ON-LINE EDIT

Users Manual

Contract No. DAAK70-80-C-0127
01 August 1983

84 07 12 158
This manual was prepared for the U.S. Army Materiel Development and Readiness Command by:

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Contract No. DAAK70-80-C-0127
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I. INTRODUCTION

The purpose of this manual is to provide a reference guide for field users of the Army's On-Line-Edit system (OLE) for DD Form 1498.

The purpose of the Army OLE system is to provide Army elements a method to input remotely their research and technology work unit summaries. The system provides edit criteria for the input of research and development (AR 70-9), studies and analyses (AR 5-5) or management analytical support services (AR 5-14) to insure that data is inserted into the OLE system in the proper format for subsequent retrieval and use. It is assumed that readers are familiar with AR 70-9, AR 5-5, and AR 5-14, the regulation documents used in preparation of the Army's DD Form 1498.

Only unclassified work units will be entered into the OLE system. Any attempt to enter other than a "U" in the DD Form 1498 Summary Security field (field 5) will result in an error message. Classified data for ARs 70-9, 5-5 or 5-14 will be submitted on the DD Form 1498 to the address designated in AR 70-9.

------------------------
A. Description of the OLE System

On-Line-Edit is a dial-in, time-sharing system which allows concurrent processing by users. The complete unclassified data base of Army DD Forms 1498 will be maintained, with their Army particular data elements, in the OLE system. Changes and additions made through the OLE system are forwarded to Defense Technical Information Center weekly.

The OLE system also provides a training and demonstration facility which is available to all users. This training facility was designed to be used as an in-house training tool. Special passwords and user identification codes have been established. For further information regarding this training facility call HQ DARCOM or the OLE Operations Center.

B. Arrangement of this Manual

Chapter I is an introduction for new users and a description of terms and symbols used in this manual. Chapter II covers Sign-on, Sign-off, and recovery. Chapter III presents an overview of the features available in the OLE system. This includes a description of the commands, processing modes, assistance levels and error handling. Chapter IV includes a detailed description of how to use each processing mode. Chapter V on Edit Rules contains the edit criteria for every field in the DD Form 1498 as well as useful tables of codes.
The appendices include a command summary, error messages, and sample sessions.

C. Special Symbols and Terms

There are several special symbols and terms which are used throughout this manual. These special symbols and terms are described in the following paragraphs.

**Bold type.**

Bold type represents information displayed on the user's terminal by the OLE system. User entries are represented in regular type.

**Carriage return, <CR>.**

The symbol <CR> represents a carriage return. The carriage return key is usually marked by CR or RETURN on a terminal. When a carriage return key is pressed, it signifies that the current input line is complete. After each input line is entered on the terminal, the user press the carriage return key. The only exception to this rule occurs while entering narrative text within the TEXT mode.

**Field, subfield, and line.**

The DD Form 1498 is primarily divided into 26 fields which are referred to by field numbers. Some fields are further divided into subfields which are referred to by
field numbers and subfield letters. Some subfields are further divided into lines which are referred to by field numbers, subfield letters and line numbers.

Session.

The term 'session' indicates the time period beginning when the user signs-on to the OLE system and ending when the user signs-off the OLE system.

Square brackets, []

Square brackets indicate that the information between them is optional. The brackets themselves are never entered. For example, the MODE portion of the END command is optional because the format is described as:

//END[MODE]//

The system prompt character, >.

The OLE system prompts for all inputs except the sign-on line and narratives in TEXT mode. The system prompt character, which resembles the greater-than sign (>), appears at the beginnings of each new line. You must wait for the system prompt before entering anything except where noted. Anything entered after the carriage return and before the prompt is ignored by the system.

Symbols in lower case type.

All terminal inputs and outputs are printed in CAPITAL
LETTERS. To represent information which is variable, lower case letters are used. For example:

DATE: mm/dd/yy

Work unit.

The term 'work unit' indicates a DD Form 1498.
D. OLE Operations

The OLE system is controlled and monitored by a terminal located at OLE operations. (See Appendix D for the address and telephone number of OLE operations.) At least one staff member will be available during the normal operating hours of the OLE system. If you have problems or questions call OLE operations for assistance.

The OLE system is scheduled for operation between 0900 and 1830 hours on Monday and between 0700 and 1830 hours Tuesday through Friday, except for periods of scheduled maintenance and related functions.

E. Procedure for Becoming an OLE User

1. Complete a USER INFORMATION sheet in accordance with the format shown in Figure 1.

2. Submit the required information to OLE operations and they will issue you an OLE log-in user ID and password. (To hasten the procedure, telephone the information to OLE operations, and follow it with a written confirmation.)

3. Read the following section on terminal specifications before attempting a log-in to the OLE system.
F. Terminal Specifications

There are many different terminals which can be used on the OLE system. However, there are certain requirements which must be met. These terminal requirements are listed in Table 1, and Table 2 contains just a few examples of terminals which can be used. Coupler/modems must be used with the terminals to establish dial-in communications with the computer. In some cases the modem is contained within the terminal. A list of coupler/modem requirements appear in Table 3. If you are unsure whether your terminal and coupler/modem meet these requirements call OLE operations for assistance or your local data processing installation where available.

The OLE system is line oriented and not screen oriented. Local editing functions available on many full screen terminals do not apply to a line oriented system. A line is eighty characters or less followed by a carriage return. Be aware that some terminals automatically generate a carriage return after the eightieth character. Those terminals that create their own carriage return following the eightieth character will not allow the user to input the text portion.
TO BE COMPLETED BY USER

DATE:

ORGANIZATION
NAME:
OFFICE SYMBOL:

ADDRESS:

TELEPHONE NO. - COMMERCIAL:
AUTOVON:

NAME OF RESPONSIBLE PERSON OR PERSONS:

TYPE OF TERMINAL(S) TO BE USED:

TO BE COMPLETED BY OLE OPERATIONS

OLE USER ID:

OLE PASSWORD:

RENEWAL DATE:

------------------------------------------------------

FIGURE 1. USER INFORMATION FORMAT
### TABLE 1. TERMINAL SELECTION REQUIREMENTS

- Asynchronous transmission technique
- TTY-33 compatible
- ASCII code
- 300 or 1200 baud transmission speed
- EIA RS232C interface
- Even parity
- 10 or 11 bit unit code (1 or 2 stop bits, 1 start bit)
- Dial-out (switched line) capability
- Keyboard printer or cathode ray tube (CRT) acceptable
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<td>YES</td>
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<td>CRT</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
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<td>CRT</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
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<tr>
<td>DIABLO 1640</td>
<td>PRINTER</td>
<td>NO</td>
<td>N/A</td>
<td>NO</td>
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<td>OPTIONAL</td>
<td>N/A</td>
<td>NO</td>
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<td>NO</td>
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<tr>
<td>LIER-SIEGLER ADM-3A</td>
<td>CRT</td>
<td>NO</td>
<td>NO</td>
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<td>PERKIN-ELMER 1100</td>
<td>CRT</td>
<td>NO</td>
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<td>N/A</td>
<td>NO</td>
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<tr>
<td>TEXAS INSTR 745</td>
<td>PRINTER</td>
<td>COUPLER</td>
<td>N/A</td>
<td>YES</td>
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<tr>
<td>XEROX 1700</td>
<td>PRINTER</td>
<td>OPTIONAL COUPLER</td>
<td>N/A</td>
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TABLE 3. COUPLER/MODEM SELECTION REQUIREMENTS

ASYNCHRONOUS TRANSMISSION
ORIGINATE (DIAL-OUT) CALLING MODE
LOW SPEED (300 BAUD): BELL SYSTEM
   103 SERIES COMPATIBLE
HIGH SPEED (1200 BAUD): BELL SYSTEM
   212A SERIES COMPATIBLE
II. SIGN-ON/SIGN-OFF THE OLE SYSTEM

This section describes the procedures for signing-on and signing-off the OLE system. If you do not have an OLE user ID and password, refer to Chapter I, Section E. During the sign-on or sign-off procedure, if you have problems call OLE operations for assistance.

A. Sign-on Procedure

1. Turn on power for the terminal. If modem is separate from the terminal, turn on power for the modem.

2. Dial up the OLE computer system. The number was provided with your password and OLE user ID.

If the number is busy, all of the ports are in use. If there is no answer, the computer is down. In either case try again later or call OLE operations for a prognosis.

3. Listen for the high pitched tone. If an acoustical coupler is used, insert the telephone receiver into the coupler. Within a few seconds, the ready light on the terminal goes on. If the modem is separate from the terminal, the ready light on the modem goes on. If a non-coupled data set (EIA connection) is used, press the "DATA" button on the data set's telephone handset and the "DATA" light lights.
Communication has now been established with the computer.

4. Enter the Telenet sign-on sequence:

   A. Type carriage return, semi-colon, carriage return.

   Format: <CR>;<CR>

   B. Telenet will respond with a network herald followed by your terminal port address and prompt you to identify your terminal model (see page 6 of pamphlet, 'How to Use Telenet', from GTE Telenet). Enter the two character ID for your terminal after the "TERMINAL=" prompt.

   Format: tt

   Where:

   tt represents the terminal model from the GTE Telenet pamphlet. If the pamphlet is not available and you do not know your terminal code, enter a carriage return only.

   C. In response to the Telenet prompt character @, type C for "CONNECT", skip a space and type the network address of the OLE computer.

   Format: C 81636

5. In response to the OLE prompt character >, enter the
OLE sign-on sequence followed by a carriage return in the format as shown:

Format:  **SIGN uuuuuu,pppp <SPACE> <CR>**

Where:

uuuuuu  Represents the six character OLE user ID assigned by OLE operations.

pppp    Represents the password assigned to the user by OLE operations.

6. If your OLE user ID and password are correct, the computer will respond:

**DCC001 - REQUEST COMPLETE**

If you do not receive this response, re-enter the sign-on command. If this also fails, hang up the telephone and go back to Step 2.

7. Enter a carriage return and the initial OLE system prompt will appear.

B. Sign-off Procedure

After you have finished your session, you may exit the OLE system with the following procedure.

1. Exit the OLE system by entering:

    >//QUIT// <CR>
2. The OLE system responds with:

```
date,time

NO. OF SUMMARIES ADDED: x
NO. OF SUMMARIES CHANGED: y
NO. OF SUMMARIES THAT CONTAINED ERRORS: z
```

where:  date is the current date
time is the current time

3. To sign-off enter:

```
>**OFF <CR>
```

The system responds with:

```
DCS007 SIGN-OFF COMPLETE
```

4. To disconnect from Telenet:

A. Type carriage return;@;carriage return.

Format: <CR>@<CR>

B. In response to the @ sign, type D.

Format: D

You will receive a disconnected message.

5. Hang up the telephone. If you will not be using the terminal or modem, turn them off.
C. Recovery Procedure

If for any reason the OLE system is scheduled to go down, you will be informed of what to do by a message. If for any reason an interruption occurs in the middle of processing (for example, the computer crashes, the computer line drops, or the system times-out on the user), you will be able to recover your work automatically. Sign-on to the OLE system as usual and it will know this is a recovery.
III. OLE SYSTEM FEATURES

Several options are available after sign-on. This chapter presents an overview of the various activities a user may perform.

A. Keyboard Functions

The OLE system provides two methods for correcting typing errors. One method requires using the control key which is usually marked CTRL or CNTL and is located just above or beside the shift key on the left side of the keyboard. The control key is similar to the shift key in that it is used simultaneously with another key. (The control key is held down as the other key is pressed.) The second method involves use of the optional BACKSPACE key.

Deleting characters - (CTRL-H function)

To delete a single character, enter CTRL-H (strike H key while holding down control key). One preceding character is deleted each time CTRL-H is entered. The characters which have been deleted still remain displayed on the terminal. The position at which the next character is to be entered will not change, no matter how many CTRL-Hs are entered. It is your responsibility to keep track of how many CTRL-Hs have been entered, since they do not appear on the display, and no backward movement of the input position takes place.
As an example, suppose you enter:

>THIS IS A TEEST <CTRL-H><CTRL-H><CTRL-H> ST <CR>

The first CTRL-H deleted the 'T', the second deleted the 'S', and the third deleted the 'E' so that the OLE system receives 'THIS IS A TEST,' although the terminal displays:

>THIS IS A TEESTST

Deleting characters - (BACKSPACE function)

An optional method for character deletion will be provided for most terminals which have a backspace key on the keyboard (usually marked BACKSPACE or BS). It must be noted that this key is not present on all terminals, and that the ASCII code generated through the use of the backspace key is terminal dependent. Some terminals may generate codes which are not supported by the OLE system, therefore the use of this feature will require individual testing and evaluation on a terminal-by-terminal basis.

The backspace key functions identically to CTRL-H in that one preceding character is deleted each time the backspace key is entered. The cursor (CRT devices) or input pointer (printer devices) will normally move one position to the left each time the backspace key is entered. Although any character at or after the present input position may still appear on your terminal, they have been effectively deleted by the OLE system.
B. Receiving Mailbox Messages

Mailbox messages are a means of exchanging information between you and the OLE operations staff. Messages may be sent only between OLE operations and users. Users cannot correspond with each other. After sign-on, you are notified if there are mailbox messages with the display:

MAILBOX MESSAGES PRESENT. DO YOU WISH TO RECEIVE THEM?

The only correct response is YES or NO. If the answer is YES, the oldest message is displayed with the date and time sent and deleted from the mailbox. If there are additional messages the system prompts:

ADDITIONAL MESSAGES. DO YOU WISH TO RECEIVE THEM?

If the answer is YES, the next oldest message is displayed. This cycle repeats until the most recent message is received or the answer is NO. Messages not received are retained for 30 days.

C. Assistance Levels

When adding or changing a work unit, the OLE system will help step the novice user through the information to be added or modified. As you become more familiar with the OLE system and a work unit, you will need less assistance in completing the form. To accommodate various experience levels, the OLE system provides three levels of assistance for novice,
intermediate, and experienced users and are referred to as assistance levels 1, 2, and 3, respectively. The OLE commands are the same regardless of assistance level.

The primary differences between assistance levels are briefly outlined below:

Assistance level 1 (novice user):

- Novice users are extensively prompted for all inputs including fields, subfields, and lines.
- Edit errors are displayed immediately after an entry.

Assistance level 2 (intermediate user):

- Intermediate users are prompted for inputs and briefly assisted in entering fields, subfields, and lines.
- Edit errors are displayed immediately after an entry.

Assistance level 3 (experienced user):

- Experienced users are briefly prompted for inputs and do not receive assistance for entering fields, subfields, or lines.
- Edit errors are displayed in coded form in accordance with the error table included as Appendix B.

Appendix C contains some sample sessions at each assistance level.
Selecting assistance levels -

After you have entered the OLE system and received any mailbox messages, you are prompted to select an assistance level with:

PLEASE ENTER ASSISTANCE LEVEL:

The only correct response is 1, 2, or 3 for novice, intermediate, or experienced level assistance. The chosen assistance level remains in effect throughout the entire session unless you change it. The assistance level may be changed later using Processing mode 5.
D. System Menu

The system menu is the point at which you can select one of the five processing modes. When a processing mode is ended the OLE system will return to the system menu. The five processing modes are:

Mode 1. Adding a new work unit -
This mode is used to add a new work unit to the OLE data base. An accession number is automatically assigned by the OLE system at the beginning of the addition sequence.

Mode 2. Changing an existing work unit -
This mode is used to make changes to an existing work unit. This includes summary kinds D, H, K, and R. You must supply the accession number of the work unit to be edited.

Mode 3. Browsing OLE files -
In this processing mode, you may scan the contents of three on-line files which are:

Corporate Author
Alert Report
Error Report

Refer to Chapter IV, Section C for a detailed
explanation on how to scan these files.

Mode 4. Sending a mailbox message to OLE operations -

This processing mode is used to send a mailbox message to the control terminal at OLE operations. (Refer to the Mailbox Messages section of Chapter IV for details.)

Mode 5. Changing assistance levels -

This mode is used to change the current assistance level. (See the Assistance Level section of Chapter IV for details.)

Selecting a processing mode -

Each assistance level prompts differently for you to select a processing mode. They are:

for assistance level 3:

PLEASE SELECT A PROCESSING MODE:

for assistance level 2:

PLEASE SELECT A PROCESSING MODE (1, 2, 3, 4, OR 5):

for assistance level 1:

PLEASE SELECT A PROCESSING MODE
ENTER 1 FOR ADDING A WORK UNIT
ENTER 2 FOR CHANGING A WORK UNIT
ENTER 3 FOR BROWSING FILES
ENTER 4 FOR SENDING A MAILBOX MESSAGE
ENTER 5 FOR CHANGING ASSISTANCE LEVEL:

Regardless of assistance level the user should enter a 1, 2, 3, 4 or 5. Once a processing mode is selected, the transaction must be completed before another processing mode can be selected.
E. Commands

This section describes the commands available in the OLE system. Some commands are unique to a specific processing mode, while others can be used in several or all modes. Appendix A is a summary of commands and their formats.

Command structure -

The structure of the OLE system governs when commands are recognized and is diagrammed in Figure 2. Each command is assigned to an indentation level. A command is valid at the assigned level or any deeper level. For example, the HELP command is recognized at all times during a session. The END command is recognized only within the processing modes.
SIGN-ON TO OLE
HELP COMMAND
SHOW COMMAND
QUIT COMMAND
SELECT PROCESSING MODE
END COMMAND
ERROR COMMAND
STOP COMMAND
PROCESSING MODE 1 & 2
FIELD COMMANDS
TEXT OPTION
EDIT OPTION
DEL COMMAND
INS COMMAND
REP COMMAND
LIS COMMAND
END EDIT OPTION
END PROCESSING MODE 1 & 2
PROCESSING MODE 3
PROCESSING MODE 4
PROCESSING MODE 5
END PROCESSING MODES
SIGN-OFF OLE

FIGURE 2. OLE COMMAND STRUCTURE OVERVIEW
Command format -

The format for all commands is:

//command[/data]//

The double slashes at the beginning and end identify this input as an OLE command. The data following the command is optional, but if included, must be separated from the command by a single slash. Blanks in the optional data portion are considered part of the data.

All users may enter multiple commands on a single line with the format:

//command1[/data1]//command2[/data2]//etc.

The commands which are valid at all times during a session are:

//HELP// This command displays as much information as possible to help you. The information it displays depends on when it is used.

//SHOW[/accession number/field 1/field 2/etc...]///

This command displays an entire or selected portions of a work unit. The accession number is optional only in processing modes 1 and 2, and in those modes shows the work unit on which you are working. If viewing of the entire work unit is not desired, enter the selected fields separated by a slash following
the accession number (processing modes other than 1 or 2) or the command (processing modes 1 or 2).

//QUIT//

This command ends the current processing mode, saves any work unit added or changed, and exits the OLE system.

//0//

This command displays the work unit category. The work unit category is defined as either AR - Army R&D Effort, AS - Army Study, NR - R&D Effort-Non Army or MA - Management Analysis. For further explanation, see page 44.

Some commands are only recognized within a processing mode. They are:

//END(/MODE)//

This command ends processing within the current mode and saves any work unit being added or changed. When used with the optional MODE operand, control returns to the menu. Otherwise the current mode is automatically re-entered.

//ERROR/error code//

This command displays the corresponding error message for the error code. See the section on Errors and Appendix B for more details.

//STOP//

This command aborts the current processing mode. It is similar to the //END/MODE//
command except that it does not save the work unit.

The Field command is used only within processing modes 1 and 2 (adding and changing work units). The format is:

//n[s][l][d][e]a[/data]//

where:

n is the field number
s is the subfield letter
l is the line number

The subfield letter and line number are not always required. If a line number is included, then the subfield letter is required.

Some examples and their definitions are:

18A1 field 18, subfield A, line 1 (i.e., resources estimate, preceding fiscal year).

18A field 18, subfield A, all lines (i.e., resources estimate, preceding fiscal year, professional man years, and funds).

18 field 18, all subfield and lines (i.e., resources estimate, professional man years and funds for preceding and current fiscal years).

Displaying information -

The Field command is used to add, change, or display
information on a work unit. To display information from the work unit, omit the optional data portion. The format for this is:

//n[s][l]//

Changing information -

To add or change information, include the optional data portion of the command. The format is:

//n[s][l]|data//

The data portion contains the new data to be inserted. If the field, subfield, or line referred to in the command already contains data, it is replaced by the new data.

Examples:

//8A// displays the current contents of field 8 subfield A (i.e., distribution instructions).

//2/810403// changes the contents of field 2 (i.e., date of summary) to 810403.

//12C// fills field 12C (3rd sci-tech code) with blanks.

Narrative fields -

Fields 23 through 26 contain multiple lines of text and are edited differently. To add or change an entire narrative field the format of the Field command is:
While entering text the system prompt is disabled. You should not enter a carriage return until all lines of text have been entered. Your terminal will automatically move to the start of a new line as required. The OLE system stores the text in 80 character lines for subsequent display or update. It is important to remember that a carriage return must not be keyed in until all data has been entered. When all text has been entered, press the carriage return and the system prompt is restored.

All efforts have a maximum combined length of fields 23 through 25 of 7920 characters (2640 characters per field). The maximum length of field 26 is 3600 characters.

Example:

//TEXT/24// adds or replaces the contents of field 24 with the text entered. Assume a line length of 80 characters. The following might be entered.

>THIS IS LINE 1 OF TEXT. JUST KEEP ON TYPING AND THE SECOND LINE IS GENERATED BY THE TERMINAL. THIS IS THE LAST LINE. <CR>

After the entry, field 24 contains:

THIS IS LINE 1 OF TEXT. JUST KEEP ON TYPING AND THE SECOND LINE IS GENERATED BY THE TERMINAL. THIS IS THE LAST LINE.
To change an existing narrative field, the format of the Field command is:

//EDIT/n//

This command enters the edit mode until the next '///' command is received. To change existing lines of narrative individual lines within the field are referenced by line number. The following command subset is made available within EDIT mode:

-LIS [line1[,line2]] This command displays one or more lines of text preceded by its line number. The basic command with no operand will display the entire field. The optional line1, line2 operand displays a particular line or a range of lines.

-DEL line1[,line2] This command deletes the line or range of lines specified. The remaining lines of text are automatically resequenced. Therefore, care should be taken to insure the use of current line numbers on subsequent commands.

-REP line1[,line2] This command replaces the specified line or range of lines with new text. The system follows with a prompt and allows entry of a new line; a line consisting of 80 spaces. Although the first line is 80 spaces long, the prompt takes the
first space leaving 79 spaces for text. (The eightieth space falls on the line immediately below the prompt. After the eightieth space the user must enter carriage return and wait for the system to prompt again. Lines of text are resequenced; therefore, care should be taken to -LIS- (list) again to insure the user of current line numbers on subsequent commands.

**-INS line**

This command inserts the specified line or range of lines with new text. The system follows with a prompt and allows entry of a new line: a line consisting of 80 spaces. Although the first line is 80 spaces long, the prompt takes the first space leaving 79 spaces for text. (The eightieth space falls on the line immediately below the prompt.) After the eightieth space the user must enter carriage return and wait for the system to prompt again. Lines of text are resequenced; therefore care should be taken to -LIS (list) again to insure the use of current line numbers on subsequent commands.

Examples of the EDIT commands are shown below:
places the user in EDIT mode and specifies field 24 as the current field. A typical edit session might look like this:

```
> //EDIT/24//
> -LIS <CR>
  1 THE QUICK BROWN FOX
  2 JUMPED OVER THE LAZY DOG AND
  3 RAN DOWN TO THE CREEK
> -DEL 2 <CR>
> -LIS <CR>
  1 THE QUICK BROWN FOX
  2 RAN DOWN TO THE CREEK
> -INS 2 <CR>
> AND FELL ASLEEP <CR>
> -LIS <CR>
  1 THE QUICK BROWN FOX
  2 RAN DOWN TO THE CREEK
  3 AND FELL ASLEEP
> -REP 1,2 <CR>
> THE LAZY DOG JUMPED
> OVER THE QUICK BROWN FOX
> -LIS <CR>
  1 THE LAZY DOG JUMPED
  2 OVER THE QUICK BROWN FOX
  3 AND FELL ASLEEP
> ```
F. Errors

The OLE system is designed to be as helpful as possible in error conditions. Errors are classified in three categories: SYNTAX, INVALID RESPONSE, and EDIT.

Syntax errors -

A syntax error is any deviation from the OLE command format. Typical errors from this category are: misspelled commands, missing or extra delimiters, or a series of commands and data that are out of sequence. For syntax errors the OLE system displays an error message immediately, and a character position in the line. For example, consider the following input while in Processing mode 2 (changing a work unit):

```>
//BA/810407// <CR>
```

The OLE system responds with the error message:

UNRECOGNIZABLE COMMAND, CHARACTER POSITION 3.

Another example of a syntax error is:

```>
//133/8212// <CR>
```

And the error message is:

INCORRECT FIELD REFERENCED, CHARACTER POSITION 5.

Another example is:

```>
//13/8212/ <CR>
```
which causes the following syntax error message:

MISSING OR EXTRA DELIMITER, CHARACTER POSITION 11.

To correct a syntax error, you must reenter the command.

If you enter several commands on one line, the commands prior to the syntax error are accepted. However, the commands which follow the syntax error must be reentered. For example, if you type the following command in processing mode 2:

>2/810407//D14/8206//TEXT/25// <CR>

The OLE system responds with:

UNRECOGNIZABLE COMMAND, CHARACTER POSITION 13.

The first command is accepted, so enter:

>14/8206//TEXT/25// <CR>

Invalid response errors -

This type of error results from an invalid response to an option prompt. For example, if the OLE system displays the following line:

PLEASE ENTER A PROCESSING MODE:

and you enter:

>OK <CR>

the OLE system responds with:
INVALID RESPONSE.

PLEASE ENTER A PROCESSING MODE:

The system repeats the prompt until it receives a valid response. If you don't know the correct answer try the HELP command.

Edit errors -

Most of the errors you encounter will be edit errors. These result from entering data into the work unit which does not meet the editing criteria or conflicts with other data in the work unit. Entering alphabatics into a numeric field is a typical example. The editing criteria for each field, subfield, and line are expanded in the chapter on Edit Rules. Appendix B contains a complete list of all error messages and error codes.

When the OLE system prompts you to enter a data item, you will get three chances to enter it correctly. After three attempts the OLE system will proceed to prompt for the next item to be entered.

When you finish processing on a work unit the system will display a summary of the errors in the work unit. In assistance levels 1 or 2 you receive a list of error messages, but level 3 lists only error codes. You can use the ERROR command to display the error message for a specific error code.

If the errors in a work unit are not corrected, the summary
of errors becomes part of your Error Report, and the work unit will not be incorporated into the data base at DTIC. To scan the Error Report call for processing mode 3 and then select the Error Report subfile for review.
IV. HOW TO USE THE OLE SYSTEM

The previous chapter describes the system features available, and this chapter shows you how to use each of the processing modes in detail. Modes 1 and 2 are similar because the commands are the same. The differences among assistance levels are included in each section.

A. Processing Mode 1 (Add a New Work Unit)

When you select processing mode 1 to add a new work unit, the OLE system automatically assigns the work unit an accession number. Be sure to make a note of this number for later reference. If you abort mode 1 with the STOP command, any data entered is lost and the accession number is de-assigned.

If you end processing mode 1 with the END, QUIT or END/MODE command, the work unit is saved even if you entered only part of it. Once a work unit has been saved you cannot delete it from the data base, you can only change it.

When you select processing mode 1 the OLE system will display:

ADDING A WORK UNIT.
THE NEW WORK UNIT'S ACCESSION NUMBER IS: DAnnnnnn

where DAnnnnnn indicates a valid accession number supplied by the OLE system. At this point it is a good idea to record that number.
Next, you are asked to categorize the work unit as an R&D effort or a study, and as ARMY or NON-ARMY.

PLEASE SELECT ONE OF THE FOLLOWING CATEGORIES.
ENTER AR FOR ARMY R&D EFFORT (AR 70-9).
ENTER AS FOR ARMY STUDY (AR 5-5).
ENTER NR FOR R&D EFFORT - NON ARMY (AR 70-9).
ENTER MA FOR MANAGEMENT ANALYSIS (AR 5-14).
THE DEFAULT IS AR FOR ARMY R&D EFFORT.
(Default means to hit a carriage return instead of data keys and then a carriage return.)

The category you select does not appear in the work unit, but it affects the editing criteria for certain fields. Editing criteria differs as follows:

<table>
<thead>
<tr>
<th>FIELD NUMBERS</th>
<th>10A2</th>
<th>10C</th>
<th>15A</th>
<th>21A</th>
<th>21B</th>
<th>26</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR-Army R&amp;D Effort AR 70-9</td>
<td>3-digit proj # required</td>
<td>required</td>
<td>DA required</td>
<td>required</td>
<td>not allowed</td>
<td>not allowed</td>
</tr>
<tr>
<td>AS-Army Study AR 5-5</td>
<td>no edit</td>
<td>not required</td>
<td>DA required</td>
<td>not allowed</td>
<td>required for H or K work units</td>
<td></td>
</tr>
<tr>
<td>NR-R&amp;D Effort-Non Army AR 70-9</td>
<td>no edit</td>
<td>not required</td>
<td>DA not required</td>
<td>required</td>
<td>not allowed</td>
<td>not allowed</td>
</tr>
<tr>
<td>MA-Management Analysis AR 5-14</td>
<td>no edit</td>
<td>not required</td>
<td>DA not required</td>
<td>not allowed</td>
<td>not allowed</td>
<td>not allowed</td>
</tr>
</tbody>
</table>

If you are in assistance level 1 or 2 the system will prompt you for every field, subfield, and line to be entered. The format of the data is also included in the prompt for the novice user. It is not necessary to use the Field command.
If an edit error occurs, an error message is displayed and you are prompted to reenter the data.

The following examples of dialogue assume assistance level 1. Level 2 would follow the same sequence, but the prompts are briefer.

PLEASE ENTER FIELD 2, DATE OF SUMMARY. THE FORMAT IS YYMMDD. IF YOU WISH TO USE TODAY'S DATE, JUST PRESS THE CARRIAGE RETURN.

You might enter:

>810501 <CR>

The OLE system prompts with:

PLEASE ENTER FIELD 5, SUMMARY SECURITY. THE FORMAT IS 1 ALPHABETIC.

You might enter:

>S <CR>

The OLE system responds with:

INVALID ENTRY. FIELD 5 IS NOT U.

PLEASE ENTER FIELD 5, SUMMARY SECURITY. THE FORMAT IS 1 ALPHABETIC.

Note: Classified data cannot be entered.

>U <CR>
You may choose to ignore the request and enter a different command. For example, you may wish to display the contents of a field previously entered (using the Field command). To continue with the example, the next prompt is:

PLEASE ENTER FIELD 6, WORK SECURITY. THE FORMAT IS 1 ALPHABETIC.

> / / 5 / / <CR>

The OLE system displays:

FIELD 5: U

PLEASE ENTER FIELD 6, WORK SECURITY. THE FORMAT IS 1 ALPHABETIC.

You may wish to change information in a field previously entered, for example:

> / / 2 / 8 1 0 5 0 2 / / <CR>

This changes the current contents of field 2 to 810502, and then repeats the current prompt:

PLEASE ENTER FIELD 6, WORK SECURITY. THE FORMAT IS 1 ALPHABETIC.

When you wish to end this processing mode enter:

> / / E N D / M O D E / / <CR>

And the system responds with:
WORK UNIT DAnnnnnn HAS BEEN SAVED.

This is your last chance to copy down the agency accession number of new entries until the agency distribution copy of your input is returned to you following DTIC processing.
B. Processing Mode 2 (Changing a Work Unit)

When you select processing mode 2, the system prompts with:

CHANGING A WORK UNIT. PLEASE ENTER THE ACCESSION NUMBER OF THE WORK UNIT TO BE CHANGED.

For example:

>DAOG1234 <CR>

If the accession number does not exist in the database, or the Responsible Organization does not match your site, you will receive an error message and be prompted again. If you are in assistance level 3, use the Field command to display or change the contents of a field, subfield, or line. As in processing mode 1, syntax errors are displayed immediately, but edit errors are displayed in coded form.

The OLE system prompts you to change each field which is in error. For example:

PLEASE ENTER FIELD 6, WORK SECURITY. THE FORMAT IS 1 ALPHABETIC.

You might enter:

>U <CR>

PLEASE ENTER FIELD 8B, CONTRACTOR ACCESS. THE FORMAT IS Y FOR YES AND N FOR NO.

The OLE system skipped fields 2 through 5 and 8a because they
did not contain errors. As in processing mode 1, you may chose to ignore the request and enter any legal command. For example:

>\//13/8106// <CR>

And the OLE system will re-prompt with:

PLEASE ENTER FIELD 8B, CONTRACTOR ACCESS. THE FORMAT IS Y FOR YES AND N FOR NO.

And you might enter:

>Y <CR>

When all fields in error have been prompted for entry, you can update other fields in any sequence with the Field command.
C. Processing Mode 3 (Browsing Files)

When you select processing mode 3, the system will ask you which file you wish to scan.

WHICH FILE DO YOU WISH TO SCAN?
ENTER C FOR THE CORPORATE AUTHOR FILE.
ENTER A FOR THE ALERT REPORT.
ENTER E FOR THE ERROR REPORT.

The commands for scanning each file are explained in detail here.

Corporate Author -

The Corporate Author file contains a list of names and addresses of all responsible DOD organizations and performing organizations involved in R&D work or studies. Each organization is identified by a six digit code. Associated with each code is the organization's complete name and address. The attention line is not included in the Corporate Author file and must be entered separately as fields 19B and 20B.

When you enter the Corporate Author scan the OLE system will prompt with:

ENTER CORPORATE AUTHOR CODE

If you enter the code, and it exists, the name and address are displayed, and the prompt is repeated. If you enter just a <CR>, you can search the file accordingly.
to three criteria: name, city, and state or nation. Valid state and nation codes are presented in Figure 3. The system will prompt for each criteria. If you know it, then enter the data. If you don't know, just press <CR> and the system will prompt for the next criteria. When all criteria have been entered, the OLE system will present a list of organizations that meet the search criteria. For example:

ENTER FIRST LETTER OF THE NAME

> J

ENTER FIRST LETTER OF THE CITY

> W

ENTER STATE OR NATION CODE

> DC

349350   JOHN I THOMPSON CO   WASHINGTON, DC
192960   JOINT USA/USN ACFT INST   WASHINGTON, DC

The organizations are listed in groups of twenty. If there are more than twenty the system will ask you:

DO YOU WANT TO SEE MORE?

If the answer is YES, up to twenty more are displayed, and the cycle repeats until all are displayed or the answer is NO. When the scan is complete, the system repeats the initial prompt.

ENTER CORPORATE AUTHOR CODE.

At this point you can scan for other criteria or end the
processing mode.
## States

<table>
<thead>
<tr>
<th>State</th>
<th>Code</th>
<th>State</th>
<th>Code</th>
<th>State</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>AL</td>
<td>Kentucky</td>
<td>KY</td>
<td>North Dakota</td>
<td>ND</td>
</tr>
<tr>
<td>Alaska</td>
<td>AK</td>
<td>Louisiana</td>
<td>LA</td>
<td>Ohio</td>
<td>OH</td>
</tr>
<tr>
<td>Arizona</td>
<td>AZ</td>
<td>Maine</td>
<td>ME</td>
<td>Oklahoma</td>
<td>OK</td>
</tr>
<tr>
<td>Arkansas</td>
<td>AR</td>
<td>Maryland</td>
<td>MD</td>
<td>Oregon</td>
<td>OR</td>
</tr>
<tr>
<td>California</td>
<td>CA</td>
<td>Massachusetts</td>
<td>MA</td>
<td>Pennsylvania</td>
<td>PA</td>
</tr>
<tr>
<td>Colorado</td>
<td>CO</td>
<td>Michigan</td>
<td>MI</td>
<td>Rhode Island</td>
<td>RI</td>
</tr>
<tr>
<td>Connecticut</td>
<td>CT</td>
<td>Minnesota</td>
<td>MN</td>
<td>South Carolina</td>
<td>SC</td>
</tr>
<tr>
<td>Delaware</td>
<td>DE</td>
<td>Mississippi</td>
<td>MS</td>
<td>South Dakota</td>
<td>SD</td>
</tr>
<tr>
<td>District Of Columbia</td>
<td>DC</td>
<td>Missouri</td>
<td>MO</td>
<td>Tennessee</td>
<td>TN</td>
</tr>
<tr>
<td>Florida</td>
<td>FL</td>
<td>Montana</td>
<td>MT</td>
<td>Texas</td>
<td>TX</td>
</tr>
<tr>
<td>Georgia</td>
<td>GA</td>
<td>Nebraska</td>
<td>NE</td>
<td>Utah</td>
<td>UT</td>
</tr>
<tr>
<td>Hawaii</td>
<td>HI</td>
<td>Nevada</td>
<td>NV</td>
<td>Vermont</td>
<td>VT</td>
</tr>
<tr>
<td>Idaho</td>
<td>ID</td>
<td>New Hampshire</td>
<td>NH</td>
<td>Virginia</td>
<td>VA</td>
</tr>
<tr>
<td>Illinois</td>
<td>IL</td>
<td>New Jersey</td>
<td>NJ</td>
<td>Washington</td>
<td>WA</td>
</tr>
<tr>
<td>Indiana</td>
<td>IN</td>
<td>New Mexico</td>
<td>NM</td>
<td>West Virginia</td>
<td>WV</td>
</tr>
<tr>
<td>Iowa</td>
<td>IA</td>
<td>New York</td>
<td>NY</td>
<td>Wisconsin</td>
<td>WI</td>
</tr>
<tr>
<td>Kansas</td>
<td>KS</td>
<td>North Carolina</td>
<td>NC</td>
<td>Wyoming</td>
<td>WY</td>
</tr>
</tbody>
</table>

### U S Territories

<table>
<thead>
<tr>
<th>Territory</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amer Samoa</td>
<td>AS</td>
</tr>
<tr>
<td>Canal Zone</td>
<td>CZ</td>
</tr>
</tbody>
</table>

### Foreign Nations

<table>
<thead>
<tr>
<th>Nation</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>AR</td>
</tr>
<tr>
<td>Australia</td>
<td>AT</td>
</tr>
<tr>
<td>Austria</td>
<td>AU</td>
</tr>
<tr>
<td>Belgium</td>
<td>BE</td>
</tr>
<tr>
<td>Brazil</td>
<td>BR</td>
</tr>
<tr>
<td>Canada</td>
<td>CN</td>
</tr>
<tr>
<td>Ceylon</td>
<td>CE</td>
</tr>
<tr>
<td>Chile</td>
<td>CI</td>
</tr>
<tr>
<td>Colombia</td>
<td>CO</td>
</tr>
<tr>
<td>Congo</td>
<td>CP</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>CS</td>
</tr>
<tr>
<td>Denmark</td>
<td>DE</td>
</tr>
<tr>
<td>Egypt</td>
<td>EG</td>
</tr>
<tr>
<td>Ireland</td>
<td>EI</td>
</tr>
<tr>
<td>Finland</td>
<td>FI</td>
</tr>
<tr>
<td>France</td>
<td>FR</td>
</tr>
<tr>
<td>Germany</td>
<td>OY</td>
</tr>
<tr>
<td>Ghana</td>
<td>GH</td>
</tr>
</tbody>
</table>

**Figure 3. State and Foreign Nation Codes**

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Alert Report -

The Alert Report is a list of accession numbers for work units that are delinquent or will become delinquent within the next 60 days. A work unit is delinquent if its "Date of Summary" is at least one year older than the current date. Listed beside each accession number is the date the work unit became or will become delinquent and the user id of the last user to update the summary.

When the Alert Report is selected, the OLE system displays up to twenty lines of the oldest delinquencies. If there are more than twenty lines the system prompts with:

DO YOU WANT TO SEE MORE?

If the answer is YES the OLE system displays up to twenty more lines. This cycle repeats until all delinquencies are displayed or the answer is NO.

When all delinquencies have been displayed the OLE system displays:

nn DELINQUENT WORK UNITS.

DO YOU WANT TO KNOW THE WORK UNITS THAT WILL BECOME DELINQUENT WITHIN THE NEXT 60 DAYS?

If the answer is YES the OLE system will display up to twenty lines. If there are more than twenty the OLE
system prompts with:

DO YOU WANT TO SEE MORE?

If the answer is YES then up to twenty more lines are displayed. This cycle repeats until all lines are displayed or the answer is NO.

Error Report -

Remember that work units which contain errors are not added to the DTIC work unit data base until the errors are corrected.

When you select to scan the Error Report, you receive a list of accession numbers in ascending order for all work units that contain errors. For example:

THE FOLLOWING SUMMARIES CONTAIN ERRORS:

DAOG1221  DAOG1645
DAOG1231  DAOG2331
DAOG1451  DAOG5511

ENTER THE ACCESSION NUMBER OF A WORK UNIT WHOSE ERRORS YOU WANT TO VIEW:

If you enter an accession number the errors in the work unit are displayed. In assistance level 1 or 2 the full error messages are displayed. For example:

DAOG1221 CONTAINS THE FOLLOWING ERRORS:
FIELD 2 CONTAINS AN INVALID DATE.
FIELD 12B MUST CONTAIN AN ENTRY.
FIELD 15A IS NOT IN THE FUNDING AGENCY CODE TABLE.
FIELD 16 IS NOT AN A, B, C, OR D.

ENTER THE ACCESSION NUMBER OF A WORK UNIT WHOSE ERRORS YOU WANT TO VIEW:

If you are in assistance level 3 only the error codes are displayed. You can use the ERROR command to display the message if you wish. For example:

WORK UNIT DA0G1221 CONTAINS THE FOLLOWING ERRORS:
2E02 12BE01

ENTER THE ACCESSION NUMBER OF A WORK UNIT WHOSE ERRORS YOU WANT TO VIEW:

If you don’t recognize 12BE01 enter:

>ERROR/12BE01<CR>

The OLE system displays:

FIELD 12B MUST CONTAIN AN ENTRY.

When you are done, you can end the mode with //END//, //END/MODE//, or //STOP//.
D. Processing Mode 4 (Sending Mailbox Messages)

You are given the opportunity to send a message to OLE operations with processing mode 4. Each message is limited to twenty lines. To send a larger message use additional mailbox messages. When you select processing mode 4, the system responds with:

ENTER YOUR MESSAGE, FOLLOWED BY THE END COMMAND.

Enter each line of the message followed by a carriage return. Use the END command to indicate that your message is complete. To abort a message in the act of creating it use the STOP command. You cannot delete a message which has already been sent.

For example:

ENTER MAILBOX MESSAGE TEXT
HAS COMPANY ABC IN MCLEAN, VIRGINIA BEEN <CR>
ENTER MAILBOX MESSAGE TEXT
ADDED TO THE CORPORATE AUTHOR FILE YET? <CR>
ENTER MAILBOX MESSAGE TEXT
//END/MODE// <CR>

The OLE system responds with:
YOUR MESSAGE HAS BEEN SENT.

Each mailbox message sent is automatically marked with the date, time, and your user ID. Because messages appear at OLE operations in the order in which they are sent, continued messages retain their appropriate order.
E. Processing Mode 5 (Changing Assistance Levels)

To change the assistance level, select Processing mode 5 and the system will prompt with:

ENTER NEW ASSISTANCE LEVEL

Then enter 1, 2, or 3 for novice, intermediate, or experienced levels. The OLE system will then proceed to the System Menu.
V. EDIT RULES

This chapter describes the edit criteria for every field in the work unit. Figure 4 presents the DD Form 1498 with each field indicator. These field indicators are used with the Field command. If you have difficulty entering a field correctly, the descriptions in this chapter should clarify the situation.
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>10A</td>
<td>PROGRAM ELEMENT</td>
</tr>
<tr>
<td>10A1</td>
<td>PROJECT NUMBER</td>
</tr>
<tr>
<td>10A2</td>
<td>TASK AREA NUMBER</td>
</tr>
<tr>
<td>10A3</td>
<td>WORK UNIT NUMBER</td>
</tr>
<tr>
<td>10B1</td>
<td>PROGRAM ELEMENT</td>
</tr>
<tr>
<td>10B2</td>
<td>PROJECT NUMBER</td>
</tr>
<tr>
<td>10B3</td>
<td>TASK AREA NUMBER</td>
</tr>
<tr>
<td>10C</td>
<td>WORK UNIT NUMBER</td>
</tr>
</tbody>
</table>

**Technical Objective:**

23. TECHNICAL OBJECTIVE

24. APPROACH

25. PROGRESS

26. EVALUATION (FOR STUDIES AND ANALYSIS ONLY)
Field 1  
Agency Accession Number  
8 alphanumerics  
The first two (2) characters are always DA. The accession number is assigned by the DLE system and cannot be changed.

Field 2  
Date of Summary  
6 numerics  
The format is YYMMDD where YY is the year, MM is the month, and DD is the day. Any valid date on or before the current date is acceptable. The default is the current date. This field is not updated for R type work units, but is required for all other types.

Example  
//2/810501//

Field 3  
Date of Previous Summary  
6 numerics  
Field 3 cannot be directly added or changed; it can only be displayed. On work unit updates this field is replaced with the original data in field 2.
<table>
<thead>
<tr>
<th>Field 4</th>
<th>Kind of Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 alphabetic</td>
<td>Enter the appropriate code from Table 4. The default for processing mode 1 is an A. This is a required entry. example //4/D//</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field 5</th>
<th>Summary Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 alphabetic</td>
<td>This field must be a U as only unclassified work units are allowed. This is a required entry. The summary security entered here will be used as a prefix for field 11 (Title) and fields 22 through 26 (Keywords and Narrative).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field 6</th>
<th>Work Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 alphabetic</td>
<td>This field must be a U, S, C, or T. This is a required entry. example //6/U//</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field 8A</th>
<th>Distribution Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 alphabetics</td>
<td>The two characters must be one of the following: NL, GE, GF, GP, GT, GU, DE, DS, or DP. This is a required entry. example //8A/NL//</td>
</tr>
</tbody>
</table>
Field 8B  Specific Data Contractor Access
1 alphanumeric

The entry must be a Y or N for yes or no, respectively. This is a required entry.

example  //8B/Y//

Field 10A1  Number/ Codes Primary Program Element
6 alphanumeric maximum

Field 10A1 may be added or changed only for Non-Army or Study category work units. For Army R&D work units, this field will be automatically generated by the correct entry of a 3 character Project Number Code in field 10A2. No edit criteria.

example  //10A1/54321A//
Field 10A2  Number/Codes Primary Project Number
12 alphabetics maximum

For Army R&D work units, enter the 3 character Project Number Code consisting of the last 3 characters of the actual 12 character Primary Project Number. The expanded 12 character Primary Project Number will be generated by the system, together with the correct Program Element code in field 10A1. Entry is required for Army R&D work units. For all other categories, entry is optional, and no edit criteria exist.

example  //10A2/235//

Field 10A3  Number/Codes Primary Task Area Number
4 alphabetics maximum

Any non-blank entry for Army R&D work units, optional for all other categories.

example  //10A3/02//

Field 10A4  Number/Codes Primary Work Unit Number
3 alphabetics maximum

Any non-blank entry for Army R&D work units, optional for all other categories.

example  //10A4/100//
Field 10A5  Number/Codes Primary Installation Activity Code  
2 alphanumerics maximum  

No edit criteria.  

example  //10A5/FC//  

Field 10B1  Number/Codes Contributing Program Element  
6 alphanumerics maximum  

For Army R&D work units, the first five characters must be numeric. The sixth, if entered, must be an A. Position 6 will default to A if field is entered. Entry is optional.  

example  //10B1/54321A//  

Field 10B2  Number/Codes Contributing Project Number  
12 alphanumerics maximum  

For Army R&D work units the first character must be numeric, the second alphabetic, and the fourth through eighth must equal positions one through five of the Contributing Program Element. Entry is optional.  

example  //10B2/1B54321//
Field 10B3  Number/Codes Contributing Task Area Number
4 alphanumerics maximum

No edit criteria.

example  //10B3/03//

Field 10C  Mission Objective
144 alphanumerics maximum

A non-blank entry is required for Army R&D efforts.

example  //10C/STOG:81-3:11//

Field 11  Title
156 alphanumerics maximum

The title is automatically prefixed by the
value in Field 5.

example  //11/TANK ARMOR DEVELOPMENT PART II//

Fields 12A, 12B & 12C  Scientific and Technological Areas
6 numerics each

The six digit code must be in the
Scientific and Technological Code Table
(see Table 5), and entries 12A, 12B, and
12C must not duplicate each other. Fields
12A and 12B are required entries.

example  //12A/010400//
//12B/004900//
//12C/003700//
Field 13  Start Date
          4 numerics

          The format is YYMM. A valid date is required.

          example  //13/8005//

Field 14  Estimated Completion Date
          4 alphanumerics

          The format is YYMM. A valid date or 'CONT' is required.

          example  //14/CONT//

Fields 15A, 15B & 15C  Funding Agency
          2 alphanumerics each

          The two character code must be in the Funding Agency Code Table (see Table 6) and entries 15A, 15B, and 15C must not duplicate each other. Field 15A is required. The value 'DA' must be entered as Field 15A for Army category work units.

          example  //15A/DA//
          //15B/DS//
          //15C/DM//
Field 16  
**Performance Method**

1 alphabetic

This field must be an A, B, C, or D.

*example*  //16/B//

Field 17  
**Contract/Grant**

Fields 17A thru 17F are required if Performing Method, field 16, is an A or B.

If the Performing Method is a C or D, all of field 17 must be blank.

Field 17A1  
**Contract/Grant Dates/Effective**

4 numerics

The format is YYMM. A valid date is required.

*example*  //17A1/8104//

Field 17A2  
**Contract/Grant Dates/Expiration**

4 numerics

The format is YYMM. A valid date is required.

*example*  //17A2/8201//

Field 17B  
**Contract/Grant Number**

24 alphanumerics maximum

Any non-blank entry.

*example*  //17B/DAAK37-48-9-0010//
Field 17C  Contract/Grant Type
1 alphabetic

The entry must be a 'G' if Performance Method, Field 16, is an 'A'. For Performance Method of 'B', the entry must be a code from the Contract/Grant Type Table (see Table 7).

example  //17C/J//

Field 17D  Contract/Grant Amount
10 alphanumerics maximum

The entry must be nine or less numerics and may be preceded by a P.

example  //17D/P250000//

Field 17E  Contract/Grant Kind of Award
3 alphabetics

The entry must be one of the following: NEW, SUP, EXT, or CON.

example  //17E/CON//

Field 17F  Contract/Grant Cumulative Amount
10 alphanumerics maximum

The entry must be nine or less numerics and may be preceded by a P.

example  //17F/1520000//

71
Field 18A1  Resource Estimate Preceding Fiscal Year
2 numerics

The format is YY. The entry must be one year less than the current fiscal year. The default is one year less than the current fiscal year. Entry is required.

example //18A1/80//

Field 18A2  Resource Estimate Preceding Professional Man Years
6 alphanumerics maximum

The format is four or less numerics followed by a decimal point and one numeric. Entry is required. The default is zeros.

example //18A2/100.0//

Field 18A3  Resource Estimate Preceding Funds
6 numerics maximum

Entry is required. The default is zeros.

example //18A3/200//
Field 18B1 Resource Estimate Current Fiscal Year  
2 numerics

The format for this entry is YY and must be the current fiscal year. The default is the current fiscal year. Entry is required.

example //18B1/81//

Field 18B2 Resource Estimate Current Professional Man Years  
6 alphanumerics maximum

The format is the same as field 18A2. Entry is required. The default is zeros.

example //18B2/50.0//

Field 18B3 Resource Estimate Current Funds  
6 numerics maximum

Entry is required. The default is zeros.

example //18B3/50//

Fields 18C1, 18C2 & 18C3 Resource Estimate Future Fiscal Year entries

These entries may be optionally used for resource estimate forecasting. Format is the same as 18A and 18B.
| Field 19A1 | Responsible DOD Organization Code  
6 numerics |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The entry is a six-digit code from the Corporate Author file. This is a required entry.</td>
</tr>
<tr>
<td>example</td>
<td>//19A1/654321//</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field 19A2</th>
<th>Responsible DOD Organization Name and Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field 19A2 is automatically set by field 19A1, and cannot be directly added or changed. You may only display this field.</td>
<td></td>
</tr>
</tbody>
</table>

| Field 19B  | Responsible DOD Organization Attention Line  
61 alphanumerics maximum |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No edit criteria.</td>
<td></td>
</tr>
<tr>
<td>example</td>
<td>//19B/DALO-AV//</td>
</tr>
</tbody>
</table>

| Field 19C1 | Responsible DOD Organization Responsible Individual Name  
28 alphanumerics maximum |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Any non-blank entry.</td>
<td></td>
</tr>
<tr>
<td>example</td>
<td>//19C1/SMITH, A B//</td>
</tr>
</tbody>
</table>
Field 19C2  Responsible DOD Organization Responsible Individual Telephone 22 alphanumerics maximum

Any non-blank entry.

example  //19C2/AVN7654321//

Field 20A1  Performing Organization Code 6 numerics

This must be a six-digit code from the Corporate Author file.

example  //20A1/123456//

Field 20A2  Performing Organization Name and Address

Field 20A2 is automatically set by field 20A1, and cannot be directly added or changed. You may only display this field.

Field 20B  Performing Organization Attention Line 61 alphanumerics maximum

No edit criteria.

example  //20B/DALO-AV//

Field 20C1  Performing Organization Principal Investigator Name 28 alphanumerics maximum

Any non-blank entry.

example  //20C1/JONES, A B//
Field 20C2 Performing Organization Principal Investigator Telephone
22 alphanumerics maximum

Any non-blank entry.

example //20C2/AVN1234567//

Fields 20D1 Performing Organization Associate Investigators
& 20D2 Name
28 alphanumerics maximum each

No edit criteria.

example //20D1/MILLER A B//

Field 21A General Use Foreign Intelligence
1 alphabetic

If foreign intelligence is applicable, enter a Y. If foreign intelligence is not applicable, enter a N. This field is not used for studies or management analysis.

example //21A/N//

Field 21B General Use Studies and Analysis Code
2 alphanumerics

This entry is required for studies only. Valid entries for the first character are numbers 1 through 8. A valid entry for the second character is one of the following: R, S, B, or C.

example //21B/1S//
<table>
<thead>
<tr>
<th>Field 21C</th>
<th>General Use Models and Code Words 2 alphabets</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This entry is applicable to studies only and is not required. A valid entry is either BC or SM.</td>
</tr>
<tr>
<td>example</td>
<td>//21C/SM//</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field 21D</th>
<th>General Use Foreign Area Code 2 alphabets</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This entry is applicable to studies only and is not required. A valid entry is one of the following: SF, SP, or BF.</td>
</tr>
<tr>
<td>example</td>
<td>//21D/BF//</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field 21E</th>
<th>Civilian/Military Application 2 alphabets</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This entry is required. A valid entry is one of the following: LC, HC, LM or HM.</td>
</tr>
<tr>
<td>example</td>
<td>//21E/LM//</td>
</tr>
<tr>
<td>Fields 22K1 to 22K10</td>
<td>Keywords</td>
</tr>
<tr>
<td>----------------------</td>
<td>----------</td>
</tr>
<tr>
<td></td>
<td>46 alphanumerics maximum each</td>
</tr>
<tr>
<td></td>
<td>Fields 22K1 through 22K4 are required. Each field is automatically prefixed with the value in field 5, Summary Security.</td>
</tr>
<tr>
<td>example</td>
<td>//22K1/BOMBS//</td>
</tr>
<tr>
<td></td>
<td>//22K2/GUNS//</td>
</tr>
<tr>
<td></td>
<td>//22K3/ROCKETS//</td>
</tr>
<tr>
<td></td>
<td>//22K4/DEFENSE//</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fields 23, 24 &amp; 25</th>
<th>Technical Objective, Approach and Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2640 alphanumerics maximum per field</td>
</tr>
<tr>
<td></td>
<td>All efforts have a maximum of 7920 characters for all three fields. These fields are automatically prefixed with the value in field 5. An entry in each field is required.</td>
</tr>
<tr>
<td>example</td>
<td>//TEXT/23// &lt;CR&gt;</td>
</tr>
<tr>
<td></td>
<td>&gt;THE TECHNICAL OBJECTIVE IS TO DEVELOP BOMBS. &lt;CR&gt;</td>
</tr>
<tr>
<td></td>
<td>//TEXT/24// &lt;CR&gt;</td>
</tr>
<tr>
<td></td>
<td>&gt;THE APPROACH IS TO USE THE SCIENTIFIC METHOD. &lt;CR&gt;</td>
</tr>
<tr>
<td></td>
<td>//TEXT/25// &lt;CR&gt;</td>
</tr>
<tr>
<td></td>
<td>&gt;THE PROGRESS EXceeds ALL EXPECTATIONS. &lt;CR&gt;</td>
</tr>
</tbody>
</table>
Field 26
Evaluation
3600 alphanumerics maximum

This field is required for terminated or completed studies (Summary Kind H or K). Entries are rejected for R&D efforts and studies with Summary Kind other than H or K. This field is automatically prefixed with the value in field 5.

example

//TEXT/26// <CR>

>THIS EFFORT HAD MEANINGFUL RESULTS. <CR>

NOTE:

At present there are restrictions on the amount of text carried in the DTIC system. This means that the combined text of fields 23, 24, 25 and 26 that exceeds 5000 characters will be truncated during extraction for transmittal to DTIC. However, the entire record will still be accessible through the OLE system.
### SUMMARY KINDS

<table>
<thead>
<tr>
<th>CODE</th>
<th>WORD</th>
<th>EXPLANATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>New</td>
<td>The first submission of a newly initiated work unit.</td>
</tr>
<tr>
<td>D</td>
<td>Change</td>
<td>A work unit to report substantive revisions or to reinstate a work unit previously reported as terminated.</td>
</tr>
<tr>
<td>H</td>
<td>Termination</td>
<td>A work unit to report an uncompleted work unit effort which has been cancelled, suspended, or otherwise discontinued.</td>
</tr>
<tr>
<td>K</td>
<td>Completion</td>
<td>The final work unit submission to report a work unit effort which has been completed.</td>
</tr>
<tr>
<td>R</td>
<td>Correction</td>
<td>A work unit submission to report an editorial change or to correct a minor error on a previously submitted work unit.</td>
</tr>
</tbody>
</table>

**TABLE 4. SUMMARY KINDS**
### TABLE 5. SCIENTIFIC AND TECHNOLOGICAL CODES

#### AERONAUTICS
- 000500 Aerodynamics
- 000600 Aeronautics
- 001300 Aircraft
- 001400 Aircraft flight instrumentation
- 001500 Air facilities

#### AGRICULTURE
- 000700 Agricultural chemistry
- 000800 Agricultural economics
- 000900 Agricultural engineering
- 001000 Astronomy and horticulture
- 001700 Animal husbandry
- 006600 Forestry

#### ASTRONOMY AND ASTROPHYSICS
- 002000 Astronomy
- 002100 Astrophysics
- 003000 Celestial mechanics

#### ATMOSPHERIC SCIENCES
- 002200 Atmospheric Physics
- 010000 Meteorology

#### BEHAVIORAL AND SOCIAL SCIENCES
- 000400 Administration and management
- 005100 Documentation and information technology
- 005300 Economics
- 007400 History, law, and political science
- 007500 Human factors engineering
- 007600 Humanities
- 009000 Linguistics
- 009400 Man-machine relations
- 012500 Personnel selection training and evaluation
- 013400 Psychological (individual and group behavior)
- 015400 Sociology

#### BIOLOGICAL AND MEDICAL SCIENCES
- 002300 Biochemistry
- 002400 Bioengineering
- 002600 Biology
- 002700 Bionics
- 003500 Clinical medicine
- 005900 Environmental biology
### SCIENTIFIC AND TECHNOLOGICAL CODES

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>006000</td>
<td>Escape, rescue, and survival</td>
</tr>
<tr>
<td>006500</td>
<td>Food</td>
</tr>
<tr>
<td>007800</td>
<td>Hygiene and sanitation</td>
</tr>
<tr>
<td>007900</td>
<td>Industrial (occupational) medicine</td>
</tr>
<tr>
<td>008800</td>
<td>Life support</td>
</tr>
<tr>
<td>009800</td>
<td>Medical and hospital equipment</td>
</tr>
<tr>
<td>010100</td>
<td>Microbiology</td>
</tr>
<tr>
<td>012400</td>
<td>Personnel selection and maintenance (medical)</td>
</tr>
<tr>
<td>012600</td>
<td>Pharmacology</td>
</tr>
<tr>
<td>012900</td>
<td>Physiology</td>
</tr>
<tr>
<td>013300</td>
<td>Protective equipment</td>
</tr>
<tr>
<td>014100</td>
<td>Radiobiology</td>
</tr>
<tr>
<td>016200</td>
<td>Stress physiology</td>
</tr>
<tr>
<td>016800</td>
<td>Toxicology</td>
</tr>
<tr>
<td>017100</td>
<td>Weapons effects</td>
</tr>
</tbody>
</table>

#### CHEMISTRY

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>003300</td>
<td>Chemical engineering</td>
</tr>
<tr>
<td>008300</td>
<td>Inorganic chemistry</td>
</tr>
<tr>
<td>012100</td>
<td>Organic chemistry</td>
</tr>
<tr>
<td>012700</td>
<td>Physical chemistry</td>
</tr>
<tr>
<td>014000</td>
<td>Radio and radiation chemistry</td>
</tr>
</tbody>
</table>

#### EARTH SCIENCES AND OCEANOGRAPHY

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>002500</td>
<td>Biological oceanography</td>
</tr>
<tr>
<td>002900</td>
<td>Cartography</td>
</tr>
<tr>
<td>005200</td>
<td>Dynamic oceanography</td>
</tr>
<tr>
<td>006800</td>
<td>Geochemistry</td>
</tr>
<tr>
<td>006900</td>
<td>Geodesy</td>
</tr>
<tr>
<td>007000</td>
<td>Geography</td>
</tr>
<tr>
<td>007100</td>
<td>Geology and mineralogy</td>
</tr>
<tr>
<td>008900</td>
<td>Hydrology and limnology</td>
</tr>
<tr>
<td>010200</td>
<td>Mining engineering</td>
</tr>
<tr>
<td>012800</td>
<td>Physical oceanography</td>
</tr>
<tr>
<td>015200</td>
<td>Seismology</td>
</tr>
<tr>
<td>015300</td>
<td>Snow, ice, and permafrost</td>
</tr>
<tr>
<td>015500</td>
<td>Soil mechanics</td>
</tr>
<tr>
<td>016600</td>
<td>Terrestrial magnetism</td>
</tr>
</tbody>
</table>

#### ELECTRONICS AND ELECTRICAL ENGINEERING

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>004000</td>
<td>Components</td>
</tr>
<tr>
<td>004200</td>
<td>Computers</td>
</tr>
<tr>
<td>005700</td>
<td>Electronic and electrical engineering</td>
</tr>
<tr>
<td>008100</td>
<td>Information theory</td>
</tr>
<tr>
<td>016400</td>
<td>Subsystems</td>
</tr>
<tr>
<td>016500</td>
<td>Telemetry</td>
</tr>
</tbody>
</table>

**TABLE 5. CONTINUED**
SCIENTIFIC AND TECHNOLOGICAL CODES

ENERGY CONVERSION (NON-PROPULSIVE)

004500 Conversion techniques
013200 Power sources
005800 Energy storage

MATERIALS

000300 Adhesives and seals
003100 Ceramics, refractories, and glasses
003600 Coatings, colorants, and finishes
004100 Composite materials
006200 Fibers and textiles
009900 Metallurgy and metallography
010300 Miscellaneous materials
011600 Oils, lubricants, and hydraulic fluids
013100 Plastics
014900 Rubber
015800 Solvents, cleaners, and abrasives
017200 Wood and paper products

MATHEMATICAL SCIENCES

009700 Mathematics and statistics
011700 Operations research

MECHANICAL, INDUSTRIAL, CIVIL, AND MARINE ENGINEERING

001200 Air conditioning, heating, lighting, and ventilating
003400 Civil engineering
004300 Construction equipment, materials, and supplies
004400 Containers and packaging
004700 Couplings, fittings, fasteners, and joints
007200 Ground transportation equipment
007700 Hydraulic and pneumatic equipment
008000 Industrial processes
009200 Machinery and tools
009500 Marine engineering
013500 Pumps, filters, pipes, fittings, tubing, and valves
015000 Safety engineering
016300 Structural engineering
018100 Submarine engineering

TABLE 5. CONTINUED
SCIENTIFIC AND TECHNOLOGICAL CODES

METHODS AND EQUIPMENT

004600 Cost effectiveness
008700 Laboratories, test facilities, and test equipment
014300 Recording devices
014400 Reliability
014500 Reprography

MILITARY SCIENCES

018200 Antimissile defense
001800 Antisubmarine warfare
003200 Chemical, biological, and radiological warfare
004900 Defense
008400 Intelligence
009100 Logistics
011400 Nuclear warfare
011800 Operations, strategy, and tactics

MISSILE TECHNOLOGY

018300 Air and space launched missiles
010400 Missile launching and ground support
010500 Missile trajectories
010600 Missile warheads and fuses
010700 Missiles
018400 Surface launched missiles
018500 Underwater launched missiles

COMMUNICATIONS, DETECTION, AND COUNTERMEASURES

000100 Acoustic detection
003900 Communications
005000 Direction finding
005600 Electromagnetic and acoustic countermeasures
008200 Infrared and ultraviolet detection
009300 Magnetic detection
011900 Optical detection
013700 Radar detection
021000 Radio communications
015100 Seismic detection
010800 Surface and subsurface navigation

TABLE 5. CONTINUED
SCIENTIFIC AND TECHNOLOGICAL CODES

NUCLEAR SCIENCE AND TECHNOLOGY

017300 Fusion devices (thermonuclear)
008500 Isotopes
010900 Nuclear explosions
011000 Nuclear instrumentation
011100 Nuclear Power Plants
013800 Radiation shielding and protection
017400 Radioactive wastes and fission products
013900 Radioactivity
017500 Reactor engineering and operation
017600 Reactor Materials
017700 Reactor Physics
017800 Reactors (power)
017900 Reactors (nonpower)
018000 SNAP technology

ORDNANCE

001600 Ammunition, explosives, and pyrotechnics
002800 Bombs
003700 Combat vehicles
006100 Explosives, ballistics, and armor
006300 Fire control and bombing systems
007300 Guns
014800 Rockets
016900 Underwater ordnance

PHYSICS

000200 Acoustics
004800 Crystallography
005500 Electricity and magnetism
006400 Fluid mechanics
009600 Masers and lasers
012000 Optics
012200 Particle accelerators
012300 Particle physics
013000 Plasma physics
013600 Quantum theory
015600 Solid mechanics
015700 Solid state physics
016700 Thermodynamics
017000 Wave propagation

TABLE 5. CONTINUED
SCIENTIFIC AND TECHNOLOGICAL CODES

PROPULSION AND FUELS

001100 Air breathing engines
003800 Combustion and ignition
005400 Electric propulsion
006700 Fuels
008600 Jet and gas turbine engines
018600 Liquid rocket motors
018700 Liquid rocket propellants
011200 Nuclear propulsion
014200 Reciprocating engines
014600 Rocket motors and engines
014700 Rocket propellants
018800 Solid rocket motors
018900 Solid rocket propellants

SPACE TECHNOLOGY

001900 Astronautics
015900 Spacecraft
016000 Spacecraft launch vehicles and ground support
016100 Spacecraft trajectories and reentry

CONTROL, GUIDANCE AND NAVIGATION

AEROSPACE VEHICLES, MISSILES, AIRCRAFT

019000 Control analysis and theory
019100 Guidance and navigation analysis and theory
019200 Inertial sensors and measurement units
019300 Passive sensors, trackers, and references
019400 Active electromagnetic radiators, sensors, and equipment
019500 Control devices and equipment
019600 Display devices and equipment
019700 Computers and related programming (control, guidance, and navigation)
019800 Control design methodology, techniques and procedures, simulation and systems
019900 Guidance and navigation design methodology, techniques and procedures and systems
020000 Human operator control characteristics and performance

TABLE 5. CONTINUED
### FUNDING AGENCY CODES

<table>
<thead>
<tr>
<th>Code</th>
<th>Funding Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>DA</td>
<td>Department of the Army</td>
</tr>
<tr>
<td>NX</td>
<td>Department of Energy</td>
</tr>
<tr>
<td>AX</td>
<td>Department of Agriculture</td>
</tr>
<tr>
<td>BX</td>
<td>Department of Labor</td>
</tr>
<tr>
<td>CX</td>
<td>Department of Commerce</td>
</tr>
<tr>
<td>DB</td>
<td>Defense Mapping Agency</td>
</tr>
<tr>
<td>DC</td>
<td>Defense Civil Preparedness Agency (DCPA)</td>
</tr>
<tr>
<td>DD</td>
<td>Department of Defense (Office of the Secretary of Defense (OSD) and Office of the Assistant Secretaries of Defense (OASD) including Department of Defense Advanced Research Projects Agency (Defense ARPA))</td>
</tr>
<tr>
<td>DE</td>
<td>Department of Education</td>
</tr>
<tr>
<td>DF</td>
<td>Department of Air Force</td>
</tr>
<tr>
<td>DG</td>
<td>National Security Agency (NSA)</td>
</tr>
<tr>
<td>DH</td>
<td>Defense Nuclear Agency (DNA)</td>
</tr>
<tr>
<td>DJ</td>
<td>Joint Chiefs of Staff (including the Joint Staff, Unified or Specified Commands and Joint Service Schools)</td>
</tr>
<tr>
<td>DK</td>
<td>Defense Communications Agency (DCA)</td>
</tr>
<tr>
<td>DL</td>
<td>Defense Intelligence Agency (DIA)</td>
</tr>
<tr>
<td>DM</td>
<td>United States Marine Corps</td>
</tr>
<tr>
<td>DN</td>
<td>Department of the Navy</td>
</tr>
<tr>
<td>DR</td>
<td>Defense Contract Audit Agency (DCAA)</td>
</tr>
<tr>
<td>DS</td>
<td>Defense Logistics Agency (DLA)</td>
</tr>
<tr>
<td>EP</td>
<td>Environmental Protection Agency</td>
</tr>
<tr>
<td>FX</td>
<td>Department of Justice</td>
</tr>
<tr>
<td>GX</td>
<td>Department of Transportation</td>
</tr>
<tr>
<td>HX</td>
<td>Department of Health and Human Services</td>
</tr>
<tr>
<td>KX</td>
<td>Department of Interior</td>
</tr>
<tr>
<td>MX</td>
<td>Department of Housing and Urban Development</td>
</tr>
<tr>
<td>PX</td>
<td>U.S. Postal Service</td>
</tr>
<tr>
<td>SX</td>
<td>Department of State</td>
</tr>
<tr>
<td>TX</td>
<td>Treasury Department</td>
</tr>
<tr>
<td>UE</td>
<td>Smithsonian Institute</td>
</tr>
<tr>
<td>VN</td>
<td>National Aeronautics and Space Administration</td>
</tr>
<tr>
<td>VA</td>
<td>Veterans Administration</td>
</tr>
<tr>
<td>WS</td>
<td>National Science Foundation</td>
</tr>
</tbody>
</table>

**TABLE 6. FUNDING AGENCIES**
# CONTRACT/GRANT TYPES

<table>
<thead>
<tr>
<th>Entry</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>FPR-A Fixed Price Redetermination - Type A</td>
</tr>
<tr>
<td>B</td>
<td>FPR-E Fixed Price Redetermination - Type E</td>
</tr>
<tr>
<td>C</td>
<td>FPR-D Fixed Price Redetermination - Other</td>
</tr>
<tr>
<td>J</td>
<td>FFP Firm Fixed Price</td>
</tr>
<tr>
<td>K</td>
<td>FPE Fixed Price with Escalation</td>
</tr>
<tr>
<td>L</td>
<td>FPI(WPI) Fixed Price Incentive (with Performance Incentive)</td>
</tr>
<tr>
<td>M</td>
<td>FPI(W/OPI) Fixed Price Incentive (without Performance Incentive)</td>
</tr>
<tr>
<td>N</td>
<td>FALIC Fixed Amount in Lieu of Individual Costs</td>
</tr>
<tr>
<td>R</td>
<td>CPAF Cost-Plus-Award-Fee</td>
</tr>
<tr>
<td>S</td>
<td>CT Cost Type</td>
</tr>
<tr>
<td>T</td>
<td>CST Cost-Sharing Type</td>
</tr>
<tr>
<td>U</td>
<td>CPFF Cost-Plus-Fixed-Fee</td>
</tr>
<tr>
<td>V</td>
<td>CPIF(WPI) Cost-Plus-Incentive-Fee (with Performance Incentive)</td>
</tr>
<tr>
<td>W</td>
<td>CPIF(W/OPI) Cost-Plus-Incentive-Fee (without Performance Incentive)</td>
</tr>
<tr>
<td>X</td>
<td>MPP Multiple Price Provisions</td>
</tr>
<tr>
<td>Y</td>
<td>TM Time and Materials</td>
</tr>
<tr>
<td>Z</td>
<td>LH Labor Hours</td>
</tr>
<tr>
<td>G</td>
<td>GRANT Self-explanatory</td>
</tr>
</tbody>
</table>

TABLE 7. CONTRACT/GRANT TYPES
<table>
<thead>
<tr>
<th>COMMAND</th>
<th>FORMAT</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDIT</td>
<td>//EDIT/nn//</td>
<td>Enters edit mode for narrative field (nn) specified</td>
</tr>
<tr>
<td>END</td>
<td>//END/MODE//</td>
<td>Terminates current processing mode and saves information</td>
</tr>
<tr>
<td>ERROR</td>
<td>//ERROR/error code//</td>
<td>Displays error message</td>
</tr>
<tr>
<td>Field</td>
<td>//n[s[l]][/data]//</td>
<td>Displays, adds, or changes a field, subfield, or line</td>
</tr>
<tr>
<td>HELP</td>
<td>//HELP//</td>
<td>Displays additional assistance information</td>
</tr>
<tr>
<td>QUIT</td>
<td>//QUIT//</td>
<td>Terminates OLE processing and saves information</td>
</tr>
<tr>
<td>SHOW</td>
<td>//SHOW[/accession no.]//</td>
<td>Displays entire work unit</td>
</tr>
<tr>
<td>STOP</td>
<td>//STOP//</td>
<td>Terminates current processing mode</td>
</tr>
<tr>
<td>TEXT</td>
<td>//TEXT/nn//</td>
<td>Enters text mode for narrative field (nn) specified</td>
</tr>
<tr>
<td>0</td>
<td>//0//</td>
<td>Displays the work unit category</td>
</tr>
</tbody>
</table>
APPENDIX B

ERRORS
This appendix contains a list of prototype error messages. Therefore, in the future it may be necessary to add, change, or delete messages from the list.

SYNTAX ERRORS

MISSING OR EXTRA DELIMITER, CHARACTER POSITION n.
UNRECOGNIZABLE COMMAND, CHARACTER POSITION n.

INVALID RESPONSE ERROR

INVALID RESPONSE.

EDIT ERRORS

<table>
<thead>
<tr>
<th>CODE</th>
<th>MESSAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2E01</td>
<td>FIELD 2 MUST CONTAIN AN ENTRY,</td>
</tr>
<tr>
<td>2E02</td>
<td>FIELD 2 CONTAINS AN INVALID DATE.</td>
</tr>
<tr>
<td>2E03</td>
<td>FIELD 2 MUST CONTAIN 6 NUMERICS.</td>
</tr>
<tr>
<td>4E01</td>
<td>FIELD 4 MUST CONTAIN AN ENTRY.</td>
</tr>
<tr>
<td>4E02</td>
<td>FIELD 4 IS NOT AN A, D, H, K, OR R.</td>
</tr>
<tr>
<td>4E03</td>
<td>FIELD 4 CAN NOT BE AN ‘A’ IN PROCESSING MODE 2.</td>
</tr>
<tr>
<td>4E04</td>
<td>FIELD 4 IS CURRENTLY AN ‘A’ INDICATING A NEW WORK UNIT AND THE WORK UNIT WAS CREATED WITHIN THE CURRENT CYCLE. THE ONLY SUMMARY KIND ALLOWED AT THIS TIME IS ‘R’ CORRECTION. ENTER ‘R’ TO CONTINUE AS A CORRECTION, OR USE THE //STOP// COMMAND TO TERMINATE PROCESSING OF THIS WORK UNIT.</td>
</tr>
<tr>
<td>5E01</td>
<td>FIELD 5 MUST CONTAIN AN ENTRY.</td>
</tr>
<tr>
<td>5E02</td>
<td>FIELD 5 IS AN INVALID CLASSIFICATION CODE.</td>
</tr>
<tr>
<td>6E01</td>
<td>FIELD 6 MUST CONTAIN AN ENTRY,</td>
</tr>
<tr>
<td>6E02</td>
<td>FIELD 6 IS NOT A U, S, C, OR T.</td>
</tr>
<tr>
<td>8AE01</td>
<td>FIELD 8A MUST CONTAIN AN ENTRY.</td>
</tr>
<tr>
<td>8AE02</td>
<td>FIELD 8A IS NOT A NL, GE, GF, GP, GT, GU, DE, DS, OR DP.</td>
</tr>
</tbody>
</table>
8BE01  FIELD 8B MUST CONTAIN AN ENTRY.
8BE02  FIELD 8B IS NOT A Y OR N.
8BE03  FIELD 8B MUST BE A Y, BECAUSE FIELD 8A IS NL.
10A1E01 FIELD 10A1 MUST CONTAIN AN ENTRY.
10A1E02 FIELD 10A1 CANNOT BE ADDED OR CHANGED DIRECTLY FOR ARMY R&D CATEGORY WORK UNITS.
10A1E03 FIELD 10A1 MUST CONTAIN 6 ALPHANUMERICS MAX.
10A2E01 FIELD 10A2 MUST CONTAIN AN ENTRY.
10A2E02 FIELD 10A2 MUST CONTAIN 3 ALPHANUMERICS.
10A2E03 FIELD 10A2 MUST CONTAIN 12 ALPHANUMERICS MAX.
10A2E04 FIELD 10A2 IS NOT IN THE PROJECT NUMBER FILE.
10A3E01 FIELD 10A3 MUST CONTAIN AN ENTRY.
10A3E02 FIELD 10A3 MUST CONTAIN 4 ALPHANUMERICS MAXIMUM.
10A4E01 FIELD 10A4 MUST CONTAIN AN ENTRY.
10A4E02 FIELD 10A4 MUST CONTAIN 3 ALPHANUMERICS MAXIMUM.
10A5E01 FIELD 10A5 MUST CONTAIN 2 ALPHANUMERICS MAXIMUM.
10B1E01 FIELD 10B1 MUST CONTAIN 6 ALPHANUMERICS MAX.
10B2E01 FIELD 10B2 MUST CONTAIN 12 ALPHANUMERICS MAX.
10B3E01 FIELD 10B3 MUST CONTAIN 4 ALPHANUMERICS MAXIMUM.
10CE01 FIELD 10C MUST CONTAIN AN ENTRY.
10CE02 FIELD 10C MUST CONTAIN 122 ALPHANUMERICS MAXIMUM.
10CE03 FIELD 10C MAY CONTAIN A MAXIMUM OF 12 CODED ENTRIES ONLY.
10CE04 FIELD 10C INDIVIDUAL CODED ENTRIES CANNOT BE LONGER THAN 12 CHARACTERS.
11E01 FIELD 11 MUST CONTAIN AN ENTRY.
11E02 FIELD 11 MUST CONTAIN 156 ALPHANUMERICS MAXIMUM.
12AE01 FIELD 12A MUST CONTAIN AN ENTRY.
12AE02 FIELD 12A IS NOT IN THE SCIENTIFIC AND TECHNICAL CODE TABLE.
12AE03 FIELD 12A MUST CONTAIN 6 NUMERICS.
12AE04 FIELD 12A IS A DUPLICATE OF FIELD 12B OR 12C.
12BE01 FIELD 12B MUST CONTAIN AN ENTRY.
12BE02 FIELD 12B IS NOT IN THE SCIENTIFIC AND TECHNICAL CODE TABLE.
12BE03 FIELD 12B MUST CONTAIN 6 NUMERICS.
12BE04 FIELD 12B IS A DUPLICATE OF FIELD 12A OR 12C.
12CE01 FIELD 12C IS NOT IN THE SCIENTIFIC AND TECHNICAL CODE TABLE.
12CE02 FIELD 12C MUST CONTAIN 6 NUMERICS.
12CE03 FIELD 12C IS A DUPLICATE OF FIELD 12A OR 12B.
13E01 FIELD 13 MUST CONTAIN AN ENTRY.
13E02 FIELD 13 CONTAINS AN INVALID DATE.
13E03 FIELD 13 MUST CONTAIN 4 NUMERICS.
14E01 FIELD 14 MUST CONTAIN AN ENTRY.
14E02 FIELD 14 CONTAINS AN INVALID DATE.
14E03 FIELD 14 MUST CONTAIN 4 NUMERICS OR CONT.
15AE01 FIELD 15A MUST CONTAIN AN ENTRY.
15AE02 FIELD 15A IS NOT IN THE FUNDING AGENCY CODE TABLE.
15AE03 FIELD 15A MUST CONTAIN 2 ALPHANUMERICS.
15AE04 FIELD 15A IS A DUPLICATE OF 15B OR 15C.
15AE05 FIELD 15A MUST CONTAIN AN ENTRY OF 'DA' FOR ARMY CATEGORY WORK UNITS.
15BE01 FIELD 15B IS NOT IN THE FUNDING AGENCY CODE TABLE.
15BE02 FIELD 15B IS A DUPLICATE OF 15A OR 15C.
15BE03 FIELD 15B MUST CONTAIN 2 ALPHANUMERICS.
15BE04 FIELD 15B DA ENTRY ONLY VALID FOR FIELD 15A.
15BE05 FIELD 15B MUST CONTAIN AN ENTRY FOR NON-ARMY CATEGORY WORK UNITS WHEN 'DA' IS PRESENT IN FIELD 15A.
15CE01 FIELD 15C IS NOT IN THE FUNDING AGENCY CODE TABLE.
15CE02  FIELD 15C IS A DUPLICATE OF 15A OR 15B.
15CE03  FIELD 15C MUST CONTAIN 2 ALPHANUMERICS.
15CE04  FIELD 15C DA ENTRY ONLY VALID FOR FIELD 15A.
16E01  FIELD 16 MUST CONTAIN AN ENTRY.
16E02  FIELD 16 IS NOT AN A, B, C, OR D.
17A1E01  FIELD 17A1 MUST CONTAIN AN ENTRY.
17A1E02  FIELD 17A1 CONTAINS AN INVALID DATE.
17A1E03  FIELD 17A1 MUST CONTAIN 4 NUMERICS.
17A1E04  FIELD 17A1 MUST BE BLANK.
17A2E01  FIELD 17A2 MUST CONTAIN AN ENTRY.
17A2E02  FIELD 17A2 CONTAINS AN INVALID DATE.
17A2E03  FIELD 17A2 MUST CONTAIN 4 NUMERICS.
17A2E04  FIELD 17A2 MUST BE BLANK.
17BE01  FIELD 17B MUST CONTAIN AN ENTRY.
17BE02  FIELD 17B MUST CONTAIN 24 ALPHANUMERICS MAXIMUM.
17BE03  FIELD 17B MUST BE BLANK.
17CE01  FIELD 17C MUST CONTAIN AN ENTRY.
17CE02  FIELD 17C IS NOT IN THE CONTRACT/GRANT TABLE.
17CE03  FIELD 17C MUST CONTAIN 1 ALPHABETIC.
17CE04  FIELD 17C MUST BE BLANK.
17CE05  FIELD 17C MUST CONTAIN A 'G' FOR PERFORMANCE METHOD OF 'A'.
17CE06  FIELD 17C CAN NOT BE A 'G' FOR PERFORMANCE METHOD OF 'B'.
17DE01  FIELD 17D MUST CONTAIN AN ENTRY.
17DE02  FIELD 17D MUST CONTAIN 9 NUMERICS MAXIMUM, AND MAY BE PRECEDED BY A 'P'.
17DE03  FIELD 17D MUST BE BLANK.
17EE01  FIELD 17E MUST CONTAIN AN ENTRY.
17EE02  FIELD 17E MUST CONTAIN NEW, SUP, EXT, OR CON.
17EE03  FIELD 17E MUST CONTAIN 3 ALPHABETICS.
17EE04  FIELD 17E MUST BE BLANK.
17FE01  FIELD 17F MUST CONTAIN AN ENTRY.
17FE02  FIELD 17F MUST CONTAIN 9 NUMERICS MAXIMUM, AND MAY BE PRECEDED BY A 'P'.
17FE03  FIELD 17F MUST BE BLANK.
18A1E01  FIELD 18A1 MUST CONTAIN AN ENTRY.
18A1E02  FIELD 18A1 CONTAINS AN INVALID DATE.
18A1E03  FIELD 18A1 MUST CONTAIN 2 NUMERICS.
18A2E01  FIELD 18A2 MUST CONTAIN AN ENTRY.
18A2E02  FIELD 18A2 MUST CONTAIN 4 NUMERICS MAXIMUM FOLLOWED BY A DECIMAL POINT AND 1 NUMERIC.
18A3E01  FIELD 18A3 MUST CONTAIN AN ENTRY.
18A3E02  FIELD 18A3 MUST CONTAIN 6 NUMERICS MAXIMUM.
18B1E01  FIELD 18B1 MUST CONTAIN AN ENTRY.
18B1E02  FIELD 18B1 CONTAINS AN INVALID DATE.
18B1E03  FIELD 18B1 MUST CONTAIN 2 NUMERICS.
18B2E01  FIELD 18B2 MUST CONTAIN AN ENTRY.
18B2E02  FIELD 18B2 MUST CONTAIN 4 NUMERICS MAXIMUM FOLLOWED BY A DECIMAL POINT AND 1 NUMERIC.
18B3E01  FIELD 18B3 MUST CONTAIN AN ENTRY.
18B3E02  FIELD 18B3 MUST CONTAIN 6 NUMERICS MAXIMUM.
18C1E01  FIELD 18C1 CONTAINS AN INVALID DATE.
18C1E02  FIELD 18C1 MUST CONTAIN 2 NUMERICS.
18C2E01  FIELD 18C2 MUST CONTAIN 4 NUMERICS MAXIMUM FOLLOWED BY A DECIMAL POINT AND 1 NUMERIC.
18C3E01  FIELD 18C3 MUST CONTAIN 6 NUMERICS MAX.
19A1E01  FIELD 19A1 MUST CONTAIN AN ENTRY.
19A1E02  FIELD 19A1 IS NOT IN THE CORPORATE AUTHOR FILE.
19A1E03  FIELD 19A1 MUST CONTAIN 6 NUMERICS.
19BE01 FIELD 19B MUST CONTAIN 61 ALPHANUMERICS MAXIMUM.
19C1E01 FIELD 19C1 MUST CONTAIN AN ENTRY.
19C1E02 FIELD 19C1 MUST CONTAIN 28 ALPHANUMERICS MAXIMUM.
19C2E01 FIELD 19C2 MUST CONTAIN AN ENTRY.
19C2E02 FIELD 19C2 MUST CONTAIN 22 ALPHANUMERICS MAXIMUM.
20A1E01 FIELD 20A1 MUST CONTAIN AN ENTRY.
20A1E02 FIELD 20A1 IS NOT IN THE CORPORATE AUTHOR FILE.
20A1E03 FIELD 20A1 MUST CONTAIN 6 NUMERICS.
20BE01 FIELD 20B MUST CONTAIN 61 ALPHANUMERICS MAXIMUM.
20C1E01 FIELD 20C1 MUST CONTAIN AN ENTRY.
20C1E02 FIELD 20C1 MUST CONTAIN 28 ALPHANUMERICS MAXIMUM.
20C2E01 FIELD 20C2 MUST CONTAIN AN ENTRY.
20C2E02 FIELD 20C2 MUST CONTAIN 22 ALPHANUMERICS MAXIMUM.
20D1E01 FIELD 20D1 MUST CONTAIN 28 ALPHANUMERICS MAXIMUM.
20D2E01 FIELD 20D2 MUST CONTAIN 28 ALPHANUMERICS MAXIMUM.
21AE01 FIELD 21A MUST CONTAIN Y OR N.
21AE02 FIELD 21A ENTRY NOT ALLOWED FOR STUDY OR MANAGEMENT ANALYSIS WORK UNITS.
21BE01 FIELD 21B MUST CONTAIN AN ENTRY.
21BE02 FIELD 21B MUST CONTAIN 1 THROUGH 8 AS THE FIRST CHARACTER AND R, S, B, OR C AS THE SECOND CHARACTER.
21BE03 FIELD 21B MUST CONTAIN 2 ALPHANUMERICS MAXIMUM.
21BE04 FIELD 21B ENTRY NOT ALLOWED FOR R&D OR MANAGEMENT ANALYSIS WORK UNITS.
21CE01 FIELD 21C MUST CONTAIN AN ENTRY.
21CE02 FIELD 21C MUST CONTAIN BC OR SM.
21CE03 FIELD 21C ENTRY NOT ALLOWED FOR R&D OR MANAGEMENT ANALYSIS WORK UNITS.
21DE01 FIELD 21D MUST CONTAIN AN ENTRY.
21DE02 FIELD 21D MUST CONTAIN SF, SP, OR BF.
21DE03 FIELD 21D ENTRY NOT ALLOWED FOR R&D OR MANAGEMENT ANALYSIS WORK UNITS.

21E01 FIELD 21E MUST CONTAIN AN ENTRY.

21E02 FIELD 21E MUST CONTAIN HC, LC, HM OR LM.

22K1E01 FIELD 22K1 MUST CONTAIN AN ENTRY.

22K1E02 FIELD 22K1 MUST CONTAIN 46 ALPHANUMERICS MAXIMUM.

22K2E01 FIELD 22K2 MUST CONTAIN AN ENTRY.

22K2E02 FIELD 22K2 MUST CONTAIN 46 ALPHANUMERICS MAXIMUM.

22K3E01 FIELD 22K3 MUST CONTAIN AN ENTRY.

22K3E02 FIELD 22K3 MUST CONTAIN 46 ALPHANUMERICS MAXIMUM.

22K4E01 FIELD 22K4 MUST CONTAIN AN ENTRY.

22K4E02 FIELD 22K4 MUST CONTAIN 46 ALPHANUMERICS MAXIMUM.

22K5E01 FIELD 22K5 MAY CONTAIN 46 ALPHANUMERICS MAXIMUM.

22K6E01 FIELD 22K6 MAY CONTAIN 46 ALPHANUMERICS MAXIMUM.

22K7E01 FIELD 22K7 MAY CONTAIN 46 ALPHANUMERICS MAXIMUM.

22K8E01 FIELD 22K8 MAY CONTAIN 46 ALPHANUMERICS MAXIMUM.

22K9E01 FIELD 22K9 MAY CONTAIN 46 ALPHANUMERICS MAXIMUM.

22K10E01 FIELD 22K10 MAY CONTAIN 46 ALPHANUMERICS MAXIMUM.

23E01 FIELD 23 MUST CONTAIN AN ENTRY.

23-25E01 FIELDS 23 THROUGH 25 MUST CONTAIN 7920 ALPHANUMERICS MAXIMUM.

23-25E02 FIELDS 23 THROUGH 25 MUST CONTAIN 7920 ALPHANUMERICS MAXIMUM.

24E01 FIELD 24 MUST CONTAIN AN ENTRY.

25E01 FIELD 25 MUST CONTAIN AN ENTRY.

26E01 FIELD 26 MUST CONTAIN AN ENTRY.

26E02 FIELD 26 MUST CONTAIN 3600 ALPHANUMERICS MAXIMUM.

26E03 FIELD 26 MUST BE BLANK.
APPENDIX C

SAMPLE SESSIONS
These sample sessions are examples of what a user might do on the OLE system. Passwords, IDs, and information on DD Form 1498s stored in the OLE system are fictional, and are for illustrative purposes only.

SESSION #1

TURN ON THE POWER FOR THE TERMINAL (AND MODEM).
DIAL UP THE OLE SYSTEM
LISTEN FOR A HIGH PITCHED TONE.
INSERT THE TELEPHONE RECEIVER INTO THE COUPLER
OR PRESS THE DATA BUTTON ON THE TELEPHONE.

THE SESSION BEGINS:

**SIGN OLEPRO,PROD
DCC001 - REQUEST COMPLETE

MAILBOX MESSAGES PRESENT. DO YOU WISH TO RECEIVE THEM?
>Y
DATE: 830318 TIME: 124142 SENDING USER ID: OLEPRO
PLEASE REMEMBER TO EXIT THE PROCESSING MODE YOU ARE WORKING IN WITH //END/MODE// OR //STOP// BEFORE ENTERING //QUIT// FOLLOWED BY **OFF.
//END/MODE// TERMINATES CURRENT PROCESSING MODE,
SAVES INFORMATION AND PROVIDES A SESSION INFORMATION LOG.
//STOP// TERMINATES CURRENT PROCESSING MODE BUT DOES NOT SAVE. IT IS THE //QUIT// COMMAND THAT PROVIDES INFORMATION FOR THE OLE ACCOUNTING FILES.
PLEASE CALL SHOULD YOU HAVE ANY QUESTIONS.
PLEASE ENTER ASSISTANCE LEVEL:
>1
PLEASE SELECT A PROCESSING MODE
ENTER 1 TO ADD A WORK UNIT
ENTER 2 TO CHANGE A WORK UNIT
ENTER 3 TO BROWSE FILES
ENTER 4 TO SEND A MAILBOX MESSAGE
ENTER 5 TO CHANGE ASSISTANCE LEVELS:
>1

ADDING A WORK UNIT.
THE NEW ACCESSION NUMBER IS: DA300990
SELECT ONE OF THE FOLLOWING CATEGORIES:
ENTER AR FOR ARMY R&D EFFORT (AR 70-9),
ENTER AS FOR ARMY STUDY (AR 5-5),
ENTER NR FOR R&D EFFORT - NON ARMY (AR 70-9),
ENTER MA FOR MANAGEMENT ANALYSIS (AR 5-14),
THE DEFAULT IS AR FOR ARMY R&D EFFORT.
>AR
ENTER FIELD 2, DATE OF SUMMARY. THE FORMAT IS YYMMDD.
IF YOU WISH TO USE TODAY'S DATE, JUST HIT THE CARRIAGE RETURN.
>
ENTER FIELD 5, SUMMARY SECURITY. FORMAT IS 1 ALPHABETIC.
>Y
FIELD 5 IS AN INVALID CLASSIFICATION CODE.
ENTER FIELD 5, SUMMARY SECURITY. FORMAT IS 1 ALPHABETIC.
>U
ENTER FIELD 6, WORK SECURITY. FORMAT IS 1 ALPHABETIC.
>S
ENTER FIELD 8A, DISTRIBUTION INSTRUCTIONS, FORMAT IS 2 ALPHABETICS.
>END/MODE/
THE WORK UNIT DA300990 HAS BEEN SAVED.
DA300990 CONTAINS THE FOLLOWING ERRORS:
FIELD 8A MUST CONTAIN AN ENTRY.
FIELD 8B MUST CONTAIN AN ENTRY.
FIELD 10A2 MUST CONTAIN AN ENTRY.
FIELD 10A3 MUST CONTAIN AN ENTRY.
FIELD 24 MUST CONTAIN AN ENTRY.
PLEASE SELECT A PROCESSING MODE
ENTER 1 TO ADD A WORK UNIT
ENTER 2 TO CHANGE A WORK UNIT
ENTER 3 TO BROWSE FILES
ENTER 4 TO SEND A MESSAGE
ENTER 5 TO CHANGE ASSISTANCE LEVEL:
>5
PLEASE ENTER NEW ASSISTANCE LEVEL SELECTION:
>2
PLEASE SELECT A PROCESSING MODE (1, 2, 3, 4, OR 5):
>2
CHANGING A WORK UNIT.
PLEASE ENTER THE ACCESSION NUMBER OF THE WORK UNIT TO BE CHANGED.
>DA300990
ENTER FIELD 4, SUMMARY KIND.
>R
ENTER FIELD 8A, DISTRIBUTION INSTRUCTIONS.
>6/
FIELD 6: S
ENTER FIELD 8A, DISTRIBUTION INSTRUCTIONS.
>6/U/
FIELD 6: S
UNRECOGNIZABLE COMMAND-CHARACTER POSITION: 006
ENTER FIELD 8A, DISTRIBUTION INSTRUCTIONS.
>6/U/
FIELD 6: S
MISSING OR EXTRA DELIMITER-CHARACTER POSITION: 006
ENTER FIELD 8A, DISTRIBUTION INSTRUCTIONS.
>6/U/
ENTER FIELD 8A, DISTRIBUTION INSTRUCTIONS.
@
TELENET

@D
816 36B DISCONNECTED 00:00:07:01 60 60
SESSION #2

QC 81636

816 36B CONNECTED

**SIGN OLEPRO, PROD
DCC001-REQUEST COMPLETE

USER RECOVERY IN PROGRESS,
YOU ARE IN ASSISTANCE LEVEL 2
YOU WERE IN PROCESSING MODE 2
THE WORK UNITS ACCESSION NUMBER IS DA300990
ENTER FIELD 8A, DISTRIBUTION INSTRUCTIONS.
>NL
ENTER FIELD 8A, CONTRACTOR ACCESS.
>Y
ENTER FIELD 10A2, PRIMARY PROJECT NUMBER.
>/>END/MODE/<
THE WORK UNIT DA300990 HAS BEEN SAVED.
DA300990 CONTAINS THE FOLLOWING ERRORS:

FIELD 10A2 MUST CONTAIN AN ENTRY.
FIELD 10A3 MUST CONTAIN AN ENTRY.
FIELD 10A4 MUST CONTAIN AN ENTRY.
FIELD 10C MUST CONTAIN AN ENTRY.
FIELD 24 MUST CONTAIN AN ENTRY.
FIELD 25 MUST CONTAIN AN ENTRY.
PLEASE SELECT A PROCESSING MODE (1, 2, 3, 4, OR 5):
>/>QUIT/< <CR>
32283, 093052
NO. OF SUMMARIES ADDED:  1
NUMBER OF SUMMARIES CHANGED:  1
NO. OF SUMMARIES THAT CONTAINED ERRORS:  2

THANK YOU FOR USING THE ON-LINE EDIT (OLE) SYSTEM
>**OFF
DC5007 SIGN-OFF COMPLETE
SESSION #3

**SIGN OLEPRO, PROD
DC001-REQUEST COMPLETE

MAILBOX MESSAGES PRESENT. DO YOU WISH TO RECEIVE THEM?
>N
PLEASE ENTER ASSISTANCE LEVEL:
>3
PLEASE SELECT A PROCESSING MODE:
>1
ADDING A WORK UNIT.
THE NEW ACCESSION NUMBER IS: DA300991
ENTER CATEGORY OF AR, AS, NR, OR MA.
>MA
ENTER FIELD 2, DATE OF SUMMARY.
4E02
ENTER FIELD 6.
/>//6/T///8A/NL/
MISSING OR EXTRA DELIMITER-CHARACTER POSITION: 081
ENTER FIELD 8A.
/>//6//
FIELD 6: T
ENTER FIELD 8A.
/>//11/STUDY OF PULSE LASERS//
ENTER FIELD 8A.
/>//END/MODE//
THE WORK UNIT DA300991 HAS BEEN SAVED.
DA300991 CONTAINS THE FOLLOWING ERRORS:

8AE01  BBE01  12AE01  12BE01  13E01  14E01  15AE01
16E01  18A1E01  18A2E01  18A3E01  18B1E01  18B2E01  18B3E01
19A1E01  19C1E01  19C2E01  20A1E01  20C1E01  20C2E01  22K1E01
 22K2E01  22K3E01  22K4E01  23E01  24E01  25E01

PLEASE SELECT A PROCESSING MODE:
>3
WHICH FILED DO YOU WANT TO SCAN?
ENTER C FOR CORPORATE AUTHOR
ENTER A FOR ALERT REPORT
ENTER E FOR ERROR REPORT:
>E
THE FOLLOWING SUMMARIES CONTAIN ERRORS:

DA300990   DA300991

ENTER THE ACCESSION NUMBER OF A WORK UNIT WHOSE ERRORS YOU WANT TO VIEW:
>DA300991
8AE01  BBE01  12AE01  12BE01  13E01  14E01  15AE01
16E01  18A1E01  18A2E01  18A3E01  18B1E01  18B2E01  18B3E01
19A1E01  19C1E01  19C2E01  20A1E01  20C1E01  20C2E01  22K1E01
 22K2E01  22K3E01  22K4E01  23E01  24E01  25E01

ENTER THE ACCESSION NUMBER OF A WORK UNIT WHOSE ERRORS YOU WANT TO VIEW:
/>//ERROR/24E01//
FIELD 24 MUST CONTAIN AN ENTRY.
ENTER THE ACCESSION NUMBER OF A WORK UNIT WHOSE ERRORS YOU WANT TO VIEW:
>://STOP//
PLEASE SELECT A PROCESSING MODE:
>2
CHANGING A WORK UNIT.
PLEASE ENTER THE ACCESSION NUMBER.
>DA300991
ENTER FIELD 4, SUMMARY KIND.
>R
ENTER FIELD 8A.
>://8A/NL//BB/Y//
ENTER FIELD 12A.
>://12A/012700//12B/017100//
ENTER FIELD 13.
>://END/MODE//
THE WORK UNIT DA300991 HAS BEEN SAVED.
DA300991 CONTAINS THE FOLLOWING ERRORS:

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>13E01</td>
<td></td>
</tr>
<tr>
<td>14E01</td>
<td></td>
</tr>
<tr>
<td>15AE01</td>
<td></td>
</tr>
<tr>
<td>16E01</td>
<td></td>
</tr>
<tr>
<td>18A1E01</td>
<td></td>
</tr>
<tr>
<td>18A2E01</td>
<td></td>
</tr>
<tr>
<td>18A3E01</td>
<td></td>
</tr>
<tr>
<td>18B1E01</td>
<td></td>
</tr>
<tr>
<td>18B2E01</td>
<td></td>
</tr>
<tr>
<td>18B3E01</td>
<td></td>
</tr>
<tr>
<td>19A1E01</td>
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</tr>
<tr>
<td>19C1E01</td>
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<td>19C2E02</td>
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<tr>
<td>20A1E01</td>
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</tr>
<tr>
<td>20C1E01</td>
<td></td>
</tr>
<tr>
<td>20C2E01</td>
<td></td>
</tr>
<tr>
<td>22K1E01</td>
<td></td>
</tr>
<tr>
<td>22K2E01</td>
<td></td>
</tr>
<tr>
<td>22K3E01</td>
<td></td>
</tr>
<tr>
<td>22K4E01</td>
<td></td>
</tr>
<tr>
<td>23E01</td>
<td></td>
</tr>
</tbody>
</table>

PLEASE SELECT A PROCESSING MODE:
>3
WHICH FILE DO YOU WANT TO SCAN?
Enter C for Corporate Author
Enter A for Alert Report
Enter E for Error Report:
>A
THE FOLLOWING SUMMARIES ARE DELINQUENT:

<table>
<thead>
<tr>
<th>Accession</th>
<th>Date</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DA0G6554</td>
<td>810122</td>
<td>A</td>
<td>000000</td>
</tr>
<tr>
<td>DA0G6555</td>
<td>810205</td>
<td>A</td>
<td>000000</td>
</tr>
<tr>
<td>DA0G7987</td>
<td>810222</td>
<td>DLEPRD</td>
<td></td>
</tr>
<tr>
<td>DA0G7987</td>
<td>810223</td>
<td></td>
<td>000000</td>
</tr>
</tbody>
</table>

THE FOLLOWING SUMMARIES ARE DELINQUENT:

8 DELINQUENT WORK UNITS
DO YOU WANT TO KNOW THE WORK UNITS THAT WILL BECOME DELINQUENT WITHIN THE NEXT 60 DAYS?
>N
WHICH FILE DO YOU WANT TO SCAN?
Enter C for Corporate Author
Enter A for Alert Report
Enter E for Error Report:
>://END/MODE//
PLEASE SELECT A PROCESSING MODE:
>5
ENTER NEW ASSISTANCE LEVEL:
>2
PLEASE SELECT A PROCESSING MODE (1, 2, 3, 4, OR 5):
>2
CHANGING A WORK UNIT.
PLEASE ENTER THE ACCESSION NUMBER OF THE WORK UNIT TO BE CHANGED.
>DA300990
ENTER FIELD 4, SUMMARY KIND.
ENTER FIELD 10A2, PRIMARY PROJECT NUMBER.
ENTER FIELD 10A3, PRIMARY TASK AREA NUMBER.
ENTER FIELD 10A4, PRIMARY WORK UNIT NUMBER.
ENTER FIELD 10C, MISSION OBJECTIVE.
ENTER FIELD 11, TITLE.

THE OBJECTIVE IS TO STUDY ARMOR COVERS FOR TANKS AND ARMORED CARRIERS.
OTHER OBJECTIVES ARE TO INCREASE TANK SURVIVABILITY.

ENTER FIELD 11, TITLE.

THE OBJECTIVE IS TO STUDY ARMOR COVERS FOR TANKS AND ARMORED CARRIERS.
OTHER OBJECTIVES ARE TO INCREASE TANK SURVIVABILITY.

ENTER FIELD 11, TITLE.

THE OBJECTIVE IS TO STUDY ARMOR COVERS FOR TANKS AND ARMORED CARRIERS.
OTHER OBJECTIVES ARE TO INCREASE TANK SURVIVABILITY.

ENTER FIELD 11, TITLE.

THE WORK UNIT DA300990 HAS BEEN SAVED.
DA300990 CONTAINS THE FOLLOWING ERRORS:

FIELD 11 MUST CONTAIN AN ENTRY.
FIELD 12A MUST CONTAIN AN ENTRY.
FIELD 12B MUST CONTAIN AN ENTRY.
FIELD 13 MUST CONTAIN AN ENTRY.
FIELD 25 MUST CONTAIN AN ENTRY.

PLEASE SELECT A PROCESSING MODE (1, 2, 3, 4, OR 5):

3

WHICH FILE DO YOU WANT TO SCAN?
ENTER C FOR CORPORATE AUTHOR
ENTER A FOR ALERT REPORT
ENTER E FOR ERROR REPORT:

ENTER CORPORATE AUTHO R CODE.

ENTER FIRST LETTER OF THE NAME.
> ENTER FIRST LETTER OF THE CITY.
> N
> ENTER STATE OR NATION CODE.
> MN

136105  FEDERAL CARTRIDGE CORPORATION
        NEW BRIGHTON          MN  55112   30  27
317032  SCHJELDAHL, G T
        NORTHFIELD           MN  55057   30  27

ENTER CORPORATE AUTHOR CODE.
> /END/MODE/

PLEASE SELECT A PROCESSING MODE (1, 2, 3, 4, OR 5):
> 4

ENTER MAILBOX USERID THAT THE MESSAGE IS TO BE SENT TO
> /STOP/

PLEASE SELECT A PROCESSING MODE (1, 2, 3, 4, OR 5):
> /QUIT/

32283, 095725
NO. OF SUMMARIES ADDED: 1
NUMBER OF SUMMARIES CHANGED: 2
NO. OF SUMMARIES THAT CONTAINED ERRORS: 3

THANK YOU FOR USING THE ON-LINE EDIT (OLE) SYSTEM
> **OFF
DCS007 SIGN-OFF COMPLETE
@ TELENET
@D
816 36B DISCONNECTED 00:00:31:02  171 259
@
OLE OPERATIONS: Information Systems & Networks Corporation
5454 Wisconsin Avenue
Chevy Chase, Maryland 20815
(301) 656-4083