

PROGRAM DOCUMENTATION

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CHANGE RECORD

Revision	Date	Pages Affected
A	2/80	Initial Release

## FOREWORD

This document provides detailed information about Version 1, Revision B of the PCC 2000 Accounts Payable Software. It is an aid to program modification, and though it was written for the PCC 2000 software, most of it applies to Version 2, Revision C of the MITS 300 Accounts Payable System.

This document is divided into four sections:

Section 1, SYSTEM OVERVIEW, describes the system data flow, file structures, and general program structure. It is divided into four parts:

- System Flowchart
- File Structures
- General Program Map
- Common Subroutines

Section 2, DATA RECORD DESCRIPTIONS, describes the record structure of the data files. The files are listed in order of importance. There is one part for each file divided into:

- Record Layout
- Field Explanations

Section 3, INDIVIDUAL PROGRAM STRUCTURE, describes the programs that are uniquely defined in the Accounts Payable system. The programs are listed alphabetically. The documentation for each program consists of three parts:

- Data Files
- Functional Description
- Code Breakdown

Section 4, PROGRAM VARIABLES, lists the variables used in the programs.

- Variable Definitions
- Variable Cross Reference

This document is used in conjunction with the PCC 2000 Accounts Payable Software User's Manual (document number 248101).

Programming terms in this document are defined in C. J. Sippl's Data Communication Dictionary, copyright 1976, and do not connote interpretations outside the computer industry.

FOREWORD

This document provides detailed information about Version 1, Revision B of the FOC 5000 Accounts Payable Software. It is an aid to program modification and though it was written for the FOC 5000 software, most of it applies to Version 2, Revision C of the FOC 5000 Accounts Payable System.

This document is divided into four sections:

Section 1, SYSTEM OVERVIEW, describes the system and how the files are organized, and general program structure. It is divided into four parts:

- Common Subroutines
- General Program File
- File Structures
- System Flowchart

Section 2, DATA RECORD DESCRIPTIONS, describes the record structure of the data files. The files are listed in order of importance. There is one part for each file described here:

- File Description
- Record Layout

Section 3, PROGRAM STRUCTURE, describes the program files and subroutines defined in the accounts payable system. The programs are listed alphabetically. The documentation for each program consists of three parts:

- Code Breakdown
- Functional Description
- Data Files

Section 4, PROGRAM VARIABLES, lists the variables used in the programs:

- Variable Definitions
- Variable Cross Reference

This document is used in conjunction with the FOC 5000 Accounts Payable Software User's Manual (document number 280101).

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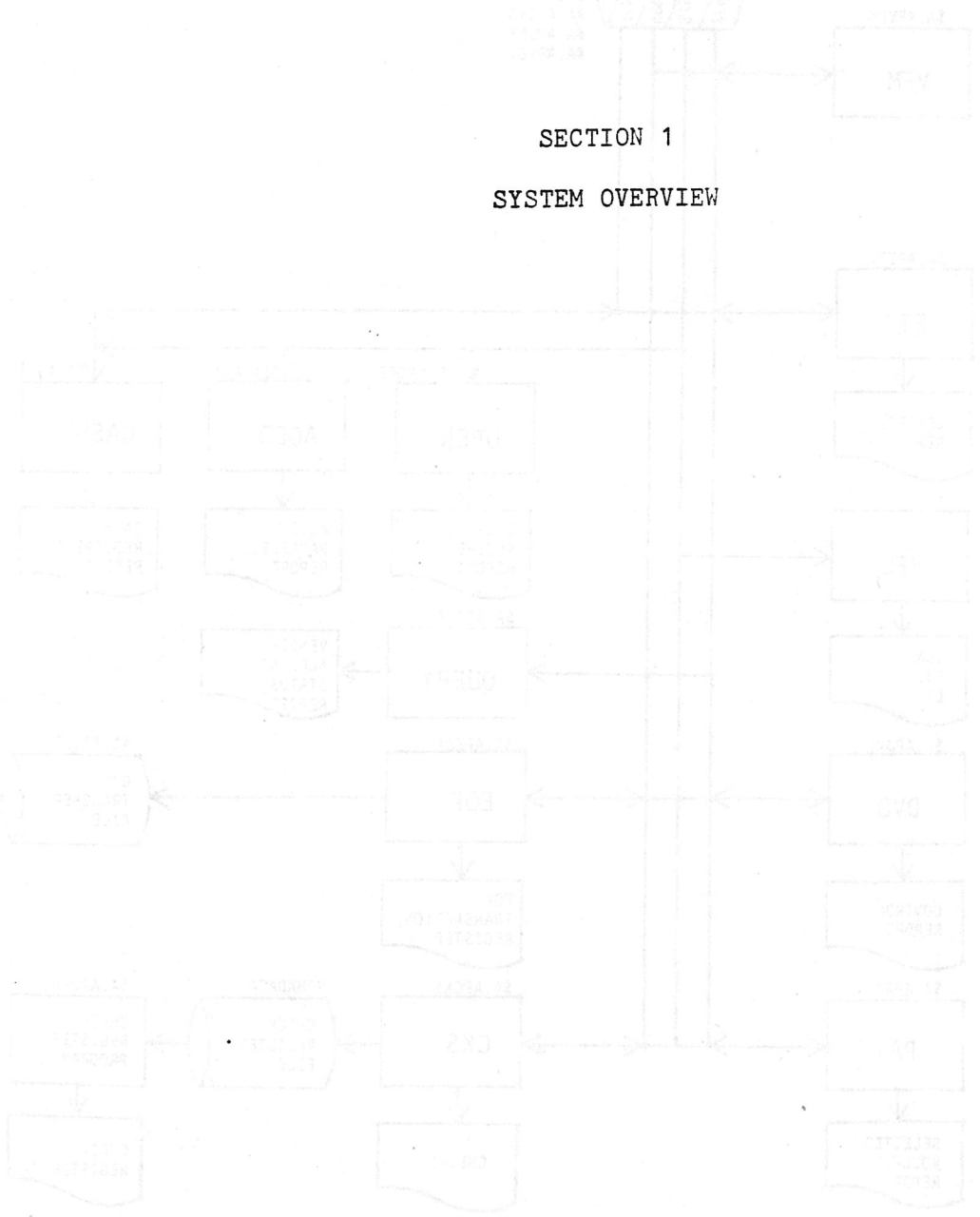
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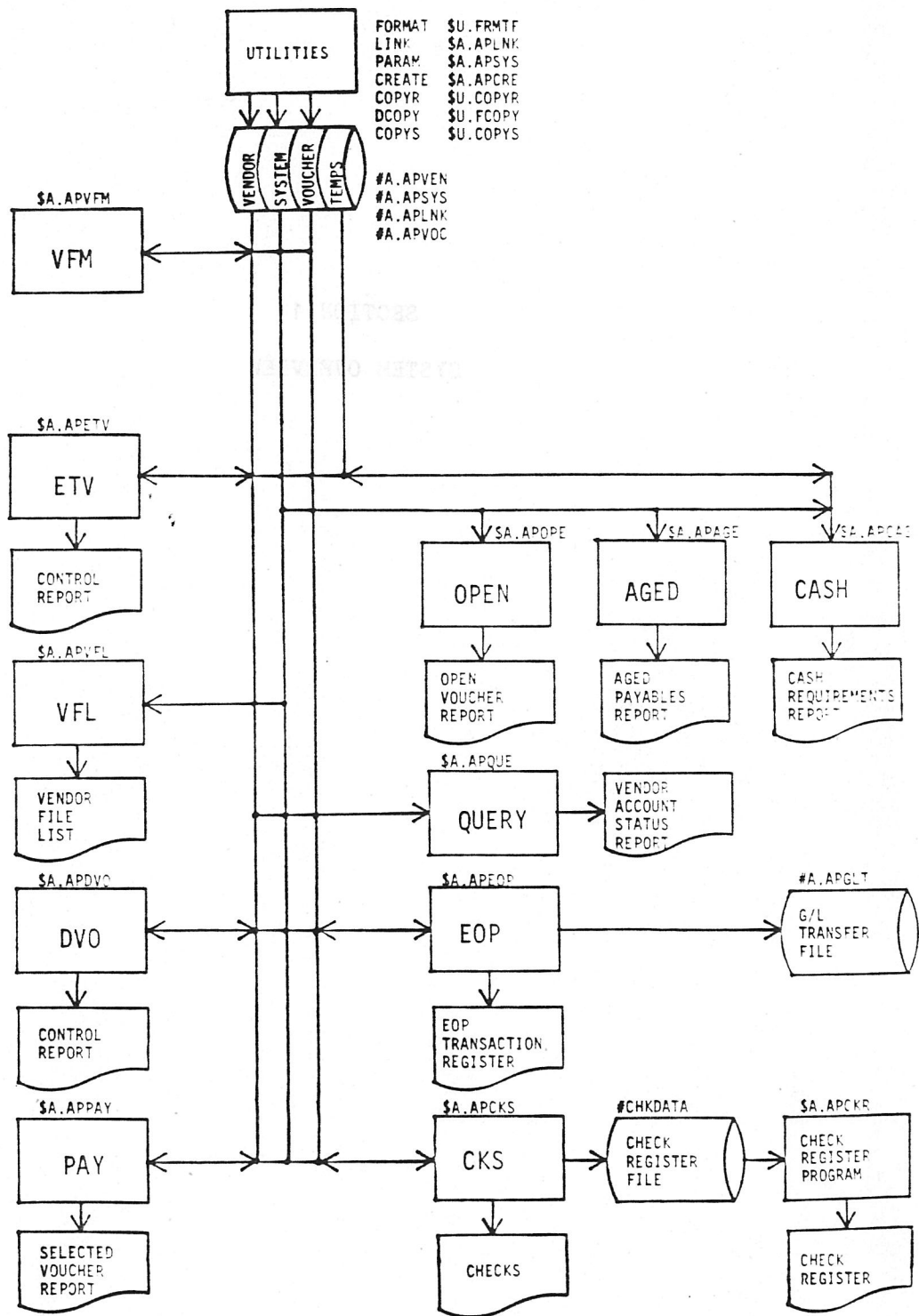
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SECTION 1  
SYSTEM OVERVIEW



SYSTEM FLOWCHART





1-2 FILE STRUCTURES

The Accounts Payable System Software creates and maintains two primary data files, the Vendor File and the Voucher File. A third file, the General Ledger Transfer File is optional.

- The Vendor File contains addresses, totals, and vendor status information.
- The Voucher File contains information about each invoice sent by a vendor.
- The General Ledger Transfer File contains summary records of Payable transactions to be transferred to the General Ledger.

Physically, each data file record requires one sector of disk storage and about 12% overhead for the ISAM key records.

In addition to the three data files, there are three system files and several temporary files.

- The System Parameter File contains information about the particular release and the installation of the Accounts Payable Software.
- The System Linkage File links the programs to the main data disk and stores the system date.
- The Help Message File contains information about the operator prompts.
- The temporary files store information for entering data, disk sorting, and report generating.

1-3 GENERAL PROGRAM MAP

The following line numbers and descriptions apply to all Accounts Payable Applications Programs:

Line Numbers	Functional Description
00000-00000	Program File Name, Title, Revision Date, and Programmer's Initials
00001-00001	SET "CTL OFF" ' Disable keyboard control characters, : CLEAR 5000 ' assign string space, and : DP% = 0 ' assign the program drive number.
00002-00002	N1\$ = "#A.APLNK" : N2\$ = "#A.APSYS" : N3\$ = "\$A.APLNK" : N4\$ = "\$A.APSYS" ' Assign the system program names : N5\$ = "#A.APHLP" ' and the system data file names.
00003-00003	PN\$ = "Program Name"
00004-00004	GOSUB 50000 ' Call the program set up subroutine.
00005-00005	N6\$ = "#A.APVEN" : N7\$ = "#A.APVOC" : N8\$ = "#CHKDATA" : N9\$ = "#A.APGLT" ' Assign the data file names.
00006-19899	Program Body
19900-19999	Close all files, end the program, and run the menu.
20000-45000	Program Subroutines
46000-46120	Retrieve the vendor or voucher record.
46020	FI% equals 1, retrieve the vendor record.
46070	FI% equals 2, retrieve the voucher record.
46110-46120	Unpack the G/L Account/Amount pairs from the voucher.
46500-46500	Retrieve the succeeding vendor or voucher record.
47000-47000	Create the vendor or voucher record.
47500-47620	Restore the vendor or voucher record.
47510	FI% equals 1, restore the vendor record.
47570	FI% equals 2, restore the voucher record.
47610-47620	Pack the G/L Account/Amount pairs into the voucher.
48000-48000	Set up the Vendor and Voucher Files.

## GENERAL PROGRAM MAP (continued)

Line Numbers	Functional Description
48050-48050	Rewind the Vendor or Voucher File.
48100-48499	Open the Vendor and Voucher Files.
48100	FI% equals 1, open the Vendor File.
48110	FI% equals 2, open the Voucher File.
48500-48560	Field variables for the vendor and voucher records.
48510	Field variables for the vendor record.
48530	Field variables for the voucher record.
48540-48550	Field variables for the G/L Account/Amount pairs.
49000-49499	Close the Vendor and Voucher Files.
49500-49500	Delete the vendor or voucher record.
50000-50899	Set up constants, error trapping, functions, screen heading, and system files.
50160	FN DI\$(D#) - Function to pack a dollar amount
50165	FN ID\$(I\$) - Function to unpack a dollar amount
50170	FN SD!(S\$) - Function to pack a date
50175	FN DS\$(D!) - Function to unpack a date
50900-50910	Heading Subroutine
51000-51099	Input an alphanumeric string (Subroutine Query).
51200-51300	Input a number (Subroutine Querynumber).
51400-51450	Input a date (Subroutine Querydate).
51600-51710	Input a dollar amount (Subroutine Querydollar).
51800-51810	Input a yes or no (Subroutine Queryyesno).
54000-54000	INVALID ENTRY Subroutine
54050-54050	SEVERE SYSTEM ERROR Test
54100-54110	SEVERE SYSTEM ERROR Subroutine
54200-54200	NUMBER OUT OF RANGE Subroutine
54300-54300	INCORRECT DATE Subroutine
54500-54700	Error Trap Subroutine
59000-59250	Help File Subroutine

1-3 GENERAL PROGRAM MAP (continued)

Line Numbers	Functional Description
ISAM	ISAM-TWO ' ISAM062878RB
60000-60310	ISAM create file
60200-60200	ISAM read/set the file Comment/Parameter Area
60500-60850	ISAM file set up
61000-61200	ISAM file open
61200-61200	ISAM file rewind
61500-61620	ISAM file close
62000-62190	ISAM create record
62500-62900	ISAM delete record
63000-63200	ISAM retrieve record
63500-63500	ISAM restore record
64000-64130	ISAM retrieve succeeding record
64500-65400	ISAM retrieve preceding record
65515-65515	SAVE "program name": END
65520-65520	SET the PRINT output command to the printer.
65525-65525	SET the PRINT output command to the CRT.
65528-65528	Subroutine to set the logical page size equal to the physical page size
65529-65529	Top-of-Forms Subroutine

## 1-4 COMMON SUBROUTINES

The subroutines common to the Accounts Payable System and all PCC accounting programs are described below.

### 1-4-1 Common Subroutines for the Accounts Payable Programs

The following subroutines are similar or identical in all Accounts Payable Applications Programs. The subroutines and their variations are described below:

#### 00000-00006 Program set up and initialization

This section identifies the program, assigns data file names to variables, disables keyboard characters, and calls the Program Set Up Subroutine. The revision date in line 0 identifies the program for maintenance purposes. Anyone modifying the program should add a new revision date at the end of the list. The keyboard control characters are disabled to prevent programs from being interrupted before the ISAM files are properly closed.

#### 18100 Voucher Key Unpacking Subroutine

This subroutine takes a voucher code stored in B\$(0) and converts it to a printable form stored in KO\$.

#### 46000 Retrieve the vendor or voucher record.

A call to this subroutine with FI% = 1 retrieves vendor KE\$. A call with FI% = 2 retrieves voucher KE\$.

#### 46110 Unpack the G/L Account/Amount Pairs from the voucher.

Programs not using the G/L Account/Amount pairs have this subroutine simplified to avoid unpacking these fields.

#### 46500 Retrieve the succeeding vendor or voucher record.

This subroutine retrieves the key succeeding the last key retrieved or stored.

1-4-1 Common Routines for the Accounts Payable Programs (continued)

47000 Create the vendor or voucher record.

A call to this subroutine with FI% = 1 creates vendor record KE\$. A call with FI% = 2 creates voucher record KE\$. The create subroutine destroys ISAM positioning. A call to retrieve a succeeding or preceding record, made after creating a record, returns a random record.

47610 Pack the G/L Account/Amount pairs into the voucher.

Programs not using the G/L Account/Amount pairs have this subroutine simplified to avoid packing these fields.

47500 Restore the vendor or voucher record.

The restore function modifies an existing record. A call with FI%=1 restores a vendor record and a call with FI% = 2 restores a voucher record.

48000 Set up the Vendor and Voucher Files.

The set up function must be performed after the files are opened. NF% is the maximum number of files that can be concurrently open. NB% is the number of virtual I/O buffers used.  $NB\% = 8 + NF\% * 5$  is the optimum number of I/O buffers.

48050 Rewind the Vendor or Voucher File.

The rewind function repositions the ISAM file index pointers to the beginning of the file

48100 Open the Vendor and Voucher Files.

This subroutine opens the Vendor and the Voucher file. The File Open Flag FO% is set to TRUE.

48500 Field variables for the vendor and voucher records.

This subroutine defines the data fields for the vendor and voucher records. Programs not using the G/L Account/Amount pairs are simplified and do not distinctly define these fields.

1-4-1 Common Subroutines for the Accounts Payable Programs (continued)

48540 Field variables for the G/L Account/Amount pairs.

Programs not using the G/L Account/Amount pairs have this subroutine simplified to avoid defining fields for these variables.

49000 Close the Vendor and Voucher Files.

This subroutine closes the Vendor File and then the Voucher File. Before a close is attempted on the Vendor File, the File Open Flag FO% is set to FALSE.

A serious error condition in the program normally closes the files; however if an error occurs while closing the Vendor File, the Voucher File is not closed. The File Open Flag FO% prevents an infinite file close attempt loop after an error is encountered closing the Vendor File.

49500 Delete the vendor or voucher record.

A call to this subroutine with FI% = 1 deletes vendor record KE\$. A call with FI% = 2 deletes voucher record KE\$.

65515 Maintenance Program SAVE Line

This line is for program maintenance and is not encountered during the programs operation. A GOTO 65515 entered in the direct mode saves the program and eliminates the possibility of entering the program name incorrectly.

## 1-4-2 Common Subroutines for All Accounting Systems

The following subroutines are similar or identical in all Accounting Programs. The subroutines and their variations are described below:

### 19900 Program End Subroutine

This subroutine closes ISAM and any other open files, resets the PRINT Command to the CRT, displays END OF "program name", prompts for RETURN TO THE SYSTEM MENU, resets error control back to BASIC, and runs the menu program.

### 50000 Program Set Up Subroutine

This subroutine opens and reads the run-time parameters from the system and linkage files; sets the run-time constants and internal error trap; prints the screen heading; initializes the functions; and opens the Help File.

### 50160 FN DI\$(D#)- Function to pack a dollar amount

This function converts a double precision amount in dollars to a four character integer string in cents.

The integer range is  $-2^{31}$  to  $2^{31} - 1$  cents. The largest representable dollar amount is \$21, 474, 836.47.

### 50165 FN ID\$(I\$) - Function to unpack a dollar amount

This function converts a packed four character integer string in cents to a double precision amount in dollars.

### 51070 FN SD!(S\$) - Function to pack a date

This function converts an eight character date string in the form MM/DD/YY to a single precision number with the decimal representation YYMMDD.

### 50175 FN DS\$(D!) - Function to unpack a date

This function converts a single precision packed date with the decimal representation YYMMDD into a string with the eight character representation MM/DD/YY.



50900 Heading Subroutine

If LP is true, the heading is printed on the printer; else, the screen is cleared and the heading is printed on the it.

51000 Subroutine Query(Q\$, Q, QL, QS, QT, R\$, RL, RL\$) - Input an alphanumeric string

Q\$ - Query prompt message  
Q - Help File message number  
QL - Query Field size  
QS - End Query print line flag  
QT - Number of tabs printed before the Q\$ message  
R\$ - User response returned by this subroutine  
RL - Length of user response  
RL\$- Leftmost character of the response

This subroutine is the basic input routine. It prints Q\$ after QT spaces and then waits for a response. Double quotes are not allowed in an input string. Entering a question mark causes the Help message to be displayed. All other responses are returned in R\$. RL is the length of the response and RL\$ is the leftmost character.

Variations of this subroutine use QS to determine whether to end the print line and others print "? " after Q\$.

51200 Subroutine Querynumber(Q\$, Q, QT, UB!, LB!, N!) - Input a number

Parameters Q\$, Q, and QT are described in Subroutine Query.  
UB! - Upper bound for N!  
LB! - Lower bound for N!  
N! - Value returned by this subroutine in the range LB!<=N!<=UB!

This subroutine prompts the user for a number with Query and validates the returned string R\$. A valid entry is a null, in which case N!= 0. Another valid entry is blanks followed by an optional "+" or "-" and one or more digits with an optional ".". If R\$ is valid, and not >= LB! or <= UB!, "OUT OF RANGE" is printed and a new R\$ is requested. If LB! equals UB!, R\$ is not range checked.

1-4-2 Common Subroutines for All Accounting Programs (continued)

51400 Subroutine Querydate(Q\$, Q, QT, R\$, MO, DA, YR) - Input a date.

Parameters Q\$, Q, QT, and R\$ are described in Subroutine Query.  
MO - Month entered  
DA - Day entered  
YR - Year entered

This subroutine prompts the user for a date with Query and validates the returned string R\$. A valid date is a null, in which case MO=DA=YR=0, or R\$ is in the form MM/DD/YY where 1<=MM<=12, 1<=DD<=31, and 9<=YY<=99. R\$ contains the date string from which MO, DA, and YR were derived.

51600 Subroutine Querydollar(Q\$, Q, QT, R\$, D#) - Input dollar amount.

Parameters Q\$, Q, QT, and R\$ are described in Subroutine Query.  
D# - Dollar value entered

This subroutine prompts the user for a dollar value with Query and validates the returned string R\$. A valid value is a null, in which case D# = 0; or R\$ is a valid number (see Querynumber), or a number preceded by a "\$". Commas are ignored. R\$ contains the dollar amount string from which D# was derived.

51800 Subroutine Queryyesno(Q\$, Q, QT, YES) - Input a yes or a no.

Parameters Q\$, Q, and QT are described in Subroutine Query.  
YES - Set TRUE (-1) if the response is Y  
- Set FALSE (0) if the response is N

This subroutine prompts the user for "(Y OR N)?" with Query. If the first character of the response is not Y or N, the prompt is repeated.

54000 - 54700 Error messages and error trapping

This section contains the system error messages, ISAM Error Check Subroutine, and the ABNORMAL END OF JOB Subroutine.

1-4-2 Common Subroutines for All Accounting Systems (continued)

59000 Help File Subroutine

This subroutine does a binary search on the Help File directory and displays message number Q. It is called when a "?" is responded to query. Q is a Query routine parameter. Refer to Section 2-6 for an explanation of the Help File's structure and purpose.

60000-65400 ISAM - TWO

See MITIS ISAM Software (PCC 2000) Version, Document Number 248107.

65520-65525 PRINT Command Output Device Switching Subroutines

These two subroutines allow all printing to be done with the PRINT command and allow the option of displaying a report on the CRT or printing it.

65528 Set the logical page size equal to the physical page size.

The logical page size is set equal to the physical page size to prevent the BASIC print driver from paging. All paging is done under program control.

65529 Top-of-Forms Subroutine

This subroutine advances to the next page by printing blank lines and then resets the line count variable LC to zero.

20000 Main File Subroutine

This subroutine does a query search on the help file directory and displays message number 6. It is called when a "P" is responded to query 4 in a query routine parameter. Refer to Section 2-2 for an explanation of the help file's structure and purpose.

20000-20100 ISAM - 100

See THIS ISAM Routines (100 2000) Section, Document Number 20000.

20000-20200 PRINT-Formatted Output Device Subroutines

These two subroutines allow all printing to be done with the PRINT command and allow the option of displaying a report on the CRT or printing it.

20000-20300 Set the Logical Page Size

The logical page size is not equal to the physical page size to take into account the print driver from output. All output is done using program control.

20000-20400 Four Subroutines

This subroutine advances to the next page by printing line feeds then resets the line count variable to zero.

DATA RECORD DESCRIPTIONS

There are 13 data files in one account readable System two Primary Data Files SA.PRVN and SA.PVND; a Q1 Transfer File SA.AQD1; three System Files SA.AQD1, SA.PVND, and SA.PVND; a Check Register Data File SA.CHR1; four Temporary Files SA.TEMP, SA.TEMP2, SA.TEMP3, and SA.TEMP4; and two Test Data Files TESTV01 and TESTV02.

Layouts and field explanations of these files are detailed in the following paragraphs:

Paragraph	File Name	Type	Description
2-1	SA.PRVN	128 Records	Vendor File
2-2	SA.PVND	128 Records	Vendor File
2-3	SA.AQD1	System File	General Ledger Transfer File
2-4	SA.PVND	System File	System Transfer File
2-5	SA.PVND	System File	System Transfer File
2-6	SA.TEMP	System File	System Help File
2-7	SA.TEMP2	System File	Check Register File
2-8	SA.TEMP3	System File	Temporary File from SA.AQD1
2-9	SA.TEMP4	System File	Temporary File from SA.AQD1
2-10	SA.TEMP5	System File	Temporary File from SA.AQD1
2-11	TESTV01	128 Records	Original Test Vendor File
2-12	TESTV02	128 Records	Original Test Vendor File

SECTION 2

DATA RECORD DESCRIPTIONS

## DATA RECORD DESCRIPTIONS

There are 13 data files in the Accounts Payable System: two Primary Data Files #A.APVEN and #A.APVOC; a G/L Transfer File #A.APGLT; three System Files #A.APHLP, #A.APLNK, and #A.APSYS; a Check Register Data File #CHKDATA; four Temporary Files #APTEMP#, <<TEMP>>, >>TEMP<<, and SORT; and two Test Data Files TESTVEN and TESTVOC.

Layouts and field explanations of these files are detailed in the following paragraphs:

Paragraph	File Name	Type	Description
2-1	#A.APVEN	ISAM Random	Vendor File
2-2	#A.APVOC	ISAM Random	Voucher File
2-3	#A.APGLT	Sequential	General Ledger Transfer File
2-4	#A.APSYS	Sequential	System Parameter File
2-5	#A.APLNK	Sequential	System Linkage File
2-6	#A.APHLP	Help Random	System Help File
2-7	#CHKDATA	Sequential	Check Register Data File
2-8	#APTEMP#	Sequential	Temporary File from \$A.APETV
2-9	<<TEMP>>	Sequential	Temporary File from \$A.APCAS
2-10	>>TEMP<<	Sequential	Temporary File from \$A.APCAS
2-11	SORT	Sequential	Temporary File from \$A.APCAS
2-12	TESTVEN	ISAM Random	Original Test Vendor File
2-13	TESTVOC	ISAM Random	Original Test Voucher File

2-1 #A.APVEN - VENDOR FILE

2-1-1 #A.APVEN - Vendor File Layout

The Vendor File is an ISAM random file and has the following layout:

Field Number	Field Description	Field Width	Position From	Position To	Field Name	Program Variable
1	Vendor Code	6	1	6	KY\$(1)	A\$(0)
2	Vendor Name	24	7	30	F1\$(1)	A\$(1)
3	Address 1	24	31	54	F1\$(2)	A\$(2)
4	Address 2	24	55	78	F1\$(3)	A\$(3)
5	Area Code	2	79	80	F1\$(4)	A1\$
6	Phone Number	4	81	84	F1\$(5)	A2\$
7	YTD Purchases	4	85	88	F1\$(6)	A#(1)
8	YTD Payments	4	89	92	F1\$(7)	A#(2)
9	Current Balance	4	93	96	F1\$(8)	A#(3)
10	Last Payment	4	97	100	F1\$(9)	A#(4)
11	Last Payment Date	4	101	104	F1\$(10)	A\$(5)
12	Monthly Entry	1	105	105	F1\$(11)	A\$(6)
13	Due Day of Month	1	106	106	F1\$(12)	A\$(7)
14	Debit Account #1	5	107	111	F1\$(13)	A\$(8)
15	Debit Amount #1	4	112	115	F1\$(14)	A#(5)
16	Debit Account #2	5	116	120	F1\$(15)	A\$(9)
17	Debit Amount #2	4	121	124	F1\$(16)	A#(6)
18	Month Last Paid	1	125	125	F1\$(17)	A\$(10)
19	Highest Voucher No.	1	126	126	F1\$(18)	A\$(11)
20	Reserved	2	127	128	-	-

2-1-2 #A.APVEN - Vendor File Field Explanations

The Vendor File contains vendor names and addresses, accumulated voucher information, and voucher numeration and Automatic Voucher generation information.

Field	Explanation
Field 1 Vendor Code	Five characters identify a vendor. The characters hyphen (-) and double quote (") are not allowed. The Vendor Code is a duplicate of the ISAM key.
Field 2 Vendor Name	The vendor name as it appears on reports and checks
Field 3 Address 1	The vendor's street address and any suite or room number
Field 4 Address 2	City, State, and zip code
Field 5 Area Code	Vendor area code
Field 6 Phone Number	The vendor's telephone number
Field 7 YTD Purchases	Total dollar amount of purchases made from the vendor this year
Field 8 YTD Payments	Total dollar amount of payments made to the vendor this year
Field 9 Current Balance	YTD purchases minus YTD payments made to the vendor
Field 10 Last Payment	Dollar amount of last payment made to the vendor
Field 11 Last Payment Date	Date of last payment made to the vendor
Field 12 Monthly Entry Flag	This flag indicates that an Automatic Voucher is to be generated. Y indicates yes; N indicates no and also that fields 13 to 18 are not in the record.



2-1-2 #A.APVEN - Vendor File Field Explanations (continued)

Field	Explanation
Field 13 Due Day of Month	A number from 1 to 31, indicating the day of the month to pay the vendor, is required if the Monthly Entry Flag is a Y.
Field 14 Debit Account #1	The first account for the G/L distribution of an automatic voucher is required if the Monthly Entry Flag is a Y.
Field 15 Debit Amount #1	A dollar amount to debit the account in Field 16 is required if the Monthly Entry Flag is a Y
Field 16 Debit Account #2	A second account for the G/L distribution of an automatic voucher is optional. Automatic Vouchers allow two distributions only.
Field 17 Debit Amount #2	A dollar amount to debit the account in Field 16 is required if Field 16 has an account number.
Field 18 Month Last Paid	A number from 1 to 12 indicates the month the last Automatic Voucher was generated.
Field 19 Highest Voucher	The last voucher extension used is read and updated when new vouchers are created in the Enter Vouchers Program.
Field 20 Reserved	Reserved for future use

2-2 #A.APVOC - VOUCHER FILE

2-2-1 #A.APVOC - Voucher File Layout

The Voucher File is an ISAM random file and has the following layout:

Field Number	Field Description	Field Width	Position From	Position To	Field Name	Program Variable
1	Voucher Code	6	1	6	KY\$(2)	B\$(0)
2	Voucher Date	4	7	10	F2\$(1)	B\$(1)
3	Amount Due	4	11	14	F2\$(2)	B\$(1)
4	Date Due	4	15	18	F2\$(3)	B\$(2)
5	Discount Percent	2	19	20	F2\$(4)	B\$(3)
6	Discount Amount	4	21	24	F2\$(5)	B\$(2)
7	Discount Date	4	25	28	F2\$(6)	B\$(4)
8	Invoice Number	10	29	38	F2\$(7)	B\$(5)
9	Invoice Date	4	39	42	F2\$(8)	B\$(6)
10	Payment Status	1	43	43	F2\$(9)	B\$(7)
11	G/L Account #1	5	44	48	F2\$(10)	B\$(8)
12	G/L Amount #1	4	49	52	F2\$(11)	B\$(3)
13	G/L Account #2	5	53	57	F2\$(12)	B\$(9)
14	G/L Amount #2	4	58	61	F2\$(13)	B\$(4)
15	G/L Account #3	5	62	66	F2\$(14)	B\$(10)
16	G/L Amount #3	4	67	70	F2\$(15)	B\$(5)
17	G/L Account #4	5	71	75	F2\$(16)	B\$(11)
18	G/L Amount #4	4	76	79	F2\$(17)	B\$(6)
19	G/L Account #5	5	80	84	F2\$(18)	B\$(12)
20	G/L Amount #5	4	85	88	F2\$(19)	B\$(7)
21	G/L Account #6	5	89	93	F2\$(20)	B\$(13)
22	G/L Amount #6	4	94	97	F2\$(21)	B\$(8)
23	G/L Account #7	5	98	102	F2\$(22)	B\$(14)
24	G/L Amount #7	4	103	106	F2\$(23)	B\$(9)
25	G/L Account #8	5	107	111	F2\$(24)	B\$(15)
26	G/L Amount #8	4	112	115	F2\$(25)	B\$(10)
27	G/L Account #9	5	116	120	F2\$(26)	B\$(16)
28	G/L Amount #9	4	121	124	F2\$(27)	B\$(11)
29	Discount Status	1	125	125	F2\$(28)	B\$(17)
30	EOP Status	1	126	126	F2\$(29)	B\$(18)
31	Reserved	2	127	128	-	-

2-2-2 #A.APVOC - Voucher File Field Explanations

A record is set up for each voucher or credit memo entered into the system. The record contains vendor invoice information, plus the G/L distribution, discount status, payment status, and G/L transfer status codes.

Field	Explanation
Field 1 Voucher Code	A vendor key plus a one byte sequence number from 1 to 250 is a duplicate of the ISAM key.
Field 2 Voucher Date	Date the voucher was entered into the system
Field 3 Amount Due	The total dollar amount due for this voucher is equal to the total of all account distributions.
Field 4 Date Due	Date the voucher is due to be paid
Field 5 Discount Percent	The integer percent of any available discount to calculate Field 6, the Discount Amount, is optional.
Field 6 Discount Amount	If the dollar amount of an allowed discount is entered it is used to calculate Field 5, the Discount Percent.
Field 7 Discount Date	Last date to pay the voucher and earn a discount
Field 8 Invoice Number	An optional field identifies the vendor's invoice.
Field 9 Invoice Date	Optional vendor invoice date
Field 10 Voucher Status	A status code is used in payment selection, check writing, and end-of-period processing.

Voucher Status Codes:

- P - To be paid
- A - Don't pay
- W - Paid, check written
- C - Credit memo

2-2-2 #A.APVOC - Voucher File Field Explanations (continued)

Field	Explanation
Field 11 G/L Account #1	G/L distribution account #1
Field 12 G/L Amount #1	G/L distribution amount #1
Field 13 G/L Account #2	Optional G/L distribution account #2
Field 14 G/L Amount #2	Optional G/L distribution amount #2
Field 15 Account #3	Optional G/L distribution account #3
Field 16 Amount #3	Optional G/L distribution amount #3
Field 17 Account #4	Optional G/L distribution account #4
Field 18 Amount #4	Optional G/L distribution amount #4
Field 19 Account #5	Optional G/L distribution account #5
Field 20 Amount #5	Optional G/L distribution amount #5
Field 21 Account #6	Optional G/L distribution account #6
Field 22 Amount #6	Optional G/L distribution amount #6
Field 23 Account #7	Optional G/L distribution account #7
Field 24 Amount #7	Optional G/L distribution amount #7

2-2-2 #A.APVOC - Voucher File Field Explanations (continued)

Field	Explanation
Field 25 Account #8	Optional G/L distribution account #8
Field 26 Amount #8	Optional G/L distribution amount #8
Field 27 Account #9	Optional G/L distribution account #9
Field 28 Amount #9	Optional G/L distribution amount #9
Field 29 Discount Status	Discount Status  Discount Status Codes: Y - Discount taken N - Discount not taken (blank) - Credit Memo from the check program
Field 30 EOP Status	End-of-period transfer status  EOP status codes: Y - Passed to the G/L N - Not yet passed to the G/L X - Credit Memo from the check program, not yet passed to the G/L
Field 31 Reserved	Reserved for future use

2-2-3 #A.APVOC - Voucher File User Comment/Parameter Area Layout

The ISAM User Comment/Parameter Area for the Voucher File is used in a payment selection by date. It contains the totals and dates used for on-line check reconciliation of cash available and voucher amounts.

The ISAM User Comment/Parameter Area for the Voucher File has the following layout:

Field Number	Field Description	Field Width	Position From	Position To	Field Name	Program Variable
1	Voucher File Change Flag	2	1	2	T0\$	TT%
2	Pay Program Pay Date	4	3	6	T1\$	DY
3	Cash Available	8	7	14	T2\$	CA#
4	Discount Window Begin Date	4	15	18	T3\$	DB
5	Discount Window End Date	4	19	22	T4\$	DE
6	Due Date	4	26	29	T5\$	DU
7	Accumulated Due Amount	8	30	37	T6\$	TI#
8	Accumulated Discount Amount	8	38	45	T7\$	TW#
9	Total Debits	8	46	53	T8\$	TD#
10	Unused	78	54	128	-	-

2-3 #A.APGLT - GENERAL LEDGER TRANSFER FILE

2-3-1 General Ledger Transfer File Layout

The G/L Transfer File is a BASIC random file and has the following layout:

Field Number	Field Description	Field Width	Position From	Position To	Field Name	Program Variable
1	Account Number	6	1	6	F2\$(0)	STR\$(
2	Source Code	1	7	7	F2\$(1)	"A"
3	Reference	8	8	15	F2\$(2)	Unused
4	Description	24	16	39	F2\$(3)	Literal
5	Date	4	40	43	F2\$(4)	DA
6	Amount	4	44	47	F2\$(5)	AC(
7	Unused	81	48	128	-	Unused

2-3-2 #A.APGLT - General Ledger Transfer File Field Explanations

This file is created by the A/P System to interface with the General Ledger System. The account numbers entered in the Enter Vouchers Program (ETV) and the Vendor File Maintenance Program (VFM) must be valid account numbers within the General Ledger Chart of Accounts. Transactions having invalid account numbers will not be posted.

This transfer file is created during end-of-period processing and is read by the General Ledger Transaction Transfer Program within the General Ledger System. The file remains on the diskette until it is KILLED or overwritten during the next month's processing.

Field	Explanation
Field 1	Five digits uniquely identify a General Ledger account. The left three digits are the major account code; the right two digits, if present, are the sub-account or department code.
Field 2 Source Code	A single character denotes the source document or system that originated the transaction. This is always an "A" for the Accounts Payable System.
Field 3 Reference	Not used by the A/P System
Field 4 Description	Twenty-four blanks or a description of the A/P transaction
Field 5 Date	Date the transaction was processed in the End-of-Period Program
Field 6 Amount	Transaction debit or credit amount with a maximum of \$9,999,999.00, absolute
Field 7 Unused	Unused



2-4 #A.APSYS - SYSTEM PARAMETER FILE

2-4-1 #A.APSYS - System Parameter File Layout

The System Parameter File is a BASIC sequential file and has the following layout:

Field Number	Field Description	Maximum Field Width	Program Variable
1	Total Data Elements in the File	2	TE
2	System Name	24	VV\$(1)
3	Diskette Title/Version	24	VV\$(2)
4	Creation Date	8	VV\$(3)
5	Disk Type Code (H or F)	1	VV\$(4)
6	Company Name	24	VV\$(5)
7	Address 1 of 2	24	VV\$(6)
8	Address 2 of 2	24	VV\$(7)
9	G/L Present ? (Y or N)	1	VV\$(8)
10	G/L Account for Cash	5	VV\$(9)
11	G/L Account for A/P	5	VV\$(10)
12	G/L Account for Discount	5	VV\$(11)
13	Voucher Deletion Allowed (Y or N)	1	VV\$(12)

2-4-2 #A.APSYS - System Parameter File Field Explanations

The System Parameter File identifies the release and contains information specific to the installation. All application programs read this file.

Field	Explanation
Field 1 Total Data Elements	Number of data fields in the file (There are twelve data fields in the A/P System.)
Field 2 System Name	ACCOUNTS PAYABLE
Field 3 Title/Version	Title/Version identifies the version of the Accounts Payable Software. It verifies that the latest version of the programs is in use and it <u>must not be changed</u> . Users changing programs must add an identifier to the end of the original entry (maximum of 24 characters).
Field 4 Creation Date	The creation date of the current version of the A/P Software must be changed when any program is modified.
Field 5 Disk Type Code (H or F)	F or H identifies floppy or hard disk, respectively. This variable is used by the menu to select the proper utility submenu and by ISAM to determine the disk size.
Field 6 Company Name	The company name (up to 24 characters) is taken from the parameter file of the main <u>data</u> disk to be printed on reports.
Field 7 Address 1 of 2	First line of the company address (maximum of 24 characters)
Field 8 Address 2 of 2	Second line of the company address (maximum of 24 characters)
Field 9 G/L Present?	A software configuration code specifies whether the General Ledger Software is used with the A/P Software (Y or N).
Field 10 G/L Account for Cash	Five-digit G/L account code for cash

2-4-2 #A.APSYS - System Parameter File Field Explanations (continued)

Field	Explanation
Field 11 G/L Account for A/P	Five-digit G/L account code for Accounts Payable
Field 12 G/L Account for Discount	Five-digit G/L account code for discounts earned
Field 13 Voucher Deletion Allowed (Y or N)	A Y allows the use of the Delete Voucher Program (DVO), and an N does not.

2-5 #A.APLNK - SYSTEM LINKAGE FILE

2-5-1 #A.APLNK - System Linkage File Layout

The System Linkage File is a BASIC sequential File and has the following layout:

Field Number	Field Description	Field Width	Program Variable
1	Data File Drive Number	1	DK%
2	Current Date	8	VD\$
3	Menu/Submenu Pointer	1	IM
4	Program Selection Pointer	1	IP

2-5-2 #A.APLNK - System Linkage File Field Explanations

The System Linkage File contains information linking the applications programs to the menu program and the data disk. This file also contains the A/P System default date.

Field	Explanation
Field 1 Data File Drive Number	The drive number of the data disk
Field 2 Current Date	The date entered in the Master Activity Selection Menu is the default date used by all programs.
Field 3 Menu/Submenu Pointer	A pointer used by the Menu Program to determine whether to display the Master Activity Selection Menu, the Report Generation Selection Menu, or the Utility Function Selection Menu.
Field 4 Program Selection Pointer	A pointer to the program last selected in the Menu Program

2-6 #A.APHLP - HELP FILE

The Help File aids the user in answering program prompts. If a prompt is not understood, enter a "?" and an explanation is displayed. After the explanation, the prompt is repeated. All accounting programs access the Help File.

The Help File is a BASIC random file that contains explanatory messages preceded by a two sector, sorted directory. The directory contains the Help message number, the starting record number, and the number of records in the message. Each prompt has a message number stored in the variable Q. The Help File Subroutine is called when a "?" is responded to a prompt. The prompt message is found using a binary search on the directory. If Q equals zero, the operator is referred to the manual. If message Q is not in the file, "\*\*\* <MSG>" is displayed followed by the value of Q.

2-7 #CHKDATA - CHECK REGISTER FILE

The Check Register File is a BASIC sequential file produced by the Print Payables Checks Program and used by the Check Register Program. It contains all the information printed on each vendor's check.

2-8 #APTEMP# - TEMPORARY FILE FOR THE \$A.APETV PROGRAM

This is a BASIC sequential file and is used by the Enter Vouchers Program to store information as each voucher is entered. This avoids the delay caused by ISAM record creation during the entry step. After "END" is entered terminating a group of voucher entries, the file is sequentially read and the stored information is used to create the voucher in the Voucher File.

2-9 <<TEMP>> - TEMPORARY FILE FOR THE \$A.APCAS PROGRAM

This file is used for the Cash Requirements Program sort/merge.

2-10 >>TEMP<< - TEMPORARY FILE FOR THE \$A.APCAS PROGRAM

This file is used for the Cash Requirements Program sort/merge.

2-11 SORT - TEMPORARY FILE FOR THE \$A.APCAS PROGRAM

This file is used for the Cash Requirements Program sort/merge.

2-12 TESTVEN - ORIGINAL VENDOR TEST DATA FILE

This is a copy of the Vendor File used to produce the user manual examples. It can be used for tests or demonstrations by creating a copy named #A.APVEN with the COPYR utility. WARNING: This will destroy information in the current Vendor File.

2-13 TESTVOC - ORIGINAL VOUCHER TEST DATA FILE

This is a copy of the Voucher File used to produce the user manual examples. It can be used for tests or demonstrations by creating a copy named #A.APVOC with the COPYR utility. WARNING: This will destroy information in the current Voucher File.

2-12 TESTER - ORIGINAL VOUCHER TEST DATA FILE

This is a copy of the Voucher file used to produce the next manual example.  
It can be used for tests or demonstrations by creating a copy named 01.RVCH  
with the CORIX utility. WARNING: This will destroy information in the  
current Voucher file.

2-13 TESTER - ORIGINAL VOUCHER TEST DATA FILE

This is a copy of the Voucher file used to produce the next manual example.  
It can be used for tests or demonstrations by creating a copy named 01.RVCH  
with the CORIX utility. WARNING: This will destroy information in the  
current Voucher file.



3-1 3A.AYAGE - AGING PAYABLES PROGRAM

3-1-1 Data Files

3A.AYAGE - Read only

3A.AYAGE - Read only

3A.AYAGE - Read only

3A.AYAGE - Read only

3-1-2 Functional Description

3A.AYAGE generates an aging report with columns, 30, 60, and over 60 day credit periods. The program accumulates open invoice totals for each vendor and lists the totals in the report according to the due date. The report may be listed on the printer or display screen.

SECTION 3

INDIVIDUAL PROGRAM STRUCTURE

3-1-3 Code Breakdown

Line Number Description

- 00000-00000 Identify the program and list the revision date.
- 00000-00000 Define control characters off and clear aging status.
- 00000-00000 Initialize the file names and other constants.
- 00000-00000 Print the screen heading and enable screen function.
- 00000-00000 Initialize the variables and set up open date number.
- 00000-00000 Query for the aging data.
- 00000-00000 Use the special algorithm to convert the aging date to the form used in calculating the age of the vouchers.
- 00000-00000 Query for the listing device and then print the heading.
- 00000-00000 Read the Voucher File and skip any vouchers with a status code 'W' (check written).
- 00000-00000 Initialize the current vendor and the date variables.
- 00000-00000 Check if this is the next vendor.
- 00000-00000 Determine the age of the voucher.
- 00000-00000 Print the vendor code and the totals for each period.
- 00000-00000 Accumulate final totals and clear the current totals.
- 00000-00000 Set the new vendor code for sequencing and start a new page, if necessary.

3-1 \$A.APAGE - AGED PAYABLES PROGRAM

3-1-1 Data Files

- #A.APHLP - Read only
- #A.APLNK - Read only
- #A.APSYS - Read only
- #A.APVOC - Read only

3-1-2 Functional Description

\$A.APAGE generates an aging report with current, 30, 60, and over 60 day credit columns. The program accumulates open invoice totals for each vendor and lists the totals in the proper column according to the due date. The report may be listed on the printer or display screen.

3-1-3 Code Breakdown

Line Numbers	Description
00000-00006	Identify the program and list the revision date. Set the control characters off and clear string space. Initialize the file names and other constants. Print the screen heading and enable error trapping.
00500-00520	Initialize the variables and set up and open the Voucher File.
00530-00540	Query for the aging date.
00550-00570	Use the special algorithm to convert the aging date to the form used in calculating the age of the vouchers.
00600-00710	Query for the listing device and then print the headers.
00720-00740	Read the Voucher File and skip any vouchers with a status code 'W' (check written).
00745-00755	Initialize the current vendor and due date variables. Check if this is the next vendor.
00757-00800	Determine the age of the voucher.
00900-00920	Print the vendor code and the totals for each period.
00930-00940	Accumulate final totals and clear the current totals.
00950-00980	Set the new vendor code for matching and start a new page, if necessary.

3-1-3 Code Breakdown (\$A.APAGE continued)

Line Numbers Description

-----

01000-01000 Top of page prompt routine

19900-19980 Close all the files, print the final totals, and prompt to return to the system menu.

20000-20060 Routine with a special algorithm to convert the aging date to a unique number that is used in aging the vouchers

30000-30070 The top of page and heading routine

46110-46120 Unnecessary unpacking of the G/L Account/Amount pairs from a voucher record has been removed to speed voucher processing.

47610-47620 Unnecessary packing of the G/L Account/Amount pairs into a voucher record has been removed to speed voucher processing.

48540-48550 Unnecessary field definition of the G/L Account/Amount pairs has been removed to speed voucher processing.

3-2 \$A.APCAS - CASH REQUIREMENTS PROGRAM

3-2-1 Data Files

#A.APHLP - Read only  
#A.APLNK - Read only  
#A.APSYS - Read only  
#A.APVOC - Read only  
<<TEMP>> - Temporary  
>>TEMP<< - Temporary  
SORT - Temporary

3-2-1 Functional Description

\$A.APCAS generates a list of vouchers in chronological groups, with daily cash requirements totals, based on the due date or a discount date selected by the operator. The report may be listed on the printer or the display screen.

3-2-3 Code Breakdown

Line Numbers Description

---

00000-00006 Identify the program and list the revision date.  
Set the control characters off and clear string space.  
Initialize the file names and other constants.  
Print the screen heading and enable error trapping.

00500-00505 Initialize the format string and the flags, and set  
the sort work disk to the data disk.

00510-00520 Open and set up the Voucher File.

00530-00560 Query to determine if the report is to sorted by the  
Discount Date or Due Date.

00600-00630 Query for the listing device.

00700-00740 Call the routine to produce the Sorted Key File and  
data record pointers. Print the heading on the Control  
Report.

00750-00770 Open the Temporary Sort File and get the Sort File  
pointers.

00780-00830 Read the Temporary File and get the vouchers directly.  
Decide which date is to be used, skip the vouchers  
marked paid, and check for credits.

00840-00860 Print the vouchers on the Control Report, grouped by  
date.

3-2-3 Code Breakdown (\$A.APCAS continued)

Line Numbers	Description
00865-00885	Calculate the totals.
00900-00910	Print the daily totals.
00920-00950	Reset the control variables and return to read the next voucher.
01000-01000	Top of page prompt routine
18000-18020	Set up a new voucher ID extension number.
18100-18200	Change a voucher ID to a printable form.
18210-18230	Change a voucher ID from the printable form to the key form.
18500-18540	Retrieve a record from the Voucher File.
19900-19980	Close all files and prompt to return to the system menu.
30000-30070	Top of page and heading routine
40000-40075	Set up the sort.
40080-40120	Perform the sort algorithm and close the Sort File.
41000-41550	If the disk is full, print an error message.
43000-43060	Sort algorithm
43070-43140	Merge
43150-43530	Close the Sort File and rename the Temporary File.
46110-46120	Unnecessary unpacking of the G/L Account/Amount pairs from a voucher record has been removed to speed voucher processing.
47610-47620	Unnecessary packing of the G/L Account/Amount pairs into a voucher record has been removed to speed voucher processing.
48540-48550	Unnecessary field definition of the G/L Account/Amount pairs has been removed to speed voucher processing.

### 3-3 \$A.APCKR - CHECK REGISTER PROGRAM

#### 3-3-1 Data Files

#A.APHLP - Read only  
#A.APLNK - Read only  
#A.APSYS - Read only

#### 3-3-2 Functional Description

\$A.APCKR generates a register with items that appear on each vendor check. The option to run this program is provided at the end of the Print Payables Checks Program. The register is listed on the printer.

#### 3-3-3 Code Breakdown

Line Numbers Description

---

00000-00006	Identify the program and list the revision date. Set the control characters off and clear string space. Initialize the file names and other constants. Print the screen heading and enable error trapping. Set the logical page size.
00100-00110	Dimension the arrays and initialize the print strings and totals.
00200-00210	Query for top of page and open the Check Register File.
00220-00220	Set the PRINT output to the printer and input the check date.
00310-00350	Print the page and column headings.
00400-00740	Print the check information and accumulate totals.
00900-00970	Print the totals and reset the PRINT output to the CRT.
19900-19980	Reset the error control, close all files, and prompt for return to the system menu.
40000-40020	Unpack the voucher number.

3-4 \$A.APCKS - PRINT PAYABLES CHECKS PROGRAM

3-4-1 Data Files

#A.APHLP - Read only  
#A.APLNK - Read only  
#A.APSYS - Read only  
#A.APVEN - Updated  
#A.APVOC - Updated  
#CHKDATA - Created

3-4-2 Functional Description

\$A.APCKS scans all vouchers and prints a check for each vendor that has one or more vouchers selected to be paid. The Vendor File is updated and the selected vouchers are marked paid. All vendor credit memos are accumulated and marked paid. If a credit balance remains after paying vouchers, a new credit memo is created.

3-4-3 Code Breakdown

Line Numbers Description

-----  
00000-00007 Identify the program and list the revision date.  
Set the control characters off and clear string space.  
Initialize the file names and other constants.  
Print the screen heading and enable error trapping.  
Set the logical page size.

00500-00510 Call the subroutine to dimension storage, set up and  
open the ISAM files, initialize constants, and print  
masks.

00600-00770 Query for check positioning and print check mask.

00860-00940 Query for check date and starting number.

01200-01265 Loop to print checks and accumulate totals.

09000-09150 Print the total number and the total amount of checks.

10000-10030 Output check information to the Check Register File.

18000-18020 Convert the voucher ID to a printable form.

19900-19980 Close all files, query for check register, reset error  
control, and prompt for a return to the system menu.

22000-22130 Check for vouchers marked for payment and accumulate  
totals.

3-4-3 Code Breakdown (\$A.APCKS continued)

Line Numbers	Description
22499-22520	Print a void check.
22600-22620	Set up for check mask.
22999-23180	Print the check stub.
23700-24520	Print the check and increment the check number and the total number of checks printed.
25000-25040	Update the YTD payments, the balance, the last payment, and the date of last payment.
25999-26040	Print the invoice number, date, amount, discount, and net amount on the check stub.
28000-28330	A special algorithm to take the check amount in CA# and return the spelled out amount in OP\$
30000-30070	Accumulate all credit memos and create a single credit memo of the total amount.
40000-43999	Dimension storage, set up and open the ISAM files, initialize constants, and print masks.
46110-46120	Unnecessary unpacking of the G/L Account/Amount pairs from a voucher record has been removed to speed voucher processing.
47610-47620	Unnecessary packing of the G/L Account/Amount pairs into a voucher record has been removed to speed voucher processing.
48111-48113	Read the Voucher File Change Flag from the User Comment/Parameter Area.
48540-48550	Unnecessary field definition of the G/L Account/Amount pairs has been removed to speed voucher processing.
49002-49004	Write the Voucher File Change Flag to the user Comment/Parameter Area.



3-5 \$A.APCRE - FILE CREATION PROGRAM

3-5-1 Data Files

- #A.APHLP - Read only
- #A.APLNK - Read only
- #A.APSYS - Read only
- #A.APVEN - Created
- #A.APVOC - Created

3-5-2 Functional Description

\$A.APCRE creates the Vendor and Voucher Files. The files created have the necessary ISAM header information, but contain no data records.

3-5-3 Code Breakdown

Line Numbers	Description
00000-00005	Identify the program and list the revision date. Set the control characters off and clear string space. Initialize the file names and other constants. Print the heading and initialize error trapping.
00100-00100	GOTO the code to create the files.
01100-00160	Disk set up subroutine to query for disk drive and disk change and then print the insert disk message and mount the disk.
06000-06040	Call the disk set up subroutine, print a warning message and provide an option to abort the file creation.
06050-06055	Set up for ISAM files.
06060-06310	Query for and create the ISAM files.
19900-19930	Reset the error control and prompt for a return to the system menu.

### 3-6 \$A.APDVO - DELETE VOUCHERS PROGRAM

#### 3-6-1 Data Files

#A.APHLP - Read only  
#A.APLNK - Read only  
#A.APSYS - Read only  
#A.APVEN - Updated  
#A.APVOC - Updated

#### 3-6-2 Functional Description

\$A.APDVO deletes vouchers with errors. It can only be run if the voucher delete option is enabled in the System Parameter File. A warning message is given before deleting a voucher already passed to the General Ledger. A Control Report is optional.

#### 3-6-3 Code Breakdown

Line Numbers	Description
00000-00006	Identify the program and list the revision date. Set the control characters off and clear string space. Initialize the file names and other constants. Print the screen heading and enable error trapping.
00500-00520	Check the System Parameter File to determine if voucher deletion is allowed.
01500-01600	Query to determine if a Control Report is wanted and then print the heading.
01610-01657	Query for the voucher key and check the voucher status for any errors.
01660-01660	Print the voucher field headings and the voucher to be deleted.
01670-01695	Query to determine if this is the voucher to be deleted. If a voucher is selected for payment, set the Payment Reconciliation Flag. Delete the voucher
01700-01710	Check for the end of a page if a Control Report is requested.
02000-02010	Check whether there are any more vouchers to be deleted.
18000-18020	Not used

3-6-3 Code Breakdown (\$A.APDVO continued)

Line Numbers Description

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18100-18200 Change a voucher ID to printable form.

18210-18230 Change a voucher ID from printable form to key form.

18500-18540 Not used

19900-19980 Close all the files and prompt to return to the system menu.

20500-20530 Check for the top of the page.

21000-22020 Print the headings for the Control Report.

22200-22205 Print the end of report message.

22500-22610 Print the voucher.

40000-40170 Initialize the print strings. Set up and open the ISAM files.

48111-48113 Read the Voucher File Change Flag from the User Comment/Parameter Area.

49002-49004 Write the Voucher File Change Flag to the user Comment/Parameter Area.

3-7 \$A.APEOP - END-OF-PERIOD PROGRAM

3-7-1 Data Files

- #A.APHLP - Read only
- #A.APLNK - Read only
- #A.APSYS - Read only
- #A.APVOC - Updated
- #A.APGLT - Created

3-7-2 Functional Description

\$A.APEOP creates the G/L Transfer File. All vouchers are scanned and totals are accumulated for the G/L distribution accounts of all vouchers entered on or before a cutoff date. Paid vouchers are deleted after their distributions are accumulated. If the operator specifies that the period is the end of a year, all YTD fields in the Vendor File are cleared. A summary of the G/L distribution for the period is printed in a G/L Transaction Register.

3-7-3 Code Breakdown

Line Numbers Description

- 
- 00000-00007 Identify the program and list the revision date.  
Set the control characters off and clear string space.  
Initialize storage, the file names, and other constants.  
Print the heading and initialize error trapping.
  - 00008-00009 Query for top of forms.
  - 01000-01090 Check for existing Transfer File, query to determine if  
it has been transferred, and print a warning if it was  
not transferred.
  - 01100-01110 Query for the end-of-period date and set up and open the  
Voucher File.
  - 01120-01410 Read the file sequentially and accumulate totals.
  - 01500-01500 Check to see if any transfers are to be written.
  - 01510-01530 Create the G/L Transfer File.
  - 01540-01670 Print the G/L Transaction Register.
  - 01700-01720 Close the G/L Transfer File and query for end of year.
  - 01730-19899 Scan the Vendor File sequentially and zero the YTD  
fields.

3-7-3 Code Breakdown (\$A.APEOP continued)

Line Numbers	Description
19900-19980	Close all files, reset error control, and prompt for a return to the system menu.
21000-21030	Print the headings for the Transaction Register.
38100-38120	Convert the voucher ID to printable form.
38200-38230	Change the voucher ID from printable form to key form.
39000-39999	Compute the Accounts Payable credit amount.
40000-45999	Print the totals on the G/L Transaction Register.
48101-48104	Read the Voucher File Change Flag and the totals used for on-line check reconciliation from the User Comment/Parameter Area.
49001-49004	Write the Voucher File Change Flag and the totals used for on-line check reconciliation to the User Comment/Parameter Area.

3-8 \$A.APETV - ENTER VOUCHERS PROGRAM

3-8-1 Data Files

- #A.APHLP - Read only
- #A.APLNK - Read only
- #A.APSYS - Read only
- #A.APVEN - Updated
- #A.APVOC - Updated
- #APTEMP# - Temporary

3-8-2 Functional Description

\$A.APETV is used to enter vendor invoice information and create corresponding vouchers. Information is also obtained from the Vendor File to create automatic vouchers for regular payments. A control report listing the created vouchers may be printed.

3-8-3 Code Breakdown

Line Numbers Description

Line Numbers	Description
00000-00006	Identify the program and list the revision date. Set the control characters off and clear string space. Initialize the file names and other constants. Print the screen heading and enable error trapping. Set the logical page size.
00007-00007	Call a subroutine to initialize the print strings and open and set up the ISAM files.
00530-00560	Query for payment selection information.
00570-00920	Open a Temporary File, query for voucher information, check for errors, and write correct voucher information in the Temporary File.
01000-01010	Query for Control Report.
01015-01280	Open the Temporary File, sequentially read the voucher information, perform an error check for the existence of the vendor, and create an ISAM voucher.
01300-01330	KILL the Temporary File and query for more voucher entries or program termination.
03000-0320	Voucher entry error checking and error messages
04000-04080	Scan the Vendor File for Auto Voucher information and create the Auto Voucher.

3-8-3 Code Breakdown (\$A.APETV continued)

Line Numbers	Description
18000-18020	Get the next voucher extension.
18100-18120	Convert the voucher ID to printable form.
18500-18540	New voucher extension existence and wraparound check
19900-19980	Close all files, reset error control, and prompt for a return to the system menu.
20500-22205	Top of page and end of report subroutines
22500-22610	Print the voucher on the Control Report.
24000-24010	Entry Rejected Subroutine
40000-40170	Subroutine to initialize the print strings and set up and open the ISAM files
48111-48113	Read the Voucher File Change Flag from the User Comment/Parameter Area.
49002-49004	Write the Voucher File Change Flag to the user Comment/Parameter Area.

3-9 \$A.APLNK - LINKAGE FILE MAINTENANCE PROGRAM

3-9-1 Data Files

#A.APLNK - Updated or Created

3-9-2 Functional Description

\$A.APLNK creates or updates a file containing the data disk drive number, the system date, and pointers to the submenu and the last program selection made in the AP MENU Program.

3-9-3 Code Breakdown

Line Numbers Description

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00000-00100	Identify the program and list the revision date. Set the control characters off and clear string space. Initialize the file names and other constants. Print the heading and enable error trapping.
01100-01160	Prompt for and mount the disk to be processed.
02000-00210	Prompt to determine if a create or update is required and transfer control to that function.
04000-04030	Create the file with IM=1, IP=0, and null entries for data drive and date. Close the file.
05000-05660	Perform the update function by reading the existing file and by looping for prompt, input, and output operations. Transfer control to the program termination subroutine.
05700-05799	Accept input for an update operation by calling the proper type of input routine. The selection is made by examining the type code in array IC\$.
05800-05859	Heading subroutine
05900-05980	Define, read, and store the field description data.
19900-19930	Print the closing message, reset error trapping, unload all disks, and terminate the program.



3-10 \$A.APOPE - LIST OPEN VOUCHERS PROGRAM

3-10-1 Data Files

#A.APHLP - Read only  
#A.APLNK - Read only  
#A.APSYS - Read only  
#A.APVOC - Read only

3-10-2 Functional Description

\$A.APOPE generates a list of all unpaid vouchers and unapplied credit memos in the Voucher File. Totals are given for the number of vouchers and the amount due by due date and discount date. The report may be listed on the printer or the display screen.

3-10-3 Code Breakdown

Line Numbers Description

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00000-00006	Identify the program and the revision date. Set the control characters off and clear string space. Initialize the file names and other constants. Print the screen heading and enable error trapping.
00500-00520	Initialize the format string and open and set up the Voucher File.
00600-00700	Query for the listing device.
00710-00755	Print the heading. Read the Voucher File and skip all vouchers marked 'W' (check written).
00756-00810	Convert the voucher to a printable form and print the open voucher.
01000-01000	Top of page prompt routine
18000-18200	Change a voucher ID to printable form.
18210-18230	Change a voucher ID from printable form to key form.
18500-18540	Retrieve a record from the Voucher File.
19900-19980	Close all the files, print the final totals, and prompt for a return to the system menu.
30000-30070	Print the heading for the Open Voucher Report.

3-10-3 Code Breakdown (\$A.APOPE continued)

Line Numbers	Description
46110-46120	Unnecessary unpacking of the G/L Account/Amount pairs from a voucher record has been removed to speed voucher processing.
47610-47620	Unnecessary packing of the G/L Account/Amount pairs into a voucher record has been removed to speed voucher processing.
48540-48550	Unnecessary field definition of the G/L Account/Amount pairs has been removed to speed voucher processing.

3-11 \$A.APPAY - DETERMINE WHAT IS TO BE PAID PROGRAM

3-11-1 Data Files

- #A.APHLP - Read only
- #A.APLNK - Read only
- #A.APSYS - Read only
- #A.APVOC - Updated

3-11-2 Functional Description

\$A.APPAY is used to select vouchers to be paid by the Print Payables Checks Program. The program can be used for on-line reconciliation of cash available and voucher amounts.

3-11-3 Code Breakdown

Line Numbers Description

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00000-00006	Identify the program and list the revision date. Set the control characters off and clear string space. Initialize the file names and other constants. Print the screen heading.
00007-00007	Call a subroutine to initialize constants and set up and open the ISAM files.
00499-01090	Query for payment selection information.
01100-01150	Scan the Voucher File sequentially and skip all paid vouchers.
01160-01170	Mark the voucher for payment and restore it to the file.
01180-01200	Check for vouchers to be included, mark them for payment, and restore them to the file.
01210-01220	Check the exclude list for the voucher and then restore the voucher to the file.
01230-01250	Process discounts and restore the voucher to the file.
01260-01380	Print the amounts for check reconciliation after a scan by date.
01390-01740	Query for and process explicit selection.
01745-19899	Query for and print the Selected Vouchers Report.

3-11-3 Code Breakdown (\$A.APPAY continued)

Line Numbers Description

19900-19999	Reset error control, close all files, and prompt for a return to the system menu.
20000-20999	Query Vendor Subroutine
21000-29999	Heading subroutine for the Selected Vouchers Report
30000-35999	Subroutines for explicit inclusion/exclusion
36000-37999	Subroutine to change the date to a unique number for calculations
38100-39999	Subroutine to convert a voucher ID to a printable form and then change it back to key form
40000-40010	Subroutine to initialize constants and set up and open ISAM Files
46110-46120	Unnecessary unpacking of the G/L Account/Amount pairs from a voucher record has been removed to speedup voucher processing.
47610-47620	Unnecessary packing of the G/L Account/Amount pairs into a voucher record has been removed to speedup voucher processing.
48101-48104	Read the Voucher File Change Flag and the totals used for on-line check reconciliation from the User Comment/Parameter Area.
48540-48550	Unnecessary fielding of the G/L Account/Amount pairs from a voucher record has been removed to speedup voucher processing.
49001-49004	Write the Voucher File Change Flag and the totals used for on-line check reconciliation to the User Comment/Parameter Area.

3-12 \$A.APQUE - QUERY VENDOR PROGRAM

3-12-1 Data Files

#A.APHLP - Read only  
#A.APLNK - Read only  
#A.APSYS - Read only  
#A.APVEN - Read only  
#A.APVOC - Read only

3-12-2 Functional Description

\$A.APQUE displays vendor record information and all attached vouchers and credit memos. The vendors are selected individually by ID and the information may be listed on the display screen or printer.

3-12-3 Code Breakdown

Line Numbers	Description
00000-00006	Identify the program and list the revision date. Set the control characters off and clear string space. Initialize the file names and other constants. Print the screen heading and enable error trapping. Set the logical page size.
00007-00007	Call the subroutine to set up and open the Vendor and Voucher Files.
01000-01020	Query for the vendor ID and retrieve the vendor record.
01030-01040	Query for the listing device.
01045-01150	Print the current vendor's information.
01160-01265	Retrieve and print any open vouchers.
01270-01290	If there are no more open vouchers, skip to the end of the page and query for the next vendor.
19900-19980	Close files, reset error control, and prompt for a return to the system menu.
21000-21070	Heading Subroutine for the Query Report
38100-38160	Convert a voucher ID to printable form.
40000-40000	Subroutine to set up and open the ISAM files
40010-40020	Top of forms prompt subroutine

3-12-3 Code Breakdown (\$A.APQUE continued)

Line Numbers	Description
46110-46120	Unnecessary unpacking of the G/L Account/Amount pairs from a voucher record has been removed to speed voucher processing.
47610-47620	Unnecessary packing of the G/L Account/Amount pairs into a voucher record has been removed to speed voucher processing.
48540-48550	Unnecessary field definition of the G/L Account/Amount pairs has been removed to speed voucher processing.

3-13 \$A.APSYS - SYSTEM PARAMETER FILE MAINTENANCE PROGRAM

3-13-1 Data Files

#A.APSYS - Updated

3-13-2 Functional Description

\$A.APSYS creates and maintains installation and version dependent information in the System Parameter File.

3-13-3 Code Breakdown

Line Number	Description
00000-00095	Identify the program and list the revision date. Set the control characters off and clear string space. Initialize the file names and other constants. Print the screen heading.
00100-00100	Enable error trapping, call field prompt initialization subroutine and GOTO create/update query.
01100-01160	The Disk Set Up Subroutine queries for the disk drive number and change option and then mounts the disk.
02000-02100	Query for create or update.
04000-04020	Create a new System Parameter File.
05000-05799	Update the System Parameter File.
05800-05859	Print the screen heading for a file update.
05900-05999	Field prompt initialization subroutine
10000-10020	Error checking for G/L account number length
19900-19930	Reset error control, prompt for a return to the system menu, and unload the disk.

### 3-14 \$A.APVFL - VENDOR FILE LIST PROGRAM

#### 3-14-1 Data Files

#A.APHLP - Read only  
#A.APLNK - Read only  
#A.APSYS - Read only  
#A.APVEN - Read only

#### 3-14-2 Functional Description

\$A.APVFL displays the information stored in the Vendor File for each vendor. The information may be listed on the printer or the display screen. All vendors may be listed or individual vendors may be selected by vendor ID.

#### 3-14-3 Code Breakdown

Line Numbers	Description
00000-00510	Identify the program and list the revision date. Set the control characters off and clear string space. Initialize the file names and other constants. Print the screen heading and enable error trapping.
00525-00605	Query for the listing device.
00610-00650	Query for 'All' or 'Selected' vendors and set the appropriate flag.
00660-00700	Continue processing here if all vendors are to be displayed. Retrieve and display the record.
00750-00805	Continue processing here if selected vouchers are to be displayed.
00810-00850	Query to determine if more vendors are to be displayed.
19900-19998	Close all files and prompt for a return to the system menu.
11999-20120	Display the record.
20500-21010	Print the heading on each page.
40000-40080	Open the ISAM files and set up the headings.



3-15 \$A.APVFM - VENDOR FILE MAINTENANCE PROGRAM

3-15-1 Data Files

- #A.APHLP - Read only
- #A.APLNK - Read only
- #A.APSYS - Read only
- #A.APVEN - Updated
- #A.APVOC - Read only

3-15-2 Functional Description

\$A.APVFM is used to enter vendors into the system, change fields within existing vendor records, and to delete vendors from the system. A vendor may be deleted only if there are no vouchers attached to that vendor.

3-15-3 Code breakdown

Line Numbers	Description
00000-00006	Identify the program and list the revision date. Set the control characters off and clear string space. Initialize the file names and other constants. Print the screen heading and enable error trapping.
00500-00500	Initialize the prompt messages and set up and open the ISAM files.
00860-00900	Query for the type of file maintenance.
01000-01270	The Vendor Addition Subroutine verifies that the vendor record is not already in the file. If not, it queries for each field, allows for any field changes, and adds the vendor record to the Vendor File.
02000-02190	The Vendor Change Subroutine verifies that the vendor record exists, displays the data fields, allows for any field changes, and restores the vendor record to the Vendor File.
003000-00360	The Vendor Deletion Subroutine verifies that the vendor record exists and deletes it if no open vouchers or credit memos are attached to it.
19900-19980	Close all the files and prompt for a return to the system menu.
20000-21000	Query for or zero the Auto Voucher fields.
30000-30020	Query for the Vendor Code.

3-15-3 Code Breakdown (\$A.APVFM continued)

Line Numbers Description

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30100-30120 Query for the Vendor Name.  
30200-30220 Query for Address 1.  
30300-30320 Query for Address 2.  
30400-30410 Query for the Area Code and Phone Number.  
30500-30510 Query for YTD Purchases.  
30600-30620 Query for YTD Payments.  
30700-30710 Query for the Current Balance.  
30800-30810 Query for the Last Payment.  
30900-30920 Query for the Last Payment Date.  
31000-31020 Query for the Monthly Entry Flag.  
31100-31120 Query for the Due Day of Month.  
31200-31210 Query for the Debit Account #1.  
31300-31310 Query for the Debit Amount #1.  
31400-31410 Query for the Debit Account #2.  
31500-31510 Query for the Debit Amount #2.  
31600-31610 Query for the Month Last Paid.  
37000-37090 Display the current record's contents.  
40000-40360 Initialize the prompt strings.

3-16 AP MENU - MENU PROGRAM

3-16-1 Data Files

#A.APHLP - Read only  
#A.APSYS - Read only  
#A.APLNK - Updated

3-16-2 Functional Description

AP MENU is used by the operator to select the programs and utilities to be run and to set the system date.

3-16-3 Code Breakdown

Line Numbers	Description
00000-00005	Identify the program and list the revision date. Set the control characters off and clear string space. Initialize the file names and other constants. Print the screen heading and enable error trapping.
00320-00320	Select the proper menu using the Menu/Submenu Pointer.
00330-01045	The Master Activity Selection Menu displays the menu choices and runs the selected program.
01050-01064	The Report Generation Selection Menu displays the menu choices and runs the selected program or calls a new subroutine.
01080-01080	The Utility Function Menu determines which utility menu to run from the system parameters.
01081-01199	Display the menu choices and run the selected utility.
01900-01920	Input new current date subroutine
02000-02020	Rewrite the System Linkage File with an updated Menu/Submenu Pointer, Program Selection Pointer, and possibly a new Current Date.
02100-02229	Menu Display Subroutine
10000-10250	Data statements for the menu display
19900-19980	Reset the error control and set the control characters on.

3-16 AP MENU - MENU PROGRAM

3-16-1 Data Files

AA.APHLF - Read only  
AA.APHYS - Read only  
AA.APHMK - Updated

3-16-2 Functional Description

AP MENU is used by the operator to select the programs and utilities to be run and to set the system date.

3-16-3 Code Breakdown

Line Number Description

00000-00005 Identify the program and list the revision date.  
Set the control characters off and clear string space.  
Initialize the file names and other constants.  
Print the screen heading and enable error trapping.

00320-00330 Select the proper menu using the Menu/Submenu Pointer.

00330-01045 The Master Activity Selection Menu displays the menu options and runs the selected program.

01050-01065 The Report Generator Selection Menu displays the menu options and runs the selected program or utility's main subroutine.

01080-01090 The Utility Function Menu determines which utility menu to run from the system parameters.

01085-01125 Display the menu choices and run the selected utility.

01200-01220 Input new current date subroutine

02000-02020 Rewrite the System Linkage File with an updated Menu Submenu Pointer, Program Selection Pointer, and possibly a new Current Date.

02100-02225 New Display Subroutine

10000-10250 Data statements for the menu display

10200-10280 Reset the error control and set the control characters.

The following are Variable Definitions and Variable Cross Reference lists for the programs in the Accounts Payable System. Variable Definitions for variables in the Common Section are not repeated for each program.

4-1 44.APA02 - AGING PAYABLES PROGRAM

4-2 44.APA01 - Aging Payables Program Variable Definition

Variable Definition

SECTION 4

PROGRAM VARIABLES

ADY	aging date
AGE	aging date
OVN	current vendor
1-30	1-30 days
31-60	31-60 days
61-90	61-90 days
91-120	91-120 days
121-150	121-150 days
151-180	151-180 days
181-210	181-210 days
211-240	211-240 days
241-270	241-270 days
271-300	271-300 days
301-330	301-330 days
331-360	331-360 days
361-390	361-390 days
391-420	391-420 days
421-450	421-450 days
451-480	451-480 days
481-510	481-510 days
511-540	511-540 days
541-570	541-570 days
571-600	571-600 days
601-630	601-630 days
631-660	631-660 days
661-690	661-690 days
691-720	691-720 days
721-750	721-750 days
751-780	751-780 days
781-810	781-810 days
811-840	811-840 days
841-870	841-870 days
871-900	871-900 days
901-930	901-930 days
931-960	931-960 days
961-990	961-990 days
991-1020	991-1020 days
1021-1050	1021-1050 days
1051-1080	1051-1080 days
1081-1110	1081-1110 days
1111-1140	1111-1140 days
1141-1170	1141-1170 days
1171-1200	1171-1200 days
1201-1230	1201-1230 days
1231-1260	1231-1260 days
1261-1290	1261-1290 days
1291-1320	1291-1320 days
1321-1350	1321-1350 days
1351-1380	1351-1380 days
1381-1410	1381-1410 days
1411-1440	1411-1440 days
1441-1470	1441-1470 days
1471-1500	1471-1500 days
1501-1530	1501-1530 days
1531-1560	1531-1560 days
1561-1590	1561-1590 days
1591-1620	1591-1620 days
1621-1650	1621-1650 days
1651-1680	1651-1680 days
1681-1710	1681-1710 days
1711-1740	1711-1740 days
1741-1770	1741-1770 days
1771-1800	1771-1800 days
1801-1830	1801-1830 days
1831-1860	1831-1860 days
1861-1890	1861-1890 days
1891-1920	1891-1920 days
1921-1950	1921-1950 days
1951-1980	1951-1980 days
1981-2010	1981-2010 days
2011-2040	2011-2040 days
2041-2070	2041-2070 days
2071-2100	2071-2100 days
2101-2130	2101-2130 days
2131-2160	2131-2160 days
2161-2190	2161-2190 days
2191-2220	2191-2220 days
2221-2250	2221-2250 days
2251-2280	2251-2280 days
2281-2310	2281-2310 days
2311-2340	2311-2340 days
2341-2370	2341-2370 days
2371-2400	2371-2400 days
2401-2430	2401-2430 days
2431-2460	2431-2460 days
2461-2490	2461-2490 days
2491-2520	2491-2520 days
2521-2550	2521-2550 days
2551-2580	2551-2580 days
2581-2610	2581-2610 days
2611-2640	2611-2640 days
2641-2670	2641-2670 days
2671-2700	2671-2700 days
2701-2730	2701-2730 days
2731-2760	2731-2760 days
2761-2790	2761-2790 days
2791-2820	2791-2820 days
2821-2850	2821-2850 days
2851-2880	2851-2880 days
2881-2910	2881-2910 days
2911-2940	2911-2940 days
2941-2970	2941-2970 days
2971-3000	2971-3000 days
3001-3030	3001-3030 days
3031-3060	3031-3060 days
3061-3090	3061-3090 days
3091-3120	3091-3120 days
3121-3150	3121-3150 days
3151-3180	3151-3180 days
3181-3210	3181-3210 days
3211-3240	3211-3240 days
3241-3270	3241-3270 days
3271-3300	3271-3300 days
3301-3330	3301-3330 days
3331-3360	3331-3360 days
3361-3390	3361-3390 days
3391-3420	3391-3420 days
3421-3450	3421-3450 days
3451-3480	3451-3480 days
3481-3510	3481-3510 days
3511-3540	3511-3540 days
3541-3570	3541-3570 days
3571-3600	3571-3600 days
3601-3630	3601-3630 days
3631-3660	3631-3660 days
3661-3690	3661-3690 days
3691-3720	3691-3720 days
3721-3750	3721-3750 days
3751-3780	3751-3780 days
3781-3810	3781-3810 days
3811-3840	3811-3840 days
3841-3870	3841-3870 days
3871-3900	3871-3900 days
3901-3930	3901-3930 days
3931-3960	3931-3960 days
3961-3990	3961-3990 days
3991-4020	3991-4020 days
4021-4050	4021-4050 days
4051-4080	4051-4080 days
4081-4110	4081-4110 days
4111-4140	4111-4140 days
4141-4170	4141-4170 days
4171-4200	4171-4200 days
4201-4230	4201-4230 days
4231-4260	4231-4260 days
4261-4290	4261-4290 days
4291-4320	4291-4320 days
4321-4350	4321-4350 days
4351-4380	4351-4380 days
4381-4410	4381-4410 days
4411-4440	4411-4440 days
4441-4470	4441-4470 days
4471-4500	4471-4500 days
4501-4530	4501-4530 days
4531-4560	4531-4560 days
4561-4590	4561-4590 days
4591-4620	4591-4620 days
4621-4650	4621-4650 days
4651-4680	4651-4680 days
4681-4710	4681-4710 days
4711-4740	4711-4740 days
4741-4770	4741-4770 days
4771-4800	4771-4800 days
4801-4830	4801-4830 days
4831-4860	4831-4860 days
4861-4890	4861-4890 days
4891-4920	4891-4920 days
4921-4950	4921-4950 days
4951-4980	4951-4980 days
4981-5010	4981-5010 days
5011-5040	5011-5040 days
5041-5070	5041-5070 days
5071-5100	5071-5100 days
5101-5130	5101-5130 days
5131-5160	5131-5160 days
5161-5190	5161-5190 days
5191-5220	5191-5220 days
5221-5250	5221-5250 days
5251-5280	5251-5280 days
5281-5310	5281-5310 days
5311-5340	5311-5340 days
5341-5370	5341-5370 days
5371-5400	5371-5400 days
5401-5430	5401-5430 days
5431-5460	5431-5460 days
5461-5490	5461-5490 days
5491-5520	5491-5520 days
5521-5550	5521-5550 days
5551-5580	5551-5580 days
5581-5610	5581-5610 days
5611-5640	5611-5640 days
5641-5670	5641-5670 days
5671-5700	5671-5700 days
5701-5730	5701-5730 days
5731-5760	5731-5760 days
5761-5790	5761-5790 days
5791-5820	5791-5820 days
5821-5850	5821-5850 days
5851-5880	5851-5880 days
5881-5910	5881-5910 days
5911-5940	5911-5940 days
5941-5970	5941-5970 days
5971-6000	5971-6000 days
6001-6030	6001-6030 days
6031-6060	6031-6060 days
6061-6090	6061-6090 days
6091-6120	6091-6120 days
6121-6150	6121-6150 days
6151-6180	6151-6180 days
6181-6210	6181-6210 days
6211-6240	6211-6240 days
6241-6270	6241-6270 days
6271-6300	6271-6300 days
6301-6330	6301-6330 days
6331-6360	6331-6360 days
6361-6390	6361-6390 days
6391-6420	6391-6420 days
6421-6450	6421-6450 days
6451-6480	6451-6480 days
6481-6510	6481-6510 days
6511-6540	6511-6540 days
6541-6570	6541-6570 days
6571-6600	6571-6600 days
6601-6630	6601-6630 days
6631-6660	6631-6660 days
6661-6690	6661-6690 days
6691-6720	6691-6720 days
6721-6750	6721-6750 days
6751-6780	6751-6780 days
6781-6810	6781-6810 days
6811-6840	6811-6840 days
6841-6870	6841-6870 days
6871-6900	6871-6900 days
6901-6930	6901-6930 days
6931-6960	6931-6960 days
6961-6990	6961-6990 days
6991-7020	6991-7020 days
7021-7050	7021-7050 days
7051-7080	7051-7080 days
7081-7110	7081-7110 days
7111-7140	7111-7140 days
7141-7170	7141-7170 days
7171-7200	7171-7200 days
7201-7230	7201-7230 days
7231-7260	7231-7260 days
7261-7290	7261-7290 days
7291-7320	7291-7320 days
7321-7350	7321-7350 days
7351-7380	7351-7380 days
7381-7410	7381-7410 days
7411-7440	7411-7440 days
7441-7470	7441-7470 days
7471-7500	7471-7500 days
7501-7530	7501-7530 days
7531-7560	7531-7560 days
7561-7590	7561-7590 days
7591-7620	7591-7620 days
7621-7650	7621-7650 days
7651-7680	7651-7680 days
7681-7710	7681-7710 days
7711-7740	7711-7740 days
7741-7770	7741-7770 days
7771-7800	7771-7800 days
7801-7830	7801-7830 days
7831-7860	7831-7860 days
7861-7890	7861-7890 days
7891-7920	7891-7920 days
7921-7950	7921-7950 days
7951-7980	7951-7980 days
7981-8010	7981-8010 days
8011-8040	8011-8040 days
8041-8070	8041-8070 days
8071-8100	8071-8100 days
8101-8130	8101-8130 days
8131-8160	8131-8160 days
8161-8190	8161-8190 days
8191-8220	8191-8220 days
8221-8250	8221-8250 days
8251-8280	8251-8280 days
8281-8310	8281-8310 days
8311-8340	8311-8340 days
8341-8370	8341-8370 days
8371-8400	8371-8400 days
8401-8430	8401-8430 days
8431-8460	8431-8460 days
8461-8490	8461-8490 days
8491-8520	8491-8520 days
8521-8550	8521-8550 days
8551-8580	8551-8580 days
8581-8610	8581-8610 days
8611-8640	8611-8640 days
8641-8670	8641-8670 days
8671-8700	8671-8700 days
8701-8730	8701-8730 days
8731-8760	8731-8760 days
8761-8790	8761-8790 days
8791-8820	8791-8820 days
8821-8850	8821-8850 days
8851-8880	8851-8880 days
8881-8910	8881-8910 days
8911-8940	8911-8940 days
8941-8970	8941-8970 days
8971-9000	8971-9000 days
9001-9030	9001-9030 days
9031-9060	9031-9060 days
9061-9090	9061-9090 days
9091-9120	9091-9120 days
9121-9150	9121-9150 days
9151-9180	9151-9180 days
9181-9210	9181-9210 days
9211-9240	9211-9240 days
9241-9270	9241-9270 days
9271-9300	9271-9300 days
9301-9330	9301-9330 days
9331-9360	9331-9360 days
9361-9390	9361-9390 days
9391-9420	9391-9420 days
9421-9450	9421-9450 days
9451-9480	9451-9480 days
9481-9510	9481-9510 days
9511-9540	9511-9540 days
9541-9570	9541-9570 days
9571-9600	9571-9600 days
9601-9630	9601-9630 days
9631-9660	9631-9660 days
9661-9690	9661-9690 days
9691-9720	9691-9720 days
9721-9750	9721-9750 days
9751-9780	9751-9780 days
9781-9810	9781-9810 days
9811-9840	9811-9840 days
9841-9870	9841-9870 days
9871-9900	9871-9900 days
9901-9930	9901-9930 days
9931-9960	9931-9960 days
9961-9990	9961-9990 days
9991-10020	9991-10020 days

## PROGRAM VARIABLES

The following are Variable Definition and Variable Cross Reference lists for the programs in the Accounts Payable System. Variable Definitions for variables in the Common Section are not redefined for each program.

4-1 \$A.APAGE - AGED PAYABLES PROGRAM

4-1-1 \$A.APAGE - Aged Payables Program Variable Definitions

Variable Definition

---

AD!	Aging date
AD\$	Aging date
CV\$	Current vendor
D1!	1-30 days
D2!	31-60 days
DD	Aging days used in aging the voucher
DUE!	Due date
FM\$	Format string
HV\$	New or existing vendor code
INITIAL	Flag to determine if a new vendor code is to be printed
MM	Aging month used in aging vouchers
MO(	Array to hold month of aging date
PG	Page counter
T	Unique number used in aging vouchers
T1#(	Array to hold current, 1-30, 31-60, and over 60 day credit totals
T2#(	Array to hold final accumulated totals
TV	Total vouchers
YY	Aging year used in aging vouchers

4-1-2 \$A.APAGE - Variable Cross Reference

Variable References

---

AD!	550, 560, 570, 760
AD\$	540, 30015
B#(	757, 760, 770, 780, 790
B\$(	740, 745
CV\$	745, 750, 755, 960
D!	560, 570, 20020, 20060
D1!	560, 780
D2!	570, 770
DD	560, 570, 20020, 20030, 20040, 20060
DP%	19980
DUE!	745, 760, 770, 780
ER%	730
FI%	520
FM\$	500, 920, 19935
FNSD!(	550, 745
HV\$	750, 755, 900, 960
I	910, 920, 930, 940, 19935
I1\$	1000
II	20030
INITIAL	500, 750
LC	970, 19940, 30060
LP	620, 700, 970, 19945
MM	20020, 20040, 20050, 20060

4-1-2 \$A.APAGE - Variable Cross Reference (continued)

Variable References

---

MO	20060
MO(	20000, 20010, 20020, 20040, 20060
PG	30010
PN\$	19950
Q	530, 600, 19960
Q\$	530, 600, 19960
QS	540
R\$	540, 550
RL	540
RL\$	620, 630
SC\$	700
T	20020
T1#(	505, 757, 760, 770, 780, 790, 920, 930, 940
T2#(	505, 930, 19935
TV	795, 19915
VD\$	540
YY	20020, 20030, 20060



4-2 \$A.APCAS - CASH REQUIREMENTS PROGRAM

4-2-1 \$A.APCAS - Cash Requirements Program Variable Definitions

Variable Definition

---

BT#	Net Amount
DD\$	"DISCOUNT" or "DUE"
DT#	Daily Total
EN	If End of File is reached, set True; otherwise, set False.
FM\$	Format string
HD\$	Discount date
INDEX%	Flag
INITIAL	Print Pay Date Flag
K\$	Record key
KC\$	Blanks
05-09	Internal ISAM variable used in the Sort/Merge
09(	Internal ISAM array used in the Sort/Merge
OE!	Internal ISAM variable used in the Sort/Merge
OI	Data to be sorted
OK!	Data to be sorted
OO	ISAM current page number in the buffer
PD\$	Discount date
PF%	Flag to print date on the first voucher of a date group
SD%	Sort work disk drive number
SK!	Defines the key and printer area
SK!(	Defines the key and printer Area
SN	Number of fields in the buffer area
SP	Sort File Pointer
SP(	Array of Sort File Pointers
WI	Sort File number
WO	Temporary File number

4-2-2 \$A.APCAS - Variable Cross Reference

Variable References

---

#2	780, 40015
#5	760
#WI	43090, 43110, 43130
#WO	43110, 43120, 43130, 43140, 43530
A\$(	18000, 18010, 18020, 18500, 18530
B#(	855, 860, 865
B\$(	795, 800, 18010, 18100, 18110, 18120, 18230, 18510
BT#	865, 870, 875
DD\$(	540, 550, 700, 795, 30015, 40070
DK%	505
DP%	19980
DT#	875, 910, 920
E	43510
E%	18200, 18210, 18220
EN	40010, 40100, 43000, 43180
ER%	18520, 18540, 40060
F2\$(	795, 40070
FI%	520, 18510
FM\$	500, 855, 860, 870, 910
HD\$	820, 830, 840, 930
I1\$	1000
IK	18100, 18120, 18200, 18210, 18220
INDEX%	40000

4-2-2 \$A.APCAS - Variable Cross Reference (continued)

Variable References

-----

INITIAL	500, 820
K\$	40015, 40050
KA\$	18500, 18530
KC\$	503, 40050
KEY\$	18510
KH\$	18110, 18120, 18210, 18230
KI	18000, 18010, 18020
KO\$	850, 18100, 18120
KS	18220, 18230
LC	770, 880, 920, 19920, 30060
LP	620, 730, 880, 920, 19920
05	43000, 43010, 43020, 43030, 43040, 43120, 43140, 43150, 43510
06	43050, 43060, 43090, 43110, 43130
07	43040, 43050, 43060
08	43030, 43040, 43510, 43520
09	43040, 43050, 43060
09(	43030, 43040, 43500, 43510, 43520
OE!	770, 920, 43110, 43130, 43510, 43530
OI	43040, 43060, 43090, 43100, 43120, 43140
OK!	43090, 43100, 43110, 43130
00	40075
PD\$	795, 810, 820, 830, 930
PF%	500, 840, 920

4-2-2 \$A.APCAS - Variable Cross Reference (continued)

Variable References

---

PG	30010
PN\$	19920, 19950
Q	530, 600, 19960
Q\$	530, 600, 19960
R\$	540, 550, 18200, 18210, 18220
RL\$	620, 630
SC\$	730
SD%	505, 750, 770, 41530, 43070, 43080, 43160, 43180, 43530
SK!	760, 770, 920, 40070, 43010, 43040, 43050, 43060
SK!(	40000, 43010, 43040, 43050, 43060, 43100, 43120, 43140
SN	40000, 43020, 43520
SP	760, 780, 40075, 43010, 43040, 43060
SP(	40000, 43010, 43040, 43050, 43060, 43120, 43140
WI	40010, 43070, 43150
WO	40010, 43080, 43150, 43530

4-3 \$A.APCKR - CHECK REGISTER PROGRAM

4-3-1 \$A.APCKR - Check Register Program Variable Definitions

Variable	Definition
A\$	Invoice amount string
AA#(	Invoice amount (gross) array
AD#(	Discount amount array
AD\$(	Invoice date array
AI\$(	Invoice number array
B\$	Invoice date string
C\$	Net amount string
C\$(	Vendor name
CD\$	Check date
CN	Check number
CN\$	Check number string
F\$	Format string
F1\$	Format string
F2\$	Format string
IK	Index
NA#(	Net amount array
PG	Page
T1#-T6#	Totals
VN\$(	Voucher number array

4-3-2 \$A.APCKR - Variable Cross Reference

Variable References

#1	References
#1	220, 400, 420
\$	40000
A\$	420, 430
A\$(	400, 630, 40000
AA#(	100, 430, 700, 730
AD#(	100, 440, 710, 730
AD\$(	100, 420, 690
AI\$(	100, 420, 650, 680
B\$	420, 440
BL#	400, 739
BL\$	400
C\$	420, 450
C\$(	400, 620
CD\$	220, 320
CN	400, 610
CN\$	400
DK%	210
DP%	19980
F\$	110, 737, 738, 739, 930, 940, 950
F1\$	110, 700, 720
F2\$	110, 710
I	410, 420, 430, 440, 450, 460, 640, 650, 670, 680, 690, 700, 710, 720, 730, 40000, 40010, 40020

4-3-2 \$A.APCKR - Variable Cross Reference (continued)

Variable References

IK	40000, 40020
LC	110, 330, 600, 605, 630, 730, 739, 900, 910, 960
LP	220, 970
N8\$	210
NA#(	100, 450, 720, 730
PG	110, 320, 330
PN\$	19950
Q	19960
Q\$	200, 19960
STRING\$(	350, 734, 910
T1#	110, 730, 735, 930
T2#	110, 730, 940
T3#	110, 730, 736, 950
T4#	460, 730, 735, 737
T5#	460, 730, 738
T6#	460, 730, 736
VN\$(	100, 670, 40000, 40020
ZY\$	40000, 40020
ZZ\$(	100, 420, 40010, 40020

4-4 \$A.APCKS - PRINT PAYABLES CHECKS PROGRAM

4-4-1 \$A.APCKS - Print Payables Checks Program Variable Definitions

Variable Definition

---

AA#	Check payment amount
AA#(	Invoice amount (gross) array
AD#(	Discount amount array
AD\$(	Invoice date array
AG#	Accumulated amount due
AI\$(	Invoice number array
AMT#	Amount due less discount
AMT\$	Check payment amount
AP\$	String used to print the amount in English
BH\$	Voucher key
BP\$	String used to print the amount in English
C\$(	Vendor name array
CA#	Check payment amount
CD\$	Check written date
CE#	Credit excess
CN	Check number
D\$(	Names of the digits "ONE" to "NINE"
DSC(#	Discount amount
EN%	Flag for end of checks to be written
FA\$	Formatted string used to print totals
GR%	Flag
IN%	Flag for invoices present
J1%	Flag used to print the check stub
J2%	Flag used to print the check stub
JJ	Counter for checks written
JQ	Counter incremented as vouchers are read
LO	Temporary variable
OP\$	String used to print the amount in English
PP%	Flag
T\$(	Names of the numbers "TEN" to "NINETEEN"
TC	Total number of checks written
TE#	Total amount for checks
TH\$	"HUNDERD", "THOUSAND", "MILLION", "/100S DOLLARS", "ZERO", and "*****"
TP%	Flag
TS\$	Names of the tens numbers from "TEN" to "NINETY"
TT%	Voucher File Change Flag
U1\$-U4\$	Format strings



4-4-1 \$A.APCKS - Print Payables Checks Program Variable Definitions  
 (continued)

-----  
 Variable Definition  
 -----

VN\$ Voucher keys  
 WL Length of the amount less the decimal point and cents  
 WS\$ String of cents from the amount  
 Z1\$-Z9\$ Heading and print strings  
 ZQ Index  
 ZQ\$ Double quote character  
 ZQI Equivalent to ZQ  
 ZZ\$ Voucher key extension

4-4-2 \$A.APCKS - Variable Cross Reference

Variable References

-----

#5	890, 10000, 10020
A#(	25000, 25010, 25020
A\$(	1256, 1265, 10000, 18000, 18010, 18020, 18500, 18530, 22110, 25030
AA#	1240, 1250, 1255, 1262, 10000, 22010, 22100, 22130, 23170, 25020, 26040, 30000
AA#(	10020, 22000, 22090, 22500, 26022, 40000
AD#(	10020, 22000, 22090, 22500, 26022, 40000
AD\$(	10020, 22000, 22090, 22500, 22620, 26020, 40000
AG#	22010, 22100, 25000, 25010
AI\$(	10020, 22000, 22090, 22500, 22620, 26010, 26020, 40000
AMT#	22050, 22060, 22100
AMT\$	28000, 28010, 28020, 28030, 28090, 28120, 28150, 28180, 28200, 28220, 28230
AP\$	28270, 28274
B#(	22050, 22060, 22090, 22100, 30010, 30020
B\$(	18010, 18510, 22015, 22030, 22040, 22042, 22045, 22050, 22090, 22105, 22120, 30010, 30030, 30040, 30050
BH\$	22015, 22030, 30060
BP\$	28270, 28272, 28274, 28276
C\$(	1256, 10000, 22110, 22510, 22610, 23010, 23030, 23050, 23155, 23170, 24080, 24120, 24140
CA#	1255, 22510, 24070, 28000
CD\$	880, 890, 22610, 22620, 23090, 24060, 25030
CE#	30000, 30010

4-4-2 \$A.APCKS - Variable Cross Reference (continued)

Variable References

Variable	References
CN	940, 10000, 22610, 23130, 24020, 24500
D\$(	28290, 28320, 41140
DK%	870
DP%	19970, 19980
DSC#	22050, 22060, 22090
EN%	960, 22020
ER%	18520, 18540, 22020, 22042
FA\$	9140, 26040, 41060
FI%	1265, 18510, 22015, 22020, 22042, 22120
FILE%	30060
FNRO#(	22130, 40700
FNSD!(	30040
GR%	22010, 22042
I	1256, 22000, 22110, 22500, 22620, 23010, 24160, 28020, 28030, 28040, 28060, 28272, 28274, 30020, 30030, 41140, 41150, 41160, 41170
IN%	960, 22015
IP	23150
J1%	23010, 26000, 26040
J2%	23010, 26000, 26030
JJ	23010, 26010, 26020, 26022, 26024
JQ	22010, 22090, 22100, 22105, 22110, 22500
KA\$	18500, 18530
KEY\$	1265, 18510, 22042, 22120, 30010, 30060
KI	18000, 18010, 18020
LO	28270, 28272

4-4-2 \$A.APCKS - Variable Cross Reference (continued)

Variable References

LB!	940
LC	500
LP	19920, 23000, 24520
MS%	760, 24175
NI	940
N8\$	870
NA#(	10020, 22000, 22100, 22500, 26024, 40000
OP\$	28000, 28060, 28070, 28090, 28130, 28160, 28190, 28270, 28272, 28274, 28280, 28290, 28300, 28310, 28320
PN\$	19950
PP%	1252, 22010, 22045
Q	640, 720, 760, 880, 940, 19960
Q\$	600, 720, 760, 860, 920, 19960
QS	880
R\$	880, 940
RL\$	680, 740
T\$(	28280, 41150
TC	9020, 22520, 24500
TE#	1255, 9140
TH\$(	28000, 28070, 28090, 28130, 28160, 28190, 28270, 28310, 41170
TP%	1240, 22010, 22045, 23160
TS\$(	28300, 41160
TT%	1265, 22120
U1\$	24070, 41060

4-4-2 \$A.APCKS - Variable Cross Reference (continued)

Variable References

Variable	References
U2\$	41060
U3\$	26022, 26024, 41070
U4\$	26022, 41070
UB!	940
VD\$	880, 30010
VN\$(	510, 10015, 22105
WL	28220, 28230
WS\$	28000, 28030, 28040, 28050, 28060, 28090, 28120, 28130, 28150, 28160, 28180, 28190, 28230, 28240, 28250, 28280, 28290, 28300, 28310, 28320
XX#	40700
XY#	40700
YES	640, 770
Z1\$	23010, 41000
Z2\$	23070, 41010
Z3\$	23110, 41020
Z5\$	26030, 41040
Z6\$	26040, 41050
Z7\$	22510, 22610, 23155, 23170, 41080
Z8\$	22510, 22610, 23170, 41080
Z9\$	22510, 22610, 23170, 41090
ZQ	10010, 10015, 10020, 10030
ZQ\$	870, 890, 10000, 10020
ZQI	10015
ZZ\$	10015, 10020

4-5 \$A.APCRE - FILE CREATION PROGRAM

4-5-1 \$A.APCRE - File Creation Program Variable Definitions

Variable Definition

D% Disk drive number  
 DISK% Disk drive number  
 NA\$ File name

4-5-2

\$A.APCRE - Variable Cross Reference

Variable References

-----  
D% 1110, 1140, 1160, 6020, 6050  
DISK% 6050  
FI% 6080, 6090  
LB! 1110  
N! 1110  
N6\$ 6080  
N7\$ 6090  
NA\$ 6080, 6090  
NB% 6055  
NF% 6055  
PN\$ 19900  
Q 1100, 1120, 1150, 6070  
Q\$ 1100, 1120, 1150, 6030, 6060  
QT 1100, 1120, 1150  
R\$ 6070, 6080, 6090, 6100  
SC\$ 6010  
UB! 1110  
YES 1130, 1150, 6040

4-6 \$A.APDVO - DELETE VOUCHERS PROGRAM

4-6-1 \$A.APDVO - Delete Vouchers Program Variable Definitions

Variable Definition

---

B	Amount due
B#	Temporary print variable
JE	Journal entry
NL%	Flag set when a voucher is displayed for deletion
TT%	Voucher File Change Flag
U1\$	Format string
U2\$	Format string
Z6\$	Control Report heading
Z7\$	Error message
Z8\$	Control Report heading
ZA\$	Control Report heading
ZB\$	Control Report heading
ZC\$	Control Report heading
ZD\$	Control Report heading



4-6-2 \$A.APDVO - Variable Cross Reference

Variable References

---

A#(	1695
A\$(	18000, 18010, 18020, 18500, 18530
B	22515, 22520
B#	22505, 22510, 22520, 22530, 22560, 22570, 22580, 22590
B#(	1695, 22505, 22515, 22520, 22560, 22570, 22580
B\$(	1640, 1655, 1656, 1657, 1685, 1695, 18010, 18100, 18110, 18120, 18230, 18510, 22505, 22510, 22530, 22540, 22560, 22570, 22580, 22600
DP%	19980
E%	1630, 18200, 18210, 18220
ER%	1650, 1695, 18520, 18540
FI%	1640, 1692, 1695, 18510
FNRO#(	40100
I\$	22000
IE\$(	40100
IK	18100, 18120, 18200, 18210, 18220
JE	22550, 22560, 22570, 22580, 22600, 22602
KA\$	18500, 18530
KE\$	1695
KEY\$	1640, 18510
KH\$	18110, 18120, 18210, 18230
KI	18000, 18010, 18020
KO\$	18100, 18120, 22505
KS	18220, 18230

4-6-2 \$A.APDVO - Variable Cross Reference (continued)

Variable References

Variable	References
LC	20500, 20530, 21000, 21020, 22010, 22200, 22500, 22555, 22602, 22610
LP	1510, 1700, 19900, 21010, 22200
NL%	1660, 22555, 22602, 22610
PC	20500, 20510, 21010, 22010
PN\$	19950
Q	1510, 1620, 1657, 1680, 2000, 19960
Q\$	1500, 1610, 1670, 2000, 19960
R\$	18200, 18210, 18220
RL	1620
SC\$	1600
TI%	1685
U1\$	22510, 22570, 22580, 22590, 40090
U2\$	22530, 40090
V\$(	500
XX#	40100
XY#	40100
YES	1510, 1680, 2010
Z6\$	1600, 20520, 40000
Z7\$	1650, 40040
Z8\$	40040
ZA\$	1660, 20530, 40060
ZB\$	1660, 20530, 40070
ZC\$	1660, 20530, 40080
ZD\$	22550, 40050

4-7 \$A.APEOP - END-OF-PERIOD PROGRAM

4-7-1 \$A.APEOP - End-of-Period Program Variable Definitions

Variable Definition

---

A#	Temporary print variable for amounts
AC(	Holds Accounts Payable credits
AN(	Account numbers.
AP#	Accounts Payable debits
AR#	Accounts Payable credits
B\$	Field variable used to set the transfer record to a null
CA#	Cash
DE#	Discount
F\$	Used to hold fielded positions in the files
J	Used to read the expense accounts
LB	Lower bound for search of the account number array AN(
MD\$	End of period date on transaction register
MX	Number of accounts found
T\$	Field variable for the first 84 positions of the Vendor File, ID, name, address, and phone
TC#	Total credits
TD#	Total debits
TF\$	General Ledger Transfer File #A.APGLT
UB	Upper bound for search of account number array AN(
VL%	Flag for scanning vouchers
VO	The voucher ID or "FINISHED"
WW	Used to sound the terminal bell
X	Account to be searched for in account number array AN(
X\$	Created voucher ID

4-7-2 \$A.APEOP - Variable Cross Reference

Variable References

#1	1030, 1510, 1515, 1520, 1530, 1570, 1580, 1590, 1600
A#	1550, 1570, 1580, 1590, 1600, 40010
AC(	7, 1240, 1250, 1530, 39000
AN(	7, 1230, 1240, 1250, 1530, 1540
AP#	1110, 1300, 1310, 1500, 1580
AR#	1110, 1210, 1500, 1570
B#(	1210, 1250, 1300, 1310, 39000
B\$	1515
B\$(	1200, 1210, 1220, 1300, 1305, 1310, 1400, 38100, 38110, 38120
BELL\$	1090, 1670
CA#	1110, 1300, 1310, 1500, 1590
D\$	1030, 1040, 1750, 1780
DA	1110, 1200, 1520, 1525
DE#	1110, 1310, 1500, 1600
DI%	1740
DK%	1000, 1020, 1060, 1510, 1740
DP%	19980
E%	1010, 1020, 38200, 38210, 38220
ER%	1150, 1770
F\$	1750, 1780
F2\$(	1200, 1510, 1520, 1525, 1530, 1550, 1570, 1580, 1590, 1600, 40000
FI%	1740, 1750

4-7-2 \$A.APEOP - Variable Cross Reference (continued)

Variable References

Variable	References
FNDI\$(	1250, 1570, 1580, 1590, 1600, 1750, 39000
FNDS\$(	1040, 1525
FNID#(	1550, 39000
FNSD!(	1110
I	1090, 1530, 1540, 1560
II	1230, 1240, 1250, 39000
IK	38100, 38120, 38200, 38210, 38220
J	1220, 1250, 1270, 39000
KH\$(	38110, 38120, 38210, 38230
KO\$(	1160, 38100, 38120
KS	38220, 38230
LB	1220, 1230, 1240, 1250
LC	8, 1530, 1630, 21030, 40020
LP	19920
MD\$(	1525, 1540, 40000
MX	6, 1200, 1220, 1240, 1500, 1520, 1527, 1530, 1640
N6\$(	1740
N9\$(	6
NA\$(	1740
PC	21005
PL	1530, 40020
PN\$(	19950

4-7-2 \$A.APEOP - Variable Cross Reference (continued)

Variable References

---

Q	1060, 1100, 1710, 19960
Q\$	8, 1060, 1100, 1710, 19960
R\$	1105, 1110, 38200, 38210, 38220
T\$	1030, 1750
TC#	1525, 1550, 1620, 40010
TD#	1525, 1550, 1620, 40010
TF\$	6, 1000, 1020, 1060, 1510
UB	1220, 1230
V\$(	1570, 1580, 1590, 1600
VD\$	1105
VL%	1120
VO\$	1150, 1160
WW	1670
X	1220, 1230, 1250
X\$	38230
YES	1060, 1720

4-8 \$A.APETV - ENTER VOUCHERS PROGRAM

4-8-1 \$A.APETV - Enter Vouchers Program Variable Definitions

Variable Definition

---

B	Amount due on the voucher
B#	Temporary print variable
BT#	Distribution totals
DV\$	Voucher date entered by the user
E1%	Error Flag if invalid entry
E2%	Error indicator
EF%	Flag to indicate a full page
EN%	Entry number
IE\$(	Holds the values entered by the user
IJ	Loop variable
J	Used to zero Vendor File fields
JE	Journal entry
JJ	Entry counter
K	Distribution counter
MN\$	Month and year that automatic vouchers are entered for
MN%	Month that automatic vouchers are entered for
RD	Set to disk space
U1\$	Format string
U2\$	Format string
Z1\$-ZE\$	Control Report headings

4-8-2 \$A.APETV - Variable Cross Reference

Variable References

-----

#3	810, 840, 850, 920, 1030
A#(	1137, 1138, 4040, 4070
A\$(	1138, 4020, 4030, 4040, 4050, 4060, 18000, 18010, 18020, 18500, 18530
B	22515, 22520
B#	22506, 22510, 22520, 22530, 22560, 22570, 22580, 22590
B#(	1140, 1150, 1155, 1165, 1180, 22506, 22515, 22520, 22560, 22570, 22580
B\$(	1110, 1140, 1150, 1155, 1160, 1165, 1170, 1180, 1200, 1260, 18010, 18100, 18110, 18120, 18510, 22506, 22510, 22530, 22540, 22560, 22570, 22580, 22600
BELL\$	890
BT#	3050, 3080, 3090
DK%	570, 860, 1020, 1300
DP%	19980
DV\$	550, 560, 1138, 1140
E1%	760, 3000, 3010, 3020, 3030, 3040, 3060, 3070, 3076, 3090, 3100, 3110, 3200
E2%	780, 890, 4080
EF%	1025, 1110, 1130, 1210, 22505
EN%	570, 600, 850, 860, 920
ER%	1110, 4010, 18501, 18520, 18540
FI%	1100, 1139, 1260, 4005, 4010, 18510
FNRO#(	1155, 4070, 40100
FNSD!(	3110



4-8-2 \$A.APETV - Variable Cross Reference (continued)

Variable References

---

I	610, 720, 730, 740, 800, 810, 820, 830, 840, 890, 1025, 1170, 1180, 1190, 3050, 3060, 3070, 3075, 3076, 3080
I\$	22000
IE\$(	610, 620, 630, 640, 650, 655, 670, 680, 690, 700, 730, 740, 810, 830, 840, 1025, 1030, 1040, 1050, 1100, 1110, 1120, 1137, 1138, 1140, 1150, 1160, 1180, 1190, 3000, 3010, 3020, 3030, 3040, 3060, 3070, 3075, 3076, 3080, 3090, 3100, 3110, 4000, 4040, 4060, 4070, 22505, 40100
IJ	4000
IK	18100, 18120
J	1170, 1180, 1190
JE	22550, 22560, 22570, 22580, 22600, 22602
JJ	1025, 1030, 1040, 1050, 1060
K	3050, 3060, 3070, 3076
KA\$	18500, 18530
KEY\$	1100, 1137, 1260, 18510
KH\$	18110, 18120
KI	18000, 18010, 18020
KO\$	18100, 18120, 22505, 22506
LB!	660
LC	1120, 20500, 20530, 21000, 21020, 22200, 22500, 22555, 22602, 22610, 24010
LP	1010, 1270, 19900, 21010, 22200, 24000
MN\$	548, 4040
MN%	548, 780, 910, 4030, 4040

4-8-2 \$A.APETV - Variable Cross Reference (continued)

Variable References

-----	
MO	548
PC	20500, 20510, 21010, 22010
PN\$	19950
Q	530, 542, 548, 550, 610, 770, 870, 1010, 1320, 19960
Q\$	530, 542, 546, 550, 610, 770, 1000, 1320, 19960
QL	620, 630, 640, 650, 655, 660, 680, 690, 700, 730, 740, 750, 770, 780, 900
QS	550, 610, 750, 900
QT	610, 630, 640, 650, 655, 660, 680, 690, 700, 730, 740, 750, 900
R\$	548, 550, 560, 620, 630, 640, 650, 652, 655, 670, 680, 685, 690, 700, 730, 740
RD	860
RL	610, 710, 740, 900
RL\$	780
RS	610, 710, 740, 900
S\$	810, 840, 850, 920, 40050
SC\$	570, 780, 4000
TT%	1160, 1165
U1\$	22510, 22570, 22580, 22590, 40090
U2\$	22530, 40090
UB!	660
VD\$	560

4-8-2 \$A.APETV - Variable Cross Reference (continued)

Variable References

-----  
XX# 40100  
XY# 40100  
YES 540, 544, 1010, 1330  
Z1\$ 600, 40000  
Z2\$ 600, 40010  
Z3\$ 710, 40020  
Z4\$ 710, 40020  
Z5\$ 600, 40030  
Z8\$ 20520, 40040  
Z9\$ 3200, 40050  
ZA\$ 20530, 40060  
ZB\$ 20530, 40070  
ZC\$ 20530, 40080  
ZD\$ 22550, 40050  
ZE\$ 600, 40045

4-9 \$A.APLNK - LINKAGE FILE MAINTENANCE PROGRAM

4-9-1 \$A.APLNK - Linkage File Maintenance Program Variable Definitions

Variable Definition

---

D%	Link File disk drive number
FC%	File Creation Flag
IC\$(	Array for the parameter field types
IL(	Array for the parameter field lengths
IT\$(	Array for the parameter field names
TE	Total number of parameters
VV\$(	System parameter array

4-9-2 \$A.APLNK - Variable Cross Reference

Variable References

-----

#1	4020, 4030, 5010, 5040, 5050
BT	5700
D%	1110, 1140, 1160, 4010, 5010, 5030
FC%	4010, 5722, 5732, 5743, 5752
FS	95
I	5020, 5650, 5715, 5720, 5724, 5730, 5740, 5742, 5750, 5986, 5990
IC\$(	5720, 5730, 5740, 5750, 5985, 5990
II	4020, 5010, 5040
IL(	5724, 5985, 5990
IM	100, 4030, 5050
IP	100, 4030, 5050
IT\$(	5715, 5985, 5990
LB!	1110, 5742
N!	1110
N1\$	4010, 5010, 5030
PN\$	19900
Q	1100, 1120, 1150, 2010, 5700
Q\$	1100, 1120, 1150, 2010, 4010, 4020, 4030, 5030, 5040, 5050, 5715
QT	1100, 1120, 1150, 2010, 5700
R\$	5650, 5722, 5724, 5732, 5743, 5752, 5753, 5754
RI	5700, 5799
RL\$	2010

4-9-2 \$A.APLNK - Variable Cross Reference (continued)

Variable References

---

TE	4020, 5010, 5020, 5040, 5980, 5985, 5986, 5990
UB!	1110, 5742
VV\$(	4020, 5010, 5040, 5650, 5715, 5985, 5986
W	95
WIDTH	95
YES	1130, 1150

4-10 \$A.APOPE - LIST OPEN VOUCHERS PROGRAM

4-10-1 \$A.APOPE - List Open Vouchers Program Variable Definitions

Variable	Definition
FD\$	Format string
FM\$	Format string
HV\$	Left five characters of the voucher ID
INITIAL	Flag that is true the first time through the voucher record
PG	Page counter
TA#	Total amount due
TD#	Total discount
TV	Total open vouchers

4-10-2 \$A.APOPE - Variable Cross Reference

Variable References

-----

A\$(	18000, 18010, 18020, 18500, 18530
B#(	760, 775, 805
B\$(	740, 752, 754, 758, 760, 770, 773, 780, 790, 18010, 18100, 18110, 18120, 18230, 18510
DP%	19980
E%	18200, 18210, 18220
ER%	730, 18520, 18540
FD\$	500, 775, 19919
FI%	520, 18510
FM\$	500, 760, 19918
HV\$	752, 754
I1\$	1000
IK	18100, 18120, 18200, 18210, 18220
INITIAL	500, 752
KA\$	18500, 18530
KEY\$	18510
KH\$	18110, 18120, 18210, 18230
KI	18000, 18010, 18020
KO\$	758, 18100, 18120
KS	18220, 18230
LC	754, 810, 19930, 30060
LP	620, 700, 810, 19940
PG	30010



4-10-2 \$A.APOPE - Variable Cross Reference (continued)

Variable References

PN\$	19950
Q	600, 19960
Q\$	600, 19960
R\$	18200, 18210, 18220
RL\$	620, 630
SC\$	700
TA#	805, 19918
TD#	805, 19919
TV	800, 19915, 19920

4-11 \$A.APPAY - DETERMINE WHAT IS TO BE PAID PROGRAM

4-11-1 \$A.APPAY - Determine What is to be Paid Variable Definitions

Variable Definition

---

CA#	Cash available
CR#	Total credits
DB	Discount window beginning date
DD	Discount date
DE	Discount window ending date
DS\$	Date Selection Flag
DU	Due date
DY	Pay Program base date
FM\$	Format string
MM	Discount month
MO(	Array to hold the month of the discount date
NE	Number of vendors to be excluded
NE\$(	Vendors to be excluded
NI	Number of vendors to be included
NI\$(	Vendors to be included
P%	Check Reconciliation Print Flag
SD#	Accumulated discount
SG#	Accumulated total vouchers
T	Unique number used in converting the discount date
T#	Cash available minus the accumulated voucher amounts
TD#	Total due
TI#	Used to accumulate the amount due
TT#	Total
TT%	Voucher File Change Flag
TV#	Check total
TW#	Accumulated amount due after discount
VE	Number of vouchers to be excluded
VE\$(	Vouchers to be excluded
VI	Number of vouchers to be included
VI\$	Vendor key
VI\$(	Vouchers to be included
VO\$	Voucher ID
X\$	Voucher ID to be included or excluded
YY	Discount year

4-11-2 \$A.APPAY - Variable Cross Reference

Variable References

-----	
Variable	References
B#(	1165, 1190, 1230, 1240, 1510, 1520, 1580, 1640, 1650, 1710, 1806, 1807, 1808, 1809, 1820, 1840, 20080, 20100
B\$(	1133, 1135, 1140, 1150, 1160, 1165, 1180, 1190, 1210, 1220, 1230, 1240, 1510, 1520, 1570, 1580, 1640, 1650, 1700, 1710, 1801, 1805, 1806, 1807, 1808, 1810, 1820, 20015, 20070, 20080, 20090, 20100, 20110, 20120, 38100, 38110, 38120
CA#	1030, 1330, 1340
CR#	1795, 1802, 1805, 1807
D!	1070, 36050
D#	1030
D\$	1808, 1830
DB	1050, 1165, 1190, 1230, 1240, 1350, 1520, 1580, 36020
DD	1070, 36020, 36030, 36040, 36050
DE	1070, 1165, 1190, 1230, 1240, 1360, 1520, 1580
DP%	19980
DS\$	520, 1015, 1075, 1300
DU	1090, 1240, 1370
DY	1010, 1050, 1090, 1310, 21010
E%	31040, 33040, 38200, 38210, 38220
ER%	1130, 1500, 1570, 1630, 1700, 1800, 1804, 20015, 20020, 20120
FI%	40000
FM\$	1270, 1330, 1340, 1360, 1380

4-11-2 \$A.APPAY - Variable Cross Reference (continued)

Variable References

Variable	References
FNDS\$(	1050, 1070, 1090, 1310, 1350, 1360, 1370, 21010
FNSD!(	1010, 1050, 1070, 1090, 1140, 1240, 1520, 1580
I	1150, 1180, 1210, 1220, 1480, 1490, 1500, 1540, 1560, 1570, 1590, 1610, 1620, 1630, 1670, 1690, 1700, 1720, 30030, 30040, 31030, 31050, 32030, 32040, 33030, 33050
II	36030
IK	38100, 38120, 38200, 38210, 38220
KEY\$(	1490, 1500, 1570, 1620, 1630, 1700, 20010, 20015, 20020, 20120
KH\$(	38110, 38120, 38210, 38230
KO\$(	1135, 1810, 20070, 38100, 38120
KS	38220, 38230
LE!	30000
LC	1803, 1850, 1900, 21060, 40000
LP	1790, 19920
MM	36020, 36040, 36050
MO	36050
MO(	36000, 36010, 36020, 36040, 36050
NI	30010, 31010, 32010, 33010
NE	1210, 1610, 32010, 32020, 32030
NE\$(	1210, 1620, 1630, 32040, 40010
NI	1150, 1480, 30010, 30020, 30030
NI\$(	1150, 1490, 1500, 30030, 40010

4-11-2 \$A.APPAY - Variable Cross Reference (continued)

Variable References

P%	1795, 1800, 1801, 1805, 1806
PC	21010, 21020, 40000
PL	1850, 40000
PN\$	1770, 19950
Q	510, 1000, 1020, 1040, 1060, 1080, 1460, 1760, 1780, 19960, 20000, 20130, 30000, 30020, 31000, 31020, 32000, 32020, 33000, 33020
Q\$	510, 1000, 1020, 1040, 1060, 1080, 1460, 1760, 1780, 19960, 20000, 20130, 30000, 30030, 31000, 31030, 32000, 32030, 33000, 33030
QT	1000
R\$	1010, 1050, 1070, 1090, 1470, 1550, 1600, 1680, 1730, 1740, 20010, 30030, 32040, 38200, 38210, 38220
SC\$	1300, 1750, 20030
SD#	1770, 1808, 1890
SG#	1770, 1809, 1880
STRING\$(	1802
T	1140, 1165, 1190, 1230, 1240, 36020
T#	1340, 1350, 1360, 1370, 1380, 1808, 1830, 1840
TD#	1100, 1240, 1370, 1380
TI#	1100, 1165, 1190, 1340, 1510, 1520, 1580, 1640, 1650, 1710
TT#	1795, 1804, 1900
TT%	1101
TV#	1795, 1802, 1804, 1805, 1806, 1808

4-11-2 \$A.APPAY - Variable Cross Reference (continued)

Variable References

---

TW#	1100, 1230, 1350, 1360
UB!	30000
VD\$	1010
VE	1220, 1690, 33010, 33020, 33030
VE\$(	1220, 1700, 33050, 40010
VI	1180, 1560, 31010, 31020, 31030
VI\$	20010, 20015, 20020, 20120
VI\$(	1180, 1570, 31050, 40010
VL%	1120
VN\$	1795, 1801, 1805
VO\$	1135
X\$	31050, 33050, 38230
YES	520, 1770, 20140
YY	36020, 36030, 36050

4-12 \$A.APQUE - QUERY VENDOR PROGRAM

4-12-1 \$A.APQUE - Query Vendor Program Variable Definitions

Variable Definition

-----  
VI\$ Vendor ID

4-12-2 \$A.APQUE - Variable Cross Reference

Variable References

---

A#(	1060, 1080, 1100, 1130, 1135, 1145
A\$(	1060, 1070, 1080, 1090, 1100, 1110, 1135, 1140, 1145, 21040, 21060
A2\$(	1120
B#(	1230, 1250
B\$(	1165, 1220, 1230, 1240, 1250, 1260, 1270, 38100, 38110, 38120, 38160
DP%	19980
E%	38130, 38140, 38150
ER%	1020, 1165, 1170, 1270
F1\$(	1120
FI%	1010, 1160
IK	38100, 38120, 38130, 38140, 38150
KEY\$(	1010, 1160, 1165, 1170, 1270
KH\$(	38110, 38120, 38140, 38160
KO\$(	1220, 38100, 38120
KS	38150, 38160
LC	1150, 1170, 1215, 1265, 1290, 21000, 40000
LP	1040, 1045, 1275, 19920
PC	21020, 40000
PL	40000
PN\$(	19950
Q	1000, 1030, 1280, 19960, 40020
Q\$(	1000, 1030, 1280, 19960, 40010



4-12-2 \$A.APQUE - Variable Cross Reference (continued)

Variable References

R\$ 1010, 1020, 1040, 38130, 38140, 38150

VI\$ 1010, 1160, 1165, 1170, 1270

YES 1290

4-13 \$A.APSYS - SYSTEM PARAMETER FILE MAINTENANCE PROGRAM

4-13-1 \$A.APSYS - System Parameter File Maintenance Program Variable  
Definitions

Variable Definition

---

D%	Disk drive number
FC%	File Create Flag
IC\$(	Array for the parameter field types
IL(	Array for the parameter field lengths
IT\$(	Array for the parameter field names
TE	Total number of parameters
VV\$(	System parameter array

4-13-2 \$A.APSYS - Variable Cross Reference

Variable	References
#1	4010, 4020, 5010, 5030, 5040
BT	5700
D%	1110, 1140, 1160, 4010, 5010, 5030
FC%	4010, 5722, 5732, 5743, 5752
FS	95
I	5020, 5650, 5715, 5720, 5723, 5724, 5730, 5740, 5742, 5750, 5986, 5990
IC\$(	5720, 5730, 5740, 5750, 5985, 5990
II	4020, 5010, 5040
IL(	5724, 5985, 5990
IT\$(	5715, 5985, 5990
LB!	1110, 5742
N!	1110
N\$	5010
N2\$	4010, 5010, 5030
PN\$	19900
Q	1100, 1120, 1150, 2010, 5700
Q\$	1100, 1120, 1150, 2010, 4010, 4020, 5030, 5040, 5715
QT	1100, 1120, 1150, 2010, 5700
R\$	5650, 5722, 5724, 5732, 5743, 5752, 5753, 5754, 10000, 10010, 10020
RI	5700, 5799
RL\$	2010
TE	4010, 4020, 5010, 5020, 5030, 5040, 5980, 5985, 5986, 5990

4-13-2 \$A.APSYS - Variable Cross Reference (continued)

Variable References

-----  
 UB! 1110, 5742  
 VV\$( 4020, 5010, 5040, 5650, 5715, 5985,  
 5986  
 W 95  
 WIDTH 95  
 YES 1130, 1150

4-14 \$A.APVFL - VENDOR FILE LIST PROGRAM

4-14-1 \$A.APVFL - Vendor File List Program Variable Definitions

Variable Definition

---

LA	Flag is true if Monthly Entry Flag is Y.
LS	Flag is true if only selected vouchers are to be listed.
PF%	Flag is true if the phone number has seven digits.
U1\$	Format string
Z1\$-ZB\$	Vendor File list headings

4-14-2 \$A.APVFL - Variable Cross Reference

Variable References

Variable	References
A#(	20020, 20040, 20070, 20090, 20092, 20096
A\$(	20005, 20010, 20025, 20030, 20050, 20060, 20082, 20083, 20084, 20092, 20094, 20096
A1\$	20083, 20084, 20086, 20090
DP%	19980
ER%	680, 685, 790
FI%	670, 780
KEY\$	780
LA	20005, 20025, 20050, 20080, 20092, 20096
LC	510, 20003, 20100, 20520, 21000, 21010
LP	510, 550, 566, 645, 800, 840, 19910, 20000, 21010
LS	510, 630, 650
PC	510, 20500, 20510
PF%	20082, 20086
PL	20003, 40000
PN\$	19950
Q	540, 565, 620, 760, 820, 19960
Q\$	530, 565, 610, 750, 810, 19960
QT	540, 620
R\$	760, 770, 780
RL\$	550, 560, 630, 640
SC\$	645, 830
U1\$	20020, 20040, 20070, 20090, 20092, 20096, 40070

4-14-2 \$A.APVFL - Variable Cross Reference (continued)

Variable References

---

YES	830
Z1\$	40020
Z2\$	800, 20510, 40030
Z3\$	800, 20510, 40040
Z4\$	20080, 40050
Z5\$	20010, 40060
Z6\$	20030, 40060
Z7\$	20060, 40060
Z8\$	20025, 40070
Z9\$	20094, 40060
ZA\$	20050, 40070
ZB\$	20090, 40070

4-15 \$A.APVFM - VENDOR FILE MAINTENANCE PROGRAM

4-15-1 \$A.APVFM - Vendor File Maintenance Program Variable Definitions

Variable Definition

---

C\$(	Prompt messages
CE\$	Prompt message 'enter'
CV\$	Prompt message 'current value'
FC	Function code
ME\$	Auto Voucher Y-N Flag status change variable
NI	Number of field to be changed
U1\$	Format string for the Vendor File
U3\$	Format string



4-15-2 \$A.APVFM - Variable Cross Reference

Variable References

A#(	20010, 30510, 30620, 30710, 30810, 31310, 31510, 37050, 37063, 37066
A\$(	1040, 1131, 1230, 1240, 2050, 2142, 3050, 20000, 20010, 30020, 30120, 30220, 30320, 30410, 30920, 31020, 31120, 31210, 31410, 31610, 37040, 37060, 37061, 37062, 37064, 37067
B\$(	3340
BELL\$	2120, 3340
C\$(	30000, 30100, 30200, 30300, 30400, 30500, 30600, 30700, 30800, 30900, 31000, 31100, 31200, 31300, 31400, 31500, 31600, 37040, 37050, 37060, 37062, 37063, 37064, 37066, 37067, 40000, 40010, 40020, 40030, 40040, 40050, 40060, 40070, 40080, 40090, 40100, 40110, 40120, 40130, 40140, 40150, 40160, 40170
CE\$	30000, 30100, 30200, 30300, 30400, 30500, 30600, 30700, 30800, 30900, 31000, 31100, 31200, 31300, 31400, 31500, 31600, 40190
CV\$	37040, 37050, 37060, 37062, 37063, 37064, 37066, 37067, 40190
D#	30510, 30620, 30710, 30810, 31305, 31310, 31505, 31510
DP%	19980
E%	3070, 3320, 3330, 3360
ER%	1050, 2060, 3060, 3300, 3320
FC	910, 1000, 2000, 2185, 3000
FI%	1040, 1240, 2050, 2190, 3050, 3140, 3300
FNRO#(	40350
I	37040, 37050, 37060, 37062, 37070
KEY\$	1040, 1240, 2050, 3050, 3140, 3300

4-15-2 \$A.APVFM - Variable Cross Reference (continued)

Variable References

-----

KY\$(	3140, 3300, 3330
LB!	2110, 31100, 31600
ME\$	20000
N!	2110
NI	2110, 2120, 2140, 2141, 2144
PN\$	19950
Q	870, 900, 930, 1200, 2110, 2150, 3100, 19960, 30000, 30100, 30200, 30300, 30400, 30500, 30600, 30700, 30800, 30900, 31000, 31100, 31200, 31300, 31400, 31500, 31600
Q\$	860, 920, 1190, 2100, 2150, 3090, 19960, 30000, 30100, 30200, 30300, 30400, 30500, 30600, 30700, 30800, 30900, 31000, 31100, 31200, 31300, 31400, 31500, 31600
QT	1200
R\$	30010, 30015, 30020, 30110, 30120, 30210, 30220, 30310, 30320, 30401, 30405, 30410, 30920, 31010, 31020, 31120, 31205, 31206, 31210, 31405, 31406, 31410, 31610
RL	30401, 30405, 31205, 31405
RL\$	940, 950, 960, 965
SC\$	1000, 2000, 2145, 3000
U1\$	37050, 37063, 37066, 40200
U3\$	40200
UB!	2110, 31100, 31600
XX#	40350
XY#	40350
YES	870, 1210, 2170, 3110

4-16 AP MENU - MENU PROGRAM

4-16-1 AP MENU - Menu Program Variable Definitions

Variable Definition

---

M\$	Description of P\$
M\$(	Menu
MM\$	NM-1
NM	Used to read the Submenu
NM\$	Holds the Submenu selection
P\$(	Holds the Submenu selection
PP\$	Menu headings (holds PN\$); indicates Menu subsection start
RA	Flag
TP\$	Menu selected

4-16-2 AP MENU - Variable Cross Reference

Variable References

-----

#1	2010
DK%	2010
DP%	1014, 1058, 1105, 1106, 1108, 1110, 1120, 1130, 1135, 1160, 1164, 1166, 1168, 1170, 1180, 2000
I	1014, 1056, 1058, 1060, 1086, 1089, 1092, 1105, 1106, 1108, 1110, 1120, 1130, 1135, 1160, 1164, 1166, 1168, 1170, 1180, 1198, 2122, 2226
IM	320, 330, 1058, 1062, 1089, 1095, 2010
IP	1089, 2010
M\$	2118
M\$(	2120, 2122, 2226
MM\$	2116, 2124
N1\$	2000
NM	1014, 1056, 1086, 2116, 2120, 2122, 2226
NM\$	2116
P\$	2118
P\$(	1014, 1058, 1089, 2120, 2122, 2226
PN\$	2108, 19950
PP\$	330, 1050, 1080, 2108, 2114
Q	1010, 1054, 1082, 1900
Q\$	1000, 1052, 1082, 1900, 2000, 2010
QT	1010, 1054, 1083, 1900
R\$	1012, 1013, 1014, 1058, 1062, 1089, 1095, 1920

4-16-2 AP MENU - Variable Cross Reference (continued)

Variable References

Variable	References
RA	2118, 2120
RL	1910
SET	19980
TP\$	2114
VD\$	1920, 2010
VT\$	1080, 1082, 1100

4-17 COMMON SUBROUTINES

4-17-1 Common Variable Definitions

Variable Definition

---

A#(	Array for Vendor File numerical data
A\$(	Array for Voucher File numerical data
A1\$	Vendor's area code
A2\$	Vendor's telephone number
B#(	Array for Voucher File numerical data
B\$(	Array for voucher string data
BE\$	Terminal bell (equivalent to BELL\$)
CH	Input character
DI!	Dummy parameter for FNDS\$, also used to hold a date
D#	Dummy parameter for FNDI\$, also used to hold dollar value returned by Subroutine Querydollar.
D\$	Dummy field variable
DA	Day returned by the Querydate Subroutine
DG	Flag for numerical input check
DI%	Main data disk drive number
DK%	Main data disk drive number
DP	Flag for decimal point input
DP%	Program disk drive number
E%	Error indicator
E\$	End
ER%	Error indicator from ISAM call
F1\$(	Field string array for the Vendor File
F2\$(	Field string array for the Voucher File
FI%	ISAM file number
FNDI\$(	Pack dollar amount function
FNDS\$(	Unpack a date function
FNID#(	Unpack a dollar amount function
FNRO#	Round off function
FNSD!(	Pack a date function
FO%	ISAM File Open Flag
FS	Maximum query input field size
HB\$	Help File field buffer
HF%	Help File number
HJ	Index for the Help File directory lower message
HK	Index for the Help File directory upper message
HL	Record separator (RS = CHR\$(30)) position
HN\$	Name of array to be ERASEd
HN\$(	Message number string array

4-17-1 Common Variable Definitions (continued)

Variable	Definition
HN(	Message number array
HP	Index for binary search
HS	Starting record number
HS\$	Fielded variable for HS(
HS\$(	Message record start/length string array
HS(	Message record start/length array
I	Index
I1\$	Input string
I\$	Dummy parameter for FNID#
II	Index
IM	Menu/Submenu pointer
IP	Program selection pointer
JJ	Index
KA\$	Highest voucher number
KE\$	Current ISAM record key (equivalent to KEY\$)
KH\$	Used to hold created voucher ID
KI	Highest voucher number + 1
KO\$	Voucher ID
KS	Sequence number used in voucher number extension
KY\$(	Key array
LB!	Lower bound for N! in Subroutine Querynumber
LC	Line counter
LP	Set Printer On Flag
MO	Month entered in Querydate Subroutine
N!	Value returned by Querynumber Subroutine
N#	Used in FNDI\$
N\$	Input value for SYSTEM File
N1\$	System Linkage File Name "#A.APLNK"
N2\$	System Parameter File Name "#A.APSYS"
N3\$	System Linkage File Maintenance Program Name "\$A.APLNK"
N4\$	System Parameter File Maintenance Program Name "\$A.APSYS"
N5\$	System Help File Name "#A.APHLP"
N6\$	Vendor File Name "#A.APVEN"
N7\$	Voucher File Name "#A.APVOC"
N8\$	Check Register Data Name "#A.APGLT"
N9\$	General Ledger Transfer File Name "#A.APGLT"
NA\$	Name of file to be opened
NB%	Number of ISAM virtual I/O buffers
NF%	Maximum number of concurrently open ISAM files
P\$	Input variable for System Linkage File

4-17-1 Common Variable Definitions (continued)

Variable Definition

---

PN\$	Program title
Q	Help File message number
Q\$	Query prompt message
QL	Query field size
QS	End Print Line In Query Flag
QT	Number of TABs to print before Q\$
R\$	User response returned by Subroutine Query
RL	Length of user response string R\$
RL\$	Leftmost character of user response string R\$
S\$	Dummy parameter for FN\$D!
SC\$	Clear screen code
T\$	Help File message string
UB!	Upper bound for N! in Subroutine Querynumber
V\$(	System parameter array
VC\$	Company name
VD\$	Current system date
V\$S	System name
VT\$	Disk type
W	Terminal width
WIDTH	Terminal width
XX#	Dummy parameter for FNRO#
XY#	100# for FNRO#
YES	Parameter returned by Queryyesno Subroutine
YR	Year entered in Querydate Subroutine



4-17-2 Common - Variable Cross Reference

Variable References

Variable	References
#1	50002, 50004, 50020
#HF%	59120, 59210, 59230, 59240
A#(	46040, 46060, 46065, 47530, 47560, 48500
A\$(	46020, 46036, 46050, 46060, 46065, 47510, 47520, 47540, 47550, 48500
A1\$	46030, 46035, 46036
A2\$	46030, 46035, 46036
B#(	46070, 46080, 47570, 47580, 48500
B\$(	18100, 18110, 18120, 46070, 46080, 46090, 46100, 47570, 47580, 47590, 47600, 48500
BE\$	50000, 50200, 50300, 54100, 54200, 54300, 54530
BELL\$	54000
CH	51240, 51250, 51260, 51270, 51660, 51670, 51680, 51690
D!	50175
D#	50160, 51655, 51710
D\$	48520, 48540
DA	51400, 51424, 51426, 51430, 51440
DG	51200, 51250, 51280, 51600, 51670, 51700
DI%	48100, 48110
DK%	48100, 48110, 50002, 50004
DP	51200, 51260, 51600, 51680
DP%	1, 50000, 50210, 50310, 59200
E\$	51200

4-17-2 Common - Variable Cross Reference (continued)

Variable References

-----

ER%	46010, 54050, 54100
F1\$(	46020, 46030, 46035, 46040, 46050, 46060, 46065, 47510, 47520, 47530, 47540, 47550, 47560, 48500, 48510, 48520
F2\$(	46070, 46080, 46090, 46100, 47570, 47580, 47590, 47600, 48500, 48530, 48540
FI%	46015, 47000, 47500, 48100, 48110, 49000
FNDI\$(	47520, 47530, 47560, 47570, 47580, 50160
FNDS\$(	46050, 46070, 46080, 46090, 50175
FNID#(	46030, 46040, 46060, 46065, 46070, 46080, 50165
FNSD!(	47540, 47570, 47580, 47590, 47600, 50170
FO%	48110, 49000
FS	50056, 51010
HB\$(	59120, 59210
HF%	59200
HJ	59000, 59080, 59090, 59110, 59120, 59240, 59250
HK	59000, 59080, 59100, 59120, 59150, 59230, 59240, 59250
HL	59130, 59140
HN\$(	59250
HN\$(	59200, 59230, 59250
HN(	59090, 59100, 59200, 59250
HP	59080, 59090, 59100, 59110, 59240, 59250
HS	59110, 59120

4-17-2 Common - Variable Cross Reference (continued)

Variable References

HS\$	59250
HS\$(	59200, 59230, 59250
HS(	59000, 59110, 59200, 59250
I	46020, 46040, 47510, 47530, 49000, 50020, 54530
I\$	50165
II	51030
IK	18100, 18120
IM	50002
IP	50002
JJ	51240, 51270, 51280, 51640, 51660, 51690, 51700
KH\$	18110, 18120
KO\$	18100, 18120
KY\$(	46020, 46070, 47510, 47570, 48500, 48510, 48530
LB!	51290
LP	50900
MO	51400, 51422, 51430, 51440
N!	51200, 51290
N#	50160, 50165
N\$	50004, 50020
N1\$	2, 50000
N2\$	2, 50004
N3\$	2, 50210

4-17-2 Common - Variable Cross Reference (continued)

Variable References

N4\$	2, 50310
N5\$	2, 59200
N6\$	5, 48100
N7\$	5, 48110
N8\$	5
N9\$	5
NA\$	48100, 48110
NB%	48000
NF%	48000
P\$	50002
PN\$	3, 50910
Q	51070, 59080, 59090, 59100
Q\$	51000, 51800
QS	51012
QT	51000
R\$	51010, 51015, 51020, 51030, 51200, 51220, 51230, 51240, 51290, 51400, 51420, 51422, 51424, 51426, 51430, 51620, 51640, 51650, 51655, 51660, 51710
RL	51015, 51030
RL\$	51015, 51020, 51426, 51805, 51810
S\$	50170
SC\$	50055, 50900
SET	1
T\$	59110, 59120, 59130, 59140, 59230

4-17-2 Common - Variable Cross Reference (continued)

Variable References

---

UB!	51290
V\$(	50020, 50050
VC\$	50050, 50905
VD\$	50002, 50910
VS\$	50050, 50905
VT\$	50050
W	50050, 50905, 50910
WIDTH	50050
YES	51805
YR	51400, 51430, 51440

Variable References

Variable	References
UB1	51250
V41	50050, 50055
V04	50050, 50055
V04	50002, 50010
V84	50050, 50055
V14	50050
W	50050, 50055, 50070
WIDTH	50050
YES	51505
Y8	51405, 51430, 51440

APPENDIX A

FLOPPY DISK TO HARD DISK CONVERSION

The following procedure converts accounting packages from a floppy disk operating system to a hard disk operating system on the PCC 2000. A hard disk drive has up to four platters as in the D3462 hard disk drive which has three fixed platters and one removable platter. A unit consists of up to three platters. In a D3462 disk drive, three fixed platters are in one unit and one removable platter is another unit. The two storage systems are compared below.

Floppy Disk Operating System	Hard Disk Operating System
The maximum non-volatile storage on two floppy disk drives is 1M byte.	The maximum non-volatile storage on two floppy disk drives and four hard disk drives is 81M bytes.
The operating system occupies 33.8K RAM bytes, leaving 30.2K RAM bytes for user programs.	An operating system, with two floppy disk and two hard disk drives, occupies 35.3K RAM bytes, leaving 29.41K RAM bytes for user programs.*
Each floppy drive requires 568 RAM bytes at system initialization.	Each drive requires 617 RAM bytes at system initialization.

\*The maximum hard disk system, consisting of two floppy disk drives and four hard disk drives, occupies 36.5K RAM bytes.

Convert a floppy disk operating system to a hard disk operating system using the following steps.

1. Copy the original distribution diskettes before using them.
2. Initialize and format the hard disk units using the utilities floppy diskette. Refer to the PCC 2000 Utility Program Specification under INIT.
3. Load the Hard Disk Operating System from the floppy diskette in drive 0. Configure the system for the hardware available and save the system image on the diskette in drive 0.

4. Start the system, insert the source diskette for the accounting system in disk drive number one, and mount all units. Individually, load each source diskette program and save it on the unit designated for the accounting system. This tedious operation will be improved using the BACKUP program that is being developed for the utility diskette.
5. Transfer all random files using the source diskette program \$U.COPYR. Transfer all sequential files using the source diskette program \$U.COPYS.
6. Modify all programs for the new system unit. Check the main menu program thoroughly and modify all its drive specification statements. Modify all other programs using a merge file since these programs have similar modifications.
7. Correct the data file drive number using the linkage program \$A.XXLNK. Correct the disk type using the system parameter program \$A.XXSYS.
8. Correct the ISAM routine line number 60610 to "IFVT\$="H"THENOD(0)=39062 ELSEIFVT\$="F"THENOD(0)=3476"
9. Test the system thoroughly with a large data base if it is available.

The size of the hard disk operating system may cause an error 7 (out of memory) or an error 14 (out of string space). Run the tests above on any memory or string space sensitive programs. If error 7 occurs, modify the DIMENSION statement with a smaller number. If error 14 occurs, modify the CLEAR statement with a larger number; and if necessary, modify the DIMENSION statement with a smaller number.

10. The "UTILITY" routines FORMAT, COPYH, and DCOPY are not on the diskettes distributed with the PCC 2000 applications software, so the hard disk utilities diskette must be used to initialize, format, and copy the hard disks. Refer to the PCC 2000 UTILITY PROGRAM SPECIFICATION document for the detailed description of the utility programs.