

CYBERCREDIT COLLECTION SYSTEM (CCS) VERSION 3 REFERENCE MANUAL

CDC® COMPUTER SYSTEM: CYBER 18 MODEL 25

REVISION RECORD					
REVISION	DESCRIPTION				
Α	Manual released.				
(5/80)					
		William 1999			
					

REVISION LETTERS I, O, Q AND X ARE NOT USED

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60475230

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PREFACE.

The Control Data Corporation[®] CYBER Credit System (CCS) Version 3.0 is an on-line teleprocessing system that is designed to interface with current collection-related data, and eliminate the manually intensive operation inherent in a collection-card process.

Update tapes are generated from user's accounts receivable information on a daily basis. The tapes contain account information for new delinquent accounts, payments to existing accounts, charges, adjustments, address changes, and other pertinent information. The information is used to update the files accessed by collectors during normal collection.

System capabilities include the ability to print collection letters, update address changes and telephone numbers on-line, schedule accounts for deferred review, and flag accounts for management review. All collection activities are recorded and can be reviewed by management on-demand through several management-oriented reports.

The CCS software is an integrated set of programs, procedures, and activities under the control of an operating executive. The result is a system dedicated to improving a user's collection and audit of delinquent accounts receivable. The flexibility of the system allows the user to tailor its use to meet specific needs, including screen formats, report formats, collection letter formats, collector work file scheduling, account-review priorities, and other pertinent parameters.

This manual is written for both the reader desiring a better understanding of the system operation, and the reader who has an interest in tailoring the system to meet specific needs. Readers should be familiar with RPG II, FORTRAN, and Macro Assembler, the languages used with CCS.

The manuals listed below, available from Literature Distribution, contain additional information useful to the CCS user.

Publication

Publication Number

CYBER Credit System (CCS) Version 3.0 Operator's/Collector's Guide

60475240

CYBER Credit System (CCS) Version 3.0 Installation Test Kit

60475250

CCS 3 is intended for use only as described in this document. Control Data Corporation cannot be responsible for the proper functioning of undescribed features or parameters.

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The CDC[®]CYBER 18 CYBER Credit System (CCS) Version 3.0 is a terminal-based system designed to assist in the daily collection functions of reviewing, updating, and acting upon delinquent accounts.

Section 1 of this manual provides a general introduction to CCS. Succeeding sections describe the major functions of the system and the operating executive that controls the operation of the functional entities. Additional sections deal with system installation, parameters, and recovery.

CCS generates delinquent account information based on data received from the user's accounts receivable system by offering the user the following: flexibility in laying out display screens viewed by a collector, development of letter files, setting up delinquent accounts in priority order, and assignment of those accounts to specific collectors. A collector can call for an account by account number, borrower name, cosigner name, or by requesting the next scheduled account assigned to him. CCS automatically arranges accounts in priority order for collector review.

Figure 1-1 is a functional block diagram of CCS.

FEATURES

The principal features provided by CCS are as follows:

- The CCS system supports a maximum of 78,000 accounts. The mass memory configuration for users is determined primarily by account volume. Refer to the Installation Test Kit manual for additional information on system configuration.
- The CCS system has some reconfiguration capabilities. On the first autoload after system (EDTLP) installation, mass memory unit 0 (system logical unit 8) is configured to use the drive present: 1867-20 or 1867-40. At all autoloads, the system configures itself for the tape drive subsystem present and memory present.

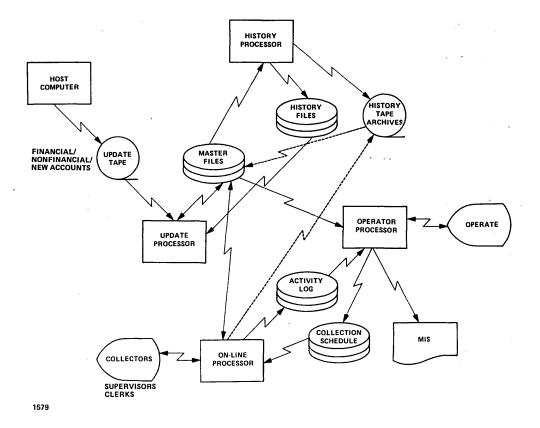


Figure 1-1. Functional Block Diagram

- Additional user requested utilities are available to configure nonsystem library mass memory units (for drive type (1867-20 or 1867-40) and format (density of 96 words/sector or 5619 words/sector)), enable lower case printing on line printer, and establish system ID message appearing at autoload and user terminal log on. These capabilities are discussed in section 7 (Operating Executive Utilities).
- Collectors may access accounts by means of an automatic file. The files place borrower accounts in priority sequence according to user-designated criteria.
- The automatic file assures that accounts are serviced at the proper time and eliminates the possibility of skipping higher priority accounts.
- Collectors do not need to arrange status sheets and cards in priority order. CCS does this by replacing status sheets and cards with disk files.
- Collectors may exit the automatic file at any time and access an account by borrower name, account number, or cosigner name.
- The above feature offers improved customer service in response to unscheduled contacts from the borrower or unexpected changes in account priority. Once the unscheduled account has been serviced, the system returns to the correct position in the automatic file and brings up the next scheduled account.
- A collector is presented with all the information necessary to service an account through a series of display screens. General account information, financial transaction history, and collection activity information are readily accessible.
- CCS is extremely easy to use. Most record information or display commands are two characters in length. However, the collector may also enter free-form comments relative to account activity. The flow of information is enhanced by system-generated prompts to the collector.
- Collectors are not permitted to alter financial data concerning an account. They are permitted to enter any changes to nonfinancial data (such as address change, employment status, and so forth) and may also request letters (the system will validate the existence of these letters) to be sent to borrowers and/or cosigners.
- The collector may use the automatic next contact date generated by the system, or enter his own next contact date after an account has been serviced.
- The automatic next contact date feature ensures accuracy in account follow-up without the normally required paper work of a manual system. Collector-designated next contact date provides a necessary degree of flexibility.
- CCS can coordinate the printing of all management reports and letters concurrently with collection activities. A daily transaction file is

- maintained by the system from which report generating procedures can be called upon to print collector-related reports. An optional secondary transaction file is available for additional backup and recovery procedures. If this feature is selected, the transactions are also logged in this file.
- Up to 56 terminals, and up to 128 collectors, can be supported by CCS. The user may have all collectors working from a single automatic file of accounts, or he may select individual accounts for each collector.
- Account file access is at four levels: clerk, collector, supervisor, and training. The supervisory level is highest and provides access to all accounts regardless of status. Status is established by one of four states of delinquency: satisfied, released, written-off, or active. Clerks and collectors can only update accounts in the active state. The training level does not change fields or cause files to be updated.
- Access to all files is restricted by an ID number to eliminate unauthorized file access.
- CCS may be tailored to meet the individual requirements of a user. The user can customize key data base fields and define formats for the screens. The format and body of delinquency notices (letters) are also user-defined.
- Collector screen entries consist of a fixed part containing activity code fields and a variable comment field.
- Information about current (active) accounts and historical backup for inactive accounts is stored in the account activity and account history files, respectively.
- Accounts are moved to an account history file after they have been inactive for a user-defined period of time.
- The maintenance of files is implemented by file maintenance procedures executed by the system operator at the system console. With some exceptions, these procedures can be executed concurrently with collection activities.
- Reports generated by the system includes delinquent record contents, trend analysis, write-off, daily assignment list, summary account list, time usage collector statistics, collector changes to accounts, queue loading, letters, and file audits.
- The update portion of CCS allows for a flexible interchange of information with a host computer (that is, the user's accounts receivable system) using magnetic tape.
- CCS includes disk backup (utility SAVE function) of the entire system with safeguards to reduce possibility of volume destruction through operator error.
- The CCS system tape backup of the entire system through EDTLP (Extended Disk to Tape Load Procedure).

ABSTRACT

The following paragraphs contain an introduction to some of the major topics of this manual. The topics listed below are covered by a separate section.

- On-Line Activities
- Daily Cycle Procedures
- File Maintenance Procedures
- On-Demand Report Procedures
- Report Generator Procedures
- History Procedures

The following definitions of key terms used repeatedly in these sections, such as activity, procedures and menu selections, are provided to assist the reader.

All functions performed by and through CCS are either activities or procedures. Activities are those functions

performed during the on-line collection sessions, predominantly by collectors. Once a collector has logged onto the system, the logic and flow of functions performed by CCS are put under collector control by entering specific two-character function codes at the console display keyboard.

Procedures are supportive of activities; activities are invoked/performed by collectors, and procedures are invoked/performed by the system operator. The system operator, through the execution of procedures, supports the collector's daily collection activities. This is done by updating files, building a collection sequence for the following day, and printing letters to borrowers as indicated by collector input to the system during the current working day.

Activities are invoked by entering a two-character function code to the system through the collector's keyboard (table 1-1). Menus are displayed by entering a two-character request code via the system console. Procedures are executed by entering the one-character selection code displayed on the menu. Entry of a two-character function code by the collector initiates one of many collection activities. For example, the entry of

TABLE 1-1. ACCOUNT REVIEW ACTIVITIES

Function			Valid Activity	
Code	Activity Invoked	Clerk	Collector	Supervisor
NA	NA Get next account for review from assigned queue.		Yes	Yes
DS	Display selection screen.	Yes	Yes	Yes
DC	Display borrower change screen.	Yes	Yes	Yes
cs	Display cosigner screen.	Yes	Yes	Yes
NQ	Move to next queue assigned to this collector, if another queue exists.	Yes	Yes	Yes
DF ·	Display financial data screen.	No	Yes	Yes
DA	Display collector activity screen.	No	Yes	Yes
EA	EA Enter collector activity.		Yes	Yes
P1	Enter permanent comment 1.	No	Yes	Yes
P2	Enter permanent comment 2.	No	Yes	Yes
Р3	Enter permanent comment 3.		Yes	Yes
RL	RL Mark account for review n accounts later; then perform NA function.		Yes	Yes
OA	Display account linked via other account field in master file.	No	Yes	Yes
AA	Additional activity screens (from activity screen)	No .	Yes	Yes
SS	Display supervisor screen.	No	No	Yes
DL	Request detail list report on given account number (from supervisor screen).	No	No	Yes
UH	Request update from tape archives.	No	No	Yes

function code NA brings up the next account from the automatic file for collector review and action. The collector indicates the action(s) he has taken by entering a two-character action code followed by a two-character result code. The collector indicates that the borrower was called at home and the borrower said that the payment was in the mail. The collector enters this as TH, IM. TH (telephone home) is an action code, and IM (in the mail) is a result code. The transaction is logged in a transaction file. The system can be designed to automatically present that account for review, a specified number of days later, to verify that payment was received.

Menu request codes, when input by the system operator, cause the system to display menus of procedures that are initiated by the operator. There are five request codes, (table 1-2), one for each class of procedures that the operator can take: DC (daily cycle), RP (reports), RG (report generator), HS (history); and MT (file maintenance). After inputting a request code, the associated menu of procedures for that code is displayed. The operator indicates the choice of procedure by entering a one-character selection code. For instance, by entering request code RP to the system prompt of REQUEST =, the system displays the on-demand report menu. By entering

TABLE 1-2. CCS PROCEDURES

Menu	Request	Selection	Procedure	Function
Daily Cycle	DC	А	PRFDC001	Print daily collector activity reports.
		В	PRFDC002	Print requested letters.
		C	PRFDC003	Add collector activities to activity file.
		D	PRFDC004	Process update tape(s) from A/R system.
		E	PRFDC005	Process 400 series (nonfinancial) update tape(s).
		F	PRFDC006	Process 500 series (financial) update tape(s).
		G	PRFRP001	Print delinquent record content report (inactive accounts).
		Н	PRFRP002	Print delinquent record content report (supervisor requests).
		I	PRFDC007	Update accounts from history.
,		J	PRFDC008	Reserved for system comments
		K	PRFDC009	Reserved for system comments
		L	PRFDC010	Sort transaction file for collector report.
•		М	PRFDC011	Create daily assignment files.
On-demand Report	RP	Α	PRFRP001	Print delinquent record content report (inactive accounts).
		В	PRFRP002	Print delinquent record content report (supervisor requests).
*	• .	С	PRFRP003	Calculate trend analysis age.
		D	PRFRP004	Print trend analysis report (by queue).
		E	PRFRP005	Print trend analysis report (by product type).
		F	PRFRP006	Print eligible/actual write-off report.
		G	PRFRP007	Print daily assignment list.
		н	PRFRP008	Print summary account list.
		, I	PRFRP009	Print weekly collector statistics report.
		J	PRFRP010	Print monthly collector statistics report.
	ı			

TABLE 1-2. CCS PROCEDURES (Contd)

Menu	Request	Selection	Procedure	Function .
		К	PRFCNTRL	Create report generator program.
		L	PRFPG000	Execute report generator program.
		М	PRFRP011	Print queue loading report.
History	HS	A	PRFHS001	Move inactive accounts to history files.
•		В	PRFHS002	Update active accounts from tape archives.
		С	PRFHS003	Purge oldest accounts from summary history file.
		D	PRFHS004	Purge oldest accounts from tape archives file.
		E	PRFMT010	Purge master files (DELQMST, COSIGNER, ACTFIL).
Report Generator	RG	A-S	PRFRG001- PRFRG019	Execute saved report generator programs.
File Maintenance	МТ	A	PRFMT001	Print letter file.
		В	PRFMT002	Perform letter file maintenance (from console input).
		С	PRFMT003	Perform utility file maintenance (add or update utility records.)
		D	PRFMT004	Perform decision table maintenance.
		E	PRFMT005	Print activity verification table in matrix format.
		F	PRFMT006	Generate and print activity verification table.
		G	PRFMT007	Audit file space and print report.
		Н	PRFHS003	Purge oldest accounts from summary history file.
		I	PRFHS004	Purge oldest accounts from tape archives file
		J	PRFMT008	Print screen definition file.
		К	PRFMT009	Print screen file.
		· L	PRFMTO10	Purge master files (DELQMST, COSIGNER, ACTFIL).
		М	PRFMT011	Print activity file maintenance report.
		. N	PRFMT012	Perform active user file maintenance.
		0	PRFMT013	Print generator data element table.
		Р	PRFMT014	Report generator data element table routines (console input).
		Q	PRFMTO15	Report generator program directory file maintenance.
		R	PRFMT016	Screen file print utility

an I to the menu selection = prompt, the operator has caused the system to execute the procedure stream which will print the weekly statistics report.

ON-LINE ACTIVITIES

On-line activities are driven by a single program, COLECT. It controls access to all accounts during collection activities whether the access be by collector, clerk, or supervisor. COLECT maintains a dialogue with each of the collectors, clerks, and supervisors logged onto the system. Function codes entered by a collector cause COLECT to initiate the indicated activity for the collector. All transactions made by the collectors are stored, for the current working day, in the transaction file. These transactions consist of activities on accounts, nonfinancial changes, and permanent comments made by the collector on accounts.

DAILY CYCLE PROCEDURES

A menu of daily cycle procedures is displayed when the system operator enters request code DC at the system console. The associated procedures perform the following:

- File updates
- Report generation
- Generation of daily assignment files

Most procedures can be performed concurrently with collection activities; however, some procedures require files to be locked (accessible only to the system operator and the system) in order to perform sorts and file updates. Procedures of this type include sorting of the transaction file and creating the daily assignment file for the next collection session. They are performed at the end of the collection session.

FILE MAINTENANCE PROCEDURES

The file maintenance procedure menu is displayed when the operator enters request code MT at the system console. The associated procedures performed are as follows:

- File purges
- File updates
- File audits
- Report generation

Most file maintenance procedures are performed at the end of the collection session to avoid conflicts with collector access to files.

REPORT GENERATOR PROCEDURES

The report generator procedure menu is displayed when the operator enters code RG at the system console. The associated procedure performed is as follows:

 Print the programs that were created and saved by the report generation routines.

ON-DEMAND REPORT PROCEDURES

The on-demand report procedure menu is displayed when the operator enters request code RP. The associated procedures permit the following reports to be printed:

- Delinquent record contents
- Trend analysis
- Write-off
- Daily assignment list
- Summary account list
- Collector statistics
- Report generation
- Queue loading

On-demand report procedures can be performed at any time of day. A supervisor activity permits the supervisor to request the printing of the delinquent record content report.

HISTORY PROCEDURES

The history procedure menu is displayed when the operator enters request code HS. The associated procedures performed are as follows:

- Movement of inactive account to history file
- Update of active accounts from tape archives
- File purges
- File compression

The two purge file procedures are identical to those that can be invoked with file maintenance selections.

ON-LINE ACTIVITIES

On-line activities are driven by a single program, COLECT. It controls access to all accounts during collection activities. COLECT maintains a dialogue with each of the collectors, clerks, and supervisors logged onto the system. Function codes entered by a collector cause COLECT to initiate the indicated activity. The program also maintains a transaction file. All of the transactions made by all collectors are stored for the current session in this file. These transactions consist of activities on accounts, nonfinancial changes, and permanent comments made by the collector on accounts.

Some of the features and capabilities available during on-line activities are as follows:

- All activities are logged in a transaction file for use in processing reports.
- A review (security) flag is provided for accounts to be reviewed by supervisors only.
- Collection activities are not permitted on any account where status codes R (released), S (satisfied), or W (write-off) are applied to the account. Change and supervisor activities are permitted.
- Collector input can be entered on a single line with field delimiters, or one field at a time with individual field prompting for collector activities.
- An automatic review of accounts is provided by a queue structure, which permits all collectors to work from one queue, or each collector can have a unique queue of accounts.
- Collector responses consist of a fixed part containing all codes and a variable part which is a comment field. The response is verified using an activity verification table. A valid response is stored in the account master record and the transaction file.
- The four levels of usage provided within the on-line activities are as follows:

- Clerical (access to change screen, cosigner screen, and related change functions only)
- Collector (access to all screens and functions except supervisor functions and screen)
- Supervisor (access to all screens and functions)
- Training (if a collector logs on with a T preceding a valid ID, all clerical, collector, or supervisor functions are permitted, but no files are changed.)
- Accounts are flagged in general groups (credit card versus installment loan) by the first digit of the account number. Certain screens and fields within the account master file can be distinct for each group.

ENTRY TO ON-LINE ACTIVITIES

To enter the on-line activities, it is necessary to call program COLECT into execution. This is done by entering:

+ (CR)

at the terminal. In response to the system prompt for user ID, the collector presses:

(CR)

This automatically initiates the NEWS program (refer to figure 2-1). The NEWS program presents three options to the user:

- 1) NEWS only
- Display NEWS then GO INTO COLECT
- Skip NEWS GO INTO COLECT

If option 1 is selected, the news file is displayed and the collector is logged off.

CHOOSE ONE OF THE FOLLOWING OPTIONS:

- 1) NEWS ONLY
- DISPLAY NEWS THEN GO INTO COLECT
- 3) SKIP NEWS GO INTO COLECT

ANSWER 1, 2, 3, (CR)

Figure 2-1. NEWS Screen

If option 2 is selected, the news file is displayed and COLECT executed.

If option 3 is selected, the news is bypassed and COLECT is executed.

Refer to section 7 (Operating Executive Utilities) for additional information regarding the operation of NEWS.

COLECT prompts the terminal operator for collector ID. Refer to figure 2-2. The operator responds by entering a valid collector, clerk, or supervisor ID. The ID is checked for validity by the system. If the ID is invalid, the system immediately logs off the terminal. A valid ID causes COLECT to display the selection screen from which a collection session begins.

SCREEN DESCRIPTIONS

The following screens are provided by CCS to implement a collection session:

- Selection screen
- News screen
- Borrower name and address screen
- Cosigner name and address screen
- Borrower master screen
- Financial data screen
- Collector activity screen
- Borrower change screen

- Cosigner screen
- Supervisor screen

The user has the option of having screens tailored (format and field) to his requirements. (Refer to the CCS 3 Operator's/Collector's Guide.)

SCREEN FUNCTIONS

The selection screen (figure 2-3) is the screen from which a collection session begins. The collector has the option of bringing up the selection screen on command. This is necessary when customer service is required, in response to an unscheduled contact from a client, or unexpected changes to an account priority occur. The selection screen is also used by the collector to exit from the system at the end of a collection session.

The activities that can be chosen from the selection screen are as follows:

- A (automatic review of accounts)
- B, NAME (retrieve by requested borrower name)
- N, # (retrieve by requested account number)
- C, NAME (retrieve by requested cosigner name)
- E (exit collection session, sign off)

The collector enters A and a carriage return to service the first account on the automatic file queue. He enters the borrower's name, cosigner's name, or account number to service a specific account. The system displays the borrower master screen (figure 2-4) if the collector enters A or N, '#'. The borrower name and address screen

CREDIT COLECTION SYSTEM COLECT VERSION 3.0 0800

PLEASE ENTER COLLECTOR ID

Figure 2-2. Log-on Prompt Screen

A = AUTOMATIC
B,(NAME) = NAME
N,(#) = ACCOUNT NUMBER
C,(NAME) = COSIGNER NAME
E = EXIT

PLEASE ENTER SELECTION

Figure 2-3. Selection Screen

or cosigner name and address screen are displayed by entering B, 'NAME' or C, 'NAME'.

BORROWER NAME AND ADDRESS SCREEN

The collector enters B, 'NAME' in response to a selection screen prompt. (He must input one or more characters of a name and the system searches for any name that matches those characters.) One or more matching names are displayed on the borrower name and address screen (figure 2-5).

If more than one name matches the name entered by the collector, up to nine names, addresses, and associated account numbers are displayed. If the collector cannot match one of the displayed names with the one he is searching for, the collector presses a carriage return to continue the search and another set of names, addresses, and account numbers is displayed. If a match is found, the operator enters n for the selected account, which leads to the display of the borrower master screen.

The name search is continued until a match is found, or until the system exhausts its supply of matching names. The system returns the collector to the selection screen after he enters D to discontinue the search.

COSIGNER NAME AND ADDRESS SCREEN

The collector enters C, 'NAME' in response to a selection screen prompt. The system's response is similar to that of the B, 'NAME' collector input, except only one cosigner name is displayed at a time to minimize search/locate time (figure 2-6).

BORROWER MASTER SCREEN

The borrower master screen (figure 2-4) is entered from the selection screen when the collector enters A or N, '#'. in response to a selection screen prompt. This screen displays basic account information and the most recent collection activity. The reader is constantly reminded that

BORROWER'S MASTER SCREEN

TIME 0810 SUPV ACCT GRAHAM, JAMES P 0001 ACCT # 0100024491204567 QUEUE # POINT SCORE AMT DELQ 99 ZEST PLACE 000 303.53 ACCT TYPE DELQ DATE 6/12/77 03 PREV QUE BROOKSIDE, MD 50701 STATUS CD 68 0005 HOME # 787/545-0202 PP FLAG PRIORITY SAL CD 3 **NEXT CONTACT** 07/17/77 CONTROL DATA CORPORATION SOC SEC # 888 ZZZ ST ADL ACCT # CAROL TOWN, MD 50704 SAV ACCT # EXT CK ACCT # WORK # 714/452-6000 ENTRY DATE 06/17/77 LAST UPDATE NUMBER COSIGNER PERM COMMENT 1: DO NOT CALL BEFORE NOON PERM COMMENT 2: LAST ACTIVITY PERM COMMENT 3: DATE AC RS LT COLL COMMENT 07/02/77 TH PP 01 MARC

Figure 2-4. Borrower Master Screen

1 BORROWERS NAME ADDRESS ACCOUNT #
2 BORROWERS NAME ADDRESS ACCOUNT #

= SELECT NAME
D = DISCONTINUE SEARCH

CONTINUE SEARCH

PLEASE ENTER SELECTION

PLEASE ENTER NEXT FUNCTION OR ACTION, RESULT, LETTER REQUEST, COMMENT

Figure 2-5. Borrower Name and Address Screen

figure 2-4 may not reflect the screen format used by the reader since screens can be tailored to the user's requirements. It is given as an example to familiarize the reader with the kind of information to be found on the borrower master screen and others.

FINANCIAL DATA SCREEN

The financial data screen (figure 2-7) is displayed when the collector enters DF in response to a system request prompt. This screen shows the current financial status of an account. It is a reference screen only, and no updating of financial data by the collector is permitted. After reviewing the financial data, the collector may service the next account, call up a specific account, or continue to service the current account by selecting another screen or activity.

COLLECTOR ACTIVITY SCREEN

The collector activity screen (figure 2-8) is displayed when the collector enters DA in response to a system request prompt. The screen displays a history of all collection activity that has occurred on an account since it was entered into the system. The most recent activities are displayed on the initial screen. If more information is needed, the collector enters AA to display additional activities. Function code AA is only valid when entered from the collector activity screen. When all activities for the account have been displayed, the END OF ACTIVITY message is displayed.

The collector may access a new activity by entering any of the function codes valid for entry from the borrower master screen. (The screen functions and activity sequences are described later in this section.)

NCA,SAM 99 Z ST

PLEASE ENTER SELECTION

C = CORRECT D = DISCONTINUE

= CONTINUE

Figure 2-6. Cosigner's Name and Address Screen

FINANCIAL HISTORY ACCT # 0100024491204567 ACCT NAME GRAHAM, JAMES P ACCT TYPE 03 LOAN OFF SPEC DESC FIELD AMT DELQ 303.53 OPEN DATE OPEN AMOUNT DELQ DATE 06/12/77 0.00 LAST UPDATE 06/22/77 CUR BALANCE 401.70 CUR PAYOFF 401.70 ENTRY DATE 06/12/77 PROMISED TO PAY FIELDS TIMES DELINQUENT FLAG 30 DAYS 60 DAYS MADE 07/07/77 BY DATE 07/15/77 90 DAYS 303.53 **AMOUNT** DATE OF TAPE, IF IN TAPE HISTORY PLEASE ENTER NEXT FUNCTION OR ACTION OR ACTION, RESULT, LETTER

Figure 2-7. Financial History Screen

BORROWER CHANGE SCREEN

The borrower change screen (figure 2-9) is displayed when the collector enters DC in response to a system request prompt. The contents of this screen represent the nonfinancial account fields that can be changed or updated by a collector. Previous and current entries are displayed for the borrower address lines 1 and 2, city, state, and zip code, and the date of the last change from this screen is shown.

To change a field, the collector enters the two-digit line number of the field to be changed, a comma, the new

information for the field and a carriage return. After all the necessary changes have been made, the collector proceeds to the next activity by entering any valid function

COSIGNER SCREEN

The cosigner screen (figure 2-10) is displayed when the collector enters CS in response to a system request prompt. The cosigner screen contains nonfinancial information for up to three cosigners. The collector may update or change any of the information shown for each cosigner.

COLLECTION ACTIVITY

ACCT NAME GRAHAM, JAMES P AMT DELQ 303.53 DELQ DATE 06/12/77

0100024491204567 LAST LTR DATE 07/07/77 LAST LTR AMT 303.53

DO NOT CALL BEFORE NOON PERM COMMENT 1:

PERM COMMENT 2: PERM COMMENT 3:

CONTACT

AC RS LR CD CD CD COLL COMMENTS DATE 07/07/77 TH PP 01 MARC END OF ACTIVITY HISTORY

PLEASE ENTER NEXT FUNCTION OR ACTION, RESULT, LETTER REQUEST, COMMENT

Figure 2-8. Collector Activity Screen

BORROWER'S CHANGE SCREEN

ACCT' NAME GRAHAM, JAMES P LAST CHANGE 00/00/00

ACCT # 0100024491204567

PREVIOUS

01 HOME ADDR 1 99 ZEST PLACE

HOME ADDR 2 02 03 CITY, STATE

BROOKSIDE, MD

HOME ZIP HOME PHONE 04 05

50701 787/545-0202

HOME EXT 06

0000

07 BUS NAME CONTROL DATA CORPORATION

80 **BUS ADDR** CITY, STATE 09

888 ZZZ ST CAROL TOWN, MD

10 BUS ŽIP

11 **BUS PHONE** 50704

12 **BUS EXT** 714/452-6000 3333

13 SAL CD

ADL ACCT # 14

15 SOC SEC #

ENTER ITEM, CHANGE OR NEXT FUNCTION OR ACTION, RESULT, LETTER REQUEST

Figure 2-9. Borrower Change Screen

If a cosigner does not exist within the system for this account, the screen is displayed with blank data; and if the collector changes an item, a record is created in the cosigner file (COSIGNER).

To change a field, the collector enters the two-digit line number of the field to be changed, a comma, the new information for the field and a carriage return. After all the necessary changes have been made, the collector proceeds to the next activity by entering any valid function code.

SUPERVISOR SCREEN

The supervisor screen (figure 2-11) can be displayed by personnel possessing a valid supervisory ID code. Supervisory personnel can display this screen by entering SS in response to a system request prompt.

The supervisor screen permits the supervisor to alter privileged information such as reassigning an account to a different queue or changing the next contact date. Changes are performed in a manner similar to changes or updates made from the borrower change screen.

```
COSIGNER **
   ACCT NAME
               GRAHAM, JAMES P
                                             ACCT # 01.00024491204567
   AMT DELQ
                            DELQ DATE 06/12/77
             303.53
COSIGNER 1 01 JOHN SMITH
                                                         222-3416
                                                06 HOME
            02 222 MAIN ST.
                                                O7 EXT
                                                          444
            03 SAN DIEGO, CALIF.
                                                08 BUS
                                                         111-1234
                                                09 EXT
            04 92100
                                                          333
COSIGNER 2
                                                    15 HOME
            10
            11
                                                    16 EXT
                                                    17 BUS
            12
            13
                                                    18 EXT
            14
COSIGNER 3
            19
                                                    24 HOME
            20
                                                    25 EXT
            21
                                                    26 BUS
            22
                                                    27 EXT
ENTER ITEM, CHANGE OR NEXT FUNCTION OR ACTION, RESULT, LETTER REQUEST,
COMMENT
```

Figure 2-10. Cosigner Screen

SUPERVISOR'S CHANGE SCREEN ACCT # 0100024491204567 ACCT NAME GRAHAM, JAMES P CURR QUEUE AMT DELQ 303.53 0001 LAST QUEUE CHNG DELQ DATE 06/12/77 06/12/77 01 QUEUE ID 0001 PREV QUEUE 68 NEXT CONTACT DATE 06/17/77 03 PRIORITY CODE 0005 SUPV FOR THIS ACCT SUPV STATUS CODE QUEUE REASSIGN COD 06 07 ACCT REVIEW CODE PP AMOUNT 303.53 ENTER ITEM, CHANGE OR NEXT FUNCTION OR ACTION, RESULT, LETTER REQUEST,

Figure 2-11. Supervisor Change Screen

SCREEN FUNCTIONS

Section 1 introduced the functions that can be invoked from the collector's display. Clerks and supervisors with valid ID codes can also invoke some or all of these functions.

SELECTION SCREEN FUNCTIONS

Selection screen functions permit a collector to review accounts automatically, or to retrieve an account by borrower name, cosigner name, or account number.

Program COLECT displays the selection screen when invoked by a collector during the sign-on process, or when a collector enters function code DS in response to a system request prompt.

The collector may sign off from a collection session via the selection screen.

ACTIVITY SEQUENCES

Four levels of activity are possible: clerical, collector, supervisor, and training. Table 1-1 contains all on-line activity function codes, a description of the activity invoked by the codes, and the kind of personnel that can validly invoke those activities.

When a collector is required to log his activities, combinations of the following fields are entered:

NOTE

Codes and requirements are defined by the user at installation time and may vary from the typical fields.

AC Two-character action code

RS Two-character result code

LR One-character letter request code

ACODE One-character address code

LC Two-digit letter code

LDATE Four- to six-character date for the letter

LAMT One- to nine-digit amount for letter

PDATE Four- to six-character promise-to-pay date

PAMT One- to nine-digit amount promised for payment

COM One- to 55-character comment

NCD Four- or six-character date for next contact date

Action codes denote the action taken by the collector. For example, action code TH may denote that the collector contacted the borrower by telephone at home.

Result codes indicate what happened as a result of the collector's action.

NOTE

A user can elect to use these codes or establish his own codes. Appendixes B and C contain examples of action and result codes.

Letter request codes are limited to L or N. L indicates that a letter is required, and N indicates that no letter is required. No letter required is the default condition if the field is left blank and preceded by a comma.

H, B, 1, 2, or 3 are examples for the one-character ACODE field. H means send the letter to the borrower's home address; B means send the letter to the borrower's business address; 1, 2, and 3 mean send the letter to cosigner 1, 2, or 3, respectively.

Two-digit letter codes indicate which type of user-defined letter to send (01 through nn). These codes must be contained in either the LTR1 or LTR2 record in the CCS utility file (UTIFIL). These codes are entered in the LTR1 or LTR2 records during the letter build procedure.

The LDATE field is entered in one of two forms: mmdd or mmddyy for month/day or month/day/year. Do not confuse this with field PDATE which has the same format but indicates the date on which the borrower promises to make payment. Field LAMT is used by the collector to indicate an amount to be printed in the body of the letter. PAMT is the amount that the borrower promises to pay on PDATE.

COM is a variable length field for collector free-form comment (up to 55 characters). NCD is an optional field for entry by the collector for the next contact date. The default condition is the entry by the system of a default next contact date as determined in the activity verification table.

METHODS OF ENTRY

There are two methods to enter the screen function codes: multiple field entry and single field entry. Normally, the collector uses the multiple field entry method to minimize the amount of disk activity and improve response time. The single field entry method normally is used only for training.

Multiple Field Entry

Multiple field entry is the recommended method of entry for activity sequence inputs. This method is designed to minimize the amount of disk activity by enabling the entry of related fields in one line.

Entry of a line of fields in the following format initiates a requested sequence and bypass prompting for additional fields except for those requested (letter) or required (promise-to-pay, letter or comment fields). The omission of a required field causes the system to prompt the collector for entry of that field. The recommended format is:

AC,RS,LR,COM

Default values (parameters omitted) are permitted for result code, letter request code and comment. Default values are blank for result code and comment fields and N for letter request codes. There is no default value for action codes.

Examples of typical entries are as follows:

 Action code, result code, letter request code, and comment all specified:

TH, SS, L, WIFE JUST LOST JOB

 Action code, result code, and comment all specified; no letter requested:

BC,PP,N,JUST GOT FIRST PAYCHECK FROM NEW JOB

 Action code and comment specified; result and letter request codes set to default values:

AR,,,AWAITING REPLY FROM BRANCH

 Action and letter request codes specified; result code and comment set to default value;

LO,,L

 Action code specified; result code, letter request code and comment set to default values:

SR

After the above entries are made, program COLECT verifies the action and result codes using the activity verification table file ACTVERTB. The sequence is rejected and control returns to the next function to be processed for any of the following reasons:

- Invalid action code
- Invalid result code
- Invalid action code/result code combination

After the system determines that all entries are valid, a check takes place. If the result code entered by the collector is BZ (borrower busy), the account is processed as an RL (review later) function and the activity is not logged. All transactions, except BZ or RL, are logged in the transaction file for later processing.

If the result code is equal to NA (no answer), and the NA field in the OLPM record of the CCS utility file (UTIFIL) contains a Y, it will be treated as an RL function and the activity will not be logged. If the NA field contains an N, the activity will be logged and the account will not appear for review later in that session.

If a result code, as entered in a sequence, is PP (promise-to-pay) the system prompts for the entry of date and amount promised to pay. The format of the entry is:

PDATE, PAMT

There are no default values for these fields. Valid entries must be made or the system prompts for them. The date entry (PDATE) must be a valid date in the future. Since this date has an impact on the next contact date, it cannot be more than the customer-defined parameter C in record OLPM of the utility file.

Other checks and prompts made by the system include checking field PAMT for an amount not larger than the current balance of the account being reviewed. The system prompts for the re-entry of both fields if either field is found to be invalid.

The collector verifies that the date and amount is correct after valid entries are made. The collector responds by entering OK or by re-entering new values for both fields.

There is no prompting for the next contact date. The next contact date entered by the system is the PP date (promise-to-pay) plus a delta value defined in the utility file (UTIFIL).

The system prompts for the entry of all letter fields if either of the following conditions are met:

- Letter request code is L
- The action code or result code requires a letter to be sent even though the letter request code is N (no letter required).

The format for the entry of the letter field is

ACODE, LC, LDATE, LAMT

where typical entries for the fields are as follows:

 No value for date and amount fields are given and other fields are specified:

H,10

 Default value for date field, other fields are specified:

B,03,,124 or

B,03,,124.00 (both amount fields are \$124.00)

No value for amount field, other fields specified:

2,07,0514 or

2,07,051478

• All fields specified:

1,14,042678,98

Any date entered must be a valid date. The collector must verify each field with OK or the entry of a new field. If a comment is required for the action or result code, and none is made by the collector, the system prompts for a comment.

Single Field Entry

The single field entry method is intended to facilitate collector training in the use of the activity sequence. Entry of the function code EA initiates this method of entry during which the system prompts for the activity fields one at a time. The field formats are the same as for multiple field entries.

When using the single field method of entry, a reply of only (CR) to the addressee code prompt indicates that no letter is requested and results in a bypass of prompts for the other letter fields.

CHANGE SCREEN ACTIVITIES

Fields in the following three screens can be changed:

- Borrower change screen
- Cosigner screen
- Supervisor screen

The exact fields that can be changed are user-defined. The person making the change indicates the parameter to be changed by line number and comma followed by the entry of the new contents for the field. If the borrower change screen is being displayed (figure 2-9), and the zip code, item 05, was found to be in error, the entry for correcting that field is.

05,55124 (CR)

where 55124 is the new zip code.

When any field is changed, the related field in the master record is automatically updated, the screen is updated, and a record of the change is saved in the transaction file. In addition, certain fields on the borrower change and supervisor screens have a previous value field. Fields with a previous value are:

- Borrower's address line 1
- Borrower's address line 2
- Borrower's city/state
- Borrower's zip code
- Queue account assigned

If a CS function (cosigner change screen) is entered and no record exists in the cosigner file for that account, the cosigner screen is displayed with the data fields filled with blanks. If the collector enters a change to any of the fields, a record is created in the cosigner file (COSIGNER) for that account number containing the new data the collector has just entered. If no entry is made, no record is created.

AUTOMATIC ACCOUNT REVIEW

The system allows the assignment of each account by priority to determine the order of accounts reviewed by

the collector. These accounts are placed in a file. The collector has access to the file by entering A in response to a system prompt for a selection, while the selection is being displayed (figure 2-3). If the collector has exited from the automatic mode of account review, he enters NA in response to a system request prompt. This returns the collector to the automatic review mode and displays the borrower master screen for the next account in the file. (The system remembers where the collector ended in the file and displays the next account to be reviewed in priority order.) If there are no more accounts to be reviewed in the current queue, the system displays the message END OF DAILY ASSIGNMENTS. If the collector has more than one queue assigned, he can enter NQ in response to a system request prompt. Function NQ moves the collector to start reviewing accounts, based on priority, in the next queue assigned that collector.

DELAYED ACCOUNT REVIEW

An RL function request or BZ result code, (or NA result code, if the NA field in the OLPM record in the UTIFIL contains a Y) on collector activity entry, schedules the current account under review, from the automatic file, for review xx accounts later. The parameter xx is user-defined and is stored in record OLPM under the CCS utility file (UTIFIL). Up to 15 accounts can be deferred in an RL queue. Any account retrieved from the RL queue is displayed regardless of whether the account has been reviewed. Accounts in the RL queue at the end of a daily collection session are treated as not worked.

BUSY ACCOUNTS IN AUTOMATIC QUEUE

Accounts retrieved from the automatic file that are found busy are bypassed and the next scheduled accounts for review are presented to the collector. If the account is busy, another collector (clerk or supervisor) is working the account and should be allowed to do so without interruption. If an account retrieved from the RL queue is busy, it is bypassed for later review.

INTERRUPTED AUTOMATIC

If a collector logs off the system partially through an automatic file and later logs on again, entry into the automatic queue is at the beginning of the queue. However, only the accounts that were not worked that day are displayed.

DAILY CYCLE PROCEDURES

A menu of daily cycle procedure selections is displayed when the system operator enters request code DC at the system console, in response to a system prompt REQUEST =. The associated procedures perform the following:

- File updates
- Report generation
- Generation of daily assignment files

Most procedures are performed concurrently with collection activities; however, some procedures require that files be locked (accessible only to the system operator and the system) to perform sorts and file updates. These procedures are performed at the end of the collection session when all collectors have logged off the system. Procedures of this type include sorting the transaction file and creating the daily assignment file for the next working day.

Table 3-1 shows the recommended daily cycle procedure execution sequence, and table 3-2 shows the relationship between a procedure, the programs in that procedure, and the files accessed by those programs. (See also appendixes F, G, and H.)

Not all procedures on this menu must be executed, provided the following conditions are observed:

- Selections L and M must be run after the collectors have completed their day's work and selections A, B, and C have been executed using the previous day's data.
- Selections A, B, and C can be run only after selection L has been completed.
- Selection B is executed only if letter printing is required.
- Selection D is executed only if there is a complete update tape from the host computer.

TABLE 3-1. DAILY CYCLE (DC) PROCEDURE EXECUTION SEQUENCE

Procedure (Selection)	Running Conditions	Prerequisites		
PRFDC004 (D)	When complete update tape(s) available from host	Update tape(s) from host A/R system		
PRFDC007	Prior to PRFDCO10 if accounts required to be updated with history information	Successful completion of PRFDC004		
PRFRP001 (G)	When detail list report required for accounts that have become inactive	Successful completion of PRFDC004		
PRFDC010 (L)	Daily in off-line mode	Collection activities ceased for the working day		
PRFDC011 (M)	Daily in off-line mode	Successful completion of PRFDC010		
PRFDC001 (A)	When daily collector activity reports required	Any time after PRFDC010 is completed		
PRFDC002 (B)	When letters are required	Should immediately follow PRFDC001 (if letters required)		
PRFDC003	To add collector activities to activity file	Successful completion of PRFDC010		
PRFDC005 (E)	To process nonfinancial update tape(s)	400 series update tape(s) from host		
PRFDC006 (F)	To process financial update tape(s)	500 series update tape(s) from host		
PRFRPOO2 (H)	When supervisor requires delinquent record contents report	Any time after PRFDC010 is completed		

TABLE 3-2. DAILY CYCLE PROCEDURE/PROGRAM/FILE RELATIONSHIPS

Procedure (Selection)	Programs Called	Files Used
PRFDC001 (A)	CCSPAS, CHEKID, COLCHG, COLSTS, TIMUSE	COLSTATS, DLYWRK, TRNSFL, UTIFIL
PRFDC002 (B)	CCSPAS, CHEKID, LTRPRT, LTRSTA	COSIGNER, DELQMST, LTRFIL TRNSFL, UTIFIL
PRFDC003	ACTADD, ACTMTN, CHEKID	ACTFIL, TRNSFL, UTIFIL
PRFDC004 (D)	CCSPAS, CCSSPC, CHEKID, UPDATE	ADDACT, COSIGNER, DELQMST, INACCT, SUMHIST, TAPEARC, UTIFIL
PRFDC005	CHEKID, UPD400	ADDACT, COSIGNER, DELQMST, UTIFIL
PRFDC006 (F)	CHEKID, UPD500	None
PRFRPOO1 (G)	CHEKID, DTLLST	ACTFIL, COSIGNER, DELQMST, DUMMY, INACCT, SREQDL, UTIFIL
PRFRP002 (H)	CHEKID, DTLLST	ACTFIL, COSIGNER, DELQMST, DUMMY, INACCT, SREQDL, UTIFIL
PRFDC007	CHEKID, DHUPDT	ADDACT, DELQMST, SUMHIST, TAPEARC, UTIFIL
PRFDC008 (J)	CHEKID	None
PRFDCO09 (K)	CHEKID	None
PRFDCO10 (L)	CHEKID, CCSPAS, NMCHNG, PRETSR	ACTIVE, ADDACT, DELQMST, TRANFL, TRNSFL
PRFDC011 (M)	CCSPAS, CHEKID, CCSSPC, DACRTE, DAQUEL	COSIGNER, DAQUE, DELQMST, DLYASSN, DLYWRK, INACCT, SUMHIST, TAPEARC

- Selection G is executed only if selection D has been run and a detailed list report is required for each account that has become inactive.
- If selection D is executed, selection I must be run (if accounts are required to be updated with history information) prior to the execution of selection L for the following day.
- Selection E is executed only if there is a nonfinancial update tape from the host computer.
- Selection F is executed only if there is a financial update tape from the host computer.
- Selections D, E, and F can be executed repeatedly if there is more than one update tape.

 Selection H can be executed at any time, but need be run only when the supervisors have requested detailed list reports during on-line activity.

SELECTION A - DAILY COLLECTOR ACTIVITY REPORTS

The daily collector activity reports summarize the collector's usage of the system. There are three reports.

- Time usage report
- Collector change report
- Collector statistics report

TIME USAGE REPORT

The time usage report (appendix D) is a listing of all collector activities that are input for that working day's collection session. The report is keyed to specific collectors by review start and stop time, and elapsed time. The actual activities performed are listed. The total number of accounts reviewed and the total review time for each collector is also reported.

COLLECTOR CHANGE REPORT

The collector change report (appendix D) lists all changes made by each collector, supervisor, or clerk to nonfinancial account fields of master files DELQMST (delinquent master) and COSIGNER. The report contains the account number field description, the newly entered data, and the data as it appeared before the change was entered.

COLLECTOR STATISTICS REPORT

The collector statistics report (appendix D) is printed in tabular form giving the actual counts of each action and result code that are used by each collector. The system operator is prompted with a message at the system console asking if the daily counts should be zeroed or allowed to accumulate with the next run of that report.

SELECTION B - LETTER PRINTING

Form letters are requested by a collector during the daily review of accounts. The letters can be sent to the following:

- The borrower's home address
- The borrower's business address
- Any of the cosigner's addresses

The body of each letter is user-defined. The input request file (TRNSFL) is updated after each letter is printed to allow program LTRPRT to stop and then restart without duplicating the letters already printed. The operator is prompted for an account number to facilitate this restart capability.

The following error messages may be displayed during the letter print routine:

UNABLE TO LOCATE ACCOUNT NUMBER ERROR ON REPOPEN OF TRANSFL UNABLE TO LOCATE COLLECTOR REQUESTED IN UTIFIL.
WILL NOT PRINT LETTERS
UNABLE TO LOCATE LETTER NUMBER nn TO BE SENT TO ACCT #
UNABLE TO LOCATE COSIGNER FOR ACCOUNT NUMBER
UNABLE TO LOCATE LTRF RECORD

SELECTION C - COLLECTOR, ACTIVITIES

The collector activities procedure logs all collector activities that are entered on reviewed accounts.

Logged activities are stored in the activity file (ACTFIL). This file consists of blocks of 500 characters each. Each block contains as many activity sequences as can be accommodated. The blocks are linked together by an account number and a suffix. A suffix less than 51 is for current sequences, and a suffix greater than 50 is from the tape archives. The lowest suffix denotes the most recent sequence.

The activities from a day's collection session are added to the file during the processing of this selection, not during the actual on-line session.

SELECTIONS D, E, AND F - UPDATE TAPE PROCESSING

Selections D, E, and F consist of the following three update tape processing procedures.

- Complete update of active accounts (selection D)
- Transaction coded update of nonfinancial information (selection E)
- Transaction coded update of financial information (selection F)

Update tapes are provided on 9-track magnetic tape, each type on a separate tape. The tapes have variable length records with a maximum record length of 1,784 characters. The labeled format is the expected label format with labels bypassed at execution. An option, to be implemented at installation time, is available for the use of unlabeled tapes.

The tapes must be unblocked (one record per block). The data on the tapes can be in either the ASCII or EBCDIC format; the format must be selected at installation time. This is done by modifying a switch setting in a procedure stream (PRFDCOO4). The user area must be unpacked ASCII or EBCDIC as determined above.

COMPLETE UPDATE

The files that are added to, or updated, and the type process performed are described in the matrix shown in table 3-3.

The first three characters of each record on this tape are a transaction code which drives the update process. The recognized codes and meanings are:

- ' ' Add/update/reactivate the account
- '301' Write off the account

TABLE 3-3. UPDATED FILES

	Comple	Non-Financial Selection E		
File Name Add	Update	Reactivation	Inactivation (Box Code)	40x Code
А	U	U	U	U
A	A (1)	A (1)		U
Α	A (2)			A (2)
			А	
A		А	U (3)	•
		·	Α	
	A A A	Add Update A U A A (1) A A (2)	Add Update Reactivation A U U A A (1) A (1) A A (2) A	Add Update Reactivation (Box Code) A U U U A A (1) A (1) A A A (2) A U (3)

NOTES

- (1) COSIGNER file addition only if no cosigner record present for account
- (2) ADDACT file addition only for name changes
- (3) On inactivations, account record is deleted from ACCAGE file
- '302' Release the account (paid in full)
- '303' Satisfy the account (brought current)

The record formats for each of the above codes are contained in appendix H_{\bullet}

" Code (Blank Code)

This code indicates the account is to be added to the delinquent account data base; or if the account is already present, it is either updated or reactivated, depending on its status (active or inactive).

Adding the account to the delinquent account data base involves the following operations:

- Adding the account to the DELQMST file.
- Adding the account to the COSIGNER file, if the name field of any cosigner on the tape record is nonblank.
- Adding the account to the ADDACT file. This flags the account for possible update from the SUMHIST and TAPEARC files if the account is present in these files.
- Adding the account to the ACCAGE file. This is the trend analysis report aging file.

Updating the account on the delinquent account data base occurs when the transaction code is blank and the account is currently active on the DELQMST file. The update operation involves the following:

Unconditional update of the following financial fields:

Field Name	Description
MSTDT	Date account last updated by A/R system
MDLDT	Delinquent date
MOPDT	Account open date
MADLQ	Amount delinquent
MCBAL	Current balance
MPYOF	Current payoff/total due
MCPGD	Current payoff good until date
MNPA	Next payoff amount
MOAMT	Open amount/credit limit
MCMN	Number of cosigners
MPTS	Credit/point score
MBBR	Bank branch
MLON	Loan officer
MTCD	Account type code/ product type

Field Name	Description	
MTD3	Number of times 30 days delinquent	
MTD6	Number of times 60 days delinquent	
MTD9	Number of times 90 days delinquent	
MSDF	Special description field	
MDYDL	Number of days delinquent	

- Conditional update of nonfinancial fields. One of the following conditions must be met for these fields to be updated:
 - Collector has not made a change of account data from borrower's change screen (MUPDT field in DELQMST record).
 - Collector has not made a change of account data from borrower's change screen for a user-specified number of days. This parameter is specified on the UPDY record of the utility file. If the value of this parameter is 999, no nonfinancial updates are ever accepted.

The following fields are conditionally updated:

Field Name	Description
MSLCD	Borrower's salutation code
MADRBL	Borrower's address block
MPHN	Borrower's phone
MEXT	Borrower's extension/comment
MBNM	Business name
MBAD _.	Business address
MBCS	Business city/state
MBZP	Business zip
МВРН	Business phone
MBEX	Business extension/comment
MADL	Additional account numbers
MSOC	Social security number

NOTE

Blank fields on the update tape are ignored; no update occurs. Also, if the borrower's address block (address lines 1 and 2, city/state, and zip) is updated, the previous contents of these fields (if nonblank) are saved in the previous value fields in the DELQMST record.

- Update of borrower's name, if name on tape is different from name on DELQMST file. If a change is made, a record is added to the ADDACT file flagging a name change was made.
- Update of user-defined area of master file (character positions 1057-2000) as controlled by field analyst-written routine (CCSPYT).

Reactivation of an account occurs when the transaction code is blank and the account is already present on the delinquent account data base but is inactive (account status code nonblank). Reactivation involves the same operations as those performed for update transactions, plus the following:

- 1) Clear status code and promise-to-pay fields.
- Update queue assigned and next contact date as if account is being added (queue from tape contents and next contact date set to system date).
- Add account to the ACCAGE file, as done for add transactions.

On update and reactivation transactions, the account can be added to the COSIGNER file providing the cosigner name data on the tape is nonblank and the account is not already present in the file.

'30x' SERIES CODE

These series of codes provide a mechanism to inactivate the account. This removes the account from collection efforts through CCS. The inactivation of an account involves the following operations:

 Update account status code according to transaction code:

CODE_	TRANSACTION CODE	<u>MEANING</u>
W	301	Written-off
R	302	Released
S	303	Satisfied

- Add account to the INACCT file. This flags the account for history processing.
- Delete account from the ACCAGE file. This is the trend analysis report aging file for active accounts.
- Add account to the RSWFIL file. This is the trend analysis report aging file for inactive accounts.
- Only three fields of the DELQMST record are updated:
 - Status code as indicated in 1 above.
 - Date account last updated by A/R system (MSTDT) - updated with inactivation date field from tape.
 - Current payoff/total due (MPYOF) updated with amount used to inactivate field from tape.

The complete update processing produces a report detailing each transaction processed (refer to appendix D for sample report). For add, update, and reactivation transactions, a detail line contains the transaction code, account number, borrower's name, delinquent date, amount delinquent, current payoff, and a comment field noting action performed (ADD, UPDATE, or REACTIVATION). An additional comment may appear on updates reactivations states NO NONFINANCIALS which ACCEPTED. This indicates that conditions stated above for conditional update of nonfinancial fields were not met and, therefore, no changes of the fields were made.

The detail lines for inactivation transactions (30x) contain transaction code, account number, borrower's name, inactivation date (displayed under delinquent date heading), amount used to inactivate (payoff), and a comment field noting action performed (WRITE-OFF, RELEASE or SATISFY). An additional comment may appear which states ACCOUNT NOT IN ACCAGE. This indicates an active account was inactivated and was not present in the trend analysis report active accounts aging file. This abnormal situation requires investigation by the field analyst to verify the integrity of the delinquent account data base.

Additional detail lines are printed for rejected transactions. These lines contain transaction code, account number, and comment field indicating error. The following are the reasons for rejection:

- Invalid transaction code not ' ', '301', '302', or '303'
- No account for 30x code account was not on DELQMST file
- Account not active for 30x code account was on DELQMST file, but was already inactive.

Some options are available for complete update processing and are selected through external CCS switch settings.

The options are:

EBCDIC/ASCII input selection - switch U1 determines format of input.

Switch Value	Input Format
0	ASCII
1	FBCDIC

Mag tape input unit selection - selects unit 0 or 1 using switch U3:

Switch Value	Input Unit
0	Mag tape unit 0
1	Mag tape unit 1

3) Print output selection - the capability exists to have print output directed to a file for listing at a later time. The file, called UPDPRINT must be defined (sequential, records 132 characters long, and approximately 2070 more records than transactions being input). This feature is enabled using switch U4;

Switch Value

Output

0

System line printer File UPDPRINT

The output file UPDPRINT can be listed to the system printer using the LIST command under the file manager utility (UTIL). This feature is useful if the system printer is down.

The remaining switches U2, U5, U6, U7, and U8 in this procedure stream (PRFDC004) are always set to zero. The system utility editor can be used to modify the switch in this procedure stream.

For example, if the format of the input tape is EBCDIC and mag tape input is to be on unit 1 and print output is to disk file UPDPRINT, then the switch should be set as follows:

SWITCH 10110000

This indicates that switches U1, U3, and U4 are on and all other switches are off.

'4xx' SERIES CODES

The '4xx' series codes cause the appropriate nonfinancial field (as determined by the value xx) to be updated. Records are rejected if the account is not present in files DELQMST or COSIGNER. Only the field denoted by value xx is updated. All other fields in the file remain unchanged.

Updated files are shown in table 3-3.

Refer to appendix H for examples of record formats and xx code values.

'5xx' SERIES CODES

The '5xx' series of codes are used to modify financial data on a transaction code basis. These financial updates are primarily used as a daily update of payments and purchases rather than as a complete update of the account.

The format of these records is completely customer-defined and requires a quote for special software (QSS) from Control Data Corporation.

SELECTIONS G AND H - DELINQUENT RECORD CONTENT REPORTS

The delinquent record content report contains all fields that are in files DELQMST, COSIGNER, and ACTFIL (appendix E). The procedure associated with selection G generates the report for all accounts that have gone to inactive status (from a 300 transaction in a complete update process) since the last time this selection was made. As each account is printed, it is flagged so that the next execution does not duplicate the report (appendix D).

The procedure associated with selection H generates the delinquent record content report for all accounts that have been requested by a supervisor. These requests are entered while the supervisor screen is being displayed on the supervisor's terminal.

These procedures may also be selected from the on-demand report menu. Selection G of the daily cycle menu N is the same as selection A of the on-demand report menu, and selection H of the daily cycle menu is the same as selection B of the on-demand report menu.

SELECTION I - UPDATE FROM HISTORY

The daily history procedure is performed after the update procedure (daily cycle, selection D) has been completed. It updates any account that has previously been in the collections system with information that is contained in the summary history file (SUMHIST).

The ADDACT file is read to select newly added accounts. When one is found, the history file (SUMHIST) is checked for the same account. If the account is found, the master record is updated with the following nonfinancial account data from the history record:

MADR1 -Borrower's address line 1 MADR2 -Borrower's address line 2 MCS Borrower's city and state MZP Borrower's zip code MPHN Borrower's home phone **MBEX** Borrower's extension MACT Collector activity block MP1 Permanent comment 1 MP2 Permanent comment 2 MP3 Permanent comment 3 MUPDT -Date last updated via change screen; contains date moved to SUMHIST

If MADR1, MADR2, MCS, or MZF contain data, the SUMHIST data is moved to the corresponding previous fields.

If the account also exists in the tape archive file (TAPEARC), the delinquent master record (DELQMST) is also updated with the date of the latest history tape containing that account. A flag is set in the ADDACT file and the SUMHIST record is deleted.

A report is generated showing which accounts were updated from which history file.

SELECTIONS J, K, L, AND M - END OF COLLECTOR USAGE

Selections J and K are used by the system to caution the system operator that selections L and M must not be selected until all collection activity on the system has stopped (collectors, clerks, and supervisors have logged off). The operator verifies that everyone has logged off by requesting the file maintenance menu (request code MT) and entering selection N. This selection lists any on-line activities.

Selection L saves the daily transaction file (TRANFL) for use by daily cycle selections A, B, and C. The file is then cleared for use the next working day. All name changes that have occurred, either from a complete update tape or from collector changes, are then processed to correct the key structure of file DELQMST.

Selection M creates the daily assignment file that controls the collector's automatic review for the next day. This selection reassigns the review priority for all accounts, performs queue reassignments, and checks for promises to pay that have been kept or broken. The promise-to-pay check is performed for accounts that have a promise date equal to or greater than the system date. The daily assignment file is created during this process. The file is sorted into review order after creation.

FILE MAINTENANCE PROCEDURES

The file maintenance menu of procedure selections is displayed when the system operator enters request code MT at the system console in response to the system prompt REQUEST =. The associated procedures perform the following:

- File purges
- File updates
- File audits
- Report generation

Most file maintenance procedures are performed at the end of a collection session to avoid conflicts with collector access to files.

Table 4-1 shows the relationship between a procedure, the programs in that procedure, and the files accessed by those programs. Refer also to appendixes F and G.

SELECTIONS A AND B - LETTER FILE MAINTENANCE

The letter file (LTRFIL) contains the format of user-defined letter bodies. A routine allows the letters to be created from the editor file LTRDESC (appendix E). The editor file contains 80-character records that make up the formats and bodies of the letters.

The first entry in LTRDESC for each letter must be

*A, II

where II is the letter number associated with that letter. This number is entered in the LTR1 (or LTR2, if the total exceeds 25) of the utility file UTIFIL. This is also the number that the collector enters during on-line activity to identify the letter to be printed. If a collector enters a number not contained in either the LTR1 or LTR2 record, the system displays an error message and prompts for a correct letter number.

The next entries in the file must be one or more (maximum of nine) format records. These records need not be in order. Each letter body can contain up to nine dates, amounts, or alphanumeric strings. The data for these nine fields is contained in the delinquent master file (DELQMST) in either the standard CCS area or the customer-defined area. The same fields may be printed in more than one line of the letter. Format records describe the line number and position in the line that the data is to be printed, as well as the starting position and length of the fields in the DELQMST.

The specifications for the format statements are as follows:

Faa...aa = In, cl, ty, mspo, Ingh

aa...aa 1-40 character comment area. This can be used by the analyst to identify the letter and/or describe unique features of the letter. This area is not used by CCS and may be omitted. If it is not used, the first two characters of the format record must be F=.

NOTE

Fields following the = must not contain embedded blanks. Each field must be separated by a comma and may or may not contain leading zeros.

- In The line number in the letter to contain the data. This may be a one or two digit number and must not exceed 24 (the maximum number of lines allowed in a letter).
- cl Starting column or position in the line to contain the data. This may be one or two digit number and must not exceed 54 (the maximum length of a letter line).
- ty The type of data contained in the field.
 The possible types are:
 - A Alphanumeric no editing
 - \$ Nine-digit edited dollar amount
 - D Date field. If ty = D and mspo = 0, the system date is printed.
- mspo Starting position in DELQMST containing the information to be used. May be one to four digits.
- lngh Length of the field.

If ty = A, length must not exceed 54

If ty = \$, length equals 0

If ty = D and length = 1, the date is printed as September 12, 1979

TABLE 4-1. FILE MAINTENANCE PROCEDURE/PROGRAM/FILE RELATIONSHIPS

Procedure	Programs Called	'Files Used
PRFMT001 (A)	CHEKID, CCSPAS	LTRDESC
PRFMT002 (B)	CHEKID, LTRBLD	LTRFIL
PRFMT003 (C)	CHEKID, UTFMTN	UTIFIL
PRFMT004 (D)	CHEKID, DECMTN	DAQUE, DECTBL
PRFMT005	AVMDMP, CHEKID	ACTVERTB, UTIFIL
PRFMT006 (F)	AVMCOM, AVMDMP, CHEKID	ACTVERTB, UTIFIL
PRFMT007 (G)	CCSPAS, CCSSPC, CHEKID	COSIGNER, DELQMST, INACCT, SUMHIST, TAPEARC
PRFHS003 (H)	CHEKID, PHDEL2, CMPSUM	SUMHIST, UTIFIL
PRFHS004	CHEKID, PHDEL1	TAPEARC, UTIFIL
PRFMT008 (J)	CCSPAS, CHEKID	SCRNDESC
PRFMTOO9 (K)	BLDSRN, CHEKID	SCRNDESC, SCRNFILE
PRFMTO10 (L)	CHEKID, CMPDLQ	ACTFIL, COSIGNER, DELQMST
PRFMTO11 (M)	ACTMTN, CHEKID	ACTFIL, UTIFIL
PRFMTO12 (N)	CHEKID, USEMTN	ACTIVE
PRFMTO13 (0)	CCSPAS, CHEKID, PGLTTB	DUMMY, RPTTBL
PRFMTO14 (P)	CHEKID, PGCMPR, PGLTTB, PGUPTB	DUMMY, RPTTBL
PRFMTO15 (Q)	CHEKID, PGLIST, PRPURG	RPTPGM, UTIFIL
PRFMT016 (R)	CHEKID, PRTSCN	COSIGNER, DELQMST, SCRNFILE

NOTE

Because of the difference in the number of characters in the month, the maximum number of blanks should be allowed. This will result in blanks following the date in the case of a shorter name month.

If ty = D and length = 2, the date is printed as Sep 12, 1979; this requires 12 spaces

If ty = D and length = 3, the date is printed as 09/12/79; this requires 8 spaces

An alternate specification for the format records is as follows:

Faa...aa = In, cl, name

aa...aa 1-40 character comment area as described above

In Line number as described above.

cl Starting column as described above

name Key to records in the report generator data element table (RRTTBL). The records in RPTTBL contain the type, master record position and length of the fields in DELQMST. Refer to appendix E (file description) for the names of the keys to this record.

If this alternate form is used, the data in RPTTBL is assumed to be correct. All data fields are edited to mm/dd/yy. An example of this F statement is as follows:

F use edit features in RPTTBL for cur bal = 04, 22, MCBAL

If no fields from DELQMST are to be used in the body of the letter, there must be only one format statement in the form of

F=No

followed by the body of the letter.

The body of the letter, as used by these procedures, includes the greeting, text, and closing. The borrower's name and address print starting in position 12, and the salutation, the collector's name and data from the LTRF record of the UTIFIL (refer to UTIFIL description in Section 4) print starting in position 27.

Two options available for the greeting are as follows:

aa...aa@l (punctuation) ** (carriage control) The data before the @ sign is printed before the addressee name (example: 'Dear') and is followed by the punctuation requested (example: ':'). The full name of the addressee (first name, middle initial if present, and last name) is then printed.

aa...aa@2

(punctuation) ** (carriage control) The data before the @ sign is printed before the title and last name (example: 'Dear') and is followed by the punctuation requested (example: ':'). The salutation code in position 17 of DELQMST identifies which title from the UTIFIL (described in this section) is to be used as the title of the addressee. This title is followed by the last name of the addressee (example: 'Dear Mr. Smith'). If the salutation code in position 17 of DELQMST is 0, the full name of the addressee is used with no title.

aa...aa**

(carriage control) If the first line of the text does not contain an @ sign, the line is printed as it appears in the file and it must contain the carriage control feature (see below) at the end of the line (example: 'Dear Customer:**2').

Letter data lines are entered one line at a time with the carriage control associated with that line. The body of the letter follows the formats. A maximum of 24 lines of data can be input, and each data line can contain up to 54 characters. A terminator (**) must be placed at the end of each line of data, followed by the number of lines to be skipped when the letter is printed (maximum four lines, default is one line). For example, if the salutation line were input as

Dear Customer: **2

two lines are skipped after the salutation before the next line is printed. Blanks must be left in the letter line for fields that may be inserted at letter print time. These must correspond to the length in the F statement.

The last data line in the letter must be followed by a letter terminator (END). Another terminator (END) must follow the last letter in the file. The procedure processes blank records if the second terminator is missing.

OPERATION

Selection A prints the letter description file (LTRDESC).

Any changes required (adds, deletes, or updates of letters) are accomplished with the use of the text editor. (Refer to section 7 for information on the use of the text editor.)

After all corrections have been made to the letter description file, selection B must be executed to create the letter file (LTRFIL).

The following error message may be printed during the letter build routines:

EXPECTED '*A." - FOUND " ".

FOUND AN ILLEGAL BLANK BEHIND PARAM " ".

EXPECTED LETTER NUMBER - FOUND A "COMMA"

DUPLICATE KEY ERROR ON WRITE

EXPECTED "END" FOUND " ".

EXPECTED "=" - FOUND " ".

FIELD DESCRIPTION EXCEEDS LIMIT OF 9.

EXPECTED "F" - FOUND " ".

EXPECTED NUMBER WITH RANGE OF 01-99 FOUND

EXCEEDED PARAMETER LIMIT ON PARAMETER #.

LINE NUMBER IN FIELD DESCRIPTION EXCEEDS 24.

COLUMN NUMBER IN FIELD DESCRIPTION EXCEEDS 54.

ILLEGAL CHARACTER - FOUND " ".

ILLEGAL USE OF PARAM 5. TYPE FIELD DOES NOT = A.

UNABLE TO LOCATE FILE NAME " "IN RPTTBL.

NUMBER OF LETTERS EXCEED 50.

UNABLE TO LOCATE LINE CONTROL OR CONTROL INVALID.

MAX LINE NUMBER FIELD EXCEEDS LETTER SIZE.

COLUMN NUMBER PLUS FIELD LENGTH EXCEEDS 54.

SELECTION C - UTILITY FILE MAINTENANCE

The utility file (UTIFIL) contains all user-defined changeable information such as collector data and report headings. The procedure associated with selection C facilitates updates to UTIFIL with ADD, UPD, and DEL functions input from the system console.

UTIFIL is an indexed file with the first four characters as the key. The key is used by the procedure to add, update, or delete records in the file.

In operation, the procedure prompts the operator for a function to be performed and verifies the validity of the function. Another prompt is made for the key to be processed. For UPD function requests, the file is checked to see if the record already exists, If the record exists, an update operation is performed. If the record does not exist, an add operation is performed. For DEL requests, the specified key must exist.

Keys are checked prior to processing for validity of the function to be performed (for example, no deletions of system required records). The system does not allow any function to be performed on the RPTG, LTR1, LTR2, ACTC or RESC records. A determination is made as to which edit prompt to display. This permits the operator to easily locate columns for data input.

For any key entered that is not part of the standard CCS, edit prompting will be for collector information; however, any data may be entered. If it is an update, the current contents of the record are displayed for operator reference.

SELECTION D - DECISION TABLE MAINTENANCE

This procedure maintains the decision table file (DECTBL). DECTBL is used to determine on-line activities, queue assignments, and priority assignments. The procedure implements the following operations on DECTBL:

- Create DECTBL may be created or loaded from 80-character records resident on any system logical unit (cards, tape). The file may also be created interactively from the system console.
- Add test A new test may be added to the file interactively from the system console.
- Delete test An existing test may be deleted from the file.
- Print table The contents of the file are printed on the system line printer.
- Dump table The file can be dumped to any appropriate system logical unit in a format compatible with the CREATE function above.
- Display test Any existing test can be displayed on the system console.

This procedure provides extensive dialogue between the operator and the system. The prompting provided by the procedure leads the operator to a successful completion of his requested function.

All error messages are displayed on the system console. The error messages and appropriate action to be taken are as follows:

- DECISION TABLE LACKS INTEGRITY
 - DECTBL does not conform to the expected format. DECTBL must be rebuilt with the CREATE function.
- DECISION TABLE OVERFLOW, TEST MAY NOT BE ADDED
 - DECTBL is not large enough for the number or complexity of tests.
- BAD SYNTAX OR SYNTAX ERROR, RE-ENTER

The operator input string is the wrong length, or a comma is in the wrong position. If a field is required, and it is not the last field in a line, it must be of the prescribed length (leading zeros or trailing spaces as required).

PB .LE. PA

The operator has entered a parameter involving ranges (.WE.,.OS.) and the first value, PA, is not less than the second value, PB.

SELECTIONS E AND F - ACTIVITY VERIFICATION TABLE MAINTENANCE

The activity verification table (ACTVERTB) contains information regarding valid action codes, result codes, and action code/result code pairs. These codes are used by collectors to log pertinent activities on accounts. Associated with ACTVERTB is an editor file (AVMDESC) which is used for line-by-line editing of text.

The first two characters of input records for ACTVERTB indicate what type of record it is:

AC Action code record

RS Result code record

For any other entry for the first two characters, the record is treated as a comment record. (See tables 4-2 and 4-3 for action and result code formats.)

The procedure associated with selection E prints the activity verification table in a matrix format. The procedure associated with selection F creates and prints ACTVERTB. The selection F procedure uses file AVMDESC for input. The input records contain information regarding the action and result codes used in the system.

The procedure makes two passes through AVMDESC. The first pass processes all records for result codes; the second pass processes all records for action codes. As each record is processed, it is listed on the system line printer along with any diagnostics for the record. Errors that generate diagnostic messages are as follows:

 THE CODE TO BE ADDED WILL CAUSE TABLE OVERFLOW

A maximum of 32 result codes and 32 action codes are permitted. The system will ignore the action/result code record.

 THE ACTION/RESULT CODE DUPLICATES A PREVIOUSLY PROCESSED ACTION/RESULT CODE

The system ignores duplicate entries.

 THE DEFAULT NEXT CONTACT DATE IN DAYS
 IS UNINTELLIGIBLE OR EXCEEDS THE MAXIMUM. IT MUST BE IN THE RANGE OF 0 to 63 DAYS

The system sets the next contact date in the record to zero (default condition) and continues processing.

TABLE 4-2. ACTION CODE RECORD FORMATS

Start Column	Number Of Characters	Description
1	2	'AC' identifier
3	2	Two-character action code
5	1	Either L or C for letter or comment required with this action code.
6	1	Either L or C for letter or command required with this action code.
7	2	Default (number of days) next contact date for this action code (00 to 63 days).
9	64 (maximum)	List of two-character result codes valid for this action code. The result codes are not separated by commas or blanks. Up to 32 result codes can be specified. If less than 32 result codes are entered, the list should be terminated with ** (double asterisk).

TABLE 4-3. RESULT CODE RECORD FORMAT

Start Column	Number Of Characters	Description
1	.2	'RS' identifier
3	2	Two-character result code
5	1	Either L or C for letter code or comment required for this result code.
6	1	Either L or C for letter code or comment required for this result code.
7	2	Default (number of days) next contact date for this result code (00 to 63 days).

 ACTION CODE TO BE ADDED IS A CCS 3.0 SCREEN FUNCTION. ACTION CODES CANNOT BE ONE OF THESE FUNCTIONS

The system ignores the action code record. The reserved list of screen function code is:

NA	DS	DF
DA	DC	CS
·P1	P2	P3
RL	NQ	OA
SS	DL	AA
EA	UH	(blanks)

 FOR ACTION CODE RECORDS, THE LIST OF VALID RESULT CODES CONTAINS A RESULT CODE NOT DESCRIBED IN A RESULT CODE RECORD

The system ignores invalid result codes in the valid result code list.

Selection F is also responsible for updating utility file (UTIFIL) records RESC and ACTC. These records contain the result and action codes used in the system.

SELECTION G - FILE SPACE AUDIT

This procedure checks the number of records versus the maximum number of records for CCS files. The files are as follows:

DELQMST	COSIGNER
SUMHIST	TAPEARC
INACCT	ACCAGE
ACTEIL	

As a result of the check, an audit report is printed which gives the number of records currently in the file, the maximum number of records that can be in that file, and the percentage of space left in that file. When the percentage is less than 15 percent, a warning is printed indicating that a file compression is needed soon (or history procedures must be run). When the percentage is less than 5 percent, the message that a compression must be done is shown on the system console and printer. History procedures are also required if they have not been performed since the last compression.

SELECTIONS H, I, and L - HISTORY FILE MAINTENANCE

The selection H (purge summarization file SUMHIST) procedure sequentially reads file SUMHIST and deletes any account that is older than xx months. The value of xx is a user-defined parameter; however, six months is recommended. The procedure is performed on all accounts meeting the age criteria and identified by status codes R (released), S (satisfied), W (written off), as established by record SMTH in the UTIFIL file. A report is also generated with details on each account being deleted.

The selection I (purge tape archive file TAPEARC) procedure reads file TAPEARC and deletes any account that has been on file more than xx months. The value of xx is a user-defined parameter; however, 18 months is

recommended. The value for xx is stored in record TMTH in the UTIFIL file. A report is generated with information on all accounts being deleted.

The selection L (file compression) procedure performs a file compression on the active account files, which are as follows:

- DELQMST
- COSIGNER
- ACTFIL

The compression removes the accounts that have been moved to history, freeing the file space for future use.

These procedures may also be selected from the history menu. Selection H of the maintenance menu is the same as selection C of the history menu. Selection I of the maintenance menu is the same as selection D of the history menu. Selection L of the maintenance menu is the same as selection E of the history menu.

SELECTIONS J AND K - SCREEN FILE MAINTENANCE

These procedures permit a user to format collector screens used in on-line activities. The screens are numbered according to the following screen number assignments:

10 to 19	Borrower's master screen (up to 10 account groups)
20 to 29	Financial data screen (up to 10 account groups)
31	Selection screen
33	Borrower change screen
35	Supervisor screen
40 to 89	Message screens (supplied in standard release)
02	Collector activity screen
94	Cosigner screen (data from cosigner file)
04	Cosigner screen (data from delinquent master file)

The selection and message screens must not be modified.

Screens 10-19 are reserved for borrower's master screens. Screens 20-29 are reserved for financial history screens. The second digit of these screen numbers is determined by the account type (the first character of the account number in the delinquent master file [DELGMST]). A user may have up to 10 different account types (0-9) and there must be a borrower's master screen and a financial history screen for each different type in the system.

The screen description file (SCRNDESC), provided at installation, contains screen number 10 (borrower's master) and screen number 20 (financial history). These numbers must be changed by the field analyst if an account type other than zero is to be used.

NOTE

The total number of characters displayed on each screen cannot exceed 1800.

The contents of edit, file SCRNDESC is used to create permanent file (SCRNFILE). SCRNDESC contains 80-character records, each record containing information about a particular field on a screen. A report is generated, listing the data processed to create each screen.

The format for SCRNDESC input records is as follows:

	Columns	Description
First Record	1 to 2	Screen number
	3 to.80	Comments
Next n Records	1 to 2	Item line number (01 through 24)
	3 to 4	Item column number (01 through 80)
	5 to 6	Length of field in bytes
	7 to 10	Starting position in file (if applicable)
	11	Editing field type (see below)
	12 to 80	Constant screen field
	41 to 80	Comment if not constant field
Last Record	1 to 3	Constant 'END'
	4 to 80	Comments

Editing field types used are as follows:

- 0 Constant screen field
- 1 Date in form mm/dd/yy
- 2 Alphanumeric in file
- 3 Nine-digit dollar amount in the form 9999999.99
- 4 Ten-digit phone number in the form 999/999-9999
- 5 Restricted usage to report collection activity
- 6 Social security number in the form 999-99-9999
- 7 Time of day in 24-hour time, hhmm
- 8 Constant screen field labeling, change screen item
- 9 Most recent collection activity

Field types 0 and 8 are constant fields output on the screen, constants such as those labelling a date, permanent

comment, or amount field. Type 8 fields have a very special interpretation and are used only on a change screen (borrower's, supervisor's, or cosigner's). A type 8 field assigns a number (first two characters of field) to flag the field immediately following as a change item. It is referenced through the change screen change function by this number.

Field type 5 is restricted to the collection activity display screen and flags the start line for preformatted activity display. The start line can be any line from 1 to 21, with as many activities as possible displayed per screen.

Field type 9 can appear on any account display screen and forms the next line to display in a pre-formatted line, or the last activity recorded for the account.

The procedure associated with selection J prints screen (SCRNDESC). The operator enters the editor mode to make required changes.

The procedure associated with selection K creates the screen file (SCRNFILE) from the edit file (SCRNDESC).

SELECTION M - ACTIVITY FILE REPORT

This selection prints a report reflecting the distribution of activities in the activity file (ACTFIL).

SELECTION N - ACTIVE USER FILE MAINTENANCE/REPORT

The active user file (ACTIVE) contains a record of all collectors currently engaged in on-line activities. This procedure allows users to be deleted from file ACTIVE in the event of a screen failure or an abnormal termination of program COLECT. (COLECT is the program that drives on-line activities.) This procedure also generates a report listing all active users by:

- Collector ID
- Port number
- Log-on time

The procedure performs these functions by sequentially reading file ACTIVE and formatting the data of each record displayed on the operator console and printed on the system line printer. When the file has been read completely, the operator is prompted to enter the IDs of those collectors to be deleted. The procedure deletes those collectors from the ACTIVE file.

SELECTIONS O, P, AND Q - REPORT GENERATOR FILE MAINTENANCE

These procedures permit the report generator data element table (RPTTBL) and saved program directory to be maintained. The data element table can be printed (selection O) or updated from the console with system

prompting (selection P). The saved program directory is maintained via operator prompting at the system console with the selection ${\sf Q}$ procedure.

Selections O and P provide the ability to add, delete, or change records in RPTTBL. A report is printed listing the changes made, records added, and records deleted.

CAUTION

The first six characters of the RPTTBL file are the key. This key must have M as its first character. This is used in the letter build routines.

The procedure associated with selection Q permits programs that are saved to be removed from the report directory and the report generator (RG request code) menu. This permits the report numbers to be available for use by a new report program.

The operator is prompted for the report number to be deleted. After entry of a valid number, the report title is displayed for operator verification. If the operator verifies the report number, the report is removed from the report directory and the report generator menu. Prompting is continued for any other report numbers to be deleted.

SELECTION R - PRINT SCREEN UTILITY

This procedure provides the collector with the ability to have any screen in the system printed on the system line printer. The operator is prompted for the screen number to be printed. Refer to appendix K for a list of the numbers of screens used in CCS 3.0. The program prompts the operator for single or double spacing. If the operator enters an account number in response to the program prompt, data from that account in the delinquent master file is printed. If no account number is entered, the position in the delinquent master file (DELGMST) containing that data is printed.

The on-demand report procedure menu (appendix G) is displayed when the operator enters RP to the system prompt REQUEST =. The associated procedures permit the following reports to be printed or generate additional reports.

- Delinquent record contents
- Trend analysis
- Write-off
- Daily assignment list
- Summary account list
- Collector statistics
- File audit
- Report generation (ability to generate additional reports)
- Queue loading report

On-demand report procedures can be performed at any time of day. A supervisor activity permits the supervisor to request the printing of the delinquent record contents report.

Table 5-1 describes the report and table 5-2 describes the relationship between a procedure, the programs in that procedure, and the files accessed by those programs.

SELECTIONS A AND B - DELINQUENT RECORD CONTENT REPORT

The delinquent record content report contains all fields found in files DELQMST, COSIGNER, and ACTFIL. The format of this report may be modified by the field analyst to include those fields contained in the user-defined areas of the delinquent master file (DELQMST), if the customer utilizes this area. The procedure associated with selection A generates the report for all accounts that have gone to inactive status (from a 300 transaction in a complete update process) since the last time this selection was made. As each account is printed, it is flagged so the next execution does not duplicate the report (appendix D).

The procedure associated with selection B generates the delinquent record content report for all accounts that have been requested by a supervisor. These requests are entered by the supervisor from the supervisor's screen.

SELECTIONS C, D, AND E - TREND ANALYSIS REPORT

This report shows movement of accounts, both number of accounts and dollar amounts, between aging periods. Aging periods are ranges of days delinquent. The report is generated by the following:

- Queue within account group (selection D)
- Product type within account group (selection E)

At the end of the printing of the trend analysis report, the operator is prompted for updating of the previous data (last run data) for the next run of the trend analysis report (selection C). If the operator selects to update previous fields when selection C is executed, the current fields will be moved to the previous or last run fields during execution of selection C. This creates a trend report reflecting one period to the next. If the operator selects to not update the previous fields, the previous fields remain the same as they were the last time the trend report (selection C) was executed. The ability to control the updating of previous fields allows the user to create trend analysis reports reflecting a specific period of time (for example, monthly or quarterly).

When an account is added to the system, a record is created in the ACCAGE file. When an account becomes inactive, the ACCAGE record is deleted and a record containing that data is created in RSWFIL.

The procedure associated with selection C calculates the current age (days delinquent) for all active accounts and marks all inactive accounts for reporting. This procedure must be executed prior to selections D and/or E. The operator is prompted to enter a date that is used for calculating the age of each account.

The date entered by the operator is saved in the trend analysis file (ACCAGE). This allows the file to be saved and then reloaded to generate other reports.

After the selection C procedure has been executed, the report by queue (selection D) and/or the report by product type (selection E) is run. Both reports are one page in length for each account group. The dollar amount used in the basic system is the amount past due. An option is available to use the current payoff as the dollar amount. Another option exists to ignore the account group for reporting. These options are controlled by switch settings in selection D and E. The available switch settings are shown in table 5-3.

TABLE 5-1. CCS REPORT DESCRIPTIONS

Menu	Request	Selection	Report	Main Program	Procedure
Daily Cycle	DC	А	Daily collector update	COLCHG	PRFDC001
		Α	Time usage	TIMUSE	PRFDC001
		A	Daily collector statistics	COLSTS	PRFDC001
		С	Activity file block distribution summary	ACTMTN	PRFDC003
		D	File space audit	CCSSPC	PRFDC004
		М	File space audit	CCSSPC	PRFDC011
		G	Delinquent record content (inactive accounts)	DTLLST	PRFRP001
		н	Delinquent record content (supervisor request)	DTLLST	PRFRP002
On-demand Report	RP	А	Delinquent record content (inactive accounts)	DTLLST	PRFRP001
*.		В	Delinquent record content (supervisor request)	DTLLST	PRFRP002
		D	Trend analysis (by queue)	TRENDP	PRFRP004
		Ε	Trend analysis (by product)	TRENDP	PRFRP005
		F	Eligible/actual write-off	WRTOFP	PRFRP006
		G	Daily assignment list	DALIST	PRFRP007
	·	H ·	Summary account list	SUMACL	PRFRP008
		I	Weekly collector statistics	COLSTS	PRFRP009
		J	Monthly collector statistics	COLSTS	PRFRPO10
		М	Queue loading	QLOAD	PRFRP011
File Maintenance	MT	E	Activity verification matrix	AVMDMP	PRFMT005
		F	Activity verification matrix	AVMDMP	PRFMT006
		G	File space audit	CCSSPC	PRFMT007
		м	Activity file maintenance	ACTMTN	PRFMTO11

TABLE 5-2. ON-DEMAND REPORT PROCEDURE/PROGRAM/FILE RELATIONSHIPS

Procedure	Programs Called	Files Used
PRFRP001 (A)	CHEKID, DTLLST	ACTFIL, COSIGNER, DELQMST, DUMMY, INACCT, SREDQL, UTIFIL
PRFRP002 (B)	CHEKID, DTLLST	ACTFIL, COSIGNER, DELQMST, DUMMY, INACCT, SREDQL, UTIFIL
PRFRP003 (C)	CHEKID, TRENDF, TRENDU	ACCAGE, DELQMST, RSWFIL
PRFRPOO4 (D)	CHEKID, TRENDP	ACCAGE, AGEWRK, UTIFIL
PRFRP005 (E)	CHEKID, TRENDP	ACCAGE, AGEWRK, UTIFIL
PRFRP006 (F)	CHEKID, WRTOFE, WRTOFP	DELQMST, UTIFIL, WOEF
PRFRP007 (G)	CHEKID, DALIST	DELQMST, DLYASSN, DUMMY, UTIFIL
PRFRPOO8 (H)	CHEKID, SUMACL	DELQMST, UTIFIL
PRFRP009	CCSPAS, CHEKID, COLSTS	COLSTATS, UTIFIL
RPFRP010 (J)	CCSPAS, CHEKID, COLSTS	COLSTATS, UTIFIL
PRFCNTRL (K)	CCSPAS, CHEKID, PGCNT1, PGGEN	PGEXTR, PRCWRK, RPTPGM, RPTTBL, RPTWKE, RPTWKP, UTIFIL
PRFRPOO1 (M)	CHEKID, QLOAD	DLYASSN, UTIFIL

TABLE 5-3. SELECTIONS D AND E SWITCH SETTINGS

Switch	Position	Function
U1	ON	Report is by queue (selection D).
U1	OFF	Report is by product type (selection E).
U2	ON	Current payoff is summed.
U2	0FF	Amount past due is summed (standard).
U3	ON	Group breaks are ignored.
U3	OFF	Group breaks are used (standard).

SELECTION F - WRITE-OFF REPORT

This report is a list of all accounts that are one of the following:

- Eligible for write-off
- Written off, actual (status code W)

The lists are mutually exclusive and are requested by the system operator at the system console. The operator is led through the procedure with system prompts.

This procedure prompts the operator for the desired list (actual or eligible). The operator is also prompted for the information necessary to generate the report. If the eligible write-off report list is selected, the operator is prompted to enter the date used to calculate the delinquency days of an account and the number of days an account must be delinquent to be included in the report.

If the actual write-off report list is selected, the operator is prompted to enter a date. The printed report list contains all accounts that have been written off since that date. Next, the operator is prompted to determine if the report list(s) are to be printed by the following:

- Account type within the queue
- Queue within account type
- Straight list of accounts

The operator is prompted if subtotals (provided when type or queue changes) are desired or a straight list of accounts is selected. Subtotals are not provided for the other two types of the report. After prompting is complete, all accounts that fulfill the input parameters are extracted and the report list is generated.

SELECTION G - DAILY ASSIGNMENT LIST

The procedure associated with this selection prints a report that contains a summary of the accounts within each queue. This report is used as a backup against a catastrophic system failure.

This procedure prompts the operator for the number of accounts to print for each queue. A carriage return response from the operator causes the procedure to use a default value for the number of accounts to be printed. Utility file (UTIFIL) record DALT contains the user-specified default value. DALT also allows for up to eight specified queues to use a different default value for printing accounts.

If the operator enters 000 in response to the same prompt, a summary report of each queue, with the number of accounts that are currently assigned to that queue, is printed.

SELECTION H - SUMMARY ACCOUNTS LIST

The procedure associated with this selection prints a report that gives a one-line summary for each active account in the system. The report is printed in ascending account number order. The total number of accounts, total delinquent amount, and total current payoff amount are printed at the end of the report.

SELECTIONS I AND J - COLLECTOR STATISTICS REPORT

This is a tabular report giving the count of each action and result code used by each collector.

The daily report is generated when the operator enters the DC (daily cycle) request code, then selection A. The weekly and monthly reports are generated when the operator enters the RP request code, and selections I and J respectively.

Counts are kept for these three distinct reporting periods. The actual reporting period is determined by the interval time between the zeroing of the counts. For example, not zeroing the counts when executing the report at the end of a week and executing the report at the end of the next week will result in a biweekly report. Recommended periods are daily, weekly or monthly.

After the desired report has been printed, the operator is prompted as to whether the counts should be cleared. The daily counts are cleared for the daily report; for the weekly report, the weekly counts are cleared. All counts are cleared for the monthly report.

Collector IDs and action/result codes can be added between report generation without affecting report integrity. All previous data still exists and any data associated with the new codes is added the next time the report is generated.

SELECTIONS K AND L - REPORT GENERATOR

The report generator provides a user with the ability to generate general reports based on data in file DELQMST (delinquent master file).

FEATURES

Any data element in the delinquent master file, excluding the activity string block, may be printed in a report if it is defined in the data element table. The data element table is created and maintained by PGUPTB, the table maintenance update program. The maintenance is through the card reader or the system console.

The data element table may be listed at the time of report program generation. The data element names (limited to six characters) are used by the operator for all data selection (including sort fields and level breaks) and as subheadings on the generated report.

Other information within the data element table is used by the report generator for editing and determining which data elements are totaled for level breaks.

NOTE

A given data element is edited/totaled the same on all reports, unless the data element table is changed.

A SAVE option exists, allowing the generated report programs to be installed for future use. A maximum of 19 programs can be saved at one time. If this number is exceeded, the directory file of the generated programs must be purged (PGPURG) before any others can be installed. A list of this file, containing the date created and report title, can be obtained through PGLIST.

All saved reports are executed from the report generator report directory menu. The menu is displayed by entering RG to the system prompt.

Any previously selected data element (a maximum of 10) may be used as a sort field for the generated report. A sort is included within the procedure stream generated for the report program if this capability is used.

Final totals and a record count are automatically given on each generated report. Totals are given for each data element defined as a TOTAL in the data element table.

NOTE

A total field must not be used as the first field printed on a report.

Up to three previously selected data elements can be selected as level breaks. A level break causes totals, both amount and record count, to be printed for the current level and all secondary levels. It also initiates a page break. A level break occurs when a data element changes value from one record to the next. These data elements must be the sort fields. If more than one data element is selected, a level break on the first element causes totals for all and a top of form. A level break on the second or third element only causes totals to be printed.

The report generator provides the option of extracting for the report all of the records in the master file, or of extracting only specified records defined by a set (or sets) of conditions entered by the operator. When using the record selection option, a maximum of 10 selections/conditions is allowed.

Seven possible types of selections are available and can be used in any of the following combinations:

- Equal
- Not equal
- Less than
- Greater than
- Less than or equal to
- Greater than or equal to
- A range

Each type of selection, excluding the range option, can be made using two data elements or a data element and a constant value. The range option requires two constant values.

The data element/value being used is restricted by the data element table. The data element/value must be alike in type, both numeric or alphanumeric. There is an additional restriction for values: the maximum length is 13 characters.

If the data element/value fields are of different lengths, the value is right justified, zero filled for numeric; and left justified, blank filled for alphanumeric.

When more than one selection is made, the operator is given the choice of selecting the record if:

- All conditions are met (criteria and)
- One condition is met (criteria or)

The operator is not given the option of choosing several conditions.

One line per record is printed. Therefore, there is a restriction on the number of data elements that can appear on a report. This number varies depending on the lengths of the data elements. The maximum number can never exceed 16, although it can be less. Calculation is based upon the length, edit code, and spacing between data fields. The program informs the operator if too many elements are selected for printing.

The report title is limited to a maximum of 30 characters and input by the operator. This title is also used as the report description in the directory of saved programs.

OPERATION

The report generator is obtained via selection K, which creates the requested report, and selection L is used to execute the requested report.

Selection K prompts the operator for all data elements and sort fields that are desired for the report. From these prompts, two RPG II programs are generated (an extract and a print program). These programs are installed in the system. If the report is to be saved, the entry on the RG menu is updated with the report title and system date.

After all files are updated and the programs are installed, the operator is prompted to execute selection L to generate the requested report, or, if saved, the report can be executed from the RG menu.

SELECTION M - QUEUE LOADING REPORT

This report prints the distribution of accounts in the queues by next contact age.

The queue loading report computes the next contact date age for each account in each queue by subtracting the next contact date from the date entered or the system date determined by an operator prompt.

The distribution of the next contact date age for accounts in each queue is printed in the following loading catagories: less than 0 days, 0 days, 1 day, 2 days, 3 days and greater than 3 days.

The maximum number of accounts that can be in one loading catagory is 32,768. The counts appear as negatives if the number exceeds this limit.

The history procedure menu (appendix G) is displayed when the operator enters request code HS to the system prompt REQUEST =. Procedures on the menu perform the following:

- Movement of inactive accounts to the history file
- Updates of active accounts from the tape archives
- File purges
- File compression

The two purge file procedures are identical to those that can be invoked with file maintenance selections H and I. In addition to the above mentioned operations, a daily update of accounts from history may be performed from the daily cycle menu.

Table 6-1 shows the relationship between a procedure, the programs in that procedure, and the files accessed by those programs.

NOTE

It is not recommended that these history procedures be executed while collectors are on-line.

Before describing the procedures, an introduction to files SUMHIST and TAPEARC (summary account history and tape archives) is given.

SUMMARY ACCOUNT HISTORY

File SUMHIST contains summary information on accounts that are inactive, in the form of names, addresses, some

financial fields, master record activity block, and permanent comments. This information is used to update an account if it returns to active status (once more becomes delinquent). The records in this file can be purged periodically by the execution of selection C.

TAPE ARCHIVE HISTORY

When an account is moved to history, a complete dump of all files for that account is placed on tape, and a record of the account number, date moved, and the tape label is saved in file TAPEARC.

The information retained in TAPEARC is placed in file DELQMST if the account returns to active status.

SELECTION A - MOVEMENT TO HISTORY

The movement of accounts to history is performed at the user's discretion. The procedure associated with selection A moves accounts that are no longer active to files SUMHIST and TAPEARC.

The movement of accounts is triggered by records in file INACCT and occurs after the account has been inactive xx days. The value of xx is a user-defined parameter, and is specified for each of the three status codes, S (satisfied), R (released), and W (written-off), within record RSW1 in the UTIFIL file.

The INACCT file is sequentially read, checking for any account that has been in the file for greater than the number of days defined for the status code of the particular account. If the test is true and the account is still inactive, the summary information is added to the SUMHIST file, all account data is written to a history tape, a record is added or updated in the TAPEARC file with the system date, and the account is deleted from the active files, DELQMST, COSIGNER, and ACTFIL.

TABLE 6-1. HISTORY PROCEDURE/PROGRAM/FILE RELATIONSHIPS

Procedure	Programs Called	Files Used
PRFHS001 (A)	CHEKID, MHUPDT	ACTFIL, COSIGNER, DELQMST, INACCT, SUMHIST, TAPEARC, UTIFIL, INTEMP
PRFHS002 (B)	CHEKID, CHUPD1, CHUPD2	ACTFIL, COSIGNER, DELQMST, TAPEARC, UPHSTCM, UPREQ, UTIFIL
PRFHS003 (C)	CHEKID, PHDEL2	SUMHIST, UTIFIL
PRFHS004 (D)	CHEKID, PHDEL1	TAPEARC, UTIFIL
PRFMTO10 (E)	CHEKID, CMPDLQ	DELQMST, COSIGNER, ACTFIL

If the account data that is written to tape exceeds one reel, the operator is prompted to mount another tape and continue.

After the procedure is complete, a file compression (selection E) should be performed to release the space previously occupied by the inactive accounts.

SELECTION B - UPDATE FROM TAPE HISTORY

A complete update process occurs whenever a supervisor requests an active account be updated from the history tape files. The process locates the appropriate tapes, locates the account, and adds/updates all active files with the information from the tapes.

In operation, the procedure sequentially reads file UPHSTCM, and creates another file with all the tape labels that are required for the update process. This file, UPREQ, is sorted by label, then by account number.

Next, the operator is prompted to mount a specified tape. The procedure verifies the correct tape, locates the desired account(s), and the activity file is updated with the activity blocks contained on the history tape. Any other accounts that require updating from the tape are located and processed. When all accounts on a specific tape have been processed, the remaining tapes (if any) are processed, as determined by the contents of file UPREQ. If a tape cannot be found or successfully processed, the procedure either starts processing the next tape or terminates the process, depending on operator input to system prompts.

SELECTIONS C, D, AND E - HISTORY FILE MAINTENANCE

When files SUMHIST or TAPEARC are full, the operator enters selection C (purge SUMHIST) or D (purge TAPEARC) at the system console. These procedures purge the oldest accounts from their respective files. The

operator then initiates a file compression procedure by entering selection E at the system console.

SELECTION C - PURGE SUMHIST

This procedure sequentially reads file SUMHIST and deletes any account that is older than xx months. The value of xx is a user-defined parameter; however, six months is recommended. The procedure is performed on all accounts that meet the age criteria and are identified by status codes R (released), S (satisfied), or W (written-off), as established by record SMTH in the UTIFIL file. A report is also generated with details on each account being deleted.

This selection should be executed as indicated from information contained in the file space report.

SELECTION D - PURGE TAPEARC

This procedure reads the tape archive file (TAPEARC) and deletes any account that has been on file more than xx months. The value of xx is a user-defined parameter; however, 18 months is recommended. The value for xx is stored in record TMTH in the utility file (UTIFIL). A report is generated with information on all accounts being deleted.

SELECTION E - FILE COMPRESSION

The procedure associated with selection E performs a file compression on the active account files, which are as follows:

- DELQMST
- COSIGNER
- ACTFIL

The compression removes the accounts that have been moved to history, freeing the file space for future use.

OPERATING EXECUTIVE UTILITIES

To perform a task, the operator (at the system console) selects one of the following system application modules:

UT	System utilities	
ED	Text editor used to edit 80-character sequences or direct files.	
DC	Daily cycle, on-line reporting, and preparation	
HS	History system procedures	
MT	System file maintenance routines	
RP	On-demand reporting	
RG	Report generator, report directory	
EX	Exit	

A primary characteristic of the application module technique is that the operator works interactively with programs using simple, easy-to-understand commands and data displays. Little training is required to become proficient in using the system.

After the operator selects the application module to be run, CCS displays a menu of the tasks that the module can perform. The operator selects a task, and CCS begins an interactive dialogue with the operator during execution of the task. Each task consists of a sequence of operations and programs, known as procedures.

CCS informs the operator as each portion of the procedure begins execution. The system requests the operator to enter data or further instructions by means of messages displayed on the terminal screen. The reports generated on the line printer are formatted to simulate the type of business forms used to maintain records and may be output on preprinted forms. Some of the reports generated are also delivered to the terminal screen.

When a task is complete, the operator is notified. The system then requests the operator to enter the name of the next task.

CCS includes a file management system for storing and manipulating data. Files may be either sequential or indexed. If indexed, a file may be accessed by one of four keywords, allowing the user a variety of ways to retrieve stored data.

FEATURES

- The file manager utility (UTIL) allows the terminal user interactive file management by:
 - Aiding the user while he executes UTIL: listing names of all UTIL commands, listing parameters for a UTIL command, changing I/O devices, listing all the files stored on volumes currently on-line.

- Bringing volumes on-line and taking them off-line: renaming, deleting, or purging files, and compressing or clearing records in files.
- Altering file contents on storage media: loading files from another medium (for instance, from magnetic tape, where they have been previously saved), or dumping files to another medium.
- A second CCS utility, text editor (EDITOR), provides line-by-line (record) editing for certain files. These must be sequential or direct files with 80-character records, and must contain ASCII text or be direct. A direct file is a sequential file that initially has all of its records filled with blanks. EDITOR is used only in interactive mode.
- The sort utility (DSORT) rearranges records from one or several files into a specified order. Records can be sorted by one or more keys. It is possible to specify the order of sorting, and, therefore, the primary sorting criterion, the secondary sorting criterion, and so forth. The sort utility is not used in interactive mode.
- I/O completion processing prepares other programs for execution, and can suspend the execution of a running program if that program's timeslice has been exceeded. This prevents lengthy user programs from locking out other user programs. The suspended program is then queued for further processing.
- Data files are kept on disk packs, with each disk pack defined as a volume. Every volume is uniquely identified. The system may have up to four volumes on-line (the maximum hardware configuration), and an unlimited number of volumes off-line. The first volume contains the executive and all user programs. This volume must be on-line at all times, and is referred to as the system volume (SYSVOL).
- User task processing is sequential and is managed to optimize throughput. To accomplish this, programs may be exchanged between the main and mass memories.
- Protect processing validates each request, preventing interface with any other user program that is ready to execute or has already started.
- Programs are executed throughout the first 192-416KB of main memory. CCS uses a memory paging technique to map programs in physical main memory into an execution memory area. This feature speeds throughput and program swapping.
- Complete support of 56 console displays on a timeshared basis. The CCS executive intercepts and checks all terminal requests before translating them for execution.

 Overlapped execution of user programs with terminal I/O operations, file management functions, and mass memory swapping to improve user program throughput.

LIMITATIONS

The following are limitations on the application programs and their operation:

- The text editor and the sort utility cannot be executed concurrently.
- All programs/procedures accessing system peripherals other than the user terminal (for example, printer, tape unit) must be executed from the system console.
- A maximum of 20 (10 sequented, 10 indexed) files per console display can be open at one time.
- A maximum of 402 concurrent opens are permitted at one time.
- A maximum of 30 unique files can be open in the system at one time.
- The maximum record size (input or output) is 2000 characters.

SYSTEM OPERATION

AUTOLOADING CCS

Before autoloading the system, the operator should make sure that a SYSVOL disk pack is on disk unit 0 (that is, the disk pack is on the drive and the READY light is illuminated).

The CYBER 18 computer cabinet contains a control panel. The processor section of the panel contains the switches necessary to autoload the system.

The system is autoloaded by pressing successively on the control panel:

STOP MASTER CLEAR AUTOLOAD RUN

All remaining entries are made from the system console keyboard.

The following are examples of the type of messages displayed:

CCS 3.0 -- PSR LEVEL 149 01/01/80 0192K BYTES OF MEMORY - CPU I 0096K BYTES OF MEMORY - CPU II SYSTEM CONFIGURED FOR USE OF 1860-5 DUAL MODE MAG TAPES (50 IPS DRIVES)

The operator presses ESC and types:

J28@

The following message is displayed:

CCS 3.0 (MM/DD/YY)

ENTER DATE/TIME MMDDYYHHMM

The operator types the correct date and time and presses (CR); (for example, 0815800900 for August 15, 1980, 9:00 a.m.).

The following message is displayed:

DATE: 15 AUG 80

TIME: 0900:00

At this point, the system is ready to accept operator instructions from the system console.

MANUAL INTERRUPT

All CCS requests must be initiated from the system console by using a manual interrupt. This is performed either by pressing the MANUAL INTERRUPT switch on the control panel, or by simultaneously pressing the CONTROL and G keys on the system console. The system responds by clearing the system console screen and displaying:

M

At this point the operator may request a CCS request.

ENABLING CCS

 $\ensuremath{\mathsf{CCS}}$ is not automatically enabled when the system is autoloaded. It must be started by the system operator.

Several initialization functions may be performed as a result of a manual interrupt, including building system files. If the system contains no files when the request is made to enable CCS, all necessary system files are defined and initialized from data contained in the CCS program library. This process requires several minutes, but should not be necessary once CCS has been executed and file backup procedures have been performed.

Every time CCS is enabled, a program directory file (\$\$PGMNAM) is built from information contained in the program library. This process requires approximately 30 seconds and ensures that any user programs recently loaded into the system may be rapidly and correctly found by the CCS executive.

CAUTION

A user program loaded in the CCS program library that replaces an existing program (that is, the programs have the same name) may not be correctly located by the CCS executive unless the start operation is performed. If the start operation is abnormally terminated, contact the local PSD analyst.

Table 7-1 shows the procedure used to start CCS.

DISABLING CCS

Whenever it is necessary to disable CCS for maintenance, or other reasons, the procedure shown in table 7-2 is used.

TABLE 7-1. CCS START PROCEDURE

Display/Keyboard	Comments
CONTROL G	The operator performs a manual interrupt by simultaneously pressing CONTROL and G.
MI	The system indicates that a manual interrupt is active.
START (CR)	The operator enters a start request.
Building system files	The message indicates that the system files are being built.
CCS ACTIVE AT	The system confirms that CCS is active.

TABLE 7-2. CCS DISABLING PROCEDURE

Display/Keyboard	Comments
CONTROL G	Manual interrupt is performed.
MI	Manual interrupt is active.
STOP (CR)	The operator enters the stop request.
VERIFY .	The message requests the operator to verify that the system is to be stopped.
OK (CR)	The operator confirms that the system is to be stopped. Any other entry aborts the request.
UNTIL hhmm	The message requests the expected restart time.
hhmm (CR) or (CR)	The operator replies with a value between 0000 and 2400. If the expected restart time is not known, the operator replies with a carriage return only.
CCS OFF-LINE	The system confirms that CCS has been disabled. A message to this effect is displayed at every active terminal along with the expected restart time, if any.

If a user attempts to log onto the system while it is disabled, the following message appears on the terminal:

OFF UNTIL hhmm

If the system was stopped without an expected restart time, the following message is displayed:

OFF UNTIL ????

The operator at the system console may repeat the stop procedure at any time and the expected restart time can be updated.

LOCAL BATCH PROCESSING CONTROL

Local batch processing is controlled from the system console. A *BATCH,F command causes the batch processor to begin processing deferred batch jobs from the batch queue file (\$\$BATCH). The batch processor executes until all jobs are received from the specified device, or until the batch queue file is empty. Once initiated, deferred batch processing (*BATCH,F) remains in effect, even after the batch queue file is empty.

CCS DEVICE ERRORS

CCS peripheral devices are often used during the execution of programs from the system console. Occasionally, device errors may occur (for example, the line printer is not ready.) The following message is then displayed:

L,lu FAILED ec ACTION

Where: lu is the device logical unit number.

ec is the device error code.

One of two legal responses can be made to this message:

- RP Allows the I/O request to be repeated after the error condition has been resolved.
- CU Allows the operator to abort the program that is performing the I/O request.

Refer to appendix L for error code values.

ENGINEERING FILE

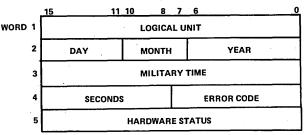
The CCS engineering file is provided to preserve driver error information for system maintenance. The engineering file is divided into three sections:

- Failure data formatting and collection
- Failure storage on mass memory
- Failure listing

DEVICE FAILURE HANDLING

When an I/O driver determines that an error condition has occurred, an entry is added to the engineering file.

The entries are of the following form:



If the failure is on a mass memory device, except for the flexible disk, the failure is saved in a 10-entry push-down table. Each 5-word entry of the table is of the same form as above. This failure data is saved in core on the premise that mass memory is not reliable because of the failure.

For mass memory failures, the failure is logged on the system comment output device with the message:

MM ERR xx LU=yy T=hhmm:ss S=zzzz

Where:	xx	is the error code.
	уу	is the logical unit.
•	hh .	is the hour.
	mm	is the minute.
	SS	is the second.
	zzzz	is the hardware status.

DEVICE FAILURE STORAGE

The system initializer defines a mass memory area of 99 sectors (preset to zero) for the engineering file. The address of this area is found in word 19 of the extended core table. One sector is allocated for each possible system logical unit. For each logical unit, 24 failures are saved as 4-word entries in a push-down/fall-off table. The first entry is the most recent failure.

DEVICE FAILURE LISTING

The device failure listing program is executed via the following mnemonic codes, following a manual interrupt.

- EF Lists all engineering file data for the system logical units. The EF entry has the format shown in figure 7-1.
- EFLU Lists engineering file data for a specified logical unit. The EFLU entry requesting the logical unit number is:

ENTER LOGICAL UNIT (xx)

Where: xx is the specified logical unit (printed in the same format as EF).

LOGICAL U	NIT 01 CO	RE ALLOC	ATOR
,		FAILURE	HARDWARE
DATE	TIME	CODE	STATUS
LOGICAL U	NIT 02 SOF	TWARE DI	JMMY DEVICE
		FAILURE	HARDWARE
DATE	TIME	CODE	STATUS
LOGICAL U	NIT 03 SOF	TWARE DI	JMMY DEVICE
		FAILURE	HARDWARE
DATE	TIME	CODE	STATUS
LOGICAL U			
		FAILURE	HARDWARE
DATE	TIME	CODE	STATUS
29 JAN 80	1903:38		0611
29 JAN 80	1902:15	00	0611
29 JAN 80	1901:28	00	0611

Figure 7-1. Engineering File Information Listing

 EFMM - Lists data from the core resident, mass memory failure table for all errors in the table.
 This entry produces a listing in the same format as EF, but contains only failure from the core resident, mass memory failure table.

FILE MANAGER UTILITY

The file manager utilities operate under the direction of the UTIL executive, which is called through the CCS executive. UTIL reads the individual request processor into main memory to process each UTIL command. UTIL operates in one of two modes, interactive or procedure stream.

INTERACTIVE MODE

UTIL is activated by replying to REQUEST = with:

UTIL or UT (CR)

The utility indicates it is ready to execute utility commands by displaying:

UTIL IN READY

When the operator enters the name of a specific utility command, UTIL individually requests each parameter that is necessary for command. Two levels of prompting, normal and full, are available to help the operator enter these commands:

- Normal prompting When the operator specifies a command, UTIL lists the mnemonic for each parameter associated with that command on a separate line. The operator must know the name and the form of each parameter. In this mode, he has the option of requesting the full name of a parameter.
- Full prompting When the operator specifies a command, UTIL lists the full name of each parameter on a separate line.

The prompting level may be specified at any time by using one of the HELP commands.

READY>

at the system console.

PROCEDURE STREAM MODE

Procedure stream mode does not use prompting. Parameters are specified in free-field form on the record that contains the mnemonic. This mode requires that the device control command (INPUT=) be previously executed in order to specify the procedure stream as the input for LITIL.

In procedure stream mode, the file manager utility is requested by a record containing UTIL as part of the procedure stream. UTIL contains 22 commands that provide four types of operations:

- UTIL executive operations which include the following; specifying the input and output devices, listing the UTIL command set, determining the amount of command prompting the utility displays to the operator in interactive mode, and exiting from the utility.
- File level operations include the following; defining and deleting files, releasing file space, listing file directory information or the file itself, renaming the file, copying a file to another file or to magnetic tape, compressing files to eliminate records previously marked to be deleted from the files, purging expired files from the system, and reloading files that were previously saved on magnetic tape.
- Record level operations include the following; allowing file records to be loaded from a user terminal. Loading from an external device is not allowed in the procedure stream mode.
- Volume level operations include the following; providing a means for initializing a volume (disk pack), making a volume accessible (on-line) or inaccessible (off-line), and copying one volume to another.

NOTE

Prompting is not used in procedure stream mode; commands are contained in records within the stream. These records have the following form:

COMMAND, P1=xx, P2=xx, ...Pn=xx

Where P1 through Pn are two-character parameter mnemonics. Each parameter is delimited by a comma.

UTIL COMMAND FORMATTING REQUIREMENTS

Format requirements of the UTIL command are as follows:

- The basic format for each UTIL request is a command followed by a parameter list. If interactive mode is used, each parameter is entered on a separate line.
- Only the first four letters of the command mnemonics need be used, except for INPUT and OUTPUT commands.
- The logical file names consist of a combination of the file name (FN), file owner (OW), and volume (VL). In general, the file owner is automatically specified as the terminal user identification: blank for common files, user ID for private files, or \$\$ for system files.

The file owner, volume, and device names must adhere to the following rules:

- Each must be eight or fewer characters in length.
- They must not contain a comma, equal sign, or semicolon, since these are used as delimiters in the command set.
- They may contain blanks, since they are ignored.

System peripheral devices are available only to the system console (terminal 00).

In procedure stream mode, UTIL commands must start at the first character position of the input record.

Parameter strings may occupy more than one record in procedure stream mode. This is accomplished by replacing a comma delimiter with a semicolon, and continuing the parameter string on the next record. Trailing blanks are disregarded.

UTIL COMMANDS

HELP Commands

The HELP commands are used in interactive mode only. They determine the amount of prompting afforded to the operator at the console display. The prompting level determines the appearance of the display after the operator enters the command mnemonic, and remains in effect until exit returns control to the executive, or until an alternate form of the HELP command is entered.

Two prompting levels are possible, normal and full. Normal prompting is the default condition if operating in interactive mode. Under normal prompting, each parameter is individually requested by typing a message with the following format:

Pn=>

The operator should be familiar with the meaning of the parameter mnemonic Pn. The operator may make one of three possible entries:

 (CR) which represents a null entry that causes UTIL to supply the parameter default value.

- A parameter value followed by (CR).
- A question mark (?) followed by (CR). If the operator is not familiar with a particular parameter, typing ? (CR) causes the full name of the parameter to be displayed:

PARAMETER NAME =

Following this, the parameter value or null entry may be made.

Normal prompting is activated by typing:

in response to READY. Since this is the normal operating mode of UTIL, its entry is only required when disabling the full prompting mode.

Full prompting is activated by typing:

in response to READY. The mode selection (x) may be any nonblank character. Full prompting causes the complete name of each parameter to be displayed. Data entry is performed in the same manner as in normal prompting mode, except that the question mark has no meaning.

COMMAN Command

This command displays a list of all UTIL commands on the system console. Two forms are available.

HELP INIT DEFINE

COMPARE

COMMAN,x, where x is any nonblank character, displays the names of all UTIL commands, together with the corresponding parameter mnemonic:

HELP, M INIT, VL, NF, DK DEFINE, FN, VL, ED, TY, LR, NR, K1, P1, K2, P2, K3, P3, K4, P4, SA

COMPRE, FN, VL

INPUT Command

The INPUT command designates the device or file from which UTIL receives commands and parameters. All commands and parameters must be arranged on the device or file as they would be in interactive mode. Null entries must be specified by blank records.

The command format is:

INPUT = name

where name is a device mnemonic or the file name as indicated in table 7-3. The command designates peripheral devices only if it is entered on the system console.

OUTPUT Command

The OUTPUT command designates the device or file that UTIL to which directs its output. Files used with the OUTPUT command must be defined as sequential, with 80-character, nonsector aligned records.

The command format is:

OUTPUT= name

where name is a device mnemonic or file name as indicated in table 7-3. The command can designate peripheral devices only if it is entered from the system console.

EXIT Command

The EXIT command returns control of the system to the CCS executive. All nonstandard device and prompting selections (HELP, INPUT, OUTPUT) are reset by this command.

The command format is:

EXIT

DEFINE Command

The DEFINE command creates a file manager file.

The command format is:

DEFINE,FN=filename, VL=vlmlabel,FD=mmddyy, TY=t,LR=reclngth,NR=maxnorec,K1=n,P1=m, K2=n,P2=m,K3=n,P3=m,K4=n,P4=m,SA=s

TABLE 7-3. DEVICE NAMES

Device/File Name	Description
'filename'	Any sequential file that has been properly defined.
TERMINAL	System console
LPRINTER	System print device
PRINTER	System print device - FTN mode
READER	System card reader
TAPEO	Magnetic tape unit 0
TAPE1	Magnetic tape unit 1

Where: filename is the one- to eight-character file name; embedded blanks are ignored.

vlmlabel is the one- to eight-character volume name; the default value is disk 0, which is the system volume (SYSVOL).

mmddyy is the expiration date (month, day, and year); the default value is the present date.

is the file type:

- S Sequential file; records must be presented randomly with respect to the default value.
- R Indexed file; records can be presented randomly with respect to the primary key.
- O Indexed file; records can be presented in ordered fashion with respect to the primary key.
- D Direct file; a sequential file in which all records are blank-filled by UTIL. Direct file record lengths may not exceed 512 bytes.

recligth is the record length in bytes. The range is 1 through 65,534; the default value is 192 bytes (one sector).

maxnorec is the maximum number of records.

The range is 1 to 16,777,215; the default value is 1024 records.

n is the length of key n in bytes. The range is 1 to 29. For n1 the default is 1; for other keys, the default is 0.

m is the position of the first byte of key
m relative to the start of the record
(byte 1). The default value is 1.

indicates whether sector alignment is chosen; a sector is 192 bytes. Sector alignment allows improved file access and throughput, but may require excessive mass storage file space.

Y Yes
N No (This is the default value.)

NOTE

If TY=S (sequential files) or D (direct files), all the n and m parameters are suppressed.

The following example illustrates the interactive use of UTIL to define an indexed file.

DEFINE FN=ORDERS VL=VOLUME2 ED-022177 TY=0 LR= K1=4 P1= K2=29 P2=5 K3=10 P3=34 K4=8 P4=44

SA=Y

This creates an indexed-ordered file, which is named ORDERS, on volume2. Each sector-length record has four keys: key 1 has up to four characters (1 to 9999), and is the primary key. Key 2 is the customer name, an alphanumeric key, 29 characters long, beginning immediately after key 1. Key 3 is a 10-letter regional key, immediately following key 2. Key 4 is an eight-character alphanumeric for the date of the order (mm/dd/yy), and begins immediately after key 3.

DELETE Command

The DELETE command releases the space on mass storage held by the specified file. The name entry is removed from the file directory.

The command format is:

DELETE, FN=filename, VL=vlmlabel

Where: filename is the one- to eight-character file name.

vlmlabel is the one- to eight-character volume name; the default value specifies an automatic search of all mounted and ready volumes.

CLEAR Command

The CLEAR command removes all records in the specified file but retains the file's entry in the file directory.

The command format is:

CLEAR, FN=filename, VL=vlmlabel

Where: filename is the one- to eight-character file name.

vlmlabel is the one- to eight-character volume name; the default value specifies an automatic search of all mounted and ready volumes.

Direct files may not be cleared, since this invalidates this file's format.

LIST Command

The LIST command displays the contents of the designated file on the specified device in the mode selected (ASCII, hexadecimal, or EBCDIC). System peripheral devices may be used for output if the request is made from the system console. If the display is made to the console display the word PAUSE appears at the end of the last complete record for this screen of data, allowing the operator to view the file listing each time the screen is filled. The operator presses carriage return to receive the next screen of the listing.

The command format is:

LIST,FN=filename, VL=vlmlabel, M=m,L=lstdvnam,F=U/F

Where: filename is the one- to eight-character file name.

vlmlabel is the one- to eight-character volume name; the default value specified automatic search of all mounted and ready volumes.

m is the mode (A=ASCII, H=hexadecimal, E=EBCDIC); default specifies that the file format is ASCII.

lstdvnam is the one- to eight-character list device name as indicated in table 7-3; default is the system console.

U/F specifies the following:

U Unformatted without headers or record numbers

F Formatted with headers and record numbers (DEFAULT)

STATUS Command

The STATUS command prints the status of the specified file or the status of all files belonging to the specified owner. STATUS also indicates the number of free sectors remaining on the specified volume(s). This command prints only those files belonging to the user logged in at a terminal. All files in the system may be printed from the system console.

The command format is:

STATUS, FN=filename, OW=ownrname, VL=vlmlabel

Where: filename is the one- to eight-character file name.

ownrname is the one- to eight-character owner name; the default value specifies the common files.

vlmlabel is the one- to eight-character volume name; the default value specifies all mounted and ready volumes.

When the STATUS command is input from a terminal and all parameters are omitted, the command prints the status

of all files on all mounted and ready volumes that belong to the user. This provides the operator with a file directory and information on each file listed. If only the VL parameter is specified, the status of all files from that volume is listed.

RENAME Command

The RENAME command allows the user to change the name of a specified file or to change the file's expiration date. The file and records remain in place, but are accessible only through the new name.

The command format is:

RENAME,FN=filename, VL=vlmlabel,F2=filenam2, ED=mmddyy

Where: filename is the one- to eight-character file name.

vlmlabel is the one- to eight-character volume name; the default causes an automatic search of all mounted and ready volumes.

filename2 is the new file name.

mmddyy is the expiration date; default value is the system date.

If F2 is defaulted, only the expiration date is changed.

COPY Command

NOTE

This command can only be used to copy sequential or direct file types. You cannot use the UTIL copy command to copy indexed files.

The COPY command causes UTIL to copy an existing file to a new file on mass storage. The original file remains unchanged. The file type and record lengths must be the same for both files, and the new file must contain at least as many records as the old file (and may have more). The maximum record length is 8000 bytes.

The command format is:

COPY,FN=filename, VL=vlmlabel,F2=filenam2, OW=ownrname, V2=vlmlabl2

Where: filename is the one- to eight-character file name.

vlmlabel is the one- to eight-character volume name; the default causes an automatic search of all mounted and ready volumes.

filenam2 is the new file name.

ownrname is the one- to eight-character new owner name; the default specifies a common file.

vlmlabl2 is the volume containing the new file; the default value causes an automatic search of all mounted and ready volumes.

COMPRESS Command

The COMPRE command copies an existing file onto its own file space, but deletes any records that are marked to be deleted. New key lists are built as necessary.

The command format is:

COMPRE,FN=filename, VL=vlmlabel

Where: filename is the one- to eight-character file name.

vimilabel is the one- to eight-character volume name; the default causes an automatic search of all mounted and ready volumes.

PURGE Command

The PURGE command releases space on mass storage for all the designated owner's files that have an expiration date that is earlier than the current date. The file entry is removed from the file directory for the volume. This command is available only at the system console in an off-line mode.

Before purging any file, UTIL displays the name of the expired file from the group of files that satisfy the OW and VL parameters entered by the operator. The operator must verify that each named file is to be purged before the system deletes the file.

The command format is:

PURGE, OW=ownrname, VL=vlmlabel

Where: ownrname is the one- to eight-character owner name; the default value is all common files.

vlmlabel is the one- to eight-character volume name; the default value causes a search of all mounted and ready volumes.

Each time an expired file is located by UTIL, the message:

FILENAME, OWNRNAME PURGE=>

is displayed on the screen. If the operator does not wish to purge that file, NO is entered. Any other entry causes the file to be deleted.

DUMP Command

The DUMP command transfers a specified file to a magnetic tape, together with sufficient information to allow the file to be redefined at a later time. The maximum record length is 512 bytes. Several files may be

placed on a tape by repeating the command. All of the user's files may be dumped by specifying only the owner name; all files on a volume may be dumped by specifying only the volume name. This command can be requested only from the system console. Dumping clears records marked as deleted.

The command format is:

DUMP,FN=filename,OW=ownrname,VL=vlmlabel,P=tapex

Where: filename is the file name.

ownrname is the owner name.

vimilabel is the volume name; the default value causes a search of all mounted and ready volumes.

tapex is the selected output unit (table 7-3).

DUMP writes two end-of-file (EOF) marks after each file as it is copied onto tape. If another file is copied sequentially onto the tape, the second of these two EOF marks is eliminated.

If an end of tape is encountered, the tape is backed up to the end of the previous file. Two file marks are written and the tape is unloaded. A message is output to the operator:

MOUNT NEXT TAPE - (CR) WHEN READY

After the operator mounts and readies the next tape, he presses (CR). The DUMP continues on the next tape.

RELOAD Command

The RELOAD command allows files that were previously dumped via DUMP to be reloaded into the system. To be reloaded, the file(s) must not be defined in the system.

NOTE

The file name is a combination of FN, OW , and VL .

The reload utility processor creates the required file(s) from information saved on the magnetic tape during the DUMP operation. Specifying a file name and owner causes the operating system to search for that file/owner combination on the tape, specifying only an owner causes the operating system to search for all of the owner's files on the tape. This command is available only from the system console.

The format of the command is:

RELOAD, FN=filename, OW=ownrname, VL=vlmlabel, I=inputdev

Where: filename is the one- to eight-character name of the file on the magnetic tape to be reloaded. The entire tape is searched for this file name. If FN is blank, all files on the tape are loaded.

ownrname is the owner name.

is the one- to eight-character volume name where the file is to be loaded; the default is volume 0 (SYSVOL).

inputdev is the one- to eight-character name of the input device (table 7-3).

If a single file is to be loaded, it is terminated by two EOF marks. If several files are to be loaded from the same tape, each file, except the last, is terminated by a single EOF mark; the final file is terminated by two EOF marks. As each file is located and loaded from tape, the message:

FILENAME OWNRNAME LOADED

is displayed on the screen. If the file is already defined in the system prior to the RELOAD request, the message

FILENAME OWNRNAME NOT LOADED

If a file dump requires more than one tape, the RELOAD operation must be repeated for each tape of the DUMP.

LOAD Command

The LOAD command allows a previously defined file to be loaded with data from an external device. The device may be the console display or a system peripheral, but the latter is only allowed from the system console. The maximum record length is 512 bytes. Records are appended at the end of any existing records in the file.

The command format is:

LOAD, FN=filename, VL=vlmlabel, I=input, M=mm

Where: filename is the one- to eight-character file name.

vimlabel is the one- to eight-character volume name; the default causes a search of all mounted and ready volumes.

inputdev is the one- to eight-character device name; the default value specifies the console display.

mm mnemonic for the mode; default value specifies that source data is in ASCII mode.

> **ASCII EBCDIC**

OA Ordered-indexed file (ASCII)

OE Ordered-indexed file (EBCDIC)

If the input device is a system peripheral, loading continues until end of file is encountered on the device, or until the designated file is full. If data is being input from the console display, an input prompt () is displayed as each record is requested. To terminate, the operator responds to the prompt with a program interrupt (CONTROL D).

If the LOAD command is part of a procedure stream, the data must follow the command and be terminated with a record containing /!. The data cannot reside on a system peripheral.

INIT Command

INIT writes a volume label on the specified disk pack; it is used in interactive mode, and only is allowed only from the system console. The volume in question must be dismounted prior to executing this command.

NOTE

This command may not be used to label the system disk (SYSVOL). SYSVOL is labeled as a part of CCS initialization.

The command format is:

INIT, VL=vlmlabel, NF=flno, DK=u

Where: vimlabel is the one- to eight-character volume name.

> flno is the maximum number of files to be written on this volume. The range is 1 to 2048; the default is 256.

> is the mass storage physical unit number. The range is 1 to 3.

If a volume label already exists on the disk pack, its volume name is displayed at the terminal, and the message:

VOLUME =

is output. If the operator enters (CR) to this request, a new volume label is created and the file space directory is initialized, making the entire volume available for file storage. Any other response to VOLUME = causes the volume name to change, but does not otherwise alter the disk pack.

MOUNT Command

The MOUNT command places the specified volume on-line to CCS. The volume should be loaded and ready on the specified disk drive prior to this request. The ready condition is indicated by the READY light on the disk drive. This command only is allowed only from the system console.

The command format is:

MOUNT, VL=vlmlabel, DK=u

Where: vimlabel is the one- to eight-character volume name.

> storage physical unit is the mass number; the range is 1 to 3.

DISMOUNT Command

The DISMOUNT command takes the specified volume off-line from CCS. The ready condition is not affected by DISMOUNT. This command is accepted only at the system console.

The command format is:

DISMOUNT, DK=u

Where: u is the mass storage physical unit number; the range is 1 to 3.

NOTE

DISMOUNT cannot be used to take SYSVOL off-line from CCS.

SAVE Command

The SAVE command copies an entire disk volume from a specified input volume to a specified output volume. The SAVE command can only be executed from the system console with CCS disabled.

The 1867-20 disk drive is also referred to as the 50 megabyte disk drive. In a CCS 3.0 system, the 1867-20 (50 MB) disk drive can be formatted as either a 96 word sector or a 569 word sector.

The 1867-40 disk drive is also referred to as the 180 megabyte disk drive. On a CCS 3.0 system the 1867-40 (180 MB) disk drives are formatted as a 96 word sector.

If the disk drives on the system are all a 96 word sector, a disk pack volume can be copied (from and to) any available disk drive on the system.

The word sector of the disk drives is configured at installation time and must not be changed, or they will not accommodate the system which has been selected. A disk pack volumes word sector is determined by the word sector of the disk drive it resided on when created.

Special Circumstance

To accommodate the CCS 3.0 36000 account system configuration, the SAVE command must be able to copy to and from different word sector volumes.

On this system, when a disk pack volume which is operational on a 50 MB, 96 word sector disk drive is copied to a disk pack volume which is residing on a 50 MB 569 word sector disk drive, it is not operational. The information residing on the "copied to" pack is only used for restoring the information to a 50 MB, 96 word sector volume.

For example: A 96 word sectored volume (which is mounted on a 96 word sector drive) can be copied to a 569 word sector volume (which is mounted on a 569 word sector drive); however, the 569 word sectored volume (mounted on a 569 word sectored volume (mounted on a 96 word sectored volume (mounted on a 96 word sector disk) before it is operational.

Operation of SAVE

SAVE operates off-line so that a volume can be copied onto SYSVOL (volume 0); therefore, before executing the SAVE command, the operator must first stop or disable CCS and log on to the disabled CCS system. Activate

UTIL by responding to a system prompt of REQUEST = with:

UTIL or UT (CR)

The command format for SAVE is:

SAVE, DK = U, D2 = D

Where: u is the mass storage physical unit number from which to copy; the range is 0 to 3.

d is the mass storage physical unit number of the output volume; the range is 0 to 3.

After accepting the parameters, the following message is displayed:

TURN OFF PROTEC SWITCH (ESCJ20@) AND TYPE CARRIAGE RETURN

The indicated operations are performed on the keyboard by pressing ESCAPE. Followed by J20@ and CR. The following message appears:

SETUP VOLUME(S) TO BE SAVED AND VERIFY

At this point, the volume disk packs must be installed on the correct drives.

NOTE

Since two complete sets of disk packs must be available in order to backup a system, it is recommended that one set of packs be marked MASTER and the other set BACKUP. The MASTER set should always be used for on-line operations. Therefore, the MASTER disk pack is always copied to the BACKUP disk pack. This method prevents inadvertant copying to the wrong disk pack.

There is one exception to this rule. Refer to transaction replay in the CCS Operator's/Collector's Guide.

When the disk packs are mounted and the drive is ready, enter:

OK (CR)

The following message is displayed on the master console:

VERFIFICATIN OR CORRECT SAVE VOLUMES

PACK VOLUME NAME LAST SAVE DATE TYPE FROM SYSVOL 9999999 MASTER TO SYSVOL 9999999 BACKUP

The SAVE function also contains features to prevent the inadvertant destruction of volumes by incorrect operator handling. When SAVE is requested, the volume names, date

the pack was last saved (copy to disk), and the backup designation flag are closed. Warning messages are displayed to note the following abnormal conditions:

 WARNING YOU ARE COPYING FROM A BACKUP TO A MASTER VOLUME

The volume you have specified as "copy to" was designated as a MASTER volume when it was created by a SAVE operation.

WARNING VOLUME NAMES DO NOT COINCIDE

The volume specified as "copy from" has a different volume name than the specified "copy to" volume.

 WARNING DATE ON COPY TO VOLUME IS THE SAME AS OR LATER THAN DATE ON COPY FROM VOLUME.

The date on the volume header of the "copy to" volume is more recent than, or the same as, the date on the volume header of the "copy from" volume. This points to a potential copy of older data over newer data

If one or more of the warning messages has been displayed, the following message is displayed on the system console:

TYPE GO TO CONTINUE, EX TO EXIT >

NOTE

If the operator wants to override the error message(s) and continue with save, enter:

GO (CR)

If the disk packs have been mounted in error, enter:

EX (CR)

The disk packs should be mounted correctly. It is necessary to autoload the system and restart the SAVE function after starting and stopping CCS.

If none of the warning messages were displayed SAVE continues with the save operation.

The following message is displayed on the master console:

DESIGNATE COPY "TO" PACK AS: MASTER = 1 BACKUP 0?>

If the recommended backup procedure is being adhered to,

0 (CR)

At the conclusion of the save operation, the message

VOLUME SAVE COMPLETE

is displayed, and the system must be autoloaded to continue.

To perform another SAVE operation, the operator must stop CCS and then log onto the disabled system.

HOST Command

The HOST command allows an operator to add or delete entries in the \$\$HOST file. This command may only be executed from the system console.

The command format is:

HOST, HO=host, OP=opt, PT=proto

Where: host is the one- to four-character name for the host, in other words, LOCL for local batch.

opt is ADD or DEL.

proto is the type of protocol being used with this host (HASP or 200UT).

SET Command

The SET command allows an operator to assign logical unit numbers to entries in the host file. The host entry must be previously defined by the host command before a logical unit is assigned. A logical unit of zero causes the input batch driver to terminate processing jobs for that host. This command may only be executed from the system console.

The command format is:

SET,HO=host,LU=lu

Where: host is the one- to four-character name of the previously defined host.

lu is a one- to two-digit logical unit number associated with the batch input driver.

The local batch input driver is always 13 in CCS.

BATCH Command

The BATCH command allows a terminal user to create entries in the batch file for processing by the batch input driver through the job processor, if local batch, or through a specified host. The file to be batched must be a source language text file (RPG II, FORTRAN, or Macro Assembler) and must contain a *JOB record somewhere in the file if it is for a remote host. This command must be executed from the system console.

The command format is:

BATCH,FN=filename,OW=ownrname,VL=vImlabel,HO=host,TY=t,PN=prqnam,M=A/R

Where: filename is the one- to eight-character file name of the file containing the source program. This file must not

be sector-aligned.

ownrname is the one- to eight-character owner name. This entry is valid only from the system console; the user ID entered during log on is automatically included in all other

console displays.

vimilabel is the one- to four-character volume name, the default value is assumed to be the system volume (SYSVOL).

host is the one- to four-character host name that has previously been defined by the HOST command.

t is the mnemonic for the source language type:

R RPG II (default value) F FORTRAN A Macro Assembler

prgnam is the one- to six-character program name to be used in the CCS program library directory. This parameter is required only for FORTRAN and Macro Assembler programs.

A/R is the binary (absolute or relocatable) output:

A produce absolute binary output (*N,FILE,,,B)

R produce relocatable binary output (*L,ENTRY)

The last three parameters (TY, PN, M) are required only for local batch processing.

To compile the program, activate the CCS batch processor, which may require that CCS be disabled. When the system is conditioned to run the batch processor, the following procedure should be employed:

CONTROL G Manual interrupt is performed.

MI Manual interrupt is active.

*BATCH,F The CCS batch processor is activated and directed to receive input from the batch input file.

When the batch file entry is created, the job number is displayed on the console in the following format:

Jmnn.

Where: m is a one-digit number identifying the host.

nn is a two-digit job number for that host.

BATCH STATUS Command

The BATS command lists or displays the status of an individual active job, the status of all active jobs by host for a particular owner, or the status of all active jobs for all hosts for a particular owner. In addition, a summary may be requested to display or print a tabular summary of all jobs for all hosts or for a particular host. The summary option may be executed from the system console only.

The command format is:

BATS, JN=Jmnn, HO=host, L=lstdevnam

Where: Jmnn is the four-digit job number.

default is all jobs for a particular host or all jobs for all hosts. If the job number is SUMM, a summary of all jobs for a particular host, or for all hosts is given (system console)

all hosts, is given (system console).

host is a four-character host name. If the host name is not specified, a status (or summary) for all hosts is given.

Istdevnam is the output device name. The default output device is the terminal screen. The printer option may only be used from the system console. If the display is made to the console, the word pause appears at the end of the last complete record for this screen of data, allowing the operator to view the status listing each time the screen is filled. The operator presses (CR) to view the next screen of the

STATUS listing.

DISCARD Command

The DISC command allows the user to delete entries in the host file. A discard may be performed for any job in the host file from the system console.

The command format is:

DISC, JN=Jmnn

Where Jmnn is a four-digit job number.

FLUSH Command

The FLUSH command purges all jobs in the host file that are in the sent status and that are n days old. If n days is a

minus sign (-), and the host is inactive (in other words, the batch driver is not processing this host), all jobs are purged for the host. The command may only be executed from the system console.

The command format is:

FLUSH, HO=host, DO=day

Where: host is a four-character name of the host.

day is a one- to three-digit number; if the number is a minus sign (-), all jobs for inactive host are purged.

DISPOSE Command

The DISPOS command allows the user to dispose of a job that is in the output received status. Three forms of disposal are available:

- The print option allows the system console operator to produce a hard-copy printout of the output job.
- The move option allows the user to move the output job, beginning at a designated character position, to another file of a designated record length.
- MOVEPR is a combination of move and print. If the output job is moved to a file with a record length of 80 characters, the new file may be processed through the text editors, but, once the move option is exercised, the print option is no longer available.

The master terminal may dispose of any job in the host file.

The command format is:

DISPOS, JN=Jmnn, OP=option, NC=char, SC=stc, VL=vlmlabel,FN=outflnam

Where: Jmnn

is a four-digit job number.

option

a five-character name (PRINT), a four-character name (MOVE), or a (MOVEPR). six-character name There is no default for parameter.

char

is the one- to three-digit number of characters. The default value is 80. This parameter is not displayed if the print option is selected.

stc

one- to three-digit starting character; the default value is 1. This parameter is not displayed if the print option is selected.

vlmlabel is a one- to eight-character volume name. This parameter is not displayed if the print option is selected. This parameter defaults to the system volume.

outflnam is a one- to eight-character file name. no default for this There is parameter. This parameter is not displayed if the print option is selected. The output file name must be unique and not previously defined.

PRINT Command

The PRINT command allows an operator to print the output files resulting from batch processing. This command may be executed only from the system console.

The command format is:

PRINT, OP=jbno, L=lstdvnam

Where: ibno

is a job number; jmnn prints a specific job, PRxx prints an unidentified file xx, and PR00 prints all unidentified files. It can also be a one- to four-character host name to print all jobs with a print request status for a specified host.

Istdvnam is the one- to eight-character list device name, as indicated in table 7-3.

ERROR MESSAGES

When an error occurs during a file operation, leaving the file in a locked condition, it is impossible to access the file again during the current UTIL operating cycle. The error message file is currently locked as output for any operation requested for that file. If this occurs, exit from the utility processor and request it again. This unlocks any locked files, making them available for use.

Appendix L gives a list of the error messages used by UTIL.

TEXT EDITOR

The CCS text editor (EDITOR) adds or changes records in existing file manager files. Editing operations are performed directly on the file.

FEATURES

There are some restrictions on the type of file that can be edited.

- If the file is to be built initially with the text editor, the file must have previously been defined by UTIL as a direct or a sequential file. The file uses 80-character nonsector-aligned records.
- If the file was not defined by UTIL, it must be a file sequential 80-character containing nonsector-aligned records in a format compatible with the specified compiler (RPG II, FORTRAN, Macro Assembler).

CAUTION

The EDITOR cannot be run concurrently with the sort utility. While EDITOR allows operation on both sequential and direct files, it really only operates on direct files. If the user's file is a sequential file, and it is not completely full of records, EDITOR fills any unused records with blank records and changes the file to a direct file.

If the user requires that data records not be blank (RPG data files may not be blank), the user must ensure that the file is completely full of data before any editor operations are performed.

The text editor operates on a line-by-line (record) basis. The GET command specifies the file and the file type to be used. Alterations are possible in several modes:

- Changing a single line The line is specified and the change is entered.
- Changing a specific character string in one or more lines - The operator specifies a sequence of records (lines), the old character string to be replaced, and the new character string. All specified records are altered by replacing the old character string with the new character string. The operator is informed of each line that is changed, but the contents of the lines are not displayed.
- Adding lines The operator adds the text, including the line numbers in the proper field position. Pressing (CR) ends the current line entry, and the text editor is ready for another editor command.
- Adding lines with automatic line numbering This mode is available with or without special line formatting (tabs set to define field boundaries). The text editor supplies the line number in the proper field. The operator enters data, ending the line with a carriage return. To leave automatic mode, the operator enters (CR) at the beginning of a new line.

For text editor purposes, lines have a range of 1 through 32,767.

NOTE

Lines are not normally numbered sequentially. The default line number interval for the text editor is 10.

The text of the line is displayed in ASCII. RPG II files have the line number on the left; FORTRAN and Macro Assembler files have line numbers on the right. If the automatic editor mode is selected, EDITOR supplies line numbers for new records in the proper field position. A tabulation mode is available to aid the user in entering (or altering) highly formatted records of the RPG II type. In this mode, the operator may skip past unused (or unchanged) fields to the field to be altered. The RESET key on a terminal keyboard is used as the tab key. A cursor positioning mode is then available to skip over unused/unchanged characters in the field.

NOTE

A previous tab field cannot be referenced by using the left arrow () cursor control. Instead, RUBOUT may be used to locate the cursor at the beginning of the previous tab position.

CALLING EDITOR

To call the text editor, the user replies to REQUEST= with:

ED or EDITOR (CR)

The text editor responds with:

EDITOR IN READY >

The message READY> is repeated after each EDITOR request is performed, indicating that EDITOR is ready to accept the next request.

The user may type in an abbreviation instead of a full command (REQUEST) word. In this section the full command word is given for each editing request.

If an invalid command is entered, the following error message is displayed:

INVALID COMMAND

followed by READY>. If an insufficient abbreviation is entered, the following message appears:

COMMAND NAME NOT UNIQUE

A list of EDITOR error messages is contained in appendix N

When data is listed on a terminal, the message:

PAUSE>

is output as the screen is filled. This allows the operator to examine the text. To continue, press (CR).

EXITING FROM EDITOR

To leave the text editor, the operator replies to READY> by typing:

EXIT (CR)

The system responds with the message:

EDITOR OUT REQUEST=

FILE RETRIEVAL

The contents of a CCS file are available to the text editor by the GET command. The operator replies to READY with:

GET, filename (CR) or GET, filename, R (CR)

Where: filename is the name of the desired file. It must be either a direct 80-character record file or must contain 80-character source text records. The file must not be sector-aligned.

R indicates that the file contains RPG II source text records.

The text editor locks the file during the entire EDIT operation, so that other terminal users cannot modify it.

CAUTION

When a file that should be usable by the text editor cannot be opened, the sequence command is provided to remedy this problem. The file type must be sequential or direct and records must be 80 characters in length.

TEXT ENTRY

There are two methods of adding records to a file, single-line mode and automatic mode.

Single-Line Mode

This mode is initiated when the operator replies to READY> with:

LINE,n,t

Where: n is the line number of the line to be changed or added.

t is the format type:

H Control card specification

F File description specification

E Extension specification

L Line counter specification

I Input specification

C Calculation specification

O Output specification

X RPG trace specification

* RPG array data (also used for /* terminator)

blank Non-RPG file format

In this mode the operator may modify an existing line of data, insert a line of data between existing lines, or add a line at the end of the file.

When one of the RPG format types is used, the appropriate tab positions for that format type are set up. If the format type is not specified, a non-RPG format is assumed that retains the last specified tab setting, if any, defined by the STAB command. The default tab settings for non-RPG format are 1 and 76. Any other specification for the T parameter results in an illegal format specification error.

To change an existing line, the operator enters the line number and the format type. The line is displayed on the screen with numbers appearing above and below the displayed line to indicate character positions. The cursor is positioned at the first tab position for this format type. The operator may re-enter the entire line at this point, or within the line. Only those characters actually entered are changed in the original record.

To add a new line, the operator enters the new line number and the format type. A blank line with the line number and format type, if necessary, is displayed on the screen. Numbers appear above and below the line to indicate character positions. The cursor is positioned at the first tab position for this format type. The operator may then enter the new line.

Auto Mode

Using one of the RPG format types, certain fields are preset and line numbers are automatically generated. Numbers appear below the line indicating character positions. The cursor is positioned at the first tab position for that format type. Each time AUTO is entered, the screen is cleared and a position header appears at the top of the screen.

To activate the automatic mode, the operator answers READY> with:

AUTO,t,nn,ii,progid

Where: t is the format type:

H Control card specification

F File description specification

E Extension specification

L Line counter specification

I Input specification

C Calculation specification

O Output specification

X RPG trace specification

* RPG array data (also used for entering /* terminator)

blank Non-RPG type

nn is the base line number; the default is 10.

ii is the line number increment; the default is 10.

progid is the program identification. This field is required on RPG-type files for format type H. It is six positions long, and may appear on other RPG format types, but is not required. It appears as positions 75 through 80 of the record.

The entry of any of the nine RPG II format types also sets the appropriate tab positions for the entry of source text.

If nn is blank, a non-RPG format is specified. This retains the last specified tab settings, if any, as defined by a STAB command. The default tab settings are 1 and 76. Any other specification for the T parameter causes an illegal format specification error.

The program identification is optional for non-RPG type files. If it is included, it may not exceed three characters and is truncated if it exceeds three characters; it appears in positions 73 through 75 of the record.

NOTE

If nn is blank, and records exist in the file, the next record is numbered M*I, where M is the line number of the current last record and I is the specified increment.

Text Entry Examples

To change an exiting line the operator replies to READY> with:

LINE,40,F

The screen is cleared, the character position indicator lines are output and the existing line is displayed:

1234567	••••			 7890
00040F>TIFIL IF	F	80	DISK	YCB00060
1234567				7890

The cursor and > are at position 7. The operator moves the cursor to the position in error with the tab and cursor position keys, and corrects the error.

To add a new line the operator replies to READY with:

LINE,45,F

The screen is cleared, the character position indicator lines are output and the line number and format type for the new line are displayed:

1234567890123	67890
00045F	CYB060
1234567899123	67890

The cursor and > are at position 7. The operator may enter the new line.

To enter an RPG II format record, the operator replies to READY > with:

AUTO,H,,,PROGID

The screen is cleared and the display is:

1234567890	•••••	1234567890
00010H>	•	PROGID
1234567890		1234567890

The character positions appear at the top of the screen and below the data line. The cursor and > are at position 7, the first tab position for RPG format type H. Since this is a new file (no records) and nn and ii are omitted, nn is 10, and ii is 10.

Under AUTO with non-RPG type format, the functions are similar, but there are no tabs for non-RPG format types. For example, when the operator enters:

AUTO,,,,TID

The screen is cleared and the display is:

1234567890	34567890
> 1	TID00010
1234567890	34567890

The cursor and are at position 1. The program ID and page/line number appear in positions 73 through 75 and 76 through 80, respectively. The next line is 00020 since default for both nn and ii is 10. This is a new file (no records).

After the operator enters a line of text terminating with a carriage return, the next line is displayed. The operator either enters text, continuing the process, or enters (CR), returning the editor to the READY condition.

INITIALIZING EDITOR

To initialize EDITOR so that a new file may be processed the operator replies to READY > with:

CLEAR (CR)

DELETING TEXT

To delete a specified record (k1) from the file, the operator enters:

DELETE, k1, (CR)

Where K1 is the line to be deleted.

To delete a number of consecutive records, the operator enters:

DELETE,k1,k2 (CR)

Where kl and k2 are the first and last lines to be deleted. Trailing commas need not be entered.

NOTE

If k1 and k2 do not designate existing lines, the editor uses the next higher existing line.

Resequencing Text Lines

To resequence the line numbers of the file, the operator enters:

RESEQ,nn,ii (CR)

Where: nn is the base line number where resequencing begins.

ii is the increment between successive lines of text.

The starting line is given line number nn, and successive lines are numbered nn=nn+ii. If nn or ii are omitted, the values are assumed to be 10. Trailing commas need not be entered.

Listing Text Lines

To list all or part of the file, the operator enters:

LIST,k1,k2 (CR)

Where k1 and k2 are the first and last lines to be listed.

EDITOR lists the contents of lines k1 through k2. If k2 is omitted, only line k1 is listed. If both k1 and k2 are omitted, the entire file is listed. If k2 is larger than the largest line number previously entered, the listing ends at the last line of the file. Trailing commas need not be entered. If k1 is greater than k2, a message indicating an invalid command is displayed.

NOTE

As the screen is filled, text listing is suspended by the PAUSE message. A carriage return must be entered to continue. Text listing may be interrupted at any time by the program interrupt (CONTROL D).

Text Modification

Text may be modified by replacing a line of text with a new line. (Refer to the LINE command.)

If the operator wishes to change only part of a line or substitute every occurrence of a character string in the file with another character string, the operator replies to the READY> message with:

CHANGE, *ala2...an *, *blb2...bn *, kl, k2 (CR)

Where: ala2...an is the character string to be replaced.

blb2...bn is the new character string to be inserted.

is the delimiting character for the character strings. The delimiting character may be any valid keyboard character with the exception of a comma. kl is the starting line to be changed.

k2 is the ending line to be changed. If k2 is omitted, only k1 is changed; if k1 and k2 are omitted, every occurrence of the character string in the entire file is changed. If k2 is smaller than k1, an error message is displayed.

It is not necessary that the character strings be equal lengths. However, both characters must be less than or equal to 20. If the length of the new string is greater than the length of the old string, ensure that text characters or line numbers are not lost at the end of the line when the existing line is expanded to accept the new text. Characters extending beyond 72 are truncated on a one-for-one basis. Trailing commas should be omitted when parameters are omitted.

As the substitutions are made, the following message is displayed:

CHANGES HAVE OCCURRED ON LINES

This is followed by a list of line numbers. The line number is listed once for every substitution that occurrs. Repeated line numbers represent multiple changes on the same line. If the substitution results in a line that is larger than the original, the message:

LINE TRUNCATED

is appended to that particular line number and the data preceding the line number is lost.

As the screen is filled, line number listing is suspended by the PAUSE message. A carriage return must be entered to continue.

Text Search " --

k2

If the operator wants to examine the text for places where a given character string occurs, the search procedure is used. To search text for character string ala2...am, the operator replies to the READY> message with:

SEARCH,*ala2...am*kl,k2 (CR)

Where: ala2...am is the character string being sought.

kl is the first line being searched.

is the last line being searched. The file is searched from line k1 through k2. If k2 is omitted, the rest of the file beyond k1 is searched. If both k1 and k2 are omitted, the entire file is searched.

Trailing commas should be omitted when parameters are omitted.

As character strings are located, the message

STRING FOUND IN LINE

is displayed, followed by a list of line numbers. The line number is listed once for every occurrence of the string. Repeated line numbers indicate multiple occurrences of the string in the same line.

As the screen is filled, line number listing is suspended by the pause message. A carriage return must be entered to continue. The listing may be interrupted by entering CONTROL D.

Tabulation

The text editor provides the ability to set tab stops in various character positions within the record. This function is used to set tab stops when entering records in a nonautomatic mode. It is especially applicable to formatting RPG II records. To set the tabs, the operator replies to READY > with:

STAB,n,n,n,...n (CR)

Where n is the various character positions within a line. These positions are limited to a maximum of 20, and must be entered in ascending order.

The default condition for the editor specifies tabs in positions 1 and 76.

To clear tabs, the operator replies to READY > with:

CTAR

This leaves the editor with tabs specified in positions 1 and 76 (non-RPG format).

Character Positioning

The text editor provides for repositioning a character in the same line (backspacing). This is activated by the \leftarrow key, which moves the cursor back a single position each time it is depressed. By using this key, line corrections are easily made.

The text editor provides a forward positioning function. This uses the ->key, and moves the cursor forward a single position. Characters of the current line (record) are not changed as the cursor moves past them.

Command List

The operator may obtain an abbreviated list of all editor commands by replying to the READY > message with:

COMMAN

The list appears as:

AUTO,TYPE,BASE,INCR,IDENT CHANGE,OSTR,NSTR,STRT,END CLEAR COMMAN CTAB DELETE, STRT, END EXIT GET, FN, R LINE, NMBR, TYPE RESEQ, BASE, INCR SEARCH, STR, STRT, RND SEQUEN, FN, R STAB, TYPE/N1, N2,.... N20

Sequencing Unnumbered Text Files

To insert sequence numbers into records of a file to be processed by the text editor, the operator enters:

SEQUEN, filename, R, N

Where: filename is name of the desired file.

R is the file that contains RPG II source text records. If R is omitted, filename is assumed to be a non-RPG

N is optional. If it is included, N specifies both the base line number and the interval between lines. Default value is 10.

NOTE

Failure to include the R indicator on an RPG II source text file may result in the destruction of that file.

This command places a sequence number in each text record in the appropriate position for that file type. The base line number and increment are both 10.

SORT UTILITY

The sort utility (DSORT) is called only from a procedure stream (that is, it is not used interactively). A single call to DSORT allows one or more files to be sorted by using one or more key values. Records in different files must be the same length. Note that there is only one output file regardless of the number of input files.

CAUTION

The sort utility cannot run concurrently with the ${\sf EDITOR}_{\:\raisebox{1pt}{\text{\circle*{1.5}}}}$

The capabilities of DSORT are as follows:

- Sorting one or more files that have equal record lengths - The number of records in each file is immaterial.
- Sorting by arbitrary keys There are no restrictions on key field length. These keys need not be (and usually are not) the keys that are defined for file manager indexed files.

- Hierarchy of sorts by several keys The first key presented causes the primary sorting, the next key presented sorts within the primary sort, the third key sorts within secondary sort, and so forth.
- Keys may overlap.
- The single sorted output file contains one of the following:
 - Full records (Tag-along sorts)
 - DATA sorts (Only the portion of the record that remains after keys are removed.) In data sorts, records are compressed by omitting keys.
 - ADDROUT sorts (Contain only the file manager's record numbers pointing to the input file records.) ADDROUT sorts can process only one input file per sort.
- Records may be selectively included or excluded from the file. Criteria for this section are based on a single key (which need not be the same as the other keys used for the sorting) having a specified relation (=, ≠,>,<,≥, or ≤) to another key in the record, or to a specified Hollerith constant. For instance, all records with DEPT. 0510 could be excluded from the sort. Conversely, only those records including DEPT. 0510 in the specified key would be included in the DSORT operation.</p>
- Data in records is normally in ASCII and the normal collating sequence used for sorting is ASCII. However, the sorting may be made in EBCDIC code, if desired.

Sorting is controlled by a series of contiguous commands called input directives. These directives (statements) start in column 1. Blanks are meaningful; they should appear only in the file or owner name in the Hollerith constant field, or as a separator for comment information. Comments may appear on any card after the required information has been provided.

CALL THE UTILITY

The initial call for the utility has the format:

DSORT

Define Input Files

Each file is defined on a separate input record (card).

The format of the statement is as follows:

FN=filename,owner

FN=filename,owner

Where: filename is the name of the file. The field is up to eight characters in length.

Leading blanks that are a part of the name are required; trailing blanks may be omitted (can be a tape file).

owner is the file owner's name. Leading and trailing blanks follow the same rule as for the filename parameter.

NOTE

Any file, regardless of owner, may be sorted by any user. In cases where several input files are sorted, these files need not have the same owner. The owner ID does not need to be the same as the user ID that was entered at log-in time. The user who calls the procedure stream starts the sorting operation.

If the owner field is left blank, common files are specified. That is, if the FN statement omits the owner, it must still have a comma following the filename.

It is assumed that the filename/owner are unique for all volumes on the system. If this is not the case, the file processed is on the first volume encountered by the file manager that has that filename/owner.

The record length for all input files must be the same.

There is no theoretical limit to the number of input files for sorting operation, except for ADDROUT sorts. (ADDROUT can sort only one file.) However, the mass storage space required for a DSORT may be as great as three times the size of all the input files used.

Define Output Files

The file may be one that has been defined previously. If so, that file is released prior to storing output records and is redefined as a sequential file.

The format of the statement is as follows:

F2=filename,ownrname,vlmlabel

Where: filename is the file name, up to eight characters in length. Leading blanks, if any, must be retained; trailing blanks are optional.

ownrname is the owner name, up to eight characters in length. It follows the rules for owner specified in the input file statement above.

vlmlabel is the name of the volume that receives the output file. It is up to eight characters long. If it is omitted, the volume defined by WKSPLU is selected to receive the file.



If both owner and volume are omitted, all commas must still be included; for instance:

F2=file1,,

The output file name can be the same as one of the input file names. If the output file is predefined, and if the total record count is greater than DSORT requires, the total record count for the existing file is used. If the output file has a total record count less than DSORT requires, DSORT recreates the file with a total record count equal to the number of records sorted.

SELECT SORT OPTION

The options statement must be included. It has the following format:

OP=ADDR/TAG,F/D, A/E

Where: ADDR/TAG may be abbreviated A or T specifing whether the output file includes only relative record number (ADDR) or includes tag-along (TAG) data. ADDR can be used only if a single input file is designated.

F/D is the tag parameter. The F option specifies that the entire input record (including the keys used for sorting) is placed in the output file. The D option specifies that the keys are eliminated from the record, and only the remaining data appears in the output record. (If the keys occurred before the end of the record, the remaining data is moved to the left to omit the space formerly occupied by the keys.)

A/E is the collating sequence used for sorting.

A ASCII E EBCDIC

DESIGNATED KEYS USED FOR SORTING

One key statement defines all keys to be used. Each key requires three consecutive parameters. The order of the keys in each key statement determines the sorting hierarchy; the first key presented is the primary key. Records are sorted first by this key, then by the second key presented, then by the third key, and so forth, until the records have been sorted by each of the specified keys. Records not distinguished by the entire series of key sorting may appear in any order (not necessarily in input order).

The key information can be extended to a new card if column 72 is reached.

The key statement has the following format:

KF=A/D,keycol,keycols,A or D,keycol, keycols,...,A or D,keycol,keycols

Where: A/D is the collating order to be used.

A Ascending order D Descending order

keycol is the character position within the record for the first character of the key. The first character position of the record is numbered 1.

keycols is the length of the key in characters.

The minimum key length is a single character.

Keys may overlap.

RECORD SELECTION

This statement allows the user to select one key in the record as a basis for including or excluding records. The statement has the following format:

SL=omit/include,keycol,keycolsl,op, 'Hollerith constant', keycol2

Where: omit/include may be abbreviated to O or I.

For omit, all records meeting the criteria are excluded. For include, only records meeting

the criteria are included.

keycol is the starting-character position of key 1; the key that governs

the record selection.

keycolsl is the length (in characters) of key

1 and, if it is used, also the length of key 2 or 'Hollerith constant'.

op is the comparison type:

EQ-key 1 = key 2/Hollerith value NE-key 1 \neq key 2/Hollerith value LT-key 1 < key 2/Hollerith value GT-key 1 > key 2/Hollerith value LE-key 1 \leq key 2/Hollerith value GE-key 1 \geq key 2/Hollerith value

'Hollerith is any value enclosed by single constant' quote marks (' '). It is 1 to 20 characters in length (used for comparison).

keycol2 is the starting character position of key 2. Length of key 2 is keycols1.

Note that either 'Hollerith constant' or key 2 can be used for the comparison.

The designated key (field of length keycols1, beginning at keycol character position) may or may not be the same as that of the sorting keys designated in the KF statement. The value of this key is compared either to the second key in the record (field of length keycols beginning at keycol2 position) or to a 'Hollerith constant'. The second key may or may not be one of the sorting keys designated in the KF statement. The comparison may be equality or one of several types of inequality. As a result of this comparison, either the records that meet the criteria are included and all other input records are excluded, or the records that meet the criteria are excluded.

OPTIONAL COMMENTS/STATEMENTS

Comment cards (statements) have a comment indicator and a comment in ASCII in the remaining columns. There may be one or several comment cards. It is recommended that one comment card be used to precede the DSORT card (for instance, START or SORT for NEWFILES), since this statement clears the screen and shows that any error message that follow, relate to a sorting operation and not to a previous operation that still may display a message on the screen. In addition, comments may be included on any statement card following the blank (separator) that ends the required input information.

TERMINAL MESSAGES

Table 7-4 shows a typical output at the console display that is executing a program with a single input file that called the sorting operation. Table 7-5 shows a sample procedure stream for DSORT.

If the sorting operation fails, one of the error messages listed in appendix L is displayed at the terminal.

Terminal responses, normal or error, follow the sort.

TABLE 7-4. TYPICAL OUTPUT DISPLAY DURING PROGRAM EXECUTION

Display	Comments
VOLUME=SYSVOL	The input file is on the system volume.
FILNAM=OLDFILE, ownername	File to be sorted
PASSED=162	162 records were read.
DONE=50	50 records were processed.
VOLUME=SYSVOL	The output file is on the system volume.
FILNAM=NEWFILE7, ownername	The name of the output file
PASSED=50	50 records were output.
DONE=50	50 records were output.

SYSTEM PATCH UTILITY (CCSDB)

CCSDB is initiated by pressing MANUAL INTERRUPT on the mainframe and typing in the characters CCSDB. CCSDB alerts the operator that it is in execution and ready for use by typing:

DEBUG IN

The operator may then type in a request. Each request must be terminated by (CR). All requests are limited to one line of up to 80 characters on the comment device. After the request is completed and all associated messages have been typed, CCSDB types:

NEXT

CCSDB is then ready for the next request from the operator.

TABLE 7-5. SAMPLE PROCEDURE FOR DSORT

·	
Procedure Stream	Comments
*SORT OF 3 NEWFILES BEGIN	Comment card to clear screen and alert operator that sorting of the new files begins immediately.
DSORT FN= NEWFIL1,SMITH FN=NEWFIL2, FN=NEWFIL3 ,SMITH	Procedure call. Files can belong to different owners; all files have equal length records.
F2= OUTFIL1,,	Output file is a common file. It appears on the volume specified by WKSPLU.
OP=T,F,A	Output file contains full input records. It is sorted using ASCII collating sequence.
KF=A,15,10,D,5,10, A,25,20	Three 10-character keys are used, with the primary key beginning at position 15, the secondary key at position 5, and tertiary key at position 25. First and third keys use ascending sorting, second key uses descending sorting.
SL=0,40,2,EQ,'CA'	Omit all records that have characters CA in columns 40 and 41. Include all others.

The list unit can be respecified by the operator with the following command:

CLU,x

Where x is the new list logical unit, standard is the system

The input unit can be respecified by the operator with the following command:

ILU,x

Where x is the new input logical unit, standard is the system console (x=4).

To terminate CCSDB, the operator types:

OFF

and CCSDB types:

DEBUG OUT

SOURCE PROGRAM UTILITIES (COSY/CUDDLY)

The CCS COSY and CUDDLY programs provide a means of compressing information in source decks by replacing three or more blanks on a card with two special ASCII codes. The resulting deck, called a COSY/CUDDLY deck, is in COSY/CUDDLY format. COSY/CUDDLY reduces average decks size by about 60 percent.

COSY is the program used to manipulate FORTRAN source programs while CUDDLY is the program used to manipulate RPG II source programs.

FEATURES

A revision deck follows the call to COSY or CUDDLY. Revision decks allow the user to revise or update programs. COSY/CUDDLY output is in Hollerith format and may be listed or punched.

OPERATION

A DCK/ card identifies the COSY or Hollerith deck to be updated or created and specifies the actions to be taken with the new deck.

The first card (record) of the revision deck is an identifier in the following format:

1	8	13	73
Deck name	DCK/	P1 ,, pn	ID

Where: deck name is the COSY deck to be processed.

specifies p1,...,pn

the actions to be taken. All parameters are optional, can be in any order, and are separated by commas. Blanks are now allowed within the parameter field.

Parameters have one of the following forms:

P = lu

D = deck name

P is I, C, H, or L. lu is the logical unit on which input or output occurs. Deck name specifies a new deck name for the COSY output.

I Parameter (COSY or Hollerith Input)

I specifies the logical unit containing the COSY or Hollerith source deck(s) to be updated or created. This parameter has one of the following forms:

I = lu

If the parameter is absent or just I, COSY assumes the source deck is on the COSY standard input device. (COSY $\,$ standard devices are set by a *CSY,... STATEMENT).

If I = lu is used and lu is the system standard input unit, COSY assumes a new deck is being added to the COSY library. If the first card after the DCK/ card is a source deck identifier, COSY assumes it is a new deck to be added to the COSY library. COSY processes the deck until an END/ card is read. Additional new source decks may follow.

Each new deck must begin with a source deck identifier card and end with an END/ card. The card following the END/ card must be a DCK/, MRG/, or another END/ card to mark the end of the revision deck.

Revision cards follow the DCK/ card, and the COSY source deck follows the revision cards. COSY reads the revision cards and places them on the mass storage scratch area until an END/ card is read. Then COSY reads the new COSY source deck (which must follow the revision cards), and modifies the new deck according to the revision cards.

If I=lu is used, and lu is not the system standard input, COSY reads the revision cards from the system standard input unit and the source deck specified by the DCK/ card from unit lu. Then COSY updates the source deck according to the revision cards.

C Parameter (COSY Output)

C specifies the device to receive COSY output. This parameter has one of the following forms:

C C = lu

If C is absent, there is no COSY output. If just C is used, COSY output is on the COSY standard output device. C cannot be equated to the unit containing the current COSY library.

H Parameter (Hollerith Output)

H specifies the device receiving Hollerith output. This parameter has one of the following forms:

H H = lu

If H is absent, there is no Hollerith output. If just H is used, Hollerith output is on the COSY standard output device.

D Parameter (Deck Name)

D changes the name of the COSY or Hollerith deck. This parameter has the following form:

D = name

COSY uses the six characters (including blanks and commas) following D = for the new deck name.

NOTE

If the name is less than 6 characters and I, C, or H parameter follows it, COSY misinterprets the name.

ID Parameter

ID is the three-character field for changing the COSY or Hollerith deck identifier. This parameter has the following form:

ID

If ID is blank, the old deck identifier on the $\mbox{HOL}/\mbox{ or CSY/}$ card is used.

The actual revision decks are comprised of the following:

DEL/CARD

COSY deletes a specified number of cards from a previously defined input deck and inserts any Hollerith source cards immediately following the DEL/ card up to the next COSY control card. A DEL/ card has two forms:

1	8	13	66	72
	DEL/	М	CHANGED RECORD	,
1	8	13	66	72
	DEL/	M,N	CHANGED REC	ORD

In the first form, card M is deleted; in the second, cards M through N are deleted. The unsigned decimal numbers M and N are the sequence numbers in columns 76 through 80 of the Hollerith source cards. Sequence number M must be less than N_{\bullet}

The number of Hollerith cards following a DEL/ card need not equal the number of cards being deleted.

INS/CARD

COSY inserts the Hollerith source cards immediately following an INS/ card into the new COSY Hollerith decks.

The Hollerith source cards are inserted after sequence number M, which is found in columns 76 through 80 of the Hollerith source cards.

The revision deck is terminated by:

END/CARD

The END/ card terminates revision decks.

Figure 7-2 is a sample deck, using CUDDLY, to expand, modify, and install the RPG program DTLLST.

Figure 7-3 is a sample deck, using COSY, to expand, modify, and install the FORTRAN program DACRTE.

```
*JOB,DTLLST,INSTALL DTLLST

*REW,7,22

*K,110,L9

*CSY,16,P22

*CUDDLY

DTLLST DCK/ I,H

END/

*K,122,P7,L12

*RPGII

*CATLOG

*K,110

*V,10

*V,7

*K,110

*V,10

*V,10

*CTO, INSTALLATION COMPLETE...
```

Figure 7-2. Sample Deck (CUDDLY)

Figure 7-3. Sample Deck (COSY)

JOB PROCESSING

The batch processing system initiates, monitors, and terminates all jobs executed in an unprotected core.

This system is scheduled for execution by the operator who performs a manual interrupt and types:

*BATCH

 \mathbf{or}

*BATCH,lu

Where lu represents the logical unit number being used as input. (If omitted, the system logical unit number is assumed.)

Upon recognition of the *BATCH statement, the batch processing subsystem is scheduled to begin processing user jobs.

JOB CONTROL STATEMENTS

Control statements to the subsystem are format records in ASCII mode. A maximum of 72 characters is allowed for each control statement. The first character of an input statement must be an asterisk, and the last must be a blank or a carriage return, if input is on the teletypewriter. Intervening characters identify the type of statement and action.

CONTROL STATEMENTS WITHIN A JOB

*JOB Statement

The *JOB statement instructs the subsystem to begin accepting a new sequence of control statements. It must be the first control statement in a job, and only one is allowed for each job. The date and the information on the *JOB card is printed on the list device.

The control statement format is:

*JOB

or

*JOB,n,u,i

- Where: n is the job name. The first six characters are used by the job processor. When a line printer is used, n is printed in large letters (except special characters) up to the first blank.
 - u is the user identification. The first six characters are saved by the job processor (required if n is used).
 - i is comment (optional).

When the *JOB card is detected, the system initializes the values of standard list, standard input, and standard punch as they appear at autoload time.

*CTO Statement

The *CTO statement causes the comments appearing on the card to be printed on the standard comment device for operator information. Continuation cards are not allowed. The format is:

*CTO,comments

*REW Statement

The *REW statement instructs the subsystem to rewind the specified logical units to their loadpoint. Several logical units can be specified in one request. Up to five logical units may be specified in an *REW statement. An error message is printed if the number exceeds five.

The format is:

*REW,lu1,lu2,lu3,lu4,lu5

*K Statement

The *K statement is used to reassign standard system logical unit numbers.

With the *K statement, the operator can select devices for system units other than those currently used.

The parameters in the *K statement are not ordered, but must be separated by a comma and followed by a carriage return or a space.

The control statement format is:

*K,Ilu,Llu,Plu

Where: lu is the logical unit number (in all cases).

I is the system input unit.

L is the system print unit.

P is the system binary output unit.

*CSY Statement

The *CSY statement reassigns standard COSY logical unit numbers. This control statement to the subsystem is for use with the COSY driver. The I, P, and L parameters may also be used to assign logical units for the COSY program control statements. If no logical units are specified on the COSY control cards, the assigned units are used.

The parameters in the *CSY statement are not ordered, but must be separated by commas, and the last parameter must be followed by a carriage return or a space.

The control statement format is:

*CSY,Lxx,Iyy,Pzz

Where: xx is the logical unit of the COSY list output.

yy is the logical unit of the COSY input library.

zz is the logical unit of the Hollerith or COSY output.

*COSY Statement

A *COSY statement instructs the subsystem to execute the COSY program, which manipulates FORTRAN and Macro Assembler source programs.

*CUDDLY Statement

A *CUDDLY statement instructs the subsystem to execute the CUDDLY program, which manipulates a RPG II source program.

*V Statement

The *V statement directs the subsystem to read all subsequent control statements from the specified logical unit.

The control statement format is:

*V,lu,m

Where: lu is the logical unit number. If not specified, the standard input is assumed.

m is the mode in which control statements are read.

A or blank

Formatted ASCII

B

Formatted binary

COMMUNICATION INTERFACE

The communications interface consists of a communications processor (CP) driver resident in and executed by the central processor (CPU1) of a CYBER 18-25 configuration. It controls the operation of the other processor (CPU2) in the CYBER 18-25 which is designated as the communications processor, and it executes a modified version of CCP 1.0 controlware.

The CP driver interface to the CP at the protocol level is similar to INTERCOM. The physical interface between the CYBER 18-25 host and the communication, processor is via memory and interrupt lines as opposed to a CYBER coupler in the INTERCOM/2550 configuration.

The CP driver requires slight modifications to the CCP 1.0 controlware, and the addition of a means to generate a macro-interrupt to the host.

 $\ensuremath{\mathsf{CP}}$ monitoring, down line loading of main micro memory, and starting the $\ensuremath{\mathsf{CP}}$ is directed by the $\ensuremath{\mathsf{CP}}$ driver.

OPERATION.

This communications interface is used by the CCS executive and it is not accessible to user-written programs.

The CP driver interfaces the CCS executive via a monitor request for read, formatted read, write and formatted write. The request parameter list is standard except for the following:

- Mode bit M = 1 Write length is in characters
 M = 0 Write length is in words
- Only bit 15 of the V field is used. If set, the error status is present as defined below.
- N = Write or Write/Read sub request
 N = Data length in characters (M = 1) or words (M = 0)

Convert sub request

N = Length of data buffer in words

The request buffer must contain four header words preceding the data to be used as follows. This requires request n to be four greater than the maximum data length.

- S = The address of the five word request buffer, structured as follows:
 - Word 0 Bits 15 through 8 are reserved for future use.
 - Word 0 Bits 7 through 0 contain the logical port number (1 through 225) of the communication line to be used. Set by a requestor on write, formatted write, read, formatted read, connect, disconnect. Set by the drive on unsolicited read.
 - Word 1 Bits 15 through 5 contain the status set by the driver. Bit 15 of the V field is also set if any status bit is set.
 - 15 CP down
 - 16 Line disconnect (on hook)
 - 13 Line inoperative (bad)
 - 12 Terminal not connected (not dialed in)
 - 11 Not used
 - 10 Request timeout
 - 9 Illegal request
 -Bad port number
 -Port not UI on
 - -Write-read -Read to UI port
 - 8 Parity error
 - 7 Break received
 - 6-5 Reserved for future use.
 - Word 1 Bits 4 through 0 contain the subrequest code.
 - Normal modeConnect. Set
 - Connect. Set by the requestor to cause a connect to a port for subsequent unsolicited input. Sets port in unsolicited input (UI) mode.
 - 2 Disconnect. Set by the requestor to cause the port to be disconnected from the user and returned to normal mode from unsolicited input mode. No completion is made to the requestor. Cause line disconnect (hangs up telephone).
 - 3 Write-read operation
 - 4-31 Reserved for future use

Word 2 Cursor position

Bit 15 = 1 No cursor positioning
Bits 14 - 01 X position
Bits 07 - 00 Y position

Word 3 Set on input by the driver to the number of words transferred to the data buffer.

Word 4 Location of the data buffer.
Received parity error causes the character with parity error to be replaced by a 7F₁₆ in the user's buffer. This allows the user to write the received data back to the terminal with the position(s) of the parity error(s) indicated.

The ${\bf Q}$ register contains the V field and the port number at completion.

USER INTERFACE - REQUEST CODES

The CP drive is capable of operating in a normal mode (which requires a read or write request for each transmission of data) or in an unsolicited input mode (which does not require a read request for data input).

Normal Mode

For normal mode, the subrequest code in word ${\bf 1}$ of the data buffer is zero, and the driver functions as follows:

- Write (RC=2) N words from the data buffer specified by word 4 in the request buffer are transmitted to the terminal device connected to the specified port.
- Formatted write (RC=6) Two prespecified characters (set in the physical device table, and normally line feed and carriage return) are transmitted to the specified port followed by N words from the data buffer.
- Read or formatted read (RC=1 or 4) The driver operates only in formatted read mode. Input is stored into the data buffer until a terminating character is detected or 2N characters have been input. The number of characters read is placed in word 3 of the request buffer. A read is handled as a formatted read. Input data presented to the driver by the CP prior to an active read request is discarded.

NOTE

The CP always waits for a terminating character before sending input to the host.

The standard terminating characters are:

Tab	\$19
Carriage Return	\$OD
Line Feed	\$OA
Rubout	\$7F
SOH	\$01
EOT	\$04
ENTER +	\$1D
ENTER -	\$1C

Unsolicited Input Mode

Unsolicited input (UI) mode requires that the requestor establish a logical connection with the CP driver port table before any requests to the driver are processed. Once this connection is made, all input received on the port is placed in the specified data buffer and the specified completion address is scheduled.

This connection process is caused by the requestor performing a read (or formatted read) with a connect subrequest code, the request buffer location, length, and the port number specified. This read is interpreted by the driver as a connect and results in portions of the requestor's parameter list being moved to the driver's port table, but does not directly result in any I/O action. Input data for the port is connected as a user. The connect request need not remain in memory.

When input is received and the port is connected, 2N characters or less of input are moved to the data buffer with word 3 of the buffer set to the number of characters filled.

The requestor must issue a disconnect when he has finished with communications and is no longer able to correctly respond to input data and input completion that may result if the terminal continues to input data. Disconnect is requested by a read (formatted read) with a disconnect subrequest code and the port number specified. The driver processes this read as a disconnect and clears the port table to discard further input.

Write and formatted write requests are handled exactly as in the normal mode.

Write - Read - An additional capability, write-read, is provided the requestor running in unsolicited input mode. If the write-read subrequest code is set in the write or formatted write request and a connect has previously been issued, the drive executes the write or formatted write but waits for input data before returning to the write request completion address. The requestor then receives write completion after the specified data has been output to the port and input data has been received from the port. No read completion is executed.

Break - If a port (terminal) is set in UI mode and if the terminal operator hits BREAK while output to the terminal is in process, the output is stopped. The CP driver then expects input from the terminal, at which time completion is generated by the driver for the unsolicited input only. The status return with the input indicates BREAK was received.

COMMUNICATIONS PROCESSOR INTERFACE

The CP driver simulates the coupler normally used between a CYBER 70/170 and a 2550 with software. The coupler registers are core locations in CP low core.

The CP driver uses a micro code sequence to generate a macro interrupt to the CP and to acknowledge a macro interrupt received from the CP.

The CP driver establishes two control points. The first allows the lower 24K (0 through 5FFF $_{16}$ of CP memory to be logically addressed from the host. The second control point allows the upper 24K 6000 $_{16}$ to BFFF $_{16}$ of CP memory to be logically addressed.

In order to read or write the coupler registers, the CP driver selects the low control point.

In order to read or write the CP data buffers, which begin above 6000_{16} in the CP, the driver selects the high control point.

CE Errors and Statistics

Statistic messages are ignored. Customer engineering (CE) error message are converted to CCS engineering log format and logged to the CCS engineering file.

Restart

At system autoload time and at any time the CP fails to send the status at the expected intervals, the restart processor KICKOF is scheduled to load and restart the CP.

The restart processor completes all active requests with the CP down error status, then retrieves CP binary load file from the program library, moves it to CPU2 and causes a start.

If the restart is not successful, several retries are attempted before declaring the CP CPU2 down.

Initialization

After the CP has been restarted, line configure service messages are sent to the CP for all CP lines.

Operator Error Messages

The following error messages are output on the comment device by the $\ensuremath{\mathsf{CP}}$ driver:

CP OUTPUT NOT READY, FORCE RESTART

This is caused by a failure of CP to respond to repeated requests by the host to output data. The CP is forced down and restarted in an attempt to recover.

• CP CONFIG LINE ERROR = LEC

This is caused by incorrect parameters sent by the host in a configure terminal service message. The line error code (LEC) indicates the general nature of the problem.

CP DOWN

This is caused by the inability to restart the CP after a number of attempts

CP STARTED

This is caused by a START operation on the CP.

CP OUTPUT QUEUE FULL - FORCE RESTART

This is caused by a full driver output queue. The CP is forced down to cause a restart. The output queue is purged.

CP LINE FAILURE, PORT =

This is caused by fatal line failure. The driver waits and tries again to enable the line. Turn off communications line adapter for indicated port terminal if error persists.

CP ILLEGAL BLOCK TYPE =
 CP ILLEGAL CMD BLOCK DPSP =

This is caused by either a ghost interrupt on the CP to host interrupt line, or a system failure.

CP MULTIPLE BACK RETURNS, PORT LOCN =

This is caused by an apparent redundant acknowledgement of a terminal output. Indicates a software failure.

TERMINAL LINE TYPE AND BAUD RATE

For each terminal attached to the CCS system, a descriptive table is contained within CPU 1.

The CCS system contains 57 port tables, where port table 00 is used to define/support the master console, and port tables 01 through 56 are used to define/support the 56 available terminals.

Word 11 of each port table defines the line type and terminal type (Baud rate) for that port:

\$001t

Where: l is line type

t is terminal cycle (baud rate)

The standard line type is parameterized for a dedicated line (L=5). The standard terminal type is parameterized for type 10 (T=10, base 10). The terminal type (T) contained in the port table is linked to a definition word contained in the system CPFILE. The following provides definition of supported terminal types. Modification is to be done only by a CDC analyst.

Values for CPFILE

CPFILE Value
AAA1
8610
8E30
9E70
4510
4D30
5D70
7DF0

Standard terminal type/CPFILE definitions:

Terminal	Location	Standard	Standard
Type	in CPFILE	Baud Rate	Value
1 2 3 9	1D49 1D48 1D4D 1D51 1D53	110 150 300 600 9600	AAA1 8610 8E30 9E70 7DF0

By changing the value in the named location the baud rate of a particular terminal type may be changed.

CONFIGURATION CAPABILITIES

AUTOMATIC CONFIGURATION

On the first autoload after system installation, the system configures itself to use disk drive unit 0 as the system resident volume. This can be either an 1867-20 disk or an 1867-40 disk. Subsequent autoloads not alter the system configuration for the system resident volume.

At all autoloads, the system configures itself to use the memory and tape drives present in the hardware configuration. The capabilities are:

 Memory - will configure for all memory in CPU 1 and 2. Allowable ranges for memory in each CPU are

<u>CPU</u>	Minimum Memory	Maximum Memory
1 2	192K bytes 96K bytes	256K bytes 256K bytes

Tape Subsystem - will configure tape units 0 and 1 for the 1860-5 phase encoded tape drives, if these drives are attached to the system. If these drives are not found, the system is configured for the 1860-4 NRZI tape drives on units 0 and 1. If the maximum configuration is present (two 1860-4 tape drives and two 1860-5 tape drives), the 1860-5 tape drives are units 0 and 1, with the 1860-4 tape drives units 2 and 3.

A message appears at autoload specifying memory present in each CPU and what type of tape drives are units 0 and 1.

If less than the minimum memory configuration is present in CPU 1 or 2, a message stating INSUFFICIENT MEMORY is displayed and system operation is disabled.

CONFIGURATION UTILITES

Three utilities are available to provide the following additional configuration capabilities:

- Non-system resident disk drives type and format
- Enable lower case printing
- Alter system ID message

DISK DRIVE CONFIGURATION UTILITY (SMDC)

System configuration of SMD drive type and sector size definition is done with this function. This function would normally be executed, for each applicable disk drive, one time following loading of the system via DTLP or EDTLP function.

Unit 0, the system volume (SYSVOL), is not configured via this function. Unit 0 is automatically configured at initial autoload for either an 1867-20, 96 word sector or an 1867-40, 96 word sector drive. No further action is required for unit 0.

This function applies only to units 1 through 3. Each drive may be configured as one of the following:

1867-20 with 96 word sectors 1867-20 with 569 word sectors 1867-40 with 96 word sectors

A request for any other combination is illegal.

The following sequence is an example of the display output during configuration for an 1867-20 disk drive having standard 96 word sectors. Note that there are three possible responses to input. The drive type parameter is 20 for the 1867-20 drive and 40 for the 1867-40 drive.

MI SMDC

SMD CONFIG IN
INPUT FORMAT (TYPE 'EXIT' TO EXIT)
UNIT NO. (1-3), DRIVE TYPE (20,40), SECTOR SIZE (96,569)....1,20,96
UNIT 1 CONFIGURED.
INPUT FORMAT (TYPE 'EXIT' TO EXIT)
UNIT NO. (1-3), DRIVE TYPE (20,40), SECTOR SIZE (96,569)....EXIT
SMD CONFIG OUT

The utility has four responses to a configure request.

 UNIT n CONFIGURED - This indicates the requested unit configuration was valid and accepted.

- UNIT n ALREADY CONFIGURED AS REQUESTED - The configuration requested already exists for that unit.
- ILLEGAL CONFIGURE REQUESTED The configuration requested contained invalid information.
- 4) REQUESTED UNIT MOUNTED. NO CONFIGURE DONE. - This indicates the unit specified in the request has a volume currently mounted (and possibly in use). The unit must be inactive (unmounted) to perform a configuration request.

This utility must be executed as part of the system installation. Refer to the Installation Test Kit.

System Identification Definition (SYID)

This utility allows the user to change the 32 character system ID. This ID appears as part of the autoload message (first line after setting protect switch) and log-on message (third line).

This utility can be executed anytime. It is also executed as part of system installation.

The system identification text displayed at autoload and at terminal sign-on may be defined as follows from the master console only:

MI SYID SYID IN ENTER 32 CHARACTER OF TEXT THIS IS A TEST OF SYS ID SYID OUT

A carriage return will result in blank text. Also, "EXIT' may be entered to exit without changing text.

Line Printer Band Modification (LPCF)

The line printers supported by CCS have the option of a lower case print band. The CCS system must be modified to utilize this band.

The system may be configured to take advantage of a line printer with a lower case band installed as follows:

MI LPCF LPCF IN LOWER CASE CURRENTLY DISABLED. (or ENABLED if enabled) ENTER 'E' ENABLE LOWER CASE: ENTER 'D' TO DISABLE LOWER CASE ... E LPCF OUT

An EXIT may be entered to exit without changing the lower case state.

NEWS

The news feature of CCS will display items of general interest to the collectors each time they log onto COLECT to begin collection activities.

These items may include company related news (for example, promotions, company picnics, etc.) as well as CCS information (for example, collectors meetings scheduled). The operator uses the system editor to enter data into this news file (NEWS).

The following specifications describe the data contained in the NEWS file:

*NEWS

Indicates the start of a new news item. The screen is cleared and the headings displayed followed by the text of the news item.

TEXT

This can follow any format and is displayed exactly as entered. A maximum of 74 characters per line can be displayed. A maximum of 19 lines can be contained on one screen. If a news item exceeds 19 lines, a prompt of READY > is displayed on the lower left of the screen. The collector enters carriage return to continue viewing the news item.

If a clear of the screen is desired within a news item, a period in column 1 of the NEWS file causes the prompt of READY>. A carriage return then results in the clearing of the screen and the text continues. The line with the period is not displayed.

Three options are available to a collector when logging onto COLECT:

- NEWS ONLY The news file is displayed and the collector logged off.
- NEWS THEN GO INTO COLECT The news files are displayed and the system displays the selection screen for COLECT execution.
- NO NEWS GO INTO COLECT The news file is bypassed and the system displays the selection screen for COLECT execution.

EDTLP

The EDTLP program can be used to save a system to tape, or load a system from tape. The EDTLP can also save a single volume to tape and load a single volume from tape. The single volume load can only be done if the one volume was saved. A single volume cannot be reloaded from a multi-volume save.

The EDTLP program runs in the background of the MSOS 5.0 operating system. The CCS system must be stopped before executing the EDTLP program.

The operator physically mounts and readies SYSVOL on disk unit ${\bf 0}_{\bullet}$

For autoload procedure and CCS start up procedure, see the system start-up procedures for on-line operations section of the CCS Operator's/Collector's Guide.

NOTE

Be sure to enter the correct date and time when autoloading. The date and time the save is made is displayed on the master terminal during reload.

The operator logs on and mounts volume disk pack(s). For this procedure see the system start-up for on-line operations section of the CCS Operator's/Collector's Guide.

The operator signs off, and stops CCS. For this procedure see the system sign-off section of the CCS Operator's/Collector' Guide.

Execute the EDTLP Save Procedure

The operator makes sure the page button is up (scroll mode) on the master terminal.

The operator performs a manual interrupt.

The following message is display on the master terminal:

MI >

The operator types in:

*BATCH, 4 (CR)

The following message is displayed on the master terminal:

J

The operator checks to see if the line printer is ready.

The operator types in:

* JOB (CR)

The following message is displayed on the master terminal:

J >

The operator types in:

*EDTLP (CR)

The following message is displayed on the master terminal:

EDTLP

TYPE SAVE (CR) FOR DISK-TO-TAPE SAVE TYPE LOAD (CR) FOR TAPE-TO-DISK RELOAD

The operator types in:

SAVE (CR)

The following message is displayed on the master terminal:

DISK TO TAPE SAVE .

THE FOLLOWING VOLUMES ARE MOUNTED: VOLUME NAME DISK NUMBER SYSVOL 0

CDD01

ENTER DISK NUMBER OR CARRIAGE RETURN

ENTERING A DISK NUMBER WILL SAVE ONLY THE SPECIFIED DISK, IF IT IS MOUNTED AND READY.

ENTERING A CARRIAGE RETURN WILL SAVE ALL MOUNTED AND READY DISK DRIVES.

VALID NUMBERS FOR DISK DRIVES ARE DISPLAYED ABOVE DISK NUMBER =>

NOTE

If CDD01, CDD02, or CDD03 are not mounted and ready, they do not appear in the list above. Check to see if the volumes you wish to save are displayed on the master console.

The following are examples of responses to DISK NUMBER = > :

SAVING ALL MOUNTED AND READY VOLUMES

The operator types in:

(CR)

SAVING ONLY SYSVOL

The operator types in:

0 (CR)

SAVING ONLY CDD01

The operator types in

1 (CR)

The following message is displayed on the master terminal, depending on the operators reply to DISK NUMBER =>:

THE FOLLOWING VOLUMES ARE MOUNTED AND WILL BE SAVED TO TAPE:

VOLUME NAME SYSVOL CDD01 DISK NUMBER 0

1

NOTE

If a single volume was specified in reply, only the disk specified is displayed.

The following message is displayed on the master terminal:

TYPE GO TO CONTINUE, EX TO EXIT >

The following are examples of the correct responses:

If the volumes to be saved are correct, the operator types in:

GO (CR)

If the volumes to be saved are not correct, the operator types in:

EX (CR)

If EX was entered the operator must abort the EDTLP run by executing the following:

The operator performs a manual interrupt.

The following message is displayed on the master terminal:

MI >

The operator types in:

*Z (CR)

The following message is displayed on the master terminal:

JP ,*EDTLP JOB ABORTED J

The operator types in:

*Z (CR)

The following message will be displayed on the master terminal, if GO was specified above:

ALTERNATING TAPE DRIVES FOR MULTI TAPES REEL # LOGICAL UNIT # TAPE DRIVE #

1 6 0 2 16 1 3 6 0

YOU MAY CHOOSE TO USE ALTERNATING TAPE DRIVES OR ONLY ONE TAPE DRIVE. IF YOU WISH TO USE ONLY ONE TAPE DRIVE, SPECIFY THE TAPE DRIVE NUMBER OF THE TAPE DRIVE YOU WISH TO USE.

ALTERNATING TAPE DRIVES (Y OR N)

NOTE

If your CCS system is equipped with two tape drives, you have the option to use both tape drives during the save, alternating the drives with each tape. If both drives are to be used, the first tape begins on drive 0, the second tape begins on drive 1, the third tape begins on 0, etc.

NOTE

If your system is not equipped with two tape drives, or if one of the drives is down, you may select the single tape drive. The only tape drives you may select are 0 and 1.

The following are examples of correct responses:

If a single tape drive is to be used, the operator types in:

N(CR)

If alternating drives are to be used, the operator types in:

Y (CR)

The following will be displayed on the master terminal only if N was entered:

SELECT A TAPE DRIVE (0 OR 1)>

The following are examples of correct responses:

If tape drive 0 is to be used, the operator types in:

0 (CR)

If tape drive 1 is to be used, the operator types in:

1 (CR)

The following message is displayed on the master terminal:

** OPERATOR-MOUNT OUTPUT TAPE ON UNIT 0 WITH RING

TYPE GO TO CONTINUE, EX TO EXIT >

NOTE

If tape drive 1 was selected, the operator's instructions have a 1 instead of 0.

The operator mounts an output tape on the unit specified on the master terminal.

The following are examples of correct responses:

If the selection of the tape drives are correct, the operator types in:

GO (CR)

If the selection of the tape drives are not correct, the operator types in:

EX (CR)

The operator performs a manual interrupt.

The following message is displayed on the master terminal:

MI >

The operator types in:

*Z (CR)

The following message is displayed on the master terminal:

JP ,*EDTLP JOB ABORTED J

The operator types in:

*Z (CR)

The following message is displayed on the master terminal only if alternating tape drives are to be used:

OPERATOR-MOUNT NEXT OUTPUT TAPE
ON UNIT 1 WITH RING

The operator mounts a output tape on unit 1.

The following message is displayed on the master terminal:

TURN OFF PROTECT SWITCH(ESC J20@) AND TYPE CARRIAGE RETURN

The operator types in:

(ESC KEY) J20@ (CR)

The following message is displayed on the master terminal at the beginning of each volume being saved:

SYSVOL IS BEING SAVED TO TAPE

CDD01 IS BEING SAVED TO TAPE

NOTE

If only one volume is to be saved, only that volume is displayed.

NOTE

After the protect switch has been turned off, the save cannot be aborted unless the operator autoloads.

End of EDTLP Save

The following message is displayed on the master console at the end of the save:

DISK TO TAPE SAVE COMPLETE

**** OPERATOR-AUTOLOAD THE SYSTEM

If save did not complete, only the following is displayed on the master terminal:

**** OPERATOR-AUTOLOAD THE SYSTEM

The system is stopped when the program completes.

The operator must autoload the system at the conclusion of the EDTLP program.

End of Tape Processing

The following message is displayed to the master terminal when the end of the tape is reached and alternating drives are not used:

END OF TAPE HAS BEEN REACHED

**** OPERATOR-REWIND TAPE ON UNIT x AND LABEL

READY (Y OR N)>

NOTE

UNIT \boldsymbol{x} is the same tape unit that just finished.

The operator rewinds the tape on the specified unit and mounts an output tape on the unit specified.

The following messages are displayed on the master terminal if alternating drives are to be used:

OPERATOR-MOUNT OUTPUT TAPE ON
UNIT x WITH RING

READY (Y OR N)>

The operator mounts an output tape on the unit specified.

The operator types in:

Y (CR)

**** **** OPERATOR-REWIND TAPE ON UNIT x AND LABEL

. . . .

OPERATOR-MOUNT NEXT OUTPUT TAPE ON UNIT x WITH RING

The operator rewinds and mounts a new output tape on the unit specified.

EDTLP Tape Error Message and Recovery Routines

The following message is displayed on the master terminal:

L,06 FAILED NN ACTION OR L,16 FAILED NN ACTION

The operator looks up the error message in the CCS Operator's/Collector's Guide for the hardware device error failure.

The operator types in:

CÜ (CR)

NOTE

Do not type RP (CR). If RP is entered, the EDTLP save will not reload properly.

The following message is displayed on the master terminal:

TAPE ERROR HAS OCCURED

OPTIONS:

- (1) MOUNT NEW OUTPUT TAPE ON THE TAPE DRIVE x
- (2) MOUNT NEW OUTPUT TAPE ALTERNATING THE TAPE DRIVES
- (3) MOUNT NEW OUTPUT TAPE CHANGING TO USE DRIVE y ONLY

PICK AN OPTION FROM ABOVE

NOTE

Tape drive x is the same drive on which the tape error occurred. Tape drive y is the other tape drive.

The following are examples of correct responses:

If you are using only the one tape drive, the operator types in:

1 (CR)

If you want to use the other tape drive to restart and continue using alternating tape drives, the operator types in:

2 (CR)

The operator can discontinue using the tape drive and use only the other tape drive by typing in:

3 (CR)

NOTE

Option 3 can be used if one of the tape drives has a hardware failure and must be fixed before the drive can be used for the save.

If the tape ran off the end of the reel, this tape must be restarted. Before unloading the tape, check to see if the end of the tape mark is present on the tape. If the tape mark is there, the end of the tape sensor did not pick up the end of the tape mark. This condition must be fixed before this tape drive can be used again for the save. When this happens the operator can use option 3, and use the other tape drive to restart the tape. All of the following reels will begin on this drive.

If option 2 or 3 was selected, make sure the tapes are labeled correctly after changing drives. Labeling the tape after it finishes saves switching the labels if the error occurs.

The tape mounting instructions vary depending on which of the above options was chosen.

The following message is displayed on the master terminal if option 1 was chosen:

**** OPERATOR-REWIND TAPE ON UNIT x

**** **** OPERATOR-MOUNT OUTPUT TAPE ON UNIT x

READY (Y OR N)>

The operator rewinds the specified unit, mounts a new output tape on the same unit, and readies the tape drive.

The following message is displayed on the master terminal if option 2 or 3 was chosen:

***** OPERATOR-MOUNT OUTPUT TAPE ON UNIT y WITH RING

READY (Y OR N)>

The operator mounts a new output tape on the specified unit and readys the tape drive.

The operator types:

Y (CR)

NOTE

A tape error only restarts the reel that failed. If reel 2 failed, only reel 2 is restarted.

Other Error Messages

- DIVISION ERROR-DIVISOR IS ZERO OR DIVIDEND IS NOT POSITIVE
- DIVISOR=XXXX DIVIDEND = XXXX XXXX STADD XXXX XXXX

This error should never occur; if it does, call a site CDC analyst.

 FILE MANAGER ERROR: FILE NAME XXXXXXXX, REQUEST=GETFCB,ISTAT=9999

This error should never occur; if it does, call for a CDC site analyst.

ILLEGAL: CCS HAS NOT BEEN DISABLED

The operator must disable CCS before the EDTLP can be executed. For instructions for stopping CCS, see the Operator's/Collector's Guide.

EXTERNAL TIMER REJECT

This is a hardware error; call a CE.

INVALID DISK NUMBER

The disk number entered was not a valid number. The operator enters a disk number from the list displayed on the master terminal.

DISK IS NOT MOUNTED AND READY

The disk number entered was not mounted using the utilities prior to the execution of EDTLP. The operator must autoload and start over.

 MASS MEMORY ERROR XXXX HAS OCCURRED ON LU XX

This error should never occur. All mass memory errors should be displayed in the MM ERR format. If this error appears call a CDC site analyst.

MM ERR NN LU=LL T=HHMM:SS S=0104

Check the RUN light on the mainframe. If the RUN light is off, there is a problem with the disk and the save will have to be restarted. Notify a CE of the mass memory error. If the RUN light is on, the save is good and the system has recovered.

STOP

The operator must abort the EDTLP run by performing a manual interrupt and typing in two *Zs.

EDTLP LOAD PROCEDURE

The operator physically mounts and readys SYSVOL on disk unit 0. For autoload procedure see the CCS Operator's/Collector's Guide.

The operator must make sure the page button (scroll mode) is up on the master terminal.

The operator performs a manual interrupt.

The following message is displayed on the master terminal:

MI >

The operator types:

*BATCH,4 (CR)

The following message is displayed on the master terminal:

J

The operator checks to see if the line printer is ready.

The operator types:

*JOB (CR)

The following message is displayed on the master terminal:

J

The operator types:

*EDTLP (CR)

The following message is displayed on the master terminal:

EDTLP

TYPE SAVE (CR) FOR DISK-TO-TAPE SAVE TYPE LOAD (CR) FOR TAPE-TO-DISK RELOAD

The operator types:

LOAD (CR)

The following message is displayed on the master terminal:

TAPE TO DISK RELOAD

ALTERNATING TAPE DRIVES FOR MULTI TAPES REEL # LOGICAL UNIT # TAPE DRIVE #

1	6	0
2	16	1
3	6	0

You may choose to use alternating tape drives or only one tape drive. If you wish to use only one tape drive, specify the tape drive number of the drive you wish to use.

ALTERNATING TAPE DRIVES (Y OR N) >

NOTE

Your CCS system is equipped with two tape drivers. You have the option to use both drives, alternating with each tape. If both drives are to be used, the first tape begins on drive 0, the second tape begins on drive 1, the third tape begins on 0, the fourth tape begins on 1 etc.

If your system is not equipped with two tape drives, or if one of the two tape drives are down, you may select the single tape drive. The only tape drives you may select are 0 or 1.

The following are examples of correct responses:

If a single tape drive is to be used, the operator types:

N(CR)

If alternating tape drives are to be used, the operator types:

Y(CR)

The following message is displayed on the master terminal if N was entered:

SELECT A TAPE DRIVE (0 OR 1)>

The following are examples of correct responses:

If tape drive 0 is to be used, the operator types:

0 (CR)

If tape drive 1 is to be used, the operator types:

1 (CR)

The following message is displayed on the master terminal:

OPERATOR-MOUNT SAVE TAPE REEL 1 ON UNIT 0 WITHOUT RING

TYPE GO TO CONTINUE, EX TO EXIT>

NOTE

The unit number is 1, if tape drive 1 was selected.

The operator mounts the first reel of the save on the unit specified and readys the tape drive.

The following are examples of correct responses:

If the tape is ready and the operator wishes to continue, the operator types:

GO (CR)

If the operator wishes to exit program, the operator types:

EX (CR)

If EX was entered, the operator aborts the EDTLP run by executing the following:

The operator performs a manual interrupt.

The following message is displayed on the master terminal:

MI >

The operator types:

*Z (CR)

The following message is displayed on the master terminal:

JP, *EDTLP

JOB ABORTED

ĵ

The operator types:

*Z (CR)

If the procedure was not aborted, the following message is displayed on the master terminal:

TAPE TO DISK RELOAD

****TAPE WAS MADE 01-22-79 at 16:09

THE FOLLOWING RELOADED TO DISK:

VOLUMES WILL

VOLUME NAME

DISK NUMBER

SYSVOL

0

BE

CDD01

1 .

IS THIS THE CORRECT SAVE TAPE (Y OR N)>

NOTE

The number of volumes listed depends on how many volumes were saved.

OPERATOR VERIFY THIS IS THE SAVE YOU WISH TO RELOAD

If this is the correct save, the operator types:

Y (CR)

If this is not the correct save, the operator types:

N(CR)

If N is entered the tape mounting instruction is displayed to the master terminal and the operator can mount another save tape.

The following message is displayed on the master terminal if Y was entered:

TURN OFF PROTECT SWITCH (ESC J20@) AND TYPE CARRIAGE RETURN

The operator types

(ESC) J20@ (CR)

The following message is displayed on the master terminal:

**** OPERATOR-BE SURE YOU HAVE THE CORRECT

**** DISK PACKS MOUNTED AND THE DISK DRIVES ARE READY

**** OPERATOR-DO NOT TYPE GO UNTIL DISK DRIVES ARE READY

. . . .

TYPE GO TO CONTINUE, EX TO EXIT

The following are examples of correct responses:

If the operator wishes to discontinue the EDTLP program, the operator types

EX (CR)

NOTE

If EX is entered, the operator must autoload since the system has been disabled.

When the disk packs are ready and set up exactly the same as in the list above, the operator types:

GO (CR)

NOTE

If the disk packs are not set up the same as they were on the save, the reload will not load properly.

If EX was entered, the program aborts and the following is displayed on the master terminal and then the procedure must be restarted:

**** OPERATOR-RELOAD ABORTED-PACKS HAVE NOT BEEN RESTORED

**** OPERATOR-AUTOLOAD THE SYSTEM

The following message is displayed on the master terminal, as each volume is restored:

SYSVOL

IS BEING RELOADED TO DISK

CDD01

IS BEING RELOADED TO DISK

NOTE

The number of volumes displayed depends on which volumes are saved.

End of EDTLP Reload

The following message is displayed on the master terminal when the reload is finished:

TAPE TO DISK RELOAD COMPLETE

****OPERATOR-AUTOLOAD THE SYSTEM

NOTE

The system is stopped when the program completes.

The following message is displayed on the master terminal if the reload did not complete:

**** OPERATOR-RELOAD ABORTED-PACKS HAVE NOT BEEN RESTORED

**** OPERATOR-AUTOLOAD THE SYSTEM

NOTE

If EX has been entered to any of the TYPE GO TO CONTINUE, EX TO EXIT messages, the above message is displayed on the master terminal. You may have to change the SYSVOL packs, this will depend on whether SYSVOL was finished before the abort or whether SYSVOL was on the save.

End of Tape Processing

The followig message is displayed on the master terminal when the end of the tape is reached and alternating drives are not used:

END OF TAPE HAS BEEN REACHED

(***

**** OPEATOR-REWIND TAPE ON UNIT nn

OPERATOR-MOUNT REEL xx ON UNIT nn

READY (Y OR N) >

The operator rewinds the tape on the drive specified and mounts and readys the next reel on the same tape drive.

The operator types:

Y (CR)

The following message is displayed on the master terminal when the end of the tape is reached and alternating tape drives are used:

* * * *****

**** OPERATOR-MOUNT REEL xx ON UNIT nn

READY (Y OR N)

The operator mounts and readies the next reel on the unit specified.

The operator types:

Y (CR)

The following message is displayed on the master terminal only if alternating tape drives are used:

OPERATOR-REWIND TAPE ON UNIT nn

**** ***

OPERATOR-MOUNT THE NEXT REEL # xx

ON UNIT nn

The operator mounts and readys the next tape on the drive specified.

EDTLP Tape Error Messages and Recovery

The following message is displayed on the master terminal:

L,06 FAILED NN

L,16 FAILED NN

ACTION

ACTION

Refer to the NN in the CCS Operator's/Collector's Guide. appendix A for the hardware device error failure.

The operator types:

CU (CR)

NOTE

Do not type RP (CR). If RP is entered, the EDTLP reload will not work.

The following message is displayed on the master terminal:

TAPE ERROR HAS OCCURRED

OPTIONS:

- (1) RESTART TAPE ON THE SAME TAPE DRIVE
- RESTART TAPE ALTERNATING THE TAPE DRIVES
- RESTART TAPE CHANGING TO USE TAPE DRIVE X ONLY
- (4) END TAPE TO DISK RELOAD PICK AN OPTION FROM ABOVE>

The following are examples of correct responses:

If you are using only one tape drive and the failure was not a hardware failure, to restart the reload of the tape that failed, the operator types:

1 (CR)

If alternating tape drives are being used and the tape failure was not a hardware error, the operator can load the tape that failed on the other drive and continue the reload alternating the drives. operator types:

2 (CR)

The operator may discontinue using the tape drive that failed and use only the other tape drive by typing:

The operator may discontinue the reload by typing:

4 (CR)

NOTE

Option 3 can be used if one of the tape drives has a hardware failure and must be fixed before continuing with the reload.

The tape mounting instructions vary depending on which option is chosen above.

The following message is displayed on the master terminal, if option 1 was chosen:

**** ***

OPERATOR-REWIND TAPE ON UNIT x

READY (Y OR N)>

The operator rewinds and readys the tape.

The following message is displayed on the master terminal if option 2 or 3 was chosen:

**** ****

OPERATOR-REWIND TAPE ON UNIT x

**** ****

OPERATOR-MOUNT REEL n ON UNIT y

READY (Y OR N)>

The operator rewinds the tape and moves it to the tape drive specified.

The operator types:

Y (CR)

If option 4 is selected, the program will abort and the following message is displayed on the master terminal:

**** OPERATOR-AUTOLOAD THE SYSTEM

NOTE

If Y is typed before the tape is ready, another tape error will occur.

A tape error will only restart the reel which failed. If reel 2 failed, only reel 2 will be restarted.

Other Error Messages

STOP

The operator must abort the EDTLP run by performing a manual interrupt and typing two *Zs.

NOTE

If this message accompanies another error message, it must be corrected first.

ILLEGAL: CCS HAS NOT BEEN DISABLED

The operator must disable CCS before the EDTLP load can be executed. For instructions for stopping CCS, see the Operator's/Collector's Guide.

MASS MEMORY ERROR XXXX ON LOGICAL
 UNIT NN

This error should never occur. All mass memory errors should be displayed in the MM ERR format. If this error appears call a CDC site analyst.

MM ERR NN LU=LL T=HHMM:SS S=0104

Check the RUN light on the mainframe. If the RUN light is off, there is a problem with the disk and the load must be restarted. Notify a CE of the mass memory error. If the RUN light is on, the save is good and, the system has recovered.

TAPE CHECKSUM ERROR

If a checksum error occurs, this means a tape record has not been read correctly from tape. The tape must be restarted.

TAPE SEQUENCE ERROR

Each record on the tape has a sequence number. If the tape records are read out of sequence the tape must be restarted.

TAPE TYPE WRONG

This error should never occur; if it does, call the CDC site analyst.

 WRONG REEL MOUNTED-MOUNT REEL NUMBER n ON TAPE DRIVE x

TYPE GO TO CONTINUE, EX TO EXIT

The operator has mounted the wrong tape, or the tapes have been labeled incorrectly. Locate the correct reel and mount and ready the correct reel. The operator types:

GO (CR)

•

This section describes the procedures for installing a basic CYBER Credit System. The successful completion of these procedures does not result in a fully operational system. It does provide the system components necessary for Control Data analysts and trainers to make parametric and program modifications to fit a user's specific requirements.

INSTALLATION MATERIALS

The following list of materials is provided for basic system installation:

- DTLP dead start media for NRZI and/or phase encoded tape drives
- SMD initializer/diagnostic media
- Operating system install tape (DTLP)
- System install tape (EDTLP)
- ITK update test Reactivate inactive SUMHIST tape
- ITK update test Reactivate inactive accounts tape

- ITK update 400 Nonfinancial update tape
- ITK update 500 Financial update, promise-to-pay tape
- ITK update 500 Financial update, payment stacking tape

INSTALLATION PROCEDURES

Detailed procedures for system installation are contained in the CCS 3.0 Installation Test Kit.

The actual installation is comprised of four steps:

- Hardware installation
- System installation
- Installation test kit execution
- Clear files

This is followed by system parameterization as defined in section 9.

SYSTEM PARAMETERS

CCS is designed to permit extensive user-tailoring of the system parameters that affect the way the user does business. To facilitate this process, utility procedures and work tables can be found in appendix J. The Control Data field analyst and the user representative jointly complete these tables and use the results to enter customer parameters into the system.

Five areas must be built or updated before CCS can operate. These areas are as follows:

- HOSUPT Creation of delinquent master file (DELQMST) from data in host accounts receivable.
- Utility file
- Activity verification table
- DACRTE program must be modified.
- Decision table

There are numerous areas that may be modified to include user-defined information in addition to standard CCS information already available. These areas are as follows:

- User area of the master file (DELQMST)
- Collector screens
- Letter file
- Report generator data element table
- Detail list report program DTLLST must be modified if the contents of the user area of the master file is to be included.
- Update tapes

There are two programs that may need to be written by the field analyst which are not part of the standard system and must be negotiated with a quote for special software (QSS). These programs are as follows:

- CCSPYT Payment stacking subroutine
- UPD500 Financial update tape processing

The following paragraphs describe the areas and programs that can or must be tailored to fit the customer's needs.

HOSUPT - INITIAL MASTER FILE FROM HOST SYSTEM

The Control Data field analyst and/or the user representative are responsible for creating the initial delinquent master file. This is accomplished by using the

host system resources, or by writing a program on CCS to extract the data required from the host accounts receivable file. Appendix E gives a description of the standard fields in the CCS delinquent master file (DELQMST).

The standard system accepts EBCDIC format tapes as input for daily cycle menu - selection D, process complete update tape(s) from A/R, and daily cycle menu - selection E, Process 400 Series nonfinancial tape(s). The option of accepting EBCDIC or ASCII input tapes is controlled by a switch setting in the procedure systems PRFDC004 and PRFDC005. In the standard system, switch U1 is set to 1 to accept EBCDIC input tapes; if ASCII input tapes are to be used, switch U1 is set to zero (0). This is accomplished by using the text editor.

UTILITY FILE

The utility file (UTIFIL) contains user-defined information necessary for processing data in CCS, such as report headings, collector ID and names, and so forth. Appendix J contains work sheets to aid the analyst in defining the information.

UTIFIL is an indexed file with the first four characters as the key. This key is used to obtain information from the utility file. The following keys are provided with the standard system. These keys cannot be deleted and must be updated when the system is installed. Figure 9-1 provides additional information.

- HDR1, HDR2, and HDR3 are each a maximum of 40 characters long. These three lines appear on all reports printed by the system. Suggested data is the company name and address.
- RSW1 is the number of days an inactive account remains on the master file before it is moved to history. (R is released, S is satisfied, and W is written-off.)
- ACTC and RESC are each a maximum length of 32 codes (64 characters). These are supplied when the activity verification table construction routine is executed (procedure F of the maintenance menu).
- SALC is the salutation code. Each code is eight characters long. The system can have a maximum of nine codes. This code corresponds to the salutation code assigned to each collector, supervisor, or clerk using CCS. (See record entry in section 4.) This code is also used to indicate the title of the collector, which is printed below the closing in the collection letters, and may be used in the greeting line of the letter.

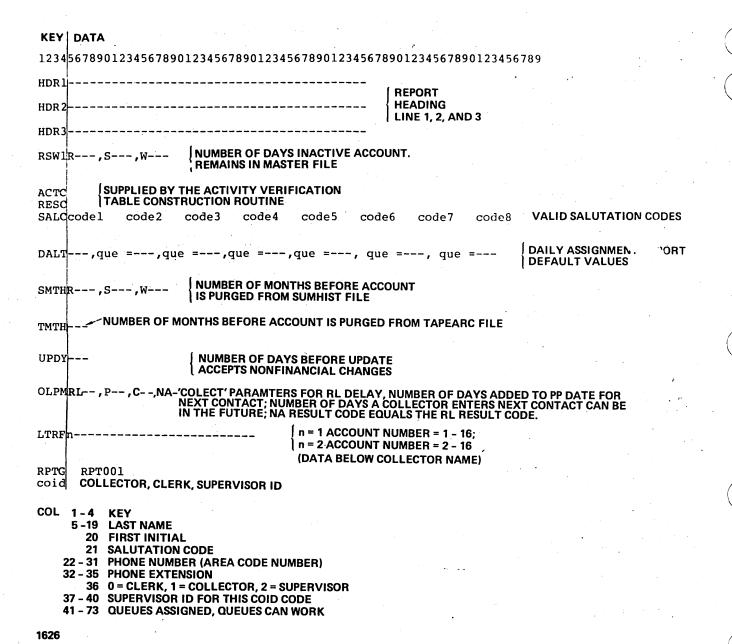


Figure 9-1. UTIFIL Record Description

- DALT is the daily assignment report default value. The daily assignment report is a hard copy print of the information a collector needs to continue making customer contacts if the screen displays are not available. The format of DALT is aaa, que = bbb, where aaa is the number of records to be printed for every queue in the system and the que = bbb is an override number for that particular queue. For example, an entry of 030,0869 = 040 causes 30 records for each queue to print, except queue 0869 which will print 40. If any one queue is assigned to a large number of collectors, a larger number of accounts may need to be printed for that queue. An entry of 999 for aaa causes all accounts for all queues to be printed. An entry 999 for bbb causes all accounts for that queue to be printed. A maximum of five overrides is possible.
- SMTH is the number of months an account must be in the on-line summary history file before it can be purged.
- TMTH is the number of months an account must be in the on-line tape archive file before it can be purged.
- UPDY, a maximum of three characters, is the number of days before the CCS UPDATE program accepts nonfinancial changes from the master system. For example, if the value is 10, the update tape contains a change to a customer address, and if a collector has changed that field within the last 10 days, the field is not changed during the update. A value of 999 indicates that nonfinancial changes are not accepted from the update tape.
- OLPM is the on-line parameters used by COLECT. These parameters are:
 - RLxxx: When a collector in automatic mode enters an action code of RL, the account reappears a number of accounts later.
 - Pxx: The number of days added to the promise-to-pay date, to allow a check to be processed through an accounting system. This number is added to the promise-to-pay date before determining if the promise-to-pay was kept, pending, or broken.
 - Cxx: The number of days added to the present date to determine the next contact date. This is the default value used when a collector enters (CR) and is prompted for the next contact date. There is a limit of 63 days.

NOTE

The system will not allow entry of a promise-to-pay date that is farther into the future (a number of days from the current system date) than the sum of the Pxx and Cxx parameters.

- Nax: This parameter controls the systems response to an NA (no answer) result code. If x = Y, the NA result code will be treated as an RL (review later). See the RL parameter above. If x = N, the NA result code will be treated as any other result code.
- LTRF n data is used by the collection letters print procedures.
 - If n = 1, account number printed is 1 through 16.
 - If n = 2, account number printed is 2 through 16.
 - Data = is a maximum of 20 characters of actual data to be printed below the signature line.

Example: LTRF2COLLECTION DEPT causes digits 2 through 16 of the account number to be used in the letter and the words COLLECTION DEPT to be printed below the collectors, name on the signature line.

- LRT1 and LTR2 records are present in the initial UTIFIL. The LTRBLD program updates these records with valid letter numbers when LTRFIL is built. COLECT uses these records to validate numbers when they are requested by the collectors.
- The RPTG record contains entries used by the report generator procedures. The entries are generated when a program is created and saved while executing selection K on the on-demand report menu.

The RPTG record is initialized at system installation time with a single entry of RPT001 (entries are always in the form of RPTnnn). After the first time a report is created and saved using the report generator, the RPTG record will contain two entries; the first entry represents the next available report number and the second entry represents the report number of the last (immediately prior) report created and saved by the report generator.

 COID is one entry for each collector using the on-line system. The first four characters must be unique and correspond to the user ID used when logging into the system (figure 9-1).

NOTE

The entry ALL allows the collector to access all the master records regardless of queue assignments.

Any key not existing in the standard system is assumed to be for a collector, but any data can be entered. Figure 9-1 (COID) shows the format to use if the entry is for a collector.

To add, update, or delete entries in UTIFIL, selection C of the maintenance menu prompts the operator for the desired function, ADD, UPD (update), or DEL (delete). For an ADD function the key must not exist, and is assumed to be a collector. For UPD and DEL, the key must exist; however, the standard keys cannot be deleted. A determination as to which edit codes to display is made to aid the operator in locating columns. On a UPD function the current contents of the record are also displayed.

The following is a sample of information from UTIFIL.

KEY DATA HDR1CYBER CREDIT SYSTEM HDR2VERSION 3.0 HDR3SYSTEM VERIFICATION RSW1RO10,S015,W005 ACTCTHTB** **RESCLMBZNH**** MISS **MRS** SALCMR DALT030,0869=040 SMTHR006,S006,W006 **SMTM012** UPDY015 OLPMRL06,P02,C31 RPTG RPT007RPT006 LTRF2COLLECTION DEPT. LTR10102030405** LTR2 0001SUPER VISOR 2 2133,0869,ALL 0002COLLECTOR 100010869 000010869,ALL 0003CLERICAL

ACTIVITY VERIFICATION TABLE

CCS permits the user to determine the action and result codes to be used by a collector while reviewing an account. Up to 32 action codes and 32 result codes can be accommodated. In addition, a user can define which result codes are valid for use with specific action codes, whether a letter or comment is required, and the default value for the next contact date. This information is contained in the activity verification table (ACTVERTB).

The standard CCS contains a text editor file AVMDESC (table 9-1), which is used to create the activity verification matrix (ACTVERTB). Selection E from the maintenance menu prints the contents of the activity verification matrix file. The action and result codes and their related letter and comment codes must be entered in the activity file (AVMDESC) using the system EDITOR. Appendix J contains a work table to aid the analyst/user representative in defining this data (figure 9-2).

The creation of the activity verification table is accomplished by executing procedure F from the maintenance menu. The procedure makes two passes through AVMDESC. The first pass processes all records for result codes; the second pass processes all records for action codes. As each record is processed, it is listed on the system line printer along with any diagnostics for the record. Errors that generate diagnostic messages are:

 THE CODE TO BE ADDED WILL CAUSE TABLE OVERFLOW

A maximum of 32 result codes and 32 action codes are permitted. The system ignores the action/result code record.

TABLE 9-1. AVMDESC RECORD FORMAT

Start Column	Number of Characters	Description
1	2	Identifier is either RS for result code record, 'AC for action code record, or any other characters for comment record.
3	2	The two-character action or result code.
5	1	Either L or C for letter of comment required. Any other entry is ignored.
6	1	Either L or C for letter of comment required. Any other entry is ignored.
7	2	Default number of days until the next contact for use by COLECT. Must be in the range of OO to 63.
9	64	For action code records; list of result codes are permitted with this action for less than 32 two-character codes. Terminate the list with a '**'.

 THE ACTION/RESULT CODE DUPLICATES A PREVIOUSLY PROCESSED ACTION/RESULT CODE

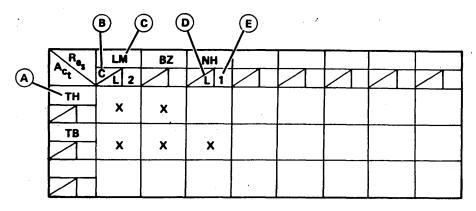
The system ignores duplicate entries.

 THE DEFAULT NEXT CONTACT DATE IN DAYS IS UNINTELLIGIBLE OR EXCEEDS THE MAXIMUM. IT MUST BE IN THE RANGE OF 00 TO 63 DAYS

The system sets the next contact date in the record to zero (default condition) and continues processing.

 ACTION CODE TO BE ADDED IS A CCS 3.0 SCREEN FUNCTION. ACTION CODES CANNOT BE ONE OF THESE FUNCTIONS

The system ignores the action code record. The reserved list of screen function codes is as follows:



NOTE 1: A - ACTION CODE

B - COMMENT IS REQUIRED

C - RESULT CODE

D - LETTER IS TO BE SENT

E - NUMBER OF DAYS TO NEXT CONTACT DATE

NOTE 2: ENTRIES IN AVMDESC SHOULD BE:

ACTH ^ ^ LMBZ**
ACTB ^ ^ LMBZNH**

RSLMCL 02

RSBZ

RSNHL01

1932

Figure 9-2. Activity Matrix

NA DS DF DA DC CS P1 P2 P3 RL NQ OA SS DL AA EA UH (blanks)

 FOR ACTION CODE RECORDS THE LIST OF VALID RESULT CODES CONTAINS A RESULT CODE NOT DESCRIBED IN A RESULT CODE RECORD

The system ignores invalid result codes in the valid result code list.

Selection F is responsible for updating utility file (UTIFIL) records, RESC and ACTC. These records contain the result and action codes used in the system.

Selection E, from the maintenance menu, prints the table on the line printer in a matrix format.

DAILY ASSIGNMENT CREATION - DACRTE

During daily collection activities in CCS, COLECT (the on-line program) accesses a file called DLYASSN. This file contains information on queue assignments to individual collectors and the priority of accounts within those queues. The factors establishing those queues and priorities are customer-defined. The Control Data field analyst must modify the program, DACRTE, with the

information necessary to create the DLYASSN file. This information includes the following:

- The starting position and field length of the fields in the DELQMST file that are to be used as decision table parameters for both queue and priority (if both are used). Figure 9-3 shows the areas in DACRTE that must be modified.
- The starting character position for the last payment received and amount received. These fields are used in checking for broken or kept promises-to-pay (figure 9-4).
- The additional fields that may be required in the DLYASSN file (figure 9-5).

The standard system contains a FORTRAN program, DACRTE, that has to be recompiled with these fields included in the calling parameters. An editor file (SFDACRTE) is provided with the standard system. The analyst can use the text editor to make the desired changes.

DAILY ASSIGNMENT OPERATION - DECISION TABLE

In addition to the changes to DACRTE, the Control Data analyst must build the decision table (DECTBL) used by that program. Appendix J contains a work sheet to aid the analyst in developing the data to be input to the decision table.

****	, , , , , , , , , , , , , , , , , , ,	DAC00028 DAC00029
DATA	P-1 P-2 P-3 P-4 P-5 P-6 P-7 P-8 P-9	DAC00030 DAC00031 DAC00032
***	SET UP THE DELOMST PARAMETER LENGTH IN CHARACTERS MAX. = 6 IF UNUSED MUST BE ZERO (0)	DAC00033 DAC00034 DAC00035
DATA	P-1 P-2 P-3 P-4 P-5 P-6 P-7 P-8 P-9	DAC00036 DAC00037 DAC00038
***	SET UP THE STARTING CHARACTER POSITIONS IN DELOMST FILE FOR	DAC00039 DAC00040 DAC00041
DATA		DAC00042 DAC00043 DAC00044
***		DAC00045 DAC00046 DAC00047
DATA	P-1 P-2 P-3 P-4 P-5 P-6 P-7 P-8 P-9 PRIL / 0, 0, 0, 0, 0, 0, 0, 0 /	DAC00048 DAC00049 DAC00050 DAC00051

Figure 9-3. Modified Areas in DACRTE File

	C****				TER POSITIONS DATE USED FOR		DAC00052 DAC00053
13	DATA	LDATE /	0/,	LAMT/			DAC00055

Figure 9-4. DACRTE for Promise-to-Pay

C 230 CALI CALI	BUILD THE DLYASSN RECORD - ACCT #, QUEUE, NEXTCD, PRIORITY L CCSMVA (DEQREC, J, 16, ASNREC, L, 16) L CCSMVA (DEQREC, J+270, 14, ASNREC, L+16, 14)	DAC000243 DAC000244 DAC000245
2 C**** C 2	IF ADDITIONAL FIELDS ARE REQUIRED IN THE DLYASSN RECORD, THEY SHOULD BE MOVED IN AT THIS POINT	DAC000246 DAC000247 DAC000248 DAC000249

Figure 9-5. Additional Fields in DLYASSN File

This file is used to control the assignment of collector numbers and account priorities. Its contents may be modified via the program DECMTN. It interfaces to CCS routines via the programs, RPGDT1 and FTNDT1.

The file and its associated processing subroutines provide a decision table look-up function. A value (or one in a sequence of values) may be returned to a calling program based on logical operations, up to nine input parameters.

The file consists of one record that is essentially a decision table. The table is composed of individual tests. Each test can logically compare up to nine input parameters against values within the table, and if the test proves true, assign a specific value to the returned parameters.

Tests are grouped together within levels. A specific grouping (level) of tests is processed until a test proves true. If the level is exhausted before a true test is found, control is returned to the calling program. If a test within the level proves true, the designated value is assigned to the returned parameter, and processing either continues with the next level (as indicated in the true test) or returns to the caller (if the true test does not include a next level).

The file DECTBL is created by DECMTN. There are eight tests within the table that are divided into three levels. The fields within each test are listed below.

- Test number A sequential numbering of all the tests within the table. Test number 1 is always the first test to be examined upon entry to the processing routines. The test number is used by DECMTN to add, delete, or display tests.
- Level 1 The level of tests to which a specific test belongs. Groups (levels) of tests must be in the table in increasing order. Levels may have values from 1 to 9.
- Next level The level of tests to transfer control to, if the test proves true. The next level must have a value greater than the level value, unless control is to be returned to the user immediately (next level = 0).
- Number of parameters The number of parameters in the test. There may be from 1 to 9 parameters.
- Parameter number Each parameter has up to four fields associated with it in the table. These fields are operator, comparison value (5), and connector.

NOTE

Comparisons are done in ASCII sequence (spaces before numeric, before alpha).

- Parameter operator This is the logical operator used in processing the user-supplied parameter.
 Options and descriptions include the following:
 - Null Do not look at the parameter, but force true condition for this parameter.

- .EQ. Compares the 6-byte field supplied by the user, to the 6-byte field identified by parameter value 1 for equality. If equal, the parametric processing is true.
- .NE. Performs complementary processing to .EQ.: that is, true if user-supplied value not equal to table value.
- .LE. Compares the user-supplied field with table value and resolves as true if supplied value is less than or equal to table value.
- .GT. Performs complementary processing to .LE.: that is, true if user-supplied value is greater than table value.
- .WE. Compares the user-supplied field against parameter value 1 and parameter value 2 and resolves as true if the supplied value is within or equal to the bounds values.
- .OS. Performs complementary processing to .WE.: that is, true if supplied value is outside the bounds.
- Parameter value 1 The six character positions between the asterisks represent the table value used by all operators except NULL. This field should not contain special characters, only 0 through 9, blank, or A through Z.
- Parameter value 2 The six character positions between the asterisks represent the second table value used by operators .WE. and .OS.
- Parameter connector The logical connector to be used in combining parameters in multiple parameter tests. Two values are allowed; .AND. or .OR.. Table processing evaluates each parameter within a test for true or false and then evaluates the entire test using the connectors. Connectors are always evaluated from left to right; the lowest numbered parameters first. The .OR. connector is inclusive.
- Number of returned values The number of possible values to be returned to the user should the test prove true. The routines cycle through the values returning the next value in line on each successive true evaluation of the test. A selected group of collectors may be assigned on a round-robin basis to the same category of accounts. There can be from 1 to 99 unique returned values.
- Current returned value This field is reserved for future use. The current implementation starts at the first returned value on each computer run.
- Returned values The 4-byte values returned when a test proves true. The returned values should contain no special characters, only 1 through 9, blanks, or A through Z.

DECISION TABLE FILE - DECTBL

DECTBL is used for two functions: collector assignment, and account priority assignment.

The following paragraphs describe the necessary steps to build a sample decision table.

The sample customer requirements for collector assignment are to assign accounts less than \$500 and 90 days delinquent to collectors 1, 2, 3, 4, and 5; assign accounts less than \$500 but over 90 days delinquent to collectors 6 and 7; assign accounts over \$500 but less than 90 days delinquent to collectors 8 through 21 or collector 25; and assign accounts over \$500 and 90 days delinquent to collectors 22, 23, and 24.

The requirements for priority assignment are to work accounts whose last contact yielded a result of promise-to-pay. Accounts within this category of over \$100 delinquent are given the highest priority. Non promise-to-pay (PP) accounts should be worked after PP, but with delinquent accounts over \$100 coming first within this category.

The calling programs pass the decision table routine's three parameters (table 9-2). If the caller is after collector numbers, he passes the six most significant digits of amount delinquent as the first parameter. (Since this field is carried as a 9-digit field, this puts \$500 into a field as 000050.) The second parameter is the number of days delinquent, and the third parameter is blank.

If the caller is after priority, he passes amount delinquent (as above) as the first parameter. The second parameter is the result code from the last contact, and the third parameter is p.

Processing of each user call starts with the first test. This test is used to separate the priority requests from the collector requests. If a priority is made, test 1 will be true, a priority of 1000 is assigned, and the level 2 test is performed before returning to the caller.

Tests 2 through 5 are used to distribute the accounts to the various collectors. Test 5 is an unconditional assignment of all accounts not satisfying tests 2, 3, or 4 to collectors 22, 23 or 24.

Tests 6, 7, and 8 further assign priorities. The default assignment of priorities (done for collectors in test 5) has already been accomplished by test 1.

TABLE 9-2. PARAMETERS AND RESULTS

P1	P2	Р3	Result
\$600.00 \$600.00 \$ 60.00 \$ 60.00 \$ 60.00 \$ 60.00 \$ 500.00	120 120 87 SL SL PP 90	P P P	0022 0023 0001 1000 1000 3000 0002

Table 9-2 shows some results expected from specific requests.

The sample decision table contents (table 9-3) were built through selection D on the maintenance menu. The following functions are available with this selection:

• Create	DECTBL may be created or loaded from 80-character records, resident on any system logical unit (cards, tape). The file may also be created interactively from the system console.
Add test	A new test may be added to the file interactively from the system console.
Delete test	An existing test may be deleted from the file.
Print table	The contents of the file are printed on the system line printer.
Dump table	The file can be dumped to any appropriate system logical unit in a format compatible with the CREATE function above.
Display test	Any existing test can be displayed on the system console.

This procedure provides extensive dialogue between the operator and the system. The prompting provided by the procedure leads the operator to a successful completion of his requested function.

All error messages are displayed on the system console. The error messages and appropriate action to be taken are as follows:

DECISION TABLE LACKS INTEGRITY

DECTBL does not conform to the expected format. DECTBL must be rebuilt with the CREATE function.

 DECISION TABLE OVERFLOW, TEST MAY NOT BE ADDED

DECTBL is not large enough for the number or complexity of tests.

BAD SYNTAX OR SYNTAX ERROR; REENTER

The operator input string is the wrong length, or a comma is in the wrong position. If a field is required, and it is not the last field in a line, it must be of the prescribed length (leading zeros or trailing spaces as required).

• PB .LE. PA

The operator has entered a parameter involving ranges (.WE., .OS.), and the first value, PA, is not less than the second value, PB.

TABLE 9-3. DECISION TABLE CONTENTS

Test No.	Next Level	Next Level	No. of Params	Param No.	Param Operator	Param Value 1	Param Value 2	Param Connector	No. Of Return Values	Current RET Value	Returned Values
1	1	· 2	3	1	NULL	* . *	* *	.AND.	01	00	1000
				2	NULL	* + *	* *	.AND.			
				3	.EQ.	*P *	* *				
2	1	0	2	1	.LE.	*000050*	* *	.AND.	05	00	0001,0002,0003,0004,00
				2	.LE.	*000090*	* *				
3	1	0	2	1	.LE.	*000050*	* *	.AND.	02	00	0006,0007
				2	.GT.	*000090*	* *				
4	1 .	0	2	1	.GT.	*000050*	* *	.AND.	15	00	0008,0009,0010,0011,00 0013,0014,0015,0016,00
				2	.LE.	*000090*	* *	1			0018,0019,0020,0021,00
5	1	0	2	1	NULL	* *	* *	.AND.	03	00	0022,0023,0024
				2	NULL	* *	* *	•		·	
6	2	0	2	1	.GT.	*000010*	* *	.AND.	01	00	2000
				2	.NE.	*PP *	* *				
7	2	0	2	1	.LE.	*000010*	* *	.AND.	01	00	3000
				2	.EQ.	*PP *	* *				,
8 2	2	0	2	1	NULL	* *	* *	.AND.	01	00	4000
	•			2	.EQ.	*PP *	* *				

NOTE: END OF TABLE TOTAL TABLE LENGTH = 176 MAXIMUM TABLE LENGTH = 500

USER AREA OF DELINQUENT MASTER FILE - DELQMST

The borrower's master file (DELQMST) contains 944 characters of space for user-defined data. This block of characters starts in character position 1057 and ends at character position 2000 (appendix E). All fields are in unpacked ASCII and are updated when update tape processing occurs (selection D). Appendix J contains a work table to help define the fields in the user area.

The type of data occupying this area may include, but is not limited to:

- Payment history
- Specific account financial data
- Account history

This area can have a unique definition for each account group (denoted by the first character of the account number in the range of 0 to 9) with the caution that like or same fields should occupy the same locations to facilitate updating and payment stacking.

COLLECTOR SCREENS

CCS permits the user to format (table 9-4) the terminal screens as viewed by the collectors, clerks, and supervisors. A screen description edit file (SCRNDESC) is provided with CCS (appendix K). The edit file is easily modified to allow the customer to include user-defined fields from the master file (DELQMST), as well as those in the standard system.

The screens are numbered according to the following screen number assignments:

10 to 19 - Borrower master screen (based up to 10 account groups)

TABLE 9-4. FORMAT FOR INPUT RECORDS TO SCRNDESC

Input	Columns	Description
First record	1 to 2 3 to 80	Screen number Comments
Next n records	1 to 2 3 to 4 5 to 6 7 to 10	Item line number Item column number (01 to 80) Length of field in bytes Starting position in file if applicable) Editing field type
	12 to 80 41 to 80	Constant screen field Comment (if not a constant field)
Last record	1 to 3 4 to 80	Constant 'END' Comments

- 20 to 29 Financial data screen (based up to 10 account groups)
 - 31 Selection screen
 - 33 Borrower change screen
 - 35 Supervisor screen
- 40 to 89 Message screens (supplied in standard release)
 - 02 Cosigner activity screen
 - 94 Cosigner (data from cosigner file)
 - 04 Cosigner screen (data from delinquent master file)

Figure 9-6 shows a screen layout form to aid in designing the screens. Each screen is 24 lines by 80 columns. The first 22 lines from the top are customer defined. Lines 23 and 24 are reserved for prompting and data input. After formatting the screen layout, the information required may be transferred to a screen coding form (figure 9-7).

The following guidelines should be considered when making changes to SCRNDESC:

- Any screen with a number less than 40 is preceded by a clear screen request.
- Any screen with a number greater than nine is prompted for input when the screen is displayed.
- The second digit of the borrower's master screen and the financial data screen must correspond to the first digit of the account number in the delinquent master file. This field is used to designate the different account types in the file.
- The message screens must not be changed.

The standard CCS system contains a screen description file (SCRNDESC) containing the basic screens (including one master screen and one financial data screen) required by the CCS system. Selection J from the maintenance menu prints this file. The information in this file may be changed using the system EDITOR.

NOTE

The record in SCRNDESC that describes the contents of an individual screen cannot exceed 1800 characters.

Table 9-4 defines the format for input records to ${\sf SCRNDESC.}$

The editing fields used are as follows:

Number	Field
0	Constant screen field
1	Date in form mm/dd/yy

Number	Field
2	Alphanumeric in the file
3	Nine-digit dollar amount in form 9999999.99
4	Ten-digit phone number in the form 999/999-9999
5	Restricted usage to report collection activity
6	Social security number in the form 999-99-9999
7	Time of day in 24-hour time, hhmm
8	Constant screen field labeling, change screen item
9	Most recent collection activity

The contents of the edit file (SCNRDESC) are used to create the permanent file SCRNFILE. (Refer to appendix E for a complete description.) SCRNFILE contains information concerning a particular field on a screen. A report is generated listing the data processed to create each screen (appendix D).

When complete, selection K from the maintenance menu must be executed. This creates the screen file (SCRNFILE) that is used by CCS.

LETTERS

During collection activities, a collector may request a collection letter be sent to a customer. The body of this letter is user-defined. Appendix J contains a work table for designing the letter format. Letters are printed from a file called LTRFIL, which is built from an editor file called LTRDESC.

Refer to section 4 for a complete description of the records in this file.

REPORT GENERATOR

CCS report generator procedures allow the user to generate general reports based on data from the DELQMST file. The standard system includes a data element table file (RPTTBL) which contains all of the fields defined in the standard portion of the delinquent master file (DELQMST). If the customer utilizes the user-defined area in the DELQMST file, the fields should be reflected in the RPTTBL.

The report generator procedures allow the user to add, delete, or change records in RPTTBL. If selection P is executed, the updates are accomplished with field-by-field system prompting to the operator.

CAUTION

The keys of the records in the CCS RPTTBL file must begin with 'M'; this is used by the letter build routines.

DETAIL LIST REPORT - DTLLST

The detail list report (DTLLST) provided with the standard CCS is a one-page summary showing all fields contained in the master files. All of the standard fields of the master file are printed on the upper half of the report. Appendix D contains a sample layout of the basic list report as it appears in the standard system.

The Control Data field analyst and the user representative are responsible for layout of user-defined fields from the master file on the lower half of the report. When the layout is agreed upon, DTLLST must be recompiled with necessary corrections or additions. An editor file (SRDTLLST) is provided with the standard system. The analyst can use the text editor to make the required changes.

UPDATE TAPES

CCS accepts only specifically formatted tapes from the host accounts receivable system. Both the field analyst and the user representative are responsible for generating the tapes in the specified format. They must be on 9-track magnetic tape, each type on a separate tape. The tapes have variable length records with a maximum length of 1784 characters. The labeled format is the expected format with labels bypassed at execution. An option, implemented at installation time, is available for using unlabeled tapes.

NOTE

If unlabeled tapes are used as input to financial update (selection F of the daily cycle menu), the MOUNT instruction in procedure stream PRFDC006 must be changed.

These tapes must be unblocked (one record per block). The format, either ASCII or EBCDIC, must be selected at installation time. The standard system supports EBCDIC. If ASCII is required, the analyst must change the switch settings in the appropriate procedure streams (PRFDC004 and PRFDC005).

The three types of updates available with CCS are as follows:

- Complete update (blank code) or status update ('30x' code). These are accomplished by the program UPDATE.
- Nonfinancial updates ('4xx' code). Program UPD400 updates the field indicated by the value of xx.
- Financial updates (UPD500) are described in the following paragraphs.

Refer to section 3 for a complete description of these updates. $\,$

PAYMENT STACKING SUBROUTINE (CCSPYT)

To allow for stacking of payment history in the user-defined portion of the DELQMST file, the complete update program (UPDATE) performs an exit to an external subroutine (CCSPYT). (See '30x' series code in section 3.)

Figure 9-6. Screen Layout Form

e aniverante de la facilitate de la faci B.O.R.R.O.W.E.R. '.S. . W.A.M.E. L.C.C.O.U.N.T. NUMBIE.R. CREDIT COLLECTION SYSTEM - SCREEN CODING FORMS COMMENTS CONSTANT SCREEN FIELD CACCIT, NO. 11111 ON AME. RE SS ¥¥YT 416 115 NBT 3.8 0.1 0.2 0.6 3.0 1 COL CINE

Figure 9-7. Screen Coding Form

Two parameters are supplied with this call to CCSPYT. They are the customer-user area from DELQMST and the customer-user area from the update tape. In addition to stacking payment history, this subroutine saves data from the master file by moving it from the master file update area to the tape area.

The basic CCS contains the CCSPYT subroutine that performs a jump back to the calling program.

This subroutine must be written by the field analyst and is based on the customer needs as defined in a QSS (quote for special software).

FINANCIAL UPDATE TAPE PROCESSING (UPD500)

The CCS allows for the processing of a transaction-coded financial update tape. The basic system contains a program (UPD500) that performs a successful termination of a procedure only if it is selected. (See selection F on the daily cycle menu.)

The field analyst is responsible for writing the UPD500 program if financial tape processing is required by the customer. Since the format and function are completely customer defined, a QSS (quote for special software) is required.

\$\$USERID FILE SETUP AND MAINTENANCE

The user ID file (\$\$USERID) contains all allowable user IDs for log-on purposes. (Refer to appendix E for a description of \$\$USERID.) The user cannot log on to a terminal unless a record exists in this file for the user ID entered on that terminal.

The work table in appendix J describes the standard CCS file and has entries for recording changes to the file via a maintenance routine. It also discusses the ability to restrict terminal capabilities to a particular program (for example, COLECT) by use of the REQUEST field.

\$\$USERID is an indexed file with the first ten characters as the key. The key is used in the maintenance procedure to add, update or delete records in the file. The maintenance routine facilitates updates of the file through UPD and DEL functions input from the system console.

To begin operation of the maintenance routine, the user must first log in at the master console with the USER ID of \$\$. Then the user enters the program name UIDMTN to the REQUEST = prompt.

In operation, the program prompts the operator for a function to be performed and verifies the validity of the function. Another prompt is made for the key to be processed. This prompt is done in two parts: the first for user ID, the second for port number.

On a UPD function, the file is checked to see if a record with that key is present. If it is, an update operation is performed. If the record is not present, an add operation is performed. For DEL function requests, the record must be present in the file.

The program displays on adds, updates of the key fields, and on edit prompts for entry of the request field. If the operation is an update, the current contents of the request field are displayed and changes can be made through the text editor.

TRANSACTION REPLAY

The CCS system provides a procedure for system recovery in the event of a catastrophic system failure. This procedure includes capturing data in the transaction file (TRANFL), which contains activities entered by collectors.

There is also an option provided for the availability of a secondary backup transaction file in case the primary transaction file (TRANFL) is inaccessible. This backup file (TRNBCK) is provided with the CCS system.

If the user decides to use the secondary backup transaction procedures, collection activities will be entered into this file, as well as in the primary file, and it will be available for additional backup. (Refer to section 10)

If the user decides not to use this option, the field analyst must delete this file (FN = TRNBCK) using the system utility. In addition, the analyst must remove the clear statement for this file from the procedure for selection L of the daily cycle menu. This procedure is PRFDC010. The analyst will use the system EDITOR to delete the line CLEAR, FN = TRNBCK.

SYSTEM ID DEFINITION

The user may change the data displayed as the system ID. This system ID appears as part of the autoload and log-on message. It is 32 bytes long and may contain any valid character. It may be changed at any time by logging off CCS, performing a manual interrupt, and typing SYID. Refer to section 7, and figure 9-8.

NEWS

The news feature is described in section 7. The option is provided for collectors to display this file (NEWS) when they log on the system for their daily activities. The data in the file is customer-defined and must be input with the use of the system EDITOR by the operator before the collectors sign on for their daily collection activities.

READY MASTER AND BACKUP DISK PACKS

When the parameterization of the system is complete and the customer is ready to go on-line, the disk packs should be copied to a second set of disk packs. The copy-to packs should be designated as MASTER with the SAVE operation and physically labeled MASTER. The set of disk packs which were used for installation and parameterization should be physically labeled BACKUP. $\label{eq:backup} % \begin{array}{c} \text{ and } \\ \text{ on } \\ \text{ on$

After the on-line operation, the MASTER packs (used for the on-line operation) should be copied to the disk packs (labeled BACKUP) and these backup packs should be designated BACKUP during the save operation. Refer to the Operator's/Collector's Guide.

monddyy nnmm:ss CDC CYBER 18 CCS SYSTEM VER 3.0 A SAMPLE OF A SYSTEM ID MESSAGE TERMINAL = 01 USERID=

Figure 9-8. Sample of the Messages Displayed During Log On

 In the event of a catastrophic system failure (for example, head crash), a procedure called transaction replay is invoked. The transaction replay results in a data base with essentially the same structure as before the failure.

Transaction replay provides the capability of replaying those collector, clerk, and supervisor transactions made prior to the failure against a backup disk system.

OPERATION

The basic philosophy behind transaction replay is to duplicate the update function of program COLECT, using program TRNPLY, and restore copies of the system. The steps required to do this are as follows:

- Save (on tape) the transaction file (TRANFL) or, if used, the secondary transaction file (TRNBCK) from the damaged system. Perform this by using the system utility LIST function.
- Restore the system packs by copying the backup packs that were saved prior to the work session.
- Restore the saved transaction file from tape onto the new system packs. If the secondary transaction file is used, the transactions must be loaded into TRNBCK as well as into TRANFL. This is done using the system utility LOAD function.

Execute replay program, TRNPLY.

If the cause of the system failure was a head crash, the assumption is made that the disk containing the transaction file (normally on SYSVOL) was not damaged. If this is not the case, the transaction file cannot be accessed and if the backup file is not available, the replay cannot be accomplished. Since there is no way to predict where, within the system, a failure is most likely to occur, an all encompassing menu selection procedure cannot be developed. It is recommended that an analyst be available to determine what steps in the replay procedure need be executed.

Before any attempt at transaction replay is made, the problem that caused the system failure should be corrected. Backup packs and a scratch tape MUST be available.

When transaction replay is complete, the day's input by the clerk, collectors, or supervisor has been restored except for any UH or DL requests which were entered by the supervisor. These requests must be re-entered.

Any menu selections which were made by the operator on the day of the catastrophic system failure must be re-selected. If any files have been updated or changed by use of the text editor, they must be re-entered.

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The Legal and Agency (LA) extension of the CYBER Credit System (CCS) concerns the accounts on which collection efforts through CCS have been unsuccessful in curing delinquency. When accounts have been delinquent for an excessive length of time (usually 120-180 days), they are termed 'written-off' in the CCS system and the collection department seeks alternative methods of collection.

These alternative methods may include passing the account to a collection agency for additional collection effort, or assigning the account to an outside attorney to initiate legal action against the borrower. When either of these alternatives is utilized, CCS is no longer directly involved with the account and any follow-up on the part of the original collection department must be completed manually.

The Legal and Agency System is designed to relieve these manual efforts by tracking and reporting the activities of the extended collection efforts. In addition, the LA system records the expenses involved, such as court costs and attorney fees. Where these costs are recoverable, the capability exists to apply the cost to the account balance due. A facility is also provided to determine performance effectiveness of attorneys and agencies.

NOTE

Certain terminology which relates to the Legal and Agency system will be used frequently in the following document. For ease in understanding, a definition of terms is listed in the glossary.

To create the LA system, the CCS system has been:

- Minaturized only the written-off accounts from the CCS system are moved to the LA system.
- Duplicated all the features and functions available to the CCS user have been retained for the LA user.
- Extended additional features (on-line financial updates) and reports (direct payment by borrower) have been added to reflect the extended collection effort of clients.

The main difference between a CCS system and an LA system is that the CCS collection department actively participates in the collection process; in the LA system, the collection department monitors the account as it is being "worked" by others.

The CCS and LA procedures reside on the same system. It is important that the user be aware that any action taken affects both systems. For example, if the operator stops CCS at the master terminal, both the CCS and LA collectors must be off-line. If a transaction replay is required, both the CCS TRANSFL and LA LATRANFL must be listed to tape, loaded onto the backup system, and both the CCS transaction replay (TRNPLY) and the LA transaction replay (LTRPLY) procedures must be executed.

FEATURES

All of the features and functions available in CCS are also available in LA. These include:

- On-line account availability The ability of the system to present LA accounts to the user in a prioritized sequence, provide account number and name search capabilities, and display account information with meaningful screen formatting is provided.
- Update capability Complete update, on-line nonfinancial updates, and batch updates of financial data have been retained.
- History processing The capability to relieve (purge) the LA data base of inactive accounts and the ability to retrieve these accounts should the need arise are included.
- Reporting capabilities These include all the standard reports available to CCS.
- The ability to produce customer designed reports by executing the report generator routines is found in the LA system.
- File maintenance The LA system contains duplicates of all the files used by CCS. These files may or may not have the same parameters.

In addition, the LA system includes unique features designed for tracking the extended collection efforts. Some of these features are:

A master client file (LACLIENT). There is a record in this file for every agency, attorney, or in-house collection department that may be involved in the LA extended collection efforts. The first two characters of the client number identify the type of collection method the client represents. Performance statistics are maintained in this file for use by performance evaluation reporting modules.

- Interactive creating, updating, and deleting of records in the client (attorney or agency) master file by the execution of a selection from the LA file maintenance menu.
- The creation of the LA delinquent master file by extracting records from the CCS delinquent master file. The criteria for selecting a record to be extracted is a status of written-off. If other selection criteria is required by the user, the extract program (SFLAXTRT) can be modified by the field analyst to incorporate this criteria.
- The retention of the complete update process. This process will add records to the LA master file directly from the host AR system without them first being moved to the CCS system. This feature would be used for accounts which have not necessarily been delinquent, but which require legal action for collection. An example of this type of situation might be the death of a borrower whose account includes no cosigners. In order to recover the balance owing, legal action might be instituted against the estate of the borrower.
- The enhancement of update capabilities to include on-line financial updates. A payment entry screen is available to enable on-line input of financial data required by the LA system, but not available through the CCS update process or not obtainable from the host AR system.
- A client referral list report, produced as a byproduct of the extract process that creates the LA delinquent master file. This report provides an audit track of the movement of accounts from CCS to LA. The contents of the report may be customer-defined. The information in this report may be useful to the client working the account.
- The availability of five reports containing information exclusive to the extended collection activity. These are the complete payment report, direct (borrower-to-host) payment report, client inventory report (printed in order by account number), and a recovery analysis report. The direct payment report is printed one client per page, allowing separation and transmission of copies to the client for recording payments of borrowers.

ON-LINE PROCESSING

The on-line capabilities of the LA system are provided by the program LEGAL (a renamed version of the CCS COLECT program) which retains all of the functions and features of COLECT. Refer to section 2 for the operation of CCS on-line activities.

The same NEWS feature options, with the entry of LA to the user ID prompt during log-on, are available as described in section 2. This NEWS may be a file unique to LA (owner ID of LA). If no NEWS file is defined on the system with an owner ID of LA, the system will display the contents of the CCS NEWS file (if the NEWS option is selected).

When the LEGAL option is selected (with or without NEWS), the LA system will display the selection screen. Refer to appendix M for a samples of LA screens.

This screen provides all the selections available in CCS. An additional selection is available: P = PAYMENT ENTRY. A response of P to the prompt will display the LA payment entry screen and allow the financial data required by LA to be input on-line.

Several functions are available from the payment entry screens.

 AD - Add a new item. The prompt is: ADD -PLEASE ENTER ACCOUNT #, LEGAL AGENCY #, TYPE, DATE, AMOUNT, - (IF CREDIT)

NOTE

The following codes identify TYPE of payments possible in an LA system.

- 01 Direct payment (from borrower to host AR system)
- O2 Indirect payment (from borrower to client to host AR system)
- 03 Nonrecoverable court costs cannot be charged to the delinquent account
- 04 Recoverable court costs can be charged to the delinquent account
- 05 Fee or commission charged by attorney or collection agency
- CH Change an item previously entered. The prompt is: CHANGE - PLEASE ENTER ITEM #, ACCT #, LGL/AGY #, TYPE, DATE, AMOUNT, -(IF CREDIT)
- DT Delete an item previously entered. The prompt is: DELETE - PLEASE ENTER THE ITEM # TO BE DELETED

NOTE

An item that has been deleted must not be used in a subsequent CH function.

RT - Review transactions that have been entered. The prompt is: REVIEW - ENTER A VALID FUNCTION OR (CR) TO VIEW ADDITIONAL ENTRIES A maximum of six payment entry screens is available with 15 items on each screen, for a total of 90 financial update items. The RT function displays these screens, in order, with repeated entries of carriage return, and displays the appropriate prompt after the entry of a valid function.

SB - Statement balance screen is displayed (refer
to figure 11-1). This screen contains the total
number of items entered minus the number of
items deleted, as well as a summary by type of the
amounts entered. It is provided to aid in verifying
that the items have been entered correctly. The
functions available from this screen are:

RT - Review the last payment entry screen and continue entering items.

OK - Okay. The session is complete and the items are correct. The items will be recorded in the transaction file and the selection screen is displayed.

AB - Abort. The session is complete but the items are not correct. The items are not recorded in the transaction file and the selection screen is displayed.

The financial data items entered on the payment entry screen are not applied to the accounts until the daily cycle update process has been executed. Therefore, they are not immediately reflected in the customer files, on the screens, or in the reports printed.

Since the collection department will not be working the accounts, the LA system will have relatively little on-line activity (compared to CCS). In addition to payment entry (described above), the identifiable on-line activities include:

- An update of nonfinancial data via a change screen.
- The assignment and reassignment of accounts to or from clients (attorneys and agencies). This is accomplished via the supervisor change screen and is unique to the LA system.

- A generation of letters to borrowers or cosigners, as in CCS.
- The entry of comments (permanent or related to an activity) which would be useful in the LA tracking and collection effort.
- A request for the referral list report. This report summarizes account information and identifies the client handling that account. As an option, the system may be parameterized to produce this report (instead of the detail list report) as a result of a supervisor DL request.

DAILY CYCLE PROCEDURES (LD MENU)

The daily cycle procedures are comprised of a series of processes which apply the daily activities of the LA collectors (accumulated in the transaction file LATRANFL) to the related files and produce related reports.

The LA daily cycle procedures remain essentially the same as CCS. Refer to section 3 for a discussion of the CCS daily cycle procedures.

COMPLETE UPDATE - SELECTION D

The purpose of the complete update process from the AR system (selection D) is to allow previously nondelinquent accounts to be transferred from the host AR system directly to the LA system.

NON-FINANCIAL UPDATE - SELECTION E

The nonfinancial update (selection E) remains unchanged from CCS.

		STATEMENT BALANCE	BALANCE						
TOTAL	ITEMS	ENTERED = 90							
	TYPE NO.	TYPE TRANSACTION	TOTAL_ AMOUNT						
	01	DIRECT	242.11						
	02	INDIRECT	431.05						
	03	NON-RECOVERABLE COURT COSTS	207.24						
	04	RECOVERABLE COURT COSTS	15.13						
	05	FEES	131.00						
ENTER	OK RT AB	TO ACCEPT DATA-UPDATE RECORDS TO REVIEW TRANSACTIONS TO ABORT ROUTINE-NO UPDATE							

Figure 11-1. Statement Balance Screen

DELINQUENT RECORD CONTENT - SELECTION G AND H

These procedures may be modified to produce the client referral list instead of the delinquent record content report. This client referral list is a one-page per account list found in the LA master file. It contains information concerning the client assigned to collect that account. The field analyst may modify this report to include customer-defined information. The source program for the LA delinquent record content report (SRLDTLST) is also available for modification.

NIGHTLY (BATCH) UPDATE - SELECTION N

The financial update operation in the LA system is a deviation from the standard CCS system. A QSS request is necessary to provide this feature for CCS users. It exists as a standard feature for an LA user.

The updates processed by these procedures may come from three sources:

- A tape from the host AR, if that system is capable of distinquishing between direct/indirect payments and recoverable/nonrecoverable court costs. Refer to appendix Q for the format of this tape. Selection F must be executed to re-format these transactions to resemble the records in the transaction file (LATRANFL) and stores them in a temporary transaction file (LAFILTMP).
- An on-line supervisor's request for assignment or reassignment of clients to master file records. (This is not a financial update but is processed as part of this selection.)
- An on-line input by collectors using the payment entry screen. These transactions are stored in LATRANFL and this file is reformatted and sorted into the transaction file LATRNSFL by executing selection L.

NOTE

Selection F must be executed before this selection if a tape from the host AR system is to be processed.

- Merges the two transaction files (LAFILTMP and LATRNSFL) into one transaction file (LAFINTRN).
- Updates both the LA master file (LADLQMST) and the LA client file (LACLIENT).
- Indicates a client assignment transaction (on-line supervisor request) with a 0261 in positions 29-32. Current client data (in the account master record) is moved to the previous client fields and the new client becomes the current client. The system date is used as the assignment date. The client file is read to obtain the new data.

- Indicates financial updates with a 03 in positions 29-30. Payments (direct or indirect) reduce the total payoff and the amount delinquent. Recoverable court costs increase the total payoff. Nonrecoverable court costs and fees/commissions will not be reflected in the account master file but will be noted in the client record. Only the standard portions of the LA delinquent master record are updated by the selection. Any other updating required by the customer must be supplied by a QSS.
- Writes all processed transactions to a cumulative file (LAPMTFIL) which is used by the audit track report program. This report is produced during the execution of this procedure.

FINANCIAL UPDATE - SELECTION F

Selection F transforms the financial update tape developed on the host AR system into the format of the transaction file (LATRANFL). These records are stored in a temporary file (LAFILTMP) and are input in the nightly batch update, selection N.

EXTRACTION PROCESS - SELECTION O

The Legal and Agency delinquent master file (LADLQMST) consists of records extracted from the CCS delinquent master file (DELQMST). When records in the CCS file have been assigned the status code of W (written-off), they are candidates for extraction to the LA file. The customer may define other conditions for extraction requirements.

This selection should be executed at customer-defined intervals. It will read the CCS delinquent master file and merge the selected records into the LA delinquent master file. The status of these records in the LA file is changed to blank (active).

The format and content of bytes 1 through 1056 of the two master files are identical. These bytes are copied from the CCS file to the LA file. Bytes 1057 through 1062 of the LA master file contain the system date indicating the date the record was transferred to the LA system. Bytes 1063 through 1071 (balance due to LA) is updated with the current balance during this extraction process. Bytes 1072 through 1385 will be updated from data in the client file (LACLIENT) by the nightly batch update process (selection N of the daily cycle menu). The remaining 614 bytes are customer-defined. Refer to appendix P for a description of the LA master file.

Accounts which have been extracted will not be removed from the CCS master file, but will be flagged 'LA' in position 1055 through 1056 to indicate they are currently in the LA system. The account will then cycle out of the CCS system through normal history operations.

During the extract process, a client referral list is produced. This list can serve as an audit track of account movement from CCS to LA. The report, as it is produced during this procedure, contains information on the borrower-employment, days delinquent, permanent comments, and so forth. The customer may elect to include additional information.

Accounts are not assigned (referred) to a client by this extraction process. The actual assignment is accomplished via the supervisor change screen.

The client referral list is provided as an aid to the supervisor in defining the information required for these requests. The information concerning the client is left blank when the report is printed during this extraction process.

Appendix O contains a sample of the client referral list produced by the execution of this selection.

FILE MAINTENANCE PROCEDURES (LM MENU)

The LA maintenance menu, with all of its associated processes, is the same as described for CCS. Refer to section 4.

The LA system contains all of the files with identical formats contained in the CCS system. These duplicates have been renamed with an LA prefix. Thus, ACTFIL in CCS becomes LAACTFIL in LA. Refer to appendix T for a CCS/LA cross-reference of file names. If the LA system is parameterized to function the same as the CCS system, any changes made to a CCS file must also be made to its LA counterpart by executing the related selections on the LM Menu.

In addition to these files, the LA system contains a file unique to attorney/agency collection processes. This file is the LA client file (LACLIENT). It contains attorney and/or agency (client) contact information such as name, address, contact name (the person in the agency responsible for the collection effort), and historical effectiveness statistics. These statistics include the number of accounts paid-in-full and the number of accounts closed. These statistics are accumulated by month, and the file contains 12 months of data. The financial fields in this file are updated during the daily cycle nightly batch update process. Refer to appendix Q for a description of this file.

CLIENT FILE MAINTENANCE - SELECTION S

Selection S of the file maintenance menu provides an interactive capability of creating records in the client file changing the nonfinancial information in this file, and inactivating records. These inactive records were removed from the client file during the history processes. Refer to appendix M for samples of the screens displayed during execution of selection S.

Three functions are available during the execution of the client file routines. These are:

- CS Return to the client file selection screen.
- CC Display the client file change screen.
- CF Display the selected client's financial information screen. This screen contains 12 months of financial activity individually by month and collectively as a 12-month summary.

Two methods of changing data on the change screen are available. By entering XX, change (XX = line number, change = new data) and pressing (CR), line items can be changed in any order. By pressing (CR) twice, the cursor will be positioned either at the next sequential line (and the new data may be entered followed by a (CR)), or at the bottom line, ready for the next change item or next function.

A, (NAME) Option

When a selection is made, the system displays the client file selection screen. If the first option is selected (A, (NAME)), the system will search the client file for that name and display a screen listing all the accounts that match the name entered. If the operator selects one of the accounts on the list, the client change screen will be displayed.

N, (#) Option

If the second option is selected and an account exists in the file for the number entered, that client change screen will be displayed.

If no account exists in the file for the number entered, the assumption is made that a new client record is to be created and the message * NEW CLIENT is displayed. The operator, is given the option of entering a function or (CR) to return to the selection screen (no record is created).

If the CC function is selected, the client change screen is displayed and the operator may create a record in the file using the change data methods.

If the CF function is selected, the financial data screen is displayed with blank information.

S, (#) OPTION

The third option of the client file selection screen provides for inquiry and change of the status of records in the client file. If selected, a screen is displayed with the current status and the option is provided for changing this status or returning to the client file selection screen.

If the status is changed to inactive, the system date is stored in the "contact" field in the client file record. This date, plus the customer-defined number of additional days (in the LACL record of the LAUTIFIL described under LA parameterization in this section) determines if the account will be purged from the file during the history processing.

NOTE

The status of these records must not be changed without a supervisor request.

ON-DEMAND REPORT PROCEDURES (LO MENU)

The report capabilities of CCS (including the report generation capability (selection K)) remain intact within the LA system.

DELINQUENT RECORD CONTENT - SELECTIONS A AND B

Selections A and B may be modified by the field analyst to print the client referral report instead of the delinquent record content report. The client referral report is similar to the detail list report but contains only those fields deemed relevant by the customer for referral processing. The standard report supplied by the system may be modified (program SFLARPRT).

Three selections have been added to the menu to produce reports unique to the LA system. These are:

- N Complete payment, direct payment statement reports
- O Inventory report by client type, and customer
- P Recovery analysis report

Samples of these reports are included in appendix O.

Complete and Direct Payment Statements - Selection N

This selection produces two reports - complete payment and direct payment.

The payment file (LAPMTFIL) is produced by the nightly batch update process (selection N of the LA daily cycle menu). This file is sorted by client number for this report. The borrower name and balance due are retrieved from the LA master file (LADLQMST).

NOTE

It is suggested that this report be executed monthly. LAPMTFIL is cleared when the printing is complete; therefore, this selection must be executed only by supervisor request.

The complete payment statement contains a list of all payments (direct and indirect) made by the borrower since this procedure was last executed.

The direct payment statement contains a list of all direct payments made by the borrower since the procedure was last executed. This report is generated by client number with information concerning each client on a separate page. The report may be separated and sent to individual clients.

Inventory Reports - Selection O

Selection O produces a client inventory report by borrower account number, and a client inventory report by client type. This client type is defined in the LACL parameter of the LA utility file (LAUTIFIL). Refer to LA parameterization in this section for a discussion of client types.

Both of these reports contain a one-line summary for each active account in the LA master file, and may be executed as often as needed.

Recovery Analysis - Selection P

The recovery analysis is a one-page per client report showing the number of active accounts assigned to that client with dollar volume, accounts collected, accounts closed, and fees and court costs incurred to date. This report shows the last 12 months of activities individually by month and collectively as a 12-month summary of totals.

HISTORY PROCEDURES (LH MENU)

The LA history processes function exactly as do those of the CCS. They allow the LA data base to be purged of inactive accounts. Refer to section 6 for a discussion of the CCS history procedures. The user will be required to maintain separate LA and CCS history tape libraries.

PURGE CLIENT FILE - SELECTION F

The client file unique to LA (LACLIENT) must also be periodically purged of inactive accounts. The records in this file become inactive as a result of supervisor input while executing selection S of the file maintenance menu.

If the record is inactive XXX number of days (where XXX is customer-defined in the LACL parameter of the LA utility file (LAUTIFIL)), it will be purged from the file during execution of this selection. A one-page per client report titled 'Client Purge Report' is printed as an audit track of the movement of accounts out of the LA system.

OPERATING EXECUTIVE/UTILITIES

The LA system does not have its own operating executive/utilities, but operates under those described for CCS. In order to access the files in the LA system, the user ID of LA must be entered when logging onto the system.

SYSTEM INSTALLATION

The LA system installation is accomplished in conjunction with the CCS system installation. It is at this time that the hardware requirements are determined.

INSTALLATION MATERIALS

- Legal and agency system install tape
- UPDATE write-off 10 accounts tape
- LUD500 first financial update tape
- LUD500 second financial update tape

INSTALLATION PROCEDURE

Refer to the Installation Test Kit Manual for detailed instructions for installing an LA system.

SYSTEM PARAMETERIZATION

The LA system (as in CCS) is designed to allow extensive customer flexibility and parameterization. The parameterization options in the LA system are the same as those in CCS. If the LA system (on-line activities and menu selectons) are to function exactly as those in the CCS system, the identical parameterization done on the CCS files must be performed on the LA files. This is a customer option and is restricted only by the reduced size of the customer-defined area of the LA master file. Refer to section 9 for the requirements of parameterizing a CCS system. All files and programs used in this process have been modified to access the renamed files and the work tables remain the same.

In addition, the analyst must include those requirements unique to the LA system.

LA DELINQUENT MASTER FILE (LADLQMST)

The LA master file is created by an extract process (selection O of the LA daily cycle menu). The standard extract program (LAXTRT), provided with the system, selects records from the CCS master file when the status code (position 306) equals W, indicating the account has been written-off. If the customer requires additional criteria to be used for this extract process, the field analyst must modify the program to include these parameters.

A FORTRAN source program (SFLAXTRT) is provided with the system and must be installed in the program library (if modified) with the name LAXTRT.

USER AREA OF LA DELINQUENT MASTER FILE

The standard portion (bytes 1 through 1056) of the LA master file remains unchanged from CCS. The extract program (LAXTRT) will copy this data to the LA master file.

Bytes 1057 through 1062 contain the date the account entered the LA system (system date the extract program was executed). Bytes 1063 through 1071 contain the balance due to LA (the extract program inserts the current balance). Both of these fields are built during the extract process.

Bytes 1072 through 1385 contain information required by the LA system. These fields are updated with information from the LA client file during the nightly batch update (selection N of the daily cycle menu).

The remaining portion (bytes 1386 through 2000) may contain customer-defined information.

UPDATE TAPES

Updates of the standard and LA required portions of the LA master file (both financial and nonfinancial) are standard features of the LA system and require no customer modification.

The standard system supports EBCDIC tapes. If the input tapes are ASCII, the switch settings in PRFLD004, PRFLD005, and PRFD006 must be modified. Refer to section 3 for a discussion of the switch settings used in the update procedures. In addition, the financial update procedure (PRFLD006) will process labeled tapes. If the input tapes are unlabeled, the FTAPE,B,P statement must be modified to read FTAPE,,P.

A QSS is required to develop a separate mechanism for updating the customer-defined fields in the LA master file.

LA CLIENT FILE (LACLIENT)

This file contains a record for each client (attorney/agency) involved in the collection of accounts in the LA system. Each account in the LA delinquent master file (LADLQMST) is assigned to one of these clients. This assignment (or reassignment) is accomplished via the supervisor change screen and it must be the first item on that screen.

The key to the client file is the client number which is the first four characters of each record. The first two characters of this client number comprise a code and are used by the reporting modules to define the type of collection the client represents. Refer to the UTILITY file description for a further description of this client number.

Records in this file are created, changed, or inactivated by executing selection S of the file maintenance menu.

UTILITY FILE (LAUTIFIL)

If the on-line activities and menu selections are to operate in the LA system as they do in CCS, the same data must be entered in the utility file record in LA and in the CCS utility file.

The customer may wish to change the header information (records HDR1, HDR2 and HDR3) which appears on each report produced by the LA system.

Six additional records are required for processing that are unique to the LA system. These are:

- LACL --, --, --, --, nnn.
- LAC1 -----
- LAC2LAC3
- LAC4
- LAC5

The LACL record contains five 2-character codes designating client type. These correspond to the first two characters of the client number (part of the key of client master file). The first of these codes relates to the LAC1

record, the second to the LAC2 record, and so forth. The LAC1-5 records contain 30-character descriptions of the five different client types. These 30-character descriptions are printed by the inventory reporting modules to define the type of agency that has been assigned to collect the account. Any 2-character prefix in the client number that does not have an identical code defined in the LACL record will be assigned a miscellaneous description on the reports printed. See figure 11-2 for samples of the LACL and related LAC1 through LAC5 records in this utility file.

The nnn parameter in the LACL record contains the number of days an inactive account will remain on the LACLIENT file before being removed to history. Selection S of the LA file maintenance menu allows interactive changing of the status codes to active or inactive. The account will be removed by executing selection F on the LA history menu.

ACTIVITY VERIFICATION TABLE (LAAVMDSC)

Activity verification table processes are unchanged from those described in CCS. The function codes, used by the on-line program (LEGAL) and the client file maintenance routine, are <u>not</u> restricted from use as valid action or result codes in the collector activities.

DAILY ASSIGNMENT CREATION (LDACRT) AND DECISION TABLE (LADECTBL)

The decision table capabilities and procedures are unchanged from CCS and may or may not be structured with the same queue and/or priority assignment of accounts to collectors. A FORTRAN source program

KEY DATA HDR1 LEGAL AGENCY SYSTEM HDR2VERSION3.0 HDR3SYSTEM VERIFICATION RSW1R010,S015,W005 ACTCTHTB** RESCLMBZNH** SALCMR MRS MISS DALT030,0869=040 SMTHR006, S006, W006 SMTM012 UPDY015 OLPMRLO6, PO2, C31, NAY RPTG RPT007RPT006 LTRF2COLLECTION DEPT. LTR101020304** LTR2 LACL,LG,AA,OO,--,--,O30 LAC1OUTSIDE COLLECTION AGENCIES LAC2LEGAL FIRMS LAC3IN-HOUSE COLLECTION DEPTS LAC4 LAC5 0001SUPERVISOR 2133,0869,ALL 0002COLLECTOR 2 100010869 0003CLERICAL 000010869,ALL

Figure 11-2. LAUTIFIL Information

(SFLDACRT) is provided with the standard system. The field analyst may modify this program and install it as LDACRT.

COLLECTOR SCREENS (LASCNDSC, LASCNFIL)

The LA system contains a screen description file (LASCNDSC) which includes all the screens available to the LA on-line procedures. The records in this file are identical to the CCS counterpart with the exception that the maximum number of characters per screen is 2000. These screens may be modified and re-formatted to suit the customer requirements as described in section 9.

NOTE

If the supervisor change screen is modified, care should be taken to assure that the reassignment of accounts to or from clients remains the first item on the screen.

In addition, screens are provided for unique LA processes. These include the payment entry, statement balance, client change, and the client financial screens.

NOTE

These screens must not be modified. Refer to appendix M for samples of those screens unique to LA.

LETTERS (LALTRDSC, LALTRFIL)

The ability to define or request standard form letters remains the same on the LA system as on the CCS system.

REPORT GENERATOR

The standard report generator data element table has been expanded to include the additional LA fields in the LA master file. Therefore, these fields are available for use in reports generated by these routines. If the customer wishes to generate reports or letter printing using fields in the user-defined area of the master file, records must be built in the data element table for these fields.

CAUTION

The keys of the records built in the LARPTTBL file must begin with the characters 'L' or 'M'; these are used by the letter build routine.

DETAIL LIST REPORT (LDTLST)

The detail list report in CCS, which contains all of the fields for each record in the standard area of the CCS master file, is also available in the LA system (it will read the LA master file). It may be modified to include customer-defined fields in the LA master file. An RPG source program (SRLDTLST) is provided with the standard system. The field analyst may modify this program to

include the extra fields and install it as LDTLST. However, this report may not be very useful in the collection effort. Therefore, a client referral list report is provided. The standard area of this report contains information pertaining to the account balance and client information. The rest of the report may be modified to include user-defined information. An RPG source file (SRLARPRT) is provided with the standard system. This may be modified by the field analyst and installed with the name LARPRT.

In addition, the procedure streams executed by selections G and H of the daily cycle menu (PRFLD007 and PRFLD008) and selections A and B of the on-demand report menu (PRFL0001 and PRFL0002) may be changed to print the client referral list instead of the detail list report. The system EDITOR is used to make these changes.

\$\$USERID

This file is not unique to the LA system. The same file (with a \$\$ owner ID) is used for both the CCS and LA user IDs.

The clerks, collectors and supervisors who will be using the on-line activities should set up the system to automatically execute the program LEGAL.

TRANSACTION REPLAY

This feature is available exactly as described in section 9. The standard transaction file for the LA system is LATRANFL and the backup transaction file is LATRNBCK. If the customer decides not to retain the optional backup file, the analyst must remove the CLEAR, FN=LATRNBCK from the procedure stream PRFLD010 with the use of the system EDITOR, and delete the file using the system UTILITY.

SYSTEM ID DEFINITION

The user may change the data displayed as the system ID. This system ID appears as part of the autoload and log-on messages. It is 32 bytes long and may contain any valid character. It may be changed at any time by logging off CCS, performing a manual interrupt and typing SYID. Refer to section 7, and figure 11-3.

monddyy hhmm:ss CDC CYBER 18 CCS SYSTEM VER 3.0 A SAMPLE OF A SYSTEM ID MESSAGE TERMINAL = 01 USERID.=

Figure 11-3. Sample of the Messages Displayed During Log On

NEWS (NEWS)

The NEWS feature of the LA system functions exactly as it does for CCS. When a collector logs on the LA system, the option is given of displaying a NEWS file containing items of interest to the collector. An editor file NEWS with an owner ID of LA is provided with the standard system.

If the user decides not to use the LA NEWS option, the analyst must use the system UTILITY to delete the file. In this case, the CCS NEWS file will be displayed to a collector logging onto the system (if the option to display NEWS is chosen).

READY MASTER AND BACKUP PROCEDURES

The same procedures must be executed as described in section 9. This is necessary to provide the correct backup procedures.

SYSTEM RECOVERY

Transaction replay is the recovery methodology and remains the same as described in section 10.

OPERATION

Two additional steps are required to recover a CCS/LA system replay. All of the steps required are as follows:

- List to tape the CCS transaction file (TRANFL). If that file is unavailable, and the backup file is used, list that backup transaction file (TRNBCK) to tape.
- List to tape the LA transaction file (LATRANFL).
 If that file is unavailable, and the LA backup file is used, list that backup transaction file (LATRNBCK) to tape.
- Restore the system by copying the backup packs that were saved prior to the work session.
- Load the CCS transaction file (TRANFL) onto the new system. If the backup file (TRNBCK) is used, it must also be loaded.
- Execute the replay program for CCS: TRNPLY.
- Load the LA transaction file (LATRANFL) onto the new system. If the backup file (LATRNBCK) is used, it must also be loaded.
- Execute the replay program for LA: LTRPLY.

When the transaction replay is complete, the day's input by the clerks, collectors, or supervisors has been restored, except any UH or DL requests which were made by the supervisors. These must be re-entered.

Any menu selections (including client file maintenance) which were made by the operator the day of the failure must be re-executed. If any files have been updated or changed by the use of the text editor, they must be re-entered.

ACCOUNT GROUP

The general classification code used in categorizing accounts (that is, installment loan, ready credit, credit card, and so on). Groupings are represented by a numeric character (0 through 9) used as the most significant character of the account number.

ACCOUNT NUMBER

The 16-byte account identifier used to provide account access and uniqueness. The account number is comprised of the 1-byte numeric account group and 15-byte alphanumeric customer number used by the host A/R system within each group.

NOTE

The customer number entering the CCS system must be 15 characters in length. If the customer number used by the host A/R system is less than 15 characters, it must be left-justified and right-filled with blanks.

ACCOUNT REVIEW CODE

Code to restrict review of an account to a supervisor. If nonblank, only a supervisor can review this account. Designed to appear on user change screen.

ACCOUNT STATUS

Refer to status code.

ACCOUNT TYPE CODE/PRODUCT TYPE

Customer-defined field used to identify product or type of account.

ACTION CODE

The two-character code used by collectors to abbreviate the function performed on the account, such as TH (telephone home), TB (telephone business), or LO (letter only).

ACTIVE ACCOUNT

A delinquent account considered collectible by the organization using CCS. An account on which the collector is still performing collection activities.

ACTIVITY

The string of information indicating a specific processing of an account by a collector. An activity has the following information directly associated with it: action, result, letter, next contact, and comment. Indirectly, each activity has the activity date and the collector ID associated with it. Information saved in the activity file is action, result, letter, activity date, collector ID, and comment.

ACTIVITY SEQUENCE

Refer to activity.

ACTIVITY VERIFICATION TABLE

The matrix used by program, COLECT, to validate action codes, result codes, and the requirements for letters, comments, and next contact dates. A CCS maintenance routine is provided for table creation.

AMOUNT DELINQUENT

The monetary amount that an account is in arrears. This value IS NOT calculated by CCS, but is updated from the host system. Within CCS the field is displayed, reported, and totaled.

ARCHIVE HISTORY

A complete record of all accounts that are inactive. These records are on tape files. Disk files contain indexes into the tape files.

AUTOMATIC MODE

A feature of CCS program COLECT, used to present accounts to collectors in an optimal order.

BATCH

A subsystem within the CCS operating system which handles the processing of all background or user application programs.

BORROWER CHANGE SCREEN

The screen available through COLECT that displays primary nonfinancial information that a collector may modify. For instance, borrower address lines, additional account number, and borrower telephone number. A particular CCS may have only one borrower change screen.

BORROWER'S SALUTATION CODE

Value used to index 'SALC' record on UTIFIL. Allows Mr., Mrs., etc. to appear on letters.

CCS

The Credit Collection System, offered by Control Data Corporation on the CYBER 18 computer system.

CHANGE FUNCTIONS

The actual codes that allow a collector to modify items on a change screen. These are comprised of a number followed by the new value.

CHANGE SCREEN

Refer to BORROWER CHANGE SCREEN.

CLERICAL PERSONNEL

On-line users restricted to entering changes via the borrower change screen and the cosigner screen only. Clerical personnel do not have access to the supervisor, master, activity or financial screens, and may not enter activities.

CLIENT

Any attorney, law firm, collection agency or other third party to whom a fee is paid for assistance in difficult account collection efforts. (Acting as a client on behalf of the originating collection department).

COLECT

The CCS on-line program controlling the use of the system by collectors, collector supervisors, and clerical personnel.

COLLECTOR

The account representative responsible for determining the reason for account delinquency, and returning the account to a satisfied or released status.

COLLECTOR CHANGES

The changes input by collector and clerical personnel via the COLECT screens, borrower changes, and cosigner.

COLLECTOR FUNCTIONS

A two-character code that controls the collector's screens and actions in the review of accounts.

COLLECTOR ID

The security mode assigned to the users of COLECT.

COMPRESS

The process of removing all records from a file that have been marked for deletion, thus freeing up file space.

COSIGNER

An individual who guarantees a loan in case of default by the borrower.

COURT COSTS

Fees and charges levied by a judiciary department or otherwise directly associated with and requested by court action.

CR

Carriage return key.

CREDIT COLLECTION

The process by which account representatives (collectors) work delinquent accounts to reduce delinquency rates within receivables.

CURRENT PAYOFF

The monetary amount that, if applied to the account, would result in a zero balance (paid in full). This value IS NOT calculated by CCS, but is updated from the host system. Within CCS the field is displayed, reported, totaled, and (trend analysis) compared over time.

CUSTOMER

The organization using the CYBER CREDIT SYSTEM (CCS) see USER.

DECISION TABLE

The table used by CCS to assign accounts to queues and assign review priorities to accounts. The contents of the table may be easily modified to change both types of assignments by a CCS maintenance routine. The table is used through CCS program, DACRTE.

DELINQUENT ACCOUNT Refer to ACTIVE ACCOUNT.

DIRECT PAYMENT

Payments received directly by the host accounts receivable system and passed to $L/A_{\:\raisebox{1pt}{\text{\circle*{1.5}}}}$

ELIGIBLE FOR WRITE-OFF

An account that has met customer-defined parameters which determine that an account is no longer collectable using CCS.

FFE

The money paid to a client for assistance in the collection.

FEE RATE

The percentage applied to collected funds to determine the fee.

FINANCIAL FIELDS

Those fields on the update tape from the host computer representing data associated with the account monetary history and degree of delinquency (current payoff, days past due, payment schedule).

FUNCTIONS

Refer to COLLECTOR FUNCTIONS.

GROUF

Refer to ACCOUNT GROUP.

INACTIVE

An account that has become released, satisfied, or written-off.

INDIRECT PAYMENT

Payments received by attorneys or agencies which are consolidated and forwarded to the host accounts receivable system.

LEGAL AND AGENCY

Subsystem which may include all the functions of CCS as well as the added feature of recording, tracking, and reporting of the costs associated with extended collection efforts incurred by outside attorneys and collection agencies.

LOG-ON ID

Same as COLLECTOR ID.

MENUS

The selection display from which the operator may choose any of several procedures listed on the display screen to perform specific tasks.

NET-TO-CLOSE

Refer to CURRENT PAYOFF.

NEXT CONTACT DATE

The date an account should next be reviewed. This date is controlled by COLECT, being a function of explicit collector input or implicit assignment via default values within the activity verification table. Maximum values are controlled via the on-line parameter (OLPM) entry within the utility file (UTIFIL).

NEXT PAYOFF AMOUNT

If the current monthly payment is not received on an account, the next payoff amount is equal to current payoff plus the additional interest and other charges if applicable. This IS NOT calculated by CCS, but is updated from the host system.

NONFINANCIAL FIELDS

Those fields associated with the general attributes of the borrower. Such items as borrower's address, social security number, and phone number are representative of these fields.

NONRECOVERABLE COURT COSTS

Court costs incurred as a result of legal action which are not chargeable against the balance owing on the delinquent account.

OWNER ID

The security code which is used when defining a file.

PAYOFF AMOUNT

Refer to CURRENT PAYOFF.

PERMANENT COMMENT(S)

Three 30-byte fields are included within an account for collector notes and comments. Collectors may enter information into these fields that is associated with the account in general, not with specific activities. "Contact after 7:00 pm" is representative of this type of information.

PORTFOLIO

The total set of accounts within CCS, excluding accounts already moved to the history subsystem. This normally includes delinquent accounts and previously delinquent accounts that have been released, satisfied, or written-off within the last month.

PRIORITY

A value assigned to each active account that, along with next contact date, determines the order of account review.

PRIORITY ASSIGNMENT

Actual priority values are a function of CCS program, DACRTE, and the decision table contents.

PROCEDURES

The batch job streams available through the CCS menus from the master terminal. Procedures are available for CCS daily cycle, demand reports, maintenance, history processing, and report generator/report directory.

PURGE

The process of marking a record for deletion when it has been determined by some system criteria that it is no longer needed on the specified file.

QUEUE

A list of accounts ordered in the sequence that they will be presented to collectors working in automatic mode.

QUEUE ASSIGNMENT

The parceling out of accounts to queues. A function of CCS program, DACRTE, and the decision table contents.

QUEUE REASSIGN CODE

Determines which accounts can be reassigned during daily cycle off-line operation. Accounts with nonblank code cannot be reassigned. Designed to appear on user changeable screen.

- QSS

A quote for special software not included in the basic CCS.

RE-ACTIVATED

If an account has become inactive (released, written-off, or satisfied), and has been moved to history, it may be added to the system again by an update tape record from the host computer. This account is referred to as re-activated.

RECOVERABLE COURT COSTS

Court costs incurred as a result of legal action which may be applied to the balance owing on a delinquent account.

REFERRAL

The process of assigning a delinquent account to an attorney or agency (client) for extended collection efforts.

RELEASED (R)

An account status indicating that the account has been paid in full.

RESULT CODE

The two-character code used by collectors to abbreviate the outcome of the function (action).

SATISFIED (S)

An account status indicating the account is current (no longer delinquent, but not paid off).

SCREEN

A display on a collector terminal output by CCS program, COLECT. Several types of screens are available.

SPECIAL DESCRIPTION FIELD

Customer-defined. Designed for use via update to provide information such as collateral description.

STATUS CODE ·

The account condition within the CCS portfolio. Accounts may be actively delinquent (blank), satisfied (S), released (R), or written-off (W).

SUPERVISOR STATUS CODE

Customer-defined. Designed to appear on user changeable screen to provide a customer defined coding mechanism to communicate information concerning an account between users.

SUPERVISORS

Collector's direct management. Supervisors have access to the supervisor screen. In addition, their collectors may direct specific accounts to their attention via the action of supervisor review (SR).

SWITCH

The switch utility routine has the form SWITCH xxxxxxxx where xxxxxxxx is the switch settings (0 is off and 1 is on) with the characters labeled from left to right as U1 to U8.

SYSTEM CONSOLE
The CYBER 18-25 system console. It is the only terminal that utilizes computer system resources and initiates CCS functions other than COLECT.

TAPE ARCHIVE HISTORY Refer to ARCHIVE HISTORY.

USER

The organization using the CYBER Credit System (CCS). See CUSTOMER.

USER-DEFINED FIELDS

Those fields contained within the 944-byte user area of the DELQMST file. Financial transactions, payment schedules, and unique nonfinancial fields are representative of user-defined fields.

The security code used by the operator to sign on the system console.

WRITE-OFF (W)

An account status indicating that the account is not collectible via the organization using CCS.

	pendix lists sample action codes, meanings, and	LR	Letter received
require	ments. (Entry of the next contact date is optional.)	RM	Returned mail
AR	Account review	SK	Skip trace
вс	Borrower contacted bank	SR	Supervisor review
CC	Cosigner contact	ТВ	Telephone business
CD	City directory	TC	Telephone cosigner
DB	Debit account	TH	Telephone home
LO	Letter only	TL	Telephone lead

. .

	ppendix lists sample result codes, meanings and	IM	In the mail
require	ments.	LM	Left message
BK	Bankrupt	NA	No answer
BZ	Busy	NE	No longer employed
CP	Claims payment made	NL	No lead
DI	Dispute	PB	Paid at branch
DS	Deceased	PP	Promise to pay
DV	Divorced	PR	Payment received
FL	Found lead	RP	Refused to pay
11_	Illness	SS	Sad story

60475230 A

CCS SAMPLE REPORTS

This appendix contains sample reports used with CCS.

CYBER CREDIT SYSTEM VERSION 3.0 SYSTEM VERIFICATION

ACTIVITY VERIFICATION TABLE RUN DATE: 11/01/77

PAGE 1

R E S U L T C 0 D E

										,						
ACT	01 BZ	02 PP	03 R1	04 R2	05 R3	06 R4	07	08	09	10	11	12	13	14	15	15
104							L C CD	r c co	L C C9							
SR	NA.	на	- NA	NA	АМ	AA,	C 01									
A 1	L RL	L DP	L C NC	L NC	L C NC	L' NC	NA									
· A2	RL	DP	C NC	01	MA	01	01									•
A 3	RL	NA	C NC	01	F C 05	02	02									
84	L RL	t DP	LCNC	NA	F C 05	L 03	L 03									

END OF TABLE

							DEG	ISION TA	BLE CUNTENTS	DATE 11	.4	
TEST NO	LEVEL	HEXT LEVEL	NO. OF	PARAH NO.	PARAM OPERATOR	PARAI VALUE		PARAM VALUE 2	PARAM CUNNECTOR	NO. OF RETURN VALUES	CURRENT RET VAL	RETURNED VALUES
1	1 "	2	2	1	NULL .E0.	* *q	•		.AND.	01	00	1000
2	1	0	1	1	.GT.	+000046) *	•		01	00	0004
3	1	0	1	1	.GT.	+00003	0 +	• •		01	00	0003
, 4	1	0	1	1	.GT.	•000020	•	• •		01	00	0002
5	1	0	1	1	NULL	•	٠	• •		01	00	0001
6	2	0	1	1	.EO.	◆ B	٠	•		01	00	9000
7	2	0	1	1	NULL	•	٠			01	00	2000

END OF TABLE TOTAL TABLE LENGTH = 91 MAXIMUM TABLE LENGTH =3000

FILE SPACE REPORT - 11/01/77

FILE NAME	HAXIMUM RECORDS	CURRENT RECORDS	AVAILABLE RECORDS	PCT SPACE AVAILABLE
DELOMST	12000.	90.	11910.	99.22
COSIGNER	12000.	8.	11992	99.92
ACCAGE	12000.	91.	11909.	99.2%
ACTFIL.	12000.	•	12000.	****
SUMHIST	12000.	2.	11998.	****
TAPEARC	12000.	2.	11998.	****
INACCT	12000•	•	12000.	****

()	NEWLY ADDED	00 - 29	30 - 59	60 - 89	90 - 119.	120 - 149	150 - 179	.180 +	HRITE OFF	RELEASED	SATISFIED
	770 10	433 7	337 3	0	. 0	0	,o	0	. 0	0	σ
	FURMER STATUS 00 - 29										
	375 8	0	375 6	0	. 0	0	0		0	0	0
	30 - 59 1.086 16	0	0	1,086 16	0	0	0	0	0	0	0
	60 - 89 284 5	· O	0	0	284	0		0	0	O	0
	90 - 119 1+136 16	0	-, O	•	0	1.136 16	0 -	0	. 0	0	0
	120 - 149 684 12	0	0	0	o	. 0	684 12	0	0	0	, o
	150 - 179 684 13	0	O	o	0	0	. 0	684 13	G	0	0
	180 +		0	0	0	0	0	. 0	0		0
	PAGE TOTALS 5,019 80	433 7	712 11	1•086 16	284 5	1.136	684 12	684 13	0	0	. 0

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MENLY ADDED	00 - 29	30 - 59	60 - 89	90 - 119 12	20 - 149 15	0 - 179	180 + MRI	TE OFF R	ELEASED SAT	ISFIED
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FURHER STATUS 00 - 29										
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30 - 59 526 2	0		526 2	• • • • • • • • • • • • • • • • • • •	0	0	0	0	0	0
60 - 89	0	0	Ö	0	. 0	0	0	. 0	0	0
90 - 119 514 2	0	. 0	0	0	514 Z	0	0	0	0	0
120 - 149	0	0	ó ·	0	0	0	0	0	.0	0 .
150 - 179 0	0	0	o	ö	0	Ö	0	0	0	0
180 +	o	0	0	0	o	0	O	0	0	0
PAGE TOTALS 1+252 5	0	212 1	526 2	o o	514 2	0	0	O	0	0

DELINQUENT TREND ANALYSIS FOR GROUP O QUEUE 0003 FRDH 10/01/77 TO 11/01/77 PAGE 3 . RUN DATE : 11/01/77

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	30 - 59 0	. 0	0	0	0	0	0	.0.	o	O	0
	60 - 89	o	0	0	· O	o	0	0	0	o	o
	90 - 119	0	0	0	0	0	. ,	0	O	0	0
	120 - 149 369 1	0	0	0	0	0	369 1	0	, 0	. 0	O
	150 - 179 0	0	0	0	0	. 0	0	o	0	0	o
\bigcup	180 • 0	0	o	0	o	0	0	0	0	0	o
	PAGE TOTALS 746 2	377	0	0	0	0	369 1	0	0	0	. 0

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120 - 149	0	0	0	0	0.	0	0	0	0.	0
150 - 179 1.178 2	o	о о	0 .	0	o ·	0	1+178 2	o :	o	0
180 +	0 :	0	o	0	0	0 .	0	ó	0	0
PAGE TOTALS 1+896 3	0	0	71.8 1	0	0 -	0.	1+178 2	0	o	0

DELINOUENT TREND ANALYSIS TOTALS FROM 10/01/77 TO 11/01/77

PAGE 5 RUN DATE : 11/01/77

1	NEWLY ADDED	00 - 29	30 - 59	60 - 89	90 - 119	120 - 149	150 - 179	180 +	WRITE OFF	RELEASED	SATISFIED
).	1,359	810 8	549 4	,0	0	. 0	0	0	. 0	0	Ö
	FORMER STATUS 00 - 29 375	0	375	0	0	. 0	o	0,	0	0	0
	8 30 - 59 2.330 19	0	0	2,330 19	0	0	0	o	0	. 0	0
	60 - 89 284 5	0	0	0	284 5	0	0	0	0	0	0
	90 - 119 1,650 18	0.	. 0	04 	0	1.650	0.	0	0	0	0
	120 - 149 1.053 13	0	0	0	• •	0	1.053 13	0	0	0	Ō
	150 - 179 1.862 15	0	0	0	0	• • • • • • • • • • • • • • • • • • •	0	1,862 15	0	0	0
)	180 •	0	0	0	0	0	0	0	0	0	0
	REPORT TOTALS 8.913 90	810 8	924 12	2,330 19	284 5	1,650 18	1,053 13	1,862 15	0	0	0

PAGE 1 RUN DATE : 11/01/77

NEHLY ADDED	. 00 - 29	30 - 59	60 - 89	90 - 119	120 - 149	150 - 179	180 + H	RITE OFF	RELEASED	SATISFIED
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2				2						
90 - 119										
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120 - 149 290	· o	0	. 0	0	. 0	290	0	0	0	0
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DELINQUENT TREMD AMALYSIS FOR GROUP O PRODUCT 03 FROM 10/01/77 TO 11/01/77

PAGE 2 RUN DATE : 11/01/77

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) i e	NEWLY ADDED 220 3	220	0	0	0	0	0	. ,	0	0	0
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	30 - 59 492 3	0	o	492	0	0	o	, 0	0	0	0
÷ .	60 - 89 44 2	0	0	0	44	0	0	0	0	0	0
	90 - 119 472 3	0	0	0	0	472	0	0	0	0	0
	120 - 149 90 2	.0	0	0	0	0	90 2	0	. 0	0	0
	150 - 179 748 3	0	0	0	0	, * ₁ 0	0	746 3	0	U	0
	180 •	0	. 0	0	0	õ	0	0	0	0	0
	PAGE TOTALS 2.165	220 3	99 2	492 3	44 2	472 3	90 2	748 3	0	. 0	0

DELINGUENT TREND ANALYSIS FOR GROUP O PRODUCT Q4 FROM 10/01/77 TO 11/01/77

PAGE 3 RUN DATE : 11/01/77

	00 - 29	30 - 59	60 - 89	90 - 119	120 - 149	150 - 179	180 +	WRITE OFF	RELEASED	SATISFIED	(
NEWLY ADDED	00 - 27	30 - 37		70 - 117	10 - 147	170 - 117	100	WALLE OF	***************************************	341131120	(
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120 - 149 369	• 0	0	0	0	0	369	0	0	0	o	
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PAGE 4
RUN DATE : 11/01/77

	00 - 29	30 - 59	60 - 89	90 - 119	- 119 120 - 149 150 - 179		180 +	HRITE OFF	RELEASED SATISFIED	
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30 - 59										
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60 - 89 74		0	0	74	. 0	0	0	0	0	0
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90 - 119 494	0	. 0	. 0	0	494	0	0	0	. 0	0
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120 - 149 304	. 0	. 0	. 0	0	0	304	0	0	0	. 0
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150 - 179 198	0	. 0	0		. 0	0	198	0	. 0	0
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PAGE TOTALS 2,004	4	381	549	74	494	304	198	0	0	0
2,004	ì	301	3	77	3	2	3	Ū		v

DELINQUENT TREND ANALYSIS TOTALS FROH 10/01/77 TO 11/01/77

PAGE 5
RUN DATE : 11/01/77

	00 - 29	30 - 59	60 - 89	90 - 119	120 - 149	150 - 179	180 +	HRITE OFF	RELEASED	SATISFIED
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284	0	0	0	284	0	0	0	. 0	0	. 0
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90 - 119										
1,650	0	. 0	0	.0	1,650	0	0	0	0	0
18					18					
120 - 149										
1,053	0	0	0	0	0	1,053	0	0	0	0
13						13				
150 - 179							·			
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15							15			
180 +										
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REPURT TOTALS									•	
8,913	810	924	2,330	284	1+650	1.053	1.862	0	O	0
90	8	12	19	5	18	13	15			

PAGE

SAZIE	H VERI	FICA	TION		RUN DA	AF: 11/01	///					
	TYPE					DELQ Date	PAST DUE		STATUS C		CURRENT	DATE LAST
OUFUE	CODE		ACCOUNT	NAME .	*	UATE	THUUNT	DELG	CODE .	PATUFF .	BALANCE	UPU A/R
1000	02		0129537571234567	OBRIEN.MICHAEL		5/18/77	21.68	167		42.79	42.79	6/24/77
1000	02		0137006531234567	FRIEDHAN, GLENN H		4/16/77	70.30	199		136.00	136.00	6/24/77
0001	02		0173712971234567	HCGRATH, PHILIP J		6/30/77	38.27	124		83.20	83.20	6/24/77
0001	02		0174434561234567	HAURO, JOHN		5/19/77	24.29	166		42.10	42.10	6/21/77
0001	02		0186126781234567	ARRINGTON. WILLIAM	Н	6/28/77	30.40	126		45.62	45.62	6/24/77
0001	02		0189348761234567	SEPULVEDA, JOSEPH A		4/28/77	124.91	187		188.60	188.60	6/24/77
0001	02		0194384871234567	HARTINDALE, HINSTON	. A	6/12/77	131.93	142		204.16	204.16	6/22/77
0001	02		0204414681234567	RIOS, ANTONIO		5/01/77	•00	184		8.89	8.89	6/21/77
0001	0.5		0212262571234567	ROSS, ROBERT	•	6/08/77	61.62	146		121.86	121.86	6/19/77
1000	02		0216323171234567	GREAVES, FRANKLIN E		5/18/77	•00	167		3.61	3.61	6/19/77
0001	0.5		0234384871234567	TRIPPI.LORRAINE A		4/16/77	•00	199		.83	.83	6/19/77
0001	02		0241465771234567	ELEARY.CORNELIUS		5/19/77	•00	166		75.44	75.44	6/19/77
0001	02		0255350361234567			6/12/77	36.76	142		53.45	53.45	6/21/77
0001	02		0273083321234567			6/08/77	• • 00	146		154.06	154.06	6/19/77
1000	02		0278634561234567	WILLIAMS + RICHARD L		5/18/77	125.40	167		166.74	166.74	6/21/77
0001	02		0292117571234567			6/30/77	58.56	124		110.03	110.03	6/24/77
0001	0.5		0332898561234567			6/28/77	63.01	126		104.07	104.07	6/19/77
1000	02		0346013171234567	WILLIAMS.EDNA HAE		4/28/77	• 32	187		15.06	15.06	6/22/77
1000	02		0349716481234567			6/12/77	4.78	142		24.54	24.54	6/22/77
0001	0.5			CLARKE, GLADS TONE		5/01/77	13.74	184		13.91	13.91	6/24/77
0001	0.5		0378065561234567			5/18/77	77.79	167		170.56	170.56	7/11/77
1000	02		0378924121234567			4/16/77	83.13	199		135.37	135.37	6/19/77
0001	02		0396211661234567			5/28/77	.00	157		.68	.68	6/19/77
0001	02		0402013101234567			6/30/77	50.07	124		99.34	99.34 82.27	6/19/77 7/11/77
0001	02		0417047671234567			5/19/77	43.35	166	•	82.27	37.05	6/24/77
0001	02		0431234561234567			6/28/77	22.15	126		37.05 289.00	345.87	6/24/77
0001	02		0434395981234567			6/12/77	191.55	142			36.42	6/24/77
0001	02		0457185561234567	SABLO.DONNA P		5/01/77	•00	184		36.42	36.42	6/24///
					NO. ACCOUNTS		PAST DUE A	нт	CURR P	AYOFF AHT	CURR BALA	NCE
	••	TYPE	CODE TOTALS **		28		1,274.0	1	2,	445.65	2,502.5	2
OVEVE	TYPE CODE		ACCOUNT	NAME		DELQ Date	PAST DUE AMOUNT		STATUS C	URRENT Payoff	CURRENT BALANCE	DATE LAST UPD A/R
1000	03		0236341591234567	PIDGEON,R V		5/28/77	90.37	157		171.59	171.59	7/11/77
0001	.03		0239409191234567	BRAY DAVID P		6/30/77	141.23	124		197.77	197.77	6/19/77
0001	03			LOZANO JOSEPHINE M		6/28/77	28.96	126		49.69	49.69	6/24/77
0001	03		0250214491234567	PETERSON. DELORES P		4/28/77	135.80	187		184.31	184.31	6/22/77
0001	03		0282798591234567	RANDALL, LEHIS H		4/16/77	61.31	199		97.85	97.85	7/11/77
0001	03	•	0283219591234567	JONES . PATRICIA A		5/28/77	•00	157		.83	.83	6/24/77
					NO. ACCOUNTS		PAST DUE A	нт	CURR P	AYOFF AMT	CURR BALA	NCE
											-	

457.67

702.04

702.04

** TYPE CODE TOTALS **

ELIGIBLE FOR WRITE-OFF AS OF 11/01/77 RUN DATE: 11/01/77

PAGE

31316	" VEKIFIC	A11014		KON 07	., 11,01	• • • • • • • • • • • • • • • • • • • •				
QUEUE	TYPE CODE	ACCOUNT :	NAME		DELQ Date	PAST DUE Amount	DAYS	STATUS CURRENT CODE PAYOFF.	CURRENT- BALANCE	DATE LAST UPD A/R
0001 0001 0001 0001 0001 0001	05 05 05 05 05 05	0106944291234567 0149907691234567 0267317591234567 0368074191234567 0452924191234567 0476044291234567 0486626391234567	SIMONE, DONNA M MAYE, KENNETH E BALVELT, HAROLD DEMAIO, MALTER H COLON, EUGENE FOOTE, DORIS MALL, JOYCE		5/01/77 5/28/77 5/01/77 6/08/77 6/18/77 5/08/77 4/16/77	49.50 147.87 86.10 98.40 185.95 157.85 63.40	184 157 184 146 136 177	94.50 218.87 128.10 146.40 263.25 234.85 92.44	94.50 218.87 128.10 146.40 184.28 234.85 123.03	6/24/77 6/19/77 7/11/77 6/19/77 6/19/77 6/19/77 6/19/77
	•		y d	ND. ACCOUNTS		PAST DUE A	нт	CURR PAYOFF AHT	CURR BALA	NCE
	** TYP	PE CODE TOTALS **		7		789.0	17	1,178.41	1,130.0	
	**** QUE	UE TOTALS ****		NO. ACCOUNTS		PAST DUE A		CURR PAYOFF AMT	CURR BALA	

ELIGIBLE FOR HRITE-OFF AS OF 11/01/77 RUN DATE: 11/01/77 PAGE

TYPE QUEUE CODE DELQ DATE PAST DUE DAYS STATUS CURRENT AMOUNT DELQ CODE PAYOFF DATE LAST UPD A/R CURRENT ACCOUNT NAHE PAYOFF. BALANCE 2000 0100024491204567 GRAHAM.JAMES P 03 6/12/77 303.53 142 401.70 401.70 6/22/77 NO. ACCOUNTS PAST DUE AHT CURR PAYOFF AHT CURR BALANCE ** TYPE CODE TOTALS ** 303.53 401.70 401.70 DELQ Date PAST DUE DAYS STATUS CURRENT AMOUNT DELQ CODE PAYOFF CURRENT DATE LAST BALANCE UPD A/R QUEUE CODE ACCOUNT NAME 319.00 319.00 6/19/77 0002 05 0110644191234567 SARACO.DOMENICK J . 6/08/77 211.00 146 NO. ACCOUNTS PAST DUE ANT CURR PAYOFF AHT CURR BALANCE ** TYPE CODE TOTALS *** 211.00 319.00 319.00 NO. ACCOUNTS PAST DUE AHT CURR PAYOFF AHT **** QUEUE TOTALS **** 720.70 720.70

ELIGIBLE FOR WRITE-OFF AS OF 11/01/77 RUN DATE: 11/01/77

PAGE

QUEUE	TYPE: CODE.	ACCOUNT	NAME	,	DELQ Date	PAST DUE DAYS Amount delo	STATUS CURRENT CODE, PAYOFF	CURRENT DATE LAST BALANCE UPD A/R
0003	04	0306177221234567	MAJOR'S HINE & LIQUOR	STORE.	5/19/77	369.19 166	557.53	557.53 6/19/77
			NO.	ACCOUNTS		PAST DUE ANT	CURR PAYOFF AHT	CURR BALANCE
	** TYPE	CODE TOTALS **		1		369.19	557.53	557.53
			NO.	ACCOUNTS		PAST DUE ANT	CURR PAYOFF AMT	CURR BALANCE
	**** QUEU	E TOTALS ****		1		369.19	557.53	557-53

ELIGIBLE FOR WRITE-OFF AS OF 11/01/77 RUN DATE: 11/01/77

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31316	ii rek	IFICATION		KUN U	11701	.,,,		
OUEUE	TYPE CUDE	ACCOUNT	NAHE	,	DELQ Date	PAST DUE DA Amount de	YS STATUS CURRENT LQ CODE PAYOFF	CURRENT DATE LAST BALANCE UPD A/R
0004	02	0431294811234567	DIGGS.LAHRENCE JR		4/28/77	626.88 1	87 745.30	745.30 6/19/77
				NO. ACCOUNTS		PAST DUE AMT	CURR PAYOFF AHT	CURR BALANCE
	**	TYPE CODE TOTALS **		, 1		626.88	745.30	745.30
QUEUE	TYPE CODE	ACCOUNT	NAME		DELQ Date		YS STATUS CURRENT LG CODE PAYOFF	CURRENT DATE LAST BALANCE UPD A/R
0004	03	0479043391234567	PARISI + MICHAEL P		4/18/77	552.26 1	97 698.76	688.76 6/19/77
				NU.ACCOUNTS		PAST DUE AMT	CURR PAYOFF AHT	CURR BALANCE
	**	TYPE CODE TOTALS **		1		552.26	698.76	688.76
							,	
				NO. ACCOUNTS		PAST DUE AMT	CURR PAYOFF AMT	CURR BALANCE
	****	QUEUE TOTALS ****		2		1.179.14	1,444.06	1,434.06

0.10024491204567 GRAMAN_JAMES 0.6/12/77 303.53 001.70 0002 10/27/77 10/00154251254567 STRINGE_DOWNA 0.7/27/77 10/52 16.63 0001 11/03/77 10/06767931254567 STRINGE_DOWNA 0.5/01/77 49.50 94.50 0001 11/08/77 10/067679312454567 STRAKS_BARBARA 0.8/30/77 7.13 116.65 0001 11/05/77 11/06419123565 SARAGO_OOMENICK 0.9/12/77 211.00 319.00 0002 11/01/77 11/07/77 11/07/3556 AMRGES_SRECHRAD 0.9/12/77 211.00 319.00 0002 11/01/77 0.101313123565 AMRGES_SRECHRAD 0.9/12/77 2.51 110.55 0001 11/02/77 0.11/07/77 0.11	ACCOUNT NUMBER	BORROHERS NAME	• .	DEL INQUENT DATE	DEL INQUENT AMOUNT	CURRENT Payoff	QUEUE	PROMISED Date	TO PAY	NEXT CONTACT	REVIE CODE
11/08/77	0100024491204567	GRAHAM.JAHES P		06/12/77	303.53	401.70	0002			10/27/77	
11/05/77	0100135561234567	DAVIS.JOAN E		07/23/77	107.52	168.36	0001			10/31/77	
11/01/77	0106944291234567	SIMONE+DONNA M		05/01/77	49.50	94.50	0001			11/08/77	
0110813101233-567 ANGREES, RICHARD 09/12/77 6.51 110.56 0001 11/01/77 0131593391233-567 CONCA, SAH 10/18/77 90.33 179.39 0001 11/01/77 0131593391233-567 CONCA, SAH 10/18/77 90.33 179.39 0001 11/01/77 0147346781233-567 RAMLS, YYDONE 08/26/77 84.52 127.16 0001 11/01/77 0147346781233-567 RAMLS, YYDONE 08/26/77 84.52 127.16 0001 11/01/77 014907691233-567 RAMLS, YYDONE 08/26/77 131.54 231.64 0001 11/01/77 0149084221233-567 BACHARACH-HARYLEE 10/27/77 173.54 231.64 0001 10/30/77 01673686721233-567 RAMLS, WYDONE 09/01/77 77.85 78.27 83.20 0004 10/29/77 017747721623-567 MCCRATH, HMILIP J 06/30/77 38.27 83.20 0001 11/03/77 018712771233-567 MCCRATH, HMILIP J 06/30/77 38.27 83.20 0001 11/03/77 018712771233-567 MCCRATH, HMILIP J 06/30/77 38.27 83.20 0001 11/03/77 01881233-567 SROUN-ALMA 09/23/77 37.21 56.82 0001 11/03/77 0188123-567 SROUN-ALMA 09/23/77 37.21 56.82 0001 11/03/77 0188124721233-567 MCCRATH, HMILIP J 06/28/77 30.40 45.62 0001 11/03/77 018938-6761233-567 ARRINOSON-HILLIAN 06/28/77 30.40 45.62 0001 11/03/77 014938-6761233-567 ARRINOSON-HILLIAN 06/28/77 30.40 45.62 0001 11/03/77 014938-6761233-567 MARTINOSE ARRINOSON 06/12/77 30.40 45.62 0001 11/03/77 014938-6761233-567 MARTINOSE ARRINOSON 06/12/77 0.00 8.69 0001 11/03/77 020/414-681233-567 RIDS, ARRINOS 06/12/77 0.00 8.69 0001 11/03/77 020/21/216233-567 ARRINOSON 06/08/77 0.00 8.69 0001 11/03/77 020/21/216233-567 RIDS, ARRINOS 06/08/77 0.00 8.69 0001 11/03/77 020/21/216233-567 RIDS, ARRINOS 06/08/77 0.00 8.69 0001 11/03/77 020/21/21633-567 RIDS, ARRINOS 06/08/77 0.00 8.69 0001 11/03/77 020/216233-567 RIDS, ARRINOS 06/08/77 0.00 3.61 0001 11/03/77 023/316367 RIDS, ARRINOS 06/08/77 0.00 3.61 0001 11/03/77 023/3163	0107879631234567	SPARKS+BARBARA B		08/30/77	97.13	116.65	0001				
0129537571234567 0BRIEN,HICHAEL 05/18/77 21.68 22.79 0001 11/02/77 0131593391234567 FRIEDMAN,GLENH 04/16/77 70.30 136.00 0001 11/02/77 0137006531234567 FRIEDMAN,GLENH 04/16/77 70.30 136.00 0001 11/02/77 0147306731234567 RANLS-YVONNE 08/26/77 84.52 117.16 0001 11/04/77 014907691234567 MAYE-KENHETH E 05/28/77 147.87 218.87 0001 11/04/77 01646884221234567 RADIN-DAVID 09/01/77 718.59 823.38 0004 10/30/77 0165360511234567 RADIN-DAVID 09/01/77 718.59 823.38 0004 10/30/77 0167312371234567 RADIN-DAVID 09/01/77 718.59 823.38 0004 10/30/77 0174747381234567 MARCATH-HPILIP J 06/30/77 38.27 83.20 0001 11/03/77 0174743561234567 MARCATH-HPILIP J 06/30/77 37.21 56.82 0001 11/03/77 0174747381234567 MARCATH-HPILIP J 06/30/77 37.21 56.82 0001 11/03/77 01826742234567 LACA-GONDAN H 1 09/23/77 37.21 56.82 0001 11/03/77 01826742234567 LACA-GONDAN H 1 09/23/77 37.21 56.82 0001 11/03/77 01826742234567 LACA-GONDAN H 1 00/22/77 30.40 45.62 0001 11/03/77 01826742234567 LACA-GONDAN H 1 00/22/77 30.40 45.62 0001 11/03/77 0194338421234567 MARCATH-MARCATH M 06/22/77 30.40 45.62 0001 11/03/77 0194338421234567 HARITOLE-KENHINSTON A 06/12/77 10.10 0001 10/27/77 0194338421234567 HARITOLE-KENHINSTON A 06/12/77 10.10 0001 10/27/77 0194338421234567 HARITOLE-KENHINSTON A 06/12/77 10.10 0001 10/27/77 0194338421234567 HARITOLE-KENHINSTON A 06/12/77 10.10 0001 11/03/77 020414681234567 HIGGINS-HARVIN 08/30/77 115.67 150.18 0001 11/03/77 020414681234567 HIGGINS-HARVIN 08/30/77 15.67 150.18 0001 11/03/77 0214225591234567 VIGGINS-HARVIN 08/30/77 15.67 150.18 0001 11/03/77 0214225591234567 VIGGINS-HARVIN 08/30/77 15.67 150.18 0001 11/03/77 0214225591234567 VIGGINS-HARVIN 08/30/77 150.67 150.18 0001 11/03/77 0214225591234567 VIGGINS-HARVIN 08/30/77 150.67 150.18 0001 11/03/77 02142252571234567 VIGGINS-HARVIN 08/30/77 150.67 150.18 0001 11/03/77 021423557 FOGLIA-HARGUERIE H 09/12/77 37.36 576.03 0001 11/03/77 021436357 FOGLIA-HARGUERIE H 09/12/77 20.00 03.3 00.00 11/03/77 0233348671234567 VIGGINS-HARVIN 0 0001 11/03/77 0233348671234567 VIGGINS-HARVIN 0 0001 11	0110644191234567	SARACO, DOMENICK J		06/08/77	211.00	319.00	0002			11/01/77	
013159319712334567	0110813101234567	ANGREES + RICHARD		09/12/77	6.51						
0131593391234567 CONCA-SAH	0129537571234567	OBRIEN, MICHAEL		05/18/77	21.68	42.79	0001				
1013700e31234567 FRIEDMAN,GLENN H	0131593391234567	CONCA SAH		10/18/77	90.33	179.39	0001				
0149907601234567 MAYE.KENNETH E 05/24/77 147.67 218.87 0001 11/01/77 0165360511234567 RADIN.DAVID 09/01/77 718.59 823.38 0004 10/29/77 0165360511234567 RADIN.DAVID 09/01/77 718.59 823.38 0004 10/29/77 01747436501234567 RADIN.DAVID 09/01/77 24.29 42.10 0001 11/03/77 01747436501234567 MAURG.JOHN 05/19/77 24.29 42.10 0001 11/03/77 017474361234567 RADIN.DAVID 09/01/77 73.21 56.82 0001 11/03/77 01814306401234567 SHEARN.DHIGHT H 09/23/77 37.21 56.82 0001 11/03/77 018287421234567 LAZO.ECDHARD H 10/01/77 166.43 336.90 0001 11/03/77 018287421234567 RARINGION.HILLIAH H 06/28/77 30.40 45.62 0001 11/03/77 018384871234567 RARINGION.HILLIAH H 06/28/77 30.40 45.62 0001 11/02/77 0194384871234567 RARINGION.HILLIAH H 06/28/77 124.91 188.60 0001 11/02/77 0194384871234567 RARINGION.BSEPH A 04/28/77 124.91 188.60 0001 11/02/77 01940641234567 RARINGION.BSEPH A 04/28/77 131.93 204.16 0001 10/27/77 020/414681234567 RARINGION.BSEPH A 08/30/77 10.00 8.89 0001 10/37/77 020/27/14681234567 RARINGION.BSEPH A 08/30/77 10.00 8.89 0001 10/37/77 021/2262571234567 RASINGION.BSEPH A 08/30/77 10.00 8.89 0001 11/08/77 021/27/27/27/27/27/27/27/27/27/27/27/27/27/	0137006531234567	FRIEDMAN.GLENN H		04/16/77	70.30	136.00	0001			10/28/77	
0149907691234567 MAYE.KENNETH E 05/28/77 147.87 216.87 0001 11/01/77 1063540511234567 RADIH.DAVID 09/01/77 718.59 823.38 0004 10/29/77 0163540511234567 RADIH.DAVID 09/01/77 718.59 823.38 0004 10/29/77 0174743561234567 RADIH.DAVID 09/01/77 24.29 42.10 0001 11/03/77 0174743561234567 MAURQ.JOHN 05/19/77 24.29 42.10 0001 11/03/77 0174743561234567 SRBODH.ALHA H 08/28/77 7.52 74.03 0001 10/28/77 0181406481234567 SHEARN.DHIGHT H 09/23/77 37.21 56.82 0001 11/03/77 018287421234567 LAZO.ECDHARD H 10/01/77 168.43 336.90 0001 11/03/77 018287421234567 ARRINGTON.HILLIAH H 06/28/77 30.40 45.62 0001 11/03/77 018434871234567 ARRINGTON.HILLIAH H 06/28/77 30.40 45.62 0001 11/02/77 0194348871234567 ARRINGTON.HILLIAH H 06/28/77 124.91 188.60 0001 11/02/77 0194348871234567 RADIUCK.NEAL GODDHAM 07/23/77 74.12 98.12 0001 10/27/77 0197026491234567 HADIUCK.NEAL GODDHAM 07/23/77 74.12 98.12 0001 10/37/77 020/21/14681234567 RIDS.ANTONIO 05/01/77 0.00 8.89 0001 10/27/77 0212262571234567 RADICHOLUUIS 09/12/77 115.01 80 0001 11/08/77 0212262571234567 RADICHOLUUIS 09/12/77 74.64 0001 11/08/77 0212262571234567 RADICHOLUUIS 09/12/77 75.00 8.89 0001 11/08/77 02121925591234567 RADICHOLUUIS 09/12/77 75.00 8.89 0001 11/08/77 02121925591234567 RADICHOLUUIS 09/12/77 75.00 3.61 0001 11/08/77 02121925591234567 RADICHOLUUIS 09/12/77 75.00 3.61 0001 11/01/77 0213233171234567 GREAVES.FRAMKLIN E 05/18/77 0.00 3.61 0001 11/01/77 0239045101234567 FOLGLIA,HARGUERITE H 10/18/77 54.18 82.22 0001 11/01/77 0239045101234567 FOLGLIA,HARGUERITE H 10/18/77 397.36 0001 11/01/77 0239045101234567 FOLGLIA,HARGUERITE 08/20/77 39.37 77.44 0001 11/01/77 0239045101234567 RADICHOLUUIS 09/12/77 39.73 77.44 0001 11/01/77 0239045101234567 RADICHOLUUIS 09/12/77 39.73 77.44 0001 11/01/77 024465771234567 RADICHOLUCIS 09/12/77 37.36 0001 11/01/77 02739043	0147346781234567	RAHLS. YVONNE			84.52						
1016816721234567 RACHARACH+MARYLEE 10/27/77 133.54 231.64 0001 10/30/77 10173712971234567 RACINA, DAVID 00/01/77 718.59 823.38 0004 10/29/77 10173712971234567 RACRAIH, PHILIP J 06/30/77 38.27 83.20 0001 11/03/77 11/03/77 10174747361234567 RAURO, JOHN 05/19/77 24.20 0001 11/03/77 10174747361234567 RAURO, JOHN 09/23/77 37.21 56.82 0001 11/03/77 1018106781234567 RARINOTON-HILLIAM 09/23/77 37.21 56.82 0001 11/03/77 10182074321234567 RARINOTON-HILLIAM 00/28/77 30.00 11/03/77 10182074321234567 RARINOTON-HILLIAM 00/28/77 124.91 108.60 0001 11/03/77 10174346761234567 RARINOTON-HILLIAM 00/28/77 124.91 108.60 0001 11/03/77 10174346761234567 RARINOTON-HILLIAM 00/28/77 124.91 108.60 0001 10/27/77 10174026491234567 RARINOTON-HILLIAM 07/23/77 74.12 98.12 0001 10/27/77 10174026491234567 RARINOTON-HILLIAM 07/23/77 74.12 98.12 0001 10/31/77 107/026491234567 RARINOTON-HILLIAM 07/23/77 74.12 98.12 0001 11/03/77 102/02414661234567 RAISON-HILLIAM 07/23/77 74.12 98.12 0001 11/03/77 102/02414661234567 RAISON-HILLIAM 09/30/77 115.67 150.18 0001 11/03/77 11/03/77 11/03/75 10/03/77 10/03/75 10/03/75 10/03/77 10/03/75	0149907691234567	MAYE . KENNETH E		05/28/77	147.87						
0163506511234567 RADIN.DAVID 09701/77 718.59 82.3.8 0004 10/29777 0173434561234567 MAURCI.JOHN 05/19/77 24.29 42.10 0001 11/03/77 017434561234567 MAURCI.JOHN 05/19/77 72.4.29 42.10 0001 11/03/77 0184134561234567 BROUN.ALMA H 09/23/77 73.2.1 56.82 0001 10/24/77 01841304561234567 SHEARN.DHICHI H 09/23/77 37.21 56.82 0001 11/03/77 018267321234567 LAZO.EDWARD H 10/01/77 168.43 336.90 0001 11/03/77 0180126781234567 RARINGION.PHILLIAH H 06/28/77 30.40 45.62 0001 11/03/77 01834871234567 ARRINGION.PHILLIAH H 06/28/77 124.91 188.60 0001 11/03/77 0194384871234567 MARTINDALE.HINSTON A 06/12/77 131.93 204.16 0001 10/27/77 0194384871234567 RAIDUKK, NEAL GOODHAM 07/23/77 74.12 98.12 0001 10/27/77 020414681234567 RIOS.ANIONIO 05/01/77 0.00 8.89 0001 11/03/77 0204714681234567 RIOS.ANIONIO 05/01/77 0.00 8.89 0001 11/03/77 02124262571234567 RUSS.ANIONIO 05/01/77 0.00 3.61 0001 11/03/77 0214925591234567 RUSS.ANIONIO 05/01/77 0.00 3.61 0001 11/01/77 0210323171234567 GREAVES.FRANKLIN E 05/18/77 0.00 3.61 0001 11/01/77 0230415101234567 FOOL 1.4 ANIONIO 05/01/77 0.00 3.61 0001 11/01/77 0230415101234567 FOOL 1.4 ANIONIO 05/01/77 0.00 3.61 0001 11/01/77 0230415101234567 FOOL 1.4 ANIONIO 05/01/77 0.00 3.61 0001 11/01/77 023041501234567 FOOL 1.4 ANIONIO 05/01/77 0.00 3.61 0001 11/01/77 023041501234567 FOOL 1.4 ANIONIO 05/01/77 0.00 0.83 0001 11/01/77 023041501234567 FOOL 1.4 ANIONIO 05/01/77 0.00 0.83 0001 11/01/77 023041501234567 RUSS.ANIONIO 05/01/77 0.00 0.83 0001 11/01/77 023041091234567 RUSS.ANIONIO 05/01/77 0.00 0.83 0001 11/01/77 02304104150567 RUSS.ANIONIO 05/01/77 0.00 075.44 0001 11/01/77 0230410	0164884221234567	BACHARACH, MARYLEE		10/27/77	133.54		0001				
0173712971234567	0165360511234567	RADIN.DAVID		09/01/77	718.59	823.38	0004				
0174434561234567 MAURO, JOHN 05/19/77 24.29 42.10 0001 11/03/77 0181406481234567 SHCARN, DMIGHT W 09/23/77 37.21 56.82 0001 11/01/77 0181406481234567 SHCARN, DMIGHT W 09/23/77 37.21 56.82 0001 11/03/77 01861247581234567 AZRIGION-MILLIAM H 06/28/77 37.21 56.82 0001 11/03/77 0186124761234567 AZRIGION-MILLIAM H 06/28/77 30.40 45.62 0001 11/02/77 0189346761234567 SEPULYEDA, JOSEPH A 04/28/77 124.91 188.60 0001 11/02/77 0194384871234567 MARTINDALE, MINSTON A 06/12/77 131.93 204.16 0001 11/02/77 0197026491234567 MARTINDALE, MINSTON A 06/12/77 74.12 98.12 0001 10/27/77 0197026491234567 RIDS, ANTONIO 05/01/77 0.00 8.89 0001 11/08/77 02/02/01/04/06/12/04/06/04/06/12/04/06/12/04/06/12/04/06/12/04/06/12/04/06/12/04/06/12/04/06/12/04/06/12/04/06/12/04/06/12/04/06/12/04/06/12/04/06/12/04/	0173712971234567	MCGRATH, PHILIP J									
0174747381234567 BRODN-ALMA H	0174434561234567	MAURO, JOHN		05/19/77	24.29	42.10	0001				
0181406481234567 SHEARN,ONIGHT H	0174747381234567	BROOM, ALMA M		08/28/77	7.52		0001				
018612674121234567 LAZ0_EDMARD H 10/01/77 168.43 336.90 0001 11/02/77 0189348761234567 ARRINGTON_HILLIAH H 06/28/77 124.91 188.60 0001 11/02/77 0189348761234567 SEPULYEDA_JOSEPH A 04/28/77 124.91 188.60 0001 11/01/77 0197026491234567 HARTINDALE_WINSTON A 06/12/77 131.93 204.16 0001 10/27/77 1097026491234567 HARTINDALE_WINSTON A 06/12/77 131.93 204.16 0001 10/27/77 0204414681234567 RIDS_ANTONIO 05/01/77 0.00 8.89 0001 11/08/77 0204714681234567 RIDS_ANTONIO 05/01/77 0.00 8.89 0001 11/08/77 0212262571234567 RIDS_ANTONIO 05/01/77 0.00 8.89 0001 11/05/77 0212262571234567 AURRICHIO_LOUIS 09/12/77 4.64 113.41 0001 11/01/77 0216323171234567 GREAVES_FRANKLIN E 05/18/77 0.00 3.61 0001 11/01/77 023043101234567 FOGGLIA_HARGUERITE H 10/18/77 54.18 82.22 0001 11/02/77 0235042071234567 ALEN_JAMET E 08/26/77 18.95 37.68 0001 11/02/77 0235042071234567 ALEN_JAMET E 08/26/77 18.95 37.68 0001 11/04/77 0235043071234567 ALEN_JAMET E 08/26/77 18.95 37.68 0001 11/04/77 023693261234567 SHITH_CRAIG C 10/27/77 377.36 576.03 0003 10/30/77 0239023871234567 SHITH_CRAIG C 10/27/77 377.36 576.03 0003 10/30/77 0239023871234567 BROUKS_CHARLES E 09/01/77 72.41 108.88 0001 10/29/77 0239023871234567 BROUKS_CHARLES E 09/01/77 72.41 108.88 0001 10/29/77 0241465771234567 SHITH_CRAIG C 10/27/77 377.36 576.03 0003 10/30/77 0241465771234567 SHARK_INS_FREDERIC H 08/28/77 230.43 347.68 0002 10/28/77 02414693391234567 BRAY_DAYID P 06/30/77 141.23 197.77 0001 11/03/77 02414693391234567 BRAY_DAYID P 06/30/77 141.23 197.77 0001 11/03/77 02414693391234567 BRAY_DAYID P 06/30/77 141.23 197.77 0001 11/03/77 02414693391234567 PIDEEDN_R P 04/28/77 135.80 184.31 0001 11/03/77 02414693391234567 PIDEEDN_R P 04/28/77 135.80 184.31 0001 11/03/77 0250114491234567 PIDEEDN_R P 04/28/77 135.80 184.31 0001 11/03/77 0250114491234567 PIDEEDN_R P 04/28/77 135.80 184.31 0001 11/03/77 026501244691234567 PIDEEDN_R P 04/28/77 135.80 184.31 0001 11/03/77 026501234567 PIDEEDN_R P 04/28/77 135.80 184.31 0001 11/03/77 02650301234567 PIDEEDN_R P 04/28/77 135.80 184.31 0001 11/03/77 0265											
0186126781234567 ARRINGTON+HILLIAM H	0182874321234567	LAZO, EDHARD H									
0194384761234567 SEPULVEDA-JÜSEPH A											
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ACCOUNT NUMBER BORROWERS NAME DELINQUENT DELINQUENT CURRENT QUEUE PROHISED TO PAY REVIE DATE AMOUNT PAYOFF DATE AHOUNT CONTACT CODE 0283219591234567 JONES.PATRICIA A 0287164291234567 SWEENEY.MARTIN J 05/28/77 11/01/77 0.00 0.83 0001 0287164291234567 0288571481234567 0292117571234567 105.13 4.13 92.56 58.56 0001 GORDIAN, DUMINGO 09/01/77 146.78 0001 10/29/77 HEISS-EDMARD
HAJOR'S HINE & LIQUOR STORE,
PREZIOSO-HILLIAH R
LEE,THOMAS J 0001 05/19/77 557.53 11/03/77 0306177221234567 369.19 0003 0308046431234567 0311475771234567 0.00 0001 09/23/77 81.28 15.58 11/01/77 0001 0314907971234567 0332898561234567 RODRIGUEZ.NURAH DURHAH.ANGELYNN 10/01/77 0.00 0001 11/03/77 06/28/77 63.01 104.07 0001 0346013171234567 0349716481234567 WILLIAMS, EDNA MAE BAILEY, GEURGE 0.32 4.78 15.06 24.54 04/28/77 0001 11/01/77 06/12/77 0001 18.30 13.74 133.29 98.40 32.75 77.79 37.11 13.91 197.29 146.40 51.67 0353693391234567 0354019101234567 NIESSL.THUMAS CLARKE, GLADSTONE 07/23/77 0001 10/31/77 0001 0359666691234567 0368074191234567 MODGE , MELVIN DEMAIO , MALTER M 08/30/77 06/08/77 0001 11/05/77 0001 11/01/77 JACKSON, KARL U
CAMPBELL, WILLIE G
EADY , CARNEL G
HENRY, MICHELE A
PURSLEY, WILLIE R
BEDICS, JOSEPH F 0377475561234567 0378065561234567 09/12/77 0001 11/01/77 0001 11/01/77 162.24 135.37 0378864491234567 10/18/77 88.76 0001 11/02/77 10/28/77 0378924121234567 0384715101234567 04/16/77 83.13 51.61 0001 08/26/77 05/28/77 52.37 0.68 11/04/77 0001 0396211661234567 0397288631234567 0.00 0001 10/30/77 FLAMHOLTZ, CARL 10/27/77 22.30 43.96 0001 0401578631234567 0402013101234567 MARTELLO, LAHRENCE ROBINSON, SHEILA C 52.31 99.34 09/01/77 3.11 0001 06/30/77 0001 11/03/77 CASALE.JOHN B HD HUNTER.DONALD 82.27 240.00 11/03/77 0417047671234567 0418074291234567 43.35 05/19/77 0001 08/28/77 120.00 10/28/77 0428040581234567 0428807591234567 MUNUZ, SIGIDFREDO BRONTE, DAVIEL PETER 09/23/77 10/01/77 127.37 169.59 174.05 223.59 0001 11/01/77 11/03/77 0001 VELAZQUEZ,RONALD DIGGS,LAHRENCE JR HUNT, HILLIAM COLON, EUGENE 0431234561234567 0431294811234567 06/28/77 22.15 37.05 745.30 11/02/77 0001 0004 11/01/77 0434395981234567 0452924191234567 06/12/77 191.55 185.95 289.00 0001 10/27/77 263.25 0001 0457185561234567 0469123191234567 36.42 52.40 SABLO.DONNA P 05/01/77 0.00 0001 11/08/77 11/05/77 26.62 0001 ALEXANDER. SUE C 07/30/77 0476044291234567 FUOTE DORIS 05/08/77 157.85 234.85 0001 11/01/77 O*LOUGHLIN, MICHAEL J K PARISI, HICHAEL P 11/01/77 0476336781234567 0479043391234567 08/12/77 30.53 67.95 0001 698.76 0004 11/01/77 11/02/77 0482825591234567 MARSHALL,CHARLES 0488626391234567 HALL,JOYCE 0489201811234567 COFFEY,J. ARTHUR 83.69 92.44 0001 08/18/77 53.78 0001 10/28/77 04/16/77 08/26/77 2.00 68.45 0001

TOTALS
NUMBER OF ACCOUNTS
DELINQUENT AMOUNT
CURRENT PAY OFF

90 8950.86 13873.14

CYBER CREDIT SYSTEM VERSION 3.0. SYSTEM VERIFICATION	VERSION 3.0. QUEUE LOADING REPORT											
			NEX	T CONTACT	DATE AGE							
QUEUE	<0	0	. 1	2	3	>3	TOTALS					
0001	23	24	9	10	5	9	80 .					
0002	2	1	0	1	0	1	5					
0003	1	0	0	1	. 0	0	2					
0004	1	2	0	0	. 0	0	3	•				
201415	. 27	27		1.2	5	10	an					

PAGE

COLLECTOR: H LOHE

ACCT NO

FIELD CODE-SCREEN

NEW DATA

DLD DATA

0194384871234567 0194384871234567 0255350361234567 0255350361234567 13 BURROHER 15 BORROHER 05 BORROHER 14 BURROHER MILLER FORD 9997772222 011847

7775551212

60475230 A

TIME USAGE REPORT AS OF: 11/01/77

PAGE

COLLECTOR: H LOWE

ACCOUNT NUMBER START TIME STUP ELAP NEXT TIME TIME CONTACT ACT RES LTR CDE COMMENT

0194384871234567 15:05 0255350361234567 15:07 15:06 :01 11/17/77 15:08 :01 11/17/77 P P 02

TOTALS- TIME ACCOUNTS : 0 Z 2

	CYBER CREDIT SYSTEM VERSION 3.0° SYSTEM VERIFICATION						COL		DAIL R STATI OF: 11	STICS		•						PAGE	1 .
	COLLECTOR NAME	Al	AZ	A3	A4	SR	••	••	ACTIO	NS **	••	**	**	**,	••	**	••		TOTAL
$\langle \hat{} \rangle$						3.1						•		•		,			
	M LOWE P GARRET	1	1																ì
	H SHERMAN			1												•			1
	TOTALS	1	2	1															4

CYBER CREDIT SYSTEM VERSION 3.0' SYSTEM VERIFICATION	DAILY COLLECTOR STATISTICS REPORT AS OF: 11/01/77													PAGE	2			
COLLECTOR NAME	8 Z	PP	R 1	R2	R3	R 4	RESUL	.TS	**	••	**	**	**	**	**		TOTAL	
H LOHE P GARRET H SHERMAN		2	1	1										•			2 1	
TOTALS		2	1	1													4	

RE: 0100024491204567

JAMES P GRAHAM C/O BUSY TOHN INC 888 ZZZ ST BUSY TOHN, USA 88888

DEAR JAMES P GRAHAM.

THIS IS SAMPLE LETTER NUMBER 01.

IT CONTAINS TWO DOLLAR AMOUNTS, TWO DATES, AND ONE STRING. ALL ARE FROM THE ROOT AREA OF THE FILE AND ARE NOT FIELDS THAT ARE ENTERED BY A COLLECTOR.

DOLLAR 1 : \$303.53 = AMOUNT DELINQUENT

DULLAR 2 : \$401.70 = CURRENT PAYOFF

DATE 1: 06/12/77 = DELINQUENT DATE .

DATE 2: XXX XX. XXXX * PAYOFF GOOD UNTIL DATE

STRING : 000000000 = SOCIAL SECURITY NUMBER

VERY TRULY YOURS,

MISS P GARRET 222/555-1200 EXT 412

COLLECTION DEPT

COLLECTOR LETTER STATISTICS AS OF: 11/01/77

PAGE: 1

LETTERS REQUESTED

 NAME
 01
 02
 TOTALS

 LOME
 0
 1
 1

 GARRET
 1
 0
 1

 TOTALS
 1
 1
 2

D-28

THE FOLLOWING IS A SUMMARY OF THE NUMBER OF ACCOUNTS WITH XXX NUMBER OF ACTIVITY BLOCKS

4 ACCOUNTS HITH 1 ACTIVITY BLOCKS
O ACCOUNTS HITH 2 ACTIVITY BLOCKS
O ACCOUNTS HITH 3 ACTIVITY BLOCKS
O ACCOUNTS HITH 5 ACTIVITY BLOCKS
O ACCOUNTS HITH 6 ACTIVITY BLOCKS
O ACCOUNTS HITH 7 ACTIVITY BLOCKS
O ACCOUNTS HITH 8 ACTIVITY BLOCKS
O ACCOUNTS HITH 9 ACTIVITY BLOCKS
O ACCOUNTS HITH 10 ACTIVITY BLOCKS
O ACCOUNTS HITH 10 ACTIVITY BLOCKS
O ACCOUNTS HITH 10 ACTIVITY BLOCKS

TRAN	ACCOUNT	BURROWERS	DELINQUENT		CURRENT					
CODE	NUMBER	NAME	DATE	AHOUNT	PAYOFF	ACTION				
	0434395981234567	HUNT .WILLIAM	06/12/77	229.77	345.87	UPDATE	*			
	0452924191234567	COLON, EUGENE	07/23/77	139.28	184.28	UPDATE				
302	0457185561234567	SABLU-DONNA P	10/26/77		0.00	RELEASE				
301	0469123191234567	ALEXANDER.SUE C	10/26/77		26.00	MRITEOFF				
	0476044291234567	FOOTE + DORIS	06/08/77	157.85	234.85	UPDATE				
301	0476336781234567	O'LOUGHLIN. HICHAEL J K	10/26/77		30.00	WRITEOFF				
	0479043391234567	PARISI . HICHAEL P	05/18/77	552.26	688.76	UPDATE				
	0482825591234567	MARSHALL, CHARLES	10/18/77	36.48	61.39	UPDATE				
	0488626391234567	HALL.JOYCE	04/16/77	99.03	123.03	UPDATE				
303	0489201811234567	COFFEY.J. ARTHUR	10/26/77		2.00	SATISFY				
	0493406201234567	BRADY + DOREEN	05/28/77	54.47	84.18	ADD .				
	0510040581234567	SMITH.ROBERT A	10/27/77	100.61	101.86	ADD				
	0510606391234567	DEVINE, JAMES P	09/01/77	143.73	212.73	ADD				
	0517797561234567	LOPILATO, ANTHONY	06/30/77	318.19	422.82	ADD				
	0526882291234567	TAYLUR + ANNAHAY	05/19/77	66.24	82.36	ADD				
_	0532174291234567	NAZZARO, EVENLY	08/28/77	164.00	244.00	ADD				
301	0536364561234567					REJECT - NO	ACCOUNT	FUR	30 X	CUDE
301	0541033871234567					REJECT - NO	ACCOUNT	FUR	30 X	CUDE
	0541196591234567	BRETT, DAVID C	06/28/77	102.50	152.50	ADD				
	0549714491234567	RYAN, HILLARD L	04/28/77	440.53	568.88	ADD				
	0553268091234567	PURCELL, ANDREW JR	06/12/77	362.87	456.19	ADD				
	0555352771234567	MCINERNEY+JAMES R	07/23/77	38.44	82.81	ADD				
	0561326391234567	SEHUQUIEST.HARGAUT H	05/01/77	186.31	231.31	ADD				
301	0563143281234567					REJECT - NO	ACCOUNT	FUR	30 X	CODE
	0563175571234567	SIGONA, SALVATORE V	06/08/77	192.91	301.09	ADD				
	0565092291234567	BROOKS.MICHAEL J	09/12/77	366.76	489.20	ADD				
	0567560201234567	REESE, JAMES	05/18/77	108.47	151.29	ADD				
	0575526121234567	HILSON, SAMUEL E JR	10/18/77	171.58	228.42	ADD				
303	0577995391234567					REJECT - NO				
302						REJECT - NO	ACCOUNT	FUR	30 X	CODE
302	0583721661234567					REJECT - NO	ACCOUNT	FUR	30 X	CUDE
	0584187421234567	WATSON, DENTON	10/27/77	76.26	159.54	ADD				
	0586475561234567	FELLERS, FELLERS	09/01/77	74.03	93.33	ADD				
	0587534191234567	LAR SEN • E VANDNE	06/30/77	98.51	188.51	ADD				
302						REJECT - NO	ACCOUNT	FUR	30X	CODE
	0593975391234567	ROCK +SAHUEL	08/28/77	303.00	452.00	ADD				
301					•	REJECT - NO	ACCOUNT	FUR	30 X	CDDE
	0605092291234567	HIGH.CLARENCE W III	10/01/77	67.95	101.10	ADD				
	0605125121234567	GENZ.JOHN K	06/28/77	270.96	403.39	ADD				
	0608525121234567	STINGONE, LINDA S	04/28/77	33.29	57.98	ADD				
	0610392971234567	HORRIS . PAULA Y	06/12/77	63.70	98.44	ADD				,

		+ TUTA	LS +	•	
ACCOUNTS	NUMBER	AHT DELQ	PAYOFF	PREV AHT DELQ	PAYOFF
ADDED	23	3805.31	5363.93	•	
REACTIVATED	. 0	0.00	0.00		
UPDATED	. 6	1214.67	1638.18	1204.79	1661.99
RELEASED	1		0.00	0.00	36.42
SATISFIED	1		. 2.00	2.00	68.45
WRITTENOFF	2		56.00	57.15	120.35
REJECTED	. 8				

DELINQUENT RECORD CONTENTS AS OF 11/01/77

PAGE

ASSIGNED CR.
QUEUE PTS
0001 000 ACCUUNT ADDITIONAL BANK AHOUNT TO DELQ LAST LETTER SENT LOAN DPEN AMOUNT NU. 0457185561234567 OFFICER 0000 DATE 5/01/77 AHOUNT OR CR LIMIT 99.00 ACCOUNT NO. BR. COLLECT .00 .00 SALUTATION CODE O SOCIAL SECURITY NO. NO. UF COSIGNERS O HOME PHONE: 777-555-1212-0000 DOB 3/24/33 NAME SABLO.DONNA P BUSINESS NAME VA HOSPTL. ST. ADDRESS 888 ZZZ ST CITY/STATE/ZIP BUSY TOWN, USA 88888 BUSINESS PHONE: 777-555-1212-0000 MAKE OF AUTO: SAAB ADDRESS 1 ADDRESS 2 9999 Z ST CITY/STATE/ZIP HOME TOWN. USA HOTHERS MAIDEN NAME JOHNSON 99999 HOTHERS MAIDEN NAME PRUMISED TO PROMISED TO PAY DATE PAY AMOUNT TIMES DELQ 30 60 90 PREVIOUS ADDRESS 1 PREVIOUS ADDRESS 2 CITY/STATE/ZIP PRIURITY TYPE STATUS PAY DATE CODE 11/08/77 2000 30 60 90 00 00 00 FLAG CODE CODE 02 0 -00 NEXT PAYOFF SUPERVISOR AMOUNT 1.D. ARCHIVE TAPE DATE CURRENT CURRENT CURRENT PAYOFF * * SPECIAL INSTRUCTIONS * * CURKE... PAYOFF •00 EFFECTIVE DATE BALANCE 36.42 .00 LAST COL UPDATE DATE 1ST IN CCS 6/19/77 LAST QUEUE STATUS OPEN QUEUE * * * * * * PERMANENT COHHENT * * * * * DATE 10/26/77 DATE CHANGE DATE 11/01/77 1111

PAYMENT HISTORY THUUNA

.00

.00

ACTIVE ACCOUNTS UPDATED FROM HISTORY SYSTEM AS OF: 11/01/77

PAGE: 1

ACCOUNT NUMBER

BORROHERS NAME

FORMER STATUS

INACTIVE DATE TAPE ARCHIVE DATE

0561326391234567

SEHUQUIEST. HARGAUT H

07/31/77

07/31/77

TOTAL NUMBER OF ACCOUNTS UPDATED FROM SUMMIST

ACCOUNT HOVEHENT TO HISTORY
RUN DATE: 11/01/77
AS OF: RELEASED 10 DAYS, SATISFIED 15 DAYS, WRITTEN-OFF 5 DAYS

ACCOUNT NUMBER BORROHERS NAME INACTIVE STATUS DATE INACTIVE DATE LOST WITH TAPE ARCHIVE DATA 0469123191234567 0476336781234567 ALEXANDER.SUE C O'LOUGHLIN,MICHAEL J K HRITTEN-OFF HRITTEN-OFF 10/26/77 10/26/77 TOTALS

RELEASED SATISFIED WRITTEN-OFF 0 0 2 HOVED TO HISTORY 2 PAGE 1

	CYBER CREDIT SYSTEM VERSIUN 3.0' SYSTEM VERIFICATION						COL		HEEKL R STATI OF: La	STICS								PAGE	· L .
	COLLECTOR NAME	A1	AZ	A 3	A4	SR	**	**	ACTIO	HS ++	**	**	••	**	**	••	**		TOTAL
\bigcup	M LOHE P GARRET H SHERHAN	1	1 1	1											•				2 1 1
	TOTALS	1	2	ı					•										4

CYBER CHEDIT SYSTEM VERSION 3.0 SYSTEM VERIFICATION						COI		HONTHL R STATI OF: 12	STICS		Ť						PAGE	1
COLLECTOR NAME	A 1	AZ	A3	A Ġ	SR	**	••	ACTIO	NS ++	••	**	**	, ••	**	. **	**	. /	TOTAL
M LOHE P GARRET H SHERMAN	1	1 1	1												·			2 1 1
TOTALS	1	2	ı		•							4						4

CYBER CREDIT SYSTEM VERSION 3.0 SYSTEM VERIFICATION				-	COL		HONTHL R STATI OF: 12	STICS		r				•		PAGE	2.
COLLECTOR NAME	#Z	PP	R 1	R 2	R 3	R 4	RESUL	.TS	••	••	••	**	**	••	**		TOTAL
M LOME P GARRET H SHERMAN		2	ı	ı										:			2. 1 1
TOTALS		2	1	1			•										4

	CREDIT	SYSTEM
VERS1	UN 3.0'	
CVCTC		TO A TROOL

DAILY MASTER FILE NON-FINANCIAL UPDATE REPORT 12/15/77

PAGE

TRAN CODE	ACCOUNT NUMBER	NEW DATA	OLD DATA	· ACTION
409	0100024491204567	CONTROL DATA CORPORATIO	N BUSY TOWN INC	UPDATE
413	0100024491204567	714/452-6000	777/555-1212	UPDATE
414	0100024491204567	3333	0000	UPDATE
409	0110644191234567	CONTROL DATA CORPORATION	N PELHAH CHURCH GDS	UPDATE
413	0110644191234567	714/452-6000	777/555-1212	UPDATE
414	0110644191234567	4444	0000.	UPDATE

+ TUTALS +
ACCOUNTS NUMBER
UPDATED 6

REJECTED 0

DAILY ASSIGNMENTS FOR QUEUE 0001 AS DF: 12/15/77

SYSTEM VERIFICATION 4.78

DELQ DATE

HUHE PHONE & EXT. 777-555-1212-0000

BUS. NAME

BUSY TOWN INC

BUS. PHONE & EXT. 777-555-1212-0000

***** COMMENTS ***** 0349716481234567 AHOUNT DELQ PAYOFF/TOTAL DUE 10/27/77 CONTACT DATE BAILEY, GEORGE 2000 9999 Z ST HOME TOWN. USA 99999 DATE ACTION RESULT LETTER COLLECTOR-ID

AMOUNT DELO 70-30
DELO DATE 4/16/77
HUHE PHONE & EXT. 777-555-1212-0000 PAYOFF/TOTAL DUE FRIEDHAM.GLENN M CONTACT DATE 10/28/77 PRIORITY 2000 BUS. NAME NBD BUS. PHONE & EXT. 777-555-1212-0000 HOHE TONN. USA 99999 RESULT LETTER COLLECTOR-ID DATE ACTION

AMOUNT DELQ 7.52
DELQ DATE 8/28/77
HOME PHONE & EXT. 777-555-1212-0000
BUS. NAME BUSY TOWN INC
BUS. PHONE & EXT. 777-555-1212-0000
**** COMMENTS **** 0174747381234567 PAYOFF/TOTAL DUE CONTACT DATE 74.03 10/28/77 BRUDH.ALHA M 9999 2 51 PRIORITY 2000 HOME TOWN. USA 99999 RESULT LETTER COLLECTOR-ID DATE ACTION

ANDUNT DELO .00
DELO DATE 4/16/77
HUHE PHONE & EXT. 777-555-1212-0000
BUS. MAHE BELKMAP HORAN INC
BUS. PHONE & EXT. 777-555-1212-0000
**** CUMHENTS ***** PAYOFF/TOTAL DUE CONTACT DATE 0234384871234567 TRIPPI.LORRAINE A 9999 Z ST PRIORITY 2000 HOHE TOHN. USA DATE ACTION 99999 RESULT LETTER COLLECTOR-ID

PAYOFF/TOTAL DUE 0282798591234567

AMOUNT DELQ 61.31

DELQ DATE 4/16/77

HUME PHONE & EXT. 777-555-1212-0000

BUS. NAME BUSY TOWN INC

BUS. PHONE & EXT. 777-555-1212-0000

***** COMMENTS ***** 10/28/77 2000 9999 Z ST PRIDRITY HOME TUNN. USA 99999 DATE ACTION RESULT LETTER COLLECTOR-10

CYBER CREDIT SYST VERSION 3.0 SYSTEM VERIFICATI		DAILY ASSIGNMENTS FOR QUEUE 0001 AS OF: 12/15/77	PAGE	1.93 10/28/77 2000	
PREZIOSO, HILLIAH 9999 Z ST	0308046431234567 R	AMOUNT DELO DELQ DATE 8/28/77 HUME PHONE & EXT. 777-555-1212-0000 BUS. NAME BUSY TOWN INC	PAYOFF/TOTAL DUE CONTACT DATE PRIORITY		
HOME TOWN USA DATE ACTION	99999 RESULT LETTER COLLECTOR-ID	BUS. PHUNE E EXT. 777-555-1212-0000			
	**************************************	AHOUNT DELO 83-13	PAYOFF/TOTAL DUE	135.37	
HENRY.HICHELE A		DELO DATE 4/16/77 HOHE PHONE & EXT. 777-555-1212-0000 BUS. NAME BROWN BROS. HARRIHAN	CONTACT DATE PRIORITY	10/28/77 2000	
HOME TUMN, USA DATE ACTION	99999 RESULT LETTER COLLECTOR-ID	BUS. PHONE & EXT. 777-555-1212-0000 ***** CONHENTS *****			
	**************************************	**************************************	PAYOFF/TOTAL DUF	240.30	
HUNTER, DONALD		DELO DATE 8/28/77 HUME PHONE & EXT. 777-555-1212-0000 BUS. NAME HUNTER EXCYATINE	CONTACT DATE PRIORITY	2000	
HOHE TOWN, USA Date action	99999 RESULT LETTER COLLECTOR-ID	BUS. PHONE & EXT. 777-555-1212-0000 ***** COMMENTS *****			
	***************************************		*****		
HALL+JOYCE 9999 Z ST	0488626391234567	ANOUNT DELO 99.03 DELO DATE 4/16/77 HUNE PHUNE & EXT. 777-555-1212-0000	PAYOFF/TOTAL DUE CONTACT DATE PRIORITY	123.03 10/28/77 2000	
HOME TOWN USA Date action	99999 RESULT LETTER CULLECTOR-ID	BUS. NAME BRONX LEBANON BUS. PHUNE & EXT. 777-555-1212-0000 ***** COMMENTS *****			
	***************************************	***************************************	**********	100 00	
BRUDKS, CHARLES E 9999 Z ST	0239023871234567	AMDUNT DELQ 72.41 DELQ DATE 9/01/77 HUME PHONE & EXT. 777-555-1212-0000 BUS. NAME BUSY TOWN INC	PAYOFF/TOTAL DUE CONTACT DATE PRIORITY	109.88 10/29/77 2000	
HOME TUHN. USA DATE ACTION	99999 RESULT LETTER COLLECTOR-ID	BUS. PHONE E EXT. 777-555-1212-0000		•	

PAGE.

95 ACCOUNTS ASSIGNED TO QUEUE 0001

DAILY ASSIGNMENTS FOR QUEUE 0002 CYBER CREDIT SYSTEM PAGE AS OF: 12/15/77 VERSION 3.0 System verification AMOUNT DELQ 229.77
DELQ DATE 6/12/77
HUME PHONE & EXT. 777-555-1212-0000
BUS. NAME N.Y.S.DEPT OF YOUTH
BUS. PHONE & EXT. 777-555-1212-0000
***** COMMENTS ***** 0434395981234567 PAYOFF/TOTAL DUE HUNT HILLIAM 9999 Z ST CONTACT DATE PRIORITY 10/27/77 HOME TOWN, USA DATE ACTION 99999 RESULT LETTER COLLECTOR-ID AMOUNT DELO 230.43 8/28/77 PAYOFF/TOTAL DUE CONTACT DATE 0241693391234567 347-68 AMOUNT DELU

DELQ DATE 8/28/77

HUME PHONE & EXT. 777-555-1212-0000

BUS. NAME BUSY TOWN INC

BUS. PHONE & EXT. 777-555-1212-0000

***** COMMENTS ***** HAHKINS.FREDERIC H 10/28/77 9999 Z ST PRIORITY 2000 HOME TOWN. USA 99999
RESULT LETTER COLLECTOR-ID DATE ACTION PAYOFF/TOTAL DUE CONTACT DATE AHOUNT DELQ 211.00 319.00 0110644[91234567 AMOUNT DELQ ZII.00
DELQ DATE 6/08/77
HOME PHONE & EXT. 777-555-1212-0000
BUS. MAME CONTROL DATA CORPORATION
BUS. PHONE & EXT. 714-452-6000-4444
**** COMHENTS ***** SARACO+DOMENICK J 9999 Z ST PRIDRITY 2000 HOME TOWN, USA 99999 DATE ACTION RESULT LETTER COLLECTOR-ID AHOUNT DELQ 0593975391234567 303.00 PAYOFF/TOTAL DUE 452.00 ANDUNI DELU 303.00
DELQ DATE 8/28/77
HOHE PHONE & EXT. 777-555-1212-0000
BUS. NAME US POST OFFICE
BUS. PHONE & EXT. 777-555-1212-0000
***** COMMENTS ***** ROCK •SAMUEL 9999 Z ST CONTACT DATE PRIDRITY 11/01/77 2000 HOME TOWN, USA 99999 DATE ACTION RESULT LETTER COLLECTOR-10 AHOUNT DELO 0605125121234567 270.96 PAYOFF/TOTAL DUE 403.39 DELQ DATE 6/28/77 HUME PHONE E EXT. 777-555-1212-0000 GENZ+JUHN K 9999 Z ST CONTACT DATE 11/01/77 PRIORITY BUS. NAME . AMERICAN CAN CO. BUS. PHUNE & EXT. 777-555-1212-0000 ***** COMMENTS ***** HOHE TOHN. USA 99999 RESULT LETTER COLLECTOR-ID

DATE ACTION

DAILY ASSIGNMENTS FOR QUEUE 0002 AS OF: 12/15/77

PAGE

GRAHAM. JAMES P

0100024491204567

0248285391234567

PAYOFF/TOTAL DUE CONTACT DATE PRIDRITY

401.70° 11/02/77 2000

9999 Z ST HOME TOWN. USA

99999 DATE ACTION 11/01/77 A2

RESULT LETTER COLLECTOR-ID
R2 01 GARR

AMDUNT DELQ 303.53

DELQ DATE 6/12/77

HOME PHONE & EXT. 777-555-1212-0000

BUS. NAME COMTROL DATA CORPORATION

BUS. PHONE & EXT. 714-452-6000-3333

***** COMMENTS *****

AMOUNT DELO 212.73
DELO DATE 10/01/77
HUME PHONE & EXT. 777-555-1212-0000
BUS. NAME DR A MODRE
BUS. PHONE & EXT. 777-555-1212-0000
***** COMMENTS *****

PAYOFF/TOTAL DUE CONTACT DATE PRIORITY

PAYOFF/TOTAL DUE CONTACT DATE

PRIORITY

281.73 11/03/77 2000

SOTO.ANGELO E 9999 Z ST HOME TOWN. USA DATE ACTION

99999 RESULT LETTER COLLECTOR-ID

9999 2 51

0270007591234567

AHOUNT DELQ 296.47
DELQ DATE 8/30/77
HOME PHOME & EXT. 777-555-1212-0000
BUS. NAME TOWN OF GREENBURGH
BUS. PHOME & EXT. 777-555-1212-0000
***** COMMENTS *****

392.47 2000

HOME TUMN. USA 99999
DATE ACTION RESULT LETTER COLLECTOR-ID

8 ACCOUNTS ASSIGNED TO QUEUE 0002

DAILY ASSIGNMENTS FOR QUEUE 0003

PAGE

VERSION 3.0 SYSTEM VERIFICATION AS OF: 12/15/77 AMOUNT DELQ PAYOFF/TOTAL DUE 0236592621234567 377.36 576-03 ANDUNI DELY 077-36
DELQ DATE 10/27/77
HOHE PHONE & EXT. 777-555-1212-0000
BUS. NAHE
BUS. PHONE & EXT. 777-555-1212-0000
***** COHHENTS ***** SHITH, CRAIG G CONTACT DATE 10/30/77 9999 7 51 PRIDRITY 2000 HOME TOHN, USA DATE ACTION 99999 RESULT LETTER COLLECTOR-10 ************************ AHOUNT DELQ 0517797561234567 318.19 PAYOFF/TOTAL DUE 422.82 ARIUNI DELQ 318.19
DELQ DATE 6/30/77
HUME PHOME & EXT. 777-555-1212-0000
BUS. NAME BUSY TOWN INC
BUS. PHOME & EXT. 777-555-1212-0000
***** COMMENTS ***** LOPILATO, ANTHONY CONTACT DATE 11/01/77 9999 Z ST PRIORITY 2000 HOME TOHN. USA DATE ACTION 99999 RESULT LETTER COLLECTOR-ID AMOUNT DELQ 362.87
DELQ DATE 6/12/77
HOHE PHONE & EXT. 777-555-1212-0000
BUS. NAHE NLE
BUS. PHONE & EXT. 777-555-1212-0000
***** COMMENTS ***** PAYOFF/TOTAL DUE 0553268091234567 PURCELL . ANDREW JR 11/01/77 PRIORITY HOHE TOWN, USA 99999 ACTION RESULT LETTER COLLECTOR-ID AHOUNT DELQ 366. 9/12/77 0565092291234567 366.76 PAYOFF/TOTAL DUE CONTACT DATE 489.20 ANDUNI VELU 306.76
DELQ DATE 9/12/77
HUME PHONE & EXT. 777-555-1212-0000
BUS. NAME HERRY MODES
BUS. PHONE & EXT. 777-555-1212-0000 BROOKS.HICHAEL J 11/01/77 HOME TOHN, USA DATE ACTION RESULT LETTER COLLECTOR-1D AHDUNT DELQ 369.19
DELQ DATE 5/19/77 PAYOFF/TOTAL DUE CONTACT DATE 0306177221234567 557.53 AMDUNI UELA
DELQ DATE 5/19/77
HUME PHONE & EXT. 777-555-1212-0000
BUS. NAME HAJORS HINE LIQUOR
BUS. PHONE & EXT. 777-555-1212-0000
****** CUHHENTS ***** MAJOR'S HINE & LIQUOR STORE. 11/03/77 PRIORITY 2000 HOME TOWN, USA DATE ACTION 11/01/77 A3 99999

RESULT LETTER COLLECTOR-ID

60475230 A

PAGE

***** 5 ACCOUNTS ASSIGNED TO QUEUE 0003

DAILY ASSIGNMENTS FOR QUEUE 0004

718.59

PAGE

823.38

2000

CYBER CREDIT SYSTEM VERSION 3.0 SYSTEM VERIFICATION AS OF: 12/15/77 AMOUNT DELO 0165360511234567 ANDUNI DELU 710-39
DELU DATE 9/01/77
HOHE PHONE & EXT. 777-555-1212-0000
BUS. NAME BUSY TOWN INC
BUS. PHONE & EXT. 777-555-1212-0000
***** COHHENTS ***** RADIN, DAVID 4949 7 ST LA JOLLA.CA DATE ACTION 99999 RESULT LETTER COLLECTOR-ID ************************ ************************* AMOUNT DELQ 626.88 0431294811234567 ADUNI DELU 626.88 DELO DATE 4/28/77 HOHE PHONE & EXT. 777-555-1212-0000 BUS. NAME BUSY TOWN INC BUS. PHONE & EXT. 777-555-1212-0000 ***** COMMENTS ***** DIGGS.LAHRENCE JR 9999 7 ST HOME TUNN, USA Date action 99999 RESULT LETTER COLLECTOR-ID 0479043391234567 PARISI.HICHAEL P 9999 Z ST

PAYOFF/TOTAL DUE 745.30 CONTACT DATE PRIORITY 11/01/77 2000

PAYOFF/TOTAL DUE

CONTACT DATE

CONTACT DATE PRIORITY

.................

AMOUNT DELQ 552.26
DELQ DATE 5/18/77
HOME PHONE & EXT. 777-555-1212-0000 BUS. NAME METROPOLITAN LIFE
BUS. PHONE & EXT. 777-555-1212-0000
***** COMMENTS ***** 99999

PAYOFF/TOTAL DUE 688.76 11/01/77 2000

HOME TUNN. USA DATE ACTION RESULT LETTER COLLECTOR-ID

> ***************************** AMOUNT DELO 440.53
> DELO DATE 4/28/77
> HOME PHONE & EXT. 777-555-1212-0000
> BUS. NAME NY TEL. CO.
> BUS. PHONE & EXT. 777-555-1212-0000
> ***** COMMENTS ***** PAYOFF/TUTAL DUE CONTACT DATE 0549714491234567 568.98 11/01/77 PRIDRITY 2000

HOME TOWN. USA RESULT LETTER COLLECTOR-ID DATE ACTION

**** 4 ACCOUNTS ASSIGNED TO QUEUE 0004

60475230 A

RYAN•HILLARD L 9999 Z ST

PAGE

***** TOTAL ACCOUNTS ASSIGNED:

112 ****

- END OF REPORT -

D-48

UPDATE FROM TAPE ARCHIVE AS OF: 12/15/77

PAGE

ACCOUNT NUMBER

DATES OF TAPES TO BE RETREIVED

0469123191234567 11/01/77 0476336781234567 11/01/77

TAPE HISTORY UPDATE REPORT RUN DATE:12/15/77

ACCOUNT NUMBER

BORROHERS NAME

DATE OF TAPE

RECORDS ADDED TO ACTIVITY FILE

0469123191234567 0476336781234567 ALEXANDER SUE C O'LOUGHLIN HICHAEL J K 11/01/77 11/01/77 NÖ ND

DAILY MASTER FILE UPDATE REPORT FOR 5XX CODE 11/01/77

PAGE

 TRAN
 ACCOUNT
 PAYHENT
 PAYHENT
 STATUS

 CODE
 NUMBER
 AHOUNT
 DATE

 501
 0100024491204567
 10.00
 10/15/77
 UPDATE

 501
 0100024491204567
 20.00
 10/20/77
 UPDATE

 501
 0100024491204567
 30.00
 10/25/77
 UPDATE

TOTALS

3

ACCOUNTS NUMBER

UPDATED

REJECTED

REPORT GENERATOR DATA NAME LIST

	NAME	STARTING PUSITION	LENGTH		CODE			DESCRIPTION	SUB NAME1	SUB NAME 2	SUB NAME 3	SUB . Name 4	SUB NAME 5
	HACCT	0001	0016					ACCOUNT NUMBER	MACTEG				
	HACT	0307	0360	A			0	COLLECTUR ACTIVITY BLOCK	HALIFU				
	MACTE		0001	Ā			0	ACCOUNT TYPE FLAG					1
	HADL	0246	0016	Ã			Ö	ADDITIONAL ACCOUNT NUMBER					
	MADLQ	0887	0009	Ť	Α	,	0						
	HADRI	0048	0030		А	5	Ö	AMOUNT DELINQUENT (PAST DUE)					
	MADR2	0078	0030	A.			0	BORROWERS ADDRESS LINE 1					
				A			-	BORROHERS ADDRESS LINE 2					
	MBAD	0177	0030	A			0	BUSINESS ADDRESS					
	MBBR	0950	0005	A				BANK BRANCH					
	HBCS	0207	0020	A			0	BUSINESS CITY+STATE					
	MBEX	0242	0004	A			0	BUSINESS PHONE EXTENSION					
	MBFG	0286	0001	A			0	ACCOUNT BUSY FLAG					
	нвин	0147	0030	A			. 0	BUSINESS NAME					
	нврн	0232	0010	A			0	BUSINESS PHONE					
	HBZP	0227	0005	A		_	0	BUSINESS ZIP CODE					
	HCBAL	0896	0009	T	A	2	0	CURRENT BALANCE					
	HCCDT	0869	0006	N	Y	0	0	DATE ACCT 1ST APPRS IN CCS SYS	i				
	MCHN	0938	0001	Α.			Ō	NUMBER OF COSIGNERS					
	HCPGD	0914	0006	N	Y.	0	0	CURRENT PAYOFF GOOD UNTIL					
	HCS	0108	0020	A			0	BORROWERS CITY. STATE					
	MOLUT	0875	0006	N	Y	0	0	DATE ACCOUNT DELINQUENT FROM					
	MOYDL	1013	0003	N	3	0	0	# DF DAYS ACCOUNT DELINGUENT					
	MEXT	0143	. 0004	A			0	BURROHERS EXTENSION/COMMENT					
	MLLAT	0848	0009	N	. С	2	0	LAST LETTER REQUEST AMOUNT					
	HLLDT	0842	0006	N	Y	0	0	LAST LETTER REQUEST DATE					
	HLON	0955	0008	A			0	LUAN DEFICER					
	MNADR	8100	0116	A			0	BURROWERS NAME/ADDR COMBINED	HNAH	HADR 1	HADR 2	HC S	HZP
	HAAH	0018	0030	A			0	BORROHERS NAME					
	HHPA	0920	0009	N	A	Z	0	NEXT PAYOFF AHOUNT					
	HNXTC	0275	0006	. 14	Y	0		HEXT CONTACT DATE					
٠	THAUH	0929	0009	N	C	2	0	OPEN ANDUNT/CREDIT LIMIT					
	HULNAP	1 1047	0006	A				DLD KEY VALUE-NAME CHANGE					
	MUL S	0295	0001	A				RESERVED FOR ON-LINE COLECT					
	HUPDT.	0881	0006	M.	, Y	0	0	ACCOUNT OPEN DATE	200		i jak		
	MP1	0667	0030	A			0	PERMANENT COMMENT 1					
	HP2	0697	0030	- A			0	PERMANENT COMMENT 2				110	
	MP3	0727	0030	A			0	PERHANENT CUMMENT 3		-			
	MPAU1	0757	0030	A			. 0	PREVIOUS ADDRESS 1					14
	HPADZ	0787	0030	A			0	PREVIOUS ADDRESS 2					
	HPCS .	0817	0020	A			0	PREVIOUS CITY+STATE		•			
	MPDU	0300	0006	N	. Y	0	O	DATE QUEUE CHANGED					
	MPFG	0285	0001	A			0	PROMISE TO PAY FLAG			•	•	
	HPHN .	0133	0010	A			0	BURROWERS HOME PHONE					-
	HPPA	1022	0009	N	A	2	0	PROMISED TO PAY AMOUNT					
	HPPB	1039	0002	H	3	ō		# OF BROKEN PROM TO PAY					
	MPPCD	1041	0006	N-	Y	0		PROMISE TO PAY COMMIT DATE				•	
	MPPU	1016	0006	N	Y	0	0	PROMISED TO PAY DATE					
	HPPK	1037	0002	N	3	0		* KEPT PRUHISES TO PAY					
	HPQU	0296	0004	A			0	PREVIOUS QUEUE ASSIGNED		•			
	HPR I	0281	0004	A				ACCOUNT PRIDRITY CODE					

CYBER CREDIT SYSTEM VERSION 3.0 SYSTEM VERIFICATION PGGEN

REPORT GENERATOR DATA NAME LIST

NAME	STARTING POSITION	LENGTH		EDIT CODE			DESCRIPTION	SUB NAME1	SUB NAHE2	SUB NAME 3	SUB NAME 4	SUB NAMES
												-
MPTS	0947	0003	A			0	CREDIT/POINT SCORE					
HPYOF	0905	0009	T	A	2	0	CURRENT PAYOFF/TOTAL DUE					
HPZC	0837	0005	A			0	PREVIOUS ZIP CODE					
HOAS	0294	0001	A				QUEUE REASSIGN CODE					
MOUE	0271	0004	A			0	QUEUE ASSIGNED					
HRCD	0291	0001	A				ACCOUNT REVIEW CODE					
HSCD	0292	0002	A				SUPV STAT CODE-NOT USED BY CCS					
HSDF	0973	0040	A			1	SPECIAL DESCRIPTION FIELD					
HSLCD	0017	0001	A			0	BURROWERS SALUTATION CODE					
MSOC	0262	0009	A			0	SOCIAL SECURITY NUMBER					
MSTC	0306	0001	A			0	ACCOUNT STATUS CODE					
HSTOT	0857	0006	N	Y	0	0	DATE ACCT LAST UPD BY A/R SYS					
MSUP	0287	0004	A			0	SUPERVISOR FOR THIS ACCOUNT					
MTCD	0963	0004	A			0	ACCOUNT TYPE CODE/PRODUCT TYPE					
HTD3	0967	0002	N	3	0	0	# TIMES ACCT 30 DAYS DELING					
HTD6	0969	0002	N	3	0	0	# TIMES ACCT 60 DAYS DELING					
HTD9	0971	0002	N	3	0	0	# TIMES ACCT 90 DAYS DELING					
HTHD	1031	0006	N	, γ	0		DATE OF TAPE, IF IN HISTORY					
HTP	0939	8000	A			0	RESERVED FOR FUTURE USE					
MUPDT	0863	0006	N	Y	0		DATE ACCT LAST UPDATED BY CHG					
MZP	0128	0005	A			0	BORROHERS ZIP CODE					

		RG SUHHAR	Y ACCOUNT LIST	REPORT		÷	
HACCT	HNAH	HOLDT	MADLQ	HPYOF	MQUE	MPP.D	HPPA
010002449120456	7 GRAHAH, JAMES P	6/12/77	303.53	401.70	0002		•00
010013556123456	7 DAVIS-JOAN E	7/23/77	107.52	168.36	0001		•00
010694429123456	7 SIMONE.DUNNA M	5/01/77	49.50	94.50	0001		•00
010787963123456	7 SPARKS.BARBARA B	8/30/77	97.13	116.65	0001		•00
011064419123456	7 SARACO.DOMENICK J	6/08/77	211.00	319.00	0002		•00
011081310123456	7 ANGREES RICHARD	9/12/77	6.51	110.56	0001		.00
012953757123456	7 OBRIEN, MICHAEL	5/18/77	21.68	42.79	0001		00
013159339123456	7 CONCA+SAM	10/18/77	90.33	179.39	0001		00
	7 FRIEDMAN, GLENN H	4/16/77	70.30	136.00	0001		.00
014734678123456	7 RAHLS.YVONNE	8/26/77	84.52	127.16	0001	•	•00
	7 HAYE KENNETH E	5/28/77	147.87	218.87	0001		•00
	7 BACHARACH+MARYLEE	10/27/77	133.54	231.64	.0001		•00
016536051123456	7 RADIN.DAVID	- 9/01/77	718.59	823.38	0004	•	00
017371297123456	7 HCGRATH, PHILIP J	6/30/77	38,27	83.20	0001		•00
017443456123456	7 HAURO, JOHN	5/19/77	24.29	42.10	0001		•00
017474738123456	7 BROOM+ALMA M	.8/28/77	7.52	74.03	0001		.00
018140648123456	7 SHEARN.DHIGHT H	9/23/77	37.21	56.82	0001		00
018287432123456	7 LAZO, EDWARD H	10/01/77	168.43	336.90	0001		•00
	7 ARRINGTON+HILLIAH H	6/28/77	30.40	45.62	0001		•00
	7 SEPULVEDA JOSEPH A	4/28/77	124.91	188.60	0001		.00
	7 HARTINDALE.HINSTUN A	6/12/77	131.93	204.16	0001	11/15/77	100.00
	7 HAIDUCK+NEAL GUODHAN	7/23/77	74.12	98.12	0001		•00
020441468123456		5/01/77	- • 00	8.89	0001		•00
	7 HIGGINS HARVIN	8/30/77	115.67	150.18	0001		•00
021226257123456		6/08/77	61.62	121.86	0001		•00
	7 AURRICHID.LOUIS	9/12/77	74.64	113.41	0001	•	•00
	7 GREAVES FRANKLIN E	5/18/77	•00	3.61	0001		•00
	7 FOGLIA MARGUERITE H	10/18/77	54.18	82.22	0001		•00
	7 TRIPPI.LORRAINE A	4/16/77	•00	•83	0001		.00
	7 ALLEN.JANET E	8/26/77	18.95	37.68	0001		.00
023634159123456		5/28/77	90.37	171.59	0001		.00
	7 SHITH+CRAIG G	10/27/77	377.36	576.03		11/15/77	25.00
	7 BROOKS.CHARLES E	9/01/77	72.41	108.88	0001		00
	7 BRAY DAVID P	6/30/77	141.23	197.77	0001		.00
	7 ELEARY CURNELIUS	5/19/77	•00	75.44	0001		00
	7 HANKINS FREDERIC H	8/28/77	230.43	347.68	0002		•00
	7 SAVARESE RAYHOND D I	9/23/77	33.34	74.04	0001		•00
	7 SOTO.ANGELO-E	10/01/77	212.73	281.73	0002		. • 00
	7 LOZANO JOSEPHINE H	6/28/77	28.96	49.69	.0001		•00
	7 PETERSON.DELORES P	4/28/77	135.80	184.31	0001		.00
025535036123456	7 HORGAN.EDWARD	6/12/77	36.76	53.45	0001	11/15/77	10.00

CYBER CREDIT SYSTEM VERSION 3.0 SYSTEM VERIFICATION

	no soman					
HACCT HNAH	HDLDT	HADLQ	HPYOF	HOUE	HPPD,	HPPA
0263007561234567 CHAHBERS,LLOYD R	7/23/77	59.21	87.75	0001		•00
0267317591234567 BALVELT, HAROLD	5/01/77	86.10	128.10	0001		.00
0270007591234567 YOUNG, THEODORE D	8/30/77	296.47	392.47	0002		•00
0273083321234567 BECKER.ROBERT E	6/08/77	-00	154.06	0001		•00
0276992191234567 YOUNHANS, JOSEPHINE H	9/12/77	25.84	38.83	0001		.00
0278634561234567 HILLIAHS.RICHARD L	5/18/77	125.40	166.74	0001		•00
0282282291234567 MAYMES+DEMA	10/18/77	42.75	43.19	0001		.00
0282798591234567 RANDALL.LEWIS H	4/16/77	61.31	97.85	0001		.00
0282990691234567 PAGAND, JOHN A	8/26/77	209.93	309.87	0001		.00
0283219591234567 JONES, PATRICIA A	5/28/77	•00	.83	0001		.00
0287164291234567 SHEENEY.MARTIN J	10/27/77	4.13	105.13	0001		.00
0288571481234567 GORDIAN.DOMINGO	9/01/77	92.56	146.78	0001		.00
0292117571234567 HEISS.EDWARD	6/30/77	58.56	110.03	0001		•00
0306177221234567 MAJOR'S HINE & LIQUOR STORE,	5/19/77	369.19	557.53		11/15/77	35.00
0308046431234567 PREZIOSO.WILLIAM R	8/28/77	•00	1.93	0001		.00
0311475771234567 LEE,THOMAS J	9/23/77	41.22	81.28	0001		•00
0314907971234567 RODRIGUEZ+NORAH	10/01/77	•00	15.58	0001		•00
0332898561234567 DURHAM,ANGELYNN	6/28/77	63.01	104.07	0001		.00
0346013171234567 HILLIAMS.EDNA MAE	4/28/77	• 32	15.06	1000		.00
0349716481234567 BAILEY.GEORGE	6/12/77	4.78	24.54	0001		.00
0353693391234567 NIESSL.THOMAS	7/23/77	18.30	37.11	0001		.00
0354019101234567 CLARKE,GLADSTONE	5/01/77	13.74	13.91	0001		.00
0359666691234567 HODGE. HELVIN	8/30/77	133.29	197.29	0001		.00
0368074191234567 DEMAID. HALTER M	6/08/77	98.40	146.40	0001		•00
0377475561234567 JACKSON, KARL D	9/12/77	32.75	51.67	0001		.00
0378065561234567 CAMPBELL, WILLIE G	5/18/77	77.79	170.56	0001		•00
0378864491234567 EADY .CARNEL G	10/18/77	88.76	162.24	0001		•00
0378924121234567 HENRY.MICHELE A	4/16/77	83.13	135.37	0001		.00
0384715101234567 PURSLEY.HILLIE R	8/26/77	51.61	52.37	0001		.00
0396211661234567 BEDICS.JOSEPH F	5/28/77	•00	.68	0001		.00
0397288631234567 FLAMHOLTZ.CARL	10/27/77	22.30	43.96	0001		•00
0401578631234567 MARTELLO, LAHRENCE	9/01/77	3.11	52.31	0001		.00
0402013101234567 ROBINSON.SHEILA C	6/30/77	50.07.	99.34	0001		.00
0417047671234567 CASALE, JOHN 8 HD	5/19/77	43.35	82.27	0001		.00
0418074291234567 HUNTER, DONALD	8/28/77	120.00	240.00	0001		•00
0428040581234567 HUNDZ+SIGIDFREDO	9/23/77	127.37	174.05	0001		.00
0428807591234567 BRONTE, DAVIEL PETER	10/01/77	169.59	223.59	0001		.00
0431234561234567 VELAZQUEZ.ROMALD	6/28/77	22.15	37.05	0001		.00
0431294811234567 DIGGS.LAWRENCE JR	4/28/77	626.88	745.30	0004		•00
0434395981234567 HUNT .HILLIAM	6/12/77	191.55	289.00	0001		•00
0452924191234567 COLON, EUGENE	6/18/77	185.95	263.25	0001		•00
· ·						

RG SUMMARY ACCOUNT LIST REPORT

PAGE 3 RUN DATE 11/17/77

RG	SUMMARY	ACCOUNT	LIST	REPORT

HACCT	HNAH	HOLDT	HADLO	HP YOF	HQUE	. HPPD	НРРА
0457185561234567	SABLO,DONNA P	5/01/77	•00	- 36-42	0001		•00
0469123191234567	ALEXANDER, SUE C	7/30/77	26.62	52.40	0001		.00
0476044291234567	FOOTE DORIS	5/08/77	157.85	234.85	0001		•00
0476336781234567	D'LOUGHLIN.MICHAEL J K	8/12/77	30.53	67.95	0001		•00
0479043391234567	PARISI+HICHAEL P	4/18/77	552.26	698.76	0004		.00
0482825591234567	HARSHALL, CHARLES	8/18/77	53.78	83.69	0001		•00
0488626391234567	HALL . JOYCE	4/16/77	63.40	92.44	0001		.00
0489201811234567	COFFEY, J. ARTHUR	8/26/77	2.00	68.45	0001		.00

FINAL TOTALS FINAL RECORD COUNT

90

13.873.14

This appendix contains a description of the data files used in $\ensuremath{\mathsf{CCS}}\xspace$

the primary key, account number, columns 1 through 16. There is one record in the file for each active account in ${\sf DELQMST.}$

ACCOUNT AGING FILE (ACCAGE)

This file contains the information necessary to generate the trend analysis file, which is an analysis of the portfolio by account age in delinquency. ACCAGE is indexed with

HEADER RECORD

1	27	BLANK
27	28	UPDATE CODES
29	6	RUN DATE (OPERATOR INPUT)
35	6	LAST RUN DATE
41	. 50	BLANK

TABLE E-1. ACCOUNT AGING FILE

Start Column	Number Character	Field Description
1	1	Account group
2	15	Account number
17	4 1	Queue
21	. 4 "	Queue last run
25	4	Product type
29	6	Delinquency date
35	3	Days delinquent
38	3	Days delinquent last run
41	9	Current payoff
50	9	Current payoff last run
59	9	Amount delinquent
68	9	Amount delinquent last run
77	1	Status code
78	4	Program flags
82		End of records = record length

COLLECTOR ACTIVITY FILE (ACTFIL)

The collector activity file contains all collector-entered activities in a compressed format. The file is 500

characters in length, and the primary key is columns 1 through 18 (the CCS account number and suffix). The suffix controls the order of retrieval. The smallest is the most recent block, and suffixes greater than 50 are blocks which were brought back from history.

TABLE E-2. COLLECTOR ACTIVITY FILE

Start Column	Number Character	Field Name	Field Description
1	1	AAFG	Account group
2	15	AACCT	Account number
- 17	2	ASUF	ACTFIL suffix
19	482	ABLK	Activity block
500			End of record = record length

TABLE E-3. COLLECTOR ACTIVITY FILE - UNCOMPRESSED FORMAT OF EACH ACTIVITY BLOCK

Start	Number	Field	Field
Column	Character	Name	Description
1 7 9 11 13 17	6 2 2 2 2 4 60	ACNDT AACCD ARSCD ALTCD ACOID ACOMM	Contact Data Action Code Result Code Letter Code Collector ID Comment

ACTIVE USER ID FILE - (ACTIVE)

characters in length and the primary key is the collector ID (columns 1-4).

The active collector ID file contains information on all collectors currently signed-on and using COLECT. It is $10\,$

TABLE E-4. ACTIVE USER ID FILE

Start	Number	Field	Field
Column	Character	Name	Description
1 5 7 10	4 2 4	ACOLL APNO ATLO	Collector Port Number Time Logged On End of Record = Record Length

ACTIVITY VERIFICATION TABLE FILE (ACTVERTB)

The activity verification table contains the information necessary for COLECT to verify a collector's activity sequence.

The file is comprised of five subrecords with 32 words each.

The individual record formats are as follows:

- Record 1 A list of up to 32 action codes is utilized. The list is terminated by '**' for less than 32 codes.
- Record 2 The same as record 1 except that the result codes are utilized.
- Record 3 A bit mask where the Nth entry indicates which result codes (each result code is represented by one bit), of the first 16 result codes in record 2, are valid with the Nth action code.
- Record 4 The same as record 3, except that the second 16 result codes are utilized

Record 5 - The Nth has the following meaning:

Bit 15	-Letter requirement for Nth action code.
Bit 14	-Comment requirement for Nth
Bits 8-13	action code. -Next contact date in
Dits 0-17	days for Nth action
Bit 7	-Letter requirement for Nth result code.
Bit 6	-Comment
	requirement for Nth result code.
Bits 0-5	 -Next contact date in days for Nth result code.

NOTE

For letter and comment requirements, nonzero implies required; zero implies optional.

ADD ACCOUNT LIST FILE (ADDACT)

program. This file is used for updating history accounts and processing name changes.

The ADDACT file contains account numbers for records added or name change records processed by the update $% \left\{ 1\right\} =\left\{ 1\right\} =$

TABLE E-5. ADD ACCOUNT LIST FILE

Start Column	Number Character	. Field Description
1	1	Account group
. 2	15	Account number
17	1	Code A = add, N = name change
. 17		End of record = record length

ACCOUNT AGING FILE (AGEWRK)

27 BLANK 28 **UPDATE CODES**

This file contains the information necessary to generate the trend analysis file, which is an analysis of the portfolio by account age in delinquency. AGEWRK is a sequential file. It is the output file from the sort of RSWFIL and

27 29 35 6 RUN DATE (OPERATOR INPUT)

HEADER RECORD

6 LAST RUN DATE

41 50 BLANK

1

TABLE E-8. SORTED ACCOUNT AGING FILE (AGEWRK)

Start Column	Number Character	Field Description
1	1	Account group
2	15	Account number
17	4	Queue
21	4	Queue last run
25	4	Product type
29	6	Delinquency date
35	3	Days delinquent
38	3	Days delinquent last run
41	9	Current payoff
50	9	Current payoff last run
59	9	Amount delinquent
68	9	Amount delinquent last run
77	1	Status code
78	4	Program flags
82		End of records = record length

COLLECTOR STATISTICS FILE (COLSTATS)

each collector/code used. The primary key is columns 1 through 7. $\,$

This file contains the counts of action/result codes that have been entered by each collector. There is a record for

TABLE E-9. COLLECTOR STATISTICS FILE

Start Column	Number Character	Field Description
1	1	A = action, R = result
2	4	Collector ID
6	2	Action or result code
8	4	Daily counts
12	4	Weekly counts
16	4 .	Monthly counts
20		End of record = record length

COSIGNER FILE (COSIGNER)

length, and the primary key into the file is the borrower's 16-digit account number. $\,$

The cosigner file contains all the information concerning the cosigners, nearbys, or relatives. It is 362 characters in

TABLE E-10. COSIGNER FILE

Start Column	Number Character	Field Name	Field Description
1	1	CACTFG	Account group
2	15	CACCT	Account number (1 through 16 file key 1)
17 -	. 1	CRES	Reserved for future use
18	1	CSLC1	Cosigner 1 Salutation code
19	1	C1FG	Flag
20	30	CN1	Name
50	30	CA1	Address
80	20	CS1	City, state
100	5	CZ1	Zip code
105	10	CH1	Home phone (area code and number)
115	4	CHE1	Home extension/comment
119	10	CB1	Business phone (area code and number)
129	4	CBE1	Business extension
133	1	CSLC2	Cosigner 2 Salutation code
134	1	C2FG	Flag
135	30	CN2	Name
165	30	CA2	Address
195	20	CS2	City, state
215	5	CZ2	Zip code
220	10	CH2	Home phone (area code and number)
230	4	CHE2	Home extension/comment
234	10	CB2	Business phone (area code and number)
244	4	CBE2	Business extension
248	1	CSLC3	Cosigner 3 salutation code
249	1	C2FG	Flag
250	30	CN3	Name
280	20	CA3	Address

TABLE E-10. COSIGNER FILE (Contd)

Start Column	Number Character	Field Name	Field Description
310	20	CS3	City, state
330	5	CZ3	Zip code
335	10	СНЗ	Home phone (area code and number)
345	4	CHE3	Home extension/comment
349	10	CB3	Business phone (area code and number
359	4	CBE3	Business extension
362			End of record = record length

DAILY ASSIGNMENT START FILE (DAQUE)

start account for the on-line automatic function. The file is indexed with the primary key, queue, columns 1 through 4.

This file contains the starting account for each queue within the daily assignment file. This is used to locate the $\,$

TABLE E-11. DAILY ASSIGNMENT START

Start Column	Number Character	Field Name	Field Description
1	4	DQUE	Queue
5	4	DRRN	Relative record pointer
8			End of record = record length

DECISION TABLE FILE (DECTBL)

This file is used to control the assignment of collector numbers and account priorities. Its contents may be modified via the program DECMTN. It interfaces to CCS routines via the program RPGDT1 and FTNDT1.

The file and its associated processing subroutines provide a decision table look-up function. A value for one in a sequence of values may be returned to a calling program based on logical operations or up to nine input parameters.

The file consists of one record that is essentially a decision table. The table is composed of individual tests. Each test can logically compare up to nine input parameters against values within the table and, if the test proves true, assign a specific value to the returned parameters.

Tests are grouped together within levels. A specific grouping (level) of tests is processed until a test proves true. If the level is exhausted before a true test is found, control is returned to the calling program. If a test within the level proves true, the designated value is assigned to the returned parameter; processing either continues with the next level (as indicated in the true test) or returns to the caller (if the true test does not include a next level).

The file DECTBL is created by DECMTN. There are eight tests within the table that are divided into three levels. The fields within each test are listed below.

- Test number A sequential numbering of all the tests within the table. Test number 1 is always the first test to be examined upon entry to the processing routines. The test number is used by DECMTN to add, delete, or display tests.
- Level 1 The level of tests to which a specific test belongs. Groups (levels) of tests must be in the table in increasing order. Levels may have values from one to nine.
- Next level The level of tests to transfer control to, if the test proves true. The next level must have a value greater than the level value, unless control is to be returned to the user immediately (next level = 0).
- Number of parameters The number of parameters in the test. There may be from one to nine parameters.
- Parameter number Each parameter has up to four fields associated with it in the table. These fields are operator, comparison value (5), and connector.

NOTE

Comparisons are done in ASCII sequence.

- Parameter operator This is the logical operator used in processing the user-supplied parameter.
 Options and descriptions include the following:
 - Null Do not look at the parameter, but force true condition for this parameter.
 - .EQ. Compares the 6-byte field, supplied by the user, to the 6-byte field, identified by parameter value 1 for equality. If equal, the parametric processing is true.
 - .NE. Performs complementary processing to .EQ.: that is, true if user-supplied value not equal to table value.
 - .LE. Compares the user-supplied field with table value and resolves as true if supplied value is less than or equal to table value.
 - .GT. Performs complementary processing to .LE.: that is, true if user-supplied value is greater than table value.
 - .WE. Compares the user-supplied field against parameter value 1 and parameter value 2 and resolves as true if the supplied value is within or equal to the bounds values.
 - .OS. Performs complementary processing to .WE.: that is, true if supplied value is outside the bounds.
- Parameter value 1 The six character positions between the asterisks represent the table value used by all operators except NULL. This field should not contain special characters, only 0 through 9, blank, or A through Z.
- Parameter value 2 The six character positions between the asterisks represent the second table value used by operators .WE. and .OS.
- Parameter connector This is the logical connector to be used in combining parameters in multiple parameter tests. Two values are allowed: .AND. or .OR.. Table processing evaluates each parameter within a test for true or false and then evaluates the entire test using the connectors. Connectors are always evaluated from left to right, with the lowest numbered parameters first. The .OR. connector is inclusive.
- Number of returned values This is the number of possible values to be returned to the user should the test prove true. The routines cycle through the values returning the next value in line on each successive true evaluation of the test. A selected group of collectors may be assigned on a round-robin basis to the same category of accounts. There can be from 1 to 99 unique returned values.

- Current returned value This field is reserved for future use. The current implementation starts at the first returned value on each computer run.
- Returned values These are the 4-byte values returned when a test proves true. The returned values should contain no special characters, only 1 through 9, blanks, or A through Z.

DECTBL is used for two functions: collector assignment and account priority assignment.

The sample customer requirements for collector assignment are to assign accounts less than \$500 and 90 days delinquent to collectors 1, 2, 3, 4, and 5; assign accounts less than \$500 but over 90 days delinquent to collectors 6 and 7; assign accounts over \$500 but less than 90 days delinquent to collectors 8 through 21 or collector 25; assign accounts over \$500 and 90 days delinquent to collectors 22, 23, and 24.

The requirements for priority assignment are to work accounts whose last contact yielded a result of promise-to-pay. Accounts within this category of over \$100 delinquent are given the highest priority. Non promise-to-pay (PP) accounts should be worked after PP, but with delinquent accounts over \$100 coming first within this category.

The calling programs pass the decision table routines three parameters. If the caller is after collector numbers, he passes the six most significant digits of amount delinquent as the first parameter. (Since this field is carried as a nine-digit field, this puts \$500 into a field as 000050.) The second parameter is the number of days delinquent, and the third parameter is blank.

If the caller is after priority, he passes amount delinquent (as above) as the first parameter. The second parameter is the result code from the last contact, and the third parameter is p.

Processing of each user-call starts with the first test. This test is used to separate the priority requests from the collector requests. If a priority is made, test 1 will be true, a priority of 1000 is assigned, and the level 2 test is performed before returning to the caller.

Tests 2 through 5 are used to distribute the accounts to the various collectors. Test 5 is an unconditional assignment of all accounts not satisfying tests 2, 3, or 4 to collectors 22, 23, or 24.

Tests 6, 7, and 8 further assign priorities. The default assignment of priorities (done for collectors in test 5) has already been accomplished by test 1.

Table E-12 shows some results expected from specific requests.

TABLE E-12. PARAMETERS AND RESULTS

P1	. P2	Р3	Result
\$600.00 \$600.00 \$ 60.00 \$ 60.00 \$ 60.00 \$ 60.00 \$ 500.00	120 120 87 SL SL PP 90	P P P	0022 0023 0001 1000 1000 3000 0002

TABLE E-13. DECISION TABLE CONTENTS

Test No.	Next Level	Next Level	No. of Params	Param No.	Param Operator	Param Value 1	Param Value 2	Param Connector	No. Of Return Values	Current RET Value	Returned Values
1	1	2	3	1	NULL	#	*	.AND.	01	00	1000
		·	•	2	NULL	* *	* *	.AND.			
			· ·	3	.EQ.	*P *	* *	·			
2	1	0	2	1,	.LE.	*000050*	* *	.AND.	05	00	0001,0002,0003,0004,000
		,		2	LE.	*000090*	* * :				
3	1	. 0,	2	1	.LE.	*000050*	* * *	.AND.	02	00	0006,0007
•			·	2	.GT.	*000090*	* *				
4	1	0	2	1	.GT.	*000050*	* *	.AND.	15	00	0008,0009,0010,0011,001 0013,0014,0015,0016,001
				2	.LE.	*000090*	* *				0018,0019,0020,0021,002
5	1	0	2	1	NULL	* *	* *	.AND.	03	00	0022,0023,0024
	-		,	2	NULL	* *	* *	,			
6	2	0	2	1	.GT.	*000010*	* *	.AND.	01	00	2000
	· ·		·	2	.NE.	*pp *	* *			·	
7	2	0	2	1	.LE.	*000010*	* . *	.AND.	01	00	3000
			·	2	.EQ.	*pp *	* *			,	•
8	2	0	2	1	NULL	* *	* *	.AND.	01	00	4000
		;		2	.EQ.	*PP *	* *				

NOTE: END OF TABLE TOTAL TABLE LENGTH = 176 MAXIMUM TABLE LENGTH = 1500

MASTER FILE (DELQMST)

The DELQMST file contains all the information relating to the borrower's delinquent account. The primary key is the $\,$

borrower's 16-character account number. The secondary key is the first 6 characters of the borrower's name. The record is 2000 characters in length.

TABLE E-14. MASTER FILE

Start Column	Number Character	Field Name	Field Description
1 .	. 1	MACTFG	Account group
2	15	MACCT	Account number (1 through 16 file key 1)
17	1	MSLCD	Borrower's salutation code
18	30	MNAM	Borrower's name (18 through 23 file key 2)
48	30	MADR1	Borrower's address line 1
78	30	MADR2	Borrower's address line 2
108	20	MCS	Borrower city, state
128	5	MZP	Borrower zip code
133	10	MPHN	Borrower home phone (area code and number)
143	4	MEXT	Borrower extension/comment
147	30	MBNM	Business name
177	30	MBAD	Business address
207	20	MBCS	Business city, state
227	5	MBZP	Business zip code
232	10	МВРН	Business phone (area code and number)
242	4	MBEX	Business phone extension
246	16	MADL	Additional account number
262	9	MSOC	Social security number
271	4	MQUE	Queue assigned (can be changed by supervisor; see queue reassign code)
275	6	MNXTC	Next contact date
281	4	MPR1	Account priority code
285	1	MPFG	Promised to pay flag
286	1	MBFG	Reserved
287	4	MSUP	Supervisor for this account
291	. 1	MRCD	Account review code (cannot be reviewed if nonblank account)
292	2	MSCD	Supervisor status code (not used by CCS)

TABLE E-14. MASTER FILE (Contd)

Start Column	Number Character	Field Name	Field Description
294	1	MQAS	Queue reassign code (reassignment is permanent if nonblank queue)
295	1	MOLS	On-line COLECT use
296	4	MPQU	Previous queue assigned
300	6	MPDQ	Date queue changed
306	1	MSTC	Account status code
307	360	MACT	Collector activity block
667	30	MP1	Permanent comment 1
697	30	MP2	Permanent comment 2
727	30	мрз	Permanent comment 3
757	30	MPAD1	Previous address 1
787	30	MPAD2	Previous address 2
817	20	MPCS	Previous city, state
837	5	MPZC	Previous zip code
842	6	MLLDT	Last letter request date
848	9	MLLAT	Last letter request amount
857	6	MSTDT	Date account last updated by A/R system
863	6	MUPDT	Date account last updated via change screen
869	6	MCCDT	Date account first appears in CCS
875	6	MDLDT	Date account delinquent from
. 881	6	MOPDT	Account open date
887	9	MADLQ	Amount delinquent (past due)
896	9	MCBAL	Current balance
905	9	MPYOF	Current payoff/total due
914	6	MCPGD	Current payoff good until
920	9	MNPA	Next payoff amount
929	9	MOAMT	Open amount/credit liimit
938	1	MCMN	Number of cosigners
939	8	MTP	Reserved for future use
947	3	MPTS	Credit/point score

TABLE E-14. MASTER FILE (Contd)

		ABLE E-14.	MASTER FILE (COULD)
Start Column	Number Character	Field Name	Field Description
950	5	MBBR	Bank branch
955	8	MLON	Loan officer
963	4	MTCD	Account type code/product type
967	2	MTD3	Number of times account is 30 days delinquent
969	2	MTD6	Number of times account is 60 days delinquent
971	2	MTD9	Number of times account is 90 days delinquent
973	40	MSDF	Special description field
1013	3	MDYDL	Number of days account delinquent
1016	6	MPPD Promise to pay date	
1022	9	MPPA Promise to pay amount	
1031	6	MTHD	Date of tape, if in tape history
1037	2	MPPK	Number of kept promises to pay
1039	2	МРРВ	Number of broken promises to pay
1041	6	MPPCD	Promise to pay commitment date
1047	6	MONAM	Old key values name change
1053	4 .	MRESV	Reserved
1057	944	MCUS	Customer-defined information
2000			End of record = record length

DAILY ASSIGNMENT FILE (DLYASSN, DLYWRK)

accounts are to be reviewed each day within each queue. DLYWRK contains all accounts assigned for supervisor review.

This file contains the information necessary to create the daily queue review files. This is the order in which

TABLE E-15. DAILY ASSIGNMENT FILE

Start Column	Number Character	Field Name	Field Description
1	1	DACFG	Account group
2	15	DACCT	Account number
17	4	DQUE	Queue assigned
21	- 6	DNXTC	Next contact date
27	4	DPRI	Account priority
31	8	DRES	Reserved for future use
39	1	DSTAT	Account status code
40			End of record = record length

INACTIVE ACCOUNT LIST FILE DEFINITION (INACCT)

the HISTORY System and removed from the active accounts file. The primary key is the account group and number columns 1 through 16).

The INACCT file contains information necessary for determining when an inactive account should be moved to $\frac{1}{2} \left(\frac{1}{2} \right) = \frac{1}{2} \left(\frac{1}{2} \right) \left(\frac{1}{2} \right)$

TABLE E-16. INACTIVE ACCOUNT LIST FILE

Start Column	Number Character	Field Name	Field Description
1	1	IACTFG	Account Groups
2	15	IACCT	Account Number (Cols 1-16 File Key)
17	1	I STC	Account Status Code (R, S, or W)
18	1	IPFLAG	Program Flag
19	6	IINDT	Date Account Became Inactive
24			End of Record = Record Length

LETTER DESCRIPTION INPUT FILE (LTRDESC)

This 80-character record editor file contains the information necessary to build the letter file (LTRFIL). It is the input file for the LTRBLD program. $\begin{tabular}{ll} \hline \end{tabular}$

These records are required to indicate the location and position of the dates, amounts, and strings in the letter, as well as the body of the letter.

Layout of each letter format specification record:

Line number Column number Length Type Master file position

SAMPLE LETTER DESCRIPTION FILE

*A,01
FMSTDT=02,36,D,0275,03 F CURRENT BAL REPORT TABLE=02,21,MCBAL
Dear@1**2
Your promise to pay by was **1
accepted in good faith. However, as of **1 this date we have not received the agreed **1
this date we have not received the agreed **1 upon payment nor have we heard from you. **2
Would you be so kind as to give us a call **1
at the earliest convenient time for you **1
during the day to discuss the reason for **1 you not being able to to keep your promise. **2
Sincerely,**4
END
*A,2
F=NO Dear Customer**2
As a follow up of our conversation this morning **1
I would like to add that if for any reason you **1
are unable to keep your promise, please give me **1 a call.**2
Sincerely,**4
END
*A,3 F DATE FIRST IN CCS = 02,07,D,869,03
F CURRENT BALANCE =04,34,\$,0896,0
F CURRENT DATE =05,04,D,0000,03
Dear@1**2 Since we have been continuously in contact **1
Since we have been continuously in contact **1 with you concerning your account.**2
Our agreement was for you to pay *1 by .**2
Sincerely,**4
END END

LETTER FORMAT FILE (LTRFIL)

format. The record is 1512 characters in length. The primary key is columns 1 through 2, which is the letter number.

The letter file contains the letter body format for each valid letter within the system. Each record is one letter $\,$

TABLE E-17. LETTER FORMAT FILE

Start Column	Number Character	Field Name	Field Description
1	2	LNO	Letter number
3	2	LFM	F = (constant)
4	1512	LL1	Letter format specifications (if present), letter body, and carriage control.
1512			End of record = record length

REPORT DIRECTORY FILE (RPTPGM)

The RPTPGM file contains the names of programs generated by PGGEN under the SAVE option. This file is $\frac{1}{2}$

used as a directory list to keep track of program names currently in use. The RPTPGM is an indexed file; the primary key is in positions 1 through 6.

TABLE E-18. REPORT DIRECTORY FILE

Start Column	Number Character	Data Name	Data Description
1	6	RPNAME	Program name (RPT001-RPT019)
7	6	RPDATE	Date created (mmddyy)
13	30	RPDESC	Report description
43	38		Unused

DATA ELEMENT FILE (RPTTBL)

The RPTTBL file contains the names and associated information for all data elements in the delinquent master file. It is used by the report generator program (PGGEN) in determining data validity and print specifications for the report.

This is an indexed file; the primary key is in positions 1 through $\pmb{6}$.

NOTE

This key must begin with M.

TABLE E-19. DATA ELEMENT FILE

Start Column	Number Character	Data Name	Data Description
1	6	RTNAME	Name of the data field
7	4	RTSTRT	Starting position in DELQMST
11	4	RTLNG	Data length
15	1	RTTYPE	Data type
			A = alphanumeric N = numeric T = total this field on RPT
16	1	PTEDIT	Edit Code
			1 Print with commas, print O balance, suppress sign.
			2 Print with commas, suppress 0 balance, suppress sign.
			3 Print without commas, print 0 balance, suppress sign.
			4 Print without commas, suppress O balance, suppress sign.
			A Print with commas, print O balance, print sign as CR.
			B Print with commas, suppress O balance, print sign as CR.
			C Print without commas, print O balance, print sign as CR.
			D Print without commas, suppress O balance, print sign as CR.
			J Print with commas, print O balance, print sign as ' '.
			K Print with commas, suppress 0 balance, print sign as ' '.
			L Print without commas, print 0 balance, print sign as ' '.
			M Print without commas, suppress O balance, print sign as
			Y Edit date field mm/dd/yy.
17	1		Blank
18	1	PTDPOS	Number of decimal positions

TABLE E-19. DATA ELEMENT FILE (Contd)

Start Column	Number Character	Data Name	Data Description
19	30	RTDESC	Description of data field
49	30	RTSUBN	Five subdata field names. To be used if the data name in column 1 through 6 is a composite of several data fields.
(49)	(06)	RTSN1	Subfield 1
(55)	(06)	RTSN2	Subfield 2
(61)	(06)	RSTN3	Subfield 3
(67)	(06)	RTSN4	Subfield 4
(73)	(06)	RTSN5	Subfield 5
80			End of record = record length

ACCOUNT AGING FILE (RSWFIL)

by account age in delinquency. RSWFIL is a sequential file. It contains a record for every written-off, satisfied, or released account in DELQMIST.

This file contains the information necessary to generate the trend analysis file, which is an analysis of the portfolio

TABLE E-20. INACTIVE ACCOUNTS AGING FILE (RSWFIL)

Start Column	Number Character	Field Description
1	1	Account group
2	15	Account number
17	4	Queue
21	4	Queue last run
25	4	Product type
29	6	Delinquency date
35	3	Inactive status code '997' - Written off '998' - Released '999' - Satisfied
38	3	Days delinquent last run
41	9	Current payoff
50	9	Current payoff last run
59	9	Amount delinquent
68	9	Amount delinquent last run
77	1	Status code
78	4	Program flags
82		End of records = record length

BUILD SCREEN INPUT FILE (SCRNDESC)

create the records in SCRNFILE, which COLECT uses to display the collector screens. (Refer to the BLDSRN program description.)

The input file to the BLDSRN program is an 80-character record editor file. It contains the information necessary to

TABLE E-21. BUILD SCREEN INPUT FILE

Start Column	Number Character	Field Name	Field Description
1	2	SLN	Screen line
3	2	SCL	Screen column
5	2	SLTH	Field length
7	4	SPOS	File start column
11	1	STYP	Field type
12	69	SDES	Screen label/description
41	40	SCMT	Comment, if not screen label
80			End of record = record length

SCREEN DISPLAY FORMAT FILE (SCRNFILE)

The screen display file contains the actual screen format that COLECT uses to display screens to the collectors. The file is indexed by the screen number contained in columns 1 through 2 and is a binary key.

The screen definition record, SDEF, is as follows:

Word	<u>Value</u>			
I .	X-Y position on screen for start of item			
I+1	Start word of next item in screen definition			
I+2	Length of unedited item in bytes			
I+3	Starting character position in an array, if applicable			
I+4	Field type (see below)			
I+5	Start of constant screen field if applicable			

The field types used are as follows:

Type	Meaning		
0	Constant screen field		
1	Date, edit to form mm/dd/yy		
2	Alphanumeric field from a file		
3	Nine-digit dollar amount, edit to 9999999.99.		
4 .	Ten-digit phone number, edit to 999/999-9999.		
5	Signals start of activity display		
6	Social security number, edit to 999-99-9999.		
7	Current time displayed as 24-hour military time		
8	Constant screen field labeling a change screen item		
9	Requests display of most recent activity		

SUPERVISOR REQUEST FILE (SREQDL, UPHSTCM)

contains requests for detail list reports. UPHSTCM contains requests for update from tape archives.

These files contain information entered via the on-line process by supervisors. Both are sequential files. SREQDL

TABLE E-22. SUPERVISOR REQUEST FILE

Start Column	Number Character	Field Description
1	1	Account group
2	15	Account number
17	4	Supervisor ID
20		End of record = record length

SUMMARY HISTORY FILE SUMHIST

The SUMHIST file contains summary information on accounts that are no longer active in the collection ${\bf r}$

system. This information is used to update an account if it comes back into the collection system. The primary key to the file is the account group and number (characters 1 through 16).

TABLE E-23. SUMMARY HISTORY FILE

	,	
Start Column	Number Character	Field Description
1	1	Account group
2	15	Account number (1 through 16 file key)
17	6	Date account moved to SUMHIST file
23	1	Account status code
24	30	Borrower's name
54	30	Borrower's address line 1
84	30	Borrower's address line 2
114	20	Borrower city, state
134	5	Borrower zip code
139	10	Borrower home phone (area code and number)
149	30	Business name
179	10	Business phone (area code and number)
189	4	Business phone extension
193	360	On-line activity block
553	30	Permanent comment 1
583	30	Permanent comment 2
613	30	Permanent comment 3
643	4	Account product type
647	6	Account open date
653	9	Amount delinquent (amount used to clear)
662	4	Queue assigned
666		End of record = record length

TAPE ARCHIVE (ON-LINE) FILE (TAPEARC)

active. The information is used to bring the information back into the system. The primary key is the account group and number (characters 1 through 6).

The TAPEARC file contains information concerning which tape(s) contain information on accounts that are no longer

TABLE E-24. TAPE ARCHIVE FILE

Start Column	Number Character	Field Description
1	1	Account group
2	15	Account number (1 through 16 file key)
17	6	Date 1, tape label
23	6	Date 2, tape label
29	6	Date 3, tape label
35	6	Date 4, tape label
41	6	Date 5, tape label
46		End of record = record length

TRANSACTION FILE DESCRIPTION (TRANFL, TRNSFL, TRNBCK)

The transaction files contain all of the transactions that the collectors entered for one work day. These

transactions comprise activities on accounts, nonfinancial changes from the change screens, and permanent comment charges. The TRNSFL is the sorted TRANFL that is used for generation of the daily reports. Both files are sequential with a record length of 138 characters.

TABLE E-25. TRANSACTION FILE DESCRIPTION

Start Column	Number Character	Field Name	Field Description
1	1	TACFG	Account group
2	15	TACCT	Account number
17	4	TCID	Collector ID
21	4	TSIT	Start time
25	4.	TSPT	Stop time
29	2	TRT	Record type
	RECOR	D TYPE = 01, CO	 LLECTION ACTIVITY
31	6	TCD	Contact date
37	2	TAC	Action code
39	2	TRS	Result code
41	2	TLR	Letter code
43	56	тст	Comment
99	6	TNCD	Next contact date
105	1	TLAC	Letter addressee code (H, B, 1, 2, or 3)
106	6	TLDT	Letter request date
112	9	TLAT	Letter request amount
121	6	TPPDT	Promise to pay date
127	9	TPPDA	Promise to pay amount
136	3	TSRT	Off-line sort codes: 136 - activity count 137-138 - seconds - start/stop time
138			End of record = record length

TABLE E-25. TRANSACTION FILE DESCRIPTION (Contd)

Start Column	Number Character	Field Name	Field Description		
RECORD TYPE = 02, NONFINANCIAL FILE UPDATE					
31	2	TUP	Type update code		
33	30	TND	New data		
63	30	TPD	Previous data		
93	46		Unused		
138			End of record = record length		

UPDATE FROM HISTORY REQUEST (UPREQ) This file is a temporary file used for updating accounts from the tape archive files.

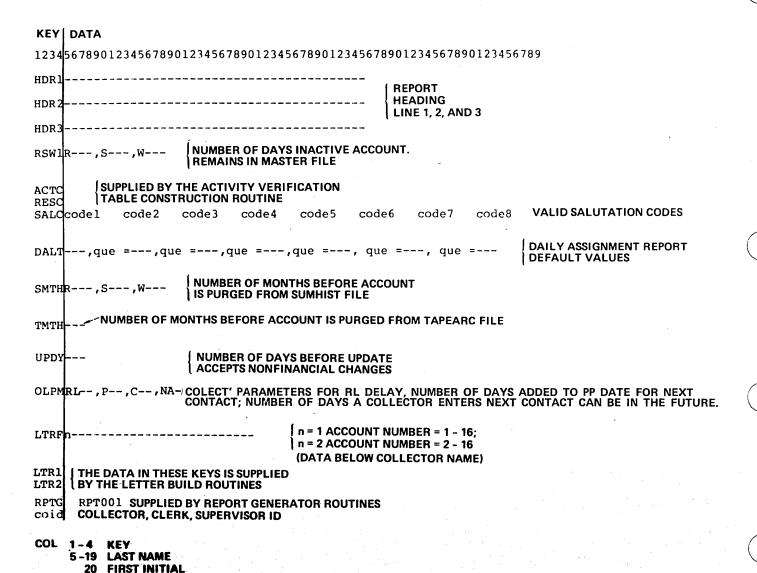
TABLE E-26. UPDATE REQUEST FILE

Start Column	Number Character	Field Description
1	16	Account number
17	6	Tape Archive-Date 1
23		End of Records Record Length

UTILITY FILE (UTIFIL)

being columns 1 through 4, and data in columns 5 through 80.

This file contains all customer-defined dependent information. It is an indexed file with the primary key



1931

21 SALUTATION CODE

32 - 35 PHONE EXTENSION

22 - 31 PHONE NUMBER (AREA CODE NUMBER)

37 - 40 SUPERVISOR ID FOR THIS COID CODE 41 - 73 QUEUES ASSIGNED, QUEUES CAN WORK

36 0 = CLERK, 1 = COLLECTOR, 2 = SUPERVISOR

WRITE-OFF EXTRACT FILE (WOEF)

requirements entered by the operator during program execution (refer to program WRTOFE). The file is 115 characters in length.

The write-off extract file contains all records that the write-off program has determined as having met all

TABLE E-27. WRITE-OFF EXTRACT FILE

	INDLL L-27	. WITTE-OFF EXTRACT FILE
Start Column	Number Character	Field Description
1	1	Account group
2	15	Account number
17	4	Sort code 1
21	4	Sort code 2
25	1	Status code
26	4	Queue
30	4	Product type
34	30	Name
64	6	Delinquent date
70	9	Amount delinquent
79	9	Current payoff
88	6	From date
94	3	Number of days delinquent
97	6	Status date
103	9	Current balance
112	1	Program flag 1
113	1	Program flag 2
114	2	Supervisor status code
115		End of record = record length

USER ID FILE (\$\$USERID) (OWNER \$\$)

The \$\$USERID file controls the log-on of users at terminals. The user cannot log on at a terminal unless there is an entry in this file for this user ID on the user port number. (The only exception is user ID of '\$\$' on the master console.) This file can restrict the functions the user performs under this user ID/port number combination to a particular program. This is accomplished by entering the program name in the request field of the \$\$USERID file record. This program execution starts immediately

after user-ID validation and the user never sees the REQUEST = prompt. If the request field in the file record is blank, the terminal prompts for requested programs and procedures through the REQUEST = prompt.

CAUTION

Any programs put into execution utilizing the request field of the \$\$USERID file record must terminate using a CALL CHAIN to EXIT request, NOT through a CALL PGMOUT statement.

TABLE E-28. USER-ID FILE

Start Column	Number Character	Field Name	Field Description
1	8	UID\$	User identification (entry response to 'USER ID =' prompt)
9	2	UPN\$	Port number
11	2		Not used
13	8	URQ\$	Request field
20			End of record = record length

CCS CROSS REFERENCE OF PROCEDURE FILES, PROGRAMS, AND SUBROUTINES

This appendix contains a cross reference system used with CCS.

GDCONTROL DATA CORPORATION

ACTADD	ACTMTN	AVMCON	AVMDMP	BLDSRN	CCSDMP	CCSPAS	CCSSPC	CHEKID	CHUPD1	CHUPD2	CMPDLQ	CMPSUM	онотоо	COLECT	CPYIND	DALIST	DACRTE	DAQUEL	DECTMTN	DHUPDT	DMPFIL		PROGRAM SUBROUTINE
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ACTADD	ACTMTN	AVMCON	AVMDMP	BLDSRN	CCSDMP	CCSPAS	CCSSPC	СНЕКІР	CHUPD1	CHUPD2	CMPDLQ	CMPSUM	ОПСНЕ	COLECT	CPYIND	DALIST	DACRTE	DAQUEL	DECTMTN	DHUPDT	DMPFIL			PROGRAM SUBROUTINE
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CROSS REFERENCE

PROGRAM/SUBROUTINE

GD CONTROL DATA CORPORATION



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																		PGSJR
																		PGSLST
																		PIKAMT
																		PMEDT1
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PROCEDURE/FILE CROSS REFERENCE

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PROCEDURE/FILE CROSS REFERENCE

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PROCEDURE/FILE CROSS REFERENCE

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PROGRAM/FILE CROSS REFERENCE

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PROGRAM/FILE CROSS REFERENCE

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PROGRAM/FILE CROSS REFERENCE

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PROGRAM/FILE CROSS REFERENCE

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PROGRAM/FILE CROSS REFERENCE

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PROGRAM/FILE CROSS REFERENCE

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PROCEDURE/PROGRAM CROSS REFERENCE

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PROCEDURE/PROGRAM CROSS REFERENCE

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PROCEDURE/PROGRAM CROSS REFERENCE

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PREMT009	PRFMT010	PRFMT011	PRFMT012	PRFMT013	PRFMT014	PRFMT015	PRFMT016	PRFRP001	PRFRP002	PRFRP003	PRFRP004	PRFRP005	PRFRP006	PRFRP007	PRFRP008	PRFRP009	PRFRP010	PRFCNTRL	PRFRP012				PROCEDURE PROGRAM
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PROCEDURE/PROGRAM CROSS REFERENCE

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CCS MENUS/PROCEDURES

This appendix lists the menus maintained in CCS. It also lists the procedure stream that is executed when each selection is made from the various menus.

SYSTEM MENU

REQUEST = >

SYSTEM MENU

SYSTEM UTILITIES

TEXT EDITOR-USED TO EDIT 80 CHARACTER SEQ OR DIRECT FILES CCS20 DAILY CYCLE, ON-LINE REPORTING AND PREPARATION CCS20 HISTORY SYSTEM PROCEDURES

- CCS20 SYSTEM FILE MAINTENANCE ROUTINES

CCS20 ON-DEMAND REPORTING

CCS20 REPORT GENERATOR - REPORT DIRECTORY

EXIT SELECTION =>

DAILY CYCLE MENU

REQUEST => DC

DAILY CYCLE MENU

A - DAILY COLLECTOR ACTIVITY REPORTS

B - PRINT REQUESTED LETTERS

C - ADD THE COLLECTOR ACTIVITIES TO THE ACTIVITY FILE
D - PROCESS COMPLETE UPDATE TAPE(S) FROM A/R SYSTEM
E - PROCESS 400 SERIES NONFINANCIAL UPDATE TAPE(S)

F - PROCESS 500 SERIES FINANCIAL UPDATE TAPE(S)

G - DELINQUENT RECORD CONTENT REPORT - (INACTIVE ACCOUNTS)
H - DELINQUENT RECORD CONTENT REPORT - (SUPERVISOR REQUESTS)

I - UPDATE ACCOUNTS FROM HISTORY

J** THE FOLLOWING PROCEDURES ARE TO BE RUN WHEN THE COLLECTORS

K** ARE FINISHED WITH THE DAYS ACTIVITIES
L - SORT TRANSACTION FILE IN PROPER ORDER FOR COLLECTOR REPORT

M - CREATE DAILY ASSIGNMENT FILES

Z - EXIT

SELECTION =>

SELECTION A

A - DAILY COLLECTOR ACTIVITY REPORTS

CHEKID

*THIS ROUTINE WILL PRINT - DAILY COLLECTOR UPDATE REPORT

- TIME USAGE REPORT

- DAILY COLLECTOR STATISTICS REPORT

INPUT=PRFDC001

UTIL

CLEAR, FN=DLYWRK

* TRNSFL FILE IS NOW BEING SORTED

INPUT=PRFDC001

DSORT

FN=TRNSFL,CCS20

F2=TRNSFL,CCS20,

```
0P=T,F,A
KF=A,29,2,A,17,4,A,135,4,A,25,4,A,1,16,A,134,1
SL=I
 *THE TRNSFL FILE HAS BEEN SORTED
 *THE DAILY COLLECTOR UPDATE REPORT WILL BE PRINTED
COLCHG
 *THE DAILY COLLECTOR UPDATE REPORT IS COMPLETE
 *THE TIME USAGE REPORT WILL BE PRINTED
TIMUSE
*THE TIME USAGE REPORT IS COMPLETE INPUT=PRFDC001
SWITCH
10000000
 *THE DAILY STATISTICS REPORT WILL BE PRINTED
  COLSTS
 *THE DAILY STATISTICS REPORT IS COMPLETE **** OPERATOR -
       RESPOND:
                  'N' CARRIAGE RETURN - TO BYPASS ZEROING THE DAILY COUNT
                  CARRIAGE RETURN ONLY - TO ZERO THE DAILY COUNT
CCSPAS
INPUT=PRFDC001
SWITCH
00010000
COLSTS
 *THIS ROUTINE IS COMPLETE
MNUPRO
```

SELECTION B

```
B - PRINT REQUESTED LETTERS
CHEKID
 * THE TRANSACTION FILE WILL BE SORTED FOR PRINTING OF LETTERS
INPUT=PRFDC002
DSORT
FN=TRNSFL,CCS20
F2=TRNSFL,CCS20,
OP=T,F,A

KF=A,17,4,A,41,2,A,1,16

SL=I **** OPERATOR - LOAD LETTER PAPER
                  CARRIAGE RETURN WHEN READY TO CONTINUE
CCSPAS
 * THE REQUESTED LETTER WILL BE PRINTED
 * THE REQUESTED LETTERS HAVE BEEN PRINTED
 **** OPERATOR - LOAD REGULAR PAPER
                  CARRIAGE RETURN WHEN READY TO CONTINUE
CCSPAS
*THE LETTER STATISTICS SUMMARY WILL BE PRINTED
LTRSTA
*THE LETTER STATISTICS SUMMARY IS COMPLETE
MNUPRO
```

SELECTION C

C - ADD THE COLLECTOR ACTIVITIES TO THE ACTIVITY FILE
CHEKID
* THE COLLECTOR ACTIVITIES WILL BE ADDED TO THE ACTIVITY FILE
INPUT=PRFDC003
DSORT
FN=TRNSFL,CCS20
F2=TRNSFL,CCS20,
OP=T,F,A

```
KF=A,29,2,A,21,4,D,25,4,D,121,2
SL=I
ACTADD
 * THE COLLECTOR ACTIVITIES HAVE BEEN ADDED TO THE ACTIVITY FILE
 * THE SUMMARY REPORT OF THE BLOCK DISTRIBUTION IN THE ACTIVITY FILE
 * WILL BE PRINTED
ACTMTN
 * THE SUMMARY REPORT OF THE BLOCK DISTRIBUTION IN THE ACTIVITY FILE
 * HAS BEEN PRINTED
MNUPRO
SELECTION D
D - PROCESS COMPLETE UPDATE TAPE(S) FROM A/R SYSTEM
CHEKID
 ****OPERATOR - MOUNT UPDATE INPUT TAPE ON TAPE UNIT 'O'
                 CARRIAGE RETURN WHEN READY TO CONTINUE
CCSPAS
INPUT=PRFDC004
SWITCH
10000000
 * THE UPDATE TAPE HAS BEEN PROCESSED
UPDATE
 * THE UPDATE TAPE HAS BEEN PROCESSED
 * THE FILE SPACE AUDIT REPORT WILL NOW BE PRINTED
**** OPERATOR - CARRIAGE RETURN TO CONTINUE AFTER REVIEWING
                  SCREEN INFORMATION
CCSSPC
CCSPAS
 * THE FILE SPACE AUDIT REPORT IS COMPLETE
MNUPRO
SELECTION E
E - PROCESS 400 SERIES NONFINANCIAL UPDATE (TAPE)S
CHEKID
 * THE NONFINANCIAL UPDATES WILL BE PROCESSED
 **** OPERATOR - NONFINANCIAL UPDATE TAPE SHOULD BE MOUNTED ON UNIT 'O'
                  CARRIAGE RETURN WHEN READY TO CONTINUE
CCSPAS
INPUT=PRFDC005
SWITCH
10000000
UPD400
 * THE NONFINANCIAL UPDATES HAVE BEEN PROCESSED
MNUPRO
SELECTION F
F - PROCESS 500 SERIES FINANCIAL UPDATE TAPE(S)
CHEKID
 * THE FINANCIAL UPDATES WILL BE PROCESSED
 **** OPERATOR - FINANCIAL UPDATE TAPE SHOULD BE MOUNTED ON UNIT 'O'
INPUT=PRFDC006
MOUNT
FTAPE, B, P
UPD500
 * THE FINANCIAL UPDATES HAVE BEEN PROCESSED
MNUPRO
SELECTION G
G - DELINQUENT RECORD CONTENT REPORT - (INACTIVE ACCOUNTS)
CHEKID
INPUT=PRFRP001
SWITCH
```

- * DELINQUENT RECORD CONTENT REPORT WILL NOW BE PRINTED 10000000
- * THE ACCOUNTS BEING PRINTED ARE THE INACTIVE ACCOUNTS NOT PREVIOUSLY
- * PRINTED

DTLLST

* THE DELINQUENT RECORD CONTENT REPORT IS COMPLETE **MNUPRO**

SELECTION H

H - DELINQUENT RECORD CONTENT REPORT - (SUPERVISOR REQUESTS)

CHEKID

INPUT=PRFRP002

SWITCH

01000000

* DELINQUENT RECORD CONTENT REPORT WILL NOW BE PRINTED

* THE ACCOUNTS BEING PRINTED WERE REQUESTED BY THE SUPERVISOR

INPUT=PRFRP002

UTIL

CLEAR, FN=SREQDL

* THE DELINQUENT RECORD CONTENT REPORT IS COMPLETE

MNUPRO

SELECTION I

I - UPDATE ACCOUNTS FROM HISTORY

CHEKID

* THE ACTIVE ACCOUNTS WILL BE UPDATED FROM HISTORY

DDUPDT

* THE ACTIVE ACCOUNTS HAVE BEEN UPDATED FROM HISTORY

MNUPRO

SELECTION J

J - THIS IS A DUMMY PROCEDURE

CHEKID

DO NOT SELECT 'L' OR 'M' FROM THE DAILY CYCLE MENU UNTIL THE * WARNING:

COLLECTORS ARE OFF-LINE FOR THE DAY

MNUPRO

SELECTION K

K - THIS IS A DUMMY PROCEDURE

CHEKID

DO NOT SELECT 'L' OR 'M' FROM THE DAILY CYCLE MENU UNTIL THE * WARNING:

COLLECTORS ARE OFF-LINE FOR THE DAY

MNUPRO

SELECTION L

L - SORT TRANSACTION FILE IN PROPER ORDER FOR COLLECTOR REPORT

CHEKID

**** OPERATOR - THE COLLECTORS MUST BE OFF-LINE

RESPOND: 'N' CARRIAGE RETURN - TO ABORT CARRIAGE RETURN ONLY - TO CONTINUE

*

CCSPAS

* THE TRANSACTION FILE WILL BE SORTED FOR THE COLLECTORS REPORT

INPUT=PRFDC010

UTIL

CLEAR, FN=TRNSFL

ΕX

INPUT=PRFDC010

```
DSORT
FN=TRANFL,CCS20
F2=TRNSFL, CCS20,
OP=T,F,A
KF=A,29,2,A,17,4,A,1,16,A,21,4,A,25,4,A,137,2
SL=I
PRETSR
INPUT=PRFDC010
UTIL
CLEAR, FN=ACTIVE
CLEAR, FN=TRANFL
CLEAR, FN=TRNBCK
* THE TRANSACTION FILE HAS BEEN SORTED FOR THE COLLECTORS REPORT
NHCHNG
INPUT=PRFDC010
UTIL
CLEAR, FN=ADDACT
MNUPRO
SELECTION M
M - CREATE DAILY ASSIGNMENT FILES
CHEKID
 **** OPERATOR - THE COLLECTORS MUST BE OFF-LINE
                              'N' CARRIAGE RETURN - TO ABORT
CARRIAGE RETURN ONLY - TO CONTINUE
                   RESPOND:
 *
CCSPAS
 * THE DAILY ASSIGNMENT FILES WILL BE CREATED
 * THE DLYASSN FILE IS BEING CREATED
DACRTE
```

DSORT FN=DLYWRK,CCS20 FN=DLYASSN, CCS20 F2=DLYASSN,CCS20, OP=T,F,A KF=A,17,4,A,25,2,A,21,4,D,27,4,A,1,16 SL=I * THE DLYASSN FILE HAS BEEN SORTED INPUT=PRFDC011 UTIL

* THE DLYASSN FILE HAS BEEN CREATED * THE DLYASSN FILE IS BEING SORTED

CLEAR, FN=DAQUE ΕX

INPUT=PRFDC011

* THE DAILY QUEUE FILE IS BEING CREATED DAQUEL

* THE DAILY QUEUE FILE HAS BEEN CREATED

* THE FILE SPACE AUDIT REPORT WILL NOW BE PRINTED

**** OPERATOR - CARRIAGE RETURN TO CONTINUE AFTER REVIEWING

SCREEN INFORMATION

CCSSPC **CCSPAS**

* THE FILE SPACE AUDIT REPORT IS COMPLETE

* THE DAILY ASSIGNMENT FILES HAVE BEEN CREATED

HISTORY SYSTEM MENU

REQUEST = > HS

HISTORY SYSTEM MENU

A - MOVE INACTIVE ACCOUNTS TO HISTORY FILES
B - UPDATE ACTIVE ACCOUNTS FROM THE TAPE ARCHIVES
C - PURGE OLDEST ACCOUNTS FROM SUMMARY HISTORY FILE

```
D - PURGE OLDEST ACCOUNTS FROM THE TAPE ARCHIVES FILE E - PURGE MASTER FILES (DELQMST-COSIGNER-ACTFIL) Z - EXIT
```

SELECTION A

SELECTION = >

```
A - MOVE INACTIVE ACCOUNTS TO HISTORY FILES
CHEKID
 * THE INACTIVE ACCOUNTS WILL BE MOVED TO HISTORY
 * THE INACCT FILE IS BEING SORTED INTO ACCOUNT NUMBER ORDER
INPUT=PRFHS001
DSORT
FN=INACCT,CCS20
F2=INTEMP,CCS20,
OP=T,F,A
KF = A, 1, 16, D, 23, 2, D, 19, 4
SL=I
INPUT=PRFHS001
UTIL
CLEAR, FN=INACCT
COPY, FN=INTEMP, F2=INACCT, OW=CCS20
DELETE, FN=INTEMP
EX
 * THE INACCT FILE HAS BEEN SORTED INTO ACCOUNT NUMBER ORDER
 ****OPERATOR - MOUNT HISTORY FILE OUTPUT TAPE ON TAPE UNIT 'O'
                 BE SURE TAPE HAS A WRITE RING
CCSPAS
MHUPDT
 * THE INACTIVE ACCOUNTS HAVE BEEN MOVED TO HISTORY
MNUPRO
```

SELECTION B

```
B - UPDATE ACTIVE ACCOUNTS FROM THE TAPE ARCHIVES
CHEKID
 * THE ACTIVE ACCOUNTS WILL BE UPDATED FROM THE TAPE ARCHIVES
INPUT=PRFHS002
UTIL
DEFINE, FN=UPREQ, ED=999999, TY=S, LR=22, NR=300
ΕX
CHUPD1
 * THE UPREQ FILE WILL BE SORTED
INPUT=PRFHS002
DSORT
FN=UPREQ,CCS20
F2=UPREQ,CCS20,
OP=T,F,A
KF=D,21,2,D,17,4,A,1,16
 * THE UPREQ FILE HAS BEEN SORTED
INPUT=PRFHS002
UTIL
CLEAR, FN=UPHSTCM
 **** OPERATOR - YOU WILL BE PROMPTED TO MOUNT TAPES DURING THE
                  EXECUTION OF THE NEXT JOB
CHUPD2
INPUT=PRFHS002
UTIL
DELETE, FN=UPREQ
 * THE ACTIVE ACCOUNTS HAVE BEEN UPDATED FROM THE TAPE ARCHIVES
MNUPRO
```

SELECTION C

C - PURGE OLDEST ACCOUNTS FROM SUMMARY HISTORY FILES CHEKID * THE SUMHIST FILE WILL BE PURGED PHDEL2 * THE SUMHIST FILE HAS BEEN PURGED MNUPRO

SELECTION D

D - PURGE OLDEST ACCOUNTS FROM THE TAPE ARCHIVES FILE CHEKID * THE TAPEARC FILE WILL PURGED PHDEL1 INPUT=PRFHS004 UTIL COMPRE, FN=TAPEARC * THE TAPEARC FILE HAS BEEN PURGED MNUPRO

SELECTION E

E - PURGE MASTER FILES (DELQMST-COSIGNER-ACTFIL) CHEKID * THE DELQMST, COSIGNER AND ACTFIL FILES WILL BE PURGED CMPDLQ INPUT=PRFMT010 UTIL COMPRE, FN=COSIGNER COMPRE, FN=ACTFIL *THE DELQMST, COSIGNER AND ACTFIL FILES HAVE BEEN PURGED MNUPRO

FILE MAINTENANCE MENU (H1)

REQUEST => MT

FILE MAINTENANCE MENU

- A PRINT THE LETTER DEFINITION FILE
- B CREATE THE LETTER FILE
- C UTILITY FILE MAINTENANCE ADD OR UPDATE UTILITY RECORDS
- D DECISION TABLE MAINTENANCE E PRINT ACTIVITY VERIFICATION TABLE
- F CREATE THE ACTIVITY VERIFICATION TABLE
- G FILE SPACE AUDIT REPORTS PERCENTAGE OF UNUSED FILE SPACE H PURGE OLDEST ACCOUNTS FROM SUMMARY HISTORY FILE
- I PURGE OLDEST ACCOUNTS FROM THE TAPE ARCHIVES FILE J PRINT SCREEN DEFINITION FILE
- K CREATE THE SCREEN FILE
- L PURGE MASTER FILES (DELQMST-COSIGNER-ACTFIL)
- M ACTIVITY FILE MAINTENANCE/REPORT
- N COLECT ACTIVE USER FILE MAINTENANCE
- O PRINT GENERATOR DATA ELEMENT TABLE
 P REPORT GENERATOR DATA ELEMENT TABLE ROUTINES-CONSOLE INPUT
 Q REPORT GENERATOR PROGRAM DIRECTORY FILE MAINTENANCE
- R SAMPLE SCREEN FILE PRINT UTILITY
- Z EXIT

SELECTION =>

SELECTION A

A - PRINT THE LETTER DEFINITION FILE
CHEKID

* THE LETTER DEFINITION FILE WILL BE PRINTED
INPUT=PRFMT001
UTIL
LIST,FN=LTRDESC,L=LPRINTER,F=U
EX

* THE LETTER DEFINITION FILE IS LOADED
***** OPERATOR - IF CHANGES ARE TO BE MADE TO THE LETTER FILE ENTER

* THE EDITOR TO PROCESS THE LTRDESC FILE, WHEN

COMPLETE PERFORM THE NEXT MENU PROCEDURE STEP "B"

CARRIAGE RETURN WHEN READY TO CONTINUE
CCSPAS
MNUPRO

SELECTION B

B - CREATE THE LETTER FILE AND SAVE THE DEFINITIONS
CHEKID

* THE LETTER FILE WILL BE CREATED
INPUT=PRFMT002
UTIL
CLEAR,FN=LTRFIL
EX
LTRBLD

* THE LETTER FILE HAD BEEN CREATED
MNUPRO

SELECTION C

C - UTILITY FILE MAINTENANCE - ADD OR UPDATE UTILITY RECORDS
CHEKID

* THE UTILITY FILE MAINTENANCE ROUTINE WILL BE EXECUTED

* **** OPERATOR - YOU CAN ADD, UPDATE OR DELETE UTILITY FILE RECORDS

* FROM THE CONSOLE

*

* FOLLOW THE INSTRUCTIONS AS THEY APPEAR ON THE SCREEN
UTFMTN

* THE UTILITY FILE WILL BE LISTED ON THE PRINTER
INPUT=PRFMT003
UTIL
LIST,FN=UTIFIL,L=LPRINTER,F=U
EX

* CHECK PRINTER LISTING TO VERIFY THAT RECORDS ARE CORRECT

* THE UTILITY FILE MAINTENANCE ROUTINE IS COMPLETE

SELECTION D

MNUPRO

D - DECISION TABLE MAINTENANCE
CHEKID

* THE DECISION TABLE MAINTENANCE ROUTINE WILL BE EXECUTED

***** OPERATOR - FOLLOW THE INSTRUCTIONS AS THEY APPEAR ON THE SCREEN
DECMTN

* THE DECISION TABLE MAINTENANCE ROUTINE IS COMPLETE
MNUPRO

SELECTION E

E - PRINT ACTIVITY VERIFICATION TABLE
CHEKID
* THE ACTIVITY VERIFICATION TABLE WILL BE PRINTED
AVMDMP
* THE ACTIVITY VERIFICATION TABLE HAS BEEN PRINTED
MNUPRO

SELECTION F

F - CREATE THE ACTIVITY VERIFICATION TABLE

CHEKID

* THE ACTIVITY VERIFICATION TABLE ROUTINE WILL BE EXECUTED

AVMCON

* THE ACTIVITY VERIFICATION TABLE ROUTINE IS COMPLETE * THE ACTIVITY VERIFICATION TABLE WILL BE PRINTED

* THE ACTIVITY VERIFICATION TABLE HAS BEEN PRINTED

MNUPRO

SELECTION G

G - FILE SPACE AUDIT - REPORTS PRECENTAGE OF UNUSED FILE SPACE

CHEKID

* THE FILE SPACE AUDIT REPORT WILL BE PRINTED

**** OPERATOR - CARRIAGE RETURN TO CONTINUE AFTER REVIEWING

SCREEN INFORMATION

CCSSPC

CCSPAS

* THE FILE SPACE AUDIT REPORT IS COMPLETE

MNUPRO

SELECTION H

H - PURGE OLDEST ACCOUNTS FROM SUMMARY HISTORY FILE

CHEKID

* THE SUMHIST FILE WILL BE PURGED

PHDEL2

CMPSUM

* THE SUMHIST FILE HAS BEEN PURGED

MNUPRO

SELECTION I

I - PURGE OLDEST ACCOUNTS FROM THE TAPE ARCHIVES FILE

CHEKID

* THE TAPEARC FILE WILL BE PURGED

PHDEL1

INPUT=PRFHS004

UTIL

COMPRE, FN=TAPEARC

* THE TAPEARC FILE HAS BEEN PURGED

MNUPRO

SELECTION J

J - PRINT SCREEN DEFINITION FILE

CHEKID

* THE SCREEN DEFINITION FILE WILL BE PRINTED

INPUT=PRFMT008

UTIL

LIST, FN=SCRNDESC, L=LPRINTER, F=U

ΕX

* THE SCREEN DEFINITION FILE HAS BEEN PRINTED

**** OPERATOR - IF CHANGES ARE TO BE MADE TO THE SCREEN DESCRIPTION

FILE ENTER THE EDITOR TO PROCESS THE SCRNDESC FILE,

WHEN COMPLETE PERFORM THE NEXT MENU PROCEDURE STEP 'K'

CARRIAGE RETURN WHEN READY TO CONTINUE

CCSPAS

MNUPRO

SELECTION K

K - CREATE THE SCREEN FILE AND SAVE THE DEFINITIONS

CHEKID

* THE SCREEN FILE WILL BE CREATED AND THE SCREEN DEFINITION FILE WILL

BLDSRN

* THE SCREEN FILE HAS BEEN CREATED

MNUPRO

SELECTION L

L - PURGE MASTER FILES (DELQMST-COSIGNER-ACTFIL)

CHEKID

* THE DELQMST, COSIGNER AND ACTFIL FILES WILL BE PURGED

CMPDLQ

INPUT=PRFMT010

UTIL

COMPRE, FN=COSIGNER

COMPRE, FN=ACTFIL

ΕX

* THE DELOMST, COSIGNER AND ACTFIL FILES HAVE BEEN PURGED

MNUPRO

SELECTION M

M - ACTIVITY FILE MAINTENANCE/REPORT

CHEKID

* THE SUMMARY REPORT OF THE BLOCK DISTRIBUTION IN THE ACTIVITY FILE

* WILL BE PRINTED

ACTMTN.

* THE SUMMARY REPORT OF THE BLOCK DISTRIBUTION IN THE ACTIVITY FILE

* HAS BEEN PRINTED

MNUPRO

SELECTION N

N - COLECT ACTIVE USER FILE MAINTENANCE

CHEKID

* THE COLECT ACTIVE USER MAINTENANCE FILE ROUTINE WILL BE EXECUTED

**** OPERATOR - FOLLOW THE INSTRUCTIONS AS THEY APPEAR ON THE SCREEN

* THE COLECT ACTIVE USER MAINTENANCE FILE ROUTINE IS COMPLETE

MNUPRO

SELECTION O

O - REPORT GENERATOR DATA ELEMENT TABLE

CHEKID

* THE REPORT GENERATOR DATA ELEMENT TABLE WILL BE PRINTED

PGLTTB

MNUPRO

SELECTION P

P - REPORT GENERATOR DATA ELEMENT TABLE ROUTINES-CONSOLE INPUT CHEKID

* THE REPORT GENERATOR DATA ELEMENT TABLE ROUTINES WILL BE EXECUTED

* THE DATA ELEMENT TABLE WILL BE PRINTED

PGLTTB

* THE DATA ELEMENT TABLE HAS BEEN PRINTED

* THE DATA ELEMENT TABLE WILL BE UPDATED

```
**** OPERATOR - INPUT WILL BE FROM THE CONSOLE
 ****OPERATOR - FOLLOW THE INSTRUCTIONS AS THEY APPEAR ON THE SCREEN
INPUT=PRFMT014
SWITCH
00000000
PGUPTB
 * THE DATA ELEMENT TABLE HAS BEEN UPDATED
 * THE DATA ELEMENT TABLE WILL BE PURGED
INPUT=PRFMT014
UTIL
DEFINE, FN=TBLWRK, TY=R, K1=6, P1=1, NR=2000, LR=80
ΕX
PGCMPR
INPUT=PRFMT014
UTIL
DELETE, FN=RPTTBL
RENAME, FN=TBLWRK, F2=RPTTBL
 * THE DATA ELEMENT TABLE HAS BEEN PURGED
 * THE REPORT GENERATOR DATA ELEMENT TABLE ROUTINES ARE COMPLETE
MNUPRO
SELECTION Q
O - REPORT GENERATOR PROGRAM DIRECTORY FILE MAINTENANCE
CHEKID
 * THE PROGRAM DIRECTORY FILE ROUTINES WILL BE EXECUTED
 * THE PROGRAM DIRECTORY FILE WILL BE PRINTED
 * PGLIST
 * THE PROGRAM DIRECTORY FILE HAS BEEN PRINTED
 * THE PROGRAM DIRECTORY FILE WILL BE PURGED
 **** OPERATOR - FOLLOW THE INSTRUCTIONS AS THEY APPEAR ON THE SCREEN
PGPURG
INPUT=PRFMT015
UTIL
COMPRE, FN=RPTPGM
ΕX
 * THE PROGRAM DIRECTORY FILE HAS BEEN PURGED
 * THE PROGRAM DIRECTORY FILE WILL BE PRINTED
PGLIST
 * THE PROGRAM DIRECTORY FILE HAS BEEN PRINTED
 * THE PROGRAM DIRECTORY FILE ROUTINES HAVE BEEN EXECUTED
MNUPRO
SELECTION R
R - SCREEN FILE PRINT UTILITY
CHEKID
 * THE SCREEN FILES WILL BE PRINTED
 **** OPERATOR - FOLLOW THE INSTRUCTIONS AS THEY APPEAR ON THE SCREEN
PRTSCN
* THE SCREEN FILES HAVE BEEN PRINTED
MNUPRO
```

ON-DEMAND REPORT MENU

REQUEST => RP

ON-DEMAND REPORT MENU

- A DELINQUENT RECORD CONTENT REPORT (INACTIVE ACCOUNTS)
 B DELINQUENT RECORD CONTENT REPORT (SUPERVISOR REQUESTS)
- C TREND ANALYSIS-CALCULATE AGE- RUN BEFORE SELECTION D OR E D TREND ANALYSIS REPORT PRINTED BY QUEUE
- E TREND ANALYSIS REPORT PRINTED BY PRODUCT TYPE
- F ELIGIBLE/ACTUAL WRITE-OFF REPORT
- G DAILY ASSIGNMENT LIST H - SUMMARY ACCOUNT LIST REPORT
- I WEEKLY COLLECTOR STATISTICS REPORT
- J MONTHLY COLLECTOR STATISTICS REPORT
- K CREATE REPORT GENERATOR PROGRAM
- L EXECUTE REPORT GENERATOR PROGRAM
- M QUEUE LOADING REPORT
- Z EXIT

SELECTION = >

SELECTION A

A - DELINQUENT RECORD CONTENT - (INACTIVE ACCOUNTS)

CHEKID

INPUT=PRFRP001

SWITCH

10000000

- * DELINQUENT RECORD CONTENT REPORT WILL NOW BE PRINTED
- * THE ACCOUNTS BEING PRINTED ARE THE INACTIVE ACCOUNTS NOT PREVIOUSLY
- * PRINTED

* THE DELINQUENT RECORD CONTENT REPORT IS COMPLETE

MNUPRO

SELECTION B

B - DELINQUENT RECORD CONTENT RECORD - (SUPERVISOR REQUESTS)

CHEKID

INPUT=PRFRP002

SWITCH

01000000

- * DELINQUENT RECORD CONTENT REPORT WILL NOW BE PRINTED
- * THE ACCOUNTS BEING PRINTED WERE REQUESTED BY THE SUPERVISOR

DTLLST

INPUT=PRFRP002

UTIL

CLEAR, FN=SREQDL

ΕX

* THE DELINQUENT RECORD CONTENT REPORT IS COMPLETE

MNUPRO

SELECTION C

- C TREND ANALYSIS-CALCULATE AGE- RUN BEFORE SELECTION D OR E CHEKID
- * CALCULATE AGE FOR TREND ANALYSIS

TRENDF

- * THE TREND ANALYSIS AGE CALCULATION IS COMPLETE
- * THE ACCAGE AND RSHFIL FILES ARE BEING SORTED INTO AGEWRK INPUT=PRFRP003

```
UTIL
DELETE, FN=AGEWRK
INPUT=PRFRP003
DSORT
FN=ACCAGE,CCS20
FN=RSWFIL,CCS20
F2=AGEWRK,CCS20,SYSVOL
OP=T,F,A
KF=A,1,1,A,17,4
SL=I
 * THE ACCAGE AND RSWFIL FILES HAVE BEEN SORTED
 ****OPERATOR-
     RESPOND: 'N' CARRIAGE RETURN TO BYPASS UPDATING PREVIOUS
 *
               TREND DATA FOR NEXT RUN
 *
               CARRIAGE RETURN ONLY TO UPDATE PREVIOUS
               TREND DATA FOR NEXT RUN
CCSPAS
TRENDU
INPUT=PRFRP003
CLEAR, FN=RSWFIL
EX
MNUPRO
SELECTION D
D - TREND ANALYSIS REPORT PRINTED BY QUEUE
CHEKID
 * GENERATE THE TREND ANALYSIS REPORT BY QUEUE
 * THE AGEWRK FILE IS BEING SORTED
INPUT=PRFRP004
DSORT
FN=AGEWRK,CCS20
F2=AGEWRK, CCS20,
OP=T,F,A
KF=A,1,1,A,17,4
SL=I
 * THE AGEWRK FILE HAS BEEN SORTED
 * THE TREND ANALYSIS REPORT BY QUEUE WILL NOW BE PRINTED
INPUT=PRFRP004
SWITCH
10000000
TRENDP
 * THE TREND ANALYSIS REPORT BY QUEUE IS COMPLETE
MNUPRO
SELECTION E
E - TREND ANALYSIS REPORT PRINTED BY PRODUCT TYPE
CHEKID
 * GENERATE THE TREND ANALYSIS REPORT BY PRODUCT TYPE
* THE AGEWRK FILE IS BEING SORTED
INPUT=PRRFP005
DSORT
FN=AGEWRK,CCS20
F2=AGEWRK, CCS20,
OP=T,F,A
KF=A,1,1,A,25,4
SL=I
 * THE AGEWRK FILE HAS BEEN SORTED
 * THE TREND ANALYSIS REPORT BY PRODUCT TYPE WILL NOW BE PRINTED
INPUT=PRFRP005
SWITCH
00000000
TRENDP
 * THE TREND ANALYSIS REPORT BY PRODUCT TYPE IS COMPLETE
MNUPRO
```

SELECTION F

```
F - ELIGIBLE/ACTUAL WRITE-OFF REPORT
CHEKID
 * THE WRITE-OFF REPORT WILL BE GENERATED
* THE WOEF FILE WILL BE CREATED
INPUT=PRFRP006
UTIL
DEFINE, FN=WOEF, ED=999999, TY=S, LR=115, NR=6000
EX
WRTOFE
* THE WOEF FILE HAS BEEN CREATED
* THE WOEF FILE IS BEING SORTED
INPUT=PRFRPOO6
DSORT
FN=WOEF,CCS20
F2=WOEF, CCS20,
OP=T,F,A
KF=A,25,1,A,17,4,A,21,4,A,1,16
SL=I
 * THE WOEF FILE HAS BEEN SORTED
 * THE WRITE-OFF REPORT WILL BE PRINTED
WTROFP
INPUT=PRFRP006
UTIL
DELETE, FN=WOEF
EX
 * THE WRITE-OFF REPORT IS COMPLETE
MNUPRO
```

SELECTION G

G - DAILY ASSIGNMENT LIST
CHEKID

* THE DAILY ASSIGNMENT REPORT LIST WILL BE PRINTED
DALIST

* THE DAILY ASSIGNMENT LIST REPORT IS COMPLETE
MNUPRO

SELECTION H

H - SUMMARY ACCOUNT LIST REPORT
CHEKID

* THE SUMMARY ACCOUNT REPORT LIST WILL BE PRINTED
SUMACL

* THE SUMMARY ACCOUNT REPORT LIST IS COMPLETE
MNUPRO

SELECTION I

I - WEEKLY COLLECTOR STATISTICS REPORT CHEKID * THE WEEKLY COLLECTOR STATISTICS REPORT WILL BE PRINTED INPUT=PRFRP009 SWITCH 01000000 COLSTS * THE WEEKLY COLLECTOR STATISTICS REPORT IS COMPLETE **** OPERATOR -RESPOND: 'N' CARRIAGE RETURN - TO BYPASS ZEROING THE WEEKLY COUNT CARRIAGE RETURN ONLY - TO ZERO THE WEEKLY COUNT CCSPAS INPUT=PRFRP009 SWITCH 00001000 COLSTS **MNUPRO**

SELECTION J

```
J - MONTHLY COLLECTOR STATISTICS REPORT
CHEKID
 * THE MONTHLY COLLECTOR STATISTICS REPORT WILL BE PRINTED
INPUT=PRFRP010
SWITCH
00100000
COLSTS
 * THE MONTHLY COLLECTOR STATISTICS REPORT IS COMPLETE
 **** OPERATOR -
     RESPOND: 'N' CARRIAGE RETURN - TO BYPASS CLEARNING THE COLLECTOR
                                       STATISTICS COUNT FILE
 *
               CARRIAGE RETURN ONLY - TO CLEAR THE COLLECTOR STATISTICS
                                       COUNT FILE
CCSPAS
INPUT=PRFRP010
UTIL
CLEAR, FN=COLSTATS
ΕX
MNUPRO
```

SELECTION K

```
K - CREATE REPORT GENERATOR PROGRAM
CHEKID
 * THE REPORT GENERATOR PROGRAMS WILL BE CREATED
**** OPERATOR - (BATCH HOST MUST BE ACTIVE BEFORE PROCEEDING)
                        TO ACTIVATE BATCH HOST
                        MI, *BATCH,F
        RESPOND: 'N' CARRIAGE RETURN - IF BATCH HOST IS NOT ACTIVE
 *
                     CARRIAGE RETURN ONLY - TO CONTINUE
CCSPAS
 **** OPERATOR - FOLLOW THE INSTRUCTIONS AS THEY APPEAR ON THE SCREEN
INPUT=PRFCNTRL
UTIL
DEFINE,FN=RPTWKE,LR=80,NR=1000
DEFINE,FN=RPTWKP,LR=80,NR=1000
DEFINE,FN=PRCWRK,LR=80,NR=50
ΕX
PGGEN
 * THE REPORT GENERATOR PROGRAMS HAVE BEEN CREATED
* THE REPORT GENERATOR PROGRAMS WILL BE BATCHED
INPUT=PRFCNTRL
UTIL
BATCH, FN=RPTWKE, TY=N
BATCH, FN=RPTWKP, TY=R
DELETE, FN=RPTWKE
DELETE, FN=RPTWKP
CLEAR, FN=PGEXTR
EX
PGCNT1
 **** OPERATOR - SELECTION L MUST NOW BE RUN TO EXECUTE THE REPORT
CCSPAS
MNUPRO
```

SELECTION L

L - EXECUTE REPORT GENERATOR PROGRAM

NOTE

This selection executes the procedure stream that contains the latest report generator program, created by selection K. It is for the convenience of the user, so the most recently created program can be tested. If the report generator program created by selection K was saved, it can be repeatedly executed by selecting it from the report generator report directory menu.

SELECTION M

M - QUEUE LOADING REPORT

CHECKID

* THE QUEUE LOADING REPORT WILL BE PRINTED
QLOAD

* THE QUEUE LOADING REPORT IS COMPLETE
MNUPRO

REPORT GENERATOR/DIRECTORY MENU

REQUEST => RG

SELECTION = >

REPORT GENERATOR - REPORT DIRECTORY

```
A - R.G. REPORT 1 - (AVAILABLE)
                           (AVAILABLE)
B - R.G. REPORT 2
C - R.G. REPORT 3
                            (AVAILABLE)
D - R.G. REPORT 4
                           (AVAILABLE)
E - R.G. REPORT 5
F - R.G. REPORT 6
                            (AVAILABLE)
                            (AVAILABLE)
G - R.G. REPORT 7
                           (AVAILABLE)
H - R.G. REPORT 8
                            (AVAILABLE)
I - R.G. REPORT 9
                            (AVAILABLE
J - R.G. REPORT 10 -
                           (AVAILABLE)
K - R.G. REPORT 11 -
L - R.G. REPORT 12 -
M - R.G. REPORT 13 -
                           (AVAILABLE
                            (AVAILABLE
                           (AVAILABLE
N - R.G. REPORT 14 -
                           (AVAILABLE)
0 - R.G. REPORT 15 -
P - R.G. REPORT 16 -
                           (AVAILABLE)
                           (AVAILABLE)
Q - R.G. REPORT 17 -
                           (AVAILABLE)
R - R.G. REPORT 18 - (AVAILABLE)
S - R.G. REPORT 19 - (AVAILABLE)
Z - EXIT
```

This appendix contains tables describing various update tape records used in $\ensuremath{\mathsf{CCS}}\xspace$

TABLE H-1. ' ', ADD/UPDATE CODE RECORD UPDATE

		DEE H-I.	, ADD/OFDATE CODE RECORD OFDATE
Start Column	Number Character	Field Name	Field Description
1 45 20 21 51 111 136 150 210 235 245 274 278 308 338 369 375 408 417 427 430 447 449 451 453 494 493 494 494 495 496 497 497 498 498 498 498 498 498 498 498 498 498	3 1 15 1 30 30 30 20 5 10 4 30 30 20 5 10 4 4 30 30 20 5 6 6 9 9 9 9 6 9 9 9 9 1 3 1 3 1 3 1 3 1 3 1 3 3 3 3 3	MCD MACTFG MACCT MSLCD MNAM MADR1 MADR2 MCS MZP MPHN MEXT MBNM MBAD MBCS MBZP MBPH MBAD MBCS MDLDT MADLQ MCPAD MCPGD MCP	' denotes ADD or UPDATE record Account group Account number Borrower's salutation code Borrower's address line 1 Borrower's address line 2 Borrower city, state Borrower zip code Borrower's extension/comment Business name Business address Business city, state Business address Business zip code Business zip code Business phone (area code and number) Business phone extension Additional account number Social security number Queue assigned Previous address 1 Previous address 2 Previous city, state Previous zip code Date account delinquent from Account open date Amount delinquent (past due) Current payoff or total due Current payoff good until Next payoff amount Open amount or credit limit Number of cosigners Credit or point score Bank branch Loan officer Account type code or product type Number of times account is 30 days delinquent Number of times account is 90 days delinquent Number of times account is 90 days delinquent Special description field Number of tays account is delinquent Customer-defined information Cosigner 1 salutation.code Flag Name Address City, state

TABLE H-1. ' ', ADD/UPDATE CODE RECORD UPDATE (Contd)

			(**************************************
Start Column	Number Character	Field Name	Field Description
1522 1527 1537 1541 1551 1555 1556 1557 1587 1617 1637 1642 1652 1656 1666 1670 1671 1672 1702 1732 1752 1757 1767 1771 1781 1784	5 10 4 10 4 1 1 30 30 20 5 10 4 10 4 1 1 30 30 20 5 10 4 10 4	CZ1 CH1 CHE1 CB1 CBE1 CSLC2 C2FG CN2 CA2 CC2 CH2 CH2 CHE1 CB CBE2 CSLC3 C3FG CN3 C3FG CN3 CC33 CC33 CC43 CC53 CC53 CC53 CC53 CC5	Zip code Home phone Extension and comment Business phone Extension Cosigner 2 salutation code Flag Name Address City, state Zip code Home phone Extension and comment Business phone Extension Cosigner 3 salutation code Flag Name Address City, state Zip code Home phone Extension Cosigner 3 ralutation code Flag Name Address City, state Zip code Home phone Extension and comment Business phone Extension and comment Business phone Extension END OF RECORD = record length

TABLE H-2. '30X' CODE RECORD FORMAT

Start	Number	Field	Field Description
Column	Character	Name	
1 4 5 20 26 34	3 1 15 6 9	MCD MACTFG MACCT	301, 302, or 303 Account group Account number Date inactive status is effective Dollars involved to make account inactive END OF RECORD = record length

TABLE H-3. '4XX' CODE RECORDS FORMAT

Start	Number	Field	Field Description
Column	Character	Name	
1 4 5 20 49	3 1 15 30	MCD	4xx, xx=01, 02, Account group Account number Field containing the nonfinancial data (left justified to be updated) END OF RECORD = record length

TABLE H-4. 400 CODES

Code	Length	Description
401 402	1 30	Borrower's salutation code Name (last, first, middle)
403	30	Address line 1
404	30	Address line 2
405	20	City, state
406	5	Zip code
407	10	Home phone (area code and number)
408	4	Extension
409	30	Business name
410	30	Address
411	20	City, state
412 413	5 10	Zip code Phone number (area code and number)
413	4	Extension
415	16	Additional account number (must include flag)
416	9	Social security number
417-420		Reserved for future use
421	1	Cosigner 1 salutation code
422	1	Flag
423	30	Name
424 425	30 20	Address City, state
426	5	Zip code
427	10	Home phone (area code and number)
428	4	Extension
429	10	Business phone (area code and number)
430	4	Extension
431	1	Cosigner 2 salutation code
432	1	Flag
433 434	30 30	Name Address
434	20	City, state
436	5	Zip code
437	10	Home phone (area code and number)
438	4	Extension
439	10	Business phone (area code and number)
440	4	Extension
441	1	Cosigner 3 salutation code
442	1	Flag
443 444	30 30	Name Address
445	20	City, state
446	5	Zip code
447	10	Home phone (area code and number)
448	4	Extension
449	10	Busines phone (area code and number)
450	4	Extension

- This appendix contains a summary of the memory requirements for CCS.

CPU I MEMORY

The concept of logical memory is used to define memory in which programs are executed. The concept of physical memory is used to define memory in which programs reside. CPU I requires a minimum of 192K bytes of physical memory. Logical memory is limited to 128K bytes. Figure I-1 defines CPU I physical memory.

User programs are executed in the user area of logical memory. This area is constructed from the paged physical memory in 2K blocks. The maximum user area is 60K bytes.

During on-line operations with CCS, the user area is used for multiple versions of COLECT and the REPORT subsystems. Each terminal, when active, requires a portion of paged memory for its programs. The operating system timeslices each user program. The programs are swapped to mass memory when the memory is required by other users.

Batch and concurrent operations are handled in the same manner. Since the operating system utilizes all available memory, expanding the memory size reduces the swapping required at execution time and improves the throughput of the system.

Application programs added to the existing configuration operate within the 124K bytes of memory available. The facilities are timeshared with the various COLECTs coming into memory, as required by the system activity. As the application gets larger, fewer COLECTs can be resident and more swapping with mass memory is required. System performance, therefore, degrades proportionally.

CPU II MEMORY

CPU II services the terminals attached to the system. A minimum of 96K bytes are required for the communication software. Additional memory added to CPU II becomes part of the paged physical memory available to CPU I.

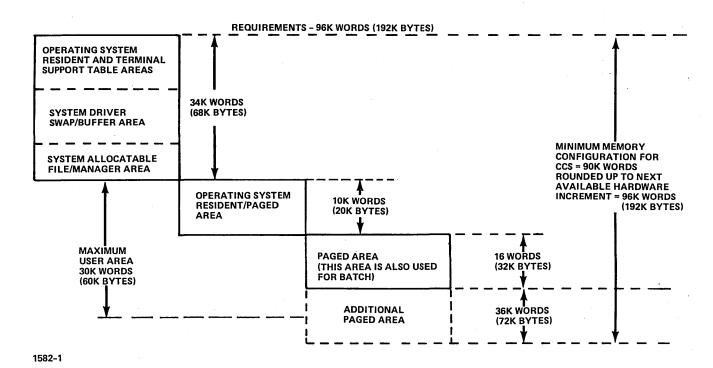


Figure I-1. Physical Memory (CPU I)

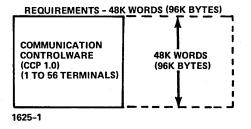


Figure I-2. Physical Memory (CPU II)

This appendix contains work sheets to aid the analyst or customer in defining data and parameters necessary for input into an initial system (section 9).

CUSTOMER MASTER FILE DATA

Start Field	Length	Format	Corr. CMF	Description/Comment
			 	
 			<u> </u>	
			<u> </u>	
i				
		· ·		
<u> </u>				
			<u> </u>	
			ļ <u></u>	
				
				

Length = Length of Field in Bytes Start Field = Starting location in Master File Format = Alpha, Dollar, Data

CCS SCREEN LAYOUT FORM

	SCREEN:	CHARACTER POSITION	
		10 11 12 12 16 16 16 17 16 19 20 21 27 23 24 25 26 27 20 28 37 32 33 34 35 37 38 39 40 41 42 45 44 45 46 47 40 40 50 51 52 55 54 55 50 57 50 50 60 60 61 62 63 64 65 67 68 60 70 71 72 72 72 76 76	16 77 70 70 60
1	1		-
2	2		
3	3	_ _+++++++++++++++++++++++++++++++++++	+ + -+ -+ -
4	4		
5	5		
6	8		
7	7 - 		
8		 	
9			
10	 		
11	} - - - - - - - - - -		
12	1 -1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-		
13	3		
14	4		
15	5		
16	6 	*************************************	
17	7 	 	
18	8 		
19	9 		
20	o 	- 	
21	1		
22	² + + + + + + + + + + + + + + + + + + +		
23	1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-		
24	4		لحبيب
	EXAMPLE:		
		10 ii 12 ii 16 ii 16 ii 17 ii 18 10 20 21 22 23 .4 29 20 27 20 20 27 20 27 20 27 20 27 20 27 20 27 20 27 20 27 20 27 27 27 27 27 27 27 27 27 27 27 27 27	76 77 10 10 60
1	1 NAME (M, 18		
	•	TE LABEL DATA FOLLOWER BY (CCS MASTER FILE LOCATION)	, , , , , , , , , , , , , , , , , , ,
	INSERT SPACES AS	S APPROPRIATE	

IN THE EXAMPLE, THE BORROWER NAME FIELD IS 30 CHARACTERS LONG THE AND ACCOUNT FIELD IS 16 CHARACTERS LONG

SOME STATE OF THE PROPERTY OF			Γ		CREDIT COLLECTION SYST	CREDIT COLLECTION SYSTEM - SCREEN CODING FORMS	
	T 3MII	i	ГЕИ		lo a político	COMMENTS	ार क प्रदेशक काताविकामान्त्रमामान्त्र
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ACTIVITY MATRIX

60475230 A

COLLECTOR ASSIGNMENT/PRIORITY

Test #	Level	Next Level	# Of Params	Param #	Param Operator	Param Value 1	Param Value 2	Param Connector	# of Return Values	Collector ID/Priority
				<u>.</u>					 	· · · · · · · · · · · · · · · · · · ·
									·	
								<u> </u>		
										100000000000000000000000000000000000000
										7771
				<u>.</u>						
								<u> </u>	 	

CUSTOMER UTILITY FILE DATA

Report heading	1(maximum 40 characters)
	2(maximum 40 characters)
	3(maximum 40 characters)
Number of days	account is to remain in the active files prior to moving the history:
	eased(maximum 3 digits)
Sati	sfied(maximum 3 digits)
Writ	ten-off(maximum 3 digits)
Number of mont On-line sumn	hs an account has to be in history before it is eligible for purging: nary history
Rel	eased(maximum 3 digits)
Sati	sfied(maximum 3 digits)
Writ	ten-off(maximum 3 digits)
On-line tape	archive index(maximum 3 digits)
	before acceptance of nonfinancial changes on the complete update 09 denotes no nonfinancial changes are accepted) n 3 digits)
Salutation codes	
Blank no.	No salutation
1	(maximum 8 characters)
2	(maximum 8 characters)
3	(maximum 8 characters)
4	(maximum 8 characters)
5	(maximum 8 characters)
6	(maximum 8 characters)
7	(maximum 8 characters)
8	(maximum 8 characters)
9	(maximum 8 characters)
Default number (maximum 3 digi	of accounts to print for each queue in the list report(ts)
Override va	lues Queue Number
	· ·

UTILITY FILE COLLECTOR DATA

CO	LLECTOR				
ID	NAME	SAL. CD	TELEPHONE EXT	SUPERVISOR	QUEUES (8 max.)
					
					
					
		·			
	····				
	 .				
					
SUPI	ERVISOR	• •			
ID	NAME	SAL. CD	TELEPHONE EXT	SUPERVISOR	QUEUES (8 max.)
					
·	 .	·		·	

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UTILITY FILE COLLECTOR DATA

•			
NAME	*	QUEUES (8 ma	x.)
			
		NAME	NAME QUEUES (8 max

Number of digits of account number to be printed on letters 15 or 16.
Letter closing (appears beneath collector name) (maximum 25 characters)
Number of accounts to delay for 'RL' function in COLECT(1-15).
Number of days delay added to promise-to-pay date for next contact date in $COLECT$. (0-30)
Maximum number of days a next contact date may be in the future if entered by a collector (0-99)
No answer (NA) result code treated as a review later result code (RC).

LETTER FORM CHARACTER POSITION

(NAME 45 CHAR INCLUDING AN 8 CHAR SALUTATION) I)	MM /DD/YY
(ADDRESS 30 CHARACTERS))	
(ADDRESS 20 CHARACTERS))	
(ZIP CODE)	ACCT # 16 DIGITS
LINES 1 THROUGH 11 FIXED FORMAT	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	
	
	
	
	
, 1 1 1 1 1 1 1 1 1 1 	
-1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 	
-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	
-1	
	
CLOSING SALUTATION	SINCERELY
	COLLECTOR NAME
	COLLECTOR PH. #
	COLLECTION DEPT
PLEASE FILL INFORMATION FOR UP TO 5 VARIABLE TEXT INSER	TIONS AND NOTE IN
BODY OF TEXT A "V1" (NO CHAR) "V2" (NO CHAR) ETC.	VŠ
<u>V1</u> <u>V2</u> <u>V3</u> <u>V4</u>	<u>V5</u>
TEXT LINE	Line number in text
TEXT COLUMN	Character position in t
CODE	A=Amount/D=Date/S
START POSITION	Start position in Maste

\$\$USERID FILE INFORMATION

USER ID REQUEST FIELD	PORT NUMBER	
-		
	·	

The entry under REQUEST FIELD can be a program name, providing the program exists through a CALL CHAIN to EXIT request (not a CALL PGMOUT). After entering the correct ID for the port number, the user begins execution of this program. The user will only see and operate from the REQUEST = prompt if the REQUEST FIELD in the \$\$USERID file is blank.

SAMPLE SCREENS

This appendix contains examples of screens provided by CCS to implement a collection session. The screens are

samples only. The user has the option of tailoring screens (format and field) to his requirements.

A = AUTOMATIC
B,(NAME) = NAME
N,(#) = ACCOUNT NUMBER
C,(NAME) = COSIGNER NAME
E = EXIT

PLEASE ENTER SELECTION

Figure K-1. Selection Screen

CREDIT COLLECTION SYSTEM COLECT VERSION 3.0 0946

PLEASE ENTER COLLECTOR ID

Figure K-2. Sign-On Screen

1 BORROWERS NAME 2 BORROWERS NAME ADDR ESS ADDR ESS ACCOUNT # ACCOUNT #

= SELECT NAME

D = DISCONTINUE SEARCH = CONTINUE SEARCH

PLEASE ENTER SELECTION

Figure K-3. Borrower's Name and Address Screen

99

C = CORRECT D = DISCONTINUE = CONTINUE

PLEASE ENTER SELECTION

Figure K-4. Cosigner's Name and Address Screen

	BORROWER'S MASTER SCREEN
9999 PARK ST	TIME 0810 QUEUE # 0001 ACCT # 0107879631234567 POINT SCORE 000 AMT DELQ 97.13 ACCT TYPE 02 DELQ DATE 05/30/77 STATUS CD PREV QUE 0004 PP FLAG Y PRIORITY 0008 NEXT CONTACT 10/17/78
834 TÓTON PL ARCO, PA 86204 WORK # 777/452-3232 NUMBER COSIGNER 1 LAST ACTIVITY DATE AC RS LT COLL COMM	ENTRY DATE 06/19/77 LAST UPDATE PERM COMMENT 1: THREE PERMANENT COMMENTS (MAX PERM COMMENT 2: OF 30 CHARACTERS EACH) MAY BE PERM COMMENT 3: STORED IN THE MASTER FILE ENT
06/19/77 TH PP 2 0022 NEW PLEASE ENTER NEXT FUNCTION	OR ACTION,RESULT,LETTER REQUEST,COMMENT

Figure K-5. Cosigner's Name and Address Screen

```
FINANCIAL HISTORY
ACCT NAME SPARKS, BARBARA B
                                                         ACCT # 0107879631234567
ACCT TYPE
                02
LOAN OFF
SPEC DESC FIELD
AMT DELQ
                97.13
                          OPEN DATE
DELO DATE 05/30/77
LAST UPDATE 06/19/77
                          OPEN AMOUNT
                                              0.00
                          CUR BALANCE
                                            116.65
ENTRY DATE 06/19/77
                          CUR PAYOFF
                                            116.65
TIMES DELINQUENT
                          PROMISED TO PAY FIELDS
30 DAYS
                      FLAG
            00
60 DAYS
            00
                      MADE
                                                 06/19/77
90 DAYS
            00
                      BY DATE
                                                 06/25/77
                      AMOUNT
                                                    50.00
DATE OF TAPE, IF IN TAPE HISTORY
PLEASE ENTER NEXT FUNCTION OR ACTION OR ACTION, RESULT, LETTER REQUEST, COMMENT
```

Figure K-6. Financial History Screen

COLLECTION ACTIVITY

SPARKS,BARBARA B 97.13 ACCT NAME

AMT DELQ

ACCT # 0107879631234567 LAST LTR DATE 06/19/77

DELQ DATE 05/30/77

LAST LTR AMT

50.00

PERM COMMENT 1: THREE PERMANENT COMMENTS (MAX PERM COMMENT 2: OF 30 CHARACTERS EACH) MAY BE PERM COMMENT 3: STORED IN THE MASTER FILE

AC RS LR CONTACT

CD CD CD COLL COMMENTS DATE 06/19/77 TH PP 2 0002 NEW JOB

Figure K-7. Collection Activity Screen

BORROWER'S CHANGE SCREEN

ACCT NAME SPARKS, BARBARA B LAST CHANGE 00/00/00

ACCT # 0107879631234567

PREVIOUS

01 HOME ADDR 1 9999 PARK ST

HOME ADDR 2 02

03 CITY, STATE NEW CAROL, PA

HOME ZIP 04 05

86211

HOME PHONE HOME EXT

777/670-0385 0000

06

MAXOR, INC

07 BUS NAME BUS ADDR 80

834 TOTON PL

CITY, STATE BUS ZIP 09

ARCO, PA 86204

10 BUS PHONE

777/452-3232

12 **BUS EXT**

4211 13 SAL CD 0

14 ADL ACCT #

15 SOC SEC #

ENTER ITEM, CHANGE OR NEXT FUNCTION OR ACTION, RESULT, LETTER REQUEST

Figure K-8. Borrower's Change Screen

COSIGNER ** SPARKS, BARBARA B 97.13 DELQ DATE 05/30/77 ACCT NAME ACCT # 0107879631234567 AMT DELQ COSIGNER 1 01 JOHN SMITH 06 HOME 222-3416 02 222 MAIN ST. 03 SAN DIEGO, CALIF. 07 EXT 444 **08 BUS** 111-1234 04 92100 09 EXT 333 05 1 COSIGNER 2 10 15 HOME 16 EXT 11 12 17 BUS 13 **18 EXT** 14. COSIGNER 3 19 24 HOME 20 21 22 25 EXT 26 BUS 27 EXT ENTER ITEM, CHANGE OR NEXT FUNCTION OR ACTION, RESULT, LETTER REQUEST,

Figure K-9. Cosigner Screen

SUPERVISOR'S CHANGE SCREEN ACCT NAME SPARKS, BARBARA B ACCT # 0107879631234567 CURR QUEUE LAST QUEUE CHNG AMT DELQ 0001 97.13 10/01/78 DELQ DATE 05/30/77 QUEUE ID 0001 NEXT CONTACT DATE 07/17/77 01 PREV QUEUE 0004 02 03 PRIORITY CODE 8000 SUPV FOR THIS ACCT 04 SUPV STATUS CODE QUEUE REASSIGN COD 05 06 ACCT REVIEW CODE PP AMOUNT 50.00 ENTER ITEM, CHANGE OR NEXT FUNCTION OR ACTION, RESULT, LETTER REQUEST, COMMENT

Figure K-10. Supervisor's Change Screen

COMMENT

CCS 3.0 SCREENS IN SCREEN NUMBER ORDER

000	O.O OOREERO HT OOREER TOMBER ORBER
01	END OF DAILY ASSIGNMENTS
02	COLLECTION ACTIVITY SCREEN
04	COSIGNER'S SCREEN, PART I
10-19	BORROWER'S MASTER SCREENS
20-29	FINANCIAL HISTORY SCREENS
30	LOG IN PROMPT SCREEN
31	SELECTION SCREEN
33	BORROWER'S CHANGE SCREEN
34	COSIGNER NAME SEARCH DISPLAY SCREEN
35	SUPER VISOR SCREEN
36	SELECTION SCREEN, ACCOUNT BUSY
37 .	SELECTION SCREEN, ACCOUNT NOT FOUND
38	SELECTION SCREEN, ACCOUNT NOT IN ALLOWED QUEUE
39	SELECTION SCREEN, ACCOUNT NOT FOUND COSIGNER SEARCH
40	'NO ACTIVITY ALLOWED ON THIS ACCOUNT, PLEASE ENTER NEXT FUNCTION'
41	'NO ACTIVITY ALLOWED ON THIS ACCOUNT, PLEASE ENTER NEXT ITEM, CHANGE OR NEXT FUNCTION'
42	'FORMAT ERROR, ENTER NEXT FUNCTION OR ACTION, RESULT, LETTER REQUEST, COMMENT'
43	'FORMAT ERROR, ENTER ITEM, CHANGE OR NEXT FUNCTION OR ACTION, RESULT, LETTER, COMMENT'
44	'COMMENT TOO LONG, ENTER NEXT FUNCTION OR ACTION, RESULT, LETTER REQUEST, COMMENT'
45	'COMMENT LONG, ENTER ITEM, CHANGE OR NEXT FUNCTION OR ACTION, RESULT, LETTER, COMMENT'
46	'INVALID RESULT, ENTER NEXT FUNCTION OR ACTION, RESULT, LETTER REQUEST, COMMENT'
47	'INVALID RES, ENTER ITEM, CHANGE OR NEXT FUNCTION OR ACTION, RESULT, LETTER, COMMENT'
48	'PLEASE ENTER PROMISED TO PAY DATE, AMOUNT'
49	'FORMAT ERROR, PLEASE REENTER PROMISED TO PAY DATE, AMOUNT'
50	'INVALID DATE, PLEASE REENTER PROMISED TO PAY DATE, AMOUNT'
51	'INVALID AMOUNT, PLEASE REENTER PROMISED TO PAY DATE, AMOUNT'
52	'PROMISED TO PAY AMOUNT/DATE DISPLAY SCREEN
53	'PLEASE ENTER ADDRESSEE CODE, LETTER CODE, LETTER DATE, LETTER AMOUNT'
54	FORMAT ERROR, REENTER ADDRESSEE CODE, LETTER CODE, LETTER DATE, LETTER AMOUNT'
55	'INVALID ADDRESSEE, REENTER ADDRESSEE CODE, LETTER CODE, LETTER DATE, LETTER AMOUNT'
56	'INVALID LETTER CODE, REENTER ADDRESSEE, LETTER CODE, LETTER DATE, LETTER AMOUNT'
57	'INVALID LETTER DATE, REENTER ADDRESSEE, LETTER CODE, LETTER DATE, LETTER AMOUNT'
58	'INVALID LETTER AMOUNT, REENTER ADDRESSEE, LETTER CODE, LETTER DATE, LETTER AMOUNT'

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- 59 ADDRESSEE CODE, LETTER CODE/DATE/AMOUNT DISPLAY SCREEN
- 60 'A COMMENT IS REQUIRED, PLEASE ENTER ONE'
- 'COMMENT ENTERED IS TOO LONG, PLEASE REENTER'
- 62 PLEASE ENTER NEXT CONTACT DATE!
- 'INVALID DATE, PLEASE REENTER NEXT CONTACT DATE'
- 64 'INVALID DATE, ENTER ITEM, CHANGE OR NEXT FUNCTION OR ACTION, RESULT, LETTER, COMMENT'
- 66 NAME SEARCH PROMPT SCREEN
- 70 'PLEASE ENTER ACTION CODE'
- 71 'PLEASE ENTER RESULT CODE'
- 72 'INVALID ACTION, ENTER NEXT FUNCTION OR ACTION, RESULT, LETTER REQUEST, COMMENT'
- 73 'INVALID ACT, ENTER ITEM, CHANGE OR NEXT FUNCTION OR ACTION, RESULT, LETTER, COMMENT'
- 74 'PLEASE ENTER PROMISED TO PAY DATE'
- 75 'INVALID DATE, PLEASE REENTER PROMISED TO PAY DATE'
- 76 PLEASE ENTER PROMISED TO PAY AMOUNT!
- 77 'INVALID AMOUNT, PLEASE REENTER PROMISED TO PAY AMOUNT'
- 78 'PLEASE ENTER LETTER CODE'
- 79 'A LETTER IS REQUIRED, PLEASE ENTER LETTER CODE'
- 80 'INVALID LETTER CODE, PLEASE REENTER LETTER CODE'
- 81 'PLEASE ENTER ADDRESSEE CODE'
- 82 'INVALID ADDRESSEE CODE, PLEASE REENTER ADDRESSEE CODE'
- 83 'PLEASE ENTER LETTER DATE'
- 11 'INVALID DATE, PLEASE REENTER LETTER DATE'
- 85 'PLEASE ENTER LETTER AMOUNT'
- 86 LETTER DATE/AMOUNT DISPLAY SCREEN
- 87 'PLEASE ENTER COMMENT'
- 88 PROMISED TO PAY AMOUNT/DATE DISPLAY SCREEN
- 94 COSIGNER'S SCREEN, PART 2

HARDWARE DEVICE FAILURE ERRORS

TABLE L-1. HARDWARE DEVICE FAILURE ERRORS

Code	Error	Significance
0	Time-out	Failure to interrupt within allotted time (requires timer package). Hardware failed to generate an interrupt within the allotted time. Hardware maintenance is required.
1	Lost data	Data was not transferred out of the read register before the next data word appeared.
		Card reader (diagnostic logical unit only): Bad initiator status
		Magnetic tape: Use the control unit (CU) option to continue without processing the lost record, or abort the read option.
2 .	Alarm	Indicates the presence of an abnormal condition
		Line printer: Paper out, paper tear, fuse alarm or interlock open. Correct the problem and use the RP option.
		Card reader (diagnostic logical unit only): Bad continuator status
		COSY driver: First record is not a CSY/control record.
		Magnetic tape simulator: Failure to fulfill a request due to mass storage device error or illegal parameter in FILMGR request
3	Parity error	COSY driver: Last record was not an END/ record.
		Magnetic tape: The tape is positioned after the bad record. Either type the CU option to continue processing (the bad record is ignored), or abort the operation.
4	Checksum error	Card readers: Holes are not cleanly punched. Remove the last two cards from the output hopper, and repunch them if damaged. (Check for tears between holes.) Place these cards into the hopper ahead of the cards that have not been read. Ready the card reader and use the RP option.
		COSY driver: No end-of-file mark following the END/ record
		$\ensuremath{\mathrm{I/O}}$ device did not send reply to the computer within the allotted time.
5	Internal reject	The computer cannot communicate with the device. Check the hardware address switch and POWER ON switch. The RP option may be used if the problem has been corrected.
		COSY driver: Read on the write unit or write on the read unit before the end-of-file marker was encountered

TABLE L-1. HARDWARE DEVICE FAILURE ERRORS (Contd)

Code	Error	Significance
20	Checkword	The checkword error occurs when the controller logic detects an incorrect checkword in data read from file storage during a read, compare, or checkword operation.
22	Card output stacker full	Card readers: Empty the output hopper and use the RP option.
23	Card input hopper	If the read operation is complete, use the CU option; otherwise, supply more cards and use the RP option.
24	Card feed	The read ready station does not contain a card after a feed cycle has occurred, and the input hopper is not empty.
÷ .		Readers: A card feed failure error can occur as a result of warped or damaged cards. If the card reader can be made ready, use the RP option.
25	Card jam	A card transport problem has occurred. It is possible for a card jam to occur in any one of, or more than four of, the read stations in the card reader.
		Card reader: Stacker jam status returned
31	Short record	Attempt to write a record with a length less than the standard noise record length.
		Magnetic tape simulator: Noise record. Attempt to do zero lengt write.
33	Line break	Line break occurred while attempting to input on the communication
34	Data interrupt	Data interrupt occurred after reading 80 columns.
-		Readers: This error indicates a hardware failure, possibly due t improper card travel; reread the card.
35	End of operation	An end-of-operation interrupt occurred prior to reading 80 column
		Readers: Continuous failures may indicate card slippage during feeding.
36	TX parity error	Magnetic tape: Transmission error
37	Wrong address	Buffered data channel is using a first-word address rather than the address sent by a buffered driver.
38	Paper out	
39	Not used	
40	Repeated the request due to an error	The driver is attempting recovery.
41	Incomplete request	The request was not successfully completed. The driver attempted to repeat the request the maximum number of times allowed.
42	Not used	
43	Incomplete directory call or overlay read request	Due to irrecoverable error
44	Guarded address	Error on write
		Magnetic tape simulator: Attempt to write past the end of the specified magnetic tape simulator disk area

TABLE L-1. HARDWARE DEVICE FAILURE ERRORS (Contd)

Code	Error	Significance
45	Timing	Occurred while the drum was not busy
46	External reject	On output
47	External reject	On input
48	Controller address	The controller address status was not the vaue expected.
49	Drive address	The drive address status was not the value expected.
50	No ID	ID abort. No ID burst.
51	Illegal density	Attempt to select illegal density, or attempt to select density when the unit is not at load point.
53	EOP	Card reader: No end-of-operation status
54	Data	Card reader: No data before the end of operation
55	Not used	
56	Mass memory buffer expired	No more buffer space available (software buffer driver)
57	Buffer transfer	The mass memory error is on the buffer transfer, which is detected in the software buffer driver.
58	Not used	
59	PE lost data	Error exists in the phase encode formatter that affected the data transfer.
60	Illegal tape motion request	An illegal tape motion request was made to the magnetic tape simulator.
61.	Interrupt status bit	Magnetic tape: Interrupt should not be set when initial status is taken.
		Card reader: No interrupt status indication
62	ADT	Card reader: Auto-data transfer indication fault status
63	Busy after EOP	Card reader: Still busy after the end of operation occurs
64	Not busy	Card reader: Not busy before the end of operation occurs
67	Not used	
70	Connect	Disk: Failure to connect to the control unit or drive unit after a maximum number of retries
71	ECC	Disk: Error correction code could not correct the error since too many error bits were generated.
72	Ghost interrupt	Disk: Unexpected interrupt received
73	Force release	Disk: Force release was requested, but the disk was not released (multiple disk adapter system).
74	Transfer length	Disk: Data transfer was longer than requested.
75	Transfer	Disk: transfer was unaccomplished after a maximum number of retries.
82	Control unit	Disk: An error exists in the control unit.

TABLE L-1. HARDWARE DEVICE FAILURE ERRORS (Contd)

Code	Error	Significance
83	Main memory address	Disk: The disk adapter attempted to address a nonexistent CPU memory address.
84	Bus relinquished	Disk: Bus relinquished
85	Checkword-address status error	Magnetic tape: Checkword-address status error
86	Switch mode error	Tape: Attempt to read a seven-track tape recorded in binary-coded decimal arithmetic in the binary mode, or vice versa
87	No character read in 25 feet	Tape: No data found

GENERAL SYSTEM ERROR MESSAGES

TABLE L-2. GENERAL SYSTEM ERROR MESSAGES

Message	Significance
BO1, statement	Statement or parameters are unintelligible for the breakpoint program.
BO2, hhhh	The specified hexadecimal address hhhh cannot be processed by the breakpoint program because it is protected.
BO3, hhhh	The breakpoint limit has been exceeded. The specified hexadecimal address is the last breakpoint processed.
CHECKING FILES - ERRORS	Errors were detected in the file manager file check after autoload.
DATA/TIME ENTRY ERROR	Re-enter MSOS date/time.
DB FORMAT INCORRECT	Some part of the remaining portion of the request is incorrect for CCSDB.
DB INVALID REQUEST	The mnemonic does not agree with known mnemonics for CCSDB.
DB I/O ERROR	Monitor the request return with the error bit set for CCSDB.
DB LHO/LHC ERROR	Data written on mass storage does not match the LHO/LHC input for CCSDB.
DB NO CORE AVAILABLE	No allocatable core is available for CCSDB.
DB ORDINAL LENGTH ZERO	No program was loaded in the ordinal.
EF STACK OVERFLOW	Currently there is no space in the engineering file stack to record this device failure.
EF STOR LU ERROR	An attempt was made to update the engineering file for a logical unit of less than 1 or more than 99.
EF STOR MASS MEMORY ERROR	An error occurred in updating the engineering file on mass memory.
ILLEGAL PARAMETERS SPECIFIED	Disk-to-tape has detected a nonhexadecimal character for equipment code. Respecify the equipment codes.
L,nn FAILED xx ACTION	The number of the failed device appears when a driver cannot recover from an error.
	Where: nn is the logical unit of the failed device.
	xx is the code indicating the cause of the failure.

Message	Significance
L, nn FAILED xx (yyyy) ACTION	The status that informs the operator of device failure in the initializer.
	Where: nn is the logical unit of the failed device.
	xx is the code indicating the cause of failure.
	(yyyy) is the test hardware status of the failed device.
LU nn DOWN	If a device is marked down, contains no alternate, and is requested by a program, the message is typed on the comment device the first time it is requested after being downed. The completion address is always scheduled with error. The requesting program should not continually request downed units.
MI INPUT ERROR	The statement presented to the manual interrupt processor is unrecognizable, or the requested program is not supplied.
NM ERR xx LU = nn T = hhmm;ss	Mass storage I/O error
S = ssss	Where: xx is the error number.
	nn is the logical unit.
	hhmm is the hours/minutes
	ssss is the hardware status.
ov	An overflow of volatile storage; appears on the output comment device. No recovery is possible.
PARITY, hhhh	The memory parity error at the specified hexadecimal location; appears on the output comment device. No standard recovery is provided.
	If hhhh = DSA?, no parity error was encountered on the core scan. The parity fault was most likely caused by a DSA parity error.
SET PROGRAM PROTECT	The system is waiting for the program protect switch to be set.
TIMER REJECT	The timer start-up has been rejected (SPACE or MIPRO).
STALL REJECT	The stall alarm disable was rejected (SPACE).
DISK ERROR (ssss)	Restart the disk to the tape program; (ssss) = status
TAPE ERROR (ssss)	Restart the disk to the tape program; (ssss) = status
GIxx	Ghost interrupt on interrupt line xx was reported by LIN1V4.

JOB PROCESSOR ERROR CODES

TABLE L-3. JOB PROCESSOR ERROR CODES

Message	Significance		
JOB ABORTED	The current batch job has abnormally terminated. If the job card included a job name, that name replaces JOB.		
JР , уууууу	yyyyyy is the last program that was executed before the job terminated.		

Message	Significance	
JP01,hhhh	Program protect violation occurred at address hhhh.	
JPO2,hhhh	Illegal request or parameters at the specified hexadecimal address hhhh	
JP03, statement	An unintelligible control statement was output with the diagnositc.	
JPO4, statement	Illegal or unintelligible parameters in the control statement	
JP05,	The statement entered after a manual interrupt is illegal.	
JP06,	A threadable request was made at level 1 when no protect processor stack space was available, or an unprotected threaded request was made at level 1.	
JPO7,	An unprotected program tried to access the protected device.	
JP08,	An attempt to access a read-only unit for write or write-only unit for read, or an attempt to access an unprotected unit, or an attempt to select a mass storage device as the standard print unit	
JP09	An I/O error occurred while accessing the job processor file directory table.	
JP10	An operation was attempted on a file that is not in the file table. Define the file.	
JP11	The file name being defined already exists for another file. Dump the file table to select a name not previously used, or attempt a new definition with another name.	
JP12	An attempt has been made to access a file that has not been opened.	
JP13	No files are available for definition. Purge the file table to make any expired files available.	
JP14 .	An attempt to open a previously opened file, or an attempt to open more than one file on the same unit at the same time	
JP15,xxx	The JOB card is not the first control statement in the job, or more than one job card is detected within a job. xx is the control statement in error.	

LOADER ERROR CODES

TABLE L-4. LOADER ERROR CODES

Message	Significance			
E1	An irrecoverable I/O error. Terminates the load.			
E2	An overflow of entry or external table reservation on mass storage. Terminates the load.			
E3	An illegal or out-of-order input block. Terminates the load.			
E4	An incorrect common or data block storage reservation. Occurs if the largest common storage declaration is not on the first NAM block to declare common or data storage; or, if protected common or data was being used, the NAM block declared a reservation longer than protected common or data. Terminates the load.			
E5	The program is longer than the area or partitions allotted for it. Terminates the load.			

TABLE L-4. LOADER ERROR CODES (Contd)

Message	Significance			
E6	An attempt to load information in the protected core. Terminates the load.			
E7	An attempt to begin data storage beyond the assigned block. Terminates the load.			
E8	Duplicate entry point			
E9	A high order bit or a relocatable address was set, or negative relocation has been encountered during a part 1 load. Terminates the load.			
E10	Unpatched externals; the external name is printed following the diagnostic. When all unpatched externals have been printed, the operator may terminate the job by typing *T (CR) or continue execution by typing * (CR). Core resident entry point tables may also be linked by typing *E.			
E11	The minimum amount of core is not available for the load. At least 195 words plus the length of the loader must be available. Terminates the load.			
E12	An overflow of command sequence storage reservation on mass storage. Terminates the load.			
E13	An undefined or missing transfer address. This code is not given if the loading operation is part of system initialization. It occurs when the loader does not encounter a name for the transfer address or the name encountered is not defined as an entry point name in the loader's table. Loading is terminated.			
E14	The loader request operation code word is illegal. Terminates the load.			
E15	An overflow of the loader table used to store relocatable addresses that have been absolutized to hexadecimal 7FFFF. Terminates the load.			
E16	The entry point name is not in the loader table. Type in the correct entry point name.			
E17	Informative diagnostic. The relocatable entry point has been absolutized to location hexadecimal 7FFFF. If any program in the system is testing for an entry point value of hexadecimal 7FFFF to demonstate that this is not present, the test is not valid.			

LIBEDT ERROR CODES

TABLE L-5. LIBEDT ERROR CODES

Message	Significance			
L01	More than six characters in a parameter name were presented to the library editing program.			
L02	More than six digits in a number were presented to the library editing program.			
L03	An improper system directory ordinal was presented to the library editing program.			
L04	An invalid control statement was presented to the library editing program.			
L05	An illegal field delimiter in the control statement was presented to the library editing program. $\label{eq:control}$			
L06	An illegal field in the control statement was presented to the library editing program, or ${\rm I/O}$ was attempted on a protected device.			
L07	Errors in loading as a result of a library editing program control statement			
L08	The program being added to the program library has an entry point duplicating one already in the directory.			
L09	Standard input failed on the first input record following an *N request.			

Message	Significance			
L10	The operator deleted a program that is not in the library.			
L11	No header record on file input from mass storage.			
L12	On an $\star L$ entry statement, either there was an input error or the first record was not a NAM block.			
L13	Common declared by the program being loaded exceeds available common, or system common was not specified when requested.			
L14	The program being loaded is longer than the size of the unprotected core but is not longer than the distance from the start of the unprotected core to the top of the core.			
L15	An illegal input block was encountered; the last program stored in the library is not complete.			
L16	An I/O error occurred during input; the last program stored was not complete.			
L17	An \star L program being installed exceeded the capacity of LIBEDT to input from mass storage.			
L18	The operator attempted to load a zero-length program during an *M request or an *N request.			
L19	No data base entry point was specified in the system for use by an ${}^\star\!A$ statement and parameters.			
L20	An irrecoverable error occurred during loading.			
L21	The operator attempted to write beyond the maximum sector number specified for MAXSEC at initialization.			

COSY/CUDDLY ERRORS

TABLE L-6. COSY/CUDDLY ERRORS

Message	Significance	COSY Action
nn ERRORS	This message appears at the end of a COSY job if errors exist. The number specified in the decimal count or errors in the COSY job.	
****COSY Cnn****		
01	The first card of the revisions deck was not a DCK/, MRG/, CPY/, or END/ card.	Reads the revisions and lists them with asterisks in columns 1 through 4 until it reads a DCK/, MRG/, CPY/, or END card
02	Illegal parameters were on the MRG/control card.	COSY aborts.
03	The first card from merge input was not a DCK/ control card.	Reads the revisions and lists them with asterisks in columns 1 through 4 until it reads a DCK/ or END/ card
04	The MRG/ control card was in the revision decks.	COSY aborts.

TABLE L-6. COSY/CUDDLY ERRORS (Contd)

Message	Significance	COSY Action	
05	Illegal parameters were on the DEL/, INS/, or REM/ control cards.	Reads the revisions and lists them with asterisks in columns 1 through 4 until it reads the next control card	
06	The sequence numbers were out of order in the revisions set.	Reads the revisions and lists them with asterisks in columns 1 through 4 until it reads the next control card	
07	Two sequence numbers were on the INS/control card.	Reads the revisions and lists them with asterisks in columns 1 through 4 until it reads the next control card	
08	A control card did not follow the DCK/ card when merging revisions.	Reads the revisions and lists them with asterisks in columns 1 through 4 until it reads the next control card	
09	The first card of the source deck was not a CSY/ or HOL/ control card.	COSY aborts.	
10	The requested deck was not on input library.	Reads the revisions and lists them with asterisks in column 1 through 4 until it reads a DCK/, MRG/, or END/ card	
11	The decknames on the DCK/ and HOL/ cards did not agree when adding a new deck to the COSY library.	COSY aborts.	
12	The revision card collowing the DCK/ card was not a control card.	Reads the revisions and lists them with asterisks in columns 1 through 4 until it reads a control card	
13	A DEL/ or INS/ card contained a sequence number beyond the end of the input deck.	Reads the revisions and lists them with asterisks in column 1 through 4 until it reads a DCK/, MRG/, or END/ card	
14	An illegal parameter was on the DCK/ card.	Reads the revisions and lists them with asterisks in columns 1 through 4 until it reads a DCK/, MRG/, or END/ card	
15	A parameter was on the DCK/ card twice.	Uses second parameter	
16	The DCK/ card requested both H and C or H and L on the same unit.	C or L parameter is ignored; processing continues.	
17	The DCK/ card requested input from the logical unit previously used for output.	Reads the revisions and lists them with asterisks in columns 1 through 4 until it reads a DCK/, MRG/, or END/ card	
18	COSY output was requested on a unit previously used for Hollerith, or Hollerith output was requested on a unit previously used for COSY.	Illegal output request is cleared; processing continues.	
19	The maximum number of output units was exceeded.	Output is cleared; processing continues.	
20	The DCK/ card requested output on a logical unit previously used for input.	The output is removed; processing continues.	
21	The DCK/ card requested C and L output on the same unit.	The L parameter is ignored; processing continues.	
22	The CPY/ control card was not the first card of the revisions deck.	The CPY/ control card is listed with asterisks in the first 4 columns, and the next control card is read.	
23 ,	The CPY/card was not followed by a CPY/ or END/ card.	COSY aborts.	

Message	Significance	COSY Action
L,lu FAILED	COSY driver errors were output by the alternate device handler; all errors were catastrophic. 1 Not assigned 2 The first record read was not a CSY/record. 3 The END/ card was not the last on COSY input. 4 No end of file on COSY input 5 A read request was made to a logical unit assigned to output. A write request was made to a logical unit assigned to input.	For protected requests, type CU. For unprotected requests, type DU.
	6 A MOTION request was made to a logical unit assigned to input/output. No end-of-deck marker was encountered.	
REWIND LUnn	This message may appear at various times during a COSY job. The specified number is the decimal logical unit to be rewound.	Enter any value thrugh the standard input comment device after rewinding the unit.

COMMUNICATION INTERFACE ERROR CODES

The following tables describe errors detected and reported ${\sf dn}$ the engineering file by the CPUII driver.

The engineering error messages are reported in the engineering log, where the error code is the customer engineering error code, the status is the first two bytes of text, and the logical unit is the logical unit number of the CPUII driver. Knowledge of CCP 1.0 is assumed. (Refer to the Communications Control Program Version 1.0 Software Reference Manual for further detail.)

The following error codes are logged in the engineering file.

Decimal	Meaning	Status
48	Communication processor reloaded	Halt code
49	Communications processor restart successful	FFFF
50	Communication processor restart failed.	FFFF

Table A-7 lists the customer engineering error messages. These messages are encountered during on-line operation (that is, where a terminal is turned off). This condition is not serious. However, if any of the listed error codes occur and the on-line processing is disabled, engineering support should be contacted immediately.

CUSTOMER ENGINEERING ERROR MESSAGES

TABLE L-7. CUSTOMER ENGINEERING ERROR MESSAGES

Error Code	Reported By	Description	Text
01	Communication line adapter status handler	Disconnect the switch line.	PP SS Where: PP = Port number SS = Support number
02	Communication line adapter status handler	Abnormal DSR or CTS operation	Same as code 01
03	Communication line adapter status handler	Abnormal data carrier detect operation	Same as code 01

TABLE L-7. CUSTOMER ENGINEERING ERROR MESSAGES (Contd)

Error Code	Reported By	Description	Text
04	Worklist processor	Unsolicited ODD	Same as code 01
05	Worklist processor	The Communication line adapter address was out of range.	Same as code 01
06	Worklist processor	Illegal loop cell format	Same as code 01
07	Worklist processor	Unsolicited input	Same as code 01
08	Communication line adapter status handler	Input loop error	Same as code 01
09	Communication line adapter status handler	Output loop error	Same as code 01
OA	PTTER	ODD time-out	Same as code 01
ОВ	PTTER	Modem time-out	Same as code 01
OD	Communicaation line adapter status handler	Communication line adapter status overflow	Same as code 01
0E	Communication line adapter status handler	Farming error	Same as code 01
OF	Communication line adapter	The next character was not available.	Same as code 01
10	Communication line adapter status handler	Data transfer overrun	Same as code 01
11	PBMLIA	MLIA error status	ET LE LD AL Where: ET = Error type 00 Error condition restored 01 Error counts given 02 MLIA failure LE = Input loop error count
12	Mode 4 TIP	Upline break from error	LD = Lost data count AL = Alarm count Only listed if ET = 01 OO RB PP SS CA TA
		counter overflow	Where: RB = Reason for break O1 No response, counter over- flowed O2 Bad response, counter overflow O3 Error response, counter over- flowed PP = Port number SS = Subport number CA = Cluster address
18	Real-time clock (RTC)	Real-time clock error status	TA = Terminal address SS SS Where: SS = Clock status

TABLE L-7. CUSTOMER ENGINEERING ERROR MESSAGES (Contd)

Error Code	Reported By	Description	Text
20	PTSTART	Dead-man time-out	LS NS Where: LS = Last state NS = Next state
21	PRINTPRDC	Spurious interrupt	CP ST Where: CP ST = Coupler status word
22	ADPT2	Chain address zero	Same as code 21
23	ADPT2	Hardware time-out on input	Same as code 21
24	ADPT2	Input data transfer terminated by PPU	Same as code 21
25	ADPT3	Illegal orderword	CP ST OR WD Where: CP ST = Coupler status word OR WD = Orderword received
27	ADPT5	Output data transfer terminated by PPU	Same as code 21
28	ADPT5	Hardware time-out on output	Same as code 21
29	ADPT5	EDP missing	Same as code 21
2A	ADPT5	Unexpected status	Same as code 21

SYSTEM HALT CODES

TABLE L-8. SYSTEM HALT CODES

Code	Description	Code	Description
000	Not a valid halt code	00A	Duplicate RELEASE
001	Power fail	00B	Chain error
002	Memory parity	000	Buffer out of range
003	Program protect	00D	Bad command, not type 1 or type 2
004	Interrupt count 0	00E	PMWLOP not called from P3
005	Terminal worklist error	00F	Attempt to clean an enabled line
006	Active line control block list error	010	Wrong terminal type specified
007	No buffers left	011	Bad MLIA status (initialization)
800	Size error in stamp	012	Duplicate communication line adapter
009	Duplicate GET		address (initialization)

TABLE L-8. SYSTEM HALT CODES (Contd)

Code	Description	Code	Description
013	Attempt to redefine an existing DN directory entry	025	Reserved for firmware use
014		026	Reserved for firmware use
014	Attempt to redefine an existing CN directory entry	027	Reserved for firmware use
015	Attempt to remove a nonexistent DN directory entry	028	Coupler alarm condition
016	Attempt to remove a nonexistent SN directory	029	No queue control block available for TCB build
017	entry	02A	Bad line number from TIP
017	Attempt to remove a nonexistent CN directory entry	02B	Unknown TSKNR selected
018	Illegal PDT key	02C	Unknown block/command received
01A	Attempt to add zero CN to the directories	02D	Improper loop multiplexer-suboperation
01B	The program selected to run is not in core.	02E	Improper mode 4, terminal interface
01C	The monitor did not run for B2TIME/2 seconds.	02F	Control for disabled line
01D	Service module called with worklist empty	030	Reserved for mode 4, terminal interface
01E	Service module workcode out of range	031	Error in PNHDRBLD
01F	MLIA failure	032	Error in PNDLBH
020	The pointer to read next loop cell from CIB exceeded the present line frame pointer.	033	Illegal line status detected by PTCLAS
021	Reserved for firmware use	034	Illegal call to queue services
022	Reserved for firmware use	035	Attempt to queue message to NPU console
023	Reserved for firmware use	ĺ	in system without console
024	Reserved for firmware use	036	Directory function attempted with DN out of range

MIPRO ERROR MESSAGES (MASTER TERMINAL ONLY)

TABLE L-9. MIPRO ERROR MESSAGES (MASTER TERMINAL ONLY)

Message	Meaning and Action
CCS ACTIVE - REQUEST REJECTED	Attempted to start with CCS already active. No action is necessary.
	Tried an INIT with CCS active. Stop the system and try INIT again.
BATCH PROCESSOR ACTIVE - REQUEST REJECTED	Tried to start CCS in a system where CCS background cannot be run run concurrently with CCS. Wait until background processing is complete, or terminate background and start CCS.
EXECUTIVE PROGRAM NOT LOADED - REQUEST REJECTED	Tried to start with programs TSLOG or ULBUFF not loaded in program library, or the ULBUFF buffer was not sized correctly for the number of terminals in the system. Check and load the programs, or modify the buffer size and then restart.

TABLE L-9. MIPRO ERROR MESSAGES (MASTER TERMINAL ONLY) (Contd)

Message	Meaning and Action		
FILE NAME: xxxxxxxx ERROR STATUS= \$nnnn - REQUEST REJECTED	During an attempt to start CCS, a file error occurred while building the system files. Try restarting with the backup system volume (if any), or call for system maintenance on drive O, or INIT and reload files. The last step is a drastic action.		
ATTENTION: xxxxxxxx HAS BEEN DISMOUNTED	The file manager detected a mass memory error on a volume other than SYSVOL. Try to remount. If the error persists, call for system maintenance on the disk drive.		
Jmnn FM RJTC\$nnnn,reqtyp file/user	A file error was received by a deferred batch driver. Jmnn refers to the job number. The file manager error status, file request name, file name, and owner are also included in the message.		

CCS DIAGNOSTIC MESSAGES

TABLE L-10. CCS DIAGNOSTIC MESSAGES

Message	Meaning and Action	Index
xx IS INVALID	The code entered in reply to the menu is incorrect. Check the entry, and enter a legal code.	0015
mon dd yy hh:mm:ss	The time in month, day, year, hour, minute, and second format. The message is informational only.	0013
ACCESSING THE FILE MANAGER ERROR IN BATCH FILE	A file manager error was returned to the batch status program.	0418
A MASS MEMORY ERROR HAS OCCURRED. PROGRAM TERMINATED	Probable disk failure. Call for hardware maintenance.	0010
BATCH DRIVER BUSY ON THIS HOST	A SET cannot be performed on this host name because it is currently being processed.	0405
CLASS CODE IS NOT A DISK	System configuration error. The volume information table (VIT) is not correctly set up in SYSDAT. Call for program maintenance.	0074
DIRECT FILE RECORD LENGTH EXCEEDS 256 WORDS	The records in a direct file are limited to 512 characters in length. Re-enter the length parameter in DEFINE in UTIL.	0062
DUPLICATE HOST NAME	Cannot add a host that is already in the \$HGST file	0403
DUPLICATE LOGICAL UNIT	The specified logical unit is already assigned to another host.	0411
EQUIPMENT TYPE NOT FOUND	Invalid device name. Re-eter the valid name.	0046
ERROR - ATTEMPT TO PERFORM STACKER I/O REQUESTS AT LOCATION xxxx	Debugging problem, fatal error. A previous I/O request was still active when the request at location hexadecimal xxxx was made. Call for program maintenance.	0008
ERROR - ILLEGAL I/O REQUEST LOGICAL UNIT AT LOCATION XXXX	Debugging problem, fatal error. The I/O request at xxxx specifies a logical unit that CCS does not allow. Call for program maintenance.	0007

Message	Meaning and Action	Index
ERROR - ATTEMPT TO MODIFY THE FILE REQUEST BUFFER AT LOCATION	Debugging problem, fatal error. The file request at hexadecimal xxxx contains parameters with REQBUF. Call for program maintenance.	0011
ERROR - ILLEGAL FILE REQUEST PARAMETER AT LOCATION XXXX	Debugging problem; fatal error. The file request parameter at hexadecimal xxxx is illegal. Call for program maintenance.	0004
ERROR - ILLEGAL FILE MANAGER REQUEST AT LOCATION XXXX	Debugging problem, fatal error. The file manager request interceptor presented an invalid index to the file manager executive. The error is in interceptor operation. Call for program maintenance. The location is in hexadecimal format.	0003
ERROR - ILLEGAL PROGRAM ATTACHMENT AT LOCATION XXXX	Debugging problem, fatal error. The ATTACH execu- tive was presented with an invalid multiuser program to be attached, or the total program size (root and multiuser) exceeds the user area size. Call for program maintenance.	0002
ERROR - PROGRAM PROTECT VIOLATION AT LOCATION xxxx	Debugging problem, fatal error. An illegal reference to the protected memory was detected. Call for program maintenance.	0001
ERROR - xxxxxxxx IS TOO LARGE TO BE EXECUTED	Debugging problem, fatal error. xxxxxxxx is a library program that is too large for the user area. Call for program maintenance.	0018
ERROR - ILLEGAL REQUEST PARAMETER AT LOCATION XXXX	Debugging problem, fatal error. The monitor request contains the illegal parameter. Call for program maintenance.	0006
ERROR - ILLEGAL MONITOR REQUEST AT LOCATION xxxx	Debugging problem, fatal error. The monitor request at hexadecimal xxxx is not available to CCS. Call for program maintenance.	0005
ERROR IN COMPUTING MM WORD ADDR	Debugging problem, fatal error. The file manager has an internal error. Call for program maintenance.	0071
ERROR STATUS xxxx DURING GETS OF FILE xxxxxxxx		0022
ERROR STATUS xxxx DURING FORCE FILE CLOSE		0023
ERROR STATUS xxxx DURING READER OF FILE xxxxxxxx	Debugging problem. Find the status bit meanings in the file manager reference manual. Call for program maintenance to take appropriate action. Value xxxx is in hexadecimal format.	0021
ERROR STATUS xxxx DURING CLOSE OF FILE xxxxxxxx		0020
ERROR STATUS xxxx DURING OPEN OF FILE xxxxxxxx		0019
FCB INDEX OUT OF RANGE	Status command error. Call for program maintenance.	0058
FILE COULD NOT BE LOCATED	Check for erroneous file, owner and/or, volume, name. Retry.	0034
FILE FORMERLY OPENED FOR COMPRESSION	The file cannot be used until compression is completed. Try again later.	0072
FILE IS CURRNTLY LOCKED	Locked file cannot be used. Try again later.	0042
FILE IS CURRENTLY OPEN	The file cannot be used by this owner at this time. Try again later.	0038

Message	Meaning and Action	Index
FILE NAME/OWNER NOT UNIQUE	Check for erroneous file, owner, and/or volume name. If correct, rename the file.	0057
FILE REQUEST BUFFER NOT PROPERLY INITIALIZED		0079
FILE REQUEST ILLEGAL		0037
FILE REQUEST BUFFER NOT INITIALIZED	Illegal file manager request. Call for program maintenance.	0059 '
FILE REQUEST REJECTED		0033
FILE SPECIFIED SHOULD BE A DIRECT FILE	Copy error. Redefine the file into which data is to be copied as a direct file.	0800
FILE TYPE NOT EQUAL	Check for erroneous file name or improper file definition. Correct and retry.	0066
HOST NAME NOT FOUND	Cannot perform SET request because host name is not in \$\$HOST file	0401
ITOS LOG OFF hh:mm:ss	Information only. Time in hour, minute, and second format.	0014
ILLEGAL COMMAND FORMAT	Re-enter the command correctly.	0032
ILLEGAL GETFLD STATUS	Utility error. Call for program maintenance.	0040
ILLEGAL LOG IN	Check password and user ID and proper terminal (\$\$). Then retry logging on the operation.	0016
ILLEGAL PARAMETER RECEIVED	Re-enter the parameter correctly.	0069
ILLEGAL TO DELETE LOCAL HOST	The host name LOCL must always be present in the \$\$HOST file.	. 0412
INDEX TOO BIG FOR UTILITY ORDERED LOAD	The files index requires more levels than the ordered LOAD module can support. Load the file with an unordered LOAD.	0082
INSUFFICIENT MM FILE SPACE	Insufficient space in the file. Compress or define the new file with more space; then copy. Rename after deleting the former file.	0055
	Insufficient space on volume. Purge and delete, or use another volume.	
INSUFFICIENT FID SPACE FOR FILES	Ran ot of total mass memory space. Purge or delete the file and retry.	0056
INTERNAL FM ERROR	Call for program maintenance.	0043
INTERNAL UTILITY ERROR	Call for program maintenance.	0070
INVALID JOB NUMBER	The format of the job number is incorrect.	0415
INVALID LOGICAL UNIT	The specified logical unit is not valid for the request.	0408
INVALID OWNER IDENTIFICATION	The file owner specified in the BATCH command is invalid.	0416
INVALID SYSTEM PERIPHERAL NAME	Re-enter the proper peripheral name	0063
JOB ALREADY DISCARDED	Cannot discard this job because it is already discarded	0417

Message	Meaning and Action	Index
JOB INACTIVE	Cannot discard this job because it does not exit	0420
JOB NOT FOUND	The job number specified does not exist.	0419
JOB(S) PENDING FOR THIS HOST	A DEL cannot be performed on this host because it is currently being processed.	0406
LOGICAL UNIT ALREADY SET FOR THIS HOST	Cannot SET a host on this logical unit because it is already SET. Perform a SET with LU=O first.	0410
MAX, NO OF OPEN FILE, RETRY	Try again later. If this appears frequently, the operator may need to resize the table in SYSDAT.	0045
MAX. NO OF OPEN FILE FOR A SINGLE USER	Try again later. If this occurs frequently, the operator may need to resize the table in SYSDAT.	0044
MISSING PARAMETER	Supply the parameter.	0039
MM I/O ERROR WAS NOTED	File manager error. Call for program maintenance.	0035
MOUNTED VOLUME HAS OPEN FILES	Tried to dismount while volume was being used. Take the status to determine file(s) are open. Close, if necessary having users log off the terminals, and then retry.	0050
NO *JOB RECORD IN THE INPUT FILE	A *JOB record for job number tagging was not found in the input file.	0414
NO JOBS TO PRINT	There are no jobs in the print queue for this host.	0421
NO KEY ENTERED FOR INDEXED FILES	Missing parameter for DEFINE. Enter the primary key at a minimum.	0054
NO ROOM IN BATCH FILE	All queue entries for the host are used. Either start processing the host jobs, or discard jobs which have already been processed.	0413
NO ROOM IN HOST FILE	Cannot add any more host names. Delete the unused or inactive names.	0400
NO SUCH HOST	The host name specified in the PRINT request does not exist.	0422
NOTICE - THE CCS SYSTEM HAS BEEN DISABLED	Informational only. System can be restarted from the master terminal.	0009
OUT OF ORDER PRIMARY KEY	A record's primary key value was not greater than the previous record's key value.	0083
OUTPUT NOT RECEIVED	Cannot dispose of the job because it has not yet been received from the host	0424
PARAMETER ENTRY ERROR	Re-enter parameter correctly.	0052
PARAMETER MUST BE ADDED OR DEL	The only options allowed are ADD and DEL.	0402
PRIMARY KEY NOT UNIQUE	LOAD: During loading of an indexed file's records, a second record was found to have a primary key identical to that of the previous record. Change the record key and load again.	0067
PROCEDURE XXXXXXXX CANNOT BE FOUND	 The procedure is not defined. The procedure does not have 80-character non-sector aligned records. An error occured while trying to get the file. If an error was caused by 1 or 2 verify the procedure; if not, call for program maintenance. 	0024

Message	Meaning and Action	Index
PROGRAM ABORTED	Informational only. CONTROL A has been accepted and executed.	0012
RECORD IS LOCKED BY ANOTHER USER	Try again later.	0078
RECORD LOCK-TABLE IS CURRENTLY FULL	Try again later. If this occurs frequently, the operator may need to resize the table in SYSDAT.	0077
RECORD LENGTH TOO LARGE FOR THIS COMMAND	Records cannot be larger than 512 characters for LIST, COPY, LOAD, DUMP, and RELOAD.	0064
RECORD LENGTH NOT EQUAL	COPY error. Redefine the file into which records are to be copied so that the record length is the same size as the other file. Then retry.	0065
REQUEST XXXXXXXX CANNOT BE FOUND	xxxxxxxx is neither a procedure nor a program name. Re-enter the correct name.	0017
REQUESTED COMMAND IS NOT LEGAL	Check for an erroneous command. Re-enter the correct command.	0031
REQUESTED UTILITY PROCESSOR NOT FOUND	Installation error or internal error that removed a utility program from the library. Call for program maintenance.	0030
TAPE RECORD EXCEEDS INTERNAL BUFFER SIZE	The tape being reloaded was dumped on a system with a larger I/O buffer than this system.	0081
THIS COMMAND IS ALLOWED ONLY IF CCS IS DISABLED	CCS must be stopped to execute PURGE and SAVE. Stop the system and re-enter the request.	0075
THIS IS A SUPERVISOR COMMAND ONLY	Re-enter the command from the master terminal.	0076
THIS VOLUME IS DISMOUNTED	An internal utility error. Call for program maintenance.	0049
UNDEFINED FM STATUS ERROR	Bits are in the status word that should not be there. Call for program maintenance.	0060
VIT COULD NOT BE FOUND	Invalid DK or D2 parameter. Correct the parameter and re-enter.	0041
VOLUME 2 MAY NOT BE MOUNTED	The volume onto which another volume is being saved cannot be mounted. Dismount the volume and retry.	0073
VOLUME HAS OPEN FILES	Tried to dismount while the volume was being used. Take status to find which file(s) are open. Close files, if necesary having users log off the terminals. Then retry.	0053
VOLUME SPECIFIED NOT MOUNTED AND READY	Check for an erroneous volume name. Otherwise, mount the correct volume.	0036
VOLUME SPECIFIED MOUNTED AND READY	Informational only. Volume is now mounted and ready for use.	0048
WRONG KEY VALUE	A file manager error occurred during the creation of file. Call for program maintenance.	0068
WRONG MM UNIT DEFINED	Error in the DK or D2 parameter. Correct and retry.	0047
WRONG VOLUME MOUNTED	MOUNT used the wrong volume name. The volume on the specified disk drive has not been mounted. Check for a wrong name or wrong disk pack, and take appropriate action. Then retry.	0051

TABLE L-10. CCS DIAGNOSTIC MESSAGES (Contd)

Message	Meaning and Action	Index
Unused numbers	These numbers should never appear.	0025- 0029, 0090- 0100, 0261- 0300, 0404

EDITOR DIAGNOSTIC MESSAGES

TABLE L-11. EDITOR DIAGNOSTIC MESSAGES

Message	Meaning and Action	Index
AN ERROR OCCURRED WHEN BUILDING THE STATEMENT TABLE INDEX	The internal index for line numbers failed. Use the GET command again. If this does not correct the error, log off and relog onto the terminal; then call the editor again.	0304
AN ERROR OCCURRED WHEN INIT- IALIZING THE EDITOR ISTAT - xxxx	The editor cannot operate. Call the editor again. The ISTAT value is a file manager status word in hexadecimal format.	0336
CHARATER STRING TOO LONG	More than 20 characters in a string. Correct the SEARCH or CHANGE command, and re-enter the command.	0317
COMMAND NAME NOT UNIQUE	Add at least one more character to the editor command call being used, and re-enter the command.	0308
COULD NOT LOCATE FILE filename USER owner id	The file name was not defined, or the operator onto the terminal with a user ID that does not permit access to this file.	0332
DELIMITER MISSING	Correct the CHANGE or SEARCH command, and re-enter it.	0316
FILE filename IS NOT EDITOR FILE	The file must be a direct file if created by UTIL. Otherwise, it must be a sequential file with 80-character records.	0303
FILE filename IS LOCKED. TRY AGAIN LATER	Someone else locked the file for updating. Try again later.	
FILE MANAGER ERROR IN STATEMENT LABEL INDEX FILE ISTAT =xxxx	A file manager problem. Find the status bit in the file manager reference manual. Call for program maintenance to take appropriate action. The ISTAT value is in hexadecimal format.	0337
FILE MANAGER ERROR WHEN CLOSING FILE filename ISTAT=xxxx	Same as above.	0339
FILE MANAGER ERROR WHEN CLOSING SCRATCH FILE ISTAT=xxxx	Same as above.	0346
FILE MANAGER ERROR WHEN CREATING SCRATCH FILE ISTAT=xxxx	Same as above	0343
FILE MANAGER ERROR WHEN DELETING FROM FILE filenames ISTAT=xxxx	Same as above	0335
FILE MANAGER ERROR WHEN INITIAL- IZATING SCRATCH FILE ISTAT=xxxx	Same as above	0340

Message	Meaning and Action	Index
FILE MANAGER ERROR WHEN OPENING FILE filename ISTAT=xxxx	Same as above	0331
FILE MANAGER ERROR WHEN OPENING SCRATCH FILE ISTAT=xxxx	A file manager problem. Find the status bit in the file manager reference manual. Call for program maintenance to take appropriate action. The ISTAT value is in hexadecimal format.	0344
FILE MANAGER ERROR WHEN READING FILE filename ISTAT=xxxx	Same as above.	0334
FILE MANAGER ERROR WHEN RENAMING SCRATCH FILE ISTAT=xxxx	Same as above.	0347
FILE MANAGER ERROR WHEN UPDATING FCB FILE ISTAT=xxxx	Same as above.	0338
FILE MANAGER ERROR WHEN UPDATING FILE filename ISTAT=xxxx	Same as above.	0342
FILE MANAGER ERROR WHEN UPDATING FILE filename ISTAT=xxxx	Same as above.	0341
FILE MANAGER ERROR WHEN WRITING SCRATCH FILE ISTAT=xxxx	Same as above.	0345
ILLEGAL LINE NUMBER xxxxx	No file or less than 8 characters. Re-enter the proper name.	0305
ILLEGAL LINE NUMBER xxxxxx SPECIFIED	An illegal character (not a numeral) in the current line number was filed. Re-enter the line number.	0301
INCORRECT TAB STOP ORDER	Tabs must be in ascending order. Re-enter the tabs in that order.	0313
INVALID COMMAND	Not the name of an editor command. Re-enter a proper command name.	0309
INVALID DELIMITER	Used a comma (,) as a delimiter. Choose another character for the delimiter, and re-enter the command.	0315
INVALID FIELD	Information in the parameter field cannot be interpreted, or the field is too large. Correct and re-enter.	0306
INVALID FORMAT SPECIFICATION	AUTO command: t must be a blank or one of H, F, E, L, I, C, O, or *. Re-enter using a valid t value.	0311
INVALID NUMERIC VALUE	nn, ii in AUTO; nn ii in RESEQ; n in STAB; n in LINE; or k (1), k (2) in LIST were not pure numerics; or the value was too large. Correct and re-enter.	0307
INVALID RPG ARRAY DATA LINE NUMBER	*format for AUTO or STAB: Consecutive line numbers must ascend in value. Re-enter in the correct order.	0314
LINE NUMBER OVERFLOW	The line number was greater than 32,767.	0312
NO FILE OPEN FOR EDITOR USE	Enter a GET command to open the file.	0319
NO PROGRAM ID ON H FORMAT SPECIFICATION	AUTO: must supply the P parameter if t = H. Re-enter AUTO with P specified.	0302
REQUENCE WITH A LOWER BASE AND/ OR INCREMENT	Resequencing with the specified base and/or increment caused a line number overflow. Choose a smaller base or increment.	0318
SAVRTN STACK OVERFLOW	Not used	0320

TABLE L-11. EDITOR DIAGNOSTIC MESSAGES (Contd)

Message	Meaning and Action	Index
SAVRTN STACK UNDERFLOW	Not used	0321
WRONG FORMAT TYPE FOR THIS FILE	The t parameter is incorrect. An RPG format was used for a non-RPG file, or the reverse. Re-enter the proper command, or use the proper format for the command entered.	0310
Unused numbers	These numbers should never appear.	0322- 0330, 0348, 0349

SORT UTILITY DIAGNOSTIC MESSAGES

TABLE L-12. SORT UTILITY DIAGNOSTIC MESSAGES

Message Meaning and Action		Index
aaaa	Numerical data with a prefix	0362
aaaa	A card image. Appears with any other message specifying the error.	0370
ABNORMAL ERROR = (error)	An unusual error condition was detected.	0360
ADDROUT SORTS ONLY 1 FILE	Use only one input file for an ADDROUT sort.	0378
BLKSIZ/RECLTH .N. 1,2,3	The record length parameter is not a divisor of the block size parameter. $\hfill \hfill $	0361
CANNOT OPEN INPUT FILE	Cannot sort the requested file since it cannot be opened to read	0367
CLOSFL REQIND = \$xxxx	The status word for the CLOSFFL operation when CLOSFL failed	0350
CREATE REQIND = \$xxxx	The status word for the CREATE operation when CREATE failed	0353
DELETE REQIND = \$xxxx	The status word for the DELETE operation when DELETE failed	0352
DONE=(number)	The number of records processed	0364
EXEPECTED aaaa FOUND bb	Sort did not find the type of parameter exepected. Sorting is aborted.	0366
FATAL ERROR	The sorting operation was aborted.	0363
FILNAM = aaaaaaaa, bbbbbbbb	The file name owner (reconstructed)	0376
FN = aaaaaaaa, bbbbbbbb	The input file name owner (input and output)	0359
GETFCB REQIND = \$xxxx	The status word for the GETFCB operation when GETFCB failed	0356
GETS REQIND = \$xxxx	The status word for the GETS operation when GETS failed	0354
INTERPHASE RECORD COUNTS DISAGREE	The number of output records does not equal the number of input sort records.	0369
INPUT FILE LENGTHS ARE NOT EQUAL	Cannot sort files of unequal lengths	0375

TABLE L-12. SORT UTILITY DIAGNOSTIC MESSAGES (Contd)

Message	Meaning and Action	Index
KEY FIELD EXTENDS BEYOND END OF RECORD	The key ends outside of the record.	0381
OPENFL REQIND = \$xxxx	The status word for the OPENFL operation when OPENFL failed	0351
OUTPUT FILE RECORD LENGTH IS ZERO	The data-only sort option where all of the input record was used for keys	0377
OUTPUT RECORD COUNT BAD	An improper number of records in the output file	0374
PASSED = (number)	The specified number of records was either processed or skipped.	0371
PUTS REQIND = \$xxxx	The status word for the PUTS operation when PUTS failed	0355
SEQ. DIR. ERROR	The sequence directory read or write error	0372
START OF KEY FIELD OUTSIDE OF RECORD	The key position starts before or after the record.	0380
TOO LITTLE-CORL	The requested inputs cannot be processed in the amount of core space available.	0368
TOO LITTLE DISK	The disk space is inadequate for the sorting operation.	0373
TYPE-IN ERROR	Sort cannot interpret the command statement in the procedure stream.	0365
UPDFCB REQIND = \$xxxx	The status word for the UPDFCB operation when UPDFCB failed	0357
VOLUME=(name)	The volume name	0358
VOLUME (name) NOT MOUNTED	The volume specified for the output file is not mounted.	0379

All screens available in CCS are also available in the LA system.

The following represents either screens unique to the LA system or modifications to existing screens.

These screens must not be modified by the user.

A = AUTOMATIC
B, NAME = NAME
N, # = ACCOUNT NUMBER
C, NAME = COSIGNER NAME
P = PAYMENT ENTRY
E = EXIT

PLEASE ENTER SELECTION

Figure M-1. Selection Screen

	PAYMENT ENTRY SCREEN #1				
ITEM	ACCOUNT #	LEGAL #	TYPE	DATE	AMOUNT
01 02 03 04	0123456789012345 0246981246924821 1146892168435890 1146892168435890	LG01 AA04 0003 0003	02 03 05 05	06/19/79 06/19/79 06/20/79 06/20/79	11.22 22.44 44.11 34.11

PLEASE ENTER FUNCTION DESIRED

Figure M-2. Legal and Agency Payment Entry Screen

STATEMENT BALANCE

TOTAL ITEMS ENTERED = 4 TYPE TYPE **TOTAL AMOUNT** NO. TRANSACTION DIRECT 01 11.22 02 INDIRECT 03 NON-RECOVERABLE COURT COSTS 22.44 RECOVERABLE COURT COSTS 04 **FEES** 10.00 05 ENTER OK TO ACCEPT DATA-UPDATE RECORDS TO REVIEW TRANSACTIONS TO ABORT ROUTINE-NO UPDATE

Figure M-3. Legal and Agency Statement Balance Screen

CLIENT SELECTION SCREEN

A, NAME = CLIENT NAME SEARCH

N, # = CLIENT NUMBER RETRIEVAL

S, # = CLIENT STATUS INQUIRY/UPDATE

E = EXIT

PLEASE ENTER SELECTION

Figure M-4. Legal and Agency Client File Selection Screen

CLIENT # LA01 CLIENT CHANGE SCREEN 01,FIRM NAME JONES AND BARKER 02,FIRM ADDRESS 1 2891 THIRD STREET 03,FIRM ADDRESS 2 SAN DIEGO CALIF 92117 04, CONTACT NAME TOM SMITH 05, TELEPHONE 714/753-2211 06,EXTENSION 3333 07, CURR COMM RATE 050 08, PREV COMM RATE ENTER CHANGE ITEM OR NEXT FUNCTION

Figure M-5. Legal and Agency Client File Change Screen

#	AMT	AMT	#	AMT	COMM	#	AMT	#	COURT	HISTORY	
ACCT	ACCT	COL	PIF	PIF	EARNED	CLD	CLD	ACT	COSTS	MO/YR	
									0000050	06/78	
001 0	000087					001	0000082		0000 050	05/78 04/78 03/78	
		0000026			0000005	001	0000000			02/78 01/78	
		0000030		i e						12/77	
										,	
										/	
001 C	000087	0000056	000	0000000	0000005	001	0000082	000	0000050	12 MONTH SUMMARY	

Figure M-6. Legal and Agency Client File Financial Screen

```
L/A CLIENT # ( )

CURRENT CLIENT STATUS IS * ACTIVE *

ENTER NEW STATUS OR CR TO CONTINUE
```

Figure M-7. Legal and Agency Client Status Screen (Active)

```
L/A CLIENT # ( )

CURRENT CLIENT STATUS IS * INACTIVE *

ENTER NEW STATUS OR CR TO CONTINUE
```

Figure M-8. Legal and Agency Client Status Screen (Inactive)

LEGAL AND AGENCY SCREENS IN SCREEN ORDER

- 01 END OF DAILY ASSIGNMENTS
- 02 COLLECTION ACTIVITY SCREEN
- 04 COSIGNER'S SCREEN, PART 1
- 08 LEGAL AND AGENCY PAYMENT ENTRY SCREEN
- 09 LEGAL AND AGENCY STATEMENT BALANCE SCREEN
- 10 ACCOUNT MASTER SCREEN
- 20 FINANCIAL SCREENS
- 30 LOG IN PROMPT SCREEN
- 31 SELECTION SCREEN
- 33 BORROWER'S CHANGE SCREEN
- 34 COSIGNER NAME SEARCH DISPLAY SCREEN
- 35 SUPERVISOR SCREEN
- 36 SELECTION SCREEN, ACCOUNT BUSY
- 37 SELECTION SCREEN, ACCOUNT NOT FOUND
- 38 SELECTION SCREEN, ACCOUNT NOT IN ALLOWED QUEUE
- 39 SELECTION SCREEN, ACCOUNT NOT FOUND COSIGNER SEARCH
- 40 'NO ACTIVITY ALLOWED ON THIS ACCOUNT, PLEASE ENTER NEXT FUNCTION'
- 41 'NO ACTIVITY ALLOWED ON THIS ACCOUNT, PLEASE ENTER NEXT ITEM, CHANGE, OR NEXT FUNCTION'
- 42 'FORMAT ERROR, ENTER NEXT FUNCTION OR ACTION, RESULT, LETTER REQUEST, COMMENT'
- 43 'FORMAT ERROR, ENTER ITEM, CHANGE OR NEXT FUNCTION OR ACTION, RESULT, LETTER, COMMENT'
- 44 'COMMENT TOO LONG, ENTER NEXT FUNCTION OR ACTION, RESULT, LETTER REQUEST, COMMENT'
- 45 'COMMENT LONG, ENTER ITEM, CHANGE OR NEXT FUNCTION OR ACTION, RESULT, LETTER, COMMENT'
- 46 'INV ALID RESULT, ENTER NEXT FUNCTION OR ACTION, RESULT, LETTER REQUEST, COMMENT
- 47 'INVALID RES, ENTER ITEM, CHANGE OR NEXT FUNCTION OR ACTION, RESULT, LETTER, COMMENT
- 48 'PLEASE ENTER PROMISED TO PAY DATE, AMOUNT'
- 49 'FORMAT ERROR, PLEASE REENTER PROMISED TO PAY DATE, AMOUNT'
- 50 'INVALID DATE, PLEASE REENTER PROMISED TO PAY DATE, AMOUNT'
- 51 'INVALID AMOUNT, PLEASE REENTER PROMISED TO PAY DATE, AMOUNT'
- 52 PROMISED TO PAY AMOUNT/DATE DISPLAY SCREEN
- 53 'PLEASE ENTER ADDRESSEE CODE, LETTER CODE, LETTER DATE, LETTER AMOUNT
- 54 'FORMAT ERROR, REENTER ADDRESSEE CODE, LETER CODE, LETTER DATE, LETTER AMOUNT'
- 55 'INVALID ADDRESSEE, REENTER ADDRESSEE CODE, LETTER CODE, LETTER DATE, LETTER AMOUNT'
- 56 'INVALID LETTER CODE, REENTER ADDRESSEE, LETTER CODE, LETTER DATE, LETTER AMOUNT'
- 57 'INVALID LETTER DATE, REENTER ADDRESSEE, LETTER CODE, LETTER DATE, LETTER AMOUNT'

- 'INVALID LETTER AMOUNT, REENTER ADDRESSEE, LETTER CODE, LETTER DATE LETTER AMOUNT'
- ADDRESSEE CODE, LETTER CODE/DATE/AMOUNT DISPLAY SCREEN
- 'A COMMENT IS REQUIRED, PLEASE ENTER ONE'
- 'COMMENT ENTERED IS TOO LONG, PLEASE REENTER' 61
- 'PLEASE ENTER NEXT CONTACT DATE' 62
- 'INVALID DATE, PLEASE REENTER NEXT CONTACT DATE'
- 'INV ALID DATE, ENTER ITEM, CHANGE OR NEXT FUNCTION OR ACTION, RESULT, LETTER, COMMENT'
- NAME SEARCH PROMPT SCREEN
- 67 LA COMPOSITE OF MESSAGE SCREENS
- 'PLEASE ENTER ACTION CODE' חל
- 'PLEASE ENTER RESULT CODE' 71
- 'INVALID ACTION, ENTER NEXT FUNCTION OR ACTION, RESULT, LETTER, REQUEST, COMMENT'
- 'INV ALID ACT, ENTER ITEM, CHANGE OR NEXT FUNCTION OR ACTION, RESULT, LETTER, COMMENT'
- 'PLEASE ENTER PROMISED TO PAY DATE 74
- 'INVALID DATE, PLEASE REENTER PROMISED TO PAY DATE'
- 'PLEASE ENTER PROMISED TO PAY AMOUNT'
- 'INVALID AMOUNT, PLEASE REENTER PROMISED TO PAY AMOUNT' 77
- 'PLEASE ENTER LETTER CODE'
- 'A LETTER IS REQUIRED, PLEASE ENTER LETTER CODE'
- 'INVALID LETTER CODE, PLEASE REENTER LETTER CODE' 80
- 'PLEASE ENTER ADDRESSEE CODE' 81
- 82 'INVALID ADDRESSEE CODE, PLEASE REENTER ADDRESSEE CODE'
- 'PLEASE ENTER LETTER DATE'
- 'INVALID DATE, PLEASE REENTER DATE' 84
- 'PLEASE ENTER LETTER AMOUNT'
- 86 LETTER DATE/AMOUNT DISPLAY SCREEN
- 'PLEASE ENTER COMMENT'
- PROMISED TO PAY AMOUNT/DATE DISPLAY SCREEN
- 91 *** CLIENT FILE MAINTENANCE SELECTION SCREEN
- 92 *** CLIENT FILE MAINTENANCE CHANGE SCREEN
- 93 *** CLIENT FILE MAINTENANCE FINANCIAL SCREEN
- 94 COSIGNER'S SCREEN, PART 2 .
- 95 *** CLIENT FILE MAINTENANCE NEW CLIENT MESSAGE
- 96 *** CLIENT FILE MAINTENANCE SELECTION SCREEN, RECORD BUSY 97 *** CLIENT FILE MAINTENANCE ACTIVE CLIENT STATUS SCREEN
- 98 *** CLIENT FILE MAINTENANCE INACTIVE CLIENT STATUS SCREEN

LEGAL AND AGENCY MENUS AND **PROCEDURES**

This appendix lists the menus maintained in an LA system. It also lists the procedure stream that is executed when each selection is made from the various menus. These menus, plus those described for CCS, constitute a CCS/LA system.

SYSTEM MENU

REOUEST = > ?

LEGAL AND AGENCY SYSTEM MENU

- SC SYSTEM CONFIGURATOR
- UT SYSTEM UTILITIES
- ED TEXT EDITOR-USED TO EDIT 80 CHARACTER SEQ OR DIRECT FILES DC CCS20 DAILY CYCLE, ON-LINE REPORTING AND PREPARATION HS CCS20 HISTORY FILE MAINTENANCE ROUTINES
- MT CCS20 SYSTEM FILE MAINTENANCE ROUTINES
- RP CCS20 ON-DEMAND REPORTING
- RP CC320 ON-DEMAND REPORTING
 RG CC320 REPORT GENERATOR REPORT DIRECTORY
 LD LA DAILY CYCLE, ON-LINE REPORTING AND PREPARATION
 LH LA HISTORY SYSTEM PROCEDURES
 LM LA SYSTEM FILE MAINTENANCE ROUTINES

- LO LA ON-DEMAND REPORTING
- LR LA REPORT GENERATOR REPORT DIRECTORY
- EX EXIT

REQUEST =>

LEGAL AND AGENCY DAILY CYCLE MENU

REQUEST => LD

LEGAL AND AGENCY DAILY CYCLE MENU

- DAILY COLLECTOR ACTIVITY REPORTS
- PRINT REQUESTED LETTERS
- ADD THE COLLECTOR ACTIVITIES TO THE ACTIVITY FILE
- PROCESS COMPLETE UPDATE TAPE(S) FROM A/R SYSTEM
- PROCESS 400 SERIES NONFINANCIAL UPDATE (TAPE)S PROCESS 500 SERIES FINANCIAL UPDATE TAPE(S)

- DELINQUENT RECORD CONTENT REPORT (INACTIVE ACCOUNTS)
 DELINQUENT RECORD CONTENT REPORT (SUPERVISOR REQUESTS)
 UPDATE ACCOUNTS FROM HISTORY
- J** THE FOLLOWING PROCEDURES ARE TO BE RUN WHEN COLLECTORS
- K** ARE FINISHED WITH THE DAYS ACTIVITIES
 L SORT TRANSACTION FILE IN PROPER ORDER FOR COLLECTOR REPORT
- CREATE DAILY ASSIGNMENT FILES
- NIGHTLY BATCH UPDATE
- LA EXTRACT PROCESS EXIT 0

SELECTION =>

SELECTION A

A - DAILY COLLECTOR ACTIVITY REPORTS

```
CHECKID
                                - DAILY COLLECTOR UPDATE REPORT
 * THIS ROUTINE WILL PRINT
                                - TIME USAGE REPORT
                                - DAILY COLLECTOR STATISTICS
INPUT=PRFLD001
UTIL
CLEAR, FN=LADLYWRK
ΕX
* LATRNSFL FILE IS NOW BEING SORTED
INPUT=PRFLD001
DSORT
FN=LATRNSFL, LA
F2=LATRNSFL,LA,
OP=T,F,A
KF=A,29,2,A,17,4,A,135,4,A,25,4,A,1,16,A,134,1
SL=I
* THE LATRNSFL FILE HAS BEEN SORTED
* THE DAILY COLLECTOR UPDATE REPORT WILL BE PRINTED
LCOLCG
 * THE DAILY COLLECTOR UPDATE REPORT IS COMPLETE
* THE TIME USAGE REPORT WILL BE PRINTED
* THE TIME USAGE REPORT IS COMPLETE INPUT=PRFLD001
SWITCH
10000000
 * THE DAILY STATISTICS REPORT WILL BE PRINTED
LCOLST
       THE DAILY STATISTICS REPORT IS COMPLETE
 ****
       OPERATOR -
 *
       RESPOND: 'N' CARRIAGE RETURN - TO BYPASS ZEROING THE DAILY COUNT
                  CARRIAGE RETURN ONLY - TO ZERO THE DAILY COUNT
CCSPAS
INPUT=PRFLD001
SWITCH
00010000
LCOLST
 * THIS ROUTINE IS COMPLETE
 * MNUPRO
SELECTION B
B - PRINT REQUESTED LETTERS
CHEKID
 * THE TRANSACTION FILE WILL BE SORTED FOR PRINTING OF LETTERS
INPUT=PRFLD002
DSORT
```

```
FN=LATRNSFL, LA
F2=LATRNSFL,LA,
OP=T,F,A
KF=A,17,4,A,41,2,A,1,16
SL=I
 **** OPERATOR
                 - LOAD LETTER PAPER
                    CARRIAGE RETURN WHEN READY TO CONTINUE
```

CCSPAS

```
* THE REQUESTED LETTERS WILL BE PRINTED
LLTPRT
 * THE REQUESTED LETTERS HAVE BEEN PRINTED
 ****OPERATOR
               - LOAD REGULAR PAPER
                   CARRIAGE RETURN WHEN READY TO CONTINUE
CCSPAS
LLTSTA
MNUPRO
SELECTION C
C - ADD THE COLLECTOR ACTIVITIES TO THE ACTIVITY FILE
```

* THE COLLECTOR ACTIVIES WILL BE ADDED TO THE ACTIVITY FILE INPUT=PRFLD003 DSORT FN=LATRNSFL, LA F2=LATRNSFL,LA, OP=T,F,A KF=A,29,2,A,21,4,D,25,4,D,121,2 SL=I LACTAD * THE COLLECTOR ACTIVITIES HAVE BEEN ADDED TO THE ACTIVITY FILE * THE SUMMARY REPORT OF THE BLOCK DISTRIBUTION IN THE ACTIVITY FILE

- * WILL BE PRINTED

LACTMT

- * THE SUMMARY REPORT OF THE BLOCK DISTRIBUTION IN THE ACTIVITY FILE
- * HAS BEEN PRINTED

MNUPRO

MNUPRO

SELECTION D

D - PROCESS COMPLETE UPDATE TAPE(S) FROM A/R SYSTEM

****OPERATOR -MOUNT UPDATE INPUT TAPE ON TAPE UNIT 'O' * CARRIAGE RETURN WHEN READY TO CONTINUE * **CCSPAS** INPUT= PRFLD004 SWITCH 10000000 * THE UPDATE TAPE WILL BE PROCESSED LUPDAT * THE UPDATE TAPE HAS BEEN PROCESSED * THE FILE SPACE AUDIT REPORT WILL NOW BE PRINTED **** OPERATOR - CARRIAGE RETURN TO CONTINUE AFTER REVIEWING SCREEN INFORMATION **LCCSSP CCSPAS**

* THE FILE SPACE AUDIT REPORT IS COMPLETE

SELECTION E

E - PROCESS 400 SERIES NONFINANCIAL UPDATE TAPE(S)

CHEKID

- * THE NONFINANCIAL UPDATES WILL BE PROCESSED
- **** OPERATOR -NONFINANCIAL UPDATE TAPE SHOULD BE MOUNTED ON UNIT '0' CARRIAGE RETURN WHEN READY TO CONTINUE

CCSPAS

INPUT=PRFLD005

SWITCH

10000000

LUD400

* THE NONFINANCIAL UPDATES HAVE BEEN PROCESSED

MNUPRO

SELECTION F

F - PROCESS 500 SERIES FINANCIAL UPDATE TAPE(S)

CHEKID

- * THE FINANCIAL UPDATES WILL BE PROCESSED
 **** OPERATOR FINANCIAL UPDATE TAPE SHOULD BE MOUNTED ON UNIT 'O'

INPUT=PRFLD006

MOUNT

SWITCH

10000000

INPUT=PRFLD006

FTAPE,B,P

* THE FINANCIAL UPDATES HAVE BEEN PROCESSED

MNUPRO

SELECTION G

G - DELINQUENT RECORD CONTENT - (INACTIVE ACCOUNTS)

CHEKID

INPUT=PRFL0001

SWITCH

10000000

- * DELINQUENT RECORD CONTENT REPORT WILL NOW BE PRINTED
- * THE ACCOUNTS BEING PRINTED ARE THE INACTIVE ACCOUNTS NOT PREVIOUSLY

* PRINTED

LDTLST

* THE DELINQUENT RECORD CONTENT REPORT IS COMPLETE

MNUPRO

SELECTION H

H - DELINQUENT RECORD CONTENT RECORD - (SUPERVISOR REQUESTS)

CHECK ID

INPUT=PRFL0002

SWITH

01000000

- * DELINQUENT RECORD CONTENT REPORT WILL NOW BE PRINTED
- * THE ACCOUNTS BEING PRINTED WERE REQUESTED BY THE SUPERVISOR

LDTLST

INPUT=PRFL0002

UTIL

CLEAR, FN=LASREQDL

* THE DELINQUENT RECORD CONTENT REPORT IS COMPLETE

MNUPRO

SELECTION I

I - UPDATE ACCOUNTS FROM HISTORY

CHEKID

* THE ACTIVE ACCOUNTS WILL BE UPDATED FROM HISTORY

LDHUPD

* THE ACTIVE ACCOUNTS HAVE BEEN UPDATED FROM HISTORY MNUPRO

SELECTION J

J** THE FOLLOWING PROCEDURES ARE TO BE RUN WHEN THE COLLECTORS

CHEKID

* WARNING: DO NOT SELECT 'L' OR 'M' FROM THE DAILY CYCLE MENU UNTIL * THE COLLECTORS ARE OFF-LINE FOR THE DAY

MNUPRO

SELECTION K

K** ARE FINISHED WITH THE DAYS ACTIVITIES

CHECKID

DO NOT SELECT 'L' OR 'M' FROM THE DAILY CYCLE MENU UNTIL * WARNING:

* THE COLLECTORS ARE OFF-LINE FOR THE DAY

MNUPRO

SELECTION L

L - SORT TRANSACTION FILE IN PROPER ORDER FOR COLLECTOR REPORT

CHECKID

**** OPERATOR -THE COLLECTORS MUST BE OFF-LINE

RESPOND:

'N' CARRIAGE RETURN - TO ABORT CARRIAGE RETURN ONLY - TO CONTINUE

CCSPAS

*

* THE TRANSACTION FILE WILL BE SORTED FOR THE COLLECTORS REPORT

INPUT=PRFLD010

UTIL

CLEAR, FN=LATRNSFL

INPUT=PRFLD010

DSORT

FN=LATRANFL.LA

F2=LATRNSFL,LA,

OP=T,F,A

KF=A,29,2,A,17,4,A,1,16,A,21,4,A,25,4,A,137,2

SL=I

LPRTSR

INPUT=PRFLD010

UTIL

CLEAR, FN=LAACTIVE

CLEAR, FN=LATRANFL

CLEAR, FN=LATRNBCK

* THE TRANSACTION FILE HAS BEEN SORTED FOR THE COLLECTORS REPORT

LNMCHG

INPUT=PRFLD010

UTIL

CLEAR, FN=LAADDACT

ΕX

MNUPRO

SELECTION M

M - CREATE DAILY ASSIGNMENT FILES

```
CHEKID
                      THE COLLECTORS MUST BE OFF-LINE
 **** OPERATOR -
 *
                      RESPOND:
                                    'N' CARRIAGE RETURN - TO ABORT
                                    CARRIAGE RETURN ONLY - TO CONTINUE
 *
CCSPAS
 * THE DAILY ASSIGNMENT FILES WILL BE CREATED
 * THE LADLYASN FILE IS BEING CREATED
LDACRT
 * THE LADLYASN FILE HAS BEEN CREATED
 * THE LADLYASN FILE IS BEING SORTED
INPUT=PRFLD011
DSORT
FN=LADLYWRK,LA
FN=LADLYASN, LA
F2=LADLYASN, LA,
OP=T,F,A
KF=A,17,4,A,25,2,A,21,4,D,27,4,A,1,16
 * THE LADLYASN FILE HAS BEEN SORTED
INPUT=PRFLD011
UTIL
CLEAR, FN=LADAQUE
ΕX
 * THE DAILY QUEUE FILE IS BEING CREATED
LDAQEL
* THE DAILY QUEUE FILE HAS BEEN CREATED

* THE FILE SPACE AUDIT REPORT WILL NOW BE PRINTED

**** OPERATOR - CARRIAGE RETURN TO CONTINUE AFTER REVIEWING
                      SCREEN INFORMATION
LCCSSP
CCSPAS
 * THE FILE SPACE AUDIT REPORT IS COMPLETE
 * THE DAILY ASSIGNMENT FILES HAVE BEEN CREATED
MNUPRO
```

SELECTION N

N-NIGHTLY BATCH UPDATE

```
CHEKID
 *** OPERATOR -
                   THE COLLECTORS MUST BE OFF-LINE
                   RESPOND 'N' CARRIAGE RETURN - TO ABORT
*
                   CARRIAGE RETURN ONLY - TO CONTINUE
CCSPAS
 * SORT LAFILTMP AND LATRNSFL TRANSACTION FILES
INPUT=PRFLD012
DSORT
FN=LAFILTMP,LA
FN=LATRNSFL,LA
F2=LAFINTRN,,
OP=T,F,A
KF=A,1,20,A,40,4,A,50,3
SL=I
INPUT=PRFLD012
UTIL
CLEAR, FN=LAFILTMP
CLEAR, FN=LARPTDAT
ΕX
 * FINANCIAL TRANSACTIONS HAVE BEEN SORTED. BATCH UPDATE WILL BEGIN
LBATUD
 * BATCH UPDATE COMPLETE, AUDIT TRAIL REPORT WILL BEGIN
LBATPT
 * BATCH UPDATE PROCESS COMPLETE
MNUPRO
```

SELECTION O

0 - LA EXTRACT PROCESS

CHEKID

***OPERATOR THE COLLECTORS MUST BE OFF-LINE

*

RESPOND 'N' CARRIAGE RETURN - TO ABORT CARRIAGE RETURN ONLY - TO CONTINUE

CCSPAS

* THE LEGAL AND AGENCY EXTRACT PROGRAM WILL BEGIN

LAXTRT

* THE LEGAL AND AGENCY EXTRACT PROCESS IS COMPLETE

* REFERRAL REPORT WILL BEGIN

LARPRT

* REFERRAL REPORT COMPLETE

MNUPRO

LEGAL AND AGENCY HISTORY SYSTEM MENU

REQUEST=LH

LEGAL AND AGENCY HISTORY SYSTEM MENU

A - MOVE INACTIVE ACCOUNTS TO HISTORY FILES

B - UPDATE ACTIVE ACCOUNTS FROM THE TAPE ARCHIVES

C - PURGE OLDEST ACCOUNTS FROM SUMMARY HISTORY FILE D - PURGE OLDEST ACCOUNTS FROM THE TAPE ARCHIVES FILE E - PURGE MASTER FILES (LADLOMST-LACOSIGN-LAACTFIL)

F - PURGE CLIENT FILE (LACLIENT)

Z - EXIT

SELECTION =>

SELECTION A

A - MOVE INACTIVE ACCOUNTS TO HISTORY FILES

CHEKID

* THE INACTIVE ACCOUNTS WILL BE MOVED TO HISTORY

* THE INAACT FILE IS BEING SORTED INTO ACCOUNT NUMBER ORDER

INPUT=PRFLH001

DSORT

FN=LAINACCT, LA

F2=LAINTEMP, LA,

OP=T,F,A

KF=A,1,16,D,23,2,D,19,4

SL=I

INPUT=PRFLH001

UTIL

CLEAR, FN=LAINACCT

COPY, FN=LAINTEMP, F2=LAINACCT, OW=LA

DELETE, FN=LAINTEMP

ΕX

* THE LAINACCT FILE HAS BEEN SORTED INTO ACCOUNT NUMBER ORDER

**** OPERATOR - MOUNT HISTORY FILE OUTPUT TAPE ON TAPE UNIT 'O'

BE SURE TAPE HAS A WRITE RING

LMHUPD

* THE INACTIVE ACCOUNTS HAVE BEEN MOVED TO HISTORY

SELECTION B

B - UPDATE ACTIVE ACCOUNTS FROM THE TAPE ARCHIVES

```
CHEKID
 * THE ACTIVE ACCOUNTS WILL BE UPDATED FROM THE TAPE ARCHIVES
INPUT=PRFLH002
UTIL
DEFINE, FN=LAUPDREQ, ED=999999, TY=S, LR=22, NR=300
 * THE LAUPDREQ FILE WILL BE SORTED
INPUT=PRFLH002
DSORT
FN=LAUPDREQ,LA
F2=LAUPDREQ,LA,
OP=T,F,A
KF=D,21,2,D,17,4,A,1,16
SL=I
 * THE LAUPDREQ FILE HAS BEEN SORTED
INPUT=PRFLH002
UTIL
CLEAR, FN=LAUPHSCM
 **** OPERATOR -
                   YOU WILL BE PROMPTED TO MOUNT TAPES DURING THE
                    EXECUTION OF THE NEXT JOB
LCHUD2
INPUT=PRFLH002
UTIL
DELTE, FN=LAUPDREQ
* THE ACTIVE ACCOUNTS HAVE BEEN UPDATED FROM THE TAPE ARCHIVES
```

SELECTION C

C - PURGE OLDEST ACCOUNTS FROM SUMMARY HISTORY FILE

CHEKID

* THE LASUMHST FILE WILL BE PURGED LPHDL2
LCMPSM

* THE LASUMHST FILE HAS BEEN PURGED MNUPRO

SELECTION D

D - PURGE OLDEST ACCOUNTS FROM THE TAPE ARCHIVES FILE

CHEKID

* THE LATAPARC FILE WILL BE PURGED
LPHDL1
INPUT=PRFLH004
UTIL
COMPRE,FN=LATAPARC
EX

* THE LATAPARC FILE HAS BEEN PURGED
MNUPRO

SELECTION E

E - PURGE MASTER FILES (LADLQMST - LACOSIGN - LAACTFIL)

CHEKID

* THE LADLOMST, LACOSIGN AND LAACTFIL FILES WILL BE PURGED LCMPDQ

INPUT=PRFLM010

UTIL

COMPRE, FN=LACOSIGN

COMPRE, FN=LAACTFIL

* THE LADLOMST, LACOSIGN AND LAACTFIL FILES HAVE BEEN PURGED MNUPRO

SELECTION F

F - PURGE CLIENT FILE (LACLIENT)

CHEKID

- * THE CLIENT FILE WILL BE PURGED
- * THE CLIENT PURGE REPORT WILL BE PRINTED

LACLPG

* THE CLIENT FILE PURGE ROUTINES ARE COMPLETE

MNUPRO

LEGAL AND AGENCY FILE MAINTENANCE MENU (H1)

REQUEST = LM

LEGAL AND AGENCY FILE MAINTENANCE MENU

- A PRINT THE LETTER DEFINITION FILE
- B CREATE THE LETTER FILE C UTILITY FILE MAINTENANCE ADD OR UPDATE UTILITY RECORDS
- D DECISION TABLE MAINTENANCE
- E PRINT ACTIVITY VERIFICATION TABLE
- F CREATE THE ACTIVITY VERIFICATION TABLE
- G FILE SPACE AUDIT REPORTS PERCENTAGE OF UNUSED FILE SPACE
- H PURGE OLDEST ACCOUNTS FROM SUMMARY HISTORY FILE
 I PURGE OLDEST ACCOUNTS FROM THE TAPE ARCHIVES FILE
 J PRINT SCREEN DEFINITION FILE

- K CREATE THE SCREEN FILE
 L PURGE MASTER FILES (LADLQMST-LACOSIGN-LAACTFIL)
- M ACTIVITY FILE MAINTENANCE/REPORT N COLECT ACTIVE USER FILE MAINTENANCE
- O PRINT REPORT GENERATOR DATA ELEMENT TABLE
 P REPORT GENERATOR DATA ELEMENT TABLE ROUTINES-CONSOLE INPUT
 Q REPORT GENERATOR PROGRAM DIRECTORY FILE MAINTENANCE
 R SAMPLE SCREEN PRINT UTILITY

- S CLIENT FILE MAINTENANCE
- Z EXIT

SELECTION = >

SELECTION A

A - PRINT THE LETTER DEFINITION FILE

CHEKID * THE LETTER DEFINITION FILE WILL BE PRINTED INPUT=PRFLO01 UTIL LIST, FN=LALTRDSC, L=LPRINTER, F=U ΕX

* THE LETTER DEFINITION FILE HAS BEEN PRINTED

IF ANY CHANGES ARE TO BE MADE TO THE LETTER FILE ENTER THE EDITOR TO PROCESS THE LALTRDSC FILE, WHEN COMPLETE ****OPERATOR PERFORM THE NEXT MENU PROCEDURE STEP "B" CARRIAGE RETURN WHEN READY TO CONTINUE

CCSPAS MNUPRO

SELECTION B

B - CREATE THE LETTER FILE

CHEKID THE LETER FILE WILL BE CREATED INPUT=PRFLM002 UTIL CLEAR, FN=LALTRFIL ΕX LLTBLD * THE LETTER FILE HAS BEEN CREATED **MNUPRO**

SELECTION C

C - UTILITY FILE MAINTENANCE - ADD OR UPDATE UTILITY RECORDS

- * THE UTILITY FILE MAINTENANCE ROUTINE WILL BE EXECUTED
- ****OPERATOR -YOU CAN ADD, UPDATE OR DELETE UTILITY FILE RECORDS FROM THE CONSOLE
 - FOLLOW THE INSTRUCTIONS AS THEY APPEAR ON THE SCREEN

LUTFMT

* THE UTILITY FILE WILL BE LISTED ON THE PRINTER INPUT=PRFLM003

UTIL

LIST, FN=LAUTIFIL, L=LPRINTER, F=U

* CHECK PRINTER LISTING TO VERIFY THAT RECORDS ARE CORRECT

* THE UTILITY FILE MAINTENANCE ROUTINE IS COMPLETE

MNUPRO

SELECTION D

D - DECISION TABLE MAINTENANCE

CHEKID

- * THE DECISION TABLE MAINTENANCE ROUTINE WILL BE EXECUTED
- ****OPERATOR -FOLLOW THE INSTRUCTIONS AS THEY APPEAR ON THE SCREEN
- * THE DECISION TABLE MAINTENANCE ROUTINE IS COMPLETE MNUPRO

SELECTION E

E - PRINT ACTIVITY VERIFICATION TABLE

CHEKID

* THE ACTIVITY VERIFICATION TABLE WILL BE PRINTED

LAVMDP

* THE ACTIVITY VERIFICATION TABLE HAS BEEN PRINTED

MNUPRO

SELECTION F

F - CREATE THE ACTIVITY VERIFICATION TABLE

CHEKID

* THE ACTIVITY VERIFICATION TABLE ROUTINE WILL BE EXECUTED

LAVMCN

* THE ACTIVITY VERIFICATION TABLE ROUTINE IS COMPLETE * THE ACTIVITY VERIFICATION TABLE WILL BE PRINTED

LAVMDP

* THE ACTIVITY VERIFICATION TABLE HAS BEEN PRINTED

MNUPRO

SELECTION G

G - FILE SPACE AUDIT - REPORTS PERCENTAGE OF UNUSED FILE SPACE

CHEKID

* THE FILE SPACE AUDIT REPORT WILL BE PRINTED
****OPERATOR - CARRIAGE RETURN TO CONTINUE AFTER REVIEWING SCREEN

INFORMATION

LCCSSP

CCSPAS

* THE FILE SPACE AUDIT REPORT IS COMPLETE

MNUPRO

SELECTION H

H - PURGE OLDEST ACCOUNTS FROM SUMMARY HISTORY FILE

CHEKID

* THE LASUMHST FILE WILL BE PURGED

LPHDL2

LCMPSM

* THE LASUMHST FILE HAS BEEN PURGED

MNUPRO

SELECTION I

I - PURGE OLDEST ACCOUNTS FROM THE TAPE ARCHIVES FILE

CHEKID

* THE LATAPARC FILE WILL BE PURGED

LPHDL1

INPUT=PRFLH004

UTIL

COMPRE, FN=LATAPARC

* THE LATAPARC FILE HAS BEEN PURGED

MNUPRO

SELECTION J

J - PRINT SCREEN DEFINITION FILE

CHEKID * THE SCREEN DEFINITION FILE WILL BE PRINTED INPUT=PRFLM008 UTIL LIST, FN=LASCNDSC, L=LPRINTER, F=U ΕX * THE SCREEN DEFINITION FILE HAS BEEN PRINTED

****OPERATOR - IF CHANGES ARE TO BE MADE TO THE SCREEN DESCRIPTION

* FILE ENTER THE EDITOR TO PROCESS THE LASCNDSC FILE,

* WHEN COMPLETE PERFORM THE NEXT MENU PROCEDURE STEP 'K'

CARRIAGE RETURN WHEN READY TO CONTINUE

CCSPAS MNUPRO

SELECTION K

K - CREATE THE SCREEN FILE

CHEKID

* THE SCREEN FILE WILL BE CREATED

LBLDSR

* THE SCREEN FILE HAS BEEN CREATED

MNUPRO

SELECTION L

L - PURGE MASTER FILES (LADLOMST - LACOSIGN - LAACTFIL)

CHEKID

* THE LADLOMST, LACOSIGN AND LAACTFIL FILES WILL BE PURGED

LACMPDO

INPUT=PRFLM010

UTIL

COMPRE, FN=LACOSIGN

COMPRE, FN=LAACTFIL

* THE LADLOHST, LACOSIGN AND LAACTFIL FILES HAVE BEEN PURGED

MNUPRO

SELECTION M

M - ACTIVITY FILE MAINTENANCE REPORT

- * THE SUMMARY REPORT OF THE BLOCK DISTRIBUTION IN THE ACTIVITY FILE WILL
- * BE PRINTED

LACTMT

- * THE SUMMARY REPORT OF THE BLOCK DISTRIBUTION IN THE ACTIVITY FILE HAS
- * BEEN PRINTED

MNUPRO

SELECTION N

N - COLECT ACTIVE USER FILE MAINTENANCE

CHEKID

* THE LEGAL LAACTIVE USER MAINTENANCE FILE ROUTINE WILL BE EXECUTED ****OPERATOR - FOLLOW THE INSTRUCTIONS AS THEY APPEAR ON THE SCREEN

* THE LEGAL LAACTIVE USER MAINTENANCE FILE ROUTINE IS COMPLETE MNUPRO

SELECTION O

O - PRINT REPORT GENERATOR DATA ELEMENT TABLE

CHEKID

* THE REPORT GENERATOR DATA ELEMENT TABLE WILL BE PRINTED

LPGLTB

MNUPRO

SELECTION P

P - REPORT GENERATOR DATA ELEMENT TABLE ROUTINES - CONSOLE INPUT

CHEKID

- * THE REPORT GENERATOR DATA ELEMENT TABLE ROUTINES WILL BE EXECUTED
- * THE DATA ELEMENT TABLE WILL BE PRINTED

LPGLTB

- * THE DATA ELEMENT TABLE HAS BEEN PRINTED *
- * THE DATA ELEMENT TABLE WILL BE UPDATED
- **** OPERATOR INPUT WILL BE FROM THE CONSOLE
- **** OPERATOR FOLLOW THE INSTRUCTIONS AS THEY APPEAR ON THE SCREEN

INPUT=PRFLM014

SWITCH

00000000

LPGUTB

- * THE DATA ELEMENT TABLE HAS BEEN UPDATED
- * THE DATA ELEMENT TABLE WILL BE PURGED

INPUT=PRFLM014

UTIL

DEFINE, FN=LATBLWRK, TY=R, K1=6, P1=1, NR=2000, LR=80 ΕX

LPGCMP

INPUT=PRFLM014

UTIL

DELETE, FN=LARPTTBL

RENAME, FN=LATBLWRK, F2=LARPTTBL

- * THE DATA ELEMENT TABLE HAS BEEN PURGED
- * THE REPORT GENERATOR DATA ELEMENT TABLE ROUTINES ARE COMPLETE MNUPRO

SELECTION Q

Q - REPORT GENERATOR PROGRAM DIRECTORY FILE MAINTENANCE

CHEKID

- * THE PROGRAM DIRECTORY FILE ROUTINES WILL BE EXECUTED
- * THE PROGRAM DIRECTORY FILE WILL BE PRINTED
- **LPGLIS**
- * THE PROGRAM DIRECTORY FILE HAS BEEN PRINTED
- * THE PROGRAM DIRECTORY FILE WILL BE PURGED
- ****OPERATOR FOLLOW THE INSTRUCTIONS AS THEY APPEAR ON THE SCREEN

LPGPRG

INPUT=PRFLM015

UTIL

COMPRE, FN=LARPTPGM

ΕX

- * THE PROGRAM DIRECTORY FILE HAS BEEN PURGED
- * THE PROGRAM DIRECTORY FILE WILL BE PRINTED
- LPGLIS
- * THE PROGRAM DIRECTORY FILE HAS BEEN PRINTED
- * THE PROGRAM DIRECTORY FILE ROUTINES HAVE BEEN EXECUTED MNUPRO

SELECTION R

R - SAMPLE SCREEN PRINT UTILITY

CHEKID

- * THE SCREENS WILL BE PRINTED
- ****OPERATOR FOLLOW THE INSTRUCTIONS AS THEY APPEAR ON THE SCREEN

LPRSCN * THE SCREENS HAVE BEEN PRINTED

MNUPRO

SELECTION S

S - CLIENT FILE MAINTENANCE

CHEKID

- * THE CLIENT FILE MAINTENANCE PROGRAM WILL BEGIN
- * THE CLIENT FILE MAINTENANCE PROGRAM HAS COMPLETED

MNUPRO

LEGAL AND AGENCY ON-DEMAND REPORT MENU

REQUEST=LO

LEGAL AND AGENCY ON-DEMAND REPORT MENU

- A DELINQUENT RECORD CONTENT REPORT (INACTIVE ACCOUNTS)
 B DELINQUENT RECORD CONTENT REPORT (SUPERVISOR REQUESTS)
- C TREND ANALYSIS-CALCULATE AGE RUN BEFORE SELECTION D OR E
- D TREND ANALYSIS REPORT PRINTED BY QUEUE
 E TREND ANALYSIS REPORT PRINTED BY PRODUCT TYPE
- F ELIGIBLE/ACTUAL WRITE-OFF REPORT
- G DAILY ASSIGNMENT LIST
- H SUMMARY ACCOUNT LIST REPORT
- I WEEKLY COLLECTOR STATISTICS REPORT
- J MONTHLY COLLECTOR STATISTICS REPORT
- K CREATE REPORT GENERATOR PROGRAM
- L EXECUTE REPORT GENERATOR PROGRAM
- M QUEUE LOADING REPORT N COMPLETE PAYMENT, DIRECT PAYMENT STATEMENT REPORTS O INVENTORY REPORTS BY ACCOUNT, CLIENT
- P RECOVERY ANALYSIS REPORT
- Z EXIT
- SELECTION = >

SELECTION A

A - DELINQUENT RECORD CONTENT - (INACTIVE ACCOUNTS)

INPUT=PRFL0001

SWITCH

10000000

- * DELINQUENT RECORD CONTENT REPORT WILL NOW BE PRINTED
- * THE ACCOUNTS BEING PRINTED ARE THE INACTIVE ACCOUNTS NOT PREVIOUSLY PRINTED

* THE DELINQUENT RECORD CONTENT REPORT IS COMPLETE MNUPRO

SELECTION B

B - DELINQUENT RECORD CONTENT RECORD - (SUPERVISOR REQUESTS)

CHEKID

INPUT=PRFL0002

SWITCH

01000000

- * DELINQUENT RECORD CONTENT REPORT WILL NOW BE PRINTED
- * THE ACCOUNTS BEING PRINTED WERE REQUESTED BY THE SUPERVISOR

LDTLST

INPUT=PRFL0002

UTIL

CLEAR, FN=LASREQDL

* THE DELINQUENT RECORD CONTENT REPORT IS COMPLETE **MNUPRO**

SELECTION C

```
C - TREND ANALYSIS-CALCULATE AGE - RUN BEFORE SELECTION D OR E
CHEKID
 * CALCULATE AGE FOR TREND ANALYSIS
LTRNDF
 * THE TREND ANALYSIS AGE CALCULATION IS COMPLETE
 * THE LAACCAGE AND LARSWFIL FILES ARE BEING SORTED INTO LAAGEWRK
INPUT=PRFL0003
UTIL
DELETE, FN=LAAGEWRK
INPUT=PRFL0003
DSORT
FN=LAACCAGE, LA
FN=LARSWFIL,LA
F2=LAAGEWRK,LA,SYSVOL
OP=T,F,A
KF = A, 1, 1, A, 17, 4
SL=I
 * THE LAACCAGE AND LARSWFIL FILES HAVE BEEN SORTED
 ****OPERATOR-
 * RESPOND:
                'N' CARRIAGE RETURN-TO BYPASS UPDATING PREVIOUS TREND DATA
                FOR NEXT RUN
                CARRIAGE RETURN ONLY TO UPDATE PREVIOUS TREND DATA FOR
                NEXT RUN
CCSPAS
LTRNDU
INPUT=PRFL0003
UTIL
CLEAR, FN=LARSFIL
ΕX
MNUPRO
SELECTION D
D - TREND ANALYSIS REPORT PRINTED BY QUEUE
CHEKID
* GENERATE THE TREND ANALYSIS REPORT BY QUEUE * THE LAAGEWRK FILE IS BEING SORTED
INPUT=PRFL0004
DSORT
FN=LAAGEWRK, LA
F2=LAAGEWRK,LA,
OP=T,F,A
KF=A,1,1,A,17,4
SL=I
 * THE LAAGEWRK FILE HAS BEEN SORTED
* THE TREND ANALYSIS REPORT BY QUEUE WILL NOW BE PRINTED INPUT=PRFLO004
SWITCH
10000000
LTRNDP
```

* THE TREND ANALYSIS REPORT BY QUEUE IS COMPLETE

MNUPRO

SELECTION E

E - TREND ANALYSIS REPORT PRINTED BY PRODUCT TYPE

CHEKID * GENERATE THE TREND ANALYSIS REPORT BY PRODUCT TYPE * THE LAAGEWRK FILE IS BEING SORTED INPUT=PRFL0005 DSORT FN=LAAGEWRK, LA F2=LAAGEWRK, LA, OP=T,F,A KF=A,1,1,A,25,4SL=I * THE LAAGEWRK FILE HAS BEEN SORTED * THE TREND ANALYSIS REPORT BY PRODUCT TYPE WILL NOW BE PRINTED INPUT=PRFL0005

SWITCH 00000000

LTRNDP

* THE TREND ANALYSIS REPORT BY PRODUCT TYPE IS COMPLETE MNUPRO

SELECTION F

F - ELIGIBLE/ACTUAL WRITE-OFF REPORT

```
CHEKID
 * THE WRITE-OFF REPORT WILL BE GENERATED
 * THE LAWOEF FILE WILL BE CREATED
INPUT=PRFL0006
UTIL
DEFINE, FN=LAWOEF, ED=999999, TY=S, LR=115, NR=6000
ΕX
LWROFE
 * THE LAWOEF FILE HAS BEEN CREATED
* THE LAWOEF FILE IS BEING SORTED
INPUT=PRFL0006
DSORT
FN=LAWOEF,LA
F2=LAWOEF,LA,
OP=T,F,A
KF=A,25,1,A,17,4,A,21,4,A,1,16
SL=I
 * THE LAWOEF FILE HAS BEEN SORTED
 * THE WRITE-OFF REPORT WILL BE PRINTED
LWROFP
```

SELECTION G

INPUT=PRFL0006

DELETE, FN=LAWOEF

G - DAILY ASSIGNMENT LIST

* THE WRITE-OFF REPORT IS COMPLETE

CHEKID

UTIL

MNUPRO

* THE DAILY ASSIGNMENT REPORT LIST WILL BE PRINTED

* THE DAILY ASSIGNMENT LIST REPORT IS COMPLETE MNUPRO

SELECTION H

H - SUMMARY ACCOUNT LIST REPORT

```
CHEKID

* THE SUMMARY ACCOUNT REPORT LIST WILL BE PRINTED
LSUMAC

* THE SUMMARY ACCOUNT REPORT LIST IS COMPLETE
MNUPRO
```

SELECTION I

I - WEEKLY COLLECTOR STATISTICS REPORT

```
CHEKID

* THE WEEKLY COLLECTOR STATISTICS REPORT WILL BE PRINTED
INPUT=PRFL0009
SWITCH
01000000
LCOLST

* THE WEEKLY COLLECTOR STATISTICS REPORT IS COMPLETE

****OPERATOR -

* RESPOND: 'N' CARRIAGE RETURN - TO BYPASS ZEROING THE WEEKLY COUNT

*

* CARRIAGE RETURN ONLY - TO ZERO THE WEEKLY COUNT
CCSPAS
INPUT=PRFL0009
SWITCH
00001000
LCOLST
MNUPRO
```

SELECTION J

J - MONTHLY COLLECTOR STATISTICS REPORT WILL BE PRINTED

```
* THE MONTHLY COLLECTOR STATISTICS REPORT WILL BE PRINTED
INPUT=PRFL0010
SWITCH
00100000
LCOLST
 * THE MONTHLY COLLECTOR STATISTICS REPORT IS COMPLETE
 ****OPERATOR -
    RESPOND: 'N' CARRIAGE RETURN
                                       TO BYPASS CLEARING THE COLLECTOR
                                       STATISTICS COUNT FILE
              CARRIAGE RETURN ONLY -
                                       TO CLEAR THE COLLECTOR STATISTICS
                                       COUNT FILE
CCSPAS
INPUT=PRFL0010
UTIL
CLEAR, FN=LACOLSTS
EX
MNUPRO
```

SELECTION K

K - CREATE REPORT GENERATOR PROGRAM

```
CHEKID
 * THE REPORT GENERATOR PROGRAMS WILL BE CREATED
 ****OPERATOR - (BATCH HOST MUST BE ACTIVE BEFORE PROCEEDING) TO ACTIVATE
                    BATCH HOST
                   MI, *BATCH,F
      RESPOND: 'N' CARRIAGE RETURN - IF BATCH HOST IS NOT ACTIVE
                 CARRIAGE RETURN ONLY - TO CONTINUE
CCSPAS
 ****OPERATOR - FOLLOW THE INSTRUCTIONS AS THEY APPEAR ON THE SCREEN
INPUT=PRFLACTR
UTIL
DEFINE, FN=LARPTWKE, LR=80, NR=1000
DEFINE, FN=LARPTWKP, LR=80, NR=1000
DEFINE, FN=LAPRCWRK, LR=80, NR=50
EX
LPGGEN
     THE REPORT GENERATOR PROGRAMS HAVE BEEN CREATED
     THE REPORT GENERATOR PROGRAMS WILL BE BATCHED
INPUT=PRFLACTR
UTIL
BATCH, FN=LARPTWKE, TY=N
BATCH, FN=LARPTWKP, TY=R
DELETÉ, FN=LARPTWKÉ
DELETE, FN=LARPTWKP
CLEAR, FN=LAPGEXTR
ΕX
LPGCT1
```

SELECTION L

CCSPAS MNUPRO

L - EXECUTE REPORT GENERATOR PROGRAM

NOTE

****OPERATOR - SELECTION L MUST NOW BE RUN TO EXECUTE THE REPORT

This selection executes the procedure stream that contains the latest report generator program, which was created by selection K. It is for the convenience of the user, so that the most recently created program can be tested. If the report generator program created by selection K was saved, it can be repeatedly executed by selecting it from the report generator/report directory menu.

SELECTION M

M - QUEUE LOADING REPORT

CHEKID
THE QUEUE LOADING REPORT WILL BE PRINTED LQLOAD
* THE QUEUE LOADING REPORT IS COMPLETE MNUPRO

SELECTION N

N - COMPLETE PAYMENT, DIRECT PAYMENT STATEMENT REPORTS

```
* PAYMENT FILE WILL BE SORTED FOR THE COMPLETE PAYMENT REPORT
INPUT=PRFL0013
DSORT
FN=LAPMTFIL,LA
F2=,LAPMTFIL,LA
OP=T,F,A
KF=A,34,4,A,29,6
SL=I
INPUT=PRFL0013
 * COMPLETE PAYMENT REPORT WILL NOW BE PRINTED
COMPAY
 * DIRECT PAYMENT REPORT WILL NOW BE PRINTED
DIRPAY
INPUT=PRFL0013
UTIL
CLEAR, FN=LAPMTFIL
MNUPRÓ
```

SELECTION O

O - INVENTORY REPORTS BY ACCOUNT, CLIENT

CHEKID

```
* THE INVENTORY REPORT PROCESS WILL NOW BEGIN
    THE CLIENT FILE IS BEING EXTRACTED
INPUT=PRFL0014
UTIL
DEFINE, FN=LACLINV, TY=S, LR=80, NR=100
ΕX
LCLIUD
CLXTRT

* CLIENT EXTRACT RECORDS WILL BE SORTED
INPUT=PRFL0014
DSORT
FN=LACLINV,LA
F2= LACLINV,,
OP=T,F,A
KF=A,1,16
SL=I
INPUT=PRFL0014
 * THE INVENTORY REPORT BY ACCOUNT WILL BE PRINTED
INVCUS
 * CLIENT EXTRACT RECORDS WILL BE SORTED BY CLIENT
INPUT=PRFL0014
DSORT
FN=LACLINV,LA
F2=LACLINV,,
OP=T,F,A
KF = A, 17, 4
SL=I
INPUT=PRFL0014
 * THE INVENTORY REPORT BY CLIENT WILL BE PRINTED
INVCLI
INPUT=PRFL0014
UTIL
DELETE, FN=LACLINN
ΕX
    INVENTORY REPORT PROCESS IS COMPLETE
MNUPRO
```

SELECTION P

P - RECOVERY ANALYSIS REPORT

CHEKID

* THE RECOVERY ANALYSIS REPORT WILL BEGIN
LCLIUD
RECVRY

* THE RECOVERY ANALYSIS REPORT IS COMPLETE
MNUPRO

LEGAL AND AGENCY REPORT GENERATOR REPORT DIRECTORY

REQUEST=LR

SELECTION = >

```
(AVAILABLE)
A - R.G. REPORT 1
                                 (AVAILABLE)
B - R.G. REPORT 2
                                 (AVAILABLE)
(AVAILABLE)
C - R.G. REPORT 3
D - R.G. REPORT 4
                                 (AVAILABLE)
E - R.G. REPORT 5
F - R.G. REPORT 6
G - R.G. REPORT 7
                                  (AVAILABLE)
(AVAILABLE)
H - R.G. REPORT 8
                                 (AVAILABLE)
I - R.G. REPORT 9
                                 (AVAILABLE)
J - R.G. REPORT 10
K - R.G. REPORT 11
                                  (AVAILABLE)
                                 (AVAILABLE)
L - R.G. REPORT 12
                                  (AVAILABLE)
M - R.G. REPORT 13
N - R.G. REPORT 14
                                  (AVAILABLE)
                                  (AVAILABLE)
O - R.G. REPORT 15
P - R.G. REPORT 16
                                 (AVAILABLE)
(AVAILABLE)
Q - R.G. REPORT 17
                                  (AVAILABLE)
R - R.G. REPORT 18 -
S - R.G. REPORT 19 -
Z - EXIT
                                 (AVAILABLE)
```

LEGAL AND AGENCY REPORT SAMPLES

C

This appendix contains sample reports that are unique to the LA system.

LEGAL AND AGENCY SYSTEM VERSION 3.0 SYSTEM VERIFICATION

ACTIVITY VERIFICATION TABLE RUN DATE: 06/10/78

PAGE 1

RESULT CODE

	•															_
	01	02 PP	03	04	05	06	07	08	09	10	11	12	13	14	15	16
ACT	BZ	PP	Ri	R Z	R3	R4										L C CD
108			E C CU		L C CD				L C CD	L C CD	L C C0	LCCD	L C CD	L C C0	L C C0	L C CO \
	2															
SR	NA	HA	NA	MA	NA	NA	C 01									
Al	L RL	L DP	L C NC	L NC	L C NC	L . NC	NA									
AZ		0.0	C NC	01		01	01									
A.C.	~~	UF	C NC	01	MA	01	0.1									
A3	RL	NA	C NC	01	r c os	02	02									
44	L RL	L DP	L C NC	NA	L C 02	L 03	L 03									

END OF TABLE

			•				DEC	CISION 1	T A B	LE CONTENTS	DATE 06	/10/78 102	1
TEST NO	LEVEL	HEXT	HO. OF Params	PARAM NO.	PARAH OPERATOR	PARAH Value		PARAH Value		PARAH Connector	NO. OF RETURN VALUES	CURRENT RET VAL	RETURNED VALUES
1	1 '	0	2	1 2	NULL .EQ.	:	•	:	*	.AND.	01	00	0003
2	1	0	3	1 2 3	NULL NULL .GT.		* *	•	•	.AND.	01	00	0002
3	1	0	3	1 2 3	NULL NULL .GT.		*		•	.AND.	01	00	0001
4	. 1	o	1	1	NULL	•	*	•	•		01	00	0004

DAILY MASTER FILE UPDATE REPORT 06/10/78

PAGE 1

	********	202201526	DELINQUENT	DELINQUENT	CURRENT	
TRAN	ACCOUNT	BORROWERS		REFINARENI		
CODE	NUMBER	NAME	DATE	THUCHA	PAYOFF	ACTION
301	0263007561234567	CHAMBERS.LLOYD R	06/10/78		87.75	WRITEOFF
301	0267317591234567	BALVELT.HAROLD	06/10/78		128.10	WRITEOFF
301	0270007591234567	YOUNG, THEODORE D	06/10/78		392.47	WRITEOFF
301	0273083321234567	BECKER.ROBERT E	06/10/78		154.06	WRITEOFF
301	0276992191234567	YOUNHANS, JOSEPHINE H	06/10/78		38.83	WRITEOFF
301	0278634561234567	WILLIAMS . RICHARD L	06/10/78		166.74	WRITEOFF
301	0282282291234567	HAYHES, DEHA	06/10/78		43.19	WRITEOFF
301	0282798591234567	RANDALL, LEWIS W	06/10/78		97.85	WRITEOFF
301	0282990691234567	PAGANO, JOHN A	06/10/7 8		309.87	WRITEOFF
301	0283219591234567	JONES . PATRICIA A	06/10/78		0.87	WRITEOFF

* TOTALS * PREVIOUS										
ACCOUNTS	NUNBER	AMT DELQ	PAYOFF	* PRE ANT DELQ	V I O U S + PAYOFF					
ADDED	· · · · · · · · · · · · · · · · · · ·	0.00	0.00							
REACTIVATED	0	0.00	0.00							
UPDATED	0	0.00	0.00	0.00	0.00					
RELEASED	0		0.00	0.00	0.00					
SATISFIED	0		0.00	0.00	0.00					
WRITTENDFF	10		1419.73	907.01	1419.69					
REJECTED	0									

LEGAL AND AGENCY SYSTEM VERSION 3.0 SYSTEM VERIFICATION

LEGAL & AGENCY EXTRACT PROGRAM

DATE RCDS READ M-RCDS RCDS WRITTEN
061078 90 10 10

PAGE 1 RUN DATE: 6/10/78

ACCOUNT NUMBER BANK Branch LOAN OFFICER AMOUNT TO 0263007561234567 00 \$87.75 DEBTOR: CHAMBERS, LLOYD R NAHE ADDRESS-1 ADDRESS-2 CITY,ST,ZIP PHONE HOME TOWN, USA 777/595-1212 000-00-0000 99999 SOC SEC # LAST AR UPDATE ACCT TYPE DATE IN DELO ccs DPEN 000 6/21/77 6/10/78 0/00/00 02 EMPLOYMENT: BUSY TOWN INC 888 ZZZ ST BUSY TOWN, USA 88888 777/555-1212 X(0000) **EMPLOYER** ADDRESS CITY+ST+ZIP 00000

PERHANENT COMMENTS

PHONE

REFERRED TO: L/A NUMBER: REFERRAL DATE: // BY (COLL-ID): APPROVAL: REASON FOR REFERRAL: () FILE SUIT
() ATTACH HAGES
() ATTACH BANK ACCOUNT
() SHERIFF SALE
() BANKRUPTCY
() FILE FOR ESTATE
DATE OF DEATH: /
LIEM ON PROPERTY
() ATTACH ALL AVAILABLE ASSETS
() OTHER

GIVE DETAILS

0-6

FILE SPACE REPORT - 06/10/78

FILE NAME	MAXIMUM RECORDS	CURRENT RECORDS	AVAILABLE RECORDS	PCT SPACE AVAILABLE
LADLQHST	9000.	10.	8990.	99.9%
LACOSIGN	9000.	•	9000.	*****
LAACCAGE	9000.	10.	8990.	99.92
LAACTFIL	6000.	•	6000.	****
LASUMHST	9000.	•	9000•	****x
LATAPARC	9000•	•	9000.	*****
LAINACCT	9000.	•	9000.	****

LEGAL/AGENCY BATCH UPDATE AUDIT TRAIL AS OF 12/31/78

GENCY BATCH UPDATE AUDIT TRAIL PAGE 1

SYSTEM VERIFICAT	I LUN NSACTI	I ON			****	**** LAD	LOHST +	***	****	LACLI	LENT	****
						AMT DELQ Before	CUR BA		R.C.C. BEFORE	N.R.C.C. BEFORE	FEE/COMM BEFORE	AMT COL Before
ACCOUNT NUMBER	TC	AHOUNT	DATE	COID	L/A NO	AFTER	AFTER		AFTER	AFTER	AFTER	AFTER
0263007561234567	04	50.55	081078	HOST	LA01	59.21	87.	75	•00	•00	•00	•00
•						109.76	138.	30	50.55	•00	.00	.00
0263007561234567	03	30.00	091078	HOST	LAOI	.00		00	.00	.00	.00	•00
		•				•00	•	00	•00	30.00	•00	•00
0263007561234567	02	30.00	101078	HOST	LA01	109.76			•00	•00	•00	•00
						79.76	108.	30	•00	•00	•00	30.00
0263007561234567	01	26.00	111078	HOST	LA01	79.76	108.		•00	•00	•00	•00
						53.76	82.	30	•00	•00	•00	26.00
0263007561234567	05	5.10	121078	HOST	LA01	.00		00	•00	•00	•00	• • • • • • • • • • • • • • • • • • • •
						•00	• •	00	•00	•00	5.10	•00
0267317591234567	04	30.00	081078	HOST	0001	86.10	128.		.00	•00	.00	•00
						116.10	158.	10	30.00	•00	.00	. •00
0267317591234567	03	50.00	091078	HOST	0001	•00		00	•00	•00	.00	•00
						• 00	•	00	•00	50.00	•00	•00
0267317591234567	02	25.00	101078	HOST	0001	116.10			•00	•00	.00	•00
						91.10	133.	10	. •00	•00	•00	25.00
0267317591234567	01	26.00	111078	HOST	0001	91.10	133.		•00	•00	.00	•00
						65.10	107.	10	•00	•00	.00	26.00
0267317591234567	05	6.10	121078	HDST	0001	•00		00	•00	.00	•00	•00
						•00	•	00	.00	•00	6.10	.00
0270007591234567	01	137.47	123178	0003	0002	41.47	137.	47	.00	•00	•00	•00
•						.00	•	00	•00	•00	•00	137.47
0270007591234567	05	75.00	123178	0003	0002	•00		00	•00	•00	.00	•00
						•00	•	00	•00	•00	75.00	•00

*** END OF REPORT ***

COMPLETE PAYMENTS RECEIVED REPORT

LEGAL & AGENCY SYSTEM VERSION 3.0 SYSTEM VERIFICATION RUN DATE: 1/10/79

ATTORNEY / AGENT # 0001

CUSTOMER NAME	ACCOUNT NUMBER	INDIRECT	DIRECT	BALANCE
BAL VEL T. HAROLD	0267317591234567	\$25.00	\$26.00	\$107.10
TOTAL		\$25.00	, \$26.00	\$107.10

60475230 A

LEGAL & AGENCY SYSTEM VERSION 3.0
SYSTEM VERIFICATION

COMPLETE PAYMENTS RECEIVED REPORT

PAGE NO. RUN DATE: 1/10/79

ATTORNEY / AGENT # 0002

 CUSTOMER NAME
 ACCOUNT NUMBER
 INDIRECT
 DIRECT
 BALANCE

 YOUNG, THEODORE D
 0270007591234567
 \$30.00
 \$462.47
 \$.00

 TOTAL
 \$30.00
 \$462.47
 \$.00

COMPLETE PAYMENTS RECEIVED REPORT

PAGE NO. 1

LEGAL & AGENCY SYSTEM . VERSION 3.0 SYSTEM VERIFICATION

ATTORNEY / AGENT # LAOL

 CUSTOMER NAME
 ACCOUNT NUMBER
 INDIRECT
 DIRECT
 BALANCE

 CHAMBERS.LLOYD R
 0263007561234567
 \$30.00
 \$26.00
 \$82.30

 TOTAL
 \$30.00
 \$26.00
 \$82.30

LEGAL & AGENCY SYSTEM VERSION 3.0
SYSTEM VERIFICATION

COMPLETE PAYMENTS RECEIVED REPORT

RUN DATE: PAGE NO.

INDIRECT

DIRECT

BALANCE

GRAND TOTAL

\$85.00

\$514.47

\$189.40

INVENTORY REPORT BY ATTORNEY/AGENCY

PAGE NO. RUN DATE: 1/10/79

TOTALS PAGE

CLIENT	TYPE CODE	CLIENT TYPE DESCRIPTION	NUMBER OF ACCOUNTS	BILLED BALANCE
	LA	ATTORNEY COLLECTION FIRM	0001	\$82.30
	AA	COLLECTION AGENCY	0000	\$.00
	00	IN-HOUSE COLLECTIONS	0002	\$107.10
		- MISCELLAMEOUS -	0000	\$.00
GRAND '	TOTAL		0003	\$189.40

LEGAL & AGENCY RECOVERY ANALYSIS

PAGE NO. 1 RUN DATE: 1/10/79

L/A CL	IENT #	0001		FIRH NAME	: COLLE	CTION	INVESTIG	ATION DE	PT	FI	MANCIAL	PERIOD:	12/78	-THRU- 06	/78	
	+	PLACEHEN	TS+	*	COLLECT	1005-	+	*COHHS*	+CL	.oseD+	*	ACTIVE	+	+C	DURT COSTS	
нн/үү	NO. ACCTS	AHOUNT ACCTS	AVERAGE BALANCE	AMOUNT COLLECTD	PER CENT	NO. P1F	AHOUNT PIF	AHOUNT EARNED	NO.	AHOUNT ACCTS	NO. ACCTS	AHOUNT	AVERAGE BALANCE	COSTS INCURRED	COSTS RECOVERABLE	PER CENT
12/78	000	0	0	o	.0%	000	0	6	000	0				0	0	.0%
11/78	000	0	0	26	.0%	000	0	. 0	000	. 0				0	0	.02
10/78	000	0	0	25	.02	000	0	0	000	0				0	0	• 02
09/78	000	0	0	0	.02	000	0	. 0	000	, 0				50	0	.0%
08/78	000	0	0	. 0	.02	000	0	0	000	0				30	30	100.02
06/78	001	128	128	0	.02	000	0	0	000	0				0	0	.0%
TOTAL	001	128	128	51	39.82	000	0	6	000	0	1	128	128	80	30	37.5%

CLIENT #	LA01	DATE INACT	IVE 08/10	/79								
FIRH NAME		HARX & KRAH							RENT CONHISSION		012	
FIRH ADDR		3333 THIRD							LIONZ CONHIZZIO			
FIRH ADDR		SAN DIEGO,			• 0				LAST UPDATED		12/31/78	
PHONE NUM		** CLIENT I 714/333-444		5555 ·	7			CUM	1133104 FAC			
THORE NO	IDER	117/333-777		9999								
HISTORY HM/YY	# ACT	AHT ACT	AMT COLL	# PIF	AMT Pif	# CLD	AHT CLD	# ACT	AHT ACT	COURT	NR COURT COSTS	COMM EARNED
71771	AC.	ACI	CULL	FIF	F1F	CLU	CCD	AC1	AC.	00313	00313	CARNED
01 79						001	82.30					
12 78												5.10
11 78			26.00									
10 78			30.00									
09 78			•								30.00	
S UHHARY	000	0.00	56.00	000	0.00	001	82.30	001	82.30-	0.00	30.00	5.10
•												

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LEGAL AND AGENCY UPDATE TAPE DESCRIPTIONS

P

This appendix contains a sample of the 5xx financial update tape unique to the LA system.

The format of records with the codes ' ' (add/update records), '30x' (inactive account record), and '4xx' (nonfinancial update record) is unchanged from CCS.

The format of the '5xx' (financial update record) is given below:

TABLE P-1. UPDATE TAPE DESCRIPTIONS

Position	Description	Length	Definition
1	trans code	3	'505' direct payments '506' indirect payments '507' nonrecoverable court cost '508' recoverable court cost '509' fee/commission
4	acctno	16	account number of transaction
20	trans date	6	transaction date
26	amount	9	transaction amount
35	client	4	client number

This appendix contains a description of the data files unique to the LA system, as well as a description of CCS data files that contain information unique to LA processing. Refer to appendix E for a description of data files that remain unchanged from the CCS system.

It is accessed primarily by the nightly batch update processes, during which credit for payments is posted to the responsible attorneys/agencies, by the client file maintenance process and by the LA MIS processes.

LACLIENT - LEGAL AND AGENCY CLIENT FILE

The LA client file contains attorney/agency contact information and historical effectiveness statistics.

TABLE Q-1. LEGAL AND AGENCY CLIENT FILE

Start	End	Name	Description						
1 5 35 65 95 125 135 139 145 149 153 155 157 159 162 171 180 183 192 201 204 213 216 225 234	4 34 64 94 124 134 138 144 148 152 154 156 158 161 170 179 182 191 200 203 212 215 224 233 242	CLNUH FIRM CNTACT ADDR1 ADDR2 PHONE EXTN UPDATE CCRATE PCRATE COMLAG YEARO1 MNTH01 AALP01 ACOL01 APIF01 APIF01 COMM01 NAPL01 AACL01 NACL01 NACL01 NACCT01 ACT01 CCST01 NRCC01	Client number (primary key) Firm name (secondary key) Contact name Firm address 1 Firm address 2 Phone number Extension Date statistics last updated Current commission rate Previous commission rate Commission lag after withdrawal *Financial year *Financial month *Number of accounts placed month 1 *Amount of accounts placed month 1 *Amount collected month 1 *Amount of paid in full month 1 *Commissions earned month 1 *Number of accounts closed month 1 *Number of accounts closed month 1 *Number of accounts closed month 1 *Number of accounts closed month 1 *Amount of accounts closed month 1 *Amount of accounts closed month 1 *Amount of accounts closed month 1 *Number of active accounts month 1 *Amount of active accounts month 1 *Court costs (recoverable) *Non recoverable court costs						
243 - 1211 - 1299 - 1300 -	1210 1298 1299 1300	Repeat YEA	Repeat YEARO1 thru NRCCO1 for months 2 - 12 Repeat YEARO1 thru NRCCO1 for year-to-date CLSTAT file status (blank = active, 1 = inactive) Reserved						

LADLQMST - LEGAL AND AGENCY MASTER FILE

This record is a product of the LA extract process in which designated records from the CCS delinquent master are

selected for LA processing. The root portion will remain the same as in $\ensuremath{\mathsf{CCS}}\xspace$

Record positions 1057 through 1385 are reserved for LA use. The remaining positions are available for customer defination.

TABLE Q-2. LEGAL AND AGENCY MASTER FILE

Start	Number	Field	Field Description
Column	Character	Name	
1 2 17 18 48 78 108 128 133 143 147 177 207 227 232 242 246 262 271 275 281 285 286 287 291 292 294 295 296 300 306 307 667 697 727 757 787 817 837 842 848 857 863 869 875 881 887 896 905 914 920	1 15 130 30 30 20 5 10 4 30 20 5 10 4 16 9 4 6 4 1 1 2 1 1 4 6 1 360 30 30 30 30 30 30 5 6 6 6 6 6 6 9 9 9 9 9 9 9 9 9 9 9 9 9	MACTFG MACCT MSLCD MNAM MADR1 MADR2 MCS MZP MPHN MEXT MBNM MBAD MBCS MBZP MBPH MBEX MADL MSOC MQUE MNXTC MPRI MPFG MSUP MSCD MSCD MCS MSUP MSCD MCS MSUP MCD MSCD MCS MPUC MPTG MSCD MCS MPUC MCS MCD MCS MCD MCS MCD MCS MCD MCD MCD MCD MCD MCD MCD MCD MCD MCD	Account group Account number (1-16 file key 1) Borrower's saluation code Borrower's address line 1 Borrower's address line 2 Borrower's city, state Borrower's city, state Borrower's bome phone (area code,#) Borrower's extension/comment Business name Business address Business city, state Business zip code Business phone (area code, #) Business phone extension Additional account number Social security number Queue assigned Next contact date Account priority code Promise-to-pay flag Reserved Supervisor for this account Account review code Supervisor status code Queue reassign code On-line 'LEGAL' use Previous queue assigned Account status code Collector activity blocks Permanent comment 1 Permanent comment 2 Permanent comment 3 Previous address 1 Previous address 1 Previous city, state Previous city, state Previous city, state Previous city, state Previous letter request date Last lette

TABLE Q-2. LEGAL AND AGENCY MASTER FILE (Contd)

	IABLE Q-	·2. LEGAL	AND AGENCY MASTER FILE (Contd)
Start Column	Number Character	Field Name	Field Description
			Field Description Open amount/credit limit Number of cosigners Reserved for future use Credit/point score Bank branch Loan officer Account type code/product type Number times account 30 days delinquent Number times account 60 days delinquent Special description field Number of days account delinquent Promise-to-pay date Promise-to-pay amount Date of tape if in tape history Number of broken promises-to-pay Promise to pay commitment date Old key value - name change Reserved Date to LA Balance due, to LA Attorney/agency code (LG/AA) Attorney/agency number
1076 1082 1112 1142 1202 1212 1216 1225 1229 1231 1233 1239 1269 1299 1359 1369 1373 1382 1386 2000	6 30 30 60 10 4 9 4 2 2 2 6 30 30 60 10 4 9 4 614	LARDTI LAFRMI LACNTI LAADRI LAPHNI LAEXTI LABALI LACOD2 LANDC2 LARDT2 LARDT2 LARDT2 LAFRM2 LACNT2 LAADR2 LAPHN2 LAEXT2 LABAL2 LAREAS	Referral date Firm name Contact name Firm address Firm phone number Extension Balance due at placement Firm fee percent Attorney/agency code - previous Attorney/agency number - previous Referral date - previous Firm name - previous Contact name - previous Firm address - previous Firm phone number - previous Extension - previous Balance due at placement - previous Client reassignment code User-defined area End of record

LAFILTMP, LAFINTRN, LATRANFL, LATRNSFL - TRANSACTION FILE

These transaction files contain all of the transactions that were entered by the collectors for one work day, plus any

financial transaction which may have come from the host computer. LATRANFL and LATRNSFL contain the on-line transaction; LAFILTMP contains the host transactions; LAFINTRN contains the sorted combination of LATRNSFL and LAFILTMP.

TABLE Q-3. LEGAL AND AGENCY TRANSACTION FILE

Start Column	Number Character	Field Name	Field Description
1 2 17 21 25 29	1 15 4 4 4 2	TACFG TACCT TCID TSIT TSPT TRT	Account group Account number Collector ID Start time Stop time Record type
	RECORD T	YPE = 01,	COLLECTION ACTIVITY
31 37 39 41 43 99 105 106 112 121 127 136	6 2 2 2 56 6 1 6 9 6	TCD TAC TRS TLR TCT TNCD TLAC TLDT TLAT TPPDT TPPDA TSRT	Contact date Action code Result code Letter code Comment Next contact date Letter address code Letter request date Letter request amount Promise-to-pay date Promise-to-pay amount Off-line sort codes: 136 - activity account 137-8 - second - start/stop time End of record = record length
	RECORD T	YPE = 02,	NONFINANCIAL UPDATE
31 33 63 93 138	6 30 30 46	TUP TND TPD 	Type update code New data Previous data Unused End of record = record length
	RECORD	TYPE = 03	, FINANCIAL UPDATE
31 40 46 50 53 138	9 6 4 3 85	TPMT TDTE TLGNO TCDE	LA payment amount Payment date Client number LA update code Unused End of record = record length

LAPMTFIL - LEGAL AND AGENCY PAYMENT FILE

This file is cumulative and is the output of the nightly batch update process. It contains all payments (direct and

indirect) which have been received and successfully processed by the LA system.

The ultimate user of this file is the payment statement reporting modules which clear the file each time the payment statements are produced.

TABLE Q-4. LEGAL AND AGENCY PAYMENT FILE

Start	Number	Field	Description
Column	Character	Name	
1 17 19 26 32 36	16 2 7 6 4	PFACCT PFTRCD PFAMT PFDATE PFLGAA	Account number Transaction code (direct/indirect) Transaction amount Payment date Attorney/agency number Unused

LARPTDAT - AUDIT TRAIL REPORT DATA FILE

the update process. This file is cleared when the program LBATPT has completed the batch update audit trail report.

This file contains the results of the batch update. Included are those before and after totals of the fields affected by

TABLE Q-5. LEGAL AND AGENCY AUDIT TRAIL REPORT DATA FILE

Start	Number	Field	Field Description
Column	Character	Name	
1 17 19 28 34 38 42 51 60 69 78 87 96 105 114 123 132 141 150 152 160	16 2 9 6 4 4 9 9 9 9 9 9 9 9 9	ACCT TCODE TAMT TDATE COID LGNO AMT1 AMT2 POF1 POF2 RCC1 RCC2 NRCC1 NRCC2 FEE1 FEE2 COL1 COL2 ECODE	Account number Update code Transaction amount Transaction date Collector ID Client number Delinquent amount - before Delinquent amount - after Current payoff - before Current payoff - after Recoverable court cost - before Recoverable court cost - after Nonrecoverable court cost - after Nonrecoverable court cost - after Nonrecoverable court cost - after Ere/commissions - before Fee/commissions - after Amount collected - before Amount collected - after Error code Not used End of record = record length

LCLINV - LEGAL AND AGENCY CLIENT INVENTORY FILE

This sequential file is built by the LA client inventory extract program CLXTRT, and is used by the LA client inventory reports programs INVCLI and INVCUS.

TABLE Q-6. LEGAL AND AGENCY CLIENT INVENTORY FILE

Start	End	Size	Name	Туре	Description
1 17 21 51 57 66	16 20 50 56 65 80	16 4 30 6 9 15	INVACT INVCLI INVNAM INVDAT INVBAL	A A A N N2	Account number Client number Customer name Referral date Last billed balance Reserved for future use

LAUTIFIL - LEGAL AND AGENCY UTILITY FILE

agency processing. These records describe LA client type and description.

In addition to the records contained in the CCS utility file, the LA utility file contains a record unique to legal and $\,$

TABLE Q-7. LEGAL AND AGENCY UTILITY FILE

Start	End	Size	Name	Туре	Description
1	4	4	TYPKEY	Α	Literal 'LACL' (primary key)
5	6	2	TYPE1	A	Client Type-1 Parameter
8	9	2	TYPE2	A	Client Type-2 Parameter
5 8 11	12	2	TYPE3	Α	Client Type-3 Parameter
14	15	2	TYPE4	A	Client Type-4 Parameter
17	18	2	TYPE5	A	Client Type-5 Parameter
25	27	3	NACTIV	N	Delete client after xx
		-			inactive days
1	- 4	4	TYPKY1	A	Literal 'LAČ1' (primary key)
5	34	30	DESC1	Α	Client Type-1 Description
1	4	4	TYPKY2	A	Literal 'LAC2' (primary key)
5	34	30	DESC2	Α	Client Type-2 Description
1	4	4	TYPKY3	A	Literal 'LAC3' (primary key)
5	34	4	DESC3	A	Client Type-3 Description
1	4	4	TYPKY4	Α	Literal 'LAC4' (primary key)
5	34	30	DESC4	A	Client Type-4 Description
5 1 5	4	4	TYPKY5	A	Literal 'LAC5' (primary key)
5	34	30	DESC5	Α	Client Type-5 Description
	1	l			'

LEGAL AND AGENCY FUNCTIONAL FLOWCHART

This appendix contains the LA subsystem functional flowchart (figure R-1).

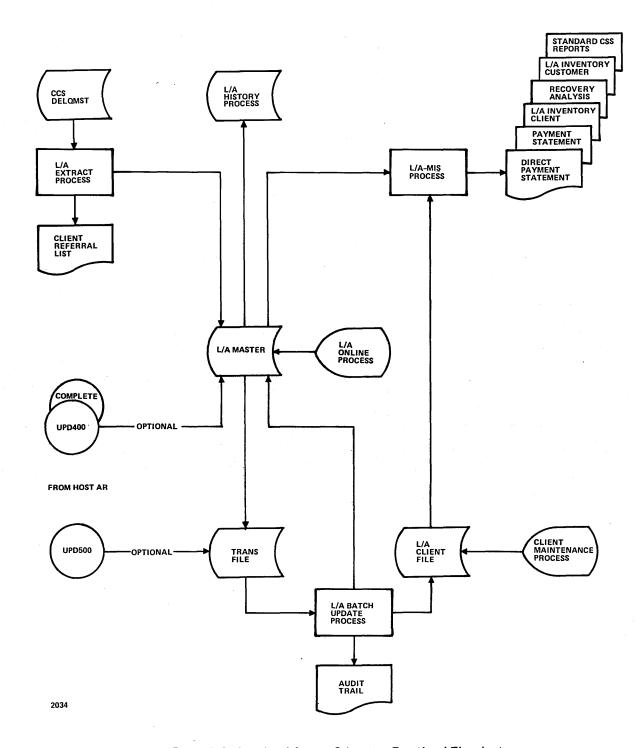


Figure R-1. Legal and Agency Subsystem Functional Flowchart

LEGAL AND AGENCY CROSS REFERENCE OF SPROCEDURES, FILES, PROGRAMS, AND SUBROUTINES

This appendix contains a cross reference system used with the LA system.



PRFLD001	PRFLD002	PRFLD003	PRFLD004	PRFLD005	PRFLD006	PRFLD007	PRFLD008	PRFLD009	PRFLD010	PRFLD011	PRFLD012	PRFLD013	PRFLH001	PRFLH002	PRFLH003	PRFLH004	PRFLH005	PRFLM001	PRFLM002	PRFLM003	PRFLM004	PRFLM005		PROCEDURE L
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PROCEDURE/PROGRAM CROSS REFERENCE

PRFLM006	PRFLM007	PRFLM008	PRFLM009	PRFLM010	PRFLM011	PRFLM012	PRFLM013	PRFLM014	PRFLM015	PRFLM016	PRFLM017	PRFLO001	PRFLO002	PRFL0003	PRFLO004	PRFLO005	PRFL0006	PRFLO007	PRFLO008	PRFL0009	PRFLO010	PRFLACTR	PROCEDURE PROCEDURE
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CLIENT	CLXTRT	COMPAY	DIRPAY	INVCLI	INVCUS	LACLPG	LACTAD	LACTMT	LARPRT	LAVMCN	LAVMDP	LAXTRT	LABATPT	LBATUD	LBLDSR	LCCSSP	LCHUD1	LCHUD2	CCLIUD	LCMPDQ	LCMPSM	COLCG	PROGRAM
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CLIENT	CLXTRT	COMPAY	DTRPAY	INVCLI	INVCUS	LACLPG	LACTAD	LACTMT	LARPRT	LAVMCN	LAVMDP	LAXTRT	LBATPT	LBATUD	LBLDSR	LCCSSP	LCHUD1	гснир2	רכרותם	LCMPDQ	LCMPSM	LCOLCG		PROGRAM FILE
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LPBSCN	LPRTSR	LQLOAD	LSUMAC	LTMUSE	LTRNDF	LTRNDP	LTRNDU	LTRPLY	LUD400	LUD500	LUPDAT	LUSEMT	LUTFMT	LWROFE	LWROFP	RECVRY					PROGRAM
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PROCEDURE/PROGRAM CROSS REFERENCE

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PRFLD001	PRFLD002	PRFLD003	PRFLD004	PRFLD005	PRFLD006	PRFLD007	PRFLD008	PRFLD009	PRFLD010	PRFLD011	PRFLD012	PRFLD013	PRFLH001	PRFLH002	PRFLH003	PRFLH004	PRFLH005	PRFLM001	PRFLM002	PRFLM003	PRFLM004	PRFLM005	PROCEDURE PROGRAM
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PROCEDURE/PROGRAM CROSS REFERENCE

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PROCEDURE/PROGRAM CROSS REFERENCE

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PROCEDURE/PROGRAM CROSS REFERENCE

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PROCEDURE/PROGRAM CROSS REFERENCE

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PROCEDURE/PROGRAM CROSS REFERENCE

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CLIENT	CLXTRT	COMPAY	DIRPAY	INVCLI	INVCUS	LACLPG	LACTAD	LACTMT	LARPRT	LAVMCN	LAVMDP	LAXTRT	LBATPT	LBATUD	LBLDSR	LCCSSP	LCHUD1	LCHUD2	CCLIUD	LCMPDQ	LCMPSM		PROGRAM SUBROUTINE
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CLIENT CLXTRT COMPAY DIRPAY INVCLI INVCUS LACLPG **LACTAD** LACTMT LARPRT LAVMCN LAVMDP LAXTRT LBATPT LBATUD LBLDSR LCCSSP LCHUD1 LCHUD2 LCLIUD LCMPDQ LCMPSM МАЯБОЯЧ UPDEND UP4PRT UP4TOT UP4NXT UPINIT VALDT1 SUBROUTINE



POPOCO	LCOLST	LDACRT	LDALST	LDAQEL	LDECMT	грнирр	LDTLST	LEGAL	LLTBLD	LLTPRT	LLTSTA	LMHUPD	LNMCHG	LPGCMP	LPGCT1	LPGCT2	LPGGEN	LPGLIS	LPGLTB	LPGPRG		PROGRAM SUBROUTINE
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This appendix contains a list of the CCS file and program names and their equivalent LA name.

DESCRIPTION	CCS NAME	LA NAME
Account aging-trend analysis	ACCAGE	LAACCAGE
Collector activity file	ACTFIL	LAACTFIL
Active users	ACTIVE	LAACTIVE
Activity verification table	ACT VERTB	LAACTVTB
Add account	ADDACT	LAADDACT
Trend analysis - output of sort of ACCAGE & RSWFIL	AGEWRK	LAAGEWRK
Activity verification table input (editor)	AVMDESC	LAAVMDSC
Collector statistics	COLSTATS	LACOLSTS
Cosigner	COSIGNER	LACOSIGN
Daily assignment start	DAQUE	LADAQUE
Decision table	DECTBL	LADECTBL
Delinquent master	DELQMST	LADLQMST
Daily assignment	DLYASSN	LADLYASN
Accounts assigned for supervisor review	DLYWRK	LADLYWRK
Inactive accounts	INACCT	LAINACCT
Temporary sort output file	INTEMP	LAINTEMP
Letter description input (editor)	LTRDESC	LALTRDSC
Letter format	LTRFIL	LALTRFIL
News	NEWS	NEWS
Report generator extract	PGEXTR	LAPGEXTR
Report generator procedure stream	PRCWRK	LAPRCWRK
Report generator program name	RPTPGM	LARPTPGM LARPTTBL
Report generator data names Report generator extract program file	RPTTBL RPTWKE	LARPTWKE
Report generator extract program file	RPTWKP	LARPTWKE
Trend analysis	RSWFIL.	LARSWFIL
Screen description input (editor)	SCRNDESC	LASCNDSC
Screen format	SCRNFILE	LASCNFIL
Supervisor DTLLST (LDTLST) requests	SREQDL	LASREQDL
Summary data of accounts in history	SUMHIST	LASUMHST
Identifying data of accounts in tape history	TAPEARC	LATAPARC
Transaction	TRANFL	LATRANFL
Second (backup) transaction	TRNBCK	LATRNBCK
Reformatted transaction	TRNSFL	LATRNSFL
Supervisor requests for updating accounts from history	UPHSTCM	LAUPHSCM
Temporary update from history requests	UPREQ	LAUPDREQ
Utility	UTIFIL	LAUTIFIL
Temporary write-off report	WOEF	LAWOEF
Client master	N/A	LACLIENT
Client inventory reports	N/A	LACLINV
Sequential file of keys used to access client		
master file	N/A	LADLQKEY
Temporary transaction file-financial update	N/A	LAFILTMP
Sort output of LAFILTMP and LATRNSFL (transactions)	N/A	LAFINTRN
Payment (transaction) file created by nightly batch update	N/A	LAPMTFIL
Temporary transaction file - audit trail report	N/A N/A	LARPTDAT
temperary transaction the - addit trait report	13/7	LAINETUAT

CCS	<u>LA</u>
ACTADD	LAACTAD
ACTMTN	LACTMT
AVMCON	LAVMCN
AVMDMP	LAVMDP
BLDSRN	LBLDSR
CCSPAS	LCCSSP
CCSSPC	Same prog. as CCS
CHEKID	Same prog. as CCS
CHUPD1	LCHUD1
CHUPD2	LCHUD2
CHPDLQ	LCMPDQ
CMPSUM	LCMPSM
COLCHG	LCOLCG
COLECT	LEGAL
COLSTS	LCOLST
CPYIND	Same prog. as CCS
DACRTE	LDACRT
DALIST	LDALST
DAQUEL	LDAQEL
DECMTN	LDECMT
DHUPDT	LDHUPD
DTLLST	LDTLST
LTRBLD	LLTBLD
LTRPRT	LLTPRT
LTRSTA	LLTSTA
MHUPDT	LMHUPD
NEWS	Same Prog. as CCS
NMCHNG	LNMCHG
PGCMPR	LPGCMP
PGCNT1	LPGCT1
PGCNT2	LPGCT2
PGGEN	LPGGEN
PGLIST	LPGLIS
PGLTTB	LPGLTB
PGPURG	LTGPRG
PGUPTB	LPGUTB
PHDEL1 PHDEL2 PRETSR PRTSCN	LPHDL1 LPHDL2 LPRTSR LPRSCN
QLOAD	LGLOAD
SUMACL	LSUMAC
TIMUSE	LTMUSE
TRENDF	LTRNDF
TRENDP	LTRNDP
TRENDU	LTRNDU
TRNPLY UIDMTN UPDATE UPD400	LTRPLY Same prog. as CCS LUPDAT LUD400
UPD500	LUD500
USEMTN	LUSEMT
UTFMTN	LUTFMT
WRTOFE	LWROFE
WRTOFP	LWROFP
N/A	CLIENT
N/A	CLXTRT
N/A	COMPAY
N/A	DIRPAY
N/A	INVCLI
N/A	INVCUS
N/A	LACLPG
N/A	LARPRT
N/A	LAXTRT
N/A	LBATPT
N/A	LBATUD
N/A	LCLIUD
N/A	RECVRY

COMMENT SHEET

MANUAL T	TLE <u>CYB</u>	ERCREDIT Collection System	(CCS) Version 3 F	Reference Manual
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