ECORLOG Computer Application Users' and Programmers' Guides

C. Winter

September 1984

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ECORLOG COMPUTER APPLICATION USERS' AND PROGRAMMERS' GUIDES

1.0 INTRODUCTION

1.1 OVERVIEW OF THE ECORLOG APPLICATION

This document provides information on using the ECORLOG application program available on the Four-Phase Systems VISION package. ECORLOG is used for management control of procurements issued by the U.S. Department of Energy's Office of Energy Systems Research (DOE/ESR). It provides a structured format for entering and updating individual procurement actions, and two standardized ECORLOG reports. These reports, which provide information on all the procurements under one or more ECOR Number (analogous to the Budget & Reporting (B&R) Classifications used more generally at DOE), are used by both Office of Energy Systems Research (ESR) personnel and other DOE Offices.

VISION is a distributed processing package which is available on Four-Phase Systems computers. Its features include source data entry, data management and report generation. In VISION, A 'Job' consists of the screen displays used by a particular application, and all the data entered using those screen displays. The Job is a collection of 'Batches', each identified by a unique name (Batch ID) and consisting of a group of entries ('Records') made using the screen displays of the Job. In this case, ECORLOG is the VISION Job; a separate Batch of ECORLOG exists for each ECOR Number, and each Batch contains one Record for each procurement (contract) issued under that ECOR Number as well as a Summary Record for the ECOR Number. Throughout the instructions that follow, the term Job refers to ECORLOG, Batch to the collection of Records for a particular ECOR Number, and Record to an Individual Contract or Summary entry.

The ECORLOG application includes the Job named ECORLOG and three associated programs: ECRUP, ECRPT1 and ECRPT2. While the Job is used to store data (in this case, information on each procurement issued by DOE's Office of Energy Systems Research), the programs are executed to process the data contained in Batches of the ECORLOG Job. The ECRUP program updates the numeric fields in each Record of a Batch to incorporate additions or modifications made to that Batch; the ECRPT1 and ECRPT2 programs allow for the printing of two different ECORLOG reports.

1.2 ORGANIZATION OF THIS GUIDE

This document consists of two separate guides to the ECORLOG application. Sections One through Five make up the Users' Guide, while the Programmers' Guide is contained in the Appendix. The Programmer's Guide contains information that will be useful in maintaining or updating the ECORLOG application's capabilities, but is not needed for day-to-day use of the ECORLOG Job and programs.

Each of the following four sections covers a separate aspect of ECORLOG. Section Two explains how data is entered into a Batch of the ECORLOG Job. In Section Three, several common data-editing operations are described. Instructions for running the three ECORLOG programs (ECORUP, ECRPT1 and ECRPT2) are given in Section Four, which also includes samples of the ECORLOG reports. Section Five concludes the Users' Guide with procedures for redirecting the output of ECORLOG reports to different printers, and for storing ECORLOG data at the end of a fiscal year.

The explanations given in the Users' Guide are illustrated by examples. Each example consists of one or more ECORLOG screen displays, and lettered steps describing what is being done in the example. The screen displays here are copies of what the user would see on an actual terminal screen. Information which is being entered by the user is underlined in the screen displays given in the examples; it is not underlined on the actual screen. The position of the cursor on the screen is shown with an open rectangle (□).

This entire Users Guide should be read before attempting to produce reports on real data. It may be helpful to open a test Batch of ECORLOG and follow through the data entry and editing examples step by step, and then to use two test Batches in running the ECORLOG programs. Open a test Batch with which to experiment before trying to enter information in a Batch which will be kept and updated.

This is not a VISION user's manual, and does not attempt to cover all aspects of VISION keyboard operation and data entry, although specific keystroke sequences for most of the operations used in the ECORLOG application are provided. The Four-Phase Systems manuals "Teach Yourself VISION" and "VISION Keyboard Operation" provide further information in this area.

2.0 DATA ENTRY

To enter information on procurements and produce the ECORLOG reports, you must leave ForeWord and enter VISION on the Four-Phase computer. While ForeWord and VISION utilize the same Four-Phase keyboard, the keyboard keys are used for different functions in the two packages. The ForeWord function of a key is written in black letters on the top of the key; the VISION function is written in white letters on the front of the key. For instance, the key referenced here as MODE is same key used to RESET in ForeWord; VISION's FIELD REL key corresponds to CURSOR RETURN in ForeWord. Another important VISION key, CORR REST (used to clear error messages) is the same key used to TAB in ForeWord.

To access VISION from the ForeWord idle screen, press CTRL-FIELD REL to get the prompt "TYPE C, I, V, S OR ?" Type V to enter VISION, where the prompt requests a three-character IO. Any three letters or numbers can be entered (pressing FIELD REL is not necessary). The job in which procurement information is stored is called ECORLOG. To enter a Batch of this Job, press the MODE key and type E to access VISION's data Entry mode, type ECORLOG,BATCH (where BATCH represents the batch IO and can be up to six letters or numbers in length) and press FIELD REL.

There are two different screen displays (called Program Levels) in ECORLOG. Program Level One displays a screen titled SUMMARY FOR ECOR NUMBER. This screen allows entry of information to be used as the report header. Program Level Two displays a screen called INDIVIDUAL CONTRACT INFORMATION, where information on each procurement is entered. Screen layouts and data entry instructions for each Program Level are detailed in the sections that follow. Record layouts of the contents of each Program Level are also provided.

When a Batch is first opened, the Program Level One SUMMARY screen will be displayed. Once this Record is filled, all subsequent screens will be Program Level Two INDIVIDUAL CONTRACT screens which appear automatically. When a Batch is reopened after data has been entered, an empty screen at the end of the Batch will be displayed -- it is a SUMMARY screen. No information should be entered into a blank SUMMARY screen after reopening a Batch. To add Records at the end of the Batch, press the up arrow once and the down arrow once to display an INDIVIDUAL CONTRACT screen. To add Records in the middle of the Batch, press CTRL and the up arrow simultaneously to go to the beginning of the Batch before continuing. Section Three contains further information on editing ECORLOG data after it has been entered into a Batch.

NOTES ON DATA ENTRY:

1. All entries appear on the screen in capital letters, so it is not necessary to shift into upper case at the beginning of words.
2. If a mistake is made during data entry, an error message (usually self-explanatory) will flash at the bottom of the screen. The CORR REST key must be pressed (the error message will stop flashing) before the error can be corrected.

2.1 PROGRAM LEVEL ONE: "SUMMARY FOR ECOR NUMBER" SCREEN

The Program Level One Record provides summary information for an ECOR number, and serves as a header for the ECORLOG report. It is important to remember that there should be only one Program Level One Record in each ECORLOG Batch, and that it should always be the first Record. The fields contained in the Program Level One Record are listed in Table 1 below.

When a Batch of ECORLOG is first opened, the Program Level One Record is the first screen to appear. The fields in this Record are described on the following pages.

TABLE 1. RECORD LAYOUT FOR PROGRAM LEVEL ONE RECORDS

FIELD NAME =====	FIELD TYPE =====	FIELD WIDTH =====	COMMENTS =====
ECOR NUMBER	General	15	
ANALYST	General	20	
PHONE NUMBER	General	15	
FISCAL YEAR I	Integer	4	Must Be Filled, i.e., all four digits of the year must be entered.
APPROPRIATION AMOUNT	Numeric	12	
APPROPRIATION NUMBER	General	15	
FISCAL YEAR II	Integer	4	The contents of FISCAL YEAR I are used to fill this field automatically.
UNOBLIGATED CARRYOVER AMOUNT	Numeric	12	
TOTAL ECOR AVAILABILITY	Numeric	12	

EXAMPLE 1. OPENING A NEW ECORLOG BATCH

- a. You start at the MFE screen, and type V to enter VISION, then enter a three-letter user ID.
- b. To open the new Batch called TEST, you press the MODE key and type E.
Message Line: TYPE JOBNAME, BATCH #
- c. Type 'ECORLOG,TEST' and press FIELD REL, which leads to the Status Line and screen display below.

Status Line: 001oG,ASD,P1,E,ECORLOG,TEST UID 1

SUMMARY FOR ECOR NUMBER	
ECOR NUMBER:	☐
ANALYST:	PHONE NUMBER:
FY APPROPRIATION AMOUNT:	*
APPROPRIATION NUMBER:	
FY UNDELEGATED CARRYOVER AMOUNT:	*
TOTAL ECOR AVAILABILITY:	*
* NUMERIC FIELDS: USE COMMAS WHEN ENTERING AMOUNTS IF NUMBER IS NEGATIVE, BEGIN WITH A NEGATIVE SIGN	

ECOR NUMBER

The ECOR NUMBER, also known as the B&R Number, is used to categorize procurement actions. Enter the ECOR NUMBER and press FIELD REL.

EXAMPLE 2. ECOR NUMBER FIELD

- a. Enter 'AK-05' for the ECOR NUMBER, and press FIELD REL.

SUMMARY FOR ECOR NUMBER

ECOR NUMBER: AK-05

ANALYST: ☐ PHONE NUMBER:

FY APPROPRIATION AMOUNT: *

ANALYST

This field stores the name of the budget analyst in the controller's office. Enter the name of this person and press FIELD REL.

EXAMPLE 3. ANALYST FIELD

- a. Enter 'D. KERN' as the ANALYST, and press FIELD REL.

SUMMARY FOR ECOR NUMBER

ECOR NUMBER: AK-05

ANALYST: D. KERN PHONE NUMBER: ☐

FY APPROPRIATION AMOUNT: *

PHONE NUMBER

This field contains the Budget Analyst's phone number. Enter and press FIELD REL.

EXAMPLE 4. PHONE NUMBER FIELD

- a. Enter '252-1500' as the analyst's phone number, and press FIELD REL.

 APPROPRIATION AMOUNT: .', and 'APPROPRIATION NUMBER:'."/>

ECOR NUMBER: AK-05

ANALYST: D. KERN PHONE NUMBER: 252-1500

FY ☐ APPROPRIATION AMOUNT: .

APPROPRIATION NUMBER:

FY (FISCAL YEAR I)

The fiscal year in which the procurements are funded is entered here. All four numbers of the fiscal year must be entered. After FISCAL YEAR I is entered, the cursor will be automatically transferred to the next field.

EXAMPLE 5. FISCAL YEAR I FIELD

- a. Enter '85' for the FISCAL YEAR, and press FIELD REL.

Status Line: MUST FILL

ANALYST: <u>D. KERN</u>		PHONE NUMBER: <u>252-1500</u>	
FY <u>85</u>	APPROPRIATION AMOUNT:		*
APPROPRIATION NUMBER:			
FY	UNOBLIGATED CARRYOVER AMOUNT:		*

- b. Press SHIFT and CORR REST simultaneously. This stops the flashing of the Status Line's error message and unlocks the keyboard.
- c. Press the left arrow key twice to position the cursor at the beginning of the fiscal year field. Enter '1985'. The cursor will move to the beginning of the next field.

ANALYST: <u>D. KERN</u>		PHONE NUMBER: <u>252-1500</u>	
FY <u>1985</u>	APPROPRIATION AMOUNT:	☐	*
APPROPRIATION NUMBER:			
FY	UNOBLIGATED CARRYOVER AMOUNT:		*

APPROPRIATION AMOUNT

This field will contain the total APPROPRIATION AMOUNT for the procurements in the fiscal year just entered. This field (along with UNOBLIGATED CARRYOVER AMOUNT and TOTAL ECOR AVAILABILITY) is a Numeric type field. The only characters which cannot be entered into numeric fields are the alphabetic characters A-Z. Thus, you can enter commas and negative signs into numeric fields such as APPROPRIATION AMOUNT. If the amount is negative, the negative sign should precede the number. Enter the figure for APPROPRIATION AMOUNT, and press FIELD REL to complete the field.

EXAMPLE 6. APPROPRIATION AMOUNT FIELD

- a. Enter '3,500,000' for the APPROPRIATION AMOUNT, and press FIELD REL.

ANALYST: <u>D. KERN</u>	PHONE NUMBER: <u>252-1500</u>
FY <u>1985</u> APPROPRIATION AMOUNT:	<u>3,500,000</u> *
APPROPRIATION NUMBER:	☐
FY UNOBLIGATED CARRYOVER AMOUNT:	*

APPROPRIATION NUMBER

The APPROPRIATION NUMBER, which further identifies the appropriation, may contain letters, numbers, and punctuation. Enter the APPROPRIATION NUMBER and press FIELD REL to continue to the next field.

EXAMPLE 7. APPROPRIATION NUMBER FIELD

- a. Enter '89X0224.91' as the APPROPRIATION NUMBER. Do not press FIELD REL yet.

FY <u>1985</u> APPROPRIATION AMOUNT:	<u>3,500,000</u> *
APPROPRIATION NUMBER:	<u>89X0224.91</u> ☐
FY UNOBLIGATED CARRYOVER AMOUNT:	*
TOTAL ECOR AVAILABILITY:	*

FY (FISCAL YEAR II)

This field will contain the same fiscal year as FISCAL YEAR I entered previously. However, you do not have to enter the fiscal year again yourself. Once FIELD REL is pressed after the APPROPRIATION NUMBER field, the computer automatically copies FISCAL YEAR I to the FISCAL YEAR II field, and moves the cursor to the beginning of the next field.

EXAMPLE 8. FISCAL YEAR II FIELD

- a. FIELD REL was not pressed at the end of the last example. Press FIELD REL now. You can see that the fiscal year appears in the FISCAL YEAR II field, as the cursor moves to the next field.

FY 1985 APPROPRIATION AMOUNT:	<u>3,500,000</u>	*
APPROPRIATION NUMBER:	<u>89X0224.91</u>	
FY 1985 UNOBLIGATED CARRYOVER AMOUNT:	☐	*
TOTAL ECOR AVAILABILITY:		*

UNOBLIGATED CARRYOVER AMOUNT

This field contains the unspent funding for the ECOR NUMBER from the previous fiscal year. Like the APPROPRIATION AMOUNT field, UNOBLIGATED CARRYOVER AMOUNT is a Numeric type field. Enter the UNOBLIGATED CARRYOVER AMOUNT with commas and a preceding negative sign if necessary, and press FIELD REL.

EXAMPLE 9. UNOBLIGATED CARRYOVER AMOUNT FIELD

- a. Enter '525,060' as the UNOBLIGATED CARRYOVER AMOUNT, and press FIELD REL.

APPROPRIATION NUMBER:	<u>89X0224.91</u>	
FY 1985 UNOBLIGATED CARRYOVER AMOUNT:	<u>525,060</u>	*
TOTAL ECOR AVAILABILITY:	☐	*
* NUMERIC FIELDS: USE COMMAS WHEN ENTERING AMOUNTS IF NUMBER IS NEGATIVE, BEGIN WITH A NEGATIVE SIGN		

TOTAL ECOR AVAILABILITY

TOTAL ECOR AVAILABILITY, the sum of the APPROPRIATION AMOUNT and the UNOBLIGATED CARRYOVER AMOUNT fields, is another numeric field. Add the amounts in the APPROPRIATION AMOUNT and UNOBLIGATED CARRYOVER AMOUNT fields, and enter their sum in TOTAL ECOR AVAILABILITY (entering commas as you go). Press FIELD REL to complete both the field and the Program Level One Record; a Program Level Two Record will then be displayed.

EXAMPLE 10. TOTAL ECOR AVAILABILITY FIELD

- a. Add the amounts entered in the APPROPRIATION AMOUNT and UNOBLIGATED CARRYOVER AMOUNT fields. Enter the result '4,025,060' in the TOTAL ECOR AVAILABILITY field. Do not press FIELD REL yet.

FY 1985 UNOBLIGATED CARRYOVER AMOUNT: 525,060 *

TOTAL ECOR AVAILABILITY: 4,025,060□ *

* NUMERIC FIELDS: USE COMMAS WHEN ENTERING AMOUNTS
IF NUMBER IS NEGATIVE, BEGIN WITH A NEGATIVE SIGN

- b. Press FIELD REL. You will see a Program Level Two, INDIVIDUAL CONTRACT INFORMATION screen displayed.

INDIVIDUAL CONTRACT INFORMATION

CONTRACTOR: □ # # PROGRAM MANAGER:

- c. Press the up arrow once to view the completed SUMMARY FOR ECOR NUMBER screen.

SUMMARY FOR ECOR NUMBER		
ECOR NUMBER:	<u>OK-05</u>	
ANALYST:	<u>D. KERN</u>	PHONE NUMBER: <u>252-1500</u>
FY 1985 APPROPRIATION AMOUNT:	<u>3,500,000</u>	*
APPROPRIATION NUMBER:	<u>89X0224.91</u>	
FY 1985 UNOBLIGATED CARRTOVER AMOUNT:	<u>525,060</u>	*
TOTAL ECOR AVAILABILITY:	<u>4,025,060</u>	*
* NUMERIC FIELDS: USE COMMAS WHEN ENTERING AMOUNTS IF NUMBER IS NEGATIVE, BEGIN WITH A NEGATIVE SIGN		

- d. Press the down arrow once to return to the INDIVIDUAL CONTRACT INFORMATION screen. You are now ready to enter information on individual procurement actions; this is described in the following section.

INDIVIDUAL CONTRACT INFORMATION			
CONTRACTOR:	☐	#	PROGRAM MANAGER:
	#	#	
DATE RECEIVED:	(XX/XX)		
FIELD OFFICE:		IPMIS (CID) NO.:	
BA:	CUMULATIVE BA:		
BO:	CUMULATIVE RO:		
WORK TITLE/DESCRIPTION:	#	#	
	#	#	
	#	#	
	#	#	
COMMENTS:	#	#	
	#	#	
	#	#	
	#	#	
		LAB	STATE
		CODE:	CODE:

2.2 PROGRAM LEVEL TWO: INDIVIDUAL CONTRACT INFORMATION

Program Level Two Records provide for entry of information concerning individual procurement actions. Each Program Level Two Record contains the information on one procurement. All of the Records in a Batch of ECORLOG, after the first Record, should be Program Level Two Records. The fields in each Program Level Two Record are listed in Table 2 below.

After the SUMMARY FOR ECOR NUMBER screen has been completed, all subsequent screens will be INDIVIDUAL CONTRACT INFORMATION screens. The fields entered into Program Level Two Records from these screens are described on the following pages.

TABLE 2. RECORD LAYOUT FOR PROGRAM LEVEL TWO RECORDS

FIELD NAME =====	FIELD TYPE =====	FIELD WIDTH =====	COMMENTS =====
CONTRACTOR I	General	12	First of three fields. Must Be Entered, i.e., the field cannot be bypassed by pressing FIELD REL.
CONTRACTOR II	General	12	Second of three fields.
CONTRACTOR III	General	12	Third of three fields.
PROGRAM MANAGER	General	10	Must Be Entered.
DATE RECEIVED	Integer and Text	5	Together, the first two digits (the month) must be greater than zero and less than 13. The third digit is a slash, which is gener- ated automatically. the last two digits (the day) must be greater than zero and less than 32.
FIELD OFFICE	General	4	Must Be Entered.
IPMIS (CID) NUMBER	General	7	

TABLE 2. RECORD LAYOUT FOR PROGRAM LEVEL TWO RECORDS (continued)

FIELD NAME	FIELD TYPE	FIELD WIDTH	COMMENTS
BA	Numeric	12	Must Be Entered.
CUMULATIVE BA	Numeric	12	Skipped during data entry. The contents of this field are provided by the ECORUP program.
BO	Numeric	12	Must Be Entered.
CUMULATIVE BO	Numeric	12	Skipped during data entry. The contents of this field are provided by the ECORUP program.
WORK TITLE/DESCRIPTION I	General	19	First of four fields. Must Be Entered.
WORK TITLE/DESCRIPTION II	General	19	Second of four fields.
WORK TITLE/DESCRIPTION III	General	19	Third of four fields.
WORK TITLE/DESCRIPTION IV	General	19	Fourth of four fields.
COMMENTS I	General	17	First of four fields. Must Be Entered.
COMMENTS II	General	17	Second of four fields.
COMMENTS III	General	17	Third of four fields.
COMMENTS IV	General	17	Fourth of four fields.
LAB CODE	General	4	
STATE CODE	General	2	Validated against a value set containing the postal abbreviations for the states, blanks, and '99' for foreign contracts as permitted entries.

EXAMPLE 11. BEGINNING AN INDIVIDUAL CONTRACT SCREEN

- a. You have finished entering information into the SUMMARY FOR ECOR NUMBER screen, and have pressed FIELD REL after entering TOTAL ECOR AVAILABILITY. A Program Level Two, INDIVIDUAL CONTRACT INFORMATION, screen is displayed.

INDIVIDUAL CONTRACT INFORMATION			
CONTRACTOR:	☐	#	PROGRAM MANAGER:
	#	#	
DATE RECEIVED:	(XX/XX)		
FIELD OFFICE:		IPMIS (CID) NO.:	
BA:	CUMULATIVE BA:		
BO:	CUMULATIVE BO:		
WORK TITLE/DESCRIPTION:	#	#	
	#	#	
	#	#	
COMMENTS:	#	#	
	#	#	
	#	#	
		LAB	STATE
		CODE:	CODE:

CONTRACTOR

The Contractor's name is entered in one or more of three sub-fields, which are delineated by the hash marks (#'s) on the screen. The hash marks will disappear as the sub-fields are filled. Information entered here will appear in the same format on the ECORLOG reports, so words should not be split between lines unless they are hyphenated. Enter the name of the CONTRACTOR, pressing FIELD REL at the end of each subfield. Note, though, that if the entire sub-field is filled, the cursor moves to the beginning of the next sub-field. Pressing FIELD REL fills unneeded sub-fields with blanks.

EXAMPLE 12. CONTRACTOR FIELD

- a. Enter 'OAK RIDGE NATIONAL LABORATORY' in the CONTRACTOR field. Do not press FIELD REL until you are finished.

INDIVIDUAL CONTRACT INFORMATION

CONTRACTOR: OAK RIDGE NA
TIONAL LABOR
ATORY

PROGRAM MANAGER: ☐

DATE RECEIVED: (XX/XX)

- b. Since the CONTRACTOR field will print out the same way it was entered, it should be changed so that the words break at the sub-fields. Use the left arrow to move the cursor backward. Stop when the cursor is positioned between 'RIDGE' and 'NA'.

INDIVIDUAL CONTRACT INFORMATION

CONTRACTOR: OAK RIDGE NA
TIONAL LABOR
ATORY

PROGRAM MANAGER:

DATE RECEIVED: (XX/XX)

- c. Press FIELD REL. Notice that the 'NA' has been erased from the first sub-field, and that the cursor is now positioned at the beginning of the second sub-field.

INDIVIDUAL CONTRACT INFORMATION

CONTRACTOR: OAK RIDGE
TIONAL LABOR
ATORY

PROGRAM MANAGER:

DATE RECEIVED: (XX/XX)

- d. Enter 'NATIONAL'. The cursor is now positioned over the third 'A' in the second sub-field.

```

      INDIVIDUAL CONTRACT INFORMATION

CONTRACTOR:  OAK RIDGE
              NATIONAL
              LABOR
              ATORT
PROGRAM MANAGER:

DATE RECEIVED:  (XX/XX)

```

- e. Press FIELD REL. 'LABOR' is erased from the screen, and the cursor is now positioned at the beginning of the third sub-field.

```

      INDIVIDUAL CONTRACT INFORMATION

CONTRACTOR:  OAK RIDGE
              NATIONAL
              LABOR
              ATORT
PROGRAM MANAGER:

DATE RECEIVED:  (XX/XX)

```

- f. Enter 'LABORATORY' and press FIELD REL. The CONTRACTOR entry is now properly aligned for output in a report.

```

      INDIVIDUAL CONTRACT INFORMATION

CONTRACTOR:  OAK RIDGE
              NATIONAL
              LABORATORY
              ATORT
PROGRAM MANAGER:

DATE RECEIVED:  (XX/XX)

```


PROGRAM MANAGER

Enter the last name of the PROGRAM MANAGER for the work performed under the procurement, and press FIELD REL.

EXAMPLE 13. PROGRAM MANAGER FIELD

- a. Enter 'KLEIN' in the PROGRAM MANAGER field, and press FIELD REL.

INDIVIDUAL CONTRACT INFORMATION

CONTRACTOR:	<u>OAK RIDGE</u> <u>NATIONAL</u> <u>LABORATORY</u>	PROGRAM MANAGER:	<u>KLEIN</u>
DATE RECEIVED:	☐ (XX/XX)		

DATE RECEIVED

As indicated on the screen, the DATE RECEIVED field should be entered as 'XX/XX'. The slash between the first two digits (the month) and the second two digits (the day) will be generated automatically after the two digits for the month are entered. Two digits must be used for the month, and two for the day; after each two digits are entered, the cursor moves to the next data entry position on the screen. If there is no date to record, hitting FIELD REL for each field will result in blanks (the slash will still be generated). Alternatively, pressing the white-lettered ? key at the top of the keyboard will fill these fields with question marks.

EXAMPLE 14. DATE RECEIVED FIELD

- a. Enter '9' and press FIELD REL.

Status Line: NOT VALID DATA

CONTRACTOR: OAK RIDGE
NATIONAL
LABORATORY

PROGRAM MANAGER: KLEIN

DATE RECEIVED: ☒ (XX/XX)

FIELD OFFICE: IPMIS (CID) NO.:

- b. The error message flashes on the screen because only one digit was entered. Unlock the terminal by pressing SHIFT and CORR REST simultaneously. Enter '09'. A slash appears to the right of '09' and the cursor is positioned in the next column.

CONTRACTOR:	<u>OAK RIDGE</u> <u>NATIONAL</u> <u>LABORATORY</u>	PROGRAM MANAGER:	<u>KLEIN</u>
DATE RECEIVED:	09/ ☐ (XX/XX)	IPMIS (CID) NO.:	
FIELD OFFICE:			

- c. Enter '20' for the day. DATE RECEIVED has now been completed, and the cursor moves to the next field.

CONTRACTOR:	<u>OAK RIDGE</u> <u>NATIONAL</u> <u>LABORATORY</u>	PROGRAM MANAGER:	<u>KLEIN</u>
DATE RECEIVED:	09/20 (XX/XX)	IPMIS (CID) NO.:	
FIELD OFFICE:	☐		

FIELD OFFICE (FO)

Here, a code is entered to indicate the Department of Energy FIELD OFFICE under which the procurement falls. If less than four characters are entered, press FIELD REL to proceed to the next field. If four characters are entered, the cursor will move to the next field automatically. Select a FIELD OFFICE code from the following list.

ALO	Albuquerque Operations Office
CHO	Chicago Operations Office
GJAO	Grand Junction Area Office
IDO	Idaho Operations Office
NVO	Nevada Operations Office
ORO	Oak Ridge Operations Office
RLO	Richland Operations Office
SFO	San Francisco Operations Office
WHO	DOE Headquarters/Washington Office

EXAMPLE 15. FIELD OFFICE FIELD

- a. Enter 'ORO' as the FIELD OFFICE, and press FIELD REL.

CONTRACTOR:	<u>OAK RIDGE</u> <u>NATIONAL</u> <u>LABORATORY</u>	PROGRAM MANAGER:	<u>KLEIN</u>
DATE RECEIVED:	<u>09/20</u> (XX/XX)		
FIELD OFFICE:	<u>ORO</u>	IPMIS (CID) NO.:	☐
BA:	CUMULATIVE BA:		
BO:	CUMULATIVE BO:		

IPMIS (CID) #

Not all procurements have an IPMIS (CID, or CONTRACT IDENTIFICATION) NUMBER. If there is no IPMIS NUMBER, press FIELD REL to proceed to the next field. If there is an IPMIS NUMBER associated with the procurement, enter its seven digits; the cursor will move to the next field.

EXAMPLE 16. IPMIS NUMBER FIELD

- a. Enter 'OR12345' as the IPMIS NUMBER. The cursor moves to the next field.

CONTRACTOR:	<u>OAK RIDGE</u> <u>NATIONAL</u> <u>LABORATORY</u>	PROGRAM MANAGER:	<u>KLEIN</u>
DATE RECEIVED:	<u>09/20</u> (XX/XX)		
FIELD OFFICE:	<u>ORO</u>	IPMIS (CID) NO.:	<u>OR12345</u>
BA: ☐	CUMULATIVE BA:		
BO:	CUMULATIVE BO:		

BA (BUDGET AUTHORITY)

This field will contain the BUDGET AUTHORITY (BA) amount for the procurement action. The BA field (as well as CUMULATIVE BA, BO, and CUMULATIVE BO in Program Level Two Records) is a Numeric type field. The only characters which cannot be entered into numeric fields are the alphabetic characters A-Z. Thus, you can enter commas and negative signs into numeric fields such as BA (BUDGET AUTHORITY). If the amount is negative, enter the negative sign before the number. Enter the BUDGET AUTHORITY amount for the procurement, and press FIELD REL to complete the field.

EXAMPLE 17. BUDGET AUTHORITY (BA) FIELD

- a. Enter '700' in the BA field. Enter 'M' instead of the comma which should come next. The 'M' will not appear on the screen.

Status Line: A-Z NOT ALLOWED

DATE RECEIVED:	09/20 (XX/XX)	IPMIS (CID) NO.:	QR12345
FIELD OFFICE:	ORO		
BA:	700	CUMULATIVE BA:	
BO:		CUMULATIVE BO:	
WORK TITLE/DESCRIPTION:	#		

- b. The error message displays on the screen because alphabetic characters cannot be entered in Numeric fields. To unlock the terminal, press SHIFT and CORR REST simultaneously. Enter ',000', but do not press FIELD REL.

DATE RECEIVED:	09/20 (XX/XX)	IPMIS (CID) NO.:	QR12345
FIELD OFFICE:	ORO		
BA:	700,000	CUMULATIVE BA:	
BO:		CUMULATIVE BO:	
WORK TITLE/DESCRIPTION:	#		

CUMULATIVE BA

CUMULATIVE BA will contain the total of all the BA amounts entered in Program Level Two Records up to and including the current Record. CUMULATIVE BA is not entered at the terminal now, but is generated later by the ECORUP program (Section 4.1). When FIELD REL is pressed after entering the BA field, the cursor skips over CUMULATIVE BA and moves to the BO field.

EXAMPLE 18. CUMULATIVE BA FIELD

- a. Press FIELD REL at the end of the BA field. The cursor skips over CUMULATIVE BA and moves to the BO field.

DATE RECEIVED:	09/20 (XX/XX)	
FIELD OFFICE:	ORO	IPMIS (CID) NO.: OR12345
BA:	700,000	CUMULATIVE BA:
BO:	☐	CUMULATIVE BO:
WORK TITLE/DESCRIPTION:	#	#

BO (BUDGET OBLIGATION)

This field will contain the BUDGET OBLIGATION (BO) amount for the procurement action. Like BA, BO is a Numeric type field, in which anything except alphabetic characters can be entered. Enter the BUDGET OBLIGATION amount, using commas and a preceeding negative sign if necessary. Press FIELD REL to complete the field.

EXAMPLE 19. BUDGET OBLIGATION (BO) FIELD

- a. Enter '700,000' in the BO (BUDGET OBLIGATION) field. Do not press FIELD REL.

DATE RECEIVED:	09/20 (XX/XX)	
FIELD OFFICE:	ORO	IPMIS (CID) NO.: OR12345
BA:	700,000	CUMULATIVE BA:
BO:	700,000	CUMULATIVE BO:
WORK TITLE/DESCRIPTION:	#	#

CUMULATIVE BO

CUMULATIVE BO will contain the total of all BO amounts entered in Program Level Two Records up to and including the current Record. Like cumulative BA, it is generated by the ECORUP program instead of being entered at the terminal. When FIELD REL is pressed after entering the BO field, the cursor skips over CUMULATIVE BO and moves to the next field.

EXAMPLE 20. CUMULATIVE BO FIELD

- a. Press FIELD REL to complete the BO field. The cursor skips over CUMULATIVE BO and moves to the WORK TITLE/DESCRIPTION field.

BA:	700,000	CUMULATIVE BA:	
BO:	700,000	CUMULATIVE BO:	
WORK TITLE/DESCRIPTION:			

WORK TITLE/DESCRIPTION

The WORK TITLE/DESCRIPTION field is made up of four sub-fields, which are outlined by hash marks (#'s), similar to the CONTRACTOR field. The hash marks will disappear as the sub-fields are filled. The information entered here appears in the same report format as it does on the screen. Words should not be split between lines unless they are hyphenated. Enter the WORK TITLE/DESCRIPTION information for the procurement, pressing FIELD REL at the end of each subfield. If an entire sub-field is filled, the cursor moves to the beginning of the next sub-field. Pressing FIELD REL will fill unneeded sub-fields with blanks.

EXAMPLE 21. WORK TITLE/DESCRIPTION FIELD

- a. Enter 'ELECTROMAGNETIC' in the first WORK TITLE/DESCRIPTION sub-field. Press FIELD REL -- the hash marks at the end of the first sub-field and at the beginning of the second sub-field are erased from the screen, and the cursor moves to the second sub-field. Enter 'PULSE'.

BA:	<u>700,000</u>	CUMULATIVE BA:	
BO:	<u>700,000</u>	CUMULATIVE BO:	
WORK TITLE/DESCRIPTION:		<u>ELECTROMAGNETIC</u>	
		<u>PULSE</u>	
COMMENTS:			

- b. Press FIELD REL. The hash marks at the end of the second sub-field and the beginning of the third sub-field are erased, and the cursor moves to the third sub-field.

BA:	<u>700,000</u>	CUMULATIVE BA:	
BO:	<u>700,000</u>	CUMULATIVE BO:	
WORK TITLE/DESCRIPTION:		<u>ELECTROMAGNETIC</u>	
		<u>PULSE</u>	
COMMENTS:			

- c. Press FIELD REL again to bypass the third sub-field. Two more hash marks disappear, and the cursor moves to the fourth and last sub-field.

BA:	<u>700,000</u>	CUMULATIVE BA:	
BO:	<u>700,000</u>	CUMULATIVE BO:	
WORK TITLE/DESCRIPTION:	<u>ELECTROMAGNETIC PULSE</u>		
	☐	#	#
COMMENTS:	#	#	

- d. Press FIELD REL. The hash mark at the end of the fourth sub-field, and that at the beginning of the first COMMENTS sub-field, now disappear from the screen. The cursor moves to the first sub-field of the COMMENTS field.

WORK TITLE/DESCRIPTION:	<u>ELECTROMAGNETIC PULSE</u>		
COMMENTS:	☐	#	#
	#	#	
		LAB CODE:	STATE CODE:

COMMENTS

Actions taken regarding the procurement are entered here. Like the WORK TITLE/DESCRIPTION field, COMMENTS contains four sub-fields outlined by hash marks (#'s). As for WORK TITLE/DESCRIPTION, do not split words between COMMENTS sub-fields without hyphenating them, and press FIELD REL to skip sub-fields.

EXAMPLE 22. COMMENTS FIELD

- a. Enter 'TO DIR 9/22' in the first COMMENTS sub-field, and press FIELD REL. Enter 'TO DASC 9/27' in the second sub-field, and press FIELD REL again. Enter 'TO LAB 11/3/84' in the third sub-field.

Diagram illustrating the data entry screen for the COMMENTS field. The screen is divided into sections. The top section is labeled 'WORK TITLE/DESCRIPTION:' and contains the text 'ELECTROMAGNETIC PULSE'. Below this, the 'COMMENTS:' section is shown with three sub-fields: 'TO DIR 9/22', 'TO DASC 9/27', and 'TO LAB 11/3/84'. The 'TO LAB 11/3/84' sub-field is followed by a hash mark (#). To the right of the COMMENTS section, there are labels for 'LAB CODE:' and 'STATE CODE:'.

- b. Press FIELD REL, and watch two of the remaining hash marks fade from the screen. Press FIELD REL a final time to complete the COMMENTS field. The cursor moves to the next field.

Diagram illustrating the data entry screen after the COMMENTS field is completed. The 'COMMENTS:' section now contains three sub-fields: 'TO DIR 9/22', 'TO DASC 9/27', and 'TO LAB 11/3/84'. The 'LAB CODE:' and 'STATE CODE:' labels are now empty, with a small square box next to 'LAB CODE:'.

LAB CODE

A three or four digit code is entered here to indicate the Department of Energy Laboratory performing work under the procurement. If less than four characters are entered, press FIELD REL to proceed to the next field. If four characters are entered, the cursor will move to the next field automatically. Select a LAB CODE from the list below.

ANL	Argonne National Laboratory
BNL	Brookhaven National Laboratory
LANL	Los Alamos National Laboratory
ORNL	Oak Ridge National Laboratory
PNL	Pacific Northwest Laboratory
SNL	Sandia National Laboratories
SNLL	Sandia National Laboratories, Livermore
LBL	Lawrence Berkeley Laboratories
LLL	Lawrence Livermore Laboratories

EXAMPLE 23. LAB CODE FIELD

- a. Enter 'ORNL' as the LAB CODE. The cursor moves to the next field.

COMMENTS:	TO DIR 9/22	LAB CODE: <u>ORNL</u>	STATE CODE: ☐
	TO DASC 9/27		
	TO LAB 11/3/84		

STATE CODE

This is a two-character field for entering the state in which work under the procurement is being performed. It may be left blank. If you do enter anything in this field, the computer checks your entry against a list of the standard postal abbreviations, and displays a flashing error message if the entry matches nothing in the list. '99' can also be entered, and should be used if the work will be done outside of the fifty states and the District of Columbia. The standard postal abbreviations are given below. Once the two-digit abbreviation is entered for STATE CODE (the last field in the Record), the Record is complete and a new, blank INDIVIDUAL CONTRACT INFORMATION screen will be displayed.

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

EXAMPLE 24. STATE CODE FIELD

- a. Enter 'TE' in the STATE CODE field. Do not press FIELD REL.

Status Line: USE POSTAL ABBREVIATIONS - '99' FOR FOREIGN

COMMENTS: TO DIR 9/22
 TO DASC 9/27
 TO LAB 11/3/84

LAB STATE
CODE: ORNL CODE: TE

- b. The Status Line message flashes on the screen because 'TE' is not a standard postal abbreviation. Press SHIFT and CORR REST together to unlock the terminal. Enter 'TN'. The Record is now considered complete, and a blank INDIVIDUAL CONTRACT INFORMATION screen will be displayed.

INDIVIDUAL CONTRACT INFORMATION

CONTRACTOR: ☐ # # PROGRAM MANAGER:
 # #
 # #

- c. Press the up arrow once to review the Program Level Two Record just completed.

INDIVIDUAL CONTRACT INFORMATION			
CONTRACTOR:	<u>ORNL</u>	#	
	<u>NATIONAL</u>	#	
	<u>LABORATORY</u>	#	
DATE RECEIVED:	<u>09/20</u>	(XX/XX)	
FIELD OFFICE:	<u>ORO</u>		
		IPMIS (CID) NO.:	<u>OR12345</u>
BA:	<u>700,000</u>	CUMULATIVE BA:	
BO:	<u>700,000</u>	CUMULATIVE BO:	
WORK TITLE/DESCRIPTION:	<u>ELECTROMAGNETIC</u>	#	
	<u>PULSE</u>	#	
		#	
		#	
COMMENTS:	<u>TO DIR 9/22</u>	#	
	<u>TO DASC 9/27</u>	#	
	<u>TO LAB 11/3/84</u>	#	
		#	
		LAB	STATE
		CODE: <u>ORNL</u>	CODE: <u>TN</u>

- d. Press the down arrow once to return to the blank individual contract information screen.

Blank Program Level Two screens will continue to be displayed after each Record is completed. Continue entering information on individual procurements as described above. When you are finished, you can review your entries by using the up and down arrow keys. The Batch can be exited by pressing the MODE key (MODE X S logs the user out of VISION; following this with CTRL and FIELD REL pressed simultaneously returns the user to the "TYPE C, I, V, S OR ?" prompt, from which typing I returns the user to ForeWord).

3.0 EDITING THE DATA IN ECORLOG BATCHES

The Records in a Batch of ECORLOG may need to be changed after they have been entered. The contents of various fields may change as the procurement is processed. Records may need to be added to or deleted from a Batch. These common editing operations -- changing, adding, and deleting Records -- are covered in the next sections.

When a Batch is reopened, a blank Program Level One SUMMARY screen, positioned at the end of the Batch, will be displayed on the screen. Before further editing, press either CTRL/up arrow (to go to the beginning of the batch), or the up arrow key (to go back one Record).

The following keys are used to move between Records in a Batch:

1. CTRL/up arrow -to go to the beginning of a Batch;
2. CTRL/down arrow -to go to the end of a Batch;
3. up arrow - to go back one Record;
4. down arrow - to go forward one Record.

After a Batch is re-edited, the ECORUP program should be run to update the numeric fields in each Record.

3.1 CHANGING EXISTING RECORDS

1. Go to the Record to be changed.
2. Pressing SHIFT and CORR REST simultaneously will unlock the Record, which allows changes to be made.
3. To bypass fields without changing them, press AUX DUP. (Exception: DATE RECEIVED fields filled with blanks must be bypassed by pressing FIELD REL; pressing AUX DUP here only leads to an error message.)
4. When the cursor is positioned at a field to be changed, key in the new information (pressing FIELD REL if the field is not filled). When the old contents of the field are longer than the new contents, any data not written over will be erased when FIELD REL is pressed.
5. When all corrections have been made, continue to another Record by using the up or down arrow key.

EXAMPLE 25. CHANGING A RECORD

- a. The Batch 'T1' has been re-opened by typing MODE E ECORLOG,T1, and the Record below located using the up arrow key. The WORK TITLE/DESCRIPTION field will be changed from 'MANAGE AND ASSESS TECHNOLOGY' to 'TECHNOLOGY MANAGEMENT AND ASSESSMENT'.

INDIVIDUAL CONTRACT INFORMATION			
CONTRACTOR:	US AIR FORCE	PROGRAM MANAGER:	
		LEVINSON	
DATE RECEIVED:	11/14 (XX/XX)	IPMIS (CID) NO.:	CS35217
FIELD OFFICE:	WHO		
BA:	100,000	CUMULATIVE BA:	1,680,000
BO:	100,000	CUMULATIVE BO:	1,680,000
WORK TITLE/DESCRIPTION:	MANAGE AND ASSESS		
	TECHNOLOGY		
COMMENTS:	PTO BROGAN 11/14		
	PTO DASC 11/15		
	PTO PROCURE 12/5		
		LAB	STATE
		CODE:	CODE: DC

- b. Unlock the Record by pressing SHIFT and CORR REST simultaneously. Bypass fields by pressing the AUX OUP key until the WORK TITLE/DESCRIPTION field is reached. As the BA and BO fields are bypassed, the CUMULATIVE BA and CUMULATIVE BO fields will be erased from the screen.

BA:	100,000	CUMULATIVE BA:	
BO:	100,000	CUMULATIVE BO:	
WORK TITLE/DESCRIPTION:		MANAGE AND ASSESS	
		TECHNOLOGY	
		#	
		#	
		#	

- c. Enter 'TECHNOLOGY MANAGE-' as the first line of the field, and press FIELD REL.

BA:	100,000	CUMULATIVE BA:	
BO:	100,000	CUMULATIVE BO:	
WORK TITLE/DESCRIPTION:		TECHNOLOGY MANAGE-	
		TECHNOLOGY	
		#	
		#	
		#	

- d. Enter 'MENT AND ASSESSMENT' as the second line of the field. The cursor will move to the next line automatically.

BA:	100,000	CUMULATIVE BA:	
BO:	100,000	CUMULATIVE BO:	
WORK TITLE/DESCRIPTION:		TECHNOLOGY MANAGE-	
		MENT AND ASSESSMENT	
		☐	
		#	
		#	
		#	

- e. At this point, the change is complete. Press the down arrow to go to the next Record, then press the up arrow to go back. Notice that the contents of the COMMENTS and STATE CODE fields have been retained.

INDIVIDUAL CONTRACT INFORMATION			
CONTRACTOR:	US AIR FORCE	PROGRAM MANAGER:	
		LEVINSON	
DATE RECEIVED:	11/14 (XX/XX)		
FIELD OFFICE:	WHO	IPMIS (CID) NO.:	CS35217
BA:	100,000	CUMULATIVE BA:	
BO:	100,000	CUMULATIVE BO:	
WORK TITLE/DESCRIPTION:	#TECHNOLOGY MANAGE- #		
	#MENT AND ASSESSMENT#		
	#		
	#		
COMMENTS:	#TO BRDGAN 11/14 #		
	#TO DASC 11/15 #		
	#TO PROCURE 12/5 #		
	#		
	LAB	STATE	
	CODE:	CODE: DC	

3.2 ADDING RECORDS TO THE END OF A BATCH

1. After reentering the Batch, press the up arrow key once and the down arrow key once.
2. A blank INDIVIDUAL CONTRACT screen will be displayed. New Records can then be added to the end of the Batch by following the data entry instructions in Section Two.

EXAMPLE 26. ADDING TO THE END OF A BATCH

- a. The 'T1' Batch is re-entered by typing MODE E ECORLOG,T1. A blank SUMMARY FOR ECOR NUMBER screen is displayed.

SUMMARY FOR ECOR NUMBER

ECOR NUMBER: ☐

ANALYST: PHONE NUMBER:

FY APPROPRIATION AMOUNT: ☐

- b. Press the up arrow key once to display the last INDIVIDUAL CONTRACT INFORMATION Record.

INDIVIDUAL CONTRACT INFORMATION

CONTRACTOR: NATIONAL #
#BUREAU OF # PROGRAM MANAGER:
#STANDARDS # EBERHARDT

DATE RECEIVED: 09/20 (XX/XX)
FIELD OFFICE: WHO IPMIS (CID) NO.:

- c. Press the down arrow key once to display a blank INDIVIDUAL CONTRACT INFORMATION screen.

INDIVIDUAL CONTRACT INFORMATION

CONTRACTOR: ☐ #
PROGRAM MANAGER:
#

DATE RECEIVED: (XX/XX)
FIELD OFFICE: IPMIS (CID) NO.:

- d. New data is entered into the Record. After the Record is completed, the up arrow key can be pressed to display the Record as it is shown below.

INDIVIDUAL CONTRACT INFORMATION			
CONTRACTOR:	<u>WESTINGHOUSE</u> <u>#ELECTRIC CO.#</u> #	PROGRAM MANAGER:	<u>ROESLER</u>
DATE RECEIVED:	<u>10/12</u> (XX/XX)	IPMIS (CID) NO.:	<u>RA50292</u>
FIELD OFFICE:	<u>CHO</u>		
BA:	<u>150,000</u>	CUMULATIVE BA:	
BO:	<u>150,000</u>	CUMULATIVE BO:	
WORK TITLE/DESCRIPTION:	# <u>INVESTIGATION OF</u> # # <u>DOUBLY-FED MACHINE</u> # # <u>VARIABLE SPEED</u> # # <u>APPLICATIONS</u> #		
COMMENTS:	# <u>TO BROGAN 10/2</u> # # <u>TO ROESLER 10/17</u> # # <u>TO BAM 11/4</u> # # <u>TO CHO 11/14</u> #		
	LAB CODE:	STATE CODE:	<u>IL</u>

3.3 ADDING RECORDS TO THE MIDDLE OF A BATCH

1. Find the Record after which a new Record is to be inserted.
2. Press SHIFT and CORR REST simultaneously to unlock the Record and allow a copy to be made of it.
3. Press SHIFT and the down arrow simultaneously. This makes a copy of the Record (the copy is then modified to become the added Record).
4. Press the down arrow key once to display the copy of the Record.
5. Press SHIFT and CORR REST together to unlock the copy of the Record.
6. Key in the new Record, as described in the Data Entry section. To retain the contents of a field as they are displayed on the screen, press AUX DUP. When the new contents of a field are shorter than the old ones, pressing FIELD REL after entering the new contents erases anything under and to the right of the cursor.

7. The added Record is considered complete when either FIELD REL is pressed after the final COMMENTS field, or when the up or down arrow key is pressed.
8. Steps 1 through 7 must be repeated for each Record to be added. If several Records are to be added to the middle of the Batch one after the other, multiple copies of an old Record can be made by pressing SHIFT and the down arrow key repeatedly (at Step 3); each copy can then be modified to become a new Record.

EXAMPLE 27. ADDING TO THE MIDDLE OF A BATCH

- a. The Record displayed below has been located using the up arrow key. Press SHIFT and CORR REST simultaneously to unlock the Record, then SHIFT and the down arrow simultaneously to copy the Record. Press the down arrow key to display the copy, which also appears as in the screen below.

INDIVIDUAL CONTRACT INFORMATION			
CONTRACTOR:		DAK RIDGE #	
		#NATIONAL #	PROGRAM MANAGER:
		#LABORATORY #	KLEIN
DATE RECEIVED:		09/20 (XX/XX)	
FIELD OFFICE:		ORO	IPMIS (CID) NO.:
BA:	580,000	CUMULATIVE BA:	1,280,000
BO:	580,000	CUMULATIVE BO:	1,280,000
WORK TITLE/DESCRIPTION:		#ADVANCED	#
		#DIELECTRICS	#
		#	#
		#	#
COMMENTS:		#TO BROGAN 9/22	#
		#TO DASC 9/27	#
		#TO LAB 11/3	#
		#	#
		LAB	STATE
		CODE: ORNL	CODE: TN

- b. Only the BA, BO and WORK TITLE/DESCRIPTION fields need to be changed. Press SHIFT/CORR REST to unlock the Record; press AUX DUP until the cursor is at the BA field. Enter '300,000' and press FIELD REL. For BO, enter '300,000' again and press FIELD REL. The CUMULATIVE BA and CUMULATIVE BO fields are erased from the screen. Enter 'ADAPTIVE PROTECTION' in the WORK TITLE/DESCRIPTION field. The cursor moves to the next line in this field. Press FIELD REL to erase the old contents of the second line.

BA: <u>300,000</u>	CUMULATIVE BA:
BO: <u>300,000</u>	CUMULATIVE BO:
WORK TITLE/DESCRIPTION: <u>ADAPTIVE PROTECTION</u>	
<div style="text-align: center;"> ☐ </div>	

- c. At this point, all necessary changes have been made. Press the down arrow key to go to the next Record, then the up arrow key to review the added Record, which appears as it does below.

INDIVIDUAL CONTRACT INFORMATION			
CONTRACTOR:	☒ OAK RIDGE #	PROGRAM MANAGER:	KLEIN
	#NATIONAL #		
	#LABORATORY #		
DATE RECEIVED:	09/20 (XX/XX)	IPMIS (CID) NO.:	
FIELD OFFICE:	ORO		
BA: <u>300,000</u>	CUMULATIVE BA:		
BO: <u>300,000</u>	CUMULATIVE BO:		
WORK TITLE/DESCRIPTION: #ADAPTIVE PROTECTION#			
	#		
	#		
	#		
COMMENTS:	#TO BROGAN 9/22 #		
	#TO DASC 9/27 #		
	#TO LAB 11/3 #		
	#		
		LAB CODE: ORNL	STATE CODE: TN

3.4 DELETING A RECORD

1. Display the Record that is to be deleted.
2. Press SHIFT and CORR REST simultaneously to unlock the Record.
3. Press SHIFT and the up arrow key simultaneously to delete the Record.

EXAMPLE 28. DELETING A RECORD

- a. The Record below has been located with the down arrow key.

INDIVIDUAL CONTRACT INFORMATION			
CONTRACTOR:	NATIONAL	#	
	#BUREAU OF	#	PROGRAM MANAGER:
	#STANDARDS	#	EBERHARDT
DATE RECEIVED:	09/20	(XX/XX)	
FIELD OFFICE:	WHD		IPMIS (CID) NO.:

- b. Press SHIFT and CORR REST simultaneously to unlock the Record, then SHIFT and the up arrow key together to delete the Record. The Record is deleted and the next Record displayed.

INDIVIDUAL CONTRACT INFORMATION			
CONTRACTOR:	WESTINGHOUSE	#	
	#ELECTRIC CO.	#	PROGRAM MANAGER:
		#	ROESLER
DATE RECEIVED:	10/12	(XX/XX)	
FIELD OFFICE:	CHD		IPMIS (CID) NO.: RA50292

4.0 RUNNING PROGRAMS TO PROCESS ECORLOG DATA

There are three programs associated with the ECORLOG package. These programs -- ECORUP, ECRPT1, and ECRPT2 -- process the data which has been entered into ECORLOG Batches.

The first of these programs, ECORUP, calculates Cumulative BA and Cumulative BO amounts for each Record in one ECORLOG Batch, updates these fields in the Batch, and right justifies the Batch's other numeric fields. For the Cumulative BA and Cumulative BO fields of each Record in a Batch to be accurate, ECORUP should be run after the data in a Batch is first entered, and whenever any numeric fields in any Record of a Batch are changed. ECORUP will only process one Batch at a time, so it must be run for each Batch in which numeric fields have been modified.

The second ECORLOG program, ECRPT1, causes a standard ECORLOG report to be printed for any one Batch of ECORLOG. ECRPT1 is run whenever a printed record of the ECORLOG information in one Batch is needed. During an ECRPT1 run, prompts on the screen request the current date and the name of the user. These items are incorporated in an end-of-report entry, which appears on the printed output but is not stored in the ECORLOG Batch.

The third program, ECRPT2, produces a standard ECORLOG report for more than one ECORLOG Batch. The ECRPT2 report includes, for each Batch, all the information printed by the ECRPT1 report. In addition, a Report Summary gives the Total BA and Total BO amounts for each Batch included in the report, and a grand total of these amounts. During an ECRPT2 run, a list of the Batches to process is requested by screen prompts, the data in the Batches is formatted and printed, and the date and user's name are requested for the Report Summary.

The ECORUP, ECRPT1 and ECRPT2 programs are stored in the ECORLG Batch of Job Master. (Note that MASTER,ECORLG is a storage area for these programs, while ECORLOG is the Job which stores ECORLOG information.) The three programs can be run separately or together. Whenever substantial changes have been made to a Batch of ECORLOG, it is advisable to run the ECORUP program so that the Cumulative BA and BO fields contain current information, whether or not a report is needed at the time. Instructions follow for running each program by itself, and for running the three programs in succession. Section 4.5 gives examples of ECRPT1 and ECRPT2 reports.

4.1 UPDATING A BATCH'S NUMERIC FIELDS: THE ECORUP PROGRAM

1. After all entries or changes have been made for a Batch of ECORLOG, make a note of the Batch ID.
2. Press the MODE key, then type F. The F represents Find Mode, which allows the user to locate the first ECORUP program statement.
3. When the prompt TYPE JOBNAME, BATCH# appears, enter MASTER,ECORLG and press FIELD REL.
4. When the prompt TYPE SEARCH INFORMATION appears, type '#1' (without the quotes), and press FIELD REL. This will locate Record 1 in MASTER,ECORLG, which is the first statement of the ECORUP program.

EXAMPLE 29. ECORUP

- a. Steps 1 through 3 have been followed. At the TYPE SEARCH INFORMATION prompt (Step 4), '#1' is entered. Before FIELD REL is pressed, the screen looks like the example below.

The diagram shows a rectangular terminal window with a 3D effect. Inside the window, the text "TYPE SEARCH INFORMATION" is displayed on the first line, and "ENTER#1" followed by a small square cursor icon is on the second line.

5. Press the MODE key, then type T. Mode T allows for execution of ECORUP (or any other VISION program).
6. When prompted for a password, type in the word PASSWORD (pressing FIELD REL is unnecessary).
7. At the prompt beginning TYPE S=SINGLE, M=MULTI...., type M. At this point, an ECORUP run begins.

8. The jobname, ECORLOG, appears near the top of the screen, and the prompt ENTER BATCH ID TO UPDATE appears near the bottom. Type in the ID of the Batch for which totals are being updated, and press FIELD REL. The Batch ID will appear next to ECORLOG on the screen.

EXAMPLE 30. ECORUP

- a. The ECORUP program has been initiated (Steps 5 through 7), and the ENTER BATCH ID TO UPDATE prompt (Step 8) appears on the screen. The Batch ID 'T1' is entered; the screen is shown as it appears before FIELD REL is pressed.

```
TYPEIN; SET S(3,9)=S(NLINES-2,2).6;
ECORLOG,

ENTER BATCH ID TO UPDATE
T1□
```

9. If the Batch entered in Step 8 does not exist, the ECORUP program halts. Press the MODE key to exit the program, recheck the Batch ID, and go back to Step 2.

10. If the Batch does exist, the next prompt to appear will be:
IS THIS THE CORRECT BATCH? ENTER YES OR NO. If the wrong batch has been chosen, type the word NO. Otherwise, type YES. Press FIELD REL.

EXAMPLE 31. ECORUP

- a. The 'T1' Batch is a valid ECORLOG Batch, so the IS THIS THE CORRECT BATCH?... prompt is displayed on the screen (Step 10). Since it is also the correct Batch, 'YES' is entered as the response.

```
SET S(NLINES-2,2)=4 .79; TYPEIN;  
ECORLOG,T1  
  
IS THIS THE CORRECT BATCH? ENTER YES OR NO  
YES ☐
```

11. If NO was entered at Step 10, or if the Batch specified does not contain any data, the Batch ID will be erased from the top of the screen and a prompt is set to TRY AGAIN. Either go back to Step 8, or exit the program by pressing the MODE key, recheck the Batch ID and begin again at Step 2.

12. If YES was entered at Step 10, a message is written next to ECORLOG and the Batch ID indicating that TOTALS ARE BEING UPDATED. As program statements are executed, they flash rapidly at the top of the screen. Depending on the size of the Batch, ECORUP will take approximately one to three minutes to run.

EXAMPLE 32. ECORUP

- a. FIELD REL has been pressed to complete Step 11, and the numeric fields in the 'T1' Batch are being updated. While the statements to update the Batch are being executed (Step 12), the screen displays the message below.

13. When ECRUP is completed, the top line of the screen reads:
\$PAUSE PRESS SPACE BAR TO PRINT REPORT ON ONE BATCH, MODE KEY TO EXIT.
The prompt near the bottom of the screen reads:
HIT SPACE BAR TO CONTINUE MULTI-MODE. Press the MODE key. To exit
VISION, continue by typing X S; to go back to a Batch, type E, then
ECORLOG and the Batch ID.

EXAMPLE 33. ECRUP

- a. Updating of the 'T1' Batch is now complete, and the screen now gives the option of continuing on to the ECRPT1 program (see Section 4.4) or exiting (Step 13). To exit, the MODE Key would be pressed, and the next task selected.

4.2 PRINTING A REPORT ON ONE BATCH: THE ECRPT1 PROGRAM

1. Enter the Batch for which a report will be printed, and ascertain that the Cumulative BA and Cumulative BO fields in each Record contain the correct totals, and that other numeric fields in the Batch are right-justified. If you find inaccurate Cumulative BA/BO fields or left-justified numeric fields, run ECORUP before printing the ECRPT1 report (see the previous section for information on running ECORUP).
2. Press the MODE key, then type F to enter Find Mode.
3. At the TYPE JOBNAME, BATCH# prompt, enter MASTER,ECORLG and press FIELD REL.
4. At the TYPE SEARCH INFORMATION prompt, type '#148' (without the quotes) and press FIELD REL. This will locate Record 148 in MASTER,ECORLG, the first statement of the ECRPT1 program.
5. Press the MODE key, then type T to enter Mode T.
6. When prompted for a password, type in the word PASSWORD (pressing FIELD REL is not necessary).
7. At the prompt beginning TYPE S=SINGLE, M=MULTI...., type M. At this point, an ECRPT1 run begins.
8. By default, VISION reports (including ECRPT1 and ECRPT2) are printed on the system printer in the computer room. (See Section 5.1 for information on changing the default printer.) Make sure the printer is loaded with 14-inch wide paper, line up the edge of the paper with the metal guide behind the printer ribbon, and press the RESET button on the printer.

9. The jobname, ECORLOG, appears near the top of the screen, and the prompt ENTER BATCH ID TO FORMAT FOR REPORT appears near the bottom. Type in the ID of the Batch for which a report is to be printed, and press FIELD REL. The Batch ID will appear next to ECORLOG on the screen.

EXAMPLE 34. ECRPT1

- a. The ECRPT1 program has been initiated, and the printer has been set up (Steps 1 through 8). A Batch ID is requested for the ECRPT1 report, as shown below (Step 9). The Batch ID 'T2' is entered, but it is not the correct Batch.

```
(TYPEIN; SET S(3,9)=S(NLINES-2,2).6;
ECORLOG,

ENTER BATCH ID TO FORMAT FOR REPORT
T2□
```

10. If the Batch entered in Step 9 does not exist, the ECORUP program halts. Press the MODE key to exit the program, recheck the Batch ID, and go back to Step 2.

11. If the Batch does exist, the next prompt to appear will be:
IS THIS THE CORRECT BATCH? ENTER YES OR NO. If the wrong batch has
been chosen, type the word NO. Otherwise, type YES. Press FIELD REL.

EXAMPLE 35. ECRPT1

- a. Although 'T2' is not the Batch for which the report is run, it does
exist. At Step 11, the IS THIS THE CORRECT BATCH?... prompt gives the
chance to correct the Batch ID. As shown below, 'NO' is entered.

```
SET S(NLINES-2,2)=4 .79; TYPEIN;  
  
ECORLOG,T2  
  
IS THIS THE CORRECT BATCH? ENTER YES OR NO  
NO  ,
```

12. If NO was entered at Step 11, or if the Batch specified does not contain any data, the Batch ID will be erased from the top of the screen and the prompt is set to TRY AGAIN. Either go back to Step 9, or exit the program by pressing the MODE key, recheck the Batch ID and begin again at Step 2.

EXAMPLE 36. ECRPT1

- a. In Step 12, the Batch ID 'T2' is erased from the top of the screen, and the TRY AGAIN prompt is displayed near the bottom of the screen. 'T1' is now entered as the correct Batch ID.

```
(TYPEIN; SET S(3,9)=S(NLINES-2,2).6;
ECORLOG,

TRY AGAIN
I□
```

13. If YES was entered at Step 11, a message is written next to ECORLOG and the Batch ID indicating that the Batch IS BEING FORMATTED FOR REPORT.
14. A message flashes at the bottom of the screen to READY 8121 PRINTER UNIT NUMBER x (where 'x' is the number of the system printer (zero) or the reassigned printer). Go to the printer, check again to make sure the printer is loaded with 14" wide paper, and push the READY button. The paper will advance and the first line of the heading (which prints NATIONAL ECOR LOG at the center of the page and the page number on the right) begins printing. If the heading is not at the top of a page, push the RESET button while the first line is printing. Reposition the paper at the top of a page, push the READY button, and the first line of the heading will print in the proper place. Once the beginning of the report is lined up correctly, the rest of the report will position properly.

15. At the terminal, two lines have been written underneath ECORLOG,Batch IS BEING FORMATTED FOR REPORT. They read:
REPORT DATE:	TOTAL BA:	{number}
PREPARED BY:	TOTAL BO:	{number}
- The prompt at the bottom of the screen reads ENTER TODAY'S DATE. Type in the date (MONTH DAY, YEAR) and press FIELD REL. The date entered will appear next to REPORT DATE.

EXAMPLE 37. ECRPT1

- a. When the Records from Batch 'T1' have been processed for the ECRPT1 report (Steps 13 and 14), the screen is set to request the date and the user's name (Step 15). The next prompt asks you to ENTER TODAY'S DATE. 'JUNE 33, 1984' is entered, as shown below.

TYPEIN; SET S(6,18)=S(NLINES-2,2).25;		
ECORLOG,T1 IS BEING FORMATTED FOR REPORT		
REPORT DATE:	TOTAL BA:	{number}
PREPARED BY:	TOTAL BO:	{number}
ENTER TODAY'S DATE		
JUNE 33, 1984 ☐		

16. The next prompt at the bottom of the screen is ENTER YOUR NAME. Type in your name and press FIELD REL. The name entered will appear next to PREPARED BY at the top of the screen.

17. The prompt at the bottom asks ARE NAME AND DATE CORRECT? ENTER YES OR NO. Type in the word YES or the word NO and press FIELD REL.

EXAMPLE 38. ECRPT1

- a. The user's name has been entered (Step 16), and the prompt in Step 17 asks for validation of the name and date. Since the date (JUNE 33) needs to be corrected, 'NO' is entered here.

TYPEIN;	
ECORLOG,T1	IS BEING FORMATTED FOR REPORT
REPORT DATE: JUNE 33, 1984	TOTAL BA: (number)
PREPARED BY: C. WINTER	TOTAL BC: (number)
ARE NAME AND DATE CORRECT? ENTER YES OR NO	
NO ☐	

18. If NO was entered at Step 17, the name and date last entered will be erased from the top of the screen, and the prompt at the bottom of the screen becomes TRY AGAIN - ENTER TODAY'S DATE. Go back to Step 15 to reenter the date and name.

EXAMPLE 39. ECRPT1

- a. In Step 18, the previously entered name and date are erased from the middle of the screen, and the prompt requests a corrected date. 'JUNE 3, 1984' is entered. Next, a corrected name will be requested.

TYPEIN; SET S(6,18)=S(NLINES-2,2).25;	
ECORLOG,T1 IS BEING FORMATTED FOR REPORT	
REPORT DATE:	TOTAL BA: (number)
PREPARED BY:	TOTAL BO: (number)
TRY AGAIN - ENTER TODAY'S DATE	
JUNE 3, 1984	

19. If YES was entered at Step 17, the report continues to print until finished. After the entire ECRPT1 program has executed, the prompt near the bottom of the screen reads:
HIT SPACE BAR TO CONTINUE MULTI-MODE
The top line of the screen displays:
\$PAUSE PRESS SPACE BAR TO PRINT MULTI-BATCH REPORT, MODE KEY TO EXIT
At this point, press the MODE key (MODE X S signs the user out of VISION, MODE E ECRLOG, Batch allows another Batch to be viewed or edited). Pressing the MODE key will not interrupt a report still being printed.

EXAMPLE 40. ECRPT1

- a. After the report summary has been sent to the printer, the option is given in Step 19 of continuing on to the ECRPT2 program (see Section 4.4 for details) or exiting. At this point, the MODE Key should be pressed to continue on to the next VISION task.

. \$PAUSE PRESS SPACE BAR TO PRINT MULTI-BATCH REPORT, MODE KEY TO EXIT	
ECRLOG,T1 IS BEING FORMATTED FOR REPORT	
REPORT DATE: JUNE 3, 1984	TOTAL BA: (number)
PREPARED BY: C. WINTER	TOTAL BO: (number)
HIT SPACE BAR TO CONTINUE MULTI-MODE	

4.3 PRINTING A REPORT ON MULTIPLE BATCHES: THE ECRPT2 PROGRAM

1. Enter the Batches for which the report will be printed, and ascertain that the Cumulative BA and Cumulative BO fields in each Record contain the correct totals, and that all numeric fields are right-justified. If any numeric fields are incorrect, run ECORUP on the Batch(es) before printing the ECRPT2 report (see Section 4.1 for information on running ECORUP). Make a note of the Batch ID's for which the report is to be printed, and the order in which they should appear.
2. Press the MODE key, then type F to enter Find Mode.
3. At the TYPE JOBNAME, BATCH# prompt, enter MASTER,ECORLG and press FIELD REL.
4. At the TYPE SEARCH INFORMATION prompt, type '#248' (without the quotes) and press FIELD REL. This will locate Record 248 in MASTER,ECORLG, the first statement of the ECRPT2 program, and the message FOUND #248 will be displayed.
5. Press the MODE key, then type T to enter Mode T and run the program.
6. When prompted for a password, type in the word PASSWORD (pressing FIELD REL is not necessary).
7. At the prompt beginning TYPE S=SINGLE, M=MULTI...., type M. At this point, an ECRPT2 run begins.
8. By default, the ECRPT2 report is printed on the system printer in the computer room. (Section 5.1 gives instructions for changing the default printer.) Make sure the printer is loaded with 14-inch wide paper, line up the edge of the paper with the metal guide behind the printer ribbon, and press the RESET button on the printer.
9. Near the top of the terminal screen, a message appears reading
ECORLOG BATCHES AVAILABLE FOR PROCESSING. Below this, a list of the Batches which have been entered into the ECORLOG Job will appear. If there are forty or fewer ECORLOG Batches in the system, a line near the bottom of the screen will read ALL AVAILABLE BATCHES ARE DISPLAYED. If there are more than forty ECORLOG Batches in the system, the bottom of the screen will read:
JOB HAS MORE BATCHES THAN CAN BE DISPLAYED
ABORT PROGRAM WITH MODE KEY TO SEE OTHERS IN JOB MODE
If these messages appear and there are undisplayed Batches (to include in the ECRPT2 report) whose ID's you cannot recall, abort the ECRPT2 program with the MODE key. Use Mode J to find the names of all ECORLOG Batches, then begin ECRPT2 again at Step 2.

10. Below the list of available Batches, another message appears on the screen, reading:
ECORLOG BATCHES TO BE INCLUDED IN REPORT (ORDERED FROM LEFT TO RIGHT)
The prompt ENTER FIRST BATCH ID TO INCLUDE IN REPORT appears near the bottom. Type in the ID of the first Batch to appear in the report, and press FIELD REL. The Batch ID will be written to the middle of the screen.

EXAMPLE 41. ECRPT2

- a. The ECRPT2 program has been initiated, and printer set for output, and a list of the available ECORLOG Batches written on the screen (Steps 1 through 9). In Step 10, a new prompt requests that the first Batch ID for the report be entered. 'T2' is entered for the first Batch ID.

TYPEIN; IF S(22,2)=" " THEN EXIT;									
ECORLOG BATCHES AVAILABLE FOR PROCESSING									
1	2	3	4	5	6	MCH	T1	T2	AK05
LAURA	AK05	T3	ESR	TES2					
ECORLOG BATCHES TO BE INCLUDED IN REPORT (ORDERED FROM LEFT TO RIGHT)									
ALL AVAILABLE BATCHES ARE DISPLAYED									
ENTER FIRST BATCH ID TO INCLUDE IN REPORT									
T2									

11. The next prompt to appear will be: IS BATCH ABOVE CORRECT? ENTER YES OR NO. If the wrong batch has been chosen, type the word NO. Otherwise, type YES. Press FIELD REL.

EXAMPLE 42. ECRPT2

- a. In Step 11, 'T2' is placed in the list of ECRLOG BATCHES TO BE INCLUDED IN REPORT, and the IS THIS THE CORRECT BATCH?... requests that it be validated. 'YES' has been entered to validate the Batch, and will be followed by pressing FIELD REL.

SET S(22,2)=& .79; TYPEIN;

ECORLOG BATCHES AVAILABLE FOR PROCESSING

1	2	3	4	5	6	MCH	T1	T2	AK05
LAURA	AK05	T3	ESR	TES2					

ECORLOG BATCHES TO BE INCLUDED IN REPORT (ORDERED FROM LEFT TO RIGHT)

T2

ALL AVAILABLE BATCHES ARE DISPLAYED

IS BATCH ABOVE CORRECT? ENTER YES OR NO

YES

12. If NO was entered at Step 11, the Batch ID will be erased from the middle of the screen and the prompt is set to ENTER CORRECT BATCH ID. Go back to Step 9 to reenter the Batch ID.
13. If YES was entered at Step 11, the prompt will become ENTER NEXT BATCH ID, OR FIELD REL WHEN DONE. If more Batches are to be included in the report, enter the ID of the next to include, press FIELD REL and go back to Step 11. If all Batch ID's for the report have been entered (and appear on the middle of the screen), press FIELD REL without entering anything. The ECRPT2 program will process a maximum of twenty Batches per report.

14. The screen prompt now reads IS LIST OF BATCHES CORRECT?
ENTER YES OR NO. Check the Batch list at the middle of the screen to see if it contains valid Batch ID's and is in the correct order. Type in YES or NO and press FIELD REL.

EXAMPLE 43. ECRPT2

- a. Another Batch has been entered in the list of Batches for the report; FIELD REL was pressed to complete the list (Steps 11 through 13). In Step 14, a prompt requests validation of the entire list of Batches. In this case, the order of 'T1' and 'T2' should be reversed, so 'NO' is entered in answer to the prompt.

SET S(22,2)=& .79; TYPEIN;									
ECORLOG BATCHES AVAILABLE FOR PROCESSING									
1	2	3	4	5	6	MCH	T1	T2	AK05
LAURA	AK05	T3	ESR	TES2					
ECORLOG BATCHES TO BE INCLUDED IN REPORT (ORDERED FROM LEFT TO RIGHT)									
T2	T1								
ALL AVAILABLE BATCHES ARE DISPLAYED									
IS LIST OF BATCHES CORRECT? ENTER YES OR NO									
NO ☐									

15. If NO was entered in Step 14, the list below ECRLOG BATCHES TO BE INCLUDED IN REPORT will be erased from the screen, and the prompt near the bottom becomes TRY AGAIN - ENTER FIRST BATCH TO PROCESS. Go back to Step 10 and enter the first Batch ID for the report.

EXAMPLE 44. ECRPT2

- a. In Step 15, the list of Batches for the ECRPT2 report is erased, with a new prompt at the bottom of the screen to request a corrected first Batch ID. 'T1' is entered as the correct first Batch.

TYPEIN; IF S(22,2)=" " THEN EXIT;									
ECORLOG BATCHES AVAILABLE FOR PROCESSING									
1	2	3	4	5	6	MCH	T1	T2	AK05
LAURA	AK05	T3	ESR	TES2					
ECORLOG BATCHES TO BE INCLUDED IN REPORT (ORDERED FROM LEFT TO RIGHT)									
ALL AVAILABLE BATCHES ARE DISPLAYED									
TRY AGAIN - ENTER FIRST BATCH TO PROCESS									
T1									

16. If YES was entered at Step 14, all messages will be erased from the screen except the list of Batches chosen for ECRPT2. Below this list, another message will read BATCH NOW BEING PROCESSED: ECRLOG,. The ECRPT2 program now begins to process each selected Batch in turn. As a Batch is processed, its ID will be written to the right of this message line. The ECOR Number, Total BA and Total BO amounts for each Batch are also displayed on the screen in turn.

EXAMPLE 45. ECRPT2

- a. The list of Batches for the ECRPT2 report has been entered and validated (Steps 11 through 15), and the processing of each Batch's contents has begun. While the Batches are being processed, the screen appears as it does below.

17. A message flashes at the bottom of the screen to READY 8121 PRINTER UNIT NUMBER x ('x' being the number of the printer you are using). Go to the printer, check again to make sure the printer is loaded with 14" wide paper, and push the READY button. The paper will advance and the first line of the heading (which prints NATIONAL ECOR LOG at the center of the page and the page number on the right) begins printing. If the heading is not at the top of a page, push the RESET button while the first line is printing. Reposition the paper at the top of a page, push the READY button, and the first line of the heading will print in the proper place. Once the beginning of the report is lined up correctly, the rest of the report will position properly.

18. When all Batches have been formatted for ECRPT2, several additional lines appear on the screen. Near the top of the screen, they read:

	REPORT SUMMARY	
ECOR NUMBER	TOTAL BA	TOTAL BO
REPORT TOTAL:	(number)	(number)

Also, two new lines have appeared near the bottom of the screen:

REPORT DATE:

PREPARED BY:

The prompt at the bottom of the screen reads ENTER TODAY'S DATE. Type in the date (MONTH DAY, YEAR) and press FIELD REL. The date entered will appear next to REPORT DATE.

19. The next prompt at the bottom of the screen is ENTER YOUR NAME. Type in your name and press FIELD REL. The name entered will appear next to PREPARED BY in the middle of the screen.
20. The prompt at the bottom asks ARE NAME AND DATE CORRECT? ENTER YES OR NO. Type in the word YES or the word NO and press FIELD REL.

EXAMPLE 46. ECRPT2

- a. The ECORLOG Batches for the ECRPT2 report have been processed, and a name and date requested and entered for the report summary (Steps 17 through 19). In Step 20, the name and date are validated by the ARE NAME AND DATE CORRECT?... prompt. Since the name and date were entered correctly, 'YES' is entered.

TYPEIN; SET S(13,47)=S(22,2).25;		
ECOR NUMBER:	REPORT SUMMARY	
REPORT TOTAL:	TOTAL BA:	TOTAL BO:
	(number)	(number)
ECORLOG BATCHES TO BE INCLUDED IN REPORT (ORDERED FROM LEFT TO RIGHT)		
T1	T2	
REPORT DATE:	JUNE 3, 1984	
PREPARED BY:	C. WINTER	
ARE NAME AND DATE CORRECT? ENTER YES OR NO		
YES ☐		

21. If NO was entered at Step 20, the name and date last entered will be erased from the top of the screen, and the prompt at the bottom of the screen becomes TRY AGAIN - ENTER TODAY'S DATE. Go back to Step 18 to reenter the date and name.
22. If YES was entered at Step 20, the report continues to print until finished. After all ECRPT2 program statements have been executed, the prompt near the bottom of the screen reads:
HIT MODE KEY TO EXIT WHEN '\$END ENCOUNTERED' APPEARS BELOW
Almost immediately, the bottom line of the screen displays \$END ENCOUNTERED. At this point, press the MODE Key (MODE X S signs the user out of VISION, MODE E ECRLOG, Batch allows another Batch to be viewed or edited). As long as \$END ENCOUNTERED is displayed, pressing the MODE Key will not interrupt a report still being printed.

EXAMPLE 47. ECRPT2

- a. In Step 22, the report summary is sent to the printer, and the ECRPT2 program finishes. As the prompt on the screen indicates, the MODE Key should be pressed to proceed to the next VISION task.

<div style="text-align: left; margin-bottom: 10px;">\$END</div> <div style="display: flex; justify-content: space-between;"> <div style="text-align: left; width: 30%;"> <p>ECOR NUMBER:</p> <p>REPORT TOTAL:</p> </div> <div style="text-align: left; width: 30%;"> <p>REPORT SUMMARY</p> <p>TOTAL BA:</p> <p>(number)</p> </div> <div style="text-align: left; width: 30%;"> <p>TOTAL BO:</p> <p>(number)</p> </div> </div> <div style="margin-bottom: 10px;"> <p>ECORLOG BATCHES TO BE INCLUDED IN REPORT (ORDERED FROM LEFT TO RIGHT)</p> <p>T1 T2</p> </div> <div style="display: flex; justify-content: space-between; margin-bottom: 10px;"> <div style="text-align: left; width: 30%;"> <p>REPORT DATE:</p> <p>PREPARED BY:</p> </div> <div style="text-align: left; width: 60%;"> <p>JUNE 3, 1984</p> <p>C. WINTER</p> </div> </div> <div style="margin-bottom: 10px;"> <p>HIT MODE KEY TO EXIT WHEN '\$END ENCOUNTERED' APPEARS BELOW</p> </div> <div> <p>\$END ENCOUNTERED</p> </div>		
---	--	--

4.4 RUNNING ECORUP, ECRPT1 AND ECRPT2 IN ONE OPERATION

1. Follow Steps 1 through 12 in the section on running ECORUP.
2. When ECORUP is completed, the top line of the screen reads:
\$PAUSE PRESS SPACE BAR TO PRINT REPORT ON ONE BATCH, MODE KEY TO EXIT
The prompt near the bottom of the screen reads:
HIT SPACE BAR TO CONTINUE MULTI-MODE. Press the space bar.
3. At this point ECRPT1 will begin to execute (Steps 1 through 7 of the section on running ECRPT1 have been bypassed). Continue by following Steps 8 through 18 in the ECRPT1 section.
4. The ECRPT1 report will finish printing out; when it is completed, the top line of the screen reads:
\$PAUSE PRESS SPACE BAR TO PRINT MULTI-BATCH REPORT, MODE KEY TO EXIT
The prompt near the bottom of the screen reads: HIT SPACE BAR TO CONTINUE MULTI-MODE. Press the space bar again. Do not remove the ECRPT1 report from the printer or reposition the paper.
5. ECRPT2 will begin to execute (Steps 1 through 8 of the ECRPT2 section have been bypassed). Follow Steps 9 through 22 for ECRPT2, omitting Step 17. When the program is complete and \$END ENCOUNTERED appears at the bottom of the screen, press the MODE key to go to other VISION tasks or exit VISION.

4.5 SAMPLE ECORLOG REPORTS

This section contains samples of the ECORLOG reports. These sample reports were produced from the Batches 'T1' and 'T2' which have been used in the Examples throughout the Users' Guide. Figure 1 shows a sample ECRPT1 report; Figure 2 shows a sample ECRPT2 report.

FIGURE 1. SAMPLE ECRPT1 REPORT

NATIONAL ECR LOG

PAGE 01

ECOR #: AK 05

FY 1984 APPROPRIATION AMOUNT: 3,500,000 APPROPRIATION NUMBER: 89X0224.91 ANALYST: D. KERN
 FY 1984 UNOBLIGATED CARRYOVER AMT: 525,060 TOTAL ECR AVAILABILITY: 4,025,060 PHONE #:

DATE REC'D.	CONTRACTOR	FO	IPMIS (CIO) #	BA	CUM. BA	BO	CUM. BO	PROGRAM MANAGER	WORK DESCRIPTION/TITLE	COMMENTS
09/20	OAK RIDGE NATIONAL LABORATORY	ORD		700,000	700,000	700,000	700,000	KLEIN	ELECTROMAGNETIC PULSE	TO BROGAN 9/22 TO DASC 9/27 TO LAB 11/3
09/20	OAK RIDGE NATIONAL LABORATORY	ORD		580,000	1,280,000	580,000	1,280,000	KLEIN	ADVANCED DIELECTRICS	TO BROGAN 9/22 TO DASC 9/27 TO LAB 11/3
09/20	OAK RIDGE NATIONAL LABORATORY	ORD		300,000	1,580,000	300,000	1,580,000	KLEIN	ADAPTIVE PROTECTION DIELECTRICS	TO BROGAN 9/22 TO DASC 9/27 TO LAB 11/3
11/14	US AIR FORCE	HQ	CS35217	100,000	1,680,000	100,000	1,680,000	LEVINSON	TECHNOLOGY MANAGE- MENT AND ASSESSMENT	TO BROGAN 11/14 TO DASC 11/15 TO PROCURE 12/5
11/04	GENERAL ELECTRIC CO.	WHQ	ET29040	9,000	1,689,000	9,000	1,689,000	ROESLER	COORDINATED DECENT- RALIZED EMERGENCY STATE CONTROL - NO COST EXTENSION	TO BROGAN 11/4 TO BAM 11/4
10/12	WESTINGHOUSE ELECTRIC CO.	CHQ	RA50292	150,000	1,839,000	150,000	1,839,000	ROESLER	INVESTIGATION OF DOUBLY-FED MACHINE VARIABLE SPEED APPLICATIONS	TO BROGAN 10/2 TO ROESLER 10/17 TO BAM 11/4 TO CHQ 11/14

REPORT DATE: JUNE 3, 1984
 PREPARED BY: C. WINTER

TOTAL BA: 1,839,000
 TOTAL BO: 1,839,000

FIGURE 2. SAMPLE ECRT2 REPORT

NATIONAL ECR LOG

PAGE 01

REPORT FOR ECR NUMBERS: AK 05 AK 06

ECR #: AK 05

FY 1984 APPROPRIATION AMOUNT: 3,500,000 APPROPRIATION NUMBER: 89X0224.91 ANALYST: D. KERN

FY 1984 UNOBLIGATED CARRYOVER AMT: 525,060 TOTAL ECR AVAILABILITY: 4,025,060 PHONE #:

DATE REC'D.	CONTRACTOR	FO	IPMIS (CID) #	BA	ECR# CUM. BA	BO	ECR# CUM. BO	PROGRAM MANAGER	WORK DESCRIPTION/TITLE	COMMENTS
09/20	OAK RIDGE NATIONAL LABORATORY	ORO		700,000	700,000	700,000	700,000	KLEIN	ELECTROMAGNETIC PULSE	TO BROGAN 9/22 TO DASC 9/27 TO LAB 11/3
09/20	OAK RIDGE NATIONAL LABORATORY	ORO		580,000	1,280,000	580,000	1,280,000	KLEIN	ADVANCED DIELECTRICS	TO BROGAN 9/22 TO DASC 9/27 TO LAB 11/3
09/20	OAK RIDGE NATIONAL LABORATORY	ORO		300,000	1,580,000	300,000	1,580,000	KLEIN	ADAPTIVE PROTECTION DIELECTRICS	TO BROGAN 9/22 TO DASC 9/27 TO LAB 11/3
11/14	US AIR FORCE	HQ	CS35217	100,000	1,680,000	100,000	1,680,000	LEVINSON	TECHNOLOGY MANAGE- MENT AND ASSESSMENT	TO BROGAN 11/14 TO DASC 11/15 TO PROCURE 12/5
11/04	GENERAL ELECTRIC CO.	WHO	ET29040	9,000	1,689,000	9,000	1,689,000	ROESLER	COORDINATED DECENT- RALIZED EMERGENCY STATE CONTROL - NO COST EXTENSION	TO BROGAN 11/4 TO BAM 11/4
10/12	WESTINGHOUSE ELECTRIC CO.	CHO	RA50292	150,000	1,839,000	150,000	1,839,000	ROESLER	INVESTIGATION OF DOUBLY-FED MACHINE VARIABLE SPEED APPLICATIONS	TO BROGAN 10/2 TO ROESLER 10/17 TO BAM 11/4 TO CHO 11/14

SUMMARY FOR ECR NUMBER AK 05 BA: 1,839,000 BO: 1,839,000

FIGURE 2. SAMPLE ECRPT2 REPORT (Continued)

NATIONAL ECR LOG										
PAGE 02										
REPORT FOR ECR NUMBERS: AK 05 AK 06										

ECOR #: AK 06										
FY 1984 APPROPRIATION AMOUNT: 11,500,000 APPROPRIATION NUMBER: 89X224.91 ANALYST: D. KERN										
FY 1984 UNOBLIGATED CARRYOVER AMT: 0 TOTAL ECR AVAILABILITY: 10,614,000 PHONE #:										
DATE REC'D.	CONTRACTOR	FO	IPMIS (CID) #	BA	ECOR# CUM. BA	BO	ECOR# CUM. BO	PROGRAM MANAGER	WORK DESCRIPTION/TITLE	COMMENTS
11/04	OAK RIDGE NATIONAL LABORATORY	ORNL		855,000	855,000	555,000	555,000	KLEIN	TECHNICAL CONCEPTS AND MANAGEMENT	TO BAM 11/15 TO ORO 11/28
10/12	CORNELL UNIVERSITY	CHO	RA50664	74,000	929,000	74,000	629,000	ROESLER	INTEGRATION METHOD- ODOLOGY FOR LARGE WIND ENERGY CONVERSION SYSTEMS	TO BROGAN 10/12 TO ROESLER 10/18 TO BAM 11/4
10/21	ARTHUR D. LITTLE	WHO	ET29242	35,000	964,000	35,000	664,000	KLEIN	TECHNICAL SUPPORT	TO BROGAN 10/21 TO BAM 11/4 TO PROCURE 11/14
11/22	DHR, INC.	HQ	CS10097	97,000	1,061,000	97,000	761,000	BROGAN	STUDY FOR POSSIBLE TRANSFER OF ACHIEVEMENTS TO DOD	TO BAM 11/26 TO PROCURE 12/5
09/25	BROOKHAVEN NATIONAL LABORATORY	CHO		1,500,000	2,561,000	1,500,000	2,261,000	EATON	AC SUPERCONDUCTING POWER CABLE RESEARCH	TO DASC 9/27 TO DAS 10/11 TO LAB 11/3
01/12	NASA/JPL	ORO		500,000	3,061,000	500,000	2,761,000	ROESLER	FIBER OPTICS COMMUNICATIONS	TO DASC 1/16 TO LAB 2/2

SUMMARY FOR ECR NUMBER AK 06 BA: 3,061,000 BO: 2,761,000										

FIGURE 2. SAMPLE ECRPT2 REPORT (Continued)

```

                                NATIONAL ECR LOG                                PAGE    03
REPORT FOR ECR NUMBERS:  AK 05                                AK 06

*****

                                REPORT SUMMARY

                                ECR NUMBER                                TOTAL BA                                TOTAL BO
                                AK 05                                1,839,000                                1,839,000
                                AK 06                                3,061,000                                2,761,000
                                REPORT TOTAL:                        4,900,000                                4,600,000

                                REPORT DATE:                        JUNE 3, 1984
                                PREPARED BY:                        C. WINTER

*****
```

5.0 UTILITY FUNCTIONS FOR THE ECORLOG APPLICATION

This section contains instructions for two utility operations used by the ECORLOG application. Section 5.1 describes two alternate procedures for resetting the VISION system printer with the \$SETPRINT command. Section 5.2 gives details on storing old ECORLOG Batches in archival storage, and retrieving those Batches when necessary.

5.1 RESETTING THE VISION SYSTEM PRINTER

By default, all printed output from VISION Jobs and programs is sent to the system printer in the computer room. It is often desirable to redirect that output to another printer in a more convenient location. Output can be redirected with the VISION \$SETPRINT command. The \$SETPRINT command can be issued directly from the terminal; alternately, \$SETPRINT commands can be accessed and executed in the MASTER,SETPRT Batch. Procedures for both methods are given below.

5.1.1 Resetting the VISION Printer Directly

1. Press the MODE key, type E, and press FIELD REL.
2. The prompt at the bottom of the screen asks you to TYPE COMMAND. Enter:

\$SETPRINT SYSPRINT TO P8121 n

where 'n' is the number of the printer to which VISION output should be sent.

3. Press the MODE key, and type T. When prompted to TYPE PASSWORD, type in the word PASSWORD. Type S to execute the command. If the command is executed successfully, the bottom of the screen will display: REQUEST COMPLETE.

5.1.2 Resetting the VISION Printer with MASTER,SETPRT

1. Press the MODE key and type F to access Find Mode. When you are prompted to TYPE JOBNAME,BATCH#, type MASTER,SETPRT and press FIELD REL.
2. The next prompt asks you to TYPE SEARCH INFORMATION. To redirect output to the printer in the computer room, type #3. To redirect output to printer#2, enter #1. Conclude either entry by pressing FIELD REL.
3. Press the MODE key, and type T. When prompted to TYPE PASSWORD, type in the word PASSWORD. Type S to execute the command. If the command is executed successfully, the bottom of the screen will display: REQUEST COMPLETE.

5.2 YEAR-END PROCEDURES FOR STORING ECORLOG BATCHES

Procurements are issued under the same ECOR Number in successive fiscal years. Each Batch of ECORLOG, however, should cover only those procurements issued under one ECOR Number in one fiscal year. If Batches continued to be stored in the ECORLOG Job year after year, it would become difficult to find unique Batch ID's for the same ECOR Number. For this reason, a procedure has been developed for transferring ECORLOG Batches to archival (compressed) storage in computer memory. These procedures, described in the sections which follow, should be followed at the end of each fiscal year.

The commands which transfer ECORLOG Batches to archival storage are stored in Batch ECPURG of the MASTER Job. Each year, these commands are edited so that the ID's of all Batches created during the past fiscal year are included. After the editing is completed, the set of commands is executed to transfer ECORLOG Batches to storage, then to delete the Batches from the ECORLOG Job. In addition, MASTER,ECPURG contains commands to retrieve old Batches from archival storage. These commands can be modified and executed whenever there is a need to access ECORLOG data from prior fiscal years.

The three operations - storage, deletion, and retrieval - each use a different VISION command. All three types of commands are stored in MASTER,ECPURG. The storage commands at the beginning of the Batch make up a \$TODOS command string. The deletion commands which follow the storage commands are \$PURGE command strings. The last commands in MASTER,ECPURG - the retrieval commands - are a \$FRODOS command string.

In Section 5.2.1, the VISION commands and their parameters are discussed in greater detail. The editing of the MASTER,ECPURG commands is covered in Section 5.2.2. The next section (Section 5.2.3) gives instructions for storing and deleting ECORLOG Batches; Section 5.2.4 contains instructions for retrieving ECORLOG Batches from archival storage.

A second set of storage and retrieval commands has been created in MASTER, ECPG84. These commands should be used only for the Fiscal Year 1984 Batches stored in the ECLOG84 Job. The instructions on the following pages are also valid for ECPG84, with one exception: 'ECPG84' should be substituted for 'ECPURG' when the commands are being edited and executed.

5.2.1 The VISION Commands for Storage, Deletion and Retrieval

The Batch containing the ECORLOG storage, deletion, and retrieval commands is MASTER,ECPURG. This Batch has been created with templates of the \$TODOS, \$PURGE and \$FRODOS commands used, respectively, for storing, deleting, and retrieving ECORLOG Batches. The contents of the original MASTER,ECPURG Batch are shown in Figure 3. Since these contents are modified before execution, the MASTER,ECPURG Batch stored in the computer will not be identical to Figure 3. The following paragraphs describe the setup and parameters for each of the three commands.

FIGURE 3. ORIGINAL CONTENTS OF MASTER,ECPURG

```
$COMMENT COMMANDS TO ARCHIVE  ECORLOG BATCHES
$TODOS
/O=BCH184@O,J=ECORLO,K=KG,B=BBATCH,C=C1,P

/O=BCH284@O,J=ECORLO,K=KG,B=BBATCH,C=C2,P
$PAUSE  COMMANDS TO DELETE  ECORLOG BATCHES
$PURGE ECORLOG,BATCH1
$PURGE ECORLOG,BATCH2
$PAUSE  COMMANDS TO RETRIEVE ECORLOG BATCHES
$FRODOS
/I=BCH184@O,J=ECORLO,K=KG,B=BBATCH,C=C1,P

/I=BCH284@O,J=ECORLO,K=KG,B=BBATCH,C=C2,P
$END
```

\$TODOS Commands. The first command string in MASTER,ECPURG is the \$TODOS command string to transfer ECRLOG Batches to archival storage. A copy of the \$TODOS command string appears below.

```
$TODOS
/O=BCH184@0,J=ECORLO,K=KG,B=BBATCH,C=C1,P

/O=BCH284@0,J=ECORLO,K=KG,B=BBATCH,C=C2,P
$PAUSE
```

The command string begins with the keyword \$TODOS, which is followed by parameter lines for one or more Batches. Each parameter line, except the last, is followed by a blank line. The last parameter line is followed by a \$PAUSE (or a \$END) keyword. Each parameter line consists of the parameters described below.

/O=BCH184@0,

The /O= parameter indicates the name of the output file, and that the file is to be created on Drive#0. The underlined characters are the output file name - this should be changed for each transfer operation. The output file name's last two characters should indicate the fiscal year.

J=ECORLO,K=KG,

The J=/J=K parameter indicates that the data to be transferred is currently stored in the ECRLOG Job. This parameter should not be changed.

B=BBATCH,C=C1,

The B=B/C=C parameter indicates the Batch ID where the data is currently stored. The underlined characters are the Batch ID (in this case, 'BATCH1'). The Batch ID should be changed for each Batch to be transferred. If the Batch ID is five characters or less in length, the C=C parameter and the comma which follows it should be deleted from the parameter line.

P

The P parameter, which sets the program level for the data transfer, concludes all \$TODOS command strings used in transferring ECRLOG Batches. It should never be deleted or modified.

\$PURGE commands. The next command strings in MASTER,ECPURG are \$PURGE command strings, each of which deletes one ECRLOG Batch after it has been copied to archival storage. Two \$PURGE command strings are shown below.

```
$PURGE ECRLOG,BATCH1
$PURGE ECRLOG,BATCH2
$PAUSE
```

For each ECRLOG Batch to be deleted, there is a command string beginning with the \$PURGE keyword. This is followed by the Job name (ECRLOG) and the ID of the Batch to be deleted (here, the Batches are BATCH1 and BATCH2). The Batch ID should be modified for each Batch which is to be deleted. The set of command strings - one for each Batch - is concluded by a \$PAUSE (or \$END) keyword.

\$FRODOS Commands. The last command string in MASTER,ECPURG is the \$FRODOS command string, which retrieves ECORLOG Batches from archival storage. A copy of the \$FRODOS command string appears below.

```
$FRODOS
/I=BCH184@0,J=ECORLO,K=KG,B=BBATCH,C=C1,P

/I=BCH284@0,J=ECORLO,K=KG,B=BBATCH,C=C2,P
$END
```

The command string begins with the keyword \$FRODOS, which is followed by parameter lines for one or more Batches. Each parameter line, except the last, is followed by a blank line. The last parameter line is followed by a \$END (or a \$PAUSE) keyword. The parameter lines consist of the following parameters.

/I=BCH184@0,

The /I= parameter indicates the name of the input file in archival storage, and that the file is stored on Drive#0. The underlined characters are the input file name - this should be changed for each retrieval operation. The names of files in archival storage can be viewed in the IDOS Index from ForeWord.

J=ECORLO,K=KG,

The J=/J=K parameter indicates that the data is to be retrieved into the ECORLOG Job. This parameter should not be changed.

B=BBATCH,C=C1,

The B=B/C=C parameter indicates the Batch ID of the destination ECORLOG Batch. The underlined characters are the Batch ID (here, it is 'BATCH1'). The Batch ID should be changed for each Batch to be retrieved. If the Batch ID is five characters or less in length, the C=C parameter and the comma which follows it should be deleted from the parameter line.

P

The P parameter, which sets the program level for the data retrieval, concludes all \$FRODOS command strings used in transferring ECORLOG Batches. It should never be deleted or modified.

5.2.2 Editing the Commands in MASTER,ECPURG

Before the storage or retrieval command strings in MASTER,ECPURG can be executed, the Batch must be edited to change the parameters to the command(s). This editing is done in data Entry mode (MODE E). To begin editing the MASTER,ECPURG commands, type MODE E MASTER,ECPURG. Details on changing, adding and deleting MASTER,ECPURG Records are given below.

Changing Records.

1. Find and display the Record that is to be changed by using the up or down arrow key.
2. Press SHIFT and CORR REST simultaneously. This unlocks the Record and allows changes to be made.
3. Move the cursor to the first character of an item which needs changing. The right arrow key moves the cursor to the right; the left arrow key moves the cursor to the left.
4. Type the new parameter over the old one. The CTRL and right arrow keys, when pressed together, will open up one space (use this when the new parameter is longer than the old one). The CTRL and left arrow keys pressed simultaneously will delete one space (used if the new parameter is shorter than the old one).
5. Repeat Steps 3 and 4 until all needed changes have been made.
6. If you want to retain that portion of the Record which is under and to the right of the cursor, press the AUX DUP key to finish editing the Record. If you want to erase the portion of the Record underneath and to the right of the cursor, press FIELD REL to complete the edit.

Adding Records.

1. Display the Record after which the new Record is to be added.
2. Press SHIFT/CORR REST to unlock the Record.
3. Press SHIFT and the down arrow together to make a copy of the Record.
4. Press the down arrow key once to display the copy of the Record. This copy will be changed to become the added Record.
5. If you are adding a blank Record, press SHIFT/CORR REST to unlock the Record, then press FIELD REL to erase its contents and store it as a blank Record.
6. If you are adding a non-blank Record, refer to the instructions in the previous section on Changing Records.

Deleting Records.

1. Display the Record which is to be deleted, using the up or down arrow key.
2. Press SHIFT/CORR REST to unlock the Record.
3. Press SHIFT and the up arrow simultaneously to delete the Record.

5.2.3 Storing and Deleting ECORLOG Batches

1. When you are ready to store and delete ECORLOG Batches at the end of the fiscal year, make a list of the Batches you want to store and delete. Next to each Batch ID, write the name of the output file (maximum six characters) to which it will be copied in archival storage. The name of each output file should end in two numbers signifying the fiscal year.
2. Edit the \$TODOS and \$PURGE commands in MASTER,ECPURG, following the instructions given in Section 5.2.3. You should include one \$TODOS parameter line for each Batch; the O= (output file name) and B=B/C=C (Batch ID) parameters need to be edited in each of the \$TODOS parameter lines. Do not forget to include a blank line after each \$TODOS parameter line except the last. You also need to create one \$PURGE command string for each Batch. The Batch ID parameter will need to be changed in each of the \$PURGE command strings.
3. When the editing is finished, press CTRL and the up arrow together to display the first Record of MASTER,ECPURG, which reads:

\$COMMENT COMMANDS TO ARCHIVE ECDRLOG BATCHES

4. Press the MODE key, and type T. At the TYPE PASSWORD prompt, type the word PASSWORD. At the prompt beginning TYPE S=SINGLE, M=MULTI..., type M. The transfer of ECORLOG Batches to archival storage will begin.
5. When all selected ECORLOG Batches have been copied to archival storage, the top and bottom lines of the screen will display, respectively:

\$PAUSE COMMANDS TO DELETE ECORLOG BATCHES
HIT SPACE BAR TO CONTINUE MULTI-MODE

Press the space bar. The selected Batches will now be deleted from the ECORLOG Job.

6. When all of the selected Batches have been deleted, the top and bottom lines of the screen will display:

\$PAUSE COMMANDS TO RETRIEVE ECORLOG BATCHES
HIT SPACE BAR TO CONTINUE MULTI-MODE

Press the MODE key to exit VISION or proceed to another VISION task.

5.2.4 Retrieving ECORLOG Batches

1. When you need to retrieve ECORLOG Batches from archival storage, make a list of the file names under which the Batches are stored. A list of the files in archival storage can be viewed by accessing the IDOS Index from ForeWord. Next to each file name, write the name of the Batch ID (maximum six characters) to which it will be copied in the ECORLOG Job.
2. Edit the \$FRODOS command string in MASTER,ECPURG, following the instructions given in Section 5.2.3. You should include one \$FRODOS Parameter line for each Batch; the I= (input file name) and B=B/C=C (Batch ID) parameters need to be edited in each of the \$FRODOS parameter lines. Do not forget to include a blank line after each \$FRODOS parameter line except the last.
3. When the editing is finished, use the up arrow to display that Record of MASTER,ECPURG which reads:

\$FRODOS

4. Press the MODE key, and type T. At the TYPE PASSWORD prompt, type the word PASSWORD. At the prompt beginning TYPE S=SINGLE, M=MULTI..., type M. The transfer of Batches from archival storage to the ECORLOG Job will begin.
5. When all selected ECORLOG Batches have been retrieved from archival storage, the top and bottom lines of the screen will read, respectively:

\$END
\$END ENCOUNTERED

Press the MODE key. The Batches have been stored in the ECORLOG Job. They can now be viewed and edited (see Section Three) or used in the ECORLOG programs (Section Four).

APPENDIX

ECORLOG COMPUTER APPLICATION PROGRAMMERS' GUIDE

APPENDIX

ECORLOG COMPUTER APPLICATION PROGRAMMERS' GUIDE

This Appendix describes the structure and logic of the ECORLOG Job (database) and programs. The information here will be useful for programmers who are maintaining or enhancing the ECORLOG application.

Section A.1 contains a description of the ECORLOG Job; Sections A.2 through A.4 outline each of the three ECORLOG programs. The outline for each program includes a description of the steps followed by the program, a list of uses made of the system resources (Buffers, Variables and Scratch Accumulators), and print layouts for the two report programs. Finally, Section A.5 contains listings of all pertinent ECORLOG source code.

A.1 THE ECORLOG JOB

The ECORLOG Job embodies the database structure used in this application. It was created by the source code stored on the system in the MASTER,ECORJB Batch. Essentially, the Job provides for two different kinds of Records (summary and detail Records) and a screen display for entering data into each Record type. Figure A.1 summarizes the fields contained in the Program Level One summary Records, while Figure A.2 shows a data entry screen for these Records. Figure A.3 shows the fields contained in the Program Level Two detail Records and Figure A.4 is a data entry screen layout for these detail Records.

FIGURE A.1. RECORD LAYOUT FOR PROGRAM LEVEL ONE RECORDS

FIELD NAME =====	FIELD TYPE =====	FIELD WIDTH =====	BEGINNING SCREEN POSITION =====	RECORD POSITION =====	COMMENTS =====
ECOR NUMBER	General	15	Line 3, Column 15	1- 15	
ANALYST	General	20	Line 5, Column 11	16- 35	
PHONE NUMBER	General	15	Line 5, Column 54	36- 50	
FISCAL YEAR I	Integer	4	Line 7, Column 5	51- 54	Must be filled, i.e., all four digits of the year must be entered.
APPROPRIATION AMOUNT	Numeric	12	Line 7, Column 40	55- 66	
APPROPRIATION NUMBER	General	15	Line 9, Column 40	67- 81	
FISCAL YEAR II	Integer	4	Line 11, Column 5	82- 85	The contents of FISCAL YEAR I are used to fill this field automatically.
UNOBLIGATED CARRYOVER AMOUNT	Numeric	12	Line 11, Column 40	86- 97	
TOTAL ECOR AVAILABILITY	Numeric	12	Line 13, Column 40	98-109	

PROGRAM		ECORLOG Screen Layout PL.1								PUNCHING INSTRUCTIONS	GRAPHIC	PAGE 1 OF 2						
PROGRAMMER		C. Winter								DATE	4/24/74	PUNCH						CARD ELECTRO NUMBER
STATEMENT																		
Name	8	10	Operation	14	16	20	Operand 25	30	35	40	45	50	55	Comments	60	65	71	Identification Sequence
a	SUMMARY FOR ECOR NUMBER																	
a	ECOR NUMBER:	a	XXXXXXXXXXXXXXX															
a	ANALYST:	a	XXXXXXXXXXXXXXX							a	PHONE NUMBER:	a	XXXXXXXXXXXXXXX					
a	FY9999	a	APPROPRIATION AMOUNT:							a	999999999999	a*						
a	APPROPRIATION NUMBER:									a	XXXXXXXXXXXXXXX							
a	FY9999	a	UNOBLIGATED CARRYOVER AMOUNT:							a	999999999999	a*						
a	TOTAL ECOR AVAILABILITY:									a	999999999999	a*						
a*	NUMERIC FIELDS: USE COMMAS WHEN ENTERING AMOUNTS																	
a	IF NUMBER IS NEGATIVE, BEGIN WITH A NEGATIVE SIGN																	

FIGURE A.3. RECORD LAYOUT FOR PROGRAM LEVEL TWO RECORDS

FIELD NAME =====	FIELD TYPE =====	FIELD WIDTH =====	BEGINNING SCREEN POSITION =====	RECORD POSITION =====	COMMENTS =====
CONTRACTOR I	General	12	Line 3, Column 27	1- 12	First of three fields. Must be entered, i.e., the field cannot be bypassed by pressing FIELD REL.
CONTRACTOR II	General	12	Line 4, Column 27	13- 24	Second of three fields.
CONTRACTOR III	General	12	Line 5, Column 27	25- 36	Third of three fields.
PROGRAM MANAGER	General	10	Line 5, Column 50	37- 46	Must be entered.
DATE RECEIVED	Integer and Text	5	Line 7, Column 26	47- 51	Together, the first two digits (the month) must be greater than zero and less than 13. The third digit is a slash, which is gener- ated automatically. the last two digits (the day) must be greater than zero and less than 32.
FIELD OFFICE	General	4	Line 8, Column 26	52- 55	Must be entered.
IPMIS (CID) NUMBER	General	7	Line 8, Column 61	56- 62	
BA	Numeric	12	Line 10, Column 9	63- 74	Must be entered.
CUMULATIVE BA	Numeric	12	Line 10, Column 43	75- 86	Skipped during data entry. The contents of this field are provided by the ECORUP program.

FIGURE A.3. RECORD LAYOUT FOR PROGRAM LEVEL TWO RECORDS (continued)

FIELD NAME =====	FIELD TYPE =====	FIELD WIDTH =====	BEGINNING SCREEN POSITION =====	RECORD POSITION =====	COMMENTS =====
BO	Numeric	12	Line 11, Column 9	87- 98	Must be entered.
CUMULATIVE BO	Numeric	12	Line 11, Column 43	99-110	Skipped during data entry. The contents of this field are provided by the ECORUP program.
WORK TITLE/DESCRIPTION I	General	19	Line 13, Column 27	111-129	First of four fields. Must be entered.
WORK TITLE/DESCRIPTION II	General	19	Line 14, Column 27	130-148	Second of four fields.
WORK TITLE/DESCRIPTION III	General	19	Line 15, Column 27	149-167	Third of four fields.
WORK TITLE/DESCRIPTION IV	General	19	Line 16, Column 27	168-186	Fourth of four fields.
COMMENTS I	General	17	Line 18, Column 27	187-203	First of four fields. Must be entered.
COMMENTS II	General	17	Line 19, Column 27	204-220	Second of four fields.
COMMENTS III	General	17	Line 20, Column 27	221-237	Third of four fields.
COMMENTS IV	General	17	Line 21, Column 27	238-254	Fourth of four fields.
LAB CODE	General	4	Line 22, Column 60	255-258	
STATE CODE	General	2	Line 22, Column 75	259-260	Validated against Value Set 011, which contains the postal abbreviations for the states, blanks, and '99' for foreign contracts.

FIGURE A.4. SCREEN LAYOUT FOR PROGRAM LEVEL TWO RECORDS

PROGRAM		ECORLOG: Screen Layout P.L.2		PUNCHING INSTRUCTIONS		GRAPHIC		PAGE 2 OF 2														
PROGRAMMER		C. Winter		DATE		PUNCH		CARD ELECTRO NUMBER														
STATEMENT																						
1	Name	8	10	Operation	14	18	20	Operand	25	30	35	40	45	50	55	Comment	60	65	71	72	Identification Sequence	80
								a	INDIVIDUAL CONTRACT INFORMATION													
	a	CONTRACTOR:						a	XXXXXX													
								a	XXXXXX							a	PROGRAM MANAGER:					
								a	XXXXXX							a	XXXXXXXXXX					
	a	DATE RECEIVED:						a	99/99			a	(XX/XX)									
	a	FIELD OFFICE:						a	XXXX					a	IPMIS (CID) NO. 1		a	XXXXXXXXXX				
	a	BA:		a	999999		a	CUMULATIVE			BA:		a	9999999999								
	a	BO:		a	999999		a	CUMULATIVE			BO:		a	9999999999								
	a	WORK TITLE/DESCRIPTION:						a	XXXXXX													
								a	XXXXXX													
								a	XXXXXX													
								a	XXXXXX													
	a	COMMENTS:						a	XXXXXX													
								a	XXXXXX													
								a	XXXXXX													
								a	XXXXXX													
								a	XXXXXX							a	LAB		a	STATE		
															a	CODE: XXXX		a	CODE: XXX			

A.2 THE ECORUP PROGRAM

The ECORUP program serves to update the numeric fields in all Records contained in one Batch of the ECORLOG Job. It is stored at the beginning of the MASTER, ECORLG Batch, in Statements 1-147. Each step that the program follows is listed below. The numbers in parentheses following the name of each step correspond to Statement numbers in the source code. Figure A.5 shows the use of system resources by the ECORUP program.

A brief description of the ECRJST subroutine called by the ECORUP program is also included in this section. This subroutine is stored in MASTER, ECRJST. Figure A.6 shows how the ECRJST subroutine uses system resources.

DESCRIPTION OF THE ECORUP PROGRAM

1. RETRIEVE A VALID BATCH ID TO UPDATE (2-18)
Use the screen buffer to request and validate the Batch ID of the Batch to be updated. In testing the Batch, it is opened and the first (header) Record read into Buffer#1.
2. RIGHT-JUSTIFY HEADER REC'S NUMERIC FIELDS IF NECESSARY (19-25)
The header Record now in Buffer#1 contains three numeric fields. For each field, the last position is checked. If it contains a blank, the field needs to be right-justified. The field is then copied to SAC1, a call to the ECRJST subroutine copies the field to SAC2 during the justification, and the field is copied back to Buffer #1 from SAC2.
3. OPEN BATCH 'TEMP', WRITE HEADER RECORD TO IT (26-31)
The Batch 'TEMP' will temporarily hold an updated copy of the ECORLOG Batch. This Batch is created (and opened), and the header Record written to it.
4. BEGIN MAIN PROGRAM LOOP TO PROCESS DETAIL RECS (32-35)
The main program loop, which processes one detail Record per iteration, begins here. A Record is read, and the loop exited if the end of the Batch has been reached.
5. PROCESS BA (36-83)
Process the BA and CUMULATIVE BA fields of the detail Record. This operation consists of the four tasks that follow.
 - 5A. RIGHT-JUSTIFY BA IF NECESSARY (37-42)
The BA field is copied from positions 63-74 of Buffer#1 to SAC1. If the last position of SAC1 is blank, a call to ECRJST will right-justify the field and copy it to SAC2. If the field is already justified, SAC1 is copied to SAC2.
 - 5B. EDIT BA TO USE IT IN ARITHMETIC (43-54)
This task involves removing any commas and/or negative signs from the BA amount. This is done using a position-by-position copy from SAC2 to SAC3, with only numerals being copied. Variable I controls the WHILE statement which does this, and also serves as pointer to each position in SAC2. Variable J is a pointer to the rightmost available position in SAC3 (the edited version), while K serves as a flag which

is set to the value of one if a negative sign is found in the number. If the number is negative, SAC3 is copied to SAC4, which is then subtracted from SAC3 twice so that SAC3 contains a negative number. Now SAC3 can be added to SAC11, which accumulates the BA amounts from the CUMULATIVE BA field of each detail Record.

- 5C. EDIT CUM. BA TO REMOVE LEADING ZEROES (55-69)
The CUMULATIVE BA figure now stored in SAC11 must be edited twice; the first edit removes leading zeroes and adds a negative sign if necessary. SAC11 is copied twice: once to SAC5, where the rightmost position contains the sign (positive or negative) of the number, once to SAC6 without the sign. SAC6 is then scanned from left to right to remove leading zeroes. Variable I controls the WHILE statement that accomplishes this, and points to each position of SAC6 in turn. If the position contains a zero and the preceding position contains a blank, the position is a leading zero which is blanked out. Variable J is set to mark the last leading zero/blank position and that position marked with a '-' when the first non-zero number is encountered. When the scan is complete, SAC5's twelfth position is checked. If the number is not negative, the '-' at SAC6(J) is blanked out; if the number is negative, the overpunched letter in the last position of SAC6 is replaced by the appropriate number (from SAC5(11)).
- 5D. INSERT COMMAS IN CUM. BA (70-83)
Commas are inserted in the number representing CUMULATIVE BA by another copy between SAC's, this time from SAC6 to SAC7. The copy proceeds from right to left. Three positions are copied. The next position (to the left) in SAC6 is checked: if it is blank, the number has been copied in its entirety; if it is a negative sign, this is copied to SAC7 to complete the edit; if it is a number, the copy is not complete, so a comma and the next three positions of SAC6 are copied to SAC7 to continue the edit. When the edit is complete, SAC7 is written to positions 75-86 of Buffer#1, where CUMULATIVE BA is stored. This completes the processing of BA.
6. PROCESS B0 (84-131)
The same logic is used to process B0 as for the previous operations on BA. The following descriptions of the four subtasks contain only the different storage locations used in handling B0.
 - 6A. RIGHT-JUSTIFY B0 IF NECESSARY (85-90)
B0 is copied to SAC1 from positions 87-98 of Buffer#1.
 - 6B. EDIT B0 TO USE IT IN ARITHMETIC (91-102)
CUMULATIVE B0 is accumulated in SAC12.
 - 6C. EDIT CUM. B0 TO REMOVE LEADING ZEROES (103-117)
SAC5 and SAC6 are copied from SAC12.
 - 6D. INSERT COMMAS IN CUM. B0 (118-131)
CUMULATIVE B0 is stored in positions 99-110 of Buffer #1.
7. WRITE UPDATED RECORD TO BATCH (132-133)
The Record is copied from Buffer#1 to the Batch 'TEMP' in the last statement of the main program loop.

8. TRANSFER BATCH 'TEMP' BACK INTO ORIGINAL BATCH (134-147)
Both the original Batch and 'TEMP' are closed. The original Batch is recreated, which erases its former contents, and 'TEMP' is reopened. Each record in 'TEMP' is then read into Buffer#1 and copied to the original Batch. After all Records have been copied, both Batches are closed, and 'TEMP' is deleted. The last (\$PAUSE) statement allows the user a choice of exiting or running the ECRPT1 program.

FIGURE A.5. USE OF SYSTEM RESOURCES BY THE ECRUP PROGRAM

BUFFERS

Buffer#1 - Used to read both header and detail Records from the Batch, and to write to the updated Batch. During most of the program (Steps 1-7), Records are read from the Batch chosen for updating and written to Batch 'TEMP'. At the end of the program (Step 8), Records are read from 'TEMP' and written back to the original Batch. Columns 1-109 of the buffer are used to process the header Record; columns 1-260 are used to process detail Records.

VARIABLES

I,J,K (Steps 5B,6B): Used in removing commas from each detail Record's BA field (Step 5B) and BO field (Step 6B).

I,J (Steps 5C,6C): Used in removing leading zeroes from the number representing each detail Record's CUMULATIVE BA (Step 5C) and CUMULATIVE BO (Step 6C) fields.

SCRATCH ACCUMULATORS (SAC's)

SAC1 through SAC7: Used sequentially in the four edits performed on BA (Step 5) and BO (Step 6) amounts.

SAC11: Accumulates CUMULATIVE BA for the duration of the program.

SAC12: Accumulates CUMULATIVE BO for the duration of the program.

DESCRIPTION OF THE ECRJST SUBROUTINE

This subroutine, which is called by the ECORUP program, right-justifies any one of the numeric fields in a Batch of ECORLOG. It is called after the last position of a numeric field is checked; if this position contains a blank the field needs justifying and so ECRJST is called.

ECRJST uses a position-by-position copy from SAC1 (the unjustified version) to SAC2, which is initialized with blanks. The copy proceeds from right to left, with Variable I pointing to positions in SAC1, J to positions in SAC2. If SAC1(I) is not blank, it is copied to SAC2(J) and J is decremented. Then I is decremented and the next position checked. If SAC1 contained nothing, the number is assumed to be zero, and SAC2(12) set to zero.

FIGURE A.6. USE OF SYSTEM RESOURCES BY THE ECRJST SUBROUTINE

BUFFERS

No Buffers are used in this subroutine.

VARIABLES

I,J: Used in right-justifying numeric fields.

SCRATCH ACCUMULATORS (SAC's)

SAC1,SAC2: Used in right-justifying numeric fields.

A.3 THE ECRPT1 PROGRAM

The ECRPT1 program outputs a report on the information contained in one ECORLOG Batch. The source code for this program is stored in Statements 148-247 of MASTER,ECORLG. The steps followed by the ECRPT1 program are described below. The numbers in parentheses after the name of each ECRPT1 step indicate the location of the step in the source code. Figure A.7 lists the use of system resources by ECRPT1. Figure A.8 shows the print layout for the report produced by the ECRPT1 program.

DESCRIPTION OF THE ECRPT1 PROGRAM

1. RETRIEVE A VALID BATCH ID TO PROCESS (149-166)
Use the screen to request and validate a Batch ID entered by the user. The Batch is tested by opening it and reading the first (header) Record into Buffer#2.
2. FORMAT THE REPORT HEADER IN BUFFER#1 (167-183)
The report header is set up in Buffer#1. Some of the information consists of text strings which do not change from Batch to Batch, so are treated as literals. The rest of the header information is contained in the Batch's header Record; these fields are copied from Buffer#2 to the correct positions in Buffer#1.
3. PREPARE FOR, BEGIN MAIN PROGRAM LOOP TO PROCESS DETAIL RECORDS (184-197)
The main program loop processes one detail Record per iteration. Before the loop begins, Variable I is set for use as a line counter, J for use as a page counter. As the loop begins, the value of I is checked; if necessary, the value of J (the page number) is set into the report header, the header printed, and I and J incremented. Next, a detail Record is read. If the end of the Batch has been reached, the loop is exited. Otherwise, processing continues by clearing Buffer#3, into which the Record will be formatted for printing.
4. FORMAT A DETAIL RECORD INTO BUFFER#3 (198-210)
The contents of the detail Record are copied from Buffer#2 (into which they have been read) to Buffer#3 in the proper format for printing.
5. PRINT THE FORMATTED DETAIL RECORD (210-214)
The contents of Buffer#3 are printed, followed by a blank line from the screen. Line counter I is incremented, Buffer#2 cleared to read the next Record, and the main program loop ends, with control returning to Step 3 (Statement 188).
6. PRINT FINAL HEADER IF NECESSARY, SET UP FINAL ENTRY (215-223)
Only the first four lines of the header will be printed if a header is needed, since column headings are not used for the report summary. The report summary lines are formatted on the screen. Total BA and Total BO are the numbers in the CUMULATIVE BA and CUMULATIVE BO fields of the last detail Record. These are copied from Buffer#3 (which, in the main program loop, is cleared after the EXIT statement).

7. GET DATE AND NAME FROM USER (224-241)
The screen buffer is used to request and validate the user's name and the date. These are copied to lines six and seven of the screen, which are being used to format the final entry.
8. PRINT FINAL ENTRY (242-247)
The final entry is transferred from the screen to Buffer#4 to align it properly on the page, and then printed. The Batch processed for the report is closed and a \$PAUSE message displayed on the screen.

FIGURE A.7. USE OF SYSTEM RESOURCES BY THE ECRPT1 PROGRAM

BUFFERS

- Buffer#1 - Used to hold a formatted header Record for printing.
Columns 1-135 contain Line One of the Batch header.
Columns 136-216 contain Line Two of the Batch header.
Columns 217-351 contain Line Three of the Batch header.
Columns 352-486 contain Line Four of the Batch header.
Columns 487-594 contain Line Five of the Batch header.
Columns 595-723 contain Line Six of the Batch header.
- Buffer#2 - Used to read both header and detail Records from the Batch.
Columns 1-109 are used in reading header Record.
Columns 1-260 are used in reading detail Records.
- Buffer#3 - Used to hold formatted detail Records for printing.
Columns 1-135 contain Line One of the detail Record.
Columns 136-270 contain Line Two of the detail Record.
Columns 271-405 contain Line Three of the detail Record.
Columns 406-540 contain Line Four of the detail Record.
- Buffer#4 - Columns 1-84 are used to temporarily hold the report summary **entries** before printing. These entries are copied from the screen to the buffer so that they will be properly aligned when printed.
-

VARIABLES

- I (entire program): Print line counter.
- J (entire program): Print page counter.
-

SCRATCH ACCUMULATORS (SAC's)

No Scratch Accumulators are used in this program.

FIGURE A.8. PRINT LAYOUT FOR THE ECRPT1 REPORT

Print Chart for ECRPT1 program (single-Batch report) output

NATIONAL ECR LOG										PAGE 99
ECOR #: XXXXXXXXXXXXXXXX										
FY 9999 APPROPRIATION AMOUNT: 999999999999					APPROPRIATION NUMBER: XXXXXXXXXXXXXXXX			ANALYST: XXXXXXXXXXXXXXXX		
FY 9999 UNOBLIGATED CARRYOVER AMT: 999999999999					TOTAL ECR AVAILABILITY: 999999999999			PHONE #: XXXXXXXX		
DATE REC'D.	CONTRACTOR	FO	PHIS (CID) #	BA	CUM. BA	BO	CUM. BO	PROGRAM MANAGER	WORK DESCRIPTION/TITLE	COMMENTS
99/99	XXXXXXXXXX	XXXX	XXXXXXXX	999999999999	999999999999	999999999999	999999999999	XXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
	XXXXXXXXXX								XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
	XXXXXXXXXX								XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
									XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
99/99	XXXXXXXXXX	XXXX	XXXXXXXX	999999999999	999999999999	999999999999	999999999999	XXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
	XXXXXXXXXX								XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
	XXXXXXXXXX								XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
									XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
REPORT DATE:		XXXXXXXXXXXXXXXXXXXX			TOTAL BA:		999999999999			
PREPARED BY:		XXXXXXXXXXXXXXXXXXXX			TOTAL BO:		999999999999			
Notes for Chart: Lines 8-15 are the header. If report summary is only entry on page, only Lines 1-11 are printed. Lines 16-20 and Lines 25-29 are (the first and last) Detail Records. Lines 30-39 are the Report Summary.										

A.4 THE ECRPT2 PROGRAM

The ECRPT2 program produces a report on the information in more than one Batch of the ECORLOG Job. The source code for this program is stored in Statements 248-537 of MASTER,ECORLG. A description of the steps followed by the ECRPT2 program is given below, with the statement numbers corresponding to each step given in parentheses after its name. Figure A.9 shows the system resources used by the program. Figure A.10 gives a print layout for the ECRPT2 report.

DESCRIPTION OF THE ECRPT2 PROGRAM

1. **DISPLAY LIST OF ALL BATCHES ONSCREEN (249-264)**
The Batch ID's of all ECORLOG Batches are displayed on the screen so that Batches can be selected for the report. In this and subsequent tasks, Variable I is used to point to lines on the screen, while J points to screen columns. A loop is used to open each Batch in turn and write its ID at the next slot on the screen. A maximum of 40 Batch ID's will be displayed on the screen.
2. **SELECT THOSE BATCHES TO BE PROCESSED (265-298)**
The user's selection of a list of Batches for the report is accomplished by a set of three nested loops. The innermost loop (Statements 272-281) is executed separately for each Batch ID selected, and iterates until the user verifies that Batch ID. The middle loop (Statements 271-291) is executed separately for each list of Batches selected, iterating once for each Batch ID. Variable K tallies the number of Batches in the list as they are entered. A maximum of 20 Batches can be selected for one report. When the user presses FIELD REL to signify that there are no more Batches to enter, this loop is exited, with control passing to the outermost loop (Statements 270-298). The outermost loop validates the entire list of Batches. If the user verifies the list, the loop is exited; if not, the list is erased and control passes back to the top of the loop to obtain another list.
3. **SET UP SCREEN TO BEGIN PROCESSING BATCHES (299-304)**
The screen is cleared of all messages except the list of batches chosen for the report. Another message written to the screen allows Batches to be opened from the screen and informs the user of the program's progress.
4. **FORMAT REPORT HEADER RECORD IN BUFFER#4 (305-322)**
The report header consists of a few text strings, the page number, and a list of the ECOR Numbers of the Batches included in the report. The text strings are set into Buffer#4, along with constant information for the Batch summary entry (also stored in Buffer#4, beginning at position 541). A WHILE statement iterates once for each of the K Batches selected for the report. Variable L controls the execution of the WHILE statement. I and J point to the screen position of each Batch ID in turn. The Batch is opened, and the header Record read into Buffer#2. The ECOR NUMBER field is copied to Buffer#4, at the position indicated by Variable M (used as a buffer position pointer).
5. **FORMAT CONSTANT PORTIONS OF BATCH HEADER IN BUFFER#1 (323-341)**
The Batch header (stored in Buffer#1) consists of fields from the Batch's header Record, text strings describing those fields, and column headers.

Items in the last two categories do not change from Batch to Batch, so they are formatted into Buffer#1 here, before the main program loop. In addition, text strings are written to the screen for the Batch summary entry, and variables set for the main program loop. Variables I and J still point to screen lines and columns, and L will control the main program loop. Variable M will now be used to point to positions in Buffer#5, where each Batch summary is stored for the report summary. Variable O is used as a print line counter, P as a page counter.

6. BEGIN MAIN PROGRAM LOOP TO PROCESS BATCHES (342-351)
The main program loop (Steps 6-11) is a WHILE statement which iterates once for each of the K Batches. At the top of the loop, a Batch is opened and its header record read into Buffer#2. The ECOR NUMBER field is copied to the screen for the Batch summary entry. The fields from this Record are copied to the Batch header for the report in Buffer#1. Buffer#2 is cleared and the first detail Record read into it.
7. BEGIN INNER LOOP TO PROCESS DETAIL RECORDS (352-362)
The inner WHILE loop (Steps 7-9), executed until the end of the Batch is encountered, processes one detail Record per iteration. If the printer is at the end of a page of output, the printer is advanced to the next page, and the page number is set into the report header. The report header (from Buffer#4) and the Batch header (from Buffer#1) are printed; line counter O and page counter P are incremented.
8. FORMAT A DETAIL RECORD INTO BUFFER#3 (363-375)
The most recently read detail Record (read in Step 6 or Step 9) is formatted for printing by copying its fields from Buffer#2 to Buffer#3.
9. PRINT A DETAIL RECORD (376-381)
The formatted detail Record in Buffer#3 is printed, along with a blank line from the screen. Line counter O is incremented, and the next detail Record read into Buffer#2 in the last statement enclosed by the inner (detail Record) WHILE statement beginning in Step 7.
10. COMPLETE PROCESSING FOR ONE BATCH (382-398)
The Batch is closed, and the CUMULATIVE BA and CUMULATIVE BO fields from the last detail Record are copied from Buffer#3 to the screen for the Batch summary. The report header and Batch header are printed if necessary, but column headings are not printed since they are not needed for the Batch summary. The Batch summary is transferred to Buffer#4 for proper alignment and printed. The ECOR Number, BA and BO amounts are then transferred to the Buffer#5 positions pointed to by Variable M. Note that if 20 Batches are included in the report, the BO amount for the last Batch is stored in SAC13 due to the buffer size limit of 768 characters.
11. PREPARE TO PROCESS NEXT BATCH (399-405)
The Batch summary is cleared from the screen. Variables I and J are incremented to point to the next Batch ID on the screen. L is incremented by one to signal to the WHILE statement that a Batch has been completed. M is incremented to point to the next available positions in Buffer#5, and O is set to ensure that the next Batch will begin to print on a new page. The main program loop begun at Step 6 ends here, with control returning to Step 6.

12. PREPARE FOR REPORT SUMMARY PROCESSING (406-415)
At this point, detailed information from all of the Batches included in the report has been printed. Old screen messages are cleared and new ones set for the report summary. The report header and the summary title and column headings are printed on a new page.
13. GET EACH BATCH SUMMARY BACK FROM BUFFER#5 (416-423)
A WHILE statement (encompassing Steps 13-15) is used for this task, with Variable L looping over Batches and M pointing to positions in Buffer#5. For each Batch, the ECOR Number, Total BA and Total BO are copied from Buffer#5 to the screen. If 20 Batches were included in the report, the BO amount for the last Batch is retrieved from SAC13. The summary information for the Batch is then copied from the screen to Buffer #4 and printed.
14. EDIT BATCH TOTAL BA, ADD TO SAC11 FOR RPT TOTAL BA (424-436)
The Total BA figure from each Batch will be added to SAC11 to obtain a report Total BA amount. Before it can be added, however, it must be edited to remove commas and/or negative signs. This is accomplished by copying Total BA from the screen to SAC2, then using a position-by-position copy from SAC2 to SAC3, with only numerals being copied. Variable I controls the WHILE statement which does this, and also serves as pointer to each position in SAC2. Variable J is a pointer to the rightmost available position in SAC3 (the edited version), while N serves as a flag which is set to the value of one if a negative sign is found in the number. If the number is negative, SAC3 is copied to SAC4, which is then subtracted from SAC3 twice so that SAC3 contains a negative number. Now SAC3 can be added to SAC11 for the report Total BA.
15. EDIT BATCH TOTAL BO, ADD TO SAC12 FOR RPT TOTAL BO (437-450)
Report Total BO is accumulated in SAC12. The current Batch's Total BO is copied from the screen to SAC2, and edited the same way that BA was in the previous step. The result is added to SAC12. Variables L and M are incremented for the next iteration of the WHILE statement, and control returns to Step 13.
16. EDIT REPORT TOTAL BO (451-481)
All Batch summaries have now been processed and printed - totals for the report will now be formatted and printed. The report Total BA stored in SAC11 must be edited twice before printing: first to remove leading zeroes, then to add commas and a negative sign if necessary. These two subtasks are described next.
- 16A. EDIT BA TO REMOVE LEADING ZEROES (452-467)
The report Total BA in SAC11 is copied twice: once to SAC5, where the rightmost position contains the sign (positive or negative) of the number, once to SAC6 without the sign. SAC6 is then scanned from left to right to remove leading zeroes. Variable I controls the WHILE statement that accomplishes this, and points to each position of SAC6 in turn. If the position contains a zero and the preceeding position contains a blank, the position is a leading zero which is blanked out. Variable J is set to mark the rightmost leading zero/blank position and that position marked with a '-' when the first non-zero number is encountered. When the scan is complete, SAC5's twelfth

position is checked. If the number is not negative, the '-' at SAC6(J) is blanked out; if the number is negative, the overpunched letter in the last position of SAC6 is replaced by the appropriate number (from SAC5(11)).

16B. INSERT COMMAS IN REPORT TOTAL BA (468-481)

Commas are inserted in the number representing report Total BA by another copy between SAC's, this time from SAC6 to SAC7. The copy proceeds from right to left. Three positions are copied. The next position (to the left) in SAC6 is checked: if it is blank, the number has been copied in its entirety; if it is a negative sign, this is copied to SAC7 to complete the edit; if it is a number, the copy is not complete, so a comma and the next three positions of SAC6 are copied to SAC7 to continue the edit. When the edit is complete, SAC7 is written to the screen for the report summary.

17. EDIT REPORT TOTAL BO (482-513)

Now the report Total BO must be edited for the final report entry. The logic of this step mirrors that of Step 16 - only the differences between the two are described below.

17A. EDIT BO TO REMOVE LEADING ZEROES (483-497)

The copies to SAC5 and SAC6 are made from SAC12, where the report Total BO amount has been accumulated.

17B. INSERT COMMAS IN REPORT TOTAL BO (498-513)

After the editing operation is complete and SAC7 has been copied to the screen, the report total line on the screen is complete. It is transferred to Buffer#4 and printed.

18. GET NAME AND DATE FROM USER (514-531)

The screen is used to request and validate the user's name and the date. These are copied to lines 13 and 14 of the screen, which are being used to format the final entry.

19. PRINT FINAL ENTRY (532-537)

The final entry is transferred from the screen to Buffer#4 to align it properly for printing. A message for the user is written on the screen. The final report entry is printed in the last statements.

FIGURE A.9. USE OF SYSTEM RESOURCES BY THE ECRPT2 PROGRAM

BUFFERS

- Buffer#1 - Used to hold a line of asterisks for printing in various parts of the ECRPT2 report, as well as a formatted Batch header constructed from each Batch's header Record.
Columns 1-135 contain a line of asterisks.
Columns 136-216 contain Line One of the Batch header.
Columns 217-351 contain Line Two of the Batch header.
Columns 352-486 contain Line Three of the Batch header.
Columns 487-594 contain Line Four of the Batch header.
Columns 595-723 contain Line Five of the Batch header.
- Buffer#2 - Used to read both header and detail Records from Batches.
Columns 1-109 are used in reading header Records.
Columns 1-260 are used in reading detail Records.
- Buffer#3 - Used to hold formatted detail Records for printing.
Columns 1-135 contain Line One of the detail Record.
Columns 136-270 contain Line Two of the detail Record.
Columns 271-405 contain Line Three of the detail Record.
Columns 406-540 contain Line Four of the detail Record.
- Buffer#4 - Used to hold a formatted report header for printing, and to align Batch and report summary entries before printing.
Columns 1-135 contain Line One of the report header.
Columns 136-270 contain Line Two of the report header.
Columns 271-405 contain Line Three of the report header.
Columns 406-540 contain Line Four of the report header.
Columns 541-624 are used to align summary entries.
- Buffer#5 - Used to store the information from each Batch summary entry for use in the report summary. The information from each Batch fills 39 columns of the buffer: fifteen for the ECOR Number, twelve for Batch Total BA, and twelve for Batch Total BO. If twenty Batches are included in the report, only the ECOR Number and Total BA for the last Batch are stored here - Total BO is stored in SAC13.
-

FIGURE A.9. USE OF SYSTEM RESOURCES BY THE ECRPT2 PROGRAM (continued)

VARIABLES

K (entire program): Set to the number of Batches in the report at Step 2.

L (entire program): Used to iterate looping statements from zero to (K-1).

O (entire program): Print line counter.

P (entire program): Print page counter.

I (Steps 1-13): Pointer to screen lines.

J (Steps 1-13): Pointer to screen columns.

I,J,N (Steps 14-15): Used in removing commas from each Batch's Total BA (Step 14) and Total BO (Step 15) amounts.

I,J (Steps 16-17): Used in removing leading zeroes from the report Total BA (Step 16) and Total BO (Step 17) amounts.

M (Step 4): Points to positions in Buffer#4 while the report header is being formatted.

M(Steps 5-15): Points to positions in Buffer#5 for storing and retrieving each Batch summary.

SCRATCH ACCUMULATORS (SAC's)

SAC2,SAC3,SAC4: Used in removing commas from each Batch's Total BA and Total BO amounts (Steps 14-15).

SAC5,SAC6,SAC7: Used to remove leading zeroes and add commas to the report Total BA and Total BO amounts (Steps 16-17).

SAC11: Accumulates report Total BA for the duration of the program.

SAC12: Accumulates report Total BO for the duration of the program.

SAC13: If twenty Batches (the maximum) are included in the report, the Total BO amount for the last Batch summary is stored here.

Chart for ECRPT2 program (multiple-batch report) output: Batch details

NATIONAL ECOR LOG											PAGE	99
REPORT FOR ECOR NUMBERS:		XXXXXXXXXXXXXX	XXXXXXXXXXXXXX	XXXXXXXXXXXXXX	XXXXXXXXXXXXXX	XXXXXXXXXXXXXX	XXXXXXXXXXXXXX	XXXXXXXXXXXXXX	XXXXXXXXXXXXXX	XXXXXXXXXXXXXX		
FY 1999 APPROPRIATION AMOUNT:		999999999999	APPROPRIATION NUMBER:		XXXXXXXXXXXXXX	ANALYST:		XXXXXXXXXXXXXX	XXXXXXXXXXXXXX	XXXXXXXXXXXXXX		
FY 1999 UNOBLIGATED CARRYOVER AMT:		999999999999	TOTAL ECOR AVAILABILITY:		999999999999	PHONE #:		XXXXXXXXXXXXXX	XXXXXXXXXXXXXX	XXXXXXXXXXXXXX		
DATE REC'D	CONTRACTOR	FO	IPMIS (CID) #	BA	ECOR# CUM. BA	BO	ECOR# CUM. BO	PROGRAM MANAGER	WORK DESCRIPTION/TITLE	COMMENTS		
99/99	XXXXXXXXXXXXXX	XXXX	XXXXXXXXXXXXXX	999999999999	999999999999	999999999999	999999999999	XXXXXXXXXXXXXX	XXXXXXXXXXXXXX	XXXXXXXXXXXXXX		
99/99	XXXXXXXXXXXXXX	XXXX	XXXXXXXXXXXXXX	999999999999	999999999999	999999999999	999999999999	XXXXXXXXXXXXXX	XXXXXXXXXXXXXX	XXXXXXXXXXXXXX		
SUMMARY FOR ECOR NUMBER XXXXXXXXXXXXXXXX											BA: 999999999999	BO: 999999999999
Notes for Chart: Lines 1-7 are the Report Header. Lines 8-20 are in Batch Header. If Batch Summary is only entry on page, only Lines 8-16 are printed. Lines 21-25 and Lines 31-35 are the first and last detail records. Lines 31-40 are a Batch summary.												

FIGURE A.10. PRINT LAYOUT FOR THE ECRT2 REPORT (continued)

Chart for ECRT2 program (multiple-Batch report) output: Report Summary

NATIONAL ECOR LOG										PAGE	99
REPORT FOR ECOR NUMBERS:											
XXXXXXXXXXXXXXXXXX											
XXXXXXXXXXXXXXXXXX											
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A.5 SOURCE CODE FOR THE ECORLOG APPLICATION

This section contains source code printouts for all code used in the ECORLOG application. The different pieces of source code are identified by the Job (all MASTER) and Batch in which each is stored. An indication of the contents of each Batch is given below, followed by the printouts of these Batches.

MASTER,ECORLG

The three ECORLOG programs are stored in this Batch. The ECORUP program constitutes Statements 1-147 in the ECORLG Batch. ECRPT1 is stored in Statements 148-247, ECRPT2 in Statements 248-537.

MASTER,ECRJST

This Batch contains the short ECRJST subroutine, which is called by the ECORUP program from MASTER,ECORLG.

MASTER,ECPURG

Templates of the commands to store and retrieve ECORLOG Batches after the end of a fiscal year are stored in this Batch.

MASTER,ECORJB

The statements defining the ECORLOG Job are stored in this Batch. The statements stored here were used to define formats C21 (Program Level One) and C22 (Program Level Two) and value set 011 to validate postal abbreviations for the STATE CODE field.

MASTER,ECLG84

This Batch is used to store old versions of the ECORLOG programs, which should be used to process data only in Batches of the ECLOG84 Job. The older version of the ECORUP program is stored in Statements 1-74 of MASTER,ECLG84. Statements 75-200 make up the old ECRPT1 program, Statements 201-486 the old ECRPT2 program.

MASTER,ECPG84

Examples of the commands used to store and retrieve ECLOG84 Batches at the end of a fiscal year are stored in this Batch.

MASTER,ECJB84

The code in this Batch was used to create the ECLOG84 Job, which uses formats C11 and C12 and value set 011.

SOURCE CODE FROM MASTER,ECORLG

```

1  $EDIT    !PROGRAM NAME: ECORUP -- UPDATES TOTALS IN A BATCH OF ECORLOG;
2  !*** 1. RETRIEVE A VALID BATCH ID TO UPDATE ***;
3  SET S(NLINES-3,2)="ENTER BATCH ID TO UPDATE";
4  SET S(3,1)="ECORLOG,";
5  LOOP(                                           !LOOP REQUESTS BATCH ID UNTIL VALID;
6      TYPEIN; SET S(3,9)=S(NLINES-2,2).6;
7      OPEN1 S(3,1); READ1 B1;
8      SET S(NLINES-3,2)="IS THIS THE CORRECT BATCH? ENTER YES OR NO";
9      SET S(NLINES-2,2)=& .79; TYPEIN;
10     IF EOF AND S(NLINES-2,2)="YES"
11         THEN (SET S(3,18)="TOTALS ARE BEING UPDATED"; EXIT)
12     ELSE SET S(NLINES-3,2)=& .79;
13     IF S(NLINES-2,2)="YES"
14         THEN SET S(NLINES-3,2)="NO DATA IN THIS BATCH...TRY AGAIN"
15     ELSE SET S(NLINES-3,2)="TRY AGAIN";
16     CLOSE1; SET S(NLINES-2,2)=& .79;
17     SET S(3,9)=& .71 );                               !END LOOP;
18 SET S(NLINES-3,2)=& .79; SET S(NLINES-2,2)=& .79;
19 !*** 2. RIGHT-JUSTIFY HEADER REC'S NUMERIC FIELDS IF NECESSARY ***;
20 IF B1(66)=" " THEN(
21     SET SAC1=B1(55).12; CALL "MASTER,ECRJST"; SET B1(55)=SAC2.12; );
22 IF B1(97)=" " THEN(
23     SET SAC1=B1(86).12; CALL "MASTER,ECRJST"; SET B1(86)=SAC2.12; );
24 IF B1(109)=" " THEN(
25     SET SAC1=B1(98).12; CALL "MASTER,ECRJST"; SET B1(98)=SAC2.12; );
26 !*** 3. OPEN BATCH 'TEMP', WRITE HEADER RECORD TO IT ***;
27 CREATE2 "ECORLOG,TEMP";
28 SET PLEVEL2=1 ; SET RECSIZ2=109 ;
29 WRITE2 B1;
30 !SET PROG.LEVEL,REC.SIZE TO PROCESS DETAIL RECS;
31 SET PLEVEL2=2; SET RECSIZ2=260;
32 !*** 4. BEGIN MAIN PROGRAM LOOP TO PROCESS DETAIL RECS ***;
33 LOOP(
34     READ1 B1;
35     IF EOF THEN EXIT;                               !EXIT LOOP IF NO MORE RECORDS;
36     !*** 5. PROCESS BA ***;
37     !*** 5A. RIGHT-JUSTIFY BA IF NECESSARY ***;
38     SET SAC1=B1(63).12;
39     IF SAC1(12)=" " THEN(
40         CALL "MASTER,ECRJST"; SET B1(63)=SAC2.12; )
41     ELSE
42         SET SAC2=SAC1.12;
43     !*** 5B. EDIT BA TO USE IT IN ARITHMETIC ***;
44     SET SAC3=&0.12
45     SET I=12; SET J=12; SET K=0;                     !FLAG K SET IF '-' ENCOUNTERED;
46     WHILE I>0(
47         IF (SAC2(I)>="0" AND SAC2(I)<="9") THEN(
48             SET SAC3(J)=SAC2(I).1; SET J=J-1;);
49         IF SAC2(I)="-" THEN SET K=1;
50         SET I=I-1; );                               !END WHILE STMT;
51     IF K=1 THEN(                                     !RESOLVE NEGATIVE NUMBERS;
52         SET SAC4=SAC3.12; SUB SAC4.12 FROM SAC3;
53         SUB SAC4.12 FROM SAC3; SET K=0;);
54     ADD SAC3.12 TO SAC11;                             !ADD TO CUM BA;
55     !*** 5C. EDIT CUM.BA TO REMOVE LEADING ZEROES ***;

```


SOURCE CODE FROM MASTER,ECORLG

```

56      SET I=2; SET J=1;
57      SET SAC5=SAC11(2).11 SIGN;
58      SET SAC6=SAC11.12; SET SAC6(1)=" ";
59      WHILE I<13(                                     !WHILE STMT EDITS CUM.BA IN SAC6;
60          IF (SAC6(I)≠"0" AND SAC6(I-1)=" ")
61              THEN (SET SAC6(I-1)="-"; SET J=I-1;); !J MARKS LAST BLANK POSITION;
62          IF (SAC6(I)="0" AND SAC6(I-1)=" ")
63              THEN SET SAC6(I)=" ";                !REMOVE LEADING ZEROES;
64          SET I=I+1; );                                !END WHILE STATEMENT;
65      IF (SAC6(12)≠"0" AND SAC6(12)≤"9")
66          THEN SET SAC6(J)=" ";                    !REMOVE MINUS SIGN FOR POSITIVE #S;
67      IF SAC6(12)=" "
68          THEN SET SAC6(12)="0";                    !INSERT ZERO IF # IS 0;
69      IF SAC5(12)="-" THEN SET SAC6(12)=SAC5(11).1;
70      !*** 5D. INSERT COMMAS IN CUM.BA ***;
71      SET SAC7=&.12;
72      SET SAC7(10)=SAC6(10).3;
73      IF (SAC6(9)=" " OR SAC6(9)="-")
74          THEN (IF SAC6(9)="-"
75              THEN SET SAC7(9)="-";)
76      ELSE( SET SAC7(9)=", ";
77          SET SAC7(6)=SAC6(7).3;
78          (IF (SAC6(6)=" " OR SAC6(6)="-")
79              THEN (IF SAC6(6)="-"
80                  THEN SET SAC7(5)="-";)
81              ELSE (SET SAC7(5)=", ";
82                  SET SAC7(1)=SAC6(3).4; ) ) ; ) ;    !CUM. BA COMPLETED;
83      SET B1(75)=SAC7.12;                             !COPY TO BUFFER;
84      !*** 6. PROCESS BO ***;
85      !*** 6A. RIGHT-JUSTIFY BO IF NECESSARY ***;
86      SET SAC1=B1(87).12;
87      IF SAC1(12)=" " THEN(
88          CALL "MASTER,ECRJST"; SET B1(87)=SAC2.12; )
89      ELSE
90          SET SAC2=SAC1.12;
91          !*** 6B. EDIT BO TO USE IT IN ARITHMETIC ***;
92      SET SAC3=&0.12
93      SET I=12; SET J=12;
94      WHILE I≥0(
95          IF (SAC2(I)≠"0" AND SAC2(I)≤"9") THEN(
96              SET SAC3(J)=SAC2(I).1; SET J=J-1;);
97          IF SAC2(I)="-" THEN SET K=1;
98          SET I=I-1; );                                !END WHILE STMT;
99      IF K=1 THEN(                                     !RESOLVE NEGATIVE NUMBER;
100          SET SAC4=SAC3.12; SUB SAC4.12 FROM SAC3;
101          SUB SAC4.12 FROM SAC3; );
102      ADD SAC3.12 TO SAC12;                             !ADD TO CUM BO;
103      !*** 6C. EDIT CUM.BO TO REMOVE LEADING ZEROES ***;
104      SET I=2; SET J=1;
105      SET SAC5=SAC12(2).11 SIGN;
106      SET SAC6=SAC12.12; SET SAC6(1)=" ";
107      WHILE I<13(                                     !WHILE STMT EDITS CUM.BO IN SAC6;
108          IF (SAC6(I)≠"0" AND SAC6(I-1)=" ")
109              THEN (SET SAC6(I-1)="-"; SET J=I-1;); !J MARKS LAST BLANK POSITION;
110          IF (SAC6(I)="0" AND SAC6(I-1)=" ")

```

SOURCE CODE FROM MASTER,ECORLG

```

111     THEN SET SAC6(1)=" ";                                !REMOVE LEADING ZEROES;
112     SET I=I+1; );                                         !END WHILE STATEMENT;
113     IF (SAC6(12)>="0" AND SAC6(12)<="9")
114     THEN SET SAC6(J)=" ";                                !REMOVE MINUS SIGN FOR POSITIVE #S;
115     IF SAC6(12)=" "
116     THEN SET SAC6(12)="0";                                !INSERT ZERO IF # IS 0;
117     IF SAC5(12)="-" THEN SET SAC6(12)=SAC5(11).1;
118     !*** 6D. INSERT COMMAS IN CUM.BO ***;
119     SET SAC7=& .12;
120     SET SAC7(10)=SAC6(10).3;
121     IF (SAC6(9)=" " OR SAC6(9)="-")
122     THEN (IF SAC6(9)="-"
123           THEN SET SAC7(9)="-";)
124     ELSE( SET SAC7(9)=" ";
125           SET SAC7(6)=SAC6(7).3;
126           (IF (SAC6(6)=" " OR SAC6(6)="-")
127             THEN (IF SAC6(6)="-"
128                   THEN SET SAC7(5)="-";)
129             ELSE (SET SAC7(5)=" ";
130                   SET SAC7(1)=SAC6(3).4; ) ) ;
131           SET B1(99)=SAC7.12;                                !CUM.BO COMPLETED;
132           !*** 7. WRITE UPDATED RECORD TO BATCH ***;        !COPY TO BUFFER;
133           WRITE2 B1; )                                     !END MAIN PROGRAM LOOP;
134           !*** 8. TRANSFER BATCH 'TEMP' BACK INTO ORIGINAL BATCH ***;
135     CLOSE1; CLOSE2;                                         !CLOSE ORIGINAL AND UPDATED BATCHES;
136     OPEN1 "ECORLOG,TEMP";                                  !REOPEN TEMP;
137     CREATE2 S(3,1);                                         !CLEAR OUT ORIGINAL BATCH;
138     SET PLEVEL2=1; SET RECSIZ2=109;
139     READ1 B1; WRITE2 B1;                                    !TRANSFER HEADER RECORD;
140     SET PLEVEL2=2; SET RECSIZ2=260;
141     LOOP(                                                    !LOOP TRANSFERS DETAIL RECORDS;
142         READ1 B1;
143         IF EOF THEN EXIT;
144         WRITE2 B1; )                                       !END LOOP;
145     CLOSE1; CLOSE2;
146     $PURGE ECORLOG,TEMP
147     $PAUSE PRESS SPACE BAR TO PRINT REPORT ON ONE BATCH, MODE KEY TO EXIT
148     $EDIT !PROGRAM NAME: ECRPT1 -- PRINTS AN ECORLOG REPORT FOR ONE BATCH;
149     !*** 1. RETRIEVES A VALID BATCH ID TO PROCESS ***;
150     SET S(NLINES-3,2)="ENTER BATCH ID TO FORMAT FOR REPORT";
151     SET S(3,1)="ECORLOG,";
152     LOOP
153         (TYPEIN; SET S(3,9)=S(NLINES-2,2).6;
154         OPEN1 S(3,1); READ1 B2;
155         SET S(NLINES-3,2)="IS THIS THE CORRECT BATCH? ENTER YES OR NO";
156         SET S(NLINES-2,2)=& .79; TYPEIN;
157         IF ~EOF AND S(NLINES-2,2)="YES"
158         THEN (SET S(3,17)="IS BEING FORMATTED FOR REPORT"; EXIT)
159         ELSE SET S(NLINES-3,2)=& .79;
160         IF S(NLINES-2,2)="YES"
161         THEN SET S(NLINES-3,2)="NO DATA IN THIS BATCH...TRY AGAIN"
162         ELSE SET S(NLINES-3,2)="TRY AGAIN";
163         CLOSE1;
164         SET S(NLINES-2,2)=& .79;
165         SET S(3,9)=& .71 );                                !END LOOP;

```

SOURCE CODE FROM MASTER,ECORLG

```

166 SET S(NLINES-3,2)=& .79; SET S(NLINES-2,2)=& .79;
167 !*** 2. FORMAT THE REPORT HEADER IN BUFFER#1 ***;
168 SET B1(54)="NATIONAL ECOR LOG"; SET B1(123)="PAGE"; !1ST HEADER LINE;
169 SET B1(189)="ECOR #:"; SET B1(197)=B2(1).15; !2ND HEADER LINE;
170 SET B1(217)="FY APPROPRIATION AMOUNT:"; !3RD LINE BEGINNING;
171 SET B1(220)=B2(51).4; SET B1(252)=B2(55).12;
172 SET B1(270)="APPROPRIATION NUMBER:"; SET B1(294)=B2(67).15;
173 SET B1(320)="ANALYST:"; SET B1(329)=B2(16).20;
174 SET B1(352)="FY UNOBLIGATED CARRYOVER AMT:"; !4TH LINE BEGINNING;
175 SET B1(355)=B2(82).4; SET B1(387)=B2(86).12;
176 SET B1(405)="TOTAL ECOR AVAILABILITY:"; SET B1(432)=B2(98).12;
177 SET B1(455)="PHONE #:"; SET B1(464)=B2(36).15;
178 SET B1(488)="DATE"; SET B1(515)="IPMIS"; !5TH LINE BEGINNING;
179 SET B1(572)="PROGRAM"; SET B1(588)="WORK";
180 SET B1(595)="REC'D. CONTRACTOR FO"; !6TH LINE BEGINNING;
181 SET B1(622)="(CID) # BA CUM. BA";
182 SET B1(660)="BO CUM. BO MANAGER";
183 SET B1(691)="DESCRIPTION/TITLE COMMENTS";
184 !*** 3. PREPARE FOR, BEGIN MAIN PROGRAM LOOP TO PROCESS DETAIL RECORDS ***;
185 SET I=52; SET J=1; !I COUNTS LINES, J PAGES;
186 SET B2=& .109;
187 LOOP( !BEGINNING OF MAIN PROGRAM LOOP;
188 IF I>51 THEN( !PRINT HEADER;
189 TFORM; SET B1(127)=J.6; SET B1(127)=" ";
190 PRINT B1(1).132; PRINT S(4,1).1; PRINT S(4,1).1;
191 PRINT B1(136).78; PRINT S(4,1).1; PRINT B1(217).132; PRINT S(4,1).1;
192 PRINT B1(352).132; PRINT S(4,1).1; PRINT S(4,1).1; PRINT S(4,1).1;
193 PRINT B1(487).105; PRINT B1(595).126; PRINT S(4,1).1; PRINT S(4,1).1;
194 SET I=16; SET J=J+1;); !INCREMENT COUNTERS, END IF;
195 READ1 B2;
196 IF EOF THEN EXIT;
197 SET B3=& .540;
198 !*** 4. FORMAT A DETAIL RECORD INTO BUFFER#3 ***;
199 SET B3(1)=B2(47).5; SET B3(8)=B2(1).12; !FIRST LINE BEGINS;
200 SET B3(22)=B2(52).4; SET B3(28)=B2(56).7;
201 SET B3(35)=B2(63).12; SET B3(47)=B2(75).12;
202 SET B3(59)=B2(87).12; SET B3(71)=B2(99).12;
203 SET B3(85)=B2(37).10; SET B3(96)=B2(111).19;
204 SET B3(116)=B2(187).17;
205 SET B3(143)=B2(13).12; SET B3(231)=B2(130).19; !SECOND LINE BEGINS;
206 SET B3(251)=B2(204).17;
207 SET B3(278)=B2(25).12; SET B3(366)=B2(149).19; !THIRD LINE BEGINS;
208 SET B3(386)=B2(221).17;
209 SET B3(501)=B2(168).19; SET B3(521)=B2(238).17; !FOURTH LINE;
210 !*** 5. PRINTS THE FORMATTED DETAIL RECORD ***;
211 PRINT B3(1).132; PRINT B3(136).132;
212 PRINT B3(271).132; PRINT B3(406).132; PRINT S(4,1).1;
213 SET I=I+5; !INCREMENT LINE COUNTER;
214 SET B2=& .260;); !END MAIN PROGRAM LOOP;
215 !*** 6. PRINT FINAL HEADER IF NECESSARY, SET UP FINAL ENTRY ***;
216 IF I>51 THEN(
217 TFORM; SET B1(127)=J.6; SET B1(127)=" ";
218 PRINT B1(1).132; PRINT S(4,1).1; PRINT S(4,1).1;
219 PRINT B1(136).78; PRINT S(4,1).1; PRINT B1(217).132; PRINT S(4,1).1;
220 PRINT B1(352).132; PRINT S(4,1).1; PRINT S(4,1).1; PRINT S(4,1).1;);

```

SOURCE CODE FROM MASTER,ECORLG

```

221 SET S(6,5)="REPORT DATE:"; SET S(6,56)="TOTAL BA:";
222 SET S(7,5)="PREPARED BY:"; SET S(7,56)="TOTAL BO:";
223 SET S(6,68)=B3(47).12; SET S(7,68)=B3(71).12;
224 !*** 7. GET DATE AND NAME FROM USER ***;
225 SET S(NLINES-3,2)="ENTER TODAY'S DATE";
226 LOOP(
227     TYPEIN; SET S(6,18)=S(NLINES-2,2).25;
228     SET S(NLINES-3,2)=& .79; SET S(NLINES-2,2)=& .79;
229     SET S(NLINES-3,2)="ENTER YOUR NAME";
230     TYPEIN; SET S(7,18)=S(NLINES-2,2).25;
231     SET S(NLINES-3,2)=& .79; SET S(NLINES-2,2)=& .79;
232     SET S(NLINES-3,2)="ARE NAME AND OATE CORRECT? ENTER YES OR NO";
233     TYPEIN;
234     IF S(NLINES-2,2)="YES" THEN
235         EXIT
236     ELSE(
237         SET S(6,18)=& .25; SET S(7,18)=& .25;
238         SET S(NLINES-3,2)=& .79; SET S(NLINES-2,2)=& .79;
239         SET S(NLINES-3,2)="TRY AGAIN - ENTER TOOAY'S OATE";);); !END LOOP;
240 SET S(NLINES-2,2)=& .79;
241 SET S(NLINES-3,2)=& .79;
242 !*** 8. PRINT FINAL ENTRY ***;
243 PRINT S(4,1).1; PRINT S(4,1).1; PRINT S(4,1).1;
244 SET B4=& .84; SET B4(4)=S(6,1).80; PRINT B4(1).84;
245 SET B4(4)=S(7,1).80; PRINT B4(1).84;
246 CLOSE1;
247 $PAUSE PRESS SPACE BAR TO PRINT MULTI-BATCH REPORT, MODE KEY TO EXIT
248 $EDIT !PROGRAM ECRPT2 -- PRODUCES MULTI-BATCH REPORT;
249 !*** 1. DISPLAY LIST OF ALL BATCHES ONSCREEN ***;
250 OPEN1 "ECORLOG,$";
251 SET I=4; SET J=2; !I COUNTS SCREEN LINE#, J COLUMN#;
252 SET S(3,2)="ECORLOG BATCHES AVAILABLE FOR PROCESSING";
253 SET S(I,J)=BATCH1.6; !WRITE 1ST BATCH IO ONSCREEN;
254 LOOP( !LOOP DISPLAYS BATCH IDS ONSCREEN;
255     NEXTB1;
256     IF ^OPEN1 THEN (SET S(19,2)="ALL AVAILABLE BATCHES ARE DISPLAYED"; EXIT);
257     IF J<74
258         THEN SET J=J+8
259         ELSE (SET I=I+1; SET J=2;); !INCREMENT COUNTERS;
260     IF I=8
261         THEN (SET S(19,2)="JOB HAS MORE BATCHES THAN CAN BE OISPLAYED"; !MAX 40;
262             SET S(20,2)="ABORT PROGRAM WITH MODE KEY TO SEE OTHERS IN JOB MODE"; EXIT;);
263     SET S(I,J)=BATCH1.6; !END LOOP;
264 CLOSE1;
265 !*** 2. SELECT THOSE BATCHES TO BE PROCESSED ***;
266 SET S(9,2)="ECORLOG BATCHES TO BE INCLUDED IN REPORT";
267 SET S(9,44)="(ORDERED FROM LEFT TO RIGHT)";
268 SET I=10; SET J=2; SET K=0; !K COUNTS # OF BATCHES SELECTED;
269 SET S(21,2)="ENTER FIRST BATCH ID TO INCLUDE IN REPORT";
270 LOOP( !LOOP ONE VALIOATES ENTIRE LIST;
271     LOOP( !LOOP TWO SELECTS LIST OF BATCHES;
272         LOOP( !LOOP THREE SELECTS ONE VALID BATCH;
273             TYPEIN; IF S(22,2)=" " THEN EXIT;
274             SET S(I,J)=S(22,2).6; !COPY ID ENTERED TO S(I,J);
275             SET S(21,2)="IS BATCH ABOVE CORRECT? ENTER YES OR NO ";

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SOURCE CODE FROM MASTER,ECORLG

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276      SET S(22,2)=& .79; TYPEIN;
277      IF S(22,2)="YES"
278      THEN (SET K=K+1; EXIT)
279      SET S(21,2)=& .79;
280      SET S(21,2)="ENTER CORRECT BATCH ID";
281      SET S(22,2)=& .79; SET S(I,J)=& .8;); !END LOOP THREE;
282      IF S(22,2)=" " THEN EXIT; !LIST DONE IF NOTHING ENTERED;
283      IF J<74
284      THEN SET J=J+8
285      ELSE (SET I=I+1; SET J=2;);
286      IF I=12
287      THEN (SET S(19,2)="MAXIMUM NUMBER OF BATCHES ENTERED "; !MAX 20;
288      SET S(20,2)="PROCESS AS IS, RESTRUCTURE LIST OR ABORT WITH MODE KEY";
289      EXIT;);
290      SET S(21,2)=& .79; SET S(22,2)=& .79;
291      SET S(21,2)="ENTER NEXT BATCH ID, OR FIELD REL WHEN DONE"); !END LOOP TWO;
292      SET S(21,2)=& .79; SET S(22,2)=& .79;
293      SET S(21,2)="IS LIST OF BATCHES CORRECT? ENTER YES OR NO";
294      TYPEIN; IF S(22,2)="YES" THEN EXIT;
295      SET S(21,2)=& .79; SET S(22,2)=& .79; !CLEAR SCREEN,COUNTERS TO RETRY;
296      SET S(21,2)="TRY AGAIN - ENTER FIRST BATCH TO PROCESS";
297      SET S(10,2)=& .79; SET S(11,2)=& .79;
298      SET I=10; SET J=2; SET K=0;); !END LOOP ONE;
299      !*** 3. SET UP SCREEN TO BEGIN PROCESSING BATCHES ***;
300      SET S(3,2)=& .79; SET S(4,2)=& .79;
301      SET S(5,2)=& .79; SET S(6,2)=& .79; SET S(7,2)=& .79;
302      SET S(19,2)=& .79; SET S(20,2)=& .79;
303      SET S(21,2)=& .79; SET S(22,2)=& .79;
304      SET S(12,2)="BATCH NOW BEING PROCESSED: ECORLOG,";
305      !*** 4. FORMAT REPORT HEADER RECORD IN BUFFER#4 ***;
306      SET B4(54)="NATIONAL ECOR LOG"; SET B4(123)="PAGE";
307      SET B4(136)="REPORT FOR ECOR NUMBERS:";
308      SET B4(541)="SUMMARY FOR ECOR NUMBER";
309      SET I=10; SET J=2; SET L=0; SET M=163; !L CONTROLS WHILE STMTS;
310      WHILE L<K( !WHILE STMT GETS ECOR NUMBERS;
311      SET S(12,38)=S(I,J).6;
312      OPEN1 S(12,30); READ1 B2;
313      SET B4(M)=B2(1).15; !M POINTS TO WRITE POSITION IN B4;
314      CLOSE1;
315      SET L=L+1;
316      SET M=M+18;
317      IF (M=271 OR M=406)
318      THEN SET M=M+9; !EXTRA SPACE NEEDED IF NEW LINE;
319      IF J<74
320      THEN SET J=J+8
321      ELSE (SET I=I+1; SET J=2;); !INCREMENT SCREEN POINTERS;
322      SET B2=& .109;); !END WHILE STMT;
323      !*** 5. FORMAT CONSTANT PORTIONS OF BATCH HEADER IN BUFFER#1 ***;
324      SET B1(1)=&*.132; !FIRST HEADER LINE;
325      SET B1(189)="ECOR #:"; !2ND HEADER LINE;
326      SET B1(217)="FY APPROPRIATION AMOUNT:"; !3RD LINE BEGINNING;
327      SET B1(270)="APPROPRIATION NUMBER:";
328      SET B1(320)="ANALYST:";
329      SET B1(352)="FY UNOBLIGATED CARRYOVER AMT:"; !4TH LINE BEGINNING;
330      SET B1(405)="TOTAL ECOR AVAILABILITY:";

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SOURCE CODE FROM MASTER,ECORLG

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331 SET B1(455)="PHONE #:";
332 SET B1(488)="DATE"; SET B1(515)="IPMIS"; !5TH LINE BEGINNING;
333 SET B1(538)="ECOR#"; SET B1(562)="ECOR#";
334 SET B1(572)="PROGRAM"; SET B1(588)="WORK";
335 SET B1(595)="REC'D. CONTRACTOR FO"; !6TH LINE BEGINNING;
336 SET B1(622)="(CID) # BA CUM. BA";
337 SET B1(660)="BO CUM. BO MANAGER";
338 SET B1(691)="DESCRIPTION/TITLE COMMENTS";
339 SET S(7,40)="BA:"; SET S(7,64)="BO:"; !SET UP BATCH SUMMARY ENTRY LINE;
340 SET I=10; SET J=2; SET L=0; SET M=1; SET O=52; SET P=1;
341 !O IS PRINT LINE COUNTER, P PAGE COUNTER;
342 !*** 6. BEGIN MAIN PROGRAM LOOP TO PROCESS BATCHES ***;
343 WHILE L<K( !MAIN PROGRAM LOOP;
344 SET S(12,38)=S(I,J).6; OPEN1 S(12,30);
345 READ1 B2; SET S(7,22)=B2(1).15; !READ HEADER RECORD;
346 SET B1(197)=B2(1).15; !VARIABLE HEADER FIELDS TO BUFFER#1;
347 SET B1(220)=B2(51).4; SET B1(252)=B2(55).12;
348 SET B1(294)=B2(67).15; SET B1(329)=B2(16).20; SET B1(355)=B2(82).4;
349 SET B1(387)=B2(86).12; SET B1(432)=B2(98).12; SET B1(464)=B2(36).15;
350 SET B2=&.109;
351 READ1 B2; !READ FIRST DETAIL RECORD;
352 !*** 7. BEGIN INNER LOOP TO PROCESS DETAIL RECORDS ***;
353 WHILE ~EOF( !INNER WHILE BEGINS;
354 IF O>51 THEN( !PRINT HEADER IF NECESSARY;
355 TFORM; SET B4(127)=P.6; SET B4(127)=" "; !GET PAGE NUMBER;
356 PRINT B4(1).132; PRINT S(4,1).1; PRINT B4(136).132;
357 PRINT B4(271).132; PRINT B4(406).132; PRINT S(4,1).1;
358 PRINT B1(1).132; PRINT S(4,1).1;
359 PRINT B1(136).78; PRINT S(4,1).1; PRINT B1(217).132; PRINT S(4,1).1;
360 PRINT B1(352).132; PRINT S(4,1).1; PRINT S(4,1).1; PRINT S(4,1).1;
361 PRINT B1(487).105; PRINT B1(595).126; PRINT S(4,1).1; PRINT S(4,1).1;
362 SET O=21; SET P=P+1;); !INCREMENT COUNTERS, END IF;
363 !*** 8. FORMAT A DETAIL RECORD INTO BUFFER#3 ***;
364 SET B3=&.540;
365 SET B3(1)=B2(47).5; SET B3(8)=B2(1).12; !FIRST LINE BEGINS;
366 SET B3(22)=B2(52).4; SET B3(28)=B2(56).7;
367 SET B3(35)=B2(63).12; SET B3(47)=B2(75).12;
368 SET B3(59)=B2(87).12; SET B3(71)=B2(99).12;
369 SET B3(85)=B2(37).10; SET B3(96)=B2(111).19;
370 SET B3(116)=B2(187).17;
371 SET B3(143)=B2(13).12; SET B3(231)=B2(130).19; !SECOND LINE BEGINS;
372 SET B3(251)=B2(204).17;
373 SET B3(278)=B2(25).12; SET B3(366)=B2(149).19; !THIRD LINE BEGINS;
374 SET B3(386)=B2(221).17;
375 SET B3(501)=B2(168).19; SET B3(521)=B2(238).17; !FOURTH LINE;
376 !*** 9. PRINT A DETAIL RECORD ***;
377 PRINT B3(1).132; PRINT B3(136).132;
378 PRINT B3(271).132; PRINT B3(406).132; PRINT S(4,1).1;
379 SET O=O+5; !INCREMENT LINE COUNTER;
380 SET B2=&.260;
381 READ1 B2;); !END INNER WHILE STMT;
382 !*** 10. COMPLETE PROCESSING FOR ONE BATCH ***;
383 CLOSE1;
384 SET S(7,44)=B3(47).12; SET S(7,68)=B3(71).12;
385 IF O>51 THEN( !PRINT HEADER IF NECESSARY;

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SOURCE CODE FROM MASTER,ECORLG

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386      TFORM; SET B4(127)=P.6; SET B4(127)=" ";
387      PRINT B4(1).132; PRINT S(4,1).1; PRINT B4(136).132
388      PRINT B4(271).132; PRINT B4(406).132; PRINT S(4,1).1;
389      PRINT B1(1).132; PRINT S(4,1).1; PRINT B1(136).78;
390      PRINT S(4,1).1 PRINT B1(217).132; PRINT S(4,1).1;
391      PRINT B1(352).132; PRINT S(4,1).1; PRINT S(4,1).1;
392      PRINT S(4,1).1; SET P=P+1; ); !END IF;
393      PRINT B1(1).132; PRINT S(4,1).1; !PRINT BATCH SUMMARY RECORD;
394      SET B4(565)=S(7,22).59; PRINT B4(541).84; PRINT S(4,1).1; PRINT B1(1).132;
395      SET B5(M)=S(7,22).15; SET B5(M+15)=S(7,44).12; !STORE BATCH SUMMARY IN B5;
396      IF L<19
397      THEN SET B5(M+27)=S(7,68).12
398      ELSE SET SAC13(1)=S(7,68).12
399      !*** 11. PREPARE TO PROCESS NEXT BATCH ***;
400      SET S(7,22)=& .15; SET S(7,44)=& .12; SET S(7,68)=& .12;
401      IF J<74
402      THEN SET J=J+8
403      ELSE (SET I=I+1; SET J=2;);
404      SET L=L+1; SET M=M+39; SET O=52;
405      SET B3=& .540; ); !MAIN PROGRAM LOOP ENDS;
406      !*** 12. PREPARE FOR REPORT SUMMARY PROCESSING***;
407      SET S(12,1)=& .80; SET S(7,1)=& .80; SET B4(541)=& .84;
408      SET S(5,45)="REPORT SUMMARY"; SET S(6,22)="ECOR NUMBER";
409      SET S(6,48)="TOTAL BA"; SET S(6,72)="TOTAL BO";
410      TFORM; SET B4(127)=P.6; SET B4(127)=" "; !PRINT HEADING FOR SUMMARY;
411      PRINT B4(1).132; PRINT S(4,1).1; PRINT B4(136).132;
412      PRINT B4(271).132; PRINT B4(406).132; PRINT S(4,1).1;
413      PRINT B1(1).132; PRINT S(4,1).1; PRINT S(4,1).1;
414      PRINT S(5,1).80; PRINT S(4,1).1; PRINT S(4,1).1;
415      SET B4(544)=S(6,1).80; PRINT B4(541).84; PRINT S(4,1).1;
416      !*** 13. GET EACH BATCH SUMMARY BACK FROM BUFFER#5***;
417      SET L=0; SET M=1; !M POINTERS TO BUFFER#5 COLUMN;
418      WHILE L<K(
419      SET S(7,22)=B5(M).15; SET S(7,44)=B5(M+15).12;
420      IF L<19
421      THEN SET S(7,68)=B5(M+27).12
422      ELSE SET S(7,68)=SAC13(1).12; !IF 20TH BATCH, BO COMES FROM SAC13;
423      SET B4(544)=S(7,1).80; PRINT B4(541).84; !PRINT BATCH SUMMARY ENTRY;
424      !*** 14. EDIT BATCH TOTAL BA, ADD TO SAC11 FOR RPT TOTAL BA;
425      SET SAC2=S(7,44).12;
426      SET SAC3=&0.12
427      SET I=12; SET J=12; SET N=0; !FLAG N SET IF '-' ENCOUNTERED;
428      WHILE I>0(
429      IF (SAC2(I))>="0" AND SAC2(I)<="9") THEN(
430      SET SAC3(J)=SAC2(I).1; SET J=J-1;);
431      IF SAC2(I)="-" THEN SET N=1;
432      SET I=I-1; ); !END WHILE STMT;
433      IF N=1 THEN !RESOLVE NEGATIVE NUMBER;
434      SET SAC4=SAC3.12; SUB SAC4.12 FROM SAC3;
435      SUB SAC4.12 FROM SAC3; SET N=0; );
436      ADD SAC3.12 TO SAC11;
437      !*** 15. EDIT BATCH TOTAL BO, ADD TO SAC12 FOR RPT TOTAL BO;
438      SET SAC2=S(7,68).12;
439      SET SAC3=&0.12
440      SET I=12; SET J=12;

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SOURCE CODE FROM MASTER,ECORLG

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441     WHILE I>0(
442         IF (SAC2(I)>="0" AND SAC2(I)<="9") THEN(
443             SET SAC3(J)=SAC2(I).1; SET J=J-1;);
444         IF SAC2(I)="-" THEN SET N=1;
445         SET I=I-1; );
446     IF N=1 THEN(
447         SET SAC4=SAC3.12; SUB SAC4.12 FROM SAC3;
448         SUB SAC4.12 FROM SAC3; );
449     ADD SAC3.12 TO SAC12;
450     SET L=L+1; SET M=M+39; );
451     !*** 16. EDIT REPORT TOTAL BA ***;
452     !*** 16A. EDIT BA TO REMOVE LEADING ZEROES ***;
453     SET S(7,22)="REPORT TOTAL:"; SET S(7,35)=& .46; !SET UP REPORT TOTAL LINE;
454     SET I=2; SET J=1;
455     SET SAC5=SAC11(2).11 SIGN;
456     SET SAC6=SAC11.12; SET SAC6(1)=" ";
457     WHILE I<13(
458         IF (SAC6(I)~"0" AND SAC6(I-1)=" ")
459             THEN (SET SAC6(I-1)="-"; SET J=I-1;);
460         IF (SAC6(I)="0" AND SAC6(I-1)=" ")
461             THEN SET SAC6(I)=" ";
462         SET I=I+1; );
463     IF (SAC6(12)>="0" AND SAC6(12)<="9")
464         THEN SET SAC6(J)=" ";
465     IF SAC6(12)=" "
466         THEN SET SAC6(12)="0";
467     IF SAC5(12)="-" THEN SET SAC6(12)=SAC5(11).1;
468     !*** 16B. INSERT COMMAS IN REPORT TOTAL BA ***;
469     SET SAC7=& .12;
470     SET SAC7(10)=SAC6(10).3;
471     IF (SAC6(9)=" " OR SAC6(9)="-")
472         THEN (IF SAC6(9)="-"
473             THEN SET SAC7(9)="-";)
474     ELSE( SET SAC7(9)=", ";
475         SET SAC7(6)=SAC6(7).3;
476         (IF (SAC6(6)=" " OR SAC6(6)="-")
477             THEN (IF SAC6(6)="-"
478                 THEN SET SAC7(5)="-";)
479             ELSE (SET SAC7(5)=", ";
480                 SET SAC7(1)=SAC6(3).4; ) ; ) ;
481     SET S(7,44)=SAC7.12;
482     !*** 17. EDIT REPORT TOTAL BO ***;
483     !*** 17A. EDIT BO TO REMOVE LEADING ZEROES ***;
484     SET I=2; SET J=1;
485     SET SAC5=SAC12(2).11 SIGN;
486     SET SAC6=SAC12.12; SET SAC6(1)=" ";
487     WHILE I<13(
488         IF (SAC6(I)~"0" AND SAC6(I-1)=" ")
489             THEN (SET SAC6(I-1)="-"; SET J=I-1;);
490         IF (SAC6(I)="0" AND SAC6(I-1)=" ")
491             THEN SET SAC6(I)=" ";
492         SET I=I+1; );
493     IF (SAC6(12)>="0" AND SAC6(12)<="9")
494         THEN SET SAC6(J)=" ";
495     IF SAC6(12)=" "

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SOURCE CODE FROM MASTER,ECORLG

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496     THEN SET SAC6(12)="0";
497     IF SAC5(12)="-" THEN SET SAC6(12)=SAC5(11).1;
498     !*** 17B. INSERT COMMAS IN REPORT TOTAL BO ***;
499     SET SAC7=& .12;
500     SET SAC7(10)=SAC6(10).3;
501     IF (SAC6(9)="" OR SAC6(9)="-")
502     THEN (IF SAC6(9)="-"
503           THEN SET SAC7(9)="-";)
504     ELSE( SET SAC7(9)=", ";
505           SET SAC7(6)=SAC6(7).3;
506           (IF (SAC6(6)="" OR SAC6(6)="-")
507             THEN (IF SAC6(6)="-"
508                   THEN SET SAC7(5)="-";)
509             ELSE (SET SAC7(5)=", ";
510                   SET SAC7(1)=SAC6(3).4;) ; ) ;
511     SET S(7,68)=SAC7.12;                                !TOTAL BO COMPLETED;
512     PRINT S(4,1).1;                                       !PRINT REPORT TOTALS;
513     SET B4(544)=S(7,1).80; PRINT B4(541).84;
514     !*** 18. GET NAME AND DATE FROM USER ***;
515     SET S(13,25)="REPORT DATE:";
516     SET S(14,25)="PREPARED BY:";
517     SET S(21,2)="ENTER TODAY'S DATE";
518     LOOP(                                                !REQUESTS DATE/NAME UNTIL VALID;
519         TYPEIN; SET S(13,47)=S(22,2).25;
520         SET S(21,2)=& .79; SET S(22,2)=& .79;
521         SET S(21,2)="ENTER YOUR NAME";
522         TYPEIN; SET S(14,47)=S(22,2).25;
523         SET S(21,2)=& .79; SET S(22,2)=& .79;
524         SET S(21,2)="ARE NAME AND DATE CORRECT? ENTER YES OR NO";
525         TYPEIN;
526         IF S(22,2)="YES" THEN
527             EXIT
528         ELSE(
529             SET S(13,47)=& .25; SET S(14,47)=& .25;
530             SET S(21,2)=& .79; SET S(22,2)=& .79;
531             SET S(21,2)="TRY AGAIN - ENTER TODAY'S DATE";) ; ) ;    !END LOOP;
532     !*** 19. PRINT FINAL ENTRY ***;
533     SET S(22,2)=& .79;
534     SET S(21,2)="HIT MODE KEY TO EXIT WHEN '$END ENCOUNTERED' APPEARS BELOW";
535     PRINT S(4,1).1; PRINT S(4,1).1; PRINT S(4,1).1; PRINT S(13,1).80;
536     PRINT S(14,1).80; PRINT S(4,1).1; PRINT S(4,1).1; PRINT B1(1).132;
537     $END

```

SOURCE CODE FROM MASTER, ECRJST

```
1      !SUBROUTINE ECRJST WHICH RIGHT JUSTIFIES NUMERIC FIELDS IN ECRLOG;  
2      SET SAC2=& .12;  
3      SET I=12; SET J=12;  
4      WHILE I>0(  
5          IF SAC1(I)~" " THEN(  
6              SET SAC2(J)=SAC1(I).1; SET J=J-1; );  
7              SET I=I-1; ); !END WHILE STMT;  
8      IF SAC2(12)=" " THEN  
9          SET SAC2(12)="0";  
10     RETURN
```

SOURCE CODE FROM MASTER,ECPURG

```
1  $COMMENT COMMANDS TO ARCHIVE  ECORLOG BATCHES
2  $TODOS
3  /O=BCH184@0,J=ECORLO,K=KG,B=BBATCH,C=C1,P
4
5  /O=BCH284@0,J=ECORLO,K=KG,B=BBATCH,C=C2,P
6  $PAUSE  COMMANDS TO DELETE  ECORLOG BATCHES
7  $PURGE ECORLOG,BATCH1
8  $PURGE ECORLOG,BATCH2
9  $PAUSE  COMMANDS TO RETRIEVE ECORLOG BATCHES
10 $FRODOS
11 /I=BCH184@0,J=ECORLO,K=KG,B=BBATCH,C=C1,P
12
13 /I=BCH284@0,J=ECORLO,K=KG,B=BBATCH,C=C2,P
14 $END
```

SOURCE CODE FROM MASTER,ECORJB

```

1      $COMMENT CODE TO CREATE ECORLOG JOB, IN MASTER,ECORJB
2      $PURGE ECORLOG,0-ZZZZZZ
3      $DELETE JOB ECORLOG
4      $DEFJOB ECORLOG $MAXSIZ 260 $FORMAT C21,C22 $VALUES 011 $ACCUMS 0
5      $PAUSE FORMATTING FOR PROGRAM LEVEL 1
6      $DELETE FORMAT C21
7      $FORMAT C21 $SIZE 109
8      ASD INTEN L E22,80
9      P1,24"SUMMARY FOR ECOR NUMBER"
10     P3,1"ECOR NUMBER:"
11     P5,1"ANALYST:"
12     P5,39"PHONE NUMBER:"
13     P7,1"FY"
14     P7,9"APPROPRIATION AMOUNT:"
15     P7,53"*"
16     P9,1"APPROPRIATION NUMBER:"
17     P11,1"FY"
18     P11,9"UNOBLIGATED CARRYOVER AMOUNT:"
19     P11,53"*"
20     P13,1"TOTAL ECOR AVAILABILITY:"
21     P13,53"*"
22     P16,1"* NUMERIC FIELDS: USE COMMAS WHEN ENTERING AMOUNTS"
23     P17,3"IF NUMBER IS NEGATIVE, BEGIN WITH A NEGATIVE SIGN"
24     @3,14 G(H)15
25     @5,10 G(H)20
26     @5,53 G(H)15
27     @7,4 1I(H)4F
28     @7,39 N(H)12
29     @9,39 G(H)15
30     @11,4 I(H)4GF1
31     @11,39 N(H)12
32     @13,39 N(H)12
33     F2
34     $PAUSE FORMATTING FOR PROGRAM LEVEL 2
35     $DELETE FORMAT C22
36     $FORMAT C22 $SIZE 260
37     ASD INTEN L E22,80
38     P1,20"INDIVIDUAL CONTRACT INFORMATION"
39     P3,8"CONTRACTOR:"
40     P(H)3,25"#" P(-)3,39"#"
41     P(H)4,25"#" P(-)4,39"#"
42     P4,46"PROGRAM MANAGER:"
43     P(H)5,25"#" P(-)5,39"#"
44     P7,8"DATE RECEIVED:"
45     P7,32"(XX/XX)"
46     P8,8"FIELD OFFICE:"
47     P8,42"IPMIS (CID) NO.:"
48     P10,1"BA:"
49     P10,25"CUMULATIVE BA:"
50     P11,1"BO:"
51     P11,25"CUMULATIVE BO:"
52     P13,1"WORK TITLE/DESCRIPTION:"
53     P(H)13,25"#" P(-)13,46"#"
54     P(H)14,25"#" P(-)14,46"#"
55     P(H)15,25"#" P(-)15,46"#"

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SOURCE CODE FROM MASTER,ECORJB

```

56 P(H)16,25"#" P(-)16,46"#"
57 P18,8"COMMENTS:"
58 P(H)18,25"#" P(-)18,44"#"
59 P(H)19,25"#" P(-)19,44"#"
60 P(H)20,25"#" P(-)20,44"#"
61 P(H)21,25"#" P(-)21,44"#"
62 P21,53"LAB"
63 P21,68"STATE"
64 P22,53"CODE:"
65 P22,68"CODE:"
66 @3,26 G(H)12E
67 @4,26 G(H)12
68 @5,26 G(H)12
69 @5,49 G(H)10E
70 @7,25 INTEN H I2>00<13 T(-)"/" I(-)2>00<32 INTEN L
71 @8,25 G(H)4E
72 @8,60 G(H)7
73 @10,8 N(H)12E
74 @10,42 N(H)12S
75 @11,8 N(H)12E
76 @11,42 N(H)12S
77 @13,26 G(H)19E
78 @14,26 G(H)19
79 @15,26 G(H)19
80 @16,26 G(H)19
81 @18,26 G(H)17E
82 @19,26 G(H)17
83 @20,26 G(H)17
84 @21,26 G(H)17
85 @22,59 G(H)4
86 @22,74 G(H)2 IF 7V1 THEN "USE POSTAL ABBREV'S - '99' FOR FOREIGN"
87 F2
88 $PAUSE CODING FOR STATE VALUE SET FOLLOWS
89 $DELETE VALUES 011
90 $VALUES 011 $SIZE 2
91
92 CA
93 IL
94 TN
95 WA
96 AL
97 AK
98 AZ
99 AR
100 CO
101 CT
102 DE
103 FL
104 GA
105 HI
106 ID
107 IN
108 IA
109 KS
110 KY

```

SOURCE CODE FROM MASTER,ECORJB

111	LA
112	ME
113	MD
114	MA
115	MI
116	MN
117	MS
118	MO
119	MT
120	NE
121	NV
122	NH
123	NJ
124	NM
125	NY
126	NC
127	ND
128	OH
129	OK
130	OR
131	PA
132	RI
133	SC
134	SD
135	TX
136	UT
137	VT
138	VA
139	WV
140	WI
141	WY
142	DC
143	99
144	\$END

SOURCE CODE FROM MASTER,ECLG84

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1  $EDIT    !PROGRAM NAME: ECORUP -- UPDATES TOTALS IN A BATCH OF ECLOG84;
2  !THIS SECTION RETRIEVES A VALID BATCH TO UPDATE;
3  SET S(NLINES-3,2)="ENTER BATCH ID TO UPDATE";
4  SET S(3,1)="ECLOG84,";
5  LOOP(      !LOOP REQUESTS BATCH ID UNTIL VALID BATCH ENTERED;
6  TYPEIN; SET S(3,9)=S(NLINES-2,2).6;
7  DPEN1 S(3,1); READ1 B1;
8  SET S(NLINES-3,2)="IS THIS THE CORRECT BATCH? ENTER YES OR NO";
9  SET S(NLINES-2,2)=& .79; TYPEIN;
10 IF EOF AND S(NLINES-2,2)="YES"
11 THEN (SET S(3,18)="TOTALS ARE BEING UPDATED"; EXIT)
12 ELSE SET S(NLINES-3,2)=& .79;
13 IF S(NLINES-2,2)="YES"
14 THEN SET S(NLINES-3,2)="NO DATA IN THIS BATCH...TRY AGAIN"
15 ELSE SET S(NLINES-3,2)="TRY AGAIN";
16 CLOSE1;
17 SET S(NLINES-2,2)=& .79; SET S(3,9)=& .71 );      !END LOOP;
18 SET S(NLINES-3,2)=& .79; SET S(NLINES-2,2)=& .79;
19 !THIS SECTION OPENS BATCH 'TEMP', WRITES HEADER RECORD TO IT;
20 CREATE2 "ECLOG84,TEMP";
21 SET PLEVEL2=1 ; SET RECSIZ2=139 ;
22 WRITE2 B1;
23 !SET PROG.LEVEL,REC.SIZE TO PROCESS DETAIL RECS;
24 SET PLEVEL2=2; SET RECSIZ2=281;
25 LOOP(      !MAIN PROGRAM LOOP TO PROCESS DETAIL RECS STARTS HERE;
26 READ1 B1;
27 IF EOF THEN EXIT;      !EXIT LOOP IF NO MORE RECORDS;
28 !FOLLOWING SECTION UPDATES CUM BA;
29 ADD B1(66).8 TO SAC1;
30 SET SAC2=SAC1.12;
31 SET K=2; SET L=1;      !K ITERATES WHILE STMT,L IS A MARKER;
32 SET SAC2(1)=" ";
33 WHILE K<13(      !WHILE STMT EDITS CUM BA IN SAC2;
34 IF (SAC2(K)≠"0" AND SAC2(K-1)=" ")
35 THEN (SET SAC2(K-1)="-"; SET L=K-1);      !L MARKS LAST BLANK POSITION;
36 IF (SAC2(K)="0" AND SAC2(K-1)=" ")
37 THEN SET SAC2(K)=" ";
38 SET K=K+1);      !END WHILE STMT;
39 IF (SAC2(12)≠"0" AND SAC2(12)≤"9")
40 THEN SET SAC2(L)=" ";
41 IF SAC2(12)=" "
42 THEN SET SAC2(12)="0";
43 SET B1(74)=SAC2(3).10;      !UPDATED CUM BA (SAC2) WRITTEN TO BUFFER;
44 !FOLLOWING SECTION UPDATES CUM BO;
45 ADD B1(84).8 TO SAC3;
46 SET SAC4=SAC3.12;
47 SET K=2; SET L=1;      !RESET K AND L;
48 SET SAC4(1)=" ";
49 WHILE K<13(      !WHILE STMT EDITS CUM BO IN SAC4;
50 IF (SAC4(K)≠"0" AND SAC4(K-1)=" ")
51 THEN (SET SAC4(K-1)="-"; SET L=K-1);
52 IF (SAC4(K)="0" AND SAC4(K-1)=" ")
53 THEN SET SAC4(K)=" ";
54 SET K=K+1);      !END WHILE STMT;
55 IF (SAC4(12)≠"0" AND SAC4(12)≤"9")

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SOURCE CODE FROM MASTER,ECLG84

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56      THEN SET SAC4(L)=" ";
57      IF SAC4(12)=" "
58      THEN SET SAC4(12)="0";
59      SET B1(92)=SAC4(3).10;          !UPDATED CUM BO (SAC4) WRITTEN TO BUFFER;
60      WRITE2 B1;)          !WRITE UPDATED RECORD TO BATCH TEMP,CLOSE MAIN PROG.LOOP;
61      CLOSE1; CLOSE2;          !CLOSE ORIGINAL AND UPDATED BATCHES;
62      !THIS SECTION TRANSFERS TEMP BACK INTO ORIGINAL BATCH;
63      OPEN1 "ECLOG84,TEMP";          !REOPEN TEMP;
64      CREATE2 S(3,1);          !CLEAR OUT ORIGINAL BATCH;
65      SET PLEVEL2=1; SET RECSIZ2=139;
66      READ1 B1; WRITE2 B1;          !TRANSFER HEADER RECORD;
67      SET PLEVEL2=2; SET RECSIZ2=281;          !SET FOR DETAIL RECORDS;
68      LOOP(          !LOOP TO TRANSFER DETAIL RECORDS;
69      READ1 B1;
70      IF EOF THEN EXIT;
71      WRITE2 B1;)          !END LOOP;
72      CLOSE1; CLOSE2;
73      $PURGE ECLOG84,TEMP
74      $PAUSE   PRESS SPACE BAR TO PRINT REPORT ON ONE BATCH, MODE KEY TO EXIT
75      $EDIT    !PROGRAM NAME: ECRPT1 -- PRINTS AN ECRLOG REPORT FOR ONE BATCH;
76      !THIS SECTION RETRIEVES A VALID BATCH TO PROCESS;
77      SET S(NLINES-3,2)="ENTER BATCH ID TO FORMAT FOR REPORT";
78      SET S(3,1)="ECLOG84,";
79      LOOP
80      (TYPEIN; SET S(3,9)=S(NLINES-2,2).6;
81      OPEN1 S(3,1); READ1 B2;
82      SET S(NLINES-3,2)="IS THIS THE CORRECT BATCH? ENTER YES OR NO";
83      SET S(NLINES-2,2)=& .79; TYPEIN;
84      IF-EOF AND S(NLINES-2,2)="YES"
85      THEN (SET S(3,17)="IS BEING FORMATTED FOR REPORT"; EXIT)
86      ELSE SET S(NLINES-3,2)=& .79;
87      IF S(NLINES-2,2)="YES"
88      THEN SET S(NLINES-3,2)="NO DATA IN THIS BATCH...TRY AGAIN"
89      ELSE SET S(NLINES-3,2)="TRY AGAIN";
90      CLOSE1;
91      SET S(NLINES-2,2)=& .79; SET S(3,9)=& .71 );          !END LOOP;
92      SET S(NLINES-3,2)=& .79; SET S(NLINES-2,2)=& .79;
93      !THIS SECTION FORMATS THE REPORT HEADER IN BUFFER 1;
94      SET B1(54)="NATIONAL ECR LOG"; SET B1(123)="PAGE";          !1ST HEADER LINE;
95      SET B1(189)="ECOR #:"; SET B1(197)=B2(1).15;          !2ND HEADER LINE;
96      SET B1(217)="FY      APPROPRIATION AMOUNT:";          !3RD LINE BEGINNING;
97      SET B1(219)=B2(51).4; SET B1(251)=B2(102).12;
98      SET B1(270)="APPROPRIATION NUMBER:"; SET B1(295)=B2(64).15;
99      SET B1(319)="ANALYST:"; SET B1(328)=B2(16).20;
100     SET B1(352)="FY      UNOBLIGATED CARRYOVER AMT:";          !4TH LINE BEGINNING;
101     SET B1(354)=B2(79).4; SET B1(386)=B2(114).12;
102     SET B1(405)="TOTAL ECR AVAILABILITY:"; SET B1(431)=B2(126).14;
103     SET B1(454)="PHONE #:"; SET B1(463)=B2(36).15;
104     SET B1(489)="DATE"; SET B1(518)="IPMIS";          !5TH LINE BEGINNING;
105     SET B1(569)="PROGRAM"; SET B1(586)="WORK";
106     SET B1(595)="RECEIVED CONTRACTOR FO";          !6TH LINE BEGINNING;
107     SET B1(625)="(CID) #      BA      CUM. BA";
108     SET B1(658)="BO      CUM. BO      MANAGER";
109     SET B1(688)="DESCRIPTION/TITLE      COMMENTS";
110     SET I=52; SET J=1;          !I IS A LINE COUNTER, J A PAGE COUNTER;

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SOURCE CODE FROM MASTER,ECLG84

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111 SET B2=& .139;                                !CLEAR BUFFER TWO FOR INDIVIDUAL RECORDS;
112 LOOP(                                          !BEGINNING OF MAIN PROGRAM LOOP;
113     IF I>51 THEN(                             !PRINT HEADER AT TOP OF EACH PAGE;
114         TFORM; SET B1(127)=J.6; SET B1(127)=" ";
115         PRINT B1(1).132; PRINT S(4,1).1; PRINT S(4,1).1;
116         PRINT B1(136).78; PRINT S(4,1).1; PRINT B1(217).132; PRINT S(4,1).1;
117         PRINT B1(352).132; PRINT S(4,1).1; PRINT S(4,1).1; PRINT S(4,1).1;
118         PRINT B1(487).105; PRINT B1(595).123; PRINT S(4,1).1; PRINT S(4,1).1;
119         SET I=16; SET J=J+1;);                !INCREMENT COUNTERS, END IF;
120 READ1 B2;
121 IF EOF THEN EXIT;
122 SET B3=& .540;                                !CLEAR BUFFER3 TO FORMAT RECORD;
123 !THIS SECTION FORMATS A DETAIL RECORD INTO BUFFER3;
124 SET B3(1)=B2(47).8; SET B3(11)=B2(1).12;      !FIRST LINE BEGINS;
125 SET B3(25)=B2(55).4; SET B3(31)=B2(59).7;
126 SET B3(39)=B2(258).9; SET B3(49)=B2(74).10;
127 SET B3(60)=B2(267).9; SET B3(70)=B2(92).10;
128 SET B3(82)=B2(37).10; SET B3(93)=B2(102).19;
129 SET B3(113)=B2(178).20;
130 SET B3(146)=B2(13).12; SET B3(228)=B2(121).19; !SECOND LINE BEGINS;
131 SET B3(248)=B2(198).20;
132 SET B3(281)=B2(25).12; SET B3(363)=B2(140).19; !THIRD LINE BEGINS;
133 SET B3(383)=B2(218).20;
134 SET B3(498)=B2(159).19; SET B3(518)=B2(238).20; !FOURTH LINE;
135 !THIS SECTION PRINTS THE DETAIL LINE;
136 PRINT B3(1).132; PRINT B3(136).132;
137 PRINT B3(271).132; PRINT B3(406).132; PRINT S(4,1).1;
138 SET I=I+5;                                    !INCREMENT LINE COUNTER;
139 SET B2=& .281;);                                !CLEAR BUFFER2 FOR NEW RECORD, END MAIN PROGRAM LOOP;
140 !THIS SECTION FORMATS AND PRINTS CLOSING INFORMATION;
141 !PRINT OUT FINAL HEADER BELOW IF NECESSARY;
142 IF I>51 THEN(
143     TFORM; SET B1(127)=J.6; SET B1(127)=" ";
144     PRINT B1(1).132; PRINT S(4,1).1;
145     PRINT B1(136).78; PRINT S(4,1).1; PRINT B1(217).132; PRINT S(4,1).1;
146     PRINT B1(352).132; PRINT S(4,1).1; PRINT S(4,1).1; PRINT S(4,1).1;);
147 SET S(6,11)="REPORT DATE:"; SET S(6,54)="TOTAL BA:"; !USE SCREEN BUFFER;
148 SET S(7,11)="PREPARED BY:"; SET S(7,54)="TOTAL BO:"; !FOR CLOSING ENTRY;
149 !BEGIN EDITING TOTAL BA USING SAC1 AND SCREEN;
150 SET SAC1(1)=" "; SET SAC1(3)=B3(49).10;
151 SET S(6,77)=SAC1(10).3;
152 IF (SAC1(9)=" ") OR (SAC1(9)="-") THEN
153     (IF SAC1(9)="-" THEN
154         SET S(6,76)="-";)
155 ELSE(
156     SET S(6,76)="-";
157     SET S(6,73)=SAC1(7).3;
158     (IF (SAC1(6)=" ") OR (SAC1(6)="-") THEN
159         (IF SAC1(6)="-" THEN
160             SET S(6,72)="-";)
161         ELSE
162             (SET S(6,72)="-";
163             SET S(6,68)=SAC1(3).4;););); !TOTAL BA COMPLETED;
164 !BEGIN EDITING TOTAL BO USING SAC2 AND SCREEN;
165 SET SAC2(1)=" "; SET SAC2(3)=B3(70).10;

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SOURCE CODE FROM MASTER,ECLG84

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166 SET S(7,77)=SAC2(10).3;
167 IF (SAC2(9)=" ") OR (SAC2(9)="-") THEN
168     (IF SAC2(9)="-" THEN
169         SET S(7,76)="-";)
170 ELSE(
171     SET S(7,76)="-";
172     SET S(7,73)=SAC2(7).3;
173     (IF (SAC2(6)=" ") OR (SAC2(6)="-") THEN
174         (IF SAC2(6)="-" THEN
175             SET S(7,72)="-";)
176     ELSE
177         (SET S(7,72)="-";
178             SET S(7,68)=SAC2(3).4;) ; ) ;
179 !GET DATE AND NAME FROM USER;
180 SET S(NLINES-3,2)="ENTER TODAY'S DATE";
181 LOOP(
182     TYPEIN; SET S(6,25)=S(NLINES-2,2).25;
183     SET S(NLINES-3,2)=& .79; SET S(NLINES-2,2)=& .79;
184     SET S(NLINES-3,2)="ENTER YOUR NAME";
185     TYPEIN; SET S(7,25)=S(NLINES-2,2).25;
186     SET S(NLINES-3,2)=& .79; SET S(NLINES-2,2)=& .79;
187     SET S(NLINES-3,2)="ARE NAME AND DATE CORRECT? ENTER YES OR NO";
188     TYPEIN;
189     IF S(NLINES-2,2)="YES" THEN
190         EXIT
191     ELSE(
192         SET S(6,25)=& .25; SET S(7,25)=& .25;
193         SET S(NLINES-3,2)=& .79; SET S(NLINES-2,2)=& .79;
194         SET S(NLINES-3,2)="TRY AGAIN - ENTER TODAY'S DATE";) ; ) ; !END LOOP;
195 SET S(NLINES-2,2)=& .79;
196 SET S(NLINES-3,2)=& .79;
197 PRINT S(4,1).1; PRINT S(4,1).1; !PRINT FINAL ENTRY;
198 PRINT S(4,1).1; PRINT S(6,1).80; PRINT S(7,1).80;
199 CLOSE1;
200 $PAUSE PRESS SPACE BAR TO PRINT MULTI-BATCH REPORT, MODE KEY TO EXIT
201 $EDIT !PROGRAM ECRPT2 -- PRODUCES OFFICE SUMMARY REPORT;
202 !***DISPLAY LIST OF ALL BATCHES ONSCREEN***;
203 OPEN1 "ECLG84,$";
204 SET I=4; SET J=2; !I COUNTS SCREEN LINE#, J COLUMN#;
205 SET S(3,2)="ECORLOG BATCHES AVAILABLE FOR PROCESSING";
206 SET S(I,J)=BATCH1.6; !WRITE 1ST BATCH ID ONSCREEN;
207 LOOP( !LOOP DISPLAYS ONE BATCH ID ONSCREEN;
208     NEXTB1;
209     IF NOT OPEN1 THEN (SET S(19,2)="ALL AVAILABLE BATCHES ARE DISPLAYED"; EXIT);
210     IF J<74
211         THEN SET J=J+8
212     ELSE (SET I=I+1; SET J=2;); !INCREMENT LINE,COL COUNTERS I,J;
213     IF I=8
214         THEN (SET S(19,2)="JOB HAS MORE BATCHES THAN CAN BE DISPLAYED"; !MAX 40;
215             SET S(20,2)="ABORT PROGRAM WITH MODE KEY TO SEE OTHERS IN JOB MODE"; EXIT;);
216     SET S(I,J)=BATCH1.6; !END DISPLAY LOOP;
217 CLOSE1;
218 !***SELECT ALL BATCHES TO BE PROCESSED***;
219 SET S(9,2)="ECORLOG BATCHES TO BE INCLUDED IN REPORT";
220 SET S(9,44)="(ORDERED FROM LEFT TO RIGHT)";

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SOURCE CODE FROM MASTER,ECLG84

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221 SET I=10; SET J=2; SET K=0;      !RESET I,J - K COUNTS # OF BATCHES SELECTED;
222 SET S(21,2)="ENTER FIRST BATCH ID TO INCLUDE IN REPORT";
223 LOOP(      !LOOP ONE VALIDATES ENTIRE LIST AFTER SELECTION;
224   LOOP(      !LOOP TWO SELECTS LIST OF BATCHES;
225     LOOP(      !LOOP THREE SELECTS ONE VALID BATCH;
226       TYPEIN; IF S(22,2)=" " THEN EXIT;
227       SET S(I,J)=S(22,2).6;      !COPY ID ENTERED TO S(I,J);
228       SET S(21,2)="IS BATCH ABOVE CORRECT? ENTER YES OR NO ";
229       SET S(22,2)=& .79; TYPEIN;
230       IF S(22,2)="YES"
231         THEN (SET K=K+1; EXIT)
232       SET S(21,2)=& .79;      !ONLY EXEC'ED IF ID NOT CONFIRMED;
233       SET S(21,2)="ENTER CORRECT BATCH ID";
234       SET S(22,2)=& .79; SET S(I,J)=& .8;);      !END LOOP THREE;
235   IF S(22,2)=" " THEN EXIT;      !LIST COMPLETE IF NOTHING ENTERED;
236   IF J<74
237     THEN SET J=J+8
238   ELSE (SET I=I+1; SET J=2;);      !INCREMENT I,J;
239   IF I=12
240     THEN (SET S(19,2)="MAXIMUM NUMBER OF BATCHES ENTERED "; !MAX 20 BATCHES;
241     SET S(20,2)="PROCESS AS IS, RESTRUCTURE LIST OR ABORT WITH MODE KEY";
242     EXIT;);
243   SET S(21,2)=& .79; SET S(22,2)=& .79;
244   SET S(21,2)="ENTER NEXT BATCH ID, OR FIELD REL WHEN DONE";); !END LOOP TWO;
245   SET S(21,2)=& .79; SET S(22,2)=& .79;
246   SET S(21,2)="IS LIST OF BATCHES CORRECT? ENTER YES OR NO";
247   TYPEIN; IF S(22,2)="YES" THEN EXIT;
248   SET S(21,2)=& .79; SET S(22,2)=& .79;      !CLEAR SCREEN,COUNTERS TO RETRY;
249   SET S(21,2)="TRY AGAIN - ENTER FIRST BATCH TO PROCESS";
250   SET S(10,2)=& .79; SET S(11,2)=& .79;
251   SET I=10; SET J=2; SET K=0;);      !END LOOP ONE;
252   !***SET UP SCREEN TO BEGIN PROCESSING BATCHES***;
253   SET S(3,2)=& .79; SET S(4,2)=& .79;      !CLEAR AVAILABLE BATCH LIST,MESSAGES;
254   SET S(5,2)=& .79; SET S(6,2)=& .79; SET S(7,2)=& .79;
255   SET S(19,2)=& .79; SET S(20,2)=& .79;
256   SET S(21,2)=& .79; SET S(22,2)=& .79;
257   SET S(12,2)="BATCH NOW BEING PROCESSED: ECLG84,";
258   !***FORMAT REPORT HEADER RECORD IN BUFFER4***;
259   SET B4(54)="NATIONAL ECOR LOG"; SET B4(123)="PAGE";
260   SET B4(136)="REPORT FOR ECOR NUMBERS:";
261   SET I=10; SET J=2; SET L=0; SET M=163; !L CONTROLS WHILE LOOPS;
262   WHILE L<K(      !WHILE LOOP GETS ECOR NUMBERS;
263     SET S(12,38)=S(I,J).6;
264     OPEN1 S(12,30); READ1 B2;
265     SET B4(M)=B2(1).15;      !M POINTS TO WRITE POSITION IN B5;
266     CLOSE1;
267     SET L=L+1;
268     SET M=M+18;
269     IF (M=271 OR M=406)
270       THEN SET M=M+9;      !EXTRA SPACE NEEDED IF NEW LINE;
271     IF J<74
272       THEN SET J=J+8
273     ELSE (SET I=I+1; SET J=2;);      !INCREMENT SCREEN LINE,COL POINTERS;
274     SET B2=& .139;);      !END WHILE, ALL ECOR #'S READ;
275     !***FORMAT CONSTANT PORTIONS OF BATCH HEADER RECORD IN BUFFER1***;

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SOURCE CODE FROM MASTER,ECLG84

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276 SET B1(1)=&*.132;                                !FIRST HEADER LINE;
277 SET B1(189)="ECOR #:";                            !2ND HEADER LINE;
278 SET B1(217)="FY APPROPRIATION AMOUNT:";          !3RD LINE BEGINNING;
279 SET B1(270)="APPROPRIATION NUMBER:";
280 SET B1(319)="ANALYST:";
281 SET B1(352)="FY UNOBLIGATED CARRYOVER AMT:";      !4TH LINE BEGINNING;
282 SET B1(405)="TOTAL ECOR AVAILABILITY:";
283 SET B1(454)="PHONE #:";
284 SET B1(489)="DATE"; SET B1(518)="IPMIS";          !5TH LINE BEGINNING;
285 SET B1(538)="ECOR#"; SET B1(559)="ECOR#";
286 SET B1(569)="PROGRAM"; SET B1(586)="WORK";
287 SET B1(595)="RECEIVED CONTRACTOR FO";          !6TH LINE BEGINNING;
288 SET B1(625)="(CID) # BA CUM. BA";
289 SET B1(658)="BO CUM. BO MANAGER";
290 SET B1(688)="DESCRIPTION/TITLE COMMENTS";
291 SET S(7,1)="SUMMARY FOR ECOR NUMBER"; !SET UP BATCH SUMMARY ENTRY LINE;
292 SET S(7,44)="BA:"; SET S(7,64)="BO:"; !O IS PRINT LINE COUNTER;
293 SET I=10; SET J=2; SET L=0; SET M=1; SET O=52; SET P=1; !P PAGE COUNTER;
294 !***PROCESS EACH BATCH IN MAIN PROGRAM LOOP***;
295 WHILE L<K( !MAIN PROGRAM LOOP, EACH ITERATION PROCESSES ONE BATCH;
296 SET S(12,38)=S(I,J).6; OPEN1 S(12,30);
297 READ1 B2; SET S(7,26)=B2(1).15; !READ HEADER RECORD;
298 !***FORMAT VARIABLE PORTIONS OF BATCH HEADER INTO BUFFER1***;
299 SET B1(197)=B2(1).15; SET B1(219)=B2(51).4; SET B1(251)=B2(102).12;
300 SET B1(295)=B2(64).15; SET B1(328)=B2(16).20; SET B1(354)=B2(79).4;
301 SET B1(386)=B2(114).12; SET B1(431)=B2(126).14; SET B1(463)=B2(36).15;
302 SET B2=&.139; !CLEAR READ BUFFER2;
303 READ1 B2; !READ FIRST DETAIL RECORD;
304 !***PROCESS A DETAIL RECORD FOR PRINTING***;
305 WHILE NOT EOF( !INNER WHILE LOOP PROCESSES EACH DETAIL RECORD;
306 IF O>51 THEN( !NEW PAGE WITH HEADER IF NECESSARY;
307 TFORM; SET B4(127)=P.6; SET B4(127)=" "; !GET PAGE NUMBER;
308 PRINT B4(1).132; PRINT S(4,1).1; PRINT B4(136).132;
309 PRINT B4(271).132; PRINT B4(406).132; PRINT S(4,1).1;
310 PRINT B1(1).132; PRINT S(4,1).1;
311 PRINT B1(136).78; PRINT S(4,1).1; PRINT B1(217).132; PRINT S(4,1).1;
312 PRINT B1(352).132; PRINT S(4,1).1; PRINT S(4,1).1; PRINT S(4,1).1;
313 PRINT B1(487).105; PRINT B1(595).123; PRINT S(4,1).1; PRINT S(4,1).1;
314 SET O=21; SET P=P+1; !INCREMENT COUNTERS, END IF;
315 SET B3=&.540; !CLEAR BUFFER3 TO FORMAT RECORD;
316 !***FORMAT A DETAIL RECORD INTO BUFFER3***;
317 SET B3(1)=B2(47).8; SET B3(11)=B2(1).12; !FIRST LINE BEGINS;
318 SET B3(25)=B2(55).4; SET B3(31)=B2(59).7;
319 SET B3(39)=B2(258).9; SET B3(49)=B2(74).10;
320 SET B3(60)=B2(267).9; SET B3(70)=B2(92).10;
321 SET B3(82)=B2(37).10; SET B3(93)=B2(102).19;
322 SET B3(113)=B2(178).20;
323 SET B3(146)=B2(13).12; SET B3(228)=B2(121).19; !SECOND LINE BEGINS;
324 SET B3(248)=B2(198).20;
325 SET B3(281)=B2(25).12; SET B3(363)=B2(140).19; !THIRD LINE BEGINS;
326 SET B3(383)=B2(218).20;
327 SET B3(498)=B2(159).19; SET B3(518)=B2(238).20; !FOURTH LINE;
328 !***PRINT THE DETAIL RECORD***;
329 PRINT B3(1).132; PRINT B3(136).132;
330 PRINT B3(271).132; PRINT B3(406).132; PRINT S(4,1).1;

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SOURCE CODE FROM MASTER,ECLG84

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331      SET O=O+5;                                !INCREMENT LINE COUNTER;
332      SET B2=& .281;                             !CLEAR BUFFER2 TO READ NEW RECORD;
333      READ1 B2;); !INNER WHILE LOOP ENDS BY READING NEXT DETAIL RECORD;
334      !***COMPLETE PROCESSING FOR ONE BATCH***;
335  CLOSE1;
336      !*** EDIT BATCH TOTAL BA USING SAC1 AND SCREEN***;
337      SET SAC1(1)=" "; SET SAC1(3)=B3(49).10;      !PUT BA IN SAC1;
338      ADD B3(49).10 TO SAC3; !WRITE TO SCREEN, INSERT COMMAS WHERE NEEDED;
339      SET S(7,57)=SAC1(10).3; !EDIT PROCEEDS LEFT TO RIGHT;
340      IF (SAC1(9)=" ") OR (SAC1(9)="-") THEN
341        (IF SAC1(9)="-" THEN
342          SET S(7,56)="-";)
343      ELSE(
344        SET S(7,56)=", ";
345        SET S(7,53)=SAC1(7).3;
346        (IF (SAC1(6)=" ") OR (SAC1(6)="-") THEN
347          (IF SAC1(6)="-" THEN
348            SET S(7,52)="-";)
349          ELSE
350            (SET S(7,52)=", ";
351              SET S(7,48)=SAC1(3).4;););); !TOTAL BA COMPLETED;
352      !***EDIT BATCH TOTAL BO USING SAC2 AND SCREEN***;
353      SET SAC2(1)=" "; SET SAC2(3)=B3(70).10;      !PUT BO IN SAC2;
354      ADD B3(70).10 TO SAC4; !EDIT TO SCREEN AS FOR BA;
355      SET S(7,77)=SAC2(10).3;
356      IF (SAC2(9)=" ") OR (SAC2(9)="-") THEN
357        (IF SAC2(9)="-" THEN
358          SET S(7,76)="-";)
359      ELSE(
360        SET S(7,76)=", ";
361        SET S(7,73)=SAC2(7).3;
362        (IF (SAC2(6)=" ") OR (SAC2(6)="-") THEN
363          (IF SAC2(6)="-" THEN
364            SET S(7,72)="-";)
365          ELSE
366            (SET S(7,72)=", ";
367              SET S(7,68)=SAC2(3).4;););); !TOTAL BO COMPLETED;
368      !***PRINT BATCH SUMMARY WITH NEW PAGE, HEADER IF NEEDED;
369      IF O>51 THEN( !PRINT HEADER IF NECESSARY;
370        TFORM; SET B4(127)=P.6; SET B4(127)=" ";
371        PRINT B4(1).132; PRINT S(4,1).1; PRINT B4(136).132
372        PRINT B4(271).132; PRINT B4(406).132; PRINT S(4,1).1;
373        PRINT B1(1).132; PRINT S(4,1).1; PRINT B1(136).78;
374        PRINT S(4,1).1 PRINT B1(217).132; PRINT S(4,1).1;
375        PRINT B1(352).132; PRINT S(4,1).1; PRINT S(4,1).1;
376        PRINT S(4,1).1; SET P=P+1;); !END IF;
377      PRINT B1(1).132; PRINT S(4,1).1; !PRINT BATCH SUMMARY RECORD;
378      PRINT S(7,1).80; PRINT S(4,1).1; PRINT B1(1).132;
379      SET B5(M)=S(7,26).15; SET B5(M+15)=S(7,48).12; !STORE BATCH SUMMARY IN B5;
380      IF L<19
381        THEN SET B5(M+27)=S(7,68).12
382      ELSE SET SAC5(1)=S(7,68).12
383      SET S(7,26)=& .15; SET S(7,48)=& .12; SET S(7,68)=& .12; !CLEAR SCREEN;
384      IF J<74
385      THEN SET J=J+8

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SOURCE CODE FROM MASTER,ECLG84

```

386     ELSE (SET I=I+1; SET J=2;);           !SET I,J TO POINT TO NEXT SCREEN POS.;
387     SET L=L+1; SET M=M+39; SET O=52;       !INCREMENT WHILE, POINTER, LINE COUNTERS;
388     SET B3=& .540; );                     !END OF MAIN WHILE LOOP, BATCH DONE;
389     !***SET UP SCREEN FOR REPORT SUMMARY PROCESSING***;
390     SET S(7,1)=& .25; SET S(7,44)=" "; SET S(7,64)=" ";
391     SET S(12,1)=& .80;
392     SET S(5,45)="REPORT SUMMARY"; SET S(6,26)="ECOR NUMBER";
393     SET S(6,52)="TOTAL BA"; SET S(6,72)="TOTAL BO";
394     !***PRINT PAGE AND REPORT SUMMARY HEADERS***;
395     TFORM; SET B4(127)=P.6; SET B4(127)=" ";
396     PRINT B4(1).132; PRINT S(4,1).1; PRINT B4(136).132;
397     PRINT B4(271).132; PRINT B4(406).132; PRINT S(4,1).1;
398     PRINT B1(1).132; PRINT S(4,1).1; PRINT S(4,1).1;
399     PRINT S(5,1).80; PRINT S(4,1).1; PRINT S(4,1).1;
400     PRINT S(6,1).80; PRINT S(4,1).1;
401     !***GET BATCH SUMMARIES BACK FROM BUFFER5***;
402     SET L=0; SET M=1;                     !M POINTERS TO BUFFER5 POSITIONS;
403     WHILE L<K(
404         SET S(7,26)=B5(M).15; SET S(7,48)=B5(M+15).12;
405         IF L<19
406             THEN SET S(7,68)=B5(M+27).12
407             ELSE SET S(7,68)=SAC5(1).12;    !IF 20TH BATCH, BO COMES FROM SAC5;
408             PRINT S(7,1).80;                !PRINT BATCH SUMMARY ENTRY;
409             SET L=L+1; SET M=M+39; );        !END WHILE;
410     SET S(7,26)="REPORT TOTAL:"; SET S(7,39)=& .42; !SET UP REPORT TOTAL LINE;
411     !***EDIT TOTAL BA AND WRITE TO SCREEN***;
412     !***FIRST EDIT BA WITHIN SAC3 TO REMOVE LEADING ZEROES***;
413     SET I=2; SET J=1;                     !I ITERATES WHILE STMT, J IS A MARKER;
414     SET SAC3(1)=" ";
415     WHILE I<13(
416         IF (SAC3(I)~"0" AND SAC3(I-1)=" ") !WHILE STMT EDITS TOTAL BA IN SAC3;
417             THEN (SET SAC3(I-1)="-"; SET J=I-1;); !J MARKS LAST BLANK POSITION;
418         IF (SAC3(I)="0" AND SAC3(I-1)=" ")
419             THEN SET SAC3(I)=" ";           !REMOVE LEADING ZEROES;
420         SET I=I+1; );                       !END WHILE STATEMENT;
421     IF (SAC3(12)>="0" AND SAC3(12)<="9")
422         THEN SET SAC3(J)=" ";               !REMOVE MINUS SIGN FOR POSITIVE #S;
423     IF SAC3(12)=" "
424         THEN SET SAC3(12)="0"              !INSERT ZERO IF # IS 0;
425     !***THEN EDIT BA FROM SAC3 TO SCREEN TO INSERT COMMAS***;
426     SET S(7,57)=SAC3(10).3;                !INSERT NEGATIVE SIGN BELOW IF NEEDED;
427     IF (SAC3(9)=" " OR SAC3(9)="-")
428         THEN (IF SAC3(9)="-"
429             THEN SET S(7,56)="-";)
430     ELSE( SET S(7,56)="-";
431         SET S(7,53)=SAC3(7).3;
432         (IF (SAC3(6)=" " OR SAC3(6)="-")
433             THEN (IF SAC3(6)="-"
434                 THEN SET S(7,52)="-";)
435             ELSE (SET S(7,52)="-";)
436         SET S(7,48)=SAC3(3).4; ) ) );        !TOTAL BA COMPLETEO;
437     !***EDIT TOTAL BO AND WRITE TO SCREEN***;
438     !***FIRST EDIT BO WITHIN SAC4 TO REMOVE LEADING ZEROES***;
439     SET I=2; SET J=1;                     !RESET I AND J;
440     SET SAC4(1)=" ";

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SOURCE CODE FROM MASTER,ECLG84

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441 WHILE I<13(                                     !WHILE STATEMENT EOLTS TOTAL BO IN SAC4;
442     IF (SAC4(I)~"0" AND SAC4(I-1)=" ")
443     THEN (SET SAC4(I-1)="-"; SET J=I-1;);          !SAME LOGIC AS FOR TOTAL BA;
444     IF (SAC4(I)~"0" AND SAC4(I-1)=" ")
445     THEN SET SAC4(I)="-";
446     SET I=I+1; );                                !END WHILE STATEMENT;
447 IF (SAC4(12)~"0" AND SAC4(12)<="9")
448 THEN SET SAC4(J)="-";
449 IF SAC4(12)~" " THEN SET SAC4(12)~"0";
450     !***THEN EDIT BO FROM SAC4 TO SCREEN TO INSERT COMMAS***;
451 SET S(7,77)=SAC4(10).3;
452 IF (SAC4(9)~" " OR SAC4(9)~"-")
453 THEN (IF SAC4(9)~"-")
454     THEN SET S(7,76)~"-";)
455 ELSE (SET S(7,76)~",";
456     SET S(7,73)=SAC4(7).3;
457     (IF (SAC4(6)~" " OR SAC4(6)~"-")
458     THEN (IF SAC4(6)~"-")
459     THEN SET S(7,72)~",";))
460 ELSE (SET S(7,72)~",";
461     SET S(7,68)=SAC4(3).4;););) ;                !TOTAL BO COMPLETED;
462 PRINT S(4,1).1; PRINT S(7,1).80;                !PRINT REPORT TOTALS;
463     !***GET NAME AND DATE FROM USER***;
464 SET S(13,26)~"REPORT DATE:";
465 SET S(14,26)~"PREPARED BY:";
466 SET S(21,2)~"ENTER TODAY'S DATE";
467 LOOP(                                             !LOOP REQUESTS DATE/NAME UNTIL VALID;
468     TYPEIN; SET S(13,48)=S(22,2).25;              !COPY DATE TO SCREEN LINE 14;
469     SET S(21,2)~& .79; SET S(22,2)~& .79;
470     SET S(21,2)~"ENTER YOUR NAME";                !COPY NAME TO SCREEN LINE 14;
471     TYPEIN; SET S(14,48)=S(22,2).25;
472     SET S(21,2)~& .79; SET S(22,2)~& .79;
473     SET S(21,2)~"ARE NAME AND DATE CORRECT? ENTER YES OR NO";
474     TYPEIN;                                         !EXIT LOOP WHEN NAME/DATE VALIDATED;
475     IF S(22,2)~"YES" THEN
476     EXIT
477     ELSE(                                           !CLEAR SCREEN FOR RETRY;
478     SET S(13,48)~& .25; SET S(14,48)~& .25;
479     SET S(21,2)~& .79; SET S(22,2)~& .79;
480     SET S(21,2)~"TRY AGAIN - ENTER TODAY'S DATE";);) ; !END LOOP;
481 SET S(22,2)~& .79;
482 SET S(21,2)~"HIT MODE KEY TO EXIT WHEN '$END ENCOUNTERED' APPEARS BELOW";
483     !***PRINT FINAL ENTRY***;
484 PRINT S(4,1).1; PRINT S(4,1).1; PRINT S(4,1).1; PRINT S(13,1).80;
485 PRINT S(14,1).80; PRINT S(4,1).1; PRINT S(4,1).1; PRINT B1(1).132;
486 $END

```

SOURCE CODE FROM MASTER,ECPG84

```
1      $COMMENT COMMANDS TO ARCHIVE  ECLOG84 BATCHES
2      $TOOOS
3      /O=BCH184@O,J=ECLOG8,K=K4,B=BBATCH,C=C1,P
4
5      /O=BCH284@O,J=ECLOG8,K=K4,B=BBATCH,C=C2,P
6      $PAUSE  COMMANDS TO DELETE  ECLOG84 BATCHES
7      $PURGE ECLOG84,BATCH1
8      $PURGE ECLOG84,BATCH2
9      $PAUSE  COMMANDS TO RETRIEVE ECLOG84 BATCHES
10     $FRODOS
11     /I=BCH184@O,J=ECLOG8,K=K4,B=BBATCH,C=C1,P
12
13     /I=BCH284@O,J=ECLOG8,K=K4,B=BBATCH,C=C2,P
14     $ENO
```


SOURCE CODE FROM MASTER,ECJB84

```

1      $COMMENT CODE TO CREATE ECLOG84 JOB, IN MASTER,ECJB84
2      $PURGE ECLOG84,0-ZZZZZZ
3      $DELETE JOB ECLOG84
4      $DEFJOB ECLOG84 $MAXSIZ 281 $FORMAT C11,C12 $VALUES 011 $ACCUMS 2
5      $PAUSE FORMATTING FOR PROGRAM LEVEL 1
6      $DELETE FORMAT C11
7      $FORMAT C11 $SIZE 139
8      ASD INTEN L E22,80
9      GETBUF(SIZE=49)
10     P1,24"SUMMARY FOR ECOR NUMBER"
11     P3,1"ECOR NUMBER:"
12     P5,1"ANALYST:"
13     P5,39"PHONE NUMBER:"
14     P7,1"FY"
15     P7,9"APPROPRIATION AMOUNT:"
16     P7,51"*"
17     P9,1"APPROPRIATION NUMBER:"
18     P11,1"FY"
19     P11,9"UNOBLIGATED CARRYOVER AMOUNT:"
20     P11,51"*"
21     P13,1"TOTAL ECOR AVAILABILITY:"
22     P13,51"*"
23     P16,1"*NUMERIC FIELDS: ENTER AMOUNTS WITHOUT USING COMMAS"
24     P17,18"ENTER A ZERO IF AN AMOUNT IS NOT NEEDED"
25     @3,14 G(H)15
26     @5,10 G(H)20
27     @5,53 G(H)15
28     @7,4 1I(H)4F
29     @7,39 2L(H)9
30     @9,39 G(H)15
31     @11,4 1I(H)4GF1
32     @11,39 3L(H)9
33     @13,39 4L(H)10
34     SET B(2,9)=F2
35     IF B(10,1)<"0"|>"9" THEN SET B(1,1)="-"
36                     ELSE SET B(1,1)="0"
37     SET B(12,9)=F3
38     IF B(20,1)<"0"|>"9" THEN SET B(11,1)="-"
39                     ELSE SET B(11,1)="0"
40     SET B(22,10)=F4
41     IF B(31,1)<"0"|>"9" THEN SET B(21,1)="-"
42                     ELSE SET B(21,1)="0"
43     @22,1 5N(B)12S EDIT F5=B(1,10) USING ----,---,---
44     B1      6N(B)12S EDIT F6=B(11,10) USING ----,---,---
45     B1      7N(B)14S EDIT F7=B(21,11) USING --,---,---,---
46     F2
47     $PAUSE FORMATTING FOR PROGRAM LEVEL 2
48     $DELETE FORMAT C12
49     $FORMAT C12 $SIZE 281
50     ASD INTEN L E22,80
51     P1,20"INDIVIDUAL CONTRACT INFORMATION"
52     P3,8"CONTRACTOR:"
53     P(H)3,25"#" P(-)3,39"#"
54     P(H)4,25"#" P(-)4,39"#"
55     P4,46"PROGRAM MANAGER:"

```

SOURCE CODE FROM MASTER,ECJB84

```

56 P(H)5,25"#" P(-)5,39"#"
57 P7,8"DATE RECEIVED:"
58 P7,35"(XX/XX/XX)"
59 P8,8"FIELD OFFICE:"
60 P8,42"IPMIS (CID) NO.:"
61 P10,1"BA:"
62 P10,25"CUMULATIVE BA:"
63 P11,1"BO:"
64 P11,25"CUMULATIVE BO:"
65 P13,1"WORK TITLE/DESCRIPTION:"
66 P(H)13,25"#" P(-)13,46"#"
67 P(H)14,25"#" P(-)14,46"#"
68 P(H)15,25"#" P(-)15,46"#"
69 P(H)16,25"#" P(-)16,46"#"
70 P18,8"COMMENTS:"
71 P(H)18,25"#" P(-)18,47"#"
72 P(H)19,25"#" P(-)19,47"#"
73 P(H)20,25"#" P(-)20,47"#"
74 P(H)21,25"#" P(-)21,47"#"
75 P21,53"LAB"
76 P21,68"STATE"
77 P22,53"CODE:"
78 P22,68"CODE:"
79 @3,26 G(H)12E
80 @4,26 G(H)12
81 @5,26 G(H)12
82 @5,49 G(H)10E
83 @7,25 INTEN H I2>00<13 T(-)"/" I(-)2>00<32 T(-)"/" I(-)2 INTEN L
84 @8,25 G(H)4E
85 @8,60 G(H)7
86 @10,8 V 8L(H)8E
87 @10,42 N(H)10S
88 @11,8 9L(H)8E
89 @11,42 N(H)10S
90 @13,26 G(H)19E
91 @14,26 G(H)19
92 @15,26 G(H)19
93 @16,26 G(H)19
94 @18,26 G(H)20E
95 @19,26 G(H)20
96 @20,26 G(H)20
97 @21,26 G(H)20
98 SET B(33,8)=F8
99 IF B(40,1)<"0"|>"9" THEN SET B(32,1)="-"
100 ELSE SET B(32,1)="0"
101 SET B(42,8)=F9
102 IF B(49,1)<"0"|>"9" THEN SET B(41,1)="-"
103 ELSE SET B(41,1)="0"
104 @22,1 10N(B)9S EDIT F10=B(32,9) USING -----9
105 B1 11N(B)9S EDIT F11=B(41,9) USING -----9
106 @22,59 G(H)4
107 @22,74 G(H)2 IF 7V1 THEN "USE POSTAL ABBREV'S - '99' FOR FOREIGN"
108 F2
109 $PAUSE CODING FOR STATE VALUE SET FOLLOWS
110 $DELETE VALUES 011

```

SOURCE CODE FROM MASTER,ECJB84

111 \$VALUES 011 \$SIZE 2

112

113 CA

114 IL

115 TN

116 WA

117 AL

118 AK

119 AZ

120 AR

121 CO

122 CT

123 DE

124 FL

125 GA

126 HI

127 ID

128 IN

129 IA

130 KS

131 KY

132 LA

133 ME

134 MD

135 MA

136 MI

137 MN

138 MS

139 MO

140 MT

141 NE

142 NV

143 NH

144 NJ

145 NM

146 NY

147 NC

148 ND

149 OH

150 OK

151 OR

152 PA

153 RI

154 SC

155 SD

156 TX

157 UT

158 VT

159 VA

160 WV

161 WI

162 WY

163 DC

164 99

165 \$END

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