Dist.: UC-505, Mathematics and Computers K/CSD/TM--95 DE91 004904

### ENGINEERING DESIGN INFORMATION SYSTEM (EDIS)

### PHASE 1

### USER'S MANUAL

### P. S. Smith

R. D. Short R. K. Schwarz Engineering Design Information Systems Section Engineering and Production Management Systems

November 1990

### COMPUTING AND TELECOMMUNICATIONS DIVISION

at Oak Ridge K-25 Site Post Office Box 2003 Oak Ridge, Tennessee 37831

Martin Marietta Energy Systems, Inc. managing the Oak Ridge K-25 Site Oak Ridge National Laboratory Oak Ridge Y-12 Plant Paducah Gaseous Diffusion Plant under Contract No. DE-AC05-84OR21400 for the Department of Energy



### TABLE OF CONTENTS

		Page
1.0	INTRODUCTION	. 1
2.0	SYSTEM OVERVIEW	. 2
	2.1 System Description         2.1.1 EDIS Database         2.1.2 System Functions         2.1.2.1 Reserve         2.1.2.2 Query         2.1.2.3 Tutorial	. 2 . 3 . 3 . 3
	2.2 System Requirements	. 4
	2.3 Help Screens and Error Messages	. 4
3.0	SYSTEM OPERATION	. 6
	3.1 Conventions in System Commands and Keys         3.1.1 EDIS Function Codes         3.1.2 General Key Assignments         3.1.3 Special Screen Processing Features	. 6 . 7
	3.2 Accessing EDIS	. 8
	3.3 Operating EDIS         3.3.1 Query Option (Q)         3.3.1.1 Query (Q)         3.3.1.2 Hardcopy (HC)         3.3.1.3 View (V)	. 11 . 14 . 17
	<ul> <li>3.3.1.3 View (V)</li> <li>3.3.2 Reserve Option (R)</li> <li>3.3.2.1 Reserve Document Numbers (Option 1)</li> <li>3.3.2.2 Reserve Revisions for Existing Documents (Option 2)</li> <li>3.3.2.3 Select Reserved Documents/Revisions (Option 3)</li> <li>3.3.2.4 Reserve Engineering Job Numbers for Special Projects (Option 4)</li> <li>3.3.3 Tutorial Option (T)</li> </ul>	. 19 . 20 . 24 . 26 . 31
API	PENDIX A: SOFT MASTER	

# APPENDIX B: HELP AND ERROR SCREENS

### APPENDIX C: EDIS DATA DICTIONARY

### 1.0 INTRODUCTION

This manual is a guide to the use of the Engineering Design Information System (EDIS) Phase I. The system runs on the Martin Marietta Energy Systems, Inc., IBM 3081 unclassified computer. This is the first phase in the implementation of EDIS, which is an index, storage, and retrieval system for engineering documents produced at various plants and laboratories operated by Energy Systems for the Department of Energy.

Section 2.0 of this manual presents an overview of EDIS, describing the system's purpose; the functions it performs; hardware, software, and security requirements; and help and error functions.

Section 3.0 describes how to access EDIS and how to operate system functions using Database 2 (DB2), Time Sharing Option (TSO), Interactive System Productivity Facility (ISPF), and Soft Master viewing features employed by this system.

Appendix A contains a description of the Soft Master viewing capabilities provided through the EDIS View function.

Appendix B provides examples of the system error screens and help screens for valid codes used for screen entry.

Appendix C contains a dictionary of data elements and descriptions.

### 2.0 SYSTEM OVERVIEW

#### 2.1 SYSTEM DESCRIPTION

The Engineering Design Information System (EDIS) provides a means for reserving unique design document numbers, locating released engineering design documents, electronically viewing those stored in electronic form, and retrieving hard copies of those released by the Information Services Division (ISD) Design Centers. EDIS provides the ability to query the index on various document attributes.

The Reserve function of EDIS is used primarily to reserve unique design document numbers and revision codes. This function is required for all document types to establish initial identification in EDIS for document control and security. In the current Phase I development of EDIS, the Reserve function is used to standardize the alphanumerical identification of Design Drawing, Bill of Material, Equipment Specification, Equipment Data Sheet, and Design Analysis and Calculation documents. Ultimately, all Engineering design documents throughout the DOE plants and laboratories operated by Energy Systems will be included in this system. This is an attempt to eliminate duplicate, invalid, and unofficial document numbers, as well as to prevent the uncontrolled simultaneous revision of released documents.

The Query function of EDIS is used to obtain a list of documents meeting a desired selection criteria or to obtain detailed information about a specific document. To obtain this information users enter values in one or more of the entry fields. Documents contained in the EDIS database that have values matching those entered will be displayed in the form of a table. Each of the documents shown in the table can then be queried to obtain detailed information about the selected document.

The EDIS View function is used to request a graphical display of documents that have a graphical image stored in the EDIS repository. Currently, the ability to view documents is limited to design drawings that have an associated CADAM format stored in the EDIS repository.

The EDIS Hardcopy function is used to request copies of documents indexed into the EDIS database. Currently, the ability to request copies of documents is limited to documents that have been officially released by ISD.

#### 2.1.1 EDIS Database

The basic information that is stored for each document in the EDIS Index and displayed on the system screens is defined by the following data elements:

ine

Access Date	Document Number	Reserve Date
Anticipated Release Date	Draft Date	Reserver ID
Block 48	Draftsman	Responsible ID
Block 1	Drawing Size	Responsible Discipline
Block 50	EJN	Revision Code
Block 49	ESO	Revision Date
Building	Floor	Send to EFM
Change Date	Format Code	Sequence Letter
Change Control Number	Function Code	Sequence Number
Classification	Index Date	Sequence Letter Title
Classification Date	Initial Store Date	Sheet Number
Classifier ID	Issue Date	Software Version
Company	Last Store Date	Special Project Title

Number of Sheets	Status Date
Number of Models	Status Code
Original Format	Storage Location
Originator Discipline	Storage Date
Originator ID	Subject
Originator's Company	Type of Package
Plant	Vendor Code
Project Number	Workorder
	Number of Models Original Format Originator Discipline Originator ID Originator's Company Plant

A complete dictionary defining data elements retained by the system is presented in Appendix C.

#### 2.1.2 System Functions

EDIS functions are accessed through a Primary Option Menu that lists the Reserve, Query, and Tutorial functions available for the system. Section 3.0 describes the screens and user actions for each of the EDIS functions. The following sections describe these major functions.

#### 2.1.2.1 Reserve

The Reserve function provides you with the capability to initiate the entry of new document information into the system. The Reserve main menu offers a variety of functions that govern the entry of and access to this initial document information. The following functions may be selected from the Reserve Menu:

- 1. Reserve one or more new document numbers.
- 2. Reserve revisions for any existing drawings.
- 3. Select a specific document:
  - a. To Query information about the document.
  - b. To Modify existing information about the document.
  - c. To Unreserve and return the number.
- 4. Reserve Engineering Job Numbers (EJNs) for Special Projects and query and modify EJN information.

The operation of these functions is described in Sect. 3.3.2 of this user's manual.

#### 2.1.2.2 Query

This function allows you to display index information for documents that exist in the EDIS Index based on data element values you enter into a query screen. Once you locate a document index record(s), you may select to do further query, make a hard copy request, or view a graphical display of the document identified. The operation of these functions is described in Sect. 3.3.1 of this user's manual.

#### 2.1.2.3 Tutorial

This function is only provided with the Reserve subsystem of the Phase I implementation of EDIS. The Reserve subsystem tutorial can be viewed in its entirety or in segments that describe the procedures to follow for each individual Reserve subsystem screen. Refer to Sect. 3.3.3 for a description of the Tutorial feature.

3

#### 2.2 SYSTEM REQUIREMENTS

#### 2.2.1 Hardware and Software

EDIS is located on the IBM 3081 unclassified processor located at the Oak Ridge K-25 Site.

EDIS is accessed via asynchronous communication over the unclassified DCA network using VT-100type terminals or microcomputers equipped with VT-100 emulation software as follows:

- 1. An ASCII terminal connection to the IBM 7171 (System Select 47) through the unclassified DCA network for the 3081 unclassified system or a microcomputer with communications software (e.g., SmarTerm).
- 2. An IBM 3270-type terminal or a microcomputer equipped with 3270 emulation, such as IRMA, connected through coaxial cable or an IBM token ring network.

PL/I is the primary programming language used for EDIS. The following vendor software packages are used:

- 1. ISPF Dialog Manager User interface screens
- 2. DB2 relational database Repository for EDIS data
- 3. Soft Master Viewing capability

All vendor software packages currently reside on the IBM 3081.

#### 2.2.2 Security

To access the system, you must have a user ID, a computer password, and an authorized TSO account on the IBM 3081 computer at K-25. Each EDIS user also must be given specific access to EDIS by the Engineering Data Resource Administrator (DRA). Security is enforced through user identification at the time of logon and through authorization tables that exist within EDIS to define the functions that are permitted to be performed by each user of the system.

An EDIS user is given access  $\bigcirc$  EDIS and specific access to documents for specific plants by the Engineering DRA. This requires that an EDIS Access application be submitted to the Engineering DRA by each user's supervisor. User access control information is obtained from the Engineering Management Information System (EMIS). Engineering information, including EMIS user IDs, is written to a DB2 table that is used to control access to the EDIS data.

#### 2.3 HELP SCREENS AND ERROR MESSAGES

Help screens are available throughout the system to prompt you for valid codes for buildings, engineering personnel, companies, classifications, plants, document types, etc. These screens may be accessed by placing a "?" in the code field and pressing <ENTER>. The help screens are displayed in Appendix B of this user's manual.

A help screen of valid EDIS command and selection codes to be used in operating the interactive system screens can be obtained by typing "?" in the COMMAND line of any screen and pressing <ENTER>. Refer to Appendix B for this help screen. When this screen is displayed, only the valid codes appropriate for the current screen will be shown.

Help is also available for the Reserve subsystem in the form of an online tutorial that can be accessed from any screen by typing HELP or H in the COMMAND line and pressing <ENTER> or by selecting the Tutorial option from the Primary Option Menu (see Sect. 3.3.3).

Error screens for certain special cases are also displayed in Appendix B.

Error messages are displayed to you on the system screens just below the COMMAND line whenever an invalid command or invalid information is entered. Messages that confirm the system's execution of functions you have requested are also displayed on the screen just below the COMMAND line.

### 3.0 SYSTEM OPERATION

#### 3.1 CONVENTIONS IN SYSTEM COMMANDS AND KEYS

System operations are performed using a series of data display, selection, and/or entry screens. The system will perform the tasks you request by guiding you from one screen to the next based upon your responses to the prompts. You can make selections from a displayed menu by entering requested data and pressing the  $\langle ENTER \rangle$  key or by entering one of the EDIS function command codes (shown below) in the indicated command field and pressing the  $\langle ENTER \rangle$  key. Section 3.1.1 lists the EDIS function codes and their associated system responses. Section 3.1.2 lists the general key assignments and their associated functions.

#### 3.1.1 EDIS Function Codes

The system screens are operated from a COMMAND line, which is the second line of each screen. The commands that may be entered on this line are listed below. Command keys are enclosed in angle brackets (e.g., <ENTER>) that indicate you should press a single key to perform the action.

<u>Command</u> o	r <u>Code</u> a	and <u>Press</u>	Action
END	E	<enter></enter>	Terminates the present screen or function and returns the user to the previous screen or function accessed.
UP	UP	<enter></enter>	Scrolls the screen image up to reveal text that is above the displayed list. ("UP n" scrolls "n" lines up.)
DOWN	DN	<enter></enter>	Scrolls the screen image down to reveal text that is below the displayed list. ("DOWN n" scrolls "n" lines down.)
EXIT	х	<enter></enter>	Returns to the Primary Option Menu from any other system screen.
HELP	Н		Calls the EDIS on-line tutorial. (Only available in Phase I for the Reserve subsystem.)

The following function codes are used in the Select field of screens that display document listings. These functions will be performed for the documents selected from the screen. (The commands can be entered on the COMMAND line if an X is placed in the Select field.)

Command or Code	and <u>I</u>	Press	Action
MODIFY	М	<enter></enter>	Modifies an existing document or project information.
QUERY	Q	<enter></enter>	Displays document information.
HARDCOPY	HC	<enter></enter>	Requests a hard copy of the selected document.
VIEW			Displays electronically stored documents.
UNRESERVE			Unreserve a previously reserved number. (Used in the Reserve subsystem only.)

#### 3.1.2 General Key Assignments

Command keys and their functions to operate cursor movement on the screen are listed below:

Command Key	Function
<arrow-down></arrow-down>	Moves cursor down one line directly below the current cursor position.
<arrow-left></arrow-left>	Moves cursor one space to the left of the current cursor position.
<arrow-right></arrow-right>	Moves cursor one space to the right of the current cursor position.
<arrow-up></arrow-up>	Moves cursor up one line directly above the current cursor position.
<backspace></backspace>	Moves cursor one space to the left of the current cursor position.
<delete></delete>	Deletes character on which the cursor currently rests and moves all characters on the right of the cursor one space to the left.
<enter></enter>	Tells system to execute the command that the user has entered.
<reset></reset>	Unlocks keyboard when the system displays the locked symbol in the lower- left corner of the screen. (Applies to connections using IRMA.)
<shift><tab> <tab></tab></tab></shift>	Moves cursor back to the previous sequential field on the screen. Moves cursor to the next sequential field on the screen.

#### 3.1.3 Special Screen Processing Features

#### Search Screens

For the entry of partial search criteria on search screens, a "%" sign can be used as a wild-card to represent unknown characters located before, after, or in the middle of a known string of characters. The system will search all records that contain the search string in the indicated position.

When using Code Help screens (see Appendix B) to find valid search entries while using one of the system's search screens, do not select directly from the code listing screen if you have not completed entering search criteria on the search screen. Return to the search screen using the END command, and then, type the chosen value directly on the search screen. If the code and <ENTER> are entered on the help screen, the search will be executed with only the search criteria existing at that time.

#### System Code Help Screens

You may enter "?" in some of the input fields of the system screens to receive a help screen listing valid input options for that field. These fields include document type, plant, building, classification, block 48, block 49, and block 50, etc. See Appendix B for examples of these list screens. In most cases, you may select from the list in one of two ways: either by placing an X beside the desired option or by entering the indicated response code. The system will return you to the original screen, and the data for the input option selected will be placed in the original screen's input field just as if you had entered the characters directly into the field manually. If you press <ENTER> while one of these list screens is displayed without having made a selection, the system will display a message requesting a selection. If you enter END in the command field of any of these list screens, the system will redisplay the screen where the "?" was a ginally entered, place the cursor at that field, and continue processing as required.

#### EMIS ID Help Screens

For input fields that require EMIS IDs to be entered, you may enter "?" and press <ENTER> to receive the Engineering Personnel Help screen. This screen allows you to enter search criteria consisting of a portion of a person's name and to receive a second screen listing the EMIS IDs and the associated names that meet the search criteria you entered. You may then select an entry from this list for the needed EMIS ID.

#### 3.2 ACCESSING EDIS

To access EDIS, you must have a user ID, a computer password, and an authorized TSO account on the IBM 3081 machine.

Several types of terminal connections may be used to access the 3081, as described in Sect. 2.2.1. To log on the K-25 IBM 3081 unclassified system using one of these terminal connections, follow one of the procedures described below. Responses enclosed in parentheses () indicate that you should fill in the appropriate variable information.

- **NOTE:** Whenever the system displays \*\*\* at the bottom of text, you must press <ENTER> to continue.
  - 1. For the 7171 connection to the K-25 system, answer the following prompts with the indicated responses:

Prompt	Response
Which System (1 thru 55)?	47 <enter> <enter></enter></enter>
enter terminal type:	(type) <enter>*</enter>
THIS TERMINAL IS ATTACHED TO	TSOK <enter></enter>

\*The (type) response for this terminal type is almost always VT100.

2. For the 3270-type terminal with coaxial or token ring connection, respond to the prompt as shown below:

Prompt

THIS TERMINAL IS ATTACHED TO THE ...

TSOK <ENTER>

Response

After entering the TSOK command for each of these log-on sequences, you will receive prompts for user ID and password:

Prompt ACF82003 ACF2, ENTER LOGON ID ACF82004 ACF2, ENTER PASSWORD ACF82012 ACF2, ENTER ACCOUNT (Displayed if no default account

Response

(user ID) <ENTER>

(user password) <ENTER>

has been set up.) \*\*\*

(account number) <ENTER>

If the log-on session is successful, you will receive TSO log-on messages followed by the TSO prompt:

#### READY

To access EDIS, type

EDIS < ENTER >

The EDIS Primary Option Menu shown on the next page will be displayed if you have been given proper access to EDIS by the Engineering Data Resource Administrator.

#### 3.3 OPERATING EDIS

When you have gained access to EDIS, the following menu will be displayed, from which you may select the system functions.

	PRIMARY OPTION MENU	
OPTION:	TRADUCT OF TON HERO	EMIS ID - XXXX
		USER ID - XXX
		TIME - XX:XX
2011 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -		
R RESERVE	<ul> <li>Reserve Document Numbers, Revi Index, or Release Reserved D Revisions.</li> </ul>	
Q QUERY	<ul> <li>Find, Display Detail, Graphica Hardcopies of EDIS Indexed D</li> </ul>	
Q QUERY	- Find, Display Detail, Graphica Hardcopies of EDIS Indexed D	ocuments.
	- Find, Display Detail, Graphica	ocuments.
T TUTORIAL	<ul> <li>Find, Display Detail, Graphica Hardcopies of EDIS Indexed D</li> <li>Display information about EDIS</li> </ul>	ocuments.
T TUTORIAL	<ul> <li>Find, Display Detail, Graphica Hardcopies of EDIS Indexed D</li> <li>Display information about EDIS</li> </ul>	ocuments.
T TUTORIAL	<ul> <li>Find, Display Detail, Graphica Hardcopies of EDIS Indexed D</li> <li>Display information about EDIS</li> </ul>	ocuments.
T TUTORIAL X EXIT	<ul> <li>Find, Display Detail, Graphica Hardcopies of EDIS Indexed D</li> <li>Display information about EDIS</li> <li>Terminate EDIS.</li> </ul>	ocuments.
T TUTORIAL X EXIT	<ul> <li>Find, Display Detail, Graphica Hardcopies of EDIS Indexed D</li> <li>Display information about EDIS</li> </ul>	ocuments.

#### PRIMARY OPTION MENU

You can indicate the function to be performed by typing the option character (R, Q, T, or X) on the OPTION line and pressing  $\langle ENTER \rangle$ . The following sections of this manual describe the operation of the Primary Option Menu options. Refer to the table below to find the manual section that covers each option.

Option Action

- R RESERVE (see Sect. 3.3.2).
- Q QUERY (see Sect. 3.3.1).
- T TUTORIAL (see Sect. 3.3.3). (This option is only available for the Reserve subsystem.)

Entering option X or the command END and pressing <ENTER> will exit EDIS and return you to the system READY prompt.

#### 3.3.1 Query Option (Q)

The Query option on the EDIS Primary Menu allows you to find and display index information for documents that exist in the EDIS Index based on data element values you enter into a query screen. Once you locate a document index record(s), you may select to do further query, request a hard copy, or view a graphical display of the document.

When you select option Q from the EDIS Primary Menu, the following screen will be displayed for you to enter search criteria:

#### ----- AUERY SCREEN -----COMMAND (OPTIONAL): Enter values in the following fields and press the ENTER key to search for documents. Move from field to field by pressing the TAB key. Enter the END command to return to the previous screen. Doc. No. : \_ Doc. Type :\_\_\_ Doc. Title:\_ Revision Code : \_\_\_ Revision Date : \_ Status Plant Building :\_\_ Classification : Block 48 Block 49 :\_\_\_ Block 50 ESO Vendor Code Subject Code Proj. No. Orig. Disc. Resp. Disc. 1 Company Originator ID : \_\_ Responsible ID: \_\_\_\_ Floor

Use the <TAB> key to move to any of the blank fields on the screen to enter search values into the fields, and press <ENTER>. It is not necessary to enter information in every field. "You should, however, enter enough information to obtain the desired result. In general, entering more information will produce a narrower search, and the resulting list of documents will be shorter and more specific. Valid values entered in the Doc. No., Doc. Type, and Revision Code fields uniquely identify a document; therefore, any information entered in addition to the document type and document number is unnecessary if the goal of the query is to locate a particular revision of a document. However, if the goal of the query is to locate all of the latest revisions of all design drawings related to a particular building, you should enter "DD" in the Doc. Type field and the building number in the Building field and press <ENTER>.

Seven fields on this screen will accept partial entries if the whole value is not known: Doc. No., Doc. Title, Building, ESO, Vendor Code, Subject Code and Proj. No. A "%" sign can be used as a wild-card to represent unknown characters located before, after, or in the middle of a known string of characters. Using a "%" symbol to terminate a partial Building field entry will allow a search of a group of buildings starting with the same characters.

The system will search the database for any released documents that fulfill the values you enter and either show you the document information (Detail Document Information Screen) or a list of the documents that are found (Abbreviated Document Information Screen). (These screens are described in the following text.) If you do not specify a revision number in the revision code field, only the latest revision of

QUERY SCREEN

documents meeting the entered search criteria will be displayed. If you enter an asterisk (\*) in the revision code field, all revisions of each document meeting the entered search criteria will be shown.

If no documents are found that match the entered values, the Query Screen will be redisplayed with a message stating that no documents meet the search criteria. If you press <ENTER> without entering values in any of the input fields, the screen will be redisplayed with a message requesting entry of search fields. Enter END in the command field and press <ENTER> if you wish to cancel this function and return to the Primary Option Menu.

When more than one document satisfies the search criteria you enter, the system will display the partial index information for the documents on the following Abbreviated Document Information Screen, in order by document number and revision.

> - ABBREVIATED DOCUMENT INFORMATION SCREEN -----ROW 1 OF 2 COMMAND (OPTIONAL): Enter a valid function code in the select code field and press ENTER . Enter a ? to view the list of valid codes. An \* indicates that an electronic copy of the document is stored in EDIS. SELECT DOCUMENT SHEET DOCUMENT DOC. STATUS PLANT BUILDING FLOOR CODE NUMBER NO. REVISION TYPE CODE . . . . . . . . ..... • • .... . . . . . . . \*XXXXXXXXXXXXXXXX XXX XXX XX XXX XXXX XXXXXXXX XX \*\*\*\*\* XXX XX XXX XXX XXXX XXXXXXX XX

If more documents are listed than can be viewed on one screen, enter UP or DOWN on the COMMAND line and press <ENTER> to scroll the rest of the list onto the screen. The prompt "ROW OF \_" in the upper right corner of the screen tells you how many rows are included on the list. If more than 240 documents satisfy the search criteria you enter, the system will display the partial index information for the first 240 documents found on the Abbreviated Document Information Screen with a message requesting additional search criteria to help narrow the search. The END command will end the Abbreviated Document listing and return you to the Query Screen.

You may select one or more of the listed documents for further query, hardcopy request, or graphical display by entering one of the following codes in the SELECT CODE field directly beside the document(s) and pressing <ENTER>. [A help screen of these and other EDIS codes will be displayed if you type "?" in the COMMAND line and press <ENTER> (see Appendix B).]

~ .

Code	Function
Q	Query. Displays a screen of more detailed index information (see Sect. 3.3.1.1).
НС	Hardcopy. Sends a request to the ISD Document Center for a hard copy of the drawing (see Sect. 3.3.1.2).
V	View - Permits a Soft Master graphical display of the drawing if it exists in EDIS (as noted by '*' just to the left of the document number) (see Sect. 3.3.1.3 and Appendix A).

**NOTE:** You may also select one or more documents from the list using an X instead of a letter in the SELECT CODE field. Then, enter the Q, HC or V command on the COMMAND line and press <ENTER>. Doing so will apply the Q, HC, or V command to all those documents marked with an X.

If multiple documents are selected from this list, the system will process them, one by one, in the order in which they are listed and then return you to the Abbreviated Document Information Screen when finished.

If you have not been given proper authority to access any of the documents listed, the titles of those documents will not be displayed. If you request a hard copy or request to view any of these documents, an error message will be displayed, and your request will be denied.

Additional restrictions apply to the use of the View function. Please refer to Sect. 3.2.1.3 for an explanation of these restrictions.

The Query, Hardcopy, and View functions are presented in Section 3.3.1.1, 3.3.1.2 and 3.3.1.3 along with the screens that are displayed for each function.

....

#### 3.3.1.1 <u>Query (Q)</u>

When a search from the Query Screen finds only one document or when you enter the Q function code for a specific document on the Abbreviated Document Information Screen, the following screen is displayed containing detailed index information for the selected document:

> ----- DETAIL DOCUMENT INFORMATION SCREEN COMMAND (OPTIONAL): Enter F in the command field and press ENTER to view additional information. Enter the END command to end the Detail Query function. Doc. No. : XXXXXXXXXXXXXXXX Rev Code : XXX Status : XXX Doc. Type : XX Sheet : XX of XX Status Date : XX/XX/XX : X Plant Building : XXXX Project Number: XXXXXX Reserver 1D : XXXXX Resv. Date : XX/XX/XX Index Date : XX/XX/XX Classifier ID : Class. Date: \_ Classification: X **Issue Date** Access Date : XX/XX/XX : Change Date: Last Store : XX/XX/XX Orig. Format : XXXXX Initial Store : XX/XX/XX : XX Orig. Disc Subject Code : XXX Resp. Disc. : XXX Originator ID : XXXXX Responsible ID: XXXXX ESO : XXXXXX Vendor Code: XXXXX

The information supplied on this screen is standard for all document types in the EDIS Index and is provided for display only. If you have not been given proper authority to access this document, the title and project number will not be shown. No changes can be made to the displayed information using this function. To exit the Detail Query function, enter END on the COMMAND line, and you will be returned to the previous screen (Abbreviated Document Information Screen or the Document Query Screen).

The HC and V codes can be entered on the COMMAND line of this screen either to obtain a hard copy of this document or to view a graphical display of the drawing. These functions are described in detail in Sects. 3.3.1.2 and 3.3.1.3, respectively. If you have not been given proper authority to view or receive a hard copy of this document, a message indicating this fact will be displayed if you enter either the HC or V codes. Additional restrictions apply to the use of the View function. Please refer to Sect. 3.3.1.3 for an explanation of these restrictions.

If the displayed document is a design drawing, type F and <ENTER> to receive additional screens of information containing (1) more design information and (2) a list of formats associated with the document. These two additional screens are described below as numbered.

1. If you type F to request additional information for the design drawing, the system will display the additional index information for this document on the Detail Document Information Screen 2.

---- DETAIL DOCUMENT INFORMATION SCREEN 2 -----COMMAND (OPTIONAL): Enter B in the command field and press the ENTER key to view the previous screen. Enter F in the command field and press the ENTER key to view additional information. Enter the END command to end the Detail Query function. : XXXXXXXXXXXXX Rev Code : XXX : XXX Doc. No. Status : XX of XX Doc. Type : XX Sheet Status Date : XX/XX/XX Designer : XX XXXXX Draftsman : XX XXXXX Draft Date : XX/XX/XX Design Date: XX/XX/XX : XXXX : X Building Floor : X Plant : X Workorder : XXXXXX Block 1 : X Type Block 48 Block 49 : X 2 X Block 50 : X Total Models: X Configuration Control Number : XXXXXXX Send to EFM : X : XXXXXXX Change Control Number

This information is provided for display only and cannot be changed. The END command will end the Detail Query function and return you to either the Abbreviated Document Information Screen or the Document Query Screen from which the function was requested. If you have not been given proper authority to access this document, the title will not be shown.

The HC and V codes can be entered on the COMMAND line of this screen to either obtain a hard copy of this document or to view a graphical display of the drawing. These functions are described in detail in Sects. 3.3.1.2 and 3.3.1.3, respectively. If you have not been given proper authority to view or receive a hard copy of this document, a message indicating this fact will be displayed if you enter the HC or V codes. Additional restrictions apply to the use of the View function. Please refer to Sect. 3.3.1.3 for an explanation of these restrictions.

Enter the B or F codes in the COMMAND line and press <ENTER> to either return to the prior screen of information for this drawing or continue to the Document Format Listing screen described in (2) below.

1.11.10.0

6.1

2. The Query Function - Document Format Listing Screen displays a listing of all the formats in which this document is stored and their associated storage locations. It is displayed when you enter an F in the COMMAND line of either of the two previous Detail Document Information screens.

```
-- QUERY FUNCTION - DOCUMENT FORMAT LISTING ----- ROW 1 OF 2
COMMAND (OPTIONAL):
The following is a list of the formats associated with the
selected document
Select a Format and enter any valid EDIS command.
Enter the END command to end the Detail Query function.
Enter B and press ENTER to view the previous screen.
Doc. No. : XXXXXXXXXXXXXXX
                       Rev. Code : XXX
                                          Status
                                                     : XXX
                              : XXX of XXX Status Date
Doc. Type : XX
                       Sheet
                                                    : XX/XX/XX
SELECT
         FORMAT
                SOFTWARE
                               STORAGE
                                               STORAGE
CODE
         CODE
                VERSION
                              LOCATION
                                                DATE
         XXX
                        ****
                                               XX/XX/XX
         XXX
                        ****
                                               XX/XX/XX
         ***
```

If more formats are listed than can be viewed on one screen, enter UP or DOWN on the COMMAND line and press <ENTER> to scroll the rest of the list onto the screen. The prompt "ROW \_ OF \_" in the upper right corner of the screen tells you how many rows are included on the list. Enter B and <ENTER> in the COMMAND line of the screen if you wish to redisplay the prior screen of information for this document.

The END command will end the Detail Query function and return you to the Abbreviated Document Information Screen.

You may select one of the listed formats for further graphical display or hardcopy request by entering either the Hardcopy (HC) or View (V) function codes in the SELECT CODE field directly beside the format and pressing  $\langle ENTER \rangle$ . The HC option sends an electronic request to the ISD Document Center for a hard copy of the drawing selected and the V option permits a Soft Master Graphical display of the document if it exists in EDIS. (You may also perform the same operation by entering the function code in the COMMAND line and indicating the desired format by entering an "X" in the SELECT CODE field directly beside the format and pressing  $\langle ENTER \rangle$ ).

A help screen of valid EDIS codes will be displayed if you type "?" in the COMMAND line or SELECT CODE field and pressing <ENTER>.

If you have not been given the proper authority to access the selected document, you will not be allowed to view the graphical display or request a hard copy of the document. If you attempt to do so, an error message will be displayed indicating that you lack the necessary authority. Additional restrictions apply to the use of the View function. Please refer to Sect. 3.3.1.3 for an explanation of these restrictions.

#### 3.3.1.2 Hardcopy (HC)

When HC is entered from Abbreviated Document Listing Screen, the Format Listing Screen or either of the Detailed Document Information Screens, the following Hardcopy Request Screen will be displayed with summary information for the selected document at the top of the screen.

HARDCOPY REQU	EST SCREEN
COMMAND (OPTIONAL) :	
Doc. Type : XX	Rev. Code : XXX Sheet : XXX of XXX Status Date : XXXX-XX-XX
Enter the following information and press	ENTER to submit the request:
Work Order or Cost Center:	(eg. 64100719 or \$3300511)
Quantity : 1 (limited to 10)	
Disposition : <u>1</u> 1 = Mail 2 = Pick Up	
Call: Y Y = YES, N = NO	

Use the <TAB> key to move the cursor between data fields on the bottom of the screen. You must enter a charge number to request a hard copy of a document. You are allowed to modify the displayed default values for the following data items:

Quantity	-	Number of paper copies desired. This is limited to 10 copies per request.
Disposition	-	Specifies whether (1) the output is to be mailed to your address or (2) you will
-		pick up the output.
Call	-	Specifies whether or not the ISD facility should call you when the output is ready.

When all data are complete on the screen, press <ENTER> to validate the data. If there are invalid data on the screen, an error message will be displayed, and you will be prompted to correct the data. If all input is valid, your request will be processed and you will be returned to the previous screen from which this screen was accessed.

### 3.3.1.3 <u>View (V)</u>

When the code V is entered from the Abbreviated Document Listing Screen, the Format Listing Screen or either of the Detailed Document Information Screens, the Soft Master Graphical Viewing process will be initiated by EDIS. Refer to Appendix A for a description of using Soft Master to view the selected document.

To exit the Soft Master program and return to the EDIS screen from which the View function was initiated, press the <PF13>, <PF13>, <PF24> function keys in separate keystrokes.

- NOTE: There are special requirements regarding the ability to view graphical images using Soft Master:
  - 1. Viewing requires the use of an IBM 3270-type terminal or a microcomputer equipped with 3270 emulation that supports display of GDDM graphics (such as IRMA) connected through coaxial cable or an IBM token ring network.
  - 2. Your TSO account must be set up to allow the request of a larger region size than normally allowed.
  - 3. Special logon requirements apply to the viewing function.

Please contact your Engineering User Representative, Karen Shaw, at 4-7869 for more information regarding the View function.

#### 3.3.2 Reserve Option (R)

When you have selected Reserve from the EDIS Primary Option Menu, the following menu will be displayed, from which the Reserve functions may be selected.

**RESERVATION MENU** 

2	Reserve Document Numbers Reserve Revisions for Exist	Document Type: ing Documents	DD	
	Reserve Revisions for Exist	ing Documents		
-				
3	Select Reserved Documents/Re to Query, Modify, or Unreser			• • • • •
4	Reserve Engineering Job Numb	bers for Special Pr	rojects	
X	END Document Number Reservat	tion Function		

You can indicate the subfunction to be performed by typing the option number in the "Indicate desired function" field and pressing <ENTER>. A Document Type must be entered to reserve a document number (Option 1). The default code DD, which stands for design drawings, is entered by the system in the Document Type field. You may <TAB> to this field to enter another document type code. If an invalid document type is entered (or if you enter a "?" for help in this field and press <ENTER>), a list of valid document types will be displayed on the screen (see Appendix B).

The following sections of this manual describe the operation of the Reservation Menu options. Refer to the table below to find the manual section that covers each option.

#### Option

<u>Action</u>

- 1 Reserve one or more new document numbers (see Sect. 3.3.2.1).
- 2 Reserve a revision for an existing drawing (see Sect. 3.3.2.2).
- 3 Select a specific document number for the purpose of performing a Query, Modify, or Unreserve action (see Sect. 3.3.2.3).
  - NOTE: This command on the Reservation Menu only displays reserved document numbers (not released or issued documents). To query released or issued documents, use the Query option on the EDIS Primary Option Menu (see Section 3.3.1).
- 4 Reserve Engineering Job Numbers (EJNs) for Special Projects or query and modify EJN information (see Sect. 3.3.2.4).

Option X will exit the Reserve function and return you to the EDIS Primary Option Menu.

#### 3.3.2.1 Reserve Document Numbers (Option 1)

One of two separate screens are displayed to perform this function depending upon whether (1) you entered DD as a document type on the menu screen or (2) you entered BM, JS, DS, or DC as a document type. These two screens are discussed below.

1. When DD is selected as the document type on the Reserve Menu, you will receive the following screen to reserve numbers for design drawings.

		ects enter Package Type R. PACKAGE; RP - REACTOR	
lumber of drawings	to be reserve	d:	
Plant	: XXXX	Building	4
SO	:	Classification	: <b>X</b>
itle:			
lesponsible Discip	line: XXXX	Responsible ID	: ****
unction Code	: X	Drawing Size	: X
Driginator's Compa		Antic. Release Date	: XX/XX/XX

2. When BM (Bill of Material), JS (Equipment Specification), DS (Equipment Data Sheets), or DC (Design Analysis and Calculations) is selected as the document type on the Reservation Menu, you will receive the following screen to reserve numbers for the selected document type.

	ects enter Package Type in Building number. R. PACKAGE; RP - REACTOR CONT. PACKAGE)
Number of documents to be reserve	:d:
Plant : XXXX	Building Number :
ESO :	Classification : ¥
Title:	
Responsible Discipline: XXXXX	Responsible EMIS ID : XXXXX
Driginator's Company : XXXXX	Anticip. Release Date : XX/XX/XX

Use the <TAB> and <SHIFT><TAB> keys to move the cursor forward and backward between input fields on either of the above screens to enter dat or change field values. Typing END and <ENTER> in the COMMAND line will cancel this function without generating new numbers and cause the Document Number Reservation Menu to be displayed.

These screens will have data supplied by the system in the following fields:

Field	Value
Plant	User's plant
Classification	U
Responsible Discipline	User's discipline (will be blank if your discipline is AS, SP, ISD, KPJ, XPJ, or YPJ)
Responsible ID	User's EMIS ID
Function Code	Code for user's discipline (will be blank if your discipline is AS, SP, ISD, KPJ, XPJ, or YPJ) (for DD documents only)
Drawing Size	E (for DD documents only)
Originator's Company	MMES (for Martin Marietta Energy Systems)
Anticip. Release Date	Current date + 12 months
Sketches	N (for DD documents only)

These data are system defaults or are obtained from your logon information, but they may be changed. You are required to fill in all remaining fields on the screen.

If any field is not completed or if any codes you have entered are not valid, when you press <ENTER> to submit the screen information to the system, screens of valid codes for any field that is in error will be displayed on the screen. These screens are available for the following fields and are displayed in Appendix B.

Building	Originator's Company (Participant Code)
Responsible Discipline	Classification
Responsible ID	Plant (where constructed or funded)
Function Code	

These code screens are also available to you from this screen if you type a "?" and <ENTER> in an empty code field. Select a valid code from the help screen list and press <ENTER> to return to the Reserve Design Drawings screen, and the code you selected will be displayed in the code field from which you requested help.

The specific requirements of several fields are described below:

- o All weapons drawings are assigned an EJN of 800440. These drawings do not require entry of ESO and Building Number; these values are set to blank in the database.
- o If SP, RP, or IP is entered for Building Number, the Charge ESO will be used to obtain the appropriate special project EJN. If an EJN has not been assigned to the Charge ESO that is entered and if you have proper authority, you must exit to the Document Number Reservation Menu and select the Reserve EJNs for Special Projects option (Option 4) to create an EJN for this project (see Sect. 3.3.2.4 for information on using this function). An error message will be displayed if you do not have authority to assign an EJN. This message will tell you whom to contact to have the EJN established.

o If SP, RP, or IP is entered for Building Number and the EJN for this project has sequence letters assigned to it, the following screen will be displayed to allow you to select the sequence letter for which this document number should be generated:

COMMAND (OPTIONAL): Select desired Sequence Letter by marking with X and pressing ENTER SEQUENCE SEL LETTER DESCRIPTION - X XXX - X XXX

- o AS, SP, ISD, XPJ, KPJ, and YPJ cannot be entered as the Responsible Discipline for the document.
- A message will be displayed if either the Function Code field or the Responsible Discipline field is changed and the function code and discipline do not match. The system will require a valid function code to be entered for each responsible discipline.
- o If you enter anything other than U for Classification, the Title Classification Verification panel (see Appendix B) is displayed to remind you not to enter a title containing classified information.
- The Title field may reflect a general project title for the group of drawings requested and may be modified later for the individual drawings. Titles for classified drawings must be unclassified. When the document is actually issued and placed in the EDIS index of released documents, this title will be replaced by the title appearing on the document.
- o If documents are not released within 12 months after the anticipated i ase date, the document initiator will be contacted for approval to unreserve the document numbers.

When all fields of either of the Reserve Document Numbers screens (screen 1 or 2 shown on page 20) are completed and <ENTER> is pressed, the Document Reservation Confirmation screen is displayed to show you the range of numbers to be reserved:

Beginning Document Number	: XXXXXXXXXXXXX	
Ending Document Number	: XXXXXXXXXXXXX	
ESO	: ****	
Building	: XXXXXXX	
Responsible Discipline	: XXXXX	
Responsible ID	: XXXXX	
Project Record Number	: ****	
(itle: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	*****	
Confirm Reservation (Y/N)? X		

You may confirm or cancel the reservation. If confirmed, the requested quantity of document numbers will be generated and displayed on the Reserved Document List screen (see Sect. 3.3.2.3). The same query, modify, and delete functions are available from this List screen as are accessed through Option 3 of the Reservation Menu and described in Sect. 3.3.2.3.

When constructing the actual physical drawing (document), the exact character representation of the document number displayed on this screen should be placed on the face of the drawing (document).

3.3.2.2 <u>Reserve Revisions for Existing Documents</u> (Option 2)

When option 2 is selected from the Reservation Menu, you will receive the following screen to reserve revisions for existing or reserved drawings. Revisions may only be obtained for Design Drawings (DD).

COMMAND (OPTIONAL):	
Document Number	in the second
ESO	•
Responsible Discipline	: XXXX
Responsible ID	: XXXXX
Originator's Company	: XXXX
Antic. Release Date	: XX/XX/XX

Use the <TAB> and <SHIFT><TAB> keys to move the cursor forward and backward between fields to enter the Document Number and ESO values or type over the displayed field values. Typing END and <ENTER> or X and <ENTER> in the COMMAND line will cancel the operation of this function and return you to the Document Number Reservation Menu. Pressing <ENTER> without an entry in the COMMAND line will process the request.

This screen will have data supplied by the system in the following fields:

Value

Responsible DisciplineUser's discipline (will be blank if your discipline is AS, SP, ISD, KPJ,<br/>XPJ, or YPJ)Responsible IDUser's EMIS IDOriginator's CompanyUser's company codeAnticipated Release DateCurrent date + 12 months

These data are system defaults or are obtained from your logon information, but they may be changed. You are required to fill in all remaining fields on the screen.

Help screens are available for this screen to prompt you with valid codes if you type a "?" and <ENTER> in a code field or if the data you enter in these fields are not valid. Help screens are available for the following fields and are displayed in Appendix B.

Responsible Discipline Responsible ID Originator's Company

<u>Field</u>

The specific requirements of several fields are described below:

- o AS, SP, ISD, XPJ, KPJ, and YPJ cannot be entered as the Responsible Discipline for the document.
- o An ESO value is not required for a weapons drawing. If a value is entered, it is ignored and stored as a blank.
- o The initial revision assigned for Energy Systems weapons drawings will be "A" instead of "0."

When all fields are completed and <ENTER> is pressed, the following Document Revision List screen will be displayed:

Confirm Reservat			*****
			, to view entire list of se END command to exit.
DOCUMENT	REVISION	STATUS	RESP. ID
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		RESERVE XXXXXXXXXXXXXX	***** *****
**********	********* BOTT	OH OF DATA **	*****

This screen displays a newly assigned document revision code and lists all revisions that have already been reserved or released for this document, the status of each revision, and the responsible person who requested the revision number, if available. If the "ROW \_ OF \_" prompt in the upper right-hand corner of the screen indicates there are more revisions than appear on this screen, type DOWN or UP and <ENTER> on the COMMAND line to scroll to the rest of the document revisions. ("DOWN n" and "UP n" can be used to scroll "n" number of rows that you specify.) You are asked to confirm the reservation of this revision after reviewing the screen information by typing Y and <ENTER> by the "Confirm Reservation (Y/N)?" prompt.

If you confirm the revision and press <ENTER>, the revision information will be added to the Reserved database. If you enter anything except Y to confirm reservation, the revision will not be assigned, and the Reserve Document Revisions screen will be shown. Typing END and <ENTER> will return you to the Reserve Document Revisions screen; typing X and <ENTER> will return you to the Document Number Reservation Menu.

#### 3.3.2.3 Select Reserved Documents/Revisions (Option 3)

The Reserve database information may be queried, modified, or unreserved (deleted) using option 3 on the Document Number Reservation Menu. To perform these functions, you must first enter criteria by which to select documents from the database and then indicate what action is to be performed on these documents. You can select the desired document or document revision using the following search screen:

A percent sign	% may be use	the group of reserved d as a wild card for an search fields.	drawings to be listed. ny unknown portion of
Document Type	: DD	Document Number	•
Responsible Discip	line:	Responsible ID	
Reserver's ID	:	•	e Date Range:(MO/DA/YR) / through//
Plant	: _	Building	:

Use the <TAB> and <SHIFT><TAB> keys to move the cursor forward and backward between input fields. Values need not be entered for all fields, but you should enter as many search criteria as needed for the desired query and press <ENTER>. In general, entering more information will produce a narrower search, and the resulting list *cf* documents will be shorter and more specific. Valid values entered in the Document Type and Document Number fields uniquely identify a document; therefore, any information entered in addition to the document type and document number is unnecessary if the goal of the query is to locate a particular document. Partial document and ESO numbers can be entered using a % sign for unknown portions of the numbers, and a range of dates may be found using the Anticipated Release Date Range. The END command may be entered to cancel the search function and return to the Document Number Reservation Menu.

Help screens are available to prompt you with valid codes if you type a "?" and <ENTER> in a code field or if the data entered in these fields are not valid. These screens are available for the following fields and are displayed in Appendix B.

Responsible Discipline	Plant
Responsible ID	Originator's Company
Reserver's ID	

Do not select directly from these help screens if you have not completed entering search criteria on the search screen, but return to the search screen to enter the code. If the code and <ENTER> are entered on the help screen, the search will be executed with only the search criteria existing at that time. Exit the help screen by typing END and <ENTER> on the COMMAND line of the help screen and then type the code over the "?" in the field from which the help screen was requested.

When the search criteria are completed and <ENTER> is pressed, all documents in the database matching the search criteria will be displayed to you on the Reserved Document List screen shown next. From this screen you can elect to perform one of the displayed functions for a particular document.

---- RESERVED DOCUMENT LIST -----ROW X OF XX COMMAND (OPTIONAL): Documents may be selected for Query, Modify, or Unreserve by entering appropriate letter in SELECT and pressing Enter. Unreserve -- U Query -- Q Modify -- M Use END command to exit. RESP . RESERVE DOCUMENT NUMBER REVISION STATUS ID DATE SELECT DOCUMENT TITLE RESERVE XXXXX MM/DD/YY \*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\* RESERVE XXXXX MM/DD/YY XXXXXXXXXXXXXXXX X RESERVE XXXXX MM/DD/YY XXXXXXXXXXXXXXXX X RESERVE XXXXX MM/DD/YY \*\*\*\*\* 

Use the  $\langle TAB \rangle$  keys to move the cursor between the SELECT input fields. Typing DOWN and  $\langle ENTER \rangle$  or UP and  $\langle ENTER \rangle$  on the COMMAND line will display additional documents on the list if the "ROW \_ OF \_\_" prompt on the upper right-hand corner of the screen indicates that there are more documents on the list than are displayed on the screen. ("UP n" or "DOWN n" will scroll "n" number of lines at a time.) The END command will return you to the Reserved Document Search screen.

You can select documents for query, modification, or unreserve by entering one of the following codes beside a document number in the SELECT field:

#### Code

#### Action

- Q Display more complete information about the selected document on the Reserved Document Query screen (see Query section on the following page).
- M Execute the Reserved Document Modification screen if you have authority to modify (see Modify section on the following pages).
- U Unreserve or remove the document from the Reserved Document Number table. The Status field will be changed to UNRESERVE. If the document is a design drawing with a Revision Code of 0 and no higher revisions exist for the drawing, the sequence number and sequence letter will be made available for re-use. You must have delete authority to perform Unreserve (see Unreserve section on the following pages).

A Q, M, or U code may be entered beside more than one document at a time. When  $\langle ENTER \rangle$  is pressed, the documents will be displayed one after the other before you are returned to the Reserved Document List screen. These codes can also be executed by typing an X in the SELECT field beside the selected document(s) and then typing a code (either Q, M, or U) and  $\langle ENTER \rangle$  on the COMMAND line.

## Query (Q)

The Reserve Document Query screen displays information about a document selected by the Q code on the Reserved Document List screen.

SO : XXX Originator's Company : XX	cument Number	: XXXXXXXXXXXXXXXXXXX	Revision Code	: X
SO : XXX Originator's Company : XX	ocument Type	: XX	Classification	: X
	ant	: X	Building	: xxxx
Reservation Date : XX/XX/XX Reserver ID : XX	SO	: XXX	Originator's Company	: ****
	eservation Date	: XX/XX/XX	Reserver ID	: XXXXX
Responsible Disc. : XXX Responsible ID : XX	esponsible Disc.	: XXX	Responsible ID	: ****
Antic. Release Date : XX/XX/XX	ntic. Release Date	: XX/XX/XX		

This information is displayed for query only and cannot be changed. If more than one document was selected, press <ENTER> to see the next selected document. The END command will return you to the Reserved Document List screen.

#### Modify (M)

When the code M is entered beside a document number on the Reserved Document List screen, the following modification screen will be displayed with the existing data for the selected document:

RESERVED DOCUMENT MODIFICATION ---COMMAND (OPTIONAL): Document Number : XXXXXXXXXXXXXXXXXX **Revision Code** : X Classification Document Type : XX : <u>X</u> Plant Building : X : XXXXXXXX FS0 : XXX Originator's Company : XXXX **Reservation Date** : XX/XX/XX Reserver ID : XXXXX Responsible Disc. Responsible ID : XXX : <u>XXXXX</u> Antic. Release Date : XX/XX/XX Drawing Size : <u>X</u> 

The Revision Code and Drawing Size fields will be displayed only for records with a Document Type of DD.

Use the <TAB> and <SHIFT><TAB> keys to move the cursor bet ween data fields. You are allowed to modify the following data items:

Responsible IDESOAnticipated Release DateDrawing Size (if document type = DD and no revisions have<br/>been received)ClassificationDrawing Size (if document type = DD and no revisions have<br/>been received)

Drawing size may be changed only on the initial issue of the drawing and only prior to release into ISD. If Classification is other than U and the title is changed, the Title Classification Verification panel is displayed to warn you not to enter classified information in the title (see Appendix B).

When all changes are complete, press <ENTER> to save the changes and return to the Reserved Document List screen. Typing END and <ENTER> will cancel the function and return you to the Reserved Document List screen without saving the changes.

#### Unreserve (U)

If a U is typed in the SELECT field of a document on the Reserved Document List screen (see Sect. 3.3.2.3), the selected document number will be returned to the system and can be reassigned. This Unreserve function can also be operated from the list by typing an X in the SELECT column beside a document number and UNRESERVE and <ENTER> on the COMMAND line.

#### 3.3.2.4 Reserve Engineering Job Numbers for Special Projects (Option 4)

EJNs may be reserved or queried by choosing Option 4 on the Document Number Reservation Menu. The following Special Project Menu will be displayed:

Indicate desired function:
1 Creaté a new Engineering Job Number for a Special Project ESO
2 Query Special Projects on Plant, EJN, ESO, or Title

This menu allows you to either create a new EJN and sequence letters (option 1) or query, add, or modify information on an EJN that exists in the database (option 2). Choose one of these functions and press <ENTER>. These two options are described in the following two sections.

### Create a New EJN (1)

When you select option 1 from the Special Project Menu, one of the following screens will be displayed, depending upon the division to which you belong. If you are in the Instrumentation and Controls Division, the following screen will be displayed:

Plant	Special Project Information. Use END command to exit screen. : X
	: X
ESO	
	approx to prove the second
	Package: CIAL PROJECT; IP - INSTR. PACKAGE; RP - REACTOR CONT. PACKAGE)
Special F Title :	Project
Do you wi	sh to specify an alpha sequence ? N (Y or N)

If you are from either the Chemical Technology Division or the Engineering Division, the following screen will be displayed:

ASSIGN SPECIAL PROJECT EJN ------COMMAND (OPTIONAL): Enter Special Project Information. Use END command to exit screen. Plant : X ESO : \_\_\_\_\_\_ Special Project Title : \_\_\_\_\_\_ Do you wish to specify an alpha sequence ? N (Y or N) Do you wish to add additional Eso's ? : N (Y or N)

On these screens, the Plant field is initialized to your plant and may not be changed unless you have authority for more than one plant. You must enter values for all of the remaining fields. Use the <TAB> keys to move the cursor between input fields to enter data. Only one EJN can be assigned for each ESO/Workorder. The END command will cancel this function and return you to the Document Number Reservation Menu.

If you wish to specify an alpha sequence to be used on document numbers for this EJN you must answer Y to the next prompt; an alpha sequence cannot be added to the EJN at a later time unless it is declared now. When reserving new document numbers using this EJN, you will be prompted for the alpha sequence to be used only if this prompt has been answered Y (as described in Sect. 3.3.2.1). Specifying an alpha sequence for document numbers provides a means to further organize work. For example, all documents ending with A001 through A999 could be assigned to component 1, B001 through B999 could be assigned to component 2, etc.

If you wish to add additional ESOs at this time, answer Y to the last prompt. Additional ESOs can be added at a later time if desired (using option 2 of the Special Projects Menu; see Query Special Projects section on the following pages).

When all fields and prompts have been completed, press <ENTER>. The next numerically sequential EJN will be assigned and stored for the ESO entered, and you will receive a message below the COMMAND line saying "EJN XXXXXX WAS CREATED FOR ESO XXXXXXXX." If you selected to add (1) alpha sequence letters or (2) additional ESOs, one or both of the following screens will be displayed to accept these data, as described below.

1. <u>Sequence Letter Addition Screen</u>. When you choose to add an alpha sequence to an EJN, the following screen is displayed for entry of the sequence letter(s) and title(s):

	e special s End comm			responding titles.	
Plant	:	x			
EJN	:	XXXXXX			
Special Proj Title	ect :	*****	*****	****	
Sequence Letter	Sequence L title	etter	· · · · ·		
			· · · · · · · · · · · · · · · · · · ·		

A message "EJN XXXXXX WAS CREATED FOR ESO XXXXXXXX" will be displayed on the second line of the screen to inform you that the EJN you just requested has been reserved.

Use the <TAB> and <SHIFT><TAB> keys to move the cursor forward and backward to the input fields. Typing END and <ENTER> on the COMMAND line will exit this screen without saving the data and display the next screen to process; typing X and <ENTER> returns you to the Document Number Reservation Menu. If you exit from this screen without entering a sequence letter, it will result in the cancellation of the sequence letter assignment function, and no future assignments will be allowed for this EJN.

More than five sequence letters can be added on this screen by filling all five of these lines and pressing <ENTER>. A message will appear under the COMMAND line to tell you the sequence letters entered were added to the EJN, and then five more blank lines will be displayed to accept more sequence letters. Repeat this process until all desired entries have been made.

When you have entered the sequence letters and pressed <ENTER>, you will be returned to the Assign Special Project EJN screen unless you selected to add additional ESOs at the time you reserved the EJN. In this case, you will receive the Special Project ESO Addition screen displayed below. 2. <u>Special Project ESO Addition Screen</u>. When you select to add additional ESOs to the EJN you just reserved, the following screen will be displayed:

Enter additi the list or							command	to end	
Plant	:	X							
EJN	н. Т	XXXXXX				d <sup>i</sup>			
Special Project Title	:	*****	*****	XXXXXX	XXXXX	*****	XXXX		
ESOs	:								
	:								

The message "EJN XXXXXX WAS CREATED FOR ESO XXXXXXXX" may be displayed on the second line of this screen if you access it directly after requesting an EJN without first selecting sequence numbers. Use the <TAB> and <SHIFT><TAB> keys to move the cursor between input fields for entry of ESOs. END and <ENTER> may be typed on the COMMAND line to cancel this screen.

More than five ESO numbers can be added on this screen by filling all five of these fields and pressing <ENTER>. A message will appear under the COMMAND line to tell you the ESOs entered were added to the EJN, and then five more blank lines will be displayed to accept more ESO numbers. Repeat this process until all desired entries have been made. When all ESOs are entered, press <ENTER> to save these entries and return to the Assign Speciel Project EJN screen.

## Query Special Projects (2)

Query, addition, or modification of existing EJN information can be performed using option 2 of the Special Project Menu screen. The following Search screen will be displayed for you to identify the EJN group you wish to access:

COMMAND (OPTIONAL	and the second	Project SE			
to be listed	s which identify d. A percent sig tion of the EJN,	n % may be	used as a	wild-card	
Plant	<b>:</b>				
EJN	:		ан н 11		
ESO	•				
Special Project Title	a .		-	····	

Use <TAB> and <SHIFT><TAB> to move the cursor between input fields. The END command will cancel the search and return you to the Special Project Menu screen. Enter as many search criteria as possible, using the percent sign (%) for any portion of the EJN, ESO, or title that is not known.

When the search criteria are entered and <ENTER> is pressed, all records meeting the search criteria will be located and displayed on the EJN List screen shown below:

or in Add		EJN information ing Enter. ify M	n by enteri	ESOs or sequence letters, ng the appropriate letter
ELECT	EJN Special project		PLANT	SEQUENCE LETTER ASSIGNED (Y-Yes, N-No)
-	×××××× ××××××××××××××××××	XXXXXXXX (XXXXXXXXXXXXXXXXXXXXXXXXXXXX	x xxxxxxxxxxx	Y XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
-	xxxxxx xxxxxxxxxxxxxxxxx			N XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
-	xxxxxx xxxxxxxxxxxxxxxx			Y XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
	XXXXXX	XXXXXXXX	X	N XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

Use the <TAB> and <SHIFT><TAB> keys to move the cursor to the SELECT column input fields to select an EJN for query, title modification, or addition of sequence letters and ESOs. One of the following codes can be entered in the SELECT field to perform these actions:

Code	Action
A	Add ESOs to the EJN. If Sequence Letters Assigned column on the above screen is Yes, this function also will allow new sequence letters to be assigned.
M	Modify the EJN title. If Sequence Letters Assigned column on the above screen is Yes, this function also will allow existing sequence letter titles to be modified.
Q	Query the EJN Title. If Sequence Letters Assigned column on the above screen is 'Yes, this function also will allow existing sequence letter titles to be queried.

The steps required to perform each of these functions are described below.

## Add

If sequence letters are assigned to the EJN selected from the EJN List screen, the Special Project Addition Menu shown below will be displayed for you to indicate whether you want to add an ESO or a sequence letter to the EJN. If the sequence letter option is not available for this EJN, you will go directly to the ESO Addition screen (the second screen displayed below).

Enter either 1 or 2 by the "Indicate desired function:" prompt and press <ENTER>. These options will be performed as described below:

1. <u>Add ESO</u>. If 1 is entered on the above menu, the ESO Addition screen will be displayed to accept input of additional ESO numbers:

		00. (					
Enter addition the list or						command 1	o end
Plant	:	X					
EJN	:	XXXXXX					
Special Project Title		*****	(XXXXXXX)	(XXXXXXXXX	*****	XXXXX	
ESOs	:			an an taon 1994 - Anna Anna 1997 - Anna Anna Anna Anna Anna Anna Anna An			
	:						

Use the <TAB> and <SHIFT><TAB> keys to move the cursor to the input fields to enter ESO numbers. The END command will exit this screen without adding any ESOs and return you to the EJN List screen.

More than five ESO numbers can be added on this screen by filling all five of these fields and pressing <ENTER>. A message will appear under the COMMAND line to tell you the ESOs entered were added to the EJN, and then five more blank lines will be displayed to accept more ESO numbers. Repeat this process until all desired entries have been made.

Press <ENTER> when all ESOs are entered, and you will be returned to the EJN List screen, where the ESOs just added will be included on the list.

2. <u>Add Sequence Letter</u>. Option 2 on the Addition Menu allows you to add additional sequence letters and titles to an EJN using the following screen:

Passa AL				
Enter in Enter an	e special sequence codes End command to end th	le screen.	ponding title	28.
Plant				
EJN	: XXXXXX			;
Special Proj Title	ect : XXXXXXXXXXXXXXXX	(XXXXXXXXXXXXXXXX)	*****	
Sequence Letter	Sequence Letter title			
· -				

Use the <TAB> and <SHIFT><TAB> keys to move the cursor to the input fields to enter sequence letters and titles. The END command will exit this screen without adding any sequence letters and return you to the EJN List screen.

More than five sequence letters can be added on this screen by filling all five of these lines and pressing <ENTER>. A message will appear under the COMMAND line to tell you the sequence letters entered were added to the EJN, and then five more blank lines will be displayed to accept more sequence letters. Repeat this process until all desired entries have been made.

Press <ENTER > when all sequence letters are entered, and you will be returned to the EJN List screen to END or select another function.

Modify

If the M command is entered for an EJN on the EJN List screen, and that EJN has sequence letters assigned, the following Special Projects Modification Menu will be displayed. If no sequence letters are assigned to the selected EJN, you will go directly to the Title Modification screen (the second screen displayed below).

Enter either 1 or 2 by the "Indicate desired function:" prompt and press <ENTER>. These options will be performed as described below:

1. <u>Modify EJN Title</u>. If 1 is entered on the above menu, the following Title Modification screen will be displayed:

The only data that can be modified on this screen is the EJN title. Overtype the existing title and press <ENTER > to save the new title. You will be returned to the EJN List screen.

2. <u>Modify Sequence Letter Title</u>. If you entered option 2 at the Modification Menu prompt, the following Sequence Letter Modification screen will be displayed listing all of the sequence letters and titles for the selected EJN, allowing title modification:

<b>.</b>			
Enter the ne Enter an En modification	d command to enc	title(s) by typing over the screen or a return t	the existing title(s). o continue the title
Plant	: X		
EJN	: XXXXX	X	
ESO	: XXXXX	xxx	
	Sequence Letter	•	
Letter	Title	· · · · · · · · · · · · · · · · · · ·	
X	*****		
X		*****	
X			
X		XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
X		XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
		~~~~	

Use the <TAB> and <SHIFT><TAB> keys to move the cursor to the titles you wish to change. If more sequence letters exist for this EJN than are shown on the screen, the message "ROW \_ OF \_" in the upper right-hand corner of the screen will indicate how many rows exist and the number of the first row that is displayed on the screen. Enter either UP or DOWN and <ENTER> on the COMMAND line to scroll the additional sequence letters onto the screen. When the screen is scrolled, any title changes you have made on the first list displayed will be saved, and you will receive a message below the COMMAND line confirming "THE TITLE(S) HAVE BEEN UPDATED FOR EJN XXXXXX."

When all modifications have been made, press <ENTER> to save the current changes. To exit this screen and return to the EJN List screen, type END and <ENTER> on the COMMAND line. If you give the END command without first pressing <ENTER> to save the current screen's changes, the system will exit this screen without saving the changes.

Query

If you entered the Q command on the Special Project EJN List screen to query a selected EJN, the Special Projects Query Menu shown below will be displayed if the EJN has sequence letters assigned. If sequence letters do not exist for the select EJN, you will go directly to the EJN Query screen (the second screen displayed below).

Enter either 1 or 2 by the "Indicate desired function:" prompt and press <ENTER>. Either one of the following steps will be performed:

1. <u>Query ESO</u>. If 1 is selected from the above menu, the EJN Query screen will be displayed:

COMMAND (UPTIONAL):		Special Projects EJN Query Screen
Plant	:	X
EJN	:	xxxxxx
ESO	:	XXXXXXX
Special Project Title	:	***************************************

This screen is for display only and may not be modified. To exit the screen, enter END and <ENTER> on the COMMAND line, and you will be returned to the EJN List screen.

2. <u>Query Sequence Letter</u>. If option 2 is entered on the Query Menu screen, the Sequence Letter Query screen will be displayed:

----- ROW X OF XX COMMAND (OPTIONAL): Plant : X EJN : XXXXXX ESO XXXXXXXX : Sequence Sequence Letter Letter Title XXXXXXXXXXXXXXXXXXXX X х \*\*\*\* \*\*\*\*\* \*\*\*\*\*\*\*\*\*

This screen displays all of the sequence letters and titles for the selected EJN. If the "ROW \_OF \_" message on the upper right-hand corner of the screen indicates that more rows of data exist than are displayed on the screen, enter UP or DOWN and <ENTER> on the COMMAND line to scroll the additional information onto the screen for viewing. This data is for display only and cannot be modified. To return to the EJN List screen, enter END and <ENTER> on the COMMAND line.

### 3.3.3 Tutorial Option (T)

When the tutorial option is selected from the Primary Option Menu, the following Tutorial Select Menu is displayed to allow you to select the tutorial information you wish to view.

TUTORIAL ----- ENGINEERING DESIGN INFORMATION SYSTEM ----- TUTORIAL NEXT SELECTION ===> L EDIS TUTORIAL SELECT MENU I ------Each of the EDIS subsystems has its own tutorial. Please choose one of the following tutorials: Q, QUERY - Document Query Tutorial. R, RESERVE - Document Number Reservation Tutorial. TO EXIT TUTORIAL: END SELECT: Type topic letter in selection field and TO CONTINUE: <ENTER> press <ENTER>.

This option is currently available only for the Reserve subsystem of EDIS (option R on the Primary Option Menu). When the Reserve tutorial option is selected from the Tutorial Select Menu, the first screen of the Reserve Tutorial will be displayed on your terminal screen, as shown below.

TUTORIAL ----- DRAWING NUMBER RESERVE SYSTEM ----- TUTORIAL NEXT SELECTION ===> GENERAL INFORMATION - RESERVATION MENU The Reserve System controls and standardizes the assignment of alphanumerical document numbers to Engineering drawings and design documents. This is an attempt to eliminate duplicate and invalid document numbers and control the simultaneous revision of released drawings. The RESERVATION MENU lists four functions that can be selected by entering a selection number (1-4) and pressing <ENTER>: (1) reserve document numbers, (2) reserve revisions to existing documents, (3) select document information to query, modify, or delete (unreserve), and (4) reserve EJNs for special projects. These functions are described in this tutorial under the following topics (topics are presented in sequence, or you may select them by number): System Commands/Codes/Messages 1 5 Query Document Information Reserve Document Numbers 2 6 Modify Document Information 3 Reserve Revisions 7 Unreserve Document Numbers Select Reserved Document/Revision 8 Reserve EJNs for Special Projects TO EXIT TUTORIAL: END SELECT: Type topic number in selection field and TO CONTINUE: <ENTER> press <ENTER>.

The tutorial can be viewed in its entirety by pressing <ENTER> to page through each successive screen. It can also be viewed in segments that describe the procedures to follow for each individual Reserve subsystem screen. Options 1 to 8 listed on the tutorial menu describe the separate functions and screens for the Reserve subsystem. Enter the option you wish to view at the NEXT SELECTION prompt at the top of the screen and press <ENTER>. Options to allow you to move about in the tutorial screens are displayed at the bottom of each screen. When you have completed viewing the tutorial, type END and <ENTER> at the NEXT SELECTION prompt, and you will be returned to the EDIS Primary Option Menu.

The tutorial can also be accessed from any Reserve subsystem screen by typing HELP or H in the COMMAND line and pressing <ENTER>. If accessed by this method, upon typing END and <ENTER> to exit the tutorial, you will be returned to the subsystem screen from which the tutorial was accessed.

Tutorial information for the Query function of EDIS will be provided at a later date.

## APPENDIX A: SOFT MASTER

Soft Master is a computer program that allows a you to view a CADAM drawing on a low-cost graphics terminal without the need for expertise in the use of CADAM. You can perform viewing and query on an actively displayed drawing. Other features such as drawing mark-up and plotting are available in Soft Master but are not active in the EDIS Phase I environment.

The information presented in this appendix is adapted from the manual <u>Soft Master Release 3.0, A</u> <u>Dynamic Viewing, Analysis, and Mark-Up System for the CADAM Database</u> with permission from IGS Corporation.

Soft Master uses the IBM Graphical Data Display Manager (GDDM) software to display the graphics on the terminal screen. To view a drawing, your terminal or terminal emulation software must support GDDM graphics. Because both the ASCII/Series 1 and the IBM 7171 terminal emulators do not support GDDM, users accessing EDIS via the DCA will be unable to perform the Soft Master viewing capabilities.

### A.1 OBTAINING ACCESS TO SOFT MASTER VIEWING

Soft Master can be executed from the EDIS Detailed Document Information Screen, Format Listing Screen, or either of the Abbreviated Document Listing screens by placing a V in the drawing Select field or COMMAND line of the screen and pressing  $\langle ENTER \rangle$ . The model(s) associated with the selected drawing will then be displayed by Soft Master. When more than one model is associated with the drawing, each model will be displayed in a separate color. Instructions for viewing are presented in Sect. A.4. Pressing the  $\langle PF13 \rangle$ ,  $\langle PF13 \rangle$ ,  $\langle PF24 \rangle$  function keys in separate keystrokes will exit the Soft Master program and return you to the EDIS system screen from which the View request was initiated.

### A.2 SOFT MASTER SCREENS

There are two screens used by the Soft Master program: the Command screen and the Graphic screen. You can toggle between these two screens by pressing the <PF9> key.

### A.2.1 Graphic Screen

1.1.1

The Graphic screen is used for the display and selection of CADAM drawing geometry. Using the Window function, you can perform pan, zoom, and full display of an active drawing. Using the Analysis function, you can select geometry, such as a circle, and afterwards be provided specific data about the element, such as coordinate location, diameter, etc.

### A.2.2 Command Screen

The Command Screen shown below depicts the Soft Master menus/commands that are available to you. The listing of CADAM drawings, subgroups, and Soft Master prompts and error messages are also presented on this screen.

DISPLAY	A1E0538860	000A0001	C1E7	00017A00100	111PN
WINDOW (2)	A1E0538860			03051A00100	
ANALYSIS		000E0001		06330A00100	
COLOR	A130549740		••••	10070A00200	
PRIORITY	A1E0549740			10070A003A0	
INPUT	A1E0819250			10080400100	
OUTPUT		00100111PN		10391A00100	
		00000111PN		10391A00300	
FIRST		300000111PN		10391A00400	
OVERLAY	C1E0492900			10391A00500	
ACTIVE		DSK20001		10392400100	
MODE (3)	C1E0492900			1070DA00100	
LOCATE	C1E0492900	SK20003		12030A001A0	
		00000111PN		12030A00200	
	C1E0555680	00080001			
	C1E40383A0	000000111SP		13300A00100	
	C1E40383AC	000000112SP	C1E7	14140A00100	111PN
12209222022222	C1E0555680 C1E40383A0	00080001 0000001115P	C1E7 C1E7	13100A00200 13300A00100	)111 )111

Sections of the screen (1-6) that manage these functions are numbered on the above example and described as follows:

- 1. Section 1 is used for messages and prompts to the user.
- 2. Section 2 is used to display the menu of major functions that are available. The function that is active will appear in red.
- 3. Section 3 is used to display the menu of subfunctions available for the current function.
- 4. Section 4 is used to display major lists of information by the program. Typically found in this portion of the screen is the scroll area for drawing IDs or the output of the Analysis function.
- 5. Section 5 displays a help message informing the user of the available <PF> function keys.
- 6. Section 6 is used for keyboard input to the program. Move the cursor to this part of the screen to type information in response to prompts appearing in Section 1.

### A.3 SOFT MASTER COMMAND KEYS

## A.3.1 <ENTER > Key

The Command screen displays a menu of the available functions, subfunctions, and lists. Any of these may be selected by moving the cursor to that screen location and pressing the <ENTER> key. The current selection will appear in red.

## A.3.2 <PF> Function Keys

Many of the most often used commands can be selected by using the  $\langle PF \rangle$  function keys on the terminal keyboard. When using IRMA emulation software, the  $\langle PF1 \rangle$  through  $\langle PF12 \rangle$  function keys are represented by the  $\langle F1 \rangle$  through  $\langle F12 \rangle$  keys on most keyboards, while  $\langle PF13 \rangle$  through  $\langle PF24 \rangle$  are represented by pressing the  $\langle SHIFT \rangle$  key plus the  $\langle F1 \rangle$  through  $\langle F12 \rangle$  keys, respectively. This is the quickest and easiest method of entering the commands. The function keys and their actions are described below. Instructions for performing basic functions using these keys are given in Sect. A.4. For more information, contact the EDIS support group.

#### Function Key

#### Action

- <PF1> HLP Help. Turns on and off a display of the function key settings on the bottom of the Graphic screen.
- <PF4> MAX Maximum View. Scales the window so that the entire drawing geometry fits exactly on the display screen.
- <PF5> IN Zoom In. Rescales the screen to display the image in greater detail.
- <PF6> OUT Zoom Out. Rescales the screen to display less detail but more of the image.
- <PF7> UP Scroll Up. Scrolls up through the drawing list (on the Command screen) or moves the window upwards on the displayed geometry (on the Graphic screen).
- <PF8> DOWN Scroll Down. Scrolls down through the drawing list (on the Command screen) or moves the window downwards on the displayed geometry (on the Graphic screen).
- <PF9> SWAP Swap Screens. Toggles between the Graphic screen and the Command screen with each depression of the function key.
- <PF10> CUR Cursor. Toggles between the keyboard cursor and mouse cursor.
- <PF11> MSG Message. Displays the next line of a message in the Command Area such as the next line of a multiple line Analysis output.
- <PF12> PFX Alternate Function. Invokes an alternate function for function keys <PF1> through <PF24> when pressed before one of these <PF> keys. The PFX key is active for one depression only.
- <PF13> END End Function. Exits the current function to the next higher command level.

### <u>Action</u>

- <PF14> REL Relative Distance. Calculates the relative distance between the last two geometry selections.
- <PF15> DSP New Display. Clears the current Graphic screen of highlighted elements and other temporary annotation created by functions such as Analysis.
- <PF16> BOX Window Box. Defines a rectangular area on the Graphic screen selected by marking the opposite corners of the rectangle on the geometry and expands the defined rectangle to fill the screen.
- <PF19> LF Scroll Left. Moves the window to the left 3/4 screen on the displayed geometry.
- <PF20> RG Scroll Right. Moves the window to the right 3/4 screen on the displayed geometry.
- <PF23> ERR Error-Tutorial Key. Displays the current tutorial message if it is overlayed by an error message in the command area.
- <PF24> Y/N Yes/No. Provides a general-purpose alternative selection switch that is explicitly called for in a number of commands and subcommands.

### A.3.3 <RESET> Key

Sometimes, after an error in entering commands, the keyboard will lock and X?+, X-f, or X and a picture of a stick man will appear in the lower left corner of the screen. It is necessary to press the <RESET> key to free the keyboard.

#### A.3.4 Terminal Wait Mode

After a command has been entered that requires the central host computer to perform a process that requires a wait, a picture of a clock will appear in the lower left corner of the screen. No action is required; this simply means that the user will have to wait for the results.

## A.4 HOW TO USE SOFT MASTER

#### A.4.1 Swap Between the Command Screen and the Graphic Screen

Press <PF9> to toggle between the Command screen and the Graphic screen at any time.

## A.4.2 View a Drawing or Overlay (Windowing)

After a drawing or overlay has been selected, there are several viewing operations (described below) available from the Graphic screen. The geometry appearing on the screen at any one time is called a window.

1. Max Size -  $\langle PF4 \rangle$ 

When  $\langle PF4 \rangle$  is pressed, the scale of the drawing is adjusted so that all of the geometry will fit on the screen at one time. This operation is useful for selecting parts of the drawing for closer viewing.

2. Window Move (Pan)

This operation allows you to reposition the Graphic window without changing the scale of the data. One way to do this is to position the cursor over a point on the drawing to be centered on the screen as follows:

a. Press <PF12> and <PF15> one after the other.

b. Move the cursor to the geometry that is to appear at the center of the screen.

c. Press <ENTER>.

The Graphic window can also be repositioned by using the Up Move (<PF7>), Down Move (<PF8>), Left Move (<PF19>), and Right Move (<PF20>) commands. These commands move the Graphic window 3/4 screen width in the direction specified.

3. Window Size (Zoom)

These operations allow you to cause the size of the geometry on the screen to appear larger or smaller. Use either method a or method b.

a. Method a.

- i. Press <PF12> and <PF16> one after the other.
- ii. Position the cursor. To make the geometry appear smaller, place the cursor in the upper half of the screen. To make the geometry appear larger, place the cursor in the lower half of the screen.
- iii. Press <ENTER>.

- b. Method b.
  - i. Press < PF5> to make the image double the displayed size or < PF6> to make the image half the displayed size.
  - ii. Press <ENTER>.

The <PF4> key quickly sizes the graphic window to display all of the current drawings within the screen boundaries.

4. Window Box

This operation allows you to select a portion of the geometry on the screen and have it expanded to the full screen.

a. Press <PF16>.

- b. Move the cursor to one corner of the rectangle to be displayed.
- c. Press <ENTER>.
- d. Move the cursor to the opposite corner of the rectangle.
- e. Press <ENTER>. The box will be enlarged to fill the Graphic window.
- 5. Keep Save the Contents of the Screen

At any time, the window that appears on the screen can be saved for later recall. It is possible to keep as many as ten separate windows.

- a. When it is desired to save the contents of the screen, press <PF9> to return to the Command screen.
- b. Select the function WINDOW if it does not appear in red letters.
- c. Select the subfunction KEEP.

d. The prompt KEY NUMBER TO KEEP CURRENT WINDOW will appear in section 1.

- i. Move the cursor to section 5, under the help line.
- ii. Type a number between 0 and 9.
- iii. Press <ENTER>.
- e. Press <PF9> to return to the Graphic screen for further viewing.

### 6. Restore

This command is used to swap between saved windows.

- a. If the Graphic screen is current, press <PF9> to swap to the Command screen.
- b. Select the function WINDOW, if it does not appear in red letters.
- c. Select the subfunction RESTORE.
- d. Move the cursor to section 6.
- e. Type the number of a previously saved window.
- f. Press <ENTER>.
- g. Press <PF9> to return to the Graphic screen to view the window.
- 7. Relative Analysis

This operation calculates the distance between two geometric elements in the Graphics screen.

a. Press <PF14>.

- b. Move the cursor to the first element to be analyzed.
- c. Press <ENTER>.

d. Move the cursor to the second element.

- e. Press <ENTER>.
- f. Press <PF14>.
- g. View relative analysis in the message area of the Graphic screen or press <PF9> to view the relative analysis information in the list area of the Command screen.
- 8. Exit Soft Master.
  - a. Press  $\langle PF13 \rangle$  to exit the current command level.
  - b. Press <PF13> again to exit the next command level.
  - c. Confirm exit with the Yes/No key, <PF24>.

### A.4.3 <u>Remove a Model from an Overlay</u>

Sometimes it is desirable to remove a model from an overlay that has been accumulated. Perhaps the wrong model was chosen, or the overlay is too busy. The default from EDIS is an overlay of the models associated with the drawing being viewed (when more than one model is associated with the drawing being viewed).

- 1. On the Command screen, select the function DISPLAY and the subfunction ACTIVE.
- 2. The list of models making up the overlay will be shown. Select any models that are to be removed from display.
- 3. Press <PF9> to return to the Graphic screen.

#### A.4.4 Select More Than One Model for Overlay

The various features of a building will occur on separate models. These models will all have the same name in the first 16 characters of the model name, but the last four characters of the name will differ uniquely. For instance, the exterior walls of a building will appear on one of these models, while the interior walls will appear on a different model. It is possible to see all of these features or to select only certain ones for viewing. The composite of all the drawings selected will appear on the Graphic screen, with each separate model shown in a different color.

- 1. On the Command screen, press <PF12> and <PF2> one after the other, and select the first model of the overlay.
- 2. Press <PF12> and <PF2> and select all the remaining models.
- 3. It is possible to use <PF9> at any time to monitor the building of the Graphic screen.

# APPENDIX B: HELP AND ERROR SCREENS

•

LIST OF VALID EDIS CODES

.

.

. .

.

FUNCTION	FUNCTION	SYSTEM ACTION
END	E	End current screen
QUERY	0	Display document information
VIEW	v	Display document
UP	UP	Scrollup
DOWN	DN	Scroll down
EXIY	X	Exit EDIS
HELP	H	Request Help screens
HARDCOPY	HC	Request hard copy
PFKEYS	PF	Display <pf> keys</pf>

A partial list of these codes will be displayed, depending upon the screen from which this help screen is accessed.

PLANT LIST SCREEN

	IONAL) :		
Enter desig	gnator for des	sired plant: _	
DESIGNATOR	PLANT	PLANT DESCRIPTION	
M	NULT	MULTI-PLANT	
ĸ	K-25	OAK RIDGE GASEOUS DIFFUSION PLANT	
X	X-10	OAK RIDGE NATIONAL LABORATORY	
Y	Y-12	Y-12 PLANT	
F	FER	FERNALD	
G	GCEP	GAS CENTRIFUGE ENRICHMENT PLANT	
- <b>O</b>	ORO	OAK RIDGE OPERATIONS	
P	PGDP	PADUCAH GASEOUS DIFFUSION PLANT	
R	PORT	PORTSMOUTH GASEOUS DIFFUSION PLANT	
S	SRS	SAVANNAH RIVER SITE	
U	USAF	US AIR FORCE	
W	WMCO		

A partial list of these codes will be displayed, depending upon the screen from which this help screen is accessed.

## CLASSIFICATION CODE LIST SCREEN

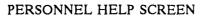
----- CLASSIFICATION CODE LIST ----- ROW 1 OF 5 Scroll: PAGE Command: Enter desired Classification Code Designator: BUSINESS SENSITIVE B C CONFIDENTIAL UNCLASSIFIED CONTROLLED NUCLEAR INFORMATION N. SECRET S U UNCLASSIFIED 

# SELECT BUILDING NUMBER SCREEN

СОММ	AND (OPTION		SELECT BUILDING NUMBER ROW	1 OF 807
			lding by typing X and pressing ENTER mmands to view entire list, if necessary.	
SEL	BUILDING	EJN	BUILDING NAME	
	CRBR-PO	720000	CRBR - PROJECT OFFICE	000
-	K-1000	710000	CONFERENCE ROOM (PORTAL 2)	000
	K-1001	710010	ADMIN BUILDING	000
-	K-1001-A	710010	ADMINISTRATION BUILDING - WING A	000
-	К-1001-В	710010	ADMINISTRATION BUILDING - WING B	000
_	K-1001-C	710010	ADMINISTRATION BUILDING - WING C	000
_	K-1001-D	710010	ADMINISTRATION BUILDING - WING D	000
_	K-1002	710020	CAFETERIA/LIBRARY/OFFICES	000
_	K-1003	710030	DISPENSARY	000
_	K-1003-A	710030	DISPENSARY OFFICE TRAILER	000
-	K-1004-A	710040	LABORATORY FACILITIES	000
-	К-1004-В	710040	LABOKATORY FACILITIES	000
-	K-1004-C	710040	LABORATORY FACILITIES	000
_	K-1004-D	710040	LABORATORY	000
	К-1004-Е	710041	LABORATORY STORAGE BUILDING	000

# SELECT COMPANY CODE SCREEN

mmand:	ROW 1 OF 1
	iate Company by placing X in SELECT and pressing ENTER N commands, if necessary, to view entire list.
AGA	A.G. & ASSOCIATES
ACHW	ADAMS, CRAFT, HERTZ, WALKER (SURVEYING CO.)
ASI	ADVANCED SCIENCES INCORPORATED
ACA	ALERTING COMMUNICATION OF AMERICA
ALLEN	& MARSHALL
AMTA	AMERICAN TECHNICAL ASSOCIATION
APCOT	APPLIED COATING
APT	AUTO. PROGRAM TOOL
AVIS	AVISCO INCORPOR.
BD	B & D EQUIPMENT CO.
BWSC	BARGS, WAGGONER, SUMNER & CANNON
BASIC	BASIC CONSTRUCTION CO.
BAYHT	BAYMONT ENGINEERING
BEC	BECHTEL
BVTH	BLACK AND VEATCH
BLAIN	BLAINE HAYS CONSTRUCTION CO.
BOENG	BOEING ENG,
BOUE	BOEING/URANIUM ENRICHMENT



Enter values by which	appropriate person may be identified:
Search by:	
==> LAST NAME:	
INITIALS:	
or ==> DISCIPLINE:	
or ==> COMPANY:	<b>Vertices</b>
You may further limit	any search by:
PLANT:	

SELECT EMIS ID SCREEN

				SELECT and pressing Enter. ist, if necessary.
			to view entrie t	
SELECT	EMIS ID	NAME		DISCIPLINE
_	AWS	AW	SMITH	YMD
_	BGS01	BG	SMITH	XFT
_	CBS	CB	SMITH	XPJ
_	DES	DE	SMITH	YCP
_	GSS01	GS	SMITH	XIE
_	GSS	GS	SMITH	YMD
_	HGS	HG	SMITH	EE
_	JAS01	JA	SMITH	EE
_	JMS	JM	SMITH	AD
-	JPS	JP	SMITH	YEE
-	JWS02	JW	SMITH	KDE
-	KDS01	KD	SMITH	YPJ
	KES	KE	SMITH	EM
-	KLS	KL	SMITH	KCD
-	MAS01	M	SMITH	XDE
	MAS02	NA	SMITH	EM

# SELECT DOCUMENT TYPE SCREEN

COMMAND :			
Indic	ate the desi	red Document type	
		the SELECT CODE and pressing ENTER	
Use I	JP and DOW	IN commands to view entire list.	
SELECT	TYPE	Description of Document Type	
CODE	CODE		
	DD	Design Drawing	
	JS	Equipment Specification	
6.4F	ES	Engineering Standard	
-	BM	Bill of Materials	· .
-	DS	Equipment Data Sheet	
-	DC	Design Analysis & Calculation	
<b>44</b> -7	MD	Manufacturer/Vendor Data	
-	RP	Report with Report Number Prefix "EN"	
	CH	Design Change Notice	
	SA	Safety Related Document	
	QA	Quality Related Document	
<b>-</b> ,	TI	Test or Inspection Data	
	στ	Other Document (none of the above)	

A partial list of these codes will be displayed for the Reserve system screens.

# SELECT DISCIPLINE CODE

	cate the	e Desired Discipline by placing X in SELECT and pressing ENTER
Use I	JP and I	DOWN command, if necessary, to view entire list.
	AS	APPLICATIONS SUPPORT
	CV	CIVIL ENGINEERING
	ST	ARCHITECTURAL, STRUCTURAL, EXPERIMENTAL
	CM	CHEMICAL PROCESS DESIGN
-	CT	CHEMICAL TECHNOLOGY DIVISION
	EA	
	EC	
	EE	
	EM	ENGINEERING MECHANICS
	10	INSTRUMENTATION AND CONTROL DIVISION ORNL
	KCD	COMPUTER AIDED DESIGN
-	KDE	MECHANICAL DESIGN, EQUIPMENT
~	KIE	INSTRUMENT ENGINEERING
	MS	MECHANICAL TECHNOLOGY ENGINEERING
-	PD	PRODUCTION CHEMICAL AND ENRICHMENT PROCESS ENGINEERING
	RP	PLANNING AND CONTROL
	XAT	APPLIED TECHNOLOGY ENGINEERING
~	XCD	COMPUTER AIDED DESIGN

## SELECT FUNCTION CODE

SELECT FUNCTION CODE ------- ROW 1 OF 31 Command (Optional): Select desired Code by typing X and pressing ENTER. SELECT Valid function codes for Discipline ST ARCHITECTURE A -S STRUCTURAL -EXPERIMENTAL X .....

A unique list of codes exists for each discipline. A particular list will be displayed, depending upon the discipline previously selected. This example is for discipline ST.

# SELECT ENGINEERING DISCIPLINE

Enter code (Block 4	for the desired Engineering 8)	Discipline: _	Maria da Cara
CODE	ENGINEERING DISCIPLINE		
C	Civil, Structural, and Arc	hitectural	· · ·
E	Electrical		e de la composition d Reference de la composition de la compos
2	Computer applications	а. 	
M	Instrumentation Mechanical		1.5
P	Engineering Nechanics		
H	Environmental Control		
J	Support Engineering		
F	Machine Design		
•			

## SELECT NATURE OF WORK

----- NATURE OF WORK LIST -----Command: Enter code for the desired Nature of Work: \_ (Block 49) CODE NATURE OF WORK K ---- Miscellaneous alarm system Radiation alarm system A ----L ---- Lighting B ----Communication M ---- Mechanical apparatus C ----- Control D ----- Switchyard N ---- Cathodic protection P ---- Power. E ---- Switch house F ----- Fire alarm system R ---- Receptacle S ---- Supervisory control G ----- Grounding H ----- Heaters (resistance) U ---- Underground J ---- Induction Coil X ---- X-ray and source system 1

A partial list of these codes will be displayed, depending upon the Engineering Discipline previously selected (Block 48).

-1

# SELECT NATURE OF WORK SUBSET

	50)	
CODE	NATURE OF WORK SUBSET	
A	One line diagram	L Layout
B	Bus bar	N Printed circuit board
°C	Conduit	O Outside distribution
D	Demolition	P Photometal
E	Elementary	Raceway (includes bus duct)
F	Fence and street	S Schedule
G	Schematic	T Equipment
H	Wiring	W Cable through
1	Interconnection wiring	X Miscellaneous
ل '	Program	Z Pictorial
К	Details	

A partial list of these codes will be displayed, depending upon the Engineering Discipline previously selected (Block 48).

## TITLE CLASSIFICATION VERIFICATION

```
----- Title Classification Verification -----
COMMAND (OPTIONAL):
***************
****
                                                  بله بله بله بله بله بله
*****
                                                  ****
*****
    Title should have been declared UNCLASSIFIED by an Authorized *****
****
    Derivative Classifier (ADC).
                                                  *****
*****
                                                  ****
****
    Do not enter Program number, Process Number, Part Drawing
                                                  *****
*****
                                                  ****
****
    Number, or anything classified in the title of this Drawing.
                                                  *****
****
                                                  ****
*****
    Correct Title if necessary and press ENTER to continue.
                                                  *****
****
                                                  ****
****
    Enter END to cancel the drawing reservation or modification.
                                                  ****
****
                                                  *****
*****
                                                  ****
    Title:
    *****
****
                                                  ****
****
                                                  ****
*****
     **********************
                                                 بله بله بله بله بله بله
     ****
```

# UNRESERVE FAILURES

Unable to UNRESERVE the following documents because a higher level revision still exists for the marked document number and revision DOCUMENT NUMBER REVISION XXXXXXXXXXXXX XX XX XXXXXXXXXXXXX XX XX			
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	DOCUMENT NUMBER	REVISION	
	*****	XX	
		н 	

-

## **REVISION PROBLEM**

*****	*****	*****	*****
****	*****	*****	*****
****			****
****			****
****	Unable to assign a Revision	for XXXXXXXXXXXXXXX	****
****	김 승규는 이 것이 같이 많이 있는 것이 같아.		****
****	Insufficient information in	ISD Database to build new revision.	****
****			*****
****	Please contact ISD for help	concerning this problem	*****
****		- ,	*****
****		Error Code:	****
****			****
****	For more information please	contact:	*****
****	Karen Shaw	574 - 7869	****
****	Montgomery Lokey	574-3590	****
r de de de de de de	*****	*****	*****

NOTE: This error message is presented due to the fact that the last alphabetic revision code is unavailable on the system and the assignment of a new revision is not possible. When this error screen appears, obtain the next revision from the face of the drawing and contact either of the individuals listed on the screen. UNRESERVE OR MODIFY FAILURES

					ose operations.	
			RESP	RESP	RESERVER	
OPERATION	DOCUMENT NUMBER	REV	DISC	EMIS ID	EMIS ID	
U	****	XX	XXXXX	XXXXX	XXXXX	
M	*****	XX	XXXXX	XXXXX	XXXXX	

B-16

# DATABASE ERROR

		و الله الله الله الله عليه الله الله الله الله عليه الله الله الله الله الله الله الله ا
**************	***************************************	***********************
**************		******************
****	***********	****
****		****
**** An unrecov	erable Database Management System error	has *****
****		****
**** occurred.	making it impossible for this program t	o continue. *****
****		****
**** Please rep	ort the condition immediately:	****
****		****
**** 574-7869	Error Code: XXXXXX	
**** 574-3590		****
in de jur de		****
****		****
***		****
******	******	*****
*************	*********************************	*******

## DATABASE ERROR

----- Database Error COMMAND (OPTIONAL) ===> \*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\* \*\*\*\*\*\* \*\*\*\* \*\*\*\*\* \*\*\*\* \*\*\*\* \*\*\*\* \*\*\*\*\* \*\*\*\*\* Inability to assign an Engineering Job Number. \*\*\*\*\* \*\*\*\* \*\*\*\* \*\*\*\*\* Available range of numbers has been exhausted. \*\*\*\*\* \*\*\*\* \*\*\*\*\* \*\*\*\*\* Please report the condition immediately: \*\*\*\* \*\*\*\* \*\*\*\* \*\*\*\* 574-7869 \*\*\*\*\* \*\*\*\* 574-3590 \*\*\*\* \*\*\*\*\* \*\*\*\*\* \*\*\*\* \*\*\*\* \*\*\*\*\* \*\*\*\*\* \*\*\*\*\* \*\*\*\* \*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*

# APPENDIX C: EDIS DATA DICTIONARY

4

Data Element	Description
Access Date	The date on which the document image was last accessed.
Anticipated Release Date	The date on which the reserved document is expected to be released. (Abbreviated as Antic. Release Date.)
Block 1	A code representing the category of the work contained in the document.
Block 48	A code that identifies the Engineering discipline to which the document (design drawing) belongs.
Block 49	A code that identifies the nature of the work contained in the document (applies to design drawing).
Block 50	A code that signifies a subset of the nature of work being performed.
Building	A code uniquely identifying the building with which the document is associated. (Abbreviated as Bldg.)
Call	A code indicating whether ISD should phone the hardcopy recipient upon completion request.
Change Date	The date on which the document index was last modified.
Change Control Number	The identifying number of the project change order for which the revision is made.
Classification	A code indicating the classification of the document. (Abbreviated as Class.)
Classification Date	The date on which the document's classification was approved. (Abbreviated as Class. Date.)
Classifier ID	The EMIS ID of the person who approves the classification of the document. (Abbreviated as Class. ID.)
Company	A code indicating the company responsible for the creation of the document.
Company Description	The description associated with the company code.
Configuration Control Number	A number that identifies the configuration control plan under which changes to the document are made.
Cost Center	A number associated with an Engineering Cost Center for which hard copies of documents may be charged.

Data Element	Description
Design Date	The date on which the document was designed. Applies to design drawings only.
Designer	The name of the designer of the original document.
Disposition	A code that indicated whether the hardcopy output is to be delivered via plant mail or picked up by the requester.
Document Type	A code that identifies a category of documents to which the document belongs. (Abbreviated as Doc. Type.)
Document Title	A title that describes the document. (Abbreviated as Doc. Title.)
Document Number	A number that uniquely identifies all documents referenced in the EDIS index. (Abbreviated as Doc. No.)
Draft Date	The date on which the document was drafted.
Draftsman	The name of the original drafter of the document.
Drawing Size	A code describing the size of the document (applies to drawings only).
EJN	Engineering Job Number. An identifying number associated with buildings and special project activities.
ESO	The Engineering Service Order to which specific revision work done on the document is charged.
Floor	A code describing the building floor to which the drawing or document refers.
Format Code	A code indicating the format of the document: CADAM - CADAM Electronic Format; ANVIL - Anvil Electronic Format; FILM - Aperture Card or Microfilm; MAN - Hard Copy or Manually Generated; UNCAD - Unspecified CAD Generated; OTHER - Unspecified.
Function Code	A code, as specified in EP-C-03, "Drawing Numbering", indicating drawing type.
Index Date	The date on which the document was entered into the EDIS Index.
Initial Store Date	The date on which an electronic copy of the document was first stored in the EDIS repository. (Abbreviated as Initial Store.)
Issue Date	The date on which the document was issued.

Data Element	Description
Last Store Date	The date on which an electronic copy of the document was last stored in the EDIS Repository. (Abbreviated as Last Store.)
Number of Sheets	Indicates the total number of sheets that comprise a drawing.
Number of Models	The number of models associated with a CADAM drawing.
Originator ID	The EMIS ID of the originator of the document. (Abbreviated as Orig. ID.)
Original Format	A code indicating the format in which the document was originally created. (See format code.) (Abbreviated as Orig. Format.)
Originator Discipline	The EMIS discipline code associated with the EMIS ID of the originator of the document. (Abbreviated as Orig. Disc.)
Originator's Company	A code identifying the originator's company. (See company.)
Plant	A code indicating the plant to which the drawing pertains.
Project Number	The EMIS project number with which the document is associated. (Abbreviated as Proj. No.)
Quantity	The number of copies requested by the user requesting the hardcopy function.
Reserve Date	The date the document number was reserved in EDIS. This is automatically generated at reserve time. (Abbreviated as Resv. Date.)
Reserver ID	The EMIS ID of the person who reserved the document. (Abbreviated as Resv. ID.)
Responsible ID	The individual (normally the Eng. RED) responsible for the document. (Abbreviated as Resp. ID.)
Responsible Discipline	The Engineering design discipline responsible for the document. (Abbreviated as Resp. Disc.)
Revision Code	A code that indicates the level of the document revision. Codes for revisions made by Martin Marietta are characters beginning at "A"; for architect/engineers, they are numbers beginning at "1." (Abbreviated as Rev. Code.)
Revision Date	A date that, in some cases, indicates a document's revision. Some text documents (maybe in a CADAM model) do not have revision codes. This field will be blank if an entry is made in the Revision code. (Abbreviated as Rev. Date.)

C-3

Data Element	Description
Send to EFM	A code indicating if a copy of the document is to be sent to the EFM system.
Sequence Letter Title	A descriptive title assigned to a specific special project sequence letter.
Sequence Letter	A letter used in the construction of a document number (refer to Engineering Procedure EP-C-03).
Sequence Number	A sequential number assigned to a document number (refer to Engineering Procedure EP-C-03).
Sheet Number	The number of the sheet of a multiple sheet document. This is defaulted to '001' for all single sheet documents or documents that are not design drawings. (Abbreviated as Sheet.)
Software Version	A code identifying the version of the software that created a particular electronic format of a document.
Special Project Title	Title of a special project.
Status Code	A code indicating the stage of development of the document. (Abbreviated as Status.)
Status Date	The date the sheet revision was stored in its current state of development.
Storage Date	The date that a particular electronic format of a document was stored.
Storage Location	The storage location of a particular format of a document.
Subject Code	A code indicating subject of manufacturing or vendor data (document type MD).
Type of Package	A code indicating the type of design package associated with a specified project.
Vendor Code	A code describing the vendor associated with document types MD (manufacturing or vendor data).
Workorder	An Engineering Workorder number for which changes may be assigned.



DATE FILMED 12/27/90