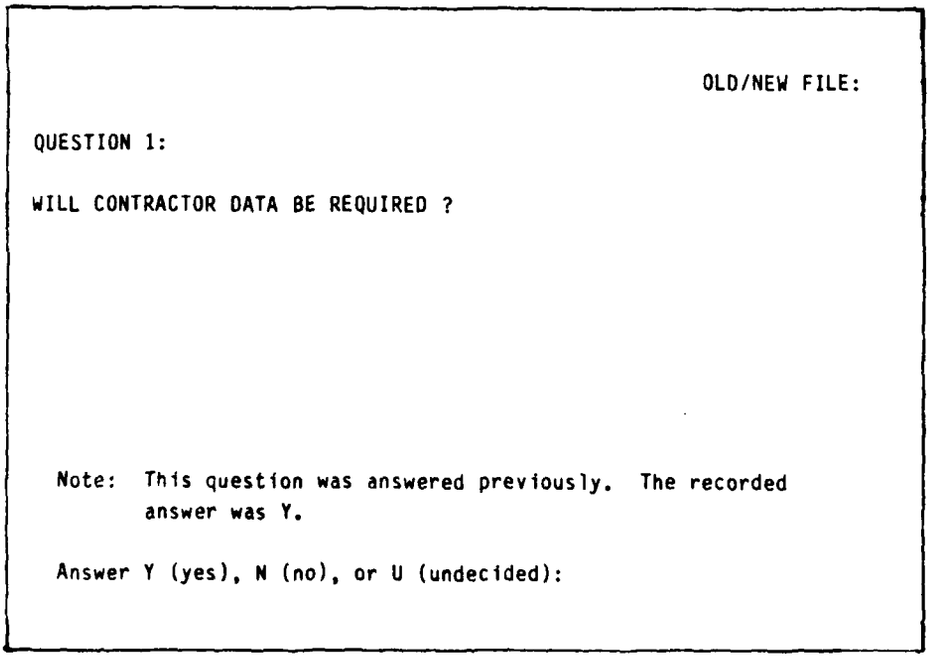

Figure 3-7. Previously Answered Question Screen.

After answering the question, the Answer Option screen will appear. See Figure 3-8. The V option will show the user the word processed output that will result from the answer given for the question, including the output for the SOW, CDRL, and action messages. The user may wish to use the V option to examine the output to be provided when answering the question a particular way. If the user does not agree that the output appearing on the screen is necessary, he may change his answer before proceeding. After the output has been viewed, the Answer Option screen reappears. The R option will then allow the user to repeat the previous question in order to change the answer or to check it. The B option will let the user begin the questions in this task again if the answer to an earlier question now appears to be wrong.

```
                                                    OLD/NEW FILE:

Y is the recorded answer.



     <space>  Continue to the next question

        V     View output to question just answered
                 then return to this menu

        R     Repeat previous question

        B     Begin this task again

        X     Exit this task and return to task menu


Enter option:
```

Figure 3-8. Answer Option Screen.

The user should remain in the task until all questions are answered. However, if the user wants to interrupt the question answering session, he may return to the Task Menu by choosing option X. The answers provided thus far will be recorded in 'WFILENAME'. After answering all questions for a particular task, the user will automatically be returned to the Task Menu. An asterisk (*) will appear in front of the number of the task just completed. See Figure 3-9. The user should address all tasks in the functional area before returning to the Area Menu. From the Area Menu, the user should continue selecting the functional areas until all tasks in all five areas have been completed. This is necessary to ensure completeness of the SOW/CDRL. Upon completing the

```
                                                    OLD/NEW FILE:
CONFIGURATION AND DATA FUNCTIONAL TASKS:

*1.  CONFIGURATION MANAGEMENT                  NOTES:
*2.  DATA MANAGEMENT
 3.  ENGINEERING DATA
 4.  NOMENCLATURE                              1.  An '*' in column one
                                               indicates task completion.

                                               2.  There are three
                                               options available to you.
                                               You may enter:

                                               <1-4>   To process a
                                                       particular task
                                                 M     To return to the
                                                       main menu
                                                 A     To select another
                                                       area



                                               Enter option fol-
                                               lowed by <return> :
```

Figure 3-9. Task Menu with Completed Tasks.

questions in all five functional areas, the user should return to the Main Menu by selecting the M option on the Area Menu.

At any time during the question answering session, the user may exit the program by first returning to the Main Menu and then selecting the exit option. The answers that were already provided by the user will be saved for the next session.

Option D. Selecting option D from the Main Menu (See Figure 3-2) will allow the user to delete a previously created file from either the disk or diskette. The user may wish to delete a file that is no longer required, perhaps because the output has been tailored and accepted in final form. The user may also want to delete one of the files in the sequence ('A:TEST.1', 'A:TEST.2', etc.) if one alternate file is deemed to be the most current. Upon entering the option letter, the Filename Rules screen will appear requesting the name (and disk drive letter, if applicable) of the file to be deleted. See Figure 3-3. Since there is no provision for verifying prior to deletion of a file or for recovering a deleted file, the user should make sure the file is no longer required before entering the filename. Also, the user should ensure the correct filename is entered. After deleting the file, the program will return the user to the Main Menu.

Option W. This Main Menu option will create a word processing file for the SOW/CDRL from the answers provided in the interactive session. The Filename Rules screen will appear upon entering the W option. The same filename that has been used throughout the session should be entered. The word processing file, with the given filename, will be created on the diskette (or disk) and will be available for tailoring. Creating the file will take approximately four minutes. The

user will be prompted when the word processing file is complete. The tailoring can be accomplished using an MSDOS word processing package. When the word processor asks for the name of the file to be edited, the user need only enter the 'A:FILENAME' supplied during the MGADS session. Word processing may then proceed as usual.

Option E. Selecting this option will exit the user from the MGADS program and enter the operating system. The use of the E option will save the working file and the word processing file, if it was created. The E option terminates the MGADS session.

If the session was conducted on the hard disk, the working file and the word processing file should be transferred to the diskette after terminating the session. For example, if the disk is drive E and the diskette is in drive A, use the MSDOS commands:

```
COPY E:FILENAME A:FILENAME
COPY E:WFILENAME A:WFILENAME
```

Tailoring should now be accomplished using the word processing file and the MSDOS word processing package.

Engineering Tasks:

1. Systems Engineering
2. System Safety
3. Human Factors
4. Value Engineering
5. Security
6. Availability
7. Maintainability
8. Reliability
9. Parts Control Program
10. Aerospace Meteorological Environment
11. Electromagnetic Compatibility
12. Survivability / Vulnerability
13. Communications Long Lines
14. Communications Security / Tempest
15. Radio Frequency Management
16. Transportability
17. Quality Assurance
18. Test and Evaluation
19. Computer Resources Management
20. Real Property Facilities
21. Manufacturing Management

Packaging and Transportation Tasks:

1. Preservation, Packaging, and Packing
2. Transportation
3. Travel

Configuration and Data Tasks:

1. Configuration Management
2. Data Management
3. Engineering Data
4. Nomenclature
5. STINFO
6. Photographic Documentation

Program Management Tasks:

1. Contract Work Breakdown Structure
2. Cost Information Systems
3. Cost / Schedule Control Systems
4. Schedule Management

Logistics Tasks:

1. Logistics Support Analysis
2. Integrated Logistics Support
3. Initial Spare / Repair Parts
4. Preoperational Maintenance
5. Preoperational Supply Support
6. Support Breakdown
7. Technical Orders

Figure 3-10. Functional Tasks.

IV. File Descriptions

This chapter contains descriptions of the files needed for MGADS. Sample portions of the files are contained in this chapter. The complete files can be found in the referenced appendices.

The descriptions of the files are provided to allow maintenence, upgrade, and/or modification of the files.

Document File

This file is identified as 'DOCFILE.FSD'. The complete file can be found in Appendix A.

The MGADS document file is a subset of the CGADS document file. It contains only the information pertinent to a full-scale development SOW/CDRL.

The document file contains two different types of information. The first section consists of the CDRL references. See Figure 4-1. In this

KEY VALUE		RECORD VALUE
0001	==>	9361
0002	==>	2. Maintainability Demonstration Plan
0003	==>	4. DI-R-2129
0004	==>	8. A
0005	==>	10. ONE/R
0006	==>	12. 30 days prior to CDR.
0007	==>	13. AS REQ
0008	==>	14. AS REQ BY PO
0009	==>	9381
0010	==>	2. Photographic Plan
0011	==>	4. DI-A-3006
0012	==>	10. ONE/R
0013	==>	14. AS REQ BY PO

Figure 4-1. Document File - Section One.

section, the numbers 0001 - 0013 are key values (or MGADS line numbers) of the information that appears with the numbers. The numbers 2, 4, 8, 10, 12, 13, and 14 refer to the block numbers on the DD Form 1423 into which the information goes. The numbers 9361 and 9381 refer to the old key values in CGADS.

The second section of the document file contains a listing of the DIDs, military and DOD handbooks and standards, specifications, and other documents that might be required in the SOW/CDRL. It also contains the standard tasking statements that relate to certain standards/specifications which are to be printed in the SOW portion of the word processing output. See Figure 4-2. The numbers 1090 - 1101 are key values (or MGADS line numbers). As above, the numbers like 13961 and 21 are old key values in CGADS.

```
 KEY       RECORD
VALUE      VALUE
-----      ------
1090 ==>   13961
1091 ==>           DI-H-3258A              Training Support Data
1092 ==>   14041
1093 ==>           DI-H-7049A              Safety Assessment Report
1094 ==>   21
1095 ==>        The contractor shall design military systems,
1096 ==>   equipment, and facilities to meet the human engineering
1097 ==>   requirements in MIL-H-46855B.
1098 ==>
1099 ==>   MIL-H-46855B             Human Engineering Requirements for
1100 ==>   31 Jan 79                Military Systems, Equipment and
1101 ==>                            Facilities
```

Figure 4-2. Document File - Section Two.

MGADS accesses the document file using relative key values contained in the indexes file. This will be explained further in the Indexes File portion of this chapter.

Standards File

This file is identified as 'STDFILE.FSD'. The complete file can be found in Appendix B.

The standards file consists of information that will be needed for the SOW portion of the output. It is a list of sections, paragraphs, appendices, tasks, and methods of the applicable handbooks, standards, specifications, and other documents. See Figure 4-3.

```
 KEY       RECORD
VALUE      VALUE
-----      ------
0345 ==>   APPENDIX A
0346 ==>   P          345          124
0347 ==>   10.1.8-10.2.7.3
0348 ==>   P          347          370
0349 ==>   10-10.1.6
0350 ==>   P          349          324
0351 ==>   APPENDIX B
```

Figure 4-3. Standards File.

Referring to the figure, key value 0345 and 0351 indicate appendices applicable in a given situation. Records 0347 and 0349 are paragraph numbers that are also applicable. Records 0346, 0348 and 0350 are for other documents besides the FSD SOW/CDRL that can be generated by CGADS and do not apply to this implementation of MGADS.

MGADS accesses the standards file using relative key values contained in the indexes file.

Question File

This file is identified as 'QUESTFILE.FSD'. The complete file can be found in Appendix C.

The question file consists of four different types of information.

See Figure 4-4. The first type of information is a list of the tasks within each of the five functional areas. Key values 55-62 give a partial list of the tasks in the logistics and packaging and transportation functional areas.

```
 KEY      RECORD
VALUE     VALUE
-----     ------
0055 ==>  PREOPERATIONAL MAINTENANCE
0056 ==>  PREOPERATIONAL SUPPLY SUPPORT
0057 ==>  SUPPORT EQUIPMENT (SE)
0058 ==>  TECHNICAL ORDERS
0059 ==>  TRAINING
0060 ==>  PRESERVATION, PACKAGING AND PACKING
0061 ==>  TRANSPORTATION
0062 ==>  TRAVEL
0063 ==>  DOES SYSTEMS ENGINEERING APPLY TO THIS CONTRACT ?
0064 ==>
0065 ==>  SOW: IN SOME CASES, THE GOVERNMENT MAY WISH TO ATTEND
0066 ==>       SUBCONTRACTOR AND VENDOR DESIGN REVIEWS WITH THE
0067 ==>       PRIME CONTRACTOR.  IF THIS SITUATION IS ANTICIPATED,
0068 ==>       USE MIL-STD-499A, PARA 10.1.7.
0069 ==>
0070 ==>  Systems Engineering requirements are not applicable.
0071 ==>  IS A SYSTEMS ENGINEERING MANAGEMENT PLAN (SEMP) REQUIRED
0072 ==>  TO BE SUBMITTED IN CONJUNCTION WITH THE SYSTEMS
0073 ==>  ENGINEERING PROPOSAL ?
```

Figure 4-4. Question File.

The second type of information this file contains is the questions that appear on the screen when executing the program. Key values 63 and 71 - 73 contain questions.

As appropriate, each question is followed by the third type of information, namely a list of action messages related to that question. Key values 65-68 contain an action message.

The final type of information in the question file is additional textual material that will appear in the word-processed SOW relative to a particular task and due to a particular 'YES' or 'NO' answer. Key

value 70 contains the message that will result from a 'NO' answer to the first question under systems engineering.

Index Pointer File

This file is identified as 'INDEXPTR.FSD'.

The index pointer file contains the relative key values used to access the index file. The complete file is contained in Figure 4-5.

```
AREA       TASKS
----       -----
 1       0001007101730249025802660277034604200514071608280865087609 75
        +1074112511481294132013 34
 2       1419178717971808182318 34
 3       1849186418871916
 4       1927209921202134221422452270233 4
 5       238124342471
```

Figure 4-5. Index Pointer File.

This file consists of five records, each of which relates to a functional area. The length of the record depends upon the number of tasks in the functional area. Each four digit value in the record is the key value pointing to the first index file record applicable to the area and task. For example, 0001 refers to the first task in the engineering functional area. The second task in engineering is 0071, and so on.

Indexes File

This file is identified as 'INDEXES.FSD'. The complete file can be found in Appendix D.

As is apparent from above, the indexes file is the file that ties together the other files to the MGADS program. All files accessed by MGADS have MGADS key values associated with them; some CGADS key values

are still present in the files for use in other portions of CGADS. This file, depending upon the recorded answers to the questions, directs the program to the appropriate handbooks, standards, specifications, and other documents using relative key values (pointers) contained in the second and/or third fields.

Each INDEXES record has a relative key value associated with it and is divided into three fields. See Figure 4-6. The first field can contain the following values: 1, A, 2, 3, 4, D, C, H, O, S, M, P, 5, or 6. The values of the second and third fields depend upon the value of the first field.

KEY VALUE	FIRST FIELD	SECOND FIELD	THIRD FIELD
0828	==> 1	1235	843
0829	==> A	64	0
0830	==> 2	0	833
0831	==> 3	-1	841
0832	==> 4	0	842
0833	==> D	3501	834
0834	==> C	13501	835
0835	==> D	13421	836
0836	==> C	13461	837
0837	==> D	4901	838
0838	==> C	12741	839
0839	==> 6	1239	840
0840	==> 6	1254	0
0841	==> 6	1261	0
0842	==> 6	1235	0
0843	==> 1	1265	0
0844	==> A	65	848

Figure 4-6. Indexes File.

First Field Value '1'. See records 0828 and 0843 in Figure 4-6. A '1' in the first field indicates the start of the information pertaining to a new question. (In the case of record 0828, based on Figure 4-5, this is the start of the first question in the twelfth task

under Area #1.) Records 0828-0842 all pertain to one particular question. Record 0843 is then the start of the second question in the twelfth task.

The value in the second field of records 0828 and 0843 is the key value (location) of the question in the question file (QUESTFILE.FSD).

The value in the third field is not immediately used by the program. It is the MGADS key value (location pointer) stored in memory until needed later to tell the program where to go to continue the program. The value can be a positive number as in record 0828 or a '0' as in record 0843. If it is a positive number, as in record 0828, it indicates the key value of the next record (for the next question) to be accessed in the INDEXES file. It also indicates that another question will be asked for a particular task. For example, when all of the information pertaining to the question 1235 in record 0828 is completed, record 0843 will then be accessed.

A '0' in the third field, as in record 0843, indicates that this is the last question for the task. The program will have to return to the index pointer file to obtain the key value for the next task.

First Field Value 'A'. See records 0829 and 0844 in Figure 4-6. An 'A' in the first field indicates that this record contains the location of the answer. Record 0829 contains the location of the answer to question 1235 identified in record 0828. Record 0844 contains the location of the answer to question 1265 in record 0843.

The second field contains the actual location of the answer in the working file, 'WFILENAME'. The answer of record 0829 is held in record 64 of the working file. The answer of record 0844 is held in record 65 of the working file.

The third field will always contain a '0' when the first field contains an 'A'. This is a filler value; it has no significance.

First Field Value '2', '3', or '4'. See records 0830, 0831, and 0832 in Figure 4-6. A '2', '3', or '4' in the first field represents a yes, no, or undecided was the answer, respectively, to the question. This allows flexible branching, as cited in the third field, based on the answer given.

The second field contains a '-1' or '0'. Neither of these values has any significance in MGADS.

The third field contains the key value of the next record to be accessed in the indexes file. For example, if the answer to question 1235 in record 0828 was yes, MGADS would store a 'Y' in location 64 in 'WFILENAME'. When the answers in 'WFILENAME' are word processed (Main Menu Option W), MGADS would proceed to record 0830. Then, reading the value 833 in the third field, record 0833 through 0840 would be accessed to obtain the output. A 'NO' answer would branch over this information to record 0841.

First Field Value Alphabetic, '5', or '6'. See records 0833-0842 in Figure 4-6. An alphabetic character (other than 'A') or a '5' or '6' in the first field indicates the type of document being referenced. An alphabetic character refers to a standard, specification, handbook, or other type of document. These are found in the standards and document files. A '5' or '6' refers to the verbage or action messages, respectively, in the question file. The 'D' in records 0833, 0835, and 0837 refer to Data Item Descriptions (DIDs). The 'C' in records 0834, 0836, and 0838 refer to CDRLs. The '6' in records 0839-0842 refer to action messages in the question file.

The second field contains the key values of the applicable records in the document, standards, and question file. In record 0833, 3501 refers to record 3501 in the document file.

The third field contains either a positive number as in records 0833-0839 or a '0' as in records 0840-0842. A positive number is the key value of the next record accessed in the indexes file. For example, after the DID in record 0833 has been recorded, record 0834 will be accessed for the next CDRL that applies. A '0' in the third field as in record 0840 indicates that no other documents are applicable to this question.

The pointer, at this time, will return to the most recent record with a '1' in the first field. In this case, it will return to record 0828. The number held in memory earlier, from field three, will be examined to indicate whether or not more questions apply to the particular task and, if so, to locate the record in which to next question starts.

Headings File

This file is identified as 'HEADINGS.FSD'. The complete file can be found in Appendix E.

The headings file contains a skeleton output. This is the output that would be obtained if all of the questions were answered 'NO'.

The headings file is accessed by MGADS through the indexes file.

Task File

The task file is identified as 'TASKFILE.FSD'. The complete file can be found in Appendix F.

This file contains the introduction screen face that will appear

while running the MGADS program. It also contains the area and task titles.

The task file is accessed directly from MGADS.

COBOL Source Program

This file is identified as 'FSD1ST.COB'. It is the actual COBOL source listing for MGADS. The listing can be found in Appendix G.

V. Conclusion

This chapter provides a summary of the research as well as several recommendations for further research.

Summary

The Computer Generated Acquisition Documents System was developed by Electronic Systems Division (ESD). CGADS automated the development of draft acquisition documents such as the Statement of Work and the Contract Data Requirements List. The system is still being expanded to create additional documents.

Several shortfalls exist with the current CGADS:

1. The system is difficult for non-ESD personnel to access.
2. The program requires too much memory for a micro-computer. The source code and data files require 1750K bytes of storage.
3. The output obtained from CGADS is not in WBS format.

The main objective of this thesis was to simplify the program manager's SOW/CDRL preparation job by modifying the portion of CGADS that deals with Full-Scale Development programs. In accomplishing that objective, the authors have overcome the shortfalls of CGADS.

1. MGADS, written in COBOL, is available for use by any AFSC personnel with access to a micro-computer with the MSDOS operating package.
2. MGADS concentrates only on the FSD SOW/CDRL, limiting the amount of memory required. The MGADS program and files require 570K bytes of memory.
3. The output of MGADS is in the WBS format.

The MGADS program was verified by comparing its output to that of CGADS when responding the same way to the same question. The CGADS program was first run with all 'YES' answers and then with all 'NO' answers. The same procedure was followed with the MGADS program. The

resulting CGADS and MGADS SOWs/CDRLs provided the same information. The test SOWs are provided in Appendices I and J.

A user's manual is provided in Appendix K. The manual will assist a program manager in installing the MGADS program onto a micro-computer. The manual also describes the execution of the program. The program manager may wish to detach Appendix K from this report to allow easy access to the manual.

Recommendations for Further Research

This thesis focused on the Full-Scale Development Statement of Work and Contract Data Requirements List. The questions asked as part of the program were developed by ESD for CGADS.

The following areas should be considered for further research:

1. Other portions of CGADS could be converted for use on the micro-computer. This would include SOWs/CDRLs for the other phases of the acquisition life cycle, Program Management Plans, Reliability Centered Maintenance Plans, Test and Evaluation Master Plans, and acquisition plans.

2. Additional questions could be added to the current MGADS to assist in tailoring the standards, specifications, and other documents even further. The existing questions could also be redesigned for a generic system rather than an electronic system.

3. The current questions asked in both CGADS and MGADS do not cover all topic areas that are part of the Work Breakdown Structure. Additional questions could be added to MGADS to cover these areas.

4. The size of the MGADS files and program could be reduced to allow all files to reside on a single or dual diskette micro-computer.

Appendix A: Document File

```
Key       Record
Value     Value
-----     -----
0001 ==>   9361
0002 ==>   2. Maintainability Demonstration Plan
0003 ==>   4. DI-R-2129
0004 ==>   8. A
0005 ==>  10. ONE/R
0006 ==>  12. 30 days prior to CDR.
0007 ==>  13. AS REQ
0008 ==>  14. AS REQ BY PO
0009 ==>   9381
0010 ==>   2. Photographic Plan
0011 ==>   4. DI-A-3006
0012 ==>  10. ONE/R
0013 ==>  14. AS REQ BY PO
0014 ==>   9421
0015 ==>   2. Still Photo Coverage
0016 ==>   4. DI-A-3011
0017 ==>  10. AR
0018 ==>  14. AS REQ BY PO
0019 ==>   9441
0020 ==>   2. Motion Picture Coverage (Footage)
0021 ==>   4. DI-A-3013
0022 ==>  10. AR
0023 ==>  14. AS REQ BY PO
0024 ==>   9481
0025 ==>   2. Contract Work Breakdown Structure (CWBS)
0026 ==>   4. DI-A-3023
0027 ==>  10. AR
0028 ==>  12. 30 DAC
0029 ==>  14. ACCI 1/0
0030 ==>      AS REQ BY PO
0031 ==>  16. The initial CWBS as well as all subsequent changes thereto are
0032 ==>      subject to program office approval.
0033 ==>   9501
0034 ==>   2. Data Accession List/Internal Data
0035 ==>   4. DI-A-3027
0036 ==>  10. MTHLY
0037 ==>  12. 45 DAC
0038 ==>  13. NLT 15th day of each month.
0039 ==>  14. DATA MGR 1/0
0040 ==>      PC DIV 1/0
0041 ==>      ACCI 1/0
0042 ==>   9521
0043 ==>   2. Agenda, Design Reviews, Configuration Audits and Demonstrations
0044 ==>   4. DI-A-3029
0045 ==>  10. AR
0046 ==>  12. 30 days prior to each review.
```

0047 ==> 14. AS REQ BY PO
0048 ==> 9541
0049 ==> 2. System Specification
0050 ==> 4. DI-E-3101/M. The final copy shall include all system design
0051 ==> analysis and trade-off studies.
0052 ==> 7. SD
0053 ==> 10. ONE/R
0054 ==> 12. AS REQ BY PO
0055 ==> 14. AS REQ BY PO
0056 ==> 9561
0057 ==> 2. Configuration Item Development Specification (B1)
0058 ==> 4. DI-E-3102A
0059 ==> 10. ONE/R
0060 ==> 12. 90 days prior to end of contract. Revisions as required. The
0061 ==> specification shall be prepared as Part 1 of two part specifica-
0062 ==> tions in accordance with para 3.1.4.
0063 ==> 14. AS REQ BY PO
0064 ==> 9581
0065 ==> 2. Configuration Item Product Fabrication Specification (C1B)
0066 ==> 4. DI-E-3103A
0067 ==> 10. ONE/R
0068 ==> 12. 30 days prior to CDR. The specification shall be prepared as
0069 ==> Part II of two part specifications IAW para 3.1.4.
0070 ==> 14. AS REQ BY PO
0071 ==> 9641
0072 ==> 2. Specification Maintenance Document
0073 ==> 4. DI-E-3106
0074 ==> 10. AS REQ
0075 ==> 12. With ECP
0076 ==> 14. Contractor shall distribute final SCN to all specification
0077 ==> holders.
0078 ==> 9681
0079 ==> 2. Configuration Management Plan
0080 ==> 4. DI-E-3108
0081 ==> 10. ONE/R
0082 ==> 12. 30 DAC
0083 ==> 14. AS REQ BY PO
0084 ==> 9701
0085 ==> 2. System Allocation Document
0086 ==> 4. DI-E-3116
0087 ==> 8. A
0088 ==> 10. ONE/R
0089 ==> 12. 30 days after approval of draft.
0090 ==> 13. AS REQ
0091 ==> 14. AS REQ BY PO
0092 ==> 9721
0093 ==> 2. Minutes of Formal Reviews, Inspections and Audits
0094 ==> 4. DI-E-3118
0095 ==> 10. AR
0096 ==> 12. 10 days after each review.
0097 ==> 14. AS REQ BY PO
0098 ==> 9741
0099 ==> 2. Computer Program Development Specification (Type B5)

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0100 ==>  4. DI-E-3119B
0101 ==> 10. ONE/R
0102 ==> 12. 90 days prior to end of contract.  Revisions as required.  The
0103 ==>     specification shall be prepared as Part I of two part specifica-
0104 ==>     tions IAW para 3.1.4.
0105 ==> 14. AS REQ BY PO
0106 ==>  9761
0107 ==>  2. Computer Program Product Specification (C5)
0108 ==>  4. DI-E-3120B
0109 ==> 10. ONE/R
0110 ==> 12. 30 days prior to CDR.  The specification shall be prepared as
0111 ==>     Part II of two part specifications IAW para 3.1.4.
0112 ==> 14. AS REQ BY PO
0113 ==>  9781
0114 ==>  2. Version Description Document (Computer Programs)
0115 ==>  4. DI-E-3121
0116 ==>  8. A
0117 ==> 10. AS REQ
0118 ==> 12. Submit with release of each version of a CPCI and each release of
0119 ==>     an interim change (i.e., changes that occur between CPCI ver-
0120 ==>     sions).
0121 ==> 14. AS REQ BY PO
0122 ==>  9801
0123 ==>  2. Configuration Index (Computer Program)
0124 ==>  4. DI-E-3122
0125 ==> 10. AS REQ
0126 ==> 12. AS REQ
0127 ==> 13. AS REQ
0128 ==> 14. AS REQ BY PO
0129 ==>  9821
0130 ==>  2. Change Status Report (Computer Program)
0131 ==>  4. DI-I-3123
0132 ==> 10. AS REQ
0133 ==> 14. AS REQ BY PO
0134 ==>  9841
0135 ==>  2. Request for Nomenclature
0136 ==>  4. DI-E-3126A
0137 ==> 10. AR
0138 ==> 12. 90 days before requirement of the type designation.
0139 ==> 14. AS REQ BY PO
0140 ==>  9861
0141 ==>  2. Advance Change Study Notice
0142 ==>  4. DI-E-3127
0143 ==> 10. AS REQ
0144 ==> 12. AS REQ
0145 ==> 13. AS REQ
0146 ==>  9881
0147 ==>  2. Engineering Change Proposal (ECP)
0148 ==>  4. DI-E-3128
0149 ==> 10. AR
0150 ==> 14. AS REQ BY PO
0151 ==> 16. Prior to preparation of a formal ECP, the contractor shall notify
0152 ==>     the Government of its intent to submit a proposal via Advance
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0153 ==> Change Study Notice (ACSN). Emergency, urgent, compatibility and
0154 ==> record type ECPs do not require an ACSN prior to submittal.
0155 ==> 9901
0156 ==> 2. Request for Deviation/Waiver
0157 ==> 4. DI-E-3129
0158 ==> 10. AS REQ
0159 ==> 12. AS REQ
0160 ==> 13. AS REQ
0161 ==> 14. AS REQ BY PO
0162 ==> 10161
0163 ==> 2. Technical Order Status and Schedules
0164 ==> 4. DI-M-3402
0165 ==> 10. MTHLY
0166 ==> 12. 45 DAC
0167 ==> 13. 15th of each month thereafter.
0168 ==> 14. AS REQ BY PO
0169 ==> 10181
0170 ==> 2. Technical Order CFAE/CFE Notices and Related Tech Orders
0171 ==> 4. DI-M-3405A/M. Notices shall be submitted for all items of equip-
0172 ==> ment including commercial, existing military and Support Equip-
0173 ==> ment. The existing military or commercial manuals submitted with
0174 ==> these notices will be reviewed IAW MIL-M-7298C. The contractor
0175 ==> will be notified if they are: 1) adequate, 2) can be made adequate
0176 ==> with supplemental data, or 3) require preparation of a new manual.
0177 ==> 14. AFLC 1/0
0178 ==> AS REQ BY PO
0179 ==> 10341
0180 ==> 2. Suspect Material Deficiency Notice (ALERT) and Response
0181 ==> 4. DI-R-3548B
0182 ==> 14. AS REQ BY PO
0183 ==> 10421
0184 ==> 2. Final Facilities Design Package
0185 ==> 4. DI-S-3559
0186 ==> 10. 0 TIME
0187 ==> 12. NLT 120 days after completion of Preliminary Design Review.
0188 ==> 14. ESD/DE 15/0
0189 ==> AS REQ BY PO
0190 ==> 10441
0191 ==> 2. Technical Reports
0192 ==> 3. Facilities Design Review
0193 ==> 4. DI-S-3591A/M
0194 ==> 10. Periodic - 2 times during design phase - 2 times during construc-
0195 ==> tion.
0196 ==> 12. Within 30 days of design review or construction surveillance.
0197 ==> 13. Within 30 days of design review or construction surveillance.
0198 ==> 14. ESD/DE 6/0
0199 ==> AS REQ BY PO
0200 ==> 10501
0201 ==> 2. System Engineering Management Plan (SEMP)
0202 ==> 4. DI-S-3618
0203 ==> 10. ONE/R
0204 ==> 12. 30 DAC
0205 ==> 13. AS REQ

0206 ==> 14. AS REQ BY PO
0207 ==> 10541
0208 ==> 2. Contractor Test Plans/Procedures
0209 ==> 3. Contractor Test Plans
0210 ==> 4. DI-T-3702A/M. Test Plans only.
0211 ==> 8. A. Draft: 15 days prior to PDR.
0212 ==> 10. ONE/R
0213 ==> 12. Final: 30 days after Government approval of draft.
0214 ==> 13. AS REQ
0215 ==> 14. AS REQ BY PO
0216 ==> 10701
0217 ==> 2. Installation Test Plan/Procedures (Ground C-E Equipment)
0218 ==> 3. Installation Test Plan
0219 ==> 4. DI-T-3712A. Test plans only.
0220 ==> 8. A. Draft: 30 days prior to CDR.
0221 ==> 10. ONE/R
0222 ==> 12. Final: 30 days after Government approval of draft.
0223 ==> 13. AS REQ
0224 ==> 14. AS REQ BY PO
0225 ==> 10761
0226 ==> 2. Acceptance Test Procedures
0227 ==> 4. DI-T-3714A
0228 ==> 8. A. Draft: prior to FCA.
0229 ==> 10. ONE/R
0230 ==> 12. Final: 30 days after Government approval of draft.
0231 ==> 13. AS REQ
0232 ==> 14. AS REQ BY PO
0233 ==> 10781
0234 ==> 2. Final Test Report
0235 ==> 4. DI-T-3716A
0236 ==> 10. ONE/R
0237 ==> 12. 30 days after completion of test.
0238 ==> 14. AS REQ BY PO
0239 ==> 10821
0240 ==> 2. Installation Test Report (Ground C-E Equipment)
0241 ==> 4. DI-T-3720B
0242 ==> 10. ONE/R
0243 ==> 12. 30 days after completion of tests.
0244 ==> 13. AS REQ
0245 ==> 14. AS REQ BY PO
0246 ==> 10841
0247 ==> 2. Acceptance Test Reports
0248 ==> 4. DI-T-3721A
0249 ==> 10. ONE/R
0250 ==> 13. AS REQ
0251 ==> 14. AS REQ BY PO
0252 ==> 10881
0253 ==> 2. Test Requirements Document (TRD)
0254 ==> 4. DI-T-3734A
0255 ==> 10. ONE/R
0256 ==> 12. 30 days after Government approval of the ORLA.
0257 ==> 14. AS REQ BY PO
0258 ==> 10921

0259 ==> 2. Cost Performance Report (CPR)
0260 ==> 4. DI-F-6000C
0261 ==> 10. MTHLY
0262 ==> 12. 30 DAC
0263 ==> 13. 15th of each month thereafter.
0264 ==> 14. AS REQ BY PO
0265 ==> ACCI 1/0
0266 ==> 16. Deliver one magnetic tape to ESD/ACCI. Specific instructions
0267 ==> for this tape are included in the back up.
0268 ==> 10941
0269 ==> 2. Contract Funds Status Report (CFSR)
0270 ==> 4. DI-F-6004B
0271 ==> 10. QTRLY
0272 ==> 14. AS REQ BY PO
0273 ==> ACCI 1/0
0274 ==> 10961
0275 ==> 2. Cost Data Summary Report (DD Form 1921)
0276 ==> 4. DI-F-6006
0277 ==> 10. Annually
0278 ==> 12. & 13. For all incentive type contracts (FPIF, CPIF, FPI) reports
0279 ==> marked Final Report will be submitted at the end of the month
0280 ==> during which the final price revision is signed by the contractor
0281 ==> and the government. For CPFF contracts, Final Report will be
0282 ==> submitted when cumulative costs have reached 98% of the estimate
0283 ==> at completion.
0284 ==> 14. ACCI 4/0
0285 ==> AS REQ BY PO
0286 ==> 10981
0287 ==> 2. Functional Cost Hour Report (DD Form 1921-1)
0288 ==> 4. DI-F-6007
0289 ==> 10. Annually
0290 ==> 12. & 13. For all incentive type contracts (FPIF, CPIF, FPI) reports
0291 ==> marked Final Report will be submitted at the end of the month
0292 ==> during which the final price revision is signed by the contractor
0293 ==> and the government. For CPFF contracts, Final Report will be
0294 ==> submitted when cumulative costs have reached 98% of the estimate
0295 ==> at completion.
0296 ==> 14. ACCI 4/0
0297 ==> AS REQ BY PO
0298 ==> 11001
0299 ==> 2. Progress Curve Report (DD Form 1921-2)
0300 ==> 4. DI-F-6008
0301 ==> 10. AR
0302 ==> 12. Unit/lot completion as specified in contract. Following delivery
0303 ==> of the last prime item, a report marked Preliminary Final Report
0304 ==> shall be submitted at the end of the month in which the item was
0305 ==> delivered and accepted.
0306 ==> 13. For all CPFF contracts, Final Report shall be submitted when
0307 ==> cumulative costs have reached 98% of estimate at completion.
0308 ==> For all incentive contracts, Final Reports shall be submitted
0309 ==> at the end of the month during which the final price revision is
0310 ==> signed by the contractor and the government.
0311 ==> 14. ACCI 4/0

0312 ==> AS REQ BY PO
0313 ==> 11021
0314 ==> 2. Plant-Wide Data Report (DD Form 1921-3)
0315 ==> 4. DI-F-6009
0316 ==> 10. Annually. The report shall be prepared based on contractor's
0317 ==> accounting system and estimating procedures.
0318 ==> 14. ACCI 5/0
0319 ==> AS REQ BY PO
0320 ==> 11041
0321 ==> 2. Cost Schedule Status Report (C/SSR)
0322 ==> 4. DI-F-6010A
0323 ==> 10. MTHLY
0324 ==> 14. ACCI 1/0
0325 ==> AS REQ BY PO
0326 ==> 16. Deliver one magnetic tape to ESD/ACCI. Specific instructions
0327 ==> for this tape are included in the back up.
0328 ==> 11141
0329 ==> 2. Integrated Support Plan
0330 ==> 4. DI-L-6138
0331 ==> 10. ONE/R
0332 ==> 12. 30 DAC
0333 ==> 13. Revisions, as required, following contract award.
0334 ==> 14. AS REQ BY PO
0335 ==> USING COMD 2/0
0336 ==> ALC-AR
0337 ==> ATC 2/0
0338 ==> 11201
0339 ==> 2. Logistics Support Plan for Preoperational Support (LSPPS)
0340 ==> 4. DI-L-6143/M
0341 ==> 10. ONE/R
0342 ==> 12. 30 DAC
0343 ==> 14. AS REQ BY PO
0344 ==> AFLC
0345 ==> USING COMD
0346 ==> 11241
0347 ==> 2. Preservation and Packaging Plan
0348 ==> 4. DI-L-6147A
0349 ==> 10. ONE/R
0350 ==> 12. NLT 60 days prior to production packaging.
0351 ==> 13. AS REQ
0352 ==> 14. AS REQ BY PO
0353 ==> 11661
0354 ==> 2. Part Control Program Plan
0355 ==> 4. DI-E-7026A
0356 ==> 14. DESC/EPA 1/0
0357 ==> RADC/RBRA 1/0
0358 ==> AS REQ BY PO
0359 ==> 11721
0360 ==> 2. Drawings, Engineering and Associated Lists
0361 ==> 4. DI-E-7031
0362 ==> 14. DESC/EPA 1 N/R
0363 ==> DISC/ESM 1 N/R
0364 ==> RADC/RBRA 1 N/R

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0365 ==>     AS REQ BY PO
0366 ==> 16. Whenever the generation of a control drawing that relates to the
0367 ==>     procurement of Parts in the categories listed in para 6.4 of MIL-
0368 ==>     STD-965 is needed and that generation is approved by the Procur-
0369 ==>     ing Activity, a copy of that Control Drawing together with a com-
0370 ==>     pleted DD Form 2052 will be distributed to DESC, DISC and/or RADC,
0371 ==>     as appropriate.  Selected Item Drawings (SID) IAW DOD-STD-100
0372 ==>     shall be the type of Control Drawing provided whenever a drawing
0373 ==>     is provided that describes a piece part that requires selection,
0374 ==>     screening, testing, etc. over and above that provided by that
0375 ==>     part vendor's usual practice relative to the specific part num-
0376 ==>     bered item referenced in the drawing.                              *
0377 ==> 11741
0378 ==>  2. Plan, Reliability Test
0379 ==>  4. DI-R-7033
0380 ==>  8. A
0381 ==> 10. ONE/R
0382 ==> 14. AS REQ BY PO                                                      *
0383 ==> 11761
0384 ==>  2. Reports, Reliability Test and Demonstration
0385 ==>  4. DI-R-7034
0386 ==> 10. 0 TIME
0387 ==> 14. AS REQ BY PO                                                      *
0388 ==> 11781
0389 ==>  2. Procedures, Reliability Test and Demo
0390 ==>  4. DI-R-7035
0391 ==> 10. 0 TIME
0392 ==> 14. AS REQ BY PO                                                      *
0393 ==> 11881
0394 ==>  2. Report, Burn-In Test
0395 ==>  4. DI-R-7040
0396 ==> 10. 0 TIME
0397 ==> 14. AS REQ BY PO                                                      *
0398 ==> 11901
0399 ==>  2. Report, Failure Summary and Analysis
0400 ==>  4. DI-R-7041
0401 ==> 10. AR
0402 ==> 14. AS REQ BY PO                                                      *
0403 ==> 11921
0404 ==>  2. Human Engineering Program Plan
0405 ==>  4. DI-H-7051
0406 ==>  8. A
0407 ==> 10. ONE/R
0408 ==> 12. 30 DAC
0409 ==> 13. AS REQ
0410 ==> 14. AS REQ BY PO                                                      *
0411 ==> 11961
0412 ==>  2. Human Engineering Test Plan
0413 ==>  4. DI-H-7053
0414 ==>  8. A. (15) days prior to PDR.
0415 ==> 10. ONE/R
0416 ==> 12. (30) days after Government approval of draft.
0417 ==> 13. AS REQ
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0418 ==> 14. AS REQ BY PO
0419 ==> 12001
0420 ==> 2. Critical Task Analysis Report
0421 ==> 4. DI-H-7055
0422 ==> 8. A
0423 ==> 10. ONE/R
0424 ==> 12. Prior to preliminary design reviews.
0425 ==> 13. AS REQ
0426 ==> 14. AS REQ BY PO
0427 ==> 12021
0428 ==> 2. Human Engineering Design Approach Document - Operator
0429 ==> 4. DI-H-7056
0430 ==> 8. A
0431 ==> 10. ONE/R
0432 ==> 12. Prior to critical design review.
0433 ==> 13. AS REQ
0434 ==> 14. AS REQ BY PO
0435 ==> 12041
0436 ==> 2. Human Engineering Design Approach Document - Maintainer
0437 ==> 4. DI-H-7057
0438 ==> 8. A
0439 ==> 10. ONE/R
0440 ==> 12. Prior to critical design phase.
0441 ==> 13. AS REQ
0442 ==> 14. AS REQ BY PO
0443 ==> 12061
0444 ==> 2. Human Engineering Test Report
0445 ==> 4. DI-H-7058
0446 ==> 10. ONE/R
0447 ==> 14. AS REQ BY PO
0448 ==> 12081
0449 ==> 2. Human Engineering Progress Report
0450 ==> 4. DI-H-7059
0451 ==> 10. QTRLY
0452 ==> 12. 90 DAC
0453 ==> 13. Each quarter thereafter.
0454 ==> 14. AS REQ BY PO
0455 ==> 12101
0456 ==> 2. Electromagnetic Interference Control Plan
0457 ==> 4. DI-R-7061
0458 ==> 8. A
0459 ==> 10. ONE/R
0460 ==> 13. AS REQ
0461 ==> 14. AS REQ BY PO
0462 ==> 12121
0463 ==> 2. Electromagnetic Interference Test Report
0464 ==> 4. DI-R-7062
0465 ==> 8. A. Draft report 30 days after test.
0466 ==> 10. 0 TIME
0467 ==> 12. Final 30 days after draft approval.
0468 ==> 14. AS REQ BY PO
0469 ==> 12141
0470 ==> 2. Electromagnetic Interference Test Plan/Procedures

0471 ==> 3. EMC Test Plan
0472 ==> 4. DI-R-7063
0473 ==> 8. A. Draft by CDR.
0474 ==> 10. ONE/R
0475 ==> 12. Final 30 days after draft approval.
0476 ==> 13. AS REQ
0477 ==> 14. AS REQ BY PO
0478 ==> 12181
0479 ==> 2. Reliability Program Plan
0480 ==> 4. DI-R-7079
0481 ==> 8. A.
0482 ==> 10. ONE/R
0483 ==> 13. AS REQ
0484 ==> 14. AS REQ BY PO
0485 ==> 12201
0486 ==> 2. Reliability Status Report
0487 ==> 4. DI-R-7080
0488 ==> 10. AR
0489 ==> 14. AS REQ BY PO
0490 ==> 12281
0491 ==> 2. Electronic Parts/Circuits Tolerance Analysis Report
0492 ==> 4. DI-R-7084
0493 ==> 10. ONE/R
0494 ==> 14. AS REQ BY PO
0495 ==> 12301
0496 ==> 2. Report, FMECA
0497 ==> 4. DI-R-7085
0498 ==> 10. ONE
0499 ==> 14. AS REQ BY PO
0500 ==> 12321
0501 ==> 2. Maintainability Program Plan
0502 ==> 4. DI-R-7103. If the solicitor was the contractor from a previous
0503 ==> phase, revise/update the preceding plan.
0504 ==> 8. A
0505 ==> 10. ONE/R
0506 ==> 12. 60 DAC
0507 ==> 13. Final report 30 days after receipt of comments.
0508 ==> 14. AS REQ BY PO
0509 ==> 12341
0510 ==> 2. Maintainability Status Report
0511 ==> 4. DI-R-7104
0512 ==> 10. AR
0513 ==> 12. 90 DAC
0514 ==> 13. Quarterly thereafter.
0515 ==> 14. AS REQ BY PO
0516 ==> 12361
0517 ==> 2. Data Collection, Analysis and Corrective Action System Reports
0518 ==> 4. DI-R-7105
0519 ==> 10. MTHLY
0520 ==> 12. Start of test.
0521 ==> 13. 30 day intervals after start of test.
0522 ==> 14. AS REQ BY PO
0523 ==> 12381

0524 ==> 2. Maintainability Modelling Report
0525 ==> 4. DI-R-7106
0526 ==> 10. ONE/R
0527 ==> 12. 60 DAC
0528 ==> 13. Updates for each re-design 30 days prior to design review.
0529 ==> 14. AS REQ BY PO
0530 ==> 12401
0531 ==> 2. Maintainability Allocations Report
0532 ==> 4. DI-R-7107
0533 ==> 10. ONE/R
0534 ==> 12. 60 DAC
0535 ==> 13. Updates for each re-design 30 days prior to design review.
0536 ==> 14. AS REQ BY PO
0537 ==> 12421
0538 ==> 2. Maintainability Predictions Report
0539 ==> 4. DI-R-7108
0540 ==> 10. ONE/R
0541 ==> 12. 60 DAC
0542 ==> 13. Updates for each re-design 30 days prior to design review.
0543 ==> 14. AS REQ BY PO
0544 ==> 12441
0545 ==> 2. Maintainability Analysis Report
0546 ==> 4. DI-R-7109
0547 ==> 10. AR
0548 ==> 12. 30 days prior to PDR and CDR.
0549 ==> 13. 30 days prior to special R/M reviews.
0550 ==> 14. AS REQ BY PO
0551 ==> 12461
0552 ==> 2. Maintainability Design Criteria Plan
0553 ==> 4. DI-R-7110
0554 ==> 10. ONE/R
0555 ==> 12. 60 DAC
0556 ==> 13. AS REQ
0557 ==> 14. AS REQ BY PO
0558 ==> 12481
0559 ==> 2. Inputs to the Detailed Maintenance Plan and Logistics Support
0560 ==> Analysis
0561 ==> 4. DI-R-7111
0562 ==> 10. ONE/R
0563 ==> 12. 30 days prior to PDR and CDR.
0564 ==> 14. AS REQ BY PO
0565 ==> 12501
0566 ==> 2. Maintainability Demonstration Report
0567 ==> 4. DI-R-7113
0568 ==> 10. ONE/R
0569 ==> 12. 30 days after test.
0570 ==> 13. AS REQ
0571 ==> 14. AS REQ BY PO
0572 ==> 12621
0573 ==> 2. Computer Program Configuration Item Developmental Test and
0574 ==> Evaluation Report
0575 ==> 4. OT-DI-E-30152
0576 ==> 8. A

0577 ==> 10. 0 TIME
0578 ==> 12. NLT 30 days after completion of test.
0579 ==> 14. AS REQ BY PO
0580 ==> USING COMD 1/0
0581 ==> SUP COMD 1/0
0582 ==> AFTEC 1/0
0583 ==> 12641
0584 ==> 2. Computer Program Configuration Item Test Procedures
0585 ==> 4. OT-DI-E-30153
0586 ==> 8. A. 1st submission: Draft submitted after Government approval of
0587 ==> Test Plan but NLT CDR.
0588 ==> 10. ONE/R
0589 ==> 12. Final submission: 30 days after Government approval of draft.
0590 ==> 13. Revisions as required.
0591 ==> 14. AS REQ BY PO
0592 ==> USING COMD 1/0
0593 ==> SUP COMD 1/0
0594 ==> AFTEC 1/0
0595 ==> 12661
0596 ==> 2. Computer Program Configuration Item Test Plan
0597 ==> 4. OT-DI-E-30154
0598 ==> 8. A. Draft 60 days after PDR.
0599 ==> 10. ONE/R
0600 ==> 12. Final submission: 30 days after Government approval of draft.
0601 ==> 13. Revisions as required.
0602 ==> 14. AS REQ BY PO
0603 ==> USING COMD 1/0
0604 ==> SUP COMD 1/0
0605 ==> 12721
0606 ==> 2. Critical Item Control Plan
0607 ==> 4. DI-R-30511
0608 ==> 8. A
0609 ==> 10. ONE/R
0610 ==> 14. AS REQ BY PO
0611 ==> 12741
0612 ==> 2. Survivability/Vulnerability Program Plan
0613 ==> 4. DI-R-30515
0614 ==> 8. A
0615 ==> 10. ONE/R
0616 ==> 12. 90 DAC
0617 ==> 14. AS REQ BY PO
0618 ==> 12761
0619 ==> 2. Computer Program Development Plan
0620 ==> 4. DI-S-30567A
0621 ==> 8. A
0622 ==> 10. ONE/R
0623 ==> 12. NLT 60 DAC. Comments from negotiations are to be incorporated
0624 ==> in submittal of CPDP. Updates are required.
0625 ==> 13. AS REQ
0626 ==> 14. AS REQ BY PO
0627 ==> 12981
0628 ==> 2. Tempest Test and Evaluation Report
0629 ==> 4. DI-T-5180

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0630 ==> 14. AS REQ BY PO                                                    .
0631 ==> 13001
0632 ==>  2. Tempest Test Facility Certification Report, Electromagnetics
0633 ==>  4. DI-T-5181A
0634 ==> 14. AS REQ BY PO                                                    .
0635 ==> 13021
0636 ==>  2. Tempest Detection System Certification Report, Electromagnetics
0637 ==>  4. DI-T-5182A
0638 ==> 14. AS REQ BY PO                                                    .
0639 ==> 13041
0640 ==>  2. Tempest Test Set-up Ambient Signal Control Certification Report,
0641 ==>     Electromagnetics
0642 ==>  4. DI-T-5183A
0643 ==> 14. AS REQ BY PO                                                    .
0644 ==> 13061
0645 ==>  2. System Safety Program Plan
0646 ==>  4. DI-H-7047A
0647 ==> 12. 30 DAC
0648 ==> 13. O/TIME
0649 ==> 14. AS REQ BY PO                                                    .
0650 ==> 13081
0651 ==>  2. Reliability Block Diagrams and Math Models Report
0652 ==>  4. DI-R-7094
0653 ==> 10. ONE/R
0654 ==> 14. AS REQ BY PO                                                    .
0655 ==> 13101
0656 ==>  2. Reliability Prediction and Documentation of Supporting Data
0657 ==>  4. DI-R-7095
0658 ==> 10. ONE/R
0659 ==> 14. AS REQ BY PO                                                    .
0660 ==> 13121
0661 ==>  2. Survivability Cost Effectiveness Tradeoff
0662 ==>  4. DI-R-21498A
0663 ==> 14. AS REQ BY PO                                                    .
0664 ==> 13141
0665 ==>  2. Tempest Test Plan, Electromagnetics
0666 ==>  4. DI-T-5140B
0667 ==> 14. AS REQ BY PO                                                    .
0668 ==> 13161
0669 ==>  2. Tempest Control Plan
0670 ==>  4. DI-T-5245
0671 ==> 14. AS REQ BY PO                                                    .
0672 ==> 13181
0673 ==>  2. Positional Handbook - Information System Operational Personnel
0674 ==>  4. DI-M-3409
0675 ==> 14. AS REQ BY PO                                                    .
0676 ==> 13201
0677 ==>  2. User's Manual - Computer Program
0678 ==>  4. DI-H-3410
0679 ==> 14. AS REQ BY PO                                                    .
0680 ==> 13221
0681 ==>  2. Maintainability Demonstration Test Plan
0682 ==>  4. DI-R-7112
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0683 ==> 14. AS REQ BY PO
0684 ==> 13261
0685 ==> 2. Configuration Management Accounting Reports (Machine or Manually
0686 ==> Prepared)
0687 ==> 4. DI-E-3133
0688 ==> 14. AS REQ BY PO
0689 ==> 13281
0690 ==> 2. System Safety Hazard Analysis Report
0691 ==> 3. Preliminary Hazard Analysis
0692 ==> 4. DI-H-7048B
0693 ==> 12. 30 days before PDR
0694 ==> 13. Update A/R
0695 ==> 14. AS REQ BY PO
0696 ==> 13381
0697 ==> 2. Commercial Off-the-Shelf Manual
0698 ==> 4. DI-M-7024
0699 ==> 14. AS REQ BY PO
0700 ==> 13461
0701 ==> 2. Nuclear Hardness Critical Item Index
0702 ==> 4. OT-DI-L-30324
0703 ==> 14. AS REQ BY PO
0704 ==> 13501
0705 ==> 2. Technical Reports
0706 ==> 3. HA, HM, HS Plan
0707 ==> 4. DI-S-3591A/M
0708 ==> 14. AS REQ BY PO
0709 ==> 13541
0710 ==> 2. Technical Reports
0711 ==> 3. Vulnerability Analysis - Upset/Damage
0712 ==> 4. DI-S-3591A
0713 ==> 14. AS REQ BY PO
0714 ==> 13581
0715 ==> 2. Technical Reports
0716 ==> 3. Vulnerability Analysis - Critical CIs
0717 ==> 4. DI-S-3591A
0718 ==> 14. AS REQ BY PO
0719 ==> 13601
0720 ==> 2. Technical Reports
0721 ==> 3. Threat Analysis
0722 ==> 4. DI-S-3591A
0723 ==> 14. AS REQ BY PO
0724 ==> 13621
0725 ==> 2. Nonstandard Part Approval Requests/Proposed Additions to an
0726 ==> Approved PPSL
0727 ==> 4. DI-E-7028A
0728 ==> 14. DESC/EPA 1/0
0729 ==> DISC/ESM 1/0
0730 ==> RADC/RBRA 1/0
0731 ==> AS REQ BY PO
0732 ==> 16. Prepare three separate submissions: One covering
0733 ==> electrical and electronic parts as shown in para 6.4b of MIL-STD-
0734 ==> 965 which is to be distributed to DESC, and others in Block 14
0735 ==> except DISC. The second submission covering Mechanical Parts as

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0736 ==>     shown in para 6.4a of MIL-STD-965 is to be distributed to DISC and
0737 ==>     others in Block 14 except DESC and RADC.  The remaining items will
0738 ==>     be submitted to all addressees except DESC and DISC.  Within 30
0739 ==>     days following the establishment of the Product baseline, the con-
0740 ==>     tractor shall annotate, by simple means, a complete copy of both
0741 ==>     the Mechanical and the Electrical/Electronic PPSL together with
0742 ==>     their amendments, indicating which of the listed items are actual-
0743 ==>     ly being used in the baseline product.  The annotated PPSL shall
0744 ==>     be sent to DISC only and the Electrical/Electronic to DESC only.
0745 ==> 13941
0746 ==>  2. Training and Training Equipment Planning Information
0747 ==>  4. DI-H-7066
0748 ==> 10. ONE
0749 ==> 12. 90 DAC
0750 ==> 14. HQ ATC/TTYR 1/0
0751 ==>     HQ ATC/TTYK 1/0
0752 ==>     HQ ATC/TTYS 1/0
0753 ==>     ESD/TTGT 1/0
0754 ==>     3300 TCHTW/TTGXV 1/0
0755 ==>     3300 TCHTW/TTGXR 1/0
0756 ==> 13981
0757 ==>  2. Training Support Data
0758 ==>  4. DI-H-3258A
0759 ==> 10. AS REQ
0760 ==> 13. AS REQ
0761 ==> 14. 3300 TCHTW/TTGXR 15/0
0762 ==> 16. Contingency item will be called out as a deliverable only in the
0763 ==>     event Technical Orders/manuals will not be available for training.
0764 ==> 14061
0765 ==>  2. Safety Assessment Report
0766 ==>  4. DI-H-7049A
0767 ==> 10. 1/R
0768 ==> 12. 60 days prior to Major Test Milestones; e.g., DT&E.
0769 ==> 13. AR
0770 ==> 14. AS REQ BY PO
0771 ==> 14141
0772 ==>  2. System Safety Hazard Analysis Report
0773 ==>  3. Subsystem Hazard Analysis
0774 ==>  4. DI-H-7048B
0775 ==> 12. 60 days after PDR
0776 ==> 13. Update A/R
0777 ==> 14. AS REQ BY PO
0778 ==> 14161
0779 ==>  2. System Safety Hazard Analysis Report
0780 ==>  3. System Hazaard Analysis
0781 ==>  4. DI-H-7048B
0782 ==> 12. 30 days prior to CDR
0783 ==> 13. Update A/R
0784 ==> 14. AS REQ BY PO
0785 ==> 14181
0786 ==>  2. System Safety Hazard Analysis Report
0787 ==>  3. Operating and Support Hazard Analysis
0788 ==>  4. DI-H-7048B
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0789 ==> 12. 60 days prior to Major Test Milestone; i.e., DT&E.
0790 ==> 13. Update A/R
0791 ==> 14. AS REQ BY PO

0792 ==>	1821		
0793 ==>		DI-S-3618	System Engineering Management
0794 ==>			Plan (SEMP)
0795 ==>	1921		
0796 ==>		DI-R-7084	Electronic Parts/Circuits
0797 ==>			Tolerance Analysis Report
0798 ==>	1941		
0799 ==>		DI-R-30511	Critical Item Control Plan
0800 ==>	1961		
0801 ==>		DI-R-7041	Report, Failure Summary and
0802 ==>			Analysis
0803 ==>	1981		
0804 ==>		DI-R-7079	Reliability Program Plan
0805 ==>	2001		
0806 ==>		DI-R-7080	Reliability Status Report
0807 ==>	2041		
0808 ==>		DI-R-7033	Plan, Reliability Test
0809 ==>	2061		
0810 ==>		DI-R-7040	Report, Burn-In Test
0811 ==>	2081		
0812 ==>		DI-R-7035	Procedures, Reliability Test
0813 ==>			and Demo
0814 ==>	2101		
0815 ==>		DI-R-7034	Reports, Reliability Test and
0816 ==>			Demonstration
0817 ==>	2301		
0818 ==>		DI-R-3548	Suspect Material Deficiency
0819 ==>			Notice (ALERT) and Response
0820 ==>	2381		
0821 ==>		DI-R-3524	IEMCAP Report
0822 ==>	2401		
0823 ==>		DI-R-7061	Electromagnetic Interference
0824 ==>			Control Plan
0825 ==>	2421		
0826 ==>		DI-R-7063	Electromagnetic Interference
0827 ==>			Test Plan/Procedures
0828 ==>	2441		
0829 ==>		DI-R-7062	Electromagnetic Interference
0830 ==>			Test Report
0831 ==>	2461		
0832 ==>		DI-L-6143/M	Logistics Support Plan for
0833 ==>			Preoperational Support (LSPPS)
0834 ==>	3141		
0835 ==>		DI-A-3023	Contract Work Breakdown
0836 ==>			Structure (CWBS)
0837 ==>	3161		
0838 ==>		DI-F-60048	Contract Funds Status Report
0839 ==>			(CFSR)
0840 ==>	3181		
0841 ==>		DI-F-6006	Cost Data Summary Report

0842 ==>			(DD Form 1921)
0843 ==>	3201		
0844 ==>		DI-F-6007	Functional Cost Hour Report
0845 ==>			(DD Form 1921-1)
0846 ==>	3221		
0847 ==>		DI-F-6009	Plant-Wide Data Report
0848 ==>			(DD Form 1921-3)
0849 ==>	3241		
0850 ==>		DI-F-6008	Progress Curve Report
0851 ==>			(DD Form 1921-2)
0852 ==>	3261		
0853 ==>		DI-F-6000C	Cost Performance Report (CPR)
0854 ==>	3281		
0855 ==>		DI-F-6010A	Cost Schedule Status Report
0856 ==>			(C/SSR)
0857 ==>	3341		
0858 ==>		DI-L-6147A	Preservation and Packaging Plan
0859 ==>	3381		
0860 ==>		DI-A-3007	Program Schedule
0861 ==>	3401		
0862 ==>		DI-E-7031	Drawings, Engineering and
0863 ==>			Associated Lists
0864 ==>	3461		
0865 ==>		DI-A-3027	Data Accession List/Internal
0866 ==>			Data
0867 ==>	3481		
0868 ==>		DI-E-3126A	Request for Nomenclature
0869 ==>	3501		
0870 ==>		DI-S-3591A	Technical Reports
0871 ==>	3521		
0872 ==>		DI-M-3401/M	Technical Order Publication
0873 ==>			Plan
0874 ==>	3541		
0875 ==>		DI-M-3402	Technical Order Status and
0876 ==>			Schedules
0877 ==>	3561		
0878 ==>		DI-M-3407B	Technical Orders
0879 ==>	3581		
0880 ==>		DI-M-3405A	Technical Order CFAE/CFE
0881 ==>			Notices and Related Tech Orders
0882 ==>	3601		
0883 ==>		DI-A-3006	Photographic Plan
0884 ==>	3621		
0885 ==>		DI-A-3011	Still Photo Coverage
0886 ==>	3641		
0887 ==>		DI-A-3013	Motion Picture Coverage
0888 ==>			(Footage)
0889 ==>	3661		
0890 ==>		DI-E-3108	Configuration Management Plan
0891 ==>	3681		
0892 ==>		DI-E-3101	System Specification
0893 ==>	3741		
0894 ==>		DI-E-3119B	Computer Program Development

0895 ==>			Specification (Type B5) ■
0896 ==>	3761		
0897 ==>		DI-E-3102A	Configuration Item Development
0898 ==>			Specification (B1) ■
0899 ==>	3861		
0900 ==>		DI-E-3120B	Computer Program Product
0901 ==>			Specification (C5) ■
0902 ==>	3881		
0903 ==>		DI-E-3103A	Configuration Item Product
0904 ==>			Fabrication Specification (C1B)■
0905 ==>	3901		
0906 ==>		DI-E-3106	Specification Maintenence
0907 ==>			Document ■
0908 ==>	3921		
0909 ==>		DI-E-3123	Change Status Report
0910 ==>			(Computer Program) ■
0911 ==>	3941		
0912 ==>		DI-E-3122	Configuration Index
0913 ==>			(Computer Program) ■
0914 ==>	3961		
0915 ==>		DI-E-3121	Version Description Document
0916 ==>			(Computer Programs) ■
0917 ==>	3981		
0918 ==>		DI-E-3129	Request for Deviation/Waiver ■
0919 ==>	4001		
0920 ==>		DI-E-3128	Engineering Change Proposal
0921 ==>			(ECP) ■
0922 ==>	4021		
0923 ==>		DI-E-3127	Advance Change Study Notice ■
0924 ==>	4041		
0925 ==>		DI-E-3116	System Allocation Document ■
0926 ==>	4061		
0927 ==>		DI-E-3118	Minutes of Formal Reviews,
0928 ==>			Inspections and Audits ■
0929 ==>	4081		
0930 ==>		DI-A-3029	Agenda, Design Reviews,
0931 ==>			Configuration Audits and
0932 ==>			Demonstrations ■
0933 ==>	4121		
0934 ==>		DI-S-30567A	Computer Program Development
0935 ==>			Plan ■
0936 ==>	4401		
0937 ==>		DI-S-3559	Final Facilities Design Package■
0938 ==>	4581		
0939 ==>		DI-T-3702A	Contractor Test Plans/
0940 ==>			Procedures ■
0941 ==>	4681		
0942 ==>		DI-T-3716A	Final Test Report ■
0943 ==>	4741		
0944 ==>		DI-T-3734A	Test Requirements Document
0945 ==>			(TRD) ■
0946 ==>	4761		
0947 ==>		DI-T-3712A	Installation Test Plan/

0948 ==>			Procedures (Ground C-E Equipment)	■
0949 ==>				
0950 ==>	4801			
0951 ==>		DI-T-3714A	Acceptance Test Procedures	■
0952 ==>	4821			
0953 ==>		DI-T-3720B	Installation Test Report (Ground C-E Equipment)	■
0954 ==>				
0955 ==>	4861			
0956 ==>		DI-T-3721A	Acceptance Test Reports	■
0957 ==>	4901			
0958 ==>		DI-R-30515	Survivability/Vulnerability Program Plan	■
0959 ==>				
0960 ==>	5021			
0961 ==>		DI-E-7028	Nonstandard Part Approval Requests/Proposed Additions to an Approved PPSL	■
0962 ==>				
0963 ==>				
0964 ==>	5061			
0965 ==>		DI-E-7026	Part Control Program Plan	■
0966 ==>	5081			
0967 ==>		DI-H-7051	Human Engineering Program Plan	■
0968 ==>	5101			
0969 ==>		DI-H-7059	Human Engineering Progress Report	■
0970 ==>				
0971 ==>	5121			
0972 ==>		DI-H-7056	Human Engineering Design Approach Document - Operator	■
0973 ==>				
0974 ==>	5141			
0975 ==>		DI-H-7057	Human Engineering Design Approach Document - Maintainer	■
0976 ==>				
0977 ==>	5181			
0978 ==>		DI-H-7055	Critical Task Analysis Report	■
0979 ==>	5381			
0980 ==>		DI-H-7053	Human Engineering Test Plan	■
0981 ==>	5401			
0982 ==>		DI-H-7058	Human Engineering Test Report	■
0983 ==>	5421			
0984 ==>		DI-M-3409	Positional Handbook - Information System Operational Personnel	■
0985 ==>				
0986 ==>				
0987 ==>	5441			
0988 ==>		DI-M-3410	User's Manual - Computer Program	■
0989 ==>				
0990 ==>	5601			
0991 ==>		DI-E-3133	Configuration Management Accounting Reports (Machine or Manually Prepared)	■
0992 ==>				
0993 ==>				
0994 ==>	5641			
0995 ==>		DI-T-5140B	Tempest Test Plan, Electromagnetics	■
0996 ==>				
0997 ==>	5661			
0998 ==>		DI-T-5181A	Tempest Test Facility Certification Report, Electromagnetics	■
0999 ==>				
1000 ==>				

1001 ==>	5681		
1002 ==>		DI-T-5182A	Tempest Detection System Certification Report, Electromagnetics •
1003 ==>			
1004 ==>			
1005 ==>	5701		
1006 ==>		DI-T-5183A	Tempest Test Set-up Ambient Signal Control Certification Report, Electromagnetics •
1007 ==>			
1008 ==>			
1009 ==>	5721		
1010 ==>		DI-T-5245	Tempest Control Plan •
1011 ==>	5741		
1012 ==>		DI-T-5180	Tempest Test and Evaluation Report •
1013 ==>			
1014 ==>	5761		
1015 ==>		DI-H-7047A	System Safety Program Plan •
1016 ==>	5781		
1017 ==>		DI-H-7048B	System Safety Hazard Analysis Report •
1018 ==>			
1019 ==>	5861		
1020 ==>		DI-R-2129	Maintainability Demonstration Plan •
1021 ==>			
1022 ==>	5981		
1023 ==>		DI-R-7085	Failure Mode, Effects and Criticality Analysis Report •
1024 ==>			
1025 ==>	6241		
1026 ==>		DI-R-7094	Reliability Block Diagrams and Math Models Report •
1027 ==>			
1028 ==>	6261		
1029 ==>		DI-R-7095	Reliability Prediction and Documentation of Supporting Data •
1030 ==>			
1031 ==>			
1032 ==>	6281		
1033 ==>		DI-R-7113	Maintainability Demonstration Report •
1034 ==>			
1035 ==>	6301		
1036 ==>		DI-R-7112	Maintainability Demonstration Test Plan •
1037 ==>			
1038 ==>	6321		
1039 ==>		DI-R-7111	Inputs to the Detailed Maintenance Plan and Logistics Support Analysis •
1040 ==>			
1041 ==>			
1042 ==>	6341		
1043 ==>		DI-R-7110	Maintainability Design Criteria Plan •
1044 ==>			
1045 ==>	6361		
1046 ==>		DI-R-7103	Maintainability Program Plan •
1047 ==>	6381		
1048 ==>		DI-R-7104	Maintainability Status Report •
1049 ==>	6401		
1050 ==>		DI-R-7105	Data Collection, Analysis and Corrective Action System Reports •
1051 ==>			
1052 ==>			
1053 ==>	6421		

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1054 ==>          DI-R-7106                    Maintainability Modelling
1055 ==>                                           Report                 ■
1056 ==>  6441
1057 ==>          DI-R-7107                    Maintainability Allocations
1058 ==>                                           Report                 ■
1059 ==>  6461
1060 ==>          DI-R-7109                    Maintainability Analysis Report■
1061 ==>  6481
1062 ==>          DI-R-7108                    Maintainability Predictions
1063 ==>                                           Report                 ■
1064 ==>  6641
1065 ==>          DI-L-6138                    Integrated Support Plan    ■
1066 ==>  8621
1067 ==>          UT-DI-A-30026                Reports, Quality Assurance
1068 ==>                                       Program Status             ■
1069 ==>  8681
1070 ==>          OT-DI-E-30154                Computer Program Configuration
1071 ==>                                       Item Test Plan             ■
1072 ==>  8701
1073 ==>          OT-DI-E-30153                Computer Program Configuration
1074 ==>                                       Item Test Procedures       ■
1075 ==>  8721
1076 ==>          OT-DI-E-30152                Computer Program Configuration
1077 ==>                                       Item Developmental Test and
1078 ==>                                       Evaluation Report          ■
1079 ==>  9181
1080 ==>          DI-R-21498A                  Survivability Cost
1081 ==>                                       Effectiveness Tradeoff     ■
1082 ==> 13361
1083 ==>          DI-M-7024                    Commercial Off-the-Shelf Manual■
1084 ==> 13421
1085 ==>          OT-DI-L-30324                Nuclear Hardness Critical Item
1086 ==>                                           Study                  ■
1087 ==> 13921
1088 ==>          DI-H-7066                    Training and Training Equipment
1089 ==>                                           Planning Information   ■
1090 ==> 13961
1091 ==>          DI-H-3258A                   Training Support Data      ■
1092 ==> 14041
1093 ==>          DI-H-7049A                   Safety Assessment Report   ■
1094 ==> 21
1095 ==>      The contractor shall design military systems, equipment, and
1096 ==> facilities to meet the human engineering requirements in         ■
1097 ==> of MIL-H-46855B.                                                 ■
1098 ==>
1099 ==> MIL-H-46855B                 Human Engineering Requirements for
1100 ==> 31 Jan 79                    Military Systems, Equipment and
1101 ==>                              Facilities                         ■
1102 ==>    81
1103 ==>      The contractor shall establish and maintain a work breakdown
1104 ==> structure in accordance with                                     ■
1105 ==> of MIL-STD-881A.                                                ■
1106 ==>
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1107 ==> MIL-STD-881A                Work Breakdown Structure for Defense
1108 ==> 25 Apr 75                   Material Items
1109 ==>   121
1110 ==>      The contractor shall establish and maintain a reliability program
1111 ==> for end item development in accordance with
1112 ==> of MIL-STD-785B.
1113 ==>
1114 ==> MIL-STD-785B                Reliability Program for Systems and
1115 ==> 15 Sept 80                   Equipment Development and Production
1116 ==>   301
1117 ==>      The contractor shall identify all end items requiring nomencla-
1118 ==> ture.  The contractor shall develop and recommend nomenclature for
1119 ==> these end items in accordance with
1120 ==> of MIL-STD-196C.
1121 ==> MIL-STD-196C                Joint Electronic Type Designation System
1122 ==> 22 Apr 71
1123 ==>   321
1124 ==>      The contractor shall conduct program technical reviews and
1125 ==> configuration audits for all configuration items of the end item in
1126 ==> accordance with
1127 ==> of MIL-STD-1521A.
1128 ==> MIL-STD-1521A                Technical Reviews and Audits for Systems
1129 ==> 1 Jun 76                     Equipments and Computer Programs
1130 ==> Notice 1
1131 ==> 29 Sep 78
1132 ==> Notice 2
1133 ==> 21 Dec 81
1134 ==>   361
1135 ==>      The contractor shall establish and maintain a reliability / main-
1136 ==> tainability program consistent with the principles and definitions
1137 ==> contained in
1138 ==> of MIL-STD-721C.
1139 ==> MIL-STD-721C                Definitions of Terms for Reliability
1140 ==> 12 Jun 81                        and Maintainability
1141 ==>   381
1142 ==>      The contractor shall develop predictions of the reliability of
1143 ==> components and assemblies of electronic end item equipment in accor-
1144 ==> dance with
1145 ==> of MIL-HDBK-217D.
1146 ==> MIL-HDBK-217D                Reliability Prediction of Electronic
1147 ==> 15 Jan 82                          Equipment
1148 ==> Notice 1
1149 ==>   401
1150 ==>      The contractor shall establish and maintain a maintainability
1151 ==> program for the contract end item in accordance with
1152 ==> of MIL-STD-470A.
1153 ==>
1154 ==> MIL-STD-470A                Maintainability Program Requirements
1155 ==> 3 Jan 83                     (For Systems and Equipment)
1156 ==>   421
1157 ==>      The contractor shall accomplish a maintainability verification /
1158 ==> demonstration evaluation in accordance with
1159 ==> of MIL-STD-471A.
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1160 ==>
1161 ==> MIL-STD-471A Maintainability
1162 ==> 27 Mar 73 Verification/Demonstration
1163 ==> Notice 2 Evaluation
1164 ==> 8 Dec 78 ■
1165 ==> 501
1166 ==> The contractor shall conduct the configuration management tasks
1167 ==> and meet the configuration management requirements in ■
1168 ==> of MIL-STD-483. ■
1169 ==>
1170 ==> MIL-STD-483 Configuration Management Practices for
1171 ==> 31 Dec 70 Systems, Equipment, Munitions, and
1172 ==> Notice 2 Computer Programs
1173 ==> 21 Mar 79 ■
1174 ==> 521
1175 ==> The contractor prepared specifications shall meet the format and
1176 ==> content requirements in ■
1177 ==> of MIL-STD-490. ■
1178 ==>
1179 ==> MIL-STD-490 Specification Practices
1180 ==> 30 Oct 68
1181 ==> Notice 2
1182 ==> 18 May 72 ■
1183 ==> 741
1184 ==> The contractor shall establish and maintain a management system
1185 ==> in accordance with ■
1186 ==> of MIL-STD-1528. ■
1187 ==>
1188 ==> MIL-STD-1528 Production Management
1189 ==> 1 Aug 72 ■
1190 ==> 821
1191 ==> The contractor shall establish and maintain an electromagnetic
1192 ==> emission and susceptibility control program for the control of elec-
1193 ==> tromagnetic interference in accordance with ■
1194 ==> of MIL-STD-461B. ■
1195 ==> MIL-STD-461B Electromagnetic Emission and
1196 ==> 1 Apr 80 Susceptibility Requirements for the
1197 ==> Control of Electromagnetic Interference ■
1198 ==> 841
1199 ==> The contractor shall measure the electromagnetic interference
1200 ==> characteristics in accordance with ■
1201 ==> of MIL-STD-462. ■
1202 ==>
1203 ==> MIL-STD-462 Electromagnetic Interference
1204 ==> 31 Jul 67 Characteristics, Measurement of
1205 ==> Notice 2
1206 ==> 1 May 70 ■
1207 ==> 881
1208 ==> The contractor shall include design provisions for grounding,
1209 ==> bonding, and shielding of electronic equipment in accordance with ■
1210 ==> of MIL-STD-188-124. ■
1211 ==>
1212 ==> MIL-STD-188-124 Grounding, Bonding and Shielding

1213 ==> 14 Jun 78
1214 ==> 941
1215 ==> The contractor shall conduct a logistic support analysis in
1216 ==> accordance with
1217 ==> of MIL-STD-1388-1A.
1218 ==>
1219 ==> MIL-STD-1388-1A Logistic Support Analysis
1220 ==> 11 Apr 83
1221 ==> 981
1222 ==> The contractor shall establish and maintain a system safety
1223 ==> program in accordance with
1224 ==> of MIL-STD-882B.
1225 ==>
1226 ==> MIL-STD-882B System Safety Program Requirements
1227 ==> 30 Mar 84
1228 ==> 1001
1229 ==> The contractor shall participate in the government / industry
1230 ==> data exchange program in accordance with
1231 ==> of MIL-STD-1556A (USAF).
1232 ==>
1233 ==> MIL-STD-1556A (USAF) Government/Industry Data Exchange Program
1234 ==> 29 Feb 76 Contractor Participation Requirements
1235 ==> 1061
1236 ==> The contractor shall establish and maintain a systems
1237 ==> engineering management program in accordance with
1238 ==> of MIL-STD-499A.
1239 ==>
1240 ==> MIL-STD-499A Engineering Management
1241 ==> 1 May 74
1242 ==> 1161
1243 ==> The contractor shall conduct provisioning analyses of end item
1244 ==> components and assemblies in accordance with
1245 ==> of MIL-STD-1561B.
1246 ==>
1247 ==> MIL-STD-1561B Provisioning Procedures, Uniform DoD
1248 ==> 17 Mar 81
1249 ==> 1301
1250 ==> The contractor shall provide cargo aircraft dimensional data in
1251 ==> accordance with
1252 ==> of MIL-HDBK-318.
1253 ==>
1254 ==> MIL-HDBK-318 Cargo Aircraft Compartment Dimensional
1255 ==> 1 Apr 77 Data
1256 ==> 1661
1257 ==> The contractor shall develop calibration system requirements in
1258 ==> accorcance with
1259 ==> of MIL-STD-45662.
1260 ==>
1261 ==> MIL-STD-45662 Calibration System Requirements
1262 ==> 10 Jun 80
1263 ==> 1701
1264 ==> The contractor shall analyze and recommend support equipment that
1265 ==> maximizes the use of items identified in the support equipment for the

1266 ==> Air Force in
1267 ==> of MIL-HDBK-300M.
1268 ==> MIL-HDBK-300M Air Force Technical Information File of
1269 ==> 1 Oct 82 Support Equipment
1270 ==> 1781
1271 ==> The contractor shall establish a parts control program in
1272 ==> accordance with
1273 ==> of MIL-STD-965.
1274 ==>
1275 ==> MIL-STD-965 Parts Control Program
1276 ==> 15 Apr 77
1277 ==> Notice 1
1278 ==> 22 Dec 78
1279 ==> Notice 2
1280 ==> 16 Feb 81
1281 ==> Notice 3
1282 ==> 26 Aug 83
1283 ==> 5821
1284 ==> The contractor shall establish and maintain a configuratin
1285 ==> control program to provide engineering changes, deviations, and
1286 ==> waivers in accordance with
1287 ==> of DOD-STD-480A.
1288 ==> DOD-STD-480A Configuration Control Engineering
1289 ==> 12 Apr 78 Changes, Deviations and Waivers
1290 ==> 5941
1291 ==> The contractor shall establish and maintain a program consistent
1292 ==> with the definitions contained in
1293 ==> of MIL-STD-280A.
1294 ==>
1295 ==> MIL-STD-280A Definition of Item Levels, Item
1296 ==> 7 Jul 69 Exchangeability, Models and Related Terms
1297 ==> 5961
1298 ==> The contractor shall develop models and predictions for
1299 ==> reliability in accordance with
1300 ==> of MIL-STD-756B.
1301 ==>
1302 ==> MIL-STD-756B Reliability Modeling and Prediction
1303 ==> 18 Nov 81
1304 ==> Notice 1
1305 ==> 31 Aug 82
1306 ==> 6001
1307 ==> The contractor shall develop procedures for performing a failure
1308 ==> mode, effects, and criticality analysis in accordance with
1309 ==> of MIL-STD-1629A.
1310 ==>
1311 ==> MIL-STD-1629A Procedures for Performing a Failure Mode,
1312 ==> 24 Nov 80 Effects and Criticality Analysis
1313 ==> Notice 1
1314 ==> 7 Jun 83
1315 ==> 6021
1316 ==> The contractor shall conduct reliability design qualification and
1317 ==> production acceptance tests in accordance with
1318 ==> of MIL-STD-781C.

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1319 ==>
1320 ==> MIL-STD-781C                Reliability Design Qualification and
1321 ==> 21 Oct 77                   Production Acceptance Tests: Exponential
1322 ==> Notice 1                        Distribution
1323 ==> 20 Mar 81                                                          .
1324 ==>  6041
1325 ==>      The contractor prepared technical manuals shall meet the style
1326 ==> and format requirements of                                          .
1327 ==> of MIL-M-38784A.                                                   .
1328 ==>
1329 ==> MIL-M-38784A                Manual, Technical, General Style and
1330 ==> Ammendment 6                 Format Requirements
1331 ==> 21 Dec 81                                                          .
1332 ==>  6061
1333 ==>      The contractor prepared technical orders shall meet the reading
1334 ==> level requirements in                                             .
1335 ==> of MIL-STD-1752.                                                  .
1336 ==>
1337 ==> MIL-STD-1752 (USAF)         Reading Level Requirements for
1338 ==> 22 Sep 78                   Preparation of Technical Orders       .
1339 ==>  6121
1340 ==>      The contractor shall develop the electronic equipment
1341 ==> requirements in accordance with                                   .
1342 ==> of MIL-STD-454H.                                                  .
1343 ==>
1344 ==> MIL-STD-454H                Standard General Requirements for
1345 ==> 30 Jul 82                   Electronic Equipment                  .
1346 ==>  8921
1347 ==>      The contractor shall establish and maintain a user-system inter-
1348 ==> face design for computer-based information systems in accordance with .
1349 ==> of ESD-TR-82-132.                                                  .
1350 ==>
1351 ==> ESD-TR-82-132               User-System Interface Design for
1352 ==> Apr 82                      Computer-Based Information Systems     .
1353 ==>  8941
1354 ==>      The contractor shall establish a human engineering program in
1355 ==> accordance with                                                    .
1356 ==> of AFAHRL-TR-81-35.                                               .
1357 ==>
1358 ==> AFAHRL-TR-81-35             Human Engineering Procedures Guide
1359 ==> Sep 81                                                            .
1360 ==> 13641
1361 ==>      The contractor shall establish and maintain a parts selection
1362 ==> program for electrical / electronic parts in accordance with       .
1363 ==> of PPSL-01, Rev C.                                                 .
1364 ==>
1365 ==> PPSL-01, Rev C              Program Parts Selection List
1366 ==> 6 Aug 84                    Electrical/Electronic Parts           .
1367 ==> 13661
1368 ==>      The contractor shall establish and maintain a parts selection
1369 ==> program for mechanical parts in accordance with                   .
1370 ==> of PPSL-01, Rev B.                                                .
1371 ==>
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1371 ==>
1372 ==> PPSL-01, Rev B Program Parts Selection List
1373 ==> Feb 84 Mechanical Parts
1374 ==> 13681
1375 ==> The contractor shall accomplish all tasks in accordance with
1376 ==> of F-4-71.
1377 ==>
1378 ==>
1379 ==> F-4-71 DESC Computer Printout
1380 ==> (Contact DESC/EPA from Contract No. _____
1381 ==> for correct date)
1382 ==> 13701
1383 ==> The contractor shll accomplish all tasks in acordance with
1384 ==> of F-4-71.
1385 ==>
1386 ==>
1387 ==> F-4-71 DISC Computer Printout
1388 ==> (Contact DISC/ESM from Contract No. _____
1389 ==> for correct date)
1390 ==> 14081
1391 ==> The contractor shall develop and maintain a logistics support
1392 ==> analysis record in accordance with
1393 ==> of MIL-STD-1388-2A.
1394 ==>
1395 ==> MIL-STD-1388-2A Logistics Support Analysis Record,
1396 ==> 20 Jul 84 DoD Requirements
1397 ==> 8161
1398 ==> The contractor shall develop and maintain integrated logistics
1399 ==> support for systems and equipment in accordance with
1400 ==> of DODD 5000.39.
1401 ==>
1402 ==> DODD 5000.39 Development of Integrated Logistics
1403 ==> 17 Jan 80 Support for Systems and Equipments
1404 ==> 9221
1405 ==> The contractor shall conduct provisioning and other prepro-
1406 ==> curement screening in accordance with
1407 ==>
1408 ==> of DODD 4100.38M.
1409 ==> DODD 4100.38M Provisioning and Other Preprocure-
1410 ==> 1 Jul 82 ment Screening Manual
1411 ==>
1412 ==>

Appendix B: Standards File

Key Value	Record Value			
0001 ==>	M	962	962	
0002 ==>	S	186	186	
0003 ==>	H	1119	1119	
0004 ==>	O	1795	1795	
0005 ==>	R	888	888	
0006 ==>	D	593	593	
0007 ==>	P	1779	1779	
0008 ==>	F	1905	1905	
0009 ==>	A	1049	1049	
0010 ==>	X AVAILABLE FOR NEW LIBRARY TYPE			
0011 ==>	X AVAILABLE FOR NEW LIBRARY TYPE			
0012 ==>	X AVAILABLE FOR NEW LIBRARY TYPE			
0013 ==>	X AVAILABLE FOR NEW LIBRARY TYPE			
0014 ==>	X AVAILABLE FOR NEW LIBRARY TYPE			
0015 ==>	X AVAILABLE FOR NEW LIBRARY TYPE			
0016 ==>	5.3			
0017 ==>	P	16	214	
0018 ==>	5.2			
0019 ==>	P	18	303	
0020 ==>	3.5.1.2			
0021 ==>	P	20	1201	
0022 ==>	3.5			
0023 ==>	P	22	21	
0024 ==>	PARA			
0025 ==>	P	24	1238	
0026 ==>	R	101	52	1.04
0027 ==>	M	121	1883	785.0000
0028 ==>	301			
0029 ==>	P	28	1833	
0030 ==>	209			
0031 ==>	P	30	1903	
0032 ==>	208			
0033 ==>	P	32	31	
0034 ==>	206			
0035 ==>	P	34	394	
0036 ==>	203			
0037 ==>	P	36	1847	
0038 ==>	202			
0039 ==>	P	38	37	
0040 ==>	201			
0041 ==>	P	40	39	
0042 ==>	105			
0043 ==>	P	42	1889	
0044 ==>	104			
0045 ==>	P	44	43	
0046 ==>	102			

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0047 ==> P       46      931
0048 ==> TASK
0049 ==> P       48      945
0050 ==> 101
0051 ==> P       50       47
0052 ==> R      141       53     1.05
0053 ==> R      161       54     1.06
0054 ==> R      181       55     1.07
0055 ==> R      201       56     1.08
0056 ==> R      221       57     1.09
0057 ==> R      241       61     1.10
0058 ==> 0      261      449     5.10
0059 ==> 3.1 THRU 3.11
0060 ==> P       59      917
0061 ==> R      281       95     1.11
0062 ==> M      301      946   196.00
0063 ==> ALL
0064 ==> P       63      164
0065 ==> M      321      162  1521.00
0066 ==> H      341       72     6.10
0067 ==> M      361      947   721.00
0068 ==> APPENDIX
0069 ==> P       68       92
0070 ==> FIGURE 1
0071 ==> P       70     1205
0072 ==> H      381      964   217.00
0073 ==> 3
0074 ==> P       73      160
0075 ==> Sec. 40
0076 ==> P       75       49
0077 ==> M      401       82   470.00
0078 ==> 5.0
0079 ==> P       78      226
0080 ==> 4.0
0081 ==> P       80     1272
0082 ==> M      421      932   471.00
0083 ==> 3.0
0084 ==> P       83      823
0085 ==> 2.0
0086 ==> P       85       41
0087 ==> 1.0
0088 ==> P       87     1105
0089 ==> APPENDIX B TO B.10.5
0090 ==> P       89      360
0091 ==> APPENDIX A
0092 ==> P       91      352
0093 ==> H      441     1110   472.0000
0094 ==> S      461      414  7513.00
0095 ==> R      481      150     1.12
0096 ==> M      501      141   483.00
0097 ==>   XX
0098 ==> P       97     1880
0099 ==>   XIX
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0100 ==> P      99      98
0101 ==> P
0102 ==> P     101      25
0103 ==>   XVIII
0104 ==> P     103     663
0105 ==>    XVII
0106 ==> P     105     104
0107 ==>   XVII
0108 ==> P     107     104
0109 ==>   XVI
0110 ==> P     109     108
0111 ==>   XV
0112 ==> P     111     110
0113 ==>   XIV
0114 ==> P     113     112
0115 ==>   XIII
0116 ==> P     115     114
0117 ==>   XII
0118 ==> P     117     116
0119 ==>   XI
0120 ==> P     119     118
0121 ==>   X
0122 ==> P     121     120
0123 ==>   IX
0124 ==> P     123    1897
0125 ==>    VIII
0126 ==> P     125     740
0127 ==>    VII
0128 ==> P     127     126
0129 ==>    VI
0130 ==> P     129     128
0131 ==>    V
0132 ==> P     131     130
0133 ==>    IV
0134 ==> P     133     132
0135 ==>    III
0136 ==> P     135     134
0137 ==>     II
0138 ==> P     137     136
0139 ==>      I
0140 ==> P     139     138
0141 ==> M     521     308  490.00
0142 ==> 0     541     154  480.00
0143 ==> M     561      96  481.00
0144 ==> F
0145 ==> P     144      71
0146 ==> E
0147 ==> P     146     145
0148 ==> G
0149 ==> P     148      25
0150 ==> R     581     151    1.13
0151 ==> R     601     152    1.14
0152 ==> R     621     153    1.15
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0153 ==> R     641     158    1.16
0154 ==> 0     661    1087  800.2400
0155 ==> CHAPTER 5, SECTION B
0156 ==> P     155     988
0157 ==> 0     681     154  716.00
0158 ==> R     701     161    1.17
0159 ==> 3 Sec. 40
0160 ==> P     159     811
0161 ==> R     721     168    1.180
0162 ==> M     741     301 1528.0000
0163 ==> ALL EXCEPT
0164 ==> P     163     827
0165 ==> 5.5
0166 ==> P     165     288
0167 ==> M     761     949 1567.00
0168 ==> R     781     195    1.19
0169 ==> S     801      94 6051.00
0170 ==>  3.2.2
0171 ==> P     170     173
0172 ==>  3.2.3
0173 ==> P     172     175
0174 ==>  3.2.6-3.2.12
0175 ==> P     174     795
0176 ==> 3.2.14
0177 ==> P     176     179
0178 ==> 3.2.15
0179 ==> P     178    1217
0180 ==> 4.3.3-4.3.5
0181 ==> P     180    1798
0182 ==> M     821     185  461.00
0183 ==> PARTS 1 AND 2, CLASS A1b
0184 ==> P     183     990
0185 ==> M     841      77  462.00
0186 ==> S     861     169 5087.00
0187 ==> PARTS 1 AND 4, CLASS A3
0188 ==> P     187     692
0189 ==> M     881      62  188.00
0190 ==> 0     901       010000.00
0191 ==> CHAPTER
0192 ==> P     191    1125
0193 ==> 5
0194 ==> P     193    1802
0195 ==> R     921     209    1.20
0196 ==> M     941    1876 1388.0000
0197 ==> 5.8.13
0198 ==> P     197     242
0199 ==> 5.8.11
0200 ==> P     199     198
0201 ==>  5.8.2
0202 ==> P     201     248
0203 ==>  5.4.1
0204 ==> P     203     256
0205 ==>  5.4
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0206 ==> P      205      204
0207 ==>  5.1.1
0208 ==> P      207      262
0209 ==> R      961      306    1.21
0210 ==> M      981      452  882.00
0211 ==> 5.5.1.1 THRU 5.6
0212 ==> P      211      232
0213 ==> 5.3 THRU 5.4
0214 ==> P      213      284
0215 ==> 4.2.1
0216 ==> P      215      228
0217 ==> 4.1
0218 ==> P      217      841
0219 ==> 1.3.6
0220 ==> P      219      326
0221 ==> 5.6 THRU 5.9
0222 ==> P      221      939
0223 ==> 5.1.2
0224 ==> P      223     1302
0225 ==> 5.1
0226 ==> P      225     1442
0227 ==> 4.2.2
0228 ==> P      227      853
0229 ==> 5.5.1.1
0230 ==> P      229      212
0231 ==> 5.5.1.2
0232 ==> P      231      234
0233 ==> 5.5.1.3
0234 ==> P      233      236
0235 ==> 5.5.1.4
0236 ==> P      235      238
0237 ==> 5.6
0238 ==> P      237      222
0239 ==> 5.4
0240 ==> P      239      286
0241 ==> 5.9
0242 ==> P      241     1875
0243 ==> Y
0244 ==> P      243        0
0245 ==> 5.10
0246 ==> P      245      943
0247 ==>  5.9
0248 ==> P      247      432
0249 ==>  5.8
0250 ==> P      249      202
0251 ==>  5.7
0252 ==> P      251      250
0253 ==>  5.6
0254 ==> P      253      292
0255 ==>  5.5
0256 ==> P      255      276
0257 ==>  5.3
0258 ==> P      257      290
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0259 ==>  5.2
0260 ==> P      259      258
0261 ==>  5.1.2
0262 ==> P      261      260
0263 ==>  5.1
0264 ==> P      263      208
0265 ==>  4.2.3
0266 ==> P      265      376
0267 ==>  4.1
0268 ==> P      267      266
0269 ==>  3.0
0270 ==> P      269      799
0271 ==>  1.3.6
0272 ==> P      271     1174
0273 ==>  1.3.5
0274 ==> P      273      272
0275 ==>  5.5.1.1
0276 ==> P      275      278
0277 ==>  5.5.1.2
0278 ==> P      277      280
0279 ==>  5.5.1.3
0280 ==> P      279      282
0281 ==>  5.5.1.4
0282 ==> P      281      254
0283 ==> 5.3-5.4.4
0284 ==> P      283      240
0285 ==> 5.4-5.4.4
0286 ==> P      285      294
0287 ==> 5.5-5.9
0288 ==> P      287      230
0289 ==>  5.3-5.4.4
0290 ==> P      289      206
0291 ==>  5.6-5.10
0292 ==> P      291      252
0293 ==> 5.4.4
0294 ==> P      293      166
0295 ==> 4.2.4
0296 ==> P      295      464
0297 ==> R      961        0   22.00
0298 ==> M      981      196  965.00
0299 ==> 5.1-5.1.3
0300 ==> P      299      305
0301 ==> M     1001      389 1556.00
0302 ==> 5.2-5.2.4.2
0303 ==> P      302      460
0304 ==> 5.1-5.2.4.2
0305 ==> P      304      468
0306 ==> R     1021      307    2.01
0307 ==> R     1041      381    2.02
0308 ==> M     1061       67  499.00
0309 ==> 10.2.9
0310 ==> P      309     1891
0311 ==> 10.2.7.3
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0312 ==> P      311     1559
0313 ==> 10.2.4
0314 ==> P      313      312
0315 ==> 10.1.8
0316 ==> P      315      332
0317 ==> 10.1.6
0318 ==> P      317      344
0319 ==> 10.1.5.2
0320 ==> P      319      318
0321 ==> 10.1.2
0322 ==> P      321      330
0323 ==> 10.1
0324 ==> P      323      322
0325 ==> 10
0326 ==> P      325      350
0327 ==>  4
0328 ==> P      327     1893
0329 ==> 10.1.2-10.1.5.2
0330 ==> P      329      374
0331 ==> 10.1.8-10.2.4
0332 ==> P      331      348
0333 ==> SECTION
0334 ==> P      333     1184
0335 ==>  FIGURE 2, P 11
0336 ==> P      335     1492
0337 ==>  FIGURE 1, P 10
0338 ==> P      337      336
0339 ==> 6
0340 ==> P      339     1804
0341 ==> 4
0342 ==> P      341      817
0343 ==> 10.1.6.1
0344 ==> P      343      372
0345 ==>   APPENDIX A
0346 ==> P      345      124
0347 ==> 10.1.8-10.2.7.3
0348 ==> P      347      370
0349 ==> 10-10.1.6
0350 ==> P      349      324
0351 ==> APPENDIX B
0352 ==> P      351       90
0353 ==> 10.1.6.4
0354 ==> P      353      366
0355 ==> 10.1.6.3
0356 ==> P      355      354
0357 ==> APPENDIX D
0358 ==> P      357      378
0359 ==> APPENDIX C
0360 ==> P      359      358
0361 ==> 40.1
0362 ==> P      361     1863
0363 ==> 30.1
0364 ==> P      363       29
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0365 ==> 10.1.7
0366 ==> P      365      316
0367 ==> 10.2-10.2.9
0368 ==> P      367      314
0369 ==> 10.1.9
0370 ==> P      369      368
0371 ==> 10.1.6.2
0372 ==> P      371      356
0373 ==> 10.1.2-10.1.6
0374 ==> P      373      320
0375 ==>  4.X
0376 ==> P      375      264
0377 ==> APPENDIX E
0378 ==> P      377     1490
0379 ==> APPENDIX F
0380 ==> P      379     1494
0381 ==> R     1081      387     2.03
0382 ==> 3.15
0383 ==> P      382     1270
0384 ==> S     1101    187845 62.0000
0385 ==> APPENDIX XII
0386 ==> P      385      766
0387 ==> R     1121      406     2.04
0388 ==> M     1141      301 1552.00
0389 ==> M     1161      167 1561.00
0390 ==> R     1181      406     2.05
0391 ==> 204
0392 ==> P      391      981
0393 ==> 207
0394 ==> P      393       33
0395 ==> 302
0396 ==> P      395     1857
0397 ==> 303
0398 ==> P      397     1859
0399 ==> 304
0400 ==> P      399     1142
0401 ==> CHAPTER 5
0402 ==> P      401      156
0403 ==> 0     1201       58     5.00
0404 ==> 0     1221      405 5100.00
0405 ==> 0     1241     1093 5203.0000
0406 ==> R     1261      415     2.05
0407 ==> RED EQUIPMENT
0408 ==> P      407      410
0409 ==> RED/BLK INSTALLATION CRITERIA
0410 ==> P      409     1561
0411 ==> S     1281      447 9024.00
0412 ==> H     1301       93  318.00
0413 ==> S     1321      411 8421.00
0414 ==> S     1341      413 8090.00
0415 ==> R     1361      416     2.06
0416 ==> R     1381      417     3.01
0417 ==> R     1401      418     3.02
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0418 ==> R    1421     419    3.03
0419 ==> R    1441     420    3.04
0420 ==> R    1461     421    4.01
0421 ==> R    1481     422    4.02
0422 ==> R    1501     423    4.03
0423 ==> R    1521     424    4.04
0424 ==> R    1541     425    4.05
0425 ==> R    1561     954    4.06
0426 ==> R    1581     427    5.01
0427 ==> R    1601     428    5.02
0428 ==> R    1621    1120    5.0300
0429 ==> M       7       045662.00
0430 ==> O      27     157  100.31
0431 ==>  CHAPTER 3
0432 ==> P     431     434
0433 ==>  CHAPTER 4
0434 ==> P     433     440
0435 ==> ATTACHMENT 1
0436 ==> P     435     442
0437 ==> CHAPTER 4
0438 ==> P     437     402
0439 ==>  CHAPTER 5
0440 ==> P     439     338
0441 ==> ATTACHMENT 5
0442 ==> P     441    1127
0443 ==> S      47     38428800.00
0444 ==> H      67     412  300.00
0445 ==> O      87     430   33.00
0446 ==> M    1661       045662.00
0447 ==> S    1681     95128800.00
0448 ==> H    1701     412  300.00
0449 ==> O    1721    1197   33.0000
0450 ==> O    1741     965  100.31
0451 ==> O    1761    1799  310.0000
0452 ==> M    1781     196  965.00
0453 ==> PART 1
0454 ==> P     453     456
0455 ==> PART 2
0456 ==> P     455     992
0457 ==> PART 4
0458 ==> P     457     184
0459 ==> 5.2.3
0460 ==> P     459      17
0461 ==> 4.4.2
0462 ==> P     461    1336
0463 ==> 4.3
0464 ==> P     463     803
0465 ==> D    1801    1630 3701.0000
0466 ==> D    1821    1629 3618.0000
0467 ==> 5.1.1
0468 ==> P     467     224
0469 ==> D    1841     470 7079.00
0470 ==> D    1861     475 7080.00
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0471 ==> D     1881      469 7041.00
0472 ==> D     1901        0 7081.00
0473 ==> D     1921      466 2114.00
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0475 ==> D     1861     1716 7082.0000
0476 ==> D     1881      628 1734.00
0477 ==> D     1901     1717 7083.0000
0478 ==> D     1921     1718 7084.0000
0479 ==> D     1941   174030511.0000
0480 ==> D     1961     1699 7041.0000
0481 ==> D     1981     1713 7079.0000
0482 ==> D     2001     1714 7080.0000
0483 ==> D     2021     1715 7081.0000
0484 ==> D     2041     1691 7033.0000
0485 ==> D     2061     1698 7040.0000
0486 ==> D     2081     1693 7035.0000
0487 ==> D     2101     1692 7034.0000
0488 ==> D     2121     1694 7036.0000
0489 ==> D     2141     1695 7037.0000
0490 ==> D     2161     1696 7038.0000
0491 ==> D     2181     1697 7039.0000
0492 ==> D     2201     1619 3535.0000
0493 ==> D     2221     1618 3533.0000
0494 ==> D     2241      597 3549.00
0495 ==> D     2261      497 3547.00
0496 ==> D     2281      500 3542.00
0497 ==> D     2301     1621 3548.0000
0498 ==> D     2321     1620 3537.0000
0499 ==> D     2341      496 3538.00
0500 ==> D     2361      495 3544.00
0501 ==> D     2381     1617 3524.0000
0502 ==> D     2401     1709 7061.0000
0503 ==> D     2421     1711 7063.0000
0504 ==> D     2441     1710 7062.0000
0505 ==> D     2461     1664 6143.0000
0506 ==> D     2481     1682 7010.0000
0507 ==> D     2501     1663 6142.0000
0508 ==> D     2521     1662 6140.0000
0509 ==> D     2541      507 6141.00
0510 ==> D     2561     1675 6180.0000
0511 ==> D     2581     1669 6162.0000
0512 ==> D     2601     1665 6144.0000
0513 ==> D     2621     1676 6181.0000
0514 ==> D     2641      54730317.00
0515 ==> D     2661      51430316.00
0516 ==> D     2681     1684 7017.0000
0517 ==> D     2701     1610 3344.0000
0518 ==> D     2721      525 6101.00
0519 ==> D     2741     1686 7019.0000
0520 ==> D     2761     1685 7018.0000
0521 ==> D     2781     1609 3342.0000
0522 ==> D     2801      476 1632.00
0523 ==> D     2821     1674 6177.0000
```

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0524 ==> D     2841     1577 3014.0000
0525 ==> D     2861     1657 6102.0000
0526 ==> D     2881     1628 3596.0000
0527 ==> D     2901     1673 6176.0000
0528 ==> D     2921     1680 6186.0000
0529 ==> D     2941     1679 6185.0000
0530 ==> D     2961     1658 6120.0000
0531 ==> D     2981     1683 7016.0000
0532 ==> D     3001     1668 6153.0000
0533 ==> D     3021     1671 6171.0000
0534 ==> D     3041     1670 6165.0000
0535 ==> D     3061     1677 6183.0000
0536 ==> D     3081     1678 6184.0000
0537 ==> D     3101     1660 6127.0000
0538 ==> D     3121     1659 6121.0000
0539 ==> D     3141     1578 3023.0000
0540 ==> D     3161     1651 6004.0000
0541 ==> D     3181     1652 6006.0000
0542 ==> D     3201     1653 6007.0000
0543 ==> D     3221     1655 6009.0000
0544 ==> D     3241     1654 6008.0000
0545 ==> D     3261     1650 6000.0000
0546 ==> D     3281     1656 6010.0000
0547 ==> D     3301      60630318.00
0548 ==> D     3321     1667 6149.0000
0549 ==> D     3341     1666 6147.0000
0550 ==> D     3361     1608 3339.0000
0551 ==> D     3381     1574 3007.0000
0552 ==> D     3401     1690 7031.0000
0553 ==> D     3421     1616 3461.0000
0554 ==> D     3441     1607 3327.0000
0555 ==> D     3461     1579 3027.0000
0556 ==> D     3481     1596 3126.0000
0557 ==> D     3501     1626 3591.0000
0558 ==> D     3521     1611 3401.0000
0559 ==> D     3541     1612 3402.0000
0560 ==> D     3561     1615 3407.0000
0561 ==> D     3581     1613 3405.0000
0562 ==> D     3601     1573 3006.0000
0563 ==> D     3621     1575 3011.0000
0564 ==> D     3641     1576 3013.0000
0565 ==> D     3661     1588 3108.0000
0566 ==> D     3681     1581 3101.0000
0567 ==> D     3701     173330130.0000
0568 ==> D     3721     1584 3104.0000
0569 ==> D     3741     1591 3119.0000
0570 ==> D     3761     1582 3102.0000
0571 ==> D     3781     1773 3131.0000
0572 ==> D     3801     1772 3130.0000
0573 ==> D     3821     1585 3105.0000
0574 ==> D     3841     1600 3132.0000
0575 ==> D     3861     1592 3120.0000
0576 ==> D     3881     1583 3103.0000
```

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0577 ==> D     3901     1586 3106.0000
0578 ==> D     3921     1595 3123.0000
0579 ==> D     3941     1594 3122.0000
0580 ==> D     3961     1593 3121.0000
0581 ==> D     3981     1599 3129.0000
0582 ==> D     4001     1598 3128.0000
0583 ==> D     4021     1597 3127.0000
0584 ==> D     4041     1589 3116.0000
0585 ==> D     4061     1590 3118.0000
0586 ==> D     4081     1580 3029.0000
0587 ==> D     4101     1587 3107.0000
0588 ==> D     4121     174230567.0000
0589 ==> D     4141     174330568.0000
0590 ==> D     4161     1602 3162.0000
0591 ==> D     4181     1248  745.0000
0592 ==> D     4201      591  744.00
0593 ==> D     4221      592  743.00
0594 ==> D     4241     173430145.0000
0595 ==> D     4261      557 3581.00
0596 ==> D     4281     173126346.0000
0597 ==> D     4301     1622 3551.0000
0598 ==> D     4321      600 6173.00
0599 ==> D     4341     1623 3552.0000
0600 ==> D     4361     1672 6174.0000
0601 ==> D     4381     1624 3558.0000
0602 ==> D     4401     1625 3559.0000
0603 ==> D     4421     174530573.0000
0604 ==> D     4441     174830577.0000
0605 ==> D     4461     175030719.0000
0606 ==> D     4481     173930319.0000
0607 ==> D     4501     1614 3406.0000
0608 ==> D     4521     174930718.0000
0609 ==> D     4541     174730575.0000
0610 ==> D     4561     174630574.0000
0611 ==> D     4581     1631 3702.0000
0612 ==> D     4601     1633 3705.0000
0613 ==> D     4621     1634 3707.0000
0614 ==> D     4641     1636 3708.0000
0615 ==> D     4661     1638 3709.0000
0616 ==> D     4681     1643 3716.0000
0617 ==> D     4701     1644 3718.0000
0618 ==> D     4721     1647 3729.0000
0619 ==> D     4741     1648 3734.0000
0620 ==> D     4761     1639 3712.0000
0621 ==> D     4781     1641 3713.0000
0622 ==> D     4801     1642 3714.0000
0623 ==> D     4821     1645 3720.0000
0624 ==> D     4841     1649 3737.0000
0625 ==> D     4861     1646 3721.0000
0626 ==> D     4881     174430572.0000
0627 ==> D     4901     174130515.0000
0628 ==> D     4921     1566 1759.0000
0629 ==> D     4941     1567 1760.0000
```

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0630 ==> D     4961     1568 1761.0000
0631 ==> D     4981     1569 1762.0000
0632 ==> D     5001     1570 1763.0000
0633 ==> D     5021     1689 7028.0000
0634 ==> D     5041     1688 7027.0000
0635 ==> D     5061     1687 7026.0000
0636 ==> D     5081     1700 7051.0000
0637 ==> D     5101     1708 7059.0000
0638 ==> D     5121     1705 7056.0000
0639 ==> D     5141     1706 7057.0000
0640 ==> D     5161      660 3266.00
0641 ==> D     5181     1704 7055.0000
0642 ==> D     5201     1603 3260.0000
0643 ==> D     5221     1604 3262.0000
0644 ==> D     5241     1701 7052.0000
0645 ==> D     5261     1703 7054.0000
0646 ==> D     5281      647 3263.00
0647 ==> D     5301      649 3264.00
0648 ==> D     5321     1712 7068.0000
0649 ==> D     5341     1605 3265.0000
0650 ==> D     5361     173830260.0000
0651 ==> D     5381     1702 7053.0000
0652 ==> D     5401     1707 7058.0000
0653 ==> D     5421     1766 3409.0000
0654 ==> D     5441     1767 3410.0000
0655 ==> D     5461      656 3411.00
0656 ==> D     5481      553 3413.00
0657 ==> D     5501      653 3408.00
0658 ==> D     5521      601 3553.00
0659 ==> D     5521     175130720.0000
0660 ==> D     5541     1606 3323.0000
0661 ==> M     5561       65 1519.00
0662 ==>  (ALL TASKS REQUIRE TAILORING)
0663 ==> P      662     1172
0664 ==> D     5581     1681 7003.0000
0665 ==>  TEST METHODS
0666 ==> P      665      100
0667 ==> PARTS 1 AND 7, CLASS B
0668 ==> P      667      672
0669 ==> RE03
0670 ==> P      669      408
0671 ==> RE02
0672 ==> P      671      670
0673 ==> CS06
0674 ==> P      673      147
0675 ==> CS05
0676 ==> P      675      674
0677 ==> CS04
0678 ==> P      677      676
0679 ==> CS03
0680 ==> P      679      678
0681 ==> CS02
0682 ==> P      681      680
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0683 ==> CS01
0684 ==> P      683      682
0685 ==> CE07
0686 ==> P      685      192
0687 ==> CE06
0688 ==> P      687      686
0689 ==> CE03
0690 ==> P      689      688
0691 ==> PARTS 1 AND 7, CLASS A1d
0692 ==> P      691      668
0693 ==> RS03
0694 ==> P      693      334
0695 ==> RS02
0696 ==> P      695      694
0697 ==> APPENDIX I
0698 ==> P      697     1290
0699 ==>   3.10
0700 ==> P      699      738
0701 ==>  3.9
0702 ==> P      701      328
0703 ==>  3.6
0704 ==> P      703     1474
0705 ==>  3.5
0706 ==> P      705     1386
0707 ==>  3.1 - 3.4
0708 ==> P      707     1260
0709 ==>  3.10
0710 ==> P      709      726
0711 ==>   3.9
0712 ==> P      711      736
0713 ==>   3.6
0714 ==> P      713      782
0715 ==>   3.5
0716 ==> P      715      768
0717 ==>   3.1 - 3.4
0718 ==> P      717      732
0719 ==> APPENDIX II
0720 ==> P      719      724
0721 ==>   3.3.2
0722 ==> P      721      770
0723 ==> APPENDIX III
0724 ==> P      723      746
0725 ==>  3.10 - 3.12
0726 ==> P      725      748
0727 ==>   3.8 - 3.9.1
0728 ==> P      727      712
0729 ==>   3.4.7 - 3.7
0730 ==> P      729      716
0731 ==>   3.1 - 3.4.2
0732 ==> P      731      700
0733 ==>   4.3 - 5.1
0734 ==> P      733      774
0735 ==>   4.2.3.2 EXAMPLE 2
```

```
0736 ==> P      735      734
0737 ==>   3.2 - 4.2.3
0738 ==> P      737      722
0739 ==>   1. - 3.1.3.1
0740 ==> P      739      718
0741 ==> APPENDIX XVI
0742 ==> P      741      436
0743 ==> APPENDIX VI
0744 ==> P      743      762
0745 ==> APPENDIX IV
0746 ==> P      745      758
0747 ==>  3.10.1
0748 ==> P      747      786
0749 ==>   3.4.7
0750 ==> P      749      730
0751 ==> APPENDIX V
0752 ==> P      751      744
0753 ==> APPENDIX XI
0754 ==> P      753      386
0755 ==> APPENDIX X
0756 ==> P      755      754
0757 ==> APPENDIX IX
0758 ==> P      757      752
0759 ==> APPENDIX VIII
0760 ==> P      759      756
0761 ==> APPENDIX VII
0762 ==> P      761      760
0763 ==> APPENDIX XIV
0764 ==> P      763      784
0765 ==> APPENDIX XIII
0766 ==> P      765      764
0767 ==>   3.5 - 3.8
0768 ==> P      767      714
0769 ==>   3.4
0770 ==> P      769      750
0771 ==>   3.8
0772 ==> P      771      728
0773 ==>   5.1.5
0774 ==> P      773      776
0775 ==>   5.1.6
0776 ==> P      775      780
0777 ==> APPENDIX G
0778 ==> P      777     1496
0779 ==>   5.1.7
0780 ==> P      779      346
0781 ==>   3.7
0782 ==> P      781      772
0783 ==> APPENDIX XV
0784 ==> P      783      742
0785 ==>  3.11
0786 ==> P      785      797
0787 ==> D     5601     1770 3133.0000
0788 ==>  3.4.9
```

```
0789 ==> P     788    1268
0790 ==>  3.4.8
0791 ==> P     790    1412
0792 ==>  3.4.1 AND APPENDIX III
0793 ==> P     792    1266
0794 ==>  3.3
0795 ==> P     794    1402
0796 ==>  3.2
0797 ==> P     796    1262
0798 ==>  3.1
0799 ==> P     798     708
0800 ==>  1.
0801 ==> P     800    1298
0802 ==> 4.3 - 5.1
0803 ==> P     802    1468
0804 ==> 4.2.3.2 (EXAMPLE 2:)
0805 ==> P     804    1288
0806 ==> 3.2 - 4.2.3
0807 ==> P     806    1254
0808 ==> 3.1.3.1 AND APPENDIX I
0809 ==> P     808    1280
0810 ==> 3. - 3.1.2.2
0811 ==> P     810    1428
0812 ==> 2.
0813 ==> P     812      86
0814 ==> 1.
0815 ==> P     814    1276
0816 ==> 4.
0817 ==> P     816    1294
0818 ==> 3.3.2 AND APPENDIX II
0819 ==> P     818    1292
0820 ==> 3.3 - 3.3.1
0821 ==> P     820    1256
0822 ==> 3.1
0823 ==> P     822    1252
0824 ==> 3.3
0825 ==> P     824     821
0826 ==> APP. A, PARA 10.1.6 & 10.2.8
0827 ==> P     826      69
0828 ==> 3.4
0829 ==> P     828    1258
0830 ==> 4.1.7
0831 ==> P     830    1777
0832 ==> 4.1.6
0833 ==> P     832     831
0834 ==> 4.1.4
0835 ==> P     834     843
0836 ==> 4.1.3
0837 ==> P     836     835
0838 ==> 4.1.2
0839 ==> P     838     837
0840 ==> 4.1.1
0841 ==> P     840    1563
```

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0842 ==> 4.1.5
0843 ==> P      842      833
0844 ==>  3.1.1 AND APPENDIX I
0845 ==> P      844     1426
0846 ==>  2.
0847 ==> P      846     1304
0848 ==>  3.3.2 AND APPENDIX II
0849 ==> P      848     1510
0850 ==>  3.3.1
0851 ==> P      850     1308
0852 ==> 4.2.3 (EXAMPLE 2:)
0853 ==> P      852     1462
0854 ==> 3.2 - 4.2.2
0855 ==> P      854      807
0856 ==> 3.1.1 - 3.1.2.2
0857 ==> P      856     1430
0858 ==>  3.4.7 AND APPENDICES VI & XVI
0859 ==> P      858      791
0860 ==>  3.4.6 AND APPENDIX V
0861 ==> P      860     1352
0862 ==>  3.4.5 AND APPENDIX IV
0863 ==> P      862     1350
0864 ==>  3.4.4
0865 ==> P      864     1346
0866 ==>  3.4.2
0867 ==> P      866     1344
0868 ==> 3.1.3.3.4 AND APPENDIX XII
0869 ==> P      868     1376
0870 ==> 3.1.3.2.4 AND APPENDIX V
0871 ==> P      870     1374
0872 ==> 3.1.3.2.3 AND APPENCIX IV
0873 ==> P      872      899
0874 ==> 3.1.3.2.2 AND APPENDIX III
0875 ==> P      874     1370
0876 ==> 3.1.3.2.1 AND APPENDIX II
0877 ==> P      876     1368
0878 ==> 3.1.1 - 3.1.1.3
0879 ==> P      878      857
0880 ==>  3.5 AND APPENDIX VII
0881 ==> P      880      919
0882 ==> 3.13
0883 ==> P      882     1394
0884 ==> 3.10 AND APPENDIX XIII
0885 ==> P      884     1534
0886 ==>  3.6 AND APPENDIX IX
0887 ==> P      886     1356
0888 ==> R     5621      996    0.110
0889 ==> D     5641     1763 5140.0000
0890 ==> D     5661     1756 5181.0000
0891 ==> D     5681     1757 5182.0000
0892 ==> D     5701     1758 5183.0000
0893 ==> D     5721     1764 5245.0000
0894 ==> D     5741     1755 5180.0000
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0895 ==> D     5761     1759 7047.0000
0896 ==> D     5781     1771 7048.0000
0897 ==> R     5801      954    4.07
0898 ==> 3.1.3.2.3 AND APPENDIX IV
0899 ==> P      898     1372
0900 ==> 3.1.1 - 3.1.1.2
0901 ==> P      900      879
0902 ==>  3.4.3
0903 ==> P      902     1444
0904 ==> 3.1.3.3.3 AND APPENDIX XI
0905 ==> P      904     1526
0906 ==> 3.1.3.3.2.2 AND APPENDIX X
0907 ==> P      906     1524
0908 ==> 3.1.3.3.2.1 AND APPENDIX IX
0909 ==> P      908     1522
0910 ==> 3.1.3.3.1.2 AND APPENDIX VIII
0911 ==> P      910     1520
0912 ==> 3.1.3.3.1.1 AND APPENDIX VII
0913 ==> P      912     1452
0914 ==> 3.1.2
0915 ==> P      914     1362
0916 ==> 3.1.1
0917 ==> P      916      901
0918 ==>  3.5 AND APPENDIX VIII
0919 ==> P      918     1354
0920 ==> 3.10.1 AND APPENDIX XIV
0921 ==> P      920     1498
0922 ==>  3.7 AND APPENDIX X
0923 ==> P      922     1540
0924 ==>  3.8 AND APPENDIX XI
0925 ==> P      924      702
0926 ==> 3.12
0927 ==> P      926     1550
0928 ==> 3.11 AND APPENDIX XV
0929 ==> P      928      927
0930 ==> 103
0931 ==> P      930       45
0932 ==> M     5821      143  480.00
0933 ==> D     5841      937 2130.00
0934 ==> D     5861     1572 2129.0000
0935 ==> D     5881      934 2128.00
0936 ==> D     5901      935 2127.00
0937 ==> D     5921      562 2131.00
0938 ==> 5.8
0939 ==> P      938      200
0940 ==> 5.12
0941 ==> P      940       19
0942 ==> 5.11
0943 ==> P      942      941
0944 ==> TEST METHOD (TBD)
0945 ==> P      944     1199
0946 ==> M     5941      961  280.00
0947 ==> M     5961      950  756.00
```

```
0948 ==> D    5981    1719 7085.0000
0949 ==> M    6001     952 1629.00
0950 ==> M    6021      27  781.00
0951 ==> S    6041     99338784.000
0952 ==> M    6061     963 1752.00
0953 ==> D    6081     522  795.00
0954 ==> R    6101    1829    4.0700
0955 ==> 4.4
0956 ==> P     955    1334
0957 ==> 3.3.3
0958 ==> P     957     829
0959 ==> 403
0960 ==> P     959    1136
0961 ==> M    6121     182  454.00
0962 ==> M    6141     189  129.00
0963 ==> M    6161     446 1776.00
0964 ==> H    6181     448  246.00
0965 ==> O    6201     451  101.00
0966 ==> D    6221     889 5085.00
0967 ==> D    6241    1760 7094.0000
0968 ==> D    6261    1761 7095.0000
0969 ==> D    6281    1729 7113.0000
0970 ==> D    6301    1768 7112.0000
0971 ==> D    6321    1728 7111.0000
0972 ==> D    6341    1727 7110.0000
0973 ==> D    6361    1720 7103.0000
0974 ==> D    6381    1721 7104.0000
0975 ==> D    6401    1722 7105.0000
0976 ==> D    6421    1723 7106.0000
0977 ==> D    6441    1724 7107.0000
0978 ==> D    6461    1726 7109.0000
0979 ==> D    6481    1725 7108.0000
0980 ==> 205
0981 ==> P     980    1849
0982 ==> R    6501    1881    1.0100
0983 ==> A    6521    1037   80.014
0984 ==> A    6541    1050   80.031
0985 ==> A    6561     986 1080.007
0986 ==> A    6581    1132 1080.0140
0987 ==> CHAPTER 5, SECTIONS 5.2 & 5.3
0988 ==> P     987    1180
0989 ==> PARTS 1 AND 2, CLASS A1d
0990 ==> P     989     188
0991 ==> PART 2 OR
0992 ==> P     991     458
0993 ==> S    6601     38438804.000
0994 ==> D    6621    1809 7999.0000
0995 ==> D    6641    1661 6138.0000
0996 ==> R    6661     982    0.120
0997 ==> A    6681    1039  800.012
0998 ==> A    6701    1061   57.001
0999 ==> A    6721    1031  800.004
1000 ==> A    6741    1001  800.0141
```

1001	==> A	6761	985	800.0142
1002	==> A	6781	1038	800.008
1003	==> A	6801	1004	50.008
1004	==> A	6821	1005	50.009
1005	==> A	6841	1006	50.011
1006	==> A	6861	1007	50.018
1007	==> A	6881	1021	50.023
1008	==> A	6901	1009	55.431
1009	==> A	6921	998	55.432
1010	==> A	6941	1064	66.014
1011	==> A	6961	1170	800.0020
1012	==> A	6981	1013	800.222
1013	==> A	7001	1014	800.223
1014	==> A	7021	1015	800.224
1015	==> A	7041	1016	800.225
1016	==> A	7061	1017	800.230
1017	==> A	7081	1018	800.231
1018	==> A	7101	985	800.240
1019	==> A	7121	1028	300.002
1020	==> A	7141	997	800.011
1021	==> A	7161	1057	55.031
1022	==> A	7181	1085	87.0010
1023	==> A	7201	1012	800.215
1024	==> A	7221	1046	70.015
1025	==> A	7241	1003	23.036
1026	==> A	7261	1041	57.006
1027	==> A	7281	1055	173.001
1028	==> A	7301	1029	310.001
1029	==> A	7321	1036	310.003
1030	==> A	7341	1011	600.001
1031	==> A	7361	1002	800.006
1032	==> A	7381	1062	136.008
1033	==> A	7401	1186	127.0040
1034	==> A	7421	1035	19.001
1035	==> A	7441	1059	19.002
1036	==> A	7461	1043	320.001
1037	==> A	7481	1047	80.018
1038	==> A	7501	1020	800.009
1039	==> A	7521	1185	800.0150
1040	==> A	7541	1033	122.002
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1042	==> A	7581	1045	71.001
1043	==> A	7601	1044	400.026
1044	==> A	7621	1048	400.027
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1046	==> A	7661	1042	70.024
1047	==> A	7681	984	80.022
1048	==> A	7701	1030	400.041
1049	==> A	7721	1034	8.002
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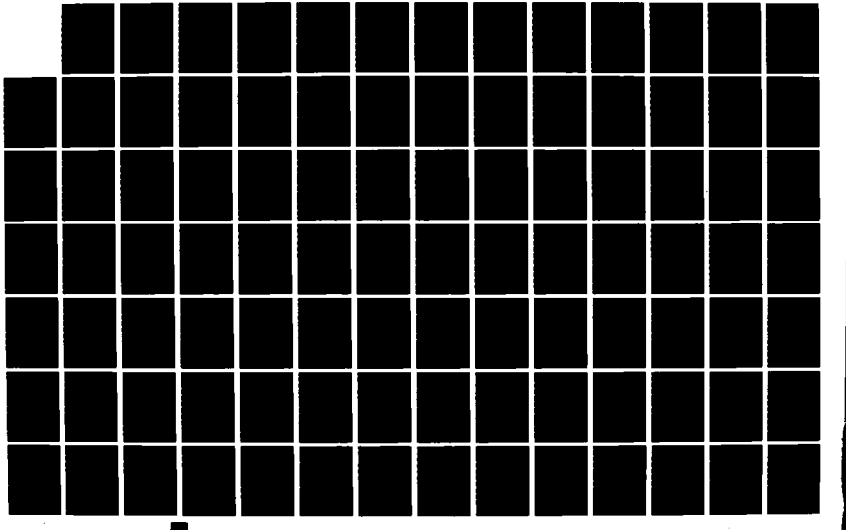
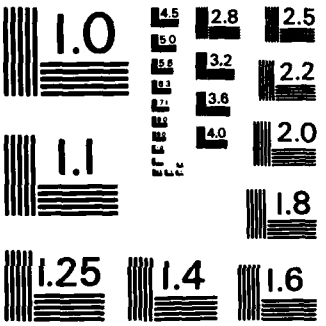
1051	==> A	7761	1052	80.041
1052	==> A	7781	1053	80.043
1053	==> A	7801	1054	80.044

AD-A162 273 A MODIFICATION TO THE COMPUTER GENERATED ACQUISITION DOCUMENTS SYSTEM (CG..(U) AIR FORCE INST OF TECH WRIGHT-PATTERSON AFB OH SCHOOL OF SYST.. 2/4

UNCLASSIFIED L M ZABKER ET AL. SEP 85 F/G 9/2 NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS - 1963 - A

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1112 ==> P    1111    1118
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1114 ==> P    1113      74
1115 ==> ATTCH 5, PARA 2.1
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1117 ==> ATTCH 4, PARA 2b
1118 ==> P    1117    1129
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1120 ==> R    8781    1121    6.0100
1121 ==> R    8801    1226    6.0200
1122 ==> ATTCH 4
1123 ==> P    1122    1112
1124 ==> CHAPTER 17, PARA 10
1125 ==> P    1124    1131
1126 ==> ATTCH 2, PARA E(3)
1127 ==> P    1126    1123
1128 ==> ATTCH 4, PARA 3b
1129 ==> P    1128    1138
1130 ==> CHAPTER 17, PARA 4
1131 ==> P    1130    1140
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1134 ==> P    1133    1146
1135 ==> 4b(3)
1136 ==> P    1135     194
1137 ==> ATTCH 4, PARA 3c
1138 ==> P    1137    1166
1139 ==> CHAPTER 17, PARA 5
1140 ==> P    1139     438
1141 ==> 3d(1)
1142 ==> P    1141    1152
1143 ==> PARA 2o
1144 ==> P    1143    1188
1145 ==> 1e
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1148 ==> P    1147    1162
1149 ==> 3g(13)
1150 ==> P    1149    1154
1151 ==> 3d(2)
1152 ==> P    1151    1148
1153 ==> 3g(6)
1154 ==> P    1153    1156
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1157 ==> 3g(8)
1158 ==> P    1157     342
1159 ==> 1j
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1163 ==> 3g(12)
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1166 ==> P    1165    1168
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1168 ==> P    1167    1178
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1172 ==> P    1171     801
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1174 ==> P    1173     847
1175 ==>  3
1176 ==> P    1175    1424
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1178 ==> P    1177    1190
1179 ==> CHAPTER 8, PARA 8-3 TO 8-8
1180 ==> P    1179    1182
1181 ==> CHAPTER 9
1182 ==> P    1181     684
1183 ==> SECTION  4.0
1184 ==> P    1183    1246
1185 ==> A    8861    1066  800.0160
1186 ==> A    8881    1032  127.0120
1187 ==> PARA 8-24(c)
1188 ==> P    1187    1192
1189 ==> ATTCH 4, PARA 5a(9)
1190 ==> P    1189    1116
1191 ==> PARA 9-5
1192 ==> P    1191    1194
1193 ==> PARA 9-6
1194 ==> P    1193     454
1195 ==> R    8901    1227    6.0400
1196 ==> 0    8921     450   82.1320
1197 ==> 0    8941    1196   81.0350
1198 ==> USI CHECKLIST
1199 ==> P    1198    1223
1200 ==> 3.9.4.3
1201 ==> P    1200    1203
1202 ==> 3.9.4.9
1203 ==> P    1202     364
1204 ==> FIGURE 3.9-8
1205 ==> P    1204     149
1206 ==> 3.2.1.1
1207 ==> P    1206    1234
1208 ==> 3.2.1.1.3
1209 ==> P    1208    1221
1210 ==> 3.2.1.3.1
1211 ==> P    1210    1213
1212 ==> 3.2.1.3.2
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1216 ==> 3.2.2
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1218 ==> 3.2.2.2-3.2.2.5
1219 ==> P    1218    1225
1220 ==> 3.2.1.2
1221 ==> P    1220    1211
1222 ==> USI Checklist
1223 ==> P    1222     244
1224 ==> 3.2.3
1225 ==> P    1224    1101
1226 ==> R    8961    1195    6.0300
1227 ==> R    8981    1247    6.0500
1228 ==> R    9001    1229    6.0700
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1235 ==> R    9101    1236    6.1200
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1237 ==> PARA 1-2100-3
1238 ==> P    1237    1144
1239 ==> 501.2.1
1240 ==> P    1239    1242
1241 ==> 501.2.2
1242 ==> P    1241    1244
1243 ==> 501.2.3
1244 ==> P    1243    1818
1245 ==> SECTION B, PARAS 3a, b & c
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1251 ==> 3.1 Intro
1252 ==> P    1251      60
1253 ==> 3.2 Baseline Mgt
1254 ==> P    1253    1324
1255 ==> 3.3 Sys Eng & Intfc Cont
1256 ==> P    1255    1326
1257 ==> 3.4.1 Fctnl Config Ident
1258 ==> P    1257      23
1259 ==>  3.1 Intro
1260 ==> P    1259    1552
1261 ==>  3.2 Baseline Mgt
1262 ==> P    1261     171
1263 ==>  3.3 Sys Eng & Intfc Cont
1264 ==> P    1263    1300
1265 ==>  3.4.1 Fctnl Config Ident
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1266 ==> P    1265     867
1267 ==>  3.4.9 Spec Authentication
1268 ==> P    1267     706
1269 ==> 3.15 QA Provisions
1270 ==> P    1269     855
1271 ==> 4.0 Data
1272 ==> P    1271     218
1273 ==> 5.1 Terms
1274 ==> P    1273     300
1275 ==> 1. Scope
1276 ==> P    1275    1318
1277 ==> 3.-3.1.2.2 Intro Config Ident
1278 ==> P    1277    1320
1279 ==> 3.1.3.1 Type A Sys Spec
1280 ==> P    1279    1322
1281 ==> 3.2-3.3 Stl, Frm & Id of Spec
1282 ==> P    1281    1207
1283 ==> 4.-4.7.3 Gen Req, Sects Specs
1284 ==> P    1283      81
1285 ==> 4.2.3.1 EXAMPLE 2 APPLIES
1286 ==> P    1285    1464
1287 ==> 4.2.3.2 EXAMPLE 2 APPLIES
1288 ==> P    1287    1466
1289 ==> APPENDIX I Type A Sys Spec
1290 ==> P    1289     720
1291 ==> 3.3.2 Intfc Cont
1292 ==> P    1291     958
1293 ==> 4. Data
1294 ==> P    1293    1502
1295 ==>  3.3.2 Intfc Cont
1296 ==> P    1295    1418
1297 ==>  1. Scope
1298 ==> P    1297    1895
1299 ==>  3.3-3.3.1 Sys Eng & Intfc Cnt
1300 ==> P    1299     851
1301 ==> 5.1.K Terms/Intfc Cont
1302 ==> P    1301    1396
1303 ==>  2. Intro
1304 ==> P    1303    1176
1305 ==>  3.1.1 & APP I Config Mgt Plan
1306 ==> P    1305     845
1307 ==>  3.3.1 Sys Eng
1308 ==> P    1307    1404
1309 ==>  3.3.2 & APP II Intfc Cont
1310 ==> P    1309    1406
1311 ==>  3.4.1 & APP III Func Conf Idn
1312 ==> P    1311     793
1313 ==>  3.4.8 Specification Form
1314 ==> P    1313     789
1315 ==> 5.1.n Sys Seg Spec
1316 ==> P    1315    1504
1317 ==> 1.-1.4 Scope
1318 ==> P    1317    1358
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1319 ==> 3.-3.1.2.2 Requirements
1320 ==> P    1319      84
1321 ==> 3.1.3.1 Type A Sys Spec APP I
1322 ==> P    1321    1434
1323 ==> 3.2-3.2.16.8 Styl Frmt & Ident
1324 ==> P    1323    1282
1325 ==> 3.3-3.3.3 Changes & Revisions
1326 ==> P    1325     819
1327 ==> 4.-4.1.2.2 Gen Rqmt Sect of Sp
1328 ==> P    1327    1528
1329 ==> 4.2-4.2.3.2 Applicable Docmts
1330 ==> P    1329     216
1331 ==> 4.3-4.3.1.1 Requirements
1332 ==> P    1331    1438
1333 ==> 4.4-4.4.2 QA Provisions
1334 ==> P    1333     462
1335 ==> 4.5-4.5.3.3 Prep for Delivery
1336 ==> P    1335    1338
1337 ==> 4.6-4.6.5 Notes
1338 ==> P    1337    1340
1339 ==> 4.7-4.7.3 APP & Index
1340 ==> P    1339     362
1341 ==> 5.-5.1 Detail Requirements
1342 ==> P    1341      79
1343 ==>  3.4.2 Allocated Conf Ident
1344 ==> P    1343    1420
1345 ==>  3.4.4 Precedence
1346 ==> P    1345    1348
1347 ==>  3.4.5 & APP IV Add to Conf Id
1348 ==> P    1347    1422
1349 ==>  3.4.6 & APP V Inv Item Ident
1350 ==> P    1349     861
1351 ==>  3.4.7 & APPS VI & XVI CPCI
1352 ==> P    1351     859
1353 ==>  3.5 Spec Maintenance
1354 ==> P    1353     704
1355 ==>  3.6 Config Item Ident
1356 ==> P    1355    1532
1357 ==> 1.-1.4.2 Scope
1358 ==> P    1357      88
1359 ==> 3.1.1.2 Allocated Conf Ident
1360 ==> P    1359    1516
1361 ==> 3.1.2 Coverage of Specs
1362 ==> P    1361    1364
1363 ==> 3.1.3 Types
1364 ==> P    1363    1414
1365 ==> 3.1.3.2 Type B Dev Spec
1366 ==> P    1365     877
1367 ==> 3.1.3.2.1 Prime Item Dev Spec
1368 ==> P    1367     875
1369 ==> 3.1.3.2.2 Crit Item Dev Spec
1370 ==> P    1369     873
1371 ==> 3.1.3.2.3 Ncom Item Dev Spec
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1372 ==> P    1371     871
1373 ==> 3.1.3.2.4 Facil & Ship Dev Spc
1374 ==> P    1373    1448
1375 ==> 3.1.3.3.4 Inv Item Spec
1376 ==> P    1375    1378
1377 ==> 3.1.4 Two Part Spec
1378 ==> P    1377    1436
1379 ==> 4.-4.1.2.2 Gen Requirements
1380 ==> P    1379    1328
1381 ==> 4.2-4.2.3.2 Applicable Docmnts
1382 ==> P    1381    1330
1383 ==> 5.1 Detail Requirements
1384 ==> P    1383    1530
1385 ==>  3.5 & APP VII Spec Maint
1386 ==> P    1385    1472
1387 ==> 5.1.e Conf Item Dev Rcrd
1388 ==> P    1387    1446
1389 ==>  3.6 & APP IX Config Item Idnt
1390 ==> P    1389     887
1391 ==> 3.10 & APP XIII Eng Changes
1392 ==> P    1391    1478
1393 ==> 3.13 & APP XIII ACSN
1394 ==> P    1393    1556
1395 ==> 5.1.a ACSN
1396 ==> P    1395    1538
1397 ==>  3.1.1 & APP I CMP
1398 ==> P    1397    1306
1399 ==> 5.1.h Terms/CMP
1400 ==> P    1399    1512
1401 ==>  3.3 & APP II Sys Eng & Int Cn
1402 ==> P    1401    1264
1403 ==>  3.3.2 & APP I Intfc Cntl/CMP
1404 ==> P    1403    1310
1405 ==>  3.3.2 & APP II Intfc Control
1406 ==> P    1405     849
1407 ==> 5.1.k Terms/Intfc Control
1408 ==> P    1407    1486
1409 ==>  3.4.1 & APP III Fctnl Conf Id
1410 ==> P    1409    1312
1411 ==>  3.4.8 Spec Form
1412 ==> P    1411    1314
1413 ==> 3.1.3.1 & APP I Type A Sys Spc
1414 ==> P    1413     809
1415 ==> 4.2.3.1 Ex 2 Non-Gov Documents
1416 ==> P    1415     805
1417 ==>  3.4 Config Ident
1418 ==> P    1417    1410
1419 ==>  3.4.2 Conf Ident
1420 ==> P    1419     903
1421 ==>  3.4.5 & APP IV Addm to CI
1422 ==> P    1421     863
1423 ==>  3. Requirements
1424 ==> P    1423     270
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1425 ==>  3.1.1 Config Ident
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1427 ==> 3. Requirements
1428 ==> P    1427    1278
1429 ==> 3.1.1 Config Ident
1430 ==> P    1429    1432
1431 ==> 3.1.1.2 Allocated CI
1432 ==> P    1431    1360
1433 ==> 3.1.3.2 Dev Specs
1434 ==> P    1433    1366
1435 ==> 3.1.4 Two Part Specs
1436 ==> P    1435    1392
1437 ==> 4.3-4.3.11 Requirements
1438 ==> P    1437     181
1439 ==> 5. Detail Requirements
1440 ==> P    1439    1342
1441 ==> 5.1 Detail Requirement (Genrl)
1442 ==> P    1441    1384
1443 ==>  3.4.3 Product CI
1444 ==> P    1443    1514
1445 ==> 5.1.g CI Spec Addendum
1446 ==> P    1445    1508
1447 ==> 3.1.3.3 Product Spec
1448 ==> P    1447    1518
1449 ==> 3.1.3.3.1.1 & APP VII PIP Func
1450 ==> P    1449     913
1451 ==> 3.1.3.3.1.2 & APP VIII PIP Fab
1452 ==> P    1451     911
1453 ==> 3.1.3.3.2.1 & APP IX CIP Func
1454 ==> P    1453     909
1455 ==> 3.1.3.3.2.2 & APP X CIP Fab
1456 ==> P    1455     907
1457 ==> 3.1.3.3.3 & APP XI N-Com P Fab
1458 ==> P    1457     905
1459 ==> 3.1.3.3.4 & APP XII Inv Itm Sp
1460 ==> P    1459     869
1461 ==> 4.2.3 List of References
1462 ==> P    1461    1286
1463 ==> 4.2.3.1 Ex 1 Gov Documents
1464 ==> P    1463    1775
1465 ==> 4.2.3.2 Ex 2 Non-Gov Documents
1466 ==> P    1465     296
1467 ==> 4.3 Requirements
1468 ==> P    1467    1332
1469 ==> 5.1 General
1470 ==> P    1469    1274
1471 ==>  3.5 & APP VIII Spec Maint
1472 ==> P    1471     881
1473 ==>  3.6 & APP IX CI Ident
1474 ==> P    1473    1390
1475 ==>  3.7 & APP X Eng rls rqmnts
1476 ==> P    1475     923
1477 ==> 3.10 & APPS XIII & XIV Eng Chg
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1478 ==> P    1477     885
1479 ==> 3.13 Advnc Chng Stdy Ntc
1480 ==> P    1479     383
1481 ==> 5.1.a Advnc Chng Stdy Ntc
1482 ==> P    1481    1388
1483 ==>  3.8 & APP XI Sys Alloc Docmnt
1484 ==> P    1483     925
1485 ==> 5.1.m Sys Alloc Document
1486 ==> P    1485    1542
1487 ==>  SECT 1-6 Scope-Gen Rqmnts
1488 ==> P    1487     666
1489 ==> APPENDIX E  FCA
1490 ==> P    1489    1546
1491 ==>  SECT 1-6 Scope-Dtld Rqmnts
1492 ==> P    1491    1544
1493 ==> APPENDIX F  PCA
1494 ==> P    1493     778
1495 ==> APPENDIX G  FQR
1496 ==> P    1495     698
1497 ==> 3.11 & APP XV
1498 ==> P    1497    1548
1499 ==> 3.12 Config Mgt Rcrds/Rprts
1500 ==> P    1499     883
1501 ==> 4. Data Rprtng Updtd Chngs
1502 ==> P    1501    1380
1503 ==> 5.1.o Updating Changes
1504 ==> P    1503     246
1505 ==> 5.1.n CMP
1506 ==> P    1505    1316
1507 ==> 5.1.h CMP
1508 ==> P    1507    1400
1509 ==>  3.3.2 Interface Control
1510 ==> P    1509    1296
1511 ==> 5.1.k Interface Control
1512 ==> P    1511    1408
1513 ==>  3.4.3 Product Config Ident
1514 ==> P    1513     865
1515 ==> 3.1.1.3 Product CI
1516 ==> P    1515     915
1517 ==> 3.1.3.3.1 Prime Item Prdt Spec
1518 ==> P    1517    1450
1519 ==> 3.1.3.3.1.2 PI Prdt Fab Spec
1520 ==> P    1519    1454
1521 ==> 3.1.3.3.2.1 Cr Itm Pdt Func Sp
1522 ==> P    1521    1456
1523 ==> 3.1.3.3.2.2 Cr Itm Pdt Fab Spc
1524 ==> P    1523    1458
1525 ==> 3.1.3.3.3 N-Com Prdt Fab Spec
1526 ==> P    1525    1460
1527 ==> 4.-4.2.3.2 General Rqrmnts
1528 ==> P    1527    1284
1529 ==> 5.1 Detail Rqrmnts (General)
1530 ==> P    1529    1470
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1531 ==>  3.7 & APP X Eng Release
1532 ==> P    1531    1554
1533 ==> 3.10.1 & APP XIV Eng Changes
1534 ==> P    1533     921
1535 ==> 3.13 Advance Chng Stdy Ntc
1536 ==> P    1535    1480
1537 ==> 5.1.a Advance Chng Stdy Ntc
1538 ==> P    1537    1482
1539 ==>  3.8 & APP XI Sys Alloc Doc
1540 ==> P    1539    1484
1541 ==> 5.1.m Sys Allocation Doc
1542 ==> P    1541    1506
1543 ==>  SECT 1-6 Scope-Dtld Rqrmnts
1544 ==> P    1543    1488
1545 ==> APPENDIX E  FQR
1546 ==> P    1545     380
1547 ==> 3.11 & APP XV Rprtg Rtrft Chgs
1548 ==> P    1547     929
1549 ==> 3.12 CM Records/Reports
1550 ==> P    1549    1500
1551 ==>  3.1.1 & APP I  CMP
1552 ==> P    1551    1398
1553 ==>  3.7 & APP X Eng Rls Rqrmnts
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1559 ==> P    1558     310
1560 ==> REQUIREMENT 9
1561 ==> P    1560     696
1562 ==> 4.1.1.1
1563 ==> P    1562    1565
1564 ==> 4.1.1.2
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1570 ==> C    9321     474 1763.1000
1571 ==> C    9341     936 2114.1001
1572 ==> C    9361     933 2129.1001
1573 ==> C    9381     551 3006.1001
1574 ==> C    9401     563 3007.1001
1575 ==> C    9421     564 3011.1001
1576 ==> C    9441     524 3013.1001
1577 ==> C    9461     539 3014.1001
1578 ==> C    9481     555 3023.1001
1579 ==> C    9501     586 3027.1001
1580 ==> C    9521     566 3029.1001
1581 ==> C    9541     570 3101.1001
1582 ==> C    9561     576 3102.1001
1583 ==> C    9581     568 3103.1001
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1584 ==> C     9601      573 3104.1001
1585 ==> C     9621      577 3105.1001
1586 ==> C     9641      587 3106.1001
1587 ==> C     9661      565 3107.1001
1588 ==> C     9681      584 3108.1001
1589 ==> C     9701      585 3116.1001
1590 ==> C     9721      569 3118.1001
1591 ==> C     9741      575 3119.1001
1592 ==> C     9761      580 3120.1001
1593 ==> C     9781      579 3121.1001
1594 ==> C     9801      578 3122.1001
1595 ==> C     9821      556 3123.1001
1596 ==> C     9841      583 3126.1001
1597 ==> C     9861      582 3127.1001
1598 ==> C     9881     1783 3128.1001
1599 ==> C     9901      572 3129.1001
1600 ==> C     9921      787 3132.1001
1601 ==> C     9941      590 3134.1001
1602 ==> C     9961     1826 3162.1001
1603 ==> C     9981      643 3260.1001
1604 ==> C    10001      646 3262.1001
1605 ==> C    10021      640 3265.1001
1606 ==> C    10041      554 3323.1001
1607 ==> C    10061      550 3327.1001
1608 ==> C    10081      521 3339.1001
1609 ==> C    10101      517 3342.1001
1610 ==> C    10121      558 3344.1001
1611 ==> C    10141      559 3401.1001
1612 ==> C    10161      561 3402.1001
1613 ==> C    10181      607 3405.1001
1614 ==> C    10201      560 3406.1001
1615 ==> C    10221      657 3407.1001
1616 ==> C    10241      501 3461.1001
1617 ==> C    10261      493 3524.1001
1618 ==> C    10281      492 3533.1001
1619 ==> C    10301      498 3535.1001
1620 ==> C    10321      499 3537.1001
1621 ==> C    10341      494 3548.1001
1622 ==> C    10361      599 3551.1001
1623 ==> C    10381      601 3552.1001
1624 ==> C    10401      602 3558.1001
1625 ==> C    10421      595 3559.1001
1626 ==> C    10441     1792 3591.1001
1627 ==> C    10461     1780 3591.2000
1628 ==> C    10481     1805 3596.1001
1629 ==> C    10501      465 3618.1001
1630 ==> C    10521      611 3701.1001
1631 ==> C    10541     1632 3702.1001
1632 ==> C    10561      612 3702.2000
1633 ==> C    10581      613 3705.1001
1634 ==> C    10601     1635 3707.1001
1635 ==> C    10621      614 3707.2000
1636 ==> C    10641     1637 3708.1001
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1637 ==> C    10661     615 3708.2000
1638 ==> C    10681     620 3709.1001
1639 ==> C    10701    1640 3712.1001
1640 ==> C    10721     621 3712.2000
1641 ==> C    10741     622 3713.1001
1642 ==> C    10761     616 3714.1001
1643 ==> C    10781     617 3716.1001
1644 ==> C    10801     623 3718.1001
1645 ==> C    10821     625 3720.1001
1646 ==> C    10841     618 3721.1001
1647 ==> C    10861     619 3729.1001
1648 ==> C    10881     624 3734.1001
1649 ==> C    10901     966 3737.1001
1650 ==> C    10921     540 6000.1001
1651 ==> C    10941     541 6004.1001
1652 ==> C    10961     542 6006.1001
1653 ==> C    10981     544 6007.1001
1654 ==> C    11001     543 6008.1001
1655 ==> C    11021     546 6009.1001
1656 ==> C    11041     518 6010.1001
1657 ==> C    11061     530 6102.1001
1658 ==> C    11081     538 6120.1001
1659 ==> C    11101     537 6121.1001
1660 ==> C    11121     995 6127.1001
1661 ==> C    11141     508 6138.1001
1662 ==> C    11161     509 6140.1001
1663 ==> C    11181     505 6142.1001
1664 ==> C    11201     512 6143.1001
1665 ==> C    11221     549 6144.1001
1666 ==> C    11241     548 6147.1001
1667 ==> C    11261     532 6149.1001
1668 ==> C    11281     511 6153.1001
1669 ==> C    11301     534 6162.1001
1670 ==> C    11321     533 6165.1001
1671 ==> C    11341     598 6171.1001
1672 ==> C    11361     527 6174.1001
1673 ==> C    11381     523 6176.1001
1674 ==> C    11401     510 6177.1001
1675 ==> C    11421     513 6180.1001
1676 ==> C    11441     535 6181.1001
1677 ==> C    11461     536 6183.1001
1678 ==> C    11481     529 6184.1001
1679 ==> C    11501     528 6185.1001
1680 ==> C    11521     664 6186.1001
1681 ==> C    11541     506 7003.1001
1682 ==> C    11561     531 7010.1001
1683 ==> C    11581     516 7016.1001
1684 ==> C    11601     520 7017.1001
1685 ==> C    11621     519 7018.1001
1686 ==> C    11641    1781 7019.1001
1687 ==> C    11661     634 7026.1001
1688 ==> C    11681     633 7027.1001
1689 ==> C    11701    1794 7028.1001
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1690 ==> C   11721     484 7031.1001
1691 ==> C   11741     487 7033.1001
1692 ==> C   11761     486 7034.1001
1693 ==> C   11781     488 7035.1001
1694 ==> C   11801     489 7036.1001
1695 ==> C   11821     490 7037.1001
1696 ==> C   11841     491 7038.1001
1697 ==> C   11861     485 7039.1001
1698 ==> C   11881     480 7040.1001
1699 ==> C   11901     895 7041.1001
1700 ==> C   11921     644 7051.1001
1701 ==> C   11941     651 7052.1001
1702 ==> C   11961     645 7053.1001
1703 ==> C   11981     641 7054.1001
1704 ==> C   12001     638 7055.1001
1705 ==> C   12021     639 7056.1001
1706 ==> C   12041     652 7057.1001
1707 ==> C   12061     637 7058.1001
1708 ==> C   12081     502 7059.1001
1709 ==> C   12101     504 7061.1001
1710 ==> C   12121     503 7062.1001
1711 ==> C   12141    1824 7063.1001
1712 ==> C   12161     481 7068.1001
1713 ==> C   12181     482 7079.1001
1714 ==> C   12201     483 7080.1001
1715 ==> C   12221     475 7081.1001
1716 ==> C   12241     477 7082.1001
1717 ==> C   12261     478 7083.1001
1718 ==> C   12281     948 7084.1001
1719 ==> C   12301     967 7085.1001
1720 ==> C   12321     974 7103.1001
1721 ==> C   12341     975 7104.1001
1722 ==> C   12361     976 7105.1001
1723 ==> C   12381     977 7106.1001
1724 ==> C   12401     979 7107.1001
1725 ==> C   12421     978 7108.1001
1726 ==> C   12441     972 7109.1001
1727 ==> C   12461     971 7110.1001
1728 ==> C   12481     970 7111.1001
1729 ==> C   12501    1809 7113.1001
1730 ==> C   12521    1249 7999.1001
1731 ==> C   12541  109426346.0996
1732 ==> C   12561   56730026.0996
1733 ==> C   12581   59430130.0996
1734 ==> C   12601  110930145.0996
1735 ==> C   12621  110830152.0996
1736 ==> C   12641  110730153.0996
1737 ==> C   12661   65030154.0996
1738 ==> C   12681   51530260.0996
1739 ==> C   12701  178430319.0996
1740 ==> C   12721  125030511.0996
1741 ==> C   12741   58830515.0996
1742 ==> C   12761   58930567.0996
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1743 ==> C    12781      62630568.0996
1744 ==> C    12801      60330572.0996
1745 ==> C    12821      61030573.0996
1746 ==> C    12841      60930574.0996
1747 ==> C    12861      60430575.0996
1748 ==> C    12881      60830577.0996
1749 ==> C    12901      60530718.0996
1750 ==> C    12921      65930719.0996
1751 ==> C    12941        030720.0996
1752 ==> C    12961      62730513.0996
1753 ==> C    12981      545 5245.1001
1754 ==> C    12961      894 5140.1001
1755 ==> C    12981      890 5180.1001
1756 ==> C    13001      891 5181.1001
1757 ==> C    13021      892 5182.1001
1758 ==> C    13041      893 5183.1001
1759 ==> C    13061      896 7047.1001
1760 ==> C    13081      968 7094.1001
1761 ==> C    13101      973 7095.1001
1762 ==> C    13121      59621498.0996
1763 ==> C    13141      894 5140.1001
1764 ==> C    13161      545 5245.1001
1765 ==> Z        0        0
1766 ==> C    13181      654 3409.1001
1767 ==> C    13201      655 3410.1001
1768 ==> C    13221      969 7112.1001
1769 ==> C    13241      522  794.1000
1770 ==> C    13261     1106 3133.1001
1771 ==> C    13281     1885 7048.1001
1772 ==> C    13301      571 3130.1001
1773 ==> C    13321      574 3131.1001
1774 ==> 4.2.3.1 Ex 2 Gov Documents
1775 ==> P     1774     1416
1776 ==> 4.2-4.2.3 Applicable Documents
1777 ==> P     1776     1382
1778 ==>
1779 ==> P     1778      140
1780 ==> C    13341     1785 3591.3000
1781 ==> D    13361     1782 7024.0000
1782 ==> C    13381      635 7024.1001
1783 ==> C    13401      581 3128.2000
1784 ==> D    13421    178630324.0000
1785 ==> C    13441     1787 3591.4001
1786 ==> C    13461      47930324.0996
1787 ==> C    13481     1788 3591.5000
1788 ==> C    13501     1789 3591.6001
1789 ==> C    13521     1790 3591.7000
1790 ==> C    13541     1791 3591.8000
1791 ==> C    13561      526 3591.9001
1792 ==> C    13581     1793 3591.1101
1793 ==> C    13601     1627 3591.1201
1794 ==> C    13621      552 7028.2002
1795 ==> 0    13641     1796    1.1000
```

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1796 ==> O   13661     403    1.2000
1797 ==> 4.3.4.4.2
1798 ==> P    1797     956
1799 ==> O   13681    1800  471.1000
1800 ==> O   13701     157  471.2000
1801 ==> 5.
1802 ==> P    1801    1440
1803 ==> 7028
1804 ==> P    1803      64
1805 ==> D   13721    1810 3606.0000
1806 ==> D   13741    1814 7117.0000
1807 ==> D   13761    1813 7116.0000
1808 ==> D   13781    1812 7115.0000
1809 ==> D   13801    1811 7114.0000
1810 ==> C   13821     466 3606.1001
1811 ==> C   13841    1808 7114.1001
1812 ==> C   13861    1807 7115.1001
1813 ==> C   13881    1806 7116.1001
1814 ==> C   13901    1249 7117.1001
1815 ==> SECTION I
1816 ==> P    1815      76
1817 ==> 501.2.5
1818 ==> P    1817    1843
1819 ==> 301 (EXCEPT 301.2.4.2)
1820 ==> P    1819    1851
1821 ==> 303.2.7
1822 ==> P    1821     400
1823 ==> R   13921    1120    6.0000
1824 ==> D   13921    1825 7066.0000
1825 ==> C   13941     648 7066.1001
1826 ==> D   13961    1827 3258.0000
1827 ==> C   13981     642 3258.1001
1828 ==> R   14001    1120    6.0000
1829 ==> R   14021     426    4.0800
1830 ==> D   14041    1831 7049.0000
1831 ==> C   14061     636 7049.1001
1832 ==> 301 (EXCEPT 301.2.4)
1833 ==> P    1832    1820
1834 ==> 302.2.1
1835 ==> P    1834    1837
1836 ==> 302.2.2
1837 ==> P    1836    1839
1838 ==> 302.2.5
1839 ==> P    1838     398
1840 ==> 303 (EXCEPT 303.2.7)
1841 ==> P    1840    1861
1842 ==> 505.2.1
1843 ==> P    1842     340
1844 ==> 401.2.7
1845 ==> P    1844    1865
1846 ==> 203 (NOT 203.2.1, .2.3 & .2.6)
1847 ==> P    1846     392
1848 ==> 205.2.3
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1849 ==> P    1848      35
1850 ==> 301.2.4 (EXCEPT 301.2.4.2)
1851 ==> P    1850    1853
1852 ==> 301.2.5
1853 ==> P    1852    1855
1854 ==> 301.2.6
1855 ==> P    1854     396
1856 ==> 302 (EXCEPT 302.2.1)
1857 ==> P    1856    1835
1858 ==> 303  (EXCEPT 303.2.8, 303.2.9,
1859 ==> P    1858    1841
1860 ==> 303 303.2.10 AND 303.2.12)
1861 ==> P    1860    1822
1862 ==> 401 (EXCEPT 401.2.7)
1863 ==> P    1862    1845
1864 ==> 402.2.1
1865 ==> P    1864    1867
1866 ==> 402.2.2
1867 ==> P    1866    1869
1868 ==> 402.2.3
1869 ==> P    1868    1873
1870 ==> 402.2.5
1871 ==> P    1870     960
1872 ==> 402.2.4
1873 ==> P    1872    1871
1874 ==> 501
1875 ==> P    1874    1240
1876 ==> M   14081     661 1388.1000
1877 ==> R   14101    1878    9.0000
1878 ==> S      21    109546855.0000
1879 ==> **(REQUIRES TAILORING BY PO)**
1880 ==> P    1879    1103
1881 ==> R      41    1882    1.0200
1882 ==> R      61      26    1.0300
1883 ==> M      81     210  881.0000
1884 ==> C   14141    1886 7048.2002
1885 ==>
1886 ==> C   14161    1887 7048.2998
1887 ==> C   14181    1830 7048.3999
1888 ==> 107
1889 ==> P    1888    1134
1890 ==> 100
1891 ==> P    1890    1899
1892 ==>  4.0
1893 ==> P    1892     268
1894 ==>  1.3.3
1895 ==> P    1894     274
1896 ==>   PARA
1897 ==> P    1896     122
1898 ==> 100 THRU 108
1899 ==> P    1898      51
1900 ==> 213
1901 ==> P    1900    1114
```

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1902 ==> 211
1903 ==> P    1902    1905
1904 ==> 212
1905 ==> P    1904    1901
```

Appendix C: Question File

Key Value	Record Value
0001 ==>	
0002 ==>	
0003 ==>	
0004 ==>	
0005 ==>	
0006 ==>	
0007 ==>	
0008 ==>	
0009 ==>	
0010 ==>	
0011 ==>	
0012 ==>	
0013 ==>	
0014 ==>	
0015 ==>	
0016 ==>	
0017 ==>	
0018 ==>	
0019 ==>	
0020 ==>	
0021 ==>	SYSTEMS ENGINEERING
0022 ==>	SYSTEM SAFETY
0023 ==>	HUMAN FACTORS
0024 ==>	VALUE ENGINEERING
0025 ==>	SECURITY
0026 ==>	AVAILABILITY
0027 ==>	MAINTAINABILITY
0028 ==>	RELIABILITY
0029 ==>	PARTS CONTROL PROGRAM
0030 ==>	AEROSPACE METEOROLOGICAL ENVIRONMENT
0031 ==>	ELECTROMAGNETIC COMPATIBILITY (EMC)
0032 ==>	SURVIVABILITY/VULNERABILITY
0033 ==>	COMMUNICATIONS LONG LINES
0034 ==>	COMMUNICATIONS SECURITY/TEMPEST
0035 ==>	RADIO FREQUENCY MANAGEMENT
0036 ==>	TRANSPORTABILITY
0037 ==>	QUALITY ASSURANCE
0038 ==>	TEST AND EVALUATION
0039 ==>	COMPUTER RESOURCES MANAGEMENT
0040 ==>	REAL PROPERTY FACILITIES
0041 ==>	MANUFACTURING MANAGEMENT
0042 ==>	CONFIGURATION MANAGEMENT
0043 ==>	DATA MANAGEMENT
0044 ==>	ENGINEERING DATA
0045 ==>	NOMENCLATURE
0046 ==>	STINFO

```
0047 ==> PHOTOGRAPHIC DOCUMENTATION                                          =
0048 ==> CONTRACT WORK BREAKDOWN STRUCTURE (CWBS)                            =
0049 ==> COST INFORMATION SYSTEMS                                            =
0050 ==> COST/SCHEDULE CONTROL SYSTEM (C/SCSC)                               =
0051 ==> SCHEDULE MANAGEMENT                                                 =
0052 ==> LOGISTICS SUPPORT ANALYSIS                                          =
0053 ==> INTEGRATED LOGISTICS SUPPORT (ILS)                                  =
0054 ==> INITIAL SPARE/REPAIR PARTS                                          =
0055 ==> PREOPERATIONAL MAINTENANCE                                          =
0056 ==> PREOPERATIONAL SUPPLY SUPPORT                                       =
0057 ==> SUPPORT EQUIPMENT (SE)                                              =
0058 ==> TECHNICAL ORDERS                                                    =
0059 ==> TRAINING                                                            =
0060 ==> PRESERVATION, PACKAGING AND PACKING                                 =
0061 ==> TRANSPORTATION                                                      =
0062 ==> TRAVEL                                                              =
0063 ==> DOES SYSTEMS ENGINEERING APPLY TO THIS CONTRACT ?
0064 ==>                                                                     =
0065 ==> SOW:  IN SOME CASES, THE GOVERNMENT MAY WISH TO ATTEND SUBCONTRACTOR
0066 ==>       AND VENDOR DESIGN REVIEWS WITH THE PRIME CONTRACTOR.  IF THIS
0067 ==>       SITUATION IS ANTICIPATED, USE MIL-STD-499A, PARA 10.1.7.
0068 ==>                                                                     =
0069 ==> Systems Engineering requirements are not applicable.                =
0070 ==> IS A SYSTEMS ENGINEERING MANAGEMENT PLAN (SEMP) REQUIRED TO BE SUB-
0071 ==> MITTED IN CONJUNCTION WITH THE SYSTEMS ENGINEERING PROPOSAL ?
0072 ==>                                                                     =
0073 ==> SOW: REVIEW MIL-STD-499A, PARA 5.X AND SEMP DATA ITEM DI-S-3618.
0074 ==>                                                                     =
0075 ==> WAS A SYSTEMS DESIGN REVIEW (SDR) COMPLETED DURING THE VALIDATION
0076 ==> PHASE ?
0077 ==>
0078 ==> CAUTION:  AN SDR IS NORMALLY ACCOMPLISHED DURING THE VALIDATION PHASE.
0079 ==>                                                                     =
0080 ==> SOW: REVIEW MIL-STD-1521A, APPENDIX B.
0081 ==>                                                                     =
0082 ==> WILL A FUNCTIONAL CONFIGURATION AUDIT (FCA) BE HELD DURING THE FULL
0083 ==> SCALE DEVELOPMENT PHASE ?
0084 ==>                                                                     =
0085 ==> SOW:  THE FCA MAY BE COMBINED WITH THE FUNCTIONAL QUALIFICATION
0086 ==>       REVIEW (FQR) AND BOTH MAY BE DEFERRED UNTIL THE PRODUCTION
0087 ==>       PHASE.  SEE MIL-STD-1521A, APPENDICES E AND G.
0088 ==>
0089 ==> SOW:  CHECK WITH THE CONFIGURATION MANAGEMENT AND TEST AND EVALUATION
0090 ==>       STAFF SPECIALISTS TO ENSURE THAT THE REQUIREMENTS FOR THESE
0091 ==>       AUDITS AND REVIEWS HAVE NOT BEEN DUPLICATED.
0092 ==>                                                                     =
0093 ==> WILL A PHYSICAL CONFIGURATION AUDIT (PCA) BE HELD DURING THE FULL
0094 ==> SCALE DEVELOPMENT PHASE ?
0095 ==>                                                                     =
0096 ==> SOW:  CHECK WITH THE CONFIGURATION MANAGEMENT STAFF SPECIALIST TO
0097 ==>       ENSURE THAT THE REQUIREMENT FOR A PCA IS NOT DUPLICATED.
0098 ==>                                                                     =
0099 ==> SOW:  SEE MIL-STD-1521A, APPENDIX F.
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0100 ==>
0101 ==> IS SYSTEM SAFETY APPLICABLE TO THIS PROGRAM ?
0102 ==>
0103 ==> CAUTION:  THE ONLY TIME SYSTEM SAFETY WOULD NOT APPLY IS WHEN THE
0104 ==>           PROCUREMENT IS FOR:
0105 ==>           (1) SOFTWARE ONLY, WHICH DOES NOT CONTROL HARDWARE; OR,
0106 ==>           (2) OFF-THE-SHELF HARDWARE THAT DOES NOT INTERFACE WITH
0107 ==>               OTHER HARDWARE.
0108 ==>
0109 ==>
0110 ==>
0111 ==> IFPP:  DESIGN HANDBOOK DH 1-X, REV 7, 7 JAN 81 MAY BE REFERENCED IN
0112 ==>        THE IFPP FOR INFORMATION TO THE CONTRACTOR.  HOWEVER, BE SURE
0113 ==>        A COPY IS AVAILABLE FOR THE CONTRACTOR'S USE.
0114 ==>
0115 ==> System Safety requirements are not applicable.
0116 ==> IS A SPO WRITTEN SYSTEM SAFETY PROGRAM PLAN (SSPP) PROVIDED AS AN
0117 ==> ATTACHMENT TO THIS SOW ?
0118 ==>
0119 ==> CAUTION: AN SSPP IS MANDATORY IN ALMOST ALL CASES.  IT MAY BE SPO
0120 ==>          WRITTEN OR CONTRACTOR WRITTEN.
0121 ==>
0122 ==> Establish, conduct, and document a System Safety Program IAW the
0123 ==> System Safety Program Plan attached to this SOW.
0124 ==> All design and procedure changes shall be analyzed for System Safety
0125 ==> impact.  Revise previously accepted hazard analysis reports as
0126 ==> necessary when changes make the reports inaccurate or incomplete.
0127 ==> Category I and II hazards shall be eliminated or controlled prior to
0128 ==> any testing to the satisfaction of the Government.
0129 ==>
0130 ==> SOW:  FURTHER DEFINE SYSTEM LOSS, SEVERE DAMAGE, INJURY, AND OTHER
0131 ==>       ELEMENTS AS REQUIRED.
0132 ==>
0133 ==> CDRL:  A SYSTEM SAFETY PROGRAM PLAN (SSPP) IS MANDATORY IN ALMOST ALL
0134 ==>         CASES.  IT MAY BE SPO WRITTEN OR CONTRACTOR WRITTEN.  INCLUDE
0135 ==>         DI-H-7047 IN THE CDRL TO OBTAIN A NEW OR UPDATED CONTRACTOR
0136 ==>         SSPP; TAILOR AS REQUIRED.
0137 ==>
0138 ==> IS THIS PROGRAM A MAJOR HARDWARE MODIFICATION TO AN EXISTING SYSTEM
0139 ==> OR END ITEM ?
0140 ==>
0141 ==> IS THIS PROGRAM A MINOR HARDWARE MODIFICATION TO AN EXISTING SYSTEM
0142 ==> OR END ITEM ?
0143 ==>
0144 ==> WILL A PRELIMINARY HAZARD ANALYSIS BE PERFORMED OR UPDATED ?
0145 ==>
0146 ==> SOW:  IF QUANTITATIVE ANALYSIS IS REQUIRED, SO SPECIFY AND PROVIDE
0147 ==>       NUMERICAL HAZARD PROBABILITY LIMITS.
0148 ==>
0149 ==> SOW:  HAZARD ANALYSIS - SEE AFR 80-14 AND AFSC SUP 1 AND COORDINATE
0150 ==>       WITH THE TEST STAFF SPECIALIST.
0151 ==>
0152 ==> CDRL:  DI-H-7048 APPLIES; TAILOR AS REQUIRED AND ADD TO BLOCKS #3 AND
```

0153 ==> #16 THE SPECIFIC ANALYSIS TO BE MADE.
0154 ==>
0155 ==>
0156 ==>
0157 ==> WILL A SUBSYSTEM HAZARD ANALYSIS BE PERFORMED OR UPDATED ?
0158 ==>
0159 ==> SOW: IF QUANTITATIVE ANALYSIS IS REQUIRED, SO SPECIFY AND PROVIDE
0160 ==> NUMERICAL HAZARD PROBABILITY LIMITS.
0161 ==>
0162 ==> SOW: HAZARD ANALYSIS - SEE AFR 80-14 AND AFSC SUP 1 AND COORDINATE
0163 ==> WITH THE TEST STAFF SPECIALIST.
0164 ==>
0165 ==> CDRL: DI-H-7048 APPLIES; TAILOR AS REQUIRED AND ADD TO BLOCKS #3 AND
0166 ==> #16 THE SPECIFIC ANALYSIS TO BE MADE.
0167 ==>
0168 ==> WILL A SYSTEM HAZARD ANALYSIS BE PERFORMED OR UPDATED ?
0169 ==>
0170 ==> SOW: IF QUANTITATIVE ANALYSIS IS REQUIRED, SO SPECIFY AND PROVIDE
0171 ==> NUMERICAL HAZARD PROBABILITY LIMITS.
0172 ==>
0173 ==> SOW: HAZARD ANALYSIS - SEE AFR 80-14 AND AFSC SUP 1 AND COORDINATE
0174 ==> WITH THE TEST STAFF SPECIALIST.
0175 ==>
0176 ==> CDRL: DI-H-7048 APPLIES; TAILOR AS REQUIRED AND ADD TO BLOCKS #3 AND
0177 ==> #16 THE SPECIFIC ANALYSIS TO BE MADE.
0178 ==>
0179 ==> WILL AN OPERATING AND SUPPORT HAZARD ANALYSIS BE PERFORMED OR
0180 ==> UPDATED ?
0181 ==>
0182 ==> SOW: IF QUANTITATIVE ANALYSIS IS REQUIRED, SO SPECIFY AND PROVIDE
0183 ==> NUMERICAL HAZARD PROBABILITY LIMITS.
0184 ==>
0185 ==> SOW: HAZARD ANALYSIS - SEE AFR 80-14 AND AFSC SUP 1 AND COORDINATE
0186 ==> WITH THE TEST STAFF SPECIALIST.
0187 ==>
0188 ==> CDRL: DI-H-7048 APPLIES; TAILOR AS REQUIRED AND ADD TO BLOCKS #3 AND
0189 ==> #16 THE SPECIFIC ANALYSIS TO BE MADE.
0190 ==>
0191 ==>
0192 ==> WILL THIS PROJECT OR SYSTEM BE OPERATED BY, MAINTAINED BY, OR AFFECT
0193 ==> PEOPLE ?
0194 ==>
0195 ==> Define and maintain a Human Factors Engineering (HFE) program to
0196 ==> achieve effective human performance by optimizing human-machine
0197 ==> interactions. Insure that the HFE program is part of the mainstream
0198 ==> engineering activity for defining, integrating, and validating all
0199 ==> design/development requirements necessary to establish an optimal
0200 ==> system configuration. The HFE program shall keep pace with any
0201 ==> changes in system requirements. The program shall:
0202 ==>
0203 ==> a. Identify and analyze system requirements and functions
0204 ==> wherever human performance impacts mission performance.
0205 ==>

0206 ==> b. Translate these requirements and functions into hardware and
0207 ==> software designs.
0208 ==>
0209 ==> c. Evaluate the resulting designs for compliance with system
0210 ==> and specification requirements.
0211 ==>
0212 ==>
0213 ==>
0214 ==> IFPP: DESIGN HANDBOOK DH 1-3 AND AFAHRL-TR-81-35, HUMAN ENGINEERING
0215 ==> PROCEDURES GUIDE, MAY BE REFERENCED IN THE IFPP FOR INFORMATION
0216 ==> TO THE CONTRACTOR. ENSURE THE CONTRACTOR HAS A COPY OR THAT
0217 ==> ONE IS AVAILABLE FOR HIS USE.
0218 ==>
0219 ==> IFPP: THE CONTRACTOR IS REQUESTED TO PROVIDE ONE OR MORE QUALIFIED,
0220 ==> EXPERIENCED HUMAN FACTORS ENGINEERS WITH THE RESPONSIBILITY
0221 ==> AND AUTHORITY TO ENSURE EFFECTIVE PROGRAM IMPLEMENTATION.
0222 ==> THIS WILL BE USED AS SOURCE SELECTION CRITERIA.
0223 ==>
0224 ==> SOW: COORDINATE WITH SYSTEM ENGINEERING TO ADD TO HIS AREA THAT HFE
0225 ==> STATUS AND PROGRESS SHALL BE REVIEWED AT MAJOR DESIGN REVIEWS
0226 ==> IAW MIL-STD-1521.
0227 ==>
0228 ==> SOW: COORDINATE WITH SYSTEMS ENGINEERING AND HAVE HUMAN FACTORS ENGI-
0229 ==> NEERING INCLUDED IN THE MAINSTREAM ENGINEERING ACTIVITY.
0230 ==>
0231 ==> SOW: MIL-H-46855B MUST BE APPLIED AND TAILORED TO YOUR SPECIFIC
0232 ==> SYSTEM.
0233 ==>
0234 ==> SPEC: MIL-STD-1472C IS APPLICABLE AND MUST BE TAILORED.
0235 ==>
0236 ==> SPEC: COORDINATE WITH SYSTEMS ENGINEERING AND TEST.
0237 ==>
0238 ==> CDRL: PRELIMINARY TECHNICAL DATA MUST BE AVAILABLE FOR REVIEW PRIOR
0239 ==> TO THE START OF TRAINING AND TEST. COORDINATE WITH USAF AIR
0240 ==> TRAINING COMMAND, TEST, AND THE DATA MANAGEMENT SPECIALISTS.
0241 ==>
0242 ==> PLEASE RECONSIDER YOUR ANSWER!
0243 ==>
0244 ==> WILL YOUR SYSTEM REQUIRE NEW EQUIPMENT/OPERATION POSITION DESCRIPTIONS
0245 ==> OR SIGNIFICANT MODIFICATION OF OLD ONES ?
0246 ==>
0247 ==> HFE Analysis and Design.
0248 ==>
0249 ==> Operational Analysis. Conduct functional and task analysis of
0250 ==> the system by using functional flow block diagrams (FFBDs) and
0251 ==> operational sequence diagrams. Generate or update them as
0252 ==> appropriate. Starting with the mission objectives, FFBDs shall be
0253 ==> developed iteratively to identify and analyze operator functions.
0254 ==> Based on the identified functions, operational sequence diagrams
0255 ==> shall be developed to specify operator and unique maintainer actions
0256 ==> in detail. FFBDs shall be constructed through the point of operator,
0257 ==> equipment, or software allocation. Operational sequence diagrams
0258 ==> shall be constructed from the point of operator, equipment, or

0259 ==> software allocation. FFBDs and operational sequence diagrams shall
0260 ==> be reviewed at PDR and CDR, respectively. A critical task list,
0261 ==> derived from the FFBDs and operational sequence diagrams, shall be
0262 ==> developed.
0263 ==>
0264 ==>
0265 ==> Critical Task Analysis. For the government accepted critical
0266 ==> task list, the level of detail of the operational sequence diagrams
0267 ==> shall be expanded to depict the specific interaction between the
0268 ==> operator and his console parts (switches, pushbuttons, cursors, etc.)
0269 ==> as well as the display (CRT) of his own console and any other display
0270 ==> or equipment he uses.
0271 ==>
0272 ==> User-System Interface (USI). Based on the FFBDs and operational
0273 ==> sequence diagrams, define in detail and recommend USI functional
0274 ==> capabilities and detailed design guidelines required to support
0275 ==> effective performance of characteristic operator tasks. Use the USI
0276 ==> checklist to determine whether each listed capability is required,
0277 ==> useful, or not needed.
0278 ==>
0279 ==>
0280 ==> Synthesize Position Descriptions. Based on the FFBDs and
0281 ==> operational sequence diagrams and the results of related tasks,
0282 ==> synthesize/revise system position descriptions. These shall identify
0283 ==> each operational position and detail the operator's responsibilities
0284 ==> in terms of information types handled, actions taken, and interfaces
0285 ==> with other operational positions and specific external systems and
0286 ==> their personnel. Where the results entail a change to existing or
0287 ==> specified position descriptions, the difference shall be explained
0288 ==> in detail and justified.
0289 ==>
0290 ==> Positional Handbooks. Using the outputs of analysis and design,
0291 ==> construct/revise positional handbooks, one for each kind of operator
0292 ==> position plus a system overview handbook for the management position.
0293 ==> The positional and system handbooks shall address the total
0294 ==> operational job of each respective position/manager (including
0295 ==> reporting procedures); i.e., they shall not be restricted to the
0296 ==> operator/console interface.
0297 ==>
0298 ==>
0299 ==> HFE Analysis and Design.
0300 ==>
0301 ==> a. Prepare HFE design criteria based on MIL-STD-1472 and
0302 ==> relevant human performance literature for inclusion in the design
0303 ==> documentation.
0304 ==>
0305 ==> b. Coordinate in writing all appropriate overall layout,
0306 ==> top-assembly, panel layout, and maintenance access engineering
0307 ==> drawings.
0308 ==>
0309 ==> c. Use the User-System Interface (USI) Checklist to determine
0310 ==> whether each listed capability is required, useful, or not needed.
0311 ==> The USI requirements definition shall be presented for Government

0312 ==> approval during the Preliminary Design Review.
0313 ==>
0314 ==> d. Wherever relevant, ensure existing positional handbooks and
0315 ==> technical orders reflect changes in operational and maintenance
0316 ==> procedures brought about by the new equipment. Wherever relevant,
0317 ==> ensure changes in operational and maintenance procedures are
0318 ==> incorporated into existing logistics support analyses.
0319 ==>
0320 ==> CDRL: COORDINATE WITH TECH MANUAL OPR TO UPGRADE DI-H-3407 AND
0321 ==> DI-3409 AS REQUIRED.
0322 ==>
0323 ==> WILL THE CONTRACTOR PERFORM THE DEVELOPMENT TEST AND EVALUATION OF
0324 ==> THIS SYSTEM/EQUIPMENT ?
0325 ==> HFE Test and Evaluation.
0326 ==>
0327 ==> HFE test and evaluation shall validate system design compliance
0328 ==> with MIL-STD-1472, operator/maintainer task loading, all major
0329 ==> operational and maintenance procedures including communication and
0330 ==> decision making, and positional handbooks or users manuals.
0331 ==>
0332 ==> HFE Test and Evaluation Procedures.
0333 ==>
0334 ==> HFE test and evaluation may be combined with other system
0335 ==> testing if:
0336 ==>
0337 ==> a. Qualified HFE personnel are collecting data during the test.
0338 ==>
0339 ==> b. Documentation is provided contrasting test conditions to the
0340 ==> operational environment.
0341 ==>
0342 ==> c. The operators and maintainers interfacing with the equipment
0343 ==> are solicited for subjective evaluation of task difficulty and
0344 ==> suggested improvements.
0345 ==> d. Instrumentation either used for general system testing or for
0346 ==> HFE tests can be integrated without interference into system
0347 ==> functions.
0348 ==> CONTRACT: ADD TO THE CONTRACT TO IMPLEMENT THE APPROVED HFE TEST AND
0349 ==> EVALUATION PLAN, DI-H-7053.
0350 ==>
0351 ==> CDRL: MODIFY DI-H-7053 TO BE FURTHER DEVELOPED AND REPORTED AS AN
0352 ==> INTEGRAL PART OF SYSTEM TEST PLANS. THE PLAN SHALL DELINEATE
0353 ==> PASS/FAIL CRITERIAL FOR ALL HFE TESTS.
0354 ==>
0355 ==> CDRL: MODIFY DI-H-7058 TO BE INCORPORATED INTO THE FINAL SYSTEM TEST
0356 ==> REPORT. WHEREVER RELEVANT, TEST RESULTS FROM DI-H-7058 SHALL
0357 ==> BE INCORPORATED INTO SYSTEM POSITIONAL HANDBOOKS OR USERS
0358 ==> MANUALS.
0359 ==>
0360 ==> IS THE VALUE OF THIS ACQUISITION FOR $100 THOUSAND OR MORE ?
0361 ==>
0362 ==> Value Engineering. The contractor should apply Value Engineering
0363 ==> techniques throughout this program to achieve the desired system
0364 ==> requirements and to reduce the total cost of production, operation,

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0365 ==> maintenance, and logistics support of this program.
0366 ==>      See DAR 7-104.44 in the General Provisions of this contract.
0367 ==> CONTRACT:  NORMALLY, IF THE CONTRACT VALUE EXCEEDS $100 THOUSAND,
0368 ==>            VALUE ENGINEERING IS MANDATORY, HOWEVER THERE ARE
0369 ==>            EXCEPTIONS.  SEE DEFENSE ACQUISITION REGULATION (DAR)
0370 ==>            SECTION I, PART 17.
0371 ==>
0372 ==> CONTRACT:  IF VALUE ENGINEERING IS MANDATORY, USE DAR CLAUSE 7-104.44;
0373 ==>            ADDITIONAL TAILORING IS REQUIRED - CONTACT YOUR BUYER OR
0374 ==>            PCO FOR ASSISTANCE.
0375 ==>
0376 ==> Value Engineering is not required.
0377 ==> HAVE SYSTEM SECURITY REQUIREMENTS BEEN IDENTIFIED THROUGH PROGRAM
0378 ==> DIRECTION OR OTHER VALID THREAT DOCUMENTATION ?
0379 ==>
0380 ==> See the General Provisions of this contract.
0381 ==> CONTRACT:  APPLY THE CONTRACT SECURITY CLASSIFICATION SPECIFICATION
0382 ==>            (DD FM 254), YOUR SYSTEM SECURITY CLASSIFICATION GUIDE AND
0383 ==>            SECTION L.11 TO THE CONTRACT.  REF: DAR 7-104.12, 7-204.12,
0384 ==>            7-302.25, 7-402.24 AND 16-811, AS APPROPRIATE.  COORDINATE
0385 ==>            WITH YOUR PCO OR BUYER.
0386 ==>
0387 ==>
0388 ==> IS AVAILABILITY A REQUIREMENT ON THIS PROGRAM/SYSTEM ?
0389 ==>
0390 ==> Perform design analyses and trade-offs of reliability and maintaina-
0391 ==> bility to ensure the specified availability requirements are met.
0392 ==> Include availability predictions with the reliability and maintaina-
0393 ==> bility reports.  Verify the availability requirements through testing
0394 ==> and analysis IAW Section 4 of the System/System Segment Specification.
0395 ==> If the availability requirements are not met, propose the necessary
0396 ==> corrective action and advise the procuring activity.
0397 ==> SOW:  FOR DEFINITIONS AND EQUATIONS FOR AVAILABILITY, SEE CHAPTER 4,
0398 ==>       DOD 3235.1H, TEST & EVALUATION OF SYSTEM RELIABILIT ,
0399 ==>       AVAILABILITY AND MAINTAINABILITY.
0400 ==>
0401 ==> SPEC:  SPECIFY AND DEFINE THE DESIRED AVAILABILITY REQUIREMENTS IN
0402 ==>        THE SPECIFICATION.
0403 ==>
0404 ==> CDRL:  AVAILABILITY REPORTS ARE REQUIRED, HOWEVER THEY SHOULD BE
0405 ==>        INCLUDED WITH THE R&M REPORTS.
0406 ==>
0407 ==> IS A MAINTAINABILITY PROGRAM REQUIRED ?
0408 ==>
0409 ==> CAUTION:  A MAINTAINABILITY PROGRAM IS NORMALLY MANDATORY!
0410 ==>           IF NOT USED, A WAIVER MUST BE PROCESSED IAW AFR 800-18.
0411 ==> IFPP:  FOR CONTRACTOR GUIDANCE, ENTER THE FOLLOWING RADC-TRs
0412 ==>        IN THE IFPP:
0413 ==>
0414 ==>          RADC-TR-74-308    MAINTAINABILITY ENGINEERING DESIGN HANDBOOK
0415 ==>           (AD-A009044)     REVISION II, AND COST OF MAINTAINABILITY
0416 ==>                            (3 VOL)
0417 ==>
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0418 ==>          RADC-TR-78-224    A DESIGN GUIDE FOR BUILT-IN-TEST
0419 ==>           (AD-A069384)
0420 ==>
0421 ==>          RADC-TR-79-327    AN OBJECTIVE PRINTED CIRCUIT BOARD
0422 ==>           (AD-A082329)     TESTABILITY DESIGN AND RATING SYSTEM
0423 ==>
0424 ==>          RADC-TR-79-309    BIT/EXTERNAL TEST FIGURES OF MERIT AND
0425 ==>           (AD-A081128)     DEMONSTRATION TECHNIQUES
0426 ==>
0427 ==>          RADC-TR-80-111    DESIGN GUIDELINES AND OPTIMIZATION
0428 ==>           (AD-A087059)     PROCEDURES FOR TEST SUBSYSTEM DESIGNS
0429 ==>                                                                  =
0430 ==>          RADC-TR-81-220    ANALYSIS OF BUILT-IN-TEST FALSE ALARM
0431 ==>                            CONDITIONS
0432 ==>
0433 ==>          RADC-TR-82-189    RADC TESTABILITY NOTEBOOK
0434 ==>                                                                  =
0435 ==>        THESE DOCUMENTS MUST BE MADE AVAILABLE TO THE CONTRACTOR BY
0436 ==>        THE SPO.
0437 ==>                                                                  =
0438 ==> SOW:  MIL-STD-470A, TAILOR EACH TASK APPLIED PER THE "DETAILS TO BE
0439 ==>       SPECIFIED" PARAGRAPH UNDER EACH TASK DESCRIPTION IN
0440 ==>       MIL-STD-470A.  DETAILS ANNOTATED BY AN "(R)" ARE ESSENTIAL AND
0441 ==>       MUST BE PROVIDED TO THE CONTRACTOR.
0442 ==>
0443 ==> SOW:  MIL-STD-470A, TASK 104: TASK CONTRACTOR TO INTEGRATE WITH
0444 ==>       TASK 104, MIL-STD-785B.
0445 ==>
0446 ==> SOW:  MIL-STD-470A, TASK 204 (FMECA): TASK CONTRACTOR TO COMBINE
0447 ==>       WITH TASK 204, MIL-STD-785B IN ONE REPORT.  REF MIL-STD-1629A,
0448 ==>       TASK 103.
0449 ==>
0450 ==> SOW:  MIL-STD-470A, TASK 203: USE NOTICE 1, 12 JAN 84 OF
0451 ==>       MIL-HDBK-472 FOR MAINTAINABILITY PREDICTIONS.
0452 ==>
0453 ==>                                                                  =
0454 ==> PROCESS A WAIVER FOR A MAINTAINABILITY PROGRAM IAW AFR 800-18.
0455 ==>                                                                  =
0456 ==> DO YOU WANT A BUILT-IN-TEST (BIT) FUNCTION INCLUDED IN THE PRIME
0457 ==> EQUIPMENT FOR STATUS MONITORING AND FAULT DETECTION AND ISOLATION ?
0458 ==>                                                                  =
0459 ==> SPEC:  SEE RADC-TR-78-224, 79-309, 80-111 AND 82-189, AND ENTER THE
0460 ==>        REQUIREMENTIN THE SPECIFICATION.  FOR CONDUCTING TRADE STUDIES
0461 ==>        TO DETERMINE OPTIONAL FAULT DETECTION/ISOLATION DESIGN, SEE
0462 ==>        MIL-STD-001591A.
0463 ==>                                                                  =
0464 ==> SOW:  RADC-TR-82-189, TAILOR BY IDENTIFYING TASKS TO INSURE
0465 ==>       CONTRACTOR'S DESIGN CONSIDERS TESTABILITY AND FAULT
0466 ==>       DETECTION/ISOLATION REQUIREMENTS.
0467 ==>
0468 ==> SOW:  TASK THE CONTRACTOR TO PERFORM THE REQUIRED ANALYSES USING THE
0469 ==>       APPLICABLE RADC TRs AS GUIDES.
0470 ==>                                                                  =
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0471 ==> IS A RELIABILITY PROGRAM REQUIRED ?
0472 ==>
0473 ==> CAUTION:  RELIABILITY PROGRAMS ARE MANDATORY ON MOST CONTRACTS!
0474 ==>
0475 ==> SOW:  TAILOR EACH TASK APPLIED PER THE "DETAILS TO BE SPECIFIED"
0476 ==>       PARAGRAPH UNDER EACH TASK DESCRIPTION OF MIL-STD-785B.  DETAILS
0477 ==>       ANNOTATED BY AN "(R)" ARE ESSENTIAL AND MUST BE PROVIDED TO THE
0478 ==>       CONTRACTOR.
0479 ==>
0480 ==> SOW:  TASK 103, MIL-STD-785B, PROGRAM REVIEWS: USE FOR SPECIAL
0481 ==>       REVIEWS.  STANDARD PROGRAM REVIEWS ARE PART OF THE SYSTEM
0482 ==>       ENGINEERING TASK.  MIL-STD-1521A IS THE PRIMARY IMPLEMENTING
0483 ==>       DOCUMENT.
0484 ==>
0485 ==> SOW:  TASK 204, MIL-STD-785B, FAILURE MODES, EFFECTS AND CRITICALITY
0486 ==>       ANALYSIS: REFER IN SOW TO MIL-STD-1629A (TASKS 101, 102 AND
0487 ==>       103) FOR PROCEDURES.  STATE LEVEL TO WHICH FMECA SHALL BE
0488 ==>       CONDUCTED (NORMALLY TO SRU LEVEL).
0489 ==>
0490 ==> SOW:  TASK 207, MIL-STD-785B, PARTS PROGRAM: USE ONLY IF SEPARATE
0491 ==>       PARTS PROGRAM IS NOT A TASK IN SOW.
0492 ==>
0493 ==> SOW:  TASK 302, MIL-STD-785B, RELIABILITY DEVELOPMENT/GROWTH
0494 ==>       TESTING: REFER TO HIL-HDBK-189 FOR PROCEDURES.  MIL-STD-1635
0495 ==>       AND MIL-STD-2068 COVER GROWTH TESTS - REVIEW FOR
0496 ==>       APPLICATION TO YOUR PROGRAM.
0497 ==>
0498 ==> SOW:  TASK 303, MIL-STD-785B, RELIABILITY QUALIFICATION TESTING:
0499 ==>       IDENTIFY TEST PLAN, MISSION PROFILE, TEST CONDITIONS, AND
0500 ==>       FAILURE DEFINITIONS IN MIL-STD-781C.  IF THERMAL SURVEY IS
0501 ==>       REQUIRED, USE DI-R-7036, REFER TO PARA 5.1.5 IN MIL-STD-781C
0502 ==>       AND RADC-TR-82-172, THERMAL GUIDE.
0503 ==>
0504 ==> SOW:  TASKS 201 AND 203, MIL-STD-785B, RELIABILITY MODELING AND
0505 ==>       PREDICTION:  REFER TO MIL-STD-756B FOR SPECIFIC METHODS;
0506 ==>       IDENTIFY TASKS THAT APPLY TO YOUR PROGRAM.
0507 ==>
0508 ==> SOW:  TASK 205, MIL-STD-785B, SNEAK CIRCUIT ANALYSIS: REFER TO
0509 ==>       APPENDIX IN MIL-STD-785B FOR INFORMATION ON APPLYING TASK.
0510 ==>       USE DI-R-7083.  SEE RADC-TR-82-179 FOR APPLICATION GUIDELINES.
0511 ==>
0512 ==> SOW:  TASK 203, MIL-STD-785B, RELIABILITY PREDICTION, REFER TO
0513 ==>       MIL-HDBK-217D FOR ELECTRONIC EQUIPMENT FAILURE RATES, AND
0514 ==>       SELECT EITHER PARA 5.1 OR 5.2 FOR TYPE OF PREDICTION (PART
0515 ==>       STRESS ANALYSIS OR PARTS COUNT).  REFER TO RADC-TR-75-22
0516 ==>       (AD-A005667) FOR NON-ELECTRONIC EQUIPMENT FAILURE RATES
0517 ==>       AND MODELS.
0518 ==>
0519 ==> SOW:  TASK 203, MIL-STD-785B: THE CONTRACTOR CAN BE TASKED TO USE
0520 ==>       RADC-ORACLE (AUTOMATED PREDICTION); PROGRAM OFFICE/RADC MOA
0521 ==>       REQUIRED FOR REIMBURSEMENT.  DERATING OF PARTS REQUIRED ON ALL
0522 ==>       ESD CONTRACTS - REFER TO ESD-TR-83-197 OR CONTRACTOR'S
0523 ==>       EQUIVALENT DERATING GUIDE.
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0524 ==>
0525 ==> SOW:  IF PARTS SUBJECT TO ELECTROSTATIC DISCHARGE ARE USED IN THE
0526 ==>       DESIGN, TASK THE CONTRACTOR TO IMPLEMENT AN ELECTROSTATIC
0527 ==>       DISCHARGE (ESD) PROGRAM IAW DOD-STD-1686 AND DOD-HDBK-263.
0528 ==> SOW:  TASK 301, MIL-STD-785B: SEE RADC-TR-82-87, STRESS SCREENING OF
0529 ==>       ELECTRONIC HARDWARE, FOR GUIDANCE IN APPLYING STRESS SCREENING.
0530 ==>
0531 ==> IF A RELIABILITY PROGRAM IS NOT GOING TO BE USED, CONTACT THE STAFF
0532 ==> OPR FOR ASSISTANCE.
0533 ==>
0534 ==> IF A RELIABILITY PROGRAM IS NOT GOING TO BE USED, CONTACT THE STAFF
0535 ==> OPR FOR ASSISTANCE.
0536 ==>
0537 ==> IS HARDWARE BEING DESIGNED OR MODIFIED ?
0538 ==>
0539 ==> A PARTS CONTROL PROGRAM IS NOT REQUIRED.
0540 ==> WILL COMPONENT PARTS BE IDENTIFIED ?
0541 ==>
0542 ==> A PARTS CONTROL PROGRAM IS REQUIRED AND MUST BE IDENTIFIED BEFORE
0543 ==> RELEASING THE FORMAL RFP TO INDUSTRY (REF: AFR 800-24, PARTS CONTROL
0544 ==> PROGRAM).
0545 ==>
0546 ==> SOW:  THE FOLLOWING PARTS CONTROL PROGRAM TAILORS OUT SOME OF THE
0547 ==>       MIL-STD-965 REQUIREMENTS AND PROVIDES FOR THE UTILIZATION OF THE
0548 ==>       GOVERNMENT GENERATED PPSLs KNOWN AS GOVERNMENT FURNISHED BASE-
0549 ==>       LINE (GFB).  THE DEFENSE ELECTRONIC SUPPLY CENTER (DESC) IS
0550 ==>       RESPONSIBLE FOR THE ELECTRONIC PPSL AND THE DEFENSE INDUSTRIAL
0551 ==>       SUPPLY CENTER (DISC) IS RESPONSIBLE FOR THE MECHANICAL PPSL.
0552 ==>       THE CONTRACTOR IS REQUIRED IAW THE SYSTEM SPECIFICATION TO
0553 ==>       SELECT PARTS FROM THESE PPSLs WHENEVER POSSIBLE.  IF ADDITIONAL
0554 ==>       PARTS ARE NEEDED, THE CONTRACTOR SELECTS THEM IAW A GENERAL
0555 ==>       EQUIPMENT SPECIFICATION AND REQUESTS APPROVAL IAW MIL-STD-965
0556 ==>       AND DI-E-7028.  DESC AND DISC MAINTAIN COMPUTER PRINTOUTS
0557 ==>       (F-4-71) SUMMARIZING THEIR RECOMMENDATIONS.  IT IS IMPERATIVE
0558 ==>       THAT THE PROGRAM OFFICE NOTIFY DESC/DISC OF THE DISPOSITION
0559 ==>       OF THESE RECOMMENDATIONS.  THIS CAN MOST EASILY BE ACCOMPLISHED
0560 ==>       BY SENDING THEM A COPY OF THE PROGRAM OFFICE'S LETTER TO THE
0561 ==>       CONTRACTOR.  WITH THIS DATA, DESC/DISC CAN ANNOTATE F-4-71 IN
0562 ==>       A MANNER THAT WILL ALLOW IT TO BECOME THE OFFICIAL APPROVED
0563 ==>       AMENDMENT TO THE GFB PPSL.  (THE TOTAL APPROVED PPSL IS THE SUM
0564 ==>       OF THE GFB AND THE APPROVED AMENDMENT.)  CONTACT ESD/ALEQ FOR
0565 ==>       ASSISTANCE AS NECESSARY.
0566 ==> SPEC/  PROVIDED BELOW IS A SAMPLE SPECIFICATION PARAGRAPH CONSISTENT
0567 ==>        WITH THE METHOD USED FOR THE SOW AND CDRL.
0568 ==> 3.X.X.X PARTS.
0569 ==> 3.X.X.X.1 DERATED APPLICATION OF PARTS.
0570 ==>          THE DESIGN OF PARTS INTO EQUIPMENTS SHALL COMPLY WITH A
0571 ==>        GOVERNMENT-APPROVED, CONTRACTOR DERATING STANDARD OR WITH
0572 ==>        DERATING LEVEL (TO BE SELECTED BY THE GOVERNMENT PROGRAM
0573 ==>        OFFICE) OF ESD TR-83-197.
0574 ==> 3.X.X.X.2 PARTS SELECTION.
0575 ==>          ALL PARTS EMPLOYED IN THE MANUFACTURE OF NEWLY DESIGNED OR
0576 ==>        MODIFIED ITEMS (MODIFIED PORTION ONLY) FOR THE (SYSTEM NAME)
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0577 ==> EQUIPMENTS SHALL BE SELECTED IAW THE PROGRAM PARTS SELECTION
0578 ==> LIST, ELECTRICAL/ELECTRONIC PARTS AND THE PROGRAM PARTS SE-
0579 ==> LECTION LIST, MECHANICAL PARTS AND F-4-71 COMPUTER PRINTOUTS
0580 ==> FROM DESC AND DISC. PARTS NOT COVERED BY THE ABOVE MENTIONED
0581 ==> PPSLs SHALL BE SELECTED IAW MIL-E-4158 AND MIL-STD-965.
0582 ==> ALL PARTS SHALL BE SCREENED THROUGH THE GOVERNMENT-INDUSTRY
0583 ==> DATA EXCHANGE PROGRAM (GIDEP) FAILURE EXPERIENCE DATA INTER-
0584 ==> CHANGE (FEDI) PRIOR TO THEIR SELECTION.
0585 ==>
0586 ==> ALL SEMICONDUCTORS SHALL BE SELECTED IAW REQUIREMENT 30 OF
0587 ==> MIL-STD-454 AND THE FOLLOWING:
0588 ==> A. ONLY SOLID GLASS METALURGICALLY BONDED AXIAL LEAD DIODES
0589 ==> AND RECTIFIERS SHALL BE USED.
0590 ==> B. WHEN TO-50 PACKAGES ARE REQUIRED, THEY SHALL BE LIMITED TO
0591 ==> THE SOLID METAL HEADER TYPE.
0592 ==> C. THERMOCOMPRESSION WEDGE BONDING SHALL NOT BE USED WITH
0593 ==> ALUMINUM WIRE.
0594 ==> D. ALUMINUM TO-3 PACKAGES SHALL NOT BE USED.
0595 ==> E. GERMANIUM DEVICES SHALL NOT BE USED.
0596 ==> F. ALL NON-JAN TX DEVICVES SHALL BE SCREAQ" IAW TABLE II OF
0597 ==> MIL-S-19500. ALL DEVICE TYPES SHALL BE TESTED TO THE GROUP
0598 ==> A, TABLE III AND GROUP B, TABLE IV QUALITY CONFORMANCE REQ-
0599 ==> UIREMENTS OF MIL-S-19500, AS A MINIMUM.
0600 ==> G. SEMICONDUCTOR DEVICES NOT COVERED BY ESD-TR-83-197 SHALL
0601 ==> NOT HAVE PEAK JUNCTION TEMPERATURES EXCEEDING THE FOLLOWING
0602 ==> WHEN OPERATING UNDER ANY SPECIFIED ENVIRONMENTAL CONDITIONS:
0603 ==> 1. POWER DEVICES = 135 DEGREES C (275 DEGREES F)
0604 ==> 2. SMALL SIGNAL DEVICES = 125 DEGREES C (257 DEGREES F)
0605 ==>
0606 ==> CRITICAL ITEMS. HYBRID (INCLUDING RADIO FREQUENCY, MICROWAVE
0607 ==> AND MILLIMETER TYPES) AND MONOLITHIC MICROCIRCUITS CUSTOM DES-
0608 ==> IGNED FOR THIS SYSTEM SHALL BE CONSIDERED CRITICAL ITEMS.
0609 ==>
0610 ==> ALL MICROELECTRONIC DEVICES SHALL BE SELECTED IAW REQUIREMENT
0611 ==> 64 OF MIL-STD-454 AND THE FOLLOWING.
0612 ==>
0613 ==> MICROELECTRONIC DEVICES NOT COVERED BY ESD-TR-83-197 SHALL
0614 ==> NOT HAVE PEAK JUNCTION TEMPERATURES EXCEEDING 125 DEGREES C
0615 ==> (257 DEGREES F) WHEN OPERATED UNDER ANY SPECIFIED ENVIRON-
0616 ==> MENTAL CONDITIONS.
0617 ==>
0618 ==> ALL NON-JAN DEVICES SHALL BE TESTED IAW MIL-STD-883, METHOD
0619 ==> 5004 OR 5008 AS APPLICABLE. ALL DEVICES SHALL BE TESTED TO THE
0620 ==> QUALITY CONFORMANCE REQUIREMENTS OF MIL-STD-883 METHOD 5004 OR
0621 ==> 5008 AS APPLICABLE. NO WAIVERS ARE ALLOWED EXCEPT CURRENT AND
0622 ==> VALID GENERIC DATA AS DEFINED BELOW MAY BE SUBSTITUTED FOR
0623 ==> GROUPS C AND D.
0624 ==>
0625 ==> GROUP C GENERIC DATA MUST BE ON DATE CODES NO MORE THAN ONE
0626 ==> YEAR OLD AND ON A DIE IN THE SAME MICROCIRCUIT GROUP (SEE
0627 ==> APPENDIX E OF MIL-M-38510) WITH THE SAME MATERIAL, DESIGN, PRO-
0628 ==> CESSES AND FROM THE SAME PLANT AS THE DIE REPRESENTED. GROUP D
0629 ==> GENERIC DATA MUST BE ON DATE CODES NO MORE THAN ONE YEAR OLD

0630 ==> AND ON THE SAME PACKAGE TYPE (SEE 3.1.3.12 OF MIL-M-38510) AND
0631 ==> FROM THE SAME PLANT AS THE PACKAGE REPRESENTED.
0632 ==>
0633 ==> NOTE: MIL-E-4158, SHOWN IN THE FIRST SENTENCE OF ABOVE SPECIF-
0634 ==> ICATION, RELATES TO GROUND ELECTRONIC EQUIPMENT. IF THE EQUIP-
0635 ==> MENT IS TO BE AIRBORNE, MIL-E-5400 SHOULD BE SUBSTITUTED FOR
0636 ==> MIL-E-4158. OTHER GENERAL EQUIPMENT SPECIFICATIONS MAY BE
0637 ==> SIMILARLY SUBSTITUTED AS APPROPRIATE. SEE APPENDIX B OF ESD-
0638 ==> TR-83-197 FOR INFORMATION CONCERNING THE CONTENT OF SECTION 4
0639 ==> OF THE SPECIFICATION.
0640 ==>
0641 ==> CDRL: DI-E-7028, DI-R-3548 AND DI-E-7031 APPLY. TAILOR AS REQUIRED.
0642 ==>
0643 ==> WHENEVER CONTROL DRAWINGS IAW DOD-STD-100 ARE TO BE PREPARED,
0644 ==> THE FOLLOWING SHOULD BE ADDED TO THE BACK-UP SHEET OF DI-E-7031
0645 ==> RELATIVE TO PARA 6.2.1(N) OF DODD-1000 (THIS MAY BE IN ADDITION
0646 ==> TO OTHER REQUIREMENTS:
0647 ==>
0648 ==>
0649 ==>
0650 ==>
0651 ==>
0652 ==> SELECTED ITEM DRAWINGS (SID) IAW DOD-STD-100 SHALL BE THE
0653 ==> TYPE OF CONTROL DRAWING PROVIDED WHENEVER A DRAWING IS PROVIDED
0654 ==> THAT DESCRIBES A PIECE PART THAT REQUIRES SELECTION, SCREENING,
0655 ==> TESTING, ETC. OVER AND ABOVE THAT PROVIDED BY THAT PART VENDOR'S
0656 ==> USUAL PRACTICE RELATIVE TO THE SPECIFIC PART NUMBERED ITEM
0657 ==> REFERENCED IN THE DRAWING. ALSO, ADD TO BLOCK 16 OF DD FORM
0658 ==> 1423: WHENEVER THE GENERATION OF A CONTROL DRAWING THAT RELATES
0659 ==> TO THE PROCUREMENT OF PARTS IN THE CATEGORIES LISTED IN PARA 6.4
0660 ==> OF MIL-STD-965 IS NEEDED AND THAT GENERATION IS APPROVED BY THE
0661 ==> PROCURING ACTIVITY, A COPY OF THAT CONTROL DRAWING TOGETHER WITH
0662 ==> A COMPLETED DD FORM 2052 WILL BE DISTRIBUTED TO DESC, DISC,
0663 ==> AND/OR RADC AS APPROPRIATE. THIS DID WILL MOST LIKELY BE
0664 ==> APPLIED IN THE CDRL FOR OTHER PURPOSES; THEREFORE, IF THIS IS
0665 ==> THE CASE, ADD THE ABOVE DETAILS TO IT SO THERE WILL BE ONLY ONE
0666 ==> ALL INCLUSIVE DI-E-7031 APPLIED.
0667 ==>
0668 ==>
0669 ==>
0670 ==>
0671 ==>
0672 ==> A PARTS CONTROL PROGRAM IS NOT REQUIRED.
0673 ==> WILL COMPONENT PARTS BE IDENTIFIED ?
0674 ==>
0675 ==> WILL THE CONTRACTOR FUNCTION AS AN INTEGRATING CONTRACTOR ?
0676 ==>
0677 ==> Parts Control Program. (Procedure II):
0678 ==> Establish and maintain a Parts Control Pro-
0679 ==> gram IAW (1) this SOW, (2) (the System Specification), (3) MIL-STD-965
0680 ==> and (4) the contractor's Parts Control Program when it has been app-
0681 ==> lied by this procuring activity (DI-E-7026).
0682 ==> Use the Government generated and maintained Program Parts

0683 ==> Selection List (PPSL) in addition to any existing F-4-71 Computer
0684 ==> Printouts from DESC or DISC. Requests for use of parts not on
0685 ==> these PPSLs shall be submitted IAW the CDRL. Amendments to these
0686 ==> PPSLs as a result of such requests and procurement activity approval
0687 ==> will be supplied to the contractor by the PCO as required by the con-
0688 ==> tractor, but not oftener than once every 30 days (DI-E-7028).
0689 ==> Participate in the Government-Industry Data
0690 ==> Exchange Program (GIDEP) to the extent necessary to receive data from
0691 ==> the Failure Experience Data Interchange (FEDI). The contractor shall
0692 ==> screen all parts through the FEDI prior to their selection IAW the
0693 ==> System Specification (DI-R-3548).
0694 ==> WILL THE MAGNITUDE OF THIS PROGRAM REQUIRE THE PRIME CONTRACTOR TO
0695 ==> HAVE ONE OR MORE LARGE AND/OR COMPLEX SUBCONTRACTOR EFFORTS ?
0696 ==> Parts Control Program. (Procedure II):
0697 ==> Establish and maintain a Parts Control Pro-
0698 ==> gram IAW (1) this SOW, (2) (the System Specification), (3) MIL-STD-965
0699 ==> and (4) the contractor's Parts Control Program when it has been app-
0700 ==> lied to this procuring activity (DI-E-7026).
0701 ==> Use the Government generated and maintained Program Parts
0702 ==> Selection List (PPSL) in addition to any existing F-4-71 Computer
0703 ==> Printouts from DESC or DISC. Requests for use of parts not on
0704 ==> these PPSLs shall be submitted IAW the CDRL. Amendments to these
0705 ==> PPSLs as a result of such requests and procurement activity approval
0706 ==> will be supplied to the contractor by the PCO as required by the con-
0707 ==> tractor, but not oftener than once every 30 days (DI-E-7028).
0708 ==> Participate in the Government-Industry Data
0709 ==> Exchange Program (GIDEP) to the extent necessary to receive data from
0710 ==> the Failure Experience Data Interchange (FEDI). The contractor shall
0711 ==> screen all parts through the FEDI prior to their selection IAW the
0712 ==> System Specification (DI-R-3548).
0713 ==> Parts Control Program. (Procedure I):
0714 ==> Establish and maintain a Parts Control Pro-
0715 ==> gram IAW (1) this SOW, (2) (the System Specification) and (3) MIL-STD-
0716 ==> 965.
0717 ==> Use the Government generated and maintained Program Parts
0718 ==> Selection Lists (PPSLs) in addition to any existing F-4-71 Computer
0719 ==> Printouts from DESC or DISC. Requests for use of parts not
0720 ==> on these PPSLs shall be submitted IAW the CDRL. Amendments to these
0721 ==> PPSLs as a result of such requests and procurement activity approval
0722 ==> will be supplied to the contractor by the PCO as required by the con-
0723 ==> tractor, but not oftener than once every 30 days (DI-E-7028A/T).
0724 ==> Participate in the Government-Industry Data
0725 ==> Exchange Program (GIDEP) to the extent necessary to receive data from
0726 ==> the Failure Experience Data Interchange (FEDI). The contractor shall
0727 ==> screen all parts through the FEDI prior to their selection IAW the
0728 ==> System Specification (DI-R-3548).
0729 ==> WILL THE MAGNITUDE OF THIS PROGRAM REQUIRE THE PRIME CONTRACTOR TO
0730 ==> HAVE ONE OR MORE LARGE AND/OR COMPLEX SUBCONTRACTOR EFFORTS ?
0731 ==> DO YOU HAVE A HIGH QUALITY PPSL AMENDMENT FROM A PREVIOUS PHASE THAT
0732 ==> YOU WOULD LIKE TO USE ON THE FSD CONTRACT ?
0733 ==>
0734 ==> NOTE: A HIGH QUALITY PPSL IS DEFINED AS A LIST THAT WAS FINALIZED NO
0735 ==> MORE THAN 12 TO 15 MONTHS PRIOR TO THE EXPECTED AWARD OF THE

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0736 ==>        FSD CONTRACT AND IN ADDITION CONTAINS A VERY LARGE PERCENTAGE
0737 ==>        OF QPL PARTS AND VERY FEW INSTANCES OF PO OVERRIDES OF DESC/
0738 ==>        DISC/RADC RECOMMENDATIONS.
0739 ==>
0740 ==> CDRL:  RESUBMISSION AND REEVALUATION OF THE PREVIOUSLY APPROVED PPSL
0741 ==>        FROM AN EARLIER CONTRACT OR PROGRAM PHASE MAY BE DESIRABLE. BE-
0742 ==>        CAUSE OF THE RAPID EVOLUTION OF SOME OF THE COMPONENTS, THEIR
0743 ==>        ACCEPTANCE ON A NEW CONTRACT, ON THE BASIS OF THEIR BEING
0744 ==>        APPROVED ON AN EARLIER EFFORT, IS NOT VALID.
0745 ==>
0746 ==> SOW:   ADD IDENTIFICATION OF THE PREVIOUSLY APPROVED HIGH QUALITY PPSL
0747 ==>        (SECTION I ONLY) TO SECTION 2 FOR LISTING AND TO SECTION 3 FOR
0748 ==>        REQUIREMENTS.
0749 ==>
0750 ==> WAS A PROGRAM PARTS SELECTION LIST (PPSL) GENERATED DURING A PREVIOUS
0751 ==> ACQUISITION PHASE ?
0752 ==>
0753 ==> WILL METEOROLOGICAL CONDITIONS HAVE AN IMPACT ON EITHER THE
0754 ==> PERFORMANCE OR WITHSTANDING CAPABILITY OF THIS SYSTEM ?
0755 ==>
0756 ==> The design requirements for natural environmental conditions are
0757 ==> located in Section 3 of the Specification.  Methods of verification
0758 ==> are located in Section 4 of the Specification.
0759 ==>      Consider aspects of meteorology as they relate to the system's
0760 ==> acquisition.  There are four general areas of potential concern:
0761 ==>      a. Meteorological effects upon the performance and withstanding
0762 ==> capabilities of system hardware (equipment and facilities) (e.g., ice/
0763 ==> wind loads).
0764 ==>      b. Meteorological effects upon any electromagnetic energy
0765 ==> propagated or received by the system (e.g., rain attenuation of the
0766 ==> electromagnetic wave).
0767 ==>      c. The need for meteorological data/messages to be transmitted,
0768 ==> received, processed, or displayed by the system (e.g., weather
0769 ==> observations or forecasts).
0770 ==>      d. The need for additional direct weather support to the
0771 ==> operational system.
0772 ==>
0773 ==> SOW:  THE PROGRAM MANAGER SHALL:
0774 ==>          ESTABLISH AND MAINTAIN THE METEOROLOGICAL REQUIREMENTS FOR ALL
0775 ==>        ACQUISITION PHASES OF HIS PROGRAM.
0776 ==>          CONTACT THE ESD STAFF METEOROLOGY OFFICE FOR ASSISTANCE IN
0777 ==>        ESTABLISHING REQUIREMENTS, SUCH AS:
0778 ==>            PROVIDING METEOROLOGICAL DATA FOR DEVELOPMENT OF EQUIPMENT
0779 ==>          DESIGN CRITERIA, PROPAGATION STUDIES, AND TRADE-OFF STUDIES,
0780 ==>            ASSISTING IN THE INTERPRETATION/EVALUATION OF THE DATA,
0781 ==>            PROVIDING INFORMATION ON METEOROLOGICAL TEST METHODS,
0782 ==>          INSTRUMENTATION, AND MEASUREMENT TECHNIQUES, EVALUATING THE
0783 ==>          NEED FOR AND ARRANGING METEOROLOGICAL SUPPORT DURING TEST AND
0784 ==>          EVALUATION.
0785 ==>        CONTACT THE ESD TEST OPR AND HAVE HIM INCLUDE METEOROLOGICAL
0786 ==>      REQUIREMENTS IN HIS TASK.
0787 ==>
0788 ==> CDRL:  SELECT APPROPRIATE DATA ITEMS AND TAILOR TO INCLUDE: DATA FOR
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0789 ==>        EVALUATION AND POST ANALYSIS DURING SYSTEMS TEST; METEOROLOGI-
0790 ==>        CAL EQUIPMENT REQUIRED AT OR IN THE SYSTEM; DATA FOR FORECASTS
0791 ==>        AND OTHER SERVICES FOR OPERATIONAL SUPPORT; AND, DATA FOR
0792 ==>        SERVICES REQUIRED DURING SITE CONSTRUCTION.  DI-R-7123,
0793 ==>        DI-R-7124, DI-R-7125, DI-R-7126 AND DI-R-7127 ARE EXAMPLES OF
0794 ==>        APPLICABLE DATA ITEMS.
0795 ==>
0796 ==> SPEC:  ALL OF THE FOLLOWING SPECIFICATION REQUIREMENTS SHOULD BE
0797 ==>        PLACED IN SECTIONS 3.0 AND 4.0 OF THE SYSTEMS SPECIFICATION.
0798 ==>        SPECIFIC TAILORING WILL BE REQUIRED FOR YOUR PROGRAM; CONTACT
0799 ==>        ESD/WE FOR ASSISTANCE.
0800 ==>
0801 ==> CONTRACT:  ADD THE FOLLOWING IN THE GENERAL CONTRACT: "THE PROGRAM
0802 ==>            MANAGER SHALL HAVE THE PCO INFORM THE CONTRACTOR THAT THE
0803 ==>            ESD STAFF METEOROLOGIST IS AVAILABLE THROUGH THE PROGRAM
0804 ==>            OFFICE TO ADVISE AND ASSIST THE CONTRACTOR."
0805 ==> SPEC:  ENSURE THAT THE SYSTEM IS DESIGNED COMPATIBLE WITH EXPECTED
0806 ==>        NATURAL ENVIRONMENTAL LIMITATIONS ON SYSTEM PERFORMANCE.
0807 ==>
0808 ==> CDRL:  SELECT APPROPRIATE DATA ITEMS AND TAILOR TO INCLUDE: DATA FOR
0809 ==>        EVALUATION AND POST ANALYSIS DURING SYSTEMS TEST; METEOROLOGI-
0810 ==>        CAL EQUIPMENT REQUIRED AT OR IN THE SYSTEM; DATA FOR FORECASTS
0811 ==>        AND OTHER SERVICES FOR OPERATIONAL SUPPORT; AND, DATA FOR
0812 ==>        SERVICES REQUIRED DURING SITE CONSTRUCTION.  DI-R-7123,
0813 ==>        DI-R-7124, DI-R-7125, DI-R-7126 AND DI-R-7127 ARE EXAMPLES OF
0814 ==>        APPLICABLE DATA ITEMS.
0815 ==>
0816 ==> SPEC:  ALL OF THE FOLLOWING SPECIFICATION REQUIREMENTS SHOULD BE
0817 ==>        PLACED IN SECTIONS 3.0 AND 4.0 OF THE SYSTEMS SPECIFICATION.
0818 ==>        SPECIFIC TAILORING WILL BE REQUIRED FOR YOUR PROGRAM; CONTACT
0819 ==>        THE OPR FOR NATURAL ENVIRONMENT (ESD/WE) FOR ASSISTANCE.
0820 ==>
0821 ==> CONTRACT:  ADD THE FOLLOWING IN THE GENERAL CONTRACT:
0822 ==>              "THE PROGRAM MANAGER SHALL HAVE THE PCO INFORM THE
0823 ==>            CONTRACTOR THAT THE ESD STAFF METEOROLOGIST IS AVAILABLE
0824 ==>            THROUGH THE PROGRAM OFFICE TO ADVISE AND ASSIST THE CON-
0825 ==>            TRACTOR."
0826 ==>
0827 ==> DOES THE SYSTEM EMIT ELECTROMAGNETIC RADIATION ?
0828 ==>
0829 ==>
0830 ==> SPEC:  ENVIRONMENTAL EFFECTS ON WAVE PROPAGATION NEED TO BE CONSIDERED
0831 ==> IFPP:  IN ALL PHASES OF HARDWARE/SOFTWARE SYSTEM ACQUISITION THROUGH
0832 ==>        COORDINATION WITH THE ESD STAFF METEOROLOGIST.
0833 ==>
0834 ==> SPEC:  REF: ELECTROMAGNETIC ENERGY.  ENVIRONMENTAL EFFECTS ON WAVE
0835 ==>        PROPAGATION SPAN THE ENTIRE AEROSPACE ENVELOPE OF USAF OPERA-
0836 ==>        TIONS TO INCLUDE THE TROPOSPHERE (SURFACE TO 10-20 KM) AND
0837 ==>        IONOSPHERE (60 TO BEYOND 300 KM ABOVE THE SURFACE).  THESE
0838 ==>        ENVIRONMENTAL EFFECTS INCLUDE REFRACTION, REFLECTION,
0839 ==>        ABSORPTION, SCATTERING, DIFFRACTION, SCINTILLATION, AND
0840 ==>        VARIOUS SOLAR DISTURBANCES.  INCLUDE THESE REQUIREMENTS IN
0841 ==>        SECTION 3 OF THE SPECIFICATION.
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0842 ==>
0843 ==> DOES THIS SYSTEM HAVE SURFACE-BASED (GROUND OR SEABORNE) SUBSYSTEMS
0844 ==> OR COMPONENTS ?
0845 ==> WILL TEMPERATURE, PRESSURE AND DENSITY HAVE AN EFFECT ON THIS SYSTEM ?
0846 ==>
0847 ==>
0848 ==> SPEC: REF: TEMPERATURE/PRESSURE/DENSITY.
0849 ==>
0850 ==> SECTION 3.0
0851 ==> TEMPERATURE - MIL-E-4158E, PARA 3.2.30.1, 3.2.30.1.1 (TABLE I
0852 ==> VALUES SHOULD BE AS AMENDED BY MIL-E-4158E, AMENDMENT 2, 12
0853 ==> JUL 77). 6.2.C, 6.2.D AND 6.3.1. THE ABOVE PARAGRAPHS
0854 ==> SHOULD BE TAILORED BY MIL-STD-210B, PARAS 5.1.2, 5.1.3 (SEE
0855 ==> PARAS 5.2.2.1 AMD 5.2.2.2 FOR SEABORNE SYSTEMS).
0856 ==>
0857 ==> PRESSURE - MIL-STD-210B, PARAS 5.1.16 AND 5.1.17 (SEE PARAS
0858 ==> 5.3.13 AND 5.3.14 FOR SEABORNE SYSTEMS).
0859 ==>
0860 ==> DENSITY - MIL-STD-210B, PARAS 5.1.18 AND 5.1.19 (SEE PARAS
0861 ==> 5.2.2.17 AND 5.2.2.18 FOR SEABORNE SYSTEMS).
0862 ==>
0863 ==> SECTION 4.0
0864 ==> MIL-STD-810D, TEST METHODS 500.2, 501.2, 502.2, 503.2 AND
0865 ==> 520.0. TAILORING IS REQUIRED.
0866 ==>
0867 ==> WILL HUMIDITY AFFECT THIS SYSTEM ?
0868 ==>
0869 ==> SPEC: REF: HUMIDITY.
0870 ==>
0871 ==> SECTION 3.0
0872 ==> MIL-E-4158E, AMENDMENT 2, 12 JUL 77, PARA 3.2.30.1.3 (a. AND
0873 ==> b.). MIL-E-4158E, PARA 6.2.C, 6.2.D AND 6.3.1. THE ABOVE
0874 ==> PARAGRAPHS SHOULD BE TAILORED BY MIL-STD-210B, PARAS 5.1.4
0875 ==> THRU 5.1.9 (SEE PARAS 5.2.2.3 THRU 5.2.2.8 FOR SEABORNE
0876 ==> SYSTEMS).
0877 ==>
0878 ==> SECTION 4.0
0879 ==> MIL-STD-810D, TEST METHOD 507.2; TAILORING IS REQUIRED.
0880 ==>
0881 ==> WILL THUNDERSTORMS (TO INCLUDE LIGHTNING AND HAIL) AFFECT THIS
0882 ==> SYSTEM ?
0883 ==> SPEC: REF: LIGHTNING/THUNDERSTORMS/HAIL.
0884 ==>
0885 ==> SECTION 3.0
0886 ==> MIL-E-4158E, PARA 3.2.12.2 AND MIL-E-4158E, AMENDMENT 2, 12
0887 ==> JUL 77, PARA 3.2.12.2.1. MIL-STD-210B, PARA 5.1.15.
0888 ==>
0889 ==> SECTION 4.0
0890 ==> METHODS OF VERIFICATION:
0891 ==> CONTRACTOR DEVELOPED, GOVERNMENT APPROVED TEST METHOD(S)
0892 ==> SHALL BE USED. THE PROGRAM OFFICE SHALL CONSULT THE STAFF
0893 ==> METEOROLOGY OFFICE FOR ASSISTANCE IN EVALUATING THE CONTRACT-
0894 ==> OR PROPOSED TEST METHOD(S).

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0895 ==>
0896 ==> IS THIS A SHELTERED SYSTEM ?
0897 ==>
0898 ==> NOTE:  A SHELTERED SYSTEM IS ONE THAT IS PROTECTED FROM THE NATURAL
0899 ==>        ENVIRONMENTAL ELEMENTS.
0900 ==>
0901 ==> WILL PRECIPITATION (FROZEN, LIQUID AND VAPOR) AFFECT THIS SYSTEM ?
0902 ==>
0903 ==> SPEC:  REF: PRECIPITATION.
0904 ==>
0905 ==>        SECTION 3.0
0906 ==>          MIL-E-4158E, PARA 3.2.30.1.5.b, AS TAILORED BY MIL-STD-210B,
0907 ==>          PARAS 5.1.11, 5.1.12 AND 5.1.15 (SEE PARAS 5.2.2.10,
0908 ==>          5.2.2.11 AND 5.2.2.14 FOR SEABORNE SYSTEMS).
0909 ==>
0910 ==>        SECTION 4.0
0911 ==>          MIL-STD-810D, TEST METHOD 506.2; TAILORING IS REQUIRED.
0912 ==>
0913 ==> WILL SNOW LOADS AND ICE BUILD-UPS HAVE AN EFFECT ON THIS SYSTEM ?
0914 ==>
0915 ==> SPEC:  REF: SNOW LOAD/ICE BUILD-UP.
0916 ==>
0917 ==>        SECTION 3.0
0918 ==>          MIL-STD-4158E, PARA 3.2.30.1.5 ( g. AND i.) AS TAILORED BY
0919 ==>          MIL-STD-210B, PARAS 5.1.13 AND 5.1.14 (SEE PARAS 5.2.2.12
0920 ==>          AND 5.2.2.13 FOR SEABORNE SYSTEMS).
0921 ==>
0922 ==>        SECTION 4.0
0923 ==>          METHODS OF VERIFICATION:
0924 ==>            CONTRACTOR DEVELOPED, GOVERNMENT APPROVED TEST METHOD(S)
0925 ==>          SHALL BE USED.  THE PROGRAM OFFICE SHALL CONSULT THE STAFF
0926 ==>          METEOROLOGY OFFICE FOR ASSISTANCE IN EVALUATING THE CONTRACT-
0927 ==>          OR PROPOSED TEST METHOD(S).
0928 ==>
0929 ==> WILL WIND AFFECT THIS SYSTEM ?
0930 ==>
0931 ==> SPEC:  REF: WIND.
0932 ==>
0933 ==>        SECTION 3.0
0934 ==>          MIL-E-4158E, PARA 3.2.30.1.5F AS TAILORED BY MIL-STD-210B,
0935 ==>          PARA 5.1.10 (SEE PARA 5.2.2.9 FOR SEABORNE SYSTEMS).
0936 ==>
0937 ==>        SECTION 4.0
0938 ==>          METHODS OF VERIFICATION:
0939 ==>            CONTRACTOR DEVELOPED, GOVERNMENT APPROVED TEST METHOD(S)
0940 ==>          SHALL BE USED.  THE PROGRAM OFFICE SHALL CONSULT THE STAFF
0941 ==>          METEOROLOGY OFFICE FOR ASSISTANCE IN EVALUATING THE CONTRACT-
0942 ==>          OR PROPOSED TEST METHOD(S).
0943 ==>
0944 ==> WILL SAND, DUST AND SALT CORROSION AFFECT THIS SYSTEM ?
0945 ==>
0946 ==> SPEC:  REF: SAND/DUST/SALT CORROSION.
0947 ==>
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0948 ==>        SECTION 3.0
0949 ==>          MIL-E-4158E, PARA 3.2.30.1.5 (d. AND e.) AS TAILORED BY
0950 ==>          MIL-STD-210B, PARA 5.1.21 (SEE PARA 5.2.2.20 FOR SEABORNE
0951 ==>          SYSTEMS).
0952 ==>
0953 ==>        SECTION 4.0
0954 ==>          MIL-STD-810D, TEST METHODS 509.2 AND 510.2; TAILORING IS
0955 ==>          REQUIRED.
0956 ==>
0957 ==> WILL SOLAR RADIATION AFFECT THIS SYSTEM ?
0958 ==>
0959 ==> SPEC: REF: SOLAR RADIATION.
0960 ==>
0961 ==>       SECTION 3.0
0962 ==>         MIL-E-4158E, PARA 3.2.30.1.2.
0963 ==>
0964 ==>       SECTION 4.0
0965 ==>          MIL-STD-810D, TEST METHOD 505.2; TAILORING IS REQUIRED.
0966 ==>
0967 ==> WILL OZONE AFFECT THIS SYSTEM ?
0968 ==>
0969 ==> SPEC:  REF: OZONE.
0970 ==>
0971 ==>        SECTION 3.0
0972 ==>          MIL-STD-210B, PARA 5.1.20 (SEE PARA 5.2.2.19 FOR SEABORNE
0973 ==>          SYSTEMS).
0974 ==>
0975 ==>        SECTION 4.0
0976 ==>          METHODS OF VERIFICATION:
0977 ==>            CONTRACTOR DEVELOPED, GOVERNMENT APPROVED TEST METHOD(S)
0978 ==>          SHALL BE USED.  THE PROGRAM OFFICE SHALL CONSULT THE STAFF
0979 ==>          METEOROLOGY OFFICE FOR ASSISTANCE IN EVALUATING THE CONTRACT-
0980 ==>          OR PROPOSED TEST METHOD(S).
0981 ==>
0982 ==> WILL FUNGUS AFFECT THIS SYSTEM ?
0983 ==>
0984 ==> SPEC:  REF: FUNGUS.
0985 ==>
0986 ==>        SECTION 3.0
0987 ==>          MIL-E-4158E, PARA 3.2.30.1.5c.
0988 ==>
0989 ==>        SECTION 4.0
0990 ==>          MIL-STD-810D, TEST METHOD 508.3; TAILORING IS REQUIRED.
0991 ==>
0992 ==> WILL SEA/OCEAN SURFACE TEMPERATURES, SEA-ICE, SALINITY, AND WAVE
0993 ==> HEIGHT AFFECT THIS SYSTEM ?
0994 ==>
0995 ==> NOTE:  THIS QUESTION GENERALLY APPLIES TO ONLY SEABORNE SYSTEMS.
0996 ==>
0997 ==> SPEC:  REF: SEA/OCEAN CONDITIONS.
0998 ==>
0999 ==>        SECTION 3.0
1000 ==>          MIL-E-210B, PARAS 5.2.2.21 THRU 5.2.2.24.
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1001 ==>
1002 ==>        SECTION 4.0
1003 ==>          METHODS OF VERIFICATION:
1004 ==>            CONTRACTOR DEVELOPED, GOVERNMENT APPROVED TEST METHOD(S)
1005 ==>          SHALL BE USED.  THE PROGRAM OFFICE SHALL CONSULT THE STAFF
1006 ==>          METEOROLOGY OFFICE FOR ASSISTANCE IN EVALUATING THE CONTRACT-
1007 ==>          OR PROPOSED TEST METHOD(S).
1008 ==>
1009 ==> DOES THIS SYSTEM HAVE AIRBORNE SUBSYSTEMS OR COMPONENTS
1010 ==> BELOW 100,000 FEET ?
1011 ==>
1012 ==> WILL TEMPERATURE, PRESSURE AND DENSITY AFFECT THIS SYSTEM ?
1013 ==>
1014 ==> SPEC:  REF: AIRBORNE - TEMPERATURE/PRESSURE/DENSITY.
1015 ==>
1016 ==>        SECTION 3.0
1017 ==>          TEMPERATURE - MIL-E-5400T, PARAS 3.2.24.1 THRU 3.2.24.3
1018 ==>          (TABLE I VALUES SHOULD BE AMENDED BY MIL-E-5400T, AMENDMENT
1019 ==>          1, 5 SEP 80).  THE ABOVE PARAGRAPHS SHOULD BE TAILORED BY
1020 ==>          MIL-STD-210B, PARAS 5.3.2 AND 5.3.3 (SEE PARAS 5.2.3.2 AND
1021 ==>          5.2.3.3 FOR NAVAL AIR SYSTEMS).
1022 ==>
1023 ==>          PRESSURE - MIL-STD-210B, PARAS 5.3.13 AND 5.3.14.
1024 ==>
1025 ==>          DENSITY - MIL-STD-210B, PARAS 5.3.15 AND 5.3.16.
1026 ==>
1027 ==>        SECTION 4.0
1028 ==>          MIL-STD-810D, TEST METHODS 500.2, 501.2, 502.2, 503.2 AND
1029 ==>          520.0.  ALSO SEE MIL-T-5422F (AS) PARAS 4.1 AND 4.9;
1030 ==>          TAILORING IS REQUIRED.
1031 ==>
1032 ==> WILL HUMIDITY AFFECT THIS SYSTEM ?
1033 ==>
1034 ==> SPEC:  REF: AIRBORNE - HUMIDITY.
1035 ==>
1036 ==>        SECTION 3.0
1037 ==>          MIL-E-5400T, PARA 3.2.24.4, AS TAILORED BY MIL-STD-210B,
1038 ==>          PARAS 5.3.4 THRU 5.3.7 (SEE PARA 5.2.3.4 FOR NAVAL AIR
1039 ==>          SYSTEMS).
1040 ==>
1041 ==>        SECTION 4.0
1042 ==>          MIL-STD-810D, PARA 507.2.  MIL-T-5422F (AS), PARA 4.4;
1043 ==>          TAILORING IS REQUIRED.
1044 ==> WILL SAND, DUST AND SALT-SEA ATMOSPHERE AFFECT THIS SYSTEM ?
1045 ==>
1046 ==> SPEC:  REF: AIRBORNE - SAND/DUST/SALT-SEA.
1047 ==>
1048 ==>        SECTION 3.0
1049 ==>          MIL-E-5400T, PARAS 3.2.24.7 AND 3.2.24.9.
1050 ==>
1051 ==>        SECTION 4.0
1052 ==>          MIL-STD-810D, TEST METHODS 509.2 AND 510.2.  MIL-T-5422F
1053 ==>          (AS), PARAS 4.5 AND 4.7.  TAILORING IS REQUIRED.
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1054 ==>
1055 ==> WILL FUNGUS AFFECT THIS SYSTEM ?
1056 ==>
1057 ==> SPEC:  REF: AIRBORNE - FUNGUS.
1058 ==>
1059 ==>        SECTION 3.0
1060 ==>          MIL-E-5400T, PARA 3.2.24.8.
1061 ==>
1062 ==>        SECTION 4.0
1063 ==>          MIL-STD-810D, TEST METHOD 508.3; TAILORING IS REQUIRED.
1064 ==>          MIL-T-5422F (AS), PARA 4.8.  TAILORING IS REQUIRED.
1065 ==>
1066 ==> WILL THUNDERSTORMS (TO INCLUDE LIGHTNING AND HAIL) AFFECT THIS
1067 ==> SYSTEM ?
1068 ==> SPEC:  REF: AIRBORNE - THUNDERSTORMS/LIGHTNING/HAIL.
1069 ==>
1070 ==>        SECTION 3.0
1071 ==>          MIL-E-4158E, PARA 3.2.12.2 AND MIL-E-4158E, AMENDMENT 2,
1072 ==>          12 JUL 77, PARA 3.2.12.2.1.  MIL-STD-210B, PARA 5.3.12.
1073 ==>
1074 ==>        SECTION 4.0
1075 ==>          METHODS OF VERIFICATION:
1076 ==>            CONTRACTOR DEVELOPED, GOVERNMENT APPROVED TEST METHOD(S)
1077 ==>          SHALL BE USED.  THE PROGRAM OFFICE SHALL CONSULT THE STAFF
1078 ==>          METEOROLOGY OFFICE FOR ASSISTANCE IN EVALUATING THE CONTRACT-
1079 ==>          OR PROPOSED TEST METHOD(S).
1080 ==>
1081 ==> WILL OZONE AFFECT THIS SYSTEM ?
1082 ==>
1083 ==> SPEC:  REF: AIRBORNE - OZONE.
1084 ==>
1085 ==>        SECTION 3.0
1086 ==>          MIL-STD-210B, PARA 5.3.17.
1087 ==>
1088 ==>        SECTION 4.0
1089 ==>          METHODS OF VERIFICATION:
1090 ==>            CONTRACTOR DEVELOPED, GOVERNMENT APPROVED TEST METHOD(S)
1091 ==>          SHALL BE USED.  THE PROGRAM OFFICE SHALL CONSULT THE STAFF
1092 ==>          METEOROLOGY OFFICE FOR ASSISTANCE IN EVALUATING THE CONTRACT-
1093 ==>          OR PROPOSED TEST METHOD(S).
1094 ==>
1095 ==> WILL WIND SPEED AND WIND SHEAR AFFECT THIS SYSTEM ?
1096 ==>
1097 ==> SPEC:  REF: AIRBORNE - WIND SPEED/SHEAR.
1098 ==>
1099 ==>        SECTION 3.0
1100 ==>          MIL-STD-210B, PARAS 5.3.8 AND 5.3.9.
1101 ==>
1102 ==>        SECTION 4.0
1103 ==>          METHODS OF VERIFICATION:
1104 ==>            CONTRACTOR DEVELOPED, GOVERNMENT APPROVED TEST METHOD(S)
1105 ==>          SHALL BE USED.  THE PROGRAM OFFICE SHALL CONSULT THE STAFF
1106 ==>          METEOROLOGY OFFICE FOR ASSISTANCE IN EVALUATING THE CONTRACT-
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1107 ==>          OR PROPOSED TEST METHOD(S).
1108 ==>                                                                    *
1109 ==> WILL PRECIPITATION AFFECT THIS SYSTEM ?
1110 ==>                                                                    *
1111 ==> SPEC:  REF: AIRBORNE - PRECIPITATION.
1112 ==>
1113 ==>        SECTION 3.0
1114 ==>          MIL-STD-210B, PARAS 5.3.10 AND 5.3.11.
1115 ==>
1116 ==>        SECTION 4.0
1117 ==>          METHODS OF VERIFICATION:
1118 ==>            MIL-STD-810D, TEST METHOD 506.2; TAILORING IS REQUIRED.
1119 ==>
1120 ==>
1121 ==>
1122 ==>                                                                    *
1123 ==> WILL ICE ACCRETION AFFECT THIS SYSTEM ?
1124 ==>                                                                    *
1125 ==> SPEC:  REF: AIRBORNE - ICE ACCRETION.
1126 ==>
1127 ==>        SECTION 3.0
1128 ==>          MIL-STD-210B, PARAS 5.3.10 AND 5.3.11.
1129 ==>                                                                    *
1130 ==>        SECTION 4.0
1131 ==>          METHODS OF VERIFICATION:
1132 ==>            CONTRACTOR DEVELOPED, GOVERNMENT APPROVED TEST METHOD(S)
1133 ==>          SHALL BE USED.  THE PROGRAM OFFICE SHALL CONSULT THE STAFF
1134 ==>          METEOROLOGY OFFICE FOR ASSISTANCE IN EVALUATING THE CONTRACT-
1135 ==>          OR PROPOSED TEST METHOD(S).
1136 ==>                                                                    *
1137 ==> DOES THIS SYSTEM HAVE AEROSPACE SUBSYSTEMS OR COMPONENTS AT
1138 ==> 100,000 FEET (30 KM) OR ABOVE ?                                    *
1139 ==> SPEC:  REF: AEROSPACE - ALTITUDE.
1140 ==>
1141 ==>        SECTION 3.0
1142 ==>          MIL-STD-210B, PARAS 5.3.18 AND 5.3.19.
1143 ==>                                                                    *
1144 ==>        SECTION 4.0
1145 ==>          METHODS OF VERIFICATION:
1146 ==>            CONTRACTOR DEVELOPED, GOVERNMENT APPROVED TEST METHOD(S)
1147 ==>          SHALL BE USED.  THE PROGRAM OFFICE SHALL CONSULT THE STAFF
1148 ==>          METEOROLOGY OFFICE FOR ASSISTANCE IN EVALUATING THE CONTRACT-
1149 ==>          OR PROPOSED TEST METHOD(S).
1150 ==>                                                                    *
1151 ==> ARE MICROCIRCUITS USED IN THIS SYSTEM ?
1152 ==>                                                                    *
1153 ==> SPEC:  REF: MICROCIRCUITS/ENVIRONMENTAL EFFECTS.
1154 ==>
1155 ==>        SECTION 3.0
1156 ==>          MIL-M-38510E.
1157 ==>
1158 ==>        SECTION 4.0
1159 ==>          MIL-STD-883B, ENVIRONMENTAL TESTS, PARAS 1001 THRU 1030
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1160 ==>
1161 ==>          SEE VARIOUS REFERENCES TO ENVIRONMENTAL TEST SECTIONS OF
1162 ==>          MIL-STD-883B.
1163 ==>
1164 ==> FOR C3I SYSTEMS, DOES THE USER REQUIRE WEATHER DATA TO BE TRANSMITTED
1165 ==> OR PROCESSED BY THE SYSTEM ?
1166 ==>
1167 ==> SPEC:  REF: WEATHER MESSAGES/DATA PROCESSING
1168 ==>
1169 ==>        SECTION 3.0
1170 ==>          STATE THE USER REQUIREMENTS.  CONSULT THE ESD STAFF
1171 ==>        METEOROLOGIST FOR ASSISTANCE.
1172 ==>
1173 ==>        SECTION 4.0
1174 ==>          CONSULT WITH THE ESD STAFF METEOROLOGIST FOR ESTABLISHING
1175 ==>        TEST AND EVALUATION PROCEDURES.
1176 ==>
1177 ==> IS PRIME MISSION EQUIPMENT BEING ACQUIRED ON THIS CONTRACT ?
1178 ==>
1179 ==> IS THIS PROPOSED CONTRACT FOR SUBSYSTEMS/EQUIPMENT ASSEMBLED INTO A
1180 ==> SYSTEM ?
1181 ==>
1182 ==> ARE THE SUBSYSTEMS/EQUIPMENT ACQUIRED UNDER THIS CONTRACT TO BE PLACED
1183 ==> ON BOARD AIRCRAFT ?
1184 ==>
1185 ==> SOW:  TAILOR MIL-STD-462 BY SELECTING THOSE TEST METHODS DESIGNATED BY
1186 ==>       MIL-STD-461B FOR CLASS A1b EQUIPMENT.
1187 ==>
1188 ==> ARE THE SUBSYSTEMS/EQUIPMENT TO BE ACQUIRED INTENDED FOR USE IN GROUND
1189 ==> FIXED OR MOBILE FACILITIES ?
1190 ==>
1191 ==> SOW:  TAILOR MIL-STD-462 BY SELECTING THOSE TEST METHODS DESIGNATED BY
1192 ==>       MIL-STD-461B FOR CLASS A3 EQUIPMENT.
1193 ==>
1194 ==> IS THIS CONTRACT FOR A RADAR, COMMUNICATIONS, OR NAVIGATION SYSTEM
1195 ==> THAT USES THE ELECTROMAGNETIC SPECTRUM ?
1196 ==>
1197 ==> IS THIS CONTRACT FOR A NEWLY DEVELOPED SYSTEM ?
1198 ==>
1199 ==> Intrasystem Analysis.  Perform a detailed analysis of system, subsys-
1200 ==> tem/equipment EMC design using the computer codes of the Air Force
1201 ==> Intrasystem Electromagnetic Compatibility Analysis Program (IEMCAP).
1202 ==> Include estimates of equipment performance in the analysis and use
1203 ==> measurements available from engineering test and evaluation as neces-
1204 ==> sary to insure valid results.
1205 ==> This software shall be used to identify those EMI control design re-
1206 ==> quirements that may be relaxed or should be made more stringent to
1207 ==> ensure acceptable and cost effective EMC performance.  This analysis
1208 ==> shall be performed for each individual subsystem/equipment to define
1209 ==> the allowable EMC performance within the system.
1210 ==> CDRL:  TASK THE CONTRACTOR ON THE CDRL TO SUBMIT DI-R-3524, INTRASYS-
1211 ==>        TEM ELECTROMAGNETIC COMPATIBILITY ANALYSIS PROGRAM (IEMCAP)
1212 ==>        REPORT.  A BACKUP SHEET SHOULD DIRECT HIM TO: PREPARE AND SUB-
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1213 ==>        MIT AN ANALYSIS FOUR TIMES DURING THE PERFORMANCE OF THE CON-
1214 ==>        TRACT - PRESENT AN INITIAL BASELINE SYSTEM EMC SURVEY AT PDR,
1215 ==>        AN UPDATED ANALYSIS AT CDR, AN ANALYSIS COINCIDENT WITH THE
1216 ==>        SUBMISSION OF THE SYSTEM EMC TEST PLAN AND A FINAL ANALYSIS
1217 ==>        USING COMPLETE DESIGN INFORMATION FOR SYSTEM EMC DT&E.  EACH
1218 ==>        ANALYSIS SHALL BE SUBMITTED ON COMPUTER TAPE AND BECOME PRO-
1219 ==>        GRESSIVELY MORE COMPLETE AS DESIGN DETAILS EVOLVE AND ARE USED
1220 ==>        IN THE COMPUTER MODEL.  A WRITTEN REPORT DESCRIBING THE ANAL-
1221 ==>        YSIS, HOW IT WAS PERFORMED AND EVALUATING THE RESULTS SHALL
1222 ==>        BE SUBMITTED WITH THE DATA TAPE.  ALSO, DELIVER TO THE
1223 ==>        CONTRACTING OFFICE ON COMPUTER TAPE THE FINAL INTRASYSTEM
1224 ==>        SIGNATURE FILE THAT DESCRIBES THE SYSTEM/SUBSYSTEM EMC PER-
1225 ==>        FORMANCE.
1226 ==>
1227 ==> IS THIS CONTRACT FOR SUPPORT EQUIPMENT THAT WILL NOT BE PHYSICALLY
1228 ==> LOCATED IN CRITICAL GROUND AREAS ?
1229 ==> SOW:  THE FOLLOWING TEST METHODS OF MIL-STD-462 MUST BE TAILORED TO
1230 ==>       THE SYSTEM OR EQUIPMENT BEING TESTED: CE07, CS02, CS03, CS04
1231 ==>       AND CS05.
1232 ==>
1233 ==> ARE YOU ACQUIRING A TRAINER OR SIMULATOR ?
1234 ==>
1235 ==> WILL A SURVIVABILITY/VULNERABILITY (S/V) PROGRAM BE REQUIRED ?
1236 ==>
1237 ==> NOTE:  S/V IS MANDATORY UNLESS YOUR PMD STATES, "S/V IS NOT REQUIRED."
1238 ==>
1239 ==> SOW:  THE BASIS FOR THE S/V PROGRAM IS YOUR PMD, AFR 80-38 AND DODI
1240 ==>       4245.4.
1241 ==>
1242 ==> SOW:  AN INTACT S/V PROGRAM MUST BE MAINTAINED AS THE SYSTEM TRANSI-
1243 ==>       TIONS FROM THE CONCEPTUAL PHASE TO THE VALIDATION, THE FULL
1244 ==>       SCALE DEVELOPMENT, THE PRODUCTION AND THE DEPLOYMENT PHASES.
1245 ==>       THREAT ENVIRONMENTS SHOULD HAVE BEEN PARAMETERIZED AND APPRO-
1246 ==>       PRIATE SYSTEM SPECIFICATIONS SHOULD HAVE BEEN DEFINED IN THE
1247 ==>       CONCEPTUAL PHASE.  THE S/V PROGRAM PLAN SHOULD HAVE BEEN UP-
1248 ==>       DATED IN THE VALIDATION PHASE.  THIS PHASE REFINES THE PLANS
1249 ==>       PREVIOUSLY DEVELOPED AND CONTINUES VULNERABILITY ANALYSES.  IT
1250 ==>       LEADS TO A HARDNESS CRITICAL INDEX, A HARDNESS ASSURANCE, MAIN-
1251 ==>       TENANCE AND SURVEILLANCE PLAN, AND AN UPDATED S/V PROGRAM PLAN.
1252 ==>       IN THE AREAS OF ELECTRONIC WARFARE AND UNCONVENTIONAL OPERA-
1253 ==>       TIONS, DISCUSS REQUIREMENTS WITH THE ECCM/C3CM, SECURITY AND
1254 ==>       INTELLIGENCE OPRs.  IF ADDITIONAL THREATS ARE OF CONCERN, ADD
1255 ==>       THEM TO THE SOW.
1256 ==>
1257 ==> CDRL:  DI-S-3591A, DI-R-21498A AND DI-R-30515 ARE APPLICABLE TO BOTH
1258 ==>        NUCLEAR AND NON-NUCLEAR ENVIRONMENTS; TAILOR AS REQUIRED.
1259 ==>        DI-L-30324 APPLIES TO NUCLEAR ENVIRONMENT; TAILOR AS REQUIRED.
1260 ==>
1261 ==> SOW:  IF YOUR PMD DOES NOT EXCLUDE S/V FROM YOUR PROGRAM, AND YOU
1262 ==>       STILL DO NOT WANT IT, CONTACT YOUR SYSTO FOR A PMD EXLUSION
1263 ==>       CLAUSE (REF: AFR 80-38, PARA 3B).
1264 ==>
1265 ==> WAS AN S/V PROGRAM PLAN ESTABLISHED AS A RESULT OF PRIOR WORK ?
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1266 ==>
1267 ==> Continue vulnerability analysis drawing on work previously
1268 ==> accomplished. Develop a listing of mission critical configuration
1269 ==> items (CI) which, if damaged or electrically upset by the specified
1270 ==> threat, could lead to mission failure or abort. Identify areas for
1271 ==> vulnerability reduction (DI-S-3591A, Vulnerability Analysis).
1272 ==> Prepare a hardness critical index based on the vulnerability
1273 ==> analysis (OT-DI-L-30324).
1274 ==>
1275 ==>
1276 ==>
1277 ==> Develop a Hardness Assurance (HA), Maintenance (HM) and
1278 ==> Surveillance (HS) Plan. HA procedures will ensure that the
1279 ==> production items are in accordance with the hardened design and
1280 ==> in compliance with the S/V specification requirements. The HM
1281 ==> procedures will ensure that maintenance performed on the deployed
1282 ==> system will not degrade the hardened design and the S/V
1283 ==> specification requirements. The HS procedures will ensure that
1284 ==> the deployed system remains in accordance with the hardened design
1285 ==> and in compliance with the S/V specification requirements throughout
1286 ==> the system's life cycle (DI-S-3591A, HA, HM, HS Plan).
1287 ==>
1288 ==>
1289 ==>
1290 ==> Develop or update the S/V Program Plan based on the results of
1291 ==> work performed above (DI-R-30515).
1292 ==> SOW: THE VULNERABILITY ANALYSIS IS A GENERAL TASK THAT MAY BE
1293 ==> FLESHED OUT AND ADDED TO THE SOW. OTHER AREAS THAT COULD BE
1294 ==> ADDRESSED INCLUDE THE IMPACT OF REDESIGN FOR PRODUCTION
1295 ==> IMPROVEMENTS AND OTHER ANALYSIS AS SPECIFIED IN D-I-30515,
1296 ==> PARA 2d.
1297 ==>
1298 ==> IFPP: SUPPLY THE APPROPRIATE THREAT DOCUMENTS WITH THE CONTRACT/
1299 ==> SOLICITATION. LIST AFR 80-38 AS A GUIDANCE DOCUMENT IN THE
1300 ==> IFPP.
1301 ==>
1302 ==> LIST ALL APPLICABLE S/V DOCUMENTS GENERATED IN PREVIOUS PHASES
1303 ==> OF WORK WHICH THE CONTRACTOR MUST UPDATE OR USE FOR REFERENCE.
1304 ==> ESPECIALLY IMPORTANT IS THE S/V PROGRAM PLAN UPDATED DURING
1305 ==> VALIDATION.
1306 ==>
1307 ==> SOW: COORDINATE WITH TEST AND EVALUATION TO ENSURE THAT APPROPRIATE
1308 ==> TEST PLANS AND PROCEDURES INCLUDE S/V TESTING FOR EACH APPRO-
1309 ==> PRIATE THREAT ENVIRONMENT. CONSIDER BOTH IN-PLANT AND FIELD
1310 ==> TESTING. CONTACT THE S/V OPR FOR LABORATORY ASSISTANCE.
1311 ==>
1312 ==> Translate the threat environment provided by the Government into
1313 ==> system and equipement performance specifications addressing each of
1314 ==> the following threats (DI-S-3591A):
1315 ==> Nuclear Environment
1316 ==> Electromagnetic Pulse (EMP)
1317 ==> Radiation
1318 ==> Blast and Shock

1319 ==> Thermal
1320 ==> Other (Dust, etc.)
1321 ==> Non-Nuclear Environment
1322 ==> Conventional Arms
1323 ==> Electronic Warfare
1324 ==> Directed Energy (including Lasers, non-nuclear EMP, etc.)
1325 ==> Chemical/Biological
1326 ==> Unconventional Operations
1327 ==>
1328 ==> Perform a vulnerabity analysis for each threat. Evaluate system
1329 ==> upset and damage thresholds, and the required confidence levels to
1330 ==> ensure mission accomplishment (DI-S-3591A).
1331 ==>
1332 ==> Perform a survivability cost-effectiveness trade-off study
1333 ==> (DI-R-21498A).
1334 ==> Continue vulnerability analysis drawing on work previously
1335 ==> accomplished. Develop a listing of mission critical configuration
1336 ==> items (CI) which, if damaged or electrically upset by the specified
1337 ==> threat, could lead to mission failure or abort. Identify areas for
1338 ==> vulnerability reduction (DI-S-30515, Vulnerability Analysis).
1339 ==> work performed above (DI-R-30515).
1340 ==> Prepare a hardness critical index based on the vulnerability
1341 ==> analysis (OT-DI-L-30324).
1342 ==>
1343 ==>
1344 ==>
1345 ==>
1346 ==> Develop a Hardness Assurance (HA), Maintenance (HM) and
1347 ==> Surveillance (HS) Plan. HA procedures will ensure that the
1348 ==> production items are in accordance with the hardened design
1349 ==> and in compliance with the S/V specification requirements.
1350 ==> The HM procedures will ensure that maintenance performed on the
1351 ==> deployed system will not degrade the hardened design and the S/V
1352 ==> specification requirements. The HS procedures will ensure that
1353 ==> the deployed system remains in accordance with the hardened design
1354 ==> and in compliance with the S/V specification requirements throughout
1355 ==> the system's life cycle (DI-S-3591A, HA, HM, HS Plan).
1356 ==> Develop or update the S/V Program Plan based on the results of
1357 ==> work performed above (DI-R-30515).
1358 ==>
1359 ==>
1360 ==>
1361 ==>
1362 ==>
1363 ==>
1364 ==>
1365 ==>
1366 ==> SOW: ALL THE THREAT ENVIRONMENTS MAY NOT BE APPLICABLE TO YOUR PRO-
1367 ==> GRAM. DELETE THOSE THAT DO NOT APPLY; ADD THOSE THAT DO.
1368 ==>
1369 ==> SOW: MIL-STD-2072(AS) IS A NAVY AIRCRAFT VULNERABILITY STANDARD THAT
1370 ==> MAY BE USED AS A GUIDE, OR ON DIRECTION TO THE CONTRACTOR.
1371 ==> HOWEVER, IT MUST BE TAILORED TO YOUR PARTICULAR SYSTEM. PARA

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1372 ==>       5.2.8 MAY BE ESPECIALLY USEFUL.  IT CALLS FOR A COST-EFFECTIVE-
1373 ==>       NESS STUDY AND CAN BE MADE APPLICABLE TO BOTH AIRBORNE AND
1374 ==>       GROUND BASED SYSTEMS.
1375 ==>
1376 ==> SPEC:  COORDINATE WITH SYSTEMS ENGINEERING AND CONFIGURATION CONTROL
1377 ==>        TO ENSURE THAT APPROPRIATE PARAMETERS ARE INCLUDED IN THE
1378 ==>        SPECIFICATION THREAT PARA 3.1.3.
1379 ==>
1380 ==> SOW:  DETERMINE IF AN S/V PROGRAM PLAN HAS BEEN ESTABLISHED.
1381 ==>
1382 ==> WILL THE SYSTEM BEING PROCURED REQUIRE LEASED LONG-LINE COMMUNICA-
1383 ==> TIONS, INTERCONNECTING SERVICES OR SUPPORT ?
1384 ==>
1385 ==> Requests for leased long lines to support this system must be sub-
1386 ==> mitted to the procuring activity not later than 150 days prior to the
1387 ==> need date.
1388 ==> SOW:  COORDINATE WITH SYSTEMS ENGINEERING TO ENSURE THAT THIS REQUIRE-
1389 ==>       MENT HAS NOT BEEN DUPLICATED.
1390 ==>
1391 ==> CDRL:  CONTRACTOR DATA IS REQUIRED.  CONSULT WITH THE COMMUNICATIONS
1392 ==>        LONG LINES STAFF SPECIALIST FOR THE PROPER CDRL ENTRIES.
1393 ==>
1394 ==> SOW:  COMMUNICATIONS LONG LINES ARE TELECOMMUNICATIONS CIRCUITS
1395 ==>       LEASED FROM COMMON CARRIERS BY THE AIR FORCE ON A FULL TIME,
1396 ==>       PART TIME, DEFERRED OR STAND-BY BASIS AND PROVIDED BY RADIO,
1397 ==>       WIRE CABLE, LASER OR SATELLITE MEANS OR A COMBINATION THEREOF.
1398 ==>       LEASED LONG-LINE REQUIREMENTS ARE FULFILLED THROUGH TELECOMMUNI-
1399 ==>       CATIONS SERVICE REQUEST (TSR) ACTION INITIATED BY THE ESD STAFF
1400 ==>       C-E DIVISION (ESD/DUS) IAW THE PROVISIONS OF DCAC 310-130-1,
1401 ==>       APRIL 76.
1402 ==>
1403 ==> DOES THE SYSTEM OR EQUIPMENT BEING DEVELOPED UTILIZE ELECTRICAL,
1404 ==> ELECTRONIC OR ELECTROMECHANICAL INFORMATION PROCESSING EQUIPMENT ?
1405 ==>
1406 ==> WILL THIS EQUIPMENT PROCESS CLASSIFIED OR NATIONAL SECURITY RELATED
1407 ==> INFORMATION ?
1408 ==> WILL THIS EQUIPMENT BE DESIGNED, BUILT OR INSTALLED ?
1409 ==>
1410 ==> Design and develop the equipment to reduce or eliminate compromising
1411 ==> emanations.  This task shall be applied to all equipment processing
1412 ==> RED (classified plain-text data).  Use only Air Force approved TEMPEST
1413 ==> control design procedures.  See the CDRL.
1414 ==> CDRL:  TASK THE CONTRACTOR IN THE CDRL TO PREPARE A "TEMPEST CONTROL
1415 ==>        PLAN" (DI-T-5245) WHICH WILL DESCRIBE DESIGN EFFORTS TAKEN TO
1416 ==>        REDUCE COMPROMISING EMANATIONS.  TAILOR AS REQUIRED.
1417 ==>
1418 ==> NOTE:  PROVIDE AFCSC/EPV A COPY OF THE "TEMPEST CONTROL PLAN" FOR
1419 ==>        THEIR REVIEW, COMMENT AND APPROVAL.
1420 ==>
1421 ==> WILL THE CONTRACTOR INSTALL EQUIPMENT OZ RYSTEMS FROM COMMERCIAL,
1422 ==> OFF-THE-SHELF, OR GFE SOURCES ?
1423 ==>
1424 ==> HAS THE EQUIPMENT OR SYSTEM BEEN TEMPEST TESTED ?
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1425 ==>
1426 ==> HAS A TEMPEST TEST BEEN REQUESTED FROM ESD/DCO FOR PROTOTYPE EQUIPMENT
1427 ==> OR INSTALLED SYSTEMS ?
1428 ==>
1429 ==> SOW: THE PROGRAM OFFICE SHALL REQUEST TEMPEST TESTING OF SYSTEM/
1430 ==> EQUIPMENT BY SUBMITTING A REQUEST TO ESD/DCO IAW AFR 100-45,
1431 ==> A-2. CURRENT LEAD TIME FOR TEMPEST TEST REQUEST IS TWO YEARS.
1432 ==>
1433 ==> DID TESTS SHOW THAT THE EQUIPMENT OR SYSTEM MEETS THE STANDARDS OF
1434 ==> NACSIM 5100A ?
1435 ==>
1436 ==> SOW: IF THE EQUIPMENT PRODUCES COMPROMISING SIGNALS DETECTABLE BEYOND
1437 ==> THE CONTROL SPACE, THE OWNING MAJCOM OR SEPARATE OPERATING AGEN-
1438 ==> CY (SOA) WILL MODIFY THE EQUIPMENT, EXTEND THE CONTROL SPACE,
1439 ==> REPLACE THE EQUIPMENT, OR ACCEPT THE RISK. FOR AUTHORITY TO
1440 ==> ACCEPT THE RISK, SEE AFR 100-45, VOLUME I, PARAGRAPH 5-2b.
1441 ==>
1442 ==> WILL THE EQUIPMENT OR SYSTEM BE TEMPEST TESTED BY THE GOVERNMENT ?
1443 ==>
1444 ==> Provide operation, maintenance and administrative support for Govern-
1445 ==> ment performed TEMPEST testing. Tests will be performed down to the
1446 ==> unit level on all equipment that handles RED signals or data. Testing
1447 ==> will be accomplished IAW Government furnished test plans.
1448 ==> SOW: GOVERNMENT TESTING: TEMPEST TESTING WILL BE PERFORMED DOWN TO
1449 ==> UNIT LEVEL ON EQUIPMENT WHICH WILL HANDLE RED (CLASSIFIED PLAIN-
1450 ==> TEXT) SIGNALS OR DATA. TESTS WILL BE PERFORMED ON-SITE BY THE
1451 ==> GOVERNMENT IAW A GOVERNMENT PREPARED TEST PLAN. OPERATION,
1452 ==> MAINTENANCE AND ADMINISTRATIVE SUPPORT WILL BE SUPPLIED BY THE
1453 ==> CONTRACTOR.
1454 ==>
1455 ==> CONTRACT: GOVERNMENT TESTING: PROVIDE THE CONTRACTOR A COPY OF THE
1456 ==> GOVERNMENT PREPARED TEST PLAN/PROCEDURES.
1457 ==>
1458 ==> WILL THE EQUIPMENT OR SYSTEM BE TEMPEST TESTED BY THE CONTRACTOR ?
1459 ==>
1460 ==> Perform TEMPEST testing on each configuration item that will process
1461 ==> RED signals or data. Ensure that the TEMPEST test facility and equip-
1462 ==> ment meet Government requirements. Tests shall be performed at the
1463 ==> contractor's facility and/or the installation site.
1464 ==> CDRL: REQUEST A TEMPEST TEST PLAN (DI-T-5140B) FOR GOVERNMENT APPROV-
1465 ==> AL. HAVE THE CONTRACTOR CERTIFY THAT HIS TEMPEST TEST FACILITY
1466 ==> AND DETECTION SYSTEM MEET GOVERNMENT REQUIREMENTS.
1467 ==>
1468 ==> CDRL: REQUEST A TEMPEST TEST FACILITY CERTIFICATION REPORT, ELECTRO-
1469 ==> MAGNETIC (DI-T-5181A). TAILOR AS REQUIRED.
1470 ==>
1471 ==> CDRL: REQUEST A TEMPEST DETECTION SYSTEM CERTIFICATION REPORT, ELEC-
1472 ==> TROMAGNETICS (DI-T-5182A). TAILOR AS REQUIRED.
1473 ==>
1474 ==> CDRL: REQUEST A TEMPEST TEST SETUP AMBIENT SIGNAL CONTROL CERTIFICA-
1475 ==> TION REPORT (DI-T-5183A). TAILOR AS REQUIRED.
1476 ==>
1477 ==> CDRL: REQUEST A TEMPEST TEST AND EVALUATION REPORT (DI-T-5180A).

1478 ==> TAILOR AS REQUIRED.
1479 ==> NOTE: A COPY OF ALL CDRL ITEMS LISTED ABOVE WILL BE PROVIDED TO
1480 ==> AFCSC/EPV FOR THEIR REVIEW, COMMENT AND APPROVAL.
1481 ==>
1482 ==> WILL THE EQUIPMENT PROCESSING CLASSIFIED OR NATIONAL SECURITY RELATED
1483 ==> INFORMATION BE INSTALLED IN CLOSE PROXIMITY TO EQUIPMENT TRANSMITTING
1484 ==> UNENCRYPTED INFORMATION ?
1485 ==> WILL CLASSIFIED INFORMATION BE TRANSMITTED OVER RADIO SYSTEMS, TELE-
1486 ==> PHONE CIRCUITS OR INTERCOM SYSTEMS THAT LEAVE THE CONTROLLED AREA ?
1487 ==>
1488 ==> NOTE: THIS SITUATION SHOULD HAVE BEEN CONSIDERED DURING THE
1489 ==> CONCEPTUAL PHASE.
1490 ==>
1491 ==> SOW: AS EARLY AS POSSIBLE, SUBMIT AF FORM 622 TO ESD/DCX FOR
1492 ==> PROGRAMMING APPROPRIATE COMMUNICATIONS SECURITY EQUIPMENT TO
1493 ==> PROTECT INFORMATION TRANSMITTED BY THE SYSTEM.
1494 ==>
1495 ==> IS THIS CONTRACT FOR COMMUNICATIONS-ELECTRONICS EQUIPMENT THAT
1496 ==> TRANSMITS OR RECEIVES ELECTROMAGNETIC ENERGY ?
1497 ==>
1498 ==> CAUTION: THIS INCLUDES OFF-THE-SHELF EQUIPMENT.
1499 ==>
1500 ==> NOTE: RADIO FREQUENCY MANAGEMENT INCLUDES THE RESPONSIBILITY TO DE-
1501 ==> FINE AND CONTROL THE PARAMETERS OF ELECTROMAGNETIC DEVICES;
1502 ==> SUCH CONSIDERATIONS AS BANDWIDTH, TYPES OF MODULATION AND
1503 ==> EMISSION, POWER OUTPUTS, STABILITY AND LEVELS OF SPURIOUS AND
1504 ==> HARMONIC EMISSION MUST BE PRECISELY IDENTIFIED TO ALLOW FRE-
1505 ==> QUENCY MANAGERS TO PLAN FOR EFFICIENT USE OF THE ELECTROMAG-
1506 ==> NETIC SPECTRUM.
1507 ==>
1508 ==> EXPLANATION OF TERMS:
1509 ==>
1510 ==> (1) RADIO FREQUENCY ALLOCATION: THE DESIGNATION OF A RADIO FRE-
1511 ==> QUENCY(S) ON WHICH SPECIFIC FUNCTIONS OR SERVICES WILL BE PER-
1512 ==> FORMED. IT MAY ALSO INCLUDE DESIGNATION OF SPECIFIC EQUIP-
1513 ==> MENT(S) TO PERFORM THE FUNCTION.
1514 ==>
1515 ==> (2) RADIO FREQUENCY (AUTHORIZATION) ASSIGNMENT: DESIGNATION OF
1516 ==> A SPECIFIC FREQUENCY(S) OR FREQUENCY BAND TO BE USED AT A PAR-
1517 ==> TICULAR GEOGRAPHIC LOCATION UNDER SPECIFIED CONDITIONS OF OP-
1518 ==> ERATION.
1519 ==> HAS DEVELOPMENTAL (STAGE 3) FREQUENCY GUIDANCE BEEN OBTAINED ?
1520 ==>
1521 ==>
1522 ==>
1523 ==> CAUTION:
1524 ==>
1525 ==> DOD DIRECTIVE 4650.1 REQUIRES THAT FREQUENCY GUIDANCE BE
1526 ==> OBTAINED PRIOR TO ASSUMING CONTRACTUAL OBLIGATIONS WITH RESPECT
1527 ==> TO EITHER THE DEVELOPMENT OR PROCUREMENT OF TELECOMMUNICATIONS
1528 ==> EQUIPMENT DESIGNED PURPOSELY TO RADIATE OR RECEIVE ELECTROMAG-
1529 ==> NETIC ENERGY. RADIO FREQUENCY GUIDANCE WILL ALSO BE OBTAINED
1530 ==> PRIOR TO ASSUMING OBILGATIONS FOR THE SELECTION, PROCUREMENT OR

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1531 ==>        DEVELOPMENT OF EARTH OR TERRESTRIAL STATION SITES AND FACILI-
1532 ==>        TIES WHICH WILL BE USED TO SUPPORT TELECOMMUNICATIONS EQUIP-
1533 ==>        MENT.
1534 ==>
1535 ==>        AFR 100-31, FREQUENCY MANAGEMENT AND ELECTROMAGNETIC COMPATI-
1536 ==>        BILITY, CONTAINS THE POLICIES AND PROCEDURES FOR OBTAINING
1537 ==>        FREQUENCY GUIDANCE.  SEE CHAPTER 4.
1538 ==>
1539 ==>                                                                    e
1540 ==> NOTE:  THE IMPORTANCE OF A SYSTEM HAVING APPROVED FREQUENCY GUIDANCE
1541 ==>        CANNOT BE OVEREMPHASIZED.  FAILING TO INVOKE THE ALLOCATION
1542 ==>        PROCESS CAN RESULT IN DIFFICULTIES WHEN UNACCEPTABLE SPECTRAL
1543 ==>        CHARACTERISTICS ARE CHOSEN WITHOUT GUIDANCE FROM THE NATIONAL
1544 ==>        OR INTERNATIONAL ARENA.  IT MAY LEAD TO THE NECESSITY FOR
1545 ==>        DENIAL OF SPECTRUM SUPPORT, SIGNIFICANT OPERATIONAL LIMITATIONS
1546 ==>        AND RESTRICTIONS OR NECESSITATE COSTLY RE-ENGINEERING CAUSING
1547 ==>        SEVERE LOSS OF TIME AND MONEY.
1548 ==>
1549 ==> NOTE:  FOR TELECOMMUNICATIONS EQUIPMENT(S) OR SYSTEM(S) REQUIRING THE
1550 ==>        USE OF THE ELECTROMAGNETIC SPECTRUM, THE AVAILABILITY OF ADE-
1551 ==>        QUATE SPECTRUM SUPPORT IS A FIRM PREREQUISITE TO SUCCESSFUL
1552 ==>        SYSTEM OPERATON.  SPECTRUM RELATED ASPECTS MUST THEREFORE BE
1553 ==>        GIVEN APPROPRIATE AND TIMELY CONSIDERATION IN THE EARLIEST
1554 ==>        STAGES OF PLANNING AND DEVELOPMENT.
1555 ==>                                                                    e
1556 ==> NOTE: CONSULT THE RADIO FREQUENCY MANAGEMENT STAFF SPECIALIST TO
1557 ==>       DETERMINE IF A FREQUENCY ALLOCATION HAS BEEN SUBMITTED/APPROVED.
1558 ==>                                                                    e
1559 ==> DOES THE FREQUENCY GUIDANCE STIPULATE ADHERENCE TO APPLICABLE EMC
1560 ==> STANDARDS ?
1561 ==>
1562 ==>                                                                    e
1563 ==> NOTE:  AN UPDATED FREQUENCY ALLOCATION IS REQUIRED WHEN DESIGN OR
1564 ==>        OPERATIONAL CONCEPT/CAPABILITY CHANGES AFFECT THE EQUIPMENT
1565 ==>        PARAMETERS ON THE DD FORM 1494 FROM WHICH THE ORIGINAL FRE-
1566 ==>        QUENCY GUIDANCE WAS OBTAINED.
1567 ==>
1568 ==> NOTE:  ALSO INSURE THAT A NEW DD FORM 1494 IS SUBMITTED PRIOR TO AN
1569 ==>        ANTICIPATED DECISION TO ENTER THE PRODUCTION PHASE OR LOW
1570 ==>        RATE INITIAL PRODUCTION (LRIP) PHASE.
1571 ==>                                                                    e
1572 ==> CAUTION:  THE SYSTEM(S)/SUBSYSTEM(S) MUST MEET THE APPLICABLE MIL-STD
1573 ==>           SPECIFICATIONS AND NATIONAL TELECOMMUNICATIONS AND INFORMA-
1574 ==>           TION ADMINISTRATION (NTIA) MANUAL OF REGULATIONS AND PROCE-
1575 ==>           DURES FOR FEDERAL RADIO FREQUENCY MANAGEMENT, CONCERNING
1576 ==>           THE CRITERIA FOR USE OF THE RADIO FREQUENCY SPECTRUM,
1577 ==>           UNLESS TAILORED OR WAIVERED BY COGNIZANT AUTHORITY.
1578 ==>                                                                    e
1579 ==> NOTE: CONTACT THE RADIO FREQUENCY MANAGEMENT AND ELECTROMAGNETIC
1580 ==>       COMPATIBILITY (EMC) STAFF SPECIALISTS FOR ASSISTANCE.
1581 ==>                                                                    e
1582 ==>
1583 ==> NOTE 1.  THE SYSTEM(S)/SUBSYSTEM(S) MUST MEET THE APPLICABLE MIL-STD
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1584 ==>          SPECIFICATIONS AND NATIONAL TELECOMMUNICATIONS AND INFORMA-
1585 ==>          TION ADMINISTRATION (NTIA) MANUAL OF REGULATIONS AND PROCE-
1586 ==>          DURES FOR FEDERAL RADIO FREQUENCY MANAGEMENT, CONCERNING
1587 ==>          THE CRITERIA FOR USE OF THE RADIO FREQUENCY SPECTRUM,
1588 ==>          UNLESS TAILORED OR WAIVERED BY COGNIZANT AUTHORITY.
1589 ==>
1590 ==> NOTE 2.  IN ANY INSTANCE OF HARMFUL INTERFERENCE INVOLVING THE USE
1591 ==>          OF NON-CONFORMING EQUIPMENT, AND THE USE OF CONFORMING
1592 ==>          EQUIPMENT, THE RESPONSIBILITY FOR ADJUSTMENT TO ELIMINATE
1593 ==>          THE INTERFERENCE SHALL NORMALLY REST WITH THE AGENCY EM-
1594 ==>          PLOYING THE NON-CONFORMING EQUIPMENT, UNLESS IT IS SHOWN
1595 ==>          THAT DEFICIENCY IN THAT REGARD IS NOT A CONTRIBUTING FACTOR
1596 ==>          TO THE INTERFERENCE.
1597 ==>
1598 ==> WILL THE PROGRAM OFFICE PREPARE THE INITIAL APPLICATION FOR FREQUENCY
1599 ==> ALLOCATION (DD FORM 1494) ?
1600 ==>
1601 ==> CAUTION:  CONTRACTUAL OBLIGATIONS WITHOUT APPROPRIATE FREQUENCY
1602 ==>           GUIDANCE IS IN VIOLATION OF DOD DIRECTIVE 4650.1 AND
1603 ==>           AFR 100-31.
1604 ==>
1605 ==> NOTE:  AFR 100-31, CHAPTER 4, CONTAINS THE POLICIES AND PROCEDURES TO
1606 ==>        OBTAIN FREQUENCY ALLOCATION APPROVAL.
1607 ==>
1608 ==> NOTE:  INSURE THAT A NEW DD FORM 1494 IS SUBMITTED TO THE RADIO
1609 ==>        FREQUENCY MANAGEMENT SPECIALIST WITH A MINIMUM LEAD TIME OF
1610 ==>        210 DAYS PRIOR TO AN ANTICIPATED DECISION TO ENTER THE PRODUC-
1611 ==>        TION OR LOW RATE INITIAL PRODUCTION (LRIP) PHASE.
1612 ==>
1613 ==> NOTE:  AN UPDATED FORM 1494 IS REQUIRED WHEN DESIGN OR OPERATIONAL
1614 ==>        CONCEPT/CAPABILITY CHANGES AFFECT THE EQUIPMENT PARAMETERS ON
1615 ==>        THE ORIGINAL DD FORM 1494 FROM WHICH THE FREQUENCY GUIDANCE
1616 ==>        WAS OBTAINED.
1617 ==>
1618 ==> NOTE:  INSURE THAT AN INITIAL DD FORM 1494 IS SUBMITTED TO THE RADIO
1619 ==>        FREQUENCY MANAGEMENT STAFF SPECIALIST WITH A MINIMUM LEAD
1620 ==>        TIME OF 210 DAYS PRIOR TO THE ANTICIPATED DATE OF CONTRACT
1621 ==>        AWARD FOR THIS PHASE.
1622 ==>
1623 ==> CAUTION:  CONTRACTUAL OBLIGATIONS WITHOUT APPROPRIATE FREQUENCY
1624 ==>           GUIDANCE ARE IN VIOLATION OF DOD DIRECTIVE 4650.1 AND
1625 ==>           AFR 100-31.  PLEASE RECONSIDER YOUR ANSWER TO THIS
1626 ==>           QUESTION.
1627 ==>
1628 ==> NOTE:  THE PROGRAM MANAGER MUST BE AWARE OF THE RISK AND CONSEQUENCE
1629 ==>        FOR CONTRACTUAL OBLIGATIONS MADE WITHOUT EXPRESSED ASSURANCES
1630 ==>        OF FREQUENCY SUPPORT FOR A SYSTEMS/SUBSYSTEMS INTENDED ENVIRON-
1631 ==>        MENT.
1632 ==>
1633 ==> NOTE:  SPECTRUM SUPPORTABILITY GUIDANCE IS ISSUED BY THE MILITARY
1634 ==>        COMMUNICATIONS-ELECTRONICS BOARD (MCEB) AND IS YOUR AUTHORITY
1635 ==>        FROM A SPECTRUM SUPPORT STANDPOINT, TO PLAN, CONSTRUCT,
1636 ==>        DEVELOP, MODIFY OR ACQUIRE ELECTROMAGNETIC DEVICES WHICH
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1637 ==>        PURPOSELY RADIATE OR RECEIVE ELECTROMAGNETIC ENERGY.  THIS
1638 ==>        INCLUDES OFF-THE-SHELF EQUIPMENT.  UNTIL THE SPECTRUM SUPPORT
1639 ==>        GUIDANCE HAS BEEN ISSUED, NO CONTRACTUAL OBLIGATIONS SHOULD BE
1640 ==>        CONSUMATED.  TO OBTAIN THE REQUIRED GUIDANCE, AN APPLICATION
1641 ==>        MUST BE SUBMITTED TO THE RADIO FREQUENCY MANAGEMENT STAFF
1642 ==>        SPECIALIST.
1643 ==>
1644 ==>                                                                    s
1645 ==> WILL THE CONTRACTOR BE TASKED TO PREPARE THE UPDATED OR NEW
1646 ==> APPLICATION FOR FREQUENCY ALLOCATION (DD FORM 1494) ?
1647 ==>                                                                    s
1648 ==> NOTE:  INSURE THAT A NEW DD FORM 1494 IS SUBMITTED TO THE RADIO
1649 ==>        FREQUENCY MANAGEMENT SPECIALIST WITH A MINIMUM LEAD TIME
1650 ==>        OF 210 DAYS PRIOR TO AN ANTICIPATED DECISION TO ENTER THE PRO-
1651 ==>        DUCTION OR LOW RATE INITIAL PRODUCTION (LRIP) PHASE.
1652 ==>                                                                    s
1653 ==> NOTE:  AN UPDATED DD FORM 1494 PRIOR TO FORMAL ACCEPTANCE OF THE
1654 ==>        CHANGE IS REQUIRED WHEN DESIGN OR OPERATIONAL CONCEPT/CAPABIL-
1655 ==>        ITY CHANGES AFFECT THE EQUIPMENT PARAMETERS ON THE ORIGINAL
1656 ==>        DD FORM 1494 FROM WHICH THE FREQUENCY GUIDANCE WAS OBTAINED.
1657 ==>                                                                    s
1658 ==> NOTE:  AFR 100-31, FREQUENCY MANAGEMENT AND ELECTROMAGNETIC COMPATI-
1659 ==>        BILITY, CONTAINS THE POLICIES AND PROCEDURES TO OBTAIN FRE-
1660 ==>        QUENCY ALLOCATION APPROVAL.
1661 ==>
1662 ==>
1663 ==>        CONTACT THE RADIO FREQUENCY MANAGEMENT STAFF SPECIALIST FOR
1664 ==>        FURTHER ASSISTANCE.
1665 ==>                                                                    s
1666 ==> NOTE:  INSURE THAT A NEW DD FORM 1494 IS SUBMITTED TO THE RADIO
1667 ==>        FREQUENCY MANAGEMENT SPECIALIST WITH A MINIMUM LEAD TIME OF
1668 ==>        210 DAYS PRIOR TO AN ANTICIPATED DECISION TO ENTER THE PRODUC-
1669 ==>        TION OR LOW RATE INITIAL PRODUCTION (LRIP) PHASE.
1670 ==>                                                                    s
1671 ==> NOTE:  AN UPDATED DD FORM 1494 PRIOR TO FORMAL ACCEPTANCE OF THE
1672 ==>        CHANGE IS REQUIRED WHEN DESIGN CHANGES OR OPERATIONAL
1673 ==>        CAPABILITIES AFFECT THE EQUIPMENT PARAMETERS ON THE ORIGINAL
1674 ==>        DD FORM 1494 FROM WHICH THE FREQUENCY GUIDANCE WAS OBTAINED.
1675 ==>                                                                    s
1676 ==> NOTE:  CONTACT THE RADIO FREQUENCY MANAGEMENT STAFF SPECIALIST FOR
1677 ==>        FURTHER ASSISTANCE.
1678 ==>                                                                    s
1679 ==> DOES THE INTENDED SYSTEM('S) ENVIRONMENT INCLUDE OPERATION WITHIN A
1680 ==> FOREIGN COUNTRY ?
1681 ==>                                                                    s
1682 ==> NOTE:  ACTION MUST BE TAKEN TO OBTAIN FOREIGN DISCLOSURE AUTHORITY
1683 ==>        PRIOR TO ANY COORDINATION OF FREQUENCY REQUIREMENTS FOR THOSE
1684 ==>        NATIONS IDENTIFIED AS CRITICAL FOR PEACETIME OPERATIONS OR
1685 ==>        WHEN PERMISSION TO OPERATE EQUIPMENT IN ANOTHER NATION IS
1686 ==>        CRITICAL TO AN ACQUISITION DECISION.
1687 ==>
1688 ==>        CONTACT THE RADIO FREQUENCY MANAGEMENT STAFF SPECIALIST FOR
1689 ==>        FURTHER ASSISTANCE.
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1690 ==>
1691 ==> HAVE PREVIOUS FREQUENCY ASSIGNMENTS BEEN MADE FOR THIS SYSTEM/SUB-
1692 ==> SYSTEM ?
1693 ==>
1694 ==> NOTE:  THE FREQUENCY ALLOCATION (DD FORM 1494) IS THE MEANS OF
1695 ==>        OBTAINING SPECTRUM SUPPORT; HOWEVER, IT DOES NOT PROVIDE
1696 ==>        AUTHORIZATION TO OPERATE THE EQUIPMENT.  FREQUENCY
1697 ==>        ASSIGNMENT AUTHORIZATION FOR DEVELOPMENT, TESTING OR EVALUATION
1698 ==>        MUST BE OBTAINED PRIOR TO EQUIPMENT ACTIVATION.
1699 ==>
1700 ==>
1701 ==> NOTE:  CONTACT THE RADIO FREQUENCY STAFF SPECIALIST TO DETERMINE POS-
1702 ==>        SIBLE PREVIOUS FREQUENCY ASSIGNMENTS.
1703 ==>
1704 ==> ARE FREQUENCY REQUIREMENTS AND TEST LOCATIONS FOR THIS CONTRACT THE
1705 ==> SAME AS EXISTING AUTHORIZATIONS ?
1706 ==>
1707 ==> NOTE:  INCLUDES CONTRACTOR'S FACILITIES AND TEST SITES.
1708 ==> NOTE:  AN EXISTING ASSIGMENT MAY BE MODIFIED TO CHANGE ANY ITEM OF
1709 ==>        THE ASSIGNMENT EXCEPT FOR FREQUENCY, STATE AND COUNTRY.
1710 ==>        THESE CHANGES REQUIRE A NEW ASSIGNMENT REQUEST.
1711 ==>
1712 ==> ARE FREQUENCY REQUIREMENTS AND TEST LOCATIONS FOR THIS CONTRACT THE
1713 ==> SAME AS EXISTING ASSIGNMENTS ?
1714 ==>
1715 ==> NOTE:  CONTACT THE RADIO FREQUENCY MANAGEMENT STAFF SPECIALIST TO
1716 ==>        DETERMINE IF REQUIREMENTS AND LOCATIONS ARE THE SAME.
1717 ==>
1718 ==> ARE THERE ALSO NEW FREQUENCY REQUIREMENTS OR TEST LOCATIONS ?
1719 ==>   NOTE: INCLUDES CONTRACTOR'S FACILITIES AND TEST SITES.
1720 ==> NOTE:  NEW ASSIGNMENT AND ASSIGNMENT MODIFICATION REQUESTS SHALL BE
1721 ==>        PREPARED IAW INSTRUCTIONS FOR COMPLETING THE STANDARD MESSAGE
1722 ==>        FORMAT (SMF) CONTAINED IN AFR 100-31, ATTACHMENT 5.
1723 ==>
1724 ==> NOTE:  CONTACT THE RADIO FREQUENCY MANAGEMENT STAFF SPECIALIST TO
1725 ==>        DETERMINE WHAT ADDITIONAL ACTIONS ARE REQUIRED.
1726 ==>
1727 ==> WILL THE CONTRACTOR PREPARE ALL FREQUENCY ASSIGNMENT REQUESTS ?
1728 ==>
1729 ==> See the Schedule of this contract (H.47) and the General Provisions of
1730 ==> this contract (DAR 7-104.61).  Insure frequency management require-
1731 ==> ments, policies and procedures are followed, and radio frequency
1732 ==> allocation and assignment authorization are properly obtained.
1733 ==> CONTRACT:  INSURE H.47 AND DAR 7-104.61 ARE APPLIED TO THE CONTRACT.
1734 ==>
1735 ==> NOTE:  ALL FREQUENCY ASSIGNMENT REQUESTS SHOULD BE SUBMITTED TO THE
1736 ==>        RADIO FREQUENCY MANAGEMENT STAFF SPECIALIST WITH A MINIMUM
1737 ==>        LEAD TIME OF 180(*) DAYS PRIOR TO THE REQUIRED DATE FOR A NEW
1738 ==>        ASSIGNMENT AND 150(*) DAYS FOR A MODIFICATION REQUEST.
1739 ==>
1740 ==>        (*) ADD 60 DAYS FOR OVERSEAS LOCATIONS OR REQUESTS REQUIRING
1741 ==>        FCC OR FAA COORDINATION.
1742 ==>
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1743 ==> NOTE: ALL FREQUENCY ASSIGNMENT REQUESTS SHOULD BE SUBMITTED TO THE
1744 ==> RADIO FREQUENCY MANAGEMENT STAFF SPECIALIST WITH A MINIMUM
1745 ==> LEAD TIME OF 180(*) DAYS PRIOR TO THE REQUIRED DATE FOR A NEW
1746 ==> ASSIGNMENT AND 150(*) DAYS FOR A MODIFICATION REQUEST.
1747 ==>
1748 ==> (*) ADD 60 DAYS FOR OVERSEAS LOCATIONS OR REQUESTS REQUIRING
1749 ==> FCC OR FAA COORDINATION.
1750 ==>
1751 ==> NOTE: AFR 100-31, CHAPTER 5 AND ATTACHMENT 5, CONTAINS THE PROCEDURES
1752 ==> TO PREPARE FREQUENCY ASSIGNMENT REQUESTS. CONTACT THE RADIO
1753 ==> FREQUENCY MANAGEMENT STAFF SPECIALIST FOR FURTHER ASSISTANCE.
1754 ==>
1755 ==> SOW: WHEN THE CONTRACTOR IS TASKED TO PREPARE THE DD FORM 1494, HE
1756 ==> IS NORMALLY ALSO TASKED TO PREPARE ALL FREQUENCY ASSIGNMENT
1757 ==> REQUESTS.
1758 ==>
1759 ==> DURING THE PERIOD OF THIS DEVELOPMENT, IS IT ANTICIPATED THAT
1760 ==> TESTING WILL INCLUDE OPERATION WITHIN A FOREIGN COUNTRY ?
1761 ==>
1762 ==>
1763 ==> NOTE: UNLESS STATED OTHERWISE IN THE EXISTING STATUS OF FORCES
1764 ==> AGREEMENT, THERE WILL BE NO FREQUENCY ASSIGNMENT COORDINATION
1765 ==> ACTION WITH A FOREIGN GOVERNMENT UNTIL FOREIGN OPERATING
1766 ==> RIGHTS ARE GRANTED THROUGH THE U.S. EMBASSY.
1767 ==>
1768 ==> NOTE: THE PROGRAM OFFICE MUST INITIATE ACTION IAW AFR 55-26 TO
1769 ==> OBTAIN DIPLOMATIC CLEARANCE.
1770 ==>
1771 ==> NOTE: REQUEST FOR FREQUENCIES FOR USE WITHIN A FOREIGN COUNTRY
1772 ==> MUST BE APPROVED BY THAT COUNTRY'S GOVERNMENT.
1773 ==>
1774 ==> ARE THE DESIGN PARAMETERS KNOWN ?
1775 ==>
1776 ==> Identify and define requirements for any specialized materials hand-
1777 ==> ling equipment for use in movement of transportability problem items.
1778 ==> See the CDRL.
1779 ==> CDRL: DATA IS REQUIRED FROM THE CONTRACTOR. CONTACT THE TRAFFIC
1780 ==> MANAGEMENT STAFF SPECIALIST FOR ASSISTANCE.
1781 ==>
1782 ==> Insure that transportability design parameters are considered during
1783 ==> all phases of system acquisition. The system in the transport/ship-
1784 ==> ping configuration shall be transportable IAW the requirements of the
1785 ==> system specification and as further defined herein.
1786 ==>
1787 ==> Conduct studies to determine the compatibility of proposed system/
1788 ==> equipment design configurations with existing domestic and overseas
1789 ==> transportation and materials handling systems.
1790 ==> CDRL: DATA IS REQUIRED FROM THE CONTRACTOR. SEE THE TRAFFIC
1791 ==> MANAGEMENT STAFF SPECIALIST FOR ASSISTANCE.
1792 ==>
1793 ==> WILL THE SYSTEM CONTAIN ANY HAZARDOUS ITEMS ?
1794 ==>
1795 ==> Notify the Program Office for approval, if the system design will con-

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1796 ==> tain any dangerous materials defined as "not accep ed" for transporta-
1797 ==> tion as prescribed in Table 4-1 of AFR 71-4.
1798 ==> CDRL:  DATA IS REQUIRED FROM THE CONTRACTOR.  CONTACT THE TRAFFIC
1799 ==>        MANAGEMENT STAFF SPECIALIST FOR ASSISTANCE.
1800 ==>
1801 ==> ARE SPECIAL LOADING, UNLOADING AND MOVEMENT PROCEDURES REQUIRED ?
1802 ==>
1803 ==> CDRL:  TASK THE CONTRACTOR IN THE CDRL TO PROVIDE LOADING, UNLOADING,
1804 ==>        AND MOVEMENT INSTRUCTIONS AND PROCEDURES FOR OUT-SIZED, OVER-
1805 ==>        WEIGHT, DANGEROUS AND SENSITIVE ITEMS.  CONTACT THE TRAFFIC
1806 ==>        MANAGEMENT STAFF SPECIALIST FOR ASSISTANCE.
1807 ==>
1808 ==> ARE THERE ANY ITEMS THAT WILL INHIBIT TRANSPORTABILITY ?
1809 ==>
1810 ==> SOW:  TAILOR MIL-P-9024 TO TASK THE CONTRACTOR TO IDENTIFY ITEMS THAT
1811 ==>       WILL INHIBIT TRANSPORTABILITY.
1812 ==>
1813 ==> CDRL:  DATA ITEM              APPLIES.
1814 ==>
1815 ==> HAVE TRANSPORTABILITY PROBLEMS BEEN PREVIOUSLY IDENTIFIED ?
1816 ==>
1817 ==> SPEC:  IN ORDER TO ELIMINATE KNOWN TRANSPORTABILITY PROBLEMS, IDENTIFY
1818 ==>        SPECIFIC REQUIREMENTS IN THE SPECIFICATION.
1819 ==>
1820 ==> IS A QUALITY PROGRAM REQUIRED ?
1821 ==>
1822 ==>
1823 ==>
1824 ==> See DAR Requirement in the General Provisions of this contract and
1825 ==> Section H of the Schedule of this contract.
1826 ==> CONTRACT:  APPLY DAR 7-104.28 FOR FIXED PRICE SUPPLY CONTRACTS, OR
1827 ==>            DAR 7-204.10 FOR COST REIMBURSABLE SUPPLY CONTRACTS, OR
1828 ==>            DAR 7-303.15 FOR FIXED PRICE R&D CONTRACTS, OR
1829 ==>            DAR 7-403.15 FOR COST REIMBURSABLE R&D CONTRACTS; TO
1830 ==>            THE GENERAL PROVISIONS OF THE CONTRACT.  SEE DAR 14-304
1831 ==>            FOR APPLICATION INSTRUCTIONS AND DAR 14-101 FOR
1832 ==>            GENERAL INSTRUCTIONS.
1833 ==>
1834 ==> CONTRACT:  DAR ADDS MIL-Q-9858 TO YOUR PROGRAM IN SECTION H
1835 ==>            OF THE CONTRACT SCHEDULE; TAILOR TO PROGRAM REQUIREMENTS.
1836 ==>
1837 ==> CONTRACT:  IF NON-CONFORMING MATERIAL IS A CONSIDERATION, ADD
1838 ==>            MIL-STD-1520 TO SECTION H OF THE CONTRACT SCHEDULE AND
1839 ==>            TAILOR TO PROGRAM REQUIREMENTS.
1840 ==>
1841 ==> CONTRACT:  IF SUPPLIER QUALITY IS TO BE CONTROLLED, ADD MIL-STD-1535
1842 ==>            TO SECTION H OF THE CONTRACT SCHEDULE AND TAILOR TO
1843 ==>            PROGRAM REQUIREMENTS.
1844 ==>
1845 ==> CONTRACT:  IF COMPUTER SOFTWARE IS SIGNIFICANT, ADD MIL-S-52779
1846 ==>            TO SECTION H OF THE CONTRACT SCHEDULE AND TAILOR TO
1847 ==>            PROGRAM REQUIREMENTS.
1848 ==>
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1849 ==> CDRL: UT-DI-A-30026, QA PROGRAM STATUS REPORT, IS MANDATORY WHEN
1850 ==> MIL-Q-9858 IS PLACED ON CONTRACT. UT-DI-A-30026 MUST BE
1851 ==> TAILORED TO YOUR PROGRAM.
1852 ==>
1853 ==> CONTRACT: DAR 14-101.5 CONTAINS CRITERIA FOR APPLYING CONTRACT
1854 ==> QUALITY REQUIREMENTS.
1855 ==>
1856 ==> IS AN INSPECTION SYSTEM REQUIRED ?
1857 ==>
1858 ==> See DAR Requirement of the General Provisions of this contract, and
1859 ==> Section H of the Schedule of this contract.
1860 ==> CONTRACT: APPLY DAR 7-103.5, DAR 7-302.4, OR DAR 7-104.33, AS
1861 ==> APPROPRIATE, TO THE GENERAL PROVISIONS OF THE CONTRACT.
1862 ==> SEE DAR 14-303 FOR APPLICATION INSTRUCTIONS AND DAR
1863 ==> 14-101 FOR GENERAL INSTRUCTIONS.
1864 ==>
1865 ==> CONTRACT: ACCOMPLISH THE FOLLOWING IN SECTION H OF THE CONTRACT
1866 ==> SCHEDULE:
1867 ==>
1868 ==> (1) DAR ADDS MIL-I-45208 TO YOUR PROGRAM; TAILOR
1869 ==> TO YOUR PROGRAM REQUIREMENTS.
1870 ==>
1871 ==> (2) IF NON-CONFORMING MATERIAL IS A CONSIDERATION, ADD
1872 ==> MIL-STD-1520; TAILOR TO YOUR PROGRAM REQUIREMENTS.
1873 ==>
1874 ==> (3) IF SUPPLIER QUALITY IS TO BE CONTROLLED, ADD
1875 ==> MIL-STD-1535; TAILOR TO YOUR PROGRAM REQUIREMENTS.
1876 ==>
1877 ==> (4) IF COMPUTER SOFTWARE IS SIGNIFICANT, ADD MIL-S-52779
1878 ==> AND TAILOR TO PROGRAM REQUIREMENTS.
1879 ==>
1880 ==> CONTRACT: DAR 14-104.5 CONTAINS CRITERIA FOR APPLYING CONTRACT
1881 ==> QUALITY REQUIREMENTS.
1882 ==>
1883 ==> WILL THE CONTRACTOR BE REQUIRED TO BE A MEMBER OF THE TEST PLAN
1884 ==> WORKING GROUP (TPWG) ?
1885 ==>
1886 ==> Provide a representative to the Test Plan Working
1887 ==> Group (TPWG) who will have the following responsibilities:
1888 ==> SOW: SET FORTH THE CONTRACTOR'S RESPONSIBILITIES AS A MEMBER OF THE
1889 ==> TEST PLAN WORKING GROUP.
1890 ==>
1891 ==> WILL THE CONTRACTOR BE REQUIRED TO PREPARE OR COMPLETE THE VERIFICA-
1892 ==> TION CROSS REFERENCE INDEX APPEARING IN SECTION 4 (QUALITY ASSURANCE
1893 ==> PROVISIONS) OF THE CI/CPCI SPECIFICATIONS ? NOTE: THIS IS A MANDATORY
1894 ==> REQUIREMENT WHEN A SPECIFICATION(S) IS BEING PREPARED.
1895 ==> Verification Provisions: Complete the Verification Cross Reference
1896 ==> Index in Section 4 (Quality Assurance Provisions) of the CI/CPCI
1897 ==> specification(s).
1898 ==> SOW: THE CONTRACTUAL REQUIREMENT FOR THE PREPARATION OF THE
1899 ==> VERIFICATION MATRIX IS IMPOSED BY MIL-STD-483, PARA 3.15.
1900 ==> THIS REQUIREMENT IS BEING PUT ON CONTRACT BY THE
1901 ==> CONFIGURATION MANAGEMENT TASK FOR THE PREPARATION OF

1902 ==> SPECIFICATIONS. COORDINATE WITH THE CONFIGURATION MANAGER
1903 ==> TO ENSURE THAT THIS REQUIREMENT HAS BEEN INCLUDED.
1904 ==>
1905 ==> PLEASE RECONSIDER YOUR ANSWER. THIS IS A MANDATORY REQUIREMENT
1906 ==> WHEN A SPECIFICATION(S) IS BEING PREPARED.
1907 ==>
1908 ==> WILL THE CONTRACTOR BE REQUIRED TO CONDUCT CI/SUBSYSTEM LEVEL
1909 ==> QUALIFICATION (DT&E) TESTING ?
1910 ==>
1911 ==> Qualification Testing: The preproduction qualification testing of all
1912 ==> Configuration Items (CIs) shall be performed by the contractor at his
1913 ==> plant, a subcontractor's plant or an approved test facility. Govern-
1914 ==> ment representatives shall be briefed prior to the start of testing
1915 ==> and be kept informed as to the progress of the tests. A designated
1916 ==> contractor and Air Force representative will both sign the recorded
1917 ==> data sheets to indicate validity of test results. The Air Force
1918 ==> Test Director will determine the success or failure of tests and the
1919 ==> acceptance of the test evaluation/reports.
1920 ==>
1921 ==> SOW: CHECK WITH THE SPO SPECIALISTS MANAGING THE R/M/A, EMC/EMI, S/V,
1922 ==> COMPUTER RESOURCES, HUMAN FACTORS AND SAFETY TASKS TO ASCERTAIN
1923 ==> WHAT, IF ANY, SEPARATE TEST PLANS AND PROCEDURES THEY MAY HAVE
1924 ==> CALLED OUT FOR THEIR SPECIALTIES. MAKE SURE THAT TEST REQUIRE-
1925 ==> MENTS ARE COORDINATED AND THAT REDUNDANT DATA/INFORMATION IS
1926 ==> NOT BEING CALLED FOR.
1927 ==>
1928 ==> WILL THE CONTRACTOR BE REQUIRED TO PERFORM SOFTWARE DEVELOPMENT,
1929 ==> MODIFICATION, AND/OR INTEGRATION AS PART OF THE PROGRAM ?
1930 ==>
1931 ==> Perform software testing to verify that the software meets all of the
1932 ==> specification requirements. Testing shall take place during both the
1933 ==> Development Test and Evaluation (DT&E) phase and the Operational Test
1934 ==> and Evaluation (OT&E) phase. DT&E shall be composed of Preliminary
1935 ==> Qualification Tests (PQT), Formal Qualification Tests (FQT) and
1936 ==> System Integration Tests (SIT). Perform a PQT on those computer
1937 ==> program components that are critical to the CPCI. An FQT shall be
1938 ==> conducted for each CPCI. An SIT shall also be conducted in order
1939 ==> to demonstrate that all computer program components and CPCIs, working
1940 ==> together, meet the system performance requirements.
1941 ==> SOW: IN ORDER TO DETERMINE IF PQTs, FQTs AND/OR SITs ARE REQUIRED FOR
1942 ==> YOUR PROGRAM, THE FOLLOWING DEFINITIONS APPLY:
1943 ==>
1944 ==> PQTs: TESTS CONDUCTED FOR THOSE FUNCTIONS OR COMPUTER PROGRAM
1945 ==> COMPONENTS THAT ARE CRITICAL TO THE CPCI. THE SELECTION OF CRI-
1946 ==> TICAL FUNCTIONS TO BE TESTED MAY BE BASED ON EITHER TIME OR PER-
1947 ==> FORMANCE REQUIREMENTS. THE RESPONSIBILITY FOR CONDUCTING PQTs
1948 ==> MAY BE DELEGATED TO THE CONTRACTOR AND NEED NOT BE SPECIFICALLY
1949 ==> IDENTIFIED AS A SEPARATE TEST. PQTs MAY BE REQUIRED FOR EACH
1950 ==> CPCI IF THE CODE IS PARTICULARLY COMPLEX.
1951 ==>
1952 ==> FQTs: TESTS ACCOMPLISHED TO VERIFY THAT EACH COMPUTER PROGRAM
1953 ==> COMPONENT MEETS THE REQUIREMENTS OF SECTION 3.3.8 OF THE SYSTEM
1954 ==> SPECIFICATION AND CORRESPONDING CPCI SPECIFICATION. PROGRAM

1955 ==> AND GROUP PROGRAMS ARE TESTED TO VERIFY THAT THEY PERFORM
1956 ==> THEIR INTENDED FUNCTION PROPERLY, SEPARATELY AND TOGETHER.
1957 ==> THIS PROCESS SHALL BE APPLIED TO THE INDIVIDUAL COMPUTER PROGRAM
1958 ==> COMPONENT OF EACH CPCI AND SHALL BE CONTINUED UNTIL ALL PROGRAMS
1959 ==> HAVE BEEN VERIFIED.
1960 ==>
1961 ==> SITs: TESTS CONDUCTED TO ENSURE THAT ALL COMPUTER PROGRAM COM-
1962 ==> PONENTS AND CPCIs INTERFACE PROPERLY AND MEET ALL SYSTEM PERFOR-
1963 ==> MANCE REQUIREMENTS. THESE TESTS ARE PERFORMED ON THE FIRST
1964 ==> ARTICLE.
1965 ==> WILL THE CONTRACTOR BE TASKED TO INSTALL AND CHECK OUT THE SYSTEM
1966 ==> (EQUIPMENT) AT A FIXED OR PERMANENT SITE PRIOR TO CONDUCTING THE
1967 ==> SYSTEM AND/OR IOT&E TESTING ?
1968 ==>
1969 ==> SOW: IF THE PROGRAM INVOLVES THE INSTALLATION OF A SINGLE LARGE
1970 ==> SYSTEM, SEVERAL SMALLER "SATELLITE" COMPONENTS OR SEVERAL
1971 ==> WIDELY SCATTERED SITES, THE ABOVE DIDs MUST BE REFERENCED
1972 ==> IN THE CDRL. MAKE CLEAR TO THE CONTRACTOR WHAT EQUIPMENT
1973 ==> IS TO BE INSTALLED/CHECKED OUT. SPECIFY THE CONTRACTOR'S
1974 ==> RESPONSIBILITY DURING INSTALLATION AND CHECKOUT.
1975 ==>
1976 ==> SOW: IF POSSIBLE, REFERENCE OR LIST WHAT GFE WILL BE SUPPLIED,
1977 ==> WHAT CFE SHOULD BE SUPPLIED AND WHAT SPECIAL PROVISIONS
1978 ==> THE CONTRACTOR SHOULD BE AWARE OF.
1979 ==>
1980 ==> WILL THE SYSTEM OR EQUIPMENT BEING DEVELOPED BE REQUIRED TO UNDERGO
1981 ==> TEMPEST TESTING ?
1982 ==>
1983 ==> SOW: THE REQUIREMENTS FOR TEMPEST TESTING ARE DEFINED UNDER THE
1984 ==> SECURITY/TEMPEST MANAGEMENT TASK. TEMPEST TESTING MAY BE
1985 ==> CONDUCTED EITHER BY THE GOVERNMENT OR THE CONTRACTOR.
1986 ==>
1987 ==> CAUTION: CURRENT LEAD TIME FOR TEMPEST TESTING TO BE CONDUCTED
1988 ==> BY THE GOVERNMENT IS APPROXIMATELY TWO YEARS.
1989 ==>
1990 ==> WAS A RADIO FREQUENCY ALLOCATION REQUIRED AND OBTAINED FOR CONTRACTOR
1991 ==> DEVELOPMENT FOR IN-PLANT TESTING ?
1992 ==>
1993 ==> WILL THE CONTRACTOR BE TASKED TO PERFORM SYSTEM TESTING OR
1994 ==> INSTALLATION AND CHECKOUT AT A NEW LOCATION ?
1995 ==>
1996 ==> SOW: A NEW REQUEST FOR A RADIO FREQUENCY ALLOCATION WILL BE REQUIRED
1997 ==> FOR EACH NEW TEST LOCATION OR FREQUENCY TO BE USED.
1998 ==>
1999 ==> SOW: IF IT IS ANTICIPATED THAT TESTING IN A FOREIGN COUNTRY WILL BE
2000 ==> REQUIRED, YOU ARE CAUTIONED THAT UNLESS OTHERWISE STATED IN THE
2001 ==> EXISTING STATUS OF FORCES AGREEMENT, THERE WILL BE NO FREQUENCY
2002 ==> ASSIGNMENT COORDINATION ACTION WITH A FOREIGN GOVERNMENT UNTIL
2003 ==> FOREIGN OPERATING RIGHTS ARE GRANTED THROUGH THE U.S. EMBASSY.
2004 ==>
2005 ==> SOW: THE REQUIREMENTS FOR RADIO FREQUENCY AUTHORIZATION ARE CALLED
2006 ==> OUT IN THE RADIO FREQUENCY MANAGEMENT TASK. COORDINATE WITH
2007 ==> THE RADIO FREQUENCY MANAGEMENT STAFF OPR IN ESD/DCF.

2008 ==>
2009 ==> WILL THE CONTRACTOR BE REQUIRED TO PREPARE AND SUBMIT ACCEPTANCE TEST
2010 ==> PROCEDURES ?
2011 ==>
2012 ==> WILL A MEANS TO HANDLE DEVIATIONS FROM APPROVED TEST PLANS AND
2013 ==> PROCEDURES BE REQUIRED ?
2014 ==>
2015 ==> Deviations. A request for deviations in testing, substitutions of
2016 ==> test equipment or any other exceptions to the approved test program
2017 ==> shall be submitted to the Air Force Test Director for concurrence
2018 ==> prior to the start of test. All deviations shall be noted in the
2019 ==> contractor's test logs and on the official test record.
2020 ==> WILL THE CONTRACTOR BE REQUIRED TO PROVIDE A TEST SCHEDULE ?
2021 ==>
2022 ==> CDRL: DI-A-3007 APPLIES FOR TEST SCHEDULES. COORDINATE WITH
2023 ==> PROGRAM CONTROL TO ENSURE THAT THIS REQUIREMENT IS INCLUDED.
2024 ==>
2025 ==> IS A STATEMENT OF READINESS REQUIRED ?
2026 ==>
2027 ==> Statement of Readiness: At least fourteen (14) calendar days prior to
2028 ==> any testing requiring official Government participation or witnessing,
2029 ==> the contractor shall notify the Air Force Test Director that he is
2030 ==> ready to begin official testing. For all system level testing, the
2031 ==> contractor shall assure that the system is completely installed to
2032 ==> meet the contractual requirements. Prior to the beginning of testing
2033 ==> and arrival on site of the Government test force, the contractor shall
2034 ==> assure that all test equipment, test facilities and other supporting
2035 ==> equipment are available.
2036 ==> WILL THE CONTRACTOR BE REQUIRED TO MAINTAIN AND CALIBRATE TEST
2037 ==> EQUIPMENT ?
2038 ==>
2039 ==> WILL THE CONTRACTOR BE REQUIRED TO PREPARE PERFORMANCE DIAGNOSTIC
2040 ==> TEST DATA OR TEST PROCEDURES FOR AUTOMATIC, SEMI-AUTOMATIC OR MANUAL
2041 ==> TEST EQUIPMENT ?
2042 ==>
2043 ==> WILL THE CONTRACTOR BE REQUIRED TO CONSTRUCT OR MODIFY BUILDINGS AND
2044 ==> FACILITIES OR TO INSTALL REAL PROPERTY EQUIPMENT ?
2045 ==>
2046 ==> SOW: ENSURE THAT THE CONTRACTOR IS TASKED TO PERFORM ANY NECESSARY
2047 ==> TESTING OF THE NEW OR MODIFIED REAL FACILITIES AND THAT SUCH
2048 ==> TESTING IS INCLUDED IN THE APPROPRIATE TEST PLANS, PROCEDURES
2049 ==> AND REPORTS.
2050 ==>
2051 ==> SOW: THE REQUIREMENTS FOR REAL PROPERTY INSTALLATION AND TESTING
2052 ==> ARE CALLED OUT IN THE REAL PROPERTY MANAGEMENT TASK. COORDINATE
2053 ==> WITH THE REAL PROPERTY STAFF OPR AT ESD/DE.
2054 ==>
2055 ==> WILL THE CONTRACTOR BE REQUIRED TO CONDUCT A FUNCTIONAL CONFIGURATION
2056 ==> AUDIT (FCA) OR A FORMAL QUALIFICATION REVIEW (FQR) ?
2057 ==>
2058 ==>
2059 ==>
2060 ==> SOW: THE REQUIREMENTS FOR FCAs AND FQRs ARE CALLED OUT IN THE

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2061 ==>       CONFIGURATION MANAGEMENT TASK.
2062 ==>
2063 ==> SOW:  AN FCA IS NORMALLY ACCOMPLISHED DURING FULL SCALE DEVELOPMENT.
2064 ==>
2065 ==> SOW:  AN FQR IS NORMALLY COMBINED WITH THE FCA.  COORDINATE WITH THE
2066 ==>       STAFF SYSTEM ENGINEERING, TEST, AND CONFIGURATION MANAGEMENT
2067 ==>       SPECILISTS.
2068 ==>
2069 ==> SOW:  IF THE DEVELOPING CONTRACTOR HAS BEEN PRESELECTED TO BE THE
2070 ==>       PRODUCTION CONTRACTOR, THE FCA MAY BE DEFERRED UNTIL PRO-
2071 ==>       DUCTION.
2072 ==>
2073 ==> SOW:  IF THE PREPRODUCTION ARTICLE IS NOT REPRESENTATIVE OF THE
2074 ==>       PRODUCTION ARTICLE, THE FCA SHOULD BE DEFERRED UNTIL
2075 ==>       PRODUCTION.
2076 ==>
2077 ==> SOW:  THE FCA MAY BE ACCOMPLISHED BEFORE OR CONCURRENT WITH THE
2078 ==>       PHYSICAL CONFIGURATION AUDIT (PCA).
2079 ==>
2080 ==> SOW:  THE REQUIREMENTS FOR AN FCA AND FQR ARE CALLED OUT IN THE
2081 ==>       CONFIGURATION MANAGEMENT TASK.
2082 ==>
2083 ==> WILL THE CONTRACTOR BE REQUIRED TO PARTICIPATE IN OR SUPPORT SYSTEM
2084 ==> LEVEL (IOT&E) TESTING ?
2085 ==>
2086 ==> Contractor Support:  The contractor shall provide support to the Air
2087 ==> Force System Test programs as follows:
2088 ==> SOW:  SET FORTH THE CONTRACTOR'S RESPONSIBILITIES DURING IOT&E.  TYPES
2089 ==>       OF SUPPORT THAT CAN BE ASSIGNED TO THE CONTRACTOR ARE AS FOL-
2090 ==>       LOWS:
2091 ==>
2092 ==>         (1) MAINTAIN SYSTEM DURING TEST, TO INCLUDE PROVIDING ALL
2093 ==>             SPARES.
2094 ==>
2095 ==>         (2) ENGINEERING SUPPORT.
2096 ==>
2097 ==>         (3) TRAINING.
2098 ==>
2099 ==> DOES THE SYSTEM/PROJECT INVOLVE COMPUTER RESOURCES ?
2100 ==>
2101 ==>      The contractor shall design and develop the computer programs to
2102 ==> satisfy the design and performance requirements in the System
2103 ==> Specification.  The contractor's approach to software development
2104 ==> under this contract shall conform to that approach presented in the
2105 ==> contractor-prepared, Government approved, Computer Program Development
2106 ==> Plan (CPDP) which shall be updated by the contractor.  The PCO's
2107 ==> approval of the CPDP shall not relieve the contractor from complying
2108 ==> with any of the requirements of this contract.  All computer programs
2109 ==> shall be controlled in accordance with the requirements established in
2110 ==> the Configuration Management Task of this SOW.
2111 ==>      The overall intent of this task and the computer programming
2112 ==> requirements of paragraph 3.3.8 of the System Specification is to
2113 ==> mandate minimum computer programming requirements; this shall not
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2114 ==> preclude exceeding these minimum requirements.
2115 ==> CDRL: IF A CPDP WAS REQUIRED BY THE IFPP TO BE DELIVERED AS PART OF
2116 ==> THE CONTRACTOR'S PROPOSAL, THE CDRL USUALLY REQUIRES DELIVERY
2117 ==> OF THE FINAL CPDP AND UPDATES AS REQUIRED.
2118 ==>
2119 ==> SOW: THE FOLLOWING ITEMS PERTAINING TO COMPUTER RESOURCES MANAGEMENT
2120 ==> MUST BE INCLUDED IN THE SOW. THE PROGRAM OFFICE SHOULD
2121 ==> DETERMINE WHICH ITEM WILL BE INCLUDED IN WHICH TASK. (LISTED
2122 ==> AFTER EACH ACTION MESSAGE IS WHERE EACH ITEM IS USUALLY
2123 ==> SPECIFIED.)
2124 ==>
2125 ==> SOW: THE CONTRACTOR MUST BE TASKED WITH TREATING FIRMWARE AS
2126 ==> SOFTWARE. (USUALLY FOUND IN COMPUTER RESOURCES MANAGEMENT
2127 ==> TASK.)
2128 ==>
2129 ==> CDRL: THE CONTRACTOR MUST BE TASKED WITH THE PREPARATION AND DELIVERY
2130 ==> OF DEVELOPMENT SPECIFICATIONS, PRODUCT SPECIFICATIONS AND/OR
2131 ==> NON-COMPLEX SPECIFICATIONS (USUALLY FOUND IN THE CONFIGURATION
2132 ==> MANAGEMENT TASK).
2133 ==>
2134 ==> SOW: THE CONTRACTOR MUST BE TASKED WITH ADHERING TO THE COMPUTER
2135 ==> PROGRAM REQUIREMENTS LISTED IN PARAGRAPH 3.3.8 OF THE SYSTEM
2136 ==> SPECIFICATION (USUALLY FOUND IN THE COMPUTER RESOURCES MANAGE-
2137 ==> MENT TASK).
2138 ==>
2139 ==> SOW: THE CONTRACTOR MUST BE TASKED WITH COMPUTER TESTING. THIS
2140 ==> INCLUDES BOTH DEVELOPMENTAL TEST AND EVALUATION (PRELIMINARY
2141 ==> QUALIFICATION TESTS (PQTs), FORMAL QUALIFICATION TESTs (FQTs),
2142 ==> AND SYSTEM INTEGRATION TEST (SIT)) AND OPERATIONAL TEST AND
2143 ==> EVALUATION. PQT RESPONSIBILITY MAY BE DELEGATED TO THE
2144 ==> CONTRACTOR AND NOT SPECIFICALLY IDENTIFIED AS A SEPARATE TEST.
2145 ==> (USUALLY FOUND IN THE TEST AND EVALUATION TASK.)
2146 ==>
2147 ==> SOW: THE CONTRACTOR MUST BE TASKED WITH THE DEVELOPMENT AND
2148 ==> IMPLEMENTATION OF A SOFTWARE QUALITY ASSURANCE (SQA) PROGRAM
2149 ==> IAW MIL-S-52779A. THIS WOULD INCLUDE REQUIRING THE CONTRACTOR
2150 ==> TO PREPARE AND UPDATE AN SQA PLAN. DELIVERY OF THE SQA PLAN IS
2151 ==> NOT MANDATORY (USUALLY FOUND IN QUALITY REQUIREMENTS TASK).
2152 ==>
2153 ==>
2154 ==> SOW: THE CONTRACTOR MUST BE TASKED WITH REQUESTING A COMPUTER PROGRAM
2155 ==> IDENTIFICATION NUMBER (CPIN) FOR EACH CPCI AND USING THIS CPIN
2156 ==> ALONG WITH THE SPECIFICATION NUMBER ON ALL DOCUMENTATION
2157 ==> PERTAINING TO THE CPCI. (USUALLY FOUND IN THE CONFIGURATION
2158 ==> MANAGEMENT TASK.)
2159 ==>
2160 ==> SOW: THE CONTRACTOR MUST BE TASKED WITH HOLDING DESIGN REVIEWS FOR
2161 ==> SOFTWARE. THE NUMBER OFDESIGN REVIEWS AND THE SPECIFIC DESIGN
2162 ==> REVIEWS TO HOLD (E.G.; SYSTEM REQUIREMENT REVIEW, SYSTEM DESIGN
2163 ==> REVIEW, PRELIMINARY DESIGN REVIEW, CRITICAL DESIGN REVIEW AND
2164 ==> FORMAL QUALIFICATION REVIEW) SHOULD BE DETERMINED BY THE PROGRAM
2165 ==> OFFICE. (USUALLY FOUND IN THE SYSTEM ENGINEERING TASK.)
2166 ==>

==> SOW: THE CONTRACTOR MUST BE TASKED WITH HOLDING A FUNCTIONAL AND
==> PHYSICAL CONFIGURATION AUDIT. AGAIN, THE NUMBER OF AUDITS AND
==> WHETHER OR NOT TO COMBINE THEM SHOULD BE DETERMINED BY THE
==> PROGRAM OFFICE. (USUALLY FOUND IN THE CONFIGURATION
==> MANAGEMENT TASK.)
==>
==>
==> CDRL: THE CONTRACTOR MUST BE TASKED WITH PREPARING AND DELIVERING ALL
==> DOCUMENTATION NEEDED AS DETERMINED BY THE PROGRAM OFFICE.
==>
==> SOW: ESD/ALEQ's HANDBOOK FOR EVALUATION AND LIFE CYCLE PLANNING FOR
==> SOFTWARE, VOLUME II, FIG. II-2-2, PAGE II-21, CONTAINS A MODEL
==> COMPUTER RESOURCES MANAGEMENT TASK FOR THE FULL SCALE DEVELOP-
==> MENT PHASE. IT PROVIDES AN EXAMPLE OF THE WORDING WHICH MIGHT
==> GO INTO A SOW. IT ALSO CONTAINS THE REFERENCES WHICH REQUIRE A
==> CERTAIN ITEM TO BE INCLUDED IN THE SOW.
==>
==> Computer Resources Management requirements are not applicable.
==> IN THE RFP, WILL YOU PROVIDE THE CONTRACTOR THE OPTION TO USE
==> OFF-THE-SHELF SOFTWARE ?
==>
==> CONTRACT: THE TERM "OFF-THE-SHELF" WHETHER IT REFERS TO HARDWARE OR
==> SOFTWARE SHOULD BE DEFINED BY APPLYING DAR 14-001.7 TO
==> THE CONTRACT. ESD/ALEQ'S HANDBOOK FOR EVALUATION AND LIFE
==> CYCLE PLANNING FOR SOFTWARE, VOLUME II, FIG. II-2-2, PAGE
==> II-21, CONTAINS A FURTHER DETAILED DEFINITION OF OFF-THE-
==> SHELF.
==>
==> CONTRACT/
==> SOW/CDRL: OFF-THE-SHELF SOFTWARE SHOULD BE DOCUMENTED IN COMMERCIAL
==> MANUALS (I.E., PACK-UP DATA) AS OPPOSED TO B5 AND C5
==> SPECIFICATIONS SINCE THESE MANUALS USUALLY ALREADY EXIST
==> AND ARE ADEQUATE FOR THE GOVERNMENT NEEDS. A RECOMMENDED
==> DATA ITEM, WHICH SHOULD BE TAILORED TO THE SPECIFIC
==> PROGRAM/PROJECT, IS DI-M-7024. THIS DATA ITEM SHOULD BE
==> USED IN CONJUNCTION WITH A SPECIAL CONTRACT CLAUSE DURING
==> THE RFP/SOURCE SELECTION PHASE INDICATING THAT THE BIDDER
==> WILL FURNISH (NUMBER) COPIES OF THE COMMERCIAL MANUALS
==> FOR GOVERNMENT REVIEW/APPROVAL. A CLAUSE SHOULD ALSO BE
==> INCLUDED IN THE CONTRACT TO THE EFFECT THAT SUCH "DATA WILL
==> BE DELIVERED AS "PACK-UP" DATAWITH THE END ITEM EQUIPMENT
==> AT NO ADDITIONAL COST TO THE GOVERNMENT" TO ENSURE THAT
==> IF THE COMMERCIAL MANUALS MEET GOVERNMENT REQUISITES, THE
==> CONTRACTOR WOULD NOT SEPARATELY BILL THE GOVERNMENT FOR
==> SUCH DATA THAT IS NORMALLY DELIVERED AS PART OF THE END
==> ITEM COST. IN THE EVENT CONTRACTOR COMMERCIAL MANUALS DO
==> NOT MEET THE GOVERNMENT'S MAINTENANCE CONCEPT, APPROPRIATE
==> DATA ITEMS MUST BE CONTAINED IN THE CDRL TO ENSURE THAT
==> PROPER OPERATIONAL MAINTENANCE CAN BE OBTAINED. CONSULT
==> WITH PROCUREMENT AND LEGAL FOR FURTHER GUIDANCE.
==>
==> IS A FACILITY BEING CONSTRUCTED AND/OR IS REAL PROPERTY EQUIPMENT
==> BEING INSTALLED ?

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2220 ==>
2221 ==> Develop criteria for the Technical Facility Subsystem and place in
2222 ==> Appendix 1 of the System Specification.
2223 ==> SPEC:  DELINEATE FACILITY DESIGN AND INTERFACE REQUIREMENTS IN SECTION
2224 ==>        3.5.3 OF THE SYSTEM SPECIFICATION.
2225 ==>
2226 ==> SPEC:  ALL APPLICABLE DOCUMENTS MUST BE TAILORED AND A PERMANENT
2227 ==>        RECORD KEPT ON EACH PROGRAM.  SEE DAR APPENDIX B-307.
2228 ==>
2229 ==> CONTRACT:  AUTHORIZATION FOR THE ACQUISITION AND/OR FABRICATION OF
2230 ==>            REAL PROPERTY FACILITIES SHALL BE SPECIFIED IN THE SCHEDULE
2231 ==>            OF THE CONTRACT.  SEE H.40.1.
2232 ==>
2233 ==> The Technical Facility designers shall attend the design reviews, PDR
2234 ==> and CDR, to present the facilities design package.  The contractor
2235 ==> shall demonstrate compatibility of the Technical Facility Subsystem
2236 ==> with the rest of the system and conformance to all requirements of the
2237 ==> updated System Specification.
2238 ==> SOW:  COORDINATE WITH LOGISTICS TO INSURE THAT THE REQUIREMENTS FOR
2239 ==>       SPARE OR REPAIR PARTS FOR THE FACILITY ARE INCLUDED IN THE
2240 ==>       INITIAL OPERATIONAL SPARES PACKAGE.
2241 ==>
2242 ==> SOW:  COORDINATE WITH CONFIGURATION MANAGEMENT TO ASSURE THAT
2243 ==>       GOVERNMENT APPROVAL OF THE FINAL FACILITIES DESIGN PACKAGE
2244 ==>       DOES NOT AUTOMATICALLY MEAN ACCEPTANCE OF DETAILED DESIGN
2245 ==>       ANALYSIS AND DRAWINGS.
2246 ==>
2247 ==> SOW:  ALL CHANGES TO REAL PROPERTY ON THIS CONTRACT REQUIRE
2248 ==>       GOVERNMENT APPROVAL AND MUST BE PROCESSED IAW MIS-STD-480
2249 ==>       (NORMAL ENGINEERING CHANGE PROPOSALS).  COORDINATE WITH THE
2250 ==>       CONFIGURATION MANAGER.
2251 ==>
2252 ==> CDRL:  COORDINATE WITH TEST TO INSURE THAT THE TESTING OF THE
2253 ==>        TECHNICAL FACILITY SUBSYSTEM IS INCLUDED IN ALL THE TEST
2254 ==>        PLANS AND PROCEDURES.
2255 ==>
2256 ==> CDRL:  MAINTAIN AS-BUILT DRAWINGS UP TO THE END OF SYSTEM TEST.
2257 ==>
2258 ==> CDRL:  THE CONSTRUCTION PROGRESS REPORTS MUST REFLECT THE PERCENT
2259 ==>        OF PHYSICAL COMPLETION AND NOT THE COST OF WORK IN PLACE.
2260 ==>
2261 ==> CONTRACT:  GOVERNMENT FURNISHED SUPPLIES, PROPERTY, SERVICES, ETC.
2262 ==>            SHALL BE INCLUDED IN THE SCHEDULE OF THE CONTRACT.
2263 ==>
2264 ==> Real Property Facility requirements do not apply.
2265 ==> WILL THIS CONTRACT BE MANAGED BY ESD ?
2266 ==>
2267 ==> SOW:  CONTACT THE PRODUCT ENGINEERING SUPPORT OFFICER (PESO) IN
2268 ==>       ESD/ALM FOR ASSISTANCE.
2269 ==>
2270 ==> COULD HARDWARE DESIGNS BE DEVELOPED AND/OR CHANGED ?
2271 ==>
2272 ==> Design/Manufacturing Interface and Producibility.
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2273 ==>
2274 ==> Design/Manufacturing Interface. Utilize a design engineering system
2275 ==> which insures early and effective involvement of the manufacturing
2276 ==> engineering or production engineering discipline in the design
2277 ==> process. This interface is intended to assure that appropriate
2278 ==> consideration is given to the manufacturing aspects of the hardware
2279 ==> before a specific design is selected and refined.
2280 ==>
2281 ==> Producibility. Subject all new hardware designs, system integration
2282 ==> approaches, and design changes to specific, structured producibility
2283 ==> analyses as an integral part of the design/change process. The
2284 ==> analysis of producibility will consider, but not necessarily be
2285 ==> limited to the following characteristics:
2286 ==> a. Manufacturing process selection for cost/simplicity/repeatability
2287 ==> b. Tolerances selected (dimensional and performance)
2288 ==> c. Material availability/manufacturing suitability/substitution
2289 ==> possibility
2290 ==> c. In-process inspection requirements
2291 ==> d. Parts comonality/interchangeability
2292 ==> e. Tooling requirements/tooling availability
2293 ==> f. Production test requirements/test equipment availability
2294 ==> g. Use of commercial vs military specifications
2295 ==> h. Fabrication/assembly/testing requirements consistent with
2296 ==> existing capabilities
2297 ==>
2298 ==> These analyses will be performed by personnel familiar with and
2299 ==> directly related to the manufacturing function and the analyses will
2300 ==> be documented.
2301 ==> SOW: COORDINATE WITH SYSTEMS ENGINEERING TO INCLUDE PRODUCIBILITY
2302 ==> IN DESIGN REVIEWS.
2303 ==>
2304 ==> SOW: CONTACT THE PRODUCT ENGINEERING SUPPORT OFFICER (PESO) IN
2305 ==> ESD/ALM FOR ASSISTANCE.
2306 ==>
2307 ==> IS IT THE PROGRAM OFFICE INTENTION TO OFFER THE FOLLOW-ON EFFORT VIA
2308 ==> COMPETITION AMONG CONTRACTORS ?
2309 ==>
2310 ==> Production Readiness Review (Limited)
2311 ==>
2312 ==> Production Readiness Reviews and supporting incremental assessments
2313 ==> will be scheduled and conducted by the procuring activity. The
2314 ==> contractor shall provide personnel and plant facilities necessary
2315 ==> to support review at both contractor and subcontractor facilities.
2316 ==> Contractor personnel, knowledgeable in design and producibility
2317 ==> criteria shall be available to work with Government personnel
2318 ==> throughout the review.
2319 ==>
2320 ==> The contractor shall plan for and participate in production readiness
2321 ==> assessments during the FSD phase. The emphasis of these assessments
2322 ==> will be on producibility and on the adequacy of the design stability
2323 ==> to support a production program. These assessments will culminate
2324 ==> in a formal Production Readiness Review near the end of the FSD
2325 ==> effort. Up to ___ incremental assessments will be conducted

2326 ==> periodically during FSD, leading up to ___ Government representatives
2327 ==> for approximately ___ days for each increment.
2328 ==>
2329 ==> The formal Production Readiness Review will be conducted near the end
2330 ==> of FSD. This review will be conducted at the prime contractor's
2331 ==> facility and at up to ___ subcontractor's facilities. The review
2332 ==> at the prime will involve up to ___ Government representatives for
2333 ==> approximately ___ days. Reviews at subcontractor will involve up to
2334 ==> ___ Government representatives for up to ___ days at each subcon-
2335 ==> tractor's facility.
2336 ==>
2337 ==> Productivity. Perform the requirements of this contract in a manner
2338 ==> to assure that optimum productivity will be reached in any follow-on
2339 ==> production effort. When applicable, include: the requirements of
2340 ==> this paragraph apply to the leader and the follower under the leader/
2341 ==> follower concept. Productivity includes the policies and practices
2342 ==> utilized by contractor management to assure that the most efficient
2343 ==> and cost effective manufacturing capability is available for the
2344 ==> production of defense hardware. It includes the interconnected
2345 ==> areas of design, production engineering, production planning and
2346 ==> control, labor utilization, sub-contracting and capital investment
2347 ==> in modern processes and equipment as they affect the cost and
2348 ==> quality of hardware.
2349 ==> Establish and maintain a Productivity Improvement Program to reduce
2350 ==> manufacturing costs and increase productivity. A Productivity Program
2351 ==> Plan shall be developed and maintained which integrates on-going
2352 ==> internal contractor productivity initiatives with those efforts
2353 ==> required under this contract.
2354 ==>
2355 ==> Manufacturing Assessment Reviews. Manufacturing Assessment Reviews
2356 ==> (MARs) will be conducted periodically to evaluate contractor/subcon-
2357 ==> tractor progress in performance of the requirements of this contract.
2358 ==> Such reviews will be held at least once each quarter and will involve
2359 ==> 2 to 4 Government representatives for approximately one day (each
2360 ==> review). Such reviews will normally be held in conjunction with
2361 ==> Program Management Reviews.
2362 ==>
2363 ==> SOW: TAILOR MIL-STD-1528 TO ADD YOUR REQUIRED PRODUCTION MANAGEMENT
2364 ==> SYSTEM; ADD THE REQUIED PARAGRAPHS TO THE TAILORING COLUMN.
2365 ==> COMPLETE THE PRODUCTION READINESS REVIEW TASK BY INSERTING
2366 ==> THE REQUIRED NUMBER OF PERSONNEL AND DAYS.
2367 ==>
2368 ==> WILL THE DEVELOPMENT CONTRACTOR BE THE PRODUCTION CONTRACTOR IN THE
2369 ==> FOLLOW-ON PRODUCTION PHASE ?
2370 ==>
2371 ==> Production Readiness Review (Full)
2372 ==>
2373 ==> Production Readiness Reviews and supporting incremental assessments
2374 ==> will be scheduled and conducted by the procuring activity. The
2375 ==> contractor shall provide personnel and plant facilities necessary to
2376 ==> support the review at both contractor and subcontractor facilities.
2377 ==> Contractor personnel, knowledgeable in manufacturing management and
2378 ==> production shall be available to work with Government personnel

2379 ==> throughout the review.
2380 ==>
2381 ==> The contractor shall plan for and participate in production readiness
2382 ==> assessments during the FSD phase. These assessments will address both
2383 ==> design areas and planning issues relative to any future production
2384 ==> program. These assessments will culminate in a formal Production
2385 ==> Readiness Review near the end of the FSD effort. During FSD, assess-
2386 ==> ments of evolving production readiness preparations will be included
2387 ==> as agenda items in design reviews. In addition, up to ___ incremental
2388 ==> assessments will be conducted periodically during FSD leading up to
2389 ==> ___ Government representatives for approximately ___ days for each
2390 ==> increment. Readiness assessments will address production preparation
2391 ==> activities at the prime contractor and at up to ___ major subcon-
2392 ==> trators.
2393 ==>
2394 ==> Productivity. Perform the requirements of this contract in a manner
2395 ==> to assure that optimum productivity will be reached in any follow-on
2396 ==> production effort. When applicable, include: the requirements of
2397 ==> this paragraph apply to the leader and the follower under the leader/
2398 ==> follower concept. Productivity includes the policies and practices
2399 ==> utilized by contractor management to assure that the most efficient
2400 ==> and cost effective manufacturing capability is available for the
2401 ==> production of defense hardware. It includes the interconnected areas
2402 ==> of design, production engineering, production planning and control,
2403 ==> labor utilization, sub-contracting and capital investment in modern
2404 ==> processes and equipment as they affect the cost and quality of
2405 ==> hardware.
2406 ==>
2407 ==> Establish and maintain a Productivity Improvement Program to reduce
2408 ==> manufacturing costs and increase productivity. A Productivity Program
2409 ==> Plan shall be developed and maintained which integrates on-going
2410 ==> internal contractor productivity initiatives with those efforts
2411 ==> required under this contract.
2412 ==>
2413 ==> Manufacturing Assessment Reviews. Manufacturing Assessment Reviews
2414 ==> (MARs) will be conducted periodically to evaluate contractor/subcon-
2415 ==> tractor progress in performance of the requirements of this contract.
2416 ==> Such reviews will be ha,2 at least once each quarter and will involve
2417 ==> 2 to 4 Government representatives for approximately one day (each
2418 ==> review). Such reviews will normally be held in conjunctio| with
2419 ==> Program Management Reviews.
2420 ==>
2421 ==> SOW: TAILOR MIL-STD-1528 TO ADD YOUR REQUIRED PRODUCTION MANAGEMENT
2422 ==> SYSTEM; ADD THE REQUIRED PARAGRAPHS TO THE TAILORIN. COLUMN.
2423 ==> COMPLETE THE PRODUCTION READINESS REVIEW TASK BY INSERTING
2424 ==> THE REQUIRED NUMBER OF PERSONNEL AND DAYS.
2425 ==>
2426 ==> IS THE FOLLOW-ON PRODUCTION EFFORT ESTIMATED TO EXCEED $50 MILLION ?
2427 ==>
2428 ==> Production Engineering and Planning (PEP). Furnish the necessary
2429 ==> personnel, facilities, material, and supplies, and do all work
2430 ==> necessary for or incidental to performance of Production Engineering
2431 ==> and Planning for a smooth transition from development to production.

==> The contractor shall not duplicate any work or portion of work which
==> has already been tasked elsewhere in this contract. The PEP effort
==> will start upon successful completion of the critical design review.
==> PEP is intended to include all analysis, planning, and implementation
==> efforts required to support production in a cost effective manner and
==> on schedule as planned. It excludes actual manufacturing, production
==> testing and any re-design relating to performance. This contemplates
==> production at rates to be provided at the start of the PEP effort.
==> PEP requirements will be applied to major subcontractors as mutually
==> agreed between Government and Contractor.
==>
==> Select, assign, and designate an individual to be the contractor's
==> PEP Program Manager. It is expected that PEP Program Manager will
==> report directly to the contractor's System Pr ram Manager and shall
==> have extensive production management experience on a program of the
==> magnitude and complexity of this System.
==>
==> Perform the PEP tasks on all hardware to the maximum extent possible.
==> The tasks shall encompass end item, major assemblies, subassemblies,
==> and piece parts. The documentation to be used for these efforts
==> shall include engineering drawings, system hardware specifications
==> and those manufacturing documents used to manufacture and inspect
==> the hardware procured under the engineering development contract.
==> The tasks will not encompass hardware provided as Government
==> Furnished Equipment (GFE) except to evaluate the conclusions of
==> PEP activities to assure the Government that there is no impact
==> on Interface Control Documents (ICS).
==>
==> Address PEP status in the regularly scheduled Program Management
==> Review (PMR) between the Government and the Contractor. These reviews
==> shall cover the latest status of the overall PEP effort with emphasis
==> on problems and achievements in the key management areas of cost,
==> schedule, and technical performance.
==>
==> Manufacturing Documentation. Prepare a manufacturing data package in
==> preparation for the production phase of the program. Only those items
==> which specifically apply to production planning for this program
==> should be addressed in response to this tasking. The nomenclature
==> may not correlate directly with contractor terminology, but should
==> be considered as representative of areas to be addressed.
==>
==> Manufacturing data package items:
==>   Manufacturing Schedule
==>   Engineering Release Procedures
==>   Change Processing Procedures
==>   Wor: Flow Description
==>   Work Measurement Procedures
==>   Production and Acceptance Test Procedures
==>   Materials Handling Procedures to include:
==>   Incoming Inspection
==>   Material Issuance/Control
==>   Kitting
==>   Manufacturing Process Sheets

==> Manufacturing Methods Descriptions
==> Work Instructions
==> Tooling/Test Equipment Identification
==> Facilities Allocations
==>
==> The elements of the manufacturing data package are not to be delivered
==> to the Government but shall be available to the Government for review
==> during incremental production readiness reviews as appropriate.
==>
==> Production and Facility Planning. Plan for full scale production.
==> The production plan will be sufficiently comprehensive to enable the
==> government to 1) ascertain with a high degree of confidence that the
==> contractor has adequately evaluated and planned for production, 2)
==> verify conformance to the principles of MIL-STD-1528 (USAF), and
==> 3) monitor contractual effort to assure the timely and effective
==> execution of the production program. The Production Plan shall be
==> based on the schedule and quantities provided at the start of the
==> PEP effort. Production planning will specifically identify DRE
==> production needs in relation to other planned business.
==>
==>
==> Make or Buy. Perform a make or buy review IAW contractor procedures
==> which conform with the requirements of DAR 3-902 for all items of
==> systems hardware. The results of these reviews shall be integrated
==> into the overall production planning process. Rationale for changes
==> made to the Make/Buy List of the basic contract shall be made
==> available to the Government for review.
==>
==> Special Tooling and Special Test Equipment (ST/STE). Determine the
==> need for, identify, and do conceptional design for all ST/STE (as
==> defined in DAR B-102.5 and B-102.6) required to support the production
==> program. The conceptual design shall be suitable to meet the
==> production rates provided for planning purposes. A list of ST/STE
==> shall be provided, and submitted for the Government's approval.
==>
==> Inspection and Test. Develop an inspection and test concept for the
==> hardware commensurate with, and in support of, the production rates
==> provided for planning purposes. The inspection and test concept
==> shall make maximum use of procedures and equipment development
==> under the FSD contract and commercial test equipment.
==>
==> Long Lead Analysis. Analyze leadtimes for subassemblies, components
==> and materials and assess the impact of such leadtimes on anticipated
==> production schedules. Identify critical items in the narrative
==> portion of Program Schedule Milestone Reports.
==>
==>
==> The contractor may request authorization to acquire critical items in
==> advance of full production approval. Support any Government analysis
==> of the request for long lead release.
==>
==> Changes. Apply the same production engineering disciplines to the
==> consideration of design changes as is done on the initial designs.

==> These disciplines include but are not limited to: producibility
==> analysis, make or buy considerations, production planning, ST/STE
==> requirements, long leadtime/critical material evaluations,
==> development of work instructions, and production testing requirements.
==>
==> Workmanship. Insure that the hardware design resulting from the
==> FSD contract shall be appropriate for follow-on production and that
==> all conditions which would deter good workmanship in the production
==> hardware are eliminated during the development program.
==>
==> Industrial Modernization Incentive Program (IMIP). Accomplish a
==> preliminary analysis as a first step in initiating a possible IMIP
==> program as described in the IFPP. This preliminary analysis shall
==> be sufficiently detailed to support a feasibility assessment regarding
==> implementation of all or parts of an IMIP program. The preliminary
==> analysis shall be documented.
==>
==> Industrial Modernization Feasibility Studies. Accomplish limited
==> industrial modernization feasibility studies. These studies are
==> intended to provide information useful to the procuring activity
==> for planning future IMIPs.
==>
==> IFPP: ADD THE FOLLOWING TO THE IFPP UNDER MANUFACTURING MANAGEMENT:
==> "AIR FORCE ACQUISITIONS IN FULL SCALE DEVELOPMENT OR PRODUC-
==> TION INCLUDE TECHNOLOGY MODERNIZATION (TECH MOD) PROGRAMS
==> AIMED AT IMPROVING FACTORY PRODUCTIVITY. IN SIMPLIFIED
==> TERMS, A TECHNOLOGY MODERNIZATION PROGRAM IS A THREE PHASE
==> EFFORT. PHASE I DIRECTS THE CONTRACTOR TO ANALYZE HIS
==> FACTORY, CONDUCT A COST SAVINGS BENEFIT ANALYSIS, AND
==> NOMINATE CANDIDATE PROJECTS FOR POTENTIAL PHASE II FUNDING.
==> IN PHASE II (GOVERNMENT/CONTRACTOR FUNDED), THE CONTRACTOR
==> IMPLEMENTS SUCCESSFULLY DEMONSTRATED MANUFACTURING PRO-
==> CESSES AND EQUIPMENTS INTO HIS PRODUCTION FACILITY. THE
==> CONTRACTOR WILL HAVE AN OPPORTUNITY TO REALIZE A SATISFACTORY
==> RETURN ON INVESTMENTS IN PHASE III THROUGH CONTRACTUAL
==> INCENTIVES ON ON-GOING PRODUCTION CONTRACTS. THE NATURE
==> OF THESE INCENTIVES WILL BE SPELLED OUT IN A BUSINESS
==> AGREEMENT."
==>
==> IS THE FOLLOW-ON PRODUCTION EFFORT ESTIMATED TO RANGE BETWEEN
==> $10 - 50 MILLION ?
==>
==> Production Planning. All production engineering and production
==> planning efforts shall be accomplished in a manner that maximizes
==> the feasibility of effective competition in any follow-on production
==> program. The contractor's efforts under this task will be reviewed
==> in all design reviews and may be included as an agenda item by the
==> Government at program management reviews. The contractor shall
==> identify in Program Status Reports all know areas that would impact
==> on the feasibility of competition for production.
==>
==> Industrial Modernization Incentive Program (IMIP). Limited
==> industrial modernization feasibility studies shall include the

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2591 ==> analysis of manufacturing technologies (advanced and contemporary)
2592 ==> applicable to the hardware expected in this program.  These studies
2593 ==> shall identify potential high cost manufacturing drivers and recommend
2594 ==> specific areas for possible emphasis in any future IMIP program.
2595 ==> Study results shall be documented in a TECH MOD feasibility report.
2596 ==> Reference the IFPP for a description of the IMIP.
2597 ==>
2598 ==> IFPP:  ADD THE FOLLOWING TO THE IFPP UNDER MANUFACTURING MANAGEMENT:
2599 ==>           "AIR FORCE ACQUISITIONS IN FULL SCALE DEVELOPMENT OR
2600 ==>           PRODUCTION INCLUDE TECHNOLOGY MODERNIZATION (TECH MOD)
2601 ==>           PROGRAMS AIMED AT IMPROVING FACTORY PRODUCTIVITY.  IN
2602 ==>           SIMPLIFIED TERMS, A TECHNOLOGY MODERNIZATION PROGRAM IS A
2603 ==>           THREE PHASE EFFORT.  PHASE I DIRECTS THE CONTRACTOR TO
2604 ==>           ANALYZE HIS FACTORY, CONDUCT A COST SAVINGS BENEFIT
2605 ==>           ANLAYSIS, AND NOMINATE CONDIDATE PROJECTS FOR POTENTIAL
2606 ==>           PHASE II FUNDING.  IN PHASE II (GOVERNMENT/CONTRACTOR
2607 ==>           FUNDED), THE CONTRACTOR IMPLEMENTS SUCCESSFULLY DEMON-
2608 ==>           STRATED MANUFACTURING PROCESSES AND EQUIPMENTS INTO HIS
2609 ==>           PRODUCTION FACILITY.  THE CONTRACTOR WILL HAVE AN OP-
2610 ==>           PORTUNITY TO REALIZE A SATISFACTORY RETURN ON INVESTMENTS
2611 ==>           IN PHASE III THROUGH CONTACTUAL INCENTIVES ON ON-GOING
2612 ==>           PRODUCTION CONTRACTS.  THE NATURE OF THESE INCENTIVES
2613 ==>           WILL BE SPELLED OUT IN A BUSINESS AGREEMENT."
2614 ==>
2615 ==> SOW:  CONTACT THE PRODUCT ENGINEERING SUPPORT OFFICER (PESO) IN
2616 ==>       ESD/ALM FOR ASSISTANCE.
2617 ==>
2618 ==> SOW:  CONTACT THE PRODUCT ENGINEERING SUPPORT OFFICER (PESO) IN
2619 ==>       ESD/ALM FOR ASSISTANCE.
2620 ==>
2621 ==> IS THE FOLLOW-ON PRODUCTION EFFORT ESTIMATED TO BE LESS THAN
2622 ==> $10 MILLION ?
2623 ==>
2624 ==> SOW:  CONTACT THE PRODUCT ENGINEERING SUPPORT OFFICER (PESO) IN
2625 ==>       ESD/ALM FOR ASSISTANCE.
2626 ==>
2627 ==> IS CONFIGURATION MANAGEMENT APPLICABLE TO THIS PROGRAM ?
2628 ==>
2629 ==> CAUTION:  CONFIGURATION MANAGEMENT IS REQUIRED IF ANY OF THE
2630 ==>           FOLLOWING APPLY:
2631 ==>           1.  THE SYSTEM IS CLASSIFIED AS A MAJOR SYSTEM PER
2632 ==>               DODD 5000.1;
2633 ==>           2.  THE ACQUISITION REQUIRES THE USE OF AF 800 SERIES
2634 ==>               REGULATIONS;
2635 ==>           3.  THE SYSTEM/ITEM IS BEING DEVELOPED WITH SOME GOVERNMENT
2636 ==>               FUNDS;
2637 ==>           4.  THE SYSTEM/ITEM INTERFACES WITH ITEMS UNDER
2638 ==>               DEVELOPMENT OR IN PRODUCTION;
2639 ==>           5.  THE SYSTEM/ITEM IS COMPATIBLE WITH EXISTING/PLANNED
2640 ==>               MAINTENANCE PROGRAMS.
2641 ==>
2642 ==>
2643 ==>
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2644 ==>
2645 ==>
2646 ==> Configuration Management does not apply.
2647 ==> HAS THE CONTRACTOR'S CONFIGURATION MANAGEMENT SYSTEM BEEN PREVIOUSLY
2648 ==> VALIDATED BY THE GOVERNMENT ?
2649 ==> CDRL:  DI-E-3108 APPLIES.  TAILOR AS REQUIRED.
2650 ==>
2651 ==> HAVE ANY NEW OR ADDITIONAL CONFIGURATION MANAGEMENT REQUIREMENTS NOT
2652 ==> PREVIOUSLY REQUIRED BEEN INVOKED ?
2653 ==>
2654 ==> CDRL:  DI-E-3108 APPLIES.  TAILOR AS REQUIRED.
2655 ==>
2656 ==> IS INTERFACE CONTROL REQUIRED ?
2657 ==>
2658 ==> CAUTION:  INTERFACE CONTROL IS REQUIRED IF ANY OF THE FOLLOWING APPLY:
2659 ==>           1.  MORE THAN ONE PRIME CONTRACTOR IS ANTICIPATED;
2660 ==>           2.  MORE THAN ONE GOVERNMENT AGENCY IS INVOLVED;
2661 ==>           3.  THE SYSTEM/ITEM INTERFACES WITH ITEMS UNDER
2662 ==>               DEVELOPMENT OR PRODUCTION;
2663 ==>           4.  THE SYSTEM/ITEM IS COMPATIBLE WITH EXISTING/PLANNED
2664 ==>               MAINTENANCE PROGRAMS;
2665 ==>           5.  THE SYSTEM/ITEM IS CONSIDERED COMPLEX WITH A HIGH
2666 ==>               TECHNOLOGICAL RISK.
2667 ==>
2668 ==>
2669 ==>
2670 ==>
2671 ==>
2672 ==>
2673 ==> WILL THE CONTRACTOR BE REQUIRED TO ESTABLISH AND CHAIR AN INTERFACE
2674 ==> CONTROL WORKING GROUP (ICWG) ?
2675 ==>
2676 ==> The contractor shall establish and chair an Interface Control Working
2677 ==> Group (ICWG) which shall have the following responsibilities:
2678 ==>
2679 ==> SOW:  COORDINATE WITH SYSTEM ENGINEERING.  SET FORTH THE CONTRACTOR'S
2680 ==>       RESPONSIBILITIES AS THE CHAIRMAN OF THE INTERFACE CONTROL WORK-
2681 ==>       ING GROUP.
2682 ==>
2683 ==> CDRL:  DI-E-7031 APPLIES FOR INTERFACE CONTROL DRAWINGS.  TAILOR AS
2684 ==>        REQUIRED.
2685 ==>
2686 ==> WILL THE CONTRACTOR BE REQUIRED TO BE A MEMBER OF AN INTERFACE CONTROL
2687 ==> WORKING GROUP (ICWG) ?
2688 ==>
2689 ==> The contractor/subcontractor shall provide a representative to the
2690 ==> Interface Control Working Group (ICWG), who will have the following
2691 ==> responsibilities:
2692 ==>
2693 ==> SOW:  COORDINATE WITH SYSTEM ENGINEERING, AND SET FORTH THE CONTRACT-
2694 ==>       OR'S RESPONSIBILITIES AS A MEMBER OF THE INTERFACE CONTROL WORK-
2695 ==>       ING GROUP (ICWG).
2696 ==>
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2697 ==> CDRL: DI-E-7031 APPLIES FOR INTERFACE CONTROL DRAWINGS. TAILOR AS
2698 ==> REQUIRED.
2699 ==>
2700 ==> IF THE USE OF AN INTERFACE CONTROL WORKING GROUP (ICWG) IS NOT APPLIC-
2701 ==> ABLE, WILL THE CONTRACTOR HAVE OTHER RESPONSIBILITIES FOR INTERFACE
2702 ==> CONTROL ACTIVITY ?
2703 ==>
2704 ==> SOW: COORDINATE WITH SYSTEM ENGINEERING, AND SET FORTH THE CONTRACT-
2705 ==> OR'S RESPONSIBILITIES FOR INTERFACE CONTROL ACTIVITIES.
2706 ==>
2707 ==> CDRL: DI-E-7031 APPLIES FOR INTERFACE CONTROL DRAWINGS. TAILOR AS
2708 ==> REQUIRED.
2709 ==>
2710 ==> IS THE CONTRACTOR RESPONSIBLE FOR FURTHER DEFINING AND UPDATING THE
2711 ==> FUNCTIONAL CONFIGURATION IDENTIFICATION AND/OR BASELINE, ESTABLISHED
2712 ==> DURING THE VALIDATION PHASE ?
2713 ==>
2714 ==> Reference MIL-STD-483, PARA 3.15 (Quality Assurance Provisions);
2715 ==> change as follows: A verification matrix shall be included in Section
2716 ==> 4 of all specifications prepared per the appendices of this standard.
2717 ==> CDRL: DI-E-3117, SYS SEG SPEC, MAY ALSO BE APPLICABLE. ADD AND
2718 ==> TAILOR WHEN REQUIRED.
2719 ==>
2720 ==> IS THE CONTRACTOR RESPONSIBLE FOR ESTABLISHING OR FURTHER DEFINING THE
2721 ==> ALLOCATED CONFIGURATION IDENTIFICATION AND BASELINES ?
2722 ==>
2723 ==> Reference MIL-STD-483, PARA 3.15 (Quality Assurance Provisions);
2724 ==> change as follows: A verification matrix shall be included in Section
2725 ==> 4 of all specifications prepared per the appendices of this standard.
2726 ==> The allocated specifications shall be prepared as Part I of two part
2727 ==> specifications IAW para 3.1.4. of MIL-STD-490.
2728 ==> CDRL: DI-E-3120A AND DI-E-3119B NORMALLY APPLY. TAILOR AS REQUIRED.
2729 ==> CDRL: THE FOLLOWING DATA ITEMS MAY ALSO BE APPLICABLE:
2730 ==> DI-E-3104,
2731 ==> DI-E-3105,
2732 ==> DI-E-30130A.
2733 ==>
2734 ==> IS THE CONTRACTOR RESPONSIBLE FOR DEFINING AND ESTABLISHING THE
2735 ==> PRODUCT CONFIGURATION IDENTIFICATION AND BASELINE ?
2736 ==>
2737 ==> Reference MIL-STD-483, PARA 3.15 (Quality Assurance Provisions);
2738 ==> change as follows: A verification matrix shall be included in Section
2739 ==> 4 of all specifications prepared per the appendices of this standard.
2740 ==> The product specifications shall be prepared as Part II of two part
2741 ==> specifications IAW para 3.1.4. of MIL-STD-490.
2742 ==> CDRL: DI-E-3130A AND DI-E-3120B NORMALLY APPLY. TAILOR AS REQUIRED.
2743 ==> CDRL: THE FOLLOWING DATA ITEMS MAY ALSO BE APPLICABLE:
2744 ==> DI-E-3104,
2745 ==> DI-E-3105,
2746 ==> DI-E-3130,
2747 ==> DI-E-3131,
2748 ==> DI-E-3132,
2749 ==> DI-E-30130A.

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2750 ==>
2751 ==> IS THE CONTRACTOR RESPONSIBLE FOR MAINTAINING THE HARDWARE SPECIFICA-
2752 ==> TIONS THAT HAVE BEEN BASELINED ?
2753 ==>
2754 ==> CDRL:  DATA ITEM DI-E-3106 IS APPLICABLE.  TAILOR AS REQUIRED.
2755 ==>
2756 ==> IS THE CONTRACTOR RESPONSIBLE FOR MAINTAINING THE SOFTWARE SPECIFICA-
2757 ==> TIONS THAT HAVE BEEN BASELINED ?
2758 ==>
2759 ==> CDRL:  THE FOLLOWING DATA ITEMS ARE APPLICABLE; TAILOR AS REQUIRED:
2760 ==>          DI-E-3121,
2761 ==>          DI-E-3122,
2762 ==>          DI-E-3123.
2763 ==>
2764 ==> WILL ENGINEERING DRAWINGS AND SPECIFICATIONS BE PREPARED FOR HARDWARE
2765 ==> AND SOFTWARE CONFIGURATION ITEMS THAT ARE TO BE DEVELOPED, PROCURED
2766 ==> AND/OR DELIVERED ?
2767 ==>
2768 ==> SOW:  MIL-STD-481A MAY BE USED IN LIEU OF DOD-STD-480A
2769 ==>       FOR SOME ACQUISITIONS, HOWEVER
2770 ==>       THE PROCUREMENT ACTIVITY MUST THEN ASSUME THE RESPONSIBILITY
2771 ==>       FOR DETERMINATION OF POSSIBLE EFFECTS OF THE ENGINEERING CHANGE
2772 ==>       ON HIGHER LEVELS OR ASSOCIATED ITEMS.  CAUTION: DO NOT USE
2773 ==>       MIL-STD-481A WITHOUT CONSULTING WITH THE STAFF OPR.
2774 ==>       DO NOT USE MIL-STD-481 AND DOD-STD-480 AT THE SAME TIME!
2775 ==> CDRL:  DATA ITEMS DI-E-3127, DI-E-3128, AND DI-E-3129 ARE APPLICABLE.
2776 ==>         TAILOR AS REQUIRED.
2777 ==>        ADD THE FOLLOWING TO THE BACKUP SHEET OF DATA ITEM DI-E-3128:
2778 ==>         PRIOR TO PREPARATION OF A FORMAL ECP, THE CONTRACTOR SHALL
2779 ==>         NOTIFY THE GOVERNMENT OF ITS INTENT TO SUBMIT A PROPOSAL
2780 ==>         VIA AN ADVANCE CHANGE STUDY NOTICE (ACSN).  EMERGENCY,
2781 ==>         URGENT, COMPATIBILITY AND RECORD TYPE ECPs DO NOT REQUIRE
2782 ==>         AN ACSN PRIOR TO SUBMITTAL.
2783 ==>
2784 ==> WILL MULTIPLE SYSTEMS BE INSTALLED AT FIXED SITES ?
2785 ==>
2786 ==> CDRL: DI-E-3116 APPLIES.  TAILOR AS REQUIRED.
2787 ==>
2788 ==> WILL THE SYSTEM CONTAIN HARDWARE/SOFTWARE OF: NEW DESIGNS,
2789 ==> MODIFICATIONS TO EXISTING DESIGNS OR NEW SOURCES ?
2790 ==>
2791 ==> SOW:  A FUNCTIONAL CONFIGURATION AUDIT (FCA) IS NORMALLY ACCOMPLISHED
2792 ==>       DURING FULL SCALE DEVELOPMENT AND IS REQUIRED FOR EACH CI/CPCI.
2793 ==>
2794 ==> SOW:  A FORMAL QUALIFICATION REVIEW (FQR) IS NORMALLY COMBINED
2795 ==>       WITH THE FCA.  COORDINATE WITH THE STAFF SYSTEM ENGINEERING,
2796 ==>       TEST, AND CONFIGURATION MANAGEMENT SPECIALISTS.
2797 ==>
2798 ==> SOW:  WHEN THE PROTOTYPE OR PREPRODUCTION ARTICLE IS NOT REPRESENTA-
2799 ==>       TIVE OF THE PRODUCTION UNIT, THE FCA MUST BE DEFERED UNTIL THE
2800 ==>       FIRST PRODUCTION ARTICLE.
2801 ==>
2802 ==> SOW:  THE FCA SHOULD ALWAYS BE CONDUCTED ON THE ITEM THAT IS REPRESEN-
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2803 ==>       TATIVE OF THE CONFIGURATION TO BE RELEASED FOR PRODUCTION
2804 ==>       QUANTITIES.
2805 ==>
2806 ==> SOW:  THE FCA MUST BE ACCOMPLISHED BEFORE THE PHYSICAL CONFIGURATION
2807 ==>       AUDIT (PCA).
2808 ==>
2809 ==>
2810 ==> CDRL:  DI-E-3118 AND DI-A-3029 APPLY.  COORDINATE WITH SYSTEMS
2811 ==>        ENGINEERING AND TEST TO ENSURE THAT THESE DATA ITEMS HAVE NOT
2812 ==>        BEEN DUPLICATED.
2813 ==>
2814 ==> HAS THE DEVELOPMENT CONTRACTOR BEEN PRESELECTED FOR THE PRODUCTION
2815 ==> PHASE ?
2816 ==>
2817 ==> SOW:  A PHYSICAL CONFIGURATION AUDIT (PCA) WILL BE ACCOMPLISHED ON THE
2818 ==>       FIRST PRODUCTION ARTICLE DURING THE PRODUCTION PHASE.
2819 ==>
2820 ==> SOW:  CAUTION - PCAs ARE GENERALLY CONDUCTED DURING PRODUCTION, HOW-
2821 ==>       EVER IF THE PRODUCTION CONTRACTOR HAS NOT BEEN PRESELECTED, THE
2822 ==>       PCA SHALL BE ACCOMPLISHED DURING FULL SCALE DEVELOPMENT.
2823 ==>       SELECT A CI THAT IS MOST REPRESENTATIVE OF THE PRODUCTION UNIT
2824 ==>       FOR THE PCA.
2825 ==>
2826 ==> CDRL:  DI-E-3118 AND DI-A-3029 APPLY.  COORDINATE WITH SYSTEMS
2827 ==>        ENGINEERING AND TEST TO ENSURE THAT THESE DATA ITEMS HAVE NOT
2828 ==>        BEEN DUPLICATED.
2829 ==>
2830 ==> IS A FORMAL QUALIFICATION REVIEW (FQR) REQUIRED ?
2831 ==>
2832 ==> CAUTION:  FQRs ARE REQUIRED WHEN CONFIGURATION ITEMS (CIs) REQUIRE
2833 ==>           QUALIFICATION AT THE SYSTEM LEVEL.
2834 ==>
2835 ==> SOW:  A FORMAL QUALIFICATION REVIEW (FQR) IS GENERALLY COMBINED WITH A
2836 ==>       FUNCTIONAL CONFIGURATION AUDIT (FCA).
2837 ==>
2838 ==> SOW:  COORDINATE WITH SYSTEMS ENGINEERING AND TEST TO ENSURE THIS
2839 ==>       REQUIREMENT HAS NOT BEEN DUPLICATED.
2840 ==>
2841 ==> CDRL:  DI-E-3118 AND DI-A-3029 APPLY.  COORDINATE WITH SYSTEMS
2842 ==>        ENGINEERING AND TEST TO ENSURE THAT THESE DATA ITEMS HAVE NOT
2843 ==>        BEEN DUPLICATED.
2844 ==>
2845 ==> IS A FORMAL QUALIFICATION REVIEW (FQR) REQUIRED ?
2846 ==>
2847 ==> WILL STATUS ACCOUNTING REPORTS BE REQUIRED IN ADDITION TO THE CONFIGU-
2848 ==> RATION ITEM DEVELOPMENT RECORDS ?
2849 ==>
2850 ==> CDRL:  DI-E-3133 APPLIES.  TAILOR AS REQUIRED.
2851 ==>
2852 ==> CDRL:  DI-E-3107 MAY ALSO APPLY.
2853 ==>
2854 ==> CDRL:  MODIFY DI-E-3133 TO INDICATE WHICH TYPE OF REPORTS ARE RE-
2855 ==>        QUIRED AND WHETHER THEY ARE TO BE MANUALLY OR MACHINE PREPARED.
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2856 ==>
2857 ==> WILL CONTRACTOR DATA BE REQUIRED ?
2858 ==>
2859 ==> See the Contract Data Requirements List (CDRL), the Schedule and
2860 ==> General Provisions of the contract for data requirements.
2861 ==> CDRL: PREPARATION AND DELIVERY OF DATA ARE FUNCTIONS OF THE CDRL AND
2862 ==> ACCOMPLISHED THROUGH THE DATA CALL. A DRAFT CDRL IS AUTOMATI-
2863 ==> CALLY MADE WHEN RUNNING CGADS FOR AN SOW. IT SHOULD BE USED AS
2864 ==> A BASE DOCUMENT FOR DATA CALL. CONTACT YOUR PROGRAM OFFICE
2865 ==> DATA MANAGER FOR ASSISTANCE.
2866 ==> CONTRACT: THE GENERAL PROVISIONS OF THE CONTRACT COVER SUCH ITEMS AS:
2867 ==> DATA RIGHTS, PRICING, REQUIREMENTS, AND THE ACCESSION
2868 ==> LIST. CONTACT YOUR BUYER OR PCO FOR ASSISTANCE.
2869 ==> IS HARDWARE BEING DEVELOPED ?
2870 ==>
2871 ==> See the CDRL for Engineering Data requirements.
2872 ==> SOW: NO STATEMENT IS REQUIRED IN THE SOW, HOWEVER ENGINEERING DATA IS
2873 ==> REQUIRED AND MUST BE ACQUIRED THROUGH THE CDRL.
2874 ==>
2875 ==> CDRL: THE DATA ITEMS THAT PROVIDE ENGINEERING DATA (DRAWINGS) OR THE
2876 ==> INFORMATION THAT ENABLES THE PROGRAM OFFICE TO DECIDE THE TYPE
2877 ==> OF DATA REQUIRED CONSISTS OF COMBINATIONS OF THE FOLLOWING:
2878 ==> DI-E-7031/M, DI-E-3148, DI-P-3461, DI-P-3472, AND DI-P-3473.
2879 ==>
2880 ==> Engineering Data requirements are not applicable.
2881 ==> IS NEW EQUIPMENT BEING DESIGNED OR DEVELOPED, OR WILL COMMERCIAL
2882 ==> MATERIAL OR EQUIPMENT REQUIRE IDENTIFICATION FOR USE BY THE U.S.
2883 ==> GOVERNMENT ?
2884 ==>
2885 ==> CDRL: DI-E-3216A APPLIES; TAILOR AS REQUIRED.
2886 ==>
2887 ==> WILL SCIENTIFIC AND TECHNICAL INFORMATION (STINFO) REPORTING BE
2888 ==> REQUIRED ?
2889 ==>
2890 ==> CAUTION: STINFO IS ALWAYS REQUIRED BY THE GOVERNMENT DURING THIS
2891 ==> PHASE TO MINIMIZE DUPLICATION AND CONSERVE RESOURCES!
2892 ==> YOU SHOULD ENTER A YES RESPONSE!
2893 ==>
2894 ==> See the Schedule of the contract, Section H.48 and the CDRL.
2895 ==> CDRL: DI-S-3591 IS USED TO ACQUIRE STINFO. THIS DATA ITEM MUST BE
2896 ==> REVIEWED AND APPROVED BY THE PROJECT OFFICER.
2897 ==>
2898 ==> YOU SHOULD CHANGE YOUR RESPONSE TO YES FOR THIS QUESTION.
2899 ==>
2900 ==> WILL PHOTOGRAPHIC DOCUMENTATION BE REQUIRED ?
2901 ==>
2902 ==> Plan, manage, and accomplish photographic documentation of selected
2903 ==> program milestones. The documentation shall be integrated with the
2904 ==> Development Test and Evaluation (DT&E) programs. Ensure that
2905 ==> subcontractor efforts are complementary.
2906 ==> SOW: LIST SELECTED EVENTS, ITEMS OR EFFORTS. IF APPROPRIATE, TWO OR
2907 ==> MORE ASSOCIATED EVENTS, ITEMS, OR EFFORTS MAY BE ASSEMBLED AS
2908 ==> ONE FILM CLIP. THE PROFESSIONAL ASSISTANCE OF THE STAFF PHOTO-

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2909 ==>       GRAPHIC OFFICER IS ESSENTIAL BEFORE NEGOTIATING FOR CONTRACTOR
2910 ==>       PLANS AND SPECIFIC REQUIREMENTS.
2911 ==>
2912 ==> CDRL:  DI-A-3006, DI-A-3011, AND DI-A-3013 APPLY; TAILOR AS REQUIRED.
2913 ==>
2914 ==> CDRL:  THE FOLLOWING DATA ITEMS SHOULD BE CONSIDERED:
2915 ==>       DI-A-3010    MOTION PICTURE FILM CLIPS
2916 ==>       DI-A-3012    COMPLETE MOTION PICTURE FILM REPORTS
2917 ==>       DI-A-3024    PRESENTATION MATERIAL
2918 ==>       DI-H-5521    TECHNICAL PRESENTATIONS FOR VIDEOTAPING
2919 ==>       UDI-M-21110  ARTWORK, GRAPHIC (A/V) AIDS
2920 ==>       UDI-E-20136  DATA, GRAPHIC AND TEXTUAL PRESENTATIONS
2921 ==>
2922 ==> CDRL:  THE PROGRAM OFFICE MAY TAILOR DI-A-3006 TO INCLUDE VIDEOTAPE,
2923 ==>       GRAPHICS OR OTHER A/V MEDIA.
2924 ==>
2925 ==> IS A SYSTEM BEING DESIGNED, DEVELOPED OR MANUFACTURED?
2926 ==>
2927 ==> SOW:  A PRELIMINARY CONTRACT WORK BREAKDOWN STRUCTURE (CWBS) AND
2928 ==>       DICTIONARY TAILORED TO THE SPECIFIC CONTRACT USING MIL-STD-881A
2929 ==>       AS A GUIDE MUST BE PREPARED BY THE PROGRAM OFFICE AND INCLUDED
2930 ==>       AS PART OF THE CONTRACT SOW.  CONTRACT LINE ITEMS, CONFIGURATION
2931 ==>       ITEMS, THE CONTRACT SPECIFICATION TREE AND CONTRACTOR RESPONSE/S
2932 ==>       TO THE RFP MUST BE CORRELATED WITH OR EXPRESSED IN TERMS OF THE
2933 ==>       PRELIMINARY CWBS.  TAILORING OF MIL-STD-881 IS REQUIRED.  DO NOT
2934 ==>       RESTATE REQUIREMENTS.  SIMPLY CALL OUT PARAGRAPH NUMBERS.
2935 ==>
2936 ==> CDRL:  DI-A-3023 APPLIES.  MODIFY FOR MAINTENANCE AND UPDATING.
2937 ==>
2938 ==> CONTRACT:  REF MIL-STD-881A PARA 5.3.3.  THE PROGRAM OFFICE SHALL
2939 ==>           PLACE IN THE CONTRACT THE CWBS LEVELS AT WHICH THE COST
2940 ==>           ACCUMULATIONS SHALL BE REPORTED TO THE GOVERNMENT.  SEE
2941 ==>           YOUR BUYER OR PCO FOR ASSISTANCE.
2942 ==>
2943 ==> IS THIS CONTRACT FIRM-FIXED PRICE ?
2944 ==>
2945 ==> SOW:  COST INFORMATION SYSTEMS ARE NOT REQUIRED FOR FIRM-FIXED PRICE
2946 ==>       CONTRACTS, BUT MAY BE AUTHORIZED BY THE FIELD COMMAND FOCAL
2947 ==>       POINT (AT ESD, THE OPR IS ACCI).
2948 ==>
2949 ==> SOW:  COST INFORMATION SYSTEMS ARE NOT REQUIRED FOR FIRM-FIXED PRICE
2950 ==>       CONTRACTS, BUT MAY BE AUTHORIZED BY THE FIELD COMMAND FOCAL
2951 ==>       POINT (AT ESD, THE OPR IS ACCI).
2952 ==>
2953 ==> WILL THIS CONTRACT BE FOR $2 MILLION TO $40 MILLION RESEARCH AND
2954 ==> DEVELOPMENT ?
2955 ==>
2956 ==> See the General Provisions of this contract.
2957 ==> CONTRACT:  APPLY AFSC/DAR SUP 7-2003.101 (SOLICITATION CLAUSE) AND
2958 ==>           AFSC/DAR SUP 7-104.201 (CONTRACT CLAUSE) TO THE GENERAL
2959 ==>           PROVISIONS OF THE CONTRACT IF THE ESTIMATED COST EXCEEDS
2960 ==>           $10 MILLION.
2961 ==> CDRL:  FOR DI-F-6010A, SPECIFY IN BLOCK 16 THE LEVEL OF REPORTING
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2962 ==>        (NORMALLY LEVEL 3).  PROVIDE AS BACK-UP THE AUTOMATED FINANCIAL
2963 ==>        ANALYSIS (AFA) PROGRAM.  IN BLOCK 16 STATE, "DELIVER ONE
2964 ==>        MAGNETIC TAPE.  SPECIFIC INSTRUCTIONS FOR THIS TAPE ARE
2965 ==>        INCLUDED IN THE BACK-UP."
2966 ==>
2967 ==> NOTE:  AFSC SUP 1, PARA 4d(1) TO AFR 800-6.  "FOR CONTRACTS WITH A
2968 ==>        PRICE OF $10 MILLION OR GREATER THAT ARE NOT FFP, THE C/SSR
2969 ==>        IS MANDATORY IF THE CPR IS NOT OBTAINED.  FOR CONTRACTS
2970 ==>        BETWEEN $2 MILLION AND $10 MILLION THAT ARE NOT FFP, THE
2971 ==>        C/SSR IS REQUIRED PROVIDED THE CPR IS NOT OBTAINED; BUT MAY
2972 ==>        BE WAIVED BY THE FIELD COMMAND FOCAL POINT (ESD/ACCI).  WHEN
2973 ==>        THE C/SSR IS REQUIRED, THE STANDARD AFSC DAR SUPPLEMENT
2974 ==>        SOLICITATION AND CONTRACT CLAUSES (7-2003.101 AND 7-104.201)
2975 ==>        WILL BE USED.  THESE CLAUSES ARE MANDATORY WHEN C/SSRs ARE
2976 ==>        APPLIED TO CONTRACTS VALUED AT $10 MILLION OR GREATER."
2977 ==>
2978 ==> FOR CONTRACTS UNDER $2 MILLION, COST REPORTING SYSTEMS ARE NOT
2979 ==> REQUIRED.  FOR COSTS OVER $40 MILLION, COST/SCHEDULE CONTROL SYSTEMS
2980 ==> CRITERIA (C/SCSC) MUST BE USED.
2981 ==>
2982 ==> IS THIS CONTRACT FIRM-FIXED PRICE ?
2983 ==>
2984 ==> COST/SCHEDULE CONTROL SYSTEM DOES NOT APPLY.
2985 ==>
2986 ==> SOW:  ON FIRM-FIXED PRICE CONTRACTS, THE GOVERNMENT HAS NO RIGHT TO
2987 ==>       TRACK COSTS AND THEREFORE COST/SCHEDULE CONTROL SYSTEMS IS NOT
2988 ==>       WARRENTED.
2989 ==>
2990 ==> WILL THIS CONTRACT BE $40 MILLION OR GREATER FOR RESEARCH AND
2991 ==> DEVELOPMENT ?
2992 ==>
2993 ==> See the General Provisions of this contract.
2994 ==> CONTRACT:  APPLY DAR 7-2003.43 (SOLICITATION CLAUSE) AND DAR 7-104.87
2995 ==>            (CONTRACT CLAUSE) TO THE GENERAL PROVISIONS OF THE CON-
2996 ==>            TRACT.
2997 ==>
2998 ==> CDRL:  DI-F-6000C, DI-F-6004B, DI-F-6006 THRU DI-F-6009 APPLY;
2999 ==>        TAILOR AS REQUIRED.
3000 ==>
3001 ==> FOR CONTRACTS UNDER $40 MILLION, COST/SCHEDULE CONTROL SYSTEMS ARE NOT
3002 ==> REQUIRED (COST INFORMATION SYSTEMS WILL BE USED).
3003 ==>
3004 ==> DOES THIS PROGRAM REQUIRE A UNIQUE METHOD OF SCHEDULE MANAGEMENT ?
3005 ==>
3006 ==> CAUTION:  A NO RESPONSE IS LIKELY SINCE, IF POSSIBLE, WE SHOULD NOT
3007 ==>           INTERFERE WITH THE CONTRACTOR'S NORMAL INTERNAL PROCEDURES.
3008 ==>
3009 ==> SOW:  CLEARLY AND CONCISELY TASK THE CONTRACTOR TO COMPLY WITH YOUR
3010 ==>       UNIQUE SCHEDULE MANAGEMENT REQUIREMENTS.
3011 ==>
3012 ==> CDRL:  DI-A-3007 APPLIES; TAILOR AS REQUIRED.  DI-A-3009 AND DI-A-2024
3013 ==>        MAY BE APPLICABLE.
3014 ==>
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3015 ==> Schedule Management is a requirement of this contract.  The contract-
3016 ==> or's normal internal procedures are acceptable.  See the CDRL.
3017 ==> SOW:  THE GOVERNMENT DOES NOT IMPOSE A STYLE OF SCHEDULING ON THE
3018 ==>       CONTRACTOR.  IT DOES EXPECT GOOD BUSINESS PRACTICE IN DEVELOPING
3019 ==>       AND MANAGING A SCHEDULE.  PROGRAM REVIEWS SHOULD BE SCHEDULED
3020 ==>       DEPENDING ON THE ACQUISITION.
3021 ==>
3022 ==> CDRL:  DI-A-3007 APPLIES; TAILOR AS REQUIRED.  DI-A-3009 AND DI-A-2024
3023 ==>        MAY APPLY; REVIEW FOR TAILORING TO YOUR PROGRAM.
3024 ==>
3025 ==> DO YOU REQUIRE DOCUMENTATION ON SUPPORT FACTORS FOR THE NEW SYSTEM ?
3026 ==>
3027 ==> NOTE:  THESE FACTORS INCLUDE: MOBILITY REQUIREMENTS, DEPLOYMENT
3028 ==>        SCENARIOS, MISSION FREQUENCY, BASING CONCEPTS, SERVICE LIFE,
3029 ==>        ETC. FOR BOTH PEACETIME AND WARTIME.  IF THIS TASK WAS
3030 ==>        PERFORMED IN AN EARLIER PHASE, YOU MAY WISH TO ONLY UPDATE
3031 ==>        IT NOW.
3032 ==>
3033 ==> NOTE:  AN LSA PLAN IS MANDATORY.  PLEASE RESPOND ACCORDINGLY TO
3034 ==>        FOLLOWING QUESTIONS.
3035 ==>
3036 ==> SOW:  REF: MIL-STD-1388-1A, TASK 201: THIS TASK MAY BE DONE BY THE
3037 ==>       GOVERNMENT, THE CONTRACTOR, OR AS A JOINT EFFORT.  IF THE TASK
3038 ==>       IS PUT ON CONTRACT, THE GOVERNMENT WILL HAVE TO SUPPLY A SIGNI-
3039 ==>       FICANT AMOUNT OF DATA TO THE CONTRACTOR.
3040 ==>
3041 ==> SOW:  IF YOU WISH TO UPDATE AN EXISTING USE STUDY, APPLY ONLY TASK
3042 ==>       201.2.4.
3043 ==>
3044 ==>
3045 ==> SOW:  LSA IS TO BE APPLIED TO ALL AIR FORCE MANAGED ACQUISITION
3046 ==>       PROGRAMS PER DIRECTION OF DOD DIRECTIVE 5000.39, AFR 800-8
3047 ==>       AND AFLC/AFSCR 800-36.  THE CURRENT GUIDANCE DOCUMENTS ARE
3048 ==>       MIL-STD-1388-1A AND DARCOM-P-750-16.  A WAIVER IS REQUIRED
3049 ==>       IF YOU DO NOT USE LSA.  CONTACT THE LSA STAFF SPECIALIST FOR
3050 ==>       FURTHER ASSISTANCE.
3051 ==>
3052 ==> CDRL:  REF: MIL-STD-1388-1A: FOR TASK 201, DI-S-7115 APPLIES; TAILOR
3053 ==>        AS REQUIRED.
3054 ==>
3055 ==> SOW:  SUPPORT FACTOR INFORMATION IS GENERALLY REQUIRED IN THIS PHASE.
3056 ==>       REVIEW MIL-STD-1388-1A, TASK 201 FOR FURTHER DETAILS.
3057 ==>
3058 ==> SOW:  LSA IS TO BE APPLIED TO ALL AIR FORCE MANAGED ACQUISITION
3059 ==>       PROGRAMS PER DIRECTION OF DOD DIRECTIVE 5000.39, AFR 800-8
3060 ==>       AND AFLC/AFSCR 800-36.  THE CURRENT GUIDANCE DOCUMENTS ARE
3061 ==>       MIL-STD-1388-1A AND DARCOM-P-750-16.  A WAIVER IS REQUIRED
3062 ==>       IF YOU DO NOT USE LSA.  CONTACT THE LSA STAFF SPECIALIST FOR
3063 ==>       FURTHER ASSISTANCE.
3064 ==>
3065 ==> SOW:  SUPPORT FACTOR INFORMATION IS GENERALLY REQUIRED IN THIS PHASE.
3066 ==>       REVIEW MIL-STD-1388-1A, TASK 201 FOR FURTHER DETAILS.
3067 ==>
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3068 ==> SOW:  LSA IS TO BE APPLIED TO ALL AIR FORCE MANAGED ACQUISITION
3069 ==>       PROGRAMS PER DIRECTION OF DOD DIRECTIVE 5000.39, AFR 800-8
3070 ==>       AND AFLC/AFSCR 800-36.  THE CURRENT GUIDANCE DOCUMENTS ARE
3071 ==>       MIL-STD-1388-1A AND DARCOM-P-750-16.  A WAIVER IS REQUIRED
3072 ==>       IF YOU DO NOT USE LSA.  CONTACT THE LSA STAFF SPECIALIST FOR
3073 ==>       FURTHER ASSISTANCE.
3074 ==>
3075 ==> DO YOU WANT TO MAXIMIZE THE USE OF EXISTING RESOURCES (HARDWARE,
3076 ==> SOFTWARE, TRAINED MANPOWER, ETC.) IN THE NEWLY DESIGNED SYSTEM ?
3077 ==>
3078 ==> NOTE:  AN LSA PLAN IS MANDATORY.  PLEASE RESPOND ACCORDINGLY TO
3079 ==>       FOLLOWING QUESTIONS!
3080 ==>
3081 ==> CDRL:  REF: MIL-STD-1388-1A: FOR TASK 202, DI-S-3606, DI-E-7026,
3082 ==>       DI-E-7027, DI-E-7028, DI-E-7029 AND DI-E-7030 MAY APPLY;
3083 ==>       TAILOR AS REQUIRED AFTER CONSULTING YOUR PARTS CONTROL
3084 ==>       STAFF SPECIALIST AS LSA IS NOT THE PRIMARY IMPLEMENTING
3085 ==>       DOCUMENT.
3086 ==>
3087 ==> DO YOU NEED A BASELINE COMPARISON SYSTEM (BCS) TO DETERMINE SUPPORT
3088 ==> PARAMETERS OR SUPPORT, COST AND READINESS DRIVERS FOR THE NEW SYSTEM ?
3089 ==>
3090 ==> NOTE:  THIS WILL PROVIDE COST AND PERFORMANCE DATA, AS WELL AS LESSONS
3091 ==>       LEARNED, FROM ALREADY EXISTING SYSTEMS.  THIS TASK IS, HOWEVER,
3092 ==>       BOTH COSTLY AND TIME CONSUMING TO PERFORM!  IF THIS TASK WAS
3093 ==>       PERFORMED IN AN EARLIER PHASE, YOU MAY WISH TO ONLY UPDATE IT
3094 ==>       NOW.
3095 ==>
3096 ==> NOTE:  AN LSA PLAN IS MANDATORY.  PLEASE RESPOND ACCORDINGLY TO
3097 ==>       FOLLOWING QUESTIONS!
3098 ==>
3099 ==> SOW:  REF: MIL-STD-1388-1A: IF YOU WISH TO LIMIT THE BCS TO CERTAIN
3100 ==>       SYSTEMS OR TYPES OF EQUIPMENT, THESE MUST BE SPECIFIED IN THE
3101 ==>       SOW BY A PARAGRAPH MODIFYING TASK 203.
3102 ==>
3103 ==> SOW:  IF YOU WISH TO UPDATE AN EXISTING BCS, APPLY ONLY SUBTASKS
3104 ==>       203.2.7 AND 203.2.8.
3105 ==>
3106 ==> DO YOU WANT THE CONTRACTOR TO EXPLORE NEW TECHNOLOGICAL ADVANCES
3107 ==> AND THEIR IMPACT ON SYSTEM SUPPORT ?
3108 ==>
3109 ==> NOTE:  AT THIS PHASE OF THE PROGRAM, THIS TASK IS ONLY APPLIED
3110 ==>       SELECTIVELY TO UPDATE WORK ALREADY PERFORMED OR TO CONSIDER
3111 ==>       A SPECIFIC NEW TECHNOLOGY.
3112 ==>
3113 ==> NOTE:  AN LSA PLAN IS MANDATORY.  PLEASE RESPOND ACCORDINGLY TO
3114 ==>       FOLLOWING QUESTIONS!
3115 ==>
3116 ==> SOW:  IF THIS TASK IS TO UPDATE WORK ALREADY PERFORMED, APPLY ONLY
3117 ==>       SUBTASKS 204.2.2 AND 204.2.3.
3118 ==>
3119 ==> CDRL:  REF: MIL-STD-1388-1A: DI-S-7117 MAY APPLY FOR TASK 204.
3120 ==>
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3121 ==>
3122 ==> DO YOU WANT THE CONTRACTOR TO ESTABLISH OR UPDATE SUPPORT DESIGN
3123 ==> CONSTRAINTS AND INCLUDE THEM IN LSA DOCUMENTATION, SYSTEM
3124 ==> SPECIFICATIONS, ETC. ?
3125 ==>
3126 ==> NOTE:  AN LSA PLAN IS MANDATORY.  PLEASE RESPOND ACCORDINGLY TO
3127 ==>       FOLLOWING QUESTIONS!
3128 ==>
3129 ==> SOW:  REF: MIL-STD-1388-1A: TASK 205 IS THE FIRST TASK THAT REQUIRES
3130 ==>       DOCUMENTATION OF DATA IN THE LOGISTICS SUPPORT ANALYSIS RECORD
3131 ==>       (LSAR) OR EQUIVALENT FORMAT.  IF YOU DO NOT PLAN TO REQUIRE A
3132 ==>       FORMAL LSAR, YOU MUST SPECIFY IN THE SOW HOW YOU WANT THE
3133 ==>       INFORMATION PRESENTED (I.E., REPORT, BRIEFING, ETC.).
3134 ==>
3135 ==> CDRL:  REF: MIL-STD-1388-1A: DI-S-6171(A), LSAR, MAY APPLY TO TASK
3136 ==>       205.  REVIEW AND TAILOR CAREFULLY.
3137 ==>
3138 ==> DO YOU WANT TO IDENTIFY THE OPERATIONS AND SUPPORT TASKS NEEDED
3139 ==> TO KEEP THE NEW EQUIPMENT OPERATING ?
3140 ==>
3141 ==> NOTE:  THESE TASKS SHOULD BE SPECIFIED FOR EACH MAINTENANCE CONCEPT
3142 ==>       BEING CONSIDERED, FOR BOTH PEACETIME AND WARTIME.  THE RESULTS
3143 ==>       OF THIS EFFORT SHOULD BE DOCUMENTED IN THE LSA RECORD (LSAR)
3144 ==>       AND SERVE AS THE OUTLINE FOR YOUR TECHNICAL ORDERS AND MANUALS.
3145 ==>
3146 ==>
3147 ==> NOTE:  AN LSA PLAN IS MANDATORY.  PLEASE RESPOND ACCORDINGLY TO
3148 ==>       FOLLOWING QUESTIONS!
3149 ==>
3150 ==> SOW:  REF: MIL-STD-1388-1A: TASK 301.2.4.2, RELIABILITY CENTERED
3151 ==>       MAINTENANCE (RCM), IS NOT, IN GENERAL, COST EFFECTIVE WHEN
3152 ==>       APPLIED TO ELECTRONICS PROGRAMS.  CONSULT YOUR RELIABILITY
3153 ==>       STAFF, THE LSA STAFF SPECIALIST AND/OR THE RCM STAFF SPECIAL-
3154 ==>       IST BEFORE INCLUDING THIS TASK IN YOUR SOW.
3155 ==>
3156 ==>       TASK 301 PRODUCES A SIGNIFICANT AMOUNT OF DATA THAT IS COMMON
3157 ==>       TO THE RELIABILITY AND MAINTAINABILITY FUNCTIONS.  COORDINATE
3158 ==>       YOUR REQUIREMENTS CAREFULLY WITH YOUR R&M STAFF TO INSURE
3159 ==>       THAT NO REDUNDANCIES OCCUR.
3160 ==>
3161 ==> CDRL:  TASK 301 IS THE FIRST TASK THAT REQUIRES EXTENSIVE
3162 ==>       DOCUMENTATION IN AN LSAR.  CAREFULLY CONSIDER HOW AND
3163 ==>       WHO WILL USE THE DATA, AND TAILOR DI-S-6171A ACCORDINGLY.
3164 ==>       MISTAKES HERE CAN BE COSTLY!
3165 ==>
3166 ==>
3167 ==> DO YOU WANT THE CONTRACTOR TO PROPOSE AND EVALUATE ALTERNATIVE SUPPORT
3168 ==> CONCEPTS FOR THE SYSTEM ?
3169 ==>
3170 ==> NOTE:  THE CONTRACTOR WILL ALSO BE REQUIRED TO PERFORM AND DOCUMENT
3171 ==>       SYSTEM TRADEOFFS MADE DURING THE DESIGN PROCESS.  THESE TASKS
3172 ==>       ARE DESIGNED TO FORCE COST, SCHEDULE, READINESS AND SUPPORT-
3173 ==>       ABILITY TO BE CONSIDERED ALONG WITH PERFORMANCE WHEN DESIGN
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3174 ==>        DECISIONS ARE MADE.
3175 ==>
3176 ==>
3177 ==>
3178 ==> NOTE:  AN LSA PLAN IS MANDATORY.  PLEASE RESPOND ACCORDINGLY TO
3179 ==>        FOLLOWING QUESTIONS!
3180 ==>
3181 ==> SOW:  REF: MIL-STD-1388-1A, TASK 303.2.7: PLEASE NOTE THAT THIS TASK
3182 ==>       SPECIFICALLY REQUIRES A REPAIR LEVEL ANALYSIS.
3183 ==>
3184 ==> SOW:  IF YOU WISH TO UPDATE WORK DONE IN AN EARLIER PHASE, APPLY ONLY
3185 ==>       SUBTASKS 302.2.2, 302.2.4, 302.2.5 AND TASK 303 AS LISTED ABOVE.
3186 ==>
3187 ==> CDRL:  DI-S-3606 MAY APPLY; TAILOR AS REQUIRED.
3188 ==>
3189 ==> DO YOU WANT A REPAIR LEVEL ANALYSIS PERFORMED ?
3190 ==>
3191 ==> CDRL:  DI-S-3606 MAY APPLY; TAILOR AS REQUIRED.
3192 ==>
3193 ==> DO YOU WANT THE CONTRACTOR TO ANALYZE THE OPERATIONS AND MAINTENANCE
3194 ==> TASKS TO PROVIDE SOURCE DATA FOR PROVISIONING, TECHNICAL MANUALS,
3195 ==> TRAINING, MANPOWER LISTS, ETC. ?
3196 ==>
3197 ==> NOTE:  THIS WILL PROVIDE DATA TO IDENTIFY AREAS WHICH NEED ADDITIONAL
3198 ==>        DESIGN EFFORT TO REDUCE SUPPORT COSTS AND IMPROVE READINESS.
3199 ==>
3200 ==> NOTE:  AN LSA PLAN IS MANDATORY.  PLEASE RESPOND ACCORDINGLY TO
3201 ==>        FOLLOWING QUESTIONS!
3202 ==>
3203 ==> CDRL:  TASK 401 REQUIRES EXTENSIVE DOCUMENTATION IN AN LSAR.
3204 ==>        CAREFULLY CONSIDER HOW AND WHO WILL USE THE DATA, AND
3205 ==>        TAILOR DI-S-6171A ACCORDINGLY!  MISTAKES CAN BE COSTLY!
3206 ==>
3207 ==> CDRL:  DI-S-3606 AND DI-S-4057 MAY APPLY; TAILOR AS REQUIRED.
3208 ==>
3209 ==> DO YOU WANT THE CONTRACTOR TO ASSESS THE IMPACT OF INTRODUCING THE
3210 ==> NEW SYSTEM ?
3211 ==>
3212 ==> NOTE:  THIS INCLUDES LOOKING AT, FOR EXAMPLE, IMPACT ON DEPOT
3213 ==>        WORKLOADS, PROVISIONING, ATE AVAILABILITY, AND MANPOWER.
3214 ==>
3215 ==>
3216 ==> CDRL:  DI-S-7118 APPLIES; TAILOR AS REQUIRED.
3217 ==>
3218 ==> DO YOU WANT TO CONDUCT SURVIVABILITY ANALYSES TO DETERMINE CHANGES IN
3219 ==> SUPPORT REQUIREMENTS BASED ON COMBAT USAGE ?
3220 ==>
3221 ==> CDRL:  DI-S-7118 APPLIES; TAILOR AS REQUIRED.
3222 ==>
3223 ==> DO YOU WANT TO ASSESS HOW WELL THE CONTRACTOR HAS ACHIEVED HIS STATED
3224 ==> SUPPORT REQUIREMENTS AND GOALS ?
3225 ==>
3226 ==> NOTE:  AN LSA PLAN IS MANDATORY.  PLEASE RESPOND ACCORDINGLY TO
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3227 ==>        FOLLOWING QUESTIONS!
3228 ==>
3229 ==> SOW:  TASK 501 SHOULD BE COORDINATED WITH OTHER ORGANIZATIONS THAT
3230 ==>       ARE PLANNING TESTS SO THAT NO DUPLICATION OCCURS.
3231 ==>
3232 ==> CDRL:  DI-S-7121 MAY APPLY.  COORDINATE YOUR REQUIREMENTS WITH OTHER
3233 ==>        GOVERNMENT ORGANIZATIONS THAT ARE PLANNING TESTS.
3234 ==>
3235 ==> WAS LSA PLACED ON CONTRACT FOR AN EARLIER PHASE OF THE PROGRAM ?
3236 ==>
3237 ==> SOW:  YOU SHOULD REEXAMINE THE SOW FOR THE EARLIER PHASES AND CONSIDER
3238 ==>       UPDATING THESE TASKS NOW.  THIS APPLIES ESPECIALLY TO THOSE
3239 ==>       TASKS WHICH GENERATE LSAR DATA.  CHECK EARLIER SOWs FOR TASKS
3240 ==>       102, 201, 203, 204, 205, 301, 302 AND 303.
3241 ==>
3242 ==>
3243 ==> HAVE ANY OF YOUR PREVIOUS RESPONSES MADE AN LSA PLAN MANDATORY OR WAS
3244 ==> AN LSA PLAN WRITTEN DURING AN EARLIER PHASE OF THIS PROGRAM ?
3245 ==>
3246 ==> SOW:  REF: MIL-STD-1388-1A: TASK 102, THE LSA PLAN (LSAP) AND TASK
3247 ==>       103, PROGRAM AND DESIGN REVIEWS, ARE APPLICABLE BECAUSE YOU
3248 ==>       HAVE SELECTED AT LEAST ONE LSA TASK OTHER THAN AN EARLY LSA
3249 ==>       STRATEGY OR A REPAIR LEVEL ANALYSIS.  IN A SUBPARAGRAPH FOR
3250 ==>       TASK 102, THE SOW SHOULD INCLUDE A STATEMENT THAT THE LSAP,
3251 ==>       WHEN PROPOSED BY THE CONTRACTOR AND APPROVED BY THE GOVERNMENT,
3252 ==>       BECOMES A CONTRACTUALLY BINDING DOCUMENT.  TASK 102 SHOULD BE
3253 ==>       CAREFULLY TAILORED TO ELIMINATE REQUIREMENTS NOT APPLICABLE TO
3254 ==>       THIS PHASE OF YOUR PROGRAM.  NOTE THAT TASK 103 NOT ONLY COVERS
3255 ==>       PERIODIC LSA REVIEWS, BUT REQUIRES THAT LSA BE INCLUDED IN EACH
3256 ==>       SYSTEM/DESIGN REVIEW.  SPECIFICALLY INCLUDED ARE PDR AND CDR.
3257 ==>
3258 ==> SOW:  IF YOU WISH TO UPDATE AN LSAP WHICH WAS WRITTEN IN AN EARLIER
3259 ==>       PHASE, APPLY ONLY SUBTASK 102.2.2.  YOU SHOULD STILL REQUIRE
3260 ==>       TASK 103 FOR LSA REVIEWS.
3261 ==>
3262 ==>
3263 ==>
3264 ==> CDRL:  REF: MIL-STD-1388-1A: THE LSAP IS APPLICABLE (DI-L-7017A).  IF
3265 ==>        AN LSAP IS NOT DESIRED, THE INFORMATION ON LSA MUST BE INCLUDED
3266 ==>        IN THE INTEGRATED SUPPORT PLAN (ISP).  CONTACT THE LSA STAFF
3267 ==>        SPECIALIST FOR ASSISTANCE IF YOU COMBINE THE LSAP AND THE ISP.
3268 ==>
3269 ==> IFPP:  WHEN LSA IS PART OF A PROGRAM, A STATEMENT MUST BE INCLUDED IN
3270 ==>        THE IFPP REQUESTING AN OUTLINE OF THE INFORMATION CONTAINED IN
3271 ==>        DI-L-7017A, LSAP.  SEE MIL-STD-1388-1A, TASK 102 FOR ADDITIONAL
3272 ==>        INFORMATION.
3273 ==>
3274 ==>
3275 ==> IS AN UPDATE TO THE ILS PLANNING REQUIRED ?
3276 ==>
3277 ==> Establish and maintain an Integrated Logistics Support (ILS) activity
3278 ==> to assure systematic analysis of the design considerations and support
3279 ==> requirements to determine their interdependence upon each other.
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3280 ==> Integrated Logistics Support Management. This effort must be
3281 ==> systematically planned, implemented and managed by interlocking the
3282 ==> elements of Logistics to obtain maximum support readiness and optimum
3283 ==> cost effectiveness. The contractor shall insure that Logistics
3284 ==> considerations and Logistics planning are integrated in the system/
3285 ==> equipments engigeering and design process.
3286 ==> Integrated Support Planning. The level of detail in ILS
3287 ==> planning, analysis and design shall be consistent with the phase of
3288 ==> development of the program and shall include only that which is
3289 ==> necessary and usable at that phase or required for transition to
3290 ==> the next phase. Design trade-offs and risk analysis shall be
3291 ==> initiated and progressively refined as required during the period
3292 ==> of performance of this contract.
3293 ==> Contractor Performance. The cost of planning, developing,
3294 ==> acquiring and managing ILS resources is an inherent part of the
3295 ==> overall cost for development, production and delivery of an
3296 ==> operationally effective system. Contractor performance in carrying
3297 ==> out the Logistics Support approach shall be a major factor in the
3298 ==> evaluation of his performance of the contract as a whole.
3299 ==> CDRL: DI-L-6138 APPLIES, TAILOR AS REQUIRED FOR THIS PHASE OF THE
3300 ==> CONTRACT.
3301 ==>
3302 ==> WILL THE ELECTRONIC SYSTEM YOU ARE ACQUIRING REQUIRE AUTOMATIC TEST
3303 ==> EQUIPMENT (ATE) FOR LOGISTICS SUPPORT ?
3304 ==>
3305 ==> SOW: MODULAR AUTOMATIC TEST EQUIPMENT (MATE) IS TO BE APPLIED TO ALL
3306 ==> ESD PROGRAMS THAT ACQUIRE, MODIFY, REPLACE AND SUPPORT AIR FORCE
3307 ==> SYSTEMS THAT NEED AUTOMATIC TEST EQUIPMENT (ATE) FOR LOGISTICS
3308 ==> SUPPORT UNDER THE PROVISIONS OF AFSCR/AFLCR 800-23, DATED 25 JAN
3309 ==> 84. THIS POLICY IS NOT RETROACTIVE TO PROGRAMS THAT HAVE COM-
3310 ==> PLETED CONTRACT AWARD OF THE ATE AS OF 25 JAN 84. MATE, SOW AND
3311 ==> CDRL REQUIREMENTS ARE CURRENTLY BEING DEVELOPED; UNTIL AVAILA-
3312 ==> BLE, PLEASE CONTACT MATE FOCAL POINT, MR. J. NENCETTY, ESD/ALLP
3313 ==> FOR ASSISTANCE.
3314 ==>
3315 ==>
3316 ==> SOW: MODULAR AUTOMATIC TEST EQUIPMENT (MATE) IS TO BE APPLIED TO ALL
3317 ==> ESD PROGRAMS THAT ACQUIRE, MODIFY, REPLACE AND SUPPORT AIR FORCE
3318 ==> SYSTEMS THAT NEED AUTOMATIC TEST EQUIPMENT (ATE) FOR LOGISTICS
3319 ==> SUPPORT UNDER THE PROVISIONS OF AFSCR/AFLCR 800-23, DATED 25 JAN
3320 ==> 84. THIS POLICY IS NOT RETROACTIVE TO PROGRAMS THAT HAVE COM-
3321 ==> PLETED CONTRACT AWARD OF THE ATE AS OF 25 JAN 84. MATE, SOW AND
3322 ==> CDRL REQUIREMENTS ARE CURRENTLY BEING DEVELOPED; UNTIL AVAILA-
3323 ==> BLE, PLEASE CONTACT MATE FOCAL POINT, MR. J. NENCETTY, ESD/ALLP
3324 ==> FOR ASSISTANCE.
3325 ==>
3326 ==>
3327 ==> WILL THE HARDWARE PRODUCED IN THIS PHASE BE DEPLOYED AND SUPPORTED BY
3328 ==> AFLC ?
3329 ==>
3330 ==> NOTE: SPARE/REPAIR PARTS ARE NORMALLY PROVISIONED WITH THE SYSTEMS/
3331 ==> EQUIPMENT. THE USUAL ANSWER IS YES.
3332 ==>

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3333 ==> SOW:  MIL-STD-1552 AND MIL-STD-1561 REQUIRE TAILORING BASED ON THE USE
3334 ==>       OF DD 1949-1 AND DD 1949-2 RESPECTIVELY.  (THESE MIL-STDs
3335 ==>       SUPERSEDE AFADs 71-682, -688 WHICH SHOULD REMAIN IN EFFECT ON
3336 ==>       EXISTING CONTRACTS OR MODIFICATIONS.)
3337 ==>
3338 ==> SOW:  DD 1949-1 AND 1949-2 ARE TO BE INCORPORATED IN THE CDRL BACKUP
3339 ==>       BY THE PROGRAM OFFICE.  THE PROVISIONING DATA REQUIREMENTS ARE
3340 ==>       NORMALLY SELECTED BY THE AFLC AIR LOGISTICS CENTER (ALC) AT
3341 ==>       DATA CALL.
3342 ==>
3343 ==> CDRL:  INCORPORATE AFLC (ALC) REQUIREMENTS IN THE CDRL USING DD 1949-1
3344 ==>        AND DD 1949-2.  (ALC PROVIDES FUNDS FOR THESE AND RELATED DATA
3345 ==>        IAW AFSCR/AFLCR 172-7.)
3346 ==>
3347 ==> Initial Spare/Repair Parts requirements are not applicable.
3348 ==> WILL THE HARDWARE PROCURED IN THIS PHASE BE DEPLOYED AND SUPPORTED BY
3349 ==> AFLC ?
3350 ==>
3351 ==> HAS AN APPROPRIATE MAINTENANCE CONCEPT (MC) BEEN DEFINED ?
3352 ==>
3353 ==> SPEC:  REVIEW THE PROGRAM DIRECTION, DEFINE THE MAINTENANCE CONCEPT
3354 ==>       AND INCLUDE IT IN THE SYSTEM/EQUIPMENT SPECIFICATION.
3355 ==>
3356 ==> SPEC:  REFER TO AFR 66-14 FOR A DISCUSSION OF THE MAINTENANCE
3357 ==>       CONCEPT.
3358 ==>
3359 ==> SPEC:  REFER TO AFR 66-14 FOR A DISCUSSION OF THE MAINTENANCE
3360 ==>       CONCEPT.
3361 ==>
3362 ==> IS AN UPDATE TO THE MAINTENANCE CONCEPT REQUIRED ?
3363 ==>
3364 ==> SPEC:  UPDATE THE MAINTENANCE CONCEPT (MC) AND REVISE THE SPECIFICA-
3365 ==>       TIONS.  THE MC MUST BE CONTINUOUSLY REVIEWED AS THE NEW SYSTEM/
3366 ==>       EQUIPMENT/MODIFICATION EVOLVES.
3367 ==>
3368 ==> HAS LSA TASK 302, SUPORT SYSTEM ALTERNATIVES, BEEN TAILORED AND
3369 ==> ACCOMPLISHED, AND HAVE THE RESULTS BEEN INCLUDED IN THE ILSP/
3370 ==> MAINTENANCE CONCEPT ?
3371 ==>
3372 ==> SOW:  DETERMINE IF LSA TASK 302 SHOULD BE DONE TO EXPAND AND RE-
3373 ==>       FINE THE MAINTENANCE CONCEPT AS PART OF THE INTEGRATED LOGISTICS
3374 ==>       SUPPORT PLAN (ILSP).  IF SO, TAILOR APPROPRIATELY.
3375 ==>
3376 ==> SOW:  REFER TO MIL-STD-1388-1A.
3377 ==>
3378 ==> SOW:  REFER TO MIL-STD-1388-1A.
3379 ==>
3380 ==> WILL CONTRACTOR PREOPERATIONAL MAINTENANCE SUPPORT BE REQUIRED ?
3381 ==>
3382 ==> CAUTION:  THE CONTRACTOR IS GENERALLY RESPONSIBLE FOR ALL PREOPERA-
3383 ==>           TIONAL MAINTENANCE.  IT IS LIKELY THAT THE ANSWER TO THIS
3384 ==>           QUESTION IS YES!
3385 ==>
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3386 ==>
3387 ==> Perform all preoperational maintenance until Government acceptance of
3388 ==> the equipment.
3389 ==> SOW:  DESCRIBE EACH PHASE THE CONTRACTOR IS TO SUPPORT, SUCH AS DT&E,
3390 ==>       IOT&E, TRAINING, INSTALLATION, ETC.
3391 ==>
3392 ==> SOW:  PREOPERATIONAL MAINTENANCE IS DISCUSSED IN AFLC/AFSCR 800-24,
3393 ==>       CHAPTERS 10 AND 11, AND IN AFLC/AFSCP 800-34, CHAPTER 40.
3394 ==>
3395 ==> WILL THE CONTRACTOR BE REQUIRED TO PROVIDE PREOPERATIONAL MAINTENANCE
3396 ==> ON GOVERNMENT FURNISHED EQUIPMENT (GFE) ?
3397 ==>
3398 ==> CAUTION:  GENERALLY THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF
3399 ==>           GFE DURING THE DEVELOPMENT OF A SYSTEM.
3400 ==>
3401 ==>
3402 ==> If the Government Furnished Equipment (GFE) required to support
3403 ==> (SPO: Identify the specific activity) is unserviceable, provide an
3404 ==> estimate to repair the GFE and also identify the schedule impact to
3405 ==> the Procuring Contracting Officer (PCO).  Upon approval of the PCO,
3406 ==> accomplish the necessary repairs to the GFE.  If the GFE cannot be
3407 ==> repaired locally (field or in plant), then:  exchange stock numbered
3408 ==> parts through AF supply channels and report parts which do not have
3409 ==> stock numbers (such as mounting hardware) to the PCO for disposition
3410 ==> instructions.
3411 ==> CONTRACT:  ADD THE FOLLOWING TO SECTION H OF THE CONTRACT: IDENTIFY
3412 ==>            THE SPECIFIC DEVELOPMENT ACTIVITY WHEN THE CONTRACTOR
3413 ==>            WILL BE REQUIRED TO PERFORM MAINTENANCE OF GFE; FOR
3414 ==>            EXAMPLE, DT&E, IOT&E OR SPECIFIC TRAINING ACTIVITIES.
3415 ==>
3416 ==>
3417 ==> WILL CONTRACTOR MAINTENANCE BE REQUIRED TO SUPPORT WORK ACCOMPLISHED
3418 ==> AT GOVERNMENT FACILITIES ?
3419 ==>
3420 ==> CONTRACT:  DEFINE THE SPECIFIC MAINTENANCE REQUIREMENTS AT GOVERNMENT
3421 ==>            FACILITIES BY TAILORING AFSCR DAR SUP 7-104.200.
3422 ==>
3423 ==> HAVE RELIABILITY, MAINTAINABILITY DATA REPORTING AND FEEDBACK FAILURE
3424 ==> SUMMARY REPORTS BEEN INCLUDED IN THE RELIABILITY/MAINTAINABILITY SEC-
3425 ==> TION OF THE CDRL ?
3426 ==>
3427 ==> CDRL:  COORDINATE WITH THE RELIABILITY ENGINEER TO INSURE THAT
3428 ==>       DI-R-3537 OR DI-R-7041 (MODIFIED TO INCLUDE MAINTAINABILITY)
3429 ==>       IS ON CONTRACT.
3430 ==>
3431 ==> IS A CONTRACTOR ENGINEERING AND TECHNICAL SERVICES (CETS) PLAN
3432 ==> REQUIRED ?
3433 ==>
3434 ==> NOTE:  THE CETS PLAN PROVIDES FOR FACTORY TRAINING AND ADVISORY/
3435 ==>       LIAISON SERVICES TO SUPPORT THE SYSTEM.
3436 ==>
3437 ==> CDRL:  DI-A-6101A APPLIES.  TAILOR TO YOUR REQUIREMENTS.
3438 ==>
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3439 ==> IS A CONTRACTOR ENGINEERING AND TECHNICAL SERVICES (CETS) PLAN
3440 ==> REQUIRED ?
3441 ==>
3442 ==> SOW:  CONTRACTOR ENGINEERING TECHNICAL SERVICES ARE DISCUSSED IN
3443 ==>       AFM 66-18.
3444 ==>
3445 ==> HAVE CONTRACTUAL PROVISIONS FOR MATERIAL DEFICIENCY REPORTING BEEN
3446 ==> INCLUDED IN THE CDRL ?
3447 ==>
3448 ==> CAUTION:  CONTRACTOR DEFICIENCY REPORTING STARTS WHEN THE FIRST
3449 ==>           COMPLETE SYSTEM/EQUIPMENT IS READY FOR TESTING AND
3450 ==>           NORMALLY CONCLUDES AT PROGRAM MANAGEMENT RESPONSIBILITY
3451 ==>           TRANSFER (PMRT).
3452 ==> CDRL:  AFSC FORM 349/350 (DI-L-7018A AND 7019), OR THE CONTRACTOR'S
3453 ==>        GOVERNMENT APPROVED INTERNAL FORM WILL BE USED TO DOCUMENT
3454 ==>        MAINTENANCE ACTIONS.
3455 ==> WILL THERE BE A REQUIREMENT FOR INTERIM CONTRACTOR SUPPORT ?
3456 ==>
3457 ==> CDRL:  AN INTERIM CONTRACTOR SUPPORT PLAN IS NEEDED.  MODIFICATION OF
3458 ==>        DATA ITEM DI-L-6138 FOR INTEGRATED SUPPORT PLAN IS REQUIRED.
3459 ==>        TAILOR TO YOUR REQUIREMENTS.
3460 ==>
3461 ==> SOW:  INTERIM CONTRACTOR SUPPORT IS DISCUSSED IN AFR 800-21.  BE SURE
3462 ==>       YOU CAN SUPPORT AN ICS DECISION BASED ON THOROUGH ANALYSIS.
3463 ==>
3464 ==> CAUTION: TO QUALIFY AS ICS, THE REQUIREMENT MUST BE PLANNED,
3465 ==>          PROGRAMMED AND BUDGETED AT LEAST 2 YEARS PRIOR TO
3466 ==>          ACTUAL NEED DATE.
3467 ==>
3468 ==>
3469 ==>
3470 ==>
3471 ==>
3472 ==> SOW:  INTERIM CONTRACTOR SUPPORT IS DISCUSSED IN AFR 800-21.  BE SURE
3473 ==>       YOU CAN SUPPORT AN ICS DECISION BASED ON THOROUGH ANALYSIS.
3474 ==>
3475 ==> CAUTION: TO QUALIFY AS ICS, THE REQUIREMENT MUST BE PLANNED,
3476 ==>          PROGRAMMED AND BUDGETED AT LEAST 2 YEARS PRIOR TO
3477 ==>          ACTUAL NEED DATE.
3478 ==>
3479 ==>
3480 ==>
3481 ==>
3482 ==> WILL EQUIPMENT BE DEVELOPED OR PRODUCED ?
3483 ==>
3484 ==> WILL THE EQUIPMENT INCLUDE GOVERNMENT FURNISHED PROPERTY (GFP) ?
3485 ==>
3486 ==> Ensure that the required range and level of spares (Real Property
3487 ==> Installed Equipment and Government Furnished Property) are
3488 ==> determined, acquired, delivered and available at the site
3489 ==> prior to the start of testing.  When an approved design change is
3490 ==> authorized for a Configuration Item, change the spare parts on order.
3491 ==>
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3492 ==> See the General Provisions of this contract.
3493 ==> CDRL:  A LOGISTICS SUPPORT PLAN FOR PREOPERATIONAL SUPPORT (LSPPS)
3494 ==>       DI-L-6143 IS REQUIRED FROM THE CONTRACTOR. TAILOR AS REQUIRED.
3495 ==>
3496 ==> CONTRACT:  ADD DAR 13-101 AND APPENDICES B AND H TO THE GENERAL PRO-
3497 ==>           VISIONS OF THE CONTRACT.
3498 ==>
3499 ==> CONTRACT:  THE GOVERNMENT IS RESPONSIBLE FOR FURNISHING ONLY THAT
3500 ==>           PROPERTY AND SERVICES IDENTIFIED AS GOVERNMENT FURNISHED IN
3501 ==>           SECTION J OF THE CONTRACT SCHEDULE.  CHANGES IN QUANTITIES/
3502 ==>           ITEMS FOR AUTHORIZED GFP OR SERVICES ARE AFFECTED ONLY BY
3503 ==>           CHANGING THE APPROPRIATE PROVISIONS OF SECTION J OF THE
3504 ==>           CONTRACT SCHEDULE.
3505 ==>
3506 ==> CONTRACT:  IF GFP IS TO BE PROVIDED UNDER TERMS OF THE CONTRACT, IT
3507 ==>           SHOULD BE LISTED TO SHOW AS A MINIMUM: DESCRIPTION, NATION-
3508 ==>           AL STOCK NUMBER, QUANTITY, DELIVERY POINT AND DATE OF DE-
3509 ==>           LIVERY, CONDITION AND RESPONSIBILITY FOR MAINTENANCE, RE-
3510 ==>           PAIR, MODIFICATION AND SUPPLY SUPPORT.  GFP SHOULD BE
3511 ==>           IDENTIFIED AS TO CATEGORY IAW DAR 13-101.
3512 ==>
3513 ==> Provide all the necessary spares required for the maintenance of the
3514 ==> system equipment during all phases of system testing and site activa-
3515 ==> tion.  This includes Real Property Installed Equipment.  Ensure that
3516 ==> the required range and level of spares are determined, acquired, de-
3517 ==> livered and available at the site prior to the start of testing.  When
3518 ==> an approved design change is authorized for a Configuration Item,
3519 ==> change the spare parts on order.
3520 ==>
3521 ==> CDRL:  A LOGISTICS SUPPORT PLAN FOR PREOPERATIONAL SUPPORT (LSPPS)
3522 ==>       DI-L-6143 IS REQUIRED FROM THE CONTRACTOR.  TAILOR AS REQUIRED.
3523 ==>
3524 ==> IS THERE A REQUIREMENT FOR SITE ACTIVATION ?
3525 ==>
3526 ==> Accomplish all elements of Supply Support including, but not limited
3527 ==> to, Receiving, Inspection, Materials Handling, Warehousing, Item
3528 ==> Accounting, Requisitioning, Issuing, Shipping and Administrative Sup-
3529 ==> port necessary to support the deliverable equipments during the pre-
3530 ==> operational phase until final acceptance by the Air Force.
3531 ==> IS THE SYSTEM DEFINITION SUFFICIENTLY DEVELOPED TO ALLOW IDENTIFICA-
3532 ==> TION OF SUPPORT EQUIPMENT (SE) ?
3533 ==>
3534 ==>
3535 ==>
3536 ==> Develop Support Equipment (SE) recommendations for each requirement
3537 ==> identified.  Recommend quantitative requirements based on the func-
3538 ==> tional analysis of the system activities.
3539 ==>
3540 ==> CDRL:  DATA IS REQUIRED FOR SUPPORT EQUIPMENT RECOMMENDATION DATA
3541 ==>       (SERD); PRESCREENING DATA.
3542 ==>
3543 ==> IFPP:  HAVE THE CONTRACTOR SUBMIT, WITH HIS PROPOSAL, A PRICE LISTING
3544 ==>       OF SE REQUIRED TO SUPPORT THE DESIGNATED MAINTENANCE CONCEPT OF
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3545 ==>        THE SYSTEM BEING PROPOSED.  FOR EACH ITEM OR SUB-ITEM OF SE
3546 ==>        RECOMMENDED, THE CONTRACTOR SHOULD IDENTIFY AS A MINIMUM: ITEM
3547 ==>        NAME, THE ORGAINIZATIONAL REQUIREMENT, TOTAL RECOMMENDED QUAN-
3548 ==>        TITY, UNIT COST, TOTAL COST, AND NATIONAL STOCK NUMBER (IF
3549 ==>        KNOWN).
3550 ==>
3551 ==> IFPP:  ADVISE THE CONTRACTOR THAT HE IS AUTHORIZED FEDERALLY CATA-
3552 ==>        LOGUED ITEMS OF SE AVAILABLE FROM DOD SUPPLY ACTIVITIES AND
3553 ==>        OBTAINED THROUGH NORMAL MILSTRIP REQUISITIONING PROCEDURES.
3554 ==>        APPROPRIATE ADJUSTMENTS TO THE PRICE OF THE SE CONTRACT LINE
3555 ==>        WILL BE MADE TO COMPENSATE FOR ITEMS PROVIDED BY THE GOVERN-
3556 ==>        MENT.
3557 ==>
3558 ==>
3559 ==>
3560 ==> Make a detailed analysis of the functional requirements of the system/
3561 ==> equipment to define needs for Support Equipment (SE).  This analysis
3562 ==> shall be made on the total system, individual items of equipment and
3563 ==> areas of maintenance or calibration support.  See the Operational,
3564 ==> Maintenance, and Logistics Plans attached to this contract.
3565 ==>
3566 ==> ARE TECHNICAL ORDERS REQUIRED ?
3567 ==>
3568 ==> CDRL:  YOU MUST DETERMINE THE AIR FORCE SPECIALTY CODE OF MAINTENANCE
3569 ==>        PERSONNEL IN ORDER TO ESTABLISH THE READING GRADE IAW
3570 ==>        MIL-STD-1752.  THE AIR FORCE SPECIALTY CODE SHALL BE CITED IN
3571 ==>        BLOCK 16 OF DI-M-3407B.
3572 ==>
3573 ==> CDRL:  TECHNICAL ORDERS SHALL BE PREPARED IAW THE SPECIFICATIONS
3574 ==>        CITED ON DI-M-3407B.
3575 ==>
3576 ==> CONTRACT:  ADD THE FOLLOWING TO SECTION H IN THE SCHEDULE OF THE
3577 ==>            CONTRACT: "THE CONTRACTOR SHALL INCORPORATE INTO ALL
3578 ==>            MANUALS, AT NO INCREASE IN COST, ALL CHANGES RESULTING
3579 ==>            FROM VALIDATION, VERIFICATION, NO-COST ECPs OR ANY
3580 ==>            REVIEW.  FOR CHANGES RESULTING FROM COSTED ECPs, THE
3581 ==>            CONTRACTOR SHALL SUBMIT A PROPOSAL WITH THE ECP."
3582 ==>
3583 ==> WILL EXISTING MILITARY OR COMMERCIAL MANUALS BE USED ?
3584 ==>
3585 ==> CDRL:  YOU MUST DETERMNE THE AIR FORCE SPECIALTY CODE OF MAINTENANCE
3586 ==>        PERSONNEL IN ORDER TO ESTABLISH THE READING GRADE IAW
3587 ==>        MIL-STD-1752.  THE AIR FORCE SPECIALTY CODE SHALL BE CITED IN
3588 ==>        BLOCK 16 OF DI-M-3407B.
3589 ==>
3590 ==> CDRL:  THE FOLLOWING WILL BE CITED IN BLOCK 16 OF DI-M-3405A: "THE
3591 ==>        EXISTING MILITARY OR COMMERCIAL MANUALS SUBMITTED WITH THESE
3592 ==>        NOTICES WILL BE REVIEWED IAW MIL-M-7298C.  THE CONTRACTOR WILL
3593 ==>        BE NOTIFIED IF THEY ARE 1) ADEQUATE, 2) CAN BE MADE ADEQUATE
3594 ==>        WITH SUPPLEMENTAL DATA, OR 3) REQUIRE PREPARATION OF A NEW
3595 ==>        MANUAL."
3596 ==>
3597 ==> CONTRACT:  SEPARATE TECHNICAL DATA FOR TRAINING MAY BE NEEDED.  CHECK
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3598 ==>            WITH ATC AND THE USING COMMAND.
3599 ==>
3600 ==> IS A TECHNICAL ORDER PUBLICATION PLAN REQUIRED ?
3601 ==>
3602 ==> CDRL:  ADD THE FOLLOWING TO BLOCK 16 OF DI-M-3401: "THE PLAN SHALL
3603 ==>        DESCRIBE THE RELATIONSHIP BETWEEN WEAPON SYSTEM AND EQUIPMENT
3604 ==>        SUPPORT ANALYSIS AND T.O. PREPARATION.  THE APPROVED PLAN
3605 ==>        SHALL BE UTILIZED BY THE CONTRACTOR AND THE AIR FORCE AS THE
3606 ==>        BASIS FOR ALL T.O. PUBLICATION ACTIONS DURING THE LIFE OF
3607 ==>        THE CONTRACT."
3608 ==>
3609 ==>  F TECHNICAL ORDER (T.O.) REVIEWS REQUIRED ?
3610 ==>
3611 ==> CAUTION:  GENERALLY, CONTRACTOR PREPARED T.O.s MUST BE REVIEWED BY
3612 ==>           THE GOVERNMENT DURING DEVELOPMENT.
3613 ==>
3614 ==> Technical Order (T.O.) Reviews:
3615 ==>   Guidance Conference.  Not later than 30 days after contract award
3616 ==>   the contractor shall host a T.O. Guidance Conference between key
3617 ==>   Air Force and contractor personnel to explain his development
3618 ==>   approach.
3619 ==>
3620 ==>   In Process Reviews.  In Process Reviews shall be held IAW the
3621 ==>   schedule agreed upon at the Guidance Conference.
3622 ==>
3623 ==>   Validation.  Validation shall be conducted by actual performance
3624 ==>   on the equipment of all precedural technical data.  Each procedure
3625 ==>   shall be witnessed by a representative of the procuring agency.
3626 ==>   Upon completion, a validation record (AFSC Form 11) shall be
3627 ==>   submitted IAW the CDRL.
3628 ==>
3629 ==>   Verification.  Verification shall be accomplished prior to IOT&E.
3630 ==>   Verified preliminary T.O.s shall be used to support IOT&E.  The
3631 ==>   contractor shall provide engineering and technical assistance
3632 ==>   during the verification period and assist in formulating a T.O.
3633 ==>   Verification Plan.
3634 ==>   Pre-publication Review.  A Pre-publication Review shall be held NLT
3635 ==>   ___ days after verification.
3636 ==>
3637 ==> SOW:  SPECIFY WHEN THE PRE-PUBLICATION REVIEW WILL BE HELD.
3638 ==>
3639 ==> PLEASE RECONSIDER YOUR ANSWER!  T.O. REVIEWS ARE NORMALLY REQUIRED BY
3640 ==> THE GOVERNMENT.
3641 ==>
3642 ==> ARE CONTRACTOR FURNISHED AEROSPACE EQUIPMENT/CONTRACTOR FURNISHED
3643 ==> EQUIPMENT (CFAE/CFE) NOTICES REQUIRED ?
3644 ==>
3645 ==> CDRL:  THE FOLLOWING WILL BE CITED IN BLOCK 16 OF THE CDRL: "NOTICES
3646 ==>        SHALL BE SUBMITTED FOR ALL ITEMS OF EQUIPMENT INCLUDING
3647 ==>        COMMERDIAL, EXISTING MILITARY, AND SUPPORT EQUIPMENT."
3648 ==>
3649 ==> ARE TECHNICAL ORDER STATUS AND SCHEDULES REQUIRED ?
3650 ==>
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3651 ==> WILL YOUR SYSTEM REQUIRE TRAINING FOR OPERATION AND MAINTENANCE ?
3652 ==>
3653 ==> Government personnel will require training for software
3654 ==> maintenance as well as operation and maintenance training on
3655 ==> the system, its PME and support equipment.
3656 ==> Consideration has been given to the training needs of this
3657 ==> system, and it has been concluded that no training is required to
3658 ==> test this system during DT&E/IOT&E.
3659 ==> WILL TRAINING BE INCLUDED AS A CONTRACT LINE ITEM IN THE FSD CONTRACT?
3660 ==>
3661 ==> NOTE: NORMALLY, TRAINING REQUIREMENTS ARE PROCURED SOLELY BY ATC;
3662 ==> THEREFORE, YOU SHOULD NORMALLY PROVIDE A NO RESPONSE TO THIS
3663 ==> QUESTION!
3664 ==>
3665 ==> SOW: BEFORE A TRAINING CONTRACT CAN BE IMBEDDED IN THE SOW, IT IS
3666 ==> IMPERATIVE THAT THE USERS AND PROGRAM OFFICE THOROUGHLY UNDER-
3667 ==> STAND WHAT THEY NEED. A FIRM USER TRAINING REQUIREMENT AND
3668 ==> MAINTENANCE CONCEPT ARE NECESSARY TO EFFECTIVELY WRITE THE
3669 ==> TRAINING SOW. FURTHERMORE, A DEVIATION TO AFR 50-9 MUST BE
3670 ==> OBTAINED FROM USAF/MPPT BEFORE TRAINING CAN BE CARRIED AS AN
3671 ==> ESD LINE ITEM (REF: AFR 50-9 AND AFR 50-2).
3672 ==>
3673 ==>
3674 ==> SOW: THE PROGRAM OFFICE SHOULD CONTACT THE LOCAL AIR TRAINING COMMAND
3675 ==> (ATC) RESIDENT OFFICE. THEY CAN PROVIDE GUIDANCE ON WRITING THE
3676 ==> IMBEDDED TRAINING CONTRACT.
3677 ==>
3678 ==>
3679 ==> The requirement for training shall be satisfied through a
3680 ==> separate contract to be awarded by the Air Training Command (ATC).
3681 ==> The contractor shall be required to respond to an ATC Request for
3682 ==> Proposal Package (RFPP). Training shall be completed not more than
3683 ==> 60 days and not less than 30 days prior to the date trained personnel
3684 ==> are required to operate and/or maintain the equipment. Develop
3685 ==> Training planning information, DI-H-7066. After Government approval,
3686 ==> it shall become an appendix to the ISP.
3687 ==>
3688 ==> WILL YOUR SYSTEM INCLUDE THE DEVELOPMENT OF TRAINING EQUIPMENT ?
3689 ==>
3690 ==> NOTE: NORMALLY, TRAINING EQUIPMENT IS NOT DEVELOPED DURING THIS
3691 ==> PHASE. YOU SHOULD NORMALLY RESPOND WITH A NO RESPONSE TO
3692 ==> THIS QUESTION!
3693 ==>
3694 ==> Ensure system engineering and analysis efforts include provisions
3695 ==> for training equipment/software design and development. All
3696 ==> specifications for this equipment shall be subject to configuration
3697 ==> management procedures.
3698 ==> Any equipment required for individual/crew-type training shall
3699 ==> be delivered to the appropriate training site, installed, and checked
3700 ==> out in sufficient time to allow subject training to be completed
3701 ==> prior to system test. Document the quantity and type of repair parts
3702 ==> needed to support equipment maintenance. Upon completion of testing,
3703 ==> refurbish any prototype training or operational equipment used for

3704 ==> training to the standards required for delivery under the contract.
3705 ==>
3706 ==>
3707 ==> SOW: COORDINATE WITH LOGISTICS AND TEST TO AVOID DUPLICATION.
3708 ==>
3709 ==> Assure that one set of production equivalent equipment (including
3710 ==> support equipment) acquired under this acquisition is available to
3711 ==> provide hands-on training to Government personnel. No equipment shall
3712 ==> be developed solely for contractor-conducted training. The contractor
3713 ==> shall be responsible for all logistic support for all contractor and
3714 ==> Government furnished equipment used to support training. Assure the
3715 ==> equipment is available and maintained during hands-on training.
3716 ==> Allocate sufficient time in the production/refurbishment schedule to
3717 ==> support training.
3718 ==>
3719 ==> SOW: EQUIPMENT USED FOR TRAINING MAY BE BRASS-BOARDS OR FIRST
3720 ==> PRODUCTION ARTICLE, PROVIDED THE EQUIPMENT USED IS LIKE THE
3721 ==> ITEM TO BE TESTED. CONTRACTORS MAY REQUEST DEVIATIONS OF TYPE
3722 ==> EQUIPMENT USED FOR TRAINING; HOWEVER, THEY ARE REQUIRED TO
3723 ==> SUBMIT A FORMAL REQUEST FOR DEVIATION TO THE PROGRAM OFFICE.
3724 ==> SERIOUS CONSIDERATION SHOULD BE GIVEN TO SUCH REQUESTS BEFORE
3725 ==> GRANTING AUTHORIZATION TO DEVIATE.
3726 ==>
3727 ==> WILL YOUR SYSTEM REQUIRE THE DEVELOPMENT OF TECHNICAL ORDERS/MANUALS ?
3728 ==>
3729 ==> Training material, Data and Services. Disposition of
3730 ==> instructional materials and training aids shall be as specified in
3731 ==> the ATC training contract (DI-H-3407).
3732 ==> IF TECHNICAL ORDERS/MANUALS ARE NOT AVAILABLE IN TIME FOR TRAINING,
3733 ==> IS THERE A CONTINGENCY PLAN ?
3734 ==>
3735 ==> Training Support Data. Use the appropriate technical orders for
3736 ==> training when available. In the event technical orders are not
3737 ==> available, training support data shall be provided (DI-H-3258A).
3738 ==>
3739 ==> SOW/ DI-H-3258A, TRAINING SUPPORT DATA, IS ANY RECORDED INFORMATION
3740 ==> CDRL: SUITABLE FOR USE IN ESTABLISHING AND SUPPORTING TRAINING -
3741 ==> TRAINING MATERIALS AND COURSE CONTROL DOCUMENTS. IT IS A
3742 ==> CONTINGENCY ITEM, REQUIRED EARLY IN THE ACQUISITION PHASE,
3743 ==> WHEN NOT ECONOMICALLY FEASIBLE TO OBTAIN VALID PRELIMINARY
3744 ==> TECHNICAL ORDERS PRIOR TO THE START OF TRAINING. IT IS
3745 ==> NORMALLY PLACED ON THE CDRL IN DEFERRED STATUS.
3746 ==>
3747 ==>
3748 ==> CDRL: IF TRAINING SUPPORT DATA IS NEEDED AT A LATER DATE, DI-H-3258A
3749 ==> MAY BE ADDED AS A CONTRACT MODIFICATION.
3750 ==>
3751 ==> WILL EQUIPMENT BE PRODUCED AND SHIPPED DURING THIS PHASE ?
3752 ==>
3753 ==> See the General Provisions of this contract and section 5 of the
3754 ==> product specification.
3755 ==> CONTRACT: PLACE DAR 1-1204 ON CONTRACT.
3756 ==>

3757 ==> SPEC: PLACE MIL-P-9024 AND MIL-STD-794 IN SECTION 5 OF THE PRODUCT
3758 ==> SPECIFICATION.
3759 ==>
3760 ==> Preservation, packaging and packing requirements do not apply to this
3761 ==> phase of the contract.
3762 ==> WILL THE DELIVERY TERMS BE FOB ORIGIN ?
3763 ==>
3764 ==> CONTRACT: ADD DAR 7-104.70 TO THE CONTRACT.
3765 ==>
3766 ==> WILL THE DELIVERY TERMS BE FOB DESTINATION ?
3767 ==>
3768 ==> CONTRACT: ADD DAR 7-104.71 TO THE CONTRACT.
3769 ==>
3770 ==> WILL THE CONTRACTOR PREPARE THE PACKAGING, PACKING, MARKING, AND
3771 ==> SHIPMENT OF HAZARDOUS, DANGEROUS MATERIAL ?
3772 ==>
3773 ==> CONTRACT: ADD DAR 7-104.79 TO THE CONTRACT.
3774 ==>
3775 ==> WILL SPECIALIZED CONTAINERS BE REQUIRED TO MEET CONTRACTUAL
3776 ==> REQUIREMENTS ?
3777 ==>
3778 ==> CDRL: PLACE DI-L-3339 ON THE CDRL.
3779 ==>
3780 ==> CONTRACT: ADD DAR AFSC SUP 7-104.67, SUP 1-1204 (f) AND SUP 1-1204.50
3781 ==> TO THE CONTRACT.
3782 ==>
3783 ==> WILL PROVISIONAL INITIAL OPERATIONAL SPARE/REPAIR PARTS BE REQUIRED ?
3784 ==>
3785 ==> CDRL: DI-L-6147A APPLIES; TAILOR AS REQUIRED.
3786 ==>
3787 ==> CONTRACT: ADD ESD DAR 7.8506.1 (G.4) TO THE CONTRACT.
3788 ==>
3789 ==> WILL KNOWN LEVELS OF PACKAGING AND PACKING BE SPECIFIED FOR ALL
3790 ==> CATEGORIES OF EQUIPMENT AND MATERIALS TO BE DELIVERED UNDER THE
3791 ==> TERMS OF THE CONTRACT ?
3792 ==>
3793 ==> CONTRACT: ADD ESD DAR 7.8506.1 (G.1) AND (G.2) OR (G.3) TO THE
3794 ==> CONTRACT.
3795 ==>
3796 ==> DOES THE SCHEDULE REFLECT FREIGHT ON BOARD (FOB) DESTINATION ?
3797 ==>
3798 ==> Notify the cognizant transportation officer when assistance is re-
3799 ==> quired in arranging for Government transportation support, where ex-
3800 ==> isting commercial transportation capability is inadequate, or delivery
3801 ==> of equipment cannot be accomplished, including transportation strikes.
3802 ==>
3803 ==> Arrange all export customs clearances and the preparation of customs
3804 ==> documentation (overseas shipments only).
3805 ==>
3806 ==> Provide all services required including, but not limited to, the load-
3807 ==> ing, off-loading, blocking and bracing of carriers equipment.
3808 ==>
3809 ==> See the General Provisions of this contract.

3810 ==> CONTRACT: DAR CLAUSE IS REQUIRED. CONTACT THE STAFF SPECIALIST FOR
3811 ==> ASSISTANCE.
3812 ==>
3813 ==> Provide all services required including, but not limited to, the load-
3814 ==> ing, off-loading, blocking and bracing of carriers equipment.
3815 ==>
3816 ==> Furnish materials handling equipment and resources required to load,
3817 ==> block, and brace the equipment onto the carrier's equipment at point
3818 ==> of origin.
3819 ==>
3820 ==> Consider consolidating shipments whenever it is feasible to do so
3821 ==> without impairing the program shipping schedules.
3822 ==> Submit to the Program Office (PO) his passenger and cargo movement
3823 ==> requirements IAW PO instructions (overseas only).
3824 ==>
3825 ==> See the General Provisions of this contract.
3826 ==> CONTRACT: DAR CLAUSE IS REQUIRED. CONTACT THE STAFF SPECIALIST FOR
3827 ==> ASSISTANCE.
3828 ==>
3829 ==> CDRL: DATA ITEMS ARE REQUIRED. CONTACT THE STAFF SPECIALIST FOR
3830 ==> ASSISTANCE.
3831 ==>
3832 ==> SOW: THE GOVERNMENT MUST ASSIST THE CONTRACTOR, UPON REQUEST, IN
3833 ==> OBTAINING ROUTE ORDERS, CARRIERS AND OTHER NECESSARY INFORMATION
3834 ==> WHICH MAY BE REQUIRED. THE GOVERNMENT IS RESPONSIBLE FOR THE
3835 ==> MOVEMENT OF MATERIAL AND PERSONNEL TO THE ULTIMATE DESTINA-
3836 ==> TION(S), WITHIN THE LIMITS OF THEIR CAPABILITIES.
3837 ==>
3838 ==> ARE THE TERMS FREIGHT ON BOARD (FOB) DESTINATION AT A REMOTE SITE ?
3839 ==>
3840 ==> Notify the cognizant transportation officer when assistance is re-
3841 ==> quired in arranging for Government transportation support where ex-
3842 ==> isting commercial transportation capability is inadequate or delivery
3843 ==> of equipment cannot be accomplished, including transportation strikes.
3844 ==>
3845 ==> Arrange all export customs clearances and the preparation of customs
3846 ==> documentation (overseas shipments only).
3847 ==>
3848 ==> Provide materials handling equipment and resources for the on-loading,
3849 ==> blocking and bracing of items to be shipped on the carrier's equip-
3850 ==> ment, as well as, on-site loading, including transportation of per-
3851 ==> sonnel and material.
3852 ==>
3853 ==> Report transportation type discrepancies (lost/astray freight, damage,
3854 ==> shortages, etc.) incurred as a result of Government furnished trans-
3855 ==> portation to the appropriate Government site representative and the
3856 ==> Contracting Officer (PCO/ACO).
3857 ==>
3858 ==> See the General Provisions of this contract.
3859 ==> CONTRACT: DAR CLAUSE IS REQUIRED. CONTACT THE STAFF SPECIALIST FOR
3860 ==> ASSISTANCE.
3861 ==>
3862 ==> Furnish materials handling equipment and resources required to load,

3863 ==> block, and brace the equipment onto the carrier's equipment at point
3864 ==> of origin.
3865 ==>
3866 ==> Submit passenger and cargo movement requirements per the CDRL.
3867 ==> SOW: THE GOVERNMENT MUST SUPPLY ON-SITE TRANSPORTATION SUPPORT, WITH-
3868 ==> IN THE LIMITS OF THEIR EXISTING CAPABILITIES, AS REQUESTED BY
3869 ==> THE CONTRACTOR.
3870 ==>
3871 ==> SOW: THE GOVERNMENT IS REPONSIBLE FOR FURNISHING MATERIALS HANDLING
3872 ==> EQUIPMENT AND RESOURCES REQUIRED TO OFF-LOAD CARRIER'S EQUIP-
3873 ==> MENT.
3874 ==>
3875 ==> SOW: THE GOVERNMENT IS RESPONSIBLE FOR THE MOVEMENT OF MATERIAL AND
3876 ==> PERSONNEL TO THE ULTIMATE DESTINATION(S), WITHIN THE LIMITS OF
3877 ==> THEIR CAPABILITIES.
3878 ==>
3879 ==> CDRL: TASK THE CONTRACTOR TO SUBMIT TO THE PROGRAM OFFICE HIS PAS-
3880 ==> SENGER AND CARGO MOVEMENT REQUIREMENTS IAW THE CDRL.
3881 ==>
3882 ==> DOES THE SYSTEM HAVE CLASSIFIED HARDWARE ?
3883 ==>
3884 ==> See DAR 7-104.12 in the General Provisions of this contract.
3885 ==>
3886 ==> Prepare all necessary transportation documentation, including
3887 ==> forecasting shipping requirements, necessary to initiate a
3888 ==> shipment from origin to ultimate destination(s).
3889 ==> CONTRACT: APPLY DAR 7-104.12 (MILITARY SECURITY REQUIREMENTS) TO THE
3890 ==> GENERAL PROVISIONS OF THE CONTRACT. ALSO APPLY AFR 75-1,
3891 ==> CHAPTER 8 TO THE CONTRACT. CONTACT YOUR BUYER OR PCO FOR
3892 ==> ASSISTANCE.
3893 ==>
3894 ==> DOES THE EQUIPMENT EXCEED THE TRANSPORTABILITY PARAMETERS LISTED IN
3895 ==> MIL-P-9024 ?
3896 ==>
3897 ==> Perform studies to identify potential areas that may pose problems in
3898 ==> deployment of proposed systems equipment. Provide recommended course
3899 ==> of action to assure movement of system equipment from the source of
3900 ==> supply to ultimate destination(s) during acquisition.
3901 ==> CDRL: TAILOR AND APPLY DID.
3902 ==>
3903 ==> WILL THE CONTRACTOR BE REQUIRED TO TRAVEL DURING THIS PHASE ?
3904 ==>
3905 ==> See Section H of this contract.
3906 ==> Travel requirements are not applicable during this phase.
3907 ==> IFPP: THE CONTRACTOR IS NOT REQUIRED TO TRAVEL IN PERFORMANCE OF THIS
3908 ==> EFFORT.
3909 ==>
3910 ==> WILL ANY OF THE CONTRACTOR'S TRAVEL BE ACCOMPLISHED VIA GOVERNMENT
3911 ==> EXPENSE ?
3912 ==>
3913 ==> CONTRACT: ENTER DAR 15.205.46 IN SECTION H OF THE CONTRACT.
3914 ==> REFERENCE AFR 75-8 AND AFR 10-7 FOR INFORMATION.
3915 ==>

3916 ==> CONTRACT: ADD THE FOLLOWING TO SECTION H OF THE CONTRACT:
3917 ==> THE CONTRACTOR WILL BE RESPONSIBLE FOR OBTAINING AND
3918 ==> FUNDING ALL TRAVEL AND ASSOCIATED COSTS REQUIRED IN THE
3919 ==> PERFORMANCE OF THIS EFFORT.
3920 ==>
3921 ==> THE CONTRACTOR AGREES TO USE THE LOWEST COST MODE OF
3922 ==> TRANSPORTATION COMMENSURATE WITH MISSION REQUIREMENTS
3923 ==> IAW GOOD TRAFFIC MANAGEMENT PRINCIPLES. WHEN COSTS ARE
3924 ==> FAVORABLE, AMERICAN FLAG CARRIERS WILL BE EMPLOYED.
3925 ==>
3926 ==> WILL THE CONTRACTOR'S TRAVEL WITHIN THE 48 CONTIGUOUS STATES BE
3927 ==> PERFORMED AT GOVERNMENT EXPENSE ?
3928 ==>
3929 ==> CONTRACT: ADD THE FOLLOWING TO SECTION H OF THE CONTRACT:
3930 ==> ALL CONTRACTOR TRAVEL WITHIN THE 48 CONTIGUOUS STATES IS
3931 ==> TO BE APPROVED BY THE CONTRACTING OFFICER OR HIS DESIG-
3932 ==> NATED REPRESENTATIVE.
3933 ==>
3934 ==> TRAVEL POLICIES GOVERNING DOD PERSONNEL WILL BE APPLICA-
3935 ==> BLE TO THE CONTRACTING PERSONNEL DURING THIS EFFORT.
3936 ==>
3937 ==> WHEN THE COST OF TRANSPORTATION IS PAID BY THE GOVERN-
3938 ==> MENT TO A COMMERCIAL CARRIER, SUCH PAYMENT WILL BE MADE
3939 ==> BY USE OF A GOVERNMENT TRANSPORTATION REQUEST (GTR).
3940 ==>
3941 ==> THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL TRAVEL AND
3942 ==> ASSOCIATED COSTS OTHER THAN THOSE SPECIFICALLY MADE FOR
3943 ==> THIS EFFORT.
3944 ==>
3945 ==> CONTRACT: ADD THE FOLLOWING TO SECTION H OF THE CONTRACT:
3946 ==> THE CONTRACTOR WILL BE RESPONSIBLE FOR OBTAINING AND
3947 ==> FUNDING ALL DOMESTIC (CONUS) TRAVEL AND ASSOCIATED COSTS
3948 ==> IN PERFORMANCE OF THIS EFFOR
3949 ==>
3950 ==> THE CONTRACTOR AGREES TO USE THE LOWEST COST MODE OF
3951 ==> TRANSPORTATION COMMENSURATE WITH MISSION REQUIREMENTS
3952 ==> IAW GOOD TRAFFIC MANAGEMENT PRINCIPLES. WHEN COSTS ARE
3953 ==> FAVORABLE, AMERICAN FLAG CARRIERS WILL BE EMPLOYED.
3954 ==>
3955 ==> WILL THE CONTRACTOR'S TRAVEL TO AND FROM ALASKA AND HAWAII BE
3956 ==> PERFORMED AT GOVERNMENT EXPENSE ?
3957 ==>
3958 ==> CONTRACT: ADD THE FOLLOWING TO SECTION H OF THE CONTRACT:
3959 ==> ALL CONTRACTOR TRAVEL TO AND FROM ALASKA AND HAWAII IS TO
3960 ==> BE APPROVED BY THE CONTRACTING OFFICER OR HIS DESIGNATED
3961 ==> REPRESENTATIVE.
3962 ==>
3963 ==> TRAVEL POLICIES GOVERNING DOD PERSONNEL WILL BE APPLICA-
3964 ==> BLE TO THE CONTRACTING PERSONNEL DURING THIS EFFORT.
3965 ==>
3966 ==> WHEN THE COST OF TRANSPORTATION IS PAID BY THE GOVERN-
3967 ==> MENT TO A COMMERCIAL CARRIER, SUCH PAYMENT WILL BE MADE
3968 ==> BY USE OF A GOVERNMENT TRANSPORTATION REQUEST (GTR).

3969 ==>
3970 ==> THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL TRAVEL AND
3971 ==> ASSOCIATED COSTS OTHER THAN THOSE SPECIFICALLY MADE FOR
3972 ==> THIS EFFORT.
3973 ==>
3974 ==> CONTRACT: ADD THE FOLLOWING TO SECTION H OF THE CONTRACT:
3975 ==> THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND FUNDING
3976 ==> ALL TRAVEL AND ASSOCIATED COSTS TO AND FROM ALASKA AND
3977 ==> HAWAII IN PERFORMANCE OF THIS EFFORT.
3978 ==>
3979 ==> THE CONTRACTOR AGREES TO USE THE LOWEST COST MODE OF
3980 ==> TRANSPORTATION COMMENSURATE WITH MISSION REQUIREMENTS
3981 ==> IAW GOOD TRAFFIC MANAGEMENT PRINCIPLES. WHEN COSTS
3982 ==> ARE FAVORABLE, AMERICAN FLAG CARRIERS WILL BE EMPLOYED.
3983 ==>
3984 ==> WILL THE CONTRACTOR'S TRAVEL TO AND FROM CONUS AND OVERSEAS AREAS BE
3985 ==> PERFORMED AT GOVERNMENT EXPENSE ?
3986 ==>
3987 ==> CONTRACT: ADD THE FOLLOWING TO SECTION H OF THE CONTRACT:
3988 ==> ALL CONTRACTOR-PERSONNEL TRAVEL BETWEEN CONUS AND OVER-
3989 ==> SEAS DESTINATIONS AND TRAVEL WITHIN OVERSEAS AREAS IS TO
3990 ==> BE APPROVED BY THE CONTRACTING OFFICER OR HIS DESIGNATED
3991 ==> REPRESENTATIVE. THE CONTRACTOR SHALL SUBMIT HIS OVERSEAS
3992 ==> TRAVEL REQUEST NOT LATER THAN 45 DAYS PRIOR TO HIS
3993 ==> PLANNED DEPARTURE DATE. IN ORDER TO PROCESS TRAVEL OR-
3994 ==> DERS AND TO OBTAIN THEATRE CLEARANCE FROM THE OVERSEAS
3995 ==> COMMANDER, THE FOLLOWING INFORMATION IS REQUIRED FOR EACH
3996 ==> TRAVELER:
3997 ==> (A) FULL NAME, HOME ADDRESS, AND SSAN OF TRAVELER;
3998 ==> (B) CITIZENSHIP AND PASSPORT NUMBER;
3999 ==> (C) SECURITY CLEARANCE (DATE AND PLACE OF ISSUANCE);
4000 ==> (D) DATE OF DEPARTURE/DURATION;
4001 ==> (E) ITINERARY/PURPOSE (DETAILED JUSTIFICATION FOR VARI-
4002 ==> ATIONS IF APPLICABLE).
4003 ==>
4004 ==> TRANSPORTATION FROM THE PORT OF ENTRY OVERSEAS WILL BE
4005 ==> FURNISHED BY THE GOVERNMENT.
4006 ==>
4007 ==> TRAVEL POLICIES GOVERNING DOD PERSONNEL WILL BE APPLICA-
4008 ==> BLE TO THE CONTRACTING PERSONNEL DURING THIS EFFORT.
4009 ==>
4010 ==> WHEN THE COST OF TRANSPORTATION IS PAID BY THE GOVERNMENT
4011 ==> TO A COMMERCIAL CARRIER, SUCH PAYMENT WILL BE MADE BY USE
4012 ==> OF A GOVERNMENT TRANSPORTATION REQUEST (GTR).
4013 ==>
4014 ==> THE CONTRACTOR MAY REQUEST A ONE-YEAR BLANKET THEATRE
4015 ==> CLEARANCE FOR THOSE PERSONS WHOM HE HAS IDENTIFIED WHO
4016 ==> WILL BE PERFORMING REPEATED TRAVEL FOR DIRECT ON-SITE
4017 ==> SUPPORT OF THIS EFFORT.
4018 ==>
4019 ==> UPON NOTIFICATION BY THE PO OF THEATRE CLEARANCE APPROV-
4020 ==> AL, THE CONTRACTOR WILL APPLY TO THE ADMINISTRATIVE CON-
4021 ==> TRACTING OFFICER (ACO) FOR ISSUANCE OF TRAVEL ORDERS AND

4022 ==> MILITARY AIRLIFT COMMAND RESERVATIONS OR GTR. SUCH AP-
4023 ==> PLICATION SHALL BE MADE IAW THE POLICIES AND PROCEDURES
4024 ==> ESTABLISHED BY THE ACO.
4025 ==>
4026 ==> THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL TRAVEL AND
4027 ==> ASSOCIATED COSTS OTHER THAN THOSE SPECIFICALLY MADE FOR
4028 ==> THIS EFFORT.
4029 ==>
4030 ==> NOTE: SEE AFSCR 30-5 FOR INFORMATION.
4031 ==>
4032 ==> CONTRACT: ADD THE FOLLOWING TO SECTION H OF THE CONTRACT:
4033 ==> THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND FUNDING
4034 ==> OF ALL TRAVEL AND ASSOCIATED COSTS TO AND FROM OVERSEAS
4035 ==> AREAS IN PERFORMANCE OF THIS EFFORT.
4036 ==>
4037 ==> THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE CONTRACT-
4038 ==> ING OFFICER AND SUBMITTING THE FOLLOWING INFORMATION 45
4039 ==> DAYS PRIOR TO IMPENDING MOVEMENT OF PERSONNEL OVERSEAS:
4040 ==> (A) FULL NAME, HOME ADDRESS, AND SSAN OF TRAVELER;
4041 ==> (B) CITIZENSHIP AND PASSPORT NUMBER;
4042 ==> (C) SECURITY CLEARANCE (DATE AND PLACE OF ISSUANCE);
4043 ==> (D) DATE OF DEPARTURE/DURATION;
4044 ==> (E) ITINERARY/PURPOSE (DETAILED JUSTIFICATION FOR VARI-
4045 ==> ATIONS IF APPLICABLE).
4046 ==>
4047 ==> THE CONTRACTOR AGREES TO USE THE LOWEST COST MODE OF
4048 ==> TRANSPORTATION COMMENSURATE WITH MISSION REQUIREMENTS IAW
4049 ==> GOOD TRAFFIC MANAGEMENT PRINCIPLES. WHEN COSTS ARE FA-
4050 ==> VORABLE, AMERICAN FLAG CARRIERS WILL BE EMPLOYED.
4051 ==>
4052 ==>
4053 ==>

Appendix D: Indexes File

Key Value		Record Value	
0001	==> 1	00063	0026
0002	==> A	00001	0000
0003	==> 2	00000	0006
0004	==> 3	000-1	0024
0005	==> 4	00000	0025
0006	==> M	01236	0007
0007	==> P	00024	0008
0008	==> P	00375	0009
0009	==> P	00325	0010
0010	==> P	00323	0011
0011	==> P	00373	0012
0012	==> P	00355	0013
0013	==> P	00353	0014
0014	==> P	00315	0015
0015	==> P	00369	0016
0016	==> P	00367	0017
0017	==> M	01124	0018
0018	==> P	00333	0019
0019	==> P	00341	0020
0020	==> P	00339	0021
0021	==> P	00359	0022
0022	==> P	00357	0023
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0025	==> 6	00063	0000
0026	==> 1	00070	0038
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0030	==> 4	00000	0036
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0033	==> P	00263	0034
0034	==> D	00793	0035
0035	==> C	00201	0000
0036	==> 6	00070	0037
0037	==> 5	00073	0000
0038	==> 1	00075	0052
0039	==> A	00003	0000
0040	==> 2	00000	0000
0041	==> 3	00000	0043
0042	==> 4	00000	0050
0043	==> M	01236	0044
0044	==> P	00024	0045
0045	==> P	00371	0046

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0047 ==> P   00351   0048
0048 ==> D   00793   0049
0049 ==> C   00201   0000
0050 ==> 6   00075   0051
0051 ==> 6   00080   0000
0052 ==> 1   00082   0061
0053 ==> A   00004   0000
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0058 ==> P   00377   0059
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0062 ==> A   00005   0000
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0066 ==> M   01124   0067
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0069 ==> 6   00093   0070
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0071 ==> 1   00101   0079
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0073 ==> 2   00000   0076
0074 ==> 3   000-1   0077
0075 ==> 4   00000   0078
0076 ==> 6   00111   0000
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0083 ==> 4   00000   0096
0084 ==> 5   00122   0000
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0087 ==> P   01894   0088
0088 ==> P   00269   0089
0089 ==> P   01892   0090
0090 ==> P   00048   0091
0091 ==> P   01898   0092
0092 ==> D   01015   0093
0093 ==> C   00645   0094
0094 ==> 5   00124   0095
0095 ==> 6   00130   0000
0096 ==> 6   00116   0000
0097 ==> 1   00138   0103
0098 ==> A   00008   0000
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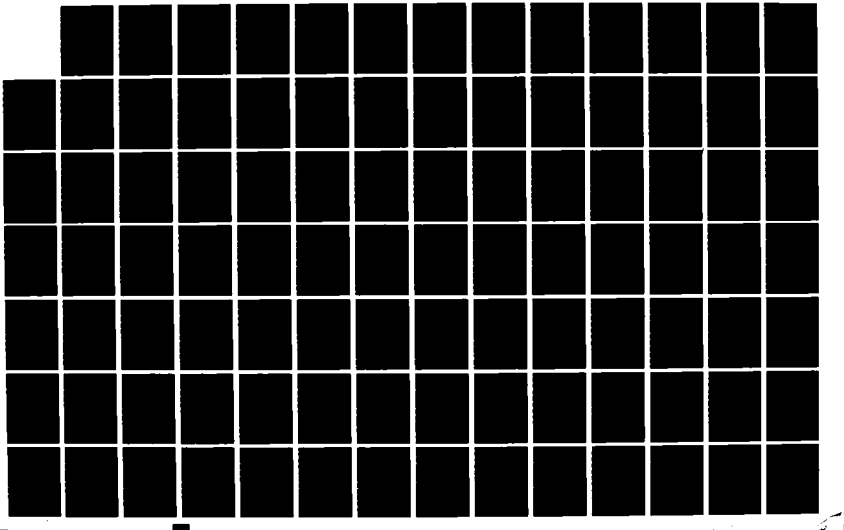
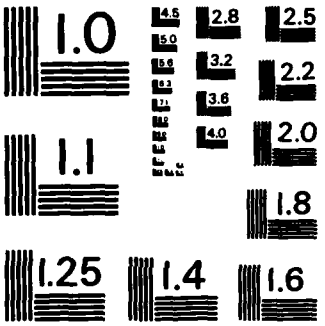
AD-A162 273 A MODIFICATION TO THE COMPUTER GENERATED ACQUISITION DOCUMENTS SYSTEM (CG.. (U) AIR FORCE INST OF TECH WRIGHT-PATTERSON AFB OH SCHOOL OF SYST.. 3/4

UNCLASSIFIED L M ZABKER ET AL. SEP 85 F/G 9/2 NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS - 1963 - A

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0111 ==> P    00030    0112
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0113 ==> P    01900    0114
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0115 ==> C    00765    0000
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0120 ==> 3    00000    0000
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0123 ==> P    00048    0124
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0125 ==> P    00038    0126
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0184 ==> 5   00195    0185
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0198 ==> P   01200    0199
0199 ==> P   01202    0200
0200 ==> P   01204    0201
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0203 ==> P   01233    0204
0204 ==> P   01220    0205
```

```
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0286 ==> P   00930   0287
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0288 ==> P   00040   0289
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0317 ==> D    01057     0318
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0327 ==> D    01036     0328
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0329 ==> D    01033     0330
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0333 ==> 6    00435     0334
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0356 ==> P    00048     0357
0357 ==> P    00050     0358
0358 ==> P    00046     0359
0359 ==> P    00040     0360
0360 ==> P    00038     0361
0361 ==> M    01316     0362
0362 ==> P    01879     0363
0363 ==> M    01110     0364
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0371 ==> P   00038    0372
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0454 ==> P   00463   0455
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0482 ==> D    00818    0483
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0493 ==> P    00063    0494
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0642 ==> 6   01034    0000
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0721 ==> D   00823    0722
0722 ==> C   00456    0723
0723 ==> D   00829    0724
0724 ==> C   00463    0725
0725 ==> D   00826    0726
0726 ==> C   00470    0000
0727 ==> 6   01177    0000
0728 ==> 1   01179    0743
0729 ==> A   00057    0000
0730 ==> 2   00000    0000
0731 ==> 3   00000    0000
0732 ==> 4   00000    0742
0733 ==> S   00801    0734
0734 ==> P   00163    0735
```

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0735 ==> P    00024    0736
0736 ==> P    00170    0737
0737 ==> P    00172    0738
0738 ==> P    00174    0739
0739 ==> P    00176    0740
0740 ==> P    00178    0741
0741 ==> P    00180    0000
0742 ==> 6    01179    0000
0743 ==> 1    01182    0756
0744 ==> A    00058    0000
0745 ==> 2    00000    0748
0746 ==> 3    00000    0000
0747 ==> 4    00000    0755
0748 ==> M    01191    0749
0749 ==> P    00183    0750
0750 ==> M    01199    0751
0751 ==> P    01879    0752
0752 ==> 6    01185    0000
0753 ==> S    00861    0754
0754 ==> P    00063    0000
0755 ==> 6    01182    0000
0756 ==> 1    01188    0769
0757 ==> A    00059    0000
0758 ==> 2    00000    0761
0759 ==> 3    00000    0000
0760 ==> 4    00000    0768
0761 ==> M    01191    0762
0762 ==> P    00187    0763
0763 ==> M    01199    0764
0764 ==> P    01879    0765
0765 ==> 6    01191    0766
0766 ==> M    01208    0767
0767 ==> P    00063    0000
0768 ==> 6    01188    0000
0769 ==> 1    01194    0777
0770 ==> A    00060    0000
0771 ==> 2    00000    0000
0772 ==> 3    00000    0000
0773 ==> 4    00000    0776
0774 ==> 0    00901    0775
0775 ==> P    00987    0000
0776 ==> 6    01194    0000
0777 ==> 1    01197    0787
0778 ==> A    00061    0000
0779 ==> 2    00000    0782
0780 ==> 3    00000    0000
0781 ==> 4    00000    0786
0782 ==> D    00821    0783
0783 ==> 5    01199    0784
0784 ==> 5    01205    0785
0785 ==> 6    01210    0000
0786 ==> 6    01197    0000
0787 ==> 1    01227    0810
```

```
0788 ==> A    00062    0000
0789 ==> 2    00000    0792
0790 ==> 3    00000    0000
0791 ==> 4    00000    0809
0792 ==> M    01191    0793
0793 ==> P    00665    0794
0794 ==> P    00667    0795
0795 ==> M    01199    0796
0796 ==> P    00665    0797
0797 ==> P    00689    0798
0798 ==> P    00687    0799
0799 ==> P    00685    0800
0800 ==> P    00683    0801
0801 ==> P    00681    0802
0802 ==> P    00679    0803
0803 ==> P    00677    0804
0804 ==> P    00675    0805
0805 ==> P    00673    0806
0806 ==> P    00671    0807
0807 ==> P    00693    0808
0808 ==> 6    01229    0000
0809 ==> 6    01227    0000
0810 ==> 1    01233    0000
0811 ==> A    00063    0000
0812 ==> 2    00000    0815
0813 ==> 3    00000    0000
0814 ==> 4    00000    0827
0815 ==> M    01191    0816
0816 ==> P    00989    0817
0817 ==> M    01199    0818
0818 ==> P    00665    0819
0819 ==> P    00689    0820
0820 ==> P    00685    0821
0821 ==> P    00683    0822
0822 ==> P    00681    0823
0823 ==> P    00673    0824
0824 ==> P    00671    0825
0825 ==> P    00695    0826
0826 ==> P    00693    0000
0827 ==> 6    01233    0000
0828 ==> 1    01235    0843
0829 ==> A    00064    0000
0830 ==> 2    00000    0833
0831 ==> 3    000-1    0841
0832 ==> 4    00000    0842
0833 ==> D    00870    0834
0834 ==> C    00705    0835
0835 ==> D    01085    0836
0836 ==> C    00701    0837
0837 ==> D    00958    0838
0838 ==> C    00612    0839
0839 ==> 6    01239    0840
0840 ==> 6    01254    0000
```

```
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0842 ==> 6   01235   0000
0843 ==> 1   01265   0000
0844 ==> A   00065   0000
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0846 ==> 3   00000   0852
0847 ==> 4   00000   0863
0848 ==> 5   01267   0849
0849 ==> 5   01277   0850
0850 ==> 5   01290   0851
0851 ==> 6   01292   0000
0852 ==> D   00870   0853
0853 ==> C   00710   0854
0854 ==> C   00715   0855
0855 ==> C   00720   0856
0856 ==> D   01080   0857
0857 ==> C   00661   0858
0858 ==> 5   01312   0859
0859 ==> 5   01332   0860
0860 ==> 5   01334   0861
0861 ==> 5   01346   0862
0862 ==> 6   01366   0000
0863 ==> 6   01265   0864
0864 ==> 6   01380   0000
0865 ==> 1   01382   0000
0866 ==> A   00066   0000
0867 ==> 2   00000   0872
0868 ==> 3   000-1   0000
0869 ==> 4   00000   0874
0870 ==> 0   01761   0871
0871 ==> P   00063   0872
0872 ==> 5   01385   0873
0873 ==> 6   01388   0000
0874 ==> 6   01382   0875
0875 ==> 6   01394   0000
0876 ==> 1   01403   0882
0877 ==> A   00067   0000
0878 ==> 2   00000   0000
0879 ==> 3   000-1   0000
0880 ==> 4   00000   0881
0881 ==> 6   01403   0000
0882 ==> 1   01406   0888
0883 ==> A   00068   0000
0884 ==> 2   00000   0000
0885 ==> 3   000-1   0000
0886 ==> 4   00000   0887
0887 ==> 6   01406   0000
0888 ==> 1   01408   0903
0889 ==> A   00069   0000
0890 ==> 2   00001   0897
0891 ==> 3   00000   0000
0892 ==> 4   00000   0902
0893 ==> 0   01221   0894
```

```
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0895 ==> 0    01241    0896
0896 ==> P    00063    0897
0897 ==> D    01010    0898
0898 ==> C    00669    0899
0899 ==> 5    01410    0900
0900 ==> 6    01414    0901
0901 ==> 6    01418    0000
0902 ==> 6    01408    0000
0903 ==> 1    01421    0909
0904 ==> A    00070    0000
0905 ==> 2    00000    0000
0906 ==> 3    000-1    0000
0907 ==> 4    00000    0908
0908 ==> 6    01421    0000
0909 ==> 1    01424    0915
0910 ==> A    00071    0000
0911 ==> 2    00001    0000
0912 ==> 3    00000    0000
0913 ==> 4    00000    0914
0914 ==> 6    01424    0000
0915 ==> 1    01426    0922
0916 ==> A    00072    0000
0917 ==> 2    00001    0000
0918 ==> 3    00001    0920
0919 ==> 4    00001    0921
0920 ==> 6    01429    0000
0921 ==> 6    01426    0000
0922 ==> 1    01433    0929
0923 ==> A    00073    0000
0924 ==> 2    00001    0000
0925 ==> 3    00001    0927
0926 ==> 4    00001    0928
0927 ==> 6    01436    0000
0928 ==> 6    01433    0000
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0930 ==> A    00074    0000
0931 ==> 2    00001    0934
0932 ==> 3    00000    0000
0933 ==> 4    00000    0936
0934 ==> 5    01444    0935
0935 ==> 6    01448    0000
0936 ==> 6    01442    0000
0937 ==> 1    01458    0960
0938 ==> A    00075    0000
0939 ==> 2    00000    0946
0940 ==> 3    00000    0000
0941 ==> 4    00000    0959
0942 ==> 0    01221    0943
0943 ==> P    00063    0944
0944 ==> 0    01241    0945
0945 ==> P    00063    0946
0946 ==> D    00995    0947
```

```
0947 ==> C   00665    0948
0948 ==> D   01012    0949
0949 ==> C   00628    0950
0950 ==> D   00998    0951
0951 ==> C   00632    0952
0952 ==> D   01002    0953
0953 ==> C   00636    0954
0954 ==> D   01006    0955
0955 ==> C   00640    0956
0956 ==> 5   01460    0957
0957 ==> 6   01464    0958
0958 ==> 6   01479    0000
0959 ==> 6   01458    0000
0960 ==> 1   01482    0968
0961 ==> A   00076    0000
0962 ==> 2   00000    0000
0963 ==> 3   00000    0000
0964 ==> 4   00000    0967
0965 ==> 0   01241    0966
0966 ==> P   00063    0000
0967 ==> 6   01482    0000
0968 ==> 1   01485    0000
0969 ==> A   00077    0000
0970 ==> 2   00000    0000
0971 ==> 3   00000    0973
0972 ==> 4   00000    0974
0973 ==> 6   01491    0000
0974 ==> 6   01485    0000
0975 ==> 1   01495    0982
0976 ==> A   00078    0000
0977 ==> 2   00000    0980
0978 ==> 3   000-1    0000
0979 ==> 4   00000    0981
0980 ==> 6   01500    0000
0981 ==> 6   01495    0000
0982 ==> 1   01519    0991
0983 ==> A   00079    0000
0984 ==> 2   00000    0000
0985 ==> 3   00001    0987
0986 ==> 4   00000    0989
0987 ==> 6   01522    0988
0988 ==> 6   01540    0000
0989 ==> 6   01519    0990
0990 ==> 6   01556    0000
0991 ==> 1   01559    1001
0992 ==> A   00080    0000
0993 ==> 2   00001    0996
0994 ==> 3   00001    0997
0995 ==> 4   00001    0999
0996 ==> 6   01563    0000
0997 ==> 6   01572    0998
0998 ==> 6   01579    0000
0999 ==> 6   01559    1000
```

```
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1002 ==> A   00081    0000
1003 ==> 2   00000    1006
1004 ==> 3   00000    1007
1005 ==> 4   00000    1008
1006 ==> 6   01605    0000
1007 ==> 6   01623    0000
1008 ==> 6   01598    1009
1009 ==> 6   01633    0000
1010 ==> 1   01645    1022
1011 ==> A   00082    0000
1012 ==> 2   00000    1015
1013 ==> 3   00000    1017
1014 ==> 4   00000    1020
1015 ==> 6   01648    1016
1016 ==> 6   01653    0000
1017 ==> 6   01658    1018
1018 ==> 6   01666    1019
1019 ==> 6   01671    0000
1020 ==> 6   01645    1021
1021 ==> 6   01676    0000
1022 ==> 1   01679    1029
1023 ==> A   00083    0000
1024 ==> 2   00000    1027
1025 ==> 3   00000    0000
1026 ==> 4   00000    1028
1027 ==> 6   01682    0000
1028 ==> 6   01679    0000
1029 ==> 1   01691    1037
1030 ==> A   00084    0000
1031 ==> 2   00000    0000
1032 ==> 3   00002    1034
1033 ==> 4   00000    1035
1034 ==> 6   01694    0000
1035 ==> 6   01691    1036
1036 ==> 6   01701    0000
1037 ==> 1   01704    1045
1038 ==> A   00085    0000
1039 ==> 2   00000    0000
1040 ==> 3   00001    1042
1041 ==> 4   00000    1043
1042 ==> 6   01708    0000
1043 ==> 6   01712    1044
1044 ==> 6   01715    0000
1045 ==> 1   01718    1053
1046 ==> A   00086    0000
1047 ==> 2   00000    1050
1048 ==> 3   00000    0000
1049 ==> 4   00000    1051
1050 ==> 6   01720    0000
1051 ==> 6   01718    1052
1052 ==> 6   01724    0000
```

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1053 ==> 1   01727   1065
1054 ==> A   00087   0000
1055 ==> 2   00000   1058
1056 ==> 3   00000   1061
1057 ==> 4   00002   1063
1058 ==> 5   01729   1059
1059 ==> 6   01733   1060
1060 ==> 6   01735   0000
1061 ==> 6   01743   1062
1062 ==> 6   01751   0000
1063 ==> 6   01727   1064
1064 ==> 6   01755   0000
1065 ==> 1   01759   0000
1066 ==> A   00088   0000
1067 ==> 2   00000   1070
1068 ==> 3   00000   0000
1069 ==> 4   00000   1072
1070 ==> 6   01763   1071
1071 ==> 6   01768   0000
1072 ==> 6   01759   1073
1073 ==> 6   01771   0000
1074 ==> 1   01774   1092
1075 ==> A   00089   0000
1076 ==> 2   00000   1079
1077 ==> 3   00000   1083
1078 ==> 4   00000   1091
1079 ==> 5   01776   1080
1080 ==> 6   01779   0000
1081 ==> S   01281   1082
1082 ==> P   01879   1083
1083 ==> H   01250   1084
1084 ==> P   01879   1089
1085 ==> S   01321   1086
1086 ==> P   01879   1087
1087 ==> S   01341   1088
1088 ==> P   01879   1089
1089 ==> 5   01782   1090
1090 ==> 6   01790   0000
1091 ==> 6   01774   0000
1092 ==> 1   01793   1102
1093 ==> A   00090   0000
1094 ==> 2   00000   1097
1095 ==> 3   00000   1100
1096 ==> 4   00000   1101
1097 ==> 5   01795   0000
1098 ==> S   01341   1099
1099 ==> P   01879   1100
1100 ==> 6   01798   0000
1101 ==> 6   01793   0000
1102 ==> 1   01801   1109
1103 ==> A   00091   0000
1104 ==> 2   00000   1107
1105 ==> 3   00000   0000
```

```
1106 ==> 4   00000   1108
1107 ==> 6   01803   0000
1108 ==> 6   01801   0000
1109 ==> 1   01808   1118
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1112 ==> 3   00000   0000
1113 ==> 4   00000   1117
1114 ==> S   01281   1115
1115 ==> P   01879   1116
1116 ==> 6   01810   0000
1117 ==> 6   01808   0000
1118 ==> 1   01815   0000
1119 ==> A   00093   0000
1120 ==> 2   00000   1123
1121 ==> 3   00000   0000
1122 ==> 4   00000   1124
1123 ==> 6   01817   0000
1124 ==> 6   01815   0000
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1126 ==> A   00094   0000
1127 ==> 2   00001   1130
1128 ==> 3   00000   0000
1129 ==> 4   00000   1136
1130 ==> D   01067   1131
1131 ==> 5   01824   1132
1132 ==> 6   01826   1133
1133 ==> 6   01834   1134
1134 ==> 6   01845   1135
1135 ==> 6   01849   0000
1136 ==> 6   01820   1137
1137 ==> 6   01853   0000
1138 ==> 1   01856   0000
1139 ==> A   00095   0000
1140 ==> 2   00000   1143
1141 ==> 3   00000   0000
1142 ==> 4   00000   1146
1143 ==> 5   01858   1144
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1145 ==> 6   01865   0000
1146 ==> 6   01856   1147
1147 ==> 6   01880   0000
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1153 ==> 5   01886   1154
1154 ==> 6   01888   0000
1155 ==> 6   01883   0000
1156 ==> 1   01891   1165
1157 ==> A   00097   0000
1158 ==> 2   00000   1161
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```
1159 ==> 3   00000   1163
1160 ==> 4   00000   1164
1161 ==> 5   01895   1162
1162 ==> 6   01898   0000
1163 ==> 7   01905   0000
1164 ==> 6   01891   0000
1165 ==> 1   01908   1177
1166 ==> A   00098   0000
1167 ==> 2   00000   1170
1168 ==> 3   00000   0000
1169 ==> 4   00000   1176
1170 ==> D   00939   1171
1171 ==> C   00208   1172
1172 ==> D   00942   1173
1173 ==> C   00234   1174
1174 ==> 5   01911   1175
1175 ==> 6   01921   0000
1176 ==> 6   01908   0000
1177 ==> 1   01928   1192
1178 ==> A   00099   0000
1179 ==> 2   00000   1182
1180 ==> 3   00000   0000
1181 ==> 4   00000   1191
1182 ==> D   01076   1183
1183 ==> C   00573   1184
1184 ==> D   01073   1185
1185 ==> C   00584   1186
1186 ==> D   01070   1187
1187 ==> C   00596   1188
1188 ==> 5   01931   1189
1189 ==> 6   01941   1190
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1191 ==> 6   01928   0000
1192 ==> 1   01965   1203
1193 ==> A   00100   0000
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1195 ==> 3   00000   0000
1196 ==> 4   00000   1202
1197 ==> D   00947   1198
1198 ==> C   00217   1199
1199 ==> D   00953   1200
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1202 ==> 6   01965   0000
1203 ==> 1   01980   1210
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1206 ==> 3   00000   0000
1207 ==> 4   00000   1209
1208 ==> 6   01983   0000
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1211 ==> A   00102   0000
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1220 ==> 4    00000    1222
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1222 ==> 6    01993    1223
1223 ==> 6    02005    0000
1224 ==> 1    02009    1234
1225 ==> A    00104    0000
1226 ==> 2    00000    1229
1227 ==> 3    00000    0000
1228 ==> 4    00000    1233
1229 ==> D    00951    1230
1230 ==> C    00226    1231
1231 ==> D    00956    1232
1232 ==> C    00247    0000
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1241 ==> 1    02020    1248
1242 ==> A    00106    0000
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1244 ==> 3    00000    0000
1245 ==> 4    00000    1247
1246 ==> 6    02022    0000
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1249 ==> A    00107    0000
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1251 ==> 3    00000    0000
1252 ==> 4    00000    1254
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1255 ==> 1    02036    1263
1256 ==> A    00108    0000
1257 ==> 2    00000    1260
1258 ==> 3    00000    0000
1259 ==> 4    00000    1262
1260 ==> M    01257    1261
1261 ==> P    00063    0000
1262 ==> 6    02036    0000
1263 ==> 1    02039    1271
1264 ==> A    00109    0000
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1266 ==> 3    00000    0000
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1268 ==> D    00944    1269
1269 ==> C    00253    0000
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1271 ==> 1    02043    1278
1272 ==> A    00110    0000
1273 ==> 2    00000    1276
1274 ==> 3    00000    0000
1275 ==> 4    00000    1277
1276 ==> 6    02046    0000
1277 ==> 6    02043    0000
1278 ==> 1    02055    1286
1279 ==> A    00111    0000
1280 ==> 2    00000    1283
1281 ==> 3    00000    0000
1282 ==> 4    00000    1284
1283 ==> 6    02060    0000
1284 ==> 6    02055    1285
1285 ==> 6    02080    0000
1286 ==> 1    02083    0000
1287 ==> A    00112    0000
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1289 ==> 3    00000    0000
1290 ==> 4    00000    1293
1291 ==> 5    02086    1292
1292 ==> 6    02088    0000
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1295 ==> A    00113    0000
1296 ==> 2    00000    1299
1297 ==> 3    000-1    1307
1298 ==> 4    00000    1308
1299 ==> D    00934    1300
1300 ==> C    00619    1301
1301 ==> 5    02101    1302
1302 ==> 6    02115    1303
1303 ==> 6    02134    1304
1304 ==> 6    02139    1305
1305 ==> 6    02154    1306
1306 ==> 6    02174    0000
1307 ==> 5    02184    0000
1308 ==> 6    02099    0000
1309 ==> 1    02185    0000
1310 ==> A    00114    0000
1311 ==> 2    00000    1314
1312 ==> 3    00000    0000
1313 ==> 4    00000    1319
1314 ==> D    01083    1315
1315 ==> C    00697    1316
1316 ==> 6    02188    1317
1317 ==> 6    02195    1318
```

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1319 ==> 6   02185    0000
1320 ==> 1   02218    0000
1321 ==> A   00115    0000
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1323 ==> 3   000-1    1332
1324 ==> 4   00000    1333
1325 ==> D   00937    1326
1326 ==> C   00184    1327
1327 ==> 5   02221    1328
1328 ==> 6   02223    1329
1329 ==> 5   02233    1330
1330 ==> 6   02238    1331
1331 ==> 6   02252    0000
1332 ==> 5   02264    0000
1333 ==> 6   02218    0000
1334 ==> 1   02265    1341
1335 ==> A   00116    0000
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1337 ==> 3   000-1    1339
1338 ==> 4   00000    1340
1339 ==> 6   02267    0000
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1341 ==> 1   02270    1355
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1348 ==> M   01124    1349
1349 ==> P   01879    1350
1350 ==> 5   02272    1351
1351 ==> 5   02286    1352
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1354 ==> 6   02270    0000
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1357 ==> 2   00002    1360
1358 ==> 3   00000    0000
1359 ==> 4   00000    1368
1360 ==> M   01184    1361
1361 ==> P   00024    1362
1362 ==> P   00239    1363
1363 ==> P   01879    1364
1364 ==> 5   02310    1365
1365 ==> 5   02329    1366
1366 ==> 5   02349    1367
1367 ==> 6   02363    0000
1368 ==> 6   02307    0000
1369 ==> 1   02368    1382
1370 ==> A   00119    0000
```

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1372 ==> 3    00000    0000
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1374 ==> M    01184    1375
1375 ==> P    01879    1376
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1377 ==> 5    02381    1378
1378 ==> 5    02394    1379
1379 ==> 5    02413    1380
1380 ==> 6    02421    0000
1381 ==> 6    02368    0000
1382 ==> 1    02426    1402
1383 ==> A    00120    0000
1384 ==> 2    000-1    1387
1385 ==> 3    00000    0000
1386 ==> 4    00000    1401
1387 ==> M    01184    1388
1388 ==> P    01879    1389
1389 ==> M    01340    1390
1390 ==> P    01560    1391
1391 ==> 5    02428    1392
1392 ==> 5    02443    1393
1393 ==> 5    02460    1394
1394 ==> 5    02466    1395
1395 ==> 5    02486    1396
1396 ==> 5    02494    1397
1397 ==> 5    02513    1398
1398 ==> 5    02532    1399
1399 ==> 5    02548    1400
1400 ==> 6    02560    0000
1401 ==> 6    02426    0000
1402 ==> 1    02577    1412
1403 ==> A    00121    0000
1404 ==> 2    000-1    1407
1405 ==> 3    00000    1409
1406 ==> 4    00000    1410
1407 ==> 5    02580    1408
1408 ==> 6    02598    0000
1409 ==> 6    02615    0000
1410 ==> 6    02577    1411
1411 ==> 6    02618    0000
1412 ==> 1    02621    0000
1413 ==> A    00122    0000
1414 ==> 2    00000    1417
1415 ==> 3    00000    0000
1416 ==> 4    00000    1418
1417 ==> 6    02624    0000
1418 ==> 6    02621    0000
1419 ==> 1    02627    1426
1420 ==> A    00123    0000
1421 ==> 2    00000    0000
1422 ==> 3    000-1    1424
1423 ==> 4    000-1    1425
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1425 ==> 6    02627    0000
1426 ==> 1    02647    1442
1427 ==> A    00124    0000
1428 ==> 2    00000    0000
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1430 ==> 4    00000    1441
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1432 ==> P    00024    1433
1433 ==> P    01297    1434
1434 ==> P    01259    1435
1435 ==> P    01397    1436
1436 ==> P    01293    1437
1437 ==> P    01399    1438
1438 ==> D    00890    1439
1439 ==> C    00079    1440
1440 ==> 6    02649    0000
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1442 ==> 1    02651    1458
1443 ==> A    00125    0000
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1445 ==> 3    00000    0000
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1447 ==> M    01166    1448
1448 ==> P    00024    1449
1449 ==> P    01297    1450
1450 ==> P    01259    1451
1451 ==> P    01397    1452
1452 ==> P    01293    1453
1453 ==> P    01399    1454
1454 ==> D    00890    1455
1455 ==> C    00079    1456
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1461 ==> 3    00003    0000
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1463 ==> 6    02656    0000
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1465 ==> A    00127    0000
1466 ==> 2    00002    1469
1467 ==> 3    00000    0000
1468 ==> 4    00000    1483
1469 ==> M    01166    1470
1470 ==> P    00024    1471
1471 ==> P    01297    1472
1472 ==> P    01259    1473
1473 ==> P    01401    1474
1474 ==> P    01307    1475
1475 ==> P    01403    1476
1476 ==> P    01293    1477
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1477 ==> P   01273   1478
1478 ==> D   00862   1479
1479 ==> C   00360   1480
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1481 ==> 6   02679   1482
1482 ==> 6   02683   0000
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1487 ==> 3   00000   0000
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1490 ==> P   00024   1491
1491 ==> P   01297   1492
1492 ==> P   01259   1493
1493 ==> P   01401   1494
1494 ==> P   01307   1495
1495 ==> P   01405   1496
1496 ==> P   01293   1497
1497 ==> P   01407   1498
1498 ==> D   00862   1499
1499 ==> C   00360   1500
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1501 ==> 6   02693   1502
1502 ==> 6   02697   0000
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1504 ==> 1   02700   1523
1505 ==> A   00129   0000
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1507 ==> 3   00000   0000
1508 ==> 4   00000   1522
1509 ==> M   01166   1510
1510 ==> P   00024   1511
1511 ==> P   01297   1512
1512 ==> P   01259   1513
1513 ==> P   01401   1514
1514 ==> P   01307   1515
1515 ==> P   01405   1516
1516 ==> P   01293   1517
1517 ==> P   01407   1518
1518 ==> D   00862   1519
1519 ==> C   00360   1520
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1521 ==> 6   02707   0000
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1524 ==> A   00130   0000
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1526 ==> 3   00000   0000
1527 ==> 4   00000   1548
1528 ==> M   01166   1529
1529 ==> P   00024   1530
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1531 ==> P   01259    1532
1532 ==> P   01261    1533
1533 ==> P   01263    1534
1534 ==> P   01409    1535
1535 ==> P   01411    1536
1536 ==> P   01267    1537
1537 ==> P   01269    1538
1538 ==> P   01293    1539
1539 ==> P   01273    1540
1540 ==> M   01175    1541
1541 ==> P   00024    1542
1542 ==> P   01413    1543
1543 ==> P   01415    1544
1544 ==> D   00892    1545
1545 ==> C   00049    1546
1546 ==> 5   02714    1547
1547 ==> 6   02717    0000
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1550 ==> A   00131    0000
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1552 ==> 3   00000    0000
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1554 ==> M   01166    1555
1555 ==> P   00024    1556
1556 ==> P   01297    1557
1557 ==> P   01259    1558
1558 ==> P   01261    1559
1559 ==> P   01417    1560
1560 ==> P   01343    1561
1561 ==> P   01345    1562
1562 ==> P   01421    1563
1563 ==> P   01349    1564
1564 ==> P   01351    1565
1565 ==> P   01411    1566
1566 ==> P   01267    1567
1567 ==> P   01353    1568
1568 ==> P   01355    1569
1569 ==> P   01269    1570
1570 ==> P   01293    1571
1571 ==> P   01273    1572
1572 ==> M   01175    1573
1573 ==> P   00024    1574
1574 ==> P   01317    1575
1575 ==> P   01427    1576
1576 ==> P   01251    1577
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1578 ==> P   01431    1579
1579 ==> P   01361    1580
1580 ==> P   01363    1581
1581 ==> P   01433    1582
1582 ==> P   01375    1583
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1583 ==> P   01435    1584
1584 ==> P   01323    1585
1585 ==> P   01325    1586
1586 ==> P   01379    1587
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1588 ==> P   01774    1589
1589 ==> P   01465    1590
1590 ==> P   01437    1591
1591 ==> P   01333    1592
1592 ==> P   01335    1593
1593 ==> P   01337    1594
1594 ==> P   01339    1595
1595 ==> P   01439    1596
1596 ==> P   01441    1597
1597 ==> D   00897    1598
1598 ==> C   00057    1599
1599 ==> D   00894    1600
1600 ==> C   00099    1601
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1602 ==> 5   02726    1603
1603 ==> 6   02728    0000
1604 ==> 6   02720    0000
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1608 ==> 3   00000    0000
1609 ==> 4   00000    1648
1610 ==> M   01166    1611
1611 ==> P   00024    1612
1612 ==> P   01297    1613
1613 ==> P   01259    1614
1614 ==> P   01261    1615
1615 ==> P   01443    1616
1616 ==> P   01345    1617
1617 ==> P   01421    1618
1618 ==> P   01349    1619
1619 ==> P   01351    1620
1620 ==> P   01411    1621
1621 ==> P   01267    1622
1622 ==> P   01269    1623
1623 ==> P   01293    1624
1624 ==> P   01445    1625
1625 ==> M   01175    1626
1626 ==> P   00024    1627
1627 ==> P   01429    1628
1628 ==> P   01361    1629
1629 ==> P   01447    1630
1630 ==> P   01449    1631
1631 ==> P   01451    1632
1632 ==> P   01453    1633
1633 ==> P   01455    1634
1634 ==> P   01457    1635
1635 ==> P   01459    1636
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1637 ==> P    01774    1638
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1639 ==> P    01467    1640
1640 ==> P    01469    1641
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1642 ==> C    00065    1643
1643 ==> D    00900    1644
1644 ==> C    00107    1645
1645 ==> 5    02737    1646
1646 ==> 5    02740    1647
1647 ==> 6    02742    0000
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1652 ==> 3    00000    0000
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1654 ==> M    01166    1655
1655 ==> P    00024    1656
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1657 ==> P    01259    1658
1658 ==> P    01385    1659
1659 ==> P    01293    1660
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1661 ==> C    00072    1662
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1663 ==> 6    02751    0000
1664 ==> 1    02756    1683
1665 ==> A    00134    0000
1666 ==> 2    00000    1669
1667 ==> 3    00000    0000
1668 ==> 4    00000    1682
1669 ==> M    01166    1670
1670 ==> P    00024    1671
1671 ==> P    01297    1672
1672 ==> P    01259    1673
1673 ==> P    01471    1674
1674 ==> P    01293    1675
1675 ==> D    00915    1676
1676 ==> C    00114    1677
1677 ==> D    00912    1678
1678 ==> C    00123    1679
1679 ==> D    00909    1680
1680 ==> C    00130    1681
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1686 ==> 3    00000    0000
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1688 ==> M    01284    1689
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1690 ==> M    01166    1691
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1692 ==> P    01297    1693
1693 ==> P    01259    1694
1694 ==> P    01473    1695
1695 ==> P    01475    1696
1696 ==> P    01477    1697
1697 ==> P    01479    1698
1698 ==> P    01293    1699
1699 ==> P    01481    1700
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1701 ==> C    00141    1702
1702 ==> D    00920    1703
1703 ==> C    00147    1704
1704 ==> D    00918    1705
1705 ==> C    00156    1706
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1707 ==> 6    02764    0000
1708 ==> 1    02784    1724
1709 ==> A    00136    0000
1710 ==> 2    00000    1713
1711 ==> 3    00000    0000
1712 ==> 4    00000    1723
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1714 ==> P    00024    1715
1715 ==> P    01297    1716
1716 ==> P    01259    1717
1717 ==> P    01483    1718
1718 ==> P    01293    1719
1719 ==> P    01485    1720
1720 ==> D    00925    1721
1721 ==> C    00085    1722
1722 ==> 6    02786    0000
1723 ==> 6    02784    0000
1724 ==> 1    02788    1739
1725 ==> A    00137    0000
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1727 ==> 3    00000    0000
1728 ==> 4    00000    1738
1729 ==> M    01124    1730
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1731 ==> P    01489    1732
1732 ==> D    00927    1733
1733 ==> C    00093    1734
1734 ==> D    00930    1735
1735 ==> C    00043    1736
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1739 ==> 1    02814    1755
1740 ==> A    00138    0000
1741 ==> 2    00000    1744
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1744 ==> 6   02817   0000
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1750 ==> D   00930   1751
1751 ==> C   00043   1752
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1762 ==> P   01495   1763
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1764 ==> C   00093   1765
1765 ==> D   00930   1766
1766 ==> C   00043   1767
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1776 ==> P   01297   1777
1777 ==> P   01259   1778
1778 ==> P   01497   1779
1779 ==> P   01499   1780
1780 ==> P   01501   1781
1781 ==> P   01503   1782
1782 ==> D   00991   1783
1783 ==> C   00685   1784
1784 ==> 6   02850   1785
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1791 ==> 4   00000   1796
1792 ==> D   00865   1793
1793 ==> C   00034   1794
1794 ==> 5   02859   1795
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1796 ==> 6   02857    0000
1797 ==> 1   02869    0000
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1803 ==> C   00360    1804
1804 ==> 5   02871    1805
1805 ==> 6   02872    0000
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1807 ==> 6   02869    0000
1808 ==> 1   02881    0000
1809 ==> A   00143    0000
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1811 ==> 3   000-1    0000
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1813 ==> M   01117    1814
1814 ==> P   00063    1819
1815 ==> S   00461    1816
1816 ==> P   00063    1817
1817 ==> H   00341    1818
1818 ==> P   00063    1819
1819 ==> D   00868    1820
1820 ==> C   00135    1821
1821 ==> 6   02885    0000
1822 ==> 6   02881    0000
1823 ==> 1   02887    0000
1824 ==> A   00144    0000
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1826 ==> 3   00000    1832
1827 ==> 4   00000    1833
1828 ==> D   00870    1829
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1830 ==> 5   02894    1831
1831 ==> 6   02895    0000
1832 ==> 7   02898    0000
1833 ==> 6   02887    0000
1834 ==> 1   02900    0000
1835 ==> A   00145    0000
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1840 ==> C   00010    1841
1841 ==> D   00885    1842
1842 ==> C   00015    1843
1843 ==> D   00887    1844
1844 ==> C   00020    1845
1845 ==> 5   02902    1846
1846 ==> 6   02906    1847
1847 ==> 6   02912    0000
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1849 ==> 1   02925   0000
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1852 ==> 3   000-1   0000
1853 ==> 4   00000   1863
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1856 ==> P   00022   1857
1857 ==> P   00020   1858
1858 ==> P   00018   1859
1859 ==> P   00016   1860
1860 ==> D   00835   1861
1861 ==> C   00025   1862
1862 ==> 6   02927   0000
1863 ==> 6   02925   0000
1864 ==> 1   02943   1872
1865 ==> A   00147   0000
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1867 ==> 3   00000   0000
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1869 ==> 6   02945   0000
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1871 ==> 6   02949   0000
1872 ==> 1   02953   0000
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1875 ==> 3   00000   1885
1876 ==> 4   00000   1886
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1878 ==> C   00269   1879
1879 ==> D   00855   1880
1880 ==> C   00321   1881
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1882 ==> 6   02957   1883
1883 ==> 6   02961   1884
1884 ==> 6   02967   0000
1885 ==> 7   02978   0000
1886 ==> 6   02953   0000
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1888 ==> A   00149   0000
1889 ==> 2   000-1   1892
1890 ==> 3   00000   0000
1891 ==> 4   00000   1893
1892 ==> 7   02984   0000
1893 ==> 6   02982   1894
1894 ==> 6   02986   0000
1895 ==> 1   02990   0000
1896 ==> A   00150   0000
1897 ==> 2   00000   1900
1898 ==> 3   000-1   1914
1899 ==> 4   00000   1915
1900 ==> D   00853   1901
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1902 ==> D    00838    1903
1903 ==> C    00269    1904
1904 ==> D    00841    1905
1905 ==> C    00275    1906
1906 ==> D    00844    1907
1907 ==> C    00287    1908
1908 ==> D    00850    1909
1909 ==> C    00299    1910
1910 ==> D    00847    1911
1911 ==> C    00314    1912
1912 ==> 5    02993    1913
1913 ==> 6    02994    0000
1914 ==> 7    03001    0000
1915 ==> 6    02990    0000
1916 ==> 1    03004    0000
1917 ==> A    00151    0000
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1919 ==> 3    00000    1923
1920 ==> 4    00000    1926
1921 ==> D    00860    1922
1922 ==> 6    03009    0000
1923 ==> D    00860    1924
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1925 ==> 6    03017    0000
1926 ==> 6    03004    0000
1927 ==> 1    03025    1942
1928 ==> A    00152    0000
1929 ==> 2    00000    1932
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1931 ==> 4    00000    1940
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1933 ==> M    01215    1934
1934 ==> P    00048    1935
1935 ==> P    00662    1936
1936 ==> P    00040    1937
1937 ==> 6    03036    1938
1938 ==> 6    03045    0000
1939 ==> 6    03055    0000
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1941 ==> 6    03065    0000
1942 ==> 1    03075    1954
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1944 ==> 2    00000    1947
1945 ==> 3    00000    0000
1946 ==> 4    00000    1953
1947 ==> 7    03078    1948
1948 ==> M    01215    1949
1949 ==> P    00048    1950
1950 ==> P    00662    1951
1951 ==> P    00038    1952
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1953 ==> 6    03075    0000
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1961 ==> P    00048    1962
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1979 ==> A    00156    0000
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1981 ==> 3    00000    0000
1982 ==> 4    00000    1989
1983 ==> 7    03126    1984
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1985 ==> P    00048    1986
1986 ==> P    00662    1987
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1993 ==> 3    00000    0000
1994 ==> 4    00000    2003
1995 ==> 7    03147    1996
1996 ==> M    01215    1997
1997 ==> P    00048    1998
1998 ==> P    00662    1999
1999 ==> P    01850    2000
2000 ==> P    01852    2001
2001 ==> P    01854    2002
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2003 ==> 6    03138    0000
2004 ==> 1    03167    2018
2005 ==> A    00158    0000
2006 ==> 2    00000    2009
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2011 ==> P   00048    2012
2012 ==> P   00662    2013
2013 ==> P   01856    2014
2014 ==> P   01858    2015
2015 ==> P   01860    2016
2016 ==> 6   03181    0000
2017 ==> 6   03167    0000
2018 ==> 1   03189    2029
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2020 ==> 2   00000    2023
2021 ==> 3   00000    0000
2022 ==> 4   00000    2028
2023 ==> M   01215    2024
2024 ==> P   00048    2025
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2026 ==> P   01821    2027
2027 ==> 6   03191    0000
2028 ==> 6   03189    0000
2029 ==> 1   03193    2041
2030 ==> A   00160    0000
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2032 ==> 3   00000    0000
2033 ==> 4   00000    2040
2034 ==> 7   03200    2035
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Appendix E: Headings File

THE PRODUCT THAT YOU GENERATED PROVIDES CURRENT REQUIRED DATA IN THE APPROPRIATE FORMAT. IT IS NECESSARY TO TAKE APPROPRIATE ACTION AS INDICATED IN THE "ACTION MESSAGES AND DIRECTIVES" SECTION BELOW. PLEASE REMEMBER THAT THE DATA WAS SUPPLIED BY ESD OFFICES OF PRIMARY RESPONSIBILITY (OPR). THE DATA IS THE BEST AVAILABLE; IT HAS BEEN REFINED AND EDITED. THE STATEMENT OF WORK IS NEARLY COMPLETE. IT IS CONCISE; REPETITIONS WITHIN APPLIED DOCUMENTS, BETWEEN TASKS, AND WITHIN THE RFP (CDRL, CONTRACT SCHEDULE, IFPP), HAVE BEEN REMOVED. LEVYING A TASK BY CITING A DOCUMENT (E.G., MIL-SPEC) AND PARAGRAPH NUMBERS IS SUFFICIENT. CITING A DATA ITEM IN PARENTHESES; E.G., (DI-A-1001) IS ALL THAT IS ALLOWED FOR STATING THAT A REPORT IS REQUIRED - DO NOT ADD PREPARATION AND OTHER DELIVERY REQUIREMENTS! REFRAIN FROM REPETITION FOR ANY REASON!!!!!!

TABLE OF CONTENTS
****

PARAGRAPH
---

1. SCOPE

2. APPLICABLE DOCUMENTS

3. REQUIREMENTS

3.1. HARDWARE

3.2. TRAINING
3.2.1 EQUIPMENT
3.2.2 SERVICES
3.2.3 FACILITIES

3.3. PECULIAR SUPPORT EQUIPMENT
3.3.1 ORGANIZATIONAL
3.3.2 INTERMEDIATE
3.3.3 DEPOT

3.4. SYSTEM TEST AND EVALUATION
3.4.1 DEVELOPMENT TEST AND EVALUATION
3.4.2 OPERATIONAL TEST AND EVALUATION
3.4.3 MARKUPS
3.4.4 TEST AND EVALUATION SUPPORT
3.4.5 TEST FACILITIES

3.5. SYSTEM / PROJECT MANAGEMENT

3.5.1.1 DESIGN ENGINEERING
3.5.1.2 LOGISTICS ENGINEERING
3.5.1.3 SPECIALTY ENGINEERING
3.5.1.4 MANUFACTURING ENGINEERING
3.5.1.5 SECURITY
3.5.1.6 COMMUNICATIONS
3.5.2.1 CONTRACT WORK BREAKDOWN STRUCTURE
3.5.2.2 COST INFORMATION SYSTEMS
3.5.2.3 C/CSC
3.5.2.4 SCHEDULE MANAGEMENT
3.5.2.5 CONFIGURATION MANAGEMENT
3.5.2.6 DATA MANAGEMENT
3.5.2.7 NOMENCLATURE
3.5.2.8 MANUFACTURING MANAGEMENT
3.5.2.9 COMPUTER RESOURCES MANAGEMENT
3.5.2.10 TRAVEL

3.6. DATA
3.6.1 TECHNICAL PUBLICATIONS
3.6.2 ENGINEERING DATA
3.6.3 MANAGEMENT DATA
3.6.4 SUPPORT DATA
3.6.5 DATA DEPOSITORY

3.7. OPERATIONS / SITE ACTIVATION
3.7.1 CONTRACTOR TECHNICAL SUPPORT
3.7.2 SITE CONSTRUCTION

3.8. COMMON SUPPORT EQUIPMENT
3.8.1 ORGANIZATIONAL
3.8.2 INTERMEDIATE
3.8.3 DEPOT

3.9 INDUSTRIAL FACILITIES
3.9.1 CONSTRUCTION / CONVERSITION / EXPANSION
3.9.2 EQUIPMENT ACQUISITION OR MODERNIZATION
3.9.3 MAINTENANCE

3.10 INITIAL SPARES AND REPAIR PARTS

1. SCOPE

1.1 This Statement of Work covers management programs and controls that the Government requires during this phase of the contract.
1.2 The data to be delivered as a result of performing the tasks prescribed by this statement of work are specified in the Contract Data Requirements List (CDRL). In no case shall any task prescribed herein be interpreted to require delivery of data.
1.3 The provisions of the applicable documents and their

tailored applications, set forth in the paragraphs of Section 3 below, are hereby incorporated into the contract by reference with the same force and effect as though set forth herein in full.

2. LISTING OF APPLICABLE DOCUMENTS

(SECTION 3 OF THIS DOCUMENT CONTAINS THE TAILORED REQUIREMENTS.)

2.1 STANDARDS

2.2 SPECIFICATIONS

2.3 HANDBOOKS

2.4 OTHER DOCUMENTS

3. REQUIREMENTS

3.1. HARDWARE

The contractor shall design, develop, fabricate, assemble, and test the _____ system in accordance with the requirements stated in the system specification provided in attachment _____ of the contract.

3.2. TRAINING

3.2.1 EQUIPMENT

3.2.2 SERVICES

3.2.3 FACILITIES

3.3. PECULIAR SUPPORT EQUIPMENT

3.3.1 ORGANIZATIONAL

3.3.2 INTERMEDIATE

3.3.3 DEPOT

3.4. SYSTEM TEST AND EVALUATION

3.4.1 DEVELOPMENT TEST AND EVALUATION

3.4.2 OPERATIONAL TEST AND EVALUATION

3.4.3 MARKUPS

3.4.4 TEST AND EVALUATION SUPPORT

Preoperational Maintenance:

Preoperational Supply Support:

3.4.5 TEST FACILITIES

3.5. SYSTEM / PROJECT MANAGEMENT

3.5.1 SYSTEM ENGINEERING

3.5.1.1 DESIGN ENGINEERING

Human Factors:

Value Engineering:

Parts Control Program:

Electromagnetic Compatability:

Survivability / Vulnerability:

3.5.1.2 LOGISTICS ENGINEERING

Availability:

Maintainability:

Reliability:

Logistics Support Analysis:

Integrated Logistics Support:

Transportability:

3.5.1.3 SPECIALTY ENGINEERING

System Safety:

Aerospace Meteorlogical Environment:

Preservation, Packaging, and Packing:

Transportation:

3.5.1.4 MANUFACTURING ENGINEERING

Quality Assurance:

3.5.1.5 SECURITY

General Security:

Communications Security / Tempest:

3.5.1.6 COMMUNICATIONS

Communications Long Lines:

Radio Frequency Management:

3.5.2.1 CONTRACT WORK BREAKDOWN STRUCTURE

3.5.2.2 COST INFORMATION SYSTEMS

3.5.2.3 C/CSC

3.5.2.4 SCHEDULE MANAGEMENT

3.5.2.5 CONFIGURATION MANAGEMENT

3.5.2.6 DATA MANAGEMENT

3.5.2.7 NOMENCLATURE

3.5.2.8 MANUFACTURING MANAGEMENT

3.5.2.9 COMPUTER RESOURCES MANAGEMENT

3.5.2.10 TRAVEL

3.6. DATA

3.6.1 TECHNICAL PUBLICATIONS

3.6.2 ENGINEERING DATA

3.6.3 MANAGEMENT DATA

3.6.4 SUPPORT DATA

3.6.5 DATA DEPOSITORY

3.7. OPERATIONS / SITE ACTIVATION

Real Property Facilities:

3.7.1 CONTRACTOR TECHNICAL SUPPORT

3.7.2 SITE CONSTRUCTION

3.8. COMMON SUPPORT EQUIPMENT

3.8.1 ORGANIZATIONAL

3.8.2 INTERMEDIATE

3.8.3 DEPOT

3.9 INDUSTRIAL FACILITIES

3.9.1 CONSTRUCTION / CONVERSITION / EXPANSION

3.9.2 EQUIPMENT ACQUISITION OR MODERNIZATION

3.9.3 MAINTENANCE

3.10 INITIAL SPARES AND REPAIR PARTS

TABLE OF CONTENTS
****

Paragraph
---

1. SCOPE

2. LISTING OF DATA ITEMS

3. DRAFT CDRL

3.1. HARDWARE

3.2. TRAINING
3.2.1 EQUIPMENT
3.2.2 SERVICES
3.2.3 FACILITIES

3.3. PECULIAR SUPPORT EQUIPMENT
3.3.1 ORGANIZATIONAL
3.3.2 INTERMEDIATE
3.3.3 DEPOT

3.3.2 INTERMEDIATE

3.3.3 DEPOT

3.4. SYSTEM TEST AND EVALUATION

3.4.1 DEVELOPMENT TEST AND EVALUATION

3.4.2 OPERATIONAL TEST AND EVALUATION

3.4.3 MARKUPS

3.4.4 TEST AND EVALUATION SUPPORT

Preoperational Maintenance:

Preoperational Supply Support:

3.4.5 TEST FACILITIES

3.5. SYSTEM / PROJECT MANAGEMENT

3.5.1 SYSTEM ENGINEERING

3.5.1.1 DESIGN ENGINEERING

Human Factors:

Value Engineering:

Parts Control Program:

Electromagnetic Compatability:

Survivability / Vulnerability:

3.5.1.2 LOGISTICS ENGINEERING

Availability:

Maintainability:

Reliability:

Logistics Support Analysis:

Integrated Logistics Support:

Transportability:

3.5.1.3 SPECIALTY ENGINEERING

System Safety:

Aerospace Meteorlogical Environment:

Preservation, Packaging, and Packing:

Transportation:

3.5.1.4 MANUFACTURING ENGINEERING

Quality Assurance:

3.5.1.5 SECURITY

General Security:

Communications Security / Tempest:

3.5.1.6 COMMUNICATIONS

Communications Long Lines:

Radio Frequency Management:

3.5.2.1 CONTRACT WORK BREAKDOWN STRUCTURE

3.5.2.2 COST INFORMATION SYSTEMS

3.5.2.3 C/CSC

3.5.2.4 SCHEDULE MANAGEMENT

3.5.2.5 CONFIGURATION MANAGEMENT

3.5.2.6 DATA MANAGEMENT

3.5.2.7 NOMENCLATURE

3.5.2.8 MANUFACTURING MANAGEMENT

3.5.2.9 COMPUTER RESOURCES MANAGEMENT

3.5.2.10 TRAVEL

3.6. DATA

3.6.1 TECHNICAL PUBLICATIONS

3.6.2 ENGINEERING DATA

3.6.3 MANAGEMENT DATA

3.6.4 SUPPORT DATA

3.6.5 DATA DEPOSITORY

3.7. OPERATIONS / SITE ACTIVATION

Real Property Facilities:

3.7.1 CONTRACTOR TECHNICAL SUPPORT

3.7.2 SITE CONSTRUCTION

3.8. COMMON SUPPORT EQUIPMENT

3.8.1 ORGANIZATIONAL

3.8.2 INTERMEDIATE

3.8.3 DEPOT

3.9 INDUSTRIAL FACILITIES

3.9.1 *CONSTRUCTION / CONVERSITION / EXPANSION*

3.9.2 EQUIPMENT ACQUISITION OR MODERNIZATION

3.9.3 MAINTENANCE

3.10 INITIAL SPARES AND REPAIR PARTS

ACTION MESSAGES AND DIRECTIVES

CAUTION: THE ABOVE PRODUCT IS A PRELIMINARY DRAFT ONLY!
TAKE APPROPRIATE ACTION AS INDICATED BELOW....

3.1. HARDWARE

3.2. TRAINING

3.2.1 EQUIPMENT

3.2.2 SERVICES

3.2.3 FACILITIES

3.3. PECULIAR SUPPORT EQUIPMENT

3.3.1 ORGANIZATIONAL

3.3.2 INTERMEDIATE

3.3.3 DEPOT

3.4. SYSTEM TEST AND EVALUATION

3.4.1 DEVELOPMENT TEST AND EVALUATION

3.4.2 OPERATIONAL TEST AND EVALUATION

3.4.3 MARKUPS

3.4.4 TEST AND EVALUATION SUPPORT

Preoperational Maintenance:

Preoperational Supply Support:

3.4.5 TEST FACILITIES

3.5. SYSTEM / PROJECT MANAGEMENT

3.5.1 SYSTEM ENGINEERING

3.5.1.1 DESIGN ENGINEERING

Human Factors:

Value Engineering:

Parts Control Program:

Electromagnetic Compatability:

Survivability / Vulnerability:

3.5.1.2 LOGISTICS ENGINEERING

Availability:

Maintainability:

Reliability:

Logistics Support Analysis:

Integrated Logistics Support:

Transportability:

3.5.1.3 SPECIALTY ENGINEERING

System Safety:

Aerospace Meteorlogical Environment:

Preservation, Packaging, and Packing:

Transportation:

3.5.1.4 MANUFACTURING ENGINEERING

Quality Assurance:

3.5.1.5 SECURITY

General Security:

Communications Security / Tempest:

3.5.1.6 COMMUNICATIONS

Communications Long Lines:

Radio Frequency Management:

3.5.2.1 CONTRACT WORK BREAKDOWN STRUCTURE

3.5.2.2 COST INFORMATION SYSTEMS

3.5.2.3 C/CSC

3.5.2.4 SCHEDULE MANAGEMENT

3.5.2.5 CONFIGURATION MANAGEMENT

3.5.2.6 DATA MANAGEMENT

3.5.2.7 NOMENCLATURE

3.5.2.8 MANUFACTURING MANAGEMENT

3.5.2.9 COMPUTER RESOURCES MANAGEMENT

3.5.2.10 TRAVEL

3.6. DATA

3.6.1 TECHNICAL PUBLICATIONS

3.6.2 ENGINEERING DATA

3.6.3 MANAGEMENT DATA

3.6.4 SUPPORT DATA

3.6.5 DATA DEPOSITORY

3.7. OPERATIONS / SITE ACTIVATION

Real Property Facilities:

3.7.1 CONTRACTOR TECHNICAL SUPPORT

3.7.2 SITE CONSTRUCTION

3.8. COMMON SUPPORT EQUIPMENT

3.8.1 ORGANIZATIONAL

3.8.2 INTERMEDIATE

3.8.3 DEPOT

3.9 INDUSTRIAL FACILITIES

3.9.1 CONSTRUCTION / CONVERSITION / EXPANSION

3.9.2 EQUIPMENT ACQUISITION OR MODERNIZATION

3.9.3 MAINTENANCE

3.10 INITIAL SPARES AND REPAIR PARTS

THE FOLLOWING IS A LIST OF ALL AREAS AND FUNCTIONAL TASKS. AN "*" IN COLUMN ONE INDICATES TASK COMPLETION.

Appendix F: Task File

Key Value	Record value
0001 ==>	ENGINEERING FUNCTIONAL TASKS:
0002 ==>	
0003 ==>	1. SYSTEMS ENGINEERING
0004 ==>	2. SYSTEM SAFETY
0005 ==>	3. HUMAN FACTORS
0006 ==>	4. VALUE ENGINEERING
0007 ==>	5. SECURITY
0008 ==>	6. AVAILABILITY
0009 ==>	7. MAINTAINABILITY
0010 ==>	8. RELIABILITY
0011 ==>	9. PARTS CONTROL PROGRAM
0012 ==>	10. AEROSPACE METEOROLOGICAL ENVIRONMENT
0013 ==>	11. ELECTROMAGNETIC COMPATIBILITY (EMC)
0014 ==>	12. SURVIVABILITY / VULNERABILITY
0015 ==>	13. COMMUNICATIONS LONG LINES
0016 ==>	14. COMMUNICATIONS SECURITY / TEMPEST
0017 ==>	15. RADIO FREQUENCY MANAGEMENT
0018 ==>	16. TRANSPORTABILITY
0019 ==>	17. QUALITY ASSURANCE
0020 ==>	18. TEST AND EVALUATION
0021 ==>	19. COMPUTER RESOURCES MANAGEMENT
0022 ==>	20. REAL PROPERTY FACILITIES
0023 ==>	21. MANUFACTURING MANAGEMENT
0024 ==>	
0025 ==>	CONFIGURATION AND DATA FUNCTIONAL TASKS:
0026 ==>	
0027 ==>	1. CONFIGURATION MANAGEMENT
0028 ==>	2. DATA MANAGEMENT
0029 ==>	3. ENGINEERING DATA
0030 ==>	4. NOMENCLATURE
0031 ==>	
0032 ==>	PROGRAM MANAGEMENT FUNCTIONAL TASKS:
0033 ==>	
0034 ==>	1. CONTRACT WORK BREAKDOWN STRUCTURE
0035 ==>	2. COST INFORMATION SYSTEMS
0036 ==>	3. COST / SCHEDULE CONTROL SYSTEMS
0037 ==>	4. SCHEDULE MANAGEMENT
0038 ==>	
0039 ==>	LOGISTICS FUNCTIONAL TASKS:
0040 ==>	
0041 ==>	1. LOGISTICS SUPPORT ANALYSIS
0042 ==>	2. INTEGRATED LOGISTICS SUPPORT
0043 ==>	3. INITIAL SPARE / REPAIR PARTS
0044 ==>	4. PREOPERATIONAL MAINTENANCE
0045 ==>	5. PREOPERATIONAL SUPPLY SUPPORT
0046 ==>	6. SUPPORT BREAKDOWN

```
0047 ==>  7.  TECHNICAL ORDERS
0048 ==>
0049 ==> PACKAGING AND TRANSPORTATION FUNCTIONAL TASKS:
0050 ==>
0051 ==>  1.  PRESERVATION, PACKAGING, AND PACKING
0052 ==>  2.  TRANSPORTATION
0053 ==>  3.  TRAVEL
0054 ==>
0055 ==>
0056 ==> **************************************************************************
0057 ==> *   MICRO-COMPUTER GENERATED ACQUISITION DOCUMENTS SYSTEM (MGADS)   *
0058 ==> **************************************************************************
0059 ==>
0060 ==> 1.  This program is designed to generate and/or modify a Statement of
0061 ==> Work (SOW) and/or Contract Data Requirements List (CDRL) for the Full
0062 ==> Scale Development phase of an acquisition.  A set of ACTION MESSAGES,
0063 ==> grouped by SOW paragraph, will follow the CDRL.
0064 ==>
0065 ==> 2.  The product created is a DRAFT document.  The draft must be
0066 ==> tailored for the specific acquisition.  The action messages are
0067 ==> intended to help you in your tailoring effort.
0068 ==> Tailoring can be accomplished using an MSDOS word processing package.
0069 ==>
0070 ==> 3.  You should be familiar with the program direction/requirements
0071 ==> at this point.  The requirements can be obtained from existing
0072 ==> acquisition documents such as the PMD and AFSC Fm 56.
0073 ==>
0074 ==> 4.  A word of advice --- you may wish to use a separate diskette for
0075 ==> each SOW/CDRL file generated.
0076 ==>
0077 ==>
0078 ==>
0079 ==>                ****** PRESS ANY KEY TO CONTINUE ******
0080 ==>
```

Appendix G: COBOL Source Code

```
       IDENTIFICATION DIVISION.
       PROGRAM-ID.    FSDIST.
      *
      * THIS PROGRAM IS THE ONLY PROGRAM IN THE SOW / CDRL
      * FOR FULL SCALE DEVELOPMENT SERIES.
      *
       ENVIRONMENT DIVISION.
       CONFIGURATION SECTION.
       SOURCE-COMPUTER. Z-100.
       OBJECT-COMPUTER. Z-100.
       INPUT-OUTPUT SECTION.
       FILE-CONTROL.
           SELECT TASK-FILE
           ASSIGN TO DISK
           FILE STATUS IS TASK-FILE-STATUS
           ACCESS IS DYNAMIC
           RELATIVE KEY IS TASK-FILE-REC-NUM
           ORGANIZATION IS RELATIVE.

           SELECT DOCUMENT-FILE
           ASSIGN TO DISK
           FILE STATUS IS FILE-STATUS
           ACCESS IS DYNAMIC
           RELATIVE KEY IS DOCUMENT-FILE-REC-NUM
           ORGANIZATION IS RELATIVE.

           SELECT STD-FILE
           ASSIGN TO DISK
           FILE STATUS IS FILE-STATUS
           ACCESS IS DYNAMIC
           RELATIVE KEY IS STD-FILE-REC-NUM
           ORGANIZATION IS RELATIVE.

           SELECT INDEX-FILE
           ASSIGN TO DISK
           FILE STATUS IS FILE-STATUS
           ACCESS IS DYNAMIC
           RELATIVE KEY IS INDEX-FILE-REC-NUM
           ORGANIZATION IS RELATIVE.

           SELECT QUESTION-FILE
           ASSIGN TO DISK
           FILE STATUS IS FILE-STATUS
           ACCESS IS DYNAMIC
           RELATIVE KEY IS QUESTION-FILE-REC-NUM
           ORGANIZATION IS RELATIVE.

           SELECT INDEX-PTR-FILE
           ASSIGN TO DISK
```

```
           FILE STATUS IIS FILE-STATUS
           ACCESS IS SEQUENTIAL
           ORGANIZATION IS LINE SEQUENTIAL.

           SELECT BATCH-FILE
           ASSIGN TO DISK
           FILE STATUS IS BATCH-STATUS
           ACCESS IS SEQUENTIAL
           ORGANIZATION IS LINE SEQUENTIAL.

           SELECT ANSWER-FILE
           ASSIGN TO DISK
           FILE STATUS IS ANSWER-STATUS
           ACCESS IS DYNAMIC
           RELATIVE KEY IS ANSWER-FILE-KEY
           ORGANIZATION IS RELATIVE.

           SELECT HEADING-FILE
           ASSIGN TO DISK
           FILE STATUS IS FILE-STATUS
           ACCESS IS SEQUENTIAL
           ORGANIZATION IS LINE SEQUENTIAL.

           SELECT WP-FILE
           ASSIGN TO DISK
           FILE STATUS IS WP-STATUS
           ACCESS IS SEQUENTIAL
           ORGANIZATION IS LINE SEQUENTIAL.

       DATA DIVISION.
       FILE SECTION.
       FD  BATCH-FILE
           LABEL RECORDS ARE STANDARD
           VALUE OF FILE-ID IS "FSDBAT1.BAT".
       01  BATCH-RECORD.
           03  FILLER                  PIC X(61).

       FD  DOCUMENT-FILE
           LABEL RECORDS ARE STANDARD
           VALUE OF FILE-ID IS "DOCFILE.FSD".
       01  DOCUMENT-FILE-RECORD.
           03  DOCUMENT-RECORD         PIC X(70).
           03  DOCUMENT-FLAG           PIC X(1).
           03  FILLER                  PIC X(1).
       01  DOCUMENT-FILE-RECORD-2.
           03  FILLER                  PIC X(7).
           03  DID-NUMBER              PIC X(15).
           03  FILLER                  PIC X(50).

       FD  STD-FILE
           LABEL RECORDS ARE STANDARD
           VALUE OF FILE-ID IS "STDFILE.FSD".
       01  STD-FILE-RECORD.
```

```
    03  STD-RECORD.
        05  STD-TITLE          PIC X(7).
        05  FILLER             PIC X(25).

FD  INDEX-FILE
    LABEL RECORDS ARE STANDARD
    VALUE OF FILE-ID IS "INDEXES.FSD".
01  INDEX-RECORD.
    03  INDEX-FIELD-1          PIC X.
    03  FILLER                 PIC X(3).
    03  INDEX-FIELD-2          PIC 9(5).
    03  FILLER                 PIC X(4).
    03  INDEX-FIELD-3          PIC 9(4).

FD  QUESTION-FILE
    LABEL RECORDS ARE STANDARD
    VALUE OF FILE-ID IS "QUEST.FSD".
01  QUESTION-RECORD.
    03  QUESTION               PIC X(70).
    03  END-OF-QUESTION-FLAG   PIC X(1).
    03  FILLER                 PIC X(1).

FD  INDEX-PTR-FILE
    LABEL RECORDS ARE STANDARD
    VALUE OF FILE-ID IS "INDEXPTR.FSD".
01  INDEX-PTR-RECORD.
    03  FILLER                  PIC 9(84).

FD  ANSWER-FILE
    LABEL RECORDS ARE STANDARD
    VALUE OF FILE-ID IS W-FILE-NAME-FORMAT.
01  TASK-COMPLETE-INDICATOR.
    03  TASK-COMPLETE-FLAG OCCURS 100 TIMES PIC X.
01  ANSWER-RECORD.
    03  ANSWER-TO-QUESTION OCCURS 100 TIMES PIC X.

FD  HEADING-FILE
    LABEL RECORDS ARE STANDARD
    VALUE OF FILE-ID IS "HEADINGS.FSD".
01  HEADING-RECORD.
    03  HDG-SECTION-NUM        PIC X(4).
    03  FILLER                 PIC X(67).

FD  WP-FILE
    LABEL RECORDS ARE STANDARD
    VALUE OF FILE-ID IS FILE-NAME-VALUE.
01  WP-FILE-RECORD.
    03  FILLER                 PIC X(9).
    03  WP-FILE-REC-VAL        PIC X(71).
01  WP-FILE-RECORD-2.
    03  WP-AREA                PIC X(7).
    03  WP-AREA-NUM            PIC Z(1).
    03  FILLER                 PIC X(5).
```

```
           03  WP-TASK                 PIC X(7).
           03  WP-TASK-NUM             PIC Z(2).
           03  FILLER                  PIC X(5).
           03  WP-QUESTION             PIC X(11).
           03  WP-QUESTION-NUM         PIC Z(2).
           03  FILLER                  PIC X(40).
       01  WP-FILE-RECORD-3.
           03  WP-SECTION-NUM          PIC X(4).
           03  WP-SUB-SECTION-NUM      PIC X(2).
           03  WP-DECIMAL-PT-1         PIC X(1).
           03  FILLER                  PIC X(2).
           03  WP-TASK-TITLE           PIC X(71).
       01  WP-FILE-RECORD-4.
           03  FILLER                      PIC X(39).
           03  WP-STD-AREA                 PIC X(32).
           03  FILLER                      PIC X(9).
       01  WP-FILE-RECORD-5.
           03  WP-COMPLETE-FLAG            PIC X.
           03  FILLER                      PIC X.
           03  WP-TASK-RECORD              PIC X(78).
       01  WP-FILE-RECORD-6.
           03  FILLER                      PIC X(29).
           03  WP-DATA-ITEM-TITLE          PIC X(15).
           03  WP-LEFT-PAREN               PIC X(1).
           03  WP-REF-TITLE                PIC X(6).
           03  WP-REF-NUMBER               PIC 9(3).
           03  WP-RIGHT-PAREN              PIC X(1).
           03  FILLER                      PIC X(25).
       01  WP-FILE-RECORD-7.
           03  FILLER                      PIC X(9).
           03  WP-NUMBER-REF-TITLE         PIC X(6).
           03  WP-NUMBER-REF               PIC 9(3).
           03  FILLER                      PIC X(62).

       FD  TASK-FILE
           LABEL RECORDS ARE STANDARD
           VALUE OF FILE-ID IS "TASKFILE.FSD".
       01  TASK-RECORD-1.
           03  TASK-RECORD             PIC X(50).
           03  FILLER                  PIC X(20).
       01  TASK-RECORD-2.
           03  INTRO-SCREEN-RECORD     PIC X(70).
       01  TASK-RECORD-3.
           03  FILLER                  PIC X(5).
           03  TASK-TITLE              PIC X(45).
           03  FILLER                  PIC X(20).

       WORKING-STORAGE SECTION.
       01  MISC-VALUES.
           03  NEW-FILE-FLAG               PIC X(13).
           03  NUMBER-OF-TASKS             PIC X(2).
           03  TASK-FILE-REC-NUM           PIC 9(5) COMP-0.
           03  TASK-COUNTER                PIC 9(2).
```

```
03  RESPONSE                    PIC X(1).
03  NUM-RESPONSE REDEFINES RESPONSE PIC 9.
03  AREA-NUMBER                PIC 9.
03  READ-FILE-COUNTER          PIC 9(5) COMP-0.
03  TASK-FILE-STATUS           PIC X(02) VALUE SPACES.
03  FILE-STATUS                PIC X(02) VALUE SPACES.
03  HOLD-MAIN-NUM              PIC 9(4).
03  ANSWER-FILE-KEY            PIC 9(5) COMP-0.
03  BATCH-STATUS               PIC X(2) VALUE SPACES.
03  ANSWER-STATUS              PIC X(2) VALUE SPACES.
03  TASK-RESPONSE              PIC X(2) JUSTIFIED RIGHT.
03  ALPHA-TASK-RESPONSE REDEFINES TASK-RESPONSE.
    05  ALPHA-FIRST-CHAR       PIC X(1).
    05  ALPHA-RESPONSE         PIC X(1).
03  NUM-TASK-RESPONSE REDEFINES TASK-RESPONSE.
    05  FILLER                 PIC 9(2).
03  TASK-NUMBER REDEFINES TASK-RESPONSE PIC 9(2).
03  ALPHA-ANSWER-SUBS          PIC X(10) VALUE
                               "0226334050".
03  NUM-ANSWER-SUBS REDEFINES ALPHA-ANSWER-SUBS.
    05  ANSWER-SUBSCRIPT OCCURS 5 TIMES PIC 9(2).
03  WP-STATUS                  PIC X(2) VALUE SPACES.
03  INDEX-FILE-REC-NUM         PIC 9(5) COMP-0.
03  QUESTION-FILE-REC-NUM      PIC 9(5) COMP-0.
03  REF-NUM                    PIC 9(3).
03  PRIME-INDEX-FIELD-2        PIC 9(5).
03  PRIME-INDEX-FIELD-3        PIC 9(4).
03  QUESTION-COMPLETE-FLAG     PIC 9(1).
03  ACT-FLAG                   PIC 9.
03  CDRL-FLAG                  PIC 9.
03  DUMMY                      PIC X.
03  FILE-NAME-STATUS           PIC 9(1).
03  ERRORS                     PIC 9(1) VALUE 0.
03  QUESTION-NUMBER-LINE.
    05  FILLER                 PIC X(9)  VALUE "QUESTION ".
    05  QUESTION-NUMBER        PIC Z(2).
    05  FILLER                 PIC X(1)  VALUE ":".
03  HOLD-REC-NUM               PIC 9(5) COMP-0.
03  DOCUMENT-FILE-REC-NUM      PIC 9(5) COMP-0.
03  STD-FILE-REC-NUM           PIC 9(5) COMP-0.
03  ANSWER                     PIC X.
03  DID-FLAG                   PIC 9.
03  COMPLETE-FLAG              PIC 9.
03  QUESTION-COUNTER           PIC 9(2).
03  NO-ERRORS                  PIC 9(1) VALUE 1.
03  SCRIPT                     PIC 9(2).
03  DISPLAY-RECORD.
    05  FILLER                 PIC X(77).
03  DISPLAY-RECORD-2 REDEFINES DISPLAY-RECORD.
    05  FILLER                 PIC X(39).
    05  DISPLAY-STD            PIC X(38).
03  DISP-MESS-TITLE-1          PIC X(22)  VALUE
    "Applicable Data Items:".
```

```
03  DISP-MESS-TITLE-2          PIC X(16)   VALUE
    "Action messages:".
03  MAX-TIMES                  PIC 9(2).
03  PREVIOUS-ANSWER            PIC X.
03  PRESENT                    PIC 9(1) VALUE 1.
03  T-AND-A-NUM.
    05  A-NUM                  PIC 9.
    05  T-NUM                  PIC 99.
03  DECIMAL-IND                PIC 9(1)  VALUE 0.
03  AREA-AND-TASK-COUNTER      PIC 9(2).
03  RED-AREA-AND-TASK-CTR REDEFINES AREA-AND-TASK-COUNTER.
    05  A-AND-T-1ST-CHAR       PIC X.
    05  A-AND-T-2ND-CHAR       PIC X.
03  TASKS-AND-AREAS.
    05  FILLER                 PIC X(30)  VALUE
        "406118404405101103104109111112".
    05  FILLER                 PIC X(30)   VALUE
        "106107108116401402102110501502".
    05  FILLER                 PIC X(30)  VALUE
        "117105114113115301302303304201".
    05  FILLER                 PIC X(27)  VALUE
        "202204121119503407203120403".
03  AREAS-AND-TASKS REDEFINES TASKS-AND-AREAS.
    05  AREA-AND-TASK-NUMS OCCURS 39 TIMES PIC 9(3).
03  SECTION-COUNTER           PIC 9(2).
03 S-TABLE.
    05  SORT-TABLE OCCURS 100 TIMES.
        07  SORT-PRIME-NUM         PIC X.
        07  SORT-MAIN-NUM          PIC 9(4).
        07  SORT-STD-NUM-A         PIC X.
        07  SORT-STD-NUM           PIC X.
        07  SORT-SUB-NUM           PIC X(32).
        07  SORT-PRIME-NUM-P       PIC X.
03  TEMP-TBL-ENTRY.
    05  TEMP-TBL-PRIME-NUM     PIC X.
    05  TEMP-TBL-MAIN-NUM      PIC 9(4).
    05  TEMP-TBL-STD-NUM-A     PIC X.
    05  TEMP-TBL-STD-NUM       PIC X.
    05  TEMP-TBL-SUB-NUM       PIC X(32).
    05  TEMP-TBL-PRIME-NUM-P   PIC X.
03  SPEC-FLAG                  PIC 9.
03  SPEC-CTR                   PIC 99.
03  SORT-FLAG                  PIC 9.
03  SOW-QUESTION-FLAG          PIC 9.
03  CTR                        PIC 9(3).
03  TBL-MAX                    PIC 9(3).
03  T-COUNTER                   PIC 9(2).
03  SCRIPT-MINUS-1              PIC 9(2).
03  SCRIPT-PLUS-3               PIC 9(2).
03  W-FILE-NAME-FORMAT.
    05  W-DRIVE-IND            PIC X(2).
    05  FILLER-1               PIC X.
    05  W-FILE-NAME            PIC X(11).
```

```
    03  W-FILE-FORMAT-2 REDEFINES W-FILE-NAME-FORMAT.
        05  FILLER-2                PIC X(1).
        05  W-FILE-NAME-2           PIC X(13).

01  INDEX-PTR-TABLE.
    03  INDEX-PTR-TABLE-ROW OCCURS 5 TIMES.
        05  INDEX-PTR OCCURS 21 TIMES
                    PIC 9(4).

01  DELETE-FORMAT.
    03  FILLER                      PIC X(4) VALUE "DEL ".
    03  DELETE-FILE-NAME            PIC X(14).

01  FILE-NAME-VALUE.
    03  FL-NAME-VAL-ALPHA.
        05  FILE-NAME-CHAR OCCURS 13 TIMES PIC X(01).
    03  FL-NAME-VAL-NUM REDEFINES FL-NAME-VAL-ALPHA.
        05  FILE-NAME-NUM OCCURS 13 TIMES PIC 9(01).
    03  FL-NAME-DRIVE-IND REDEFINES FL-NAME-VAL-ALPHA.
        05  FILE-DRIVE-IND          PIC X(2).
        05  FILE-W-DRIVE-IND        PIC X(11).
    03  FL-NAME-WO-DRIVE-IND REDEFINES FL-NAME-VAL-ALPHA.
        05  FILE-WO-DRIVE-IND       PIC X(11).
        05  FILLER                  PIC X(2).

SCREEN SECTION.

01  MAIN-MENU.
    03  LINE 2 COLUMN 27 VALUE
        "MAIN MENU".
    03  LINE 3 COLUMN 27 VALUE
        "**********".
    03  LINE 5 COLUMN 9 VALUE
        "There are four options available to you.  You may:".
    03  LINE 8 COLUMN 12 VALUE
        "D --- Delete a previously created file".
    03  LINE 10 COLUMN 12 VALUE
        "R --- Run functional tasks.  This option consists of".
    03  LINE 11 COLUMN 12 VALUE
        "      answering questions in each of five functional".
    03  LINE 12 COLUMN 12 VALUE
        "      areas to create a new SOW/CDRL or to modify a".
    03  LINE 13 COLUMN 12 VALUE
        "      previously created one".
    03  LINE 15 COLUMN 12 VALUE
        "W --- Produce a word processor file of completed".
    03  LINE 16 COLUMN 12 VALUE
        "      tasks.  Use this option after you have run".
    03  LINE 17 COLUMN 12 VALUE
        "      the functional tasks.  WARNING:  previously".
    03  LINE 18 COLUMN 12 VALUE
        "      created files having the specified filename".
    03  LINE 19 COLUMN 12 VALUE
```

```
           "      will be over-written".
       03  LINE 21 COLUMN 12 VALUE
           "E --- Exit to operating system.".

   01  AREA-SCREEN.
       03  LINE 2 COLUMN 27 VALUE
           "AREA MENU".
       03  LINE 3 COLUMN 27 VALUE
           "**********".
       03  LINE 5 COLUMN 9 VALUE
           "All functional tasks have been grouped into one of the".
       03  LINE 6 COLUMN 9 VALUE
           "following areas:".
       03  LINE 9 COLUMN 14 VALUE
           "Area 1 --- Engineering".
       03  LINE 10 COLUMN 14 VALUE
           "Area 2 --- Configuration and Data".
       03  LINE 11 COLUMN 14 VALUE
           "Area 3 --- Program Management".
       03  LINE 12 COLUMN 14 VALUE
           "Area 4 --- Logistics".
       03  LINE 13 COLUMN 14 VALUE
           "Area 5 --- Packaging and Transportation.".
       03  LINE 17 COLUMN 9 VALUE
          "Notes:  1.  You may select areas and tasks in any order".
       03  LINE 18 COLUMN 17 VALUE
          "2.  You must answer all questions pertaining to each".
       03  LINE 19 COLUMN 21 VALUE
           "task".
       03  LINE 20 COLUMN 17 VALUE
           "3.  If you fail to answer any questions, pertinent".
       03  LINE 21 COLUMN 21 VALUE
           "information will be omitted from your document.".

   01  QUESTION-SCREEN.
       03  LINE 4 COLUMN 9 PIC X
                 FROM RESPONSE.
       03  LINE 4 COLUMN 10 VALUE
           " is the recorded answer.".
       03  LINE 8 COLUMN 9 VALUE
           "You now have several options.  You may:".
       03  LINE 11 COLUMN 14 VALUE
           "<space> --- Continue to the next question".

   01  QUESTION-SCREEN-Y-OR-N.
       03  LINE 13 COLUMN 14 VALUE
           "   V    --- View output to question just answered".
       03  LINE 14 COLUMN 14 VALUE
           "            then return to this menu".
       03  LINE 16 COLUMN 14 VALUE
           "   R    --- Repeat previous question".
       03  LINE 18 COLUMN 14 VALUE
           "   B    --- Begin this task again".
```

```
           03  LINE 20 COLUMN 14 VALUE
               "   X     --- Exit this task and return to task menu".

       01  QUESTION-SCREEN-U.
           03  LINE 13 COLUMN 14 VALUE
               "   R     --- Repeat previous question".
           03  LINE 15 COLUMN 14 VALUE
               "   B     --- Begin this task again".
           03  LINE 17 COLUMN 14 VALUE
               "   X     --- Exit this task and return to task menu".

       01  FILE-NAME-SCREEN.
           03  LINE 2 COLUMN 3 VALUE
               "OPTION SELECTED:  ".
           03  LINE 5 COLUMN 3 VALUE
               "FILENAME RULES:".
           03  LINE 7 COLUMN 6 VALUE
               "1.  Filenames must be from 1 to 7 characters long".
           03  LINE 8 COLUMN 6 VALUE
               "2.  Each character in the filename must be either ".
           03  LINE 9 COLUMN 10 VALUE
               "numeric or alphabetic ".
           03  LINE 10 COLUMN 6 VALUE
               "3.  The first character in the filename must be ".
           03  LINE 11 COLUMN 10 VALUE
               "alphabetic".
           03  LINE 12 COLUMN 6 VALUE
               "4.  Disk drive names may be specified --- simply type".
           03  LINE 13 COLUMN 10 VALUE
               "the drive name letter followed by a colon".
           03  LINE 14 COLUMN 6 VALUE
               "5.  Filenames may be followed by a decimal point and".
           03  LINE 15 COLUMN 6 VALUE
               "     a three character extension".
           03  LINE 16 COLUMN 6 VALUE
               "6.  See user's manual for further clarification.".
           03  LINE 18 COLUMN 3 VALUE
               "EXAMPLES OF VALID FILENAMES:".
           03  LINE 20 COLUMN 6 VALUE
               "1.  MYFILE".
           03  LINE 21 COLUMN 6 VALUE
               "2.  MYFILE.NAM".
           03  LINE 22 COLUMN 6 VALUE
               "3.  A:MYFILE.NAM".

       01  TASK-SCREEN.
           03  LINE 4 COLUMN 51 REVERSE-VIDEO VALUE
               "  NOTES:                    ".
           03  LINE 5 COLUMN 51 REVERSE-VIDEO VALUE
               "  ------                    ".
           03  LINE 6 COLUMN 51 REVERSE-VIDEO VALUE
               "                            ".
           03  LINE 7 COLUMN 51 REVERSE-VIDEO VALUE
```

```
           " 1.  An '*' in column one   ".
       03  LINE 8 COLUMN 51 REVERSE-VIDEO VALUE
           "  indicates task completion. ".
       03  LINE 9 COLUMN 51 REVERSE-VIDEO VALUE
           "                             ".
       03  LINE 10 COLUMN 51 REVERSE-VIDEO VALUE
           "  2.  There are three        ".
       03  LINE 11 COLUMN 51 REVERSE-VIDEO VALUE
           "  options available to you.  ".
       03  LINE 12 COLUMN 51 REVERSE-VIDEO VALUE
           "  You may enter:             ".
       03  LINE 13 COLUMN 51 REVERSE-VIDEO VALUE
           "                             ".
       03  LINE 14 COLUMN 51 REVERSE-VIDEO VALUE
           "  <1-  > -- To process a     ".
       03  LINE 14 COLUMN 56 REVERSE-VIDEO PIC X(2)
                             FROM NUMBER-OF-TASKS.
       03  LINE 15 COLUMN 51 REVERSE-VIDEO VALUE
           "             particular task ".
       03  LINE 16 COLUMN 51 REVERSE-VIDEO VALUE
           "    M    -- To return to the ".
       03  LINE 17 COLUMN 51 REVERSE-VIDEO VALUE
           "             main menu       ".
       03  LINE 18 COLUMN 51 REVERSE-VIDEO VALUE
           "    A    -- To select another".
       03  LINE 19 COLUMN 51 REVERSE-VIDEO VALUE
           "            area             ".

   01  ERROR-SCREEN-2.
       03  LINE 23 COLUMN 3 JUST REVERSE-VIDEO PIC X(13)
                            FROM FILE-NAME-VALUE.
       03  LINE 23 COLUMN 16 REVERSE-VIDEO VALUE
           " is an invalid filename.  Please try again.".

   01  ENTER-LINE-FORMAT-2.
       03  LINE 24 COLUMN 3 BLANK LINE REVERSE-VIDEO VALUE
           "Enter filename followed by <return>:".

   01  ERROR-LINE-1.
       03  LINE 23 COLUMN 9 REVERSE-VIDEO PIC X(1)
                    FROM RESPONSE.
       03  LINE 23 COLUMN 10 REVERSE-VIDEO VALUE
           " is an invalid response.  Please try again.".

   01  PREVIOUS-ANSWER-LINE.
       03  LINE 20 COLUMN 9 VALUE
           "Note:  This question was answered previously.  The recor
-          "ded".
       03  LINE 21 COLUMN 16 VALUE
           "answer was ".
       03  LINE 21 COLUMN 27 PIC X(1)
                    FROM PREVIOUS-ANSWER.
       03  LINE 21 COLUMN 28 VALUE ".".
```

```
01  ENTER-AREA.
    03  LINE 24 COLUMN 9 BLANK LINE REVERSE-VIDEO VALUE
        "Enter area number <1-5> or M to return to the main menu:
        "".

01  ENTER-OPTION.
    03  LINE 24 COLUMN 9 BLANK LINE REVERSE-VIDEO VALUE
        "Enter option:".

01  ENTER-TASK-OPTION-LINE.
    03  LINE 23 COLUMN 51 BLANK LINE REVERSE-VIDEO VALUE
        "  Enter option fol- ".
    03  LINE 24 COLUMN 51 BLANK LINE REVERSE-VIDEO VALUE
        "  lowed by <return>:".

01  TASK-ERROR-LINE.
    03  LINE 21 COLUMN 51 REVERSE-VIDEO VALUE "  ".
    03  LINE 21 COLUMN 53 REVERSE-VIDEO PIC X(2)
              FROM TASK-RESPONSE.
    03  LINE 21 COLUMN 55 REVERSE-VIDEO VALUE
        " is an invalid option.".
    03  LINE 22 COLUMN 51 REVERSE-VIDEO VALUE
        "  Please try again. ".

01  ENTER-ANSWER-LINE.
    03  LINE 24 COLUMN 9 REVERSE-VIDEO VALUE
        "Answer Y (yes), N (no), or U (undecided):".

01  BLNK-SCREEN.
    03  BLANK SCREEN.
    03  LINE 1 COLUMN 55 REVERSE-VIDEO PIC X(11)
              FROM NEW-FILE-FLAG.
    03  LINE 1 COLUMN 66 REVERSE-VIDEO PIC X(13)
              FROM FILE-NAME-VALUE.

01  BLANK-SCREEN.
    03  BLANK SCREEN.

PROCEDURE DIVISION.
0000-DRIVER.
    OPEN OUTPUT BATCH-FILE.
    OPEN INPUT TASK-FILE
               DOCUMENT-FILE
               STD-FILE
               INDEX-FILE.
    OPEN INPUT INDEX-PTR-FILE.
    OPEN INPUT QUESTION-FILE.
    DISPLAY BLANK-SCREEN.
    MOVE 1 TO AREA-NUMBER.
    PERFORM 0000-READ-INDEX-PTR-FILE 5 TIMES.
    CLOSE INDEX-PTR-FILE.
    MOVE 56 TO TASK-FILE-REC-NUM.
```

```
    DISPLAY BLANK-SCREEN.
    MOVE 1 TO LIN.
    PERFORM 0000-DISPLAY-INTRODUCTION 24 TIMES.
    ACCEPT (24, 75) DUMMY WITH AUTO-SKIP.
    DISPLAY BLANK-SCREEN.
    DISPLAY MAIN-MENU.
    DISPLAY ENTER-OPTION.
    ACCEPT (24, 22) RESPONSE WITH AUTO-SKIP.
    PERFORM 0000-PROCESS-MAIN-OPTIONS  THRU
            0000-PROCESS-MAIN-OPTIONS-EXIT UNTIL
             RESPONSE = "E" OR "e".
    CLOSE BATCH-FILE.
    CLOSE TASK-FILE
          INDEX-FILE
          STD-FILE
          DOCUMENT-FILE
          QUESTION-FILE.
    DISPLAY BLANK-SCREEN.
    STOP RUN.

0000-READ-INDEX-PTR-FILE.
    READ INDEX-PTR-FILE.
    MOVE INDEX-PTR-RECORD TO INDEX-PTR-TABLE-ROW(AREA-NUMBER).
    ADD 1 TO AREA-NUMBER.

0000-DISPLAY-INTRODUCTION.
    READ TASK-FILE.
    DISPLAY (LIN, 5) INTRO-SCREEN-RECORD.
    ADD 1 TO LIN.
    ADD 1 TO TASK-FILE-REC-NUM.

0000-PROCESS-MAIN-OPTIONS.
    IF RESPONSE = "D" OR "d"
        PERFORM 4000-ENTER-FILE-NAME
        PERFORM 1000-DELETE-FILE THRU
                1000-DELETE-FILE-EXIT
        MOVE "M" TO RESPONSE
    ELSE
        IF RESPONSE = "R" OR "r"
            PERFORM 4000-ENTER-FILE-NAME
            PERFORM 2000-RUN-FCTNL-TASKS THRU
                    2000-RUN-FCTNL-TASKS-EXIT
              UNTIL RESPONSE = "M" OR "m"
            CLOSE ANSWER-FILE
        ELSE
            IF RESPONSE = "W" OR "w"
                PERFORM 4000-ENTER-FILE-NAME
                PERFORM 3000-FORMAT-FOR-WP THRU
                        3000-FORMAT-FOR-WP-EXIT
                        UNTIL RESPONSE = "M" OR "m"
            ELSE
                IF RESPONSE NOT = "M" or "m"
                    DISPLAY ERROR-LINE-1.
```

```
    IF RESPONSE = "M" OR "m"
        DISPLAY BLANK-SCREEN
        DISPLAY MAIN-MENU.
    DISPLAY ENTER-OPTION.
    ACCEPT (24, 22) RESPONSE WITH AUTO-SKIP.
0000-PROCESS-MAIN-OPTIONS-EXIT.
    EXIT.

1000-DELETE-FILE.
    MOVE W-FILE-NAME-FORMAT TO DELETE-FILE-NAME.
    MOVE SPACES TO BATCH-RECORD.
    MOVE DELETE-FORMAT TO BATCH-RECORD.
    WRITE BATCH-RECORD.
    MOVE SPACES TO DELETE-FILE-NAME.
    MOVE FILE-NAME-VALUE TO DELETE-FILE-NAME.
    MOVE DELETE-FORMAT TO BATCH-RECORD.
    WRITE BATCH-RECORD.
1000-DELETE-FILE-EXIT.
    EXIT.

2000-RUN-FCTNL-TASKS.
    OPEN INPUT ANSWER-FILE.
    IF ANSWER-STATUS = "30"
        MOVE "NEW FILE:  " TO NEW-FILE-FLAG
        CLOSE ANSWER-FILE
        OPEN OUTPUT ANSWER-FILE
        IF ANSWER-STATUS = "34"
            DISPLAY BLANK-SCREEN
            DISPLAY "DISK FULL --- YOU CANNOT PROCEED"
            STOP RUN
        ELSE
            MOVE 1 TO ANSWER-FILE-KEY
            MOVE SPACES TO ANSWER-RECORD
            PERFORM 2100-WRITE-ANSWER-RECORD 5 TIMES
    ELSE
        MOVE "OLD FILE:  " TO NEW-FILE-FLAG.
    CLOSE ANSWER-FILE.
    OPEN I-O ANSWER-FILE.
    DISPLAY BLNK-SCREEN.
    DISPLAY AREA-SCREEN.
    DISPLAY ENTER-AREA.
    ACCEPT (24, 65) RESPONSE WITH AUTO-SKIP.
    PERFORM 2200-RUN-AREAS THRU
            2200-RUN-AREAS-EXIT  UNTIL
            RESPONSE = "M" OR "m".
2000-RUN-FCTNL-TASKS-EXIT.
    EXIT.

2100-WRITE-ANSWER-RECORD.
    WRITE ANSWER-RECORD.
    ADD 1 TO ANSWER-FILE-KEY.

2200-RUN-AREAS.
```

```
    IF RESPONSE > "0"  AND
       RESPONSE < "6"
        MOVE NUM-RESPONSE TO AREA-NUMBER
        DISPLAY BLNK-SCREEN
        PERFORM 2220-DISPLAY-TASK-MENU THRU
                2220-DISPLAY-TASK-MENU-EXIT
        DISPLAY ENTER-TASK-OPTION-LINE
        ACCEPT (24, 71) TASK-RESPONSE WITH RIGHT-JUSTIFY
                                           ZERO-FILL
        MOVE ALPHA-RESPONSE TO RESPONSE
        PERFORM 2210-RUN-TASKS THRU
                2210-RUN-TASKS-EXIT   UNTIL
                RESPONSE = "A" OR "a"  OR
                RESPONSE = "M" OR "m"
        IF RESPONSE = "A" OR "a"
            DISPLAY BLNK-SCREEN
            DISPLAY AREA-SCREEN
            DISPLAY ENTER-AREA
        ELSE
            GO TO 2200-RUN-AREAS-EXIT
    ELSE
        DISPLAY ENTER-AREA
        DISPLAY ERROR-LINE-1.
    ACCEPT (24, 65) RESPONSE WITH AUTO-SKIP.
2200-RUN-AREAS-EXIT.
    EXIT.

2210-RUN-TASKS.
    IF TASK-RESPONSE = "1 "
        MOVE "01" TO TASK-RESPONSE
    ELSE
        IF TASK-RESPONSE = "2 "
            MOVE "02" TO TASK-RESPONSE.
    IF TASK-RESPONSE > "00"  AND
       NUM-TASK-RESPONSE < TASK-COUNTER
        MOVE 0 TO QUESTION-COUNTER
        PERFORM 2230-RUN-QUESTIONS UNTIL
                RESPONSE = "X" OR "x"
        DISPLAY BLNK-SCREEN
        PERFORM 2220-DISPLAY-TASK-MENU THRU
                2220-DISPLAY-TASK-MENU-EXIT
         DISPLAY ENTER-TASK-OPTION-LINE
    ELSE
        IF TASK-RESPONSE = "00"
            MOVE SPACES TO TASK-RESPONSE
            DISPLAY TASK-ERROR-LINE
            DISPLAY ENTER-TASK-OPTION-LINE
        ELSE
            IF ALPHA-FIRST-CHAR = "0"
                MOVE SPACES TO ALPHA-FIRST-CHAR
                DISPLAY TASK-ERROR-LINE
                DISPLAY ENTER-TASK-OPTION-LINE
            ELSE
```

```
                DISPLAY TASK-ERROR-LINE
                DISPLAY ENTER-TASK-OPTION-LINE.
    ACCEPT (24, 71) TASK-RESPONSE WITH RIGHT-JUSTIFY
                                       ZERO-FILL.
    MOVE ALPHA-RESPONSE TO RESPONSE.
221C-RUN-TASKS-EXIT.
    EXIT.

2220-DISPLAY-TASK-MENU.
    PERFORM 5000-DETER-MISC-TASK-VALS.
    MOVE 1 TO ANSWER-FILE-KEY.
    READ ANSWER-FILE.
    MOVE 2 TO LIN.
    PERFORM 2221-READ-TASKS-TO-SCREEN
            TASK-COUNTER TIMES.
    SUBTRACT 1 FROM TASK-COUNTER.
    DISPLAY TASK-SCREEN.
2220-DISPLAY-TASK-MENU-EXIT.
    EXIT.

2221-READ-TASKS-TO-SCREEN.
    READ TASK-FILE.
    DISPLAY (LIN, 3)
        TASK-COMPLETE-FLAG (TASK-FILE-REC-NUM).
    DISPLAY (LIN, 5) TASK-RECORD.
    ADD 1 TO LIN.
    ADD 1 TO TASK-FILE-REC-NUM.

2230-RUN-QUESTIONS.
    MOVE INDEX-PTR(AREA-NUMBER, TASK-NUMBER) TO
               INDEX-FILE-REC-NUM.
    READ INDEX-FILE.
    MOVE INDEX-FIELD-2 TO PRIME-INDEX-FIELD-2.
    MOVE INDEX-FIELD-3 TO PRIME-INDEX-FIELD-3.
    MOVE 0 TO QUESTION-COMPLETE-FLAG.
    PERFORM 2235-ASK-QUESTIONS THRU
            2235-ASK-QUESTIONS-EXIT
            UNTIL QUESTION-COMPLETE-FLAG = 1.

2235-ASK-QUESTIONS.
    ADD 1 TO INDEX-FILE-REC-NUM.
    READ INDEX-FILE.
    PERFORM 5000-DETERMINE-ANSWER-INDEX.
    READ ANSWER-FILE.
    MOVE PRIME-INDEX-FIELD-2 TO QUESTION-FILE-REC-NUM.
    DISPLAY BLNK-SCREEN.
    ADD 1 TO QUESTION-COUNTER.
    MOVE QUESTION-COUNTER TO QUESTION-NUMBER.
    DISPLAY (3, 6) QUESTION-NUMBER-LINE.
    MOVE 5 TO LIN.
    MOVE SPACES TO END-OF-QUESTION-FLAG.
    PERFORM 2235-DISPLAY-QUESTION
            UNTIL END-OF-QUESTION-FLAG = "*".
```

```
IF ANSWER-TO-QUESTION(INDEX-FIELD-2) NOT = SPACES
    MOVE ANSWER-TO-QUESTION(INDEX-FIELD-2) TO
            PREVIOUS-ANSWER
    DISPLAY PREVIOUS-ANSWER-LINE.
DISPLAY ENTER-ANSWER-LINE.
ACCEPT (24, 50) RESPONSE WITH AUTO-SKIP.
PERFORM 2235-ACCEPT-QUESTION-ANSWER
    UNTIL RESPONSE = "Y" OR "y"  OR
          RESPONSE = "N" OR "n"  OR
          RESPONSE = "U" OR "u".
IF RESPONSE = "y"
    MOVE "Y" TO RESPONSE
ELSE
    IF RESPONSE = "n"
        MOVE "N" TO RESPONSE
    ELSE
        IF RESPONSE = "u"
            MOVE "U" TO RESPONSE.
MOVE RESPONSE TO ANSWER-TO-QUESTION(INDEX-FIELD-2).
REWRITE TASK-COMPLETE-INDICATOR.
DISPLAY BLNK-SCREEN.
DISPLAY QUESTION-SCREEN.
IF RESPONSE = "Y" OR "N"
    DISPLAY QUESTION-SCREEN-Y-OR-N
    DISPLAY ENTER-OPTION
    ACCEPT (24, 22) RESPONSE WITH AUTO-SKIP
    PERFORM 2235-ACCEPT-QUESTION-RESPONSE
        UNTIL RESPONSE = " "  OR
              RESPONSE = "B" OR "b"  OR
              RESPONSE = "R" OR "r"  OR
              RESPONSE = "V" OR "v"  OR
              RESPONSE = "X" OR "x"
ELSE
    DISPLAY QUESTION-SCREEN-U
    DISPLAY ENTER-OPTION
    ACCEPT (24, 22) RESPONSE WITH AUTO-SKIP
    PERFORM 2235-ACCEPT-QUESTION-RESPONSE
        UNTIL RESPONSE = " "  OR
              RESPONSE = "B" OR "b"  OR
              RESPONSE = "R" OR "r"  OR
              RESPONSE = "X" OR "x".
IF RESPONSE = "V" OR "v"
    PERFORM 2237-VIEW-ANSWERS
        UNTIL RESPONSE NOT = "V" and "v".
IF RESPONSE = "B" OR "b"
    MOVE INDEX-PTR(AREA-NUMBER, TASK-NUMBER) TO
              INDEX-FILE-REC-NUM
    READ INDEX-FILE
    MOVE INDEX-FIELD-2 TO PRIME-INDEX-FIELD-2
    MOVE INDEX-FIELD-3 TO PRIME-INDEX-FIELD-3
    MOVE 0 TO QUESTION-COUNTER
ELSE
    IF RESPONSE = " "
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            IF PRIME-INDEX-FIELD-3 = 0
                MOVE "X" TO RESPONSE
                MOVE 1 TO QUESTION-COMPLETE-FLAG
                COMPUTE TASK-FILE-REC-NUM =
                   ANSWER-SUBSCRIPT(AREA-NUMBER) + TASK-NUMBER
                MOVE 1 TO ANSWER-FILE-KEY
                READ ANSWER-FILE
                MOVE "*" TO TASK-COMPLETE-FLAG
                              (TASK-FILE-REC-NUM)
                REWRITE TASK-COMPLETE-INDICATOR
            ELSE
                MOVE PRIME-INDEX-FIELD-3 TO INDEX-FILE-REC-NUM
                READ INDEX-FILE
                MOVE INDEX-FIELD-2 TO PRIME-INDEX-FIELD-2
                MOVE INDEX-FIELD-3 TO PRIME-INDEX-FIELD-3
        ELSE
            IF RESPONSE = "R" OR "r"
                SUBTRACT 1 FROM INDEX-FILE-REC-NUM
                SUBTRACT 1 FROM QUESTION-COUNTER
            ELSE
                MOVE 1 TO QUESTION-COMPLETE-FLAG.

2235-ASK-QUESTIONS-EXIT.
    EXIT.

2235-ACCEPT-QUESTION-ANSWER.
    DISPLAY ERROR-LINE-1.
    DISPLAY ENTER-ANSWER-LINE.
    ACCEPT (24, 50) RESPONSE WITH AUTO-SKIP.

2235-ACCEPT-QUESTION-RESPONSE.
    DISPLAY ERROR-LINE-1.
    DISPLAY ENTER-OPTION.
    ACCEPT (24, 22) RESPONSE WITH AUTO-SKIP.

2235-DISPLAY-QUESTION.
    READ QUESTION-FILE.
    DISPLAY (LIN, 6) QUESTION.
    ADD 1 TO LIN.
    ADD 1 TO QUESTION-FILE-REC-NUM.

2237-VIEW-ANSWERS.
    MOVE ANSWER-TO-QUESTION(INDEX-FIELD-2) TO RESPONSE.
    MOVE INDEX-FILE-REC-NUM TO HOLD-REC-NUM.
    DISPLAY BLANK-SCREEN.
    MOVE 1 TO LIN.
    MOVE RESPONSE TO ANSWER.
    PERFORM 6000-SET-INDEX-FILE-REC-NUM.
    READ INDEX-FILE.
    MOVE SPACES TO DISPLAY-RECORD.
    MOVE SPACES TO S-TABLE.
    MOVE 0 TO TBL-MAX.
    PERFORM 3220-RETRIEVE-SPECS
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            UNTIL INDEX-FIELD-3 = 0.
        PERFORM 6000-SORT-PHASE.
        MOVE 1 TO CTR.
        PERFORM 2238-DISPLAY-MAIN-VALS
            UNTIL CTR > TBL-MAX.
        PERFORM 2239-DISPLAY-5-VALS
            VARYING CTR FROM 1 BY 1
            UNTIL CTR > TBL-MAX.
        MOVE DISP-MESS-TITLE-1 TO DISPLAY-RECORD
        PERFORM 2250-ACTUAL-DISPLAY 2 TIMES
        MOVE 0 TO SPEC-CTR
        PERFORM 2240-DISPLAY-DID-VALS
            VARYING CTR FROM 1 BY 1
            UNTIL CTR > TBL-MAX
        IF SPEC-CTR = 0
            MOVE "          None" TO DISPLAY-RECORD
            PERFORM 2250-ACTUAL-DISPLAY.
        MOVE DISP-MESS-TITLE-2 TO DISPLAY-RECORD
        PERFORM 2250-ACTUAL-DISPLAY 2 TIMES
        MOVE 0 TO SPEC-CTR
        PERFORM 2241-DISPLAY-6-VALS
            VARYING CTR FROM 1 BY 1
            UNTIL CTR > TBL-MAX
        IF SPEC-CTR = 0
            MOVE "          None" TO DISPLAY-RECORD
            PERFORM 2250-ACTUAl -DISPLAY.
        DISPLAY (24, 27) "HIT ANY KEY TO CONTINUE".
        ACCEPT (24, 80) DUMMY WITH AUTO-SKIP.
        MOVE HOLD-REC-NUM TO INDEX-FILE-REC-NUM.
        DISPLAY BLNK-SCREEN.
        DISPLAY QUESTION-SCREEN.
        DISPLAY QUESTION-SCREEN-U.
        DISPLAY ENTER-OPTION.
        ACCEPT (24, 22) RESPONSE WITH AUTO-SKIP.
        PERFORM 2235-ACCEPT-QUESTION-RESPONSE
            UNTIL RESPONSE = " " OR
                  RESPONSE = "B" OR "b" OR
                  RESPONSE = "R" OR "r" OR
                  RESPONSE = "X" OR "x".

2238-DISPLAY-MAIN-VALS.
    IF SORT-PRIME-NUM(CTR) = "1" OR "2" OR "3" OR "4"
         MOVE SORT-MAIN-NUM(CTR) TO DOCUMENT-FILE-REC-NUM
         MOVE SPACES TO DOCUMENT-FLAG
         PERFORM 2245-DISPLAY-DOC-TO-SCREEN
             UNTIL DOCUMENT-FLAG = "E"
        ADD 1 TO CTR
        PERFORM 2250-ACTUAL-DISPLAY
        PERFORM 2242-DISPLAY-P-VALS
            UNTIL SORT-PRIME-NUM-P(CTR) NOT = "P"  OR
                  CTR > TBL-MAX
        PERFORM 2245-DISPLAY-DOC-TO-SCREEN
        PERFORM 2250-ACTUAL-DISPLAY
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    ELSE
        ADD 1 TO CTR.

2239-DISPLAY-5-VALS.
    IF SORT-PRIME-NUM(CTR) = "5"
        MOVE SORT-MAIN-NUM(CTR) TO QUESTION-FILE-REC-NUM
        MOVE SPACES TO END-OF-QUESTION-FLAG
        PERFORM 2247-DISPLAY-QUES-TO-SCREEN
            UNTIL END-OF-QUESTION-FLAG = "*"
        PERFORM 2250-ACTUAL-DISPLAY.

2240-DISPLAY-DID-VALS.
    IF SORT-PRIME-NUM(CTR) = "D"
        MOVE SORT-MAIN-NUM(CTR) TO DOCUMENT-FILE-REC-NUM
        MOVE SPACES TO DOCUMENT-FLAG
        PERFORM 2245-DISPLAY-DOC-TO-SCREEN
            UNTIL DOCUMENT-FLAG = "*"
        PERFORM 2250-ACTUAL-DISPLAY.

2241-DISPLAY-6-VALS.
    IF SORT-PRIME-NUM(CTR) = "6"
        MOVE SORT-MAIN-NUM(CTR) TO QUESTION-FILE-REC-NUM
        MOVE SPACES TO END-OF-QUESTION-FLAG
        PERFORM 2247-DISPLAY-QUES-TO-SCREEN
            UNTIL END-OF-QUESTION-FLAG = "*"
        PERFORM 2250-ACTUAL-DISPLAY.

2242-DISPLAY-P-VALS.
    MOVE SORT-SUB-NUM(CTR) TO DISPLAY-STD.
    PERFORM 2250-ACTUAL-DISPLAY.
    ADD 1 TO CTR.

2245-DISPLAY-DOC-TO-SCREEN.
    READ DOCUMENT-FILE.
    MOVE DOCUMENT-RECORD TO DISPLAY-RECORD.
    PERFORM 2250-ACTUAL-DISPLAY.
    ADD 1 TO DOCUMENT-FILE-REC-NUM.
    MOVE 1 TO SPEC-CTR.

2247-DISPLAY-QUES-TO-SCREEN.
    READ QUESTION-FILE.
    MOVE QUESTION TO DISPLAY-RECORD.
    PERFORM 2250-ACTUAL-DISPLAY.
    ADD 1 TO QUESTION-FILE-REC-NUM.
    MOVE 1 TO SPEC-CTR.

2250-ACTUAL-DISPLAY.
    DISPLAY (LIN, 3) DISPLAY-RECORD.
    ADD 1 TO LIN.
    IF LIN = 23
        ADD 1 TO LIN
        DISPLAY (LIN, 27) "HIT ANY KEY TO CONTINUE"
        ACCEPT (24, 75) DUMMY WITH AUTO-SKIP
```

```
            DISPLAY BLANK-SCREEN
            MOVE 1 TO LIN.
        MOVE SPACES TO DISPLAY-RECORD.




3000-FORMAT-FOR-WP.
    DISPLAY BLANK-SCREEN.
    MOVE "M" TO RESPONSE.
    OPEN INPUT ANSWER-FILE.
    IF ANSWER-STATUS = "30"
        DISPLAY (5, 5) "FILE DOES NOT EXIST"
        DISPLAY (24, 5) "HIT <return> TO RETURN TO MAIN MENU"
        GO TO 3000-FORMAT-FOR-WP-EXIT.
    OPEN OUTPUT WP-FILE
         INPUT  HEADING-FILE.

    DISPLAY " ".
    DISPLAY "Formatting Table of Contents --- Please wait".
    PERFORM 6000-WRITE-FROM-HDG-FILE 116 TIMES.
    MOVE SPACES TO S-TABLE.
    MOVE 0 TO SPEC-CTR.
    MOVE ZEROES TO TBL-MAX.
    DISPLAY " ".
    DISPLAY "Formatting Documents Section --- Please wait".
    PERFORM 3150-RETRIEVE-ALL-SPECS
        VARYING T-COUNTER FROM 1 BY 1
        UNTIL T-COUNTER > 39.
    PERFORM 6000-SORT-PHASE.
    MOVE 1 TO SPEC-FLAG.
    MOVE 1 TO CTR.
    PERFORM 3160-WRITE-OUT-SPECS 4 TIMES.
    PERFORM 6000-WRITE-FROM-HDG-FILE 12 TIMES.
    MOVE 1 TO REF-NUM.
    DISPLAY " ".
    DISPLAY "Formatting Requirements Section --- Please wait".
    PERFORM 3200-SOW-MAIN-BODY THRU
            3200-SOW-MAIN-BODY-EXIT
        VARYING T-COUNTER FROM 1 BY 1
        UNTIL T-COUNTER > 39.
    DISPLAY " ".
    DISPLAY "Formatting Table of Contents --- Please wait".
    PERFORM 6000-WRITE-FROM-HDG-FILE 94 TIMES.
    DISPLAY " ".
    DISPLAY "Formatting Data Item Section --- Please wait".
    PERFORM 3300-CDRL-MAIN-BODY
        VARYING T-COUNTER FROM 1 BY 1
        UNTIL T-COUNTER > 39.
```

```
    PERFORM 6000-SORT-PHASE.
    MOVE 0 TO SPEC-CTR.
    PERFORM 3380-WRITE-DIDS-FROM-TBL
        VARYING CTR FROM 1 BY 1
        UNTIL CTR > TBL-MAX.
    IF SPEC-CTR = 0
        MOVE SPACES TO WP-FILE-RECORD
        MOVE "None" TO WP-TASK-TITLE
        WRITE WP-FILE-RECORD.
    PERFORM 6000-WRITE-FROM-HDG-FILE 29 TIMES.
    MOVE 1 TO REF-NUM.
    DISPLAY " ".
    DISPLAY "Formatting Draft CDRL --- Please wait".
    PERFORM 3350-DRAFT-CDRL
        VARYING T-COUNTER FROM 1 BY 1
        UNTIL T-COUNTER > 39.
    PERFORM 6000-WRITE-FROM-HDG-FILE 11 TIMES.
    DISPLAY " ".
    DISPLAY "Formatting Action Messages --- Please wait".
    PERFORM 3400-DISP-ACTION-MESS
        VARYING T-COUNTER FROM 1 BY 1
        UNTIL T-COUNTER > 39.
    PERFORM 6000-WRITE-FROM-HDG-FILE 5 TIMES.
    DISPLAY " ".
    DISPLAY "Formatting Task Table Entry --- Please wait".
    PERFORM 3800-PRINT-OUT-COMPLETED-TASKS
       VARYING AREA-NUMBER FROM 1 BY 1
       UNTIL AREA-NUMBER > 5.
    DISPLAY " ".
    DISPLAY "FORMATTING COMPLETE --- PRESS ANY KEY TO CONTINUE".
    ACCEPT (22, 1) DUMMY WITH AUTO-SKIP.

    CLOSE WP-FILE
          HEADING-FILE
          ANSWER-FILE.
3000-FORMAT-FOR-WP-EXIT.
    EXIT.


3150-RETRIEVE-ALL-SPECS.
    MOVE AREA-AND-TASK-NUMS(T-COUNTER) TO T-AND-A-NUM.
    MOVE INDEX-PTR(A-NUM, T-NUM) TO INDEX-FILE-REC-NUM.
    MOVE ZEROES TO SPEC-FLAG.
    PERFORM 3151-TABLE-ALL-SPECS
        UNTIL SPEC-FLAG = 1.

3151-TABLE-ALL-SPECS.
    PERFORM 5000-DETERMINE-ANSWER.
    PERFORM 6000-SET-INDEX-FILE-REC-NUM.
    IF ANSWER NOT = SPACES
        READ INDEX-FILE
        PERFORM 3152-RETRIEVE-M-H-S-0 THRU
                3152-RETRIEVE-M-H-S-0-EXIT
```

```
            UNTIL INDEX-FIELD-3 = 0.
        IF PRIME-INDEX-FIELD-3 = 0
            MOVE 1 TO SPEC-FLAG
        ELSE
            MOVE PRIME-INDEX-FIELD-3 TO INDEX-FILE-REC-NUM.

    3152-RETRIEVE-M-H-S-0.
        MOVE INDEX-FIELD-3 TO INDEX-FILE-REC-NUM.
        READ INDEX-FILE.
        IF INDEX-FIELD-1 NOT = "M" AND
                         NOT = "H" AND
                         NOT = "S" AND
                         NOT = "0"
            GO TO 3152-RETRIEVE-M-H-S-0-EXIT.
        MOVE SPACES TO TEMP-TBL-ENTRY.
        MOVE INDEX-FIELD-2 TO TEMP-TBL-MAIN-NUM.
        IF INDEX-FIELD-1 = "M"
            MOVE "1" TO TEMP-TBL-PRIME-NUM
        ELSE
            IF INDEX-FIELD-1 = "H"
                MOVE "2" TO TEMP-TBL-PRIME-NUM
            ELSE
                IF INDEX-FIELD-1 = "S"
                    MOVE "3" TO TEMP-TBL-PRIME-NUM
                ELSE
                    MOVE "4" TO TEMP-TBL-PRIME-NUM.
        PERFORM 6000-SEARCH-TABLE
            VARYING CTR FROM 1 BY 1
            UNTIL TEMP-TBL-ENTRY = SORT-TABLE(CTR)  OR
                  CTR > TBL-MAX.
        IF TEMP-TBL-ENTRY NOT = SORT-TABLE(CTR)
            ADD 1 TO TBL-MAX
            MOVE TEMP-TBL-ENTRY TO SORT-TABLE(TBL-MAX).
    3152-RETRIEVE-M-H-S-0-EXIT.
        EXIT.

    3160-WRITE-OUT-SPECS.
        PERFORM 6000-WRITE-FROM-HDG-FILE 3 TIMES.
        PERFORM 3160-WRITE-SPECS-FROM-TBL
            VARYING CTR FROM CTR BY 1
            UNTIL SORT-PRIME-NUM(CTR) NOT = SPEC-FLAG OR
                  CTR > TBL-MAX.
        IF SPEC-CTR = 0
            MOVE SPACES TO WP-FILE-RECORD
            MOVE "None" TO WP-TASK-TITLE
            WRITE WP-FILE-RECORD
        ELSE
            MOVE 0 TO SPEC-CTR.
        ADD 1 TO SPEC-FLAG.

    3160-WRITE-SPECS-FROM-TBL.
        MOVE SORT-MAIN-NUM(CTR) TO DOCUMENT-FILE-REC-NUM.
        ADD 4 TO DOCUMENT-FILE-REC-NUM.
```

```
    MOVE SPACES TO DOCUMENT-FLAG.
    PERFORM 6000-WRITE-FROM-DOC-FILE
        UNTIL DOCUMENT-FLAG = "*".
    PERFORM 6000-WRITE-8LANK-LINE.

3200-SOW-MAIN-BODY.
    PERFORM 6000-HEADERS  THRU
            6000-HEADERS-EXIT.
    MOVE AREA-AND-TASK-NUMS(T-COUNTER) TO T-AND-A-NUM.
    MOVE INDEX-PTR(A-NUM, T-NUM) TO INDEX-FILE-REC-NUM.
    MOVE SPACES TO S-TABLE.
    MOVE 0 TO TBL-MAX.
    MOVE 0 TO SOW-QUESTION-FLAG.
    PERFORM 3210-SOW-QUESTIONS
        UNTIL SOW-QUESTION-FLAG = 1.
    PERFORM 6000-SORT-PHASE.
    MOVE 1 TO CTR.
    PERFORM 3230-WRITE-SOW-MAIN
        UNTIL CTR > TBL-MAX.
    IF TBL-MAX NOT = 0
        MOVE SPACES TO WP-FILE-RECORD
        WRITE WP-FILE-RECORD
        MOVE "Applicable Data Items:" TO WP-FILE-REC-VAL
        WRITE WP-FILE-RECORD
        MOVE 0 TO SPEC-CTR
        PERFORM 3240-WRITE-SOW-DIDS
            VARYING CTR FROM 1 BY 1
            UNTIL CTR > TBL-MAX
        IF SPEC-CTR = 0
            MOVE SPACES TO WP-FILE-RECORD
            MOVE "None" TO WP-DATA-ITEM-TITLE
            WRITE WP-FILE-RECORD
            MOVE SPACES TO WP-FILE-RECORD
            WRITE WP-FILE-RECORD.
    PERFORM 3250-WRITE-SOW-5S
        VARYING CTR FROM 1 BY 1
        UNTIL CTR > TBL-MAX.
3200-SOW-MAIN-BODY-EXIT.
    EXIT.

3210-SOW-QUESTIONS.
    PERFORM 5000-DETERMINE-ANSWER.
    PERFORM 6000-SET-INDEX-FILE-REC-NUM.
    IF ANSWER NOT = SPACES
        READ INDEX-FILE
        PERFORM 3220-RETRIEVE-SPECS
            UNTIL INDEX-FIELD-3 = 0.
    IF PRIME-INDEX-FIELD-3 = 0
        MOVE 1 TO SOW-QUESTION-FLAG
    ELSE
        MOVE PRIME-INDEX-FIELD-3 TO INDEX-FILE-REC-NUM.

3220-RETRIEVE-SPECS.
```

```
    MOVE INDEX-FIELD-3 TO INDEX-FILE-REC-NUM.
    READ INDEX-FILE.
    IF INDEX-FIELD-1 = "P"
        PERFORM 3260-TABLE-STDS
        MOVE "P" TO TEMP-TBL-PRIME-NUM-P
    ELSE
        MOVE SPACES TO TEMP-TBL-ENTRY
        MOVE INDEX-FIELD-2 TO TEMP-TBL-MAIN-NUM.
    IF INDEX-FIELD-1 = "M"
        MOVE "1" TO TEMP-TBL-PRIME-NUM
    ELSE
        IF INDEX-FIELD-1 = "H"
            MOVE "2" TO TEMP-TBL-PRIME-NUM
        ELSE
            IF INDEX-FIELD-1 = "S"
                MOVE "3" TO TEMP-TBL-PRIME-NUM
            ELSE
                IF INDEX-FIELD-1 = "O"
                    MOVE "4" TO TEMP-TBL-PRIME-NUM
                ELSE
                    IF INDEX-FIELD-1 NOT = "P"
                      MOVE INDEX-FIELD-1 TO TEMP-TBL-PRIME-NUM.
    PERFORM 6000-SEARCH-TABLE
        VARYING CTR FROM 1 BY 1
        UNTIL TEMP-TBL-ENTRY = SORT-TABLE(CTR) OR
              CTR > TBL-MAX.
    IF TEMP-TBL-ENTRY NOT = SORT-TABLE(CTR)
        ADD 1 TO TBL-MAX
        MOVE TEMP-TBL-ENTRY TO SORT-TABLE(TBL-MAX).

3230-WRITE-SOW-MAIN.
    IF SORT-PRIME-NUM(CTR) = "1" OR "2" OR "3" OR "4"
        PERFORM 6000-WRITE-BLANK-LINE
        MOVE SORT-MAIN-NUM(CTR) TO DOCUMENT-FILE-REC-NUM
        MOVE SPACES TO DOCUMENT-FLAG
        PERFORM 6000-WRITE-FROM-DOC-FILE
            UNTIL DOCUMENT-FLAG = "*"
        ADD 1 TO CTR
        PERFORM 6000-WRITE-BLANK-LINE
        PERFORM 3240-WRITE-OUT-PS
            UNTIL SORT-PRIME-NUM-P(CTR) NOT = "P"  OR
                  CTR > TBL-MAX
        MOVE SPACES TO DOCUMENT-FLAG
        PERFORM 6000-WRITE-FROM-DOC-FILE
    ELSE
        ADD 1 TO CTR.

3240-WRITE-OUT-PS.
    MOVE SPACES TO WP-FILE-RECORD.
    MOVE SORT-SUB-NUM(CTR) TO WP-STD-AREA.
    WRITE WP-FILE-RECORD.
    IF SORT-SUB-NUM(CTR) = "ALL     "
        PERFORM 6000-SEARCH-TABLE
```

```
            VARYING CTR FROM CTR BY 1
            UNTIL SORT-PRIME-NUM-P(CTR) NOT = "P"  OR
                  CTR >TBL-MAX
    ELSE
        ADD 1 TO CTR.

3240-WRITE-SOW-DIDS.
    IF SORT-PRIME-NUM(CTR) = "D"
        MOVE SORT-MAIN-NUM(CTR) TO DOCUMENT-FILE-REC-NUM
        MOVE SPACES TO WP-FILE-RECORD
        READ DOCUMENT-FILE
        MOVE DID-NUMBER TO WP-DATA-ITEM-TITLE
        MOVE REF-NUM TO WP-REF-NUMBER
        ADD 1 TO REF-NUM
        MOVE "(" TO WP-LEFT-PAREN
        MOVE "ref:  " TO WP-REF-TITLE
        MOVE ")" TO WP-RIGHT-PAREN
        WRITE WP-FILE-RECORD
        ADD 1 TO REF-NUM
        ADD 1 TO SPEC-CTR
        PERFORM 6000-WRITE-BLANK-LINE.

3250-WRITE-SOW-5S.
    IF SORT-PRIME-NUM(CTR) = "5"
        PERFORM 6000-WRITE-BLANK-LINE
        MOVE SORT-MAIN-NUM(CTR) TO QUESTION-FILE-REC-NUM
        MOVE SPACES TO END-OF-QUESTION-FLAG
        PERFORM 5000-WRITE-FROM-QUESTION-FILE
            UNTIL END-OF-QUESTION-FLAG = "B".

3260-TABLE-STDS.
    MOVE INDEX-FIELD-2 TO STD-FILE-REC-NUM.
    READ STD-FILE.
    IF STD-TITLE = "ALL     "
        MOVE "1" TO TEMP-TBL-STD-NUM-A
        MOVE 0 TO TEMP-TBL-STD-NUM
    ELSE
      IF STD-TITLE = "ALL EXC"
          MOVE "2" TO TEMP-TBL-STD-NUM-A
          MOVE 0 TO TEMP-TBL-STD-NUM
      ELSE
        IF STD-TITLE = "SECTION"
            MOVE "3" TO TEMP-TBL-STD-NUM-A
            MOVE 0 TO TEMP-TBL-STD-NUM
        ELSE
          IF STD-TITLE = "PARA    "
              MOVE "4" TO TEMP-TBL-STD-NUM-A
              MOVE 0 TO TEMP-TBL-STD-NUM
          ELSE
            IF STD-TITLE = "APPENDI"
                MOVE "5" TO TEMP-TBL-STD-NUM-A
                MOVE 0 TO TEMP-TBL-STD-NUM
            ELSE
```

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            IF STD-TITLE = "TASK    "
                MOVE "6" TO TEMP-TBL-STD-NUM-A
                MOVE 0 TO TEMP-TBL-STD-NUM
            ELSE
              IF STD-TITLE = "METHOD "
                 MOVE "7" TO TEMP-TBL-STD-NUM-A
                 MOVE 0 TO TEMP-TBL-STD-NUM
              ELSE
                 MOVE TEMP-TBL-STD-NUM-A TO TEMP-TBL-STD-NUM.
    MOVE STD-RECORD TO TEMP-TBL-SUB-NUM.

3300-CDRL-MAIN-BODY.
    MOVE AREA-AND-TASK-NUMS(T-COUNTER) TO T-AND-A-NUM.
    MOVE INDEX-PTR (A-NUM, T-NUM) TO INDEX-FILE-REC-NUM.
    MOVE ZEROES TO DID-FLAG.
    PERFORM 3310-TABLE-ALL-DIDS
        UNTIL DID-FLAG = 1.

3310-TABLE-ALL-DIDS.
    PERFORM 5000-DETERMINE-ANSWER.
    PERFORM 6000-SET-INDEX-FILE-REC-NUM.
    IF ANSWER NOT = SPACES
        READ INDEX-FILE
        PERFORM 3320-RETRIEVE-DIDS
            UNTIL INDEX-FIELD-3 = 0.
    IF PRIME-INDEX-FIELD-3 = 0
        MOVE 1 TO DID-FLAG
    ELSE
        MOVE PRIME-INDEX-FIELD-3 TO INDEX-FILE-REC-NUM.

3320-RETRIEVE-DIDS.
    MOVE INDEX-FIELD-3 TO INDEX-FILE-REC-NUM.
    READ INDEX-FILE.
    MOVE SPACES TO TEMP-TBL-ENTRY.
    IF INDEX-FIELD-1 = "D"
        MOVE INDEX-FIELD-2 TO TEMP-TBL-MAIN-NUM
        PERFORM 6000-SEARCH-TABLE
           VARYING CTR FROM 1 BY 1
           UNTIL TEMP-TBL-ENTRY = SORT-TABLE(CTR) OR
                 CTR > TBL-MAX
        IF TEMP-TBL-ENTRY NOT = SORT-TABLE(CTR)
            ADD 1 TO TBL-MAX
            MOVE TEMP-TBL-ENTRY TO SORT-TABLE(TBL-MAX).


3350-DRAFT-CDRL.
    PERFORM 6000-HEADERS  THRU
            6000-HEADERS-EXIT.
    MOVE AREA-AND-TASK-NUMS(T-COUNTER) TO T-AND-A-NUM.
    MOVE INDEX-PTR(A-NUM, T-NUM) TO INDEX-FILE-REC-NUM.
    MOVE SPACES TO S-TABLE.
    MOVE 0 TO TBL-MAX.
    MOVE 0 TO CDRL-FLAG.
```

```
    PERFORM 3360-TABLE-CDRL
        UNTIL CDRL-FLAG = 1.
    PERFORM 3370-WRITE-DRAFT-CDRL
        VARYING CTR FROM 1 BY 1
        UNTIL CTR > TBL-MAX.

3360-TABLE-CDRL.
    PERFORM 5000-DETERMINE-ANSWER.
    PERFORM 6000-SET-INDEX-FILE-REC-NUM.
    IF ANSWER NOT = SPACES
        READ INDEX-FILE
        PERFORM 3365-RETRIEVE-CDRL
            UNTIL INDEX-FIELD-3 = 0.
    IF PRIME-INDEX-FIELD-3 = 0
        MOVE 1 TO CDRL-FLAG
    ELSE
        MOVE PRIME-INDEX-FIELD-3 TO INDEX-FILE-REC-NUM.

3365-RETRIEVE-CDRL.
    MOVE INDEX-FIELD-3 TO INDEX-FILE-REC-NUM.
    READ INDEX-FILE.
    MOVE SPACES TO TEMP-TBL-ENTRY.
    IF INDEX-FIELD-1 = "C"
        MOVE INDEX-FIELD-2 TO TEMP-TBL-MAIN-NUM
        PERFORM 6000-SEARCH-TABLE
           VARYING CTR FROM 1 BY 1
           UNTIL TEMP-TBL-ENTRY = SORT-TABLE(CTR) OR
                 CTR > TBL-MAX
        IF TEMP-TBL-ENTRY NOT = SORT-TABLE(CTR)
            ADD 1 TO TBL-MAX
            MOVE TEMP-TBL-ENTRY TO SORT-TABLE(TBL-MAX).

3370-WRITE-DRAFT-CDRL.
    PERFORM 6000-WRITE-BLANK-LINE.
    MOVE "ref:  " TO WP-NUMBER-REF-TITLE.
    MOVE REF-NUM TO WP-NUMBER-REF.
    WRITE WP-FILE-RECORD.
    MOVE SORT-MAIN-NUM(CTR) TO DOCUMENT-FILE-REC-NUM.
    MOVE SPACES TO DOCUMENT-FLAG.
    PERFORM 6000-WRITE-FROM-DOC-FILE
        UNTIL DOCUMENT-FLAG = "*".

3380-WRITE-DIDS-FROM-TBL.
    MOVE SORT-MAIN-NUM(CTR) TO DOCUMENT-FILE-REC-NUM.
    MOVE SPACES TO DOCUMENT-FLAG.
    PERFORM 6000-DIDS-FROM-DOC-FILE
        UNTIL DOCUMENT-FLAG = "*".
    PERFORM 6000-WRITE-BLANK-LINE.


3400-DISP-ACTION-MESS.
    PERFORM 6000-HEADERS  THRU
            6000-HEADERS-EXIT.
```

```
    MOVE AREA-AND-TASK-NUMS(T-COUNTER) TO T-AND-A-NUM.
    MOVE INDEX-PTR(A-NUM, T-NUM) TO INDEX-FILE-REC-NUM.
    MOVE SPACES TO S-TABLE.
    MOVE 0 TO TBL-MAX.
    MOVE 0 TO ACT-FLAG.
    PERFORM 3410-TABLE-ACTS
        UNTIL ACT-FLAG = 1.
    PERFORM 3420-WRITE-ACT-MESS
        VARYING CTR FROM 1 BY 1
        UNTIL CTR > TBL-MAX.

3410-TABLE-ACTS.
    PERFORM 5000-DETERMINE-ANSWER.
    PERFORM 6000-SET-INDEX-FILE-REC-NUM.
    IF ANSWER NOT = SPACES
        READ INDEX-FILE
        PERFORM 3430-RETRIEVE-ACTS
            UNTIL INDEX-FIELD-3 = 0.
    IF PRIME-INDEX-FIELD-3 = 0
        MOVE 1 TO ACT-FLAG
    ELSE
        MOVE PRIME-INDEX-FIELD-3 TO INDEX-FILE-REC-NUM.

3430-RETRIEVE-ACTS.
    MOVE INDEX-FIELD-3 TO INDEX-FILE-REC-NUM.
    READ INDEX-FILE.
    MOVE SPACES TO TEMP-TBL-ENTRY.
    IF INDEX-FIELD-1 = "6"
        MOVE INDEX-FIELD-2 TO TEMP-TBL-MAIN-NUM
        PERFORM 6000-SEARCH-TABLE
           VARYING CTR FROM 1 BY 1
           UNTIL TEMP-TBL-ENTRY = SORT-TABLE(CTR) OR
                 CTR > TBL-MAX
        IF TEMP-TBL-ENTRY NOT = SORT-TABLE(CTR)
            ADD 1 TO TBL-MAX
            MOVE TEMP-TBL-ENTRY TO SORT-TABLE(TBL-MAX).

3420-WRITE-ACT-MESS.
    PERFORM 6000-WRITE-BLANK-LINE.
    MOVE SORT-MAIN-NUM(CTR) TO QUESTION-FILE-REC-NUM.
    MOVE SPACES TO END-OF-QUESTION-FLAG.
    PERFORM 5000-WRITE-FROM-QUESTION-FILE
        UNTIL END-OF-QUESTION-FLAG = "@".


3800-PRINT-OUT-COMPLETED-TASKS.
    PERFORM 5000-DETER-MISC-TASK-VALS.
    MOVE 1 TO ANSWER-FILE-KEY.
    READ ANSWER-FILE.
    MOVE SPACES TO WP-FILE-RECORD.
    PERFORM 3810-WRITE-TASKS-TO-WP-FILE
        TASK-COUNTER TIMES.
    PERFORM 6000-WRITE-BLANK-LINE.
```

```
3810-WRITE-TASKS-TO-WP-FILE.
    READ TASK-FILE.
    MOVE TASK-COMPLETE-FLAG(TASK-FILE-REC-NUM) TO
                              WP-COMPLETE-FLAG.
    MOVE TASK-RECORD TO WP-TASK-RECORD.
    WRITE WP-FILE-RECORD.
    ADD 1 TO TASK-FILE-REC-NUM.

4000-ENTER-FILE-NAME.
    DISPLAY BLANK-SCREEN.
    DISPLAY FILE-NAME-SCREEN.
    IF RESPONSE = "R" OR "r"
        DISPLAY (2, 20) "Run functional tasks"
    ELSE
        IF RESPONSE = "W" or "w"
            DISPLAY (2, 20) "Format for word processing"
        ELSE
            DISPLAY (2, 20) "Delete file".
    DISPLAY ENTER-LINE-FORMAT-2.
    MOVE ERRORS TO FILE-NAME-STATUS.
    MOVE 11 TO MAX-TIMES.
    PERFORM 4100-ASK-FOR-FILE-NAME THRU 4100-EXIT
        UNTIL FILE-NAME-STATUS = NO-ERRORS.
    MOVE SPACES TO W-DRIVE-IND.
    IF FILE-NAME-CHAR(2) = ":"
        MOVE FILE-W-DRIVE-IND TO W-FILE-NAME
        MOVE FILE-DRIVE-IND TO W-DRIVE-IND
        MOVE "W" TO FILLER-1
    ELSE
        MOVE "W" TO FILLER-2
        MOVE FL-NAME-WO-DRIVE-IND TO W-FILE-NAME-2.


4100-ASK-FOR-FILE-NAME.
    ACCEPT (24, 39) FILE-NAME-VALUE WITH LEFT-JUSTIFY.
    MOVE 1 TO SCRIPT.
    MOVE NO-ERRORS TO FILE-NAME-STATUS.
    IF FILE-NAME-CHAR(2) = ":"  AND
       FILE-W-DRIVE-IND = SPACES
        MOVE ERRORS TO FILE-NAME-STATUS
    ELSE
    IF FILE-NAME-VALUE = SPACES
        MOVE "M" TO RESPONSE
        GO TO 4100-EXIT
    ELS
        IF FILE-NAME-CHAR(1) IS ALPHABETIC  OR
          (FILE-NAME-CHAR(1) = "a" OR "z") OR
          (FILE-NAME-CHAR(1) > "a" and < "z")
            IF FILE-NAME-CHAR(2) = ":"
                IF FILE-NAME-CHAR(1) IS ALPHABETIC AND
                   FILE-NAME-CHAR(3) IS ALPHABETIC OR
                  ((FILE-NAME-CHAR(1) > "a" AND < "z" )
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                    OR = "a" OR = "z")     AND
                   ((FILE-NAME-CHAR(3) > "a" AND < "z")
                    OR = "a" OR = "z")
                   MOVE 3 TO SCRIPT
                   MOVE 13 TO MAX-TIMES
                   PERFORM 4110-EDIT-INPUT
                       UNTIL SCRIPT > MAX-TIMES
               ELSE
                   MOVE ERRORS TO FILE-NAME-STATUS
           ELSE
               MOVE 11 TO MAX-TIMES
               PERFORM 4110-EDIT-INPUT
                   UNTIL SCRIPT > MAX-TIMES
                   PERFORM 4130-EDIT-FOR-SPACES
                       UNTIL SCRIPT > 13
       ELSE
           MOVE ERRORS TO FILE-NAME-STATUS.
   IF FILE-NAME-STATUS = ERRORS
       DISPLAY ERROR-SCREEN-2
       DISPLAY ENTER-LINE-FORMAT-2.

4100-EXIT.
   EXIT.


4110-EDIT-INPUT.
   IF FILE-NAME-CHAR(SCRIPT) = SPACES
      PERFORM 4130-EDIT-FOR-SPACES
           UNTIL SCRIPT > MAX-TIMES
   ELSE
   IF FILE-NAME-CHAR(SCRIPT) = "."
       COMPUTE SCRIPT-PLUS-3 = SCRIPT + 3
       ADD 1 TO SCRIPT
       PERFORM 4120-ACTUAL-EDIT UNTIL
            SCRIPT > MAX-TIMES  OR
            SCRIPT > SCRIPT-PLUS-3
       PERFORM 4130-EDIT-FOR-SPACES
           UNTIL SCRIPT > MAX-TIMES
   ELSE
       IF MAX-TIMES = 13   AND
          SCRIPT = 10
           MOVE ERRORS TO FILE-NAME-STATUS
           MOVE 14 TO SCRIPT
       ELSE
           IF MAX-TIMES = 11   AND
              SCRIPT = 8
               MOVE ERRORS TO FILE-NAME-STATUS
               MOVE 14 TO SCRIPT
           ELSE
               PERFORM 4120-ACTUAL-EDIT.


4120-ACTUAL-EDIT.
```

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    IF FILE-NAME-CHAR(SCRIPT) IS ALPHABETIC OR
       FILE-NAME-NUM(SCRIPT) IS  NUMERIC OR
       (FILE-NAME-CHAR(SCRIPT) > "a" and < "z") OR
       FILE-NAME-CHAR(SCRIPT) = "a" OR = "z"
        IF FILE-NAME-CHAR(SCRIPT) = SPACES
            PERFORM 4130-EDIT-FOR-SPACES
                UNTIL SCRIPT > MAX-TIMES
        ELSE
            ADD 1 TO SCRIPT
    ELSE
        MOVE ERRORS TO FILE-NAME-STATUS
        MOVE 14 TO SCRIPT.


4130-EDIT-FOR-SPACES.
    IF FILE-NAME-CHAR(SCRIPT) NOT = SPACES
        MOVE ERRORS TO FILE-NAME-STATUS
        MOVE 14 TO SCRIPT
    ELSE
        ADD 1 TO SCRIPT.

5000-DETERMINE-ANSWER-INDEX.
    IF INDEX-FIELD-2 < 101
        MOVE 2 TO ANSWER-FILE-KEY
    ELSE
        IF INDEX-FIELD-2 < 201
            MOVE 3 TO ANSWER-FILE-KEY
            SUBTRACT 100 FROM INDEX-FIELD-2
        ELSE
            MOVE 4 TO ANSWER-FILE-KEY
            SUBTRACT 200 FROM INDEX-FIELD-2.

5000-DETER-MISC-TASK-VALS.
    IF AREA-NUMBER = "1"
        MOVE 1 TO TASK-FILE-REC-NUM
        MOVE "21" TO NUMBER-OF-TASKS
        MOVE 23 TO TASK-COUNTER
    ELSE
        IF AREA-NUMBER = "2"
            MOVE 25 TO TASK-FILE-REC-NUM
            MOVE " 4" TO NUMBER-OF-TASKS
            MOVE 6 TO TASK-COUNTER
        ELSE
            IF AREA-NUMBER = "3"
                MOVE 32 TO TASK-FILE-REC-NUM
                MOVE " 4" TO NUMBER-OF-TASKS
                MOVE 6 TO TASK-COUNTER
            ELSE
                IF AREA-NUMBER = "4"
                    MOVE 39 TO TASK-FILE-REC-NUM
                    MOVE " 7" TO NUMBER-OF-TASKS
                    MOVE 9 TO TASK-COUNTER
                ELSE
```

```
                    IF AREA-NUMBER = "5"
                        MOVE 49 TO TASK-FILE-REC-NUM
                        MOVE " 3" TO NUMBER-OF-TASKS
                        MOVE 5 TO TASK-COUNTER.

5000-DETERMINE-ANSWER.
    READ INDEX-FILE.
    MOVE INDEX-FIELD-2 TO QUESTION-FILE-REC-NUM.
    MOVE INDEX-FIELD-3 TO  PRIME-INDEX-FIELD-3.
    ADD 1 TO INDEX-FILE-REC-NUM.
    READ INDEX-FILE.
    PERFORM 5000-DETERMINE-ANSWER-INDEX.
    READ ANSWER-FILE.
    MOVE ANSWER-TO-QUESTION(INDEX-FIELD-2) TO ANSWER.

5000-WRITE-FROM-QUESTION-FILE.
    READ QUESTION-FILE.
    MOVE SPACES TO WP-FILE-RECORD.
    MOVE QUESTION TO WP-FILE-REC-VAL.
    WRITE WP-FILE-RECORD.
    ADD 1 TO QUESTION-FILE-REC-NUM.

5000-SET-UP-TASK-TITLE.
    MOVE AREA-AND-TASK-NUMS(T-COUNTER) TO T-AND-A-NUM.
    MOVE INDEX-PTR(A-NUM, T-NUM) TO
         INDEX-FILE-REC-NUM.
    PERFORM 5000-DETERMINE-ANSWER.
    IF ANSWER = SPACES
        GO TO 5000-SET-UP-TASK-TITLE-EXIT.
    IF AREA-AND-TASK-COUNTER < 10
        MOVE A-AND-T-2ND-CHAR TO A-AND-T-1ST-CHAR
        MOVE "." TO A-AND-T-2ND-CHAR
    ELSE
        MOVE "." TO WP-DECIMAL-PT-1.
    MOVE RED-AREA-AND-TASK-CTR TO WP-SUB-SECTION-NUM.
    MOVE A-NUM TO AREA-NUMBER.
    PERFORM 5000-DETER-MISC-TASK-VALS.
    ADD 1 TO TASK-FILE-REC-NUM.
    ADD T-NUM TO TASK-FILE-REC-NUM.
    READ TASK-FILE.
    MOVE TASK-TITLE TO WP-TASK-TITLE.
    WRITE WP-FILE-RECORD.

5000-SET-UP-TASK-TITLE-EXIT.
    EXIT.

6000-WRITE-FROM-HDG-FILE.
    READ HEADING-FILE.
    MOVE HEADING-RECORD TO WP-FILE-RECORD.
    WRITE WP-FILE-RECORD.

6000-SET-INDEX-FILE-REC-NUM.
    IF ANSWER = "Y"
```

```
            ADD 1 TO INDEX-FILE-REC-NUM
        ELSE
            IF ANSWER = "N"
                ADD 2 TO INDEX-FILE-REC-NUM
            ELSE
                IF ANSWER = "U"
                    ADD 3 TO INDEX-FILE-REC-NUM.

6000-SORT-PHASE.
    MOVE 1 TO SORT-FLAG.
    PERFORM 6000-SORT-PHASE-1 UNTIL SORT-FLAG = 0.
6000-SORT-PHASE-1.
    MOVE 0 TO SORT-FLAG.
    PERFORM 6000-SORT-PHASE-2
        VARYING CTR FROM 2 BY 1
        UNTIL CTR > TBL-MAX.
6000-SORT-PHASE-2.
    IF SORT-TABLE(CTR) < SORT-TABLE(CTR - 1)
        MOVE SORT-TABLE(CTR) TO TEMP-TBL-ENTRY
        MOVE SORT-TABLE(CTR - 1) TO SORT-TABLE(CTR)
        MOVE TEMP-TBL-ENTRY TO SORT-TABLE(CTR - 1)
        MOVE 1 TO SORT-FLAG.

6000-BUMP-TBL-ENTRIES.
    MOVE SORT-TABLE(CTR - 1) TO SORT-TABLE(CTR).
    SUBTRACT 1 FROM CTR.

6000-SEARCH-TABLE.
    MOVE SPACES TO DUMMY.

6000-WRITE-FROM-SORT-TBLE.
    DISPLAY SORT-TABLE(CTR).
    ADD 1 TO SPEC-CTR.

6000-WRITE-FROM-DOC-FILE.
    READ DOCUMENT-FILE.
    MOVE SPACES TO WP-FILE-RECORD.
    MOVE DOCUMENT-RECORD TO WP-FILE-REC-VAL.
    WRITE WP-FILE-RECORD.
    ADD 1 TO DOCUMENT-FILE-REC-NUM.
    MOVE 1 TO SPEC-CTR.

6000-DIDS-FROM-DOC-FILE.
    READ DOCUMENT-FILE.
    MOVE SPACES TO WP-FILE-RECORD.
    MOVE DOCUMENT-RECORD TO WP-FILE-RECORD.
    WRITE WP-FILE-RECORD.
    ADD 1 TO DOCUMENT-FILE-REC-NUM.
    MOVE 1 TO SPEC-CTR.

6000-WRITE-BLANK-LINE.
    MOVE SPACES TO WP-FILE-RECORD.
    WRITE WP-FILE-RECORD.
```

```
6000-HEADERS.
    IF T-COUNTER = 1
        PERFORM 6000-WRITE-FROM-HDG-FILE 11  TIMES
        GO TO 6000-HEADERS-EXIT.
    IF T-COUNTER = 2
        PERFORM 6000-WRITE-FROM-HDG-FILE 9   TIMES
        GO TO 6000-HEADERS-EXIT.
    IF T-COUNTER = 3
        PERFORM 6000-WRITE-FROM-HDG-FILE 10  TIMES
        GO TO 6000-HEADERS-EXIT.
    IF T-COUNTER = 4
        PERFORM 6000-WRITE-FROM-HDG-FILE 2   TIMES
        GO TO 6000-HEADERS-EXIT.
    IF T-COUNTER = 5
        PERFORM 6000-WRITE-FROM-HDG-FILE 7   TIMES
        GO TO 6000-HEADERS-EXIT.
    IF T-COUNTER = 6
        PERFORM 6000-WRITE-FROM-HDG-FILE 4   TIMES
        GO TO 6000-HEADERS-EXIT.
    IF T-COUNTER = 7
        PERFORM 6000-WRITE-FROM-HDG-FILE 2   TIMES
        GO TO 6000-HEADERS-EXIT.
    IF T-COUNTER = 8
        PERFORM 6000-WRITE-FROM-HDG-FILE 2   TIMES
        GO TO 6000-HEADERS-EXIT.
    IF T-COUNTER = 9
        PERFORM 6000-WRITE-FROM-HDG-FILE 2   TIMES
        GO TO 6000-HEADERS-EXIT.
    IF T-COUNTER = 10
        PERFORM 6000-WRITE-FROM-HDG-FILE 2   TIMES
        GO TO 6000-HEADERS-EXIT.
    IF T-COUNTER = 11
        PERFORM 6000-WRITE-FROM-HDG-FILE 4   TIMES
        GO TO 6000-HEADERS-EXIT.
    IF T-COUNTER = 12
        PERFORM 6000-WRITE-FROM-HDG-FILE 2   TIMES
        GO TO 6000-HEADERS-EXIT.
    IF T-COUNTER = 13
        PERFORM 6000-WRITE-FROM-HDG-FILE 2   TIMES
        GO TO 6000-HEADERS-EXIT.
    IF T-COUNTER = 14
        PERFORM 6000-WRITE-FROM-HDG-FILE 2   TIMES
        GO TO 6000-HEADERS-EXIT.
    IF T-COUNTER = 15
        PERFORM 6000-WRITE-FROM-HDG-FILE 2   TIMES
        GO TO 6000-HEADERS-EXIT.
    IF T-COUNTER = 16
        PERFORM 6000-WRITE-FROM-HDG-FILE 2   TIMES
        GO TO 6000-HEADERS-EXIT.
    IF T-COUNTER = 17
        PERFORM 6000-WRITE-FROM-HDG-FILE 4   TIMES
        GO TO 6000-HEADERS-EXIT.
```

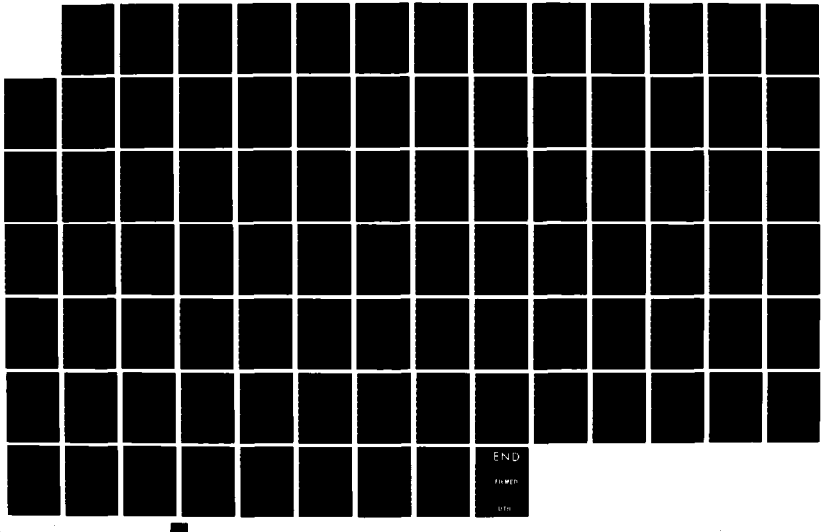
```
IF T-COUNTER = 18
    PERFORM 6000-WRITE-FROM-HDG-FILE 2   TIMES
    GO TO 6000-HEADERS-EXIT.
IF T-COUNTER = 19
    PERFORM 6000-WRITE-FROM-HDG-FILE 2   TIMES
    GO TO 6000-HEADERS-EXIT.
IF T-COUNTER = 20
    PERFORM 6000-WRITE-FROM-HDG-FILE 2   TIMES
    GO TO 6000-HEADERS-EXIT.
IF T-COUNTER = 21
    PERFORM 6000-WRITE-FROM-HDG-FILE 4   TIMES
    GO TO 6000-HEADERS-EXIT.
IF T-COUNTER = 22
    PERFORM 6000-WRITE-FROM-HDG-FILE 4   TIMES
    GO TO 6000-HEADERS-EXIT.
IF T-COUNTER = 23
    PERFORM 6000-WRITE-FROM-HDG-FILE 2   TIMES
    GO TO 6000-HEADERS-EXIT.
IF T-COUNTER = 24
    PERFORM 6000-WRITE-FROM-HDG-FILE 4   TIMES
    GO TO 6000-HEADERS-EXIT.
IF T-COUNTER = 25
    PERFORM 6000-WRITE-FROM-HDG-FILE 2   TIMES
    GO TO 6000-HEADERS-EXIT.
IF T-COUNTER = 26
    PERFORM 6000-WRITE-FROM-HDG-FILE 2   TIMES
    GO TO 6000-HEADERS-EXIT.
IF T-COUNTER = 27
    PERFORM 6000-WRITE-FROM-HDG-FILE 2   TIMES
    GO TO 6000-HEADERS-EXIT.
IF T-COUNTER = 28
    PERFORM 6000-WRITE-FROM-HDG-FILE 2   TIMES
    GO TO 6000-HEADERS-EXIT.
IF T-COUNTER = 29
    PERFORM 6000-WRITE-FROM-HDG-FILE 2   TIMES
    GO TO 6000-HEADERS-EXIT.
IF T-COUNTER = 30
    PERFORM 6000-WRITE-FROM-HDG-FILE 2   TIMES
    GO TO 6000-HEADERS-EXIT.
IF T-COUNTER = 31
    PERFORM 6000-WRITE-FROM-HDG-FILE 2   TIMES
    GO TO 6000-HEADERS-EXIT.
IF T-COUNTER = 32
    PERFORM 6000-WRITE-FROM-HDG-FILE 2   TIMES
    GO TO 6000-HEADERS-EXIT.
IF T-COUNTER = 33
    PERFORM 6000-WRITE-FROM-HDG-FILE 2   TIMES
    GO TO 6000-HEADERS-EXIT.
IF T-COUNTER = 34
    PERFORM 6000-WRITE-FROM-HDG-FILE 2   TIMES
    GO TO 6000-HEADERS-EXIT.
IF T-COUNTER = 35
    PERFORM 6000-WRITE-FROM-HDG-FILE 2   TIMES
```

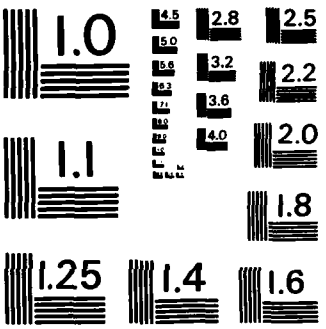
```
            GO TO 6000-HEADERS-EXIT.
        IF T-COUNTER = 36
            PERFORM 6000-WRITE-FROM-HDG-FILE 5   TIMES
            GO TO 6000-HEADERS-EXIT.
        IF T-COUNTER = 37
            PERFORM 6000-WRITE-FROM-HDG-FILE 2   TIMES
            GO TO 6000-HEADERS-EXIT.
        IF T-COUNTER = 38
            PERFORM 6000-WRITE-FROM-HDG-FILE 11  TIMES
            GO TO 6000-HEADERS-EXIT.
        IF T-COUNTER = 39
            PERFORM 6000-WRITE-FROM-HDG-FILE 25
            GO TO 6000-HEADERS-EXIT.

    6000-HEADERS-EXIT.
        EXIT.
```

AD-A162 273 A MODIFICATION TO THE COMPUTER GENERATED ACQUISITION DOCUMENTS SYSTEM (CG..(U) AIR FORCE INST OF TECH WRIGHT-PATTERSON AFB OH SCHOOL OF SYST.. 4/4

UNCLASSIFIED L M ZABKER ET AL. SEP 85 F/G 9/2 NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS - 1963 - A

Appendix H: MGADS Output

Output generated when all responses are "no":

THE PRODUCT THAT YOU GENERATED PROVIDES CURRENT REQUIRED DATA
IN THE APPROPRIATE FORMAT. IT IS NECESSARY TO TAKE APPROPRIATE
ACTION AS INDICATED IN THE "ACTION MESSAGES AND DIRECTIVES"
SECTION BELOW. PLEASE REMEMBER THAT THE DATA WAS SUPPLIED BY
ESD OFFICES OF PRIMARY RESPONSIBILITY (OPR). THE DATA IS THE
BEST AVAILABLE; IT HAS BEEN REFINED AND EDITED. THE STATEMENT
OF WORK IS NEARLY COMPLETE. IT IS CONCISE; REPETITIONS WITHIN
APPLIED DOCUMENTS, BETWEEN TASKS, AND WITHIN THE RFP (CDRL, CONTRACT
SCHEDULE, IFPP), HAVE BEEN REMOVED. LEVYING A TASK BY CITING
A DOCUMENT (E.G., MIL-SPEC) AND PARAGRAPH NUMBERS IS SUFFICIENT.
CITING A DATA ITEM IN PARENTHESES; E.G., (DI-A-1001) IS ALL
THAT IS ALLOWED FOR STATING THAT A REPORT IS REQUIRED - DO
NOT ADD PREPARATION AND OTHER DELIVERY REQUIREMENTS! REFRAIN
FROM REPETITION FOR ANY REASON!!!!!!

TABLE OF CONTENTS
****

PARAGRAPH
---

1. SCOPE

2. APPLICABLE DOCUMENTS

3. REQUIREMENTS

3.1. HARDWARE

3.2. TRAINING
3.2.1 EQUIPMENT
3.2.2 SERVICES
3.2.3 FACILITIES

3.3. PECULIAR SUPPORT EQUIPMENT
3.3.1 ORGANIZATIONAL
3.3.2 INTERMEDIATE
3.3.3 DEPOT

3.4. SYSTEM TEST AND EVALUATION
3.4.1 DEVELOPMENT TEST AND EVALUATION
3.4.2 OPERATIONAL TEST AND EVALUATION
3.4.3 MARKUPS
3.4.4 TEST AND EVALUATION SUPPORT
3.4.5 TEST FACILITIES

3.5. SYSTEM / PROJECT MANAGEMENT
3.5.1 SYSTEM ENGINEERING
3.5.1.1 DESIGN ENGINEERING
3.5.1.2 LOGISTICS ENGINEERING
3.5.1.3 SPECIALTY ENGINEERING
3.5.1.4 MANUFACTURING ENGINEERING
3.5.1.5 SECURITY
3.5.1.6 COMMUNICATIONS
3.5.2.1 CONTRACT WORK BREAKDOWN STRUCTURE
3.5.2.2 COST INFORMATION SYSTEMS
3.5.2.3 C/CSC
3.5.2.4 SCHEDULE MANAGEMENT
3.5.2.5 CONFIGURATION MANAGEMENT
3.5.2.6 DATA MANAGEMENT
3.5.2.7 NOMENCLATURE
3.5.2.8 MANUFACTURING MANAGEMENT
3.5.2.9 COMPUTER RESOURCES MANAGEMENT
3.5.2.10 TRAVEL

3.6. DATA
3.6.1 TECHNICAL PUBLICATIONS
3.6.2 ENGINEERING DATA
3.6.3 MANAGEMENT DATA
3.6.4 SUPPORT DATA
3.6.5 DATA DEPOSITORY

3.7. OPERATIONS / SITE ACTIVATION
3.7.1 CONTRACTOR TECHNICAL SUPPORT
3.7.2 SITE CONSTRUCTION

3.8. COMMON SUPPORT EQUIPMENT
3.8.1 ORGANIZATIONAL
3.8.2 INTERMEDIATE
3.8.3 DEPOT

3.9 INDUSTRIAL FACILITIES
3.9.1 CONSTRUCTION / CONVERSITION / EXPANSION
3.9.2 EQUIPMENT ACQUISITION OR MODERNIZATION
3.9.3 MAINTENANCE

3.10 INITIAL SPARES AND REPAIR PARTS

1. SCOPE

1.1 This Statement of Work covers management programs and controls that the Government requires during this phase of the contract.

1.2 The data to be delivered as a result of performing the tasks prescribed by this statement of work are specified in the Contract Data Requirements List (CDRL). In no case

shall any task prescribed herein be interpreted to require delivery of data.

1.3 The provisions of the applicable documents and their tailored applications, set forth in the paragraphs of Section 3 below, are hereby incorporated into the contract by reference with the same force and effect as though set forth herein in full.

2. LISTING OF APPLICABLE DOCUMENTS

(SECTION 3 OF THIS DOCUMENT CONTAINS THE TAILORED REQUIREMENTS.)

2.1 STANDARDS

None

2.2 SPECIFICATIONS

None

2.3 HANDBOOKS

None

2.4 OTHER DOCUMENTS

None

3. REQUIREMENTS

3.1. HARDWARE

The contractor shall design, develop, fabricate, assemble, and test the _____ system in accordance with the requirements stated in the system specification provided in attachment _____ of the contract.

3.2. TRAINING

3.2.1 EQUIPMENT

3.2.2 SERVICES

3.2.3 FACILITIES

3.3. PECULIAR SUPPORT EQUIPMENT

3.3.1 ORGANIZATIONAL

3.3.2 INTERMEDIATE

3.3.3 DEPOT

3.4. SYSTEM TEST AND EVALUATION

3.4.1 DEVELOPMENT TEST AND EVALUATION

3.4.2 OPERATIONAL TEST AND EVALUATION

3.4.3 MARKUPS

3.4.4 TEST AND EVALUATION SUPPORT

Preoperational Maintenance:

Preoperational Supply Support:

3.4.5 TEST FACILITIES

3.5. SYSTEM / PROJECT MANAGEMENT

3.5.1 SYSTEM ENGINEERING

3.5.1.1 DESIGN ENGINEERING

Human Factors:

Value Engineering:

Parts Control Program:

Electromagnetic Compatability:

Survivability / Vulnerability:

3.5.1.2 LOGISTICS ENGINEERING

Availability:

Maintainability:

Reliability:

Logistics Support Analysis:

Integrated Logistics Support:

Transportability:

3.5.1.3 SPECIALTY ENGINEERING

System Safety:

Aerospace Meteorological Environment:

Preservation, Packaging, and Packing:

Transportation:

3.5.1.4 MANUFACTURING ENGINEERING

Quality Assurance:

3.5.1.5 SECURITY

General Security:

Communications Security / Tempest:

3.5.1.6 COMMUNICATIONS

Communications Long Lines:

Radio Frequency Management:

3.5.2.1 CONTRACT WORK BREAKDOWN STRUCTURE

3.5.2.2 COST INFORMATION SYSTEMS

3.5.2.3 C/CSC

3.5.2.4 SCHEDULE MANAGEMENT

3.5.2.5 CONFIGURATION MANAGEMENT

Applicable Data Items:
None

Configuration Management does not apply.

3.5.2.6 DATA MANAGEMENT

3.5.2.7 NOMENCLATURE

3.5.2.8 MANUFACTURING MANAGEMENT

3.5.2.9 COMPUTER RESOURCES MANAGEMENT

3.5.2.10 TRAVEL

3.6. DATA

3.6.1 TECHNICAL PUBLICATIONS

3.6.2 ENGINEERING DATA

Applicable Data Items:
None

Engineering Data requirements are not applicable.

3.6.3 MANAGEMENT DATA

3.6.4 SUPPORT DATA

3.6.5 DATA DEPOSITORY

3.7. OPERATIONS / SITE ACTIVATION

Real Property Facilities:

3.7.1 CONTRACTOR TECHNICAL SUPPORT

3.7.2 SITE CONSTRUCTION

3.8. COMMON SUPPORT EQUIPMENT

3.8.1 ORGANIZATIONAL

3.8.2 INTERMEDIATE

3.8.3 DEPOT

3.9 INDUSTRIAL FACILITIES

3.9.1 CONSTRUCTION / CONVERSITION / EXPANSION

3.9.2 EQUIPMENT ACQUISITION OR MODERNIZATION

3.9.3 MAINTENANCE

3.10 INITIAL SPARES AND REPAIR PARTS

TABLE OF CONTENTS
****

Paragraph
---

1. SCOPE

2. LISTING OF DATA ITEMS

3. DRAFT CDRL

3.1. HARDWARE

3.2. TRAINING
3.2.1 EQUIPMENT
3.2.2 SERVICES

3.2.3 FACILITIES

3.3. PECULIAR SUPPORT EQUIPMENT
3.3.1 ORGANIZATIONAL
3.3.2 INTERMEDIATE
3.3.3 DEPOT

3.4. SYSTEM TEST AND EVALUATION
3.4.1 DEVELOPMENT TEST AND EVALUATION
3.4.2 OPERATIONAL TEST AND EVALUATION
3.4.3 MARKUPS
3.4.4 TEST AND EVALUATION SUPPORT
3.4.5 TEST FACILITIES

3.5. SYSTEM / PROJECT MANAGEMENT
3.5.1 SYSTEM ENGINEERING
3.5.1.1 DESIGN ENGINEERING
3.5.1.2 LOGISTICS ENGINEERING
3.5.1.3 SPECIALTY ENGINEERING
3.5.1.4 MANUFACTURING ENGINEERING
3.5.1.5 SECURITY
3.5.1.6 COMMUNICATIONS
3.5.2.1 CONTRACT WORK BREAKDOWN STRUCTURE
3.5.2.2 COST INFORMATION SYSTEMS
3.5.2.3 C/CSC
3.5.2.4 SCHEDULE MANAGEMENT
3.5.2.5 CONFIGURATION MANAGEMENT
3.5.2.6 DATA MANAGEMENT
3.5.2.7 NOMENCLATURE
3.5.2.8 MANUFACTURING MANAGEMENT
3.5.2.9 COMPUTER RESOURCES MANAGEMENT
3.5.2.10 TRAVEL

3.6. DATA
3.6.1 TECHNICAL PUBLICATIONS
3.6.2 ENGINEERING DATA
3.6.3 MANAGEMENT DATA
3.6.4 SUPPORT DATA
3.6.5 DATA DEPOSITORY

3.7. OPERATIONS / SITE ACTIVATION
3.7.1 CONTRACTOR TECHNICAL SUPPORT
3.7.2 SITE CONSTRUCTION

3.8. COMMON SUPPORT EQUIPMENT
3.8.1 ORGANIZATIONAL
3.8.2 INTERMEDIATE
3.8.3 DEPOT

3.9 INDUSTRIAL FACILITIES
3.9.1 CONSTRUCTION / CONVERSITION / EXPANSION
3.9.2 EQUIPMENT ACQUISITION OR MODERNIZATION
3.9.3 MAINTENANCE

3.10 INITIAL SPARES AND REPAIR PARTS

1. SCOPE

The following is the draft Contract Data Requirements List (CDRL) that you generated. It is intended to assist you to determine which data items and CDRL block entries are applicable to this procurement. It is not intended to replace the Data Call or to change existing Data Management Procedures or your introduction to the contract CDRL.

2. LISTING OF DATA ITEMS

(SECTION 3 OF THIS DOCUMENT CONTAINS THE DRAFT CDRL.)

None

3. DRAFT CDRL

The information below can be transferred to a word processor for refinement and completion. The following are descriptions of the CDRL data item entries:

1. Sequence Number
2. Title or Description of Data
3. Subtitle
4. Authority (Data Item Number)
5. Contract Reference
6. Technical Office
7. DD Fm 250 Requirement
8. Approval Code
9. Integrated Associate Contractor
10. Frequency
11. As of Date
12. Date of First Submission
13. Date of Subsequent Submissions/Event I.D.
14. Distribution and Addressees (Regular/Repro)
15. Total
16. Remarks

3.1. HARDWARE

3.2. TRAINING

3.2.1 EQUIPMENT

3.2.2 SERVICES

3.2.3 FACILITIES

3.3. PECULIAR SUPPORT EQUIPMENT

3.3.1 ORGANIZATIONAL

3.3.2 INTERMEDIATE

3.3.3 DEPOT

3.4. SYSTEM TEST AND EVALUATION

3.4.1 DEVELOPMENT TEST AND EVALUATION

3.4.2 OPERATIONAL TEST AND EVALUATION

3.4.3 MARKUPS

3.4.4 TEST AND EVALUATION SUPPORT

Preoperational Maintenance:

Preoperational Supply Support:

3.4.5 TEST FACILITIES

3.5. SYSTEM / PROJECT MANAGEMENT

3.5.1 SYSTEM ENGINEERING

3.5.1.1 DESIGN ENGINEERING

Human Factors:

Value Engineering:

Parts Control Program:

Electromagnetic Compatability:

Survivability / Vulnerability:

3.5.1.2 LOGISTICS ENGINEERING

Availability:

Maintainability:

Reliability:

Logistics Support Analysis:

Integrated Logistics Support:

Transportability:

3.5.1.3 SPECIALTY ENGINEERING

System Safety:

Aerospace Meteorlogical Environment:

Preservation, Packaging, and Packing:

Transportation:

3.5.1.4 MANUFACTURING ENGINEERING

Quality Assurance:

3.5.1.5 SECURITY

General Security:

Communications Security / Tempest:

3.5.1.6 COMMUNICATIONS

Communications Long Lines:

Radio Frequency Management:

3.5.2.1 CONTRACT WORK BREAKDOWN STRUCTURE

3.5.2.2 COST INFORMATION SYSTEMS

3.5.2.3 C/CSC

3.5.2.4 SCHEDULE MANAGEMENT

3.5.2.5 CONFIGURATION MANAGEMENT

3.5.2.6 DATA MANAGEMENT

3.5.2.7 NOMENCLATURE

3.5.2.8 MANUFACTURING MANAGEMENT

3.5.2.9 COMPUTER RESOURCES MANAGEMENT

3.5.2.10 TRAVEL

3.6. DATA

3.6.1 TECHNICAL PUBLICATIONS

3.6.2 ENGINEERING DATA

3.6.3 MANAGEMENT DATA

3.6.4 SUPPORT DATA

3.6.5 DATA DEPOSITORY

3.7. OPERATIONS / SITE ACTIVATION

Real Property Facilities:

3.7.1 CONTRACTOR TECHNICAL SUPPORT

3.7.2 SITE CONSTRUCTION

3.8. COMMON SUPPORT EQUIPMENT

3.8.1 ORGANIZATIONAL

3.8.2 INTERMEDIATE

3.8.3 DEPOT

3.9 INDUSTRIAL FACILITIES

3.9.1 CONSTRUCTION / CONVERSITION / EXPANSION

3.9.2 EQUIPMENT ACQUISITION OR MODERNIZATION

3.9.3 MAINTENANCE

3.10 INITIAL SPARES AND REPAIR PARTS

ACTION MESSAGES AND DIRECTIVES

CAUTION: THE ABOVE PRODUCT IS A PRELIMINARY DRAFT ONLY!
TAKE APPROPRIATE ACTION AS INDICATED BELOW....

3.1. HARDWARE

3.2. TRAINING

3.2.1 EQUIPMENT

3.2.2 SERVICES

3.2.3 FACILITIES

3.3. PECULIAR SUPPORT EQUIPMENT

3.3.1 ORGANIZATIONAL

3.3.2 INTERMEDIATE

3.3.3 DEPOT

3.4. SYSTEM TEST AND EVALUATION

3.4.1 DEVELOPMENT TEST AND EVALUATION

3.4.2 OPERATIONAL TEST AND EVALUATION

3.4.3 MARKUPS

3.4.4 TEST AND EVALUATION SUPPORT

Preoperational Maintenance:

Preoperational Supply Support:

3.4.5 TEST FACILITIES

3.5. SYSTEM / PROJECT MANAGEMENT

3.5.1 SYSTEM ENGINEERING

3.5.1.1 DESIGN ENGINEERING

Human Factors:

Value Engineering:

Parts Control Program:

Electromagnetic Compatability:

Survivability / Vulnerability:

3.5.1.2 LOGISTICS ENGINEERING

Availability:

Maintainability:

Reliability:

Logistics Support Analysis:

Integrated Logistics Support:

Transportability:

3.5.1.3 SPECIALTY ENGINEERING

System Safety:

Aerospace Meteorlogical Environment:

Preservation, Packaging, and Packing:

Transportation:

3.5.1.4 MANUFACTURING ENGINEERING

Quality Assurance:

3.5.1.5 SECURITY

General Security:

Communications Security / Tempest:

3.5.1.6 COMMUNICATIONS

Communications Long Lines:

Radio Frequency Management:

3.5.2.1 CONTRACT WORK BREAKDOWN STRUCTURE

3.5.2.2 COST INFORMATION SYSTEMS

3.5.2.3 C/CSC

3.5.2.4 SCHEDULE MANAGEMENT

3.5.2.5 CONFIGURATION MANAGEMENT

3.5.2.6 DATA MANAGEMENT

3.5.2.7 NOMENCLATURE

3.5.2.8 MANUFACTURING MANAGEMENT

3.5.2.9 COMPUTER RESOURCES MANAGEMENT

3.5.2.10 TRAVEL

3.6. DATA

3.6.1 TECHNICAL PUBLICATIONS

3.6.2 ENGINEERING DATA

3.6.3 MANAGEMENT DATA

3.6.4 SUPPORT DATA

3.6.5 DATA DEPOSITORY

3.7. OPERATIONS / SITE ACTIVATION

Real Property Facilities:

3.7.1 CONTRACTOR TECHNICAL SUPPORT

3.7.2 SITE CONSTRUCTION

3.8. COMMON SUPPORT EQUIPMENT

3.8.1 ORGANIZATIONAL

3.8.2 INTERMEDIATE

3.8.3 DEPOT

3.9 INDUSTRIAL FACILITIES

3.9.1 CONSTRUCTION / CONVERSITION / EXPANSION

3.9.2 EQUIPMENT ACQUISITION OR MODERNIZATION

3.9.3 MAINTENANCE

3.10 INITIAL SPARES AND REPAIR PARTS

THE FOLLOWING IS A LIST OF ALL AREAS AND FUNCTIONAL TASKS. AN "**" IN COLUMN ONE INDICATES TASK COMPLETION.

ENGINEERING FUNCTIONAL TASKS:

1. SYSTEMS ENGINEERING
2. SYSTEM SAFETY
3. HUMAN FACTORS
4. VALUE ENGINEERING
5. SECURITY
6. AVAILABILITY
7. MAINTAINABILITY
8. RELIABILITY
9. PARTS CONTROL PROGRAM
10. AEROSPACE METEOROLOGICAL ENVIRONMENT
11. ELECTROMAGNETIC COMPATIBILITY (EMC)
12. SURVIVABILITY / VULNERABILITY
13. COMMUNICATIONS LONG LINES
14. COMMUNICATIONS SECURITY / TEMPEST
15. RADIO FREQUENCY MANAGEMENT
16. TRANSPORTABILITY
17. QUALITY ASSURANCE
18. TEST AND EVALUATION
19. COMPUTER RESOURCES MANAGEMENT
20. REAL PROPERTY FACILITIES
21. MANUFACTURING MANAGEMENT

CONFIGURATION AND DATA FUNCTIONAL TASKS:

1. CONFIGURATION MANAGEMENT
2. DATA MANAGEMENT

3. ENGINEERING DATA
4. NOMENCLATURE
* 5. STINFO
* 6. PHOTOGRAPHIC DOCUMENTATION

PROGRAM MANAGEMENT FUNCTIONAL TASKS:

1. CONTRACT WORK BREAKDOWN STRUCTURE
2. COST INFORMATION SYSTEMS
3. COST / SCHEDULE CONTROL SYSTEMS
4. SCHEDULE MANAGEMENT

LOGISTICS FUNCTIONAL TASKS:

1. LOGISTICS SUPPORT ANALYSIS
2. INTEGRATED LOGISTICS SUPPORT
3. INITIAL SPARE / REPAIR PARTS
4. PREOPERATIONAL MAINTENANCE
5. PREOPERATIONAL SUPPLY SUPPORT
6. SUPPORT BREAKDOWN
7. TECHNICAL ORDERS

PACKAGING AND TRANSPORTATION FUNCTIONAL TASKS:

1. PRESERVATION, PACKAGING, AND PACKING
2. TRANSPORTATION
3. TRAVEL

Output generated when all responses are "yes":

THE PRODUCT THAT YOU GENERATED PROVIDES CURRENT REQUIRED DATA
IN THE APPROPRIATE FORMAT. IT IS NECESSARY TO TAKE APPROPRIATE
ACTION AS INDICATED IN THE "ACTION MESSAGES AND DIRECTIVES"
SECTION BELOW. PLEASE REMEMBER THAT THE DATA WAS SUPPLIED BY
ESD OFFICES OF PRIMARY RESPONSIBILITY (OPR). THE DATA IS THE
BEST AVAILABLE; IT HAS BEEN REFINED AND EDITED. THE STATEMENT
OF WORK IS NEARLY COMPLETE. IT IS CONCISE; REPETITIONS WITHIN
APPLIED DOCUMENTS, BETWEEN TASKS, AND WITHIN THE RFP (CDRL, CONTRACT
SCHEDULE, IFPP), HAVE BEEN REMOVED. LEVYING A TASK BY CITING
A DOCUMENT (E.G., MIL-SPEC) AND PARAGRAPH NUMBERS IS SUFFICIENT.
CITING A DATA ITEM IN PARENTHESES; E.G., (DI-A-1001) IS ALL
THAT IS ALLOWED FOR STATING THAT A REPORT IS REQUIRED - DO
NOT ADD PREPARATION AND OTHER DELIVERY REQUIREMENTS! REFRAIN
FROM REPETITION FOR ANY REASON!!!!!!

TABLE OF CONTENTS
****

PARAGRAPH
---

1. SCOPE

2. APPLICABLE DOCUMENTS

3. REQUIREMENTS

3.1. HARDWARE

3.2. TRAINING
3.2.1 EQUIPMENT
3.2.2 SERVICES
3.2.3 FACILITIES

3.3. PECULIAR SUPPORT EQUIPMENT
3.3.1 ORGANIZATIONAL
3.3.2 INTERMEDIATE
3.3.3 DEPOT

3.4. SYSTEM TEST AND EVALUATION
3.4.1 DEVELOPMENT TEST AND EVALUATION
3.4.2 OPERATIONAL TEST AND EVALUATION
3.4.3 MARKUPS
3.4.4 TEST AND EVALUATION SUPPORT
3.4.5 TEST FACILITIES

3.5. SYSTEM / PROJECT MANAGEMENT
3.5.1 SYSTEM ENGINEERING
3.5.1.1 DESIGN ENGINEERING

3.5.1.2 LOGISTICS ENGINEERING
3.5.1.3 SPECIALTY ENGINEERING
3.5.1.4 MANUFACTURING ENGINEERING
3.5.1.5 SECURITY
3.5.1.6 COMMUNICATIONS
3.5.2.1 CONTRACT WORK BREAKDOWN STRUCTURE
3.5.2.2 COST INFORMATION SYSTEMS
3.5.2.3 C/CSC
3.5.2.4 SCHEDULE MANAGEMENT
3.5.2.5 CONFIGURATION MANAGEMENT
3.5.2.6 DATA MANAGEMENT
3.5.2.7 NOMENCLATURE
3.5.2.8 MANUFACTURING MANAGEMENT
3.5.2.9 COMPUTER RESOURCES MANAGEMENT
3.5.2.10 TRAVEL

3.6. DATA
3.6.1 TECHNICAL PUBLICATIONS
3.6.2 ENGINEERING DATA
3.6.3 MANAGEMENT DATA
3.6.4 SUPPORT DATA
3.6.5 DATA DEPOSITORY

3.7. OPERATIONS / SITE ACTIVATION
3.7.1 CONTRACTOR TECHNICAL SUPPORT
3.7.2 SITE CONSTRUCTION

3.8. COMMON SUPPORT EQUIPMENT
3.8.1 ORGANIZATIONAL
3.8.2 INTERMEDIATE
3.8.3 DEPOT

3.9 INDUSTRIAL FACILITIES
3.9.1 CONSTRUCTION / CONVERSITION / EXPANSION
3.9.2 EQUIPMENT ACQUISITION OR MODERNIZATION
3.9.3 MAINTENANCE

3.10 INITIAL SPARES AND REPAIR PARTS

1. SCOPE

1.1 This Statement of Work covers management programs and controls that the Government requires during this phase of the contract.
1.2 The data to be delivered as a result of performing the tasks prescribed by this statement of work are specified in the Contract Data Requirements List (CDRL). In no case shall any task prescribed herein be interpreted to require delivery of data.
1.3 The provisions of the applicable documents and their tailored applications, set forth in the paragraphs of Sec-

tion 3 below, are hereby incorporated into the contract by reference with the same force and effect as though set forth herein in full.

2. LISTING OF APPLICABLE DOCUMENTS

(SECTION 3 OF THIS DOCUMENT CONTAINS THE TAILORED REQUIREMENTS.)

2.1 STANDARDS

MIL-STD-196C 22 Apr 71	Joint Electronic Type Designation System
MIL-STD-1521A 1 Jun 76 Notice 1 29 Sep 78 Notice 2 21 Dec 81	Technical Reviews and Audits for Systems Equipments and Computer Programs
MIL-STD-483 31 Dec 70 Notice 2 21 Mar 79	Configuration Management Practices for Systems, Equipment, Munitions, and Computer Programs
MIL-STD-490 30 Oct 68 Notice 2 18 May 72	Specification Practices
DOD-STD-480A 12 Apr 78	Configuration Control Engineering Changes, Deviations and Waivers

2.2 SPECIFICATIONS

None

2.3 HANDBOOKS

None

2.4 OTHER DOCUMENTS

None

3. REQUIREMENTS

3.1. HARDWARE

The contractor shall design, develop, fabricate,

assemble, and test the _____ system in accordance with the requirements stated in the system specification provided in attachment _____ of the contract.

3.2. TRAINING

3.2.1 EQUIPMENT

3.2.2 SERVICES

3.2.3 FACILITIES

3.3. PECULIAR SUPPORT EQUIPMENT

3.3.1 ORGANIZATIONAL

3.3.2 INTERMEDIATE

3.3.3 DEPOT

3.4. SYSTEM TEST AND EVALUATION

3.4.1 DEVELOPMENT TEST AND EVALUATION

3.4.2 OPERATIONAL TEST AND EVALUATION

3.4.3 MARKUPS

3.4.4 TEST AND EVALUATION SUPPORT

Preoperational Maintenance:

Preoperational Supply Support:

3.4.5 TEST FACILITIES

3.5. SYSTEM / PROJECT MANAGEMENT

3.5.1 SYSTEM ENGINEERING

3.5.1.1 DESIGN ENGINEERING

Human Factors:

Value Engineering:

Parts Control Program:

Electromagnetic Compatability:

Survivability / Vulnerability:

3.5.1.2 LOGISTICS ENGINEERING

Availability:

Maintainability:

Reliability:

Logistics Support Analysis:

Integrated Logistics Support:

Transportability:

3.5.1.3 SPECIALTY ENGINEERING

System Safety:

Aerospace Meteorlogical Environment:

Preservation, Packaging, and Packing:

Transportation:

3.5.1.4 MANUFACTURING ENGINEERING

Quality Assurance:

3.5.1.5 SECURITY

General Security:

Communications Security / Tempest:

3.5.1.6 COMMUNICATIONS

Communications Long Lines:

Radio Frequency Management:

3.5.2.1 CONTRACT WORK BREAKDOWN STRUCTURE

3.5.2.2 COST INFORMATION SYSTEMS

3.5.2.3 C/CSC

3.5.2.4 SCHEDULE MANAGEMENT

3.5.2.5 CONFIGURATION MANAGEMENT

The contractor shall conduct the configuration management tasks and meet the configuration management requirements in

PARA
1. Scope
3.1 Intro
3.1.1 & APP I CMP
3.2 Baseline Mgt
3.3 & APP II Sys Eng & Int Cn
3.3 Sys Eng & Intfc Cont
3.3.1 Sys Eng
3.3.2 & APP I Intfc Cntl/CMP
3.4 Config Ident
3.4.1 & APP III Fctnl Conf Id
3.4.2 Allocated Conf Ident
3.4.3 Product CI
3.4.4 Precedence
3.4.5 & APP IV Addm to CI
3.4.6 & APP V Inv Item Ident
3.4.7 & APPS VI & XVI CPCI
3.4.8 Spec Form
3.4.9 Spec Authentication

3.5 & APP VII Spec Maint
3.5 & APP VIII Spec Maint
3.5 Spec Maintenance
3.6 Config Item Ident
3.15 QA Provisions
4. Data
5.1 Terms
5.1.g CI Spec Addendum
5.1.h Terms/CMP

of MIL-STD-483.

The contractor prepared specifications shall meet the format and content requirements in

PARA
1.-1.4 Scope
3. Requirements
3.1 Intro
3.1.1 Config Ident
3.1.1.2 Allocated CI
3.1.2 Coverage of Specs
3.1.3 Types
3.1.3.1 & APP I Type A Sys Spc
3.1.3.2 Dev Specs
3.1.3.3 Product Spec
3.1.3.3.1.1 & APP VII PIP Func
3.1.3.3.1.2 & APP VIII PIP Fab
3.1.3.3.2.1 & APP IX CIP Func
3.1.3.3.2.2 & APP X CIP Fab
3.1.3.3.3 & APP XI N-Com P Fab
3.1.3.3.4 & APP XII Inv Itm Sp
3.1.3.3.4 Inv Item Spec
3.1.4 Two Part Specs
3.2-3.2.16.8 Styl Frmt & Ident
3.3-3.3.3 Changes & Revisions
4.-4.1.2.2 Gen Requirements
4.2-4.2.3 Applicable Documents
4.2.3 List of References
4.2.3.1 Ex 2 Gov Documents
4.2.3.1 Ex 2 Non-Gov Documents
4.2.3.2 Ex 2 Non-Gov Documents
4.3 Requirements
4.3-4.3.11 Requirements
4.4-4.4.2 QA Provisions
4.5-4.5.3.3 Prep for Delivery
4.6-4.6.5 Notes
4.7-4.7.3 APP & Index
5. Detail Requirements
5.1 Detail Requirement (Genrl)
5.1 General

of MIL-STD-490.

Applicable Data Items:

DI-E-7031 (ref: 001)

DI-E-3108 (ref: 002)

DI-E-3101 (ref: 003)

DI-E-3119B (ref: 004)

DI-E-3102A (ref: 005)

DI-E-3120B (ref: 006)

DI-E-3103A (ref: 007)

DI-E-3106 (ref: 008)

DI-E-3123 (ref: 009)

DI-E-3122 (ref: 010)

DI-E-3121 (ref: 011)

The contractor shall establish and chair an Interface Control Working Group (ICWG) which shall have the following responsibilities:

Reference MIL-STD-483, PARA 3.15 (Quality Assurance Provisions); change as follows: A verification matrix shall be included in Section 4 of all specifications prepared per the appendices of this standard.

Reference MIL-STD-483, PARA 3.15 (Quality Assurance Provisions); change as follows: A verification matrix shall be included in Section 4 of ail specifications prepared per the appendices of this standard.

The allocated specifications shall be prepared as Part I of two part specifications IAW para 3.1.4. of MIL-STD-490.

Reference MIL-STD-483, PARA 3.15 (Quality Assurance Provisions); change as follows: A verification matrix shall be included in Section 4 of all specifications prepared per the appendices of this standard.

The product specifications shall be prepared as Part II of two part specifications IAW para 3.1.4. of MIL-STD-490.

3.5.2.6 DATA MANAGEMENT

Applicable Data Items:

DI-A-3027 (ref: 012)

See the Contract Data Requirements List (CDRL), the Schedule and General Provisions of the contract for data requirements.

3.5.2.7 NOMENCLATURE

The contractor shall identify all end items requiring nomenclature. The contractor shall develop and recommend nomenclature for these end items in accordance with

ALL

of MIL-STD-196C.

Applicable Data Items:
DI-E-3126A (ref: 013)

3.5.2.8 MANUFACTURING MANAGEMENT

3.5.2.9 COMPUTER RESOURCES MANAGEMENT

3.5.2.10 TRAVEL

3.6. DATA

3.6.1 TECHNICAL PUBLICATIONS

3.6.2 ENGINEERING DATA

Applicable Data Items:
DI-E-7031 (ref: 014)

See the CDRL for Engineering Data requirements.

3.6.3 MANAGEMENT DATA

3.6.4 SUPPORT DATA

3.6.5 DATA DEPOSITORY

3.7. OPERATIONS / SITE ACTIVATION

Real Property Facilities:

3.7.1 CONTRACTOR TECHNICAL SUPPORT

3.7.2 SITE CONSTRUCTION

3.8. COMMON SUPPORT EQUIPMENT

3.8.1 ORGANIZATIONAL

3.8.2 INTERMEDIATE

3.8.3 DEPOT

3.9 INDUSTRIAL FACILITIES

3.9.1 CONSTRUCTION / CONVERSITION / EXPANSION

3.9.2 EQUIPMENT ACQUISITION OR MODERNIZATION

3.9.3 MAINTENANCE

3.10 INITIAL SPARES AND REPAIR PARTS

TABLE OF CONTENTS
****

Paragraph
---

1. SCOPE

2. LISTING OF DATA ITEMS

3. DRAFT CDRL

3.1. HARDWARE

3.2. TRAINING
3.2.1 EQUIPMENT
3.2.2 SERVICES
3.2.3 FACILITIES

3.3. PECULIAR SUPPORT EQUIPMENT
3.3.1 ORGANIZATIONAL
3.3.2 INTERMEDIATE
3.3.3 DEPOT

3.4. SYSTEM TEST AND EVALUATION
3.4.1 DEVELOPMENT TEST AND EVALUATION
3.4.2 OPERATIONAL TEST AND EVALUATION
3.4.3 MARKUPS
3.4.4 TEST AND EVALUATION SUPPORT
3.4.5 TEST FACILITIES

3.5. SYSTEM / PROJECT MANAGEMENT
3.5.1 SYSTEM ENGINEERING
3.5.1.1 DESIGN ENGINEERING
3.5.1.2 LOGISTICS ENGINEERING
3.5.1.3 SPECIALTY ENGINEERING
3.5.1.4 MANUFACTURING ENGINEERING
3.5.1.5 SECURITY
3.5.1.6 COMMUNICATIONS
3.5.2.1 CONTRACT WORK BREAKDOWN STRUCTURE
3.5.2.2 COST INFORMATION SYSTEMS
3.5.2.3 C/CSC
3.5.2.4 SCHEDULE MANAGEMENT
3.5.2.5 CONFIGURATION MANAGEMENT
3.5.2.6 DATA MANAGEMENT
3.5.2.7 NOMENCLATURE
3.5.2.8 MANUFACTURING MANAGEMENT
3.5.2.9 COMPUTER RESOURCES MANAGEMENT
3.5.2.10 TRAVEL

3.6. DATA
3.6.1 TECHNICAL PUBLICATIONS
3.6.2 ENGINEERING DATA
3.6.3 MANAGEMENT DATA
3.6.4 SUPPORT DATA
3.6.5 DATA DEPOSITORY

3.7. OPERATIONS / SITE ACTIVATION
3.7.1 CONTRACTOR TECHNICAL SUPPORT
3.7.2 SITE CONSTRUCTION

3.8. COMMON SUPPORT EQUIPMENT
3.8.1 ORGANIZATIONAL
3.8.2 INTERMEDIATE
3.8.3 DEPOT

3.9 INDUSTRIAL FACILITIES
3.9.1 CONSTRUCTION / CONVERSITION / EXPANSION
3.9.2 EQUIPMENT ACQUISITION OR MODERNIZATION
3.9.3 MAINTENANCE

3.10 INITIAL SPARES AND REPAIR PARTS

1. SCOPE

The following is the draft Contract Data Requirements List (CDRL) that you generated. It is intended to assist you to determine which data items and CDRL block entries are applicable to this procurement. It is not intended to replace the Data Call or to change existing Data Management Procedures or your introduction to the contract CDRL.

2. LISTING OF DATA ITEMS

(SECTION 3 OF THIS DOCUMENT CONTAINS THE DRAFT CDRL.)

DI-E-7031	Drawings, Engineering and Associated Lists
DI-A-3027	Data Accession List/Internal Data
DI-E-3126A	Request for Nomenclature
DI-E-3108	Configuration Management Plan
DI-E-3101	System Specification
DI-E-3119B	Computer Program Development Specification (Type B5)
DI-E-3102A	Configuration Item Development Specification (B1)
DI-E-3120B	Computer Program Product Specification (C5)
DI-E-3103A	Configuration Item Product Fabrication Specification (C1B)
DI-E-3106	Specification Maintenence Document
DI-E-3123	Change Status Report (Computer Program)
DI-E-3122	Configuration Index (Computer Program)
DI-E-3121	Version Description Document (Computer Programs)
DI-E-3129	Request for Deviation/Waiver
DI-E-3128	Engineering Change Proposal (ECP)

DI-E-3127	Advance Change Study Notice
DI-E-3116	System Allocation Document
DI-E-3118	Minutes of Formal Reviews, Inspections and Audits
DI-A-3029	Agenda, Design Reviews, Configuration Audits and Demonstrations
DI-E-3133	Configuration Management Accounting Reports (Machine or Manually Prepared)

3. DRAFT CDRL

The information below can be transferred to a word processor for refinement and completion. The following are descriptions of the CDRL data item entries:

1. Sequence Number
2. Title or Description of Data
3. Subtitle
4. Authority (Data Item Number)
5. Contract Reference
6. Technical Office
7. DD Fm 250 Requirement
8. Approval Code
9. Integrated Associate Contractor
10. Frequency
11. As of Date
12. Date of First Submission
13. Date of Subsequent Submissions/Event I.D.
14. Distribution and Addressees (Regular/Repro)
15. Total
16. Remarks

3.1. HARDWARE

3.2. TRAINING

3.2.1 EQUIPMENT

3.2.2 SERVICES

3.2.3 FACILITIES

3.3. PECULIAR SUPPORT EQUIPMENT

3.3.1 ORGANIZATIONAL

3.3.2 INTERMEDIATE

3.3.3 DEPOT

3.4. SYSTEM TEST AND EVALUATION

3.4.1 DEVELOPMENT TEST AND EVALUATION

3.4.2 OPERATIONAL TEST AND EVALUATION

3.4.3 MARKUPS

3.4.4 TEST AND EVALUATION SUPPORT

Preoperational Maintenance:

Preoperational Supply Support:

3.4.5 TEST FACILITIES

3.5. SYSTEM / PROJECT MANAGEMENT

3.5.1 SYSTEM ENGINEERING

3.5.1.1 DESIGN ENGINEERING

Human Factors:

Value Engineering:

Parts Control Program:

Electromagnetic Compatability:

Survivability / Vulnerability:

3.5.1.2 LOGISTICS ENGINEERING

Availability:

Maintainability:

Reliability:

Logistics Support Analysis:

Integrated Logistics Support:

Transportability:

3.5.1.3 SPECIALTY ENGINEERING

System Safety:

Aerospace Meteorlogical Environment:

Preservation, Packaging, and Packing:

Transportation:

3.5.1.4 MANUFACTURING ENGINEERING

Quality Assurance:

3.5.1.5 SECURITY

General Security:

Communications Security / Tempest:

3.5.1.6 COMMUNICATIONS

Communications Long Lines:

Radio Frequency Management:

3.5.2.1 CONTRACT WORK BREAKDOWN STRUCTURE

3.5.2.2 COST INFORMATION SYSTEMS

3.5.2.3 C/CSC

3.5.2.4 SCHEDULE MANAGEMENT

3.5.2.5 CONFIGURATION MANAGEMENT

ref: 001
2. Configuration Management Plan
4. DI-E-3108
10. ONE/R
12. 30 DAC
14. AS REQ BY PO

ref: 002
2. Drawings, Engineering and Associated Lists
4. DI-E-7031
14. DESC/EPA 1 N/R
DISC/ESM 1 N/R
RADC/RBRA 1 N/R
AS REQ BY PO
16. Whenever the generation of a control drawing that relates to the procurement of Parts in the categories listed in para 6.4 of MIL-STD-965 is needed and that generation is approved by the Procuring Activity, a copy of that Control Drawing together with a completed DD Form 2052 will be distributed to DESC, DISC and/or RADC, as appropriate. Selected Item Drawings (SID) IAW DOD-STD-100 shall be the type of Control Drawing provided whenever a drawing is provided that describes a piece part that requires selection, screening, testing, etc. over and above that provided by that part vendor's usual practice relative to the specific part numbered item referenced in the drawing.

ref: 003
2. System Specification
4. DI-E-3101/M. The final copy shall include all system design analysis and trade-off studies.
7. SD
10. ONE/R
12. AS REQ BY PO
14. AS REQ BY PO

ref: 004

2. Configuration Item Development Specification (B1)
4. DI-E-3102A
10. ONE/R
12. 90 days prior to end of contract. Revisions as required. The specification shall be prepared as Part 1 of two part specifications in accordance with para 3.1.4.
14. AS REQ BY PO

ref: 005
2. Computer Program Development Specification (Type B5)
4. DI-E-3119B
10. ONE/R
12. 90 days prior to end of contract. Revisions as required. The specification shall be prepared as Part I of two part specifications IAW para 3.1.4.
14. AS REQ BY PO

ref: 006
2. Configuration Item Product Fabrication Specification (C1B)
4. DI-E-3103A
10. ONE/R
12. 30 days prior to CDR. The specification shall be prepared as Part II of two part specifications IAW para 3.1.4.
14. AS REQ BY PO

ref: 007
2. Computer Program Product Specification (C5)
4. DI-E-3120B
10. ONE/R
12. 30 days prior to CDR. The specification shall be prepared as Part II of two part specifications IAW para 3.1.4.
14. AS REQ BY PO

ref: 008
2. Specification Maintenance Document
4. DI-E-3106
10. AS REQ
12. With ECP
14. Contractor shall distribute final SCN to all specification holders.

ref: 009
2. Version Description Document (Computer Programs)
4. DI-E-3121
8. A
10. AS REQ
12. Submit with release of each version of a CPCI and each release of an interim change (i.e., changes that occur between CPCI versions).
14. AS REQ BY PO

ref: 010
2. Configuration Index (Computer Program)

4. DI-E-3122
10. AS REQ
12. AS REQ
13. AS REQ
14. AS REQ BY PO

ref: 011
2. Change Status Report (Computer Program)
4. DI-I-3123
10. AS REQ
14. AS REQ BY PO

ref: 012
2. Advance Change Study Notice
4. DI-E-3127
10. AS REQ
12. AS REQ
13. AS REQ

ref: 013
2. Engineering Change Proposal (ECP)
4. DI-E-3128
10. AR
14. AS REQ BY PO
16. Prior to preparation of a formal ECP, the contractor shall notify the Government of its intent to submit a proposal via Advance Change Study Notice (ACSN). Emergency, urgent, compatibility and record type ECPs do not require an ACSN prior to submittal.

ref: 014
2. Request for Deviation/Waiver
4. DI-E-3129
10. AS REQ
12. AS REQ
13. AS REQ
14. AS REQ BY PO

ref: 015
2. System Allocation Document
4. DI-E-3116
8. A
10. ONE/R
12. 30 days after approval of draft.
13. AS REQ
14. AS REQ BY PO

ref: 016
2. Minutes of Formal Reviews, Inspections and Audits
4. DI-E-3118
10. AR
12. 10 days after each review.
14. AS REQ BY PO

ref: 017
2. Agenda, Design Reviews, Configuration Audits and Demonstrations
4. DI-A-3029
10. AR
12. 30 days prior to each review.
14. AS REQ BY PO

ref: 018
2. Configuration Management Accounting Reports (Machine or Manually Prepared)
4. DI-E-3133
14. AS REQ BY PO

3.5.2.6 DATA MANAGEMENT

ref: 019
2. Data Accession List/Internal Data
4. DI-A-3027
10. MTHLY
12. 45 DAC
13. NLT 15th day of each month.
14. DATA MGR 1/O
PC DIV 1/O
ACCI 1/O

3.5.2.7 NOMENCLATURE

ref: 020
2. Request for Nomenclature
4. DI-E-3126A
10. AR
12. 90 days before requirement of the type designation.
14. AS REQ BY PO

3.5.2.8 MANUFACTURING MANAGEMENT

3.5.2.9 COMPUTER RESOURCES MANAGEMENT

3.5.2.10 TRAVEL

3.6. DATA

3.6.1 TECHNICAL PUBLICATIONS

3.6.2 ENGINEERING DATA

ref: 021
2. Drawings, Engineering and Associated Lists
4. DI-E-7031
14. DESC/EPA 1 N/R
DISC/ESM 1 N/R
RADC/RBRA 1 N/R
AS REQ BY PO
16. Whenever the generation of a control drawing that relates to the procurement of Parts in the categories listed in para 6.4 of MIL-STD-965 is needed and that generation is approved by the Procuring Activity, a copy of that Control Drawing together with a completed DD Form 2052 will be distributed to DESC, DISC and/or RADC, as appropriate. Selected Item Drawings (SID) IAW DOD-STD-100 shall be the type of Control Drawing provided whenever a drawing is provided that describes a piece part that requires selection, screening, testing, etc. over and above that provided by that part vendor's usual practice relative to the specific part numbered item referenced in the drawing.

3.6.3 MANAGEMENT DATA

3.6.4 SUPPORT DATA

3.6.5 DATA DEPOSITORY

3.7. OPERATIONS / SITE ACTIVATION

Real Property Facilities:

3.7.1 CONTRACTOR TECHNICAL SUPPORT

3.7.2 SITE CONSTRUCTION

3.8. COMMON SUPPORT EQUIPMENT

3.8.1 ORGANIZATIONAL

3.8.2 INTERMEDIATE

3.8.3 DEPOT

3.9 INDUSTRIAL FACILITIES

3.9.1 CONSTRUCTION / CONVERSITION / EXPANSION

3.9.2 EQUIPMENT ACQUISITION OR MODERNIZATION

3.9.3 MAINTENANCE

3.10 INITIAL SPARES AND REPAIR PARTS

ACTION MESSAGES AND DIRECTIVES

CAUTION: THE ABOVE PRODUCT IS A PRELIMINARY DRAFT ONLY!
TAKE APPROPRIATE ACTION AS INDICATED BELOW....

3.1. HARDWARE

3.2. TRAINING

3.2.1 EQUIPMENT

3.2.2 SERVICES

3.2.3 FACILITIES

3.3. PECULIAR SUPPORT EQUIPMENT

3.3.1 ORGANIZATIONAL

3.3.2 INTERMEDIATE

3.3.3 DEPOT

3.4. SYSTEM TEST AND EVALUATION

3.4.1 DEVELOPMENT TEST AND EVALUATION

3.4.2 OPERATIONAL TEST AND EVALUATION

3.4.3 MARKUPS

3.4.4 TEST AND EVALUATION SUPPORT

Preoperational Maintenance:

Preoperational Supply Support:

3.4.5 TEST FACILITIES

3.5. SYSTEM / PROJECT MANAGEMENT

3.5.1 SYSTEM ENGINEERING

3.5.1.1 DESIGN ENGINEERING

Human Factors:

Value Engineering:

Parts Control Program:

Electromagnetic Compatability:

Survivability / Vulnerability:

3.5.1.2 LOGISTICS ENGINEERING

Availability:

Maintainability:

Reliability:

Logistics Support Analysis:

Integrated Logistics Support:

Transportability:

3.5.1.3 SPECIALTY ENGINEERING

System Safety:

Aerospace Meteorlogical Environment:

Preservation, Packaging, and Packing:

Transportation:

3.5.1.4 MANUFACTURING ENGINEERING

Quality Assurance:

3.5.1.5 SECURITY

General Security:

Communications Security / Tempest:

3.5.1.6 COMMUNICATIONS

Communications Long Lines:

Radio Frequency Management:

3.5.2.1 CONTRACT WORK BREAKDOWN STRUCTURE

3.5.2.2 COST INFORMATION SYSTEMS

3.5.2.3 C/CSC

3.5.2.4 SCHEDULE MANAGEMENT

3.5.2.5 CONFIGURATION MANAGEMENT

CDRL: DI-E-3108 APPLIES. TAILOR AS REQUIRED.

SOW: COORDINATE WITH SYSTEM ENGINEERING. SET FORTH THE CONTRACTOR'S RESPONSIBILITIES AS THE CHAIRMAN OF THE INTERFACE CONTROL WORKING GROUP.

CDRL: DI-E-7031 APPLIES FOR INTERFACE CONTROL DRAWINGS. TAILOR AS REQUIRED.

CDRL: DI-E-3117, SYS SEG SPEC, MAY ALSO BE APPLICABLE. ADD AND

TAILOR WHEN REQUIRED.

CDRL: DI-E-3120A AND DI-E-3119B NORMALLY APPLY. TAILOR AS REQUIRED.
CDRL: THE FOLLOWING DATA ITEMS MAY ALSO BE APPLICABLE:
DI-E-3104,
DI-E-3105,
DI-E-30130A.

CDRL: DI-E-3130A AND DI-E-3120B NORMALLY APPLY. TAILOR AS REQUIRED.
CDRL: THE FOLLOWING DATA ITEMS MAY ALSO BE APPLICABLE:
DI-E-3104,
DI-E-3105,
DI-E-3130,
DI-E-3131,
DI-E-3132,
DI-E-30130A.

CDRL: DATA ITEM DI-E-3106 IS APPLICABLE. TAILOR AS REQUIRED.

CDRL: THE FOLLOWING DATA ITEMS ARE APPLICABLE; TAILOR AS REQUIRED:
DI-E-3121,
DI-E-3122,
DI-E-3123.

SOW: MIL-STD-481A MAY BE USED IN LIEU OF DOD-STD-480A
FOR SOME ACQUISITIONS, HOWEVER
THE PROCUREMENT ACTIVITY MUST THEN ASSUME THE RESPONSIBILITY
FOR DETERMINATION OF POSSIBLE EFFECTS OF THE ENGINEERING CHANGE
ON HIGHER LEVELS OR ASSOCIATED ITEMS. CAUTION: DO NOT USE
MIL-STD-481A WITHOUT CONSULTING WITH THE STAFF OPR.
DO NOT USE MIL-STD-481 AND DOD-STD-480 AT THE SAME TIME!
CDRL: DATA ITEMS DI-E-3127, DI-E-3128, AND DI-E-3129 ARE APPLICABLE.
TAILOR AS REQUIRED.
ADD THE FOLLOWING TO THE BACKUP SHEET OF DATA ITEM DI-E-3128:
PRIOR TO PREPARATION OF A FORMAL ECP, THE CONTRACTOR SHALL
NOTIFY THE GOVERNMENT OF ITS INTENT TO SUBMIT A PROPOSAL
VIA AN ADVANCE CHANGE STUDY NOTICE (ACSN). EMERGENCY,
URGENT, COMPATIBILITY AND RECORD TYPE ECPs DO NOT REQUIRE
AN ACSN PRIOR TO SUBMITTAL.

CDRL: DI-E-3116 APPLIES. TAILOR AS REQUIRED.

SOW: A FUNCTIONAL CONFIGURATION AUDIT (FCA) IS NORMALLY ACCOMPLISHED
DURING FULL SCALE DEVELOPMENT AND IS REQUIRED FOR EACH CI/CPCI.

SOW: A FORMAL QUALIFICATION REVIEW (FQR) IS NORMALLY COMBINED

WITH THE FCA. COORDINATE WITH THE STAFF SYSTEM ENGINEERING, TEST, AND CONFIGURATION MANAGEMENT SPECIALISTS.

SOW: WHEN THE PROTOTYPE OR PREPRODUCTION ARTICLE IS NOT REPRESENTATIVE OF THE PRODUCTION UNIT, THE FCA MUST BE DEFERED UNTIL THE FIRST PRODUCTION ARTICLE.

SOW: THE FCA SHOULD ALWAYS BE CONDUCTED ON THE ITEM THAT IS REPRESENTATIVE OF THE CONFIGURATION TO BE RELEASED FOR PRODUCTION QUANTITIES.

SOW: THE FCA MUST BE ACCOMPLISHED BEFORE THE PHYSICAL CONFIGURATION AUDIT (PCA).

CDRL: DI-E-3118 AND DI-A-3029 APPLY. COORDINATE WITH SYSTEMS ENGINEERING AND TEST TO ENSURE THAT THESE DATA ITEMS HAVE NOT BEEN DUPLICATED.

SOW: A PHYSICAL CONFIGURATION AUDIT (PCA) WILL BE ACCOMPLISHED ON THE FIRST PRODUCTION ARTICLE DURING THE PRODUCTION PHASE.

SOW: A FORMAL QUALIFICATION REVIEW (FQR) IS GENERALLY COMBINED WITH A FUNCTIONAL CONFIGURATION AUDIT (FCA).

SOW: COORDINATE WITH SYSTEMS ENGINEERING AND TEST TO ENSURE THIS REQUIREMENT HAS NOT BEEN DUPLICATED.

CDRL: DI-E-3118 AND DI-A-3029 APPLY. COORDINATE WITH SYSTEMS ENGINEERING AND TEST TO ENSURE THAT THESE DATA ITEMS HAVE NOT BEEN DUPLICATED.

CDRL: DI-E-3133 APPLIES. TAILOR AS REQUIRED.

CDRL: DI-E-3107 MAY ALSO APPLY.

CDRL: MODIFY DI-E-3133 TO INDICATE WHICH TYPE OF REPORTS ARE REQUIRED AND WHETHER THEY ARE TO BE MANUALLY OR MACHINE PREPARED.

3.5.2.6 DATA MANAGEMENT

CDRL: PREPARATION AND DELIVERY OF DATA ARE FUNCTIONS OF THE CDRL AND ACCOMPLISHED THROUGH THE DATA CALL. A DRAFT CDRL IS AUTOMATICALLY MADE WHEN RUNNING CGADS FOR AN SOW. IT SHOULD BE USED AS A BASE DOCUMENT FOR DATA CALL. CONTACT YOUR PROGRAM OFFICE

DATA MANAGER FOR ASSISTANCE.

CONTRACT: THE GENERAL PROVISIONS OF THE CONTRACT COVER SUCH ITEMS AS: DATA RIGHTS, PRICING, REQUIREMENTS, AND THE ACCESSION LIST. CONTACT YOUR BUYER OR PCO FOR ASSISTANCE.

3.5.2.7 NOMENCLATURE

CDRL: DI-E-3216A APPLIES; TAILOR AS REQUIRED.

3.5.2.8 MANUFACTURING MANAGEMENT

3.5.2.9 COMPUTER RESOURCES MANAGEMENT

3.5.2.10 TRAVEL

3.6. DATA

3.6.1 TECHNICAL PUBLICATIONS

3.6.2 ENGINEERING DATA

SOW: NO STATEMENT IS REQUIRED IN THE SOW, HOWEVER ENGINEERING DATA IS REQUIRED AND MUST BE ACQUIRED THROUGH THE CDRL.

CDRL: THE DATA ITEMS THAT PROVIDE ENGINEERING DATA (DRAWINGS) OR THE INFORMATION THAT ENABLES THE PROGRAM OFFICE TO DECIDE THE TYPE OF DATA REQUIRED CONSISTS OF COMBINATIONS OF THE FOLLOWING: DI-E-7031/M, DI-E-3148, DI-P-3461, DI-P-3472, AND DI-P-3473.

3.6.3 MANAGEMENT DATA

3.6.4 SUPPORT DATA

3.6.5 DATA DEPOSITORY

3.7. OPERATIONS / SITE ACTIVATION

Real Property Facilities:

3.7.1 CONTRACTOR TECHNICAL SUPPORT

3.7.2 SITE CONSTRUCTION

3.8. COMMON SUPPORT EQUIPMENT

3.8.1 ORGANIZATIONAL

3.8.2 INTERMEDIATE

3.8.3 DEPOT

3.9 INDUSTRIAL FACILITIES

3.9.1 CONSTRUCTION / CONVERSITION / EXPANSION

3.9.2 EQUIPMENT ACQUISITION OR MODERNIZATION

3.9.3 MAINTENANCE

3.10 INITIAL SPARES AND REPAIR PARTS

THE FOLLOWING IS A LIST OF ALL AREAS AND FUNCTIONAL TASKS. AN "*" IN COLUMN ONE INDICATES TASK COMPLETION.

ENGINEERING FUNCTIONAL TASKS:

1. SYSTEMS ENGINEERING
2. SYSTEM SAFETY
3. HUMAN FACTORS
4. VALUE ENGINEERING
5. SECURITY
6. AVAILABILITY
7. MAINTAINABILITY
8. RELIABILITY
9. PARTS CONTROL PROGRAM
10. AEROSPACE METEOROLOGICAL ENVIRONMENT
11. ELECTROMAGNETIC COMPATIBILITY (EMC)
12. SURVIVABILITY / VULNERABILITY
13. COMMUNICATIONS LONG LINES
14. COMMUNICATIONS SECURITY / TEMPEST
15. RADIO FREQUENCY MANAGEMENT
16. TRANSPORTABILITY
17. QUALITY ASSURANCE
18. TEST AND EVALUATION
19. COMPUTER RESOURCES MANAGEMENT
20. REAL PROPERTY FACILITIES
21. MANUFACTURING MANAGEMENT

CONFIGURATION AND DATA FUNCTIONAL TASKS:

* 1. CONFIGURATION MANAGEMENT

* 2. DATA MANAGEMENT
* 3. ENGINEERING DATA
* 4. NOMENCLATURE
* 5. STINFO
* 6. PHOTOGRAPHIC DOCUMENTATION

PROGRAM MANAGEMENT FUNCTIONAL TASKS:

1. CONTRACT WORK BREAKDOWN STRUCTURE
2. COST INFORMATION SYSTEMS
3. COST / SCHEDULE CONTROL SYSTEMS
4. SCHEDULE MANAGEMENT

LOGISTICS FUNCTIONAL TASKS:

1. LOGISTICS SUPPORT ANALYSIS
2. INTEGRATED LOGISTICS SUPPORT
3. INITIAL SPARE / REPAIR PARTS
4. PREOPERATIONAL MAINTENANCE
5. PREOPERATIONAL SUPPLY SUPPORT
6. SUPPORT BREAKDOWN
7. TECHNICAL ORDERS

PACKAGING AND TRANSPORTATION FUNCTIONAL TASKS:

1. PRESERVATION, PACKAGING, AND PACKING
2. TRANSPORTATION
3. TRAVEL

Appendix I: CGADS Output

Output generated when all responses are "no":

```
0*********************************************************************************
**
OTHE PRODUCT THAT YOU GENERATED PROVIDES CURRENT REQUIRED DATA
 IN THE APPROPRIATE FORMAT.  IT IS NECESSARY TO TAKE APPROPRIATE
 ACTION AS INDICATED IN THE "ACTION MESSAGES AND DIRECTIVES"
 SECTION BELOW.  PLEASE REMEMBER THAT THE DATA WAS SUPPLIED BY
 ESD OFFICES OF PRIMARY RESPONSIBILITY (OPR).  THE DATA IS THE
 BEST AVAILABLE; IT HAS BEEN REFINED AND EDITED.  THE STATEMENT
 OF WORK IS NEARLY COMPLETE.  IT IS CONCISE; REPETITIONS WITHIN
 APPLIED DOCUMENTS, BETWEEN TASKS, AND WITHIN THE RFP (CDRL, CONTRACT
 SCHEDULE, IFPP), HAVE BEEN REMOVED.  LEVYING A TASK BY CITING
 A DOCUMENT (E.G., MIL-SPEC) AND PARAGRAPH NUMBERS IS SUFFICIENT.
 CITING A DATA ITEM IN PARENTHESES; E.G., (DI-A-1001) IS ALL
 THAT IS ALLOWED FOR STATING THAT A REPORT IS REQUIRED - DO
 NOT ADD PREPARATION AND OTHER DELIVERY REQUIREMENTS!  REFRAIN
 FROM REPETITION FOR ANY REASON - YOU WILL BE REQUIRED TO
 REMOVE ANY REPETITION BEFORE APPROVAL BY THE ESD DOCUMENTATION
 REVIEW COMMITTEE.
0*********************************************************************************
```

Table of Contents

Paragraph	
01.	SCOPE
02.	APPLICABLE DOCUMENTS
03.	REQUIREMENTS
03.1.	ENGINEERING
03.2.	CONFIGURATION AND DATA
3.2.1.	CONFIGURATION MANAGEMENT
3.2.2.	DATA MANAGEMENT
3.2.3.	ENGINEERING DATA
3.2.4.	NOMENCLATURE
3.2.5.	STINFO
3.2.6.	PHOTOGRAPHIC DOCUMENTATION
03.3.	PROGRAM MANAGEMENT
03.4.	LOGISTICS
03.5.	PACKAGING AND TRANSPORTATION
11.	SCOPE

1. SCOPE

1.1 This Statement of Work covers management programs and controls that the Government requires during this phase of the contract.

1.2 The data to be delivered as a result of performing the tasks prescribed by this statement of work are specified in the Contract Data Requirements List (CDRL). In no case

shall any task prescribed herein be interpreted to require delivery of data.

1.3 The provisions of the applicable documents and their tailored applications, set forth in the paragraphs of Section 3 below, are hereby incorporated into the contract by reference with the same force and effect as though set forth herein in full.

12. LISTING OF APPLICABLE DOCUMENTS
0 (SECTION 3 OF THIS DOCUMENT CONTAINS THE TAILORED REQUIREMENTS.)
02.1 STANDARDS

NONE

02.2 SPECIFICATIONS

NONE

02.3 HANDBOOKS

NONE

02.4 OTHER DOCUMENTS

NONE

13. REQUIREMENTS. THE CONTRACTOR SHALL COMPLY WITH THE FOLLOWING:

03.1. ENGINEERING
03.2. CONFIGURATION AND DATA
3.2.1. CONFIGURATION MANAGEMENT

Configuration Management does not apply.

3.2.2. DATA MANAGEMENT

3.2.3. ENGINEERING DATA

Engineering Data requirements are not applicable.

3.2.4. NOMENCLATURE

3.2.5. STINFO

3.2.6. PHOTOGRAPHIC DOCUMENTATION

03.3. PROGRAM MANAGEMENT
03.4. LOGISTICS
03.5. PACKAGING AND TRANSPORTATION

Table of Contents

Paragraph	
01.	SCOPE
02.	LISTING OF DATA ITEMS
03.	DRAFT CDRL
03.1.	ENGINEERING
03.2.	CONFIGURATION AND DATA
3.2.1.	CONFIGURATION MANAGEMENT
3.2.2.	DATA MANAGEMENT
3.2.3.	ENGINEERING DATA
3.2.4.	NOMENCLATURE
3.2.5.	STINFO
3.2.6.	PHOTOGRAPHIC DOCUMENTATION
03.3.	PROGRAM MANAGEMENT
03.4.	LOGISTICS
03.5.	PACKAGING AND TRANSPORTATION
11.	SCOPE

The following is the draft Contract Data Requirements List (CDRL) that you generated. It is intended to assist you to determine which data items and CDRL block entries are applicable to this procurement. It is not intended to replace the Data Call or to change existing Data Management Procedures or your introduction to the contract CDRL.

12. LISTING OF DATA ITEMS

0 (SECTION 3 OF THIS DOCUMENT CONTAINS THE DRAFT CDRL.)

13. DRAFT CDRL

0 The information below can be transferred to a word processor for refinement and completion. The following are descriptions of the CDRL data item entries:

1. Sequence Number
2. Title or Description of Data
3. Subtitle
4. Authority (Data Item Number)
5. Contract Reference
6. Technical Office
7. DD Fm 250 Requirement
8. Approval Code
9. Integrated Associate Contractor
10. Frequency
11. As of Date
12. Date of First Submission
13. Date of Subsequent Submissions/Event I.D.
14. Distribution and Addressees (Regular/Repro)
15. Total
16. Remarks

03.1. ENGINEERING

03.2. CONFIGURATION AND DATA

3.2.1. CONFIGURATION MANAGEMENT

3.2.2. DATA MANAGEMENT

3.2.3. ENGINEERING DATA

3.2.4. NOMENCLATURE

3.2.5. STINFO

3.2.6. PHOTOGRAPHIC DOCUMENTATION

03.3. PROGRAM MANAGEMENT
03.4. LOGISTICS
03.5. PACKAGING AND TRANSPORTATION

0**********
**

ACTION MESSAGES AND DIRECTIVES

CAUTION: THE ABOVE PRODUCT IS A PRELIMINARY DRAFT ONLY!
TAKE APPROPRIATE ACTION AS INDICATED BELOW....

0**********
**

YOU DID NOT RUN THIS TASK:
SYSTEMS ENGINEERING

****
**

YOU DID NOT RUN THIS TASK:
SYSTEM SAFETY

****
**

YOU DID NOT RUN THIS TASK:
HUMAN FACTORS

****
**

YOU DID NOT RUN THIS TASK:
VALUE ENGINEERING

****
**

YOU DID NOT RUN THIS TASK:
SECURITY

****
**

YOU DID NOT RUN THIS TASK:
AVAILABILITY

****
**

YOU DID NOT RUN THIS TASK:

MAINTAINABILITY

****

**

YOU DID NOT RUN THIS TASK:

RELIABILITY

****

**

YOU DID NOT RUN THIS TASK:

PARTS CONTROL PROGRAM

****

**

YOU DID NOT RUN THIS TASK:

AEROSPACE METEOROLOGICAL ENVIRONMENT

****

**

YOU DID NOT RUN THIS TASK:

ELECTROMAGNETIC COMPATIBILITY (EMC)

****

**

YOU DID NOT RUN THIS TASK:

SURVIVABILITY/VULNERABILITY

****

**

YOU DID NOT RUN THIS TASK:

COMMUNICATIONS LONG LINES

****

**

YOU DID NOT RUN THIS TASK:

COMMUNICATIONS SECURITY/TEMPEST

****

**

YOU DID NOT RUN THIS TASK:

RADIO FREQUENCY MANAGEMENT

****

**

YOU DID NOT RUN THIS TASK:

TRANSPORTABILITY

****

**

YOU DID NOT RUN THIS TASK:

QUALITY ASSURANCE

****

**

YOU DID NOT RUN THIS TASK:

TEST AND EVALUATION

****

**

YOU DID NOT RUN THIS TASK:

COMPUTER RESOURCES MANAGEMENT

****

**

YOU DID NOT RUN THIS TASK:

REAL PROPERTY FACILITIES

****
**
YOU DID NOT RUN THIS TASK:
MANUFACTURING MANAGEMENT
****
**
3.2.1. CONFIGURATION MANAGEMENT
0**********
**
3.2.2. DATA MANAGEMENT
0**********
**
3.2.3. ENGINEERING DATA
0**********
**
3.2.4. NOMENCLATURE
0**********
**
3.2.5. STINFO
0**********
**
3.2.6. PHOTOGRAPHIC DOCUMENTATION
0**********
**
YOU DID NOT RUN THIS TASK:
CONTRACT WORK BREAKDOWN STRUCTURE (CWBS)
****
**
YOU DID NOT RUN THIS TASK:
COST INFORMATION SYSTEMS
****
**
YOU DID NOT RUN THIS TASK:
COST/SCHEDULE CONTROL SYSTEM (C/SCSC)
****
**
YOU DID NOT RUN THIS TASK:
SCHEDULE MANAGEMENT
****
**
YOU DID NOT RUN THIS TASK:
LOGISTICS SUPPORT ANALYSIS
****
**
YOU DID NOT RUN THIS TASK:
INTEGRATED LOGISTICS SUPPORT (ILS)
****
**
YOU DID NOT RUN THIS TASK:
INITIAL SPARE/REPAIR PARTS
****
**
YOU DID NOT RUN THIS TASK:

PREOPERATIONAL MAINTENANCE

****

**

YOU DID NOT RUN THIS TASK:

PREOPERATIONAL SUPPLY SUPPORT

****

**

YOU DID NOT RUN THIS TASK:

SUPPORT EQUIPMENT (SE)

****

**

YOU DID NOT RUN THIS TASK:

TECHNICAL ORDERS

****

**

YOU DID NOT RUN THIS TASK:

TRAINING

****

**

YOU DID NOT RUN THIS TASK:

PRESERVATION, PACKAGING AND PACKING

****

**

YOU DID NOT RUN THIS TASK:

TRANSPORTATION

****

**

YOU DID NOT RUN THIS TASK:

TRAVEL

****

Output generated when all responses are "yes":

```
0*******************************************************************************
**
OTHE PRODUCT THAT YOU GENERATED PROVIDES CURRENT REQUIRED DATA
 IN THE APPROPRIATE FORMAT.  IT IS NECESSARY TO TAKE APPROPRIATE
 ACTION AS INDICATED IN THE "ACTION MESSAGES AND DIRECTIVES"
 SECTION BELOW.  PLEASE REMEMBER THAT THE DATA WAS SUPPLIED BY
 ESD OFFICES OF PRIMARY RESPONSIBILITY (OPR).  THE DATA IS THE
 BEST AVAILABLE; IT HAS BEEN REFINED AND EDITED.  THE STATEMENT
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 APPLIED DOCUMENTS, BETWEEN TASKS, AND WITHIN THE RFP (CDRL, CONTRACT
 SCHEDULE, IFPP), HAVE BEEN REMOVED.  LEVYING A TASK BY CITING
 A DOCUMENT (E.G., MIL-SPEC) AND PARAGRAPH NUMBERS IS SUFFICIENT.
 CITING A DATA ITEM IN PARENTHESES; E.G., (DI-A-1001) IS ALL
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0*******************************************************************************
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Table of Contents

Paragraph	
01.	SCOPE
02.	APPLICABLE DOCUMENTS
03.	REQUIREMENTS
03.1.	ENGINEERING
03.2.	CONFIGURATION AND DATA
3.2.1.	CONFIGURATION MANAGEMENT
3.2.2.	DATA MANAGEMENT
3.2.3.	ENGINEERING DATA
3.2.4.	NOMENCLATURE
3.2.5.	STINFO
3.2.6.	PHOTOGRAPHIC DOCUMENTATION
03.3.	PROGRAM MANAGEMENT
03.4.	LOGISTICS
03.5.	PACKAGING AND TRANSPORTATION
11.	SCOPE

1. SCOPE

1.1 This Statement of Work covers management programs and controls that the Government requires during this phase of the contract.

1.2 The data to be delivered as a result of performing the tasks prescribed by this statement of work are specified in the Contract Data Requirements List (CDRL). In no case shall any task prescribed herein be interpreted to require delivery of data.

1.3 The provisions of the applicable documents and their tailored applications, set forth in the paragraphs of Section 3 below, are hereby incorporated into the contract by reference with the same force and effect as though set forth herein in full.

12. LISTING OF APPLICABLE DOCUMENTS

0 (SECTION 3 OF THIS DOCUMENT CONTAINS THE TAILORED REQUIREMENTS.)

02.1 STANDARDS

DOD-STD-480A 12 Apr 78	Configuration Control Engineering Changes, Deviations and Waivers
MIL-STD-1521A 1 Jun 76 Notice 1 29 Sep 78 Notice 2 21 Dec 81	Technical Reviews and Audits for Systems Equipments and Computer Programs
MIL-STD-196C 22 Apr 71	Joint Electronic Type Designation System
MIL-STD-483 31 Dec 70 Notice 2 21 Mar 79	Configuration Management Practices for Systems, Equipment, Munitions, and Computer Programs
MIL-STD-490 30 Oct 68 Notice 2 18 May 72	Specification Practices

02.2 SPECIFICATIONS

MIL-N-7513F 14 Nov 80	Nomenclature Assignment, Contractor's Method for Obtaining

02.3 HANDBOOKS

MIL-HDBK-H6 Jul 80	Federal Item Identification Guides for Supply Categorizing

02.4 OTHER DOCUMENTS

NONE

13. REQUIREMENTS. THE CONTRACTOR SHALL COMPLY WITH THE FOLLOWING:

03.1. ENGINEERING

03.2. CONFIGURATION AND DATA

3.2.1. CONFIGURATION MANAGEMENT

DOD-STD-480A 12 Apr 78	Configuration Control Engineering Changes, Deviations and Waivers ALL

MIL-STD-1521A
1 Jun 76
Notice 1
29 Sep 78
Notice 2
21 Dec 81

Technical Reviews and Audits for Systems Equipments and Computer Programs

SECT 1-6 Scope-Dtld Rqmnts
SECT 1-6 Scope-Gen Rqmnts
APPENDIX E FCA
APPENDIX G FQR

MIL-STD-483
31 Dec 70
Notice 2
21 Mar 79

Configuration Management Practices for Systems, Equipment, Munitions, and Computer Programs

PARA
1. Scope
3.1 Intro
3.1.1 & APP I CMP
3.2 Baseline Mgt
3.3 & APP II Sys Eng & Int Cn
3.3 Sys Eng & Intfc Cont
3.3.1 Sys Eng
3.3.2 & APP I Intfc Cntl/CMP
3.4 Config Ident
3.4.1 & APP III Fctnl Conf Id
3.4.2 Allocated Conf Ident
3.4.3 Product CI
3.4.4 Precedence
3.4.5 & APP IV Addm to CI
3.4.6 & APP V Inv Item Ident
3.4.7 & APPS VI & XVI CPCI
3.4.8 Spec Form
3.4.9 Spec Authentication
3.5 & APP VII Spec Maint
3.5 & APP VIII Spec Maint
3.5 Spec Maintenance
3.6 & APP IX CI Ident
3.6 Config Item Ident
3.7 & APP X Eng rls rqmnts
3.8 & APP XI Sys Alloc Docmnt
3.10 & APPS XIII & XIV Eng Chg
3.11 & APP XV
3.12 Config Mgt Rcrds/Rprts
3.13 Advnc Chng Stdy Ntc
3.15 QA Provisions
4. Data
4. Data Rprtng Updtd Chngs
5.1 Terms
5.1.a Advnc Chng Stdy Ntc
5.1.g CI Spec Addendum
5.1.h Terms/CMP
5.1.m Sys Alloc Document

5.1.o Updating Changes

MIL-STD-490
30 Oct 68
Notice 2
18 May 72

Specification Practices

PARA
1.-1.4 Scope
3. Requirements
3.1 Intro
3.1.1 Config Ident
3.1.1.2 Allocated CI
3.1.2 Coverage of Specs
3.1.3 Types
3.1.3.1 & APP I Type A Sys Spc
3.1.3.2 Dev Specs
3.1.3.3 Product Spec
3.1.3.3.1.1 & APP VII PIP Func
3.1.3.3.1.2 & APP VIII PIP Fab
3.1.3.3.2.1 & APP IX CIP Func
3.1.3.3.2.2 & APP X CIP Fab
3.1.3.3.3 & APP XI N-Com P Fab
3.1.3.3.4 & APP XII Inv Itm Sp
3.1.3.3.4 Inv Item Spec
3.1.4 Two Part Specs
3.2-3.2.16.8 Styl Frmt & Ident
3.3-3.3.3 Changes & Revisions
4.-4.1.2.2 Gen Requirements
4.2-4.2.3 Applicable Documents
4.2.3 List of References
4.2.3.1 Ex 2 Gov Documents
4.2.3.1 Ex 2 Non-Gov Documents
4.2.3.2 Ex 2 Non-Gov Documents
4.3 Requirements
4.3-4.3.11 Requirements
4.4-4.4.2 QA Provisions
4.5-4.5.3.3 Prep for Delivery
4.6-4.6.5 Notes
4.7-4.7.3 APP & Index
5. Detail Requirements
5.1 Detail Requirement (Genrl)
5.1 General

The following data items are applicable; see the CDRL:

DI-A-3029	Agenda, Design Reviews, Configuration Audits and Demonstrations
DI-E-3101	System Specification
DI-E-3102A	Configuration Item Development Specification (B1^0)

DI-E-3103A	Configuration Item Product Fabrication Specification (C1B)
DI-E-3106	Specification Maintenence Document
DI-E-3108	Configuration Management Plan
DI-E-3116	System Allocation Document
DI-E-3118	Minutes of Formal Reviews, Inspections and Audits
DI-E-3119B	Computer Program Development Specification (Type B5)
DI-E-3120B	Computer Program Product Specification (C5)
DI-E-3121	Version Description Document (Computer Programs)
DI-E-3122	Configuration Index (Computer Program)
DI-E-3123	Change Status Report (Computer Program)
DI-E-3127	Advance Change Study Notice
DI-E-3128	Engineering Change Proposal (ECP)
DI-E-3129	Request for Deviation/Waiver
DI-E-3133	Configuration Management Accounting Reports (Machine or Manually Prepared)
DI-E-7031	Drawings, Engineering and Associated Lists

The contractor shall establish and chair an Interface Control Working Group (ICWG) which shall have the following responsibilities:

Reference MIL-STD-483, PARA 3.15 (Quality Assurance Provisions); change as follows: A verification matrix shall be included in Section 4 of all specifications prepared per the appendices of this standard.

Reference MIL-STD-483, PARA 3.15 (Quality Assurance Provisions); change as follows: A verification matrix shall be included in Section

4 of all specifications prepared per the appendices of this standard.

The allocated specifications shall be prepared as Part I of two part specifications IAW para 3.1.4. of MIL-STD-490.

Reference MIL-STD-483, PARA 3.15 (Quality Assurance Provisions); change as follows: A verification matrix shall be included in Section 4 of all specifications prepared per the appendices of this standard.

The product specifications shall be prepared as Part II of two part specifications IAW para 3.1.4. of MIL-STD-490.

3.2.2. DATA MANAGEMENT

The following data items are applicable; see the CDRL:

DI-A-3027	Data Accession List/Internal Data

See the Contract Data Requirements List (CDRL), the Schedule and General Provisions of the contract for data requirements.

3.2.3. ENGINEERING DATA

The following data items are applicable; see the CDRL:

DI-E-7031	Drawings, Engineering and Associated Lists

See the CDRL for Engineering Data requirements.

3.2.4. NOMENCLATURE

MIL-STD-196C 22 Apr 71	Joint Electronic Type Designation System	ALL
MIL-N-7513F 14 Nov 80	Nomenclature Assignment, Contractor's Method for Obtaining	ALL
MIL-HDBK-H6 Jul 80	Federal Item Identification Guides for Supply Categorizing	ALL

The following data items are applicable; see the CDRL:

DI-E-3126A	Request for Nomenclature

3.2.5. STINFO

The following data items are applicable; see the CDRL:

DI-S-3591A	Technical Reports

See the Schedule of the contract, Section H.48 and the CDRL.

3.2.6. PHOTOGRAPHIC DOCUMENTATION

The following data items are applicable; see the CDRL:

DI-A-3006	Photographic Plan
DI-A-3011	Still Photo Coverage
DI-A-3013	Motion Picture Coverage (Footage)

Plan, manage, and accomplish photographic documentation of selected program milestones. The documentation shall be integrated with the Development Test and Evaluation (DT&E) programs. Ensure that subcontractor efforts are complementary.

03.3. PROGRAM MANAGEMENT
03.4. LOGISTICS
03.5. PACKAGING AND TRANSPORTATION

Table of Contents

Paragraph	
01.	SCOPE
02.	LISTING OF DATA ITEMS
03.	DRAFT CDRL
03.1.	ENGINEERING
03.2.	CONFIGURATION AND DATA
3.2.1.	CONFIGURATION MANAGEMENT
3.2.2.	DATA MANAGEMENT
3.2.3.	ENGINEERING DATA
3.2.4.	NOMENCLATURE
3.2.5.	STINFO
3.2.6.	PHOTOGRAPHIC DOCUMENTATION
03.3.	PROGRAM MANAGEMENT
03.4.	LOGISTICS
03.5.	PACKAGING AND TRANSPORTATION
11.	SCOPE

The following is the draft Contract Data Requirements List (CDRL) that you generated. It is intended to assist you

to determine which data items and CDRL block entries are applicable to this procurement. It is not intended to replace the Data Call or to change existing Data Management Procedures or your introduction to the contract CDRL.

12. LISTING OF DATA ITEMS
0 (SECTION 3 OF THIS DOCUMENT CONTAINS THE DRAFT CDRL.)

DI-A-3006	Photographic Plan
DI-A-3011	Still Photo Coverage
DI-A-3013	Motion Picture Coverage (Footage)
DI-A-3027	Data Accession List/Internal Data
DI-A-3029	Agenda, Design Reviews, Configuration Audits and Demonstrations
DI-E-3101	System Specification
DI-E-3102A	Configuration Item Development Specification (B1^@)
DI-E-3103A	Configuration Item Product Fabrication Specification (C1B)
DI-E-3106	Specification Maintenence Document
DI-E-3108	Configuration Management Plan
DI-E-3116	System Allocation Document
DI-E-3118	Minutes of Formal Reviews, Inspections and Audits
DI-E-3119B	Computer Program Development Specification (Type B5)
DI-E-3120B	Computer Program Product Specification (C5)
DI-E-3121	Version Description Document (Computer Programs)
DI-E-3122	Configuration Index (Computer Program)
DI-E-3123	Change Status Report

	(Computer Program)
DI-E-3126A	Request for Nomenclature
DI-E-3127	Advance Change Study Notice
DI-E-3128	Engineering Change Proposal (ECP)
DI-E-3129	Request for Deviation/Waiver
DI-E-3133	Configuration Management Accounting Reports (Machine or Manually Prepared)
DI-E-7031	Drawings, Engineering and Associated Lists
DI-S-3591A	Technical Reports

13. DRAFT CDRL

0 The information below can be transferred to a word processor for refinement and completion. The following are descriptions of the CDRL data item entries:

1. Sequence Number
2. Title or Description of Data
3. Subtitle
4. Authority (Data Item Number)
5. Contract Reference
6. Technical Office
7. DD Fm 250 Requirement
8. Approval Code
9. Integrated Associate Contractor
10. Frequency
11. As of Date
12. Date of First Submission
13. Date of Subsequent Submissions/Event I.D.
14. Distribution and Addressees (Regular/Repro)
15. Total
16. Remarks

03.1. ENGINEERING

03.2. CONFIGURATION AND DATA

3.2.1. CONFIGURATION MANAGEMENT

2. Configuration Management Plan
4. DI-E-3108
10. ONE/R
12. 30 DAC
14. AS REQ BY PO

2. Drawings, Engineering and Associated Lists
4. DI-E-7031
14. DESC/EPA 1 N/R

DISC/ESM 1 N/R
RADC/RBRA 1 N/R
AS REQ BY PO

16. Whenever the generation of a control drawing that relates to the procurement of Parts in the categories listed in para 6.4 of MIL-STD-965 is needed and that generation is approved by the Procuring Activity, a copy of that Control Drawing together with a completed DD Form 2052 will be distributed to DESC, DISC and/or RADC, as appropriate. Selected Item Drawings (SID) IAW DOD-STD-100 shall be the type of Control Drawing provided whenever a drawing is provided that describes a piece part that requires selection, screening, testing, etc. over and above that pro.ided by that part vendor's usual practice relative to the specific part numbered item referenced in the drawing.

2. System Specification
4. DI-E-3101/M. The final copy shall include all system design analysis and trade-off studies.
7. SD
10. ONE/R
12. AS REQ BY PO
14. AS REQ BY PO

2. Configuration Item Development Specification (B1)
4. DI-E-3102A
10. ONE/R
12. 90 days prior to end of contract. Revisions as required. The specification shall be prepared as Part 1 of two part specifications in accordance with para 3.1.4.
14. AS REQ BY PO

2. Computer Program Development Specification (Type B5)
4. DI-E-3119B
10. ONE/R
12. 90 days prior to end of contract. Revisions as required. The specification shall be prepared as Part I of two part specifications IAW para 3.1.4.
14. AS REQ BY PO

2. Configuration Item Product Fabrication Specification (C1B)
4. DI-E-3103A
10. ONE/R
12. 30 days prior to CDR. The specification shall be prepared as Part II of two part specifications IAW para 3.1.4.
14. AS REQ BY PO

2. Computer Program Product Specification (C5)
4. DI-E-3120B
10. ONE/R
12. 30 days prior to CDR. The specification shall be prepared as Part II of two part specifications IAW para 3.1.4.
14. AS REQ BY PO

2. Specification Maintenance Document
4. DI-E-3106
10. AS REQ
12. With ECP
14. Contractor shall distribute final SCN to all specification holders.

2. Version Description Document (Computer Programs)
4. DI-E-3121
8. A
10. AS REQ
12. Submit with release of each version of a CPCI and each release of an interim change (i.e., changes that occur between CPCI versions).
14. AS REQ BY PO

2. Configuration Index (Computer Program)
4. DI-E-3122
10. AS REQ
12. AS REQ
13. AS REQ
14. AS REQ BY PO

2. Change Status Report (Computer Program)
4. DI-I-3123
10. AS REQ
14. AS REQ BY PO

2. Advance Change Study Notice
4. DI-E-3127
10. AS REQ
12. AS REQ
13. AS REQ

2. Engineering Change Proposal (ECP)
4. DI-E-3128
10. AR
14. AS REQ BY PO
16. Prior to preparation of a formal ECP, the contractor shall notify the Government of its intent to submit a proposal via Advance Change Study Notice (ACSN). Emergency, urgent, compatibility and record type ECPs do not require an ACSN prior to submittal.

2. Request for Deviation/Waiver
4. DI-E-3129
10. AS REQ
12. AS REQ
13. AS REQ
14. AS REQ BY PO

2. System Allocation Document
4. DI-E-3116
8. A

10. ONE/R
12. 30 days after approval of draft.
13. AS REQ
14. AS REQ BY PO

2. Minutes of Formal Reviews, Inspections and Audits
4. DI-E-3118
10. AR
12. 10 days after each review.
14. AS REQ BY PO

2. Agenda, Design Reviews, Configuration Audits and Demonstrations
4. DI-A-3029
10. AR
12. 30 days prior to each review.
14. AS REQ BY PO

2. Minutes of Formal Reviews, Inspections and Audits
4. DI-E-3118
10. AR
12. 10 days after each review.
14. AS REQ BY PO

2. Agenda, Design Reviews, Configuration Audits and Demonstrations
4. DI-A-3029
10. AR
12. 30 days prior to each review.
14. AS REQ BY PO

2. Configuration Management Accounting Reports (Machine or Manually Prepared)
4. DI-E-3133
14. AS REQ BY PO

3.2.2. DATA MANAGEMENT

2. Data Accession List/Internal Data
4. DI-A-3027
10. MTHLY
12. 45 DAC
13. NLT 15th day of each month.
14. DATA MGR 1/O
PC DIV 1/O
ACCI 1/O

3.2.3. ENGINEERING DATA

2. Drawings, Engineering and Associated Lists
4. DI-E-7031
14. DESC/EPA 1 N/R
DISC/ESM 1 N/R

RADC/RBRA 1 N/R
AS REQ BY PO

16. Whenever the generation of a control drawing that relates to the procurement of Parts in the categories listed in para 6.4 of MIL-STD-965 is needed and that generation is approved by the Procuring Activity, a copy of that Control Drawing together with a completed DD Form 2052 will be distributed to DESC, DISC and/or RADC, as appropriate. Selected Item Drawings (SID) IAW DOD-STD-100 shall be the type of Control Drawing provided whenever a drawing is provided that describes a piece part that requires selection, screening, testing, etc. over and above that provided by that part vendor's usual practice relative to the specific part numbered item referenced in the drawing.

3.2.4. NOMENCLATURE

2. Request for Nomenclature
4. DI-E-3126A
10. AR
12. 90 days before requirement of the type designation.
14. AS REQ BY PO

3.2.5. STINFO

2. Technical Reports
3. Facilities Design Review
4. DI-S-3591A/M
10. Periodic - 2 times during design phase - 2 times during construction.
12. Within 30 days of design review or construction surveillance.
13. Within 30 days of design review or construction surveillance.
14. ESD/DE 6/0
AS REQ BY PO

3.2.6. PHOTOGRAPHIC DOCUMENTATION

2. Photographic Plan
4. DI-A-3006
10. ONE/R
14. AS REQ BY PO

2. Still Photo Coverage
4. DI-A-3011
10. AR
14. AS REQ BY PO

2. Motion Picture Coverage (Footage)
4. DI-A-3013
10. AR
14. AS REQ BY PO

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03.3.       PROGRAM MANAGEMENT
03.4.       LOGISTICS
03.5.       PACKAGING AND TRANSPORTATION
0**********************************************************************************
**
                    ACTION MESSAGES AND DIRECTIVES
 CAUTION: THE ABOVE PRODUCT IS A PRELIMINARY DRAFT ONLY!
          TAKE APPROPRIATE ACTION AS INDICATED BELOW....
0**********************************************************************************
**
 YOU DID NOT RUN THIS TASK:
 SYSTEMS ENGINEERING
 **********************************************************************************
**
 YOU DID NOT RUN THIS TASK:
 SYSTEM SAFETY
 **********************************************************************************
**
 YOU DID NOT RUN THIS TASK:
 HUMAN FACTORS
 **********************************************************************************
**
 YOU DID NOT RUN THIS TASK:
 VALUE ENGINEERING
 **********************************************************************************
**
 YOU DID NOT RUN THIS TASK:
 SECURITY
 **********************************************************************************
**
 YOU DID NOT RUN THIS TASK:
 AVAILABILITY
 **********************************************************************************
**
 YOU DID NOT RUN THIS TASK:
 MAINTAINABILITY
 **********************************************************************************
**
 YOU DID NOT RUN THIS TASK:
 RELIABILITY
 **********************************************************************************
**
 YOU DID NOT RUN THIS TASK:
 PARTS CONTROL PROGRAM
 **********************************************************************************
**
 YOU DID NOT RUN THIS TASK:
 AEROSPACE METEOROLOGICAL ENVIRONMENT
 **********************************************************************************
**
 YOU DID NOT RUN THIS TASK:
```

ELECTROMAGNETIC COMPATIBILITY (EMC)
****
**
YOU DID NOT RUN THIS TASK:
SURVIVABILITY/VULNERABILITY
****
**
YOU DID NOT RUN THIS TASK:
COMMUNICATIONS LONG LINES
****
**
YOU DID NOT RUN THIS TASK:
COMMUNICATIONS SECURITY/TEMPEST
****
**
YOU DID NOT RUN THIS TASK:
RADIO FREQUENCY MANAGEMENT
****
**
YOU DID NOT RUN THIS TASK:
TRANSPORTABILITY
****
**
YOU DID NOT RUN THIS TASK:
QUALITY ASSURANCE
****
**
YOU DID NOT RUN THIS TASK:
TEST AND EVALUATION
****
**
YOU DID NOT RUN THIS TASK:
COMPUTER RESOURCES MANAGEMENT
****
**
YOU DID NOT RUN THIS TASK:
REAL PROPERTY FACILITIES
****
**
YOU DID NOT RUN THIS TASK:
MANUFACTURING MANAGEMENT
****
**
3.2.1. CONFIGURATION MANAGEMENT
CDRL: DI-E-3108 APPLIES. TAILOR AS REQUIRED.

SOW: COORDINATE WITH SYSTEM ENGINEERING. SET FORTH THE CONTRACTOR'S RESPONSIBILITIES AS THE CHAIRMAN OF THE INTERFACE CONTROL WORKING GROUP.

CDRL: DI-E-7031 APPLIES FOR INTERFACE CONTROL DRAWINGS. TAILOR AS REQUIRED.

CDRL: DI-E-3117, SYS SEG SPEC, MAY ALSO BE APPLICABLE. ADD AND TAILOR WHEN REQUIRED.

CDRL: DI-E-3120A AND DI-E-3119B NORMALLY APPLY. TAILOR AS REQUIRED.
CDRL: THE FOLLOWING DATA ITEMS MAY ALSO BE APPLICABLE:
DI-E-3104,
DI-E-3105,
DI-E-30130A.

CDRL: DI-E-3130A AND DI-E-3120B NORMALLY APPLY. TAILOR AS REQUIRED.
CDRL: THE FOLLOWING DATA ITEMS MAY ALSO BE APPLICABLE:
DI-E-3104,
DI-E-3105,
DI-E-3130,
DI-E-3131,
DI-E-3132,
DI-E-30130A.

CDRL: DATA ITEM DI-E-3106 IS APPLICABLE. TAILOR AS REQUIRED.

CDRL: THE FOLLOWING DATA ITEMS ARE APPLICABLE; TAILOR AS REQUIRED:
DI-E-3121,
DI-E-3122,
DI-E-3123.

SOW: MIL-STD-481A MAY BE USED IN LIEU OF DOD-STD-480A FOR SOME ACQUISITIONS, HOWEVER THE PROCUREMENT ACTIVITY MUST THEN ASSUME THE RESPONSIBILITY FOR DETERMINATION OF POSSIBLE EFFECTS OF THE ENGINEERING CHANGE ON HIGHER LEVELS OR ASSOCIATED ITEMS. CAUTION: DO NOT USE MIL-STD-481A WITHOUT CONSULTING WITH THE STAFF OPR. DO NOT USE MIL-STD-481 AND DOD-STD-480 AT THE SAME TIME!
CDRL: DATA ITEMS DI-E-3127, DI-E-3128, AND DI-E-3129 ARE APPLICABLE. TAILOR AS REQUIRED.
ADD THE FOLLOWING TO THE BACKUP SHEET OF DATA ITEM DI-E-3128: PRIOR TO PREPARATION OF A FORMAL ECP, THE CONTRACTOR SHALL NOTIFY THE GOVERNMENT OF ITS INTENT TO SUBMIT A PROPOSAL VIA AN ADVANCE CHANGE STUDY NOTICE (ACSN). EMERGENCY, URGENT, COMPATIBILITY AND RECORD TYPE ECPs DO NOT REQUIRE AN ACSN PRIOR TO SUBMITTAL.

CDRL: DI-E-3116 APPLIES. TAILOR AS REQUIRED.

SOW: A FUNCTIONAL CONFIGURATION AUDIT (FCA) IS NORMALLY ACCOMPLISHED DURING FULL SCALE DEVELOPMENT AND IS REQUIRED FOR EACH CI/CPCI.

SOW: A FORMAL QUALIFICATION REVIEW (FQR) IS NORMALLY COMBINED WITH THE FCA. COORDINATE WITH THE STAFF SYSTEM ENGINEERING, TEST, AND CONFIGURATION MANAGEMENT SPECIALISTS.

SOW: WHEN THE PROTOTYPE OR PREPRODUCTION ARTICLE IS NOT REPRESENTATIVE OF THE PRODUCTION UNIT, THE FCA MUST BE DEFERED UNTIL THE FIRST PRODUCTION ARTICLE.

SOW: THE FCA SHOULD ALWAYS BE CONDUCTED ON THE ITEM THAT IS REPRESENTATIVE OF THE CONFIGURATION TO BE RELEASED FOR PRODUCTION QUANTITIES.

SOW: THE FCA MUST BE ACCOMPLISHED BEFORE THE PHYSICAL CONFIGURATION AUDIT (PCA).

CDRL: DI-E-3118 AND DI-A-3029 APPLY. COORDINATE WITH SYSTEMS ENGINEERING AND TEST TO ENSURE THAT THESE DATA ITEMS HAVE NOT BEEN DUPLICATED.

SOW: A PHYSICAL CONFIGURATION AUDIT (PCA) WILL BE ACCOMPLISHED ON THE FIRST PRODUCTION ARTICLE DURING THE PRODUCTION PHASE.

SOW: A FORMAL QUALIFICATION REVIEW (FQR) IS GENERALLY COMBINED WITH A FUNCTIONAL CONFIGURATION AUDIT (FCA).

SOW: COORDINATE WITH SYSTEMS ENGINEERING AND TEST TO ENSURE THIS REQUIREMENT HAS NOT BEEN DUPLICATED.

CDRL: DI-E-3118 AND DI-A-3029 APPLY. COORDINATE WITH SYSTEMS ENGINEERING AND TEST TO ENSURE THAT THESE DATA ITEMS HAVE NOT BEEN DUPLICATED.

CDRL: DI-E-3133 APPLIES. TAILOR AS REQUIRED.

CDRL: DI-E-3107 MAY ALSO APPLY.

CDRL: MODIFY DI-E-3133 TO INDICATE WHICH TYPE OF REPORTS ARE REQUIRED AND WHETHER THEY ARE TO BE MANUALLY OR MACHINE PREPARED.

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3.2.2. DATA MANAGEMENT

CDRL: PREPARATION AND DELIVERY OF DATA ARE FUNCTIONS OF THE CDRL AND ACCOMPLISHED THROUGH THE DATA CALL. A DRAFT CDRL IS AUTOMATICALLY MADE WHEN RUNNING CGADS FOR AN SOW. IT SHOULD BE USED AS A BASE DOCUMENT FOR DATA CALL. CONTACT YOUR PROGRAM OFFICE DATA MANAGER FOR ASSISTANCE.

CONTRACT: THE GENERAL PROVISIONS OF THE CONTRACT COVER SUCH ITEMS AS: DATA RIGHTS, PRICING, REQUIREMENTS, AND THE ACCESSION LIST. CONTACT YOUR BUYER OR PCO FOR ASSISTANCE.

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3.2.3. ENGINEERING DATA

SOW: NO STATEMENT IS REQUIRED IN THE SOW, HOWEVER ENGINEERING DATA IS REQUIRED AND MUST BE ACQUIRED THROUGH THE CDRL.

CDRL: THE DATA ITEMS THAT PROVIDE ENGINEERING DATA (DRAWINGS) OR THE INFORMATION THAT ENABLES THE PROGRAM OFFICE TO DECIDE THE TYPE OF DATA REQUIRED CONSISTS OF COMBINATIONS OF THE FOLLOWING:

DI-E-7031/M, DI-E-3148, DI-P-3461, DI-P-3472, AND DI-P-3473.

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3.2.4. NOMENCLATURE

CDRL: DI-E-3216A APPLIES; TAILOR AS REQUIRED.

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3.2.5. STINFO

TASK LAST MODIFIED ON: 83/11/25

CDRL: DI-S-3591 IS USED TO ACQUIRE STINFO. THIS DATA ITEM MUST BE REVIEWED AND APPROVED BY THE PROJECT OFFICER.

0**********
**

3.2.6. PHOTOGRAPHIC DOCUMENTATION

SOW: LIST SELECTED EVENTS, ITEMS OR EFFORTS. IF APPROPRIATE, TWO OR MORE ASSOCIATED EVENTS, ITEMS, OR EFFORTS MAY BE ASSEMBLED AS ONE FILM CLIP. THE PROFESSIONAL ASSISTANCE OF THE STAFF PHOTOGRAPHIC OFFICER IS ESSENTIAL BEFORE NEGOTIATING FOR CONTRACTOR PLANS AND SPECIFIC REQUIREMENTS.

CDRL: DI-A-3006, DI-A-3011, AND DI-A-3013 APPLY; TAILOR AS REQUIRED.

CDRL: THE FOLLOWING DATA ITEMS SHOULD BE CONSIDERED:

DI-A-3010	MOTION PICTURE FILM CLIPS
DI-A-3012	COMPLETE MOTION PICTURE FILM REPORTS
DI-A-3024	PRESENTATION MATERIAL
DI-H-5521	TECHNICAL PRESENTATIONS FOR VIDEOTAPING
UDI-M-21110	ARTWORK, GRAPHIC (A/V) AIDS
UDI-E-20136	DATA, GRAPHIC AND TEXTUAL PRESENTATIONS

CDRL: THE PROGRAM OFFICE MAY TAILOR DI-A-3006 TO INCLUDE VIDEOTAPE, GRAPHICS OR OTHER A/V MEDIA.

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YOU DID NOT RUN THIS TASK:
CONTRACT WORK BREAKDOWN STRUCTURE (CWBS)

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**

YOU DID NOT RUN THIS TASK:
COST INFORMATION SYSTEMS

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**

YOU DID NOT RUN THIS TASK:
COST/SCHEDULE CONTROL SYSTEM (C/SCSC)

****
**

YOU DID NOT RUN THIS TASK:
SCHEDULE MANAGEMENT

****

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**
 YOU DID NOT RUN THIS TASK:
 LOGISTICS SUPPORT ANALYSIS
 ********************************************************************************
**
 YOU DID NOT RUN THIS TASK:
 INTEGRATED LOGISTICS SUPPORT (ILS)
 ********************************************************************************
**
 YOU DID NOT RUN THIS TASK:
 INITIAL SPARE/REPAIR PARTS
 ********************************************************************************
**
 YOU DID NOT RUN THIS TASK:
 PREOPERATIONAL MAINTENANCE
 ********************************************************************************
**
 YOU DID NOT RUN THIS TASK:
 PREOPERATIONAL SUPPLY SUPPORT
 ********************************************************************************
**
 YOU DID NOT RUN THIS TASK:
 SUPPORT EQUIPMENT (SE)
 ********************************************************************************
**
 YOU DID NOT RUN THIS TASK:
 TECHNICAL ORDERS
 ********************************************************************************
**
 YOU DID NOT RUN THIS TASK:
 TRAINING
 ********************************************************************************
**
 YOU DID NOT RUN THIS TASK:
 PRESERVATION, PACKAGING AND PACKING
 ********************************************************************************
**
 YOU DID NOT RUN THIS TASK:
 TRANSPORTATION
 ********************************************************************************
**
 YOU DID NOT RUN THIS TASK:
 TRAVEL
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Appendix J: MGADS User's Manual

This manual is intended to assist the user in running the program for the Micro-Computer Generated Acquisition Documents System.

Description

The MGADS program is an interactive program. This means that questions will appear on the screen and the user will have to answer the questions. The output obtained from the program will be based on the answers the user provides.

MGADS will create two files which will hold all of the information applicable to the specific SOW/CDRL the user is working on. A working file with the name 'WFILENAME' will contain the answers supplied by the user. The file the user identifies with 'FILENAME' will contain the output in word processing format. More information on filenames and working files will be provided later.

The MGADS program was designed to be operated on a micro-computer with a disk having the capacity to store 570K bytes of data. (CGADS requires 1750K bytes.) The program and data files for MGADS require all 570K bytes. If the user wants to maintain the output and working files on the same disk, additional storage is needed. For this reason, it is recommended work be done on individual floppy disks. Floppy disks, provided by the user, will be called diskettes throughout the remainder of the chapter. The term disk will refer to any disk having the capacity (570K bytes) to store MGADS.

Preparation

Before attempting to run the program, the user should be familiar

with the Zenith Z-100 micro-computer and the MSDOS operating system. MGADS may be run on a micro-computer other than the Z-100 if the source code and data files are recreated for that specific system. The recreation is necessary because of hardware peculiarities that exist between micro-computers. If the user is not familiar with the MSDOS operating system, he should refer to the MSDOS user's manual. Although the user need not understand COBOL, a COBOL software package, which is used to execute COBOL programs, must already be loaded into the micro-computer.

The user should also be familiar with the direction/requirements relating to his project. This information can be obtained in existing acquisition documents such as the Program Management Directive (PMD) and AFSC Form 56.

Installing MGADS

There are ten main files needed to execute the program. They are:

1. DOCFILE.FSD
2. STDFILE.FSD
3. INDEXES.FSD
4. QUEST.FSD
5. INDEXPTR.FSD
6. HEADINGS.FSD
7. TASKFILE.FSD
8. FSD.BAT
9. FSD.EXE
10. COBRUN.EXE

The first nine files are MGADS distribution files. They will be provided with this report upon request in order to use MGADS. The tenth file, 'COBRUN.EXE', is included in the COBOL software package when it is bought by the user. It must be transferred from the COBOL distribution diskette to the disk; because of copyrights, it cannot be provided with the MGADS files.

All ten of the above files must exist on a common disk (570K bytes) in order to execute the program. The MGADS distribution files are provided on two diskettes. To install the MGADS distribution files onto the common disk, the following steps must be taken:

1. Place the first MGADS distribution diskette into disk drive. Typically, this is referred to as disk drive 'A'.
2. Transfer the files on the MGADS distribution diskette to the common disk. This can be accomplished using the MSDOS 'COPY' command. The disk will already have a drive name. If it is drive 'E', enter the command:

   COPY A:*.* E:*.*

3. Steps one and two should be repeated for the second MGADS distribution diskette to transfer all nine MGADS distribution files to the disk.

Now, all ten main files are on the disk. The steps above need not be repeated for each execution of MGADS. The diskettes should be maintained as backup, in case something happens to destroy the files on the common disk. It may even be wise to create backup copies of the MGADS distribution diskettes.

Executing MGADS

The diskette drive should be empty at this time. The MGADS session is begun by typing 'FSD' and hitting <return>.

Introduction. The first screen which will appear is an introduction to MGADS. See Figure 1. Comment four recommends a separate diskette be used for each new SOW/CDRL file generated. This will ensure that enough diskette space is available for the working file and the output (approximately 150K bytes). The amount of space required depends upon the responses provided by the user. All work could be accomplished on the disk and later transferred to the diskette, but it

is recommended that the work be done directly on the diskette.

```
**************************************************************************
*   MICROCOMPUTER GENERATED ACQUISITION DOCUMENTS SYSTEM (MGADS)   *
**************************************************************************

1.  This program is designed to generate and/or modify a Statement of
Work (SOW) and/or Contract Data Requirements List (CDRL) for the Full
Scale Development phase of an acquisition.  A set of ACTION MESSAGES,
grouped by SOW paragraph, will follow the CDRL.

2.  The product created is a DRAFT document.  The draft must be
tailored for the specific acquisition.  The action messages are
intended to help you in your tailoring effort.
Tailoring can be accomplished using an MSDOS word processing package.

3.  You should be familiar with the program direction/requirements
at this point.  The requirements can be obtained from existing
acquisition documents such as the PMD and AFSC Fm 56.

4.  A word of advice -- you may wish to use a separate diskette for
each SOW/CDRL file generated.


                ****** PRESS ANY KEY TO CONTINUE ******
```

Figure 1. Introduction.

Main Menu. After reading the introduction and hitting any key (<space bar> is recommended) the user proceeds to the main menu. See Figure 2. This menu lists the four main options available. The user proceeds by typing in the letter of the option desired. The options will be explained in order of their importance in developing a SOW/CDRL.

Option R. Selecting option R will permit the user to create a new SOW/CDRL or modify a previously created one. If the user is creating a new SOW/CDRL, a new, correctly formatted diskette should be placed in diskette drive 'A'. This will store the working file and the output. (The session may be run on the disk, but use of the diskette is recommended.) If the user is modifying a previously created SOW/CDRL,

the user should place the diskette with tne working file and output into disk drive 'A'. The session can be conducted right on the diskette.

```
                              MAIN MENU
                              *********

There are four options available to you.  You may:


   D  Delete a previously created file

   R  Run functional tasks.  This option consists of
         answering questions in each of five functional
         areas to create a new SOW/CDRL or to modify a
         previously created one

   W  Produce a word processor file of completed
         tasks.  Use this option after you have run
         the functional tasks.  WARNING:  previously
         created files having the specified filename
         will be overwritten

   E  Exit to operating system.


Enter option:
```

Figure 2. Main Menu.

Upon entering the option letter R, the Filename Rules screen will appear requesting the name of the new/old file. See Figure 3. The rules for naming a file must be adhered to. Once the filename is entered, MGADS edits the filename to ensure that the nomenclature rules are followed. If any of the rules are violated, the user will be directed to reenter the filename. (Note: an entry comprised of all spaces will return the user to the Main Menu.) Once the user has successfully entered a valid filename, MGADS will automatically either create a workfile named 'WFILENAME' or retrieve a previously created workfile named 'WFILENAME'. This workfile will contain the answers that

the user supplies during Option R. The user should specify the disk drive in naming the file, such as 'A:FILENAME' so that the session will be conducted directly on the diskette in disk drive 'A'. (If the drive is not specified the session will be conducted on the hard disk. The files should be transferred to the diskette later.)

```
OPTION SELECTED:


FILENAME RULES:

   1.  Filenames must be from 1 to 7 characters long
   2.  Each character in the filename must be either
       numeric or alphabetic
   3.  The first character in the filename must be
       alphabetic
   4.  Disk drive names may be specified -- simply type
       the drive name letter followed by a colon
   5.  Filenames may be followed by a decimal point and
       a three character extension
   6.  See user's manual for further clarification.

EXAMPLES OF VALID FILENAMES:

   1.  A:MYFILE
   2.  A:MYFILE.NAM
   3.  MYFILE.NAM

Enter filename followed by <return>:
```

Figure 3. Filename Rules.

The user may wish to sequence the filenames such as 'A:TEST.1', 'A:TEST.2', and 'A:TEST.3'. This will be helpful if the user does not want to destroy a previous version of a SOW/CDRL. MGADS will overwrite previous versions of the same filename. This will also help in comparing outputs when questions are answered differently.

After entering the valid filename, the next screen to appear will be the Area Menu. See Figure 4. In the upper right hand corner,

the Area Menu will tell the user which file is being worked on and whether it is an old file or a new one. This menu lists the five functional areas in which the user will answer questions related to the program. The user should type in the number of the functional area he wants to enter. All tasks in all functional areas should be answered so as to avoid omitting pertinent information from the SOW/CDRL.

```
                                                    OLD/NEW FILE:
                              AREA MENU
                              *********

All functional tasks have been grouped into one of the
following areas:


     Area 1  Engineering
     Area 2  Configuration and Data
     Area 3  Program Management
     Area 4  Logistics
     Area 5  Packaging and Transportation.



Notes:  1.  You may select areas and tasks in any order
        2.  You must answer all questions pertaining to each
            task
        3.  If you fail to answer any questions, pertinent
            information will be omitted from your document.


Enter area number <1-5> or M to return to the main menu:
```

Figure 4. Area Menu.

The next screen to appear, the Task Menu, will list the tasks for the selected functional area. For example, the configuration and data functional area consists of four tasks. See Figure 5. All of the task menus operate similarly.

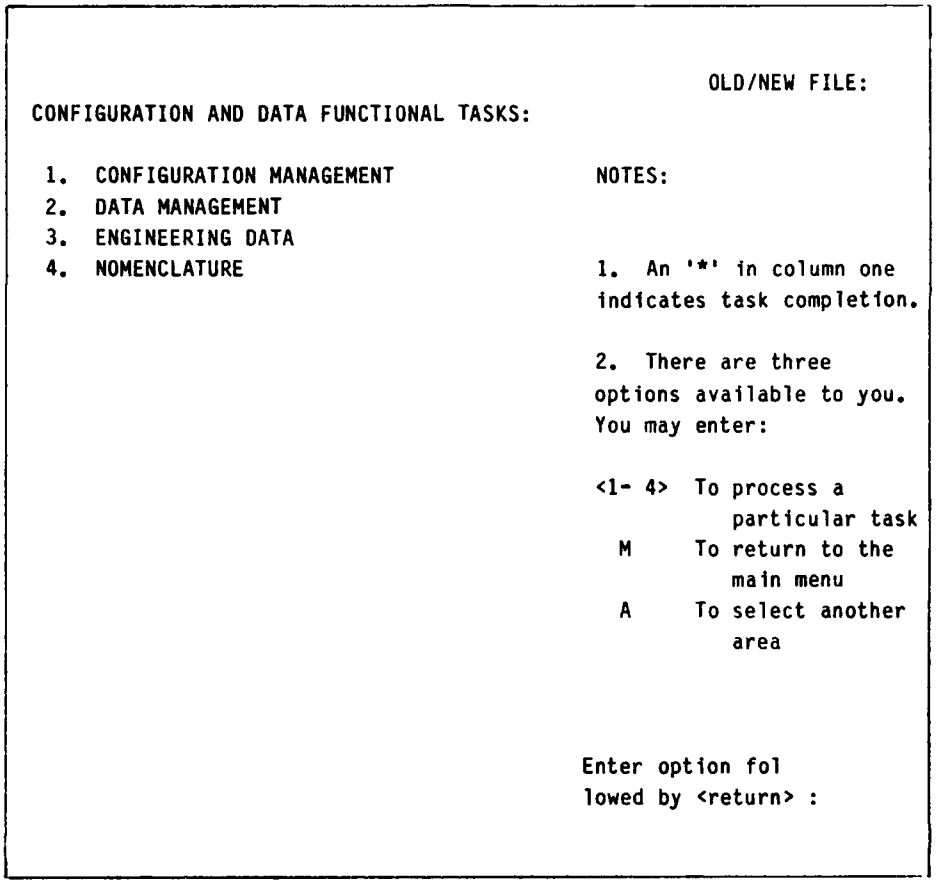

Figure 5. Configuration and Data Tasks

Upon entering the task number, questions concerning that specific task will appear one at a time. See Figure 6. If the question was answered in a previous session, the question screen will give the previous answer. See Figure 7. The user should answer the question 'Y', 'N', or 'U'.

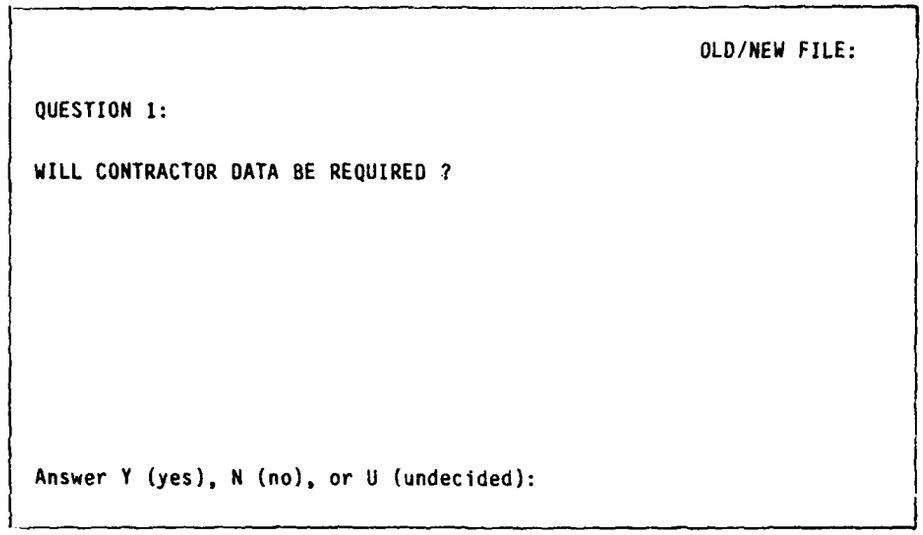

Figure 6. Question Screen.

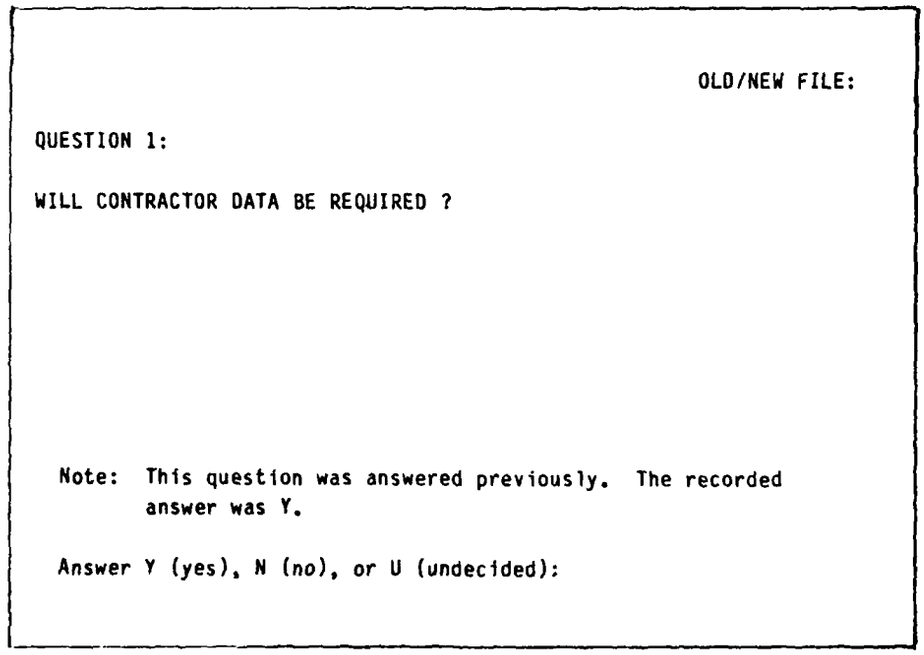

Figure 7. Previously Answered Question Screen.

After answering the question, the Answer Option screen will appear. See Figure 8. The V option will show the user the word processed output that will result from the answer given for the question, including the output for the SOW, CDRL, and action messages. The user may wish to use the V option to examine the output to be provided when answering the question a particular way. If the user does not agree that the output appearing on the screen is necessary, he may change his answer before proceeding. After the output has been viewed, the Answer Option screen reappears. The R option will then allow the user to repeat the previous question in order to change the answer or to check it. The B option will let the user begin the questions in this task again if the answer to an earlier question now appears to be wrong.

```
                                                    OLD/NEW FILE:

Y is the recorded answer.



     <space>  Continue to the next question

        V     View output to question just answered
                 then return to this menu

        R     Repeat previous question

        B     Begin this task again

        X     Exit this task and return to task menu


Enter option:
```

Figure 8. Answer Option Screen.

The user should remain in the task until all questions are answered. However, if the user wants to interrupt the question answering session, he may return to the Task Menu by choosing option X. The answers provided thus far will be recorded in 'WFILENAME'. After answering all questions for a particular task, the user will automatically be returned to the Task Menu. An asterisk (*) will appear in front of the number of the task just completed. See Figure 9. The user should address all tasks in the functional area before returning to the Area Menu. From the Area Menu, the user should continue selecting the functional areas until all tasks in all five areas have been completed. This is necessary to ensure completeness of the SOW/CDRL. Upon completing the

```
                                                    OLD/NEW FILE:
CONFIGURATION AND DATA FUNCTIONAL TASKS:

*1.  CONFIGURATION MANAGEMENT                  NOTES:
*2.  DATA MANAGEMENT
 3.  ENGINEERING DATA
 4.  NOMENCLATURE                              1.  An '*' in column one
                                               indicates task completion.

                                               2.  There are three
                                               options available to you.
                                               You may enter:

                                               <1-4>   To process a
                                                         particular task
                                                 M     To return to the
                                                         main menu
                                                 A     To select another
                                                         area



                                               Enter option fol-
                                               lowed by <return> :
```

Figure 9. Task Menu with Completed Tasks.

questions in all five functional areas, the user should return to the Main Menu by selecting the M option on the Area Menu.

At any time during the question answering session, the user may exit the program by first returning to the Main Menu and then selecting the exit option. The answers that were already provided by the user will be saved for the next session.

Option D. Selecting option D from the Main Menu (See Figure 2) will allow the user to delete a previously created file from either the disk or diskette. The user may wish to delete a file that is no longer required, perhaps because the output has been tailored and accepted in final form. The user may also want to delete one of the files in the sequence ('A:TEST.1', 'A:TEST.2', etc.) if one alternate file is deemed to be the most current. Upon entering the option letter, the Filename Rules screen will appear requesting the name (and disk drive letter, if applicable) of the file to be deleted. See Figure 3. Since there is no provision for verifying prior to deletion of a file or for recovering a deleted file, the user should make sure the file is no longer required before entering the filename. Also, the user should ensure the correct filename is entered. After deleting the file, the program will return the user to the Main Menu.

Option W. This Main Menu option will create a word processing file for the SOW/CDRL from the answers provided in the interactive session. The Filename Rules screen will appear upon entering the W option. The same filename that has been used throughout the session should be entered. The word processing file, with the given filename, will be created on the diskette (or disk) and will be available for tailoring. Creating the file will take approximately four minutes. The

user will be prompted when the word processing file is complete. The tailoring can be accomplished using an MSDOS word processing package. When the word processor asks for the name of the file to be edited, the user need only enter the 'A:FILENAME' supplied during the MGADS session. Word processing may then proceed as usual.

Option E. Selecting this option will exit the user from the MGADS program and enter the operating system. The use of the E option will save the working file and the word processing file, if it was created. The E option terminates the MGADS session.

If the session was conducted on the hard disk, the working file and the word processing file should be transferred to the diskette after terminating the session. For example, if the disk is drive E and the diskette is in drive A, use the MSDOS commands:

```
COPY E:FILENAME A:FILENAME
COPY E:WFILENAME A:WFILENAME
```

Tailoring should now be accomplished using the word processing file and the MSDOS word processing package.

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The Computer Generated Acquisition Documents System (CGADS) was developed by Electronic Systems Division. CGADS was designed to assist the program manager (PM) in developing acquisition documents including Statements of Work (SOWs) and Contract Data Requirements Lists (CDRLs) for all phases of the acquisition cycle. CGADS will produce draft versions of these documents which must then be tailored to meet the needs of the particular program.

The current CGADS has several shortfalls. PMs outside of ESD have difficulty accessing the system. The system must also be maintained on a mainframe computer since it requires too much disk space to be adapted to a micro-computer. Finally, the output obtained from CGADS is not in the Work Breakdown Structure (WBS) format required by the military handbook on SOW preparation.

The main objective of this research was to simplify the PM's job in writing a Full-Scale Development (FSD) SOW/CDRL. This was accomplished by developing a system called Micro-Computer Generated Acquisition Documents System or MGADS. The MGADS program was written in COBOL for an MSDOS operating system on a Zenith Z-100 micro-computer.

MGADS was developed to overcome the shortfalls of CGADS. Attention was focused only on the FSD SOW/CDRL to allow the program to fit onto a micro-computer. This also eliminates the problem of having to access CGADS over modem/telephone lines. The output of MGADS was restructured into WBS format in accordance with the current military handbook.

MGADS is an interactive system used to develop a draft version of the FSD SOW/CDRL. The MGADS program asks the PM questions about his/her program in five functional areas: engineering, configuration and data, program management, logistics, and packaging and transportation. MGADS will produce a draft version of the SOW/CDRL based upon the PM's responses. A list of action messages will also be provided to assist the PM in tailoring the SOW/CDRL. The PM then uses the action messages and any additional information available to tailor the SOW/CDRL to his/her particular program.

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