

14-ADM
 REVISION 2
 AMENDMENT 13
 KANSAS CITY MANAGEMENT OFFICE

```

1      4      A      DDDDDDD      M      M
1      4 4      A A      D      D      MM      MM
1      4 4      A A      D      D      M M      M M
1 444444444444 ===== AAAAAAA D      D      M M      M M
1      4      A      D      D      M      M      M      M
1      4      A      D      D      M      M      M      M
1      4      A      DDDDDDD      M      M      M
  
```

```

K      K      CCCC      M      M      0000
K      K      C      C      MM      MM      0      0
K      K      C      M M      M M      0      0
KKK      C      M M      M M      0      0
K      K      C      M      M      M      0      0
K      K      C      M      M      M      0      0
K      K      CCCC      M      M      M      0000
  
```

ADP STANDARDS AND PROCEDURES FOR DEVELOPMENT OF COMPUTER SYSTEMS

(S) THOMAS G. BURKE, DIRECTOR, KCMO

(S) KENYON M. GILL, DEPUTY DIRECTOR, SYSTEMS DEVELOPMENT

```

      A      M      M      EEEEEEE      N      N      DDDDDDD      1      3 3 3
      A A      MM      MM      E      NN      N      D      D      1      3      3
      A A      M M      M M      E      N N      N      D      D      1      3      3
      AAAAAAA      M M      M M      EEE      N      N      D      D      1      333
      A      A      M      M      M      E      N      N      D      D      1      3      3
      A      A      M      M      M      E      N      NN      D      D      ..      1      3      3
      A      A      M      M      M      EEEEEEE      N      N      DDDDDDD      ..      1      3 3 3
  
```

14-ADM
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CHANGES INCORPORATED IN THIS AMENDMENT ARE AS FOLLOWS:

- A. PARAGRAPH 172, UPDATED TO SHOW ALTERNATIVE FORMS USED.
- B. PARAGRAPH 237, UPDATED TO REFLECT REVISED IBM TIA THAT WAS OBSOLETE IN AMENDMENT 12.
- C. EXHIBIT 4, UPDATED THE LIST OF DIVISION CODES.
- D. EXHIBIT 29, UPDATED TO SHOW CHANGE IN IBM JOB CHARTS.
- E. EXHIBIT 50, ADDED TO THE PERSONAL COMPUTER DISKETTE LABELING STANDARDS.

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PAGE CONTROL CHART

TC	TEXT	EXHIBIT
	PAGE 144 PAGE 217 PAGE 218 PAGE 218.5, ADD PAGE 219	EXHIBIT 4, PAGES 1.5-1.6 PAGE 2 EXHIBIT 29, PAGE 4 EXHIBIT 50, PAGES 1-5 PAGE 6, ADD

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DOCUMENT(S) ASSEMBLY SEQUENCE AND FORMATS

SAMPLE DOCUMENTATION PACKAGE TITLE PAGE

(FOR EXHIBITS 8 THROUGH 16)

KANSAS CITY MANAGEMENT OFFICE
(APPLICATION DIVISION NAME)

(DOCUMENT TYPE)

(SYSTEM TITLE)

(SUBSYSTEM TITLE, IF APPLICABLE)

(SYSTEM, SUBSYSTEM AND PROGRAM (TASK) NUMBER, IF APPLICABLE)

<--- FOR INFORMATION ONLY --->

DOCUMENT DISTRIBUTION FOR EXHIBITS 8 THROUGH 16

EXHIBIT NUMBER									
EXHIBIT--->	8	9	10	11	12	13	14	15	16
APPLICATION DIVISIONS	AS NEEDED								
APD	1	1	1	1	1	1	1	1	1
AMS	1	1	1	1	1	1	1	1	1
DOD	1	1	1	0	1	1	1	1	1
DSPD	0	1	0	0	1	0	0	0	0
CSPD	0	0	0	0	0	4	2	1	1
CLIENT OFFICE (USER)	AS REQUESTED								

SEE PART 4 FOR APPROVALS REQUIRED

DATE OF CHANGE

DESIGNED BY: DAN D. DESIGNER

B DOCUMENTATION.

- (1) FORMAT - FORMAT AND CONTENTS ARE AS SHOWN IN EXHIBITS 8 THROUGH 16. DOCUMENTATION WILL BE TYPED.
- (2) DOCUMENT TYPES. A COMPLETE SET OF DOCUMENTS IS REQUIRED FOR FORMAL DOCUMENTATION.

C DOCUMENTATION ASSEMBLY. THE ORDER OF THE SECTIONS AND PARAGRAPHS, METHOD OF HANDLING EXHIBITS IN THE TABLE OF CONTENTS, SAMPLES OF A CHANGE COVER PAGE, DOCUMENT FORMAT, APPROVALS AND DISTRIBUTION ARE SHOWN IN EXHIBITS 7 THROUGH 16.

-- D DOCUMENT COVER PAGE. ALL DOCUMENTS (EXHIBITS 8 THRU 16) REQUIRING APPROVAL WILL USE KC-255-A, AS THE TRANSMITTAL FORM. ALL FINALIZED DOCUMENTS GOING TO CSPD WILL UTILIZE THE KC-287 AS THE TRANSMITTAL. ALL FINALIZED DOCUMENTS NOT GOING TO CSPD MAY UTILIZE THE KC-287 OR THE KC-1172 AS THE TRANSMITTAL. --

210 OPERATIONAL RELEASE REQUIREMENTS

THE FOLLOWING REPRESENT A LIST OF ITEMS REQUIRED FOR NORMAL RELEASE OF A COMPUTER SYSTEM TO A PRODUCTION STATUS:

- A ASCS-733, RELEASE INSTRUCTIONS FOR COMPUTER SYSTEM.
- B OPERATIONS MANUAL (PARAGRAPH 169 AND EXHIBIT 13).
- C USER MANUAL (PARAGRAPH 164).
- D COMMAND LANGUAGE (JCL) PROVISIONS (SUBSTITUTION JCL).
- E INSTRUCTIONS ON DATA FILE RETENTION AND OFF-SITE OR SECURITY STORAGE REQUIREMENTS.
- F INSTRUCTIONS ON ESTABLISHING CATALOG ENTRIES (INDEX).
- G FOR IDMS SYSTEMS, INSTRUCTIONS REGARDING TRANSFER OF DATA DICTIONARY ITEMS TO A PRODUCTION DICTIONARY, AND INSTRUCTIONS REGARDING INCLUSION OF APPLICATION SOFTWARE AND DATA FILES IN A PRODUCTION "DC", MUST BE PROVIDED TO AND COORDINATED WITH DSPD.
- H SYSTEMS DIVISIONS WILL ENSURE THAT CHANGES IN ONE SYSTEM WILL NOT IMPACT OPERATION OR FUNCTION OF RELATED SYSTEMS. THIS WILL BE A SPECIFIC ENTRY IN THE SYSTEM SPECIFICATION COVERING THE CHANGED SYSTEM.

EXAMPLE:

REMOVAL OF DETAIL RECORDS FROM SYSTEM A WILL BE SPECIFIED IN THE SYSTEM SPECIFICATION. ADDITIONALLY, THE IMPACT ON SYSTEM B WILL BE STATED IN THE SYSTEM SPECIFICATION TO ENSURE THAT SYSTEM B WILL CONTINUE TO FUNCTION AS REQUIRED.

- I THE GENERAL PROVISIONS OF PARAGRAPH 259, VERSION CONTROL, WILL BE APPLIED TO CONTROL OF IBM SYSTEMS.
- J SYSTEMS DOCUMENTATION WILL BE DELIVERED TO APD PRIOR TO PRODUCTION IMPLEMENTATION OF THE SYSTEM.

211 ASCS RULES FOR ROUNDING AND DIVISION

A ROUNDING.

CARRY ALL COMPUTATIONS ONE DECIMAL PLACE BEYOND THE REQUIRED NUMBER OF PLACES. IF THE LAST DIGIT IS 4 OR LESS, THE DIGIT SHALL BE DROPPED. IF THE LAST DIGIT IS 5 OR MORE, THE RESULT SHALL BE INCREASED BY ONE.

B DIVISION.

IN SOME INSTANCES, A MATHEMATICAL DIVISION WILL BE SUCH THAT THE SUM WILL NOT EQUAL THE CORRECT TOTAL DUE TO ROUNDING OF FRACTIONS. IN SUCH CASES, AN ITEM MAY BE ARBITRARILY ADJUSTED SO THAT THE SUM OF THE INDIVIDUAL ITEMS WILL EQUAL THE PROPER TOTAL.

216 SYSTEM SUPPORT STANDARDS

- A SYSTEM SOFTWARE PACKAGES FOR THE NATIONAL COMPUTER CENTER AT KANSAS CITY ARE THE OPERATING SYSTEM (OS/MVS) WITH JES2. OTHER NCC-KC PROVIDED SOFTWARE PACKAGES ARE DESCRIBED IN THE NCC-KC IBM USER'S HANDBOOK, CHAPTER 4.
- B AUTOMATED LIBRARIES THAT ARE AVAILABLE AT THE KANSAS CITY COMPUTER CENTER ARE AS FOLLOWS:
 - 1. COBOL COPY LIBRARY.
 - 2. SOURCE LIBRARIES (LIBRARIAN).
 - 3. TEST LOAD MODULE LIBRARIES.
 - 4. PRODUCTION LOAD MODULE LIBRARIES (PRODLIB).
 - 5. PROCEDURE LIBRARY (PROCLIB).
 - 6. MACRO LIBRARY.
 - 7. CARD IMAGE LIBRARY (CRDIMG).
- C AS OTHER LIBRARIES ARE ESTABLISHED THEY WILL BE COORDINATED BY THE SOFTWARE SUPPORT FUNCTION AND KCCC. REFERENCE EXHIBIT 22.
- D TERMINAL SUPPORT SOFTWARE FOR THIS CENTER CONSISTS OF
 - *-- 1. TSO AND TSO/ISPF. --*
 - * * *
 - 2. UCC7/11.
- E ANY OTHER TECHNICAL SUPPORT WILL BE REFERENCED IN THE KCCC IBM USER'S HANDBOOK.

231 HARDWARE CONFIGURATION AND PROCESSING OPTIONS

THE FOLLOWING INFORMATION IS PROVIDED TO DESCRIBE THE CURRENT NCC-KC HARDWARE CONFIGURATIONS AND PROCESSING OPTIONS WHICH WILL ENHANCE PROCESSING OF KCMO JOBS.

- A EACH STEP IN A PRODUCTION JOBSTREAM SHOULD HAVE A SYSUDUMP DD STATEMENT TO PROVIDE FOR A FORMATTED DUMP IN THE EVENT OF A PROGRAM ABEND. THIS WOULD BE CODED AS FOLLOWS:

```
//STEP1 EXEC PGM=MXXXXX
//SYSUDUMP DD SYSOUT=*
```

FOR JOB STEPS PROCESSING A SORT, ALSO INCLUDE ONE OF THE FOLLOWING STATEMENTS IN THE STEP JCL TO PRINT SORT AND "DISPLAY" MESSAGES IF THE SORT ABENDS.

```
//SYSPRINT DD SYSOUT=* (JCL SORTS)
//SYSOUT DD SYSOUT=* (COBOL SORTS)
```

- B SHARED DISK DRIVES (DASD) IS ACCESSIBLE TO ALL NCC-KC COMPUTERS. NO SPECIAL JCL IS REQUIRED.

1 PERMANENT SPACE IS ALLOCATED BY THE UNIT=STORE PARAMETER.

2 TEMPORARY SPACE IS ALLOCATED BY THE UNIT=SYSDA PARAMETER.

- C THE JOBPARM CONTROL STATEMENT SHOULD NOT BE USED TO SPECIFY A CPU.

232 ADDRESSING REMOTE JOB ENTRY (RJE) STATIONS

OUTPUT MAY BE ROUTED TO ANY RJE STATION IN KCMO THROUGH USE OF THE /*ROUTE CARD. THE FORMAT AND STATION NUMBERS ARE AS FOLLOWS:

/*ROUTE PRINT RMT01	(CADE IN CSPD)
/*ROUTE PRINT RMT13	(HARRIS 1660 IN CSPD)
/*ROUTE PRINT RMT24	(ASCS/WDC)
/*ROUTE PRINT RMT51	1ST NATIONAL BANK OF DETROIT
/*ROUTE PRINT RMT52	1ST NATIONAL BANK OF DETROIT
/*ROUTE PRINT RMT53	1ST NATIONAL BANK OF DETROIT
/*ROUTE PRINT RMT54	1ST NATIONAL BANK OF DETROIT
/*ROUTE PRINT RMT40	SCOAP S/36
/*ROUTE PRINT RMT41	SCOAP S/36
*-- /*ROUTE PRINT RMT74	PERSONNEL DIVISION (VTAM PRINTERS) ---*
/*ROUTE PRINT RMT75	PERSONNEL DIVISION (VTAM PRINTERS)
/*ROUTE PRINT U31	ZEROX 4090 LASER PAGE PRINTER
/*ROUTE PRINT KCMO	ZEROX 4090 LASER PAGE PRINTER

235 (RESERVED)

236 CADE DATA ENTRY AND VALIDATION

REFER TO PARAGRAPHS 260 AND 261, PART 7, FOR PROCEDURES RELATING TO CADE. THESE PROVISIONS ALSO APPLY TO IBM SYSTEMS.

*-- 237 XEROX 4090 LASER PRINTER

CSPD HAS INSTALLED A XEROX 4090 LASER PRINTER THAT INTERFACES WITH THE IBM MAINFRAME. THE XEROX 4090 HAS THE CAPABILITY OF PRINTING IN EITHER SIMPLEX (ONE-SIDE) OR DUPLEX (BOTH FRONT AND BACK) MODES.

THE VALUES "HLMC" SHOULD BE ENTERED AS PART OF THE FORMS PARAMETER TO PRINT THE OUTPUT AS DESIRED. THE REPLACEMENT VALUES ARE:

H - PAPER TYPE: 0 (ZERO) = 11W X 8.5L, NO HOLED PAPER.
1 = 11W X 8.5L, PRE-DRILLED 3 HOLE PAPER, HOLES ON TOP OF PAGE. (DEFAULT)
2 = 8.5W X 11L, NO HOLED PAPER.
3 = 8.5W X 11L, PRE-DRILLED 3 HOLE PAPER, HOLES ON THE LEFT SIDE OF PAGE.

L - LINED PAPER: 0 (ZERO) = NO LINES. (DEFAULT)
1 = LINED PAPER.

M - PRINT MODE: S = SINGLE SIDE PRINT. (DEFAULT)
D = DOUBLE SIDE PRINT.

C - NUMBER OF COPIES: 1 THRU 9 (DEFAULT IS 1)

TO INCREASE PRINTER OPERATION EFFICIENCY, THE FORMS PARAMETER SHOULD BE EXPLICITLY SPECIFIED. THIS WILL SUPPLY THE PROPER SETUP INFORMATION TO THE XEROX 4090 OPERATOR.

SOME METHODS TO SPECIFY THE FORMS PARAMETER ARE:

```
// DD STATEMENT SYSOUT=(*,HLMC)
/*JOBPARM FORMS=HLMC
// OUTPUT STATEMENT FORMS=HLMC
```

IN ORDER TO EFFECT PRINTING ON THE XEROX 4090 YOU MUST DIRECT THE REPORT TO PRINTER ID U31 OR KCMO.

SOME METHODS TO SPECIFY THE PRINTER ID ARE:

```
/*ROUTE PRINT KCMO          OR /*ROUTE PRINT U31
//  OUTPUT STATEMENT DEST=KCMO OR //  OUTPUT STATEMENT DEST=U31
//  DD STATEMENT DEST=KCMO    OR //  DD STATEMENT DEST=U31
```

IF YOU REVIEW THE OUTPUT IN MSGCLASS=R VIA ISPF OPTION D.J, AND YOU WANT TO PRINT THE OUTPUT, CHANGE THE DESTINATION (DEST) TO 'U31' OR 'KCMO'.

THE DEFAULT NUMBER OF LINES PER PAGE IS 63 WHEN PRINTING ON 8.5W X 11L (6 LINES PER INCH, 90 CHARACTERS PER LINE), AND 65 WHEN PRINTING ON 11W X 8.5L (8 LINES PER INCH, 132 CHARACTERS PER LINE). IF THERE ARE NO CARRIAGE CONTROL CHARACTERS IN THE SYSOUT THIS DEFAULT MAY BE OVERRIDDEN BY USING THE LINECT PARAMETER ON EITHER THE JOBPARM STATEMENT (TO OVERRIDE FOR ALL SYSOUT), OR THE OUTPUT STATEMENT (TO OVERRIDE FOR SYSOUT FROM A PARTICULAR DDNAME).

TO OBTAIN PRINTED OUTPUT ON THE XEROX 4090 FROM PRINT IMAGE FILES CREATED ON THE HONEYWELL MAINFRAME, COMPLETE FORM KC-126 AND SEND TO CSPD (NOTE ITEM 8 (GREY BAR) IS NOT AN AVAILABLE OPTION).

THE FOLLOWING EXAMPLES SHOW THE RECOMMENDED JCL TO UTILIZE THE XEROX 4090 LASER PRINTER.

EXAMPLE 1.

DDNAME1 WILL BE PRINTED ON THE XEROX 4090 PRINTER.
DDNAME2 (AND ALL OTHER SYSOUT=* PRINT OUTPUT) WILL BE DIRECTED TO THE MAINFRAME PAGE PRINTER DEVICE (LOCAL).

```
//JOBNAME JOB (XXXXXXXXXXXX,XXXX,X), 'XXX-XXXXXXX',.....,
//      MSGCLASS=A
/*ROUTE PRINT LOCAL
//STEPNAME EXEC PGM=.....
//DDNAME1 DD  SYSOUT=(*,,HLMC),DEST=U31
//DDNAME2 DD  SYSOUT=*
```

EXAMPLE 2.

DDNAME1 WILL BE PRINTED ON THE XEROX 4090 PRINTER (SEE OUTPUT CONTROL STATEMENT).
 DDNAME2 (AND ALL OTHER SYSOUT=* PRINT OUTPUT) WILL BE DIRECTED TO THE MAINFRAME PAGE PRINTER DEVICE (LOCAL).

```
//JOBNAME JOB (XXXXXXXXXXXX,XXXX,X),'XXX-XXXXXXX',.....,
//MSGCLASS=A
//*ROUTE PRINT LOCAL
//NAME1 OUTPUT FORMS=HLMC,DEST=KCMO
//STEPNAME EXEC PGM=.....
//DDNAME1 DD SYSOUT=*,OUTPUT=(*.NAME1)
//DDNAME2 DD SYSOUT=*
```

EXAMPLE 3.

ALL PRINT OUTPUT WILL BE DIRECTED TO THE XEROX 4090 PRINTER.
 DDNAME1 WILL BE PRINTED ON THE XEROX 4090 PRINTER USING THE FORMS SPECIFICATION ON THE OUTPUT CONTROL STATEMENT.
 DDNAME2 (AND ALL OTHER SYSOUT=* PRINT OUTPUT) BE PRINTED USING THE DEFAULT FORMS VALUES (SEE DEFAULTS ABOVE.)

```
//JOBNAME JOB (XXXXXXXXXXXX,XXXX,X),'XXX-XXXXXXX',.....,
//MSGCLASS=A
//*ROUTE PRINT U31
//NAME1 OUTPUT FORMS=HLMC
//STEPNAME EXEC PGM=.....
//DDNAME1 DD SYSOUT=*,OUTPUT(*.NAME1)
//DDNAME2 DD SYSOUT=*
```

EXAMPLE 4.

ALL PRINT OUTPUT WILL BE DIRECTED TO THE XEROX 4090 PRINTER USING THE FORMS SPECIFICATION FROM THE JOBPARM STATEMENT.

```
//JOBNAME JOB (XXXXXXXXXXXX,XXXX,X),'XXX-XXXXXXX',.....,
//MSGCLASS=A
//*JOBPARM FORMS=HLMC
//*ROUTE PRINT U31
//STEPNAME EXEC PGM=.....
//DDNAME1 DD SYSOUT=*
//DDNAME2 DD SYSOUT=* --*
```

238 DATA SET ORGANIZATION CHARACTERISTICS

STANDARD ATTRIBUTES HAVE BEEN ESTABLISHED FOR DATA SETS WITH DESCRIPTIVE QUALIFIERS OF "CNTL", "LOAD", AND "LIBRN".

A CNTL DATA SET ATTRIBUTES (EXCEPT "CRDIMG" AND "IDMS"):

DSORG = PO
RECFM = FB
LRECL = 80
BLKSZ = 3120

B LOAD DATA SET ATTRIBUTES:

DSORG = PO
RECFM = U
LRECL = 3072
BLKSZ = 3072

C LIBRN DATA SET ATTRIBUTES:

DSORG = DA
RECFM = F
LRECL = 0
BLKSZ = (LIBRARIAN ALLOCATES BASED ON
DEVICE TYPE (I.E., 3350=4628, 3380=9440))

D DB2 DBRM LIBRARY DATA SET ATTRIBUTES:

DSORG = PO
RECFM = FB
LRECL = 80
BLKSZ = 4000

E CRDIMG DATA SET ATTRIBUTES:

DSORG = PO
RECFM = FB
LRECL = 80
BLKSZ = 80

REPORTS, FORMS, ABBREVIATIONS AND REDELEGATIONS OF AUTHORITY

REPORTS

(NONE)

FORMS

NUMBER	TITLE	UNIT OF ISSUE	PRINCIPAL REFERENCES
AD-172	CORRESPONDENCE CONTROL	5-PART SET	PAR. 52
AD-635	FORTRAN CODING SHEET	PAD (50)	PAR. 70
AD-637	GENERAL PURPOSE CODING SHEET	PAD (50)	PAR. 70
ASCS-733	RELEASE INSTRUCTIONS FOR COMPUTER SYSTEM	5-PART SET	PAR. 260
ASCS-762	RECORD DESCRIPTOR	SHEET	EX. 20
ASCS-764	SYSTEMS DIAGRAM	PAD (50)	EX. 29, 30
ASCS-766	DECISION TABLE	PAD (50)	EX. 11
ASCS-767	REPORT LAYOUT SPECIFICATION SHEET		EX. 29, 30
KC-126	REQUEST FOR PAGE PRINTER OUTPUT	CARD	PAR. 237
KC-208	PROGRAM DESIGN PACKAGE APPROVAL AND TRANSMITTAL	3-PART SET	EX. 8
KC-255-A	KCMO PROCEDURE CLEARANCE & APPROVAL	SHEET	PAR. 172, 259
KC-1268	STATUS OF ASSIGNMENTS	SHEET	PAR. 223
-- ASCS-XXX	USDA MICROFICHE REQUEST FORM	SHEET	PAR. 243 --

SYSTEM IDENTIFICATION CODES

<<<<< I.B.M. >>>>>

KCMO DIVISION CODES FOR ACCOUNTING FIELD (CODE "CC" OF PAR 198)

CODE	DIVISION
00	= KCMO SECURITY OFFICER
*-- 01	= * * * --*
02	= DATA OPERATIONS (KCMO)
03	= FINANCIAL SYSTEMS (KCMO)
04	= PRODUCER PROGRAMS SYSTEMS (KCMO)
05	= DATA MANAGEMENT AND SYSTEMS PROGRAMMING (KCMO)
06	= SUPPORT & SPECIAL SYSTEMS (KCMO)
07	= GOVERNMENT ACCOUNTING OFFICE (GAO)
-- 08	= COMPUTER SYSTEMS & PRODUCTION MANAGEMENT (KCMO) --
10	= INFORMATION RESOURCES MANAGEMENT (WDC)
11	= LOAN SYSTEMS (KCMO)
12	= ELECTRONIC DATA SYSTEMS, INC. (CONTRACTOR)
13	= TELECOMMUNICATIONS (KCMO)
14	= OFFICE OF THE INSPECTOR GENERAL (OIG)
15	= FISCAL (KCCO)
16	= PROCESSED COMMODITIES SYSTEMS (KCMO)
17	= GRAIN SYSTEMS (KCMO)
20	= FISCAL (WDC)
21	= MANAGEMENT SERVICES (WDC)
23	= BUDGET (WDC)
25	= TRAFFIC MANAGEMENT (KCCO)
27	= AERIAL PHOTOGRAPHY FIELD OFFICE (SALT LAKE)
30	= WAREHOUSE EXAMINATION (KCCO)
33	= BULK GRAIN INVENTORY (KCCO)
35	= COTTON AND RICE (KCCO)
*-- 36	= * * * --*
37	= BULK GRAIN MERCHANDISING (KCCO)
40	= ADMINISTRATIVE SERVICES (KCMO)
41	= CONSERVATION AND ENVIRONMENTAL PROTECTION (WDC)
42	= COTTON, GRAIN AND RICE (WDC)
43	= EMERGENCY OPERATION AND LIVESTOCK PROGRAMS (WDC)
44	= TOBACCO AND PEANUTS (WDC)
-- 45	= STORAGE CONTRACT (KCCO) --
-- 46	= LICENSE AUTHORITY (KCCO) --
48	= ACCOUNTING MANAGEMENT STAFF (KCMO)
49	= FINANCIAL ACCOUNTING (KCMO)
50	= ACCOUNTING OPERATIONS (KCMO)
51	= COMMODITY ANALYSIS (WDC)
52	= EXECUTIVE CORRESPONDENCE STAFF (WDC)

SYSTEM IDENTIFICATION CODES

<<<<< I.B.M. >>>>>

KCMO DIVISION CODES FOR ACCOUNTING FIELD (CODE "CC" OF PAR 198)

CODE	DIVISION
53	= PROGRAM ANALYSIS (WDC)
-- 54	= INFORMATION (WDC) --
55	= CLAIMS & COLLECTIONS (KCCO)
-- 56	= LICENSE AUTHORITY (WDC) --
60	= PERSONNEL (KCMO)
61	= COMMODITY OPERATIONS (WDC)
-- 62	= DAIRY (WDC) --
-- 63	= STORAGE CONTRACT (WDC) --
-- 64	= HUMAN RESOURCES MANAGEMENT (WDC) --
65	= ANALYSIS & PROCEDURES (KCMO)
-- 66	= TRAIL BOSS STAFF (WDC/KCMO) --
70	= BUDGET & WORK MEASUREMENT STAFF (KCMO)
-- 71	= MIDWEST AREA (WDC) --
-- 72	= NORTHEAST AREA (WDC) --
-- 73	= NORTHWEST AREA (WDC) --
-- 74	= SOUTHEAST AREA (WDC) --
75	= ADP TECH STAFF (KCMO)
-- 76	= SOUTHWEST AREA (WDC) --
-- 77	= OFFICE OF THE DIRECTOR (KCCO) --
-- 79	= BRUNO & TERVALON (CONTRACTOR) --
80	= PROCESSED COMMODITIES (KCCO)
-- 82	= I.B.M. (WDC-CONTRACTOR) --
-- 83	= EXECUTIVE APPRAISAL & ANALYSIS STAFF (WDC-ADMIN) --
*-- 84	= * * * --*
85	= ARTHUR ANDERSEN AND CO. (CONTRACTOR)
86	= NYMA, INC. (CONTRACTOR)
87	= RADAN SYSTEMS, INC. (CONTRACTOR)
*-- 88	= * * * --*
89	= OFFICE OF THE GENERAL SALES MANAGER (OGSM)
90	= O.A.O. CORPORATION (CONTRACTOR)
-- 91	= FOREIGN AGRICULTURE SERVICE (WDC) --
93	= AGRICULTURAL MARKETING SERVICE (PCIMS) (WDC)
94	= FOOD AND NUTRITION SERVICE (PCIMS) (WDC)
*-- 95	= * * * --*
96	= DEPUTY ADMINISTRATOR, MANAGEMENT (WDC)
97	= DEPUTY ADMINISTRATOR, PROGRAM PLANNING (WDC)
98	= DEPUTY ADMINISTRATOR, COMMODITY OPERATIONS (WDC)
99	= DEPUTY ADMINISTRATOR, STATE/COUNTY OPERATIONS (WDC)
-- KS	= KANSAS ESE SMART SYSTEM --

SYSTEM IDENTIFICATION CODES

JOB DISTRIBUTION (BANNER PAGE) CODES

<<<<< HONEYWELL >>>>>

THE FOLLOWING CODES ARE USED IN IDENT CARDS IN THE FIELD "AA"
OR "DDDD". REFERENCE PARAGRAPH 250.

AA CODE		DDDD CODE
-- 02	=	DOD- --
03	=	FSD-
04	=	PPSD
05	=	DSPD
06	=	SSSD
07	=	GAOX
08	=	SCDP
09	=	SCDT
11	=	LSD-
13	=	TCD-

<<<<< I.B.M. >>>>>

THE FOLLOWING CODES ARE USED IN THE JOB CARD ACCOUNTING FIELD FOR
THE DISTRIBUTION CODE "FFFF". REFERENCE PARAGRAPH 198.

"FFFF" DIV.	"FFFF" DIV.	"FFFF" DIV.	"FFFF" DIV.
KCMO = 00	APFO = 27	CCD- = 55	*-- EAAS = 83
DOD- = 02	WED- = 30	LADW = 56	***
PSD- = 03	BGID = 33	PERS = 60	AACO = 85
PPSD = 04	CRD- = 35	CMO- = 61	NYMA = 86
DSPD = 05	***	DAD- = 62	RDAN = 87
SSSD = 06	BGMD = 37	SCDW = 63	***
GAOX = 07	ASD- = 40	PED- = 64	OGSM = 89
*-- SCDP = 08	CEPD = 41	APD- = 65	OA0- = 90
VEND = 10	CGRD = 42	TBS- = 66	FAS- = 91
LSD- = 11	ELPD = 43	BWMS = 70	***
EDS- = 12	TPD- = 44	*-- MWA- = 71	AMS- = 93
TCD- = 13	SCDK = 45	*-- NEA- = 72	FNS- = 94
OIG- = 14	LADK = 46	*-- NWA- = 73	***
FID- = 15	AMST = 48	*-- SEA- = 74	DAM- = 96
PCSD = 16	FAD- = 49	TECH = 75	DAPP = 97
GSD- = 17	AOD- = 50	*-- SWA- = 76	DACO = 98
FIDW = 20	CAD- = 51	KCCO = 77	DSCO = 99
MSD- = 21	ECS- = 52	*-- BRTE = 79	TAB- = KS
BUD- = 23	PAD- = 53	PCD- = 80	
TMD- = 25	INFO = 54	IBM- = 82	

PERSONAL COMPUTER DISKETTE LABELING STANDARDS
(INTERNAL LABELS)

THE FOLLOWING CODES ARE USED IN INTERNAL DISKETTE LABELS

DIV.	BR.	DESCRIPTION	LABEL
00	0	SECURITY OFFICERS (KCMO)	05MF000NNNN
02	0	DATA OPERATIONS (KCMO)	05MF020NNNN
	1	PRODUCER PROGRAMS	05MF021NNNN
	2	TECHNICAL ASSISTANCE	05MF022NNNN
	4	ACCEPTANCE CERTIFICATION	05MF024NNNN
03	0	FINANCIAL SYSTEMS (KCMO)	05MF030NNNN
	1	FINANCIAL MANAGEMENT	05MF031NNNN
	2	ACCOUNTING	05MF032NNNN
	3	SCOAP ACCOUNTING	05MF033NNNN
	4	ABAFAS ACCOUNTING	05MF034NNNN
04	0	PRODUCER PROGRAMS SYSTEMS (KCMO)	05MF040NNNN
	1	SCOAP COMPLIANCE	05MF041NNNN
	2	TOBACCO	05MF042NNNN
	3	PRODUCTION ADJUSTMENT	05MF043NNNN
	4	FARM RECORDS	05MF044NNNN
	5	SIGN-UP AND PAYMENTS	05MF045NNNN
05	0	DATA MANAGEMENT & SYSTEMS PROGRAMMING (KCMO)	05MF050NNNN
	1	DESIGN & DATA MANAGEMENT	05MF051NNNN
	2	SYSTEMS SUPPORT & PROGRAMMING	05MF052NNNN
	4	QUALITY CONTROL	05MF054NNNN
06	0	SUPPORT & SPECIAL SYSTEMS (KCMO)	05MF060NNNN
	1	CONSERVATION AND SPECIAL SYSTEMS	05MF061NNNN
	2	COE SYSTEMS	05MF062NNNN
	3	SUPPORT SYSTEMS	05MF063NNNN
07	0	GOVERNMENT ACCOUNTING OFFICE (GAO)	05MF070NNNN
08	0	COMPUTER SYSTEMS & PROD. MANAGEMENT (KCMO)	05MF080NNNN
	1	SCHEDULING & COMMODITY BRANCH	05MF081NNNN
	2	ENTRY & OPERATIONS	05MF082NNNN
	3	MANAGEMENT INFORMATION	05MF083NNNN
10	0	INFORMATION RESOURCES MANAGEMENT (WDC)	05MF100NNNN

MM MM GGGGGGGGGG DDDDDDDDD 11 11 444
MMM MMM GGGGGGGGGG DDDDDDDDD 111 111 4444
MMMM MMM GG GG DD DD 1111 1111 44 44
MM MM MM MM GG DD DD 11 11 44 44
MM MMM MM GG DD DD 11 11 4444444444
MM MM MM GG DD DD 11 11 4444444444
MM MM GG GGGG DD DD 11 11 44
MM MM GG GGGG DD DD 11 11 44
MM MM GG GG DD DD 11 11 44
MM MM GG GG DD DD 11 11 44
MM MM GGGGGGGGGG DDDDDDDDD 1111111111 1111111111 44
MM MM GGGGGGGGGG DDDDDDDDD 1111111111 1111111111 44

JJJJJJJJJ 11 444 8888888888 55555555555 55555555555
JJJJJJJJJJ 111 4444 888888888888 555555555555 555555555555
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JJ 11 44 44 88 88 55 55
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JJ 11 44 88 88 55 55
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JJ JJ 11 44 88 88 55 55
JJJJJJJJ 1111111111 44 888888888888 555555555555 555555555555
JJJJJJ 1111111111 44 8888888888 5555555555 5555555555

NCC	R	START	JOB14855	MGD114M	UT-114-582-MMM	DISTR	GSD-	11.27.49	AM	01	NOV	93	PRT20	SYS
NCC	R	START	JOB14855	MGD114M	UT-114-582-MMM	DISTR	GSD-	11.27.49	AM	01	NOV	93	PRT20	SYS
NCC	R	START	JOB14855	MGD114M	UT-114-582-MMM	DISTR	GSD-	11.27.49	AM	01	NOV	93	PRT20	SYS
NCC	R	START	JOB14855	MGD114M	UT-114-582-MMM	DISTR	GSD-	11.27.49	AM	01	NOV	93	PRT20	SYS
NCC	R	START	JOB14855	MGD114M	UT-114-582-MMM	DISTR	GSD-	11.27.49	AM	01	NOV	93	PRT20	SYS
NCC	R	START	JOB14855	MGD114M	UT-114-582-MMM	DISTR	GSD-	11.27.49	AM	01	NOV	93	PRT20	SYS
NCC	R	START	JOB14855	MGD114M	UT-114-582-MMM	DISTR	GSD-	11.27.49	AM	01	NOV	93	PRT20	SYS
NCC	R	START	JOB14855	MGD114M	UT-114-582-MMM	DISTR	GSD-	11.27.49	AM	01	NOV	93	PRT20	SYS
NCC	R	START	JOB14855	MGD114M	UT-114-582-MMM	DISTR	GSD-	11.27.49	AM	01	NOV	93	PRT20	SYS
NCC	R	START	JOB14855	MGD114M	UT-114-582-MMM	DISTR	GSD-	11.27.49	AM	01	NOV	93	PRT20	SYS

14 - ADM

14-ADM
 REVISION 2
 AMENDMENT 13
 KANSAS CITY MANAGEMENT OFFICE

1		4				A		DDDDDDDD		M		M
1		4	4			A A		D D		MM		MM
1		4	4			A A		D D		M M		M M
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1		4				A A		D D		M M		M M
1		4				A A		D D		M M		M M
1		4				A A		DDDDDDDD		M M		M M

K	K		CCCC		M		M		0000
K	K		C C		MM		MM		O O
K	K		C		M M		M M		O O
KKK			C		M M		M M		O O
K	K		C		M M		M M		O O
K	K		C C		M M		M M		O O
K	K		CCCC		M		M		0000

ADP STANDARDS AND PROCEDURES FOR DEVELOPMENT OF COMPUTER SYSTEMS

(S) THOMAS G. BURKE, DIRECTOR, KCMO

(S) KENYON M. GILL, DEPUTY DIRECTOR, SYSTEMS DEVELOPMENT

	A		M		M	EEEEEEEE	N	N	DDDDDD		1	3	3	3
	A A		MM		MM	E	NN	N	D D		1	3		3
	A A		M M		M M	E	N N	N	D D		1			3
	AAAAAAA		M M		M M	EEE	N N	N	D D		1		333	
A		A	M	M	M	E	N	N N	D D		1			3
A		A	M	M M	M	E	N	NN	D D	..	1	3		3
A		A	M	M	M	EEEEEEEE	N	N	DDDDDD	..	1	3	3	3

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KANSAS CITY MANAGEMENT OFFICE

CHANGES INCORPORATED IN THIS AMENDMENT ARE AS FOLLOWS:

- A. PARAGRAPH 172, UPDATED TO SHOW ALTERNATIVE FORMS USED.
- B. PARAGRAPH 237, UPDATED TO REFLECT REVISED IBM TIA THAT WAS OBSOLETE
IN AMENDMENT 12.
- C. EXHIBIT 4, UPDATED THE LIST OF DIVISION CODES.
- D. EXHIBIT 29, UPDATED TO SHOW CHANGE IN IBM JOB CHARTS.
- E. EXHIBIT 50, ADDED TO THE PERSONAL COMPUTER DISKETTE LABELING
STANDARDS.

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PAGE CONTROL CHART

TC	TEXT	EXHIBIT
	PAGE 144 PAGE 217 PAGE 218 PAGE 218.5, ADD PAGE 219	EXHIBIT 4, PAGES 1.5-1.6 PAGE 2 EXHIBIT 29, PAGE 4 EXHIBIT 50, PAGES 1-5 PAGE 6, ADD

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AMENDMENT 12
KANSAS CITY MANAGEMENT OFFICE

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1      4      A      DDDDDDD      M      M
1      4 4      A A      D      D      MM      MM
1      4 4      A A      D      D      M M      M M
1 444444444444 ===== AAAAAAA D      D      M M      M M
1      4      A      A      D      D      M M      M M
1      4      A      A      D      D      M M      M M
1      4      A      A      D      D      M M      M M
1      4      A      A      DDDDDDD      M      M      M
```



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      K      K      CCCC      M      M      0000
      K      K      C      C      MM      MM      0      0
      K      K      C      C      M M      M M      0      0
      KKK      C      C      M M      M M      0      0
      K      K      C      C      M M      M M      0      0
      K      K      C      C      M M      M M      0      0
      K      K      CCCC      M      M      0000
```

ADP STANDARDS AND PROCEDURES FOR DEVELOPMENT OF COMPUTER SYSTEMS

(S) THOMAS G. BURKE, DIRECTOR, KCMO

(S) KENYON M. GILL, DEPUTY DIRECTOR, SYSTEMS DEVELOPMENT

```
      A      M      M      EEEEEEE      N      N      DDDDDD      1      2 2 2
      A A      MM      MM      E      NN      N      D      D      1      2      2
      A A      M M      M M      E      N N      N      D      D      1      2
      AAAAAAA      M M      M M      EEE      N N      N      D      D      1      2
      A      A      M M      M M      E      N N      N      D      D      1      22
      A      A      M M      M M      E      N      NN      D      D      ..      1      22
      A      A      M      M      M      EEEEEEE      N      N      DDDDDD      ..      1      2222222
```


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AMENDMENT 12
KANSAS CITY MANAGEMENT OFFICE

CHANGES INCORPORATED IN THIS AMENDMENT ARE AS FOLLOWS:

- A. ALL REFERENCES TO 'PSMD' HAVE BEEN CHANGED TO 'CSPD'.
- B. ALL REFERENCES TO 'KCCC' HAVE BEEN CHANGED TO 'NCC-KC'.
- C. ALL REFERENCES TO 'ASCS-733' HAVE BEEN CHANGED TO 'KC-287'.
- D. ALL REFERENCES TO 'PRODUCTION SYSTEMS MANAGEMENT DIVISION' HAVE BEEN CHANGED TO 'COMPUTER SYSTEMS PRODUCTION MANAGEMENT DIVISION'.
- E. ALL REFERENCES TO 'KCCC IBM USER'S HANDBOOK' HAVE BEEN CHANGED TO 'NCC-KC CUSTOMER HANDBOOK'.
- F. PARAGRAPH 70, REFERENCE TO ACCEPTANCE TESTING IN CSPD HAS BEEN DELETED.
- G. PARAGRAPH 100, CHANGED TO INCLUDE KCCO.
- H. PARAGRAPH 199, REFERENCE TO 7-TRACK TAPE AND DRIVE HAS BEEN DELETED.
- I. PARAGRAPH 201, UPDATED TO SHOW THAT STANDARD ISO SYMBOLS SHALL BE USED.
- J. PARAGRAPH 204, EDITORIAL CHANGES.
- K. PARAGRAPH 226, ADDED B.4 AND CHANGED THE HANDBOOK REFERENCE TO SECTION 5, CHAPTER 5.1.
- L. PARAGRAPH 229, REFERENCES TO CADE TAPES NOW INCLUDE SYSTEM 36 TAPES AND EDITORIAL CHANGES.
- M. PARAGRAPH 231, REFERENCE TO SPECIFIC MODELS OF DISK DRIVES HAS BEEN DELETED.
- N. PARAGRAPH 232, UPDATED IBM REMOTE PRINT STATIONS.
- O. PARAGRAPH 237, UPDATED TO SHOW REVISION.
- P. PARAGRAPH 243, INCLUDED FORM ASCS-XXX AND EDITORIAL CHANGES.
- Q. PARAGRAPH 250, CHANGED HIS 66/80 TO HIS DPS-90.

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CHANGES INCORPORATED IN THIS AMENDMENT (CONTINUED):

- R. PARAGRAPH 261, REFERENCE HAS BEEN CHANGED TO INTERNATIONAL STANDARD ISO 5807.
- S. PARAGRAPH 264, UPDATED HIS REMOTE PRINT STATIONS.
- T. PARAGRAPH 267, UPDATED TO SHOW THAT STANDARD ISO SYMBOLS SHALL BE USED.
- U. EXHIBIT 4, UPDATED THE LIST OF STATUS CODES.
- V. EXHIBIT 21, CHANGED THE REFERENCE FROM EXHIBIT 3 TO EXHIBIT 2.
- W. EXHIBIT 22, UPDATED THE LIST OF HIGH LEVEL QUALIFIERS.
- X. EXHIBIT 29, UPDATED THE LIST OF IBM CODES AND SYMBOLS NOTES.
- Y. EXHIBIT 32, UPDATED THE LIST OF STATUS CODES.
- Z. EXHIBIT 50, ADDED TO THE PERSONAL COMPUTER DISKETTE LABELING STANDARDS.

THE FOLLOWING IBM TIA HAS BEEN OBSOLETE BY AMENDMENT 12:

<u>TIA NUMBER</u>	<u>TITLE</u>
75	XEROX 4090 LASER PRINTER

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KANSAS CITY MANAGEMENT OFFICE

PAGE CONTROL CHART

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		EXHIBIT 21, PAGE 2.5-5
		EXHIBIT 22, PAGE 2
		EXHIBIT 29, PAGE 1-4
		EXHIBIT 32, PAGE 1
		EXHIBIT 33, PAGE 1-2
		EXHIBIT 34, PAGE 5-6
		EXHIBIT 37, PAGE 25
		EXHIBIT 50, PAGE 4
		PAGE 5, ADD

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PART 1 - BASIC PROVISIONS

1 PURPOSE AND SCOPE

- A PURPOSE. THIS HANDBOOK PRESCRIBES KCMO ANALYSIS, DESIGN, PROGRAMMING, TESTING, OPERATIONS, DOCUMENTATION, AND MANAGEMENT ACCOUNTABILITY AND CONTROL STANDARDS FOR AUTOMATED SYSTEMS DEVELOPMENT.
- B SCOPE. THESE PROVISIONS APPLY TO ALL SYSTEMS EXCEPT WHERE WAIVERS ARE APPROVED BY THE DEPUTY DIRECTOR, SYSTEMS DEVELOPMENT. UNTIL PROVISIONS FOR THE WAIVED STANDARDS ARE FORMALLY PUBLISHED, THIS HANDBOOK, TECHNICAL INFORMATION ADVISORIES (TIA'S) AND OTHER PUBLICATIONS SHOULD BE FOLLOWED ALONG WITH PUBLISHED GUIDELINES IN THIS HANDBOOK.

2 RELATED PROCEDURES

- A FEDERAL INFORMATION PROCESSING STANDARDS PUBLICATIONS (FIPS).
- B ASCS DIRECTIVES.
- C DEPARTMENT INFORMATION PROCESSING STANDARDS (DIPS).
- D KANSAS CITY COMPUTER CENTER USER'S HANDBOOKS (HIS & IBM).
- E KANSAS CITY COMPUTER CENTER DIPS CIRCULARS.

3 TERMS, DEFINITIONS AND ABBREVIATIONS

TERMS AND DEFINITIONS USED IN THIS HANDBOOK CONFORM TO THE FOLLOWING:

- A ASCS APPROVED TERMS AND DEFINITIONS (EXHIBIT 2).
- B VOCABULARY OF INFORMATION PROCESSING (FIPS PUB 11 AND ANSI X3.12-1970).
- C REPORTS, FORMS, ABBREVIATIONS AND REDELEGATIONS OF AUTHORITY (EXHIBIT 1).

4 RESPONSIBILITIES

A APD FUNCTION

- 1 DEVELOP FUNCTIONAL REQUIREMENTS STATEMENT, USER REQUIREMENTS AND SYSTEM CONCEPT PACKAGE TO PROVIDE A BASIS FOR THE APPLICATION DESIGN STAGE.
- 2 PROVIDE DEFINITION OF APPLICABLE ACCOUNTING CONTROLS AND ASSURE THE ACCURACY OF IMPLEMENTATION IN THE COMPUTER SYSTEM.
- 3 REVIEW ALL SYSTEM DESIGN PACKAGES, AMENDMENTS AND CHANGES TO APPROVE REQUIRED CLEARANCE DOCUMENT.

B ASD FUNCTION

1 * * *

- 2 PROVIDES REPRODUCTION SERVICES.

C DSPD FUNCTION

- 1 PROVIDE TECHNICAL COORDINATION FOR ADP STANDARDS DEVELOPMENT.
- 2 MAINTAIN VARIOUS SOFTWARE SYSTEMS (I.E., IDD, DC, LIBRARIAN, ETC.) FOR DEVELOPMENT OF COMPUTER SYSTEMS.
- 3 DESIGN, PROGRAM AND MAINTAIN DATA BASE SYSTEMS IN CONJUNCTION WITH APPLICABLE APPLICATION DIVISIONS AND APD PERSONNEL.

* * *

-- D SYSTEMS DEVELOPMENT FUNCTION --

- 1 DESIGN, PROGRAM AND MAINTAIN ASSIGNED FUNCTIONAL AREAS VIA THE APPROPRIATE ADP SUPPORT.
- 2 DEVELOP REQUIRED DOCUMENTATION SPECIFIED BY THIS HANDBOOK.
- 3 INCORPORATE APPROVED CHANGES FROM APPLICABLE OFFICE MANAGERS AND SUPERVISORS.
- 4 PROVIDE REQUIRED TECHNICAL COORDINATION FOR SYSTEM DEVELOPMENT AND MAINTENANCE TO AD, APD, DOD AND APPLICABLE USERS.

*-- E TD FUNCTION

- 1 PROVIDE COMMUNICATIONS HARDWARE ANALYSIS AND SUPPORT.
- 2 PROVIDE DEFINITION OF APPLICABLE COMMUNICATIONS CONTROLS AND ASSURE THE ACCURACY OF IMPLEMENTATION IN THE COMPUTER SYSTEM.
- 3 REVIEW ALL SYSTEM DESIGN PACKAGES, AMENDMENTS AND CHANGES (RELATIVE TO COMMUNICATIONS REQUIREMENTS) TO APPROVE REQUIRED CLEARANCE DOCUMENT.
- 4 COORDINATE OFFICE EQUIPMENT NEEDS AND PROBLEMS WITH KCCC.
- 5 MAINTAIN VARIOUS SOFTWARE SYSTEMS (I.E., X.25, TELEMAIL, ETC.) FOR DEVELOPMENT OF COMPUTER SYSTEMS. --*

5-9 (RESERVED)

PART 2

14-ADM (KC) (REV. 2)

PAR. 4

PART 2 - (RESERVED)

PART 2 (RESERVED)

10-19 (RESERVED)

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PART 3 - FUNCTIONAL OVERVIEW

20 ADP STANDARDS AND DATA CONTROL

THE DATA CONTROL PORTION OF THIS FUNCTION IS PRIMARILY CONCERNED WITH THE INTEGRITY AND LOSS OF DATA. THE STANDARDS PORTION OF THIS FUNCTION FORMALIZES OFFICE POLICY RELATING TO ADP DEVELOPMENT AND MAINTENANCE.

21 APPLICATION DESIGN FUNCTION

THIS FUNCTION DEVELOPS, DOCUMENTS AND COMMUNICATES THE PROCESSING REQUIREMENTS, OPERATING ENVIRONMENT, DESIGN CHARACTERISTICS AND SPECIFICATIONS TO APPLICATION PROGRAMMING PERSONNEL. IN THE DESIGN FUNCTION DESIGNERS SHOULD SPECIFY FOR PROGRAMMERS THE LOGICAL COMPUTER PROCESSING REQUIRED TO ACCOMPLISH THE OBJECTIVES OF THE FUNCTIONAL AND DATA REQUIREMENT DOCUMENTS.

22 FILE MANAGEMENT FUNCTION

A THIS FUNCTION INCLUDES FILE PLANNING, FILE, RECORD AND ELEMENT RECORDATION, FILE DESIGN, DATA PROTECTION, COMMON DATA DEFINITION/MANIPULATION, OPERATING ENVIRONMENT COMPATIBILITY, TECHNICAL SOFTWARE SUPPORT, AND COORDINATION WITH SUPPORTING DOCUMENTATION.

B THIS FUNCTION PROVIDES FOR REDUCTION OF FILES AND ELEMENTS, REDUCTION OF AUXILIARY STORAGE, STANDARD USAGE AND REFERRAL PRIVACY CONTROLS AND ASSOCIATED REPORTING/RETENTION REQUIREMENT AND COST-EFFECTIVE FILE DEVELOPMENT/CONVERSION COSTS.

23 APPLICATION PROGRAMMING FUNCTION

THIS FUNCTION TRANSLATES PROGRAM SPECIFICATION DOCUMENTS INTO A LOGICAL COMPUTER PROGRAM FOR PROCESSING. THE FUNCTION RELATES TO ALL AREAS OF PROGRAMMING SUCH AS: PROGRAMMING LOGIC, DEVICE CONFIGURATION, GENERATION OF PROGRAM CODE, PROGRAM DEBUGGING, DESK CHECKING, PROGRAMMING AIDS, AUTOMATED LIBRARIES, AND OTHER SUPPORT FUNCTIONS.

24 TEST FUNCTION

- A THIS FUNCTION COORDINATES ACCEPTANCE TESTING OF COMPUTER SOFTWARE AS PRESCRIBED IN A TEST PLAN, THE REVIEW OF TEST RESULTS, AND EVALUATION OF THE SOFTWARE'S ABILITY TO MEET OBJECTIVES SET FORTH IN THE TEST DOCUMENTS.
- B THIS FUNCTION ALSO ADDRESSES THE REQUIREMENTS OF QUALITY REVIEW AND EVALUATION TESTING AT THE INTEGRATION, ACCEPTANCE, REGRESSION AND IMPLEMENTATION LEVELS.

25 APPROVAL FUNCTION

THIS FUNCTION EMBRACES THE MANAGEMENT ACCOUNTABILITY FOR SYSTEM DEVELOPMENT AND MAINTENANCE. IT INCLUDES INITIAL APPROVAL, CHANGE CONTROL, DESIGN REVIEW, TEST RESULT APPROVAL AND INTERNAL PROJECT STATUS REPORTING.

26 OPERATIONS FUNCTION

THIS FUNCTION PERFORMS JOB SCHEDULING FOR COMPUTER SYSTEMS, SERVES AS THE INTERFACE AND LIAISON BETWEEN THE TEST FUNCTION AND KCCC IN AREAS RELATING TO TESTING AND FOR PROBLEMS RELATIVE TO PRODUCTION OPERATIONS. IT ASSURES THAT ALL REQUIRED SERVICE AND PRODUCTS ARE TIMELY AND IN ACCORDANCE WITH PLANNED OBJECTIVES. THIS STANDARD ADDRESSES ONLY THOSE ELEMENTS OF THE OPERATIONS FUNCTION NECESSARY FOR THE SUPPORT OF TESTING.

27 APPLICATIONS SYSTEMS SUPPORT FUNCTION

THIS FUNCTION PROVIDES TECHNICAL SUPPORT FROM A CENTRAL POINT TO VARIOUS APPLICATION DIVISIONS INCLUDING SYSTEM SOFTWARE, AUTOMATED LIBRARIES, TECHNICAL CONTACT POINT, AND TECHNICAL DOCUMENTATION.

28 SPECIAL FUNCTION

SPECIAL FUNCTIONS ARE THOSE PERFORMED AT THE DIRECTION OF THE DEPUTY DIRECTOR, SYSTEMS DEVELOPMENT.

29-39 (RESERVED)

PART 4 - FUNCTIONAL PROCEDURES

SECTION 1 ADP STANDARDS AND DATA CONTROL

40 STANDARDS AND DOCUMENTATION OPTIONS

OPTIONS PROVIDED BY THIS HANDBOOK SHOULD BE IDENTIFIED EARLY IN THE PROJECT FOR REVIEW BY APPROPRIATE MANAGEMENT.

41 STANDARDS CHANGE CONTROL

ALL PERSONNEL, AS NECESSARY, SHOULD PETITION FOR STANDARDS TO BE ADDED, DELETED, OR CHANGED. PETITIONS FOR MODIFICATION ARE DIRECTED TO THE DSPD WHICH HAS THE TECHNICAL RESPONSIBILITY FOR THE COORDINATION OF UPDATES TO THIS HANDBOOK.

42 OFFSITE STORAGE

PHYSICAL SECURITY OF DATA SHOULD BE THE SUBJECT OF PRECISE STANDARDS. THIS AREA OF SECURITY COVERS FIRE, FLOOD, STORM AND RIOT PROTECTION AND SHOULD BE PROVIDED AS A STANDARD FOR ALL SYSTEMS PRIOR TO IMPLEMENTATION OF A NEW SYSTEM, SYSTEMS PERSONNEL SHOULD INSURE ADEQUATE SAFEGUARDS IN THE FORM OF DUPLICATE PROGRAMS (INCLUDING SUPPORTING SOFTWARE), AND BACK-UP FILES BEING CREATED AND MAINTAINED IN A LOCATION REMOTE FROM THE DATA PROCESSING. THE OFFSITE STORAGE PROCESS IS AS FOLLOWS:

- A THE KCMO SECURITY OFFICER WILL REVIEW SYSTEMS DOCUMENTATION WITH SYSTEMS PERSONNEL AND MAKE RECOMMENDATIONS FOR SPECIFIC BACK-UP FILES TO BE PLACED IN OFFSITE STORAGE.
- B A WRITTEN REPORT, FROM THE KCMO SECURITY OFFICER, CONTAINING THE JOINT RECOMMENDATIONS WILL BE SENT TO THE APPLICATION DIVISION WITH COPIES TO THE DEPUTY DIRECTOR, SYSTEMS DEVELOPMENT AND
-- CSPD FOR REVIEW. --
- C AFTER ACCEPTANCE OF RECOMMENDATIONS, AND WITH ANY CHANGES DEVELOPED AFTER IMPLEMENTATION, THE APPLICATION DIVISION WILL BE
-- RESPONSIBLE FOR ISSUING AN KC-287 TO CSPD DESCRIBING --
SPECIFIC FILES AND WILL ISSUE CHANGED OPERATIONS MANUALS ANNOTATING ANY PERTINENT INFORMATION NECESSARY FOR THE TAPES GOING TO OFFSITE STORAGE.
- D OPERATIONS WILL BE RESPONSIBLE FOR IMPLEMENTATION OF
-- INSTRUCTIONS SET FORTH IN THE OPERATIONS MANUAL OR KC-287 --
-- AND FOR DRAFTING A FORMAL LETTER TO THE NCC-KC DEPICTING THE --
FILES GOING INTO OFF-SITE STORAGE.
- E OPERATIONS WILL BE RESPONSIBLE FOR MONITORING AND CONTROLLING SPECIFIC FILES AFTER IMPLEMENTATION INTO OFF-SITE STORAGE.

43 SPECIFIC CONTROLS

THE FOLLOWING LIST IDENTIFIES THE MAJOR SPECIFIC SYSTEMS CONTROLS THAT SHOULD BE CONSIDERED BY SYSTEMS PERSONNEL AND THE PART OF THE TOTAL SYSTEM TO WHICH THEY MAY BE APPLIED.

A CONTROL TOTALS.

THE PRINCIPLE OF CONTROL TOTALS IS THAT THE VALUE OF A PARTICULAR DATA ELEMENT IS SUMMED AS A SEPARATE CLERICAL PROCESS AND WHEN THE INPUT DOCUMENTS CONTAINING THE SAME DATA ELEMENTS ARE PROCESSED BY COMPUTER, A MACHINE GENERATED TOTAL IS CREATED AND RECONCILED TO THE CONTROL TOTAL. THE SYSTEM IS MAINLY USED TO CONTROL INPUT FOR BATCH PROCESS SYSTEMS. OTHER CLOSELY RELATED CONTROLS IN COMMON USE ARE DOCUMENT, RECORD, CARD AND HASH COUNT TOTALS.

B SUPERVISORY CHECKS.

CHECKS OF THIS NATURE ARE IMPLIED, IF NOT STATED, IN ALL SYSTEMS SPECIFICATIONS. IT IS A BASIC RESPONSIBILITY OF EACH LEVEL OF MANAGEMENT TO MONITOR SYSTEM DEVELOPMENT AND SHOULD BE SEEN AS SUPPLEMENTARY (OR AS A MEANS OF ENFORCING OTHER CONTROLS) AND NOT AS CONTROLS IN THEIR OWN RIGHT.

C REASONABLENESS CHECKS.

THIS REPRESENTS A WIDE RANGE OF CONTROL TECHNIQUES OF BOTH MANUAL AND MACHINE TYPES. THE BASIC PRINCIPLE IS TO EXAMINE DATA FOR A REASONABLE VALUE. SUCH CHECKS CAN BE INCORPORATED INTO COMPUTER PROGRAMS BOTH TO VALIDATE INPUT AS WELL AS CHECK INTERMEDIATE AND FINAL RESULTS.

D CHECK DIGITS.

THESE ARE ALSO CALLED TERMINAL CHECK DIGITS, A TECHNIQUE MAY BE EMPLOYED AT TWO OR MORE STAGES IN A TOTAL SYSTEM.

E VERIFICATION.

THE DECISION TO VERIFY OR NOT TO VERIFY DATA INPUT IS PART OF A STUDY OF A TOTAL SERIES OF SYSTEMS CONTROLS. STATISTICS ARE AVAILABLE TO IDENTIFY THE RESIDUAL ERROR AFTER VERIFICATION UNDER NORMAL CIRCUMSTANCES. NORMAL RATES ARE IN THE RANGE .02 - .05%. THESE FIGURES ARE HOWEVER, CONCERNED ONLY WITH THE ACCURACY OF THE MEDIA OF THE SOURCE DOCUMENT AND NOT THE ACCURACY OF THE INFORMATION ON THE SOURCE DOCUMENT.

F ABSOLUTE CHECKS.

THE ABSOLUTE CHECKS ARE A COMPARISON BETWEEN THE ACTUAL VALUE OF A DATA ELEMENT AND THE VALID VALUES WHICH CAN BE ATTRIBUTED TO THAT FIELD. ALTHOUGH CONCEPTUALLY SUCH CHECKS CAN BE APPLIED MANUALLY, THEIR APPLICATION IS LIMITED IN MOST CASES BY THE VOLUME OF DATA INVOLVED. THEIR LIMITATION IS IN ENSURING THAT THE MASTER FILE AGAINST WHICH THE DATA IS CHECKED IS UPDATED TO ACCOUNT FOR ALL VALID INPUT VALUES.

G DATA SEQUENCE CHECKS.

CERTAIN DATA ELEMENTS MUST OCCUR IN SPECIFIC SEQUENCES AND THESE SEQUENCES MAY BE CHECKED BY PROGRAM. AS AN EXAMPLE, TRANSACTION DATA IN A CARD-ORIENTED APPLICATION ARE ONLY VALID IF PRECEDED BY A DATA CARD WITH THE SAME REFERENCE. WHERE SUCH SEQUENCES NATURALLY EXIST IN DATA, THEY SHOULD BE CHECKED BY PROGRAM.

H IDENTIFY RETENTION AND VALIDITY DATES FOR FILES.

THE DATA INCLUDED IN EACH FILE MUST BE CLEARLY IDENTIFIED BOTH PHYSICALLY (TO ENSURE CORRECT MANUAL HANDLING) AND INTERNALLY FOR PROGRAM VERIFICATION. THE INTERNAL IDENTIFICATION WILL VARY ACCORDING TO THE MEDIA USED, BEING UNITARY FOR FILES COMPOSED OF DISCRETE UNITS (E.G., PUNCHED CARDS) AND TAKING A FORM OF HEADER AND TRAILER LABELS FOR FILES ON CONTINUOUS MEDIA (MAGNETIC TAPE). PROGRAM SPECIFICATIONS MUST INCLUDE ROUTINES FOR CHECKING THE LABELS, RECORD COUNTS AND FIELD SIZES TO ENSURE PROCESSING OF THE CORRECT DATA.

I CHARACTER OR PICTURE CHECKS.

CHECKS OF THIS NATURE ARE A USEFUL MEANS OF PROGRAM CHECKING OF INPUT DATA WITHOUT RECOURSE TO AN ABSOLUTE CHECK. THE PRINCIPLE IS THAT MANY INDIVIDUAL DATA ELEMENTS HAVE A FILE FORMAT AND THIS CAN BE COMPARED WITH A STORED "PICTURE" OF THAT FORMAT. THE ADOPTION OF THIS TYPE OF CHECK IS NOT LIMITED TO THOSE CIRCUMSTANCES WHERE THE FORMAT IS COMPLETELY FIXED.

J MISCELLANEOUS.

THE ABOVE CONTROL AREAS ARE SOME OF THE SPECIFIC MAJOR PRINCIPLES AND CONTROLS WHICH MAY BE INCORPORATED INTO A SYSTEM. THERE ARE, HOWEVER, SOME ADDITIONAL POINTS WHICH SIGNIFICANTLY REDUCE THE NUMBER OF ERRORS IN A SYSTEM:

- 1 ACCURATE SOURCE DOCUMENTS.
- 2 ADEQUATE STAFF TRAINING AND USER ORIENTED DOCUMENTATION.
- 3 ADEQUATE STANDARDS THAT WILL MINIMIZE ERRORS THROUGH MISUNDERSTANDING.
- 4 ALPHA-NUMERIC TESTS.
- 5 CODE TABLES FOR ALLOWABLE CODES FOR DATA ELEMENTS.
- 6 SIGNED VS. UNSIGNED FIELDS.
- 7 DUPLICATE RECORD CHECK.
- 8 OUT OF SEQUENCE CHECK.
- 9 IDENTIFY BACKUP AND STORE CRITICAL FILES WITH SAME FREQUENCY THAT LIBRARIES ARE BACKED UP.

44 ACCOUNTING CONTROLS

- *-- FINANCIAL MANAGERS AND/OR SYSTEM ACCOUNTANTS WILL SPECIFY THE CONTROL OBJECTIVES FOR THE SYSTEM. CONTROL TECHNIQUES WILL BE IDENTIFIED AND INCORPORATED IN EACH COMPUTER SYSTEM TO ACCOMPLISH THE SPECIFIED OBJECTIVES, UNLESS THE SYSTEM IS DESIGNATED A STATISTICAL OR OTHER NON-FINANCIAL TYPE DATA MAINTENANCE FUNCTION BY THE DEPUTY DIRECTOR, SYSTEMS DEVELOPMENT. HOWEVER, SYSTEMS PROCESSING FINANCIAL DATA, OR DATA THAT IS USED TO DEVELOP OR CONTROL FINANCIAL DATA, SUCH AS A NAME AND ADDRESS FILE USED TO PREPARE CHECKS, SHALL NOT BE DEFINED AS A STATISTICAL OR NON-FINANCIAL TYPE SYSTEM. --*
- A THE BASIC PRINCIPLE OF ACCOUNTING CONTROL INVOLVES MAINTAINING THE INTEGRITY OF ALL FINANCIAL TRANSACTIONS. EVERY ADDITION, CHANGE, OR DELETION RECORD AFFECTING AMOUNT/VALUE OR QUANTITY MUST BE IDENTIFIABLE AND ACCESSIBLE VIA AN ADEQUATE AUDIT TRAIL (E.G., REGISTER, JOURNAL, ETC.) TO TRACE AND REVIEW INDIVIDUAL TRANSACTIONS.
- B SPECIFIED TOTALS, SUBTOTALS, AND CROSS-BALANCING CHECKS MUST BE PERFORMED AND RESULTS PROVIDED (PRINT, FICHE, TERMINAL DISPLAY, ETC.) FOR MANUAL REVIEW.

45-49 (RESERVED)

SECTION 2 APPLICATION DESIGN PROCEDURES

50 DEFINITION STAGE

DESIGN FUNCTION PROCEDURES FOR THE DEFINITION STAGE ARE THE RESPONSIBILITY OF THE DEPUTY DIRECTOR, SYSTEMS DEVELOPMENT, *-- IN CONJUNCTION WITH CHIEF, APD OR CHIEF, AMS, AS APPLICABLE.

- A ASSIGNMENT OF THE PROJECT TO AN APPLICATION DIVISION, TECHNICAL STAFF OR AN OUTSIDE CONTRACTOR INITIATES THE ASSIGNMENT OF PERSONNEL AND PROVIDES A PRELIMINARY TIME SCHEDULE.
- B APD DEVELOPS OR COORDINATES DEVELOPMENT OF (WHEN INITIATED AT THE WASHINGTON LEVEL) FUNCTIONAL REQUIREMENTS STATEMENT, USER REQUIREMENTS AND SYSTEM CONCEPT PACKAGE.

51 DESIGN STAGE

- A A SYSTEM/SUBSYSTEM SPECIFICATION MUST BE PREPARED TO GUIDE THE DEVELOPMENT OF PROJECTS WHICH MEET LEVEL 2 OR LEVEL 3 DOCUMENTATION CRITERIA (SEE PART 5). IF THE SYSTEM BREAKS DOWN READILY INTO SUBSYSTEMS, THIS DOCUMENT IS PREPARED WITH A DEGREE OF DETAIL COMPATIBLE WITH THE PARTICULAR PHASE OF DOCUMENTATION. EACH DOCUMENT IS THEN USED TO INTRODUCE THE NEXT MORE DETAILED LEVEL OF DESIGN.
- B THE DESIGNER WILL RECEIVE THE SYSTEM CONCEPT PACKAGE AND OTHER DOCUMENTS SUPPORTING THE DESIGN ASSIGNMENT. CLOSE COORDINATION WITH APD, AND/OR AMS, PERSONNEL SHOULD BE MAINTAINED TO ASSURE ADEQUATE COMMUNICATION OF USER REQUIREMENTS AND COMPLIANCE WITH OVERALL USDA PROGRAM OPERATIONS.
- C OUTLINE THE APPROACH AND STUDY ALTERNATIVE SOLUTIONS. CONSIDER THE MOST APPROPRIATE ONE CONSISTENT WITH STATED USER OBJECTIVES AND VALID APPROVALS ALREADY OBTAINED. CONSIDER SUCH FACTORS AS EASE OF INPUT, CONVERSION, IMPLEMENTATION FLEXIBILITY, COST, TIME, PERFORMANCE, EXISTING SYSTEMS (INTERFACE WITH OR REPLACEMENT OF), AND OTHER PERTINENT FACTORS.
- D DETERMINE REASONABLE TIME ESTIMATES FOR THE GIVEN SITUATION AND PREPARE AN AS PROJECT PLAN.

- E PROVIDE INFORMATION ABOUT THE DATA REQUIREMENTS AND DATA ORGANIZATION TO THE FILE MANAGEMENT FUNCTION INCLUDING SUCH THINGS AS SEQUENCE OF DATA, SORT KEYS, AND ACCESS KEYS. DATA REQUIREMENTS ARE SET UP BY THE SYSTEMS DESIGNER IN CONJUNCTION WITH THE FILE MANAGEMENT FUNCTION (SEE PAR. 60). COORDINATION OF FINAL DATA REQUIREMENTS BETWEEN APPLICATION DESIGN FUNCTION AND FILE MANAGEMENT FUNCTION MUST BE INITIATED VERY EARLY IN THE DESIGN STAGE AND SHOULD BE COMPLETED DURING THE DESIGN STAGE.
- F THE DESIGNER WILL DEVELOP UNIT TEST AND INTEGRATION TEST REQUIREMENTS AND INCORPORATE THEM IN THE PROGRAM SPECIFICATION. REVIEW OF THE ACCEPTANCE TEST PLAN WILL BE A PARALLEL EFFORT WITH THE DEVELOPMENT OF THE DESIGN DOCUMENTS.
- G DOCUMENT THE DESIGN AS OUTLINED IN EXHIBITS 10 AND 11 FOR SYSTEM/SUBSYSTEM SPECIFICATION AND PROGRAM SPECIFICATIONS. THE DOCUMENTATION WILL BE BASED UPON THE SELECTED ALTERNATIVE AND USER DEFINED OUTPUTS.
- H COORDINATE WITH A MANAGEMENT ANALYST ON A USER'S MANUAL. PROVIDE INFORMATION AND CONDUCT REVIEWS TO ASSIST PRODUCTION AND MAINTENANCE OF THIS MANUAL.
- I EVALUATE EACH AND EVERY CHANGE AND REPORT THE IMPACT ON THE SYSTEM DESIGN IN TERMS OF TIME, COST, AND SCHEDULED DEADLINE.

52 PROGRAM STAGE

- A PROGRAM, DESIGN AND/OR DATA BASE SPECIFICATIONS SHALL BE ASSIGNED TO A PROGRAMMER TO DEVELOP THE SOURCE CODE. THE APPLICATION DESIGNER WILL INITIATE A KC-208 AND FORWARD ALONG WITH A COPY OF THE PROGRAM SPECIFICATIONS TO THE APPROPRIATE SUPERVISOR FOR APPROVAL AND PROGRAMMER ASSIGNMENT.

*-- DISTRIBUTION OF FORM KC-208, AFTER APPROVAL SIGNATURES IS AS FOLLOWS:

ORIGINAL (WHITE) - TO ASSIGNED PROGRAMMER

SECOND (YELLOW) - TO BRANCH FILE (SUSPENSE/CONTROL COPY)

THIRD (PINK) - TO ANALYST FOR OFFICIAL FILE

(NOTE: FORM AD-172 MAY BE USED TO TRANSMIT KC-208 WITHIN A DIVISION AND FORM KC-255-A EXTERNAL TO A DIVISION.) --*

B CHANGES TO PROGRAM SPECIFICATIONS MAY BE EXPEDITED BY TRANSMITTING PEN AND INK CHANGES WITH A KC-208 THROUGH PROPER CHANNELS. IMMEDIATE FOLLOW-UP WILL INCLUDE TYPEWRITTEN PAGES OF THE CHANGES, AMENDMENT PAGES, AND CHANGES TO ALL APPROPRIATE DESIGN DOCUMENTS AFFECTED.

-- (NOTE: MAINTAIN SAME DISTRIBUTION AS ABOVE.) --

C COORDINATE WITH THE PROGRAMMER TO DEVELOP AN OPERATIONS MANUAL (SEE PAR. 70).

D WHEN ADDITIONAL COPIES OF PROGRAM, DESIGN AND/OR DATA BASE SPECIFICATIONS ARE REQUIRED, XEROX A COPY OF THE KC-208 FOR DISTRIBUTION NEEDS.

53 TEST STAGE

PERIODICALLY REVIEW AND ANALYZE ALL PROGRAM OUTPUTS WITH THE PROGRAMMER(S). VERIFY THAT TESTS ARE UTILIZING THE TEST PLAN.

54-59 (RESERVED)

SECTION 3 FILE MANAGEMENT PROCEDURES

60 DEFINITION STAGE

THE LOGICAL DATA REQUIREMENTS ARE IDENTIFIED AND DOCUMENTED BY THE DATA REQUIREMENTS DOCUMENT DURING THIS PHASE. ATTENDANT FACTORS OF SYSTEM AND ADMINISTRATIVE SUPPORT OF THESE REQUIREMENTS ARE EVALUATED AND ARE REFLECTED IN THE PLANS FOR SYSTEM DEVELOPMENT. SUCH EVALUATION MAY LEAD TO A REQUEST FOR ADDITIONAL OR REVISED FACILITIES.

61 DESIGN STAGE

THE TRANSITION FROM THE DATA REQUIREMENTS TO THE TECHNICAL LEVEL DOCUMENT (DATA BASE SPECIFICATIONS, EXHIBIT 12) IN PREPARATION FOR A TEST IMPLEMENTATION OF SYSTEM DATA FILES OCCURS DURING THE DESIGN PHASE.

- A THE DATA REQUIREMENTS DOCUMENT (EXHIBIT 9), TOGETHER WITH CONSIDERATIONS FOR THE APPLICABLE DESIGN APPROACH BEING UTILIZED AND THE AVAILABLE AND PLANNED-FOR SUPPORT FACILITIES, CONSTITUTE INPUT TO THE PHYSICAL FILE DESIGN.
- B WORKING LEVEL COORDINATION SHOULD ADDRESS THE FOLLOWING:
 - 1 DETERMINATION OF REDUNDANCY/RELATIONSHIPS WITH EXISTING FILES AND ELEMENTS.
 - 2 OPTIMIZATION OF ELEMENT GROUPINGS AND RECORDING MODES
-- (FORM ASCS-762, RECORD DESCRIPTOR, EXHIBIT 20). --
 - 3 SINGULARIZATION OF, OR CONFORMANCE WITH APPROVED DATA DEFINITIONS, SPECIFICATIONS, NAMES, AND RELATED STANDARDS.
 - 4 REVIEW OF PRIVACY AND SECURITY CONSIDERATIONS.
 - 5 ESTIMATION OF DATA STORAGE REQUIREMENT.
 - 6 ESTABLISHMENT OF FILE DOCUMENTATION REQUIREMENTS.
-- (FORM ASCS-735, FILE DESCRIPTOR, EXHIBIT 19). --

- C THE SPECIFICATIONS FOR THE DATA ARE RECORDED IN THE DATA DICTIONARY AND THE AUTOMATED COPY LIBRARY MEMBER AND DATA SPECIFICATION ARE SUBSEQUENTLY PRODUCED.
- D PROPOSED CHANGES IMPACTING MANAGED FILES MUST BE REVIEWED AND APPROVED BY THE FILE MANAGEMENT SUPERVISOR.
- E THE FILE MANAGEMENT FUNCTION WILL MAKE RECOMMENDATIONS TO APPROPRIATE MANAGEMENT TO SUPPORT AND ENHANCE COMMON OBJECTIVES OF SYSTEMS IN THE AREAS OF:
 - 1 FILE INVENTORIES.
 - 2 DATA INTEGRITY/SECURITY/PRIVACY PROCEDURES AND FACILITIES.
 - 3 DATA DEFINITION DOCUMENTATION PROCEDURES AND FACILITIES.
 - 4 DATA DISTRIBUTION AND/OR CONSOLIDATION.
 - 5 STORAGE AND FILE PLANNING AND UTILIZATION.
- F THE FILE MANAGEMENT FUNCTION WILL PROVIDE CENTRALIZED ALLOCATION, MANAGEMENT, AND CURRENT STATUS OF THE OFFICE'S UTILIZATION OF PERMANENT DIRECT ACCESS STORAGE DEVICE SPACE IN THE AREAS OF:
 - 1 APPLICATION DATA STORAGE
 - 2 LIBRARIES SUPPORTING APPLICATION DEVELOPMENT AND PRODUCTION OPERATIONS.
 - 3 PROVIDING CURRENT DOCUMENTATION (I.E., REPORTS) OF THE VARIOUS TYPES OF SPACE ALLOCATION.
 - 4 TECHNICAL AND ADMINISTRATIVE COORDINATION WITH INTERNAL OFFICE FUNCTIONS RELATIVE TO SPACE ALLOCATION AND MANAGEMENT ACTIVITIES.
 - 5 TECHNICAL COORDINATION WITH OUTSIDE ORGANIZATIONS RELATIVE TO SPACE ALLOCATION AND MANAGEMENT ACTIVITIES.

G THE FILE MANAGEMENT FUNCTION WILL, BY MUTUAL AGREEMENT WITH THE APPLICATION FUNCTION MANAGEMENT, CONDUCT RELATED ACTIVITIES IN THE AREAS OF:

- 1 RECOMMENDING/DEFINING ADDITIONAL (OR REDUCED) FACILITIES OR REQUIREMENTS FOR THE REPORTING OF MANAGEMENT OF DATA.
- 2 DEFINING, DEVELOPING, AND/OR MAINTAINING MASTER FILES.
- 3 RESEARCH OF PROPOSED FACTORS HAVING SUSPECTED IMPACT UPON THE COMPUTING OF DATA STORAGE AND HANDLING ENVIRONMENTS.

62 PROGRAMMING STAGE

APPLICATION PROGRAMS WILL USE THE RECORD DEFINITIONS PROVIDED ON THE COPY LIBRARY. THESE RECORD DEFINITIONS WILL BE INCLUDED VERBATIM WITHIN THE APPLICATION PROGRAM. REDEFINITION MAY BE UTILIZED WITHIN THE PROGRAM TO FACILITATE UNIQUE INTERNAL DATA MANIPULATION REQUIREMENTS.

63 TESTING STAGE

AS THE CAPABILITY IS AVAILABLE, THE AUTOMATED RECORD DESCRIPTIONS MAY BE UTILIZED BY TEST DATA GENERATOR UTILITIES.

64-69 (RESERVED)

SECTION 4 APPLICATION PROGRAMMING STANDARDS

70 PROGRAM STAGE

- A THE PROGRAMMER RECEIVES FORM KC-208 AND A PROGRAM SPECIFICATION DOCUMENT INITIATING THE PROGRAM ASSIGNMENT.
- B REVIEW THE PROGRAM SPECIFICATION DOCUMENT. REFER TO PART 6 AND/OR 7 OF THIS HANDBOOK FOR PROGRAMMING STANDARDS.
- C PREPARE PROGRAM LOGIC FLOWCHART OR DECISION LOGIC TABLES, AS REQUIRED.
- D CODING PROGRAM.
 - 1 APPLICATION PROGRAMS WILL BE WRITTEN IN ANS COBOL OR FORTRAN UNLESS THERE IS A NEED FOR A SPECIFIC LANGUAGE FOR WHICH KCMO HAS A WAIVER.
 - 2 VENDOR COBOL EXTENSIONS ARE NOT TO BE USED UNLESS APPROVED THROUGH AGENCY AND DEPARTMENTAL CHANNELS.
 - 3 CODING FORMS AVAILABLE FOR USE ARE AS FOLLOWS:
 - (A) SF-268, COBOL.
 - (B) AD-635, FORTRAN.
 - (C) AD-637, GENERAL PURPOSE CODING.
 - (D) * * *
- E CODING TEST DATA
 - 1 TEST DATA MUST BE GENERATED TO SATISFY THE TEST CRITERIA DEFINED BY THE PROGRAM SPECIFICATION. MANUALLY CREATED DATA MAY BE CODED ON FORM AD-637.
 - 2 TEST DATA GENERATOR SOFTWARE MAY BE USED, WHEN AVAILABLE, TO PRODUCE TEST DATA.
 - 3 TEST DATA STANDARDS AND REQUIREMENTS ARE PRESENTED IN EXHIBIT 11.
 - *-- 4 TEST DATA IS TO BE MAINTAINED IN A CURRENT STATUS WITH THE PROGRAM AND RETAINED FOR THE LIFE OF THE PROGRAM. --*

*-- F JCL CODING

- 1 JCL MAY BE CODED ON AD-637 BY APPLICATION PROGRAMMERS. --*
- 2 APPLICATION PROGRAMMERS WILL PREPARE AND MAINTAIN JCL REQUIRED TO ACCOMPLISH UNIT AND INTEGRATION TESTING.

-- 3 REFERENCE EXHIBITS 4, 33 AND 34 FOR JCL CODING --

-- G PROGRAMMING CONSIDERATIONS --

- 1 WHEN DEVIATIONS ARE IMPOSED BY THE SYSTEMS DESIGNER, THE PROGRAM SPECIFICATION DOCUMENT SHOULD BE UPDATED TO REFLECT THE ACTUAL DESIGN. ALL DOCUMENTATION SHOULD BE UPDATED PRIOR TO PROGRAM ACCEPTANCE.
- 2 MINIMUM REQUIRED INTRODUCTORY COMMENTS TO THE PROGRAM MODULE ARE:
 - (A) BRIEF OBJECTIVE OF MODULE,
 - (B) INPUTS REQUIRED,
 - (C) OUTPUTS EXPECTED,
 - (D) SPECIAL INTERFACES.
- 3 THE PROGRAM SHOULD CONTAIN SUFFICIENT COMMENTS TO PROVIDE MAINTENANCE PERSONNEL WITH ENOUGH INFORMATION TO UNDERSTAND THE OVERALL LOGIC BEING USED.
- 4 DESK CHECKS MUST BE PERFORMED TO ENSURE THAT CLERICAL OR DATA ENTRY ERRORS ARE NOT PRESENT IN THE SOURCE CODE (E.G., INCORRECT OPERATION CODES, DATA NAMES, LITERALS, PROGRAM LOGIC, ETC.).

H STORAGE AND MAINTENANCE OF SOURCE AND OBJECT MODULES

- 1 LOAD THE INITIAL SOURCE CODE TO THE DIVISION SOURCE LIBRARY USING THE TSO "CLIST" FACILITIES PROVIDED BY DSPD. THIS MAY ALSO BE VIA TSO. REFERENCE EXHIBIT 22
- 2 OBJECT MODULES WILL BE KEPT ON THE DIVISION LOAD LIBRARY UNTIL SUCH TIME AS THEY ARE THOROUGHLY TESTED
-- AND NEEDED FOR ACCEPTANCE TESTING AND/OR PRODUCTION. --
REFERENCE EXHIBIT 22.

I OPERATIONS MANUAL

OPERATIONS MANUAL MATERIAL IS PREPARED, COLLECTED AND ASSEMBLED BY THE PROGRAMMING FUNCTION IN CONJUNCTION WITH THE DESIGN FUNCTION. THE OPERATIONS MANUAL SHOULD BE PREPARED IN PARALLEL WITH THE DEVELOPMENT OF PROGRAMS PROCESSED AS A JOB STREAM.

71 TEST STAGE

- A THE ACTIVITIES REQUIRED FOR PROGRAM CODE DEBUGGING (UNIT TESTING) ARE CONTAINED PRIMARILY WITHIN THE APPLICATION PROGRAMMING FUNCTION RESPONSIBILITIES.
- B PROCEDURES RELATIVE TO INTEGRATION AND ACCEPTANCE TESTING ARE ADDRESSED IN PART 4, SECTION 5. TEST STANDARDS ARE ADDRESSED IN PART 6.
- C THE PROGRESS OF UNIT TESTING WILL BE DOCUMENTED USING FORM KC-1697, TEST LOG.

72-79 (RESERVED)

SECTION 5 TEST PROCEDURES

80 TEST FUNCTION PLANNING

UNIT, INTEGRATION, AND ACCEPTANCE TESTING REQUIREMENTS RELATE TO EACH OTHER AND THE FINAL PRODUCT EVOLVES INTO THE FORMALIZED APPROVED ACCEPTANCE TEST PLAN.

81 DESIGN STAGE

UNIT AND INTEGRATION TESTING ARE THE RESPONSIBILITIES OF THE APPLICATION DIVISION PROGRAMMING PERSONNEL/TEST TEAM. THE TEAM MAY BE COMPOSED OF OTHER DIVISION PERSONNEL AT THE DISCRETION OF THE AFFECTED APPLICATION DIVISION CHIEF. THE APPLICATION DIVISION CHIEF WILL PROVIDE WRITTEN NOTIFICATION --* TO DSPD OF THE SYSTEM DEVELOPMENT REQUIRING ACCEPTANCE TESTING. DSPD PERSONNEL WILL DEVELOP ACCEPTANCE TEST PLANS DURING THE DESIGN STAGE. DSPD ENSURES COORDINATION OF THE ACCEPTANCE TEST PLAN WITH ALL AFFECTED KCMO DIVISIONS. APD PERSONNEL WILL COORDINATE ACCEPTANCE TEST PLANS WITH THE USER COMMUNITY AND PARTICIPATE IN THE ACCEPTANCE TEST PROCESS.

82 PROGRAM STAGE

THE COMPLETION OF UNIT TESTING IS CONTAINED PRIMARILY WITHIN THIS STAGE BUT DOES OVERLAP INTO THE OTHER TEST STAGES. THE TEST PLAN IS FURTHER DEVELOPED, REFINED, AND COMPLETED AS THE SOFTWARE IS CODED AND DEBUGGED. FINAL REVIEW AND COORDINATION OF THE ACCEPTANCE TEST PLAN BY THE ACCEPTANCE TEST TEAM PERSONNEL IS COMPLETED PRIOR TO APPROVAL BY THE AFFECTED DIVISION MANAGEMENT.

83 TEST STAGE

A UNIT TEST REQUIREMENTS.

UNIT TEST DATA REQUIREMENTS SHOULD BE STATED IN THE PROGRAM SPECIFICATION AND WILL BE FORMULATED AND DEVELOPED UTILIZING THE SYSTEM/SUBSYSTEM SPECIFICATION.

B INTEGRATION TEST PROCEDURES.

- 1 ENVIRONMENT. THE TEST PLAN DERIVED FOR TESTING ACTIVITIES DELINEATES THE TEST PROCESSES AND THEIR SEQUENCE.

- 2 ACCEPTANCE OF PROGRAM. EACH PROGRAM MUST HAVE COMPLETED UNIT TESTING BEFORE IT IS ACCEPTED FOR INTEGRATION TESTING.
- 3 CONDUCTING THE TESTS.
 - (A) THE APPLICATION SYSTEMS TEST TEAM (TYPICALLY UNDER THE LEADERSHIP OF A LEAD PROGRAMMER) ASSEMBLES THE NEEDED COMPONENTS FOR THE SUBMISSION OF EACH TEST. AFTER PROCESSING, THE TEST MATERIALS AND RESULTANT PRINTOUTS ARE REVIEWED BY THE APPLICATION SYSTEMS TEST TEAM.
 - (B) THE APPLICATION SYSTEMS TEST TEAM COORDINATES THE REVIEW OF TEST RESULTS WITH APPLICABLE PERSONNEL, THE CLARIFICATION OF OPERATIONAL INFORMATION AND, THE REFERRAL OF TEST PROBLEMS TO THE APPROPRIATE DIVISION FOR RESOLUTION.
- 4 REGRESSION TEST. ANY PROGRAM REQUIRING MODIFICATION TO ITS SOURCE PROGRAM DURING INTEGRATION TESTING MUST BE RETESTED AT THE UNIT LEVEL. IT MUST SATISFY ALL CONDITIONS AND CRITERIA AT THE LEVEL OF UNIT TESTING BEFORE RE-ENTRY INTO THE INTEGRATION TEST PROCESS.
- 5 RETENTION OF TEST RESULTS. OUTPUTS OF THE LATEST SUCCESSFUL INTEGRATION TESTS WILL BE COLLECTED INTO A TEST FOLDER. EACH OUTPUT SET WILL BE LABELED AS TO ITS RELEVANCE TO MEETING TEST REQUIREMENTS. ALL TESTS WILL BE RECORDED IN A TEST LOG.
- 6 INTEGRATION TEST COMPLETION. COMPLETION IS INDICATED BY THE OCCURRENCE OF THE FOLLOWING ACTIONS:
 - (A) EACH PROGRAM HAS PROPERLY PERFORMED THE FUNCTIONS SPECIFIED. ALL FILES INTERFACED PROPERLY, AND ALL OUTPUT DATA ELEMENTS WERE VERIFIED AS HAVING MET EXPECTED VALUES OR CONTENT.
 - (B) ALL TEST DOCUMENTATION, TEST DATA, AND PROGRAM SPECIFICATIONS WERE PROPERLY UPDATED.
 - (C) SOURCE CODE OF THE TEST VERSION IS CURRENT.

- (D) THE OBJECT CODE AND JCL WERE THOROUGHLY TESTED AND ARE ACCEPTABLE FOR IMPLEMENTATION.
- (E) APPLICATION PERSONNEL PROVIDE VALIDATED INTEGRATION TEST VERSION JCL TO THE ACCEPTANCE TEST TEAM FOR USE IN MODIFICATION, TESTING AND DEVELOPMENT OF THE ACCEPTANCE/PRODUCTION LEVEL JCL.

C SYSTEM(S) TESTING.

- *-- 1 AT THE OPTION OF THE APPLICATION DIVISION CHIEF OR THE DEPUTY DIRECTOR, SYSTEMS DEVELOPMENT, A FULL --* OR PARTIAL SYSTEMS TEST MAY BE INVOKED. THIS PROCESSING WILL TEST THE APPLICATION SYSTEMS WITH COPIES OR SAMPLES OF ACTUAL INPUT TO ENSURE PROCESSING ACCURACY AND APPLICATION SYSTEM CAPACITIES REGARDING SORTS, TAPES VERSUS DISK, ETC.
- 2 APPLICATION SYSTEM TESTING IS TYPICALLY WITHIN THE SCOPE OF THE APPLICATION DIVISION AND DOES NOT PRECLUDE OR ELIMINATE ANY PHASE OR FUNCTION OF THE ACCEPTANCE TEST PROCEDURE.

D ACCEPTANCE TEST PROCEDURES.

- *-- 1 ALL AFFECTED DIVISIONS WILL ASSIGN THE NECESSARY REPRESENTATIVES TO ASSIST IN THE DEVELOPMENT OF TEST CRITERIA, TEST DATA, AND TO PARTICIPATE IN THE ACCEPTANCE TEST PROCESS AND PRODUCT REVIEW. --*
- 2 DEVELOPMENT OF TEST DATA WILL BE UNDER THE LEADERSHIP OF DSPD AND MUST SATISFY THE REQUIREMENTS OF THE FORMALIZED ACCEPTANCE TEST PLAN. THE TEAM MEMBERS WILL FUNCTION UNDER THE DIRECTION OF THE DSPD ACCEPTANCE TEST TEAM COORDINATOR. CHIEFS OF ALL AFFECTED DIVISIONS ARE RESPONSIBLE FOR EVALUATION OF THE SYSTEM ACCEPTANCE TEST. APD PERSONNEL WILL COORDINATE THE ACCEPTANCE TEST PLAN WITH THE USER COMMUNITY AND WILL BE THE TEAM LEADER FOR SCOAP TEST PROJECTS. MINIMUM PARTICIPATION ON THE TEST TEAM WILL INCLUDE A SYSTEMS ANALYST, PROGRAMMER, MANAGEMENT ANALYST, AND A USER REPRESENTATIVE. APPLICATION DIVISIONS SHALL PROVIDE THE FOLLOWING DOCUMENTATION AS INPUT TO THE ACCEPTANCE TEST PROCESS:

- (A) SYSTEM/FLOW CHART(S).
 - (B) DESIGN/PROGRAM SPECIFICATION DOCUMENT(S).
 - (C) INTEGRATION LEVEL JCL AND OPERATIONS MANUAL.
- 3 REGRESSION TESTING. ANY PROGRAM REQUIRING MODIFICATION TO ITS SOURCE LANGUAGE DURING ACCEPTANCE TESTING MUST BE RETESTED AT THE UNIT AND/OR INTEGRATION LEVEL UNLESS A WAIVER IS RECEIVED FROM THE ACCEPTANCE TEST TEAM OR THE RESPONSIBLE APPLICATION DIVISION CHIEF. IT MUST RE-SATISIFY ALL CONDITIONS AND CRITERIA AT THAT LEVEL BEFORE RE-ENTRY INTO THE ACCEPTANCE TEST PROCESS.
- 4 THE DIVISION CHIEF OF THE AFFECTED SYSTEM BEARS THE OVERALL RESPONSIBILITY FOR ENSURING THAT ALL FACETS OF THE SYSTEM OR SEGMENT TO BE TESTED ARE DEVELOPED PRIOR TO INITIATION OF THE ACCEPTANCE TEST.
- 5 THE ACCEPTANCE TEST TEAM UNDER THE LEADERSHIP OF DSPD IS RESPONSIBLE FOR ASSURING THAT ALL FACETS OF THE SYSTEM ARE EVALUATED DURING THE ACCEPTANCE TEST.
- (A) DSPD RESPONSIBILITIES:
- (1) FUNCTION AS THE ACCEPTANCE TEST TEAM COORDINATOR WITHIN THE ADP COMMUNITY.
 - (2) ENSURE THE DEVELOPMENT OF TEST PLANS, TEST DATA, AND THE TIMING FOR PROCESSING OF THE PHASES OF THE TEST. COORDINATE TIMING WITH DATA OPERATIONS, PRODUCTION SYSTEMS MANAGEMENT, ANALYSIS AND PROCEDURES, AND THE AFFECTED APPLICATION DIVISION(S).
 - (3) ENSURE ADHERENCE TO STANDARDS AND CONTROLS DEEMED NECESSARY TO ENSURE THE DATA PROCESSING INTEGRITY OF THE ENTIRE SYSTEM AND PROVIDE TECHNICAL GUIDANCE IN THIS AREA.
 - (4) PROVIDE APPLICATION DIVISION PERSONNEL THE NECESSARY CONTROLS, IF THE CONTROLS SPECIFIED IN SYSTEMS DOCUMENTATION DO NOT ADHERE TO AUDIT STANDARDS.

- (5) MAINTAIN TEST FOLDER OF TEST PLAN (EXHIBIT 15) AND TEST LOG.
 - (6) PREPARE TEST ANALYSIS REPORT (EXHIBIT 16) AND DISTRIBUTE TO ALL AFFECTED UNITS. RETAIN ORIGINAL.
 - (7) INITIATE AND COORDINATE A MEMORANDUM THROUGH DEPUTY DIRECTOR, SYSTEMS DEVELOPMENT AND DEPUTY DIRECTOR, OPERATIONS, TO THE OFFICE OF THE DIRECTOR, RECOMMENDING IMPLEMENTATION OF THE SYSTEM UPON AGREEMENT OF ALL AFFECTED UNITS THAT A SATISFACTORY SYSTEM ACCEPTANCE TEST HAS BEEN ACCOMPLISHED.
 - (8) ENSURE THAT OPERATIONAL RELEASE REQUIREMENTS ARE MET.
- (B) APD RESPONSIBILITIES:
- (1) FUNCTION AS THE ACCEPTANCE TEST TEAM COORDINATOR WITHIN THE USER COMMUNITY.
 - (2) ASSIGN REPRESENTATIVES TO ASSIST IN ACCEPTANCE TEST PROCESS.
 - (3) DISTRIBUTE THE ACCEPTANCE TEST PLAN TO ALL AFFECTED UNITS FOR REVIEW AND COORDINATION TO PERMIT PUBLICATION AT THE EARLIEST POSSIBLE DATE BUT NOT LATER THAN TWO WEEKS IN ADVANCE OF THE ACTUAL ACCEPTANCE TEST.
 - (4) ENSURE ADHERENCE TO STANDARDS AND CONTROLS DEEMED NECESSARY TO ENSURE THE ACCOUNTING INTEGRITY OF THE ENTIRE SYSTEM AND PROVIDE TECHNICAL GUIDANCE IN THIS AREA.

84 INFORMATION RESOURCES MANAGEMENT TESTING (IRM)

- *-- A THE DSPD QUALITY CONTROL BRANCH WILL PERFORM ACCEPTANCE TESTS OF ALL APPLICATION SOFTWARE PRIOR TO RELEASE FOR MAINFRAME PRODUCTION PROCESSING. ---*
- B DSPD-QCB WILL ESTABLISH AND MAINTAIN CONTROL OF PROGRAM VERSIONS UTILIZED.
- C DSPD-QCB PERFORMS EVALUATION TESTS OF EXISTING PROGRAMS TO ASSURE PERFORMANCE AND PREVENT INTERNAL FRAUD.
- D DSPD-QCB REVIEWS PROGRAMMING TECHNIQUES, PERFORMS ---* ON-SITE AUDITS AND COORDINATES PROBLEM RESOLUTION.

85-89 (RESERVED)

SECTION 6 APPROVAL PROCEDURES

90 OVERVIEW

THE APPROVAL FUNCTION IS ADDRESSED IN TERMS OF INTERNAL OFFICE REQUIREMENTS, FROM THE STANDPOINT OF DOCUMENT APPROVAL AND THEIR CHANGE CONTROL. THE APPROACH IS AS FOLLOWS:

- A APD WILL MAINTAIN A RECORD OF THE DOCUMENTATION REQUIREMENTS FOR ALL PROJECTS AND DOCUMENTATION REQUIREMENT LEVELS.
- B THE APPROVAL CONTROL FORM, KC-255-A, WILL BE THE BASIC MEANS OF RECORDING THE CONCURRENCE OF FUNCTIONAL AREA SUPERVISORS.

91 DEFINITION STAGE

- A DOCUMENTS PRODUCED DURING THE DEFINITION STAGE, IF APPLICABLE TO THE PROJECT AND DEVELOPED WITHIN KCMO, REQUIRE THE CONCURRENCE OF FUNCTIONAL SUPERVISORS LISTED BELOW:

- 1 FUNCTIONAL REQUIREMENTS.
 - (A) APPLICATION DESIGN SUPERVISOR.
 - (B) FILE MANAGEMENT SUPERVISOR.
 - (C) MANAGEMENT ANALYST SUPERVISOR.
- 2 DATA REQUIREMENTS.
 - (A) APPLICATION DESIGN SUPERVISOR.
 - (B) FILE MANAGEMENT SUPERVISOR.
 - (C) MANAGEMENT ANALYST SUPERVISOR.
- 3 DATA SPECIFICATION.
 - (A) APPLICATION DESIGN SUPERVISOR.
 - (B) FILE MANAGEMENT SUPERVISOR.

B DOCUMENT RESPONSIBILITY. PRIMARY DOCUMENT APPROVAL AND MAINTENANCE RESPONSIBILITY, INCLUDING CHANGE EVALUATION IS AS FOLLOWS:

- 1 FUNCTIONAL REQUIREMENTS. MANAGEMENT ANALYST SUPERVISOR.
- 2 DATA REQUIREMENTS. MANAGEMENT ANALYST SUPERVISOR.
- 3 DATA SPECIFICATION. FILE MANAGEMENT SUPERVISOR.

92 DESIGN STAGE

A APPROVALS. DOCUMENTS PRODUCED DURING THE DESIGN STAGE, IF APPLICABLE TO THE PROJECT, REQUIRE THE CONCURRENCE OF FUNCTIONAL SUPERVISORS LISTED BELOW:

1 SYSTEM/SUBSYSTEM SPECIFICATION.

- *-- (A) APPLICATION DESIGN/PROGRAMMING SUPERVISOR. --*
- (B) FILE MANAGEMENT SUPERVISOR.
- (C) * * *
- (D) APPLICATION SYSTEM SUPPORT SUPERVISOR - AS REQUIRED.
- (E) MANAGEMENT ANALYST SUPERVISOR.

2 DATA BASE SPECIFICATION.

- *-- (A) APPLICATION DESIGN/PROGRAMMING SUPERVISOR.
- (B) FILE MANAGEMENT SUPERVISOR.
- (C) * * *
- (D) MANAGEMENT ANALYST SUPERVISOR.

3 DATA SPECIFICATIONS.

- *-- (A) APPLICATION DESIGN/PROGRAMMING SUPERVISOR. --*
- (B) * * *
- (C) FILE MANAGEMENT SUPERVISOR.

4 PROGRAM SPECIFICATION.

-- (A) APPLICATION DESIGN/PROGRAMMING SUPERVISOR. --

(B) * * *

(C) APPLICATION SYSTEMS SUPPORT SUPERVISOR, IF SUCH SUPPORT IS REQUIRED.

B DOCUMENT RESPONSIBILITY. PRIMARY DOCUMENT APPROVAL AND MAINTENANCE RESPONSIBILITY, INCLUDING CHANGE EVALUATION IS AS FOLLOWS:

-- 1 SYSTEM/SUBSYSTEM SPECIFICATION - APPLICATION DESIGN/PROGRAMMING SUPERVISOR. --

2 DATA BASE SPECIFICATION - FILE MANAGEMENT SUPERVISOR.

3 DATA SPECIFICATION - FILE MANAGEMENT SUPERVISOR.

-- 4 PROGRAM SPECIFICATION - APPLICATION DESIGN/PROGRAMMING SUPERVISOR. --

93 PROGRAMMING STAGE

A APPROVALS. DOCUMENTS PRODUCED DURING THE PROGRAMMING STAGE, IF APPLICABLE TO THE PROJECT, REQUIRE THE CONCURRENCE OF FUNCTIONAL SUPERVISORS AS LISTED BELOW:

1 USER MANUAL (FIPS PUB 38).

-- (A) APPLICATION DESIGN/PROGRAMMING SUPERVISOR. --

(B) * * *

(C) FILE MANAGEMENT SUPERVISOR.

(D) OPERATIONS SUPERVISOR.

(E) APPLICATIONS SUPPORT SUPERVISOR.

(F) APPLICABLE USER SUPERVISOR.

(G) MANAGEMENT ANALYST SUPERVISOR.

2 OPERATIONS MANUAL.

- *-- (A) APPLICATION DESIGN/PROGRAMMING SUPERVISOR. --*
- (B) * * *
- (C) FILE MANAGEMENT SUPERVISOR.
- (D) OPERATION SUPERVISOR.
- (E) APPLICATION SYSTEM SUPPORT SUPERVISOR.

3 TEST PLAN.

- *-- (A) APPLICATION DESIGN/PROGRAMMING SUPERVISOR. --*
- (B) * * *
- (C) FILE MANAGEMENT SUPERVISOR.
- (D) OPERATIONS SUPERVISOR.
- (E) MANAGEMENT ANALYST SUPERVISOR.

B DOCUMENT RESPONSIBILITY. PRIMARY DOCUMENT APPROVAL AND
MAINTENANCE RESPONSIBILITY, INCLUDING CHANGE EVALUATION
IS AS FOLLOWS:

- 1 USER MANUAL (FIPS PUB 38) - MANAGEMENT ANALYST SUPERVISOR.
- *-- 2 OPERATIONS MANUAL - APPLICATION DESIGN/PROGRAMMING SUPERVISOR. --*
- 3 TEST PLAN - MANAGEMENT ANALYST SUPERVISOR.

94 TEST STAGE

A APPROVAL. THE TEST ANALYSIS REPORT, IF APPLICABLE TO THE PROJECT AND DEVELOPED WITHIN KCMO, REQUIRES THE CONCURRENCE OF FUNCTIONAL SUPERVISORS AS LISTED BELOW:

1 APPLICATION DESIGN/PROGRAMMING SUPERVISOR. --*

2 FILE MANAGEMENT SUPERVISOR.

3 * * *

4 APPLICATION SYSTEMS SUPPORT SUPERVISOR.

5 OPERATIONS SUPERVISOR.

6 MANAGEMENT ANALYST SUPERVISOR.

B DOCUMENT RESPONSIBILITY. THE ACCEPTANCE TEST TEAM
*-- COORDINATOR (DSPD), WILL HAVE THE PRIMARY PREPARATION AND
MAINTENANCE RESPONSIBILITIES FOR THE TEST ANALYSIS
REPORT. --*

95-99 (RESERVED)

SECTION 7 OPERATIONAL PROCEDURES

100 OVERVIEW

-- CSPD PERFORMS OPERATIONAL FUNCTIONS FOR KCMO AND KCCO. --
PRODUCTION OPERATIONS ARE NOT DESCRIBED IN THIS
HANDBOOK, BUT MANY OF THE STANDARDS CONTAINED
HEREIN APPLY TO PRODUCTION OPERATIONS.

101 PROGRAMMING STAGE

- A RECEIVE PRELIMINARY OPERATIONS MANUAL FROM APPLICATION PROGRAMMING FUNCTION.
- B REVIEW FOR ACCURACY AND COMPLETENESS.
- C RECOMMEND IMPROVEMENTS IN MANUAL BASED ON REVIEW.

102 UNIT TEST STAGE

- A AS APPLICABLE, PICK UP AND/OR DELIVER TEST(S) TO APPLICATION PROGRAMMING FUNCTION.
- B REVIEW PROGRAM TEST JCL TO ENSURE INCLUSION OF ALL REQUIRED DATA.

103 INTEGRATION TEST STAGE

THE OPERATIONS FUNCTION SERVES AS THE COMPUTER CENTER LIAISON AND INTERNAL CONTROL POINT, IN A MANNER SIMILAR TO UNIT TESTING. THE EXCEPTION WOULD BE SUBMISSION OF A FORM
-- KC-287 BY THE TEST FUNCTION REQUESTING SPECIAL HANDLING OF --
AN INTEGRATION TEST.

104 ACCEPTANCE TEST STAGE

- *-- A RECEIVE KC-287 TRANSMITTING PRELIMINARY OPERATIONS MANUAL --*
DISPOSITION INSTRUCTIONS FOR MAGNETIC TAPE FILES, REQUIRED
PARAMETER INFORMATION (E.G., JOB NUMBER DATES, CONTROL
DATES, BALANCE FIGURES, ETC.), SAMPLE STATEMENT OF CONTROL
LANGUAGE PROCEDURES, AND ANY OTHER INFORMATION.
- B UTILIZE INTEGRATION TEST JCL PROVIDED BY APPLICATION PROGRAMMERS AND MODIFY WHERE NECESSARY TO PROCESS THE ACCEPTANCE TEST. THE APPLICATION PROGRAMMING SUPERVISOR IS RESPONSIBLE FOR THE JCL USED TO PROCESS THE ACCEPTANCE TEST.

- C NOTIFY AFFECTED FUNCTIONAL AREAS OF DATE(S) OF SCHEDULED COMPUTER PROCESSING OF ACCEPTANCE TEST.
- D EVALUATE OPERATIONAL REQUIREMENTS AND PROCEDURAL DIRECTIVES TO DETERMINE THE ACCEPTABILITY OF THE COMPUTER SYSTEM FOR PRODUCTION IMPLEMENTATION.
- E RECEIVE FINALIZED OPERATIONS MANUAL, UTILITY PROGRAM CONTROL STATEMENTS AND RELATED MATERIAL AND ESTABLISH REQUIRED OPERATIONAL CONTROLS FOR PRODUCTION PROCESSING. REFER TO PARAGRAPHS 210 AND 259.
- F FOLLOWING IMPLEMENTATION OF THE SYSTEM OR SUBSYSTEM, PROVIDE A COPY OF FINALIZED JCL TO THE APPLICATION PROGRAMMING FUNCTION. THE APPLICATION PROGRAMMING FUNCTION WILL BE RESPONSIBLE FOR MAINTENANCE AND UPDATING OF THE OPERATIONS MANUAL.

105-109 (RESERVED)

SECTION 8 APPLICATION SYSTEMS SUPPORT PROCEDURES

110 FUNCTION PROCEDURES

A NUMBER OF AREAS ARE INVOLVED IN THE SUPPORT OF APPLICATION SYSTEMS. THEY RANGE FROM DISTRIBUTION OF VENDOR MANUALS TO THE DEVELOPMENT OF SPECIALIZED SOFTWARE. THE PROCEDURES FOR EACH AREA ARE INCLUDED IN THE SUBSEQUENT DISCUSSIONS.

111 SYSTEM SOFTWARE

TECHNICAL SUPPORT WILL BE PROVIDED BY DSPD FOR THE APPLICATION OF SYSTEM SOFTWARE INCLUDING THE OPERATING SYSTEM. SUPPORT SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:

- A ADVISING SYSTEM USERS ON THE MOST EFFICIENT APPLICATION OF THE SYSTEM SOFTWARE.
- B SERVING AS THE FOCAL POINT FOR RECOMMENDED ENHANCEMENTS TO SYSTEM SOFTWARE AND/OR PROCEDURES TO MORE EFFECTIVELY UTILIZE THE AVAILABLE SYSTEM SOFTWARE.
- C MAINTAINING, AS NECESSARY, USER-ORIENTED PORTIONS OF THE SOFTWARE REQUIRING TIMELY MAINTENANCE. COORDINATE SUCH MAINTENANCE WITH COMPUTER CENTER PERSONNEL.
- D SERVING AS THE FOCAL POINT FOR DISSEMINATION TO ALL AFFECTED SYSTEM USERS, TECHNICAL MALFUNCTIONS WITH THE ASSOCIATED RESOLUTION.
- E APPLYING SYSTEM AND/OR DEVELOPED CAPABILITIES TO SUPPORT COMMON REPETITIVE REQUIREMENTS (I.E., UTILITIES TO SAVE AND/OR RESTORE DATA, USER REPORTING, ETC.).
- F APPLY SYSTEM FACILITIES IN MAINTENANCE OF TEST DATA AND EXPEDITION OF TESTING AT THE SYSTEM LEVEL.
- G PROVIDING GUIDANCE TO THE USER OF TECHNICAL SOFTWARE. THIS WILL NORMALLY BE ACCOMPLISHED THROUGH THE ISSUANCE OF TECHNICAL GUIDES, TIA'S AND OTHER APPLICABLE WORKING LEVEL COORDINATION DOCUMENTS.

112 AUTOMATED LIBRARIES

AUTOMATED SUPPORT FUNCTIONS WILL BE PROVIDED BY DSPD TO EFFECT THE CREATION AND MAINTENANCE OF SOFTWARE LIBRARIES IN SUPPORT OF SYSTEM USERS.

- A SUPPORT PRODUCTS EXPLAINED IN TECHNICAL GUIDES (TG'S) REGARDING MANAGEMENT AND CONTROL, WILL BE AVAILABLE TO ANALYSTS AND PROGRAMMERS. THE FOLLOWING LIBRARIES ARE AVAILABLE:

- 1 TEST SOURCE STATEMENT LIBRARIES.
- 2 TEST LOAD MODULE LIBRARIES.
- 3 PRODUCTION SOURCE STATEMENT LIBRARIES.
- 4 PRODUCTION LOAD MODULE LIBRARIES.
- 5 PROCEDURE LIBRARY.
- 6 MACRO LIBRARY.
- 7 CARD IMAGE LIBRARY.
- 8 OTHER (AS REQUIRED).

- B LIBRARY SOFTWARE SUPPORT. AS NEEDED, SOFTWARE SUPPORT SHALL BE PROVIDED TO THE USERS FOR THE CREATION, MAINTENANCE AND BACKUP OF AUTOMATED LIBRARIES.

- C INITIAL ALLOCATIONS AND THEIR CHANGES WILL BE COORDINATED WITH AND APPROVED BY THE FILE MANAGEMENT FUNCTION AS RELATED TO THAT FUNCTION'S OVERALL PERMANENT DASD SPACE MANAGEMENT ACTIVITIES.

113 TECHNICAL CONTACT POINT

CONSOLIDATION OF CONTACTS WITH OUTSIDE ORGANIZATIONS AND SOFTWARE VENDORS FOR PURPOSES OF COORDINATION OR ACQUIRING INFORMATION AND DOCUMENTATION OF AN APPLIED TECHNICAL NATURE WILL BE PROVIDED BY DSPD.

114 TECHNICAL DOCUMENTATION

A TECHNICAL INFORMATION ADVISORY (TIA).

A TIA WOULD BE ISSUED AS AN APPLICATION SYSTEM SUPPORT FUNCTION ITEM TO RESOLVE AN IMMEDIATE TECHNICAL PROBLEM. RECOMMENDATIONS MAY BE MADE TO DSPD, WITH SUPPORTING DOCUMENTATION, THAT A TIA BE ISSUED ON A PARTICULAR TECHNICAL PROBLEM.

- 1 COORDINATION. WHERE TIME PERMITS, TIA'S WILL BE COORDINATED WITH APPLICATION MANAGERS. IN ANY CASE, TECHNICAL PERSONNEL AND THEIR SUPERVISORS ARE EXPECTED TO REVIEW EACH TIA UPON RECEIPT. UNLESS NOTIFIED TO THE CONTRARY, THE ISSUING FUNCTION MAY ASSUME COMPLIANCE.
- 2 DISTRIBUTION. TIA ORIGINALS ARE DELIVERED TO THE DSPD TECHNICAL LIBRARY WHERE CORRECT LABELING AND FORM ARE VERIFIED. FOLLOWING REPRODUCTION OF TIA, ISSUE IN SUFFICIENT QUANTITY FOR DISTRIBUTION TO ALL DESIGNERS AND PROGRAMMERS.
- 3 MAINTENANCE. TIA'S DESCRIBING TEMPORARY CONDITIONS MAY BE DESTROYED AT THE END OF THE APPLICABLE TIME PERIOD. TIA'S PROVIDING A DISPOSITION DATE MAY BE DESTROYED WHEN SPECIFIED. THE CONTENT OF OTHER TIA'S SHOULD BE REDIRECTED TO A FORMALIZED DOCUMENT OR MANUAL BY THE ISSUING UNIT.

B TECHNICAL GUIDES (MANUALS).

TECHNICAL GUIDES OR MANUALS SHALL BE ISSUED ON APPLICABLE SUBJECTS TO FACILITATE COORDINATION AND CONSISTENT UTILIZATION AMONG USERS. SOME APPROPRIATE SUBJECTS FOR TECHNICAL GUIDES INCLUDE DATA MANAGEMENT ROUTINES, SECURITY, AND SOFTWARE SUPPORT SUCH AS AN AUTOMATED LIBRARY PROCEDURE.

- 1 COORDINATION. TECHNICAL GUIDES WILL BE COORDINATED WITH THE APPLICATION MANAGERS. ASSISTANCE WILL BE PROVIDED TO THE MANAGERS RELATING TO THE TECHNICAL ASPECTS AS WELL AS THE FUNCTIONAL USE OF THE TECHNICAL GUIDES, TO AID IN THE APPROPRIATE USE OF THE FACILITIES DESCRIBED.

- 2 MAINTENANCE. TECHNICAL GUIDES SHALL BE SO DEVELOPED AS TO PERMIT MAINTENANCE AS REQUIRED. IT IS THE RESPONSIBILITY OF THE USERS TO SUBMIT RECOMMENDATIONS, SUGGESTIONS, OR CORRECTIONS PERTAINING TO THE GUIDE.
 - 3 DISTRIBUTION. THE DSPD TECHNICAL LIBRARY SHALL ADVISE PROSPECTIVE USERS OF AVAILABLE TECHNICAL GUIDES AND HOW TO ORDER COPIES OF THEM.
- C VENDOR DOCUMENTATION IS ORDERED AND DISTRIBUTED AS A SUPPORT FUNCTION BY THE DSPD TECHNICAL LIBRARY.
- 1 ORDERING INFORMATION IS COLLECTED FROM PROSPECTIVE USERS OF THE PUBLICATIONS.
 - 2 VENDOR DOCUMENTATION IS ACQUIRED EITHER BY DIRECT ORDER OR BY AUTHORIZED REPRODUCTION.
 - 3 DISTRIBUTION OF THE DOCUMENTATION IS ACCOMPLISHED BY THE DSPD TECHNICAL LIBRARY.
 - 4 ON CERTAIN DISTRIBUTIONS SOME LIMITATIONS MAY BE IMPOSED BY MANAGEMENT, DUE TO OVERALL COST, QUESTIONABLE BENEFITS, DOCUMENT QUALITY OR RELEVANCE TO NEEDS.
 - 5 MAINTAIN DOCUMENT DISTRIBUTION LISTS, ENABLING PROPER DISTRIBUTION OF SUBSEQUENT REVISION AND/OR AMENDMENT.

115-119 (RESERVED)

SECTION 9 SPECIAL FUNCTIONS PROCEDURES

120 DEFINITION STAGE

A THE IMMEDIACY FOR AN OUTPUT PRODUCT (SPECIAL AND/OR ONE-TIME REPORT OR PROCESS) WILL ON OCCASION REQUIRE WAIVER OF NORMAL PROCESSING, APPROVAL, RELEASE, AND DOCUMENTATION STANDARDS. WHEN WAIVERS ARE REQUIRED, THE PRODUCT IS NORMALLY PRODUCED THROUGH A UNIT OR INTEGRATION TEST AT THE DIRECTION OF THE DEPUTY DIRECTOR, SYSTEMS DEVELOPMENT.

-- B THE REQUESTING UNIT WILL PREPARE A MEMORANDUM ADDRESSED TO THEMSELVES FOR THE SIGNATURE OF THE DEPUTY DIRECTOR, SYSTEMS DEVELOPMENT, DETAILING THE SPECIFIC STANDARD TO BE WAIVED, DURATION ,THE AFFECTED SYSTEM AND THE REASON FOR THE WAIVER. --

-- 121-149 (RESERVED) --

SECTION 1 TECHNICAL DOCUMENTATION

150 DOCUMENTATION SUMMARY

THE FOLLOWING PARAGRAPHS PROVIDE AN OVERVIEW OF THE VARIOUS TYPES OF DOCUMENTATION THAT MAY BE REQUIRED FOR SYSTEM DEVELOPMENT AT THIS OFFICE. REFER TO EXHIBITS 8-16 FOR SPECIFIC EXAMPLES.

151 FUNCTIONAL REQUIREMENTS

THE PURPOSE OF THE FUNCTIONAL REQUIREMENTS DOCUMENT IS TO PROVIDE A BASIS FOR THE MUTUAL UNDERSTANDING BETWEEN USERS AND DESIGNERS OF THE INITIAL DEFINITION OF THE SOFTWARE, INCLUDING THE REQUIREMENTS, OPERATING ENVIRONMENT, AND DEVELOPMENT PLAN (EXHIBIT 8).

152 DATA REQUIREMENTS

THE PURPOSE OF THE DATA REQUIREMENTS DOCUMENT IS TO PROVIDE, DURING THE DEFINITION STAGE OF SOFTWARE DEVELOPMENT, A DATA DESCRIPTION AND TECHNICAL INFORMATION ABOUT DATA COLLECTION REQUIREMENTS (EXHIBIT 9).

*-- 153 * * * --*

154 SYSTEM/SUBSYSTEM SPECIFICATION

THE SYSTEM/SUBSYSTEM SPECIFICATION IS A TECHNICALLY ORIENTED DOCUMENT PREPARED BY AND FOR SYSTEMS PERSONNEL. IT IS DETAILED SUFFICIENTLY CONCERNING THE ENVIRONMENT AND DESIGN ELEMENTS TO PROVIDE SPECIFIC BOUNDARIES TO THE PROGRAM DESIGN EFFORT (EXHIBIT 10).

155 PROGRAM SPECIFICATION

- A PROGRAM SPECIFICATIONS DESCRIBE FOR PROGRAMMERS THE REQUIREMENTS OPERATING ENVIRONMENT AND DESIGN CHARACTERISTICS OF A COMPUTER PROGRAM (SEE EXHIBIT 11).
- B IF ECONOMY IN PREPARATION SEEMS WARRANTED, A SERIES OF PROGRAMS WHICH ARE CLOSELY RELATED MAY BE COMBINED IN A MULTIPLE RUN PACKAGE, I.E., OUTPUT OF ONE RUN BECOMING INPUT TO THE NEXT RUN.
- *-- C PROGRAM RUN BOOKS WILL BE MAINTAINED BY SYSTEMS DIVISIONS AS REFERENCE TOOLS FOR PROGRAM MODIFICATION OR CHANGE. REFERENCE EXHIBIT 11.5 FOR RECOMMENDED CONTENT. --*

156 DATA BASE SPECIFICATION

THE PURPOSE OF THIS DOCUMENT IS TO SPECIFY THE IDENTIFICATION, LOGICAL CHARACTERISTICS AND PHYSICAL CHARACTERISTICS OF A PARTICULAR DATA BASE (EXHIBIT 12).

157 USER MANUAL

THIS DOCUMENT DESCRIBES THE FUNCTION OF THE SOFTWARE IN NON-ADP TERMS SO USERS KNOW WHEN AND HOW TO USE IT (EXHIBIT 14).

158 OPERATIONS MANUAL

UPON COMPLETION OF A SATISFACTORY ACCEPTANCE TEST OF A NEW OR RE-DESIGNED COMPUTER SYSTEM, THE OPERATIONS MANUAL WILL BE FINALIZED BY SYSTEMS PERSONNEL. THE PURPOSE OF THE OPERATIONS MANUAL IS TO PROVIDE COMPUTER OPERATIONS PERSONNEL WITH A DESCRIPTION OF THE SOFTWARE AND OPERATIONAL ENVIRONMENT (EXHIBIT 13).

159 TEST PLAN

THE TEST PLAN IS DEVELOPED DURING THE DESIGN AND PROGRAMMING STAGE TO PROVIDE A PLAN FOR TESTING OF SOFTWARE; DETAILED SPECIFICATIONS, PROCEDURES AND DESCRIPTIONS (I.E., TEST CRITERIA); AND TEST DATA REDUCTION AND EVALUATION CRITERIA FOR THE INTEGRATION/ACCEPTANCE LEVELS OF TESTING (EXHIBIT 15).

160 TEST ANALYSIS REPORT

MATERIAL AND ANALYSIS IS COLLECTED AND ACCOMPLISHED THROUGHOUT THE SPAN OF THE TEST PHASE BY THE ACCEPTANCE TEST TEAM. UPON COMPLETION OF THE TEST, THE TEST ANALYSIS REPORT SHOULD BE FINALIZED AND THE RESULTS, CAPABILITIES AND DEFICIENCIES PRESENTED FOR REVIEW; AND PROVIDE A BASIS FOR PREPARING A STATEMENT OF SOFTWARE READINESS FOR IMPLEMENTATION (EXHIBIT 16).

161-171 (RESERVED)

SECTION 2 DOCUMENTATION REQUIREMENTS

172 DOCUMENTATION INITIATION AND PREPARATION

THE FUNCTIONAL REQUIREMENTS AND DATA REQUIREMENTS (EXHIBITS 8 & 9) WILL BE UTILIZED AS THE INITIATING DOCUMENT FOR ALL NEW SYSTEM DEVELOPMENT OR MODIFICATION TO PRESENT SYSTEMS.

A RESPONSIBILITIES.

DOCUMENT REQUIREMENT WILL BE DETERMINED BY THE APPROPRIATE LEVEL AS SHOWN IN PARAGRAPH 172 B. RESPONSIBILITIES FOR DOCUMENTATION MAINTENANCE AND CHANGE CONTROL THROUGH THE DEVELOPMENT PHASE IS COVERED IN PARAGRAPHS 173 AND 174.

B DEFINITION OF LEVELS.

TO PROTECT AGAINST BOTH OVER AND UNDER DOCUMENTATION, COMPUTER SYSTEM DOCUMENTATION HAS BEEN DIVIDED INTO THREE LEVELS. FROM LOWEST TO HIGHEST THESE LEVELS OF DOCUMENTATION ARE:

1 LEVEL 1 - MINIMUM DOCUMENTATION.

A CONDITIONS. MINIMAL DOCUMENTATION IS PERMITTED IF ALL OF THE FOLLOWING CONDITIONS ARE REFLECTED:

- (1) FREQUENCY OF PROCESSING - ONE TIME.
- (2) TIME SCHEDULE - PROJECT ASSIGNMENT DATE TO IMPLEMENTATION DATE IS NO MORE THAN FIVE CALENDAR WEEKS.
- (3) STAFFING - STAFFING OF NON-SUPERVISORY DATA PROCESSING TECHNICIANS WILL NOT EXCEED THREE.
- (4) SPECIFICATION QUANTITY - PROGRAM SPECIFICATIONS WILL NUMBER NO MORE THAN FIVE.
- (5) PRODUCT CONTROL - AFTER SUPERVISORY APPROVAL, THE OUTPUT PRODUCT IS FURNISHED DIRECTLY FROM DP TECHNICIANS TO USER WITH NO INTERMEDIARY CONTROL.

B DOCUMENTATION.

- (1) FORMAT - FORMAT AND CONTENT IS AS SHOWN IN EXHIBITS 8 THRU 16 , FOR THE PRESCRIBED DOCUMENTATION. DOCUMENTATION MAY BE HANDWRITTEN IF LEGIBILITY IS MAINTAINED.
- (2) DOCUMENT TYPES.
 - (A) PROGRAM SPECIFICATION.
 - (B) OPERATIONS MANUAL.

2 LEVEL 2 - SEMI-FORMAL DOCUMENTATION.

A CONDITIONS. SEMI-FORMAL DOCUMENTATION IS PERMITTED IF ANY OF THE FOLLOWING CONDITIONS ARE REFLECTED:

- (1) FREQUENCY OF PROCESSING - INTERMITTENT, NONSTRUCTURED, OR IRREGULAR PROCESSING.
- (2) TIME SCHEDULE - N/A.
- (3) STAFFING OF NON-SUPERVISORY PERSONNEL DATA PROCESSING TECHNICIANS EXCEEDS THREE.
- (4) SPECIFICATION QUANTITY - PROGRAM SPECIFICATIONS NUMBER NO MORE THAN 12.
- (5) PRODUCT CONTROL - OUTPUT PRODUCTS ARE SUBJECT TO THIRD PARTY QUALITY CONTROL.

B DOCUMENTATION.

- (1) FORMAT - FORMAT AND CONTENT IS AS SHOWN IN EXHIBITS 8 THRU 16, FOR THE PRESCRIBED DOCUMENTATION. THIS DOCUMENTATION IS TO BE TYPED.
- (2) DOCUMENT TYPES.
 - (A) FUNCTIONAL REQUIREMENTS - OPTIONAL.
 - (B) DATA REQUIREMENTS - OPTIONAL.
 - (C) SYSTEMS SPECIFICATION.
 - (D) PROGRAM SPECIFICATION.
 - (E) OPERATIONS MANUAL.
 - (F) TEST PLAN.

3 LEVEL 3 - FORMAL DOCUMENTATION.

A CONDITIONS. FORMAL DOCUMENTATION IS IN EFFECT IF ANY OF THE FOLLOWING CONDITIONS ARE REFLECTED:

- (1) FREQUENCY OF PROCESSING - ON-GOING SYSTEM PROCESSING.
- (2) TIME SCHEDULE - N/A.
- (3) STAFFING - N/A.
- (4) SPECIFICATIONS QUANTITY - N/A.
- (5) PRODUCT CONTROL. THIRD PARTY QUALITY CONTROL CONCERNING:
 - (A) PRODUCTS FOR EXTERNAL USERS (STATES, COUNTIES, OA, ETC.).
 - (B) PROCESSING CRITICAL TO ORGANIZATION (E.G., PAYROLL, BILLING).

B DOCUMENTATION.

- (1) FORMAT - FORMAT AND CONTENTS ARE AS SHOWN IN EXHIBITS 8 THROUGH 16. DOCUMENTATION WILL BE TYPED.
- (2) DOCUMENT TYPES. A COMPLETE SET OF DOCUMENTS IS REQUIRED FOR FORMAL DOCUMENTATION.

C DOCUMENTATION ASSEMBLY. THE ORDER OF THE SECTIONS AND PARAGRAPHS, METHOD OF HANDLING EXHIBITS IN THE TABLE OF CONTENTS, SAMPLES OF A CHANGE COVER PAGE, DOCUMENT FORMAT, APPROVALS AND DISTRIBUTION ARE SHOWN IN EXHIBITS 7 THROUGH 16.

-- D DOCUMENT COVER PAGE. ALL DOCUMENTS (EXHIBITS 8 THRU 16) REQUIRING APPROVAL WILL USE KC-255-A, AS THE TRANSMITTAL FORM. ALL FINALIZED DOCUMENTS GOING TO CSPD WILL UTILIZE THE KC-287 AS THE TRANSMITTAL. ALL FINALIZED DOCUMENTS NOT GOING TO CSPD MAY UTILIZE THE KC-287 OR THE KC-1172 AS THE TRANSMITTAL. --

SECTION 3 CHANGE CONTROL

173 PROBLEM DEFINITION STAGE

A INITIATION.

SYSTEM CHANGES AND MAINTENANCE ACTIVITIES MAY BE INITIATED AS A RESULT OF CHANGES IN LEGISLATION, USER REQUIREMENTS OR SYSTEM ENVIRONMENT FACTORS. APD PERSONNEL, IN COORDINATION WITH APPLICABLE SYSTEM OPERATION AND PROGRAM MANAGERS, HAVE THE RESPONSIBILITY TO DEFINE PROBLEMS AND ALTERNATIVE SOLUTIONS FOR MANAGEMENT REVIEW. THE DEPUTY DIRECTOR, SYSTEMS DEVELOPMENT, THROUGH THE OFFICE OF THE DIRECTOR, IS RESPONSIBLE FOR CONTROLLING AND IMPLEMENTING THE CHANGE AND ALL REQUIRED ACTIONS.

B PROPOSAL AND EVALUATION OF CHANGE.

- 1 THE ASSIGNED MANAGER WILL INITIATE APPROPRIATE DOCUMENTATION FOR ALL CHANGES TO PRODUCTION SYSTEMS AFFECTING BASIC USER REQUIREMENTS FOR DISTRIBUTION AND EVALUATION. EACH REVIEWER'S COMMENTS ARE RETURNED TO THE ASSIGNED MANAGER.
- 2 IF THE PROPOSED CHANGE APPEARS VIABLE OR IF IT IS A PREDETERMINED REQUIREMENT, THE ASSIGNED MANAGER PREPARES AN EVALUATION OF THE FACTORS (I.E., SOFTWARE, FILES, PROCEDURES, OTHER SYSTEMS/FUNCTIONS, ETC.) IMPACT AND COST ESTIMATE. IF THE CHANGE DOES NOT APPEAR FEASIBLE, THE ASSIGNED MANAGER INFORMS THE DEPUTY DIRECTOR, SYSTEMS DEVELOPMENT OF THE FINDINGS AND AWAITS DISPOSITION.
- 3 THE PROPOSED CHANGE IS ASSIGNED A CATEGORY BY THE ASSIGNED MANAGER DENOTING ITS OVERALL IMPACT.
 - A CATEGORY I - A CHANGE INITIATED BY A USER OR SOME MODIFICATION WHICH IS NOT BASED ON A CHANGE IN THE BASIC USER REQUIREMENT.

- (1) BASIC INPUT REQUIREMENTS PROVIDED BY NON-KCMO PERSONNEL ARE NOT CHANGED.
- (2) BASIC OUTPUT PRODUCTS TO NON-KCMO PERSONNEL ARE NOT MODIFIED.
- (3) COST TO IMPLEMENT DOES NOT EXCEED 120 MANHOURS; ANNUAL PRODUCTION COSTS NOT INCREASED MORE THAN 5%.
- (4) WORK EFFORTS TO IMPLEMENT DO NOT IMPERIL CATEGORY II CHANGES TO THE SAME SYSTEM.
- (5) INTERFACE REQUIREMENTS (I.E. SHARED SOFTWARE, DATA, OR OPERATIONAL SYSTEMS) OUTSIDE THE DESIGN SUPERVISOR'S RESPONSIBILITY ARE NOT CHANGED.

B CATEGORY II - A CHANGE INITIATED BY THE USER WHICH IS BASED ON CHANGES TO THE BASIC USER REQUIREMENT. (ALL OTHER CHANGES).

174 ADDITIONAL CONSIDERATIONS

MINIMALLY, A CATEGORY I CHANGE MUST UNDERGO A RETEST CYCLE AT THE INTEGRATION TEST LEVEL; A CATEGORY II CHANGE AT THE ACCEPTANCE TEST LEVEL. (REFER TO PART 4, SECTION 5).

- A IF A TEST PLAN DOES NOT EXIST, ONE MUST BE PREPARED. HOWEVER, IT NEED ONLY ADDRESS THAT PART OF THE SYSTEM WHICH CONTAINS THE CHANGE AND ALL PARTS OF THE SYSTEM LOGICALLY DEPENDENT UPON THE CHANGED PART.
- B TEST DATA MAY BE PROCESSED BY THE EXISTING PRODUCTION SYSTEM TO PROVIDE THE ESSENTIAL INGREDIENTS FOR COMPARISON TO THE CHANGED SYSTEM.

175-189 (RESERVED)

PART 6 - I.B.M. IMPLEMENTATION STANDARDS

190 ASSIGNMENT OF ACCOUNTING CODES

A APPLICATION DIVISIONS

REQUEST BUDGET STAFF TO ASSIGN A WORK STATUS CODE WHEN A NEW SYSTEM IS TO BE DEVELOPED.

B BUDGET STAFF

1. AS REQUESTED BY APPLICATION DIVISIONS, ASSIGN NEW WORK STATUS CODE THAT AGREES WITH 17-AO. ALSO DETERMINE APPROPRIATE CROSSWALK CODE (REFERENCE EXHIBIT 4).
2. UPDATE 3-ADM TO REFLECT NEW ACCOUNTING CODE.
3. PROVIDE NEW ACCOUNTING CODE TO KCMO SECURITY OFFICER(S).
4. NOTIFY APPLICATION DIVISION OF NEW WORK STATUS CODE AND APPROPRIATE CROSSWALK CODE.
5. NOTIFY APPLICATION DIVISIONS AND SECURITY OFFICER(S) OF ANY WORK STATUS CODES THAT ARE TO BE DELETED FROM ACCOUNTING CODE TABLE.

C SECURITY OFFICER(S)

1. RECEIVE NEW WORK STATUS CODE AND CROSSWALK CODE ASSIGNMENT FROM BUDGET STAFF.
2. CONSTRUCT NEW ACCOUNTING CODE AS ILLUSTRATED BY EXHIBIT 32.
3. AS REQUESTED, DELETE ANY OBSOLETE ACCOUNTING CODES. NOTIFY KCCC TO UPDATE MASTER ACCOUNTING CODE TABLE.
4. PREPARE REQUEST TO KCCC FOR ADDITION OF NEW ACCOUNTING CODE TO MASTER ACCOUNTING CODE TABLE.
5. UPDATE MASTER FILE OF KCMO ACCOUNTING CODES.
6. NOTIFY BUDGET STAFF AND APPLICATION DIVISION WHEN KCCC HAS UPDATED THE MASTER ACCOUNTING CODE TABLE.

191 STANDARD CODING STRUCTURE

UNIFORM CODING STRUCTURES ARE REQUIRED FOR ALL ENTITIES OF IDENTIFICATION. THE UNIQUENESS OF THIS STRUCTURE PROVIDES RAPID IDENTIFICATION OF KCMO APPLICATIONS. ADDITIONALLY, IT IS THE BASIS FOR ANALYSIS REPORTS FOR MANAGEMENT. REFERENCE EXHIBIT 21.

192 SECURITY

KCMO HAS DESIGNATED TWO INDIVIDUALS TO SERVE AS SECURITY OFFICER AND DEPUTY SECURITY OFFICER. THESE ARE THE INDIVIDUALS AUTHORIZED TO IMPLEMENT, MODIFY, MONITOR AND REPORT ON THE SECURITY LEVEL IMPLEMENTED WITHIN KCMO COMPUTER SYSTEMS. RESPONSIBILITIES INCLUDE:

- A ADDITION, CHANGE OR DELETION OF ACCOUNTING CODES MAINTAINED BY KCCC FOR KCMO WORK PERFORMED ON KCCC COMPUTERS.
- B ASSIGNMENT AND MONITORING OF LOGONID'S (LID'S) FOR KCMO TERMINAL USERS.
- C MONITORING AND REVIEW OF SECURITY VIOLATIONS, INCLUDING REPORTS TO KCMO MANAGEMENT OF CORRECTIVE ACTIONS.
- D PREPARATION OF THE ANNUAL KCMO SECURITY PLAN AND RISK ANALYSIS.
- E MONITORING DATA FILES IN ARCHIVAL OR SECURITY STORAGE.
- *-- F PREPARATION AND MONITORING OF ACF2 (ACCESS CONTROL FACILITY, RELEASE 2) RULES FOR MAINFRAME COMPUTER ACCESS. ---*

193 COSTING OF APPLICATION SYSTEMS/REPORTS

A RESPONSIBILITY.

BUDGET STAFF WILL PROVIDE ALL REQUESTED COST FIGURES FOR KCMO APPLICATION SYSTEMS AND/OR REPORTS. BUDGET STAFF WILL COORDINATE THE SELECTION AND REPORTING OF COST DATA WITH OTHER AFFECTED FUNCTIONS.

B METHOD.

BUDGET STAFF WILL UTILIZE THE WORK APPLICATION REPORTING SYSTEM REPORTS AND LISTINGS TO PROVIDE MAN-DAYS EXPENDED BY THE APPLICATION SYSTEM AND/OR REPORT. THE REPORTS AND LISTINGS PRODUCED FROM THE KCCC AUTOMATED COMPUTER COST AND UTILIZATION REPORTS SYSTEM (ACCURS I AND II) DATA FILE WILL SERVE AS THE SOURCE OF COMPUTER AND OTHER EQUIPMENT COSTS.

C VERIFICATION.

PRIOR TO THE COMPILATION AND RELEASE OF COST FIGURES, BUDGET STAFF WILL VERIFY THE SELECTION OF DATA WITH THE AFFECTED APPLICATION DESIGN FUNCTION.

194 RETENTION PROCEDURES AND FACILITIES

A TEST ENVIRONMENT.

1. TAPES CREATED BY A TEST PROCESS MAY BE RETAINED BY MAKING APPROPRIATE ENTRIES IN THE TEST JCL WHICH IS SUBMITTED.
2. DISK FILES MAY BE REQUESTED AS INPUT/OUTPUT OF A TEST PROCESS BY APPROPRIATE ENTRIES IN THE TEST JCL. THESE MAY BE PERMANENT OR TEMPORARY RETENTION FILES.
3. EXTENSIONS OF TEST TAPES ARE EFFECTED BY TERMINAL ENTRIES FROM THE INDIVIDUAL RESPONSIBLE FOR CREATION OF THE TAPE. THESE ENTRIES COULD BE EXTEND, SCRATCH OR DISPLAY STATUS.
4. REFERENCE KCCC USER'S HANDBOOK, CHAPTER 7 FOR A DISCUSSION OF TSO TAPE MANAGEMENT FACILITIES.

B PRODUCTION ENVIRONMENT.

1. RETENTION REQUIREMENTS FOR PRODUCTION TAPES AND DISK PACKS ARE TRANSMITTED AND DOCUMENTED BY:

- A. OPERATIONS MANUAL.

- B. JOB CHART.

- C. JCL PARAMETERS.

- *-- D. FORM ASCS-733 AS REQUIRED. --*

2. REFERENCE KCCC USER'S HANDBOOK, CHAPTER 7 FOR DISCUSSION OF TSO TAPE MANAGEMENT FACILITIES.

3. RETENTION CAPABILITIES ARE PROVIDED BY:

- A. OS CATALOG.

- B. JCL PARAMETERS AND OVERRIDE STATEMENTS. SEE EXHIBIT 33.

C CONTINGENCY RETENTION.

RETENTION REQUIREMENTS MUST BE ESTABLISHED AND IMPLEMENTED WHICH WILL ENABLE A SUCCESSFUL CONTINUANCE (THOUGH SOMEWHAT DELAYED) IN THE EVENT OF A NATURAL DISASTER. ALSO REFERENCE PARAGRAPH 224.

D OBSOLESCENCE.

1. PROGRAM MATERIAL DISPOSITION INSTRUCTIONS ARE DESCRIBED IN 2-AS.

2. OBSOLESCENCE OF PRODUCTION DATA MUST BE DETERMINED FROM A COMBINATION OF CONSIDERATIONS:

- A. EXPECTED NEED OF RETRIEVAL.

- B. WASHINGTON DIRECTIVES.

- C. SYSTEM/USER REQUIREMENTS.

- D. PRIVACY ACT REQUIREMENTS.

- E. COST/BENEFIT ANALYSIS.

- F. REVISION IMPLEMENTED.

195 CATALOG STANDARDS AND RESPONSIBILITIES

- A DATA SET CATALOG ENTRIES MUST BE PROVIDED TO COVER ALL DATA FILES WHICH ARE OF A PERMANENT NATURE (I.E., THE DATA IS TO BE RETAINED AT THE END OF A NORMAL JOB).
- B APPLICATION PROGRAMMING FUNCTIONS WILL PROVIDE FOR NORMAL CATALOG ENTRIES IN THE JCL STATEMENT PROCEDURES RELEASED TO PRODUCTION.
- C CATALOG ENTRIES WHICH ARE CONTAINED IN JCL STATEMENT PROCEDURES WHILE THESE PROCEDURES ARE IN UNIT OR INTEGRATION TEST STATUS MUST ADDRESS A TEST CATALOG WITH A VALID HIGH LEVEL QUALIFIER.
- D APPLICATION PROGRAMMING FUNCTIONS WILL RECOMMEND THE FACTOR FOR THE NUMBER OF ENTRIES (INDEX) FOR GENERATION DATA SETS CREATED BY THEIR JOBS BASED UPON INTENDED PROCESSING CYCLES AND INPUT VOLUMES.
- E OPERATIONS WILL MAINTAIN THE DATA SET CATALOG SYSTEM WHICH INCLUDES THE ENTRIES TO ESTABLISH THE INDEX; CATALOG AND UNCATALOG DATA SETS IN ORDER THAT CORRECT REEL NUMBERS ARE ASSOCIATED WITH CORRECT DATA SETS, AND DELETE CATALOG ENTRIES AND RELATED INDEX WHEN NO LONGER VALID. CORRECTIVE ENTRIES WILL BE INITIATED AFTER REVIEWING THE CATALOG RECAP LIST AND JCL SYSOUT LIST.
- F APPLICATION PROGRAMMING FUNCTIONS WILL NOT UTILIZE "IEHPROGM" AS A JOB STEP OR MODULE TO PERFORM ANY DATA SET CATALOG MAINTENANCE AS A NORMAL PRODUCTION SYSTEM PROCESSING FUNCTION OR AS A PROCESSING OPTION WHEN AN ABEND OCCURS.
- G IN USING THE GENERATION DATA GROUP CONCEPT FOR MASTER FILES THE PRINCIPLE OF "SON, FATHER, GRANDFATHER" GENERATIONS NORMALLY PROVIDES SUFFICIENT RECOVERY. SPECIFIC SYSTEM REQUIREMENTS AND OFF-SITE STORAGE REQUIREMENTS MAY MODIFY THIS TO MORE GENERATIONS IN AN INDEX.
- H TEST CATALOG ENTRIES MAY BE REQUESTED BY APPLICATION DIVISIONS
-- BY SUBMISSION OF FORM ASCS-733 TO OPERATIONS. --

196 CUTOFF DATE

- A A CUTOFF DATE (REGISTER DATE, DESIGN DATE, ETC.) IF REQUIRED IN A JOB STEP MUST BE PROVIDED IN THE PARM PARAMETER OF THE // EXEC CARD IN THE FORMAT OF "MMDDYYRJJ".
REFERENCE EXHIBITS 21 AND 33.

EXAMPLE:

```
//STEPNAME EXEC PROGRAM,PARM="MMDDYYRJJ"
```

- B EACH PROGRAM REQUIRING THE CUTOFF DATE ENTRY IN ORDER TO PRODUCE VALID OUTPUT MUST CHECK FOR THE PRESENCE AND VALIDITY OF THE DATE AND IF NOT PRESENT OR INCORRECT, THE JOB SHOULD BE TERMINATED WITH A STANDARD MESSAGE IN THE JCL LIST AS FOLLOWS:
1. NO DATE PRESENT MESSAGE - "NO PARM DATE PROVIDED"
 2. INCORRECT DATE MESSAGE - "INVALID PARM DATE"
- C CONDITION CODE 40 IS ASSIGNED FOR USE IN CONJUNCTION WITH PARM DATE TERMINATIONS. THE FOLLOWING ENTRY SHOULD BE PLACED IN THE PRODUCTION JOB CARD:
- ```
//JOBNAME JOB (ACCOUNTING),JOB-NUMBER,COND=(40,EQ)
```



## 197 HIGH LEVEL QUALIFIERS AND DESCRIPTIVE QUALIFIERS

- A DATA SETS MUST BE FULLY QUALIFIED TO BE RETAINED PROPERLY BY THE KCCC SOFTWARE SYSTEM. THIS QUALIFICATION IS IMPLEMENTED AT A HIGH LEVEL BY A CATALOG PREFIX AND AT THE LOW LEVEL BY A CONTENT DESCRIPTION. THIS STRUCTURE IS:

HLQ.DSN.DQ(MEMBER NAME)  
EXAMPLE - MF0900.IDD57.DATA(EXEPRGM3)

MF0900 -IS A CATALOG PREFIX FOR KCMO COMMON USE  
IDD57 -IS THE NAME OF THE DATA SET  
DATA -IS A DESCRIPTIVE QUALIFIER  
EXEPRGM3 -SUBORDINATE MEMBER

- B EXHIBIT 22 LISTS ALL CURRENTLY ASSIGNED KCMO HIGH LEVEL QUALIFIERS AS WELL AS KNOWN DATA SET NAMES AND RELATED DESCRIPTIVE QUALIFIERS. THE ITEMS LISTED ARE ALL COMMON LIBRARIES AND/OR PARTITIONED DATA SETS (PDS) AND SHOULD SERVE AS A REFERENCE LIST WHERE A NEED FOR INFORMATION INTERCHANGE IS NECESSARY.
- C KCCC CANNOT ESTABLISH A NEW HIGH LEVEL QUALIFIER IF DATASETS ALREADY EXIST THAT HAVE THE DESIRED HLQ.
- D REFERENCE THE KCCC IBM USER'S HANDBOOK CHAPTER 5 FOR A LIST OF VALID DESCRIPTIVE QUALIFIERS (DQ).

## \*-- 198 JOB CARD INFORMATION

THE STRUCTURE OF THE JOB CARD FOR KCMO OPERATIONS IS DEFINED IN TWO FORMATS. REFER TO EXHIBIT 4 FOR CODING CONTENT.

- A PRODUCTION  
//JOB NAME JOB(AABBCCDDEEEE,FFFF,G),'HH-LLLLLLLLL-KKK',CLASS=\_  
TIME=\_,MSGCLASS=A,PRTY=\_\_\_
- B TEST  
//JOB NAME JOB(AABBCCDDEEEE,FFFF,G),'HH-III-JJJ-KKK',CLASS=\_  
TIME=\_,MSGCLASS=A,PRTY=\_\_\_



## JOB ACCOUNTING CODE STRUCTURE

## WHERE:

AA = AGENCY DESIGNATION (05)  
 BB = OFFICE DESIGNATION (MF)  
 CC = DIVISION CODE (SEE EXHIBIT 4)  
 DD = CROSSWALK CODE (SEE EXHIBIT 4)  
 EEEE = WORK STATUS CODE (3-ADM, EXHIBIT 2)  
 FFFF = DIVISION SYMBOL (SEE EXHIBIT 4)  
 G = STATUS CODE (SEE EXHIBIT 4)

## JCL JOB CARD PROGRAMMER NAME FIELD, WHERE:

HH = JOB FUNCTION (SEE EXHIBIT 4)  
 III = EMPLOYEE NUMBER  
 JJJ = WORK CODE (SEE 3-ADM, EXHIBIT 4)  
 KKK = EMPLOYEE INITIALS  
 \*-- LLLLLLLLLL = JOB NUMBER - CSPD ASSIGNS A STANDARD JOB NUMBER --\*  
 (MMDDYYRJJ) IN PLACE OF THE EMPLOYEE NUMBER AND  
 WORK CODE.

## 199 TAPE DRIVES

A ADDRESSING. PROGRAMS OR JOB STEPS SHOULD NOT DIRECTLY ADDRESS ANY TAPE DRIVE. NAMES WHICH REFER TO UNIT CLASS ARE TO BE USED:

\*-- \* \* \* --\*  
 \*-- \* \* \* --\*

3. UNIT=TAPE9 (9-TRACK 1600 BPI TAPE, DEN=3).
4. UNIT=TAPE9 (9-TRACK 6250 BPI TAPE (DEFAULT)).
5. UNIT=TAPEC (3480 CARTRIDGE TAPE SYSTEM).

B REEL LABELS. ALL 9-TRACK TAPE REELS ARE TO BE PROCESSED WITH STANDARD LABELS.

\*-- \* \* \* --\*

## 200 ACCOUNTING INFORMATION

A ACCOUNTING INFORMATION IS THE FIRST POSITIONAL PARAMETER THE JCL JOB CARD AND IS A MANDATORY FIELD FOR ALL JOBS.



B ACCOUNTING CODES ASSIGNED (THE AABBCCDDEEEE PORTION) ARE AS ILLUSTRATED IN EXHIBIT 4.

C STATUS CODES AS USED BY KCMO ARE SHOWN IN EXHIBIT 4.

201 JOB CHARTS

\*-- ALL LOGIC CHARTS MAY BE DRAWN ON ASCS-764 (OR MAY BE PRODUCED BY AUTOMATIC CHARTING) AND MUST CONTAIN ONLY APPROVED FLOWCHART SYMBOLS (REFERENCE INTERNATIONAL STANDARD ISO 5807). --\*

A JOB CHARTS MUST SHOW THE INFORMATION IN EXHIBIT 29 (IBM).

B THE DATA SETS DEPICTED ON THE CHART SHOULD BE IDENTIFIED AS TEMPORARY OR PERMANENT.

\*-- C STANDARD ISO SYMBOLS SHALL BE USED (REFERENCE INTERNATIONAL STANDARD ISO 5807). --\*

202 RECORD FORMAT CONSIDERATIONS

A ENHANCE SYSTEM PERFORMANCE BY REDUCING RECORD SIZES THROUGH THE USE OF BINARY OR PACKED DECIMAL FORMATS FOR NUMERIC FIELDS.

B DEFINE AMOUNT FIELDS USING ARITHMETIC PROCESSES IN BINARY OR COMP-3 FORMAT.



## 203 USE OF STORAGE DEVICES

- A IN PLANNING A JOB OR SYSTEM, UTILIZE DIRECT ACCESS UNDER CONTROL OF THE OPERATING SYSTEM FOR TEMPORARY OR INTERMEDIATE DATA STORAGE. THIS FACILITY REDUCES THE NUMBER OF MAGNETIC TAPE DRIVES WHICH MAY OTHERWISE BE REQUIRED AND MAKES ACCESS OF THE DATA TO A FOLLOWING JOB STEP MORE TIMELY.
- B TAPE DRIVES WILL BE UTILIZED PRIMARILY FOR PERMANENT SEQUENTIAL DATA SETS OR PRINT FILES.
- C THE OPERATING SYSTEM PROVIDES A MEANS OF EXTENDING A FILE ON A MAGNETIC TAPE (DISP=MOD). THIS FEATURE COULD BE EFFECTIVE IN SOME SYSTEMS AND SHOULD BE CONSIDERED.
- D A JOB STEP WILL NOT BE EXECUTED UNLESS THE REQUIRED INPUT/OUTPUT STORAGE DEVICES ARE AVAILABLE. NEW OR MODIFIED JOBS REQUIRING MORE THAN 6 MOUNTABLE DEVICES PER STEP MUST BE APPROVED PRIOR TO DEVELOPMENT BY A WAIVER FROM THE DEPUTY DIRECTOR, SYSTEMS DEVELOPMENT, KCMO.
- E RECORD SIZE, BLOCKING FACTOR, FILE STRUCTURE, LEVELS OF INDEXING, REORGANIZATION AND RECOVERY METHODS, ETC. HAVE A DIRECT RELATIONSHIP TO THE EFFICIENT USE OF THE STORAGE DEVICES.

## 204 PRINTING

- A PRINTERS ARE NOT TO BE ADDRESSED DIRECTLY IN JCL.
- \*-- B PRINT FILES FOR PRODUCTION MUST BE DIRECTED TO TAPE. LARGE PRINT FILES EXCEEDING 500,000 PRINT LINES MUST BE PROGRAMMED TO FORCE END OF REEL PRIOR TO 500,000 LIMIT AND EACH TAPE PRINTED AS A SEPARATE JOB. --\*
- \*-- C THE CURRENT SYSOUT CODES WHICH MAY BE USED FOR FORM PRINTING ARE SHOWN IN EXHIBIT 24. --\*
- D FOR ANY PRINT THAT IS TO BE DIRECTED TO THE REMOTE PRINTERS  
\*-- THAT ARE LOCATED IN CSPD (I.E., REMOTE13), THE SYSTEM OUTPUT --\*  
SHOULD BE LIMITED TO A MAXIMUM OF 125,000 PRINT LINES FOR PRODUCTION JOBS AND 15,000 PRINT LINES FOR TEST JOBS.



## 205 CARD READING

CARD READING IS A SLOW MODE OF ENTERING DATA AND SHOULD BE SERIOUSLY CONSIDERED BEFORE PLACING THE SYSTEM INTO PRODUCTION. WHERE POSSIBLE READ THE CARDS IN A SEPARATE JOB OR USE OFF-LINE EQUIPMENT (E.G., MOHAWK).

## 206 CARD PUNCHING

CARD PUNCHING CAUSES JOB PROCESSING TO BE REDUCED TO THE SPEED OF THE CARD PUNCH. WHERE POSSIBLE PUNCH CARDS AS A SEPARATE JOB OR USE OFF-LINE EQUIPMENT (E.G., MOHAWK).

## 207 CONSOLE TYPEWRITER

THE CONSOLE TYPEWRITER SHALL NOT BE ADDRESSED BY AN APPLICATION PROGRAM.

## 208 SORT/MERGE

- A JCL SORTS OR MERGES ARE PERMITTED WHEN NO MODIFICATIONS ARE REQUIRED. NO USER EXIT ROUTINES ARE ALLOWED.
- B COBOL SORTS OR MERGES ARE REQUIRED FOR ALL MODIFIED PROGRAMS.

## 209 SYSTEM CONTROLS

- A AS TECHNICALLY FEASIBLE, A SYSTEM DESIGN SHOULD INTERNALLY IDENTIFY THOSE PROCESSING SITUATIONS LEADING TO INVALID CONDITIONS.
- B INVALID CONDITIONS SHOULD RESULT IN ONE OR MORE OF THE FOLLOWING ACTIONS AS APPROPRIATE:
  - 1. TERMINATION OF FURTHER SYSTEM PROCESSING.
  - 2. LOGGING A DESCRIPTION OF THE SITUATION TO A SYSTEM CONTROL LOG AND OUTPUT REPORT, IF APPLICABLE.
  - 3. INITIATE REQUEST FOR RESEARCH LIST FOR THE CONDITION.
  - 4. AUTOMATIC SELECTION OF AN ALTERNATE LOGIC PATH.
  - 5. INITIATION OF A STEP OR CHECKPOINT RESTART.
- C DEVELOP A DOCUMENTED AUDIT TRAIL IDENTIFYING ABNORMAL SITUATIONS.

06/30/83

AMEND. 1

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## 210 OPERATIONAL RELEASE REQUIREMENTS

THE FOLLOWING REPRESENT A LIST OF ITEMS REQUIRED FOR NORMAL RELEASE OF A COMPUTER SYSTEM TO A PRODUCTION STATUS:

- A ASCS-733, RELEASE INSTRUCTIONS FOR COMPUTER SYSTEM.
- B OPERATIONS MANUAL (PARAGRAPH 169 AND EXHIBIT 13).
- C USER MANUAL (PARAGRAPH 164).
- D COMMAND LANGUAGE (JCL) PROVISIONS (SUBSTITUTION JCL).
- E INSTRUCTIONS ON DATA FILE RETENTION AND OFF-SITE OR SECURITY STORAGE REQUIREMENTS.
- F INSTRUCTIONS ON ESTABLISHING CATALOG ENTRIES (INDEX).
- G FOR IDMS SYSTEMS, INSTRUCTIONS REGARDING TRANSFER OF DATA DICTIONARY ITEMS TO A PRODUCTION DICTIONARY, AND INSTRUCTIONS REGARDING INCLUSION OF APPLICATION SOFTWARE AND DATA FILES IN A PRODUCTION "DC", MUST BE PROVIDED TO AND COORDINATED WITH DSPD.
- H SYSTEMS DIVISIONS WILL ENSURE THAT CHANGES IN ONE SYSTEM WILL NOT IMPACT OPERATION OR FUNCTION OF RELATED SYSTEMS. THIS WILL BE A SPECIFIC ENTRY IN THE SYSTEM SPECIFICATION COVERING THE CHANGED SYSTEM.

## EXAMPLE:

REMOVAL OF DETAIL RECORDS FROM SYSTEM A WILL BE SPECIFIED IN THE SYSTEM SPECIFICATION. ADDITIONALLY, THE IMPACT ON SYSTEM B WILL BE STATED IN THE SYSTEM SPECIFICATION TO ENSURE THAT SYSTEM B WILL CONTINUE TO FUNCTION AS REQUIRED.

- I THE GENERAL PROVISIONS OF PARAGRAPH 259, VERSION CONTROL, WILL BE APPLIED TO CONTROL OF IBM SYSTEMS.
- J SYSTEMS DOCUMENTATION WILL BE DELIVERED TO APD PRIOR TO PRODUCTION IMPLEMENTATION OF THE SYSTEM.



(CONTINUED FROM PAGE 201)

211 ASCS RULES FOR ROUNDING AND DIVISION

A ROUNDING.

CARRY ALL COMPUTATIONS ONE DECIMAL PLACE BEYOND THE REQUIRED NUMBER OF PLACES. IF THE LAST DIGIT IS 4 OR LESS, THE DIGIT SHALL BE DROPPED. IF THE LAST DIGIT IS 5 OR MORE, THE RESULT SHALL BE INCREASED BY ONE.

B DIVISION.

IN SOME INSTANCES, A MATHEMATICAL DIVISION WILL BE SUCH THAT THE SUM WILL NOT EQUAL THE CORRECT TOTAL DUE TO ROUNDING OF FRACTIONS. IN SUCH CASES, AN ITEM MAY BE ARBITRARILY ADJUSTED SO THAT THE SUM OF THE INDIVIDUAL ITEMS WILL EQUAL THE PROPER TOTAL.



## 212 APPLICATION PROGRAMMING STANDARDS

- \*-- A UNLESS SPECIFICALLY IDENTIFIED OTHERWISE ON THE KC-208 --\*  
THE PROGRAMMING LANGUAGE WILL BE COBOL. NO LANGUAGE  
EXTENSIONS ARE TO BE UTILIZED EXCEPT WHEN APPROVED  
BY A WAIVER FROM DEPUTY DIRECTOR, SYSTEMS DEVELOPMENT.
- B PROGRAMMING AIDS ARE THE UTILITY PROGRAMS WHICH ARE  
PROVIDED BY SOFTWARE AND HARDWARE MANUFACTURERS. THE  
KCCC IBM USER'S HANDBOOK LISTS THOSE PROVIDED BY KCCC.  
DSPD PROVIDES UTILITY AND CALLED MODULES WHICH ARE  
DESCRIBED IN TECHNICAL INFORMATION ADVISORIES (TIA'S).
- C THE STANDARD REGION SIZE FOR A BATCH PROGRAM/MODULE  
IS UP TO 80K. THIS MAY BE EXPANDED TO 112K AT THE  
DISCRETION OF THE APPLICATION PROGRAMMING SUPERVISOR.  
PROGRAM/MODULES REQUIRING MORE THAN 112K MUST BE  
APPROVED PRIOR TO DEVELOPMENT BY A WAIVER FROM THE  
DEPUTY DIRECTOR, SYSTEMS DEVELOPMENT.
- D THE STANDARD REGION SIZE FOR AN ON-LINE PROGRAM/MODULE  
IS UP TO 20K. THIS MAY BE EXPANDED UP TO 30K AT THE  
DISCRETION OF THE APPLICATION PROGRAMMING SUPERVISOR.  
PROGRAM/MODULES REQUIRING MORE THAN 30K MUST BE  
APPROVED PRIOR TO DEVELOPMENT BY A WAIVER FROM THE  
DEPUTY DIRECTOR, SYSTEMS DEVELOPMENT.
- E THE EQUIPMENT CONFIGURATION REQUIRED FOR PROGRAMS  
WILL BE SPECIFIED IN THE PROGRAM SPECIFICATIONS DOCUMENT  
REFERENCE KCCC IBM USER'S HANDBOOK CHAPTER 3 FOR AVAILABLE  
EQUIPMENT.
- F ALL PROGRAMS AND TEST DATA WILL BE THOROUGHLY DESK  
CHECKED PRIOR TO SUBMITTING FOR MACHINE TESTING.
- G THE PROGRAMMER IS RESPONSIBLE FOR ASSISTING IN THE  
ASSEMBLY AND PREPARATION OF THE MANUAL, THE OPERATIONS  
MANUAL AND THE TEST ANALYSIS REPORT AS TESTING PROGRESSES.
- H NO PROGRAM CHANGES WILL BE INITIATED BY A PROGRAMMER  
\*-- OR ANALYST UNLESS DOCUMENTED ON A KC-208. --\*



## I TEST DATA.

1. TEST DATA WILL BE CREATED IN ACCORDANCE WITH PROGRAM SPECIFICATIONS REQUIREMENTS DOCUMENT.
2. TEST DATA WILL BE RETAINED AND UPDATED FOR THE LIFE OF THE PROGRAM.
3. PRODUCTION DATA FILES (OR COPIES) SHALL NOT BE USED FOR PROGRAM TESTING.

\*-- J ALL PROGRAMS WILL BE COMPILED AND LINKED TO A TEST LOAD LIBRARY (REFERENCE EXHIBIT 22) PRIOR TO ACCEPTANCE RELEASE TO DSPD OR PRODUCTION RELEASE TO CSPD. PROGRAMS WILL BE EXECUTED FROM THE TEST LIBRARY OR TEMPORARY DATA SET WHILE IN A DEVELOPMENT STATUS. PRODUCTION VERSION LIBRARIES MAY BE ACCESSED IN A READ-ONLY MODE (DISP=SHR). PARAGRAPH 238 DESCRIBES LOAD DATA SET ATTRIBUTES. ---\*

K NORMAL JOB CLASS CODES AVAILABLE ARE SHOWN IN THE NCC-KC IBM USER'S HANDBOOK.

L PRIORITY AND DISCOUNT JOBS ARE CONTROLLED BY ASSIGNMENT OF PRIORITY CODES IN THE JOB CARD. PROGRAMMERS MAY USE PRTY=11 ONLY. PROGRAMMING BRANCH CHIEFS MAY AUTHORIZE PRTY=12. ANY TEST JOB THAT REQUIRES A PRTY=13 MUST BE COORDINATED WITH AND APPROVED BY CSPD TO AVOID CONFLICT WITH PRODUCTION JOBS.

M GUIDELINES FOR JCL PREPARATION ARE OUTLINED IN THE NCC-KC IBM USER'S HANDBOOK. KCMO REQUIREMENTS ARE OUTLINED IN EXHIBITS 33 AND 34.

N PROGRAMMERS WILL LOAD THEIR SOURCE PROGRAM(S) TO A TEST  
\*-- LIBRARIAN OR PDS SOURCE LIBRARY PRECEEDING THE FIRST  
COMPILE (REFERENCE EXHIBIT 22), AND JUST PRIOR TO  
PRODUCTION RELEASE TO CSPD. ---\*

O ALL FLOW OR LOGIC CHARTS INCORPORATED IN PUBLISHED  
\*-- DOCUMENTS WILL BE DRAWN ON ASCS-764 (OR ON AUTOMATED  
CHARTS) USING APPROVED SYMBOLS. SEE FIPS PUB 24. ---\*

P PROGRAMMERS MAY REQUEST TECHNICAL ASSISTANCE ON DIFFICULT DEBUGGING PROBLEMS FROM DSPD. SHOULD THE PROBLEM REQUIRE NCC-KC INVOLVEMENT, DSPD WILL PREPARE AN INFO/SYS ENTRY AND FORWARD THE DOCUMENTATION TO NCC-KC.



## 213 TEST STANDARDS

- A USE OF PRODUCTION DATA FILES. PRODUCTION DATA FILES SHALL NOT BE USED IN ANY PHASE OF TESTING. EXTRACTED DATA MAY BE USED ONLY IF APPROVED BY THE PROGRAMMING SUPERVISOR. TEST DATA SET FILE NAMES MUST BE CHOSEN SO AS TO AVOID IMPEDING PRODUCTION OPERATIONS.
- B TEST RESOURCES. THE APPLICATION PROGRAMMING SUPERVISOR IS RESPONSIBLE FOR DETERMINING THE RESOURCES (HARDWARE, SOFTWARE, ETC.) REQUIRED FOR TESTING SUPPORT AND COORDINATING WITH HARDWARE AND SOFTWARE SUPPORT GROUPS.
- C TEST LOG. A TEST LOG WILL BE MAINTAINED FOR ALL LEVELS OF TESTING. THE INDIVIDUAL CONDUCTING THE TEST WILL MAINTAIN THE TEST LOG, FORM KC-1697.
- D TEST FOLDER. THE INDIVIDUAL RESPONSIBLE FOR THE TEST WILL INITIATE AND MAINTAIN THE TEST FOLDER. EACH SUCCESSFUL TEST THAT SUPPORTS A REQUIREMENT OF THE TEST PLAN MUST BE RETAINED. THE TEST FOLDER SHALL CONTAIN AS A MINIMUM THE FOLLOWING:
  - 1. TEST LOG, KC-1697.
  - 2. TEST RESULTS (REPORTS, INPUT, OUTPUT, JCL, ETC.) FOR EACH LATEST SUCCESSFUL TEST.
  - 3. SOURCE PROGRAM LISTING.
  - 4. SUPPORT SOFTWARE UTILIZED FOR TEST DATA GENERATION.
- E TEST PLAN REQUIREMENT. THE TEST PLAN WILL CONTAIN DETAILED SPECIFICATIONS FOR THE TESTING OF THE APPLICATION SOFTWARE. PARAGRAPH 159 DEFINES A TEST PLAN.
- F TEST ANALYSIS REPORT. THE TEST ANALYSIS REPORT PRESENTS THE DEMONSTRATED CAPABILITIES OF THE APPLICATION SOFTWARE FOR REVIEW AND PROVIDES A BASIS FOR JUSTIFYING SYSTEM IMPLEMENTATION. PARAGRAPH 160 DEFINES A TEST ANALYSIS REPORT.



## 214 DATA DICTIONARY SYSTEM

## A PURPOSE AND APPLICABILITY.

1. THE DATA DICTIONARY PROVIDES A CENTRALIZED RESOURCE FOR EFFECTING STANDARDS IN THE AREAS OF SPECIFYING, NAMING, DOCUMENTING AND MANAGING VARIOUS LEVELS OF DATA ENTITIES.
2. THE DATA STANDARDIZATIONS AND CONTROLS PROVIDED FOR SYSTEM DEVELOPMENT BY THE DATA DICTIONARY ARE REQUIRED FOR ALL PERMANENT DATA FILE DEVELOPMENTS WITHIN THE KCMO.

## B FUNCTIONAL OVERVIEW.

1. FILE DEVELOPMENT IN THE DESIGN PHASE. THE INITIAL CONTACT WITH THE DATA DICTIONARY IS ESTABLISHED DURING THE DEVELOPMENT OF DATA SPECIFICATIONS FOR AN APPLICATION SYSTEM.
2. TOTAL SYSTEM DATA MANAGEMENT AND ANALYSIS. THE DATA DICTIONARY PROVIDES IMPORTANT CONTRIBUTIONS IN THE FOLLOWING AREAS:
  - A. REDUCTION OF UNNECESSARY FILE IMPLEMENTATIONS.
  - B. A WORKING-LEVEL VEHICLE FOR STANDARDIZATION AND CENTRALIZATION OF CERTAIN DESIGN ANALYSIS AND DOCUMENTATION EFFORTS.
3. PROGRAMMING ASSISTANCE. THE DATA DICTIONARY IS AVAILABLE IN THE RECORD FORMATS AND LANGUAGE STYLES REQUIRED AND CAN BE DIRECTLY ACCESSED DURING THE THE COMPILATION AND TESTING ACTIVITIES OF PROGRAM DEVELOPMENT.

## C TECHNICAL OVERVIEW.

1. THE DATA DICTIONARY SYSTEM CONSISTS OF DATA ELEMENTS RELATING TO PUBLISHED DATA SPECIFICATION DOCUMENTS PERTAINING TO APPLICATION SYSTEM REDESIGN AND CONVERSION EFFORTS. ADDITIONAL DATA COLLECTION AND INFORMATION INPUTTING OCCURS DURING THE DESIGN PHASE OF ANY NEW OR MODIFIED APPLICATION SYSTEMS. DSPD WILL APPROVE AND ENTER DATA ELEMENTS AS NEEDED BY APPLICATION SECTIONS.



2. PRIOR TO ENTRY OF NEW DATA ELEMENTS TO THE DATA DICTIONARY SYSTEM, THE KCMO DICTIONARY SHOULD BE REVIEWED FOR PREVIOUS ENTRY OF THE DESIRED ELEMENT OR AN EXISTING ELEMENT. THE DATA ELEMENT SUMMARY REPORT WILL PROVIDE ASSISTANCE IN DETERMINING IF AN ELEMENT ALREADY EXISTS IN THE DICTIONARY (REPORT 59).
3. DATA ELEMENTS EXISTING IN THE DATA DICTIONARY SYSTEM ARE RETRIEVABLE IN REPORT FORMAT (REPORT 09, 39, 79).

D RESPONSIBILITIES.

1. A REVIEW OF DATA DICTIONARY ENTITIES FOR ACCURACY AND RELEVANCY IS A SHARED RESPONSIBILITY OF ALL USERS. DSPD WILL BE RESPONSIBLE FOR ALL DATA RECORD AND ELEMENT AND SCHEMA ENTITIES ON THE DICTIONARY. OTHER ENTITIES (MAPS, PROGRAMS, MODULES, ETC.) ARE THE DIRECT RESPONSIBILITY OF THE VARIOUS APPLICATION DIVISIONS.
2. APPLICATION ANALYSTS ARE TO WORK WITH DICTIONARY SPECIALISTS TO ENSURE THAT DATA INTEGRITY, DATA INDEPENDENCE, AND DATA OPTIMIZATION ARE ACHIEVED. DICTIONARY SPECIALISTS WILL CONDUCT APPROPRIATE ANALYSIS PRIOR TO UPDATING THE DICTIONARY TO ENSURE THAT DATA REDUNDANCY IS ELIMINATED, THAT DATA IS DEFINED IN SUCH A WAY THAT VARIOUS USERS MAY HAVE DIFFERENT VIEWS OF THE SAME DATA, AND DATA PRODUCTS ARE ACCURATE AND TIMELY IN AVAILABILITY TO USERS.

215 CALCULATION OF CHECK DIGITS

- A STATE AND COUNTY CHECK DIGITS. ALL PROGRAMS WHICH CALCULATE OR VALIDATE STATE AND COUNTY CHECK DIGITS WILL USE THE FORMULA SHOWN IN EXHIBIT 35, PAGES 1 AND 2. THE RESULTING ASCS CHECK DIGIT WILL CONFORM TO FIPS STATE AND COUNTY CODES. THIS FORMULA WILL BE UTILIZED VIA MODULE MME05A WHICH WILL PERFORM THE VERIFICATION. (SEE EXHIBIT 23).
- B IDENTIFYING NUMBER CHECK DIGITS. ALL PROGRAMS WHICH CALCULATE OR VALIDATE IDENTIFYING NUMBER CHECK DIGITS WILL USE THE FORMULA SHOWN IN EXHIBIT 35, PAGE 3. THE RESULT WILL BE THE ACCEPTABLE ASCS CHECK DIGIT. THIS FORMULA WILL BE UTILIZED VIA MODULE MME005 WHICH WILL PERFORM THE VERIFICATION. (SEE EXHIBIT 23).



## 216 SYSTEM SUPPORT STANDARDS

- A SYSTEM SOFTWARE PACKAGES FOR THE KANSAS CITY COMPUTER CENTER ARE THE OPERATING SYSTEM (OS/MVS) WITH JES2. OTHER KCCC PROVIDED SOFTWARE PACKAGES ARE DESCRIBED IN THE KCCC IBM USER'S HANDBOOK, CHAPTER 4.
- B AUTOMATED LIBRARIES THAT ARE AVAILABLE AT THE KANSAS CITY COMPUTER CENTER ARE AS FOLLOWS:
  - 1. COBOL COPY LIBRARY.
  - 2. SOURCE LIBRARIES (LIBRARIAN).
  - 3. TEST LOAD MODULE LIBRARIES.
  - 4. PRODUCTION LOAD MODULE LIBRARIES (PRODLIB).
  - 5. PROCEDURE LIBRARY (PROCLIB).
  - 6. MACRO LIBRARY.
  - 7. CARD IMAGE LIBRARY (CRDIMG).
- C AS OTHER LIBRARIES ARE ESTABLISHED THEY WILL BE COORDINATED BY THE SOFTWARE SUPPORT FUNCTION AND KCCC. REFERENCE EXHIBIT 22.
- D TERMINAL SUPPORT SOFTWARE FOR THIS CENTER CONSISTS OF
  - \*-- 1. TSO AND TSO/ISPF. --\*
  - \* \* \*
  - 2. UCC7/11.
- E ANY OTHER TECHNICAL SUPPORT WILL BE REFERENCED IN THE KCCC IBM USER'S HANDBOOK.



## 217 DISTRICT DIRECTOR DISTRICTS FILE

- A DSPD HAS CREATED AND WILL MAINTAIN A DATA FILE OF COUNTIES BY DISTRICT DIRECTOR DISTRICT (SEE EXHIBIT 23).
- B CSPD WILL UPDATE THE DISTRICT DIRECTOR FILE AS NEEDED AND ON A QUARTERLY BASIS (JAN-APR-JULY-OCT).
- C APPLICATIONS REQUIRING THE DISTRICT DIRECTORS FILE WILL UTILIZE THE FILE MAINTAINED BY FILE MANAGEMENT.
- D DSN=MSP905.U551025I.DATA

## 218 CONGRESSIONAL DISTRICTS FILE

- A DSPD HAS CREATED AND WILL MAINTAIN A DATA FILE OF COUNTIES BY CONGRESSIONAL DISTRICT (SEE EXHIBIT 23).
- B CSPD WILL UPDATE THE CONGRESSIONAL DISTRICTS FILE AS NEEDED AND ON A SEMI-ANNUAL BASIS (JAN & JULY).
- C APPLICATIONS REQUIRING CONGRESSIONAL DISTRICTS WILL UTILIZE THE FILE MAINTAINED BY FILE MANAGEMENT.
- D DSN=MSP905.U551025I.DATA

## 219 STATE AND COUNTY NAME AND ADDRESS FILE

- A ALL STATE CODES (2-DIGIT OR 2-CHARACTER) UTILIZED IN COMPUTER PROGRAMS INTERNAL TO ASCS WILL CONFORM TO THOSE PUBLISHED IN FIPS PUB 5, STATE AND OUTLYING AREAS OF THE UNITED STATES.
- B EXCEPTIONS TO THE ABOVE MUST BE APPROVED BY THE DEPUTY DIRECTOR, SYSTEMS DEVELOPMENT.
- C STATE OR COUNTY CODES WHICH ARE NOT FIPS STANDARD WILL BE INCLUDED IN COMPUTER SYSTEMS ONLY FOR REPORTING TO NON-ASCS CUSTOMERS.
- D DSPD HAS CREATED AND WILL MAINTAIN A STATE AND COUNTY NAME AND ADDRESS FILE FOR STATE AND COUNTY CODES (SEE EXHIBIT 23).

- \*-- E DSN=MSP905.U551025I.DATA - STATE AND COUNTY CODES
- F DSN=MSP905.U551035K.DATA - STATE/COUNTY AND COOP CODES --\*



## 220 VENDOR SOFTWARE PACKAGES

VENDOR SOFTWARE PACKAGES ARE DESCRIBED IN THE NCC-KC IBM USER'S HANDBOOK, CHAPTER 4, AND KCMO AND/OR VENDOR TECHNICAL GUIDES.

## 221 TERMINAL LOGONID AND PASSWORD

- A EACH INDIVIDUAL WHO HAS NEED FOR ACCESS TO THE IBM COMPUTERS VIA A TERMINAL IS ASSIGNED A UNIQUE LOGONID (LID) AND PASSWORD. REQUEST (VIA A SPEED MEMO) ASSIGNMENT OF LID FROM SECURITY OFFICER(S) INDICATING SYSTEM (TSO, IDMS-DC, ETC.). --\*
- B THE STRUCTURE OF THE LID IS PROVIDED IN EXHIBIT 21.
- \*-- C PASSWORDS ARE 6 TO 8 CHARACTERS IN LENGTH AND INITIALLY ARE SET TO 'DFDFDF' WHEN GENERATED BY NCC-KC. THE INDIVIDUAL MUST CHANGE THIS PASSWORD DURING THE FIRST TERMINAL SESSION. NOTIFY SUPERVISOR OF NEW PASSWORD.
- D ANY LID THAT IS TEMPORARILY SUSPENDED DUE TO A SECURITY VIOLATION MUST BE RESTORED BY THE SECURITY OFFICER(S) IN CONJUNCTION WITH NCC-KC.
- E NOTIFY SECURITY OFFICER(S) OF ANY LID NO LONGER REQUIRED (VIA A SPEED MEMO), INDICATING TERMINAL SUBSYSTEM INVOLVED (I.E., TSO, IDMS-DC, UCC7, ETC.). --\*

## 222 PROGRAM LIBRARY MAINTENANCE

- A APPLICATION DIVISIONS WILL IDENTIFY BY NAME, FREQUENCY AND LOCATION, THE TEST LIBRARIES FOR WHICH OPERATIONS IS TO PERFORM BACKUP.
- B CSPD WILL:
  - 1. ESTABLISH A CYCLE FOR MAINTENANCE AND BACKUP OPERATIONS FOR ALL PRODUCTION LIBRARIES.
  - 2. ESTABLISH A CYCLE FOR BACKUP OPERATIONS FOR IDENTIFIED TEST LIBRARIES.



3. REVIEW TLMS/TOSS LISTS TO VERIFY THAT PROPER TAPES HAVE BEEN MOVED TO OFF-SITE OR SECURITY STORAGE.
4. NOTIFY APPLICATIONS PROGRAMMING OF CYCLES ESTABLISHED IN ACCORDANCE WITH SUBPARAGRAPH 2 ABOVE.

#### 223 MISCELLANEOUS FORMS

MISCELLANEOUS FORMS ARE AVAILABLE TO PROVIDE ADDITIONAL INFORMATION, INSTRUCTIONS OR RECORD INFORMATION AS DESIRED.

#### 224 ARCHIVAL AND/OR SECURITY STORAGE

- A PROTECTION OF KEY DATA IS A RESPONSIBILITY OF TOTAL OFFICE MANAGEMENT. TO THAT END FACILITIES HAVE BEEN READIED BY KCCC FOR DATA PROTECTION. REFERENCE KCCC IBM USER'S HANDBOOK CHAPTER 7 FOR SPECIFIC INFORMATION.
- B APPLICATION DESIGN FUNCTION IS RESPONSIBLE FOR IDENTIFYING DATA FILES WHICH REQUIRE OFF-SITE OR SECURITY STORAGE (SEE PARAGRAPH 42).
  1. REVIEW ALL SYSTEMS AND IDENTIFY FILES (PROGRAMS OR DATA) REQUIRING SECURITY STORAGE.
  2. NOTIFY KCMO SECURITY OFFICER BY MEMORANDUM OF IDENTIFIED DATA FILES AND RECOMMENDED STORAGE LOCATION.
  3. REVIEW SYSTEMS ANNUALLY TO DETERMINE CURRENT REQUIREMENTS FOR DATA PROTECTION.
  4. REVIEW SPECIAL PROJECTS TO DETERMINE THE NEED FOR DATA RETENTION IN ARCHIVAL OR OFF-SITE SECURITY STORAGE.



\*-- C CSPD IS RESPONSIBLE FOR MONITORING DATA IN EITHER --\*  
OFF-SITE OR SECURITY STORAGE.

1. RECEIVE MEMORANDUM IDENTIFYING FILES TO BE MAINTAINED  
IN OFF-SITE OR SECURITY STORAGE.

\*-- 2. PREPARE REQUEST TO NCC-KC IDENTIFYING FILES TO BE PLACED --\*  
IN TLMS/TOSS, INDICATING CYCLES OR DAYS.

3. REVIEW TLMS/TOSS LISTINGS TO VERIFY PROPER CYCLING OF  
FILES TO OFF-SITE OR SECURITY STORAGE.

#### 225 MICROMATION

\*-- THE NCC-KC CUSTOMER HANDBOOK, CHAPTER 11, DESCRIBES IN DETAIL --\*  
INFORMATION NECESSARY TO CREATE MICROFICHE OF DATA FILES.  
ALSO REFERENCE HANDBOOK 16-ADM, MICROFICHE OPERATIONS.

#### 226 COMMAND LANGUAGE (JCL) RESPONSIBILITIES

A ACCEPTANCE TEST JCL IS DEVELOPED BY MAKING CHANGES  
TO PROGRAMMER JCL WHICH ADAPT IT TO THE ACCEPTANCE  
ENVIRONMENT.

B CHANGES TO PRODUCTION JCL MAY OCCUR AS FOLLOWS:

\*-- 1. CSPD MAY MODIFY JCL TO CONFORM TO NCC-KC REQUIREMENTS --\*  
OR CONTAINING ENTRIES WHICH DO NOT APPLY TO  
ACCEPTANCE TEST JCL (I.E., /\*COMMENT CARDS).

\*-- 2. CSPD MAY MODIFY JCL TO REMEDY TEMPORARY PRODUCTION --\*  
PROBLEMS ENCOUNTERED. THE JCL MUST BE RETURNED TO THE  
ORIGINAL STATE AFTER THE PROBLEM IS RESOLVED.

\*-- 3. CSPD MAY MODIFY JCL TO INSTITUTE UNIFORMITY IN --\*  
SEQUENCE OR LOCATION OF PARAMETER DATA.

\*-- 4. CSPD MAY MODIFY JCL TO PROCESS MORE EFFICIENTLY  
UNDER THE CA7/11 SCHEDULING SYSTEM. --\*

\*-- C PERMANENT CHANGES MADE BY CSPD WILL BE DOCUMENTED --\*  
BY PROVIDING THE SYSTEMS DESIGN DIVISION WITH  
A COPY OF THE MODIFIED JCL.

D ALL KCMO PROGRAMS WRITTEN IN COBOL LANGUAGE WILL UTILIZE  
\*-- NCC-KC UTILITY PROGRAM "COBABEND" AND PRODUCE A DUMP WHEN  
AN ABNORMAL TERMINATION OCCURS. REFERENCE NCC-KC CUSTOMER  
HANDBOOK, SECTION 5, CHAPTER 5.1. --\*



- E STANDARD KCMO USER COMPLETION CODES AND RELATED DISPLAY MESSAGES ARE ASSIGNED AS FOLLOWS:

| CODE | MESSAGE AND DEFINITION |
|------|------------------------|
|------|------------------------|

|      |                                                                                                                                   |
|------|-----------------------------------------------------------------------------------------------------------------------------------|
| 0101 | MISSING PARM &PARM FOR PROGRAM MPPPPP<br>(A PARAMETER &PARM WAS EXPECTED FOR PROGRAM MPPPPP BUT WAS NOT PRESENT IN THE JOB CARD). |
|------|-----------------------------------------------------------------------------------------------------------------------------------|

|      |                                       |
|------|---------------------------------------|
| 0202 | INVALID PARM &PARM FOR PROGRAM MPPPPP |
|------|---------------------------------------|

\*-- (THE PARAMETER &PARM CONTAINS DATA BUT THE PROGRAM --\*  
CONSIDERS IT INVALID FOR PROCESSING TO CONTINUE).

227 DATA BASE DEVELOPMENT GUIDELINES

- A DETERMINATION IS MADE AS TO THE FEASIBILITY OF THE APPLICATION BEING IN THE DATA BASE ENVIRONMENT.
- B DATA ELEMENTS (USING STANDARD ABBREVIATIONS), RECORDS AND ALL PERTINENT INFORMATION ARE ENTERED INTO THE IDD. PRIMARY DATA ELEMENTS ARE NOT PREFIXED. RECORDS AND THEIR SUBORDINATE STRUCTURE MAY BE PREFIXED.
- C DETERMINE IF EXISTING DATA BASE DATA CAN BE UTILIZED OR IF INTERFACE TO EXISTING DATA BASE(S) IS REQUIRED.
- D GATHER REQUIRED INFORMATION TO PERFORM A NORMALIZATION PROCESS TO DETERMINE LOGICAL DATA BASE DESIGN.
- E DEVELOP PHYSICAL DATA BASE STRUCTURE.
- F PROVIDE THE KCCC WITH PERTINENT DATA BASE INFORMATION INCLUDING SPACE REQUIREMENTS AND IDMS-DC USAGE. REFERENCE KCCC IBM USER'S HANDBOOK, PART 10.



- G INCORPORATE PERTINENT INFORMATION IN THE IDMS-DC.
- H DATA BASE STRUCTURE IS TESTED AND RESULTS ARE DOCUMENTED.
- I DEVELOP DATA BASE SPECIFICATION DOCUMENT (EXHIBIT 12).
- J PERFORM REQUIRED DATA BASE OPTIMIZATION SUBSEQUENT TO TESTING.
- K DEVELOP RECOVERY/RESTART, LOAD/UNLOAD, BACKUP/RESTORE PROCEDURES.
- L FINALIZE SECURITY CONSIDERATIONS IN DATA BASE STRUCTURE AND IDMS-DC.
- M AFTER SUCCESSFUL ACCEPTANCE TESTING THE DATA BASE, IDD INFORMATION AND IDMS-DC INFORMATION ARE MOVED TO PRODUCTION VERSION DICTIONARIES/DC SYSTEM.

228 COMMON DATA MANAGEMENT ROUTINES

DSPD HAS DEVELOPED AND WILL MAINTAIN COMMON USE DATA MANAGEMENT ROUTINES FOR KCMO. REFERENCE EXHIBIT 23 FOR COMMON ROUTINES CURRENTLY AVAILABLE AND FOR INSTRUCTIONS ON USE.

\*-- 229 HANDLING CADE AND S/36 TAPES IN THE NCC-KC

CADE DATA IS NORMALLY TRANSMITTED ELECTRONICALLY TO THE IBM MAINFRAME. WHEN TRANSMISSION LINES ARE NOT OPERATING, USE THE FOLLOWING TAPE PROCEDURE.

- A CADE AND S/36 TAPES WILL BE RETURNED BY NCC-KC IMMEDIATELY AFTER THEY ARE USED SUCCESSFULLY IN ANY JOB. WHEN CADE AND S/36 TAPES ARE DISMOUNTED, THEY WILL BE PLACED IN THE KCMO BIN FOR RETURN TO CSPD.
- B ANY RUNS WHICH WILL REQUIRE REPETITIVE USE OF CADE AND S/36 TAPE INPUT, OR WANT BACKUP CAPABILITY, MUST COPY THE DATA TO A PERMANENT FILE.
- C IF PREVIOUSLY USED CADE AND S/36 TAPES NEED TO BE RETURNED TO THE COMPUTER CENTER FOR REUSE, NOTIFY THE PRODUCTION CONTROL BRANCH OF CSPD. --\*



## 230 PROCESSING PRIORITIES

JOBS SUBMITTED ON IBM COMPUTERS CAN HAVE A PRIORITY ASSIGNED TO THEM FOR EXECUTION (PRTY=NN). ALL JOBS SHALL BE SUBMITTED WITH THE LOWEST POSSIBLE PRIORITY. SEE EXHIBIT 4.

- \*-- A NORMAL PRIORITY JOBS (PRTY=11) ACCRUE A DISCOUNT WHEN THE KCCC STANDARD TURNAROUND TIME IS EXCEEDED.
- B INTERMEDIATE PRIORITY JOBS (PRTY=12) INCUR A SURCHARGE OF 100 PERCENT. SUPERVISORY APPROVAL IS REQUIRED TO PROCESS A JOB WITH THIS PRIORITY.
- C HIGH PRIORITY JOBS (PRTY=13) INCUR A SURCHARGE OF 200 PERCENT. APPROVAL TO PROCESS WITH THIS PRIORITY MUST BE FROM THE DIVISION CHIEF IN CONSULTATION WITH CSPD.
- D OVERNIGHT (PRTY=2) WILL BE PROCESSED AFTER 5 PM WITH OPERATORS RELEASING THE JOBS. --\*



## 231 HARDWARE CONFIGURATION AND PROCESSING OPTIONS

THE FOLLOWING INFORMATION IS PROVIDED TO DESCRIBE THE CURRENT NCC-KC HARDWARE CONFIGURATIONS AND PROCESSING OPTIONS WHICH WILL ENHANCE PROCESSING OF KCMO JOBS.

- A EACH STEP IN A PRODUCTION JOBSTREAM SHOULD HAVE A SYSUDUMP DD STATEMENT TO PROVIDE FOR A FORMATTED DUMP IN THE EVENT OF A PROGRAM ABEND. THIS WOULD BE CODED AS FOLLOWS:

```
//STEP1 EXEC PGM=MXXXXX
//SYSUDUMP DD SYSOUT=*
```

FOR JOB STEPS PROCESSING A SORT, ALSO INCLUDE ONE OF THE FOLLOWING STATEMENTS IN THE STEP JCL TO PRINT SORT AND "DISPLAY" MESSAGES IF THE SORT ABENDS.

```
//SYSPRINT DD SYSOUT=* (JCL SORTS)
//SYSOUT DD SYSOUT=* (COBOL SORTS)
```

- B SHARED DISK DRIVES (DASD) IS ACCESSIBLE TO ALL NCC-KC COMPUTERS. NO SPECIAL JCL IS REQUIRED.

1 PERMANENT SPACE IS ALLOCATED BY THE UNIT=STORE PARAMETER.

2 TEMPORARY SPACE IS ALLOCATED BY THE UNIT=SYSDA PARAMETER.

- C THE JOBPARM CONTROL STATEMENT SHOULD NOT BE USED TO SPECIFY A CPU.

## 232 ADDRESSING REMOTE JOB ENTRY (RJE) STATIONS

OUTPUT MAY BE ROUTED TO ANY RJE STATION IN KCMO THROUGH USE OF THE /\*ROUTE CARD. THE FORMAT AND STATION NUMBERS ARE AS FOLLOWS:

|                         |                                        |
|-------------------------|----------------------------------------|
| /*ROUTE PRINT RMT01     | (CADE IN CSPD)                         |
| /*ROUTE PRINT RMT13     | (HARRIS 1660 IN CSPD)                  |
| /*ROUTE PRINT RMT24     | (ASCS/WDC)                             |
| /*ROUTE PRINT RMT51     | 1ST NATIONAL BANK OF DETROIT           |
| /*ROUTE PRINT RMT52     | 1ST NATIONAL BANK OF DETROIT           |
| /*ROUTE PRINT RMT53     | 1ST NATIONAL BANK OF DETROIT           |
| /*ROUTE PRINT RMT54     | 1ST NATIONAL BANK OF DETROIT           |
| /*ROUTE PRINT RMT40     | SCOAP S/36                             |
| /*ROUTE PRINT RMT41     | SCOAP S/36                             |
| *-- /*ROUTE PRINT RMT74 | PERSONNEL DIVISION (VTAM PRINTERS) --* |
| /*ROUTE PRINT RMT75     | PERSONNEL DIVISION (VTAM PRINTERS)     |
| /*ROUTE PRINT U31       | ZEROX 4090 LASER PAGE PRINTER          |
| /*ROUTE PRINT KCMO      | ZEROX 4090 LASER PAGE PRINTER          |



\*-- THE MAXIMUM LINE LIMIT FOR TEST JOBS PRINTED ON THE HARRIS 1000 LPM (LINES PER MINUTE) REMOTE PRINTER IS 15,000 LINES. JOBS OF MORE THAN 15,000 LINES SHOULD BE ROUTED ONLINE TO PRINT.--\*

233 PROCEDURE LIBRARY AND MEMBER NAMES

- A MSP907.PROCEDUR.CNTL WILL CONTAIN ALL IBM PROCEDURES (PROC'S), REFERENCE EXHIBIT 22.
- B NEW PROCEDURES WILL BE NAMED WITH AN 'MM' PREFIX.
- C EXISTING PROCEDURES WILL BE RENAMED TO CONTAIN THE 'MM' PREFIX AS THEY ARE MODIFIED.

\*-- 234 KCMO TSO TERMINAL PROCEDURES

THE KCMO AUTOMATED JCL PROCEDURE (#LINK) PREVIOUSLY ON INTERACT IS NOW AVAILABLE FOR USE ON TSO. TO USE THE TSO PROCEDURE, THE USER MUST DO THE FOLLOWING:

A. ONE-TIME ONLY

ON TSO, ALLOCATE A FILE CALLED 'XXXXXX.LINK.CNTL', WHERE XXXXXX IS YOUR LOGON I. D. SEE MDS570.LINK.CNTL FOR DATA SET CHARACTERISTICS TO USE.

B. EACH USE OF #LINK

ENTER 'UM' AT THE MAIN ISPF MENU AS THE SELECTION. THIS WILL GENERATE THE KCMO FUNCTIONS MENU, WHEREIN YOU CAN SELECT OPTION 01 (#LINK).

THE #LINK PROCESS WILL BUILD AND SAVE JCL FILES BASED UPON YOUR PROMPT RESPONSES. ALL SAVED FILES WILL RESIDE ON XXXXXX.LINK.CNTL (SEE ITEM A, ABOVE). --\*



235 (RESERVED)

236 CADE DATA ENTRY AND VALIDATION

REFER TO PARAGRAPHS 260 AND 261, PART 7, FOR PROCEDURES RELATING TO CADE. THESE PROVISIONS ALSO APPLY TO IBM SYSTEMS.

\*-- 237 XEROX 4090 LASER PRINTER

CSPD HAS INSTALLED A XEROX 4090 LASER PRINTER THAT INTERFACES WITH THE IBM MAINFRAME. THE XEROX 4090 HAS THE CAPABILITY OF PRINTING IN EITHER SIMPLEX (ONE-SIDE) OR DUPLEX (BOTH FRONT AND BACK) MODES.

THE VALUES "HLMC" SHOULD BE ENTERED AS PART OF THE FORMS PARAMETER TO PRINT THE OUTPUT AS DESIRED. THE REPLACEMENT VALUES ARE:

H - PAPER TYPE: 0 (ZERO) = 11W X 8.5L, NO HOLED PAPER.  
1 = 11W X 8.5L, PRE-DRILLED 3 HOLE PAPER, HOLES ON TOP OF PAGE. (DEFAULT)  
2 = 8.5W X 11L, NO HOLED PAPER.  
3 = 8.5W X 11L, PRE-DRILLED 3 HOLE PAPER, HOLES ON THE LEFT SIDE OF PAGE.

L - LINED PAPER: 0 (ZERO) = NO LINES. (DEFAULT)  
1 = LINED PAPER.

M - PRINT MODE: S = SINGLE SIDE PRINT. (DEFAULT)  
D = DOUBLE SIDE PRINT.

C - NUMBER OF COPIES: 1 THRU 9 (DEFAULT IS 1)

TO INCREASE PRINTER OPERATION EFFICIENCY, THE FORMS PARAMETER SHOULD BE EXPLICITLY SPECIFIED. THIS WILL SUPPLY THE PROPER SETUP INFORMATION TO THE XEROX 4090 OPERATOR.

SOME METHODS TO SPECIFY THE FORMS PARAMETER ARE:

```
// DD STATEMENT SYSOUT=(*, ,HLMC)
/*JOBPARM FORMS=HLMC
// OUTPUT STATEMENT FORMS=HLMC
```

IN ORDER TO EFFECT PRINTING ON THE XEROX 4090 YOU MUST DIRECT THE REPORT TO PRINTER ID U31 OR KCMO.

SOME METHODS TO SPECIFY THE PRINTER ID ARE:

```
/*ROUTE PRINT KCMO OR /*ROUTE PRINT U31
// OUTPUT STATEMENT DEST=KCMO OR // OUTPUT STATEMENT DEST=U31
// DD STATEMENT DEST=KCMO OR // DD STATEMENT DEST=U31
```

IF YOU REVIEW THE OUTPUT IN MSGCLASS=R VIA ISPF OPTION D.J, AND YOU WANT TO PRINT THE OUTPUT, CHANGE THE DESTINATION (DEST) TO 'U31' OR 'KCMO'.

THE DEFAULT NUMBER OF LINES PER PAGE IS 63 WHEN PRINTING ON 8.5W X 11L (6 LINES PER INCH, 90 CHARACTERS PER LINE), AND 65 WHEN PRINTING ON 11W X 8.5L (8 LINES PER INCH, 132 CHARACTERS PER LINE). IF THERE ARE NO CARRIAGE CONTROL CHARACTERS IN THE SYSOUT THIS DEFAULT MAY BE OVERRIDDEN BY USING THE LINECT PARAMETER ON EITHER THE JOBPARM STATEMENT (TO OVERRIDE FOR ALL SYSOUT), OR THE OUTPUT STATEMENT (TO OVERRIDE FOR SYSOUT FROM A PARTICULAR DDNAME).

TO OBTAIN PRINTED OUTPUT ON THE XEROX 4090 FROM PRINT IMAGE FILES CREATED ON THE HONEYWELL MAINFRAME, COMPLETE FORM KC-126 AND SEND TO CSPD (NOTE ITEM 8 (GREY BAR) IS NOT AN AVAILABLE OPTION).

THE FOLLOWING EXAMPLES SHOW THE RECOMMENDED JCL TO UTILIZE THE XEROX 4090 LASER PRINTER.

EXAMPLE 1.

DDNAME1 WILL BE PRINTED ON THE XEROX 4090 PRINTER.  
DDNAME2 (AND ALL OTHER SYSOUT=\* PRINT OUTPUT) WILL BE DIRECTED TO THE MAINFRAME PAGE PRINTER DEVICE (LOCAL).

```
//JOBNAME JOB (XXXXXXXXXXXXX,XXXX,X),'XXX-XXXXXXX',.....,
// MSGCLASS=A
//*ROUTE PRINT LOCAL
//STEPNAME EXEC PGM=.....
//DDNAME1 DD SYSOUT=(*,,HLMC),DEST=U31
//DDNAME2 DD SYSOUT=*
```

## EXAMPLE 2.

DDNAME1 WILL BE PRINTED ON THE XEROX 4090 PRINTER (SEE OUTPUT CONTROL STATEMENT).  
DDNAME2 (AND ALL OTHER SYSOUT=\* PRINT OUTPUT) WILL BE DIRECTED TO THE MAINFRAME PAGE PRINTER DEVICE (LOCAL).

```
//JOBNAME JOB (XXXXXXXXXXXX,XXXX,X), 'XXX-XXXXXXX',
// MSGCLASS=A
//*ROUTE PRINT LOCAL
//NAME1 OUTPUT FORMS=HLMC,DEST=KCMO
//STEPNAME EXEC PGM=.....
//DDNAME1 DD SYSOUT=*,OUTPUT=(*.NAME1)
//DDNAME2 DD SYSOUT=*
```

## EXAMPLE 3.

ALL PRINT OUTPUT WILL BE DIRECTED TO THE XEROX 4090 PRINTER.  
DDNAME1 WILL BE PRINTED ON THE XEROX 4090 PRINTER USING THE FORMS SPECIFICATION ON THE OUTPUT CONTROL STATEMENT.  
DDNAME2 (AND ALL OTHER SYSOUT=\* PRINT OUTPUT) BE PRINTED USING THE DEFAULT FORMS VALUES (SEE DEFAULTS ABOVE.)

```
//JOBNAME JOB (XXXXXXXXXXXX,XXXX,X), 'XXX-XXXXXXX',
// MSGCLASS=A
//*ROUTE PRINT U31
//NAME1 OUTPUT FORMS=HLMC
//STEPNAME EXEC PGM=.....
//DDNAME1 DD SYSOUT=*,OUTPUT=(*.NAME1)
//DDNAME2 DD SYSOUT=*
```

## EXAMPLE 4.

ALL PRINT OUTPUT WILL BE DIRECTED TO THE XEROX 4090 PRINTER USING THE FORMS SPECIFICATION FROM THE JOBPARM STATEMENT.

```
//JOBNAME JOB (XXXXXXXXXXXX,XXXX,X), 'XXX-XXXXXXX',
// MSGCLASS=A
//*JOBPARM FORMS=HLMC
//*ROUTE PRINT U31
//STEPNAME EXEC PGM=.....
//DDNAME1 DD SYSOUT=*
//DDNAME2 DD SYSOUT=* --*
```

## 238 DATA SET ORGANIZATION CHARACTERISTICS

STANDARD ATTRIBUTES HAVE BEEN ESTABLISHED FOR DATA SETS WITH DESCRIPTIVE QUALIFIERS OF "CNTL", "LOAD", AND "LIBRN".

## A CNTL DATA SET ATTRIBUTES (EXCEPT "CRDIMG" AND "IDMS"):

DSORG = PO  
RECFM = FB  
LRECL = 80  
BLKSZ = 3120

## B LOAD DATA SET ATTRIBUTES:

DSORG = PO  
RECFM = U  
LRECL = 3072  
BLKSZ = 3072

## C LIBRN DATA SET ATTRIBUTES:

DSORG = DA  
RECFM = F  
LRECL = 0  
BLKSZ = (LIBRARIAN ALLOCATES BASED ON  
DEVICE TYPE (I.E., 3350=4628, 3380=9440))

## D DB2 DBRM LIBRARY DATA SET ATTRIBUTES:

DSORG = PO  
RECFM = FB  
LRECL = 80  
BLKSZ = 4000

## E CRDIMG DATA SET ATTRIBUTES:

DSORG = PO  
RECFM = FB  
LRECL = 80  
BLKSZ = 80

\*-- 239 (WITHDRAWN, AMEND. 11) --\*

\*-- 240 (WITHDRAWN, AMEND. 6) --\*

## \*-- 241 DASD MANAGEMENT DFHSM/ASM2

DASD MANAGEMENT IS A SHARED OPERATION BETWEEN NCC-KC AND THEIR CUSTOMERS. THE FUNCTIONS PERFORMED BY EACH IS OUTLINED IN THE FOLLOWING SUBPARAGRAPHS.

## A DFHSM

1. DASD DATASETS THAT HAVE NOT BEEN ACCESSED IN 9 DAYS ARE MIGRATED TO LEVEL 1 COMPRESSED DASD DATASETS WITH A RETENTION OF 36 DAYS. WHEN A REQUEST IS ISSUED FOR THE DATASET IT IS RELOADED IN UNCOMPRESSED FORMAT TO DASD.
2. DATASETS THAT HAVE NOT BEEN ACCESSED IN THE 36 DAY PERIOD ARE MIGRATED TO LEVEL 2 TAPE DATASETS WITH A RETENTION OF 365 DAYS. WHEN A REQUEST IS ISSUED FOR THE DATASET THE OPERATOR RECEIVES A MOUNT MESSAGE FOR THE ARCHIVE TAPE AND THE DATASET IS RELOADED TO DASD.

## B ASM2

1. NCC-KC PERFORMS WEEKLY AND MONTHLY BACKUPS OF ALL DASD VOLUMES. THE WEEKLY BACKUP TAPES ARE RETAINED FOR 35 DAYS; THE MONTHLY BACKUP TAPES ARE RETAINED FOR 124 DAYS.
2. NCC-KC PROVIDES CUSTOMERS WITH LISTS OF DASD DATASETS EACH WEEK. THIS LIST IS PROVIDED IN THE FOLLOWING CATEGORIES:

DATASETS BY FIRST THREE DIGITS OF LOGONID  
DATASETS BY DASD VOLUME  
DATASETS INCORRECTLY CATALOGED  
EMPTY DATASETS  
UNUSED DATASETS

DSPD MAINTAINS A COMPLETE LIST AND DISTRIBUTES APPROPRIATE PARTS TO USER DIVISIONS/STAFFS.

3. KCMO PERFORMS WEEKLY, MONTHLY AND ON REQUEST BACKUPS OF IDENTIFIED LIBRARIES AND FILES. THESE BACKUP TAPES ARE RETAINED FOR 400 DAYS. SYSTEMS DIVISIONS MAY REQUEST CSPD TO ADD LIBRARIES FOR FILES TO THIS BACKUP PROCESS VIA KC-287. --\*

## \*-- 242 OPTICAL SCANNING

KCMO NO LONGER UTILIZES OPTICAL SCANNING. --\*

## 243 REQUESTING MICROFICHE OUTPUT

STANDARD PRINT FILES MAY BE PRODUCED ON MICROFICHE RATHER THAN HARD COPY AT THE USER REQUEST. THE FOLLOWING PROCEDURE OUTLINES THE STEPS NECESSARY TO ENSURE PRODUCTION OF MICROFICHE.

## A. APD RESPONSIBILITIES

1. NOTIFY SYSTEMS DIVISIONS OF REPORT(S) REQUESTED ON MICROFICHE.
2. ASSIST SYSTEMS DIVISION IN IDENTIFYING MICROFICHE HEADER, INDEXING REQUIREMENT AND NUMBER OF COPIES.
3. REVIEW TEST MICROFICHE TO ENSURE USER REQUIREMENTS ARE MET.

## B. SYSTEMS DIVISION RESPONSIBILITIES

1. RECEIVE NOTIFICATION FROM APD OF MICROFICHE REQUIREMENT.
2. UPDATE SYSTEMS CHARTS TO REFLECT MICROFICHE OUTPUT.
3. PRINT TWO TO THREE PAGES FROM A TEST PRINT TAPE AND ANNOTATE MICROFICHE HEADER AND INDEXING REQUIREMENTS. THE TAPE MAY BE AT 1600BPI OR 6250BPI (NO 3480 CARTRIDGE TAPES).

- \*-- 4. PREPARE AND FORWARD KC-287 TO CSPD, INDICATING TEST TAPE REEL NUMBER AND DENSITY. ATTACH UPDATED SYSTEM CHARTS, ANNOTATED PRINTOUT AND FORM ASCS-XXX FOR USE IN DEVELOPING MICROFICHE HEADERS, INDEXES AND SETUPS. --\*

5. REVIEW TEST MICROFICHE TO ENSURE USER REQUIREMENTS ARE MET.

## \*-- C. CSPD RESPONSIBILITIES --\*

- \*-- 1. RECEIVE KC-287 FROM SYSTEMS DIVISION. PROCESS THROUGH --\*  
NORMAL LOGGING PROCESS.

- \*-- 2. REQUEST TEST TAPE FROM NCC-KC TAPE LIBRARY. --\*

- \*-- 3. SEND TEST TAPE, ANNOTATED PRINTOUTS AND FORM ASCS-XXX TO CONTRACTOR FOR PREPARATION OF MICROFICHE. --\*

4. RECEIVE TEST MICROFICHE FROM CONTRACTOR. REVIEW MICROFICHE TO ENSURE USER REQUIREMENTS ARE MET. FORWARD TO APD FOR REVIEW AND APPROVAL.

5. ADVISE CONTRACTOR WHEN MICROFICHE IS ACCEPTABLE AND PRODUCTION WILL BE STARTED.

## \*-- 244 APPLICATION SYSTEM

## A LOGON PROCEDURE

ASCS USERS MUST LOGON TO TS014 IN ORDER TO USE APPLICATION SYSTEM (AS).

SAMPLE LOGON: TS014 UIDXXX

(NOTE THAT "UIDXXX" REPRESENTS AN INDIVIDUALS TSO USERID.)

## B NAMING STANDARDS

THE FOLLOWING IS THE STANDARD FOR NAMING DATA SETS DEVELOPED TO RUN UNDER AS. THIS STANDARD INCORPORATES NAMING CONVENTIONS UTILIZED BY AS. THE FORMAT OF THE DATA SET NAME IS AS FOLLOWS:

AABBBCCCCDEEEEEEEEEEE, WHERE:

|            |                                                      |     |                        |
|------------|------------------------------------------------------|-----|------------------------|
| AA         | = SYSTEM CODE (REFERENCE 3-ADM)                      |     |                        |
| BBB        | = AS FILE TYPE                                       |     |                        |
| COM        | COMPOSE (LONG DOCUMENT)                              | DRA | GRAPH OR MAP           |
| EDI        | VALIDATING DATA                                      | GRA | GRAPH                  |
| IMA        | IMAGE SCREEN                                         | FIL | DATA FILE              |
| MEM        | SHORT DOCUMENT                                       | MOD | FINANCIAL PLANNING MOD |
| PRO        | PROCEDURE                                            | REP | REPORT OR FORM         |
| TAB        | TABULATING DATA                                      | UPD | UPDATING DATA          |
| ENV        | ENVIRONMENT                                          | QUE | QUERY (SQE)            |
| NET        | NETWORK (PROJECT MANAGMENT)                          |     |                        |
| C          | = SUBSYSTEM IDENTIFIER (0-9, A-Z EXCEPT FOR I AND O) |     |                        |
| DDDD       | = SEQUENTIAL MODULE ID (NUMERIC)                     |     |                        |
| EEEEEEEEEE | = DESCRIPTION (OPTIONAL) --*                         |     |                        |

## \*-- 245 DATA SET NAMING FOR DB2 SYSTEMS

THE FOLLOWING IS THE STANDARD FOR NAMING DATA SETS DEVELOPED TO RUN UNDER DB2. THIS STANDARD INCORPORATES SOME SOFTWARE REQUIREMENTS OF DB2 SINCE THERE ARE SIX LEVELS OF QUALIFICATION. IT ALSO RECOGNIZES THE REQUIREMENTS OF VSAM CATALOGING. THE FORMAT OF THE DATA SET NAME IS AS FOLLOWS:

## A. VSAM CATALOG ENTRIES:

HLQ.LIT1.DATABASE NAME.TABLE SPACE NAME.LIT2.PARTITION, WHERE:

HLQ = MF0950 (ONLY CURRENT VALID QUALIFIER)

LIT1 = DSNDBX, WHERE X MAY BE "C" OR "D":

(C = VSAM CLUSTER)

(D = DATA FILE)

DATABASE NAME = UP TO 8 CHARACTER NAME, WHERE THE LEAST SIGNIFICANT DIGIT IS UTILIZED TO IDENTIFY THE TYPE

T = TEST DATA BASE

A = ACCEPTANCE TEST DATA BASE

P = PRODUCTION DATA BASE

INDEX OR TABLE SPACE NAME = ACTUAL DATA SET NAME IN FORMAT ABBBBBC,

WHERE:

AA = 2 CHARACTER SYSTEM CODE (REFERENCE 3=ADM)

BBBBB = NUMERIC FILE NAME

C = FILE TYPE

I - INDEX

S - TABLE SPACE

LIT2 = I0001

PARTITION = ANNN

NNN IS A NUMBER INDICATING DATA SET NUMBER FOR NON-PARTITIONED TABLE SPACES OR PARTITION NUMBER (000-999).

## EXAMPLES:

MF0950.DSNDBC.CADNASSP.MN00001I.I0001.A001 (VSAM CLUSTER ENTRY FOR INDEX SPACE)

MF0950.DSNDBD.CADNASSP.MN00001I.I0001.A001 (DATA FILE ENTRY FOR INDEX SPACE)

MF0950.DSNDBD.CADNASSP.MN00001S.I0001.A001 (DATA FILE ENTRY FOR TABLE SPACE)

MF0950.DSNDBC.CADNASSP.MN00001S.I0001.A001 (DATA FILE ENTRY FOR TABLE SPACE) --\*

## \*-- B. DB2 TABLE FILE NAMING:

WHEN DB2 DATA FILES (RECORD DESCRIPTORS) ARE DEFINED THEY ARE TO BE NAMED IN THE FORMAT:

HLQ.AABBBBBBC, WHERE:

HLQ = LOGONID OF PROGRAMMER OR ASSIGNED HLQ  
FOR DIVISION  
(E.G., MDS903, MFS903, MDS596, ETC)  
AA = ASSIGNED SYSTEM CODE  
BBBBB = FILE NAME  
C = TYPE CODE, WHERE:  
I = INDEX  
T = TABLE --\*

## 246 KCMO AUTOMATED JCL PROCEDURE ON TSO (UM)

THE FOLLOWING IDMS DATA DICTIONARIES ARE SUPPORTED BY JCL GENERATED BY THIS FACILITY: KCMO TEST, ACCEPTANCE TEST AND PRODUCTION; GIMS TEST AND PRODUCTION; SCOAP; AND APLUS TEST. THE FOLLOWING CAPABILITIES ARE PRESENTLY OPERATIONAL THROUGH THIS JCL GENERATOR.

- COBOL COMPILES
- MAPPING
- PDS MAINTENANCE
- IDD REPORTS
- LIBRARIAN
- IDMS REPORTS
- TRAPS(TAPE/PRINT)
- IDD MODULE UPDATES
- PUBLICATIONS

THE JCL WHICH IS GENERATED BY THIS FACILITY IS THE ONLY JCL WHICH WILL BE CERTIFIED BY DSPD AS CORRECT. ANY PRODUCT CHANGES MADE BY NCC-KC WHICH EFFECT JCL GENERATED BY THIS FACILITY WILL BE APPLIED ON A TIMELY BASIS BY DSPD, WHO WILL DISTRIBUTE NOTIFICATION TO ALL KCMO STAFF.

PRESENTLY, THE ONLY OTHER RECOGNIZED JCL GENERATOR IS THE ARTHUR ANDERSEN PROGRAMMER'S WORKBENCH FACILITY BEING USED FOR DEVELOPMENT OF THE PCIMS. ARTHUR ANDERSEN CONSULTANTS RESPONSIBLE FOR THIS WORKBENCH WILL INSURE THAT JCL GENERATED BY THIS FACILITY WILL MIRROR THE EQUIVALENT JCL GENERATED BY KCMO'S JCL GENERATOR.

ANY DESIRED ENHANCEMENTS OR ADDITIONS TO THE OPTIONS AVAILABLE THROUGH TSO/ISPF OPTION "UM" SHOULD BE DIRECTED TO DSPD.

\*-- 247-249 (RESERVED) --\*

## PART 7 - HONEYWELL IMPLEMENTATION STANDARDS

## 250 SYSTEM IDENTIFICATION CODE STRUCTURES

\*-- UNIFORM HIS DPS-90 IDENTIFICATION CODES ARE STRUCTURED AS --\*  
FOLLOWS:

A IDENTIFICATION CODE ASSIGNMENT. APPLICATION DIVISIONS WILL INITIATE A MEMO TRANSMITTING FORM KC-121 (EXHIBIT 4, PAGE 1) TO ESTABLISH ACCOUNTING CODE ENTRIES FOR NEW OR REVISED PROGRAM ACTIVITY. THE MEMO WILL BE INITIATED FOR PROGRAM IDENTIFICATION AS WELL AS JCL PROCEDURE NAME. THIS SHOULD BE SENT TO THE BUDGET STAFF FOR IMPLEMENTATION BEFORE THE FIRST SUBMISSION OF A UNIT TEST, ACCEPTANCE TEST OR PRODUCTION JOB. (SEE EXHIBIT 4).

B SNUMB CONTROL CARD. (NOT REQUIRED FOR TSS INITIATED JOB)

|     |       |    |    |       |
|-----|-------|----|----|-------|
| CC1 | 8-12  | 16 | 17 | 18-20 |
| \$  | SNUMB | M  | A  | BBB   |

WHERE: CARD COLUMNS 1, 8-12 AND 16 ARE CONSTANT AS SHOWN.

CC17 (A) - IDENTIFIES THE APPROPRIATE DIVISION OR FUNCTION (SEE EXHIBIT 4).

CC18-20 (BBB) - IS A SEQUENTIAL JOB NUMBER ASSIGNED BY THE SUBMITTING DIVISION OR FUNCTION. NUMBER SHOULD BE USED SEQUENTIALLY STARTING WITH 001 AND CONTINUING THROUGH 999. AT THIS POINT, START OVER AT 001.

C IDENT CONTROL CARD

THE STRUCTURE OF THE IDENT CARD FOR KCMO OPERATIONS IS DEFINED IN TWO FORMATS. REFER TO EXHIBIT 4 FOR CODING CONTENT.

(1) PRODUCTION  
\$ IDENT 05 MF AA BB CCCC,DDDD,EE-LLLLLLLLLL,FFF,GGG,HHH

(2) TEST  
\$ IDENT 05 MF AA BB CCCC,DDDD-EE,FFF-GGG,HHH WHERE:

AA = KCMO DIVISION OR FUNCTION (SEE EXHIBIT 4)  
BB = SYSTEM CROSSWALK CODE (SEE EXHIBIT 4)  
CCCC = SYSTEM DESIGNATION (SEE EXHIBIT 4)  
DDDD = DIVISION DESIGNATION (SEE EXHIBIT 4)  
EE = FUNCTION CODE (SEE EXHIBIT 4)  
FFF = EMPLOYEE NUMBER  
GGG = EMPLOYEE INITIALS  
HHH = ADDITIONAL INFORMATION

\*-- LLLLLLLLLL = JOB NUMBER AS ASSIGNED BY CSPD (MMDDYYRJJ) --\*

\*-- CC29 (DDDD) - IDENTIFIES THE KCMO DIVISION FOR DIS- --\*  
 TRIBUTION INFORMATION ON BANNER PAGES.  
 (SEE EXHIBIT 4).

FIELD EE - IDENTIFIES THE FUNCTION OF THE JOB BEING  
 PROCESSED. (SEE EXHIBIT 4).

FIELD FFF - IDENTIFIES EMPLOYEE SUBMITTING JOB BY  
 ASSIGNED EMPLOYEE NUMBER.

FIELD GGG - IDENTIFIES EMPLOYEE SUBMITTING JOB BY  
 EMPLOYEE LAST NAME.

FIELD HHH - ANY ADDITIONAL INFORMATION NOT EXCEEDING  
 CC72.

\*-- NOTE: DEVELOPMENT AND PRODUCTION JOBS DIFFER IN FORMAT  
 STARTING IN CC29. LISTED BELOW ARE SAMPLE (1)  
 DEVELOPMENT AND (2) PRODUCTION IDENT CARDS SHOW-  
 ING CC29 THROUGH THE END OF THE VARIABLE FIELDS.

CC29

\*

(1) DDDD-EE, FFF-GGG, HHH  
 (E.G.: DSPD-AT, 105-ISHMAEL, MMI53)

(2) DDDD, EE-MMDDYYRJJ, FFF, GGG, HHH  
 (E.G.: SCDP, PR-013083103, 323, KOLASSA, MGF03) --\*

#### D MODULE/PROGRAM NAME.

DUE TO THE CONFIGURATION OF THE HIS SOFTWARE, THE MAX-  
 IMUM SIZE OF A MODULE/PROGRAM NAME IS FIVE CHARACTERS.  
 KCCC HAS MANDATED THAT AN "M" BE PREFIXED, WHICH LEAVES  
 KCMO FOUR CHARACTERS TO IDENTIFY A SYSTEM/SUBSYSTEM,  
 FUNCTION/SUBSYSTEM, AND PROGRAM.

KCMO PROCEDURES (3-ADM) REFLECT THE ASSIGNMENT OF SYSTEM  
 SUBSYSTEM CODES. THE FUNCTION/SUBSYSTEM AND PROGRAM  
 CODES ARE ASSIGNED BY THE RESPONSIBLE DIVISION. FORMAT  
 IS AS FOLLOWS:

|       |                                        |
|-------|----------------------------------------|
| MAABC |                                        |
|       | PROGRAM, 0-9 AND A-Z (EXCEPT I & O)    |
|       | FUNCTION/SUBSYSTEM, A-Z (EXCEPT I & O) |
|       | SYSTEM/SUBSYSTEM, FROM 3-ADM           |
|       | CONSTANT "M"                           |

THE ABOVE FORMAT WILL BE USED WHEREVER REQUIRED.

## E JCL PROCEDURE NAME

JCL PROCEDURE NAMES WILL NOT BE THE SAME AS A PROGRAM NAME EVEN IF ONLY ONE PROGRAM IS BEING EXECUTED. THE FORMAT BELOW IS TO BE USED IN NAMING A JCL PROCEDURE:

MAABC

0-9

0-9

3-ADM CODE

CONSTANT "M"

NOTE: SINCE ONLY ONE IDENT CONTROL CARD IS REQUIRED FOR JOB (WITH MULTIPLE ACTIVITIES), THE JCL PROCEDURE NAME, EXCLUDING THE "M", CAN BE USED IN THE IDENT CONTROL CARD. THE NAME CAN ALSO BE USED ON OPERATION CHARTS IN OPERATION MANUALS TO DEFINE JOBS WITHIN SYSTEM OR SUBSYSTEM. THE JCL PROCEDURE NAMES WILL NORMALLY BE ESTABLISHED BEFORE A SYSTEM GOES THROUGH ACCEPTANCE TESTING INTO PRODUCTION.

## F TAPE FILES.

THE TAPENAME FOR TAPE FILES IS 12 CHARACTERS IN LENGTH. THE FIRST CHARACTER IS A CONSTANT "M" TO IDENTIFY THE FILE TO KCMO. THE NEXT 10 CHARACTERS DESIGNATE THE FILE NAME (MUST BE 10 CHARACTERS, NO BLANKS ARE TO BE USED). THE TWELFTH CHARACTER IS AN ALPHA CHARACTER AND IDENTIFIES THE RETENTION OF THE FILE. RETENTION CODES ARE AS FOLLOWS:

|     | DAY RETENTION                   |           |
|-----|---------------------------------|-----------|
| A = | 4                               |           |
| B = | 7                               | " "       |
| C = | 14                              | " "       |
| D = | 21                              | " "       |
| E = | 28                              | " "       |
| F = | 35                              | " "       |
| G = | 45                              | " "       |
| H = | 60                              | " "       |
| I = | 90                              | " "       |
| J = | 120                             | " "       |
| K = | 180                             | " "       |
| L = | 400                             | " "       |
| Z = | OFF-SITE STORAGE (SEE KCCC HUH) | (MAXIMUM) |



AN EXAMPLE:

```
MFBAAR1
|||||_ FIRST REPORT LISTING
 _ FILE NAME
 _ DESIGNATES KCMO FILE
```

MFBAAR2 - SECOND REPORT LISTING  
MFBAAR3 - THIRD REPORT LISTING

- 2 REPORT ID SHOULD APPEAR ONLY IN THE HEADER OF INTERNAL KCMO REPORTS OR REPORTS TO COUNTY OFFICES. THOSE REPORTS PREPARED FOR USERS OUTSIDE KCMO SHOULD CONTAIN THE REPORT I.D. ONLY WHEN AUTHORIZED BY THE USER.

NOTE: THE FILE NAME IS TO BE STRUCTURED FROM THE MODULE NAME THAT PRODUCES/PROCESSES THE FILE. IN THE EXAMPLES ABOVE (SUBPARAGRAPHS G, H AND I), THE MODULE NAME IS MFBAA.

## 251 RETENTION PROCEDURES AND FACILITIES

DATA MAY BE RETAINED ON THE HIS 66/80 IN EITHER OF TWO FORMS;  
DISK OR TAPE.

A MAGNETIC TAPE.

- 1 TAPES CREATED BY TEST OR PRODUCTION JOBS ARE RETAINED BY THE CODE IN THE 12TH POSITION OF THE TAPENAME. KCCC HAS DEFINED ACCEPTABLE RETENTION PERIODS. (SEE KCCC HUH, PARAGRAPH 8.3).
- 2 EXTENSIONS OF TAPES ARE EFFECTED BY AN APPROPRIATE ENTRY TO THE KCCC TAPE MANAGEMENT SYSTEM. (SEE KCCC HUH, PARAGRAPH 8.6).
- 3 EXTENSION OF TAPES SHOULD NOT BE MADE AS A MATTER OF ROUTINE BUT SHOULD BE DICTATED BY ACTUAL NEED.
- 4 THE CREATING DIVISION IS RESPONSIBLE FOR EFFECTING ANY TAPE EXTENSION.

## B DISK.

- 1 DATA FILES CREATED ON DISK ARE RETAINED ON THE FREQUENCY OF ACCESS (SUBCATALOGED), OR TYPE OF FILE (QUICK ACCESS). USERS ARE RESPONSIBLE FOR ANY EXTENDED RETENTION OF SUCH FILES.

\*-- 2 NCC-KC ELIMINATES FMS (FILE MANAGEMENT SYSTEM) --\*  
DISK DATA FILES AS FOLLOWS:

A SUBCATALOGED DISK DATA FILES WHICH HAVE NOT BEEN  
ACCESSED IN 45 DAYS ARE MIGRATED TO TAPE. (SEE  
\*-- NCC-KC HUH, PARAGRAPH 8.11). --\*

B QUICK ACCESS DISK DATA FILES WHICH HAVE NOT BEEN  
\*-- ACCESSED IN 14 DAYS ARE PURGED. (SEE NCC-KC HUH, --\*  
PARAGRAPH 8.11).

C CONTINGENCY RETENTION.

\*-- 1 CSPD PROVIDES CONTINGENCY RETENTION OF PRODUCTION DISK --\*  
DATA FILES BY PROCESSING WEEKLY UMC SAVES. THIS IS  
EXECUTION OF A UTILITY PROGRAM WHICH WRITES A COPY OF  
DISK DATA FILES TO MAGNETIC TAPES. INDIVIDUAL DATA  
FILES MAY BE RELOADED FROM THE MAGNETIC TAPE TO DISK.

\*-- 2 NCC-KC PROVIDES CONTINGENCY RETENTION OF DISK DATA FILES --\*  
BY PROCESSING "SINCE SAVES" AND "FULL SAVES". (SEE  
\*-- NCC-KC HUH, PARAGRAPH 8.10). --\*

3 MAGNETIC TAPE FILES MAY BE TRANSFERRED TO USER IDEN-  
TIFIED OFF-SITE STORAGE LOCATIONS. THIS IS ACCOMPLISHED  
\*-- IN CONJUNCTION WITH NCC-KC AND THE USER. (SEE NCC-KC HUH --\*  
PARAGRAPH 8.7).

## 252 PARM INFORMATION OR CUTOFF DATE

THE USER MUST PROVIDE PARAMETER INFORMATION TO THE APPLICABLE PROGRAMS AS PARM INFORMATION IS NOT AVAILABLE ON THE HIS 66/80 AS USED ON THE IBM. IT IS RECOMMENDED THAT THE USER CREATE A SINGLE PARM FILE TO CONTAIN ALL PARM DATA TO BE ACCESSED WITH A PROGRAM ACCESS IDENTIFICATION FOR EACH RECORD.

## A PARM FILE NAMING.

PARAMETER INFORMATION REQUIRED BY COBOL PROGRAMS IN A SYSTEM WILL BE ENTERED TO A PARM FILE. PARM FILES WILL BE UTIL/MSSSPARM FILES NAMED AS FOLLOWS:

MSSSPARM, WHERE

||| ||| PARM IS THE FILE NAME.  
 ||| ||| SS IS A HIS SYSTEM/SUBSYSTEM CODE (SEE 3-ADM).  
 ||| ||| M IS A CONSTANT FILE PREFIX ASSIGNED TO KCMO.

EXAMPLES: MFBPARAM IS THE PARAMETER FILE FOR PEANUT  
 ALLOTMENTS AND SALES

MGFPARM IS THE PARAMETER FILE FOR FGWCR  
 DEFICIENCY PAYMENTS

## B PARM FILE CONTENT.

EACH SYSTEM PARAMETER RECORD WILL NORMALLY BE STRUCTURED AS FOLLOWS, USING A COMMA (,) AS A SEPARATOR CHARACTER:

1 \_\_\_\_\_ (CARD COLUMNS) \_\_\_\_\_ 80  
 MSSBBC,MMDDYYRJJ,PARM 2,PARM N \_\_\_\_\_

WHERE: M IS A CONSTANT FILE PREFIX ASSIGNED TO KCMO.  
 SS IS THE HIS SYSTEM/SUBSYSTEM CODE (SEE 3-ADM).  
 BB IS THE PROGRAM/MODULE NAME (SEE EXHIBIT 4).  
 C IS A CODE TO DENOTE ADDITIONAL PARAMETER  
 INFORMATION FOR A JOB.

MMDDYYRJJ IS THE JOB NUMBER USED TO CONTROL THE JOB.  
 PARM 2 IS THE SECOND PARAMETER REQUIRED BY THIS PROGRAM.  
 PARM N IS THE LAST PARAMETER REQUIRED BY THIS PROGRAM.

THE TOTAL PARAMETER FILE REQUIRED FOR A SYSTEM CONSISTING OF 5 PROGRAMS COULD BE AS FOLLOWS:

MFBPARAM

MFBAA0,091578001,DAILY  
MFBAB0,091578001  
MFBAC0,091578001,1,1978  
MFBAD0,091578001,1978,FINAL  
MFBAE0,091578001,3,3000001,1978,FG,FINAL

(NOTE: WHEN MORE PARAMETERS THAN CAN BE CONTAINED IN ONE 80-CHARACTER ENTRY ARE REQUIRED, THE NUMERIC ZERO FOLLOWING PROGRAM NAME IS INCREMENTED TO 1, THEN 2, ETC., UP TO 9 IN EACH SUBSEQUENT PARM FILE ENTRY FOR THE SUBJECT PROGRAM, E.G., MFBAE0, MFBAE1, ETC.).

C TEST USAGE.

PARAMETER FILE INFORMATION WILL BE ENTERED TO THE PARM FILE BY APPLICATION DIVISION PERSONNEL DURING UNIT AND INTEGRATION TESTING. THE ACCEPTANCE TEST TEAM WILL ENTER PARAMETER INFORMATION DURING ACCEPTANCE TESTING.

D PRODUCTION USAGE.

\*-- COMPUTER SYSTEMS PRODUCTION MANAGEMENT DIVISION PERSONNEL --\*  
WILL ENTER PARAMETER INFORMATION TO THE PARM FILE, FOR ALL PRODUCTION SYSTEMS. A UTL2 WITH AN SDUMP OPTION WILL BE INCLUDED IN EACH PRODUCTION JOB TO PROVIDE A HISTORICAL RECORD OF THE PARM FILE CONTENTS FOR EACH PROCESS.

E PARM FILE MAINTENANCE.

- 1 TEST PARAMETER FILES SHOULD BE PURGED BY THE APPLICABLE APPLICATION DIVISION WHEN THE SYSTEM IS PLACED INTO PRODUCTION.
- 2 PARAMETER DESCRIPTIONS SHOULD BE INCLUDED AS AN EXHIBIT IN THE OPERATIONS MANUAL. (SEE EXHIBIT 13, PAGE 3).

## F PARM FILE ACCESS.

MMEPM IS A COMMON ROUTINE THAT HAS BEEN DEVELOPED TO ACCESS A PARM FILE. IT HAS BEEN LOADED UNDER UMC MUTIL1 AS /MEOBJ/MELIB. THE CALLING PROGRAM WILL CALL MMEPM FOR A SPECIFIC PARAMETER RECORD AND THE ROUTINE WILL RETRIEVE THE RECORD. REFERENCE EXHIBIT 27.

## G STANDARD COBOL ABORT CODES.

- 1 TO PROVIDE EASIER RECOGNITION OF CAUSES FOR USER ABORTS, PROGRAMMERS SHOULD SELECT A STANDARDIZED CODE/MESSAGE TO INCLUDE IN THEIR PROGRAMS AS APPLICABLE.
- 2 THE SELECTED STANDARDIZED USER ABORT MESSAGE SHOULD BE THE SUBJECT OF A COBOL DISPLAY VERB THEN FOLLOWED BY CALL TO THE CABORT ROUTINE USING THE CORRESPONDING STANDARDIZED USER ABORT CODE. APPLICATION PROGRAMS IN OTHER LANGUAGES SHOULD FOLLOW A CORRESPONDING APPROACH IF POSSIBLE.
- 3 EXHIBIT 27, PAGE 2 IS AN INITIAL ASSIGNMENT OF STANDARDIZED USER ABORT CODES AND MESSAGES AND ARE RELATED TO PARM FILE ACCESSING. ADDITIONS WILL BE MADE AS DEEMED NECESSARY.

## H FORTRAN PARM FILES.

PARAMETER DATA REQUIRED BY FORTRAN PROGRAMS MUST BE CREATED VIA TSS AS SEPARATE FILES AND READ BY THE PROGRAM. ONLY PARAMETER DATA NEED BE INCLUDED ON THE FILE.

## 253 PRINTER FORMS

- A FORM 1411-1 GREEN BAR WILL BE MAINTAINED AS THE STANDARD SYSOUT FORM AT THE NCC-KC'S PRINTERS.
- B ALL OTHER PAPER IS CONSIDERED SPECIAL FORMS, WHICH (I.E., USING CONVER) IS SPECIFIED IN THE \$ FORM CARD. ADDITIONALLY, WHEN VERTICAL FORMS MOVEMENT AND/OR PRINT DENSITY IS NOT THE SAME AS THE STANDARD FOR THE 1411 FORM, A VFC NUMBER IS SPECIFIED IN THE \$ PRINT CARD.
- C NEW VFC NUMBERS MAY BE REQUESTED BY FORWARDING TO DSPD TWO COPIES OF A COMPLETED KCCC-36. AN ACTUAL SAMPLE (NOT REPRODUCED) OF THE FORM IS HELPFUL THOUGH NOT USUALLY A REQUIREMENT.
- D EXHIBIT 28 CONTAINS A LIST OF DESCRIPTIVE ENTRIES FOR THE \$ FORM CARD AND A LIST OF THE CURRENT VFC NUMBERS. ADDITIONAL INFORMATION MAY BE FOUND UNDER VERTICAL FORMAT CONTROL IN THE NCC-KC USER'S HANDBOOK.
- \*- E SYSTEM OUTPUT PRINTING IS LIMITED TO 500,000 LINES PER JOB BY NCC-KC. LARGER PRINT FILES MUST BE PLACED ON MAGNETIC TAPE AND END-OF-REEL MUST BE FORCED SO THAT EACH TAPE CAN BE PRINTED VIA BMC AS A SEPARATE JOB. EACH REEL MUST BEGIN AND END AT A PAGE BREAK. --\*

## 254 CARD READING

THERE ARE PRIMARILY TWO METHODS OF INPUT FOR NON-MAGNETIC MEDIA DATA. BOTH METHODS ARE DESIGNED TO PRODUCE A PERMANENT DISK FILE (PRMFL) WITH GFRC-ASCII CARD IMAGES THAT ARE TSS COMPATIBLE.

- A. EXHIBIT 31 PROVIDES THE NECESSARY JCL CARDS TO SUPPORT BUILDING A TSS GFRC-ASCII PRMFL (HIGH VOLUME INPUT).
- B. LOW VOLUME INPUT IS SUBJECT TO INDIVIDUAL SYSTEM NEEDS AND TSS GUIDELINES.

## 255 HONEYWELL FILE CODES

THE FOLLOWING FILE CODE STANDARDS SHOULD BE ADHERED TO FOR FILES EXCEPT WHERE DESIGNATED FILE CODES ARE MANDATORY (I.E., FORTRAN WHERE NUMERIC FILE CODES ARE REQUIRED).

|     | FC                                                                                                                                                                                                                              | TYPE FILE                                                         | VARIABLE INFO                           |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-----------------------------------------|
| <1> | RX                                                                                                                                                                                                                              | INPUT SEQUENTIAL                                                  | X=1-9 & A-Z                             |
| <1> | WX                                                                                                                                                                                                                              | OUTPUT SEQUENTIAL (TO INCLUDE PRINT FILES)                        | X=1-9 & A-Z                             |
|     | UX                                                                                                                                                                                                                              | INPUT, OUTPUT OR I/O INDEXED, RELATIVE OR DIRECT ACCESS FILES     | X=1-9 & A-Z                             |
|     | XX                                                                                                                                                                                                                              | INDEXES FOR INDEXED FILES                                         | X=1-9 & A-Z                             |
|     | LX                                                                                                                                                                                                                              | INPUT USER LIBRARIES TO BE SEARCHED BY GENERAL LOADER             | X=1-9 & A-Z                             |
|     | CL                                                                                                                                                                                                                              | INITIAL COBOL SORT COLLATION WORK FILE (DEFINED BY ASSIGN CLAUSE) | NONE (DO NOT USE FOR \$:450PK)          |
|     | SL                                                                                                                                                                                                                              | SORT COLLATION FOR \$:450PK                                       |                                         |
| <2> | SN                                                                                                                                                                                                                              | SORT COLLATION WORK FILES                                         | N=1,2,3,4,5,6,7,8,9, , #, @, :, >, ?, / |
| <2> | SX                                                                                                                                                                                                                              | INPUT FILES TO SORT/MERGE                                         | X=A-P                                   |
|     | SZ                                                                                                                                                                                                                              | OUTPUT FILE FROM GMAP SORT/MERGE                                  | NONE                                    |
| <1> | ALSO USE THESE FOR THE INITIAL INPUT/OUTPUT FILES OF A COBOL SORT.                                                                                                                                                              |                                                                   |                                         |
| <2> | THESE FILE CODES DESIGNATE NORMAL INPUT AND/OR COLLATION FILES FOR GMAP SORT/MERGE. FOR COBOL SORT/MERGE, THESE FILE CODES DESIGNATE ADDITIONAL COLLATION FILES AND/OR CONCATENATED INPUT FILES (NOT ASSIGNED BY USER PROGRAM). |                                                                   |                                         |

## 256 USE OF STORAGE DEVICES

## A DISK.

THE UTILIZATION OF DISK STORAGE SHOULD BE SUBJECT TO THE FOLLOWING CONSIDERATIONS:

- 1 FILES REQUIRED BY USER TO BE ON-LINE.
- 2 FILES REQUIRED BY OTHER SYSTEMS TO BE ON-LINE.
- 3 FILES ACCESSED SEVERAL TIMES A WEEK WHERE SIZE CONSTRAINTS ARE NOT A FACTOR (50 MILLION CHARACTERS OR LESS).
- 4 FILES OF A STRUCTURE THAT DISK COULD BE THE ONLY MEANS OF STORAGE.
- 5 TEMPORARY FILES USED ONLY FOR THE DURATION OF A JOB WHERE SIZE IS NOT A FACTOR.
- 6 FILES WHERE THE SPEED OF RECOVERY IS A FACTOR.
- 7 FILES FOR PROGRAM, DATA DEVELOPMENT AND TESTING DURING THE SYSTEM DEVELOPMENT PROCESS. THIS SPACE SHOULD BE RELEASED AS SOON AS PRACTICAL.
- 8 FILES THAT ARE COST EFFECTIVE BASED ON USER NEED, TIMING, SIZE AND FREQUENCY OF ACCESS.

## B TAPE.

TAPE DRIVES FOR EACH ACTIVITY WILL BE LIMITED TO SIX DRIVES. THE USE OF MORE THAN SIX REQUIRES APPROVAL PRIOR TO DEVELOPMENT, BY A WAIVER, FROM THE DEPUTY DIRECTOR, SYSTEMS DEVELOPMENT.

## 257 VENDOR SOFTWARE LANGUAGES AND UTILITY PROGRAMS

- A VENDOR SOFTWARE PACKAGES ARE DESCRIBED IN THE KCCC HONEYWELL USER'S HANDBOOK AND VENDOR TECHNICAL MANUALS. AVAILABLE PACKAGES SUPPORTED BY KCCC ARE AS FOLLOWS:
- 1 COBOL-74. COBOL IS A HIGH LEVEL PROGRAMMING LANGUAGE.
  - 2 FORTRAN. FORTRAN IS A PROGRAMMING LANGUAGE COMMONLY USED IN SCIENTIFIC, ENGINEERING AND BIOMEDICAL APPLICATIONS.
  - 3 GMAP. GMAP IS A TWO-PASS SYMBOLIC LANGUAGE ASSEMBLER IN MACHINE-ORIENTED LANGUAGE. USE IS RESTRICTED.
  - 4 BASIC. BASIC IS A PROBLEM-ORIENTED, ALGEBRAIC PROGRAMMING LANGUAGE. USE IS RESTRICTED.
- B VARIOUS UTILITY PROGRAMS ARE AVAILABLE FROM HONEYWELL AND THE MOST FREQUENTLY USED ARE LISTED BELOW:
- 1 BULK MEDIA CONVERSION (BMC) - BULK MEDIA CONVERSION (CONVER OR BMC) PERFORMS CONVERSION FOR EITHER INPUT OR OUTPUT THAT EXCEEDS LIMITS SET FOR GCOS SYSTEM MEDIA CONVERSION. REFERENCE MANUAL DD11.
  - 2 UTILITY - UTILITY IS A GENERALIZED SYSTEM WHICH CAN COPY COMPARE POSITION AND PRINT FILES. REFERENCE MANUAL DD12.
  - 3 UTL2 - UTL2 IS A UTILITY ROUTINE WHICH PROCESSES RECORDS IN A SEQUENTIAL MANNER. REFERENCE MANUAL DC91.
- C VARIOUS MULTI-PURPOSE SOFTWARE PACKAGES ARE PROVIDED BY KCCC.
- 1 DEAR II - THIS IS A SOFTWARE PACKAGE SIMILAR IN NATURE TO EASYTRIEVE ON IBM SYSTEMS. NOTE: THIS PACKAGE HANDLES ONLY GPRC FILES.
  - 2 SIS/TRS - SELECTIVE INQUIRY SYSTEM IS THE BATCH VERSION WHILE TIMESHARING RETRIEVAL SYSTEM EXECUTES AS A SUB-SYSTEM TO TSS. THESE ARE DATA RETRIEVAL PROGRAMS SIMILAR TO DEAR II. NOTE: THIS PACKAGE HANDLES ONLY GPRC BCD FILES.
  - 3 SCORE - SCORE IS A SHORTHAND FILE MANAGEMENT/UTILITY SYSTEM AND COBOL PROGRAM GENERATOR.

- 4 MSG - MESSAGE GENERATION SYSTEM IS A MESSAGE HANDLER BETWEEN PROGRAMS.
- 5 PAC II - PROJECT MANAGEMENT SYSTEM IS DESIGNED TO ASSIST USERS TO BUDGET, PLAN, ANALYZE, REPORT AND CONTROL ANY TYPE OF PROJECT.
- 6 HUPPI - HONEYWELL UTILITY PRINT PROGRAM (VERSION 1) PROVIDES THE ABILITY TO PRINT FILES IN VARIOUS FORMATS. EXECUTION IS POSSIBLE THROUGH A CRUN DEVELOPED BY KCMO. TO EXECUTE, ENTER THE FOLLOWING AND ANSWER THE QUESTION:  
MAQCSI/CRUN/HUPPI,R
- 7 DPUTIO - THE PURPOSE OF THIS PROGRAM IS TO PRINT REPORT DATA SETS WHOSE RECORD LENGTH IS 133 CHARACTERS BLOCKED 10 WITH IBM 1401 CONTROL CHARACTERS IN THE FIRST POSITION. REFERENCE HUH, PAGE 1807.
- 8 UTPRNT - THE PURPOSE OF THIS PROGRAM IS TO PRINT REPORT DATA SETS WHOSE RECORD LENGTH IS 133 CHARACTERS AND BLOCK SIZE IS 1 TO 10 RECORDS WITH IBM CONTROL CHARACTERS IN THE FIRST POSITIONS. REFERENCE HUH, PAGE 1807.
- 9 SPWNER - THE CENTER HAS AVAILABLE TO USERS THE MODULE SPWNER FOR USE IN SPAWNING JOBS FROM PERMANENT DATA SETS, VIA JCL. REFERENCE HUH, PAGE 603.
- 10 MICSUB - THE EXECUTION OF THIS ACTIVITY RESULTS IN THE SPAWNING OF A ONE-ACTIVITY UTILITY JOB (MICREP). THIS JOB GENERATES PROCESSING AND BILLING REPORTS FOR MICRO-FICHE PROCESSING. REFERENCE HUH, PAGE 2306.

## 258 UMC'S

UMC'S AND THEIR STANDARD SUBCATALOGS FOLLOW THE NAMING CONVENTIONS OUTLINED BELOW:

- A UMC NAMES ARE ASSIGNED BY KCCC IN CONJUNCTION WITH DSPD.
- B STANDARD SUBCATALOG NAMES ARE AS FOLLOWS (WHERE "SS" REPRESENTS THE 3-ADM SYSTEM CODE).
  - 1 DEVELOPMENT UMC.
    - (A) MSSJCL FOR EXECUTION JCL.
    - (B) MSSOBJ FOR PROGRAM OBJECT MODULES (C\* OR H\*).
    - (C) MSSDAT FOR DATA FILES.
    - (D) MSSSRC FOR PROGRAM SOURCE MODULES.
  - 2 PRODUCTION UMC.
    - (A) MSSJCL FOR EXECUTION JCL.
    - (B) MSSOBJ FOR PROGRAM OBJECT MODULES (OBJLIB).
    - (C) MSSDAT FOR DATA FILES.
    - (D) MSSCAT FOR FILGP INDEX FILES.
    - (E) UTIL FOR GENERAL PURPOSE UTILITY PROGRAMS (JCL) AND PARM FILES.
    - (F) C FOR JOB INITIATION CRUN'S.
  - 3 MSOURC UMC.
    - MSSPRD FOR PROGRAM SOURCE MODULES (COBOL OR FORTRAN).

## 259 VERSION CONTROL

- A THE PRIMARY OBJECTIVE OF VERSION CONTROL IS TO MAINTAIN THE INTEGRITY OF ALL SOFTWARE WITH ITS SUPPORTING DOCUMENTATION AND OPERATIONAL PROCEDURE UNTIL SUCH TIME AS CHANGES HAVE BEEN THOROUGHLY TESTED, ACCEPTED, AND APPROVED FOR IMPLEMENTATION.
- B VERSION CONTROL WILL BE ACCOMPLISHED THROUGH THE ESTABLISHMENT OF A SYSTEM OF SOURCE AND OBJECT LIBRARIES. PROVISIONS FOR VERSION CONTROL WILL BEGIN AT THE ACCEPTANCE TEST LEVEL. VERSION CONTROL WILL BE APPLIED TO ALL SOFTWARE.
- C PLACING NEW PROGRAM(S) IN PRODUCTION.
  - 1 APPLICATION DIVISION.
    - A FROM DIVISION TEST/DEVELOPMENTAL UMC, COMPILE PROGRAM(S) TO BE USED IN ACCEPTANCE TESTING.
    - B ANNOTATE CURRENT COMPILATION LISTS AS VERSION USED IN ACCEPTANCE TESTING.
    - \*-- C TRANSMIT OPERATIONS MANUAL AND RUN CHARTS BY KC-287 --\* TO THE RECIPIENTS AS SHOWN IN EXHIBIT 7.
    - \*-- D SEND THE KC-287 TO CSPD FOR EXECUTION. --\*
    - E MAINTAIN RECORD OF PROGRAM VERSION RUNNING IN ACCEPTANCE TEST.
    - F UPDATE REQUIRED DOCUMENTATION TO COVER THOSE CHANGES MADE DURING THE SOFTWARE TESTING.

\*-- 2 COMPUTER SYSTEMS PRODUCTION MANAGEMENT DIVISION. --\*

- \*-- A UPON RECEIPT OF KC-287 FROM APPLICATION DIVISION, MOVE --\*  
JCL, SOURCE AND OBJECT TO ACCEPTANCE TEST UMC, COORDINATING  
MOVES WITH APPLICATION DIVISION.
- \*-- B CSPD MOVES THE MODIFIED JCL TO THE ACCEPTANCE TEST UMC --\*  
AFTER THE APPLICABLE DIVISION REVIEW AND CHANGES TO  
EXHIBIT 34 REQUIREMENTS.
- \*-- C INITIATE ACCEPTANCE TESTING UPON RECEIPT OF KC-287 --\*  
FROM THE APPLICABLE DIVISION.
- D MOVE SOURCE AND OBJECT PROGRAM(S) FROM ACCEPTANCE TEST  
UMC TO THE APPROPRIATE PRODUCTION UMC UPON RECEIPT OF  
\*-- KC-287 FROM THE APPLICABLE DIVISION. --\*
- E PROVIDE A COPY OF THE FINALIZED JCL TO THE SYSTEMS  
DIVISION.
- F MAINTAIN SOURCE LIBRARY.
- G PROVIDE GENERAL READ PERMISSION FOR JCL, SOURCE AND  
OBJECT PROGRAMS.
- H PURGE THE ACCEPTANCE TEST UMC OF THE TEST PROGRAM(S)  
\*-- UPON RECEIPT OF KC-287 FROM ACCEPTANCE TEST TEAM. --\*

3. ACCEPTANCE TEST TEAM.

- \*-- A SUBSEQUENT TO SUCCESSFUL TEST, PREPARE KC-287 TO CSPD --\*  
FOR MOVEMENT OF JCL, SOURCE AND OBJECT PROGRAM(S) TO  
APPROPRIATE PRODUCTION UMC'S FROM ACCEPTANCE TEST UMC.
- B PREPARE APPROVAL MEMORANDUM FOR SIGNATURE BY DEPUTY  
DIRECTOR, SYSTEMS DEVELOPMENT AND DIRECTOR TO PLACE  
THE PROGRAM(S) INTO PRODUCTION.
- \*-- C PROVIDE COPY OF KC-287 TO APPROPRIATE DIVISIONS UPON --\*  
\*-- RECEIPT FROM CSPD. --\*
- \*-- D WHEN DETERMINED APPROPRIATE, FORWARD KC-287 TO CSPD --\*  
REQUESTING THAT ACCEPTANCE TEST UMC BE PURGED OF  
APPLICABLE SOURCE AND OBJECT PROGRAM(S).

## D PLACING REVISED PROGRAM(S) IN PRODUCTION.

## 1 APPLICATION DIVISION.

- A OBTAIN APPLICABLE PROGRAM TO BE REVISED.
- B FOLLOWING APPROPRIATE TESTING, ANNOTATE COMPILATION LIST AS THE VERSION OF THE PROGRAM USED IN ACCEPTANCE TEST OR PLACED BACK INTO PRODUCTION.
- C IF ACCEPTANCE TEST IS TO BE PERFORMED, FOLLOW PARAGRAPH C1.
- D IF NO ACCEPTANCE TEST IS TO BE PERFORMED:
  - \*-- 1) PREPARE KC-287 TO CSPD IDENTIFYING SOURCE AND --\*  
OBJECT AND JCL AS REQUIRED PROGRAM(S) TO BE  
PLACED INTO PRODUCTION.
  - 2) MAINTAIN RECORD OF PROGRAM(S) VERSION(S) PLACED  
BACK INTO PRODUCTION.

## \*-- 2 COMPUTER SYSTEMS PRODUCTION MANAGEMENT DIVISION. --\*

- A IF ACCEPTANCE TEST WAS PERFORMED, AND UPON RECEIPT OF KC-287 FROM ACCEPTANCE TEST TEAM:
  - 1) MOVE PROGRAM(S) (SOURCE AND OBJECT) FROM ACCEPTANCE TEST UMC TO APPROPRIATE PRODUCTION UMC.
  - 2) PURGE ACCEPTANCE TEST UMC OF MOVED PROGRAM(S).
- B IF NO ACCEPTANCE TEST WAS PERFORMED, AND UPON RECEIPT OF KC-287 FROM APPLICATION DIVISION:  
MOVE SOURCE AND OBJECT PROGRAM(S) TO APPROPRIATE PRODUCTION UMC'S FROM APPLICATION DIVISION UMC.

## 3 ACCEPTANCE TEST TEAM.

- A SUBSEQUENT TO SUCCESSFUL TEST, TRANSMIT KC-287 TO  
\*-- CSPD FOR MOVEMENT OF SOURCE AND OBJECT PROGRAM(S) FROM --\*  
ACCEPTANCE TEST UMC TO APPROPRIATE PRODUCTION UMC.
- B PROVIDE COPY OF KC-287 TO APPROPRIATE DIVISION(S)  
\*-- UPON RECEIPT FROM CSPD. --\*
- \*-- C WHEN DETERMINED APPROPRIATE, FORWARD KC-287 TO CSPD --\*  
REQUESTING THAT ACCEPTANCE TEST UMC BE PURGED OF  
APPLICABLE SOURCE AND OBJECT PROGRAM(S).

## 260 CADE DATA ENTRY

- A WHEN A NEW CADE INPUT FORMATTING PROGRAM IS TO BE ESTABLISHED  
OR AN EXISTING ONE MODIFIED, THE FOLLOWING INFORMATION SHALL  
\*-- BE SUPPLIED TO CSPD BY KC-287: --\*
- 1 NAME OF SYSTEM/SUBSYSTEM.
  - 2 IF THIS IS NEW OR A MODIFICATION OF CADE INPUT.
  - 3 INDICATE THE APPROPRIATE HANDBOOK REFERENCE.
  - 4 FILE DESCRIPTOR, ASCS-735
  - 5 DESTINATION (JOB NAME).
  - 6 INDICATE THE DATE NEEDED FOR TESTING.
  - 7 ATTACH RECORD DESCRIPTOR (ASCS-762, EXHIBIT 20) OR PUNCHED  
CARD LAYOUT (AD-637).
  - 8 ATTACH A SAMPLE SOURCE DOCUMENT IDENTIFIED WITH THE FIELDS  
TO BE KEYED. THE KC-287 AND ATTACHMENT SHOULD BE SENT  
\*-- TO CSPD A MINIMUM OF TWO (2) WEEKS PRIOR TO THE DATE --\*  
NEEDED. TEST FORMS SHOULD BE SUPPLIED ONE (1) WEEK PRIOR TO  
THE DATE NEEDED TO DEBUG THE CADE PROGRAM.
  - 9 ALL CADE DATA SETS WILL BE CREATED WITH A HIGH LEVEL QUALIFIER  
OF MSP905 (E.G., MSP905.MIN999C1).
  - 10 A ONE-CHARACTER FIELD SHALL BE INCLUDED IN ALL DATA ENTRY  
RECORDS TO PROVIDE A VEHICLE FOR IDENTIFICATION OF CONTRACTOR  
\*-- PREPARED DATA ENTRY FILES. CSPD IS ASSIGNED THE CODE "M" --\*  
FOR ENTRY INTO THIS FIELD.

B OFFICIAL APPROVAL OF THE CADE PROGRAM IS TO BE PROVIDED IN  
\*-- WRITING TO CSPD UPON SUCCESSFUL COMPLETION OF TESTING AND --\*  
PRIOR TO PRODUCTION USAGE.

261 CADE VALIDATION

WHEN CADE VALIDATIONS ARE REQUESTED, THE FOLLOWING ADDITIONAL  
\*-- INFORMATION SHALL BE SUPPLIED TO CSPD: --\*

A VALIDATIONS SPECIFICATIONS.

- 1 DESCRIBE THE VALIDATIONS SPECIFICATIONS SPECIFICALLY AND  
IN DETAIL. THE DESCRIPTION MAY BE, FOR EXAMPLE, IN TABLE  
FORM, NARRATIVE, OR AS FOOTNOTES TO THE RECORD LAYOUT.  
ALL REQUIRED VALIDATIONS MUST BE DOCUMENTED, SUPPLEMENTED  
AS NECESSARY, BY LOGIC FLOWCHART AND/OR DECISION TABLE.  
ALL LOGIC CHARTS MAY BE DRAWN ON ASCS-764 (OR MAY BE PRODUCED  
BY AUTOMATIC CHARTING) AND MUST CONTAIN ONLY APPROVED  
\*-- FLOWCHART SYMBOLS (REFERENCE INTERNATIONAL STANDARD  
ISO 5807). --\*

B CONTROL PROVISIONS.

- 1 INDICATE IF DOCUMENTS ARE TO BE REJECTED OR IF RECORDS  
ARE TO BE FLAGGED BY FIELD AND ACCEPTED INTO THE SYSTEM.
  - A IF REJECT RECORDS ARE TO BE FLAGGED AND ACCEPTED INTO  
THE SYSTEM, INDICATE IF A TAPE IS REQUIRED FOR  
RESEARCH; IF REQUIRED, INDICATE THE BRANCH/DIVISION  
TO RECEIVE TAPE PRINT.
  - B IF DOCUMENTS ARE TO BE REJECTED, INDICATE THE BRANCH/  
DIVISION TO WHICH THE REJECTED DOCUMENTS ARE TO BE  
FORWARDED. (REJECTED DOCUMENT DATA WILL NOT APPEAR  
IN THE SYSTEM INPUT FILE).

## 262 APPLICATION PROGRAMMING STANDARDS

## A PROGRAM/MODULE SIZE.

- 1 HIS 66/80 EXECUTABLE BATCH PROGRAMS/MODULES, EXCLUSIVE OF SORTS AND NOT ACCESSING DM-IV DATA, ARE NOT TO EXCEED 30K WORDS EXCLUDING LINK AREA AND LOAD TABLES. EXCEPTION MUST BE APPROVED PRIOR TO DEVELOPMENT BY A WAIVER FROM THE DEPUTY DIRECTOR, SYSTEMS DEVELOPMENT.
- 2 FOR HIS 66/80 BATCH PROGRAMS/MODULES THAT DO ACCESS DM-IV DATA, FOR UPDATE OR READ-ONLY, THE ACTUAL COBOL CODE IS LIMITED TO 12K WORDS. EXCEPTION MUST BE APPROVED PRIOR TO DEVELOPMENT BY A WAIVER FROM THE DEPUTY DIRECTOR, SYSTEMS DEVELOPMENT.
- 3 HIS 66/80 TRANSACTION PROCESSING ROUTINES (TPR'S) ARE NOT TO EXCEED 5K WORDS. EXCEPTION MUST BE APPROVED PRIOR TO DEVELOPMENT BY A WAIVER FROM THE DEPUTY DIRECTOR, SYSTEMS DEVELOPMENT.

## 263 PRODUCTION LIBRARY MAINTENANCE

- A SOURCE PROGRAMS ARE LOCATED ON A UMC (MSOURC) SUBCATALOG BY SYSTEM IDENTITY. OBSOLETE SOURCE PROGRAMS RESIDE ON A COMMON SUBCATALOG "INACTV" UNTIL THE 2-AS RETENTION REQUIREMENTS ARE MET. MSOURC IS MAINTAINED BY CSPD WITH GENERAL READ PERMISSIONS TO ENABLE APPLICATION DIVISIONS TO HAVE IMMEDIATE ACCESS TO SOURCE PROGRAMS WHEN CHANGES ARE REQUIRED. ---\*

- B SUBCATALOGS ARE STRUCTURED TO IDENTIFY SYSTEMS BY THE 3-ADM SYSTEM CODE AND BY PROGRAM YEAR. EXAMPLES ARE:

| SUBCATALOG NAME | SYSTEM TITLE                          |
|-----------------|---------------------------------------|
| MDAPRD          | PRICE SUPPORT LOANS - INITIAL         |
| MDBPRD          | PRICE SUPPORT LOANS - VALIDITY        |
| MGFPRD79        | DEFICIENCY PAYMENTS - 1979 PROGRAM YR |
| MGFPRD80        | DEFICIENCY PAYMENTS - 1980 PROGRAM YR |

- \*-- C BACKUP AND RESTORE OPERATIONS ARE PERFORMED BY CSPD. ---\*

- 1 BACKUP OF MSOURC IS PROCESSED EACH THURSDAY WITH THE OUTPUT TAPE FILE ASSIGNED A 28-DAY RETENTION.
- 2 RESTORES OF PROGRAMS TO MSOURC FROM THE BACKUP TAPES ARE ACCOMPLISHED BY KC-287 REQUEST TO CSPD. ---\*

## D RETENTION OF OBSOLETE SOURCE MODULES.

- \*-- 1 APPLICATION DIVISION NOTIFIES CSPD BY KC-287 THAT --\*  
MODULES ARE OBSOLETE.
- \*-- 2 CSPD PURGES JCL AND OBJECT MODULES, PARM FILES, ETC., AND --\*  
MOVES SOURCE PROGRAMS TO THE SUBCATALOG "INACTV" WITHIN  
MSOURC.
- \*-- 3 CSPD NOTIFIES APPLICATION DIVISION WHEN SOURCE MODULE HAS --\*  
SATISFIED RETENTION REQUIREMENTS OF 2-AS.
- 4 APPLICATION DIVISIONS APPROVE PURGES FROM INACTV BY  
MEMORANDUM.
- \*-- 5 CSPD PURGES SOURCE MODULE FROM LIBRARY. --\*

E OBJECT MODULES ARE DELETED FROM PRODUCTION OBJLIB'S IN  
ACCORDANCE WITH INSTRUCTIONS ON KC-287'S FROM SYSTEMS  
DIVISION.

## 264 ADDRESSING REMOTE JOB ENTRY (RJE) STATIONS

OUTPUT MAY BE ROUTED TO ANY RJE STATION IN KCMO THROUGH USE  
OF THE ROUTE COMMAND. THE FORMAT AND STATION NUMBERS ARE  
AS FOLLOWS:

|                     |        |                               |
|---------------------|--------|-------------------------------|
| * * *               |        |                               |
| *-- SSMOVE,ROUT(02) | RMT 02 | (HARRIS 1660 IN CSPD) --*     |
| SSMOVE,ROUT(07)     | RMT 07 | (MSD/WDC)                     |
| SSMOVE,ROUT(77)     | RMT 77 | *-- (HARRIS 1660 IN CSPD) --* |
| SSMOVE,ROUT(85)     | RMT 85 | *-- (XEROX 4090 IN CSPD) --*  |
| SSMOVE,ROUT(86)     | RMT 86 | *-- (XEROX 4090 IN CSPD) --*  |
| SSMOVE,ROUT(87)     | RMT 87 | *-- (XEROX 4090 IN CSPD) --*  |
| SSMOVE,ROUT(88)     | RMT 88 | *-- (XEROX 4090 IN CSPD) --*  |
| SSMOVE,ROUT(89)     | RMT 89 | *-- (XEROX 4090 IN CSPD) --*  |
| SSMOVE,ROUT(90)     | RMT 90 | *-- (TO CADE IN CSPD) --*     |

## 265 HIS COMMON ROUTINES

DSPD HAS DEVELOPED CALLED MODULES TO PROVIDE COMMON VERIFICATION ROUTINES TO SYSTEMS PERSONNEL. REFERENCE EXHIBIT 37 FOR A LIST OF CURRENTLY AVAILABLE MODULES.

## 266 COMMODITY DATA FILE

AN HIS COMMODITY DATA FILE IS AVAILABLE AS A COMMON ACCESS FILE. ACCESS IS BY ROUTINE MMECD. SEE EXHIBIT 36.

## 267 JOB CHARTS - HIS

A JOB CHARTS MUST SHOW THE INFORMATION IN EXHIBIT 30 (HIS).

B THE DATA SETS DEPICTED ON THE CHART SHOULD BE IDENTIFIED AS TEMPORARY OR PERMANENT.

\*-- C STANDARD ISO SYMBOLS SHALL BE USED (REFERENCE INTERNATIONAL STANDARD ISO 5807). --\*

## 268 PROCESSING PRIORITIES

JOBS SUBMITTED ON HONEYWELL COMPUTERS CAN HAVE A PRIORITY ASSIGNED TO THEM FOR EXECUTION( URG(05) ). ALL JOBS SHALL BE SUBMITTED WITH THE LOWEST POSSIBLE PRIORITY.

A NORMAL PRIORITY FOR ( URG(05) ) ACCRUE A DISCOUNT WHEN THE  
\*-- NCC-KC STANDARD TURNAROUND TIME IS EXCEEDED. --\*

B INTERMEDIATE PRIORITY JOBS ( URG(06-09) ) INCUR A SURCHARGE OF 100 PERCENT. SUPERVISORY APROVAL IS REQUIRED TO PROCESS A JOB WITH THIS PRIORITY.

C HIGH PRIORITY JOBS ( URG(10) OR ABOVE) INCUR A SURCHARGE OF 200 PERCENT. APPROVAL TO PROCESS WITH THIS PRIORITY MUST BE  
\*-- FROM THE DIVISION CHIEF IN CONSULTATION WITH CSPD. --\*

D THE DEFAULT PRIORITY IS ( URG(05) ).

## 269 OPTICAL SCANNING

KCMO NO LONGER UTILIZES OPTICAL SCANNING.

\*-- \* \* \* --\*

270 REQUESTING MICROFICHE OUTPUT

STANDARD PRINT FILES MAY BE PRODUCED ON MICROFICHE RATHER THAN  
HARD COPY AT THE USER REQUEST. REFERENCE PARAGRAPH 243 FOR  
THE STEPS NECESSARY TO ENSURE PRODUCTION OF MICROFICHE.

271-299 (RESERVED)

## PART 8 - PERSONAL COMPUTER USAGE

## 300 SCOPE OF COVERAGE

THE OFFICE GOAL IS TO ACQUIRE AND USE COMPATIBLE PC'S AND OTHER ADP EQUIPMENT THROUGHOUT THE ENTIRE COMPLEX.

- A PERSONAL COMPUTERS IN USE IN KCMO WILL ADHERE TO THESE STANDARDS AND ONLY BY WRITTEN WAIVER FROM THE DEPUTY DIRECTOR, SYSTEMS DEVELOPMENT WILL AN EXCEPTION BE GRANTED.
- B THIS PART PRESCRIBES KCMO ANALYSIS, DESIGN, PROGRAMMING, TESTING, OPERATIONS, DOCUMENTATION AND MANAGEMENT ACCOUNTABILITY AND CONTROL STANDARDS FOR PERSONAL COMPUTERS.
- C THESE PROVISIONS APPLY TO ALL PERSONAL COMPUTERS AND THEIR USAGE EXCEPT WHERE A WRITTEN WAIVER EXISTS.
- D DEPARTMENT DIRECTIVE, INCORPORATED BY REFERENCE ARE:
  - 1 DR-3130-2, MICROCOMPUTER POLICY
  - 2 DR-3140-1, USDA ADP SECURITY POLICY
  - 3 DM-3140-1, ADP SECURITY MANUAL

## 301 ACQUISITION OF PERSONAL COMPUTERS

- A PERSONAL COMPUTERS MUST BE ACQUIRED ACCORDING TO DEPARTMENT REGULATIONS AND GUIDELINES.
- B FUNDS FOR ACQUISITION FOR A PERSONAL COMPUTER MUST BE IN THE REQUESTING UNIT'S BUDGET.
- C FUNDS FOR ACQUISITION OF PERSONAL COMPUTER SOFTWARE MUST BE IN THE REQUESTING UNIT'S BUDGET.
- D FUNDS FOR MAINTENANCE MUST BE IN THE REQUESTING UNIT'S BUDGET.

## 302 INITIAL INSTALLATION

- A TELECOMMUNICATIONS DIVISION WILL BE RESPONSIBLE FOR INITIAL INSTALLATION , TESTING AND CONFIGURING OF NEWLY ACQUIRED PERSONAL COMPUTERS. TD WILL ALSO SERVE AS THE CONTACT POINT FOR PROBLEM RESOLUTION FOR MALFUNCTIONING PERSONAL COMPUTERS.
- B TD WILL INSTALL ALL SOFTWARE ACQUIRED AND WILL MAINTAIN AN OFFICE INVENTORY OF ACQUIRED SOFTWARE, LOCATION AND CURRENT VERSION.
- C TD WILL MAINTAIN AN OFFICE INVENTORY OF ALL PC'S REFLECTING LOCATION, PERIPHERALS AND MODIFICATIONS.

## 303 PERSONAL COMPUTER SOFTWARE

- A MOST OFF-THE-SHELF SOFTWARE PACKAGES ACQUIRED FOR PERSONAL COMPUTERS IS PROPRIETARY IN NATURE AND IS NOT TO BE COPIED FOR PERSONAL USE OR PROPOGATION TO OTHER OFFICE PC'S.
- B PUBLIC DOMAIN SOFTWARE MAY BE COPIED, INSTALLED AND USED ON OFFICE PC'S. ADVISE TD WHEN SUCH SOFTWARE IS UTILIZED SO THE INVENTORY MAY BE MAINTAINED CURRENT.

## 304 DISKETTE LABELING STANDARD

IN THE EVENT OF A DISASTER TO THE OFFICE COMPLEX, AND THE DATA RECORDED ON DISKETTE MUST BE RECOVERED (BY A CONTRACT COMPANY), IT IS IMPERATIVE THAT THE DATA BE RETURNED TO THE PROPER OWNER. THIS WILL BE ACCOMPLISHED BY USING THE INTERNAL DISKETTE LABEL.

- A ALL DISKETTES USED BY KCMO PERSONNEL IN PERSONAL COMPUTERS WILL CONTAIN A STANDARD INTERNAL LABEL. THIS LABEL WILL BE IN THE FORMAT AA00DBNNNN, WHERE:

- AA = AGENCY CODE (05 FOR ASCS)
  - 00 = OFFICE CODE (MF FOR ALL KANSAS CITY OFFICES)
  - DD = DIVISION CODE (REFERENCE EXHIBIT 50)
  - B = BRANCH NUMBER (REFERENCE EXHIBIT 50)
  - NNNN = SEQUENTIAL NUMBER FROM 0001 TO 9999

- B EXTERNAL LABELS ON DISKETTES MUST CONTAIN AS A MINIMUM THE ABOVE ASSIGNED DISKETTE NUMBER.

## 305 DISKETTE BACKUP

- A TD WILL MAINTAIN THE ORIGINAL DISKETTES FOR ACQUIRED PERSONAL COMPUTER SOFTWARE. EACH PC USER WILL BE RESPONSIBLE FOR MAINTAINING BACKUP DISKETTES OF THE HARD DISK COPIES OF THIS SOFTWARE.
- B EACH PC USER WILL BE RESPONSIBLE FOR MAINTAINING BACKUP COPIES OF THEIR DATA ON DISKETTES. BACKUPS WILL BE CREATED NO LESS FREQUENTLY THAN MONTHLY AND WILL BE STORED IN A LOCATION NOT IMMEDIATELY ADJACENT TO THEIR WORK AREA. PC USERS ARE ENCOURAGED TO WORK TOGETHER TO DEVELOP SUCH A SYSTEM OF DISKETTE BACKUP.
- C CRITICAL OR SENSITIVE DATA FILES WILL BE BACKED UP AND THE BACKUP COPY STORED IN THE OFFSITE STORAGE LOCATION. CONTACT  
\*-- CSPD OR ASD FOR ASSISTANCE IN USING THIS STORAGE. --\*

## 306 PERSONAL COMPUTER LANGUAGES

- A THE DEPARTMENT STANDARD LANGUAGES FOR PERSONAL COMPUTERS ARE COBOL, FORTRAN, BASIC, PASCAL, ADA AND C.
- B USE OF LANGUAGES OTHER THAN ABOVE REQUIRE A WAIVER FROM IRMD-WDC.
- C APPLICATION SOFTWARE WILL, TO THE EXTENT POSSIBLE, CONSIST OF COMMONLY AVAILABLE OFF-THE-SHELF PACKAGES (E.G., LOTUS, SYMPHONY, SMART, ETC.).

## 307 DOCUMENTATION STANDARDS

THE FOLLOWING STANDARDS APPLY TO SYSTEMS DEVELOPED IN A DEPARTMENT STANDARD LANGUAGE LISTED IN PARAGRAPH 306A.

- A USER WRITTEN APPLICATIONS DEVELOPED IN KCMO WILL BE DOCUMENTED IN ACCORDANCE WITH DEPARTMENT STANDARDS.
  - B APPLICATIONS WILL BE DEVELOPED BASED ON A WRITTEN USER REQUEST, WHICH WILL SERVE AS THE PROJECT AUTHORIZATION DOCUMENT(USER REQUIREMENT).
  - C A COST/BENEFIT ANALYSIS MUST BE PERFORMED AND APPROVED BY THE DEPUTY DIRECTOR, SYSTEMS DEVELOPMENT.
  - D A SYSTEM SPECIFICATION WILL BE DEVELOPED TO DOCUMENT THE STEPS INVOLVED IN THE PERSONAL COMPUTER APPLICATION.
  - E PROGRAM SPECIFICATIONS WILL BE DEVELOPED FOR EACH PC PROGRAM, AND MUST BE MAINTAINED IN ACCORDANCE WITH APPROVED RETENTION STANDARDS (REFERENCE 2-AS).
  - F UNIT, INTEGRATION AND ACCEPTANCE TESTING WILL BE PERFORMED. IN ACCORDANCE WITH PART 4 OF THIS HANDBOOK.
  - G PERSONAL COMPUTER APPLICATIONS WHICH INTERFACE WITH OR PROVIDE INPUT TO EXISTING MAINFRAME COMPUTER SYSTEMS WILL BE COORDINATED WITH THE APPROPRIATE SYSTEMS DIVISION AND
- \*-- CSPD. --\*

## 308 RELEASE OF PERSONAL COMPUTERS

- A WHEN IT IS DETERMINED THAT A PERSONAL COMPUTER IS NO LONGER REQUIRED, WRITTEN NOTIFICATION SHOULD BE PROVIDED TO TD. TD WILL PICK UP THE PC AND RECONFIGURE SOFTWARE PACKAGES TO THEIR INITIALIZED STATE AND RELOCATE THE PC TO ANOTHER USER.
- B PC SUPPLIES (DISKETTES, RIBBONS, ETC.) WILL ALSO BE RETURNED TO TD FOR REUSE.

## 309 PC/MAINFRAME INTERFACE

- A REQUESTS FOR CONNECTION TO THE MAINFRAME COMPUTERS WILL BE IN MEMORANDUM FORM TO TD, INDICATING THE DESIRED MAINFRAME AND IF APPLICABLE, THE DESIRED SOFTWARE CONNECTION OR PACKAGE.
- B TD WILL MAKE APPROPRIATE CONNECTIONS TO THE MAINFRAME COMPUTER AND WILL TEST THE CONNECTION TO ENSURE IT IS FUNCTIONING PROPERLY.

## 310 PC SUPPLIES

- A ASD WILL MAINTAIN LIMITED SUPPLIES OF PRINTER RIBBONS AND 5 1/4" DISKETTES IN THE WAREHOUSE.
- B SUPPLIES OF PRINTER RIBBONS OR DISKETTES MAY BE ORDERED ON FORM AD-14.
- C PAPER MAY BE ORDERED FROM THE WAREHOUSE ON FORM AD-14. SPECIAL PAPER NEEDS MUST BE ORDERED ON FORM AD-700.

## 311 REMOVAL FROM OFFICE COMPLEX

PORTABLE PERSONAL COMPUTERS MAY BE CHECKED OUT TO BE USED OTHER THAN IN THE OFFICE COMPLEX.

- A REQUESTOR MUST JUSTIFY TO DIVISION CHIEF INCLUDING THE FOLLOWING:
  - 1 REASON FOR USE.
  - 2 TIME FRAME REQUIRED.
  - 3 RELATED MATERIAL REQUIRED.
- B DIVISION CHIEF MUST SECURE APPROVAL FROM DEPUTY DIRECTOR, SYSTEMS DEVELOPMENT.
- C RECEIVE APPROPRIATE CLEARANCE FORMS FROM ASD.

## 312 USE OF PRIVATELY OWNED PC'S

PRIVATELY OWNED PC'S WILL BE PERMITTED TO BE USED IN THE OFFICE UNDER THE FOLLOWING GUIDELINES:

- A THE PERSON WISHING TO USE THE PC MUST REGISTER THE SERIAL NUMBER AND MODEL WITH THEIR DIVISION CHIEF.

- B THE PC WILL BE PERMITTED TO BE USED IN THE OFFICE ONLY UNTIL IT CAN BE REPLACED WITH A GOVERNMENT OWNED PC.
- C THE PRIVATELY OWNED PC MUST BE CAPABLE OF INTERFACING WITH OTHER GOVERNMENT OWNED PC'S IN THE OFFICE.
- D THE GOVERNMENT WILL NOT PROVIDE SUPPLIES, SERVICES OR MAINTENANCE OTHER THAN THAT NORMALLY EXPERIENCED WITH GOVERNMENT OWNED PC'S. SPECIFICALLY, THE GOVERNMENT WILL NOT PROVIDE ENHANCEMENTS TO PRIVATELY OWNED PERSONAL COMPUTERS.

## 313 PERSONAL COMPUTER SOFTWARE

- A TD WILL BE RESPONSIBLE FOR REVIEWING AND PURCHASING ANY NEW PC SOFTWARE PACKAGES FOR OFFICE-WIDE USE. TD WILL ALSO INSTALL ANY SPECIALIZED SOFTWARE REQUIRED BY USER DIVISIONS IN KCMO.
- B NO PRIVATELY OWNED OR PURCHASED PC SOFTWARE WILL BE INSTALLED ON GOVERNMENT-OWNED PERSONAL COMPUTERS.
- C PUBLIC DOMAIN SOFTWARE WILL BE PERMITTED ON GOVERNMENT-OWNED PERSONAL COMPUTERS. TD MUST BE ADVISED VIA MEMORANDUM THAT SUCH SOFTWARE HAS BEEN INSTALLED AND ALSO BE PROVIDED WITH OTHER PERTINENT INFORMATION RELATED TO THE SOFTWARE.

## 314 DATA ON PERSONAL COMPUTERS

THE ONLY DATA PERMITTED ON GOVERNMENT OWNED PERSONAL COMPUTERS IS THAT DATA THAT IS DIRECTLY JOB RELATED. PERSONAL OR PRIVATE DATA IS NOT TO BE MANIPULATED ON GOVERNMENT OWNED PERSONAL COMPUTERS. WHEN SUCH DATA IS DETECTED IT WILL BE IMMEDIATELY REMOVED BY THE SUPERVISOR AND THE PERSON RESPONSIBLE FOR ENTRY OF SUCH DATA IS SUBJECT TO APPROPRIATE DISCIPLINARY ACTION.

315-349 (RESERVED)

## REPORTS, FORMS, ABBREVIATIONS AND REDELEGATIONS OF AUTHORITY

## REPORTS

(NONE)

## FORMS

| NUMBER       | TITLE                                              | UNIT OF<br>ISSUE | PRINCIPAL<br>REFERENCES |
|--------------|----------------------------------------------------|------------------|-------------------------|
| AD-172       | CORRESPONDENCE CONTROL                             | 5-PART SET       | PAR. 52                 |
| AD-635       | FORTRAN CODING SHEET                               | PAD (50)         | PAR. 70                 |
| AD-637       | GENERAL PURPOSE CODING<br>SHEET                    | PAD (50)         | PAR. 70                 |
| ASCS-733     | RELEASE INSTRUCTIONS FOR<br>COMPUTER SYSTEM        | 5-PART SET       | PAR. 260                |
| ASCS-762     | RECORD DESCRIPTOR                                  | SHEET            | EX. 20                  |
| ASCS-764     | SYSTEMS DIAGRAM                                    | PAD (50)         | EX. 29, 30              |
| ASCS-766     | DECISION TABLE                                     | PAD (50)         | EX. 11                  |
| ASCS-767     | REPORT LAYOUT SPECIFICATION SHEET                  |                  | EX. 29, 30              |
| KC-126       | REQUEST FOR PAGE<br>PRINTER OUTPUT                 | CARD             | PAR. 237                |
| KC-208       | PROGRAM DESIGN PACKAGE<br>APPROVAL AND TRANSMITTAL | 3-PART SET       | EX. 8                   |
| KC-255-A     | KCMO PROCEDURE CLEARANCE<br>& APPROVAL             | SHEET            | PAR. 172, 259           |
| KC-1268      | STATUS OF ASSIGNMENTS                              | SHEET            | PAR. 223                |
| *-- ASCS-XXX | USDA MICROFICHE REQUEST<br>FORM                    | SHEET            | PAR. 243 --*            |

## REPORTS, FORMS, ABBREVIATIONS AND REDELEGATIONS OF AUTHORITY

## FORMS

| NUMBER       | TITLE              | UNIT OF<br>ISSUE | PRINCIPAL<br>REFERENCES |
|--------------|--------------------|------------------|-------------------------|
| KC-1697      | TEST LOG           | SHEET            | PAR. 83                 |
| *-- ASCS-735 | FILE DESCRIPTOR    | SHEET            | PAR. 260 --*            |
| SF-268       | COBOL CODING SHEET | PAD (50)         | PAR. 70                 |

## ABBREVIATIONS NOT LISTED IN 1-CM

| ABBREVIATION | TERM                                                    | USE  |
|--------------|---------------------------------------------------------|------|
| A            | ALPHA                                                   | TEXT |
| A/N          | ALPHA/NUMERIC                                           | TEXT |
| DED          | DATA ELEMENT DICTIONARY (HONEYWELL)                     | TEXT |
| DIPS         | DEPARTMENTAL INFORMATION PROCESSING STANDARDS           | TEXT |
| DLT          | DECISION LOGIC TABLE                                    | TEXT |
| DP           | DATA PROCESSING                                         | TEXT |
| FIPS PUB     | FEDERAL INFORMATION PROCESSING STANDARDS<br>PUBLICATION | TEXT |
| IDD          | INTEGRATED DATA DICTIONARY (IBM)                        | TEXT |
| JCL          | JOB CONTROL LANGUAGE                                    | TEXT |
| KCCC         | KANSAS CITY COMPUTER CENTER                             | TEXT |
| L/J          | LEFT JUSTIFIED                                          | TEXT |
| N            | NUMERIC                                                 | TEXT |
| N/A          | NOT APPLICABLE                                          | TEXT |

## REPORTS, FORMS, ABBREVIATIONS AND REDELEGATIONS OF AUTHORITY

|      |                                |      |
|------|--------------------------------|------|
| PPS  | PAGE PRINTING SYSTEM           | TEXT |
| PRC  | PLANNING RESEARCH CORPORATION  | TEXT |
| L/J  | LEFT JUSTIFIED                 | TEXT |
| SB   | SYSTEM BULLETIN                | TEXT |
| TG   | TECHNICAL GUIDE                | TEXT |
| TIA  | TECHNICAL INFORMATION ADVISORY | TEXT |
| TLMS | TAPE LIBRARY MANAGEMENT SYSTEM | TEXT |
| TOSS | TAPE OFF-SITE STORAGE SYSTEM   | TEXT |
| Z/F  | ZERO FILLED                    | TEXT |

## DEFINITIONS

## -&gt; ASCS ADP SYSTEM

THE COMPUTER UTILITY AND THE APPLICATIONS SUPPORTED THEREON.

## -&gt; ACCEPTANCE TESTING

EXERCISING THE COMPLETE AGGREGATE OF INTEGRATED PROGRAMS TO ENSURE THAT THEY MEET ALL OF THE USER REQUIREMENTS AS STATED IN THE REQUIREMENTS SPECIFICATION.

## -&gt; APPLICATION

AN ADMINISTRATIVE GROUPING OF USER REQUIREMENTS FOR ADP SUPPORT BY THE COMPUTER UTILITY.

## -&gt; COMMON COMPONENT

A FUNCTION, TASK ROUTINE, OR SUBROUTINE USED IN MORE THAN ONE HIGHER-LEVEL COMPONENT.

## -&gt; COMMON ROUTINE

A SOFTWARE ROUTINE WHICH IS EXECUTABLE BY TWO OR MORE APPLICATION PROGRAMS.

## -&gt; COMPUTER PROGRAM

AN IDENTIFIABLE SERIES OF INSTRUCTIONS OR STATEMENTS, IN A FORM ACCEPTABLE TO A COMPUTER, PREPARED IN ORDER TO ACHIEVE A CERTAIN RESULT.

## -&gt; COMPUTER UTILITY

A CONFIGURATION OF COMPUTER HARDWARE, SUPPORT SOFTWARE, AND COMMUNICATIONS FACILITIES WHICH PROVIDES A GENERAL PURPOSE CAPABILITY TO SATISFY THE NEEDS OF SEVERAL SYSTEMS.

## -&gt; DATA BASE

AN ORGANIZED COLLECTION OF STORED AND OPERATIONAL DATA.

## -&gt; DATA ELEMENT

THE LOWEST LEVEL OF A RECORD'S LOGICAL DATA HIERARCHY POSSESSING A UNIQUE NUMBER, NAME, AND OTHER ATTRIBUTES. IT IS THE SMALLEST UNIT OF A DATA STRING THAT CAN BE ACCESSED.

## DEFINITIONS

## -&gt; DESIGN SPECIFICATION

A NARRATIVE AND PICTORIAL SPECIFICATION DESCRIBING THE REQUIREMENTS AND LOGIC OF A SYSTEM, SUBSYSTEM, OR PROGRAM, WHICH INVOLVES THE USE OF ADP EQUIPMENT.

## -&gt; FUNCTION

A DISCRETE PROCESS WHICH USES DATA AND ONE OR MORE TASKS TO SATISFY THE REQUIREMENT(S) OF AN APPLICATION.

## -&gt; HARDWARE SUBSYSTEMS

THE COMPUTING EQUIPMENT, TELECOMMUNICATIONS NETWORK, AND TERMINALS. MOST HARDWARE COMPONENTS ALSO INCLUDE SYSTEMS SOFTWARE.

## -&gt; INTEGRATION TESTING

TESTING THE INTERFACES BETWEEN PROGRAMS TO ENSURE THAT THEY COMMUNICATE WITH EACH OTHER AS SPECIFIED IN THE DESIGN SPECIFICATION.

## -&gt; INTERFACE

A COMMON BOUNDARY BETWEEN ADP SYSTEMS OR PARTS OF A SINGLE SYSTEM (A SHARED BOUNDARY).

## -&gt; JOB CONTROL LANGUAGE (JCL)

A PROGRAMMING LANGUAGE USED TO CODE JOB CONTROL STATEMENTS.

## -&gt; MASTER FILE

A FILE CONTAINING DETAILED, SUMMARY, OR A COMBINATION OF RELATED DATA ITEMS THROUGH THE LAST UPDATE PROCESS AND REPRESENTING THE CURRENT STATUS OF ALL DATA ELEMENTS. THE MASTER FILE IS THE SOURCE FOR ALL AUTHORITATIVE REPORTS, LISTINGS, AND DISPLAYS PRODUCED RELATIVE TO THE APPLICATION.

## DEFINITIONS

## -&gt; MENU FRAME

A FRAME (SCREEN) CONTAINING A LOGICAL SET OF ALTERNATIVES FROM WHICH THE USER MAY CHOOSE A PARTICULAR PROCESSING BRANCH TO BE ACTIVATED.

## -&gt; PAGE

A). A BLOCK OF INSTRUCTIONS, OR DATA, OR BOTH THAT CAN BE LOCATED IN MAIN STORAGE OR AUXILIARY STORAGE.

B). THE AMOUNT OF INFORMATION APPEARING ON A SINGLE DISPLAY SCREEN.

## -&gt; PROCEDURE

THE ORGANIZATION OF TASK ROUTINES TO ACCOMPLISH THE FUNCTION.

## -&gt; REGRESSION TESTING

THE EXECUTION OF PREVIOUSLY DEFINED AND EXECUTED TESTS WHICH VERIFY THAT MODIFICATIONS MADE TO A PROGRAM, SUBSYSTEM, OR SYSTEM DO NOT ADVERSELY AFFECT OTHER PORTIONS OF THAT UNIT OR OTHER UNITS WHICH INTERFACE WITH IT.

## -&gt; SOFTWARE

COMPUTER PROGRAM(S) OR A COLLECTION OF COMPUTER PROGRAMS.

## -&gt; SUBSYSTEM

AN IDENTIFIABLE MAJOR PORTION OF A TOTAL SYSTEM.

## -&gt; SUPPORT SOFTWARE

THE COMBINATION OF OPERATING SYSTEM, COMMUNICATIONS SOFTWARE AND DATA MANAGEMENT SYSTEM WHICH PROVIDES THE SOFTWARE INTERFACE BETWEEN AUTOMATED TASKS AND COMPUTER HARDWARE.

## -&gt; SYSTEMS SOFTWARE

COMPUTER PROGRAMS, USUALLY SUPPLIED BY THE HARDWARE MANUFACTURER, WHICH MAKE THE HARDWARE MORE READILY USABLE.

## -&gt; TASK

A COMPUTER PROGRAM, OR PORTION THEREOF, CAPABLE OF BEING SPECIFIED TO THE CONTROL PROGRAM AS A UNIT OF WORK.

DEFINITIONS

-> UNIT TESTING

TESTING THE PATHS AND COMBINATIONS THEREOF THROUGH EACH COMPONENT COMPRISING A PROGRAM. ALL LOGIC PATHS ARE TESTED DURING THIS ACTIVITY.

-> USE SPECIFICATION

A STATEMENT, NORMALLY WRITTEN, STATING THE PROJECT OR TASK THE USER WISHES TO ACCOMPLISH VIA THE COMPUTER UTILITY.

-> USER

ANYONE WHO REQUIRES THE SERVICE OF A COMPUTER SYSTEM.

-> WORK FILE

A FILE CONTAINING OUTPUT DATA FROM ONE PROGRAM FOR INPUT INTO A SUBSEQUENT PROGRAM. BASICALLY, A WORK FILE IS A MEANS OF MOVING DATA THROUGH THE COMPUTER SYSTEM FROM RAW INPUT DATA TO THE MASTER FILE, TO THE FINAL REPORT(S).

## SYSTEM IDENTIFICATION CODES

&lt;&lt;&lt;&lt;&lt; HONEYWELL &gt;&gt;&gt;&gt;&gt;

KCMO DIVISION CODES FOR SNUMB CARDS (CODE "A" OF PAR 250)

|    | CODE | DIVISION                                        |
|----|------|-------------------------------------------------|
| 1  | =    | COMMODITY SYSTEMS (CSD)                         |
| 3  | =    | FINANCIAL SYSTEMS (FSD)                         |
| 4  | =    | PRODUCER PROGRAMS SYSTEMS (PPSD)                |
| 5  | =    | DATA MANAGEMENT AND SYSTEMS PROGRAMMING (DSPD)  |
| 6  | =    | SUPPORT & SPECIAL SYSTEMS (SSSD)                |
| 7  | =    | GOVERNMENT ACCOUNTING OFFICE (GAO)              |
| 8  | =    | PRODUCTION SYSTEMS MANAGEMENT (SCDP)-PRODUCTION |
| 9  | =    | PRODUCTION SYSTEMS MANAGEMENT (SCDT)-TESTING    |
| 11 | =    | LOANS SYSTEMS (LSD)                             |
| 13 | =    | TELECOMMUNICATIONS (TD)                         |

\*-- (EXHIBIT CONTINUED ON PAGE 1.5) --\*

## SYSTEM IDENTIFICATION CODES

&lt;&lt;&lt;&lt;&lt; I.B.M. &gt;&gt;&gt;&gt;&gt;

## KCMO DIVISION CODES FOR ACCOUNTING FIELD (CODE "CC" OF PAR 198)

| CODE   | DIVISION                                              |
|--------|-------------------------------------------------------|
| 00     | = KCMO SECURITY OFFICER                               |
| *-- 01 | = * * * --*                                           |
| 02     | = DATA OPERATIONS (KCMO)                              |
| 03     | = FINANCIAL SYSTEMS (KCMO)                            |
| 04     | = PRODUCER PROGRAMS SYSTEMS (KCMO)                    |
| 05     | = DATA MANAGEMENT AND SYSTEMS PROGRAMMING (KCMO)      |
| 06     | = SUPPORT & SPECIAL SYSTEMS (KCMO)                    |
| 07     | = GOVERNMENT ACCOUNTING OFFICE (GAO)                  |
| *-- 08 | = COMPUTER SYSTEMS & PRODUCTION MANAGEMENT (KCMO) --* |
| 10     | = INFORMATION RESOURCES MANAGEMENT (WDC)              |
| 11     | = LOAN SYSTEMS (KCMO)                                 |
| 12     | = ELECTRONIC DATA SYSTEMS, INC. (CONTRACTOR)          |
| 13     | = TELECOMMUNICATIONS (KCMO)                           |
| 14     | = OFFICE OF THE INSPECTOR GENERAL (OIG)               |
| 15     | = FISCAL (KCCO)                                       |
| 16     | = PROCESSED COMMODITIES SYSTEMS (KCMO)                |
| 17     | = GRAIN SYSTEMS (KCMO)                                |
| 20     | = FISCAL (WDC)                                        |
| 21     | = MANAGEMENT SERVICES (WDC)                           |
| 23     | = BUDGET (WDC)                                        |
| 25     | = TRAFFIC MANAGEMENT (KCCO)                           |
| 27     | = AERIAL PHOTOGRAPHY FIELD OFFICE (SALT LAKE)         |
| 30     | = WAREHOUSE EXAMINATION (KCCO)                        |
| 33     | = BULK GRAIN INVENTORY (KCCO)                         |
| 35     | = COTTON AND RICE (KCCO)                              |
| *-- 36 | = * * * --*                                           |
| 37     | = BULK GRAIN MERCHANDISING (KCCO)                     |
| 40     | = ADMINISTRATIVE SERVICES (KCMO)                      |
| 41     | = CONSERVATION AND ENVIRONMENTAL PROTECTION (WDC)     |
| 42     | = COTTON, GRAIN AND RICE (WDC)                        |
| 43     | = EMERGENCY OPERATION AND LIVESTOCK PROGRAMS (WDC)    |
| 44     | = TOBACCO AND PEANUTS (WDC)                           |
| *-- 45 | = STORAGE CONTRACT (KCCO) --*                         |
| *-- 46 | = LICENSE AUTHORITY (KCCO) --*                        |
| 48     | = ACCOUNTING MANAGEMENT STAFF (KCMO)                  |
| 49     | = FINANCIAL ACCOUNTING (KCMO)                         |
| 50     | = ACCOUNTING OPERATIONS (KCMO)                        |
| 51     | = COMMODITY ANALYSIS (WDC)                            |
| 52     | = EXECUTIVE CORRESPONDENCE STAFF (WDC)                |

## SYSTEM IDENTIFICATION CODES

&lt;&lt;&lt;&lt;&lt; I.B.M. &gt;&gt;&gt;&gt;&gt;

KCMO DIVISION CODES FOR ACCOUNTING FIELD (CODE "CC" OF PAR 198)

| CODE   | DIVISION                                               |
|--------|--------------------------------------------------------|
| 53     | = PROGRAM ANALYSIS (WDC)                               |
| *-- 54 | = INFORMATION (WDC) --*                                |
| 55     | = CLAIMS & COLLECTIONS (KCCO)                          |
| *-- 56 | = LICENSE AUTHORITY (WDC) --*                          |
| 60     | = PERSONNEL (KCMO)                                     |
| 61     | = COMMODITY OPERATIONS (WDC)                           |
| *-- 62 | = DAIRY (WDC) --*                                      |
| *-- 63 | = STORAGE CONTRACT (WDC) --*                           |
| *-- 64 | = HUMAN RESOURCES MANAGEMENT (WDC) --*                 |
| 65     | = ANALYSIS & PROCEDURES (KCMO)                         |
| *-- 66 | = TRAIL BOSS STAFF (WDC/KCMO) --*                      |
| 70     | = BUDGET & WORK MEASUREMENT STAFF (KCMO)               |
| *-- 71 | = MIDWEST AREA (WDC) --*                               |
| *-- 72 | = NORTHEAST AREA (WDC) --*                             |
| *-- 73 | = NORTHWEST AREA (WDC) --*                             |
| *-- 74 | = SOUTHEAST AREA (WDC) --*                             |
| 75     | = ADP TECH STAFF (KCMO)                                |
| *-- 76 | = SOUTHWEST AREA (WDC) --*                             |
| *-- 77 | = OFFICE OF THE DIRECTOR (KCCO) --*                    |
| *-- 79 | = BRUNO & TERVALON (CONTRACTOR) --*                    |
| 80     | = PROCESSED COMMODITIES (KCCO)                         |
| *-- 82 | = I.B.M. (WDC-CONTRACTOR) --*                          |
| *-- 83 | = EXECUTIVE APPRAISAL & ANALYSIS STAFF (WDC-ADMIN) --* |
| *-- 84 | = * * * --*                                            |
| 85     | = ARTHUR ANDERSEN AND CO. (CONTRACTOR)                 |
| 86     | = NYMA, INC. (CONTRACTOR)                              |
| 87     | = RADAN SYSTEMS, INC. (CONTRACTOR)                     |
| *-- 88 | = * * * --*                                            |
| 89     | = OFFICE OF THE GENERAL SALES MANAGER (OGSM)           |
| 90     | = O.A.O. CORPORATION (CONTRACTOR)                      |
| *-- 91 | = FOREIGN AGRICULTURE SERVICE (WDC) --*                |
| 93     | = AGRICULTURAL MARKETING SERVICE (PCIMS) (WDC)         |
| 94     | = FOOD AND NUTRITION SERVICE (PCIMS) (WDC)             |
| *-- 95 | = * * * --*                                            |
| 96     | = DEPUTY ADMINISTRATOR, MANAGEMENT (WDC)               |
| 97     | = DEPUTY ADMINISTRATOR, PROGRAM PLANNING (WDC)         |
| 98     | = DEPUTY ADMINISTRATOR, COMMODITY OPERATIONS (WDC)     |
| 99     | = DEPUTY ADMINISTRATOR, STATE/COUNTY OPERATIONS (WDC)  |
| *-- KS | = KANSAS ESE SMART SYSTEM --*                          |

## SYSTEM IDENTIFICATION CODES

## JOB DISTRIBUTION (BANNER PAGE) CODES

&lt;&lt;&lt;&lt;&lt; HONEYWELL &gt;&gt;&gt;&gt;&gt;

THE FOLLOWING CODES ARE USED IN IDENT CARDS IN THE FIELD "AA"  
OR "DDDD". REFERENCE PARAGRAPH 250.

| AA CODE |    | DDDD CODE  |
|---------|----|------------|
| *--     | 02 | = DOD- --* |
|         | 03 | = FSD-     |
|         | 04 | = PPSD     |
|         | 05 | = DSPD     |
|         | 06 | = SSSD     |
|         | 07 | = GAOX     |
|         | 08 | = SCDP     |
|         | 09 | = SCDT     |
|         | 11 | = LSD-     |
|         | 13 | = TCD-     |

&lt;&lt;&lt;&lt;&lt; I.B.M. &gt;&gt;&gt;&gt;&gt;

THE FOLLOWING CODES ARE USED IN THE JOB CARD ACCOUNTING FIELD FOR  
THE DISTRIBUTION CODE "FFFF". REFERENCE PARAGRAPH 198.

| "FFFF" DIV.   | "FFFF" DIV. | "FFFF" DIV.   | "FFFF" DIV.   |
|---------------|-------------|---------------|---------------|
| KCMO = 00     | APFO = 27   | CCD- = 55     | *-- EAAS = 83 |
| DOD- = 02     | WED- = 30   | LADW = 56     | ***           |
| FSD- = 03     | BGID = 33   | PERS = 60     | AACO = 85     |
| PPSD = 04     | CRD- = 35   | CMO- = 61     | NYMA = 86     |
| DSPD = 05     | ***         | DAD- = 62     | RDAN = 87     |
| SSSD = 06     | BGMD = 37   | SCDW = 63     | ***           |
| GAOX = 07     | ASD- = 40   | PED- = 64     | OGSM = 89     |
| *-- SCDP = 08 | CEPD = 41   | APD- = 65     | OA0- = 90     |
| VEND = 10     | CGRD = 42   | TBS- = 66     | FAS- = 91     |
| LSD- = 11     | ELPD = 43   | BWMS = 70     | ***           |
| EDS- = 12     | TPD- = 44   | *-- MWA- = 71 | AMS- = 93     |
| TCD- = 13     | SCDK = 45   | *-- NEA- = 72 | FNS- = 94     |
| OIG- = 14     | LADK = 46   | *-- NWA- = 73 | ***           |
| FID- = 15     | AMST = 48   | *-- SEA- = 74 | DAM- = 96     |
| PCSD = 16     | FAD- = 49   | TECH = 75     | DAPP = 97     |
| GSD- = 17     | AOD- = 50   | *-- SWA- = 76 | DACO = 98     |
| FIDW = 20     | CAD- = 51   | KCCO = 77     | DSCO = 99     |
| MSD- = 21     | ECS- = 52   | *-- BRTE = 79 | TAB- = KS     |
| BUD- = 23     | PAD- = 53   | PCD- = 80     |               |
| TMD- = 25     | INFO = 54   | IBM- = 82     |               |

## SYSTEM IDENTIFICATION CODES

## KCMO SYSTEM CROSSWALK CODES

&lt;&lt;&lt;&lt;&lt; HONEYWELL &gt;&gt;&gt;&gt;&gt;

THE FOLLOWING CODES ARE USED IN IDENT CARDS IN THE FIELD "BB".  
REFERENCE PARAGRAPH 250.

&lt;&lt;&lt;&lt;&lt; I.B.M. &gt;&gt;&gt;&gt;&gt;

THE FOLLOWING CODES ARE USED IN THE JOB CARD IN THE FIELD "DD".  
REFERENCE PARAGRAPH 198.

| CODE  | SYSTEM                             | CODE | SYSTEM                       |
|-------|------------------------------------|------|------------------------------|
| AA    | = EXPORT CLAIMS SYSTEM             | 12   | = TOBACCO PROGRAMS           |
| BB    | = EXPORT SALES                     | 12   | = WOOL/MOHAIR PROGRAM        |
| CC    | = PRODUCER PAYMENTS                | 19   | = CONSERVATION (EXCEPT ECM)  |
| CC    | = CCC-182                          | 20   | = CONSERVATION (ECM)         |
| CC    | = CHECK ACCOUNTING                 | 21   | = FORESTRY INCENTIVE PROGRAM |
| CC    | = COMMODITY CERTIFICATE ACCOUNTING | 23   | = COUNTY OFFICE ADMIN. EXP.  |
| * * * |                                    | 23   | = ASCS DEPRECIATION          |
| FF    | = ASCS CLAIMS & RECEIVABLES        | 23   | = ADMIN. PROPERTY            |
| GG    | = FAS, F&B, FMS, CASH, ETC.        | 23   | = CCC BUDGET                 |
| HH    | = GENERAL SUPPORT                  | 23   | = SUPPLY & UTILIZATION       |
| 12    | = LOAN PROGRAM                     | 23   | = BUDGET FORESIGHT           |
| 12    | = RACIAL REPORTING                 | 23   | = COW/COFA                   |
| 12    | = NAME AND ADDRESS                 | 23   | = EMPLOYEE RESOURCES         |
| 12    | = PEANUTS                          | 23   | = WORK STATUS                |
| 12    | = DEFICIENCY                       | 23   | = OEO                        |
| 12    | = REPORT OF COUNTY OFFICE CLAIMS   | 23   | = SUPPLY INVENTORY SYSTEM    |
| 12    | = DEFENSE                          | 70   | = AMS                        |
| 12    | = PEANUT INSPECTION CERTIFICATES   | 73   | = GRAIN INVENTORY            |
| 12    | = FARM STORAGE FACILITY            | 74   | = SUGAR INVENTORY            |
| 12    | = DISASTER                         | 76   | = PL-480                     |
| 12    | = DIVERSION                        | 80   | = MULTI-COMMODITY            |

NOTE: ALPHA CROSSWALK CODES ARE PRORATED. NUMERIC CROSSWALK CODES  
ARE CHARGED 100% TO THE SYSTEM.

## SYSTEM IDENTIFICATION CODES

## JOB FUNCTION (STATUS CODES)

&lt;&lt;&lt;&lt;&lt; HONEYWELL &gt;&gt;&gt;&gt;&gt;

THE FOLLOWING CODES ARE USED IN IDENT CARDS IN THE FIELD "EE".  
REFERENCE PARAGRAPH 250.

&lt;&lt;&lt;&lt;&lt; I.B.M. &gt;&gt;&gt;&gt;&gt;

THE FOLLOWING CODES ARE USED IN JOB CARDS IN THE FIELD "HH".  
REFERENCE PARAGRAPH 198.

|    |   |                             |
|----|---|-----------------------------|
| AS | = | ADMINISTRATIVE SUPPORT      |
| AT | = | ACCEPTANCE TEST             |
| CP | = | COMPILE                     |
| CT | = | CATALOG MAINTENANCE         |
| CV | = | HONEYWELL TO IBM CONVERSION |
| ET | = | EMULATION TESTING           |
| IT | = | INTEGRATION TEST            |
| IQ | = | INQUIRY                     |
| LB | = | LIBRARY MAINTENANCE         |
| PD | = | PRODUCTION                  |
| PR | = | PRODUCTION RERUN            |
| RS | = | CATALOG/FILE RESTORES       |
| SP | = | SPECIAL ONE-TIME REPORT     |
| UP | = | UTILITY PROGRAM             |
| UT | = | UNIT TEST                   |

SYSTEM IDENTIFICATION CODES

JOB FUNCTION (STATUS) CODES

<<<<< I.B.M. >>>>>

KCMO STATUS CODE USED IN JOB ACCOUNTING CODE STRUCTURE (CODE  
"G" OF PARAGRAPH 198).

|       |   |                  |   |   |                     |
|-------|---|------------------|---|---|---------------------|
| *-- 0 | = | PRODUCTION RERUN | 3 | = | INTEGRATION TESTING |
| 1     | = | COMPILES         | 4 | = | ACCEPTANCE TESTING  |
| 2     | = | UNIT TESTING     | 6 | = | PRODUCTION --*      |

<<<<< I.B.M. >>>>>

KCMO PRIORITY CODES USED IN JOB CARD INFORMATION.

02 = OVERNIGHT DEFERRED  
11 = NORMAL PRODUCTION  
12 = INTERMEDIATE  
13 = RUSH (HIGHEST PRIORITY)

DOCUMENT(S) ASSEMBLY SEQUENCE AND FORMATS

DOCUMENT ASSEMBLY SEQUENCE

- A. KC-255-A
- B. CHANGE COVER PAGE
- C. PACKAGE TITLE PAGE
- D. TABLE OF CONTENTS
- E. NARRATIVE
- F. EXHIBITS

DOCUMENT(S) ASSEMBLY SEQUENCE AND FORMATS

SAMPLE CHANGE COVER PAGE

(FOR EXHIBITS 10 THROUGH 16)

\*\*\*\*\*

KANSAS CITY FIELD OFFICE  
(APPLICATION DIVISION NAME)

(SYSTEM TITLE)  
(SUBSYSTEM TITLE, IF APPLICABLE)

(SYSTEM, SUBSYSTEM AND PROGRAM (TASK) NUMBER, IF APPLICABLE)

(DOCUMENT TYPE)

1 CHANGES

NARRATIVE OF CHANGES THAT REQUIRE PROGRAM MODIFICATION.

2 DOCUMENTATION

NARRATIVE OF CHANGES THAT AFFECT DOCUMENTATION ONLY AND DO NOT  
REQUIRE PROGRAM MODIFICATION.

3 AUTHORITY

ASCS-783 NUMBER AND/OR OTHER APPLICABLE AUTHORITY.

PAGE CONTROL CHART

| T/C | TEXT   | EXHIBITS                                                             |
|-----|--------|----------------------------------------------------------------------|
| 1   | 1, 3-5 | 3, PAGE 1<br>5, PAGES 1-7<br>8, PAGE 1 (REMOVE)<br>8, PAGE 1,2 (ADD) |

DATE OF CHANGE

AMEND. NO.

PAGE

\*\*\*\*\*

DOCUMENT(S) ASSEMBLY SEQUENCE AND FORMATS

SAMPLE DOCUMENTATION PACKAGE TITLE PAGE

(FOR EXHIBITS 8 THROUGH 16)

\*\*\*\*\*

KANSAS CITY MANAGEMENT OFFICE  
(APPLICATION DIVISION NAME)

(DOCUMENT TYPE)

(SYSTEM TITLE)

(SUBSYSTEM TITLE, IF APPLICABLE)

(SYSTEM, SUBSYSTEM AND PROGRAM (TASK) NUMBER, IF APPLICABLE)

<--- FOR INFORMATION ONLY --->

DOCUMENT DISTRIBUTION FOR EXHIBITS 8 THROUGH 16

|                       |   | EXHIBIT NUMBER |   |    |    |    |    |    |       |
|-----------------------|---|----------------|---|----|----|----|----|----|-------|
| EXHIBIT---            |   | 8              | 9 | 10 | 11 | 12 | 13 | 14 | 15 16 |
| APPLICATION DIVISIONS |   | AS NEEDED      |   |    |    |    |    |    | 2 1   |
| APD                   | 1 | 1              | 1 | 1  | 1  | 1  | 1  | 1  | 1     |
| AMS                   | 1 | 1              | 1 | 1  | 1  | 1  | 1  | 1  | 1     |
| DOD                   | 1 | 1              | 1 | 0  | 1  | 1  | 1  | 1  | 1     |
| DSPD                  | 0 | 1              | 0 | 0  | 1  | 0  | 0  | 0  | 0     |
| CSPD                  | 0 | 0              | 0 | 0  | 0  | 4  | 2  | 1  | 1     |
| CLIENT OFFICE (USER)  |   | AS REQUESTED   |   |    |    |    |    |    |       |

SEE PART 4 FOR APPROVALS REQUIRED

DATE OF CHANGE

DESIGNED BY: DAN D. DESIGNER

\*\*\*\*\*

DOCUMENT(S) ASSEMBLY SEQUENCE AND FORMATS

SAMPLE DOCUMENTATION PACKAGE NARRATIVE OUTLINE

(FOR EXHIBITS 8, 9, 10 AND 12 THROUGH 16)

\*\*\*\*\*

(SYSTEM TITLE) PROGRAM  
(SUBSYSTEM TITLE, IF APPLICABLE)

(UTILIZE THE APPLICABLE EXHIBIT PARAGRAPH FORMAT)

FOOTNOTE EXPLANATIONS:

- <1> - CHANGE DATE ONLY ON AMENDED PAGES
- <2> - SHOW AMENDMENT NUMBER ON AMENDED PAGES ONLY.

| <1><br>DATE OF CHANGE | <2><br>AMEND. NO. | PAGE |
|-----------------------|-------------------|------|
|-----------------------|-------------------|------|

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DOCUMENT(S) ASSEMBLY SEQUENCE AND FORMATS

SAMPLE PROGRAM SPECIFICATION DOCUMENT  
-TITLE PAGE-

\*\*\*\*\*

KANSAS CITY FIELD OFFICE  
(APPLICATION DIVISION NAME)

PROGRAM SPECIFICATION

(SYSTEM TITLE)  
(SUBSYSTEM TITLE, IF APPLICABLE)  
(PROGRAM NUMBER)  
(PROGRAM TITLE)

SEE PART 4 FOR APPROVALS REQUIRED

DATE OF CHANGE                      DESIGNED BY: DAN D. DESIGNER

\*\*\*\*\*

DOCUMENT(S) ASSEMBLY SEQUENCE AND FORMATS

SAMPLE PROGRAM SPECIFICATION DOCUMENT  
-NARRATIVE OUTLINE-

\*\*\*\*\*

|                                                         |                  |
|---------------------------------------------------------|------------------|
| KANSAS CITY FIELD OFFICE<br>(APPLICATION DIVISION NAME) | (PROGRAM NUMBER) |
|---------------------------------------------------------|------------------|

(UTILIZE PARAGRAPH FORMAT AS SHOWN IN EXHIBIT 11)

FOOTNOTE EXPLANATIONS:

<1> - CHANGE DATE ONLY ON AMENDED PAGES.

<2> - SHOW AMENDMENT NUMBER ON AMENDED PAGES.

|                       |                   |      |
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| <1><br>DATE OF CHANGE | <2><br>AMEND. NO. | PAGE |
|-----------------------|-------------------|------|

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DOCUMENT(S) ASSEMBLY SEQUENCE AND FORMATS

SAMPLE PROGRAM SPECIFICATION DOCUMENT  
-TABLE OF CONTENTS-

\*\*\*\*\*

|                                                         |                  |
|---------------------------------------------------------|------------------|
| KANSAS CITY FIELD OFFICE<br>(APPLICATION DIVISION NAME) | (PROGRAM NUMBER) |
|---------------------------------------------------------|------------------|

(UTILIZE TABLE OF CONTENTS AS SHOWN IN EXHIBIT 11)

FOOTNOTE EXPANATIONS:

<1> - CHANGE DATE ONLY ON AMENDED PAGES.

<2> - SHOW AMENDMENT NUMBER ON AMENDED PAGES.

| <1><br>DATE OF CHANGE | <2><br>AMEND. NO. | PAGE |
|-----------------------|-------------------|------|
|-----------------------|-------------------|------|

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## SAMPLE FUNCTIONAL REQUIREMENTS DOCUMENT

THIS DOCUMENT IS TO PROVIDE A BASIS FOR MUTUAL UNDERSTANDING BETWEEN USERS AND DESIGNERS OF THE INITIAL DEFINITION OF THE SOFTWARE, INCLUDING THE REQUIREMENTS, OPERATING ENVIRONMENT, AND THE DEVELOPMENT PLAN.

\*\*\*\*\*

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| C. SPECIAL INFORMATION     | 6        |

TC PAGE

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## SAMPLE FUNCTIONAL REQUIREMENTS DOCUMENT

\*\*\*\*\*

## 1 GENERAL INFORMATION

- A. SUMMARY. STATE THE PURPOSE AND SCOPE OF THE USER REQUEST FOR SYSTEM DEVELOPMENT AS A BASIS FOR MUTUAL UNDERSTANDING BETWEEN USER AND DEVELOPER.
- B. ENVIRONMENT. IDENTIFY THE PROJECT SPONSOR, DEVELOPER, USER, AND COMPUTER CENTER OR NETWORK WHERE THE SOFTWARE IS TO BE IMPLEMENTED.
- C. REFERENCES. THE SPECIFIC SITUATION WHICH TRIGGERED THE PROJECT SHOULD BE INCLUDED. IDENTIFY ALL USER DOCUMENTATION RELATIVE TO THE PROJECT, SUCH AS:
- \*-- 1. PROJECT REQUEST (AUTHORIZATIONS, I.E., KC-208). --\*
2. PREVIOUSLY PUBLISHED DOCUMENTS ON THE PROJECT, I.E., PUBLIC LAW.
3. DOCUMENTATION CONCERNING RELATED PROJECTS.
4. FIPS PUBLICATIONS AND OTHER REFERENCE DOCUMENTS.

## 2 OVERVIEW

- A. BACKGROUND. PRESENT THE PURPOSE AND SCOPE OF THE SOFTWARE, AND ANY BACKGROUND INFORMATION THAT WOULD ORIENT THE READER.
- B. SUMMARY OF IMPROVEMENTS. ITEMIZE IMPROVEMENTS TO BE OBTAINED FROM THE PROPOSED SOFTWARE, SUCH AS:
1. NEW CAPABILITIES.
2. UPGRADED EXISTING CAPABILITIES.

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## SAMPLE FUNCTIONAL REQUIREMENTS DOCUMENT

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3. ELIMINATION OF EXISTING DEFICIENCIES.
  4. IMPROVED TIMELINESS, E.G., DECREASED RESPONSE TIME OR PROCESSING TIME.
  5. ELIMINATION OR REDUCTION OF EXISTING CAPABILITIES THAT ARE NO LONGER NEEDED.
- C. SUMMARY OF IMPACTS. SUMMARIZE THE ANTICIPATED IMPACTS OF THE PROPOSED SOFTWARE ON THE PRESENT SYSTEM, IN THE FOLLOWING CATEGORIES AS APPROPRIATE:
1. EQUIPMENT IMPACTS.
  2. SOFTWARE IMPACTS.
  3. ORGANIZATIONAL IMPACTS.
    - A. FUNCTIONAL ORGANIZATION.
    - B. INCREASE/DECREASE IN STAFF LEVEL.
    - C. UPGRADE/DOWNGRADE OF STAFF SKILLS.
  4. OPERATIONAL IMPACTS.
    - A. STAFF AND OPERATION PROCEDURES.
    - B. PROCEDURES OF THE OPERATING CENTER.
    - C. DATA (SOURCES, VOLUME, MEDIUM, TIMELINESS).
    - D. DATA RETENTION AND RETRIEVAL PROCEDURES.
    - E. REPORTING METHODS.
    - F. SYSTEM FAILURE CONTINGENCIES.
    - G. DATA INPUT PROCEDURES.
    - H. COMPUTER PROCESSING TIME REQUIREMENTS.
  5. DEVELOPMENTAL IMPACTS.
    - A. SPECIFIC ACTIVITIES TO BE PERFORMED BY THE USER IN SUPPORT OF DEVELOPMENT OF THE PROPOSED SOFTWARE.

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## SAMPLE FUNCTIONAL REQUIREMENTS DOCUMENT

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- B. RESOURCES REQUIRED TO DEVELOP THE DATA BASE.
- C. COMPUTER PROCESSING RESOURCES REQUIRED TO DEVELOP AND TEST THE NEW SOFTWARE.
- D. COST CONSIDERATIONS. DESCRIBE RESOURCE AND COST FACTORS THAT MAY INFLUENCE THE DEVELOPMENT, DESIGN, AND CONTINUED OPERATION OF THE PROPOSED SOFTWARE. DISCUSS OTHER FACTORS WHICH MAY DETERMINE REQUIREMENTS, SUCH AS INTERFACES WITH OTHER AUTOMATED SYSTEMS AND TELECOMMUNICATION FACILITIES.
- E. ALTERNATIVE PROPOSALS. IF ALTERNATIVE SOFTWARE HAS BEEN PROPOSED TO SATISFY THE REQUIREMENTS, DESCRIBE EACH ALTERNATIVE. COMPARE AND CONTRAST THE ALTERNATIVES. EXPLAIN THE SELECTION REASONING.

## 3 REQUIREMENTS

- A. FUNCTIONS. STATE THE FUNCTIONS OF THE SOFTWARE IN QUANTITATIVE AND QUALITATIVE TERMS, AND HOW THESE FUNCTIONS WILL SATISFY THE PERFORMANCE OBJECTIVES.
- B. PERFORMANCE. SPECIFY THE PERFORMANCE REQUIREMENTS, SUCH AS:
  - 1. ACCURACY.
    - A. MATHEMATICAL.
    - B. LOGICAL.
    - C. LEGAL.
    - D. TRANSMISSION.
  - 2. VALIDATION.

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## SAMPLE FUNCTIONAL REQUIREMENTS DOCUMENT

\*\*\*\*\*

## 3. TIMING. (IMPOSED ON THE SOFTWARE)

- A. RESPONSE TIME.
- B. UPDATE PROCESSING TIME.
- C. DATA TRANSFER AND TRANSMISSION TIME.
- D. THROUGHPUT TIME.

## 4. FLEXIBILITY.

- A. CHANGES IN MODES OF OPERATION.
- B. OPERATING ENVIRONMENT.
- C. INTERFACES WITH OTHER SOFTWARE.
- D. ACCURACY AND VALIDATION TIMING.
- E. PLANNED CHANGES OR IMPROVEMENTS.

- C. INPUTS-OUTPUTS. EXPLAIN, SHOW EXAMPLES AND SOURCES OF THE VARIOUS DATA INPUTS. SPECIFY THE MEDIUM (DISK, CARDS, MAGNETIC TAPE), FORMAT, RANGE OF VALUES, ACCURACY, ETC. PROVIDE EXAMPLES AND EXPLANATION OF THE DATA OUTPUTS REQUIRED OF THE SOFTWARE, AND ANY QUALITY CONTROL OUTPUTS THAT HAVE BEEN IDENTIFIED. INCLUDE DESCRIPTIONS OR EXAMPLES OF HARD COPY REPORTS (ROUTINE, SITUATIONAL AND EXCEPTION) AS WELL AS GRAPHIC OR DISPLAY REPORTS.
- D. DATA CHARACTERISTICS. DESCRIBE INDIVIDUAL AND COMPOSITE DATA ELEMENTS BY NAME, THEIR RELATED CODED REPRESENTATIONS, AS WELL AS RELEVANT DICTIONARIES, TABLES, AND REFERENCE FILES. ESTIMATE TOTAL STORAGE REQUIREMENTS FOR THE DATA AND RELATED COMPONENTS BASED ON EXPECTED GROWTH.
- E. FAILURE CONTINGENCIES. SPECIFY THE POSSIBLE FAILURES OF THE HARDWARE OR SOFTWARE, THE CONSEQUENCES (IN TERMS OF PERFORMANCE), AND THE ALTERNATIVE COURSES OF ACTION THAT MAY BE TAKEN TO SATISFY THE INFORMATION REQUIREMENTS. INCLUDE:

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## SAMPLE FUNCTIONAL REQUIREMENTS DOCUMENT

\*\*\*\*\*

1. BACK-UP. SPECIFY BACK-UP TECHNIQUES, I.E., THE REDUNDANCY AVAILABLE IN THE EVENT THE PRIMARY SYSTEM ELEMENT GOES DOWN. FOR EXAMPLE, A BACK-UP TECHNIQUE FOR A DISK MEDIUM WOULD BE TO RECORD PERIODICALLY THE CONTENTS OF THE DISK TO A TAPE.
2. FALLBACK. EXPLAIN THE FALLBACK TECHNIQUE, I.E., THE USE OF ANOTHER SYSTEM OR OTHER MEANS TO ACCOMPLISH SOME PORTION OF REQUIREMENTS. FOR EXAMPLE, THE FALLBACK TECHNIQUE FOR AN AUTOMATED SYSTEM MIGHT BE MANUAL MANIPULATION AND RECORDING OF DATA.
3. RECOVERY AND RESTART. DISCUSS THE RECOVERY AND RESTART TECHNIQUES, I.E., THE CAPABILITY TO RESUME EXECUTION OF SOFTWARE SUBSEQUENT TO WHICH HARDWARE OR SOFTWARE PROBLEM OCCURED, OR THE RE-RUNNING OF THE SOFTWARE FROM THE BEGINNING.

## 4 OPERATING ENVIRONMENT

- A. EQUIPMENT. IDENTIFY THE EQUIPMENT REQUIRED FOR THE OPERATION OF THE SOFTWARE. IDENTIFY ANY NEW EQUIPMENT REQUIRED AND RELATE IT TO SPECIFIC FUNCTIONS AND REQUIREMENTS TO BE SUPPORTED. INCLUDE INFORMATION SUCH AS:
  1. PROCESSOR AND SIZE OF INTERNAL STORAGE.
  2. STORAGE, ONLINE AND OFFLINE, MEDIA, FORM, AND DEVICES.
  3. INPUT/OUTPUT DEVICES, ONLINE AND OFFLINE.
  4. DATA TRANSMISSION DEVICES.
- B. SUPPORT SOFTWARE. IDENTIFY THE SUPPORT SOFTWARE AND DESCRIBE ANY TEST SOFTWARE. IF THE OPERATION OF THE SOFTWARE DEPENDS ON CHANGES TO SUPPORT SOFTWARE, IDENTIFY THE NATURE AND PLANNED DATE OF THESE CHANGES.
- C. INTERFACES. DESCRIBE THE INTERFACES WITH OTHER SOFTWARE.

DATE OF CHANGE

AMEND. NO.

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## SAMPLE FUNCTIONAL REQUIREMENTS DOCUMENT

\*\*\*\*\*

- D. SECURITY AND PRIVACY. DESCRIBE THE OVERALL SECURITY AND PRIVACY REQUIREMENTS IMPOSED ON THE SOFTWARE. IF NO SPECIFIC REQUIREMENTS ARE IMPOSED, STATE THIS FACT.
- E. CONTROLS. DESCRIBE THE OPERATIONAL CONTROLS IMPOSED ON THE SOFTWARE. IDENTIFY THE SOURCE OF THESE CONTROLS.

## 5 DEVELOPMENT PLAN

- A. GENERAL. DISCUSS IN THIS SECTION THE OVERALL MANAGEMENT APPROACH TO THE DEVELOPMENT AND IMPLEMENTATION OF THE PROPOSED SOFTWARE. INCLUDE A LIST OF THE DOCUMENTATION TO BE PRODUCED, TIME FRAMES AND MILESTONES FOR THE DEVELOPMENT OF THE SOFTWARE, AND NECESSARY PARTICIPATION BY OTHER ORGANIZATIONS TO ASSURE SUCCESSFUL DEVELOPMENT.
- B. FUNCTIONAL FLOW DIAGRAM. PREPARE A FLOW DIAGRAM IN USER TERMS FOR EACH FUNCTION DESCRIBED. SHOW THE GENERAL MANUAL AND AUTOMATED FLOW OF DATA INTO AND OUT OF THE SYSTEM. DESCRIBE THE REQUIREMENTS AND INTERFACES OF THE FUNCTIONS DEFINED.
- C. SPECIAL INFORMATION. PROVIDE THE FOLLOWING AS NECESSARY:
  - 1. IDENTIFY THE USERS OF THE SYSTEM MOST RESPONSIBLE FOR ITS PERFORMANCE.
  - 2. DEFINE USER PROBLEM AREAS, POTENTIAL SOLUTIONS AND INTERFACES.
  - 3. IDENTIFY SPECIAL HARDWARE AND SOFTWARE NEEDS.
  - 4. DETERMINE PROCESSES AND SITUATIONS THAT COULD IMPEDE THE SYSTEM'S DEVELOPMENT.
  - 5. LIST MANDATORY ASSUMPTIONS RELATING TO THE SYSTEM'S DEVELOPMENT.

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## SAMPLE DATA REQUIREMENTS DOCUMENT

THE PURPOSE OF THE DATA REQUIREMENTS DOCUMENT IS TO DEFINE,  
DURING THE DEFINITION STAGE OF SOFTWARE DEVELOPMENT, DATA ELEMENTS  
WHICH THE SYSTEM MUST HANDLE AND TO COMMUNICATE DATA COLLECTION  
REQUIREMENTS TO THE USER.

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| C. REFERENCES                        |  | 1        |
| D. MODIFICATION OF DATA REQUIREMENTS |  | 1        |
| 2 DATA DESCRIPTION                   |  | 1        |
| A. STATIC DATA                       |  | 1        |
| B. DYNAMIC INPUT DATA                |  | 1        |
| C. DYNAMIC OUTPUT DATA               |  | 2        |
| D. INTERNALLY GENERATED DATA         |  | 2        |
| E. DATA CONSTRAINTS                  |  | 2        |
| 3 DATA COLLECTION                    |  | 2        |
| A. REQUIREMENTS AND SCOPE            |  | 2        |
| B. INPUT RESPONSIBILITIES            |  | 5        |
| C. PROCEDURES                        |  | 5        |
| D. IMPACTS                           |  | 6        |

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## SAMPLE DATA REQUIREMENTS DOCUMENT

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## 1 GENERAL INFORMATION

- A. SUMMARY. SUMMARIZE THE GENERAL NATURE OF THE SOFTWARE FOR WHICH THESE DATA REQUIREMENTS ARE BEING DEFINED.
- B. ENVIRONMENT. IDENTIFY THE PROJECT SPONSOR, DEVELOPER, USER ORGANIZATION, AND COMPUTER CENTER WHERE THE SOFTWARE IS TO BE INSTALLED. SHOW THE RELATIONSHIPS OF THESE DATA REQUIREMENTS AND THOSE OF OTHER SOFTWARE.
- C. REFERENCES. LIST APPLICABLE REFERENCES, SUCH AS:
1. PROJECT REQUEST (AUTHORIZATION).
  2. PREVIOUSLY PUBLISHED DOCUMENTS ON THE PROJECT.
  3. DOCUMENTATION CONCERNING RELATED PROJECTS.
  4. FIPS PUBLICATIONS AND OTHER REFERENCE DOCUMENTS.
- D. MODIFICATION OF DATA REQUIREMENTS. DESCRIBE OR REFERENCE PROCEDURES FOR IMPLEMENTING AND DOCUMENTING CHANGES TO THESE DATA REQUIREMENTS, IF APPLICABLE.

## 2 DATA DESCRIPTION

SEPARATE THE DATA DESCRIPTION INTO TWO CATEGORIES, STATIC DATA AND DYNAMIC DATA. STATIC DATA IS DEFINED AS THAT DATA WHICH IS USED MAINLY FOR REFERENCE DURING OPERATION AND IS USUALLY GENERATED OR UPDATED IN WIDELY SEPARATED TIME FRAMES INDEPENDENT OF NORMAL SYSTEM RUNS. DYNAMIC DATA INCLUDES ALL DATA WHICH IS INTENDED TO BE UPDATED AND WHICH IS INPUT TO A SYSTEM DURING A NORMAL RUN OR IS OUTPUT BY THE SYSTEM. ARRANGE THE DATA ELEMENTS IN EACH CATEGORY IN LOGICAL GROUPINGS SUCH AS FUNCTIONS, SUBJECTS, OR OTHER GROUPINGS WHICH ARE MOST RELEVANT TO THEIR USE.

- A. STATIC DATA. LIST THE STATIC DATA ELEMENTS USED FOR EITHER CONTROL OR REFERENCE PURPOSES.
- B. DYNAMIC INPUT DATA. LIST THE DYNAMIC INPUT DATA ELEMENTS WHICH CONSTITUTE THE DATA INTENDED TO BE CHANGED BY A NORMAL RUN OR DURING ONLINE OPERATIONS.

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## SAMPLE DATA REQUIREMENTS DOCUMENT

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- C. DYNAMIC OUTPUT DATA. LIST THE DYNAMIC OUTPUT DATA ELEMENTS WHICH CONSTITUTE THE DATA INTENDED TO BE CHANGED BY A NORMAL RUN OR DURING ONLINE OPERATIONS.
- D. INTERNALLY GENERATED DATA. LIST THE INTERNALLY GENERATED DATA OF INFORMATIONAL VALUE TO THE USER OR DEVELOPER.
- E. DATA CONSTRAINTS. STATE THE CONSTRAINTS ON THE DATA REQUIREMENTS. INDICATE THE LIMITS OF THE DATA REQUIREMENTS WITH REGARD TO FURTHER EXPANSION OR UTILIZATION, SUCH AS THE MAXIMUM SIZE AND NUMBER OF FILES, RECORDS, AND DATA ELEMENTS. EMPHASIZE THE CONSTRAINTS THAT COULD PROVE CRITICAL DURING DESIGN AND DEVELOPMENT.

## 3 DATA COLLECTION

- A. REQUIREMENTS AND SCOPE. DESCRIBE THE TYPE OF INFORMATION REQUIRED TO DOCUMENT THE CHARACTERISTICS OF EACH DATA ELEMENT. SPECIFY INFORMATION TO BE COLLECTED BY THE USER AND THAT TO BE COLLECTED BY THE DEVELOPER. IT SHOULD BE LOGICALLY GROUPED AND PRESENTED. THE USER SHOULD DEFINE AND IDENTIFY INPUT SOURCES NECESSARY TO FULFILL PRODUCT REQUIREMENTS. INPUT VOLUME SHOULD BE MINIMIZED, MANUAL PREPARATION SHOULD BE ELIMINATED AND THE STEPS BETWEEN ORIGIN OF THE DATA AND ITS INPUT INTO THE COMPUTER SHOULD BE LIMITED.

## 1. DATA INPUT SPECIFICATIONS.

- A. IDENTIFY THE SOURCE FROM WHICH THE DATA WILL BE ENTERED, E.G., AN OPERATOR, STATION, ORGANIZATIONAL UNIT, OR ITS COMPONENT GROUP.
- B. PROVIDE COPIES OF SOURCE DATA.
- C. DEFINE THE SEQUENCE, TYPE AND FORMAT OF DATA.
- D. PROVIDE VALIDATION AND EDIT RULES FOR EACH FUNCTION'S DATA.

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SAMPLE DATA REQUIREMENTS DOCUMENT

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|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| *****          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |      |
|                | <p>E. ESTIMATE THE VOLUME OF DATA INPUT AND FREQUENCY FOR EACH FUNCTION.</p> <p>F. DETERMINE THE INPUT DISPOSITION AND/OR RETENTION.</p> <p>G. EVALUATE SECURITY, PRIVACY AND LEGAL CONDITION.</p> <p>H. DETERMINE IF THERE ARE REQUIREMENTS FOR DATA WITH SPECIAL FREQUENCIES OF USE.</p> <p>I. STATE SPECIAL ACCURACY REQUIREMENTS.</p> <p>J. STATE USER REQUIREMENTS, IF ANY, REGARDING TEST DATA.</p> <p>K. DETERMINE IF THE USER WILL PROVIDE SIMULATION DATA.</p>                                                            |      |
| 2.             | <p>INPUT MEDIUM AND DEVICE. IDENTIFY THE MEDIUM AND HARDWARE DEVICE INTENDED FOR ENTERING THE DATA INTO THE SYSTEM. IN THOSE CASES WHERE ONLY CERTAIN SPECIAL STATIONS ARE TO BE LEGITIMATE ENTRY POINTS. THEY SHOULD BE SPECIFIED.</p>                                                                                                                                                                                                                                                                                            |      |
| 3.             | <p>RECIPIENTS. IDENTIFY THE INTENDED RECIPIENTS OF THE OUTPUT DATA.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |
| 4.             | <p>OUTPUT MEDIUM AND DEVICE. IDENTIFY THE MEDIUM AND HARDWARE DEVICE INTENDED FOR PRESENTING OUTPUT DATA TO THE RECIPIENT. SPECIFY WHETHER THE RECIPIENT IS TO RECEIVE THE DATA AS PART OF A HARD COPY PRINTOUT OR OTHERWISE. IF THE OUTPUT IS TO BE PASSED TO SOME OTHER AUTOMATED SYSTEM. THE MEDIUM SHOULD BE DESCRIBED, SUCH AS MAGNETIC TAPE OR PUNCHED CARDS. THE USER SHOULD PROVIDE ANSWERS TO THE FOLLOWING:</p> <p>A. ASSURE THE EXISTENCE OF INPUT TO PROVIDE OUTPUT.</p> <p>B. DESIRED REPORT FORMATS AND LAYOUTS.</p> |      |
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## SAMPLE DATA REQUIREMENTS DOCUMENT

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- C. DETERMINE NUMBER OF COPIES OF REPORTS REQUIRED.
  - D. SPECIFY THE USE OF MANUAL PREPARED REPORTS WHERE COSTS/BRIEFS INDICATE.
  - E. DEFINE SPECIAL ONE-TIME REPORT REQUIREMENTS.
  - F. DETERMINE IF THERE WOULD BE SPECIAL PROCESSING FOR OUTPUT AND EVALUATE ITS IMPACT REGARDING TIME AND COST.
  - G. STATE REPORT VOLUME AND FREQUENCY NEEDS.
  - H. SPECIFY REPORT OUTPUT: MEDIA-CARDS, TAPE, DISK, MICROFICHE, PLOTTER, ETC.
  - I. DEFINE REPORTS SECURITY, PRIVACY AND LEGAL CONDITIONS.
  - J. SPECIFY FUTURE REPORTING CHANGES.
  - K. RESOLVE MANUAL BACKUP PROCEDURES.
  - L. DEFINE CONTROL/AUDIT REPORTS - TOTAL %, FORMULAS, ETC.
  - M. DETERMINE BACKUP, RECOVERY, STORAGE, AND SOURCE DATA CONTACT, I.E., WDC, STATE, COUNTY, ETC.
  - N. DEFINE OUTPUT VALIDITY CHECKS.
  - O. STATE REPORT IDENTIFICATION, REPRODUCTION METHODS, PAPER SIZE, BINDING AND DISTRIBUTION.
  - P. DETERMINE REPORT RELEASE AUTHORITY.
5. CRITICAL VALUE. ONE VALUE FROM A RANGE OF VALUES OF DATA MAY HAVE PARTICULAR SIGNIFICANCE TO A RECIPIENT. WHEN APPLICABLE, THE CRITICAL VALUE AND ITS SIGNIFICANCE TO THE USER SHOULD BE INCLUDED.

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## SAMPLE DATA REQUIREMENTS DOCUMENT

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6. SCALES OF MEASUREMENT. SPECIFY FOR NUMERIC SCALES, UNITS OF MEASUREMENT, INCREMENTS, SCALE ZERO-POINT, AND RANGE OF VALUES. FOR NON-NUMERIC SCALES, ANY RELATIONSHIPS INDICATED BY THE LEGAL VALUES SHOULD BE STATED.
7. CONVERSION FACTORS. SPECIFY THE CONVERSION FACTORS OF MEASURED QUANTITIES THAT MUST GO THROUGH ANALOG OR DIGITAL CONVERSION PROCESSES. DURING THE PERIOD OF IMPLEMENTATION, SPECIAL CONDITIONS RELATIVE TO PARALLEL PROCESSING SHOULD BE CLEARLY STATED, SUCH AS:
  - A. SINGLE FUNCTIONS COVERED.
  - B. FUNCTIONS INSTALLED PROGRESSIVELY BY LOCATION.
  - C. FUNCTIONS INSTALLED RELATIVE TO STATED USER REQUIREMENTS.
  - D. FUNCTIONS INSTALLED PROGRESSIVELY BY USER.
  - E. GLOBAL FUNCTIONS. (I.E., THOSE THAT RELATE TO EACH OTHER AND ARE DEPENDENT.)
8. FREQUENCY OF UPDATE AND PROCESSING. SPECIFY THE EXPECTED FREQUENCY OF DATA CHANGE AND THE EXPECTED FREQUENCY OF PROCESSING INPUT DATA. IF THE INPUT ARRIVES IN A RANDOM OR IN AN "AS OCCURED" MANNER, BOTH THE AVERAGE FREQUENCY AND SOME MEASURE OF THE VARIANCE MUST BE SPECIFIED.
- B. INPUT RESPONSIBILITIES. PROVIDE RECOMMENDATIONS AS TO RESPONSIBILITIES FOR PREPARING SPECIFIC DATA INPUTS. INCLUDE ANY RECOMMENDATIONS REGARDING THE ESTABLISHMENT OF A DATA INPUT GROUP. SPECIFY BY SOURCE THOSE DATA INPUTS DEPENDENT ON INTERFACING SOFTWARE OR UNRELATED ORGANIZATIONS.
- C. PROCEDURES. PROVIDE SPECIFIC INSTRUCTIONS FOR DATA COLLECTION PROCEDURES. INCLUDE DETAILED FORMATS WHERE APPLICABLE AND IDENTIFY EXPECTED DATA COMMUNICATIONS

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SAMPLE DATA REQUIREMENTS DOCUMENT

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MEDIA AND TIMING OF INPUTS. IDENTIFY THE SOURCE AND THE NECESSARY CONTROLS TO INSURE THAT:

1. DATA RECEIVED IS PRESENTED TO THE SYSTEM.
2. DATA PRESENTED IS VALID.
3. ERRORS CAN BE DETECTED EARLY.
4. DATA ACCEPTED IS SAFELY MAINTAINED.
5. AUDIT TRAILS ARE ESTABLISHED TO TRACK TRANSACTIONS.
6. SPECIAL USE NEEDS ARE PROVIDED.

D. IMPACTS.

1. DESCRIBE THE IMPACTS OF THESE DATA REQUIREMENTS ON EQUIPMENT, SOFTWARE AND THE USER AND DEVELOPER ORGANIZATIONS.
2. DESCRIBE THE IMPACTS ASSOCIATED WITH COLLECTION AND MAINTENANCE OF THE DATA BASE ON EQUIPMENT, SOFTWARE, ORGANIZATIONAL, OPERATIONAL AND DEVELOPMENTAL ENVIRONMENTS. IMPACTS ON THE SYSTEM RESULTING FROM DEFICIENCIES IN THE DATA BASE SHALL ALSO BE GIVEN.
3. REVIEW FALL-BACK OR LACK OF IT. STATE HOW THE FUNCTION CAN BE PERFORMED SHOULD THE COMPUTER FACILITY NOT BE AVAILABLE FOR ANY REASON AND TIMING NEEDED.
4. EVALUATE RECOVERY PROCEDURES. STATE ANY SPECIAL ACTION NECESSARY TO REGAIN THE FULL SYSTEM SHOULD PROCESSING BE INTERRUPTED.

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## SAMPLE SYSTEM/SUBSYSTEM SPECIFICATION DOCUMENT

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## SAMPLE SYSTEM/SUBSYSTEM SPECIFICATION DOCUMENT

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## 1 GENERAL INFORMATION

- A. SUMMARY. DESCRIBE THE PURPOSE OF THE SPECIFICATION AND DEFINE SYSTEM/SUBSYSTEM FUNCTIONS.
- B. ENVIRONMENT. IDENTIFY THE SOURCE OF THE PROJECT AUTHORIZATION, DEVELOPER, USER, AND COMPUTER CENTER OR NETWORK ON WHICH THE SYSTEM/SUBSYSTEM IS TO BE IMPLEMENTED.
- C. REFERENCES. LIST APPLICABLE REFERENCES, SUCH AS:
1. PROJECT REQUEST (AUTHORIZATIONS, NUMBER AUTHOR, TITLE, ETC.).
  2. PREVIOUSLY PUBLISHED DOCUMENTS ON THE SUBJECT.  
(FUNCTIONAL AND DATA REQUIREMENTS DOCUMENTS).
  3. DOCUMENTATION CONCERNING RELATED PROJECTS.
  4. FIPS PUBLICATIONS AND OTHER REFERENCE DOCUMENTS.

## 2 REQUIREMENTS

- A. DESCRIPTION. PROVIDE A GENERAL DESCRIPTION OF THE SYSTEM/SUBSYSTEM TO ESTABLISH A FRAME OF REFERENCE FOR THE REMAINDER OF THE DOCUMENT. INCLUDE A SUMMARY OF FUNCTIONAL REQUIREMENTS TO BE SATISFIED BY THIS SYSTEM/SUBSYSTEM. SHOW THE GENERAL INTERRELATIONSHIP OF THE SYSTEM/SUBSYSTEM COMPONENTS AND DEFINE ITS SCOPE IN TERMS OF ORGANIZATIONAL FACTORS, TIME, COST, SOFTWARE, LEGAL RESTRICTIONS, RESOURCES, USER REQUEST, ETC.
- B. FUNCTIONS. SPECIFY HOW THE FUNCTIONS WILL SATISFY THE USER REQUIREMENTS.
- C. PERFORMANCE.
1. ACCURACY. DESCRIBE THE DATA ACCURACY REQUIREMENTS IMPOSED ON THE SYSTEM/SUBSYSTEM, SUCH AS:
    - A. LOGICAL.

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## SAMPLE SYSTEM/SUBSYSTEM SPECIFICATION DOCUMENT

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B. LEGAL.

C. TRANSMISSION.

2. VALIDATION. DESCRIBE THE DATA VALIDATION REQUIREMENTS  
IMPOSED ON THE SYSTEM/SUBSYSTEM.3. TIMING. DESCRIBE THE TIMING REQUIREMENTS IMPOSED ON THE  
SOFTWARE UNDER VARYING CONDITIONS, SUCH AS:

A. RESPONSE TIME.

B. UPDATE PROCESSING TIME.

C. DATA TRANSFER AND TRANSMISSION TIME.

D. THROUGHPUT TIME.

4. FLEXIBILITY. DESCRIBE THE CAPABILITY FOR ADAPTING THE  
SOFTWARE TO CHANGES IN REQUIREMENTS, SUCH AS:

A. CHANGES IN MODES OF OPERATION.

B. OPERATING ENVIRONMENT.

C. INTERFACES WITH OTHER SOFTWARE.

D. PLANNED CHANGES OR IMPROVEMENTS, SUCH AS DATES,  
PERCENTAGES, INTEREST RATES, AND CONSOLIDATION AND  
ELIMINATION OF MODULES OR SEGMENTS.(IDENTIFY THE SYSTEM/SUBSYSTEM COMPONENTS WHICH ARE  
SPECIFICALLY DESIGNED TO PROVIDE THIS FLEXIBILITY.)

## 3 OPERATING ENVIRONMENT

A. EQUIPMENT. IDENTIFY THE EQUIPEMENT REQUIRED FOR THE OPERATION  
OF THE SYSTEM/SUBSYSTEM. IDENTIFY ANY NEW EQUIPMENT REQUIRED  
AND RELATE IT TO SPECIFIC FUNCTIONAL REQUIREMENTS TO BE  
SUPPORTED. INCLUDE INFORMATION SUCH AS:

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## SAMPLE SYSTEM/SUBSYSTEM SPECIFICATION DOCUMENT

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1 PROCESSOR AND MAXIMUM SIZE OF INTERNAL STORAGE.

2 INPUT/OUTPUT, ONLINE AND OFFLINE, MEDIA, FORM AND DEVICES.

3 DATA TRANSMISSION DEVICES.

B. SUPPORT SOFTWARE. GENERALLY, IDENTIFY THE PROGRAMMING LANGUAGE, SUPPORT SOFTWARE AND TEST SOFTWARE. IF THE OPERATION OF THE SYSTEM/SUBSYSTEM DEPENDS ON CHANGES TO SUPPORT SOFTWARE, IDENTIFY THE NATURE AND PLANNED DATE OF THESE CHANGES.

C. INTERFACES. DESCRIBE THE INTERFACES WITH OTHER SOFTWARE.

D. SECURITY AND PRIVACY. DESCRIBE THE OVERALL SECURITY AND PRIVACY REQUIREMENTS IMPOSED ON THE SYSTEM/SUBSYSTEM. IF NO SPECIFIC REQUIREMENTS ARE IMPOSED, STATE THIS FACT. REFER TO PART 4 FOR RELATED STANDARDS.

E. CONTROLS. DESCRIBE THE OPERATIONAL CONTROLS IMPOSED ON THE SYSTEM/SUBSYSTEM. IDENTIFY THE SOURCES OF THESE CONTROLS.

## 4 DESIGN CHARACTERISTICS

A. SYSTEM LOGICAL FLOW. DESCRIBE THE LOGICAL FLOW OF SYSTEM. UTILIZE NARRATIVE WHERE APPROPRIATE. INCLUDE AS EXHIBIT 1 A SYSTEMS DIAGRAM USING THE APPROVED ASCS SYSTEM FLOWCHART SYMBOLS. \* \* \* THE FLOW SHOULD PROVIDE AN INTEGRATED PRESENTATION OF THE SYSTEM/SUBSYSTEM DYNAMICS, OF ENTRANCES AND EXITS, COMPUTER PROGRAMS, SUPPORT SOFTWARE, CONTROLS, AND DATA FLOW. DESCRIBE ANY SPECIAL KNOWLEDGE, SOFTWARE, PROCEDURES, HANDLING, OR EQUIPMENT NEEDED. IDENTIFY ANY PRE-WRITTEN PROGRAMS THAT MAY BE UTILIZED.

## 5 PROGRAM SPECIFICATIONS

A PROGRAM (NAME/NUMBER). SPECIFY THE SYSTEM/SUBSYSTEM FUNCTIONS TO BE SATISFIED BY THE COMPUTER PROGRAM.

1. DESCRIBE THE PROGRAM REQUIREMENTS.

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## SAMPLE SYSTEM/SUBSYSTEM SPECIFICATION DOCUMENT

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2. DESCRIBE THE OPERATING ENVIRONMENT AND THE EQUIPMENT, SOFTWARE AND INTERFACES PERTAINING TO THE PROGRAM.
3. DESCRIBE THE DESIGN CHARACTERISTICS FOR THE PROGRAM INCLUDING INPUTS, PROCESSING, OUTPUTS, AND DATA BASE.  
\*-- (UTILIZE FORM ASCS-735 AND EXHIBIT 20 AS NEEDED.) --\*
- B. PROGRAM (NAME/NUMBER). DESCRIBE THE SECOND AND SUBSEQUENT COMPUTER PROGRAMS IN A MANNER SIMILAR TO SUBPARAGRAPH A, ABOVE.

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SAMPLE PROGRAM SPECIFICATION DOCUMENT

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- 1 GENERAL INFORMATION (IF THIS INFORMATION IS COVERED IN PREVIOUS DOCUMENTATION SO STATE, AND OMIT.)
  - A. SUMMARY. SUMMARIZE THE SPECIFICATIONS AND FUNCTIONS OF THE COMPUTER PROGRAM TO BE DEVELOPED.
  - B. ENVIRONMENT. IDENTIFY THE SOURCE OF THE PROJECT AUTHORIZATION, DEVELOPER, USER, AND COMPUTER CENTER OR NETWORK ON WHICH THE SYSTEM/SUBSYSTEM IS TO BE IMPLEMENTED.
  - C. REFERENCES. LIST APPLICABLE REFERENCES, SUCH AS:
    1. APPLICABLE SYSTEM/SUBSYSTEM SPECIFICATION DOCUMENT.
    2. PROJECT REQUEST (AUTHORIZATIONS, NUMBER AUTHOR, TITLE, ETC.).
    3. PREVIOUSLY PUBLISHED DOCUMENTS ON THE SUBJECT.
    4. DOCUMENTATION CONCERNING RELATED PROJECTS.
    5. FIPS PUBLICATIONS AND OTHER REFERENCE DOCUMENTS.
- 2 REQUIREMENTS
  - A. FUNCTIONS. PROVIDE A GENERAL DESCRIPTION OF THE PROGRAM AND THE FUNCTIONS OF THE PROGRAM TO BE DEVELOPED. IF THE PROGRAM IN ITSELF DOES NOT FULLY SATISFY A SYSTEM/SUBSYSTEM FUNCTION, SHOW THE RELATIONSHIP TO OTHER PROGRAMS WHICH IN AGGREGATE SATISFY THAT FUNCTION.
  - B. PERFORMANCE.
    1. ACCURACY. DESCRIBE DATA ACCURACY REQUIREMENTS IMPOSED ON THE PROGRAM, SUCH AS MATHMETICAL ROUNDING.

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## SAMPLE PROGRAM SPECIFICATION DOCUMENT

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2. VALIDATION. DESCRIBE THE DATA VALIDATION REQUIREMENTS IMPOSED ON THE PROGRAM.

3 OPERATING ENVIRONMENT

- A. SUPPORT SOFTWARE. IDENTIFY THE SUPPORT SOFTWARE AND DESCRIBE ANY TEST PROGRAMS. IF THE OPERATION OF THE PROGRAM DEPENDS ON CHANGES TO SUPPORT SOFTWARE, IDENTIFY THE NATURE AND PLANNED DATE OF THESE CHANGES.
- B. INTERFACES. DESCRIBE ALL INTERACTIONS WITH THE OPERATOR, AND OTHER SOFTWARE, INCLUDING SEQUENCE OR PROCEDURE RELATIONSHIPS AND DATA NAME AND INTERFACES. INCLUDE THE USE OF ALL DATA BASE SOFTWARE UTILIZATION.
- C. STORAGE. SPECIFY THE STORAGE REQUIREMENTS AND ANY CONSTRAINTS AND CONDITIONS.
1. INTERNAL. DESCRIBE AND ILLUSTRATE THE USE OF INTERNAL STORAGE AREAS, INCLUDING INDEXING AND WORKING AREAS. BRIEFLY STATE THE EQUIPMENT CONSTRAINTS AND DESIGN CONSIDERATIONS THAT AFFECT THE USE OF INTERNAL STORAGE.
2. DEVICE. LIST BY DEVICE TYPE ALL PERIPHERAL STORAGE REQUIRED. BRIEFLY STATE ANY CONSTRAINTS IMPOSED ON STORAGE REQUIREMENTS BY EACH STORAGE DEVICE. STATE REQUIREMENTS FOR PERMANENT AND TEMPORARY STORAGE, INCLUDING OVERLAYS.
3. OFF-LINE. DESCRIBE THE FORM, MEDIA, AND STORAGE REQUIREMENTS OF ALL OFF-LINE STORAGE.
- D. SECURITY AND PRIVACY. DESCRIBE THE SECURITY AND PRIVACY REQUIREMENTS IMPOSED ON THE PROGRAM, THE INPUTS, THE OUTPUTS, AND THE DATA BASE(S). IF NO SPECIFIC REQUIREMENTS ARE IMPOSED, STATE THIS FACT.

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## SAMPLE PROGRAM SPECIFICATION DOCUMENT

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- E. CONTROLS. DESCRIBE THE PROGRAM CONTROLS SUCH AS HASH TOTALS, CHECK DIGITS, SEQUENCE CHECKS, RECORD TYPES AND COUNTS, ACCUMULATED COUNTS, BATCH CONTROLS, VISUAL CHECKS AND BALANCING INSTRUCTIONS. IDENTIFY THE SOURCES OF THESE CONTROLS (SEE PART 4).

## 4. DESIGN CHARACTERISTICS

- A. OPERATING PROCEDURES. DESCRIBE THE UNIQUE OPERATING PROCEDURES AND ANY SPECIAL PROGRAM FUNCTIONS OR REQUIREMENTS NECESSARY FOR ITS IMPLEMENTATION. DESCRIBE THE LOAD, START, STOP, RECOVERY AND RESTART PROCEDURES. DESCRIBE ALL OTHER INTERACTIONS OF THE PROGRAM WITH THE OPERATOR.
- B. ABNORMAL PROGRAM TERMINATION PROCEDURE.
1. ISSUE A "DISPLAY" MESSAGE CLEARLY AND SIMPLY DEFINING THE PROBLEM. THE MESSAGE MUST CONTAIN THE FOLLOWING:
    - A. PROGRAM NAME.
    - B. PARAMETER DATA (JOB NUMBER, OPTIONS, ETC.).
    - C. EXPLANATION OF PROBLEM (IF NECESSARY, MORE THAN ONE LINE MAY BE USED AND SUGGESTED CORRECTIVE ACTION MAY BE INCLUDED).
  2. CALL OR PERMIT TO INVOKE "ABEND-AID" TO PROVIDE A FORMATTED PROGRAM DUMP TO BE USED FOR RESEARCH IN THE EVENT OF A PROGRAM HANG.
  3. ANY ANTICIPATED PROBLEMS COMPLEX ENOUGH TO PROHIBIT A DISPLAY MESSAGE SHOULD BE DOCUMENTED IN THE OPERATIONS MANUAL.
- \*-- C. INPUT(S). UTILIZE ASCS-735 AND EXHIBIT 20 AS NEEDED --\*  
TO PROVIDE INFORMATION ABOUT THE CHARACTERISTICS OF EACH INPUT TO THE PROGRAM, SUCH AS:
1. TITLE AND TAG.

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## SAMPLE PROGRAM SPECIFICATION DOCUMENT

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2. FORMAT AND TYPE OF DATA, SUCH AS A RECORD LAYOUT (ASCS-767).
3. VALIDATION CRITERIA.
4. VOLUME AND FREQUENCY.
5. MEANS OF ENTRY.
6. SOURCE DOCUMENT AND ITS DISPOSITION; OR SPECIFIC INTERFACE SOURCE.
7. SECURITY AND PRIVACY CONDITIONS.

\*-- D. OUTPUT(S). UTILIZE ASCS-735 AND EXHIBIT 20 AS NEEDED TO --\*  
PROVIDE INFORMATION ABOUT THE CHARACTERISTICS OF EACH  
OUTPUT FROM THE PROGRAM, SUCH AS:

1. TITLE AND TAG.
2. FORMAT SPECIFICATIONS, SUCH AS REPORT FORMAT (ASCS-767).
3. SELECTION CRITERIA FOR DISPLAY, OUTPUT OR TRANSFER.
4. VOLUME AND FREQUENCY.
5. OUTPUT MEDIA.
6. DESCRIPTION OF GRAPHIC DISPLAYS AND SYMBOLS.
7. SECURITY AND PRIVACY CONDITIONS.
8. DISPOSITION OF PRODUCTS.
9. DESCRIPTION OF SEQUENCE OF DISPLAYS, DISPLAY CONTENTS,  
FIXED AND VARIABLE FORMATS, AND DISPLAY OF ERROR  
CONDITIONS.

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## SAMPLE PROGRAM SPECIFICATION DOCUMENT

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&lt;&lt;&lt;&lt; ALTERNATIVE FORMAT FOR PARAGRAPH 4C AND 4D &gt;&gt;&gt;&gt;

C. INPUT(S). PROVIDE INFORMATION ABOUT THE CHARACTERISTICS  
OF EACH INPUT OF THE PROGRAM:

## 1. FILE NAME

\*-- A. FILE IDENTIFICATION NUMBER, REFERENCED BY FORM  
ASCS-735 FILE DESCRIPTOR. --\*

B. RECORD NAME, REFERENCE FORM ASCS-762, RECORD DESCRIPTOR.

C. RECORD NAME, REPEAT AS NEEDED FOR MULTIPLE RECORD TYPES.

## 2. FILE NAME, REPEAT THE ABOVE FORMAT FOR ADDITIONAL FILES.

-----  
<NOTE 1>: ADDITIONAL/ALTERNATIVE FORMS ARE AVAILABLE FOR USE AS NEEDED  
FOR EXHIBITS TO THE SPECIFICATION DOCUMENT, I.E.:

1. DECISION LOGIC TABLE (ASCS-766).

2. KC-1579, DATA SPECIFICATION FORM.

3. AD-611, MULTIPLE CARD LAYOUT.

4. SAMPLE INPUT AND/OR OUTPUT DOCUMENTS (ASCS-767).  
-----E. PROGRAM LOGIC. DESCRIBE THE PROCESSING STEPS IN NARRATIVE FORM  
SUPPLEMENTED, AS NECESSARY, BY LOGIC FLOWCHARTS OR DECISION  
LOGIC TABLES. PROVIDE A SYSTEM FLOWCHART SHOWING THE OPERATION  
OF THE PROGRAM. ALL LOGIC CHARTS \* \* \*  
MUST CONTAIN ONLY APPROVED ASCS FLOWCHART SYMBOLS. ASCS-766  
MAY BE USED FOR DECISION LOGIC TABLES. THIS FORM HAS BEEN  
PLACED ON THE WORD PROCESSOR FOR EASE OF ACCOMPLISHING CHANGES.F. DATA BASE. DESCRIBE THE LOGICAL AND PHYSICAL CHARACTERISTICS  
OF ANY DATA BASE USED BY THE PROGRAM.

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## SAMPLE PROGRAM SPECIFICATION DOCUMENT

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1. LOGICAL CHARACTERISTICS. DESCRIBE FOR EACH UNIQUE SET, FILE, RECORD, ELEMENT OR ITEM OF DATA, ITS IDENTIFICATION, DEFINITION AND RELATIONSHIP.
2. PHYSICAL CHARACTERISTICS. DESCRIBE IN TERMS OF THIS DATA BASE, THE STORAGE REQUIREMENTS FOR PROGRAM DATA, SPECIFIC ACCESS METHOD AND PHYSICAL RELATIONSHIPS OF ACCESS (INDEX, DEVICE, AREA), DESIGN CONSIDERATIONS AND ACCESS SECURITY MECHANISMS.

-----  
<<<< ALTERNATIVE FORMAT FOR PARAGRAPH 4F >>>>

- F. DATA BASE. PROVIDE THE LOGICAL AND PHYSICAL CHARACTERISTICS OF ANY DATA BASE USED BY THE PROGRAM BY REFERENCING AN AVAILABLE PUBLICATION (I.E., DATA BASE SPECIFICATION) WHICH PROVIDES SUCH INFORMATION.

-----  
5 UNIT TEST REQUIREMENTS.

TEST ENVIRONMENT, CONDITIONS, DATA AND OUTPUT PRODUCTS DESCRIBED IN THIS PARAGRAPH SHOULD BE DEFINED IN SUFFICIENT DETAIL SO THAT THE DESIGNER CAN BE ASSURED THAT THE FINISHED PROGRAM MEETS THE USER REQUIREMENTS AND ACCURATELY PROCESSES THE USER DATA.

- A. TEST ENVIRONMENT. LIST ANY SPECIAL SOFTWARE/HARDWARE COMPONENTS REQUIRED FOR UNIT TESTING.
- B. CONDITIONS. LIST OR REFERENCE CONDITIONS OUTLINED IN PARAGRAPH 4.D., PROGRAM LOGIC, THAT ARE TO BE TESTED. THE UNIT TEST DATA CODING STANDARDS ARE:
  1. TEST THE EXTREME VALUES OF FIELDS FOR TRUNCATION, FIELD ALIGNMENT, NUMERIC OVERFLOW CONDITIONS, ETC., ESPECIALLY AMOUNTS, QUANTITIES AND COUNTS.

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## SAMPLE PROGRAM SPECIFICATION DOCUMENT

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2. SELECTIVELY EXERCISE MULTIPLE ENTRIES IN TABLES, ESPECIALLY THE FIRST AND LAST ENTRIES. TEST FOR OVERFLOW OR OUT OF RANGE CONDITIONS WHEN BUILDING OR ACCESSING A TABLE.
3. PROVIDE FOR MULTIPLE BREAKS IN KEYS. FOR INSTANCE, IF THE CONTROL BREAK IS ON STATE CODE, PROVIDE DATA FOR AT LEAST THREE DIFFERENT STATES.
4. TEST VARIOUS OUTPUT MEDIA CONTROLS SUCH AS PAGE OVERFLOWS, CARRIAGE SKIPPING, FRAME ADVANCE, UNIQUE TAPE MANAGEMENT REQUIREMENTS, ETC.
5. CREATE DATA WHICH WILL TEST ALL ERROR MESSAGES AND PROVIDE AN ADEQUATE TEST OF RUN CONTROLS.
6. THERE SHOULD BE AT LEAST ONE TEST OF EACH LOGICAL PATH IN THE PROGRAM.
7. RETAIN ALL TEST DATA AND PREDETERMINED RESULTS. WHEN A NEW CONDITION IS ENCOUNTERED IN PRACTICE, IT SHOULD BE INCORPORATED INTO DATA THAT WILL BE USED FOR FUTURE TEST.
8. INCLUDE TEST CONDITIONS SUCH AS:
  - A. DUPLICATE TRANSACTION RECORD(S).
  - B. DUPLICATE MASTER FILE RECORD(S).
  - C. TRANSACTION RECORD, NO MASTER FILE RECORD.
  - D. MASTER FILE RECORD, NO TRANSACTION RECORD.
- C. TEST DATA. PROVIDE ACTUAL TEST DATA FILES, CARD DECKS, DOCUMENTS, ETC., OR AN ADEQUATE LIST OF TEST DATA EXAMPLES TO TEST THE CONDITIONS SET FORTH IN 5.B. WHEN ACTUAL TEST DATA IS SUPPLIED, A LISTING OF THE DATA SHOULD BE INCLUDED.
- D. TEST OUTPUT PRODUCTS. LIST ALL TEST OUTPUT PRODUCTS REQUIRED FROM THE PROGRAMMER TO ASSURE THAT THE PROGRAM FUNCTIONS CORRECTLY. THIS PRODUCT LIST SHOULD INCLUDE THE FINAL TEST PROGRAM EXECUTION JCL LIST.

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## PROGRAM RUN BOOK

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THE FOLLOWING IS A LIST OF ITEMS TO BE INCLUDED IN A PROGRAM RUN BOOK. SYSTEMS DIVISIONS SHOULD EXERCISE JUDGEMENT ON WHAT OPTIONAL ITEMS SHOULD BE INCLUDED, BASED ON PROGRAM COMPLEXITY.

## MANDATORY ITEMS

- A. PROGRAM SPECIFICATION DOCUMENT.
- B. KC-208 (OR ASCS-760).
- C. ASCS-733.
- D. CURRENT COMPILE LIST.

## OPTIONAL ITEMS

- A. PRIOR COMPILE LIST.
- B. LAST TEST RESULT.
- C. LOGIC CHART.
- D. SAMPLE JCL.
- E. TEST DATA (LIST OR DATA SET NAME).

\*\*\*\*\*

SAMPLE DATA BASE SPECIFICATIONS DOCUMENT

| TABLE OF CONTENTS |                          | PAGE NO.     |
|-------------------|--------------------------|--------------|
| 1                 | GENERAL INFORMATION      | 1            |
|                   | A SUMMARY                | 1            |
|                   | B ENVIRONMENT            | 1            |
|                   | C REFERENCES             | 1            |
| 2                 | DESCRIPTION              | 1            |
|                   | A IDENTIFICATION         | 1            |
|                   | B USING SOFTWARE         | 1            |
|                   | C CONVENTIONS            | 1            |
|                   | D SPECIAL INSTRUCTIONS   | 1            |
|                   | E SUPPORT SOFTWARE       | 2            |
| 3                 | LOGICAL CHARACTERISTICS  | 2            |
|                   | A IDENTIFICATION         | 2            |
|                   | B DEFINITION             | 2            |
|                   | C RELATIONSHIPS          | 2            |
| 4                 | PHYSICAL CHARACTERISTICS | 2            |
|                   | A STORAGE                | 2            |
|                   | B ACCESS                 | 2            |
|                   | C DESIGN CONSIDERATIONS  | 2            |
| 5                 | EXHIBITS                 | NO. OF PAGES |
|                   | NUMBER EXHIBIT NAME      | X            |
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## SAMPLE DATA BASE SPECIFICATIONS DOCUMENT

\*\*\*\*\*

## 1 GENERAL INFORMATION

- A. SUMMARY. SUMMARIZE THE PURPOSE OF THE DATA BASE AND GENERAL FUNCTIONS OF THE USING SOFTWARE.
- B. ENVIRONMENT. IDENTIFY THE PROJECT SPONSOR, DEVELOPER, USER ORGANIZATION, AND COMPUTER CENTER WHERE THE SOFTWARE AND DATA BASE ARE TO BE INSTALLED.
- C. REFERENCES. LIST APPLICABLE REFERENCES, SUCH AS:
1. PROJECT REQUEST (AUTHORIZATION).
  2. PREVIOUSLY PUBLISHED DOCUMENTS ON THE PROJECT.
  3. DOCUMENTATION CONCERNING RELATED PROJECTS.
  4. FIPS PUBLICATIONS AND OTHER REFERENCE DOCUMENTS.

## 2 DESCRIPTION

- A. IDENTIFICATION. SPECIFY THE CODE NAME, TAG, OR LABEL BY WHICH THE DATA BASE IS TO BE IDENTIFIED. IF THE DATA BASE IS TO BE EXPERIMENTAL, TEST, OR TEMPORARY, SPECIFY THIS CHARACTERISTIC AND EFFECTIVE DATES OR PERIOD. ANY ADDITIONAL IDENTIFICATION INFORMATION SHOULD ALSO BE GIVEN.
- B. CONVENTIONS. DESCRIBE ALL LABELING OR TAGGING CONVENTIONS ESSENTIAL FOR A PROGRAMMER OR ANALYST TO USE THIS DATA BASE SPECIFICATION.

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## SAMPLE DATA BASE SPECIFICATIONS DOCUMENT

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- C SPECIAL INSTRUCTIONS. PROVIDE ANY SPECIAL INSTRUCTIONS TO PERSONNEL WHO WILL CONTRIBUTE TO THE GENERATION OF THE DATA BASE, OR WHO MAY USE IT FOR TESTING OR OPERATIONAL PURPOSES. SUCH INSTRUCTIONS INCLUDE CRITERIA, PROCEDURES, AND FORMATS FOR:

- 1 SUBMITTING DATA FOR ENTRY INTO THE DATA BASE AND IDENTIFICATION OF A DATA CONTROL ORGANIZATION.
- 2 ENTERING DATA INTO THE DATA BASE.

WHERE THESE INSTRUCTIONS ARE EXTENSIVE, REFERENCE THE APPROPRIATE SECTIONS OF OTHER DOCUMENTS.

- D SUPPORT SOFTWARE. DESCRIBE BRIEFLY ALL SUPPORT SOFTWARE DIRECTLY RELATED TO THE DATA BASE. DESCRIPTIONS SHOULD INCLUDE NAME, FUNCTION, MAJOR OPERATING CHARACTERISTICS, AND MACHINE RUN INSTRUCTIONS FOR USING THE SUPPORT SOFTWARE. CITE THE SUPPORT SOFTWARE DOCUMENTATION BY TITLE, NUMBER, AND APPROPRIATE SECTIONS.

EXAMPLES OF SUPPORT SOFTWARE ARE:

- 1 DATA BASE MANAGEMENT SYSTEMS.
- 2 STORAGE ALLOCATION SOFTWARE.
- 3 DATA BASE LOADING SOFTWARE PROGRAMS.
- 4 FILE PROCESSING PROGRAMS.
- 5 OTHER GENERATING, MODIFYING, OR UPDATING SOFTWARE.

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## SAMPLE DATA BASE SPECIFICATIONS DOCUMENT

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## 3 LOGICAL CHARACTERISTICS

A DATA BASE IS A LOGICAL ARRANGEMENT OF DATA. SETS (AGGREGATES), FILES, RECORDS, ELEMENTS, AND ITEMS OF DATA MAY VARY IN THEIR LOGICAL ARRANGEMENT AND RELATIONSHIPS. THE ORGANIZATION OF THE CONTENT OF THIS SECTION SHOULD PROVIDE A MEANINGFUL PRESENTATION OF THE LOGICAL ORGANIZATION OF THE DATA BASE.

DEFINE EACH UNIQUE SET (AGGREGATE), FILE, RECORD, ELEMENT, OR ITEM OF DATA PROVIDING INFORMATION SUCH AS:

- A IDENTIFICATION. NAME AND TAG, OR LABEL.
- B DEFINITION. STANDARD OR UNIQUE; PURPOSE IN DATA BASE; USING SOFTWARE; MEDIA; FORM; FORMAT AND SIZE; UPDATE CRITERIA AND CONDITIONS; SECURITY AND PRIVACY RESTRICTIONS; LIMITATIONS OR CONDITIONS (UPDATE OR ACCESS); INTEGRITY AND VALIDITY CHARACTERISTICS; CONTROLLING DATA ELEMENTS OR ITEMS; AND GRAPHIC REPRESENTATION.
- C RELATIONSHIPS. SUPERIOR AND INFERIOR RELATIONSHIPS; UPDATE AND ACCESS RELATIONSHIPS.

## 4 PHYSICAL CHARACTERISTICS

- A STORAGE. SPECIFY THE STORAGE REQUIREMENTS FOR THE DATA BASE AND ANY CONSTRAINTS AND CONDITIONS.
  - 1 INTERNAL. DESCRIBE AND ILLUSTRATE THE USE OF INTERNAL STORAGE AREAS SET ASIDE FOR DATA INCLUDING INDEXING AND WORKING AREAS. BRIEFLY STATE THE EQUIPMENT CONSTRAINTS AND DESIGN CONSIDERATIONS THAT AFFECT THE USE OF INTERNAL STORAGE.

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## SAMPLE DATA BASE SPECIFICATIONS DOCUMENT

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- 2 DEVICE. LIST BY DEVICE TYPE ALL PERIPHERAL STORAGE REQUIRED FOR THE DATA BASE. BRIEFLY STATE ANY CONSTRAINTS IMPOSED ON STORAGE REQUIREMENTS BY EACH STORAGE DEVICE. STATE REQUIREMENTS FOR PERMANENT DATA STORAGE AND TEMPORARY DATA STORAGE, INCLUDING OVERLAYS.
- 3 OFFLINE. DESCRIBE THE FORM, MEDIA AND STORAGE REQUIREMENTS OF ALL OFFLINE DATA STORAGE.
- B ACCESS. DESCRIBE THE ACCESS METHOD AND SPECIFY THE PHYSICAL RELATIONSHIPS OF ACCESS (INDEX, DEVICE, AREA). DESCRIBE ALL PHYSICAL ACCESS SECURITY MECHANISMS.
- C DESIGN CONSIDERATIONS. STATE THE DESIGN CONSIDERATIONS FOR THE HANDLING OF THIS DATA BASE, SUCH AS BLOCKING FACTORS. EMPHASIZE THOSE PHYSICAL RELATIONSHIPS IMPORTANT TO THE EFFICIENT UTILIZATION OF THE DATA BASE.

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SAMPLE OPERATIONS MANUAL

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|                   | A SUMMARY                       | 1            |
| 2                 | OVERVIEW                        | 1            |
|                   | SOFTWARE ORGANIZATION           | 1            |
| 3                 | DESCRIPTION OF JOBS             | 1            |
|                   | JOB PROGRESSION                 | 1            |
|                   | A JOB DESCRIPTION (NAME/NUMBER) | 1            |
|                   | 1 RESTART/RECOVERY PROCEDURES   | 1            |
|                   | 2 ABORT CODES/MESSAGES          | 1            |
|                   | B JOB DESCRIPTION (NAME/NUMBER) | 1            |
| 4                 | NON-ROUTINE PROCEDURES          | 1            |
| 5                 | REMOTE OPERATIONS               | 2            |
| 6                 | PARAMETER DATA                  | 2            |
| 7                 | EXHIBITS                        | NO. OF PAGES |
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## SAMPLE OPERATIONS MANUAL

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1 GENERAL INFORMATION

SUMMARY. BRIEFLY DESCRIBE THE SYSTEM, ITS PURPOSE AND USES.

2 OVERVIEW

SOFTWARE ORGANIZATION. PROVIDE A DIAGRAM SHOWING THE INPUTS, OUTPUTS, DATA FILES, AND SEQUENCE OF OPERATIONS OF THE SOFTWARE. JOBS MAY BE GROUPED BY PERIODS OF TIME CYCLES, BY ORGANIZATIONAL LEVEL WHERE THEY WILL BE PERFORMED OR BY OTHER GROUPINGS.

3 DESCRIPTION OF JOBS

JOB PROGRESSION. DESCRIBE THE MANNER IN WHICH PROGRESSION ADVANCES FROM ONE JOB TO ANOTHER SO THAT THE ENTIRE JOB CYCLE IS COMPLETED.

A. JOB DESCRIPTION (NAME/NUMBER). LIST THE VARIOUS JOBS POSSIBLE AND SUMMARIZE THEIR PURPOSE. SHOW THE PROGRAMS EXECUTED DURING EACH JOB. PROVIDE THE FOLLOWING INFORMATION FOR EACH JOB:

1. RESTART/RECOVERY PROCEDURES. DESCRIBE THE PROCEDURES TO RESTART THE RUN OR RECOVER FROM A FAILURE.
2. ABORT CODES/MESSAGES. LIST BY ACTIVITY WITHIN A JOB.

B. JOB DESCRIPTION (NAME/NUMBER). PRESENT INFORMATION ABOUT THE SUBSEQUENT JOBS IN A MANNER SIMILAR TO THAT OUTLINED IN PARAGRAPH 3.A ABOVE.

4 NON-ROUTINE PROCEDURES.

PROVIDE ANY INFORMATION NECESSARY CONCERNING EMERGENCY OR NON-ROUTINE OPERATIONS, SUCH AS:

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## SAMPLE OPERATIONS MANUAL

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- A. SWITCHOVER TO A BACKUP SYSTEM.
- B. PROCEDURES FOR TURNOVER TO MAINTENANCE PROGRAMMERS.
- C. STATE UNIQUE FILE CONDITIONS NOT SHOWN ON JOB CHARTS.

## 5 REMOTE OPERATIONS

DESCRIBE THE PROCEDURES FOR RUNNING THE PROGRAMS THROUGH REMOTE TERMINALS FOR USER RELATED ACTIVITIES.

## 6 PARAMETER DATA

PREPARE AN EXHIBIT SHOWING PARAMETER DATA REQUIREMENTS. EXAMPLES:

## A. HONEYWELL "PARM" FILES.

## JOB MGG51

```

MGGDD0,MMDDYYRJJ,X <1>
MGGDB0,MMDDYYRJJ
MGGDF0,MMDDYYRJJ

```

## JOB MGG58

```

MGGCB0,MMDDYYRJJ
MGGCD0,MMDDYYRJJ
MGGCF0,MMDDYYRJJ,MMDDYY <2>
MGGCJ0,MMDDYYRJJ,MMDDYY <2>

```

FOOTNOTES:     <1> X = 0 ALL PROCESSINGS OF MONTH EXCEPT THE FIRST  
                   X = 1 FIRST PROCESSING OF MONTH ONLY  
                   <2> MMDDYY = AS OF DATE FOR REPORTS

## \*-- B. IBM SUBSTITUTION JCL. --\*

USING THE STANDARD SUBSTITUTION ENTRIES, DISPLAY THE EXPECTED ENTRY. REFERENCE EXHIBIT 33.

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# SAMPLE OPERATIONS MANUAL

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| S/370    | H66/80 | DESCRIPTION     |
|----------|--------|-----------------|
| MFSGE011 | MGE09  | SEPARATOR       |
| MFSGE015 | MGE01  | FORMAT          |
| MFSGE007 | -NONE- | SCANNER LISTING |
| MFSGE099 | -NEW-  | COPY RUN        |

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## SAMPLE USERS MANUAL

THE PURPOSE OF THE USERS MANUAL IS TO SUFFICIENTLY DESCRIBE THE FUNCTIONS PERFORMED BY THE SOFTWARE IN NON-ADP TERMINOLOGY, SUCH THAT THE USER ORGANIZATION CAN DETERMINE ITS APPLICABILITY AND WHEN AND HOW TO USE IT.

| *****             |                                    |          |
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| TABLE OF CONTENTS |                                    | PAGE NO. |
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|                   | A. SUMMARY                         | 1        |
|                   | B. ENVIRONMENT                     | 1        |
|                   | C. REFERENCES                      | 1        |
| 2                 | APPLICATION                        | 1        |
|                   | A. DESCRIPTION                     | 1        |
|                   | B. OPERATION                       | 1        |
|                   | C. EQUIPMENT                       | 1        |
|                   | D. STRUCTURE                       | 1        |
|                   | E. PERFORMANCE                     | 1        |
|                   | F. DATA BASE                       | 2        |
|                   | G. INPUTS, PROCESSING, AND OUTPUTS | 2        |
| 3                 | PROCEDURES AND REQUIREMENTS        | 2        |
|                   | A. INITIATION                      | 2        |
|                   | B. INPUT                           | 2        |
|                   | 1. INPUT FORMATS                   | 3        |
|                   | 2. SAMPLE INPUTS                   | 3        |
|                   | C. OUTPUT                          | 4        |
|                   | A. OUTPUT FORMATS                  | 4        |
|                   | B. SAMPLT OUTPUTS                  | 4        |
|                   | D. ERROR AND RECOVERY              | 5        |
|                   | E. FILE QUERY                      | 5        |
|                   |                                    |          |
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## SAMPLE USERS MANUAL

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## 1 GENERAL INFORMATION

- A. SUMMARY. SUMMARIZE THE APPLICATION AND GENERAL FUNCTIONS OF THE SOFTWARE.
- B. ENVIRONMENT. IDENTIFY THE USER ORGANIZATION AND COMPUTER CENTER WHERE THE SOFTWARE IS INSTALLED.
- C. REFERENCES. LIST APPLICABLE REFERENCES, SUCH AS:
  - 1. PROJECT REQUEST (AUTHORIZATION).
  - 2. PREVIOUSLY PUBLISHED DOCUMENTS ON THE PROJECT.
  - 3. DOCUMENTATION CONCERNING RELATED PROJECTS AND SOFTWARE.
  - 4. FIPS PUBLICATIONS AND OTHER REFERENCE DOCUMENTS.

## 2 APPLICATION

- A. DESCRIPTION. DESCRIBE WHEN AND HOW THE SOFTWARE IS USED AND THE UNIQUE SUPPORT PROVIDED TO THE USER ORGANIZATION. THE DESCRIPTION SHOULD INCLUDE:
  - 1. PURPOSE OF THE SOFTWARE.
  - 2. CAPABILITIES AND OPERATING IMPROVEMENTS PROVIDED.
  - 3. FUNCTIONS PERFORMED.
- B. OPERATION. SHOW THE OPERATING RELATIONSHIPS OF THE FUNCTIONS PERFORMED TO THE ORGANIZATION THAT PROVIDES INPUT TO AND RECEIVES OUTPUT FROM THE SOFTWARE. DESCRIBE SECURITY AND PRIVACY CONSIDERATIONS. INCLUDE GENERAL CHARTS AND A DESCRIPTION OF THE INPUTS AND OUTPUTS SHOWN ON THE CHARTS.
- C. EQUIPMENT. DESCRIBE THE EQUIPMENT ON WHICH THE SOFTWARE CAN BE RUN.
- D. STRUCTURE. SHOW THE STRUCTURE OF THE SOFTWARE AND DESCRIBE THE ROLE OF EACH COMPONENT OF THE SOFTWARE.
- E. PERFORMANCE. DESCRIBE THE PERFORMANCE CAPABILITIES OF THE SOFTWARE INCLUDING WHERE APPROPRIATE:

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## SAMPLE USERS MANUAL

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1. QUANTITATIVE INFORMATION ON INPUTS, OUTPUTS, RESPONSE TIME, PROCESSING TIMES AND ERROR RATES.
  2. QUALITATIVE INFORMATION ABOUT FLEXIBILITY AND RELIABILITY.
- F. DATA BASE. DESCRIBE ALL DATA FILES IN THE DATA BASE THAT ARE REFERENCED, SUPPORTED, OR KEPT CURRENT BY THE SOFTWARE. THE DESCRIPTION SHOULD INCLUDE THE PURPOSE FOR WHICH EACH DATA FILE IS MAINTAINED.
- G. INPUTS, PROCESSING, AND OUTPUTS. DESCRIBE THE INPUTS, FLOW OF DATA THROUGH THE PROCESSING CYCLE, AND THE RESULTANT OUTPUTS. INCLUDE ANY APPLICABLE RELATIONSHIPS AMONG INPUTS OR OUTPUTS.

## 3 PROCEDURES AND REQUIREMENTS

THIS SECTION SHOULD PROVIDE INFORMATION ABOUT INITIATION PROCEDURES, AND PREPARATION OF DATA AND PARAMETER INPUTS FOR THE SOFTWARE. THE SCOPE, QUALITY, AND LOGICAL ARRANGEMENT OF THE INFORMATION SHOULD ENABLE THE USER TO PREPARE REQUIRED INPUTS AND SHOULD EXPLAIN IN DETAIL THE CHARACTERISTICS AND MEANING OF THE OUTPUTS. IT SHOULD ALSO DESCRIBE ERROR, RECOVERY AND FILE QUERY PROCEDURES AND REQUIREMENTS.

- A. INITIATION. DESCRIBE STEP-BY-STEP PROCEDURES REQUIRED TO INITIATE PROCESSING.
- B. INPUT. DEFINE THE REQUIREMENTS OF PREPARING INPUT DATA AND PARAMETERS. TYPICAL CONSIDERATIONS ARE:
1. CONDITIONS--E.G., PERSONNEL TRANSFER, OUT OF STOCK.
  2. FREQUENCY--E.G., PERIODICALLY, RANDOMLY, AS A FUNCTION OF AN OPERATIONAL SITUATION.
  3. ORIGIN--E.G. PERSONNEL SECTION, INVENTORY CONTROL.
  4. MEDIUM--E.G., KEYBOARD, MAGNETIC TAPE, PUNCHED TAPE.
  5. RESTRICTIONS--E.G., PRIORITY AND SECURITY HANDLING, LIMITATIONS ON WHAT FILES MAY BE ACCESSED BY THIS TYPE TRANSACTION.
  6. QUALITY CONTROL--E.G., INSTRUCTIONS FOR CHECKING REASONABLENESS OF INPUT DATA, ACTION TO BE TAKEN WHEN

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## SAMPLE USERS MANUAL

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DATA APPEARS TO BE IN ERROR, DOCUMENTATION OF ERRORS.

7. DISPOSITION--E.G., INSTRUCTIONS NECESSARY FOR RETENTION OR  
RELEASE OF ALL DATA FILES RECEIVED, OTHER RECIPIENTS.A) INPUT FORMATS. PROVIDE THE LAYOUT FORMS USED IN THE  
INITIAL PREPARATION PROGRAM DATA AND PARAMETER INPUTS.  
EXPLAIN EACH ENTRY, AND REFERENCE IT TO THE SAMPLE FORM.  
INCLUDE A DESCRIPTION OF THE GRAMMATICAL RULES AND  
CONVENTIONS USED TO PREPARE INPUT, SUCH AS:

- 1) LENGTH--E.G., CHARACTERS/LINE, CHARACTERS/ITEM.
- 2) FORMAT--E.G., LEFT JUSTIFIED.
- 3) LABELS--E.G., TAGS OR IDENTIFIERS.
- 4) SEQUENCE--E.G., THE ORDER AND PLACEMENT OF ITEMS IN  
THE INPUT.
- 5) PUNCTUATION--E.G., SPACING AND USE OF SYMBOLS TO  
DENOTE START AND END OF INPUT, OF LINES, OR DATA GROUPS.
- 6) COMBINATION--E.G., RULES FORBIDDING USE OF GROUPS OF  
PARTICULAR CHARACTERS, OR COMBINATIONS OF PARAMETERS  
IN AN INPUT.
- 7) VOCABULARY--E.G., AN APPENDIX WHICH LISTS THE ALLOWABLE  
CHARACTER COMBINATIONS OR CODES THAT MUST BE USED TO  
IDENTIFY OR COMPOSE INPUT ITEMS.
- 8) OMISSIONS AND REPEATS--E.G., INDICATE THOSE ELEMENTS  
OF INPUT THAT ARE OPTIONAL OR MAY BE REPEATED.
- 9) CONTROLS--E.G., HEADER OR TRAILER CONTROL DATA.

B) SAMPLE INPUTS. PROVIDE SPECIMENS OF EACH COMPLETE  
INPUT FORM. INCLUDE:

- 1) CONTROL OR HEADER--E.G., ENTRIES THAT DENOTE THE INPUT  
CLASS OR TYPE, DATE/TIME, ORIGIN, AND INSTRUCTION CODES  
TO THE SOFTWARE.
- 2) TEXT--E.G., SUBSECTIONS OF THE INPUT REPRESENTING DATA  
FOR OPERATIONAL FILES, REQUEST PARAMETERS FOR AN  
INFORMATION RETRIEVAL PROGRAM.

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## SAMPLE USERS MANUAL

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- 3) TRAILER--E.G., CONTROL DATA DENOTING THE END OF INPUT AND ANY ADDITIONAL CONTROL DATA.
- 4) OMISSIONS--E.G., INDICATE THOSE CLASSES OR TYPES OF INPUT THAT MAY BE OMITTED OR ARE OPTIONAL.
- 5) REPEATS--E.G., INDICATE THOSE POSITIONS OF THE INPUT THAT MAY BE REPEATED.

C. OUTPUT. DESCRIBE THE REQUIREMENTS RELEVANT TO EACH OUTPUT. TYPICAL CONSIDERATIONS ARE:

1. USE--E.G., BY WHOM AND FOR WHAT.
  2. FREQUENCY--E.G., WEEKLY, PERIODICALLY, OR ON DEMAND.
  3. VARIATIONS--E.G., MODIFICATIONS THAT ARE AVAILABLE TO THE BASIC INPUT.
  4. DESTINATION--E.G., COMPUTER AREA, REMOTE TERMINAL.
  5. MEDIUM--E.G., PRINTOUT, CRT, TAPE, CARD.
  6. QUALITY CONTROL--E.G., INSTRUCTIONS FOR IDENTIFICATION, REASONABLENESS CHECKS, EDITING AND ERROR CORRECTION.
  7. DISPOSITION--E.G., INSTRUCTIONS NECESSARY FOR RETENTION OR RELEASE, DISTRIBUTION, TRANSMISSION, PRIORITY, AND SECURITY HANDLING.
- A) OUTPUT FORMATS. PROVIDE A LAYOUT OF EACH OUTPUT. EXPLANATIONS SHOULD BE KEYED PARTICULAR PARTS OF THE FORMAT ILLUSTRATED. INCLUDE:
- 1) HEADER--E.G., TITLE, IDENTIFICATION, DATE, NUMBER OF OUTPUT PARTS.
  - 2) BODY--E.G., INFORMATION THAT APPEARS IN THE BODY OR TEXT OF THE OUTPUT, COLUMNAR HEADINGS IN TABULAR DISPLAYS, AND RECORD LAYOUTS IN MACHINE READABLE OUTPUTS. NOTE WHICH ITEMS MAY BE OMITTED OR REPEATED.
  - 3) TRAILER--E.G., SUMMARY TOTALS, TRAILER LABELS.
- B) SAMPLE OUTPUTS. PROVIDE A SAMPLE OF EACH TYPE OF OUTPUT. FOR EACH ITEM ON A SAMPLE, INCLUDE:
- 1) DEFINITION--E.G., THE MEANING AND USE OF EACH INFORMATION VARIABLE.
  - 2) SOURCE--E.G., THE ITEM EXTRACTED FROM A SPECIFIC INPUT, FROM A DATA BASE, OR CALCULATED BY SOFTWARE.

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## SAMPLE USERS MANUAL

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3) CHARACTERISTICS--E.G., THE PRESENCE OR ABSENCE OF THE  
ITEM UNDER CERTAIN CONDITIONS OF THE OUTPUT  
GENERATION, RANGE OF VALUES, UNIT OF MEASURE.

D. ERROR AND RECOVERY. LIST ERROR CODES OR CONDITIONS GENERATED  
BY THE SOFTWARE AND CORRECTIVE ACTION TO BE TAKEN BY THE USER.  
INDICATE PROCEDURES TO BE FOLLOWED BY THE USER TO ENSURE THAT  
ANY RESTART AND RECOVERY CAPABILITY CAN BE USED.

E. FILE QUERY. PREPARE THIS PARAGRAPH FOR SOFTWARE WITH A FILE  
QUERY RETRIEVAL CAPABILITY. INCLUDE DETAILED INSTRUCTIONS  
NECESSARY FOR INITIATION, PREPARATION, AND PROCESSING OF A QUERY  
APPLICABLE TO THE DATA BASE. DESCRIBE THE QUERY CAPABILITIES,  
FORMS, COMMANDS USED, AND CONTROL INSTRUCTIONS REQUIRED.

IF THE SOFTWARE IS QUERIED THROUGH A TERMINAL, PROVIDE  
INSTRUCTIONS FOR TERMINAL OPERATORS. DESCRIBE TERMINAL SETUP  
OR CONNECT PROCEDURES, DATA OR PARAMETER INPUT PROCEDURES,  
AND CONTROL INSTRUCTIONS. REFERENCE RELATED MATERIALS  
DESCRIBING QUERY CAPABILITIES, LANGUAGES, INSTALLATION  
CONVENTIONS AND PROCEDURES, PROGRAM AIDS, ETC.

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## SAMPLE TEST PLAN DOCUMENT

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SAMPLE TEST PLAN DOCUMENT

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1 GENERAL INFORMATION

- A. SUMMARY. SUMMARIZE THE FUNCTION OF THE SOFTWARE AND THE TESTS TO BE PERFORMED.
- B. ENVIRONMENT AND PRETEST BACKGROUND. SUMMARIZE THE HISTORY OF THE PROJECT. IDENTIFY THE USER ORGANIZATION AND COMPUTER CENTER WHERE THE TESTING WILL BE PERFORMED. DESCRIBE ANY PRIOR TESTING AND NOTE RESULTS THAT MAY AFFECT THIS TESTING.
- C. REFERENCES. LIST APPLICABLE REFERENCES, SUCH AS:
  - 1. PROJECT REQUEST (AUTHORIZATION).
  - 2. PREVIOUSLY PUBLISHED DOCUMENTS ON THE PROJECT.
  - 3. DOCUMENTATION CONCERNING RELATED PROJECTS.
  - 4. FIPS PUBLICATIONS AND OTHER REFERENCE MATERIAL.

2 PLAN

- A. SOFTWARE DESCRIPTION. PROVIDE A CHART AND BRIEFLY DESCRIBE THE INPUTS, OUTPUTS, AND FUNCTIONS OF THE SOFTWARE BEING TESTED AS A FRAME OF REFERENCE FOR THE TEST DESCRIPTIONS.
- B. MILESTONES. LIST THE LOCATIONS, MILESTONE EVENTS AND DATES FOR TESTING.
- C. TESTING. IDENTIFY THE PARTICIPATING ORGANIZATIONS AND THE LOCATION WHERE THE SOFTWARE WILL BE TESTED.
  - 1. SCHEDULE. SHOW THE DETAILED SCHEDULE OF DATES AND EVENTS FOR THE TESTING AT THIS LOCATION. SUCH EVENTS MAY INCLUDE FAMILIARIZATION, TRAINING, DATA CONVERSION, AND DATA REPORT PREPARATION.

|                |            |      |
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## 2. REQUIREMENTS. STATE THE RESOURCE REQUIREMENTS, INCLUDING:

- A. EQUIPMENT. SHOW THE EXPECTED PERIOD OF USE, TYPES, AND QUANTITIES FOR THE EQUIPMENT NEEDED.
- B. SOFTWARE. LIST OTHER SOFTWARE THAT WILL BE NEEDED TO SUPPORT THE TESTING THAT IS NOT A PART OF THE SOFTWARE BEING TESTED.

## 3. TESTING MATERIALS. LIST THE MATERIALS NEEDED FOR THE TEST SUCH AS:

- A. DOCUMENTATION.
- B. SOFTWARE TO BE TESTED AND ITS MEDIUM.
- C. TEST INPUTS AND SAMPLE OUTPUTS.
- D. TEST CONTROL SOFTWARE AND WORKSHEETS.

## 4. TEST TRAINING. DESCRIBE OR REFERENCE THE PLAN FOR PROVIDING TRAINING IN THE USE OF THE SOFTWARE BEING TESTED. SPECIFY THE TYPES OF TRAINING, PERSONNEL TO BE TRAINED, AND THE TRAINING STAFF.

D TESTING (IDENTIFY LOCATION). DESCRIBE THE PLAN FOR THE SECOND AND SUBSEQUENT LOCATIONS WHERE THE SOFTWARE WILL BE TESTED, IN A MANNER SIMILAR TO PARAGRAPH 2.C, ABOVE.

## 3 SPECIFICATIONS AND EVALUATION

## A. SPECIFICATIONS.

- 1. REQUIREMENTS. LIST THE FUNCTIONAL REQUIREMENTS ESTABLISHED BY EARLIER DOCUMENTATION.
- 2. SOFTWARE FUNCTIONS. LIST THE DETAILED SOFTWARE FUNCTIONS TO BE EXERCISED DURING THE OVERALL TEST.

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## SAMPLE TEST PLAN DOCUMENT

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3. TEST/FUNCTION RELATIONSHIPS. LIST THE TESTS TO BE PERFORMED ON THE SOFTWARE AND RELATE THEM TO THE FUNCTIONS IN PARAGRAPH 3.A.2.
4. TEST PROGRESSION. DESCRIBE THE MANNER IN WHICH PROGRESSION IS MADE FROM ONE TEST TO ANOTHER SO THAT AN ENTIRE TEST CYCLE IS COMPLETED.

## B. METHODS AND CONSTRAINTS.

1. METHODOLOGY. DESCRIBE THE GENERAL METHOD OR STRATEGY OF THE TESTING.
2. CONDITIONS. SPECIFY THE TYPE OF INPUT TO BE USED, SUCH AS LIVE OR TEST DATA AS WELL AS THE VOLUME AND FREQUENCY OF THE INPUT.
3. EXTENT. INDICATE THE EXTENT OF TESTING, SUCH AS TOTAL OR PARTIAL. INCLUDE ANY RATIONALE FOR PARTIAL TESTING.
4. DATA RECORDING. DISCUSS THE METHOD TO BE USED FOR RECORDING THE DATA RESULTS AND OTHER INFORMATION OF THE TEST.
5. CONSTRAINTS. INDICATE ANTICIPATED LIMITATIONS ON THE TEST DUE TO TEST CONDITIONS, SUCH AS INTERFACES, EQUIPMENT, PERSONNEL, DATA BASE(S), ETC.

## C. EVALUATION.

1. CRITERIA. DESCRIBE THE RULES AND CRITERIA TO BE USED TO EVALUATE TEST RESULTS, SUCH AS RANGE OF DATA VALUES USED, COMBINATIONS OF INPUT TYPES USED, MAXIMUM NUMBER OF ALLOWABLE INTERRUPTS OR HALTS.
2. DATA REDUCTION. DESCRIBE THE TECHNIQUES TO BE USED FOR MANIPULATING THE TEST DATA INTO A FORM SUITABLE FOR EVALUATION, SUCH AS MANUAL OR AUTOMATED, TO ALLOW COMPARISON OF THE RESULTS THAT SHOULD BE PRODUCED TO THOSE ACTUALLY PRODUCED.

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4 TEST DESCRIPTIONS

A. TEST (IDENTIFY). DESCRIBE THE TEST TO BE PERFORMED.

1. CONTROL. DESCRIBE THE TEST CONTROL, SUCH AS MANUAL, SEMI-AUTOMATIC, OR AUTOMATIC INSERTION OF INPUTS, SEQUENCING OF OPERATIONS AND RECORDING OF RESULTS.
2. INPUTS. DESCRIBE THE INPUT DATA AND INPUT COMMANDS USED DURING THE TEST.
3. OUTPUTS. DESCRIBE THE OUTPUT DATA EXPECTED AS A RESULT OF THE TEST AND ANY INTERMEDIATE MESSAGES THAT MAY BE PRODUCED. SPECIFY THE CONDITIONS THAT TRIGGER THE OUTPUT.
4. PROCEDURES. SPECIFY THE STEP-BY-STEP PROCEDURES TO ACCOMPLISH THE TEST. INCLUDE TEST SETUP, INITIALIZATION, SETUPS AND TERMINATION.

B. TEST (IDENTIFY). DESCRIBE THE SECOND AND SUBSEQUENT TESTS IN A MANNER SIMILAR TO THAT USED IN PARAGRAPH 4.A.

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## SAMPLE TEST ANALYSIS REPORT

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|                   | B ENVIRONMENT                   | 1            |
|                   | C REFERENCES                    | 1            |
| 2                 | TEST RESULTS AND FINDINGS       | 1            |
|                   | A TEST (IDENTIFY)               | 1            |
|                   | 1 DATA PERFORMANCE              | 1            |
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| 3                 | SOFTWARE FUNCTION FINDINGS      | 2            |
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| 4                 | ANALYSIS SUMMARY                | 2            |
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| 5                 | EXHIBITS                        | NO. OF PAGES |
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SAMPLE TEST ANALYSIS REPORT

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1 GENERAL INFORMATION

A. SUMMARY. DOCUMENT THE RESULTS OF THE IMPLEMENTATION TEST AND SIGNIFICANT FACTORS LEADING TO THE IMPLEMENTATION OF THE SYSTEM.

B. ENVIRONMENT. IDENTIFY THE SOURCE OF PROJECT AUTHORIZATION, DEVELOPER, USER ORGANIZATION, AND THE COMPUTER CENTER WHERE THE SOFTWARE IS TO BE INSTALLED.

C. REFERENCES. LIST APPLICABLE REFERENCES, SUCH AS:

1. PREVIOUSLY PUBLISHED DOCUMENTS ON THE PROJECT.
2. DOCUMENTATION CONCERNING RELATED PROJECTS.
3. FIPS PUBLICATIONS AND OTHER REFERENCE DOCUMENTS.

2 TEST RESULTS AND FINDINGS

IDENTIFY AND PRESENT THE RESULTS AND FINDINGS OF EACH TEST SEPARATELY AS SHOWN IN PARAGRAPHS 2A THROUGH 2B.

A. TEST (IDENTIFY).

1. DATA PERFORMANCE. COMPARE THE DATA INPUT AND OUTPUT RESULTS, INCLUDING THE OUTPUT OF INTERNALLY GENERATED DATA, OF THIS TEST WITH THE DATA INPUT AND OUTPUT REQUIREMENTS. STATE THE FINDINGS.
2. PARAMETER PERFORMANCE. COMPARE THE PARAMETER INPUT AND OUTPUT RESULTS, INCLUDING THE OUTPUT OF INTERNALLY GENERATED DATA, OF THIS TEST WITH THE PARAMETER INPUT AND OUTPUT REQUIREMENTS. STATE THE FINDINGS.

|                |            |      |
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SAMPLE TEST ANALYSIS REPORT

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3 SOFTWARE FUNCTION FINDINGS

IDENTIFY AND DESCRIBE THE FINDINGS ON EACH FUNCTION SEPARATELY IN PARAGRAPHS 3A THROUGH 3B.

A. FUNCTION (IDENTIFY).

1. PERFORMANCE. DESCRIBE BRIEFLY THE FUNCTION. DESCRIBE THE SOFTWARE CAPABILITIES THAT WERE DESIGNED TO SATISFY THIS FUNCTION. STATE THE FINDINGS AS TO THE DEMONSTRATED CAPABILITIES FROM ONE OR MORE TESTS.
2. LIMITS. DESCRIBE THE RANGE OF DATA VALUES TESTED. IDENTIFY THE DEFICIENCIES, LIMITATIONS, AND CONSTRAINTS DETECTED IN THE SOFTWARE DURING THE TESTING WITH RESPECT TO THIS FUNCTION.

B. FUNCTION (IDENTIFY). PRESENT THE FINDINGS ON THE SECOND AND SUCCEEDING FUNCTIONS IN A MANNER SIMILAR TO THAT OF PARAGRAPH 3A.

4 ANALYSIS SUMMARY

A. CAPABILITIES. DESCRIBE THE CAPABILITIES OF THE SOFTWARE AS DEMONSTRATED BY THE TESTS. WHERE TESTS WERE TO DEMONSTRATE FULFILLMENT OF ONE OR MORE SPECIFIC PERFORMANCE REQUIREMENTS, PREPARE FINDINGS SHOWING THE COMPARISON OF THE RESULTS WITH THESE REQUIREMENTS. ASSESS THE EFFECTS ANY DIFFERENCES IN THE TEST ENVIRONMENT AS COMPARED TO THE OPERATIONAL ENVIRONMENT MAY HAVE HAD ON THIS TEST DEMONSTRATION OF CAPABILITIES.

|                |            |      |
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## SAMPLE TEST ANALYSIS REPORT

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B. DEFICIENCIES. DESCRIBE THE DEFICIENCIES OF THE SOFTWARE AS DEMONSTRATED BY THE TESTS. DESCRIBE THE IMPACT OF EACH DEFICIENCY ON THE PERFORMANCE OF THE SOFTWARE. DESCRIBE THE CUMULATIVE OR OVERALL IMPACT ON PERFORMANCE OF ALL DETECTED DEFICIENCIES.

C. RECOMMENDATIONS AND ESTIMATES. FOR EACH DEFICIENCY, PROVIDE ANY ESTIMATES OF TIME AND EFFORT REQUIRED FOR ITS CORRECTION AND ANY RECOMMENDATIONS AT TO:

1. THE URGENCY OF EACH CORRECTION.
2. PARTIES RESPONSIBLE FOR CORRECTIONS.
3. HOW THE CORRECTIONS SHOULD BE MADE.

STATE THE READINESS FOR IMPLEMENTATION OF THE SOFTWARE AND REFINEMENTS THAT WOULD ADD TO SYSTEM CAPABILITY.

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## STANDARDS FOR ASCS-735, FILE DESCRIPTOR

THE FOLLOWING ARE STANDARDS FOR COMPLETING SPECIFIC FIELDS OF THE ASCS-735, FILE DESCRIPTOR. THE STANDARDS ALSO APPLY WHEN THE FILE DESCRIPTOR IS RECORDED ON WORD PROCESSING.

| ASCS-735 FIELD    | STANDARD                                                                                           |
|-------------------|----------------------------------------------------------------------------------------------------|
| FILE I.D. - - - - | -THE INTERNAL DATA SET NAME WITH BOTH A HIGH LEVEL AND A DESCRIPTIVE QUALIFIER(E.G., HLQ.DSN.DQ).  |
| FILE NAME - - - - | -THE COMMON USAGE OR DESCRIPTIVE NAME OF THE DATA SET(E.G., WOOL/MOHAIR VALIDATION SUSPENSE FILE). |
| REMARKS - - - -   | -ENTER ANY ADDITIONAL INFORMATION PERTINENT TO THE FILE AND IT'S USAGE.                            |

## STANDARDS FOR ASCS-762, RECORD DESCRIPTOR

THE FOLLOWING ARE STANDARDS FOR COMPLETING SPECIFIC FIELDS OF THE ASCS-762, RECORD DESCRIPTOR. THE SAME STANDARDS APPLY WHEN THE RECORD DESCRIPTOR IS RECORDED IN THE INTEGRATED DATA DICTIONARY OR ON WORD PROCESSING.

| ASCS-762 FIELD   | STANDARD                                                                                                                                                                                                                                                                                                                |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FILE I.D. -----  | THE ALPHANUMERIC FILE NAME (16 CHARACTERS MAXIMUM).                                                                                                                                                                                                                                                                     |
| FIELD NAME ----- | A SYMBOLIC OR ACTUAL NAME OF THE DATA ENTERED INTO THE FIELD (30 CHARACTERS MAXIMUM).                                                                                                                                                                                                                                   |
| DISP. -----      | A CHARACTER FROM 1 THROUGH 999 INDICATING THE STARTING LOCATION WITHIN THE RECORD.                                                                                                                                                                                                                                      |
| SIZE -----       | A NUMBER SPECIFYING THE NUMBER OF CORE POSITIONS USED BY THE FIELD (BYTES).                                                                                                                                                                                                                                             |
| TYPE -----       | A ONE-LETTER CODE INDICATING THE TYPE OF DATA STORED IN THE FIELD, WHERE:<br>A = ASCII CHARACTERS<br>C = EBCDIC CHARACTERS-IBM<br>C = GBCD CHARACTERS-HIS<br>D = UNSIGNED DECIMAL NUMBER<br>E = FLOATING POINT BINARY NUMBER<br>F = FIXED POINT BINARY NUMBER<br>P = PACKED DECIMAL NUMBER<br>Z = SIGNED DECIMAL NUMBER |
| JA -----         | A CODE WHICH INDICATES THE POSITION OF THE DATA IN THE FIELD, WHERE:<br>RJ = RIGHT JUSTIFIED<br>LJ = LEFT JUSTIFIED<br>NA = VARIABLE JUXTAPOSITION                                                                                                                                                                      |
| DECM -----       | IMPLIED DECIMAL POSITIONS IN A NUMERIC FIELD.                                                                                                                                                                                                                                                                           |
| KEY -----        | A NUMBER FROM 1 THROUGH NNNN, DESIGNATING THE SORT KEYS MAJOR TO MINOR. AN ASTERISK (*) INDICATES ACCESS KEY.                                                                                                                                                                                                           |

## STANDARDS FOR ASCS-762, RECORD DESCRIPTOR

COMMENTS -----THIS COLUMN MAY BE UTILIZED TO BETTER DEFINE OR  
CLARIFY THE CONTENT OF THE FIELD.

- A. FOR CADE APPLICATIONS, INDICATE THOSE FIELDS  
DEFINED AS ONE 'TYPE', BUT WHICH MAY CONTAIN  
ANOTHER BY ADDITION OF THE TERM "ALPHANUMERIC".
- B. INDICATE FIELD FILLER CHARACTERISTICS AS:
  - ZF = ZERO FILLED FIELD
  - SF = SPACE FILLED FIELD

## NOTES:

1. RECORD REPORTS FROM THE INTEGRATED DATA DICTIONARY (REPORT 78)  
MAY BE USED IN PLACE OF FORM ASCS-762.
2. RECORD DESCRIPTORS PREPARED ON WORD PROCESSING MAY BE USED IN  
PLACE OF FORM ASCS-762.

## STANDARD CODING STRUCTURES

|                                 |        |
|---------------------------------|--------|
| LOGONID -- .....                | PAGE 2 |
| JOB NAME -- .....               | PAGE 2 |
| STEP NAME -- .....              | PAGE 3 |
| PROGRAM NAME -- .....           | PAGE 3 |
| CALLED MODULE -- .....          | PAGE 3 |
| DISK DATA SET NAME -- .....     | PAGE 3 |
| TAPE DATA SET NAME -- .....     | PAGE 4 |
| REPORT I.D. -- .....            | PAGE 4 |
| CADE OR CARD FILES -- .....     | PAGE 4 |
| JOB NUMBER -- .....             | PAGE 5 |
| PROCEDURE MEMBER NAME -- .....  | PAGE 5 |
| CARD IMAGE MEMBER NAME -- ..... | PAGE 5 |
| MAP I.D. -- .....               | PAGE 5 |
| TASK CODE (TASK ID) -- .....    | PAGE 6 |

## STANDARD CODING STRUCTURES

-- LOGON I.D. --

WILL BE 6 CHARACTERS IN LENGTH IN THE FORMAT " MDDXXX ", WHERE:

M - IS A CONSTANT TO IDENTIFY ALL KCMO OPERATIONS.

DD - IS A 2-CHARACTER ABBREVIATION TO IDENTIFY EACH DIVISION:

|                                       |                                  |
|---------------------------------------|----------------------------------|
| *-- AA - ARTHUR ANDERSEN & CO. (GIMS) | IG - OIG                         |
| AB - KCMO,DOD-ARB                     | LS - KCMO,LSD                    |
| AC - ARTHUR ANDERSEN & CO. (PCIMS)    | MS - WDC,MANAGEMENT SERVICE      |
| AK - KCMO,A/S/K ASSOC.                | NY - NYMA, INC                   |
| AM - AG. MKTING SERVICE               | OA - OAO CORPORATION             |
| AP - KCMO,ANALYSIS & PROCED.          | OD - KCMO,TECH STAFF             |
| AS - KCMO,ADMIN. SERVICES             | PA - WDC,PROGRAM ANALYSIS        |
| AT - KCMO, ACCT. MGT. STAFF           | PB - KCMO,DOD-PPB                |
| BC - KCCO,BULK GRAIN INV.             | PC - KCCO,PROCESSED COMMODITIES  |
| BG - KCCO,BULK GRAIN INV.             | PD - KCMO,PERSONNEL              |
| BM - KCCO,BULK GRAIN MDSE.            | PE - WDC,PERSONNEL               |
| BU - WDC, BUDGET                      | PP - KCMO,PRODUCER PROGRAMS      |
| BW - KCMO,B & WM STAFF                | PS - IRMD,POLICY & PLANNING      |
| CA - WDC, COMMODITY ANALYSIS          | RA - RADAN, INC.                 |
| CC - KCCO,CLAIMS & COLLECTIONS        | SB - KCMO,ACCOUNTING             |
| CD - KCMO,COMMODITY SYSTEMS           | SC - KCCO,WHSE LIC & CONTR.      |
| CE - WDC,CEPD                         | SL - APFO,SALT LAKE              |
| CG - WDC,CGRD                         | SP - KCMO,CSPD (PRODUCTION)      |
| CM - WDC,COMMODITY OPERATIONS         |                                  |
| CR - KCCO,COTTON & RICE               | SO - KCMO,SECURITY OFFICERS      |
| CT - CONTRACTOR (FSD)                 | SS - KCMO,SPECIAL SYSTEMS        |
| CU - CULLINET                         |                                  |
| DA - WDC,DAIRY                        | ST - KCMO,CSPD (ACCEPTANCE TEST) |
| DC - WDC,DACO                         |                                  |
| DI - DP ASSOCIATES, INC.              |                                  |
| DM - WDC,DAM                          |                                  |
| DO - WDC,DASCO                        |                                  |
| DP - WDC,DAPPD                        |                                  |
| DS - KCMO,DATA MANAGEMENT             | TC - KCMO,TELECOMMUNICATIONS     |
| EC - WDC,ECS                          |                                  |
| ED - KCMO,EDS INC.                    | TN - KCMO,PD (TRAINING)          |
| EL - WDC,EOLPD                        |                                  |
| FA - KCMO,FINANCIAL ACCOUNTING        | TP - WDC,TOBACCO/PEANUTS         |
| FD - KCCO,FISCAL                      | TR - KCCO,TRAFFIC MGMT.          |
| FI - WDC,FISCAL DIV.                  | TS - WDC,TECH SERVICES STAFF     |
| FN - FOOD & NUTRITION SERVICE VE -    | WDC,CONTRACTORS                  |
| FS - KCMO,FINANCIAL SYSTEMS           | WE - KCCO,WAREHOUSE EXAMINATION  |
| GO - GOVT. ACCT. OFFICE (LOCAL)       | WH - WDC,WAREHOUSE               |
| GS - GENERAL SALES MANAGER            | WL - KCCO,WLCD ---*              |

XXX - IS A 3-DIGIT NUMERIC TO IDENTIFY EACH INDIVIDUAL.

## STANDARD CODING STRUCTURES

-- JOB NAME --

WILL BE 8 CHARACTERS IN LENGTH IN THE FORMAT "MDDAABBB", WHERE:

- M - IS A CONSTANT TO IDENTIFY ALL KCMO OPERATIONS.
- DD - IS A 2-CHARACTER ABBREVIATION TO IDENTIFY EACH DIVISION.
- AA - IS A 2-CHARACTER ALPHA CODE TO IDENTIFY THE SYSTEM/SUBSYSTEM.  
\*-- (REFER TO 3-ADM, EXHIBIT 2) DO NOT USE ALPHA I OR O. --\*
- BBB - IS A SEQUENTIAL JOB NUMBER, FROM 000 THRU 999.

NOTE ON JOBPARM HAS BEEN MOVED TO EXHIBIT 33, PAGE 6.

## STANDARD CODING STRUCTURES

## -- STEP NAME --

WILL BE 6 CHARACTERS IN LENGTH IN THE FORMAT "MAACCC", WHERE:

- M - IS A CONSTANT TO IDENTIFY ALL KCMO OPERATIONS.
- AA - IS A 2-CHARACTER ALPHA CODE TO IDENTIFY THE SYSTEM/SUBSYSTEM.
- \*-- (REFER TO 3-ADM, EXHIBIT 2) DO NOT USE ALPHA I OR O. --\*
- CCC - IS THE MAINLINE PROGRAM NAME. DO NOT USE ALPHA I OR O.

## -- PROGRAM NAME --

WILL BE 6 CHARACTERS IN LENGTH IN THE FORMAT "MAAPPP", WHERE:

- M - IS A CONSTANT TO IDENTIFY ALL KCMO OPERATIONS.
- AA - IS A 2-CHARACTER ALPHA CODE TO IDENTIFY THE SYSTEM/SUBSYSTEM.
- \*-- (REFER TO 3-ADM, EXHIBIT 2) DO NOT USE ALPHA I OR O. --\*
- PPP - IS THE MAINLINE PROGRAM NAME. DO NOT USE ALPHA I OR O.

## -- CALLED MODULE --

\*-- WILL BE 8 CHARACTERS IN LENGTH IN THE FORMAT "MAACCCDD", WHERE: --\*

- M - IS A CONSTANT TO IDENTIFY ALL KCMO OPERATIONS.
- AA - IS A 2-CHARACTER ALPHA CODE TO IDENTIFY THE SYSTEM/SUBSYSTEM.
- \*-- (REFER TO 3-ADM, EXHIBIT 2) DO NOT USE ALPHA I OR O. --\*
- CCC - IS THE MAINLINE PROGRAM (CALLING PROGRAM) NAME.  
DO NOT USE ALPHA I OR O.
- DD - IS THE SEQUENTIAL NUMBER OF THE CALLED MODULE.

## -- DISK DATA SET NAME --

WILL BE 8 CHARACTERS IN LENGTH IN THE FORMAT "MAACCCEE" WHERE:

- M - IS A CONSTANT TO IDENTIFY ALL KCMO OPERATIONS.
- AA - IS A 2-CHARACTER ALPHA CODE TO IDENTIFY THE SYSTEM/SUBSYSTEM.
- \*-- (REFER TO 3-ADM, EXHIBIT 2) DO NOT USE ALPHA I OR O. --\*
- CCC - IS THE MAINLINE PROGRAM WHICH CREATES THE DATA SET.  
DO NOT USE ALPHA I OR O.
- EE - IS THE SEQUENTIAL DISK DATA SET NUMBER FOR THE PROGRAM.  
(THE USER SUPPLIED NAME IN THE KCCC NAMING SCHEME).

## STANDARD CODING STRUCTURES

## -- TAPE DATA SET NAME --

WILL BE 8 CHARACTERS IN LENGTH IN THE FORMAT " MAACCCEE ", WHERE:

- M - IS A CONSTANT TO IDENTIFY ALL KCMO OPERATIONS.
- AA - IS A 2-CHARACTER ALPHA CODE TO IDENTIFY THE SYSTEM/SUBSYSTEM.  
\*-- (REFER TO 3-ADM, EXHIBIT 2) DO NOT USE ALPHA I OR O. --\*
- CCC - IS THE MAINLINE PROGRAM NAME WHICH CREATES THE DATA SET.  
DO NOT USE ALPHA I OR O.
- EE - IS THE SEQUENTIAL TAPE DATA FOR THE PROGRAM.  
(THE KCCC STANDARD RETENTION CODE(14-ADM) MUST BE SHOWN  
ON THE JOB CHART. THIS IS USER NAMEPORTION OF KCCC NAMING  
SCHEME).

## -- REPORT I.D. --

WILL BE 8 CHARACTERS IN LENGTH IN THE FORMAT " MAACCCRF ", WHERE:

- M - IS A CONSTANT TO IDENTIFY ALL KCMO OPERATIONS.
- AA - IS A 2-CHARACTER ALPHA CODE TO IDENTIFY THE SYSTEM/SUBSYSTEM.  
\*-- (REFER TO 3-ADM, EXHIBIT 2) DO NOT USE ALPHA I OR O. --\*
- CCC - IS THE MAINLINE PROGRAM NAME. DO NOT USE ALPHA I OR O.
- R - IS A CONSTANT TO IDENTIFY THE REPORT.
- F - IS A SEQUENTIAL NUMBER, FROM 1 TO 9 TO IDENTIFY REPORTS.

(NOTE: WHEN MORE THAN 9 REPORTS ARE PRODUCED BY ONE PROGRAM  
THE REPORT I.D. MAY BE A THRU Z (DO NOT USE ALPHA I OR O).)

## -- CADE OR CARD FILES --

WILL BE 8 CHARACTERS IN LENGTH IN THE FORMAT " MAABBBG ", WHERE:

- M - IS A CONSTANT TO IDENTIFY ALL KCMO OPERATIONS.
- AA - IS A 2-CHARACTER ALPHA CODE TO IDENTIFY SYSTEM/SUBSYSTEM.  
\*-- (REFER TO 3-ADM, EXHIBIT 2) DO NOT USE ALPHA I OR O. --\*
- BBB - IS THE MAINLINE PROGRAM NAME. DO NOT USE ALPHA I OR O.
- C - IS A CONSTANT TO IDENTIFY CARD FILES.
- G - IS A SEQUENTIAL NUMBER FROM 0 THRU 9 TO IDENTIFY DIFFERENT  
FILES. (USER SUPPLIED NAME IN KCCC NAMING SCHEME.)

(NOTE: ALL DATA SETS MUST BE PREFIXED WITH A VALID HIGH LEVEL  
QUALIFIER. SEE EXHIBIT 22.)

## STANDARD CODING STRUCTURES

## -- JOB NUMBER --

WILL BE 9 CHARACTERS IN LENGTH IN THE FORMAT "MMDDYYRJJ", WHERE:

- MM - IS THE 2-DIGIT MONTH, 01 THRU 12.
- DD - IS THE 2-DIGIT DAY, 01 THRU 31.
- YY - IS THE 2-DIGIT YEAR, 82,83,84,ETC.
- R - IS A 1-CHARACTER RERUN CODE, WHERE 0 INDICATES THE INITIAL PROCESS, 1 INDICATES THE FIRST RERUN, ETC.; THRU 9. WHEN A RERUN IS NECESSARY AFTER THIS POINT, THE JOB NUMBER SHOULD BE INCREMENTED BY 1 AND THE ABOVE PROCESS RESTARTED.
- JJ - IS THE 2-DIGIT JOB NUMBER, 00 THRU 99.

## -- PROCEDURE MEMBER NAME --

WILL BE UP TO 8 CHARACTERS LONG IN THE FORMAT "MMAABBS", WHERE:

- MM - IS A 2-CHARACTER CONSTANT "MM" TO IDENTIFY ALL KCMO PROC'S.
- AA - IS A 2-CHARACTER ALPHA CODE TO IDENTIFY THE SYSTEM/SUBSYSTEM.  
\*-- (REFER TO 3-ADM, EXHIBIT 2) DO NOT USE ALPHA I OR O. --\*
- BBB - IS THE SEQUENTIAL JOB NUMBER, FROM 000 THRU 999 (NO ALPHA'S)
- S - IS A 1-CHARACTER ALPHA SUFFIX CODE.  
(USED TO IDENTIFY MODIFIED PROC'S).

NOTE: THIS FORMAT REQUIRED FOR ALL NEW OR MODIFIED PROC'S AFTER  
FEBRUARY 1, 1982.

## -- CARD IMAGE MEMBER NAME --

WILL BE UP TO 8 CHARACTERS LONG IN THE FORMAT "MDDAABBS", WHERE:

- M - IS A CONSTANT TO IDENTIFY ALL KCMO OPERATIONS.
- DD - IS A 2-CHARACTER ABBREVIATION TO IDENTIFY DIVISION.
- AA - IS A 2-CHARACTER ALPHA CODE TO IDENTIFY SYSTEM/SUBSYSTEM.  
\*-- (REFER TO 3-ADM, EXHIBIT 2) DO NOT USE ALPHA I OR O. --\*
- BBB - IS THE SEQUENTIAL JOB NUMBER, FROM 000 THRU 999. NO ALPHA'S.

## -- MAP ID --

WILL BE UP TO 8 CHARACTERS LONG IN THE FORMAT "MAABBBMC", WHERE:

- M - IS A CONSTANT TO IDENTIFY ALL KCMO OPERATIONS.
- AA - IS A 2-CHARACTER ALPHA CODE TO IDENTIFY SYSTEM/SUBSYSTEM.  
\*-- (REFER TO 3-ADM, EXHIBIT 2) DO NOT USE ALPHA I OR O. --\*
- BBB - IS A PROGRAM NUMBER.
- M - IS A CONSTANT TO IDENTIFY A MAP.
- C - IS A 1-DIGIT SEQUENCE NUMBER.

## STANDARD CODING STRUCTURES

-- TASK CODE (TASK ID) --

TASK CODES VISIBLE TO THE USER WILL BE ON RIGHT SIDE OF THE FIRST LINE OF THE DISPLAY. TASK CODE WILL BE A MAXIMUM OF 8 CHARACTERS DISPLAYING A MEANINGFUL NAME TO THE USER.

## EXAMPLES:

FMSIN - SCREEN FOR INPUT OF DATA IN FMS.  
CTRYADDS - SCREEN FOR ADDING A COUNTRY IN GSM.  
FMSGLO - SCREEN FOR GENERAL LEDGER INQUIRY IN FMS.  
AGREAPPR - SCREEN FOR AGREEMENT APPROVAL IN GSM.

HIGH LEVEL QUALIFIERS  
AND STANDARD DATA SETS

THE FOLLOWING IS THE STANDARD NAMING STRUCTURE FOR DATA SETS AND LIBRARIES. THE ILLUSTRATION SHOWS THE MOST COMMON.

| QUALIFIER         | DIVISION | DESCRIPTION               |
|-------------------|----------|---------------------------|
| MXX901.DSN.LOAD   | XXXX     | TEST LOAD MODULES         |
| MXX902.DSN.LIBRN  | XXXX     | TEST SOURCE MODULES       |
| MXX902.DSN.COBOLE | XXXX     | TEST COBOL SOURCE MODULES |
| MXX903.DSN.DATA   | XXXX     | TEST DATA FILES           |
| MXX904.DSN.CNTL   | XXXX     | TEST JCL FILES            |

THE FOLLOWING ARE SPECIALIZED DATA SETS USED IN SUPPORT OF IDMS.

|                   |      |                                   |
|-------------------|------|-----------------------------------|
| MAA905.DSN.DQ     | AACO | GIMS DEVELOPMENT DATABASE FILES   |
| MAA906.DSN.DQ     | AACO | GIMS DEVELOPMENT CONTROL FILES    |
| MAA908.DSN.DQ     | AACO | GIMS DEVELOPMENT DC SYSTEM FILES  |
| MAA911.DSN.DQ     | AACO | GIMS DEVELOPMENT IDD DICTIONARY   |
| MDS705.DSN.DQ     | KCMO | GIMS TEST DATABASE FILES          |
| MDS706.DSN.DQ     | KCMO | GIMS TEST IDD DICTIONARY          |
| MDS708.DSN.DQ     | KCMO | GIMS TEST DC SYSTEM FILES         |
| MDS815.DSN.DQ     | KCMO | PCIMS 1T TEST DATABASE FILES --*  |
| MDS816.DSN.DQ     | KCMO | PCIMS 1T TEST IDD DICTIONARY --*  |
| MDS818.DSN.DQ     | KCMO | PCIMS 1T TEST DC SYSTEM FILES --* |
| MDS905.DSN.DQ     | KCMO | APLUS DEVELOPMENT DATABASE FILES  |
| MDS906.DSN.DQ     | KCMO | APLUS DEVELOPMENT IDD DICTIONARY  |
| MDS908.DSN.DQ     | KCMO | APLUS DEVELOPMENT DC SYSTEM FILES |
| MDS915.DSN.DQ     | KCMO | ACCEPTANCE TEST DATABASE FILES    |
| MDS916.DSN.DQ     | KCMO | ACCEPTANCE TEST IDD DICTIONARY    |
| MDS918.DSN.DQ     | KCMO | ACCEPTANCE TEST DC SYSTEM FILES   |
| *-- PCI905.DSN.DQ | ASCS | PCIMS 1P DATABASE FILES           |
| PCI906.DSN.DQ     | ASCS | PCIMS 1P IDD DICTIONARY           |
| PCI908.DSN.DQ     | ASCS | PCIMS 1P PC SYSTEM FILES          |
| PCI805.DSN.DQ     | ASCS | PCIMS 2D DATABASE FILES           |
| PCI806.DSN.DQ     | ASCS | PCIMS 2D IDD DICTIONARY           |
| PCI808.DSN.DQ     | ASCS | PCIMS 2D PC SYSTEM FILES --*      |

HIGH LEVEL QUALIFIERS  
AND STANDARD DATA SETS

| QUALIFIER          | DIVISION | DESCRIPTION                        |
|--------------------|----------|------------------------------------|
| *-- PCI815.DSN.DQ  | ASCS     | PCIMS 2A DATABASE FILES            |
| PCI816.DSN.DQ      | ASCS     | PCIMS 2A IDD DICTIONARY            |
| PCI818.DSN.DQ      | ASCS     | PCIMS 2A PC SYSTEM FILES           |
| PCI915.DSN.DQ      | ASCS     | PCIMS 2P DATABASE FILES            |
| PCI916.DSN.DQ      | ASCS     | PCIMS 2P IDD DICTIONARY            |
| PCI918.DSN.DQ      | ASCS     | PCIMS 2P PC SYSTEM FILES           |
| MGA901.DSN.LOAD    | GSD      | GRAIN ACCEPTANCE TEST LOAD         |
| MGA902.DSN.SOURCE  | GSD      | GRAIN ACCEPTANCE TEST SOURCE       |
| MGA903.DSN.DATA    | GSD      | GRAIN ACCEPTANCE TEST DATA         |
| MGA904.DSN.CNTL    | GSD      | GRAIN ACCEPTANCE TEST CNTL         |
| MGA905.DSN.DATA    | GSD      | GRAIN GENERATION DATA SETS - TAPE  |
| MGT901.DSN.LOAD    | GSD      | GRAIN UNIT TEST LOAD               |
| MGT902.DSN.SOURCE  | GSD      | GRAIN UNIT TEST SOURCE             |
| MGT903.DSN.DATA    | GSD      | GRAIN UNIT TEST DATA               |
| MGT904.DSN.CNTL    | GSD      | GRAIN UNIT TEST CNTL               |
| MGM901.DSN.LOAD    | GSD      | GRAIN MIGRATION LOAD               |
| MGM902.DSN.SOURCE  | GSD      | GRAIN MIGRATION SOURCE             |
| MGM903.DSN.DATA    | GSD      | GRAIN MIGRATION DATA               |
| MGM904.DSN.CNTL    | GSD      | GRAIN MIGRATION CNTL               |
| MGD901.DSN.LOAD    | GSD      | GRAIN DEVELOPMENT LOAD             |
| MGD902.DSN.SOURCE  | GSD      | GRAIN DEVELOPMENT SOURCE           |
| MGD903.DSN.DATA    | GSD      | GRAIN DEVELOPMENT DATA             |
| MGD904.DSN.CNTL    | GSD      | GRAIN DEVELOPMENT CNTL             |
| ASCA901.DSN.LOAD   | ALL      | CICS/ABAFAS ACCEPTANCE TEST LOAD   |
| ASCA902.DSN.SOURCE | ALL      | CICS/ABAFAS ACCEPTANCE TEST SOURCE |
| ASCA903.DSN.DATA   | ALL      | CICS/ABAFAS ACCEPTANCE TEST DATA   |
| ASCA904.DSN.CNTL   | ALL      | CICS/ABAFAS ACCEPTANCE TEST CNTL   |
| ASCP901.DSN.LOAD   | ALL      | CICS/ABAFAS PRODUCTION LOAD        |
| ASCP902.DSN.SOURCE | ALL      | CICS/ABAFAS PRODUCTION SOURCE      |
| ASCP903.DSN.DATA   | ALL      | CICS/ABAFAS PRODUCTION DATA        |
| ASCP904.DSN.CNTL   | ALL      | CICS/ABAFAS PRODUCTION CNTL --*    |

HIGH LEVEL QUALIFIERS  
AND STANDARD DATA SETS

| QUALIFIER            | DIVISION | DESCRIPTION                      |
|----------------------|----------|----------------------------------|
| *-- ASCT901.DSN.LOAD | ALL      | CICS/ABAFAS DEVELOPMENT LOAD     |
| ASCT902.DSN.SOURCE   | ALL      | CICS/ABAFAS DEVELOPMENT SOURCE   |
| ASCT903.DSN.DATA     | ALL      | CICS/ABAFAS DEVELOPMENT DATA     |
| ASCT904.DSN.CNTL     | ALL      | CICS/ABAFAS DEVELOPMENT CNTL --* |

WHERE THE SYMBOL "DQ" MAY BE ONE OF THE FOLLOWING:

|                         |                               |
|-------------------------|-------------------------------|
| *-- DATA - DATA FILES   | ISPROF - ISPF PROFILE         |
| CNTL - JCL LIBRARY      | LOAD - PROGRAM LOAD LIBRARY   |
| CLIST - CLIST PROCESS   | LIBRN - LIBRARIAN             |
| SOURCE - SOURCE LIBRARY | LIST - DATA LIST              |
| COBOL - COBOL SOURCE    | TEXT - DATA TEXT              |
| FORTH - FORTRAN         | VSBASIC - BASIC               |
| GOFORT - FORTRAN        | JRNLX - JOURNAL FILES c1! --* |

c1! X MAY BE A NUMBER 1 - 9

HIGH LEVEL QUALIFIERS  
AND STANDARD DATA SETS

THE FOLLOWING ARE PRODUCTION DATA SETS AND LIBRARIES THAT MAY BE USED BY PROGRAMMERS IN A READ-ONLY MODE.

| QUALIFIER            | DIVISION | DESCRIPTION                        |
|----------------------|----------|------------------------------------|
| MSP901.PRODLIB.LOAD  | CSPD     | PRODUCTION LOAD MODULES - ACTIVE   |
| MSP903.IBM.LIBRN     | CSPD     | PRODUCTION SOURCE MODULES          |
| MSP905.DSN.DATA      | CSPD     | IDMS DC/CV PRODUCTION DATA FILES   |
| MSP905.DSN.LOAD      | CSPD     | PRODUCTION DATABASE LOAD LIBRARIES |
| MSP905.JCL.CNTL      | CSPD     | IDMS DC/CV PRODUCTION JCL          |
| MSP905.PROD.LOAD     | CSPD     | PRODUCTION LOAD MODULES            |
| MSP905.REQUEST.CNTL  | CSPD     | MICROFICHE CONTROL STATEMENTS      |
| MSP906.DSN.DATA      | CSPD     | PRODUCTION IDMS IDD FILES          |
| MSP907.LINK.CLIST    | CSPD     | COMMON ROUTINE LIBRARY             |
| MSP907.PROCEDUR.CNTL | CSPD     | PRODUCTION JCL PROCEDURE FILES     |
| MSP907.SCHEDULE.CNTL | CSPD     | UCC7 EXECUTION JCL                 |
| MSP908.DSN.DATA      | CSPD     | PRODUCTION DC SYSTEM FILES         |
| MSP909.CRDIMG.CNTL   | CSPD     | PRODUCTION CARD IMAGE (SORT/MERGE) |
| MSP910.EM74LIB.LOAD  | CSPD     | PRODUCTION EMULATION - LOAD        |
| MSP910.LOISS.LOAD    | CSPD     | PRODUCTION EMULATION - LOAD        |
| MSP910.IRIS.LOAD     | CSPD     | PRODUCTION EMULATION - LOAD        |
| MSP910.INVRPT.LOAD   | CSPD     | PRODUCTION EMULATION - LOAD        |
| MSP910.LOS.LOAD      | CSPD     | PRODUCTION EMULATION - LOAD        |
| MSP910.TRANSIT.LOAD  | CSPD     | PRODUCTION EMULATION - LOAD        |
| MSP910.WHSNA.LOAD    | CSPD     | PRODUCTION EMULATION - LOAD        |
| MSP910.INVACQ.LOAD   | CSPD     | PRODUCTION EMULATION - LOAD        |
| MSP910.MISCPA.LOAD   | CSPD     | PRODUCTION EMULATION - LOAD        |
| MSP910.WHRMAINT.LOAD | CSPD     | PRODUCTION EMULATION - LOAD        |
| MSP910.MERCHAN.LOAD  | CSPD     | PRODUCTION EMULATION - LOAD        |
| MSP910.PATCH.LOAD    | CSPD     | PRODUCTION EMULATION - LOAD        |
| MSP910.BLEND.LOAD    | CSPD     | PRODUCTION EMULATION - LOAD        |
| MSP910.CRDIMG.CNTL   | CSPD     | EMULATION LOAD AND DATA CARDS      |
| MSP910.EM1401.LOAD   | CSPD     | PRODUCTION EMULATION LOAD          |
| MSP910.DUM.DATA      | CSPD     | EMULATION FORCE E-O-J (916 HALT)   |
| MSP910.C220713A.DATA | CSPD     | WHSE N/A (045006)                  |
| MSP910.C220713B.DATA | CSPD     | WHSE N/A (045006)                  |
| MSP911.DSN.DATA      | CSPD     | PRODUCTION VSAM CLUSTERS           |
| MSP925.MACROLIB.ASM  | CSPD     | UTILITIES                          |
| *-- MF0901.DSN.DQ    | CSPD     | GENERATION DATA SETS --*           |
| MF0921.DSN.DQ        | CSPD     | SYSTEM PROCEDURES - CLIST'S        |
| MF0950.DSN.DQ        | CSPD     | IDCAMS VSAM CATALOGS               |

HIGH LEVEL QUALIFIERS  
AND STANDARD DATA SETS

## EXAMPLES OF USE OF HIGH LEVEL QUALIFIERS

## EXAMPLE:

PPSD HAS CREATED PARTITIONED DATA SETS (PDS) FOR OBJECT PROGRAMS, DATA FILES AND JCL FOR THEIR SYSTEMS. THESE WOULD BE IDENTIFIED AS FOLLOWS:

| HLQ               | DSN | DQ                          |
|-------------------|-----|-----------------------------|
| MPP901.PPSD1.LOAD | -   | OBJECT PROGRAM LOAD LIBRARY |
| MPP903.PPSD3.DATA | -   | DATA FILES                  |
| MPP904.PPSD4.CNTL | -   | JCL FILES                   |

EACH PDS MEMBER WOULD BE IDENTIFIED AFTER THE DESCRIPTIVE QUALIFIER (DQ):

| HLQ               | DSN       | DQ | MEMBER                   |
|-------------------|-----------|----|--------------------------|
| MPP901.PPSD1.LOAD | (MFN110)  | -  | MAINLINE PROGRAM         |
| MPP901.PPSD1.LOAD | (MFN120)  | -  | MAINLINE PROGRAM         |
| MPP901.PPSD1.LOAD | (MFN2010) | -  | CALLED MODULE FOR MFN120 |

## TSO

TO ACCESS THESE FILES VIA TSO, THE FULLY QUALIFIED NAME MUST BE ENCLOSED IN QUOTES (''). THIS WILL PREVENT TSO FROM ASSIGNING THE LOGON ID AS THE HLQ.

## EXAMPLE:

EDIT: 'MPP904.PPSD4.CNTL(MFN110)'

HIGH LEVEL QUALIFIERS  
AND STANDARD DATA SETS

## EXAMPLES OF USE OF HIGH LEVEL QUALIFIERS

## BATCH JCL

ACCESS OF THE OBJECT LIBRARY FILE IN BATCH JOBS REQUIRES ONE OF THE FOLLOWING ENTRIES:

```
//STEP1 EXEC PGM=MFN110
//STEPLIB DD DSN=MPP901.PPSD1.LOAD,DISP=SHR

//MFN110 JOB (AAO0DDCCPPPP.DIST.S),ETC.
//JOBLIB DD DSN=MPP901.PPSD1.LOAD,DISP=SHR
//STEP1 EXEC PGM=MFN110
```

## CATALOG INDICES FOR GENERATION DATA GROUPS - (GDG)

TO BUILD CATALOG INDICES, IT IS NECESSARY TO ENTER THE FULLY QUALIFIED NAME IN THE IEHPROGM UTILITY AS FOLLOWS:

```
 HLQ DSN DQ NUMBER
//SYSIN DD *
 BLDG INDEX=MF0902.MFN12003.DATA,ENTRIES=NNNN
```

## IBM COMMON ROUTINES

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## IBM COMMON ROUTINES

ROUTINE MME005 - CALCULATES AND VERIFIES PRODUCER-ID CHECK DIGIT  
PROGRAM REQUIREMENTS FOR MME005.

1. WORKING-STORAGE SECTION. (LINKAGE OR WORKING-STORAGE  
FOR DC PROGRAMS)
  - 01 CALL-AREA.
    - 05 PROD-ID PIC 9(9).
    - 05 CHK-DIGIT PIC 9.
    - 05 CALC-DIGIT PIC 9.
    - 05 RET-CODE PIC X.
2. PROCEDURE DIVISION.
  - A. BATCH PROGRAM  
CALL 'MME005' USING CALL-AREA.
  - B. DC PROGRAM  
TRANSFER CONTROL 'MME005' RETURN USING CALL-AREA.
3. THE USER MUST PROVIDE THE PROD-ID AND, OPTIONALLY, CHECK-DIGIT. THE CALCULATED CHECK DIGIT WILL BE RETURNED IN CALC-DIGIT. IF CHECK-DIGIT IS SUPPLIED, IT WILL BE COMPARED TO THE CALCULATED CHECK DIGIT (CALC-DIGIT). IF CHECK-DIGIT AND CALC-DIGIT ARE EQUAL, A 'Y' WILL BE RETURNED IN RET-CODE. IF CHECK-DIGIT IS NOT SUPPLIED (BLANK), OR NOT EQUAL TO CALC-DIGIT, AN 'N' WILL BE RETURNED IN RET-CODE.
4. MME005 MAY BE USED IN EITHER A BATCH PROGRAM OR A DC PROGRAM.
5. COMMON JCL REQUIREMENTS. SEE PAGE 16 OF THIS EXHIBIT.

## IBM COMMON ROUTINES

ROUTINE MME05A - CALCULATES AND VERIFIES STATE AND COUNTY CHECK DIGIT  
PROGRAM REQUIREMENTS FOR MME05A.

1. WORKING-STORAGE SECTION. (LINKAGE OR WORKING-STORAGE  
FOR DC PROGRAMS)
  - 01 CALL-AREA.
    - 05 STATE-CTY-CODE PIC X(5).
    - 05 CHECK-DIGIT PIC X.
    - 05 CALC-DIGIT PIC X.
    - 05 RET-CODE PIC X.
2. PROCEDURE DIVISION.
  - A. BATCH PROGRAM  
CALL 'MME05A' USING CALL-AREA.
  - B. DC PROGRAM  
TRANSFER CONTROL 'MME05A' RETURN USING CALL-AREA.
3. THE USER MUST PROVIDE THE STATE-CTY-CODE AND, OPTIONALLY,  
CHECK-DIGIT. THE CALCULATED CHECK DIGIT WILL BE RETURNED IN  
CALC-DIGIT. IF CHECK-DIGIT IS SUPPLIED, IT WILL BE COMPARED  
TO THE CALCULATED CHECK DIGIT (CALC-DIGIT). IF CHECK-DIGIT AND  
CALC-DIGIT ARE EQUAL, A 'Y' WILL BE RETURNED IN RET-CODE. IF  
CHECK-DIGIT IS NOT SUPPLIED (BLANK), OR CHECK-DIGIT IS NOT  
EQUAL TO CALC-DIGIT, AN 'N' WILL BE RETURNED IN RET-CODE.
4. MME05A MAY BE USED IN EITHER A BATCH PROGRAM OR DC PROGRAM.
5. COMMON JCL REQUIREMENTS. SEE PAGE 16 OF THIS EXHIBIT.

## IBM COMMON ROUTINES

ROUTINE MME006 - FORMAT PRODUCER NAME & ADDRESS INTO THREE PARTS  
PROGRAM REQUIREMENTS FOR MME006.

## 1. WORKING-STORAGE SECTION.

```
01 CALL-AREA.
 05 RECORD-IN PIC X(56).
 05 RECORD-OUT.
 10 RO-NAME PIC X(28).
 10 RO-ADDR PIC X(28).
 10 RO-CITY PIC X(28).
 05 RET-CODE PIC X.
```

## 2. PROCEDURE DIVISION.

CALL 'MME006' USING CALL-AREA.

3. THE CALLING PROGRAM WILL PROVIDE A 56 CHARACTER NAME AND ADDRESS IN RECORD-IN. THE NAME, ADDRESS, AND CITY WILL BE SEPARATED INTO SEPARATE AREAS AND PLACED IN RECORD-OUT. IF THERE IS NO ADDRESS FIELD, CITY WILL BE PLACED IN IN RO-ADDR AND RO-CITY WILL CONTAIN SPACES. IF ANY OF THE RECORD-OUT FIELDS ARE LONGER THAN 28 CHARACTERS, A '1' WILL BE PLACED IN RET-CODE AND RECORD-OUT WILL CONTAIN SPACES.
4. MME006 MAY BE USED IN A BATCH PROGRAM ONLY.
5. COMMON JCL REQUIREMENTS. SEE PAGE 16 OF THIS EXHIBIT.

## IBM COMMON ROUTINES

\*-- ROUTINE MME017 - FORMAT FARM NUMBER

## PROGRAM REQUIREMENTS FOR MME017.

1. WORKING-STORAGE SECTION. (LINKAGE OR WORKING-STORAGE FOR DC)
  - 01 PARAMETERS.
    - 05 FARM NUMBER PIC X(10).
    - 05 FORMATTED-NUMBER PIC X(10).
    - 05 ERROR-FIELD PIC X.
2. PROCEDURE DIVISION.
  - A BATCH PROGRAM  
CALL 'MME017' USING PARAMETERS.
  - B DC PROGRAM  
TRANSFER CONTROL 'MME017' RETURN USING PARAMETERS.
3. THE FARM NUMBER TO BE FORMATTED WILL BE MOVED TO FARM-NUMBER BY THE CALLING PROGRAM. ROUTINE MME017 WILL FORMAT THE FARM NUMBER AND PLACE IT IN FORMATTED-NUMBER.
  - A AN ERROR CODE OF 'E' WILL BE RETURNED IN ERROR FIELD IF:
    - 1 THE FARM-NUMBER IS BLANK.
    - 2 THE FIRST POSITION OF THE FARM-NUMBER IS BLANK.
    - 3 THE FARM-NUMBER CONTAINS OTHER THAN ALPHA, NUMERIC, OR BLANK CHARACTERS.
  - B IF ERROR-FIELD IS BLANK, THE FARM NUMBER HAS BEEN FORMATTED.
4. COMMON JCL REQUIREMENTS. SEE PAGE 16 OF THIS EXHIBIT.

## IBM COMMON ROUTINES

ROUTINE MME021 - EDIT DRAFT AMOUNT.

PROGRAM REQUIREMENTS FOR MME021.

## 1. WORKING-STORAGE SECTION. (LINKAGE OR WORKING-STORAGE FOR DC)

01 PARAMETERS.

05 DRAFT-AMT PIC X(12).

05 EDIT-DRAFT-AMT PIC X(12).

## 2. PROCEDURE DIVISION.

A BATCH PROGRAM

CALL 'MME021' USING PARAMETERS.

B DC PROGRAM

TRANSFER CONTROL 'MME021' RETURN USING PARAMETERS.

## 3. COMMON ROUTINE MME021 EDITS A 12-POSITION DRAFT AMOUNT, WHICH CONTAINS AN 11 DIGIT AMOUNT FIELD WITH A DECIMAL POINT FOR A TWO-PLACE DECIMAL. EXAMPLES OF INPUT AND OUTPUT FORMAT FOLLOW:

INPUT FORMAT

OUTPUT FORMAT

1234567.00

000123456700

123456789.00

012345678900

\$12345678.11

001234567811

\$ 45,678.00

000004567800

## 4. THE DRAFT AMOUNT TO BE EDITED WILL BE MOVED TO THE DRAFT-AMT FIELD BY THE CALLING PROGRAM. THE EDITED RESULTS ARE PLACED IN THE EDIT-DRAFT-AMT FIELD. THE EDIT-DRAFT-AMT FIELD IS ZERO-FILLED WITH THE EDIT CHARACTERS REMOVED.

NOTE: IF THE CALLING PROGRAM ONLY PROCESSES A 10-POSITION DRAFT AMOUNT DATA, THE DRAFT AMOUNT DATA MUST BE MOVED TO THE DRAFT-AMT FIELD RIGHT-JUSTIFIED AND SPACES MOVED INTO THE FIRST TWO BYTES.

## 5. THE LITERAL "ERROR" WILL BE RETURNED TO THE CALLING PROGRAM IN THE EDIT-DRAFT-AMT FIELD (LEFT-JUSTIFIED) IF:

A THE TENTH POSITION OF THE DRAFT-AMT FIELD IS NOT A DECIMAL POINT.

IBM COMMON ROUTINES

- B THERE IS MORE THAN ONE OCCURANCE OF A DOLLAR(\$) SIGN.
  - C THE CHARACTER PRECEEDING A COMMA IS NOT AN UNSIGNED NUMERIC.
  - D AFTER THE EDITING OF THE DRAFT AMOUNT DATA, A CHARACTER OTHER THAN AN UNSIGNED NUMERIC IS FOUND.
6. COMMON JCL REQUIREMENTS. SEE PAGE 16 OF THIS EXHIBIT. --\*

## IBM COMMON ROUTINES

ROUTINE MME030 - STATE/COUNTY NAME AND ADDRESS ACCESS ROUTINE

PROGRAM REQUIREMENTS FOR MME030.

## 1. WORKING-STORAGE SECTION.

-INC U5510259 (LIBRARIAN FUNCTION)  
OR  
COPY IDMS RECORD ST-CTY-RECD. (IDD PREPROCESS FUNCTION)

## \*-- 2. "UM" PROCEDURE --\*

THIS RECORD DESCRIPTOR IS MAINTAINED ON THE IDD. USING TSO "UM"  
PROCEDURE TO COMPILE AND LINK THE PROGRAM, THE RECORD DESCRIPTOR  
OF THE STATE AND COUNTY NAME AND ADDRESS FILE IS COPIED INTO THE  
CALLING PROGRAM. SEE PAGE 10, THIS EXHIBIT.

## REQUIREMENTS:

- \*-- A) EXECUTE FROM "UM" CLEAR --\*  
B) SPECIFY (Y) FOR IDD PREPROCESS  
C) LOAD LIBRARY OPTION - SPECIFY DESIRED LOAD LIBRARY

## 3. PROCEDURE DIVISION.

CALL 'MME030' USING ST-CTY-RECD.

## 4. EXECUTION JCL.

//U551025I DD DSN=MSP905.U551025I.DATA,DISP=SHR

5. THE CALLING PROGRAM MUST SUPPLY STATE-CODE, COUNTY-CODE  
AND RECD-TYPE AS FOLLOWS:

## (A) FOR STATE LEVEL INFORMATION:

STATE-CODE MUST BE NUMERIC FIPS STATE CODE.

COUNTY-CODE MUST BE ZERO.

RECD-TYPE MUST BE ZERO.

## (B) FOR COUNTY LEVEL INFORMATION:

STATE-CODE MUST BE NUMERIC FIPS STATE CODE.

## IBM COMMON ROUTINES

COUNTY-CODE MUST BE NUMERIC FIPS COUNTY CODE.

RECD-TYPE MUST BE ONE (1).

- (C) THE STCTY-CHK-DIG FIELD MUST BE CHECKED AFTER CALLING ROUTINE MME030. IF THE FIELD IS 'N' RATHER THAN A NUMERIC CHECK DIGIT, THE SPECIFIED STATE OR COUNTY RECORD WAS NOT FOUND.
6. MME030 MAY BE USED IN A BATCH PROGRAM ONLY.
  7. COMMON JCL REQUIREMENTS. SEE PAGE 16 OF THIS EXHIBIT.
  - \*-- 8. IF A CALLING PROGRAM PASSED 88 AS THE STATE-CODE, 888 AS THE COUNTY-CODE AND AN 8 AS THE RECD-TYPE, MME030 WILL CLOSE THE FILE.
  9. IF PROGRAMS CURRENTLY USING THIS ROUTINE DO NOT HAVE A PROBLEM WITH THE SYSTEM CLOSING THE FILE AFTER THE PROGRAM TERMINATES, THERE IS NO NEED TO CHANGE EXISTING PROGRAMS, HOWEVER, DB2 PROGRAMS ARE EXPERIENCING ABNORMAL TERMINATIONS WHEN THIS FILE HAS NOT BEEN CLOSED AND SHOULD UTILIZE THIS CHANGE. --\*

## IBM COMMON ROUTINES

## RECORD DESCRIPTOR FOR STATE/COUNTY NAME AND ADDRESS ACCESS ROUTINE

## RECORD DESCRIPTOR U5510259/ST-CTY-RECD

```

01 ST-CTY-RECD.
02 ST-RECD.
05 PSEUDO-GROUP1.
 49 STATE-CODE PICTURE 99.
 49 COUNTY-CODE PICTURE 9(3).
 49 RECD-TYPE PICTURE 9.
 49 STCTY-CHK-DIG PICTURE X.
 49 REGION-CODE PICTURE 9.
 49 STATE-NAME-ABBR PICTURE X(9).
 49 STATE-OFFICE-CON PICTURE X(15).
 49 LNGTH-CODE PICTURE 99.
 49 ADDR-L2 PICTURE X(28).
05 ADDR-L3.
 49 CITY-STATE PICTURE X(23).
 49 ZIP-CODE PICTURE 9(5).
05 PSEUDO-GROUP2.
 49 ST-ABBR PICTURE XX.
 49 STATE-NAME PICTURE X(15).
 49 RESERVED-FIELD-X PICTURE X
 OCCURS 033 TIMES.
02 CTY-RECD REDEFINES ST-RECD.
05 PSEUDO-GROUP3.
 49 STATE-CODE PICTURE 99.
 49 COUNTY-CODE PICTURE 9(3).
 49 RECD-TYPE PICTURE 9.
 49 STCTY-CHK-DIG PICTURE X.
 49 REGION-CODE PICTURE 9.
 49 CTY-NAME-ABBR PICTURE X(9).
 49 COUNTY-NAME PICTURE X(15).
 49 LNGTH-CODE PICTURE 99.
 49 ADDR-L2 PICTURE X(28).
05 ADDR-L3.
 49 CITY-STATE PICTURE X(23).
 49 ZIP-CODE PICTURE 9(5).
05 PSEUDO-GROUP4.
 49 DIST-DIR-CODE PICTURE 999.
 49 CONGR-DIST-NO PICTURE 99
 OCCURS 020 TIMES.
 49 RESERVED-FIELD-X PICTURE X
 OCCURS 007 TIMES.

```

## IBM COMMON ROUTINES

ROUTINE MME041 - DATE VALIDATION (MMDDYY) .

PROGRAM REQUIREMENTS FOR MME041.

1. WORKING-STORAGE SECTION. (LINKAGE OR WORKING-STORAGE  
FOR DC PROGRAMS)  
01 CALL-DATE PIC X(6).  
01 RET-CODE PIC X.
2. PROCEDURE DIVISION.
  - A. BATCH PROGRAM  
CALL 'MME041' USING CALL-DATE, RET-CODE.
  - B. DC PROGRAM  
TRANSFER CONTROL 'MME041' RETURN USING CALL-DATE RET-CODE.
3. THE DATE TO BE VALIDATED MUST BE MOVED TO CALL-DATE IN  
MMDDYY FORMAT. MME041 WILL RETURN A 'V' FOR VALID AND 'I' FOR  
INVALID IN THE RET-CODE FIELD.
4. MME041 MAY BE USED IN EITHER A BATCH PROGRAM OR DC PROGRAM.
5. COMMON JCL REQUIREMENTS. SEE PAGE 16 OF THIS EXHIBIT.

## IBM COMMON ROUTINES

ROUTINE MME042 - DATE VALIDATION (YYMMDD)

PROGRAM REQUIREMENTS FOR MME042.

1. WORKING-STORAGE SECTION. (LINKAGE OR WORKING-STORAGE  
FOR DC PROGRAMS)  
01 CALL-DATE PIC X(6).  
01 RET-CODE PIC X.
2. PROCEDURE DIVISION.
  - A. BATCH PROGRAM  
CALL 'MME042' USING CALL-DATE, RET-CODE.
  - B. DC PROGRAM  
TRANSFER CONTROL 'MME042' RETURN USING CALL-DATE RET-CODE.
3. THE DATE TO BE VALIDATED MUST BE MOVED TO CALL-DATE IN  
YYMMDD FORMAT. MME042 WILL RETURN A 'V' FOR VALID AND 'I' FOR  
INVALID IN THE RET-CODE FIELD.
4. MME042 MAY BE USED IN EITHER A BATCH PROGRAM OR DC PROGRAM.
5. COMMON JCL REQUIREMENTS. SEE PAGE 16 OF THIS EXHIBIT.

## IBM COMMON ROUTINES

ROUTINE MME043 - ELAPSED DAYS, MONTHS, AND YEARS.

PROGRAM REQUIREMENTS FOR MME043.

1. WORKING-STORAGE SECTION. (LINKAGE OR WORKING-STORAGE  
FOR DC PROGRAMS)

01 CALL-AREA.  
05 FROM-DATE PIC 9(6). (MMDDYY FORMAT)  
05 TO-DATE PIC 9(6). (MMDDYY FORMAT)  
05 NO-DAYS PIC 9(5).  
05 NO-MONTHS PIC 9(4).  
05 NO-YEARS PIC 999.  
05 ERROR-CODE PIC 9.  
05 ACCT-DATE-FL PIC X.

2. PROCEDURE DIVISION.

IF EITHER FROM-DATE OR TO-DATE IS AN ACCOUNTING DATE, MOVE  
'A' TO ACCT-DATE-FL, OTHERWISE MOVE SPACE TO ACCT-DATE-FL.

A. BATCH PROGRAM

CALL 'MME043' USING CALL-AREA.

B. DC PROGRAM

TRANSFER CONTROL 'MME043' RETURN USING CALL-AREA.

3. ERROR CODES.

IF ERROR-CODE = 1 THE FROM-DATE OR TO-DATE IS INVALID.  
IF ERROR-CODE = 2 THE FROM-DATE IS > THAN THE TO-DATE.  
IF ERROR-CODE = 3 THE FROM-DATE IS = TO THE TO-DATE.  
IF ERROR-CODE = 0 --A.) NO-DAYS WILL CONTAIN NUMBER OF DAYS  
BETWEEN FROM-DATE AND TO-DATE.

--B.) NO-MONTHS WILL CONTAIN NUMBER OF WHOLE  
MONTHS BETWEEN FROM-DATE AND TO-DATE.

--C.) NO-YEARS WILL CONTAIN NUMBER OF WHOLE  
YEARS BETWEEN FROM-DATE AND TO-DATE.

4. MME043 MAY BE USED IN EITHER A BATCH PROGRAM OR DC PROGRAM.

5. COMMON JCL REQUIREMENTS. SEE PAGE 16 OF THIS EXHIBIT.

## IBM COMMON ROUTINES

## ROUTINE MME090 - SOCIAL SECURITY VALIDATION

## PROGRAM REQUIREMENTS FOR MME090.

1. DATA DIVISION.  
WORKING-STORAGE SECTION.  
01 CALL-AREA.  
05 PROD-ID PIC X(9).  
05 VALIDITY PIC X.

2. PROCEDURE DIVISION.

## A. ONLINE.

MOVE THE SOCIAL SECURITY NUMBER TO PROD-ID.  
TRANSFER CONTROL 'MME090' RETURN USING CALL-AREA;

\*\*\*NOTE\*\*

THE 'USING LIST' MUST NOT CONTAIN COMMAS, (THE DELIMITER IS A SPACE) AND MUST END WITH THE SEMI-COLON NOT A PERIOD.

## B. BATCH.

MOVE THE SOCIAL SECURITY NUMBER TO PROD-ID.  
CALL 'MME090' USING CALL-AREA.

\*--

## BATCH ONLY:

USE THE DYNAM AND RESIDENT OPTIONS FOR THE COBOL COMPILER TO  
INSURE THE LATEST VERSION OF MME090 IS USED AT EXECUTION TIME.  
A STEPLIB FOR THE DSN=MSP901.PRODLIB.LOAD MUST BE INCLUDED IN  
THE EXECUTION JCL. --\*

3. RETURN CODES.

POSSIBLE RETURN CODES IN VALIDITY ARE:

I = INVALID SSN - NO HIT IN TABLE.  
N = NON NUMERIC SSN  
Q = QUESTIONABLE (SSN BEGINS WITH '8' OR '9')  
V = VALID SSN

\*\*\*NOTE\*\*

'PROD-ID' MUST BE A PRODUCER ID TYPE 2. OTHER CALLED MODULES  
(DESCRIBED IN 14-ADM) COULD BE USED IN THE CALLING PROGRAM TO:  
1. CONDENSE PRODUCER ID, VALIDATE ID TYPE (MME055).  
2. VALIDATE PRODUCER ID CHECK DIGIT (MME005).

## IBM COMMON ROUTINES

## ROUTINE MMECCC - JOB ABEND PROGRAM

PROGRAM MMECCC IS USED TO CAUSE ABNORMAL JOB TERMINATION. ITS TYPICAL APPLICATION IS TO (WHEN CONDITION CODE TESTS ARE CODED INTO THE EXEC CARD) VERIFY THAT THE FUNCTION PERFORMED BY A PREVIOUS STEP (I.E., CERTAIN UTILITY PROGRAMS) WAS COMPLETED WITH A DEGREE OF SUCCESS ADEQUATE TO CONTINUE THE JOB. WHEN EXECUTED, PROGRAM MMECCC WILL ABEND WITH A USERS COMPLETION CODE OF 4040. THE FOLLOWING MESSAGE WILL BE DISPLAYED:

JOB MXXXXXXX ABENDED BY MMECCC BECAUSE OF CONDITION IN THE JCL

## PROGRAM REQUIREMENTS FOR MMECCC.

## 1. EXECUTION JCL.

```
//MMECCC EXEC PGM=MMECCC
//STEPLIB DD DSN=MSP901.PRODLIB,LOAD,DISP=SHR
//SYSABEND DD SYSOUT=A
//SYSOUT DD SYSOUT=A
```

## 2. CONDITION CODE EXAMPLES:

A. //MMECCC EXEC PGM=MMECCC,COND=(0,EQ,PROG1)

STEP MMECCC WILL BE BYPASSED IF THE CONDITION CODE OF A PREVIOUS STEP (PROG1) IS 0.

B. //MMECCC EXEC PGM=MMECCC,COND=(5,GT,PROG2)

STEP MMECCC WILL BE EXECUTED AND THE JOB ABENDED IF THE CONDITION CODE OF A PREVIOUS STEP (PROG2) IS A 5 OR GREATER.

FURTHER EXPLANATION AND EXAMPLES OF THE USE OF THE COND PARAMETER MAY BE FOUND IN THE JCL REFERENCE MANUAL.

## IBM COMMON ROUTINES

## COMMON JCL REQUIREMENTS

THE LISTED KCMO COMMON ROUTINES ARE RESIDENT ON MSP901.PRODLIB.LOAD, THE PRODUCTION LOAD LIBRARY.

IF THE KCMO COMMON ROUTINE(S) IS LINK EDITED STATICALLY WITH THE CALLING PROGRAM, THE ABOVE LOAD LIBRARY MUST BE CONCATENATED WITH DDNAME LKED.SYSLIB DURING LINK EDIT EXECUTION.

IF THE KCMO COMMON ROUTINE(S) IS LINK EDITED DYNAMICALLY WITH THE CALLING PROGRAM, THE ABOVE LOAD LIBRARY MUST BE SPECIFIED AT EXECUTION TIME ON THE DDNAME STEPLIB JCL STATEMENT.

THE "DYN" OPTION MAY NOT BE SPECIFIED ON DC COMPILED PROGRAMS.

\*-- DO NOT HAVE MORE THAN ONE CALL STATEMENT TO A COMMON ROUTINE IN A PROGRAM. IF THE SAME ROUTINE NEEDS TO BE REFERENCED IN DIFFERENT POINTS IN A PROGRAM PUT THE CALL IN A SEPARATE PARAGRAPH AND UTILIZE A PERFORM STATEMENT OF THAT PARAGRAPH (ENSURES ONLY ONE ENTRY AND EXIT POINT IN THE PROGRAM). --\*

## IBM COMMON ROUTINES

\*-- ROUTINE U5874360 - CONVERSION OF IBM 7074 DATA TO IBM S/360 DATA

(NOTE: ROUTINE U587436Y IS IDENTICAL EXCEPT IT WILL HANDLE MULTI-REEL FILES, WHILE U5874360 IS FOR SINGLE REEL FILES ONLY.)

## DESCRIPTION -

THE BASIC FUNCTION OF U5874360 IS THE CONVERSION OF IBM 7074 TAPE DATA FILES FROM 7-TRACK, 556/800 BPI DENSITY TO IBM S/360, DATA STORAGE MEDIA. THIS PROGRAM RUNS WITH ERROR PROCESSING FOR THE INPUT FILE SET TO 'ACCEPT' WHICH IS DONE TO FACILITATE THE HANDLING OF MIXED HEADER AND DATA RECORDING DENSITIES.

## OVERVIEW -

THE FOLLOWING IS A LIST OF FUNCTIONS PERFORMED BY U5874360:

AUTOMATIC DENSITY CHECK FOR 556/800 BPI.

ADJUSTMENT OF 7074 ZERO SUPPRESSED NUMERIC FIELDS TO 10 BYTE 360 NUMERIC FIELDS.

MODIFICATION OF POSITIVE SIGNED INPUT NUMERIC FIELDS TO ABSOLUTE VALUE SIGNED OUTPUT NUMERIC FIELDS.

EXAMPLE: INPUT BYTE HEX 'C0', OUTPUT BYTE HEX 'F0'.

DELETION OF DELTA (MODE SHIFT) CHARACTERS.

AVAILABILITY TO CONVERT A LIMITED NUMBER OF INPUT RECORDS VIA JOB CONTROL LANGUAGE (JCL).

## REQUIREMENTS -

- A REQUEST PROCEDURES - CONTROL OF U5874360 IS PRIMARILY THROUGH THE JCL PARM KEYWORD PARAMETER BUT A CERTAIN AMOUNT OF ADDITIONAL CONTROL IS AVAILABLE THROUGH NORMAL JCL DD STATEMENTS.

THERE ARE SEVERAL CHECKS IN U5874360 TO DETECT PARM INFORMATION ERRORS. MOST ERRORS IN THE PARM INFORMATION WILL BE DETECTED IN THE EDIT STAGES AND THE STEP WILL TERMINATE ABNORMALLY AFTER PRODUCING A MESSAGE DESCRIBING THE REASON FOR TERMINATION. SEE

## IBM COMMON ROUTINES

## B REQUIRED JOB CONTROL LANGUAGE (JCL) -

- 1 A STEPLIB DD STATEMENT IS REQUIRED DESCRIBING THE LIBRARY UPON WHICH U5874360 RESIDES. THE DATA SET NAME OF THIS LIBRARY IS MSP901.PRODLIB.LOAD.
- 2 A SYSPRINT DD STATEMENT IS REQUIRED TO OUTPUT CRITICAL MESSAGES AND RECORD COUNTS PRODUCED BY U5874360.

NOTE: THIS DD STATEMENT IS NORMALLY SYSOUT=A

- 3 A TAPE INPUT DATA SET IS REQUIRED. THE DD NAME OF THIS DATA SET IS SYSUT1.
- 4 AN OUTPUT DATA SET IS REQUIRED. THE DD NAME OF THIS DATA SET IS SYSUT2. THIS DATA SET NEED NOT NECESSARILY BE TAPE RESIDENT.

## C LABEL PARAMETER PROCESSING -

- 1 THE LABEL PARAMETER FOR 7074 INPUT FILES MUST CONTAIN (,NL) TO ALLOW CORRECT ACCEPTANCE OF THE INPUT FILE BY STANDARD OS LABEL CHECKING FACILITIES.
- 2 THE OUTPUT FILE LABEL PARAMETER FACILITIES ARE OPTIONAL AND SHOULD BE CODED OR NOT CODED AT THE USER'S DISCRETION.

## D DEFINING DCB ATTRIBUTES -

- 1 INPUT - THE DCB ATTRIBUTE EROPT=ACC FOR THE 7074 INPUT TAPE MUST BE DEFINED IN THE JCL. IF OTHER DCB ATTRIBUTES ARE PROVIDED IN THE JCL THEY ARE IGNORED.
- 2 OUTPUT -
  - A SYSUT2 DD STATEMENT - THE DCB ATTRIBUTES RECFM, LRECL AND BLKSIZE FOR THE OUTPUT DATA SET MUST BE DEFINED IN JCL. ADDITIONAL DCB ATTRIBUTES OF DEN, BUFNO, TRTCH, ETC., IF NEEDED WOULD BE SPECIFIED IN THE JCL STATEMENT.
  - B SYSPRINT DD STATEMENT - THE DCB ATTRIBUTE BLKSIZE FOR THE PRINT FILE MUST BE SPECIFIED IN THE JCL.

## IBM COMMON ROUTINES

## E JCL PARM FIELD INFORMATION -

- 1 THE JCL PARM FIELD IS UTILIZED TO SUPPLY U5874360 WITH 12 BYTES OF INFORMATION. THE FOLLOWING IS A BREAKDOWN OF THE INFORMATION ENTERED VIA THE PARM FIELD.
  - A POSITIONS 1 THROUGH 3 ARE USED TO SPECIFY THE NUMBER OF 7074 LOGICAL WORDS PER LOGICAL RECORD FOR THE INPUT FILE. THIS ENTRY IS REQUIRED, MUST BE NUMERIC, RIGHT JUSTIFIED AND ZERO FILLED.
  - B POSITIONS 4 THROUGH 6 ARE USED TO SPECIFY THE NUMBER OF 7074 LOGICAL RECORDS PER PHYSICAL BLOCK FOR THE INPUT FILE. THIS ENTRY IS REQUIRED, MUST BE NUMERIC, RIGHT JUSTIFIED AND ZERO FILLED.
  - C POSITIONS 7 THROUGH 12 ARE USED TO SPECIFY THE NUMBER OF INPUT RECORDS TO BE PROCESSED FROM THE INPUT FILE. THIS ENTRY IS REQUIRED, MUST BE NUMERIC, RIGHT JUSTIFIED AND ZERO FILLED. --\*

## IBM COMMON ROUTINES

## CRITICAL ERROR MESSAGES PRODUCED BY U5874360

THERE ARE SEVERAL CONDITIONS WHICH WILL CAUSE U5874360 TO ABNORMALLY TERMINATE PROGRAM EXECUTION. WHEN ANY OF THESE CONDITIONS ARE ENCOUNTERED, U5874360 WILL PLACE A MESSAGE ON THE SYSPRINT DATA SET EXPLAINING THE REASON FOR ABNORMAL TERMINATION PRIOR TO PROGRAM TERMINATION.

BELOW IS A LIST OF THE MESSAGES AND THEIR MEANING.

## 1 INPUT PARM LENGTH ERROR

THIS MESSAGE WILL OCCUR IF THE PARM KEYWORD PARAMETER DOES NOT CONTAIN 12 CHARACTERS OF INFORMATION.

## USER RESPONSE:

INSURE THAT THE PARM KEYWORD PARAMETER INFORMATION IS CODED CORRECTLY AS DESCRIBED IN PARAGRAPH 51,E.

## 2 BAD TAPE--NOT 800 BPI/556 BPI

THIS MESSAGE WILL OCCUR IF THE FIRST DATA RECORD IN NOT 800/556 BPI.

## USER RESPONSE:

INSURE THAT THE INPUT TAPE IS A 7074 TAPE CREATED AT EITHER 800 OR 556 BPI.

## 3 NUMERIC WORD 10 BYTES

(ABEND 999 WITH A DUMP)

THIS MESSAGE INDICATES THAT A 7074 NUMERIC LOGICAL WORD DID NOT CONTAIN A POSITIVE OR NEGATIVE SIGN WITHIN THE FIFTH TO TENTH BYTE.

## USER RESPONSE:

CHECK THE SUPPLIED DUMP TO LOCATE THE PROBLEM AND TAKE APPROPRIATE ACTION.

## IBM COMMON ROUTINES

## CRITICAL ERROR MESSAGES PRODUCED BY U5874360

## 4 PARM INFO NOT NUMERIC

THIS MESSAGE OCCURS WHEN THE PARM KEYWORD PARAMETER DOES NOT CONTAIN VALID INFORMATION.

## USER RESPONSE:

INSURE THAT THE PARM KEYWORD PARAMETER INFORMATION IS CODED CORRECTLY AS DESCRIBED IN PARAGRAPH 51,E.

## 5 READ ERROR ON INPUT

(ABEND 998 WITH A DUMP)

THIS MESSAGE INDICATES AN I/O ERROR WAS ENCOUNTERED WHILE ATTEMPTING A READ OF THE INPUT FILE.

## USER RESPONSE:

CHECK THE SUPPLIED DUMP AND TAKE APPROPRIATE ACTION.

## IBM COMMON ROUTINES

## SAMPLE PROGRAM EXECUTIONS

## A EXAMPLE OF REFORMAT TAPE-TO-TAPE.

```
// EXEC PGM=U5874360,
// PARM='020008900000'
//STEPLIB DD DSN=MSP901.PRODLIB,LOAD,DISP=SHR
//SYSPRINT DD SYSOUT=A,DCB=BLKSIZE=399
//SYSUT1 DD LABEL=(,NL),UNIT=TAPE7,DISP=OLD,
// DCB=(EROPT=ACC),VOL=SER=012345
//SYSUT2 DD DSN=OUTTAPE,UNIT=TAPE9,DISP=(,KEEP,DELETE)
// DCB=(RECFM=FB,LRECL=100,BLKSIZE=1000)
```

THE ABOVE EXAMPLE SHOWS THE JCL NECESSARY TO ACCOMPLISH THE FOLLOWING:

- 1 ACCEPT A 7074, 7-TRACK, INPUT TAPE THAT CONTAINS
  - A LOGICAL RECORDS OF 020 LOGICAL WORDS PER RECORD.
  - B PHYSICAL BLOCKS OF 008 LOGICAL RECORDS PER BLOCK.
- 2 OUTPUT A S/360, 9-TRACK TAPE THAT CONTAINS
  - A LOGICAL RECORDS OF 100 BYTES PER RECORD
  - B PHYSICAL BLOCKS OF 10 LOGICAL RECORDS

NOTE: THE 9000000 FIGURE IN THE PARM FIELD IS SUPPLIED TO ACCOMPLISH PROCESSING TO THE ENTIRE INPUT FILE. (REFERENCE PARAGRAPH 51,3 FOR ADDITIONAL DESCRIPTION OF JCL PARM FIELD INFORMATION.)

## IBM COMMON ROUTINES

\*-- ROUTINE U5836074 - REFORMAT IBM S/360 DATA FILES TO IBM 7074 FORMAT.

## DESCRIPTION -

THE BASIC FUNCTION OF U5836074 IS THE REFORMATTING OF IBM S/360 DATA FILES TO ACCEPTABLE IBM 7074 DATA FILE FORMATS.

## OVERVIEW -

THE FOLLOWING IS A LIST OF FUNCTIONS PERFORMED BY U5836074 IN DATA REFORMATTING.

INSERTION OF 7074 MODE CHANGE CHARACTERS BETWEEN NUMERIC AND ALPHANUMERIC DATA.

MODIFICATION OF ABSOLUTE VALUE SIGNS ON NUMERIC ITEMS TO POSITIVE VALUE SIGNS.

CALCULATION OF OUTPUT BLOCK SIZE BASED ON INPUT PARAMETERS.

VALIDATION OF INPUT PARAMETERS.

VALIDATION OF DESIGNATED NUMERIC ITEMS.

MODIFICATION OF BLANKS IN DESIGNATED NUMERIC ITEMS TO ZEROS.

## REQUIREMENTS -

- A REQUEST PROCEDURES - CONTROL OF U5836074 IS PRIMARILY THROUGH THE JCL PARM KEYWORD PARAMETER BUT A CERTAIN AMOUNT OF ADDITIONAL CONTROL IS AVAILABLE THROUGH NORMAL JCL DD STATEMENTS.

THERE ARE SEVERAL CHECKS IN U5836074 TO DETECT PARM INFORMATION ERRORS. MOST ERRORS IN THE PARM INFORMATION WILL BE DETECTED IN THE EDIT STAGES AND THE STEP WILL TERMINATE ABNORMALLY AFTER PRODUCING A MESSAGE DESCRIBING THE REASON FOR TERMINATION.

- B REQUIRED JOB CONTROL LANGUAGE (JCL)

- 1 A STEPLIB DD STATEMENT IS REQUIRED DESCRIBING THE LIBRARY UPON WHICH U5836074 RESIDES. THE DATA SET NAME OF THIS LIBRARY IS MSP901.PRODLIB.LOAD.
- 2 A SYSPRINT DD STATEMENT IS REQUIRED TO OUTPUT PROGRAM MESSAGES PRODUCED BY U5836074.

## IBM COMMON ROUTINES

- 3 A SYSUDUMP DD STATEMENT IS REQUIRED TO ALLOW FOR POSSIBLE USER ABEND'S.
- 4 AN INPUT DATA SET IS REQUIRED. THE DD NAME OF THIS DATA SET IS SYSUT1.
- 5 AN OUTPUT DATA SET IS REQUIRED. THE DD NAME OF THIS DATA SET IS SYSUT2.

NOTE: THE OUTPUT FILE MUST BE 800 BPI DENSITY.

- C LABEL PARAMETER PROCESSING - THE OUTPUT FILE LABEL PARAMETER MUST CONTAIN (,NSL) TO ALLOW CORRECT OUTPUT LABELS FOR PROCESSING ON THE IBM 7074.
- D DEFINING DCB ATTRIBUTES -
- 1 INPUT - THE DCB ATTRIBUTES MUST BE AVAILABLE AS PER STANDARD OS JCL REQUIREMENTS.
  - 2 OUTPUT - ALL DCB ATTRIBUTES ARE HANDLED BY INTERNAL PROGRAM PROCESSING.

## IBM COMMON ROUTINES

E JCL PARM FIELD INFORMATION - THE JCL PARM FIELD IS USED TO SUPPLY U5836074 WITH 19 BYTES OF INFORMATION. THE FOLLOWING IS A DESCRIPTION OF THE 19 BYTES.

1 THE FORMAT OF THE PARM INFORMATION IS:

PARM = "AAMWWWWWWWWWWWWWWBB"  
          -1--2--3--4--5-  
          1  2  3  4  5

WHERE:

AA = THE NUMBER OF 7074 LOGICAL WORDS PER 7074 LOGICAL RECORD. THE INFORMATION MUST BE TWO NUMERIC CHARACTERS, RIGHT JUSTIFIED AND ZERO FILLED IF NECESSARY.

M = THE DATA MODE TO BE USED FOR OUTPUT OF 7074 LOGICAL WORDS. THE ONLY ACCEPTABLE SYMBOLS ARE "A" OR "N". ("A" SIGNIFIES ALPHANUMERIC; "N" SIGNIFIES NUMERIC)

WW = THE NUMBER OF 7074 LOGICAL WORDS TO BE FORMATTED USING THE CORRESPONDING "M" DATA MODE. THE INFORMATION MUST BE TWO NUMERIC CHARACTERS, RIGHT JUSTIFIED AND ZERO FILLED IF NECESSARY (E.G., 07,22).

BB = THE NUMBER OF LOGICAL RECORDS TO BE WRITTEN IN AN OUTPUT BLOCK. THE INFORMATION MUST BE TWO NUMERIC CHARACTERS, RIGHT JUSTIFIED AND ZERO FILLED IF NECESSARY.

NOTE: NONUSED WNNW FIELDS MUST BE ZERO FILLED.

EXAMPLE: 20N13A07A00A00A0020 ---\*

## IBM COMMON ROUTINES

PROGRAM MESSAGES AND USER ABEND CODES  
PRODUCED BY U5836074

| MESSAGE/CODE             | DESCRIPTION                                                                                                          |
|--------------------------|----------------------------------------------------------------------------------------------------------------------|
| 1. PARM INFO. IS INVALID | THE PARM INFORMATION IS NOT 19 BYTES LONG. EITHER INFORMATION IS MISSING, NOT ZERO FILLED, OR TOO MUCH IS SPECIFIED. |
| 2. 7074 WRDS/RCD = XX    | WHERE "XX" IS THE PARM INPUT FOR THE NUMBER OF 7074 LOGICAL WORDS PER 7074 LOGICAL RECORD.                           |
| 3. MODE 1 FORMAT = X     | WHERE "X" IS THE PARM INPUT FOR DATA MODE 1.                                                                         |
| 4. MODE 1 WORDS = XX     | WHERE "XX" IS THE PARM INPUT INFORMATION FOR THE NUMBER OF 7074 LOGICAL WORDS TO BE FORMATTED USING DATA MODE 1.     |
| 5. MODE 2 FORMAT = X     | SAME AS DESCRIPTION 3 EXCEPT FOR DATA MODE 2.                                                                        |
| 6. MODE 2 WORDS = XX     | SAME AS DESCRIPTION 4 EXCEPT FOR DATA MODE 2.                                                                        |
| 7. MODE 3 FORMAT = X     | SAME AS DESCRIPTION 3 EXCEPT FOR DATA MODE 3.                                                                        |
| 8. MODE 3 WORDS = XX     | SAME AS DESCRIPTION 4 EXCEPT FOR DATA MODE 3.                                                                        |
| 9. MODE 4 FORMAT = X     | SAME AS DESCRIPTION 3 EXCEPT FOR DATA MODE 4.                                                                        |

## IBM COMMON ROUTINES

PROGRAM MESSAGES AND USER ABEND CODES  
PRODUCED BY U5836074

| MESSAGE/CODE              | DESCRIPTION                                                                                                                                  |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| 10. MODE 4 WORDS = XX     | SAME AS DESCRIPTION 4 EXCEPT FOR DATA MODE 4.                                                                                                |
| 11. MODE 5 FORMAT = X     | SAME AS DESCRIPTION 3 EXCEPT FOR DATA MODE 5.                                                                                                |
| 12. MODE 5 WORDS = XX     | SAME AS DESCRIPTION 4 EXCEPT FOR DATA MODE 5.                                                                                                |
| 13. RCDS PER BLK = XX     | WHERE "XX" IS THE PARM INPUT INFORMATION FOR THE NUMBER OF LOGICAL RECORDS TO BE WRITTEN IN AN OUTPUT BLOCK.                                 |
| 14. TOTAL LOGICAL RECORDS | WHERE "XXXXX" IS THE COUNT OF LOGICAL RECORDS THAT WERE FORMATTED.                                                                           |
| 15. NOT "A" OR "N"        | THIS IS AN ERROR MESSAGE WHICH CAN APPEAR ON THE SAME LINE AS MESSAGE NUMBERS 3, 5, 7, 9 AND 11. ITS MEANING IS SELF-EXPLANATORY.            |
| 16. NOT NUMERIC           | THIS IS AN ERROR MESSAGE WHICH CAN APPEAR ON THE SAME LINE AS MESSAGE NUMBERS 1, 2, 4, 6, 8, 10, 12 AND 13. ITS MEANING IS SELF-EXPLANATORY. |

## IBM COMMON ROUTINES

PROGRAM MESSAGES AND USER ABEND CODES  
PRODUCED BY U5836074

| MESSAGE/CODE           | DESCRIPTION                                                                                                                                                                                                                   |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 17. SEQ ERROR          | THIS IS AN ERROR MESSAGE WHICH CAN APPEAR ON THE SAME LINE AS MESSAGE NUMBERS 4, 6, 8, 10 AND 12. IT MEANS THAT ALL LOGICAL WORD PROCESSING HAS TO BE IN THE PARM INFORMATION FIELD SEQUENTIALLY AND ADJACENT TO ONE ANOTHER. |
| 18. NO ENTRY           | THIS IS AN ERROR MESSAGE WHICH CAN APPEAR ON THE SAME LINE AS MESSAGE NUMBER 4 AND SIGNIFIES THAT AT LEAST THE FIRST MODE PARM INPUT INFORMATION IS REQUIRED.                                                                 |
| 19. NOT EQUAL TO TOTAL | THIS ERROR MESSAGE CAN APPEAR WITH MESSAGE NUMBER 2 AND SIGNIFIES THAT THE TOTAL OF MODE WORDS IS NOT EQUAL TO THE NUMBER OF SPECIFIED 7074 WORDS.                                                                            |
| 20. USER=0004          | THE PARAMETER INFORMATION WAS INVALID AND PROGRAM EXECUTION IS TERMINATED, BUT NO DUMP IS REQUESTED.                                                                                                                          |
| 21. USER=0012          | A SPECIFIED NUMBER WORD DOES NOT CONTAIN A VALID SIGN. THE PROGRAM EXECUTION IS TERMINATED WITH A DUMP REQUESTED.                                                                                                             |

## IBM COMMON ROUTINES

## U5836074 EXAMPLE JCL AND PARM INFORMATION

## EXAMPLE OF REFORMAT

```
// EXEC PGM=U5836074,
// PARM='20N13A07A00A0020'
//STEPLIB DD DSN=MSP901.PRODLIB.LOAD,DISP=SHR
//SYSPRINT DD SYSOUT=A
//SYSUDUMP DD SYSOUT=A
//SYSUT1 DD DSN=INPUT FILENAME,DISP=(OLD,KEEP)
//SYSUT2 DD DSN=OUTPUT FILENAME,DISP=(,KEEP),
// UNIT=TAPE7,LABEL=(,NSL)
```

THE ABOVE EXAMPLE SHOWS THE JCL NECESSARY TO INPUT A FILE VIA SYSUT1 AND REFORMAT THE DATA TO A 7-TRACK, 800 BPI TAPE FILE. THE PARM INFORMATION DESIGNATES:

- A 20 LOGICAL 7074 WORDS PER RECORD
- B DATA FORMAT OF:
  - 1 NUMERIC FOR 13 WORDS
  - 2 ALPHA FOR 07 WORDS
- C THE REQUIRED OUTPUT BLOCKING FACTOR IS 20 LOGICAL RECORDS PER PHYSICAL BLOCK.

## IBM COMMON ROUTINES

## COMMON ROUTINE MME045

A CALLED MODULE (MME045) IS NOW AVAILABLE WHICH TRANSLATES DATA SO THAT IT CAN BE VIEWED IN VERTICAL HEXADECIMAL FORMAT.

THIS MODULE CAN BE UTILIZED BY BOTH BATCH AND DC PROGRAMS.

THE USER MUST PROVIDE DATA-NAMES REPRESENTING THE FOLLOWING DATA TO THIS PROGRAM:

1. DATA-NAME CONTAINING THE INFORMATION TO BE TRANSLATED TO HEXADECIMAL FORMAT. MAXIMUM LENGTH IS 100 BYTES.
2. DATA-NAME CONTAINING A VALUE REPRESENTING THE LENGTH OF THE DATA-NAME CONTAINING THE INFORMATION TO BE TRANSLATED. PIC 999 OR S999 DISPLAY.
3. DATA-NAME IN WHICH THIS PROGRAM WILL INSERT THE TRANSLATED CHARACTER REPRESENTING THE UPPER FOUR BITS OF EACH CHARACTER. MAXIMUM LENGTH IS 100 BYTES. THIS SHOULD BE THE SAME LENGTH AS (1) ABOVE.
4. DATA-NAME IN WHICH THIS PROGRAM WILL INSERT THE TRANSLATED CHARACTER REPRESENTING THE LOWER FOUR BITS OF EACH CHARACTER. MAXIMUM LENGTH IS 100 BYTES. THIS SHOULD BE THE SAME LENGTH AS (1) ABOVE.

## IBM COMMON ROUTINES

## COMMON ROUTINES MME046/MME047

TWO CALLED MODULES (MME046/MME047) ARE NOW AVAILABLE WHICH PROVIDE THE SYSTEM/DATAFILE DESIGNER ADDITIONAL ALTERNATIVES AND ASSIST THE COBOL PROGRAMMER IN IMPLEMENTING AND UTILIZING THE TECHNIQUES.

THESE MODULES DECODE/ENCODE UP TO EIGHT ELEMENTS WHICH REPRESENT YES/NO. ON/OFF, TWO-STATE RELATIONSHIPS.

THE ENCODING PROVIDES A POSSIBLE 87.5% DATA STORAGE SAVINGS.

THE DECODING ALLOWS THE COBOL PROGRAMMER TO EASILY TEST AND MANIPULATE EACH INDIVIDUAL ELEMENT'S STATE.

THIS MODULE CAN BE UTILIZED BY BOTH BATCH AND DC PROGRAMS.

THE ENCODING (MME047) ALLOWS ONE BYTE, CONSISTING OF EIGHT BITS, TO BE UTILIZED TO STORE THE EIGHT ELEMENTS; AND THE DECODING (MME046) ALLOWS THE COBOL PROGRAMMER TO WORK WITH EIGHT INDIVIDUAL CHARACTERS (BYTES), EACH WHICH REPRESENT ONE BIT FROM THE ENCODED BYTE.

THE USER MUST PROVIDE DATA-NAMES REPRESENTING THE FOLLOWING DATA TO THIS PROGRAM:

1. DATA-NAME REPRESENTING THE EIGHT CHARACTERS UTILIZED BY THE COBOL PROGRAMMER.
2. DATA-NAME REPRESENTING THE ONE CHARACTER (BYTE) USE TO STORE THE EIGHT ENCODED ELEMENTS.

## IBM FORM IDENTIS FOR JCL

THE FOLLOWING ARE KCMO FORMS STOCKED IN KCCC AND REQUIRE  
THE "M" PREFIX IN THE FORM IDENT FIELD OF THE JCL.

| IDENT    | FORM      | LOOP | FORM TITLE                                                       |
|----------|-----------|------|------------------------------------------------------------------|
| M001     | KC-1355-2 | 001  | STATE MAILING LABEL                                              |
| M002     | LABEL     | 002  | COUNTY MAILING LABEL (3 UP)                                      |
| M011     | 1411-1    | OS   | 1 PART - 14-7/8" X 11" PLAIN WHITE                               |
| M012     | 1411-2    | OS   | 2 PART - 14-7/8" X 11" PLAIN WHITE                               |
| M013     | 1411-3    | OS   | 3 PART - 14-7/8" X 11" PLAIN WHITE                               |
| M014     | 1411-4    | OS   | 4 PART - 14-7/8" X 11" PLAIN WHITE                               |
| M015     | 1411-5    | OS   | 5 PART - 14-7/8" X 11" PLAIN WHITE                               |
| * * *    |           |      |                                                                  |
| *-- M052 | 911-3     | OS   | 3 PART - 9-7/8" X 11" PLAIN WHITE --*                            |
| M053     | 911-3     | OS   | 3 PART - 9-7/8" X 11" GREEN BAR                                  |
| M054     | 911-4     | OS   | 4 PART - 9-7/8" X 11" PLAIN WHITE                                |
| M064     | 811-4     | OS   | 4 PART - 8-1/2" X 11" GREEN BAR                                  |
| * * *    |           |      |                                                                  |
| M5P5     | MQ-123    | 081  | PEANUT FARM RECORD (SCANNABLE PRINT FONT)                        |
| M506     | CCC-110   | 004  | SCHEDULE OF BILLS OR INVOICES PAID                               |
| M507     | CCC-156   | 070  | LOADING ORDER, TRUST ORDER AND INVOICE<br>(PART I - COPIES 1-4)  |
| M508     | CCC-157   | 029  | LOADING ORDER SETTLEMENT                                         |
| M509     | CCC-158   | 022  | INVENTORY SALES INVOICE                                          |
| M510     | CCC-182   | 080  | REPORT OF PAYMENTS TO PRODUCER                                   |
| M511     | CCC-372   | 016  | SCHEDULE AND REGISTER OF SIGHT DRAFT<br>DISBURSEMENTS            |
| * * *    |           |      |                                                                  |
| M517     | CCC-156   | 070  | LOADING ORDER, TRUST ORDER AND INVOICE<br>(PART II - COPIES 5-7) |
| M519     | CCC-184   | 038  | SIGHT DRAFT                                                      |
| M520     | CCC-94    | OS   | DRAFT (GSM-4 PAYMENTS)                                           |
| M521     | KC-389    | 057  | LOADING ORDER SHIPMENT CONTROL                                   |
| *-- M641 | KC-641    | 023  | INVOICE FOR WAREHOUSE CHARGES --*                                |
| M526     | W-2       | OS   | WAGE AND TAX STATEMENT (C.O.E.)                                  |
| M680     | CCC-680   | OS   | PRODUCER LOAN DATA                                               |
| M530     | LABEL     | OS   | 12" X 12" PAGE, 3-UP LABELS                                      |
| *-- M999 | TEST      | 052  | 1411-1 14-7/8" X 11" GREEN BAR --*                               |

\*-- NOTE: LOOP NUMBER IS REQUIRED FOR PRINTING ON THE IBM-3203  
PRINTERS FOR ALL LOOPS EXCEPT THE STANDARD OS LOOP. REFER  
TO PARAGRAPH 204 FOR THE REQUIRED JCL ENTRY. --\*

## IBM FORM IDENTs FOR JCL

| IDENT | FORM          | LOOP | FORM TITLE                                                                  |
|-------|---------------|------|-----------------------------------------------------------------------------|
| M522  | MQ-24         | 11   | NOTICE OF BURLEY TOBACCO ACREAGE<br>ALLOTMENT AND QUOTA                     |
| M523  | MQ-24         | 11   | NOTICE OF FLUE-CURED TOBACCO<br>ACREAGE ALLOTMENT AND QUOTA                 |
| M524  | MQ-123        | 81   | BURLEY TOBACCO FARM RECORD<br>(SCANNABLE PRINT FONT)                        |
| M525  | MQ-123        | 81   | FLUE-CURED TOBACCO FARM RECORD<br>(SCANNABLE PRINT FONT)                    |
| M526  | W-2           | 41   | WAGE AND TAX STATEMENT                                                      |
| M527  | LABEL         | 05   | TAPE LABELS (RJE 1-UP)                                                      |
| M528  | LABEL         | 05   | COE LABELS (PREPRINTED)                                                     |
| M529  | LABEL         | 05   | KCCC LABELS (3-UP)                                                          |
| M560  | ASCS-560-5    | 05   | TRUST ORDER (ROUGH OR MILLED RICE)                                          |
| M573  | ASCS-1001     | 11   | NOTICE OF PEANUT ACREAGE<br>ALLOTMENT AND QUOTA                             |
| *--   | M641 KC-641-3 | 23   | INVOICE FOR WAREHOUSE CHARGES --*                                           |
|       | M680 CCC-680  | 05   | PRODUCER LOAN DATA SHEET<br>(SCANNABLE PRINT FONT)                          |
| *--   | R641 KC-641-3 | 05   | INVOICE FOR WAREHOUSE CHARGES<br>(GIMS) --*                                 |
|       | M999 1411-1   | 52   | 14 7/8" GREEN BAR (LOOP HAS ALL 12<br>12 CHANNELS, 1 CHANNEL EVERY 5 LINES) |

## IBM FORM IDENTs FOR JCL

THE FOLLOWING ARE KCCC PROVIDED FORMS AND REQUIRE THE  
"K" PREFIX IN THE FORM IDENT FIELD OF THE JCL.

| IDENT    | FORM   | LOOP | FORM TITLE                             |
|----------|--------|------|----------------------------------------|
| K001     | 1411-1 | OS   | 1 PART - 14-7/8" X 11" GREEN BAR       |
| K002     | 1411-1 | OS   | 2 PART - 14-7/8" X 11" GREEN BAR       |
| K003     | 1411-1 | OS   | 3 PART - 14-7/8" X 11" GREEN BAR       |
| K004     | 1411-1 | OS   | 4 PART - 14-7/8" X 11" GREEN BAR       |
| K005     | 1411-1 | OS   | 5 PART - 14-7/8" X 11" GREEN BAR       |
| K051     | 911-1  | OS   | 1 PART - 9-7/8" X 11" PLAIN WHITE      |
| *-- K052 | 911-2  | OS   | 2 PART - 9-7/8" X 11" PLAIN WHITE ---* |
| K061     | 811-1  | OS   | 1 PART - 8-1/2" X 11" GREEN BAR        |
| K062     | 811-2  | OS   | 2 PART - 8-1/2" X 11" GREEN BAR        |
| K063     | 811-3  | OS   | 3 PART - 8-1/2" X 11" GREEN BAR        |

## HONEYWELL PARM FILES

## USE OF UTILITY PROGRAM MMEPM

1. WORKING-STORAGE SECTION REQUIREMENTS. AN 80 BYTE AREA IS TO BE SET UP. THIS WILL BE PASSED TO MMEPM.

EXAMPLE: 01 PARM-AREA  
05 PARM-KEY PIC X(6)  
05 PARM-ERR PIC X  
05 FILLER PIC X(73)

PARM-KEY IS TO HAVE A VALUE MOVED TO IT AS DESCRIBED IN THE PARM FILE CONTENT PARAGRAPH.

THE CALLED ROUTINE WILL MOVE AN "N" TO PARM-ERR IF A MATCH WAS NOT FOUND ON PARM-KEY.

FILLER IS TO BE DESCRIBED BASED ON THE PARAMETERS THAT THE CALLING PROGRAM IS EXPECTING.

2. PROCEDURE DIVISION REQUIREMENTS. THE CALL STATEMENT IS AS FOLLOWS:

CALL "MMEPM" USING PARM-AREA.

THE PARM-ERR FIELD MUST BE CHECKED FOR AN "N".

3. JCL REQUIREMENTS:

```
$ LINK .MMEPM
$ USE MMEPM
$ ENTRY MMEPM
$ LIBRARY LI
$ EXECUTE
$ PRMFL LI,R/C,R,MUTIL1/MEOBJ/MELIB
$ PRMFL RZ,Q,S, (PARM FILE NAME)
```

THE LINK, USE AND ENTRY CONTROL CARDS ARE NOT REQUIRED FOR STATIC CALLS, BUT ARE SHOWN HERE AS THEY ARE NECESSARY FOR DYNAMIC CALLS.

THE FILE CODE "RZ" IS REQUIRED FOR THE PARM FILE.

## HONEYWELL PARM FILES

## STANDARDIZED USER ABORT CODES AND MESSAGES

| CODE | MESSAGE (EXPLANATION)                                                                                                                                                                                                                                                             |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PA   | "NO PARM DATA FOUND FOR PROGRAM N-----N"<br><br>(WHERE N-----N IS THE NUMBER OF PROGRAM ABORTING,<br>NO DATA FOUND ON THE PARM FILE FOR THE PROGRAM).                                                                                                                             |
| PB   | "MISSING PARM #N FOR PROGRAM N-----N"<br><br>(WHERE N-----N IS NUMBER OF THE PROGRAM ABORTING<br>AND #N IS THE POSITIONAL NUMBER OF THE PARAMETER<br>(STARTING WITH 1 FROM THE LEFT IN THE FORMAT).<br>THE PARAMETER IS NOT CODED IN THE PARAMETER<br>RECORD).                    |
| PC   | "INVALID PARM #N FOR PROGRAM N-----N"<br><br>(WHERE N-----N IS NUMBER OF THE PROGRAM ABORTING<br>AND #N IS THE POSITIONAL NUMBER OF THE PARAMETER<br>(STARTING WITH 1 FROM THE LEFT IN THE FORMAT).<br>THE PARAMETER HAS A VALUE BUT PROGRAM CONSIDERS<br>IT TO BE UNACCEPTABLE). |

## HIS FORMS AND VFC NUMBERS

## \*-- EXAMPLE OF \$ FORM AND \$ PRINT CARDS:

|    |       |                                 |
|----|-------|---------------------------------|
| 1  | 8     | 16                              |
| \$ | FORM  | 811-5 GRAY LINE (FORMERLY 0599) |
| \$ | PRINT | OR,,PR1200,/M0002 ---*          |

NOTE: THE \$ FORM CARD, AS SHOWN IN THE EXAMPLE ABOVE, IS USED WITH THE \$ CONVER CARD WHEN A SPECIFIC FORM IS REQUIRED FOR PRINTER OR PUNCH OUTPUT. THE \$ PRINT IS USED WHEN IT IS NECESSARY TO USE A SPECIFIC VFC. ---\*

THE VARIABLE FIELD BEGINNING IN COLUMN 16 CAN CONTAIN UP TO 51 CHARACTERS.

## FORM IDENTIFICATIONS:

## VFC NO.

|     |      |                                       |            |
|-----|------|---------------------------------------|------------|
| \$  | FORM | 811-1 GREEN BAR                       |            |
| \$  | FORM | 811-2 GREEN BAR                       |            |
| \$  | FORM | 811-3 GREEN BAR                       |            |
| \$  | FORM | 1400-1 PLAIN WHITE                    |            |
| \$  | FORM | 1400-2 PLAIN WHITE                    |            |
| \$  | FORM | 1400-3 PLAIN WHITE                    |            |
| \$  | FORM | 1400-4 PLAIN WHITE                    |            |
| \$  | FORM | 1400-5 PLAIN WHITE                    |            |
| \$  | FORM | 1411-1 GREEN BAR                      |            |
| \$  | FORM | 1411-2 GREEN BAR                      |            |
| \$  | FORM | 1411-3 GREEN BAR                      |            |
| \$  | FORM | 1411-4 GREEN BAR                      |            |
| \$  | FORM | 1478X6 3 PART PLAIN - 6 INCH          |            |
| \$  | FORM | CCC-94 OGSM SIGHT DRAFT               |            |
| \$  | FORM | CCC-182 REPORT OF PAYMENT TO PRODUCER | M0005      |
| \$  | FORM | CCC-184/CCC-184-1 DEFICIENCY DRAFTS   | M0003      |
| \$  | FORM | CCC-680 PRODUCER LOAN DATA            | M0004      |
| \$  | FORM | CCC-692 SETTLEMENT STATEMENT          |            |
| \$  | FORM | MQ-24 BURLEY                          |            |
| \$  | FORM | MQ-24 FLUE CURED                      |            |
| *-- | \$   | FORM ASCS-1001 PEANUTS ---*           | M0002      |
| \$  | FORM | MQ-123 BURLEY                         |            |
| \$  | FORM | MQ-123 FLUE CURED                     |            |
| \$  | FORM | MQ-123 PEANUTS                        | M0001      |
| \$  | FORM | LABEL KCMO SPECIAL LABELS             | KONTIN     |
| *-- | \$   | FORM W-2 (COE)                        | M0010 ---* |

## JOB CHARTS - I.B.M.

CODES AND SYMBOLS FOR COMPLETING JOB CHARTS  
<\*-- FORM ASCS-764 OR AUTOMATIC CHARTS IF AVAILABLE MAY BE USED --\*>

## -CODES-

\*-- TAPEXX - INCLUDE ONLY WHEN OTHER THAN "TAPEC". INDICATE  
SOURCE IF NOT FROM NCC-KC OR KCMO (E.G., FOREIGN TAPE). --\*  
DEN - INCLUDE ONLY WHEN DENSITY IS OTHER THAN 6250BPI.  
RS - RECORD SIZE (E.G., RS=80, RS=132, RS=216, ETC.).  
BS - BLOCK SIZE (E.G., BS=800, BS=132, BS=4320, ETC.).  
DSN - DATA SET NAME PER EXHIBIT 21 FORMATS (I.E, TAPE, DISK, ETC.).  
FICHE - INDICATES PRODUCTION OF MICROFICHE.  
PGM - KCMO PROGRAM NAME PER EXHIBIT 21 FORMAT.  
JOB - JOB NAME PER EXHIBIT 21 FORMAT (NOTE LOCATION).  
PROC - CATALOGED PROCEDURE NAME PER EXHIBIT 21 FORMAT (NOTE LOCATION).  
TRK - INDICATE NUMBER OF TRACKS; OR,  
CYL - NUMBER OF CYLINDERS FOR DISK DATA SETS.  
RMT - REMOTE TERMINAL ADDRESS.  
PERM - PERMANENT DISK DATA SETS (DEFAULT IS TEMPORARY).  
\*-- DD - DATA DEFINITION NAME. --\*  
\*-- R - RETENTION IN DAYS. --\*

## ADDITIONAL SYMBOLS NOTES

\*-- FICHE ----- USE THE "DOCUMENT" SYMBOL. --\*  
CALLED ROUTINES ----- USE THE "PREDEFINED PROCESS" SYMBOL.  
TERMINAL ----- INDICATES TRANSMISSION TO A REMOTE TERMINAL.  
INQUIRY/DISPLAY ----- USE THE "DISPLAY" SYMBOL.  
EMBOSSED CARDS----- USE THE "PUNCHED CARD" SYMBOL, BUT UPSIDE-DOWN.  
(ALSO "SMART" CARDS)  
\*-- CONNECTOR ----- USE THE CIRCLE "CONNECTOR" SYMBOL TO SHOW  
INFORMATION FLOW CONTINUATION WITHIN A JOB.  
USE THE "TERMINATOR" SYMBOL TO SHOW INFORMATION  
FLOW TO OR FROM ANOTHER JOB, SYSTEM OR  
ORGANIZATION. --\*  
\*-- AUXILIARY OPERATION - USE THE "PREDEFINED PROCESS" SYMBOL. --\*

SAMPLE JOB CHARTS ARE ON FLOW III AND AVAILABLE ON REQUEST.

## JOB CHARTS - H.I.S.

CODES AND SYMBOLS FOR COMPLETING JOB CHARTS  
 <\*-- FORM ASCS-764 OR AUTOMATED CHARTS IF AVAILABLE MAY BE USED --\*>

## -CODES-

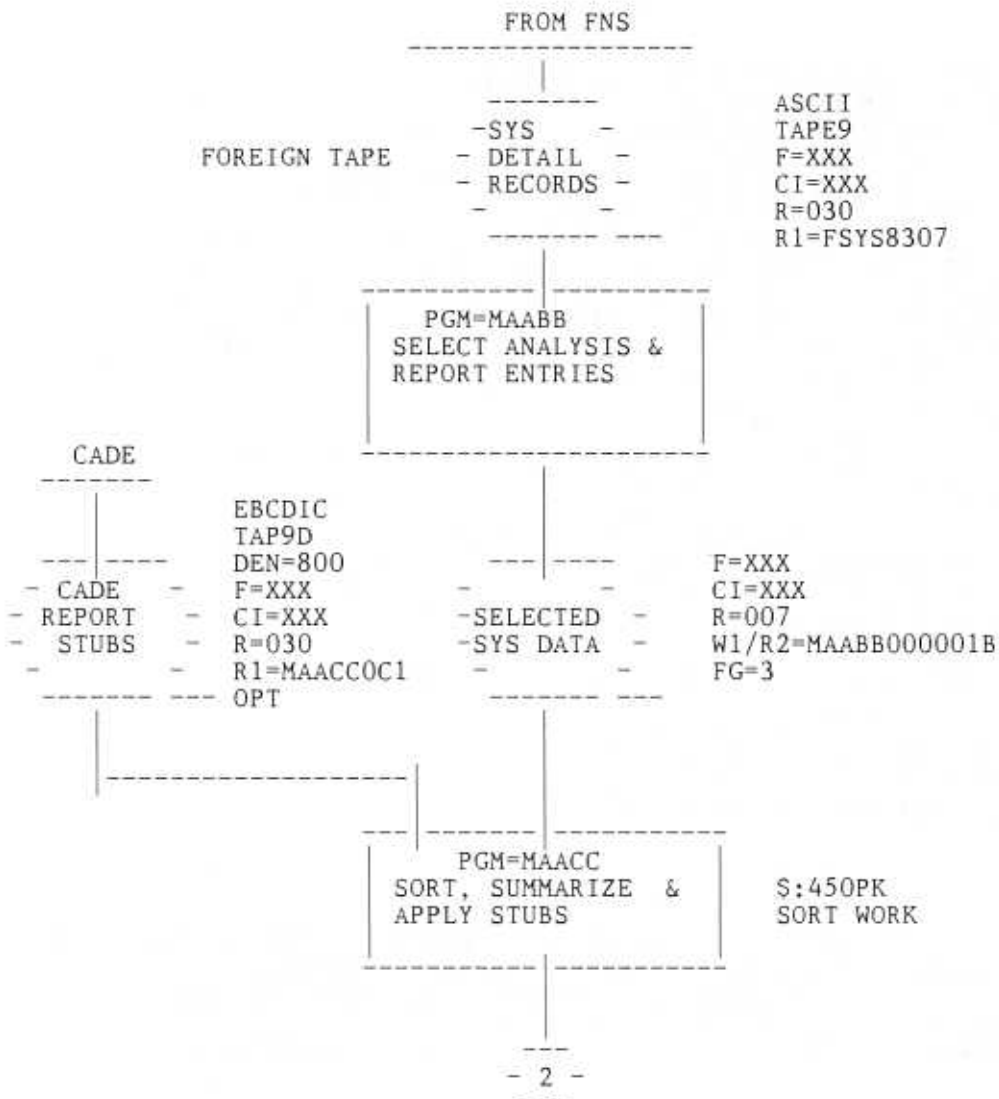
TAPEXX - INCLUDE ONLY WHEN OTHER THAN "TAPE9". INDICATE  
 SOURCE IF NOT FROM KCCC OR KCMO (E.G., FOREIGN TAPE).  
 DEN - INCLUDE ONLY WHEN DENSITY IS OTHER THAN 1600BPI.  
 ASCII - ORGANIZATION STRUCTURE OF DATA.  
 GBCD - ORGANIZATION STRUCTURE OF DATA (UNIQUE TO H.I.S.)  
 EBCDIC - ORGANIZATION STRUCTURE OF DATA.  
 R - RETENTION PERIOD IN DAYS (CANNOT EXCEED 400 DAYS).  
 F - FIXED LENGTH RECORD SIZE (E.G., F=80, F=132, F=216, ETC.).  
 MR - VARIABLE LENGTH MAXIMUM RECORD SIZE (E.G., MR=9466).  
 CI - CONTROL INTERVAL (BLOCK SIZE: E.G., CI=800, CI=4320, ETC.).  
 DSN - DATE SET NAME PER PARAGRAPH 250 FORMATS (I.E., TAPE, DISK, ETC.).  
 FG - INDICATES USE OF FILE GROUP UTILITY.  
 FICHE - INDICATES PRODUCTION OF MICROFICHE.  
 PGM - KCMO PROGRAM NAME PER PARAGRAPH 250 FORMAT.  
 JOB - JOB NAME PER PARAGRAPH 250 FORMAT (NOTE LOCATION).  
 PARM - PARAMETER FILE ENTRY REQUIRED.  
 PRMFL - INDICATES A PERMANENT DISK DATA SET.  
 FILE - INDICATES A TEMPORARY DISK DATA SET.  
 LINK - SIZE MEASUREMENT FOR H.I.S. (EQUALS 12 LLINKS).  
 LLINK - SIZE MEASUREMENT FOR H.I.S. (EQUALS 320 WORDS).  
 SECTOR - SIZE MEASUREMENT FOR H.I.S. (EQUALS 64 WORDS).  
 WORD - SIZE MEASUREMENT FOR H.I.S. (EQUALS 36 BITS).  
 OPT - INDICATES OPTIONAL INPUT DATA SET (COBOL PROGRAM).  
 RMT - REMOTE TERMINAL ADDRESS.  
 RAN - RANDOM FILE ORGANIZATION.  
 SEQ - SEQUENTIAL FILE ORGANIZATION.  
 REL - RELATIVE FILE ORGANIZATION.  
 IND - INDEXED FILE ORGANIZATION.

## -SYMBOLS-

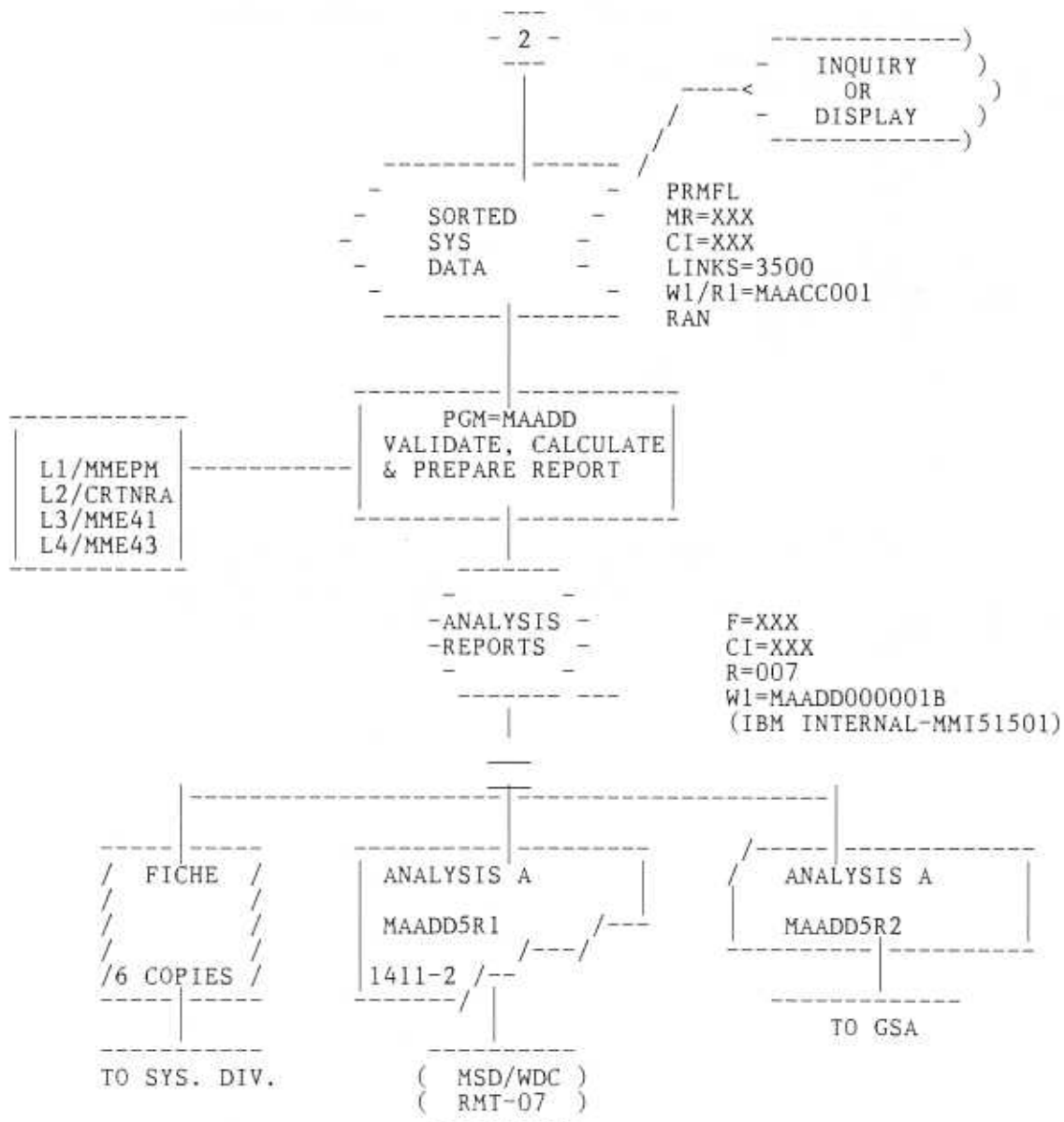
FICHE ----- USE THE "PUNCHED TAPE" SYMBOL BUT TURNED SIDE-WAYS.  
 CALLED ROUTINES - USE THE "AUXILIARY OPERATION" SYMBOL.  
 TERMINAL ----- INDICATES TRANSMISSION TO A REMOTE TERMINAL.  
 INQUIRY/DISPLAY - USE THE "DISPLAY" SYMBOL.  
 EMBOSSED CARDS--- USE THE "PUNCHED CARD" SYMBOL, BUT UPSIDE-DOWN.

JOB CHARTS - H.I.S.

T/S DUMMY SAMPLE  
DAILY ACTIVITY REPORTING - SEGMENT 1  
JOB - MAA03



JOB CHARTS - H.I.S.



## CARD READING INPUT PROCEDURES

JCL CONTROL CARDS FOR BUILDING A TSS GFRC ASCII PRMFL

THE FOLLOWING IS AN EXAMPLE OF THE CONTROL CARDS NECESSARY TO  
BUILD A TSS GFRC-ASCII PRMFL.

```
$ SNUMB
$ IDENT
$ USERID
$ UTL2
$ PRMFL OT,W,S,(OUTPUT FILE NAME)
FDEF IN,GFRC.
FDEF OT,GFRC,ASCII.
FOPT OT,RECCT,MC06.
PROC COPY IN TO OT IF.
$ DATA IN,IBMC,COPY.
```

&lt;&lt; INPUT DATA &gt;&gt;

```
$ ENDCOPY
$ ENDJOB
```

THE ENTRY ON THE \$ DATA CARD IS VARIABLE AS FOLLOWS: USE IBMC  
FOR ENTRY OF DATA VIA THE DATA 100 RJE TERMINAL. USE IBMEL  
FOR ENTRY OF DATA VIA THE KCCC REMCOM TERMINAL. (CERTAIN CARD  
CODES MUST BE ENTERED VIA THE REMCOM AS THE DATA 100 WILL NOT  
READ THEM. THE KNOWN CODE IS A + ZERO).

## IBM JOB CARD INFORMATION

THE STANDARD JOB CARD IS FORMATTED AS FOLLOWS:

```

111111111122222222223333333333444444444455555555556666666666
12345678901234567890123456789012345678901234567890123456789

```

```

//JOBNAME1 JOB (AABBCCDDEEEE,FFFF,G),'HH-III-JJJ-KKK',CLASS=_,TIME=_,
// MSGCLASS=A,PRTY=___

```

JOB ACCOUNTING CODE STRUCTURE (AABBCCDDEE,FFFF,G)

## WHERE:

```

AA = AGENCY DESIGNATION (05)
BB = OFFICE DESIGNATION (MF)
CC = DIVISION CODE (SEE EXHIBIT 4)
DD = CROSSWALK CODE (SEE EXHIBIT 4)
EEEE = WORK STATUS CODE (3-ADM, EXHIBIT 2)
FFFF = DIVISION SYMBOL (SEE EXHIBIT 4)
G = STATUS CODE (SEE BELOW)

```

```

*-- 0 = PRODUCTION RERUN 3 = INTEGRATION TESTING
 1 = COMPILES 4 = ACCEPTANCE TESTING
 2 = UNIT TESTING 6 = PRODUCTION ---*

```

JCL JOB CARD PROGRAMMER NAME FIELD

FORMATTED AS 'HH-III-JJJ-KKK'

## WHERE:

```

HH = JOB NUMBER (SEE EXHIBIT 21)
III = EMPLOYEE NUMBER
JJJ = WORK CODE (SEE 3-ADM, EXHIBIT 4)
KKK = EMPLOYEE INITIALS

```

\*-- NOTE: 1. CSPD UTILIZES A STANDARD JOB NUMBER (MMDDYYRJJ) IN PLACE ---\*  
OF THE EMPLOYEE NUMBER AND WORK CODE. FORMAT IS AS  
FOLLOWS: "HH-LLLLLLLLLL-KKK".

\*-- 2. TIME= DEFAULT VALUE ESTABLISHED BY NCC-KC IS ONE MINUTE. ---\*

## JCL CODING STANDARDS - IBM

- 1 JOB FLOWCHARTS PREPARED BY THE APPLICATION DIVISIONS WILL ACCOMPANY  
\*-- SYSTEM ACCEPTANCE TESTING PACKAGES TO CSPD SHOWING ALL INPUTS --\*  
JOB STEPS, OUTPUTS, CORE REQUIRED AND JOB CLASS. CORE  
REQUIREMENTS WHICH ARE SUBJECT TO FREQUENT CHANGE SHOULD BE  
DOCUMENTED ON AN ATTACHMENT TO THE JCL PROVISION SHEET. ALL  
INPUTS AND OUTPUTS WILL SHOW DEVICE TYPE, DATA SET DISPOSITION  
(PERMANENT OR TEMPORARY), AND RETENTION. IN-STREAM JCL  
PROCEDURE WILL ACCOMPANY THE ACCEPTANCE TESTING PACKAGE.  
CATALOG INFORMATION (INDEX NAME, NUMBER OF GENERATIONS) WILL  
BE DOCUMENTED ON THE SYSTEM CHART.
- 2 PRELIMINARY JOB SETUP INFORMATION (DDNAMES, DSN, I/O FLOWCHARTS,  
\*-- ETC.) WILL BE TRANSMITTED TO CSPD FIVE (5) WORKING DAYS BEFORE --\*  
ACTUAL START OF THE TESTING.
- 3 TEST JCL PROCEDURES WILL BE USED THROUGH SYSTEM ACCEPTANCE  
TESTING. AFTER SUCCESSFUL COMPLETION OF ONE PRODUCTION CYCLE,  
THE TEST PROCEDURES WILL BE PLACED ON THE APPROPRIATE PRODUCTION  
JCL PROCEDURE DATA SET. REFERENCE EXHIBIT 22.
- 4 SUBSTITUTION JCL AND OVERRIDE JCL SHOULD BE UTILIZED AS REQUIRED.  
JCL PROVISIONS WILL SHOW THE DEFAULT AND SUBSTITUTION JCL VALUE  
PARAMETERS. DEFAULT JCL VALUES WILL REFLECT STANDARD PROCESSING,  
WHILE SUBSTITUTION JCL VALUES WILL DENOTE OPTIONAL PROCESSING.
- \*-- 5 PRODUCTION JCL PROCEDURES WILL BE PERIODICALLY REVIEWED BY CSPD --\*  
AND APPLICATION DIVISIONS FOR RECURRING OVERRIDES. IF THIS CONDITION  
EXISTS, THE PROCEDURES WILL HAVE DEFAULT JCL VALUES CHANGED.  
\*-- CSPD WILL INITIATE REQUESTS TO APPLICATION DIVISIONS FOR REQUIRED --\*  
CHANGES.
- 6 JCL REFERENCES TO I/O DEVICES WILL BE BY GROUP NAME RATHER THAN BY  
DEVICE TYPE WHEREVER POSSIBLE (I.E., UNIT=STORE, RATHER THAN UNIT=  
3350).
- 7 SORT WORK UNITS WILL DEFAULT TO DEVICE TYPE (TAPE OR DISK) WHICH  
THE APPLICATION DIVISION HAS DETERMINED TO BE THE BEST CHOICE FOR THE  
APPLICATION AT HAND. EXCEPTIONS TO NORMAL PROCESSING WILL REQUIRE  
SUBSTITUTION JCL FOR THE WORK UNITS (E.G., VERY LOW OR VERY HIGH  
VOLUMES). TEMPORARY DATA SETS ON DIRECT ACCESS DEVICES SHOULD  
BE LIMITED TO NO MORE THAN 25 CYLINDERS PER DATA SET.

## JCL CODING STANDARDS - IBM

8 ALL PROCEDURE (PROC) JCL WILL BE NUMBERED STARTING WITH 00000100  
 \*-- AND INCREMENTED BY 100 (COLUMNS 73-80). CSPD WILL UPDATE PRO- --\*  
 \*-- CEDURE JCL BASED ON KC-287 REQUEST FROM APPLICATION DIVISIONS. --\*  
 \*-- THE UPDATED JCL WILL BE LISTED AND ONE COPY RETURNED WITH THE  
 \*-- KC-287 TO THE ORIGINATING APPLICATION DIVISION. --\*

9 SYMBOLIC PARAMETERS ENTERED INTO DD STATEMENTS SHOULD BE OF THE  
 FOLLOWING FORMAT:

&A OR &AN

WHERE: A - IS A LETTER(S) REPRESENTING A SPECIFIC PARAMETER AND,  
 N - IS A DIGIT(S) WHICH IS USED TO DISTINGUISH MULTIPLE  
 OCCURENCES OF THE SYMBOLIC PARAMETER WITHIN THE JOB.

10 THE FOLLOWING ARE KCMO STANDARD SYMBOLIC PARAMETERS:

| SYMBOLIC | PARAMETER DEFINITION                   |
|----------|----------------------------------------|
| &BN      | BLKSIZE=&BN                            |
| &DN      | DISP=&DN                               |
| &DSN     | DSNAME=&DSN                            |
| &GN      | GENDATA=&GN                            |
| &LN      | LABEL=&LN                              |
| &PN      | PARM= (NO ASSIGNED NAME)               |
| &SN      | SPACE=&SN (FULL SPACE PARAMETER ENTRY) |
| &SDN     | (DIRECTORY BLOCKS OR INDEX CYLINDERS)  |
| &SPN     | (PRIMARY ALLOCATION QUANTITY)          |
| &SSN     | (SECONDARY ALLOCATION QUANTITY)        |
| &UN      | UNIT=&UN                               |
| &VN      | VOL=SER=&VN                            |
| &JOBNO   | PARM=MMDDYYRJJ                         |

11 SYSTEM STATUS INDEX.

- A. THE SYSTEM STATUS INDEX (SSI) SHOULD BE UTILIZED TO PROVIDE AN  
 INTERNAL METHOD OF IDENTIFICATION AND CONTROL AS TO WHAT ENTRY  
 IS CURRENTLY CONTAINED IN THE PRODUCTION LIBRARY. THE SSI IS  
 LOCATED IN THE LIBRARY DIRECTORY ENTRY IDENTIFYING THE MODULE.
- B. SYSTEM GENERATED SSI ENTRIES WILL BE MADE WHEN THE MODULE IS  
 LINK-EDITED INTO PRIVATE LIBRARIES USING STANDARD JCL.

## JCL CODING STANDARDS - IBM

- C. THE SSI ENTRY WILL CONSIST OF THE DATE OF ENTRY AND THE HOUR OF ENTRY IN THE FORMAT "MMDDYYNN".
- D. A MODULAR PROGRAM NOT USING DYNAMIC CALLS, REQUIRING ONLY LINKAGE EDITOR CONTROL STATEMENTS "ALIAS, CHANGE, ENTRY, HIERARCHY, IDENTIFY, INCLUDE, INSERT, LIBRARY, NAME, OVERLAY, OR REPLACE", SHOULD HAVE THE FOLLOWING JCL CODING TO INVOKE THE SYSTEM GENERATED SETSSI INFORMATION:

```
//LKED.SYSLIN DD DDNAME=SYSIN
// DD *,DCB=BLKSIZE=80
(LINK EDIT CONTROL STATEMENTS)
/*
```

- 12 COMMENT CARDS (/\* IN COLUMNS 1-3) SHOULD BE CONCISE AND TO THE POINT TO MINIMIZE STORAGE SPACE.
- 13 THE THIRD POSITIONAL SUBPARAMETER (DELETE, KEEP, CATLG, UNCATLG) IN THE SUBPARAMETER LIST ASSOCIATED WITH THE KEYWORD "DISP", WILL BE USED TO CONTROL THE CONDITIONAL DISPOSITION OF DATA SETS.
- 14 THE SYSABEND/SYSUDUMP SYSOUT CLASS SHOULD BE THE SAME AS THE SYSTEM JCL "SYSOUT" CLASS OR THE "MSGCLASS" CLASS OF THE JOB.
- 15 TYPRUN=HOLD WOULD BE CODED ON THE // JOB CARD FOR THOSE JOBS IN A DEPENDENCY CATEGORY WHICH REQUIRE INPUT FROM OTHER JOBS THAT ARE IN A QUEUE OR EXECUTING. JOBS CAN BE RELEASED BY COMPUTER OPERATORS OR THROUGH THE EXECUTION OF A JOB STEP TO EXECUTE PROGRAM "RELEASE".

## EXAMPLE:

```
//RLSESTEP EXEC PGM=RELEASE,PARM='JOBNAME1,JOBNAME2,JOBNAME3,JOBNAME4'
```

## NOTES:

1. JOBNAMES LESS THAN 8 CHARACTERS ARE PADDED TO 8 CHARACTERS WITH SPACE FILL TO THE RIGHT OF THE JOBNAME.
  2. A MAXIMUM OF FOUR (4) JOBNAMES CAN BE PASSED TO PGM=RELEASE BY THE KEYWORD PARAMETER "PARM".
  3. JOBNAMES MUST BE ENCLOSED IN QUOTES (') AND COMMA SEPARATED.
- 16 ALL JOBS SHOULD CONTAIN THE SUBPARAMETER "MSGCLASS" IN THE JOB CARD.

## JCL CODING STANDARDS - IBM

- 17 NO REPORTS ARE TO BE PERMITTED IN PRODUCTION JCL. ALL REPORTS ARE TO BE WRITTEN TO TAPE OR DISK AND PASSED TO A TRAILING PRINT UTILITY.
- 18 FREEDOM OF INFORMATION REQUESTS
- COST REPORTS OF FOI REQUESTS ARE ACCOMPLISHED BY AN ENTRY OF "FOI" IN THE JOB CARD AS FOLLOWS:
- A DEVELOPMENTAL.
- // JOB (05MF05HH5300FOI,DSPD,2),'UT-554-573-MMDDYNNN'
- NOTE: THE FOI NUMBER IS ENTERED IN THE MMDDYNNN PORTION PROGRAMMER NAME FIELD.
- B PRODUCTION.
- // JOB (05MF08HH5300FOI,SCDP,6),'HH-MMDDYNNN-JJJ'
- NOTE: THE PROGRAMMER NAME FIELD WILL CONTAIN THE FOI NUMBER IN THE PROGRAMMER NAME FIELD IN MMDDYNNN.
- 19 JOBPARM ENTRIES
- THE SYS= SUBPARAMETER OF /\*JOBPARM IS NOT TO BE USED IN ANY JCL. KCCC OPERATORS WILL CANCEL ANY JOBS ASKING FOR A SPECIFIC MACHINE VIA THIS ENTRY.
- \*-- 20 THE ONLY JOB CLASSES THAT WILL BE PROCESSED ON THE NAS/5000 (EMULATION COMPUTER) ARE CLASSES "M" AND "P".
- 21 EFFECTIVE APRIL 29, 1984, ALL JCL UTILIZING USER PROCS MUST USE A "//PROCLIB" ENTRY DIRECTING THE SEARCH TO A SPECIFIC PROCEDURE LIBRARY. THE "//PROCLIB" ENTRY MAY BE ADDED TO ANY JCL THAT IS EXECUTED BETWEEN NOW AND APRIL 29, 1984. REFERENCE KCCC DIPS CIRCULAR 51.
- 22 USING SYMBOLIC PARAMETERS
- SYMBOLIC PARAMETER VALUES REQUIRED FOR USER PROGRAM CONTROL MAY BE MULTIPLE IN NATURE BY ENCLOSING THE VALUES IN APOSTROPHES ('), AND SEPARATING THE FIELDS CONTAINED WITHIN BY A COMMA (,). SYMBOLICS OF THIS NATURE WILL USE THE SYMBOL PARM=&PN. THE USER PROGRAM MUST INTERPRET THE COMMA AS A FIELD DELIMITER AND HANDLE ITS DISPOSITION. --\*

## \*-- JCL CODING STANDARDS - IBM

23. DSN=, DISP=, AND UNIT= SUBPARAMETERS ARE MANDATORY ENTRIES IN ALL TAPE DD STATEMENTS. THIS CONFORMS TO THE MVS/XA ARCHITECTURE EMPLOYED BY KCCC.
24. IBM 3480 CARTRIDGE TAPE DRIVES ARE TO BE UTILIZED AS MUCH AS POSSIBLE IN KCMO APPLICATIONS. AFTER JUNE 15, 1987, ALL JOBS THAT REQUIRE "REEL" TAPE DRIVES MUST INDICATE UNIT=TAPER SINCE UNIT=TAPE9 AND UNIT=TAPEC WILL DEFAULT TO "CARTRIDGE" TAPE DRIVES.
25. KCMO DATA SETS SHOULD BE ALLOCATED IN CYLINDERS RATHER THAN TRACKS.

## WHERE:

## 26. IBM JOB CLASSES

| JOB<br>CLASS | IBM 3083<br>CPU MIN. | MAX #<br>TAPE DRIVES | OTHER<br>INFORMATION     |
|--------------|----------------------|----------------------|--------------------------|
| K            | 1                    | 0                    | NO SET UP                |
| C            | 5                    | 0                    | NO SET UP                |
| D            | 1439                 | 0                    | NO SET UP                |
| B            | 5                    | 6                    | SET UP                   |
| F            | 10                   | 1                    | SET UP                   |
| I            | 1439                 | 6                    | SET UP                   |
| N            | 1439                 | 12                   | SET UP                   |
| M            | N/R                  | N/R                  | EMULATION(NAS-5000 ONLY) |
| O            | 1439                 | 1                    | IDMS/CV                  |
| P            | 10                   | 1                    | PRINT TO SPOOL           |
| E            | 0                    | 0                    | JCL SCAN                 |
| H            | 1439                 | >1                   | SPEC. HANDLING NON-PRIME |
| L            | 20                   | 2                    | FMHA PARADYNE            |
| T            | 1439                 | 0                    | PRODUCTION IDMS-DC       |
| S            | N/R                  | N/R                  | SEB SYSTEM MAINTENANCE   |
| A            | 1                    | N/R                  | ASM2 BACKUP PROCESSING   |
| V            | N/R                  | 0                    |                          |
| Q            | 20                   | 1                    | BATCH AGAINST TEST DC    |
| U            | 1439                 | 0                    | TEST IDMS-DC             |
| J            | 10                   | 1                    | IDMS-DC JOURNAL OFF-LOAD |
| G            | 1439                 | 2                    | SET UP                   |
| R            |                      |                      |                          |

## JCL CODING STANDARDS - IBM

27. NOTE: WHEN IT IS NECESSARY TO FLAG A JOB AS NON-RESTARTABLE BY THE NCC-KC OPERATOR, THE JOB NAME IS MODIFIED TO INCLUDE AN "@" IN THE UNITS POSITION AS FOLLOWS:

JOB MFSIN972 IS TO BE FLAGGED AS NON-RESTARTABLE BY CHANGING THE JOB NAME TO MFIN972@. THE SECOND POSITION OF DIVISION SYMBOL IS DROPPED AND THE "@" INSERTED IN THE UNITS POSITION OF THE JOB NAME. IT IS ALSO ADVISABLE TO INCLUDE A JCL ENTRY AS FOLLOWS TO ENSURE THE SYSTEM DOES NOT REQUEUE THE JOB WHEN A RE-IPL OCCURS:

/\*JOBPARM RESTART=N

INCLUSION OF BOTH COVER THE OPERATOR AND SYSTEM, IN THE EVENT OF OPERATOR RESET OR SYSTEM RE-IPL.

- \*-- 28. NCC-KC JOB VALIDATION CODES

THE NATIONAL COMPUTER CENTER-KANSAS CITY, VIA JES2 EXITS, VALIDATES USER JOB CARDS. WHEN ERRORS ARE DETECTED, NCC-KC-NN MESSAGES ARE GENERATED.

## MESSAGES

| NUMBER  | MESSAGE                                | ERROR                 |
|---------|----------------------------------------|-----------------------|
| KCCC-01 | USE OF REGION IN JOB CARD NOT ALLOWED  | JOB CARD-REGION       |
| KCCC-02 | TOO MANY MOUNTABLE DEVICES PER STEP    | JOB CARD-JOB CLASS    |
| KCCC-03 | REGION SIZE TOO LARGE FOR YOUR CLASS   | EXEC. CARD-JOB CLASS  |
| KCCC-04 | TIME LIMIT TOO LARGE FOR YOUR CLASS    | JOB CARD-TIME         |
| KCCC-05 | JOB CLASS INVALID                      | JOB CARD-JOB CLASS    |
| KCCC-09 | ILLEGAL JOB NAME FOR ACCOUNT CODE      | JOB CARD-NAME/ACCT    |
| KCCC-10 | NO ADDRSPC = REAL ALLOWED              | JOB CARD-ADDRSPC      |
| KCCC-11 | SYSOUT AMOUNT GREATER THAN MAX ALLOWED | JES2 CARD/SYSOUT      |
| KCCC-13 | ILLEGAL STATUS CODE                    | JOB CARD-STATUS CODE  |
| KCCC-14 | 2314 MOUNTS ARE ILLEGAL                | DD CARD-UNIT=2314 --* |

## HONEYWELL - JCL CODING STANDARDS

## 1 CODING

- A FORMAT. PLACE THE DOLLAR SIGN IN CC 1. THE OPERAND STARTS AT CC 8; VARIABLES START AT CC 16 AND MUST NOT EXCEED CC 72. VARIABLE FIELDS MAY BE CONTINUED BY AN "ETC" CARD IF THE LAST FIELD OF THE PRIOR CARD IS TERMINATED WITH A COMMA. STANDARD TAB CHARACTER (:) IS REQUIRED IN PRODUCTION JCL PROCEDURES.
- B FIRST LINE REFORMATTING. USE THE CONVERT \$\$ FIRST LINE REFORMAT WITH JCL NUMBERED IN INCREMENTS OF 10. EXAMPLE:
- 0010\$\$MOVE,ROUT(02),TAB(:,8,16,25,ETC.)
- C \$ IDENT. \$ IDENT CONTROL CARD FORMATS, AS DESCRIBED IN PARAGRAPH 250, MUST BE FOLLOWED TO PROVIDE ACCURATE ACCOUNTING INFORMATION. BANNER PAGE PRINTS ARE CONTROLLED BY THE SECOND VARIABLE FIELD OF THE \$ IDENT CARD.
- D \$ USERID. THIS CONTROL CARD PREVENTS ACTIVITY ABORTS THAT MAY OCCUR WHEN ACCESSING FILES OUTSIDE THE UMC. PASSWORD PROTECTION MUST BE CONSIDERED FOR SECURITY PURPOSES.
- E COMMENTS (\$ C.). USE OF THIS CARD, FOR DOCUMENTING PROCEDURES, SHOULD BE LIMITED TO DIRECT AND CONCISE STATEMENTS TO CONSERVE SPACE.
- F PERMISSIONS. USE Q (QUERY), IN PLACE OF R (READ), FOR PARM FILE JCL STATEMENTS AND R/C FOR UTILITY LIBRARIES.
- G DISPOSITION. USE S (SAVE) OR D (DISMOUNT) FOR TAPE FILES AND S (SAVE) OR R (RELEASE) FOR DISK FILES.
- H FILE NAMES. PRMFL AND TAPE NAMES MUST BE CODED AS SPECIFIED ON THE SYSTEM CHARTS. TAPE NAMES MUST BE CODED THRU THE 12TH POSITION AND INCLUDE A FILE RETENTION CODE. REFERENCE PARAGRAPH 250. DO NOT BEGIN A FILE NAME WITH A PERIOD (.) OR USE ALL ZEROS (0).
- I \$ LIBRARY. WHEN MULTIPLE LIBRARIES ARE USED IN ONE ACTIVITY, LIBRARY FILE CODES MUST BE CODED ON ONE \$ LIBRARY CONTROL STATEMENT. TEN FILE CODES ARE THE MAXIMUM PERMITTED IN ONE ACTIVITY. IF MORE THAN 10 FILE CODES ARE REQUIRED, UTILIZE THE \$ OBJLIB ACTIVITY TO COMBINE THEM INTO ONE FILE.

## HONEYWELL - JCL CODING STANDARDS

- J LOGICAL UNIT DESIGNATOR. THE LUD IS NOT REQUIRED FOR FILES USED IN ONLY ONE ACTIVITY, BUT IS REQUIRED WHEN FILES ARE PASSED BETWEEN ACTIVITIES. LUD NUMBERS SHOULD BE CONSECUTIVE AND NEVER DUPLICATED.
- K \$ MSG2. \$ MSG2 STATEMENTS ARE REQUIRED FOR ALL FOREIGN TAPES, INCLUDING CADE. FORMATS ARE:
- 1 \$:MSG2:2,NON-HIS MULTI-REEL FC REEL1,REEL2,ETC:<<<<<
  - 2 HIS PARTIAL FILE  
\$:MSG2:2,HIS PARTIAL FILE FC REELX,REELY,ETC:<<<<<
  - 3 FOREIGN TAPES (INCLUDING CADE)  
\$:MSG2:2,NON KCCC-FOREIGN TAPE FILE REEL1,REEL2,ETC:<<<<<
  - 4 CONTINUATION EXAMPLE  
1 \$:MSG2:2,NON-HIS MULTI-REEL FC REEL1,REEL2,REEL3,<<<<<  
2 \$:MSG2:2,CONT'D FC REEL4,REEL5,REEL6,REEL7,REEL8:<<<<<
- L \$ TAPE. FILE NAME AND TAPE DENSITY MUST BE PRESENT IN ALL \$ TAPE STATEMENTS.
- M \$ EXECUTE. ALL EXECUTE STATEMENTS MUST USE THE DUMP OPTION. (\$:EXECUTE:DUMP)
- 2 SYSTEM RESOURCES
- A \$ LIMITS. WHEN DEFAULT LIMITS ARE LESS THAN JOB AND/OR ACTIVITY REQUIREMENTS, THE \$ LIMITS CARD MUST BE CODED TO SHOW MEMORY REQUIREMENTS AS ACCURATELY AS POSSIBLE. EFFICIENT SORTS REQUIRE AT LEAST 50K OF MEMORY.
  - B PASSED FILES. FILES TO BE ACCESSED IN MORE THAN ONE ACTIVITY SHOULD BE STRUCTURED IN THE JCL PROCEDURE TO PREVENT WASTE OF DISK STORAGE OR TAPE DRIVES. TO REDUCE RESIDENT CHARGES, USE ONE OF THE FOLLOWING METHODS:

## HONEYWELL - JCL CODING STANDARDS

1. IN THE ACCOUNTING REPORT, A FILE CODE OF 00 INDICATES A FILE THAT WAS ALLOCATED BUT NOT USED IN THIS ACTIVITY. THIS OCCURS WHEN A FILE IS CREATED AND "PASSED" THROUGH AN INTERMEDIATE ACTIVITY TO ONE THAT FOLLOWS. AS SPACE OR DRIVES USED THIS WAY CANNOT BE ACCESSED BY OTHER PROGRAMS, RESIDENCE CHARGES ARE INCURRED. TO REDUCE THE NUMBER OF PASSED FILES, A TAPE BEING HELD FOR A BMC ACTIVITY IN THE JCL JOB STREAM SHOULD BE POSITIONED IMMEDIATELY AFTER THE CREATING ACTIVITY. OTHER TAPES SHOULD BE DEMOUNTED IF THE ELAPSED TIME BETWEEN CREATION AND USE IS OVER 20 MINUTES.
  2. THE USE OF BMC TAPE-TO-DISK FOR INPUT, OR DISK-TO-TAPE FOR OUTPUT FILES IS AS FOLLOWS:  
  
IF A TAPE WILL BE USED AS AN INPUT TO MORE THAN ONE ACTIVITY, USE A BMC TO LOAD DATA ON A TEMPORARY (OR PERMANENT) FILE TO AVOID HAVING THE TAPE PASS THROUGH INTERMEDIATE ACTIVITIES OR THE NEED TO DISMOUNT IT.
  3. WHEN AN ACTIVITY IS TAPE BOUND (I.E., 6 TAPES OR MORE), IT IS OFTEN ADVANTAGEOUS TO USE BMC TO ELIMINATE ONE OR MORE TAPES. A BMC MAY BE USED BEFORE THE ACTIVITY TO CREATE A DISK INPUT FILE; OR AN OUTPUT FILE MAY BE WRITTEN TO DISK AND TRANSFERRED TO TAPE BY A FOLLOWING BMC ACTIVITY. THE SMALLER THE FILES, THE GREATER THE BENEFITS TO BE GAINED IN USING THIS METHOD.
- C. DISK FILE SIZE. WHEN CREATING A DISK STORAGE FILE SPECIFY THE CURRENT FILE SIZE.
- D. SORT WORK FILE. INCLUDE THE NUMBER AND SIZE OF SORT WORK FILES ON THE SYSTEM CHART AND IN THE JCL PROCEDURES.
- E. OBEY THE FOLLOWING KCMO RULES ON THE USE OF THE SYSTEM RESOURCES
1. DIRECT TO TAPE REPORTS CONTAINING MORE THAN 5,000 PRINT LINES.
  2. DO NOT UTILIZE DISK STORAGE FOR LARGE VOLUME LOW ACCESS FILES, USE TAPE INSTEAD.

## HONEYWELL - JCL CODING STANDARDS

- 3 DO NOT MAKE DIRECT ASSIGNMENTS TO UNIT RECORD DEVICES.
- 4 DO NOT USE QUICK ACCESS FILES FOR PERMANENT DISK STORAGE.

## 3 PROCEDURE

- A FILE GENERATION. WHEN A FILE IS TO BE CATALOGED, A \$ FILGP CARD MUST REPLACE THE \$ TAPE9 CARD. IF THE FILES ARE NOT TO BE CATALOGED USE A CRUN TO ENTER THE INPUT TAPE NUMBERS. (SEE PARAGRAPH 6, FILE GROUPS PROCEDURE).
- \*-- B PRINTOUTS. NO SYSOUT REPORTS ARE TO BE PERMITTED IN PRODUCTION JCL. ALL REPORTS ARE TO BE WRITTEN TO TAPE OR DISK AND PASSED TO A TRAILING CONVER ACTIVITY. --\*
- C TEST FILES. INTEGRATION TESTING SHOULD USE APPLICABLE PRODUCTION PERIPHERAL EQUIPMENT PRIOR TO ACCEPTANCE TESTING: I.E., JOBS REQUIRING TAPES SHOULD USE TAPES FOR INTEGRATION TESTING ESPECIALLY IF DISKS WERE USED FOR UNIT TESTS.
- D LIBRARY MAINTENANCE. TO PROTECT PROGRAM LIBRARIES:
  - 1 KEEP LIBRARIES CURRENT.
  - 2 KEEP LIBRARIES BACKED UP.
  - 3 KEEP SOURCE AND OBJECT LIBRARIES PARALLEL IN CONTENT.
  - 4 KEEP PRODUCTION AND DEVELOPMENT LIBRARIES SEPARATE.
  - 5 KEEP A CURRENT LISTING OF LIBRARY CONTENTS.
- E COMPILE/EXECUTE. COBOL OR FORTRAN PROGRAMS AND GMAP SORTS/MERGES SHOULD NOT USE THE COMPILE, OR ASSEMBLE, AS PART OF INTEGRATION OR ACCEPTANCE JCL SET-UP. THIS PROCEDURE MUST BE LIMITED TO UNIT TESTING AND SHOULD BE USED SPARINGLY.
- F OPTIONAL FILES/EXECUTION. WHENEVER JCL PROCESSING AND UTILIZATION IS OPTIONAL OR UNUSUAL AND THEREFORE REQUIRES DEFINITION, USE COMMENTS (\$ C.) IN THE JCL STREAM OR \$\*\$MARK STATEMENTS IN THE CRUN PROCEDURE.

## HONEYWELL - JCL CODING STANDARDS

## 4 UTILITIES

- A TESTING. ANY UTILITIES INCLUDED IN THE JCL STREAM FOR TEST PURPOSES SHOULD BE REMOVED PRIOR TO ACCEPTANCE TESTING. IF NECESSARY TO INCLUDE THESE ACTIVITIES FOR RESEARCH PURPOSES, INDICATE THE UTILITIES TO BE REMOVED, PRIOR TO PRODUCTION, \*-- ON THE KC-287 RELEASING THE SYSTEM TO CSPD. --\*
- B BMC CARD INPUT. WHEN PROCESSING CARD DATA VIA BMC, USE THE "TAKE" OPTION IN THE \$ DATA JCL CARD. THIS ASSURES PROPER CHARACTER transliteration, BY SUBSTITUTION, FOR NON-STANDARD \*-- HONEYWELL CHARACTERS. APPLICATION DIVISIONS MUST SUPPLY CSPD --\* WITH A UTL2 DECK PRIOR TO TESTING.
- C UTL2. WHEN USING FIXED IBM TAPE FILES, CODE THE "FDEF" STATEMENT WITH "F" NOT "MR". IF VARIABLE LENGTH RECORDS ARE BEING PROCESSED, INCREASE THE RECORD LENGTH BY 4. FOR FILES OTHER THAN IBM, REFER TO THE UTL2 MANUAL.

## 5 PRODUCTION JCL CHANGES

- \*-- A FIRST LINE. CSPD WILL CHANGE ALL FIRST LINE REFORMATTING TO --\* THE FOLLOWING: \$SMOVE,ROUT(02),TAB(:,8,15,25,59,67).
- \*-- B \$ IDENT. CSPD HAS AUTHORITY TO MODIFY THIS CONTROL CARD TO --\* REFLECT PRODUCTION ACCOUNTING CODES AND NAMES.
- \*-- C UMC. CSPD WILL CHANGE ALL CATALOG FILE STRINGS TO ACCEPTANCE --\* TEST/PRODUCTION NAMES.
- D FILE SIZES. MAXIMUM SIZE FOR ALL PRODUCTION FILES IS UNLIMITED \*-- (U); CSPD MONITORS THESE FILES TO SEARCH FOR UNUSED SPACE. --\*
- \*-- E PRINT FILES. CSPD APPENDS OR MODIFIES JCL PROCEDURES DIRECTING --\* PRINT FILES TO STANDARD PRODUCTION PRINT ROUTINES FOR VOLUME 1411-1 REPORTS, MULTI-PART REPORTS, OR SPECIAL FORMS.
- \*-- F CRUN'S. CSPD WILL CONSTRUCT CRUN PROCEDURES AND MAKE JCL --\* ENHANCEMENTS FOR MORE EFFICIENT PROCESSING, WITHIN SYSTEM PARAMETERS.
- \*-- G CSPD WILL PROVIDE A UTL2 (WITH SDUMP OPTION) TO PRINT THE --\* FIRST 100 RECORDS OF TAPES TO BE MAILED OUT OF OFFICE.

## HONEYWELL - JCL CODING STANDARDS

\*-- H PARM FILE. ON PRODUCTION JOBS, CSPD WILL INCLUDE AN ACTIVITY --\*  
TO PRINT CONTENTS OF THE PARM FILE FOR HISTORICAL AND RESEARCH  
USE. THIS WILL BE THE FIRST ACTIVITY OF ALL JOBS PROCESSING  
WITH A PARM FILE.

\*-- I FILGP. ON PRODUCTION JOBS, CSPD WILL INCLUDE AN ACTIVITY --\*  
TO PRINT THE CONTENTS OF THE FILGP INDEX TO SHOW THE STATUS  
OF MAGNETIC TAPES AFTER PROCESSING. THIS WILL BE THE LAST  
ACTIVITY OF ALL JOBS UTILIZING FILGP.

## 6 FILE GROUPS

A HIS FILE GENERATION ENTRIES MUST BE LIMITED TO PERMANENT FILES,  
TAPE OR DISK (I.E., DATA TO BE RETAINED AT THE END OF A NORMAL  
JOB PROCESS).

B APPLICATION PROGRAMMERS PROVIDE FILE GROUP ENTRIES IN THE JCL  
\*-- STATEMENT PROCEDURES ON RELEASE TO CSPD FOR PRODUCTION. --\*

C APPLICATION PROGRAMMERS RECOMMEND FACTORS FOR THE NUMBER OF  
FILE GROUP ENTRIES ON DATA SETS CREATED BY THEIR JOBS, BASED  
ON PROCESSING CYCLES AND INPUT VOLUMES.

\*-- D CSPD TECHNICIANS MAINTAIN FILE GENERATION DATA, INCLUDING --\*  
ESTABLISHING THE INDEX, APPENDING THE FGCRE ACTIVITY (WHERE  
NECESSARY) TO THE JCL STREAM, AND DELETING CATALOG ENTRIES  
AND INDEXES AS THEY BECOME INVALID.

E IN USING THE FILE GROUP CONCEPT FOR MASTER FILE DATA SETS, THE  
PRINCIPLES OF "SON, FATHER, GRANDFATHER" GENERATIONS ARE  
ACCOUNTED FOR IN A GENERATION DATA GROUP HAVING AN INDEX WITH  
AN ESTABLISHED ROTATION FOR THREE ENTRIES. JCL STATEMENTS  
NECESSARY TO RETRIEVE INPUT FOR UPDATE PROCESSING ARE:

|             |       |                                |
|-------------|-------|--------------------------------|
| SON         | FILGP | FC,LUD,R,USER/CAT1/MIORH4,0LL  |
| FATHER      | FILGP | FC,LUD,R,USER/CAT1/MIORH4,-1LL |
| GRANDFATHER | FILGP | FC,LUD,R,USER/CAT1/MIORH4,-2LL |

NOTE: THE ENTER SCAN (+1, +2, ETC.) IS FROM THE BOTTOM OF THE  
INDEX TO THE TOP, WITH THE NEW ENTRY BEING ENTERED AS  
GENERATION 0 AND PUSHING DOWN THE CURRENT POINTER.

## HONEYWELL - JCL CODING STANDARDS

## ENTRIES BUILT:

| ENTRY NAME | TYPE  | DENSITY | REEL NO. |
|------------|-------|---------|----------|
| MEN001001  | TAPE9 | DEN16   |          |
| MEN001002  | TAPE9 | DEN16   |          |
| MEN001003  | TAPE9 | DEN16   |          |
| MEN001004  | TAPE9 | DEN16   |          |
| MEN001005  | TAPE9 | DEN16   |          |
| MEN001006  | TAPE9 | DEN16   |          |

## FIRST ENTER:

| W  | R  | ENTRY NAME | TYPE  | DENSITY | REEL NO. |
|----|----|------------|-------|---------|----------|
| +6 | 0  | MEN001006  | TAPE9 | DENSTD  | 03670    |
| +5 | -1 | MEN001001  | TAPE9 | DEN16   |          |
| +4 | -2 | MEN001002  | TAPE9 | DEN16   |          |
| +3 | -3 | MEN001003  | TAPE9 | DEN16   |          |
| +2 | -4 | MEN001004  | TAPE9 | DEN16   |          |
| +1 | -5 | MEN001005  | TAPE9 | DEN16   |          |

## FIRST ROTATION

| W  | R  | ENTRY NAME | TYPE  | DENSITY | REEL NO. |
|----|----|------------|-------|---------|----------|
| +6 | 0  | MEN001005  | TAPE9 | DENSTD  | 03838    |
| +5 | -1 | MEN001006  | TAPE9 | DENSTD  | 03670    |
| +4 | -2 | MEN001001  | TAPE9 | DEN16   |          |
| +3 | -3 | MEN001002  | TAPE9 | DEN16   |          |
| +2 | -4 | MEN001003  | TAPE9 | DEN16   |          |
| +1 | -5 | MEN001004  | TAPE9 | DEN16   |          |

## SECOND ROTATION

| W  | R  | ENTRY NAME | TYPE  | DENSITY | REEL NO. |
|----|----|------------|-------|---------|----------|
| +6 | 0  | MEN001004  | TAPE9 | DENSTD  | 04817    |
| +5 | -1 | MEN001005  | TAPE9 | DENSTD  | 03838    |
| +4 | -2 | MEN001006  | TAPE9 | DENSTD  | 03670    |
| +3 | -3 | MEN001001  | TAPE9 | DEN16   |          |
| +2 | -4 | MEN001002  | TAPE9 | DEN16   |          |
| +1 | -5 | MEN001003  | TAPE9 | DEN16   |          |

## HONEYWELL - JCL CODING STANDARDS

## 7 THE FOLLOWING CONTROL CARDS ARE PROHIBITED:

\$ PRIVITY  
\$ TYPE  
\$ COMMENT  
\$ MSG1  
\$ MSG2 (EXCEPT FOR MULTI-REEL FILES WHICH ARE DESCRIBED IN  
KCCC USER'S HANDBOOK, CHAPTER 6.3)

THE FOLLOWING CONTROL CARDS ARE NOT PERMITTED, EXCEPT IN  
BULK MEDIA CONVERSION (BMC):

\$ PRINT  
\$ READ  
\$ PUNCH

IN REGARD TO \$ LANGUAGE CARDS, \$ CBL74 AND \$ FORTRAN

- . IT IS STRONGLY RECOMMENDED THAT ALL DESIRED OPTIONS  
(EVEN THOSE WHICH WILL OCCUR BY DEFAULT) BE LISTED.
- . ALL PUNCHED DECKS SHOULD BE AVOIDED IF POSSIBLE  
(SPECIFY NDECK).
- . IT IS ALSO RECOMMENDED THAT USERS NOT REQUEST A  
COMPRESSED DECK UNLESS ABSOLUTELY NECESSARY.

THE \$ NTAPE CONTROL CARD WILL NOT WORK FOR MORE THAN TWO  
(2) TAPES REQUESTED.

THE \$ TAPE7 CONTROL CARD WILL ALLOCATE A 7-TRACK TAPE  
DRIVE. HOWEVER, DUE TO THE LIMITED NUMBER OF 7-TRACK  
DRIVES (2), TAPES CREATED ON THE HIS 66/80 SHOULD BE  
9-TRACK TAPES.

THE \$ TAPE9 CONTROL CARD WILL ALLOCATE A 9-TRACK TAPE  
DRIVE.

THE \$ TAPE CONTROL CARD SHOULD BE AVOIDED.

## HONEYWELL - JCL CODING STANDARDS

THE UPPER LIMIT OF SYSOUT, WHICH IS NOT SUBJECT TO MODIFICATION, IS 100,000 PRINT LINES.

THE USE OF GMAP ASSEMBLY LANGUAGE IS PROHIBITED UNLESS A WAIVER FOR ITS USE IS OBTAINED. GMAP RESIDES ON A PROTECTED LIBRARY.

BEGINNER'S ALL-PURPOSE SYMBOLIC INSTRUCTION CODE (BASIC) IS ALSO PROHIBITED IN THE ABSENCE OF A WAIVER.

JOBS ARE SCHEDULED BASED UPON RESOURCE REQUIREMENTS AND ARE PLACED INTO A JOB CLASS BASED UPON THEIR REQUEST FOR PERIPHERAL DEVICES, CPU TIME AND CORE. JOB CLASS DEFINITIONS ARE CHANGED AT THE DISCRETION OF KCCC. CURRENT DESCRIPTIONS ARE LISED IN KCHELP.

- \*-- 8 TO ASSIGN A 9-TRACK TAPE TO BE READ/WITTEN IN 800 BPI, USE A LUD OF 3T1 OR 3T2, FOLLOWED BY THE APPROPRIATE DISPOSITION LETTER - S OR D. ALWAYS END THE JCL LINE WITH ,,DEN8. --\*

## HONEYWELL - JCL CODING STANDARDS

## 8 NULL FILES

THE FOLLOWING PROCEDURES MAY BE USED FOR NULL FILES,  
FILES WHICH MAY OR MAY NOT BE PRESENT.

FOR GFRC FILES, SUCH AS CARD READER DATA, REPLACE THE  
APPROPRIATE \$ DATA, \$ FILE, ETC. CARD WITH

|      |      |                 |
|------|------|-----------------|
| C. 1 | C. 8 | C. 16           |
| \$   | FILE | FILE CODE, NULL |

(REFERENCE: CONTROL CARDS REFERENCE MANUAL, DD31, PAGE  
2-56).

A NULL DATA CARD MAY BE USED INSTEAD OF THE NULL FILE  
CARD.

|      |                |       |
|------|----------------|-------|
| C. 1 | C. 8           | C. 16 |
| \$   | DATAFILE CODE, | NULL  |

FOR UFAS SEQUENTIAL INPUT FILES, USE THE FOLLOWING SELECT  
STATEMENT IN THE COBOL PROGRAM:

SELECT OPTIONAL FILE-NAME...

AND REMOVE THE RESPECTIVE CONTROL CARD FOR THAT FILE  
(REFERENCE COBOL-74 REFERENCE MANUAL, DE01, PAGE 8-10).

SPECIFYING THE OPTIONAL SELECT STATEMENT FOR AN INDEXED  
OR RELATIVE FILE RESULTS IN FATAL COMPILER ERRORS. FOR  
FILES SUCH AS THESE, IT IS RECOMMENDED THAT A DUMMY FILE  
BE CREATED AND USED FOR PROCESSING.

## \*-- 9 FREEDOM OF INFORMATION REQUESTS

COST REPORTS OF FOI REQUESTS ARE ACCOMPLISHED BY AN ENTRY AS  
LAST FIELD OF THE VARIABLE FIELD PORTION OF THE IDENT CARD  
WHICH WILL CONTAIN THE FOI REQUEST NUMBER AS FOLLOWS:

\$:IDENT:ETC,ETC,ETC,FOI-MMDDYNNN --\*

## CHECK DIGIT FORMULAS

## FOR STATE AND COUNTY CODES

## EXPLANATION:

1. CONSIDER THE STATE AND COUNTY CODE AS A FIVE DIGIT NUMBER (STATE IS TWO HIGH ORDER POSITIONS; COUNTY IS THREE LOW ORDER POSITIONS).
2. CALCULATE UNITS, HUNDREDS AND TEN THOUSANDS POSITIONS AS FOLLOWS:
  - A. DOUBLE DIGIT
  - B. WHEN PRODUCT EXCEEDS 9, ADD CARRY TO UNITS POSITION OF PRODUCT; I.E., 14 WOULD BE  $1 + 4 = 5$
  - C. IF LESS THAN 9, USE THE RESULT.
3. TENS AND THOUSANDS POSITIONS:  
NO CALCULATION - USE DIGIT AS IS.
4. ADD RESULTS FROM EACH POSITION OF (2) WITH DIGITS OF (3).
5. IF THE RESULT IN (4) IS AN EVEN TENS MULTIPLE, SUBTRACT THIS RESULT FROM ITSELF. THE ANSWER WILL ALWAYS BE "0". IF THE UNITS POSITION OF THE RESULT IN (4) IS 1 THROUGH 9, SUBTRACT THE RESULT FROM THE NEXT HIGHEST MULTIPLE OF TEN.
6. ADD ONE TO THE RESULT OF (5). THIS IS THE CHECK DIGIT.

## CHECK DIGIT FORMULAS

## EXAMPLE I:

STATE AND COUNTY CODE: 55139

|         |    |   |    |   |    |
|---------|----|---|----|---|----|
| STEP 1: | 5  | 5 | 1  | 3 | 9  |
|         | X2 |   | X2 |   | X2 |

---

STEP 2: 1 5 2 3 9

STEP 3:  $1 + 5 + 2 + 3 + 9 = 20$ STEP 4:  $20 - 20 = 0$ STEP 5:  $0 + 1 = 1$ 

CHECK DIGIT: 1

## EXAMPLE II:

STATE AND COUNTY CODE: 41043

|         |    |   |    |   |    |
|---------|----|---|----|---|----|
| STEP 1: | 4  | 1 | 0  | 4 | 3  |
|         | X2 |   | X2 |   | X2 |

---

8 1 0 4 6

STEP 2:  $8 + 1 + 0 + 4 + 6 = 19$ STEP 3:  $20 - 19 = 1$ STEP 4:  $1 + 1 = 2$ 

CHECK DIGIT: 2

## CHECK DIGIT FORMULAS

## FOR IDENTIFYING NUMBERS

CONSIDER THE EMPLOYER IDENTIFYING NUMBER (EIN), SOCIAL SECURITY NUMBER (SSN) OR TEMPORARY IDENTIFYING NUMBER (TIN) AS A 9-DIGIT NUMBER. THE CHECK DIGIT IS PROVED VALID AS FOLLOWS:

- STEP 1 - MULTIPLY THE UNITS POSITION AND EVERY ALTERNATE POSITION OF THE IDENTIFICATION NUMBER BY 2.
- STEP 2 - CROSS ADD THE DIGITS IN THE PRODUCT (POSSIBLE 6 DIGITS) FROM STEP 1, AND THE DIGITS IN THE IDENTIFICATION NUMBER NOT MULTIPLIED BY 2.
- STEP 3 - SUBTRACT THE CROSS ADDED TOTAL FROM THE NEXT HIGHER NUMBER ENDING IN ZERO. THE RESULT IS THE 'CHECK DIGIT' NUMBER. IF THE RESULT ENDS IN A ZERO, THE 'CHECK DIGIT' NUMBER IS '0'.

## EXAMPLE:

|                                                        |                                        |
|--------------------------------------------------------|----------------------------------------|
| IDENTIFICATION NUMBER                                  | 0 4 5 2 3 6 8 1 2                      |
| UNITS AND EVERY ALTERNATE<br>POSITION MULTIPLIED BY 2= | 0 5 3 8 2<br>x 2                       |
| PRODUCT                                                | 1 0 7 6 4                              |
| DIGITS NOT MULTIPLIED BY 2=                            | 4 2 6 1                                |
| CROSS ADD                                              | 1 + 4 + 0 + 2 + 7 + 6 + 6 + 1 + 4 = 31 |
| NEXT HIGHER NUMBER ENDING IN ZERO                      | 40                                     |
| SUBTRACT CROSS ADDED TOTAL                             | -31                                    |
| CHECK DIGIT                                            | 9                                      |

## COMMODITY DATA FILE

## ROUTINE MMECD - COMMODITY DATA FILE ACCESS

## PROGRAM REQUIREMENTS FOR MMECD.

1. THE WORKING-STORAGE COMMODITY DATA RECORD IS MAINTAINED AS A MEMBER OF SOURCE LIBRARY MUTIL1/LIBSRC/ALLSRC. TO COPY THIS RECORD INTO THE CALLING PROGRAM, CODE THE FOLLOWING COBOL STATEMENT IN THE WORKING-STORAGE SECTION:

COPY MMBCMDAT

BECAUSE COMMON DATA ELEMENTS ARE USED THROUGHOUT THE RECORD DESCRIPTOR, MANY COBOL NAMES MUST BE QUALIFIED.

THE OPTION "COPY" MUST BE INCLUDED IN THE CBL74 JOB CONTROL CARD AND THE FOLLOWING SOURCE LIBRARY REFERENCES MUST BE GIVEN:

\$ PRMFL .L,R/C,R,MUTIL1/LIBSRC/ALLSRC

2. THE CALL STATEMENT FOR THE ROUTINE IS:

CALL "MMECD" USING CMMDTY-DATA-REC.

3. THE CALLING PROGRAM MUST SUPPLY ACT-CD, RECD-TYP, ST-CD, CNTY-CD AND RECD-LVL-IND VALUES AS FOLLOWS:

## FOR NATIONAL LEVEL INFORMATION

| DATA NAME    | VALUE                  |
|--------------|------------------------|
| ACT-CD       | 0                      |
| RECD-TYP     | SEE PARAGRAPH 6 BELOW. |
| ST-CD        | 00                     |
| CNTY-CD      | 000                    |
| RECD-LVL-IND | 0                      |

## FOR REGIONAL OR AREA INFORMATION

NOT AVAILABLE AT THIS TIME.

## FOR STATE LEVEL INFORMATION

| DATA NAME | VALUE |
|-----------|-------|
|-----------|-------|

## COMMODITY DATA FILE

ACT-CD 0  
RECD-TYP SEE PARAGRAHP 6 BELOW.  
ST-CD FIPS STATE CODE  
CNTY-CD 000  
RECD-LVL-IND 2

## FOR COUNTY LEVEL INFORMATION

| DATA NAME    | VALUE                  |
|--------------|------------------------|
| ACT-CD       | 0                      |
| RECD-TYP     | SEE PARAGRAPH 6 BELOW. |
| ST-CD        | FIPS STATE CODE        |
| CNTY-CD      | VALID COUNTY CODE      |
| RECD-LVL-IND | 3                      |

4. THE RECD-LVL-IND FIELD MUST BE CHECKED AFTER CALLING ROUTINE MMECD. IF THIS FIELD IS 9, THE SPECIFIED COMMODITY DATA RECORD WAS NOT FOUND.
5. JCL REQUIREMENTS FOR LINKING AND EXECUTING THE MMECD ROUTINE ARE

```
$ LIBRARY L1
$ EXECUTE
$ PRMFL L1,R/C,R,MUTIL1/MEOBJ/MELIB
$ PRMFL U2,R,R,MUTIL1/MBDAT/MMBCMDAT
$ PRMFL X2,R,R,MUTIL1/MBDAT/MMBCMDAX
```

6. VALID RECD-TYP CODES ARE AS FOLLOWS:

- 1 DEFICIENCY, DIVERSION, DISASTER DATA FOR  
BA, CN, CO, GS, RI, WH
- 2 PEANUTS
- 3 TOBACCO
- 4 WOOL/MOHAIR

7. THE RECORD DESCRIPTOR IS AVAILABLE FROM THE DED ON HONEYWELL.

## HIS COMMON ROUTINES

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## H.I.S. COMMON ROUTINES

ROUTINE MME05 - CALCULATES AND VERIFIES PRODUCER-ID CHECK DIGIT

PROGRAM REQUIREMENTS FOR MME05.

## 1. WORKING-STORAGE SECTION.

```
01 PRODUCER-AREA.
 05 PROD-ID PIC 9(9).
 05 CHKDIGIT PIC 9.
 05 CALCKDG PIC 9.
 05 RET-CODE PIC X.

 88 VAL-CHK VALUE "Y"
 88 NOT-VAL VALUE "N"
```

## 2. PROCEDURE DIVISION.

CALL 'MME05' USING PRODUCER-AREA.

## 3. JCL REQUIRED.

```
$ LIBRARY LX
$ EXECUTE
$ PRMFL LX,R/C,R,MUTIL1/MEOBJ/MELIB
```

(NOTE: LX REQUIREMENTS ARE DEFINED IN PARAGRAPH 255.)

## 4. PROVIDED A PRODUCER ID IN PROD-ID AND A CHECK DIGIT IN CHKDIGIT, MME05 WILL RETURN A CALCULATED CHECK DIGIT AND A RETURN CODE IN CALCKDG AND RET-CODE, RESPECTIVELY. THE RETURN CODE WILL CONTAIN ONE OF THE FOLLOWING:

```
Y = CHKDIGIT AND CALCKDG MATCH
N = CHKDIGIT AND CALCKDG DO NOT MATCH
```

## H.I.S. COMMON ROUTINES

ROUTINE MME17 - FORMATS A FARM NUMBER

PROGRAM REQUIREMENTS FOR MME17.

## 1. WORKING-STORAGE SECTION.

```
01 PARAMETERS.
 05 FARM-NUMBER PIC X(10).
 05 FORMATTED-NUMBER PIC X(10)..
 05 ERROR-FIELD PIC X.
 05 RET-CODE PIC X.
```

## 2. PROCEDURE DIVISION.

CALL "MME17" USING PARAMETERS.

## 3. JCL REQUIRED.

```
S LIBRARY L1
S EXECUTE
S PRMFL L1,R/C,R,MUTIL1/MEOBJ/MELIB
```

## 4. THE FARM NUMBER TO BE FORMATTED WILL BE MOVED TO FARM-NUMBER. ROUTINE MME17 WILL FORMAT THE FARM NUMBER AND PLACE IT IN FORMATTED-NUMBER.

A. AN ERROR CODE OF "E" WILL BE RETURNED IN ERROR-FIELD IF:

- 1 THE FARM-NUMBER IS BLANK
- 2 THE FIRST POSITION OF THE FARM-NUMBER IS BLANK
- 3 THE FARM-NUMBER CONTAINS OTHER THAN ALPHA, NUMERIC, OR BLANK CHARACTERS.

B. AN ERROR CODE "BLANK" INDICATES THAT THE FARM-NUMBER HAS BEEN FORMATTED.

## H.I.S. COMMON ROUTINES

ROUTINE MME21 - EDIT A DRAFT AMOUNT

PROGRAM REQUIREMENTS FOR MME21.

## 1. WORKING-STORAGE SECTION.

01 PARAMETERS.

05 DRAFT-AMT PIC X(12).  
05 EDIT-DRAFT-AMT PIC X(12).

## 2. PROCEDURE DIVISION.

CALL 'MME21' USING PARAMETERS.

## 3. JCL REQUIRED.

S LIBRARY LI  
S EXECUTE  
S PRMFL LI,R/C,R,MUTILL/MEOBJ/MELIB

## 4. THE DRAFT AMOUNT TO BE EDITED WILL BE MOVED TO THE DRAFT-AMT FIELD. THE EDITED RESULTS ARE PLACED IN THE EDIT-DRAFT-AMT FIELD.

## 5. THE LITERAL 'ERROR' WILL BE RETURNED TO THE CALLING PROGRAM IN THE EDIT-DRAFT-AMT FIELD (LEFT-JUSTIFIED) IF:

- A. THE TENTH POSITION OF THE DRAFT AMOUNT FIELD IS NOT A DECIMAL POINT.
- B. THERE IS MORE THAN ONE OCCURRENCE OF A DOLLAR SIGN.
- C. THE CHARACTER PRECEDING A COMMA IS NOT AN UNSIGNED NUMERIC.
- D. AFTER THE EDITING OF THE DRAFT AMOUNT DATA A CHARACTER OTHER THAN AN UNSIGNED NUMERIC IS FOUND.

NOTE: IF THE CALLING PROGRAM ONLY PROCESSES TEN BYTE DRAFT AMOUNT DATA, THE DRAFT AMOUNT DATA MUST BE MOVED TO THE DRAFT-AMT FIELD RIGHT-JUSTIFIED AND SPACES MOVED INTO THE FIRST TWO BYTES.

## H.I.S. COMMON ROUTINES

ROUTINE MME30 - STATE/COUNTY NAME AND ADDRESS ACCESS ROUTINE

PROGRAM REQUIREMENTS FOR MME30.

THE WORKING-STORAGE STATE/COUNTY RECORD AREA IS MAINTAINED AS A MEMBER OF SOURCE LIBRARY MUTIL1/LIBSRC/ALLSRC. TO COPY THIS RECORD AREA INTO THE CALLING PROGRAM, CODE THE FOLLOWING COBOL STATEMENT IN THE WORKING-STORAGE SECTION:

COPY STCTYREC.

THE OPTION 'COPY' MUST BE INCLUDED IN THE CBL74 JOB CONTROL CARD AND THE FOLLOWING SOURCE LIBRARY REFERENCE MUST BE GIVEN:

S PRMFL .L,R/C,R,MUTIL1/LIBSRC/ALLSRC

THE CALL STATEMENT FOR THE ROUTINE IS:

CALL "MME30" USING ST-CTY-RECD.

THE CALLING PROGRAM MUST SUPPLY STATE-CODE, COUNTY-CODE AND RECD-TYPE VALUES AS FOLLOWS:

FOR STATE-LEVEL INFORMATION:

| DATA NAME   | VALUE           |
|-------------|-----------------|
| STATE-CODE  | FIPS STATE CODE |
| COUNTY-CODE | 000             |
| RECD-TYPE   | 0               |

FOR COUNTY-LEVEL INFORMATION

| DATA NAME   | VALUE             |
|-------------|-------------------|
| STATE-CODE  | FIPS STATE CODE   |
| COUNTY-CODE | VALID COUNTY CODE |
| RECD-TYPE   | 1                 |

FOR STATE/COUNTY CODE VALIDATION THE USER SHOULD MOVE THE CODES TO BE VALIDATED TO THE STATE-CODE-X AND COUNTY-CODE-X FIELDS WHICH CONTAIN ALPHANUMERIC DESCRIPTIONS.

## H.I.S. COMMON ROUTINES

THIS IS NECESSARY BECAUSE HONEYWELL EXPECTS DATA WHICH IS MOVED TO A NUMERIC FIELD TO BE NUMERIC; SO ALPHABETICS OR SPECIAL CHARACTERS ARE TRANSFORMED TO NUMERICS SINCE ONLY THE LOW-ORDER 4 BITS OF THE DATA ARE MOVED.

THE VALIDITY-CODE FIELD MUST BE CHECKED AFTER CALLING ROUTINE MME30. IF THIS FIELD IS 'N', RATHER THAN A NUMERIC CHECK DIGIT, THE SPECIFIED STATE/COUNTY RECORD WAS NOT FOUND.

JCL REQUIREMENTS FOR LINKING AND EXECUTING THE MME30 ROUTINE ARE:

```
$ LIBRARY L1
$ EXECUTE
$ PRMFL L1,R/C,R,MUTIL1/MEOBJ/MELIB
$ PRMFL U1,R,R,MUTIL1,MBDAT/MMBSTCTY <1> <3>
$ PRMFL X1,R,R,MUTIL1/MBDAT/MMBSTCTX <2> <4>
```

- <1> THIS CARD DESCRIBES THE DATA PORTION OF THE STATE/COUNTY NAME AND ADDRESS FILE WHICH IS AN INDEXED FILE.
- <2> THIS CARD DESCRIBES THE INDEX PORTION OF THE ABOVE INDEXED FILE.
- <3> THE REFERENCE TO MMBSTCTY SHOULD BE CHANGED TO MMBCOOP IF THE COOP CODES VERSION OF THE FILE IS REQUIRED.
- <4> THE REFERENCE TO MMBSTCTX SHOULD BE CHANGED TO MMBCOOPX IF THE COOP CODES VERSION OF THE INDEX IS REQUIRED.

## H.I.S. COMMON ROUTINES

ROUTINE MME41 - DATE VALIDATION (MMDDYY)

PROGRAM REQUIREMENTS FOR MME41.

1. WORKING-STORAGE SECTION.  
01 PARM-DATE.  
05 PARM-MM PIC XX.  
05 PARM-DD PIC XX.  
05 PARM-YY PIC XX.  
01 VALIDITY-CHECK PIC X.
2. PROCEDURE DIVISION.  
CALL "MME41" USING PARM-DATE VALIDITY-CHECK.
3. JCL REQUIRED.  
S LIBRARY L1  
S EXECUTE  
S PRMFL L1,R/C,R,MUTIL1/MEOBJ/MELIB
4. THE DATE TO BE VALIDATED MUST BE MOVED TO PARM-DATE.  
ROUTINE MME41 WILL VALIDATE THE DATE AND RETURN A "V" FOR  
VALID OR AN "I" FOR INVALID IN THE VALIDITY-CHECK FIELD.

## H.I.S. COMMON ROUTINES

ROUTINE MME42 - DATE VALIDATION (YYMMDD)

PROGRAM REQUIREMENTS FOR MME42.

1. WORKING-STORAGE SECTION.  
01 PARM-DATE.  
05 PARM-YY PIC XX.  
05 PARM-MM PIC XX.  
05 PARM-DD PIC XX.  
01 VALIDITY-CHECK PIC X.
2. PROCEDURE DIVISION.  
CALL "MME42" USING PARM-DATE VALIDITY-CHECK.
3. JCL REQUIRED.  
\$ LIBRARY LI  
\$ EXECUTE  
\$ PRMFL LI,R/C,R,MUTIL1/MEOBJ/MELIB
4. THE DATE TO BE VALIDATED MUST BE MOVED TO PARM-DATE.  
ROUTINE MME42 WILL VALIDATE THE DATE AND RETURN A "V" FOR  
VALID OR AN "I" FOR INVALID IN THE VALIDITY-CHECK FIELD.

## H.I.S. COMMON ROUTINES

## ROUTINE MME43 - ELAPSED DAYS, MONTHS, AND YEARS

## PROGRAM REQUIREMENTS FOR MME43.

1. COMMON ROUTINE MME43 DETERMINES THE ELAPSED YEARS, MONTHS AND DAYS BETWEEN A FROM-DATE AND TO-DATE WHICH IS SUPPLIED BY THE CALLING PROGRAM. THIS ROUTINE WILL RETURN TO THE CALLING PROGRAM THE YEAR DIFFERENCE, MONTH DIFFERENCE AND DAY DIFFERENCE. IF VALIDATION ERRORS OCCUR, THE ROUTINE WILL RETURN AN ERROR CODE INDICATOR.
2. WORKING-STORAGE SECTION.  
01 PARAMETERS.  
05 FROM-DATE PIC 9(6). (MMDDYY FORMAT)  
05 TO-DATE PIC 9(6). (MMDDYY FORMAT)  
05 ELAPSED-DAYS PIC 9(5).  
05 ELAPSED-MONTHS PIC 9(4).  
05 ELAPSED-YEARS PIC 999.  
05 ERROR-CODE PIC X.
3. PROCEDURE DIVISION.  
CALL "MME43" USING PARAMETERS.
4. JCL REQUIRED.  
\$ LIBRARY LX  
\$ EXECUTE  
\$ PRMFL LX,R/C,R,MUTIL1/MEOBJ/MELIB
5. THE USER PROGRAM CALLING MME43 MUST SUPPLY THE FROM-DATE AND TO-DATE.
6. MME43 DETERMINES THE NUMBER OF DAYS BETWEEN THE FROM-DATE AND TO-DATE AND RETURNS THE RESULT IN THE ELAPSED-DAYS FIELD. LEAP YEARS ARE ACCOUNTED FOR WHEN CALCULATING TOTAL DAYS.
7. THE ELAPSED-MONTHS FIELD IS CALCULATED IN MME43 BY DIVIDING TOTAL ELAPSED DAYS BY 30.
8. THE ELAPSED-YEARS FIELD IS CALCULATED IN MME43 BY DIVIDING THE TOTAL ELAPSED DAYS BY 365.
9. IF THE ACTUAL YEAR SPAN IS GREATER THAN 56, THE RESULTS FOR ELAPSED DAYS, MONTHS AND YEARS ARE UNPREDICTABLE.

## H.I.S. COMMON ROUTINES

10. THE ERROR-CODE FIELD WILL CONTAIN THE FOLLOWING:

| CODE | EXPLANATION         |
|------|---------------------|
| 0    | NO ERRORS           |
| 1    | INVALID DATE        |
| 2    | FROM-DATE > TO-DATE |
| 3    | FROM-DATE = TO-DATE |

## H.I.S. COMMON ROUTINES

ROUTINE MMEAC - RANDOM NUMBER GENERATOR

PROGRAM REQUIREMENTS FOR MMEAC.

## 1. WORKING-STORAGE SECTION.

```
01 RANDOM-NO-ARGS.
 02 MINIMUM-VALUE PIC 9(5).
 02 MAXIMUM-VALUE PIC 9(5).
 02 RANDOM-NO PIC 9(5).
```

## 2. PROCEDURE DIVISION.

CALL "MMEAC" USING RANDOM-NO-ARGS.

## 3. JCL REQUIRED.

```
$ LIBRARY LX
$ EXECUTE
$ PRMFL LX,R/C,R,MUTIL1/MEOBJ/MELIB
```

NOTE: LX REQUIREMENTS ARE DEFINED IN PARAGRAPH 255.

## 4. MMEAC IS A COBOL-74 SUBROUTINE WHICH GENERATES A FIVE DIGIT RANDOM NUMBER WITHIN A USER DEFINED RANGE. THE INTEGER RANGE OVER WHICH RANDOM NUMBERS ARE GENERATED IS SET DURING THE FIRST CALL TO MMEAC.

MINIMUM-VALUE: SPECIFIES MINIMUM RANDOM NUMBER VALUE TO BE GENERATED.

MAXIMUM-VALUE: SPECIFIES MAXIMUM RANDOM NUMBER VALUE TO BE GENERATED.

RANDOM-NO: THE SUBROUTINE GENERATED RANDOM NUMBER.

NOTE: MINIMUM-VALUE MUST BE LESS THAN MAXIMUM-VALUE. IF THIS CONDITION IS NOT MET, DEFAULT VALUES OF 00001 AND 99999 ARE USED, AND THE FOLLOWING MESSAGE IS DISPLAYED:

```
ERROR - X-MAX MUST BE GREATER THAN X-MIN RANGE RESET TO
X-MIN=1
X-MAX=99999
```

## H.I.S. COMMON ROUTINES

## ROUTINE MMEAD - PRODUCER ID VALIDATION

## PROGRAM REQUIREMENTS FOR MMEAD.

## 1. WORKING-STORAGE SECTION.

```

01 PRODUCER-AREA.
 05 INPUT-IRS-ID-NO-FORM PIC X.
 05 EXPANDED-IRS-ID-NO PIC X(13).
 05 CONDENSED-IRS-ID-NO PIC X(9).
 05 TYPE-ID-CODE PIC X.
 05 VALIDATED-TYPE-ID-CODE PIC X.
 05 TYPE-ID-CODE-IN-ERROR PIC X.
 05 ID-NUMERIC PIC X.
 05 CHK-DIGIT PIC X.
 05 VALIDATED-CHK-DIGIT PIC 9.
 05 CHK-DIGIT-IN-ERROR PIC X.
 05 ERROR-CODE PIC X.

```

## 2. PROCEDURE DIVISION.

CALL "MMEAD" USING PRODUCER-AREA.

## 3. JCL REQUIRED:

```

$ LIBRARY LX
$ EXECUTE
$ PRMFL LX,R/C,R,MUTIL1/MEOBJ/MELIB

```

## 4. THE RESPONSIBILITY OF KNOWING THE SITUATION UNDER WHICH THE PRODUCER IDENTIFICATION NUMBER COMMON ROUTINE IS CALLED RESTS WITH THE CALLING PROGRAM. INFORMATION CAN ONLY BE RETURNED BASED ON INFORMATION SUPPLIED TO THE COMMON ROUTINE.

INPUT TO THIS COMMON ROUTINE MAY BE RECEIVED IN EXPANDED OR CONDENSED FORMAT AS SPECIFIED BY A PARAMETER FIELD INPUT-IRS-ID-NO-FORM (E IF EXPANDED; C IF CONDENSED). EXPANDED VERSION OF THE PRODUCER IDENTIFICATION NUMBER WILL BE PLACED IN EXPANDED-IRS-ID-NO; CONDENSED VERSION IN CONDENSED-IRS-ID-NO.

A. IF NOT 'E' OR 'C', ERROR-CODE WILL BE SET TO 'Y' AND CONTROL RETURNED TO THE CALLING PROGRAM.

B. FOR INPUT-IRS-ID-NO-FORM 'E':

1). PROVIDE THE EXPANDED-IRS-ID-NO WITH OR WITHOUT TYPE-ID-CODE OR IMBEDDED CHECK DIGIT.

## H.I.S. COMMON ROUTINES

- 2). IF EXPANDED IRS-ID-NO EQUALS ZEROS OR NINES, VALIDATED-TYPE-ID-CODE WILL BE BLANK, OTHERWISE VALIDATED-TYPE-ID-CODE WILL BE DETERMINED AS SHOWN ON PAGE 12. IF VALIDATED TYPE-ID-CODE CANNOT BE DETERMINED, IT WILL CONTAIN A BLANK. IF TYPE-ID-CODE IS BLANK, VALIDATED-TYPE-ID-CODE WILL BE DETERMINED. A VALIDATED-TYPE-ID-CODE OF BLANK WILL RESULT IN A 'Y' BEING PLACED IN TYPE-ID-CODE-IN-ERROR. IF NON-BLANK TYPE-ID-CODE FIELD IS THE SAME AS VALIDATED-ID-CODE, TYPE-ID-CODE-IN-ERROR WILL CONTAIN AN 'N', OTHERWISE A 'Y'. IF VALIDATED-TYPE-ID-CODE IS NOT BLANK, EXPANDED IRS-ID-NO WILL BE CONDENSED, THE CHECK DIGIT POSITION PLACED IN CHK-DIGIT AND ALL SPACES ZERO FILLED. CONDENSED-IRS-ID-NO WILL BE CHECKED FOR NUMERIC AND GREATER THAN ZERO. IF THESE CONDITIONS ARE MET ID-NUMERIC WILL CONTAIN A 'Y', OTHERWISE ID-NUMERIC WILL CONTAIN AN 'N' AND CONDENSED-IRS-ID-NO WILL BE BLANK.
- 3). IF VALIDATED-ID-CODE IS BLANK, CHK-DIGIT-IN-ERROR WILL CONTAIN A 'Y'. FOR VALIDATED-TYPE-ID-CODE 1, 2 OR 5 CHECK DIGIT WILL BE VERIFIED. CHECK DIGIT POSITION WILL BE PLACED IN CHECK DIGIT. IF VALIDATED TYPE-ID-CODE IS 3, 4, 6, 7, 8 OR 9, VALIDATED-CHK-DIGIT WILL CONTAIN DIGIT AS SHOWN ON PAGE 12. IF CHK-DIGIT IS THE SAME AS VALIDATED-CHK-DIGIT, CHK-DIGIT-IN-ERROR WILL CONTAIN AN 'N', ELSE A 'Y'. IF CHK-DIGIT IS BLANK, CHK-DIGIT-IN-ERROR WILL CONTAIN AN 'N'.
- 4). CONDENSED VERSION OF VALID EXPANDED-IRS-ID-NO IS PLACED IN CONDENSED-IRS-ID-NO, WITH ALL SPACES ZERO-FILLED.
- 5). ANY ERRORS DETECTED IN THE ABOVE CHECKS WILL SET ERROR-CODE TO 'Y'.
- 6). AN ERROR-CODE OF 'N' WILL PROVIDE EXPANDED-IRS-ID-NO, CONDENSED-IRS-ID-NO, VALIDATED-TYPE-ID-CODE AND VALIDATED-CHK-DIGIT.

## H.I.S. COMMON ROUTINES

## C. FOR INPUT-IRS-ID-NO-FORM 'C':

- 1). PROVIDE THE CONDENSED-IRS-ID-NO AND TYPE-ID-CODE WITH OR WITHOUT CHK-DIGIT.
- 2). CONDENSED-IRS-ID WILL BE TESTED FOR NUMERIC. IF CONDITION IS MET ID-NUMERIC WILL CONTAIN A 'Y' ELSE AN 'N'.
- 3). IF CONDENSED-IRS-ID-NO EQUALS ZEROS OR NINES, VALIDATED-TYPE-ID-CODE WILL BE BLANK. IF ID-NUMERIC IS 'N', VALIDATED-TYPE-ID-CODE WILL BE BLANK. IF TYPE-ID-CODE 1, 2 OR 5, TYPE-ID-CODE WILL BE MOVED TO VALIDATED-TYPE-ID-CODE. FOR TYPE-ID-CODE 3, 4, 6, 7, 8 OR 9, VALIDITY IS DETERMINED AS SHOWN ON PAGE 12. IF VALID, TYPE-ID-CODE WILL BE MOVED TO VALIDATED-TYPE-ID-CODE AND 'N' WILL BE IN TYPE-ID-CODE-IN-ERROR, ELSE 'Y' IN TYPE-ID-CODE-IN-ERROR.
- 4). VALIDATION OF CHECK DIGIT IS AS SHOWN FOR FORM 'E'.
- 5). CONDENSED-IRS-ID-NO WILL BE EXPANDED AS DETERMINED BY TYPE-ID-CODE AND THE RESULT PLACED IN EXPANDED-IRS-ID-NO. IF VALIDATED TYPE-ID-CODE IS BLANK, SPACES WILL BE IN EXPANDED-IRS-ID-NO.
- 6). ANY ERRORS DETECTED IN THE ABOVE CHECKS WILL SET ERROR-CODE TO 'Y'.
- 7). AN ERROR-CODE OF 'N' WILL PROVIDE EXPANDED-IRS-ID-NO, CONDENSED-IRS-ID-NO, VALIDATED-TYPE-ID-CODE AND VALIDATED-CHK-DIGIT.

## H.I.S. COMMON ROUTINES

## IRS IDENTIFYING NUMBER

THE FOLLOWING DATA ARE CONSIDERED VALID FOR IRS IDENTIFYING NUMBER  
IN THOSE RECORDS WHICH REQUIRE A NUMBER.

| ID NO | TYPE          | ID NO | CHK-DGT |                                                                |
|-------|---------------|-------|---------|----------------------------------------------------------------|
| 4     | 55B_____B     | 5     |         | CMS DRAFT WHEN MORE THAN ONE<br>IDENT NO IS APPLICABLE.        |
| 6     | 66B_____B     | 6     |         | DRAFT ISSUED TO PAYEE WITH NO<br>IRS REPORTING REQUIREMENT.    |
| 3     | 33B_____B     | 3     |         | FEDERAL ENTITY.                                                |
| 7     | 77B_____B     | 7     |         | DRAFT ISSUED TO WOOL MARKETING<br>AGENCY.                      |
| 8     | 44B_____B     | 4     |         | DRAFT ISSUED TO POOLING AGREE-<br>MENTS.                       |
| 9     | 99B_____B     | 9     |         | CMS DRAFT WHEN NOT REPORTABLE.                                 |
| 1     | NNXNNNNNNX CX |       |         | EMPLOYER IDENTIFICATION NUMBER<br>(N, NUMBER; C, CHECK DIGIT). |
| 2     | NNNXNNXNNX CX |       |         | SOCIAL SECURITY NUMBER (N,<br>NUMBER; C, CHECK DIGIT).         |
| 5     | NNXNNXNNX CX  |       |         | TEMPORARY IDENTIFYING NUMBER<br>(N, NUMBER; C, CHECK DIGIT).   |

## H.I.S. COMMON ROUTINES

ROUTINE MMEAR - VALIDATING COUNTY CODE

PROGRAM REQUIREMENTS FOR MMEAR.

## 1. WORKING-STORAGE SECTION.

```
01 STATE-AREA.
 05 ST-CNTY-CODE PIC X(5).
 05 CNTY-NAME PIC X(32).
 05 RET-CODE PIC X.
 05 FILLER PIC XX.
```

## 2. PROCEDURE DIVISION.

CALL "MMEAR" USING STATE-AREA.

## 3. JCL REQUIRED.

```
$ LIBRARY LX
$ EXECUTE
$ PRMFL LX,R/C,R,MUTIL1/MEOBJ/MELIB
$ PRMFL U1,Q,R,MUTIL1/MBDAT/MMBSTCTY
$ PRMFL X1,Q,R,MUTIL1/MBDAT/MMBSTCTX
```

## 4. PROVIDED A VALID STATE CODE AND COUNTY CODE IN ST-CNTY-CODE, MMEAR WILL RETURN A COUNTY NAME IN CNTY-NAME AND A RETURN CODE 'Y' IN RET-CODE. AN 'N' IN RET-CODE IMPLIES THAT ST-CNTY-CODE WAS NOT NUMERIC OR NOT A VALID CODE AND CNTY-NAME WILL CONTAIN SPACES.

## H.I.S. COMMON ROUTINES

## ROUTINE MMEAL - VALIDATING STATE CODE

## PROGRAM REQUIREMENTS FOR MMEAL.

## 1. WORKING-STORAGE SECTION.

```
01 STATE-AREA.
 05 ST-CODE PIC XX.
 05 ST-ABBR PIC XX.
 05 ST-NAME PIC X(40).
 05 RET-CODE PIC X.
```

## 2. PROCEDURE DIVISION.

CALL "MMEAL" USING STATE-AREA.

## 3. JCL REQUIRED.

```
$ LIBRARY LX
$ EXECUTE
$ PRMFL LX,R/C,R,MUTIL1/MEOBJ/MELIB
```

## 4. PROVIDED A VALID STATE CODE IN ST-CODE, MMEAL WILL RETURN A STATE ABBREVIATION AND STATE NAME IN ST-ABBR AND ST-NAME RESPECTIVELY, AND A RETURN CODE 'Y' IN RET-CODE. AN 'N' IN RET-CODE IMPLIES THAT ST-CODE IS NOT NUMERIC OR NOT A VALID STATE CODE.

## H.I.S. COMMON ROUTINES

## ROUTINE MMEBA - VALIDATING COUNTY CODE

## PROGRAM REQUIREMENTS FOR MMEBA.

## 1. WORKING-STORAGE SECTION.

## 01 ST-CNTY-AREA.

|                  |            |
|------------------|------------|
| 05 ST-CODE       | PIC XX.    |
| 05 CNTY-CODE     | PIC XXX.   |
| 05 DIST-DIR-CODE | PIC XXX.   |
| 05 REGION-CODE   | PIC X.     |
| 05 CNTY-NAME     | PIC X(15). |
| 05 ST-NAME       | PIC X(15). |
| 05 RET-CODE      | PIC X.     |

## 2. PROCEDURE DIVISION.

CALL "MMEBA" USING ST-CNTY-AREA.

## 3. JCL REQUIRED.

|            |                              |
|------------|------------------------------|
| \$ LIBRARY | LX                           |
| \$ EXECUTE |                              |
| \$ PRMFL   | LX,R/C,R,MUTIL1/MEOBJ/MELIB  |
| \$ PRMFL   | U1,Q,R,MUTIL1/MBDAT/MMBSTCTY |
| \$ PRMFL   | X1,Q,R,MUTIL1/MBDAT/MMBSTCTX |

## 4. PROVIDED A NUMERIC STATE CODE AND COUNTY CODE IN ST-CODE AND CNTY-CODE, DIST-DIR-CODE, REGION-CODE, CNTY-NAME AND ST-NAME WILL BE AVAILABLE WITH A 'Y' IN RET-CODE. IF STATE AND COUNTY CODE ARE NOT NUMERIC OR NOT VALID, AN 'N' WILL BE IN RET-CODE.

## H.I.S. COMMON ROUTINES

## ROUTINE MMEBF - DETERMINE CONGRESSIONAL DISTRICT INFORMATION

## PROGRAM REQUIREMENTS FOR MMEBF.

## 1. WORKING-STORAGE SECTION.

```
01 ST-CTY-AREA.
 05 ST-CODE PIC XX.
 05 CNTY-CODE PIC XXX.
 05 CONG-DIST PIC X(38).
 05 ST-ABBR PIC X(9).
 05 CNTY-ABBR PIC X(9).
 05 ST-NAME PIC X(13).
 05 CNTY-NAME PIC X(18).
 05 RET-CODE PIC X.
```

## 2. PROCEDURE DIVISION.

```
CALL "MMEBF" USING ST-CNTY-AREA.
```

## 3. JCL REQUIRED.

```
$ LIBRARY LX
$ EXECUTE
$ PRMFL LX,R/C,R,MUTIL1/MEOBJ/MELIB
$ PRMFL U1,Q,R,MUTIL1/MBDAT/MMBSTCTY
$ PRMFL X1,Q,R,MUTIL1/MBDAT/MMBSTCTX
```

## 4. PROVIDED A NUMERIC STATE AND COUNTY CODE IN ST-CODE AND CNTY-CODE, CONG-DIST, ST-ABBR, CNTY-ABBR, ST-NAME AND CNTY-NAME WILL BE AVAILABLE WITH A "Y" IN RET-CODE. IF STATE AND COUNTY CODE ARE NOT NUMERIC OR NOT VALID, AN "N" WILL BE IN RET-CODE.

## H.I.S. COMMON ROUTINES

ROUTINE MMEBW - CALCULATE AND VERIFY STATE AND COUNTY CODE CHECK DIGIT

PROGRAM REQUIREMENTS FOR MMEBW.

1. WORKING-STORAGE SECTION.
  - 01 ST-CTY-AREA.
    - 05 ST-CNTY-CODE PIC X(5).
    - 05 CHK-DIGIT PIC X.
    - 05 RECALC-CHK-DIGIT PIC X.
    - 05 RET-CODE PIC X.
2. PROCEDURE DIVISION.
  - CALL "MMEBW" USING ST-CNTY-AREA.
3. JCL REQUIRED.
  - \$ LIBRARY LX
  - \$ EXECUTE
  - \$ PRMFL LX,R/C,R,MUTIL1/MEOBJ/MELIB
4. PROVIDED A NUMERIC STATE AND COUNTY CODE AND CHECK DIGIT IN ST-CNTY-CODE AND CHK-DIGIT, CHECK DIGIT WILL BE VALIDATED AND PLACED IN THE RECALCULATED CHECK DIGIT FIELD RECALC-CHK-DIGIT. IF CHK-DIGIT AND RECALC-CHK-DIGIT ARE THE SAME, A RETURN CODE OF "Y" WILL BE IN RET-CODE. IF NOT THE SAME AN "N" WILL BE IN RET-CODE. IF ST-CNTY-CODE IS NOT NUMERIC 'HIGH-VALUE' WILL BE IN RET-CODE.

## H.I.S. COMMON ROUTINES

ROUTINE MMEC5 - BREAK OUT NAME AND ADDRESS

PROGRAM REQUIREMENTS FOR MMEC5.

## 1. WORKING-STORAGE SECTION.

```
01 NAME-ADDR-RECD.
 02 RECD-IN PIC X(56).
 02 RECD-OUT.
 03 RECD-NAME PIC X(28).
 03 RECD-ADDR PIC X(28).
 03 RECD-CITY PIC X(28).
 02 RET-CODE PIC 9.
```

## 2. PROCEDURE DIVISION.

CALL "MMEC5" USING NAME-ADDR-RECD.

## 3. JCL REQUIRED.

```
$ LIBRARY LX
$ EXECUTE
$ PRMFL LX,R/C,R,MUTIL1/MEOBJ/MELIB
```

## 4. PROVIDED A NAME AND ADDRESS FIELD IN RECD-IN FROM THE NAME AND ADDRESS MASTER FILE, THE NAME AND ADDRESS AND CITY WILL BE SEPARATED AND PLACED IN RECD-OUT. IF THERE IS NO ADDRESS FIELD, CITY WILL BE LOCATED IN THE RECD-ADDR AND RECD-CITY WILL CONTAIN SPACES. IF ANY OF THE RECD-OUT FIELDS ARE LONGER THAN 28 POSITIONS A '1' WILL BE PLACED IN RET-CODE AND RECD-OUT WILL CONTAIN SPACES.

## H.I.S. COMMON ROUTINES

## \*-- ROUTINE MMESN - SOCIAL SECURITY NUMBER VALIDATION

COMMON ROUTINE MMESN WILL DETERMINE THE VALIDITY OF A SOCIAL SECURITY NUMBER. THE ROUTINE WILL ACCEPT EITHER A NINE DIGIT (COMPRESSED) OR ELEVEN DIGIT (EXPLODED) SOCIAL SECURITY NUMBER (ID TYPE 2 ONLY), VALIDATE AND RETURN A COMPRESSED SOCIAL SECURITY NUMBER AND AN ERROR FLAG.

## PROGRAM REQUIREMENTS FOR MMESN.

## 1. WORKING-STORAGE SECTION.

01 CALL-AREA.

05 SSN.

07 SS-9 PIC 9(9).

07 FILLER PIC 99.

05 ERROR-FLAG PIC X.

## 2. PROCEDURE DIVISION.

IF TYPE-OF-ID = 2 MOVE INPUT-ID TO SSN.  
CALL "MMESN" USING CALL-AREA.

## 3. ERROR CODES.

IF ERROR-FLAG = "E" THE SOCIAL SECURITY NUMBER WAS NOT VALID.  
IF ERROR-FLAG = "SPACE" THE SOCIAL SECURITY NUMBER WAS VALID.

## 4. EXECUTION JCL REQUIRED.

```
$ LINK .MMESN
$ USE MMESN
$ ENTRY MMESN
$ LIBRARY LX
$ EXECUTE
$ PRMFL LX,R/C,R,MUTIL1/MEOBJ/MELIB
```

NOTE: THE LINK, USE AND ENTRY CONTROL CARDS ARE REQUIRED FOR DYNAMIC CALLS, SO THAT THE CURRENT VERSION OF THE PROGRAM IS USED AT EXECUTION TIME.

## 5. THIS ROUTINE HANDLES ONLY SOCIAL SECURITY NUMBERS. IF AN EMPLOYER ID (TYPE 1) IS USED IN COMPRESSED FORMAT, THE ROUTINE MAY RETURN A VALID CODE. ANY OTHER TYPE OF ID (99, 33, 44, ETC.) WILL BE MARKED INVALID.

## H.I.S. COMMON ROUTINES

## ROUTINE MMEPM - PARM FILE ACCESS

COMMON ROUTINE MMEPM HAS BEEN DEVELOPED TO ACCESS A PARAMETER FILE. IT HAS BEEN LOADED UNDER UMC MUTIL1 AS /MEOBJ/MELIB. THE CALLING PROGRAM WILL CALL MMEPM FOR A SPECIFIC PARAMETER RECORD AND THE ROUTINE WILL RETRIEVE THIS RECORD.

## PROGRAM REQUIREMENTS FOR MMEPM.

1. WORKING-STORAGE SECTION.
  - 01 PARM-AREA.
    - 05 PARM-KEY PIC X(6).
    - 05 PARM-ERR PIC X.
    - 05 PARM-VARIABLES PIC X(73).

PARM-KEY IS TO HAVE A VALUE MOVED TO IT BY THE CALLING PROGRAM.

PARM-VARIABLES IS TO BE DEFINED AND DESCRIBED BASED ON THE PARAMETERS THAT THE CALLING PROGRAM IS EXPECTING.

2. PROCEDURE DIVISION.
 

CALL "MMEPM" USING PARM-AREA.

3. JCL REQUIRED.

```

$ LINK .MMEPM <1>
$ USE MMEPM <1>
$ ENTRY MMEPM <1>
$ LIBRARY LI
$ EXECUTE
$ PRMFL LI,R/C,R,MUTIL1/MEOBJ/MELIB
$ PRMFL RZ,Q,S,USERUMC/UTIL/MSSPARM <2>

```

<1>. THE LINK, USE AND ENTRY CONTROL CARDS ARE NOT REQUIRED FOR STATIC CALLS BUT ARE SHOWN HERE AS THEY ARE NECESSARY FOR DYNAMIC CALLS.

<2>. THE FILE CODE "RZ" IS REQUIRED FOR THE PARM FILE.

## H.I.S. COMMON ROUTINES

## 4. FUNCTIONS

- A. WHEN THE SEQUENTIAL NUMERIC IDENTIFIER OF PARM-KEY IS ZERO (E.G., MLDXAO):
- 1). IF A PARM RECORD IS NOT FOUND, MMEPM WILL ABORT WITH A USER ABORT CODE OF "PA".
  - 2). THE FIRST NINE POSITIONS OF PARM-VARIABLES WILL BE EXPECTED TO BE A VALID JOBNO (MMDDYYRJJ). IF MMDDYY IS NOT A VALID DATE OR RJJ IS NOT UNSIGNED NUMERIC, MMEPM WILL ABORT WITH A USER ABORT CODE OF "PC".
- B. WHEN THE SEQUENTIAL NUMERIC IDENTIFIER OF PARM-KEY IS ONE THROUGH NINE (E.G., MLDXA2) AND A PARM RECORD IS NOT FOUND, MMEPM WILL INSERT "N" IN PARM-ERR AND RETURN TO CALLING PROGRAM.
- C. EXAMPLE PARM FILE.

THE PARAMETER FILE REQUIRED FOR A JOB CONSISTING OF FOUR PROGRAMS COULD BE AS FOLLOWS:

USERUMC/UTIL/MFBPARAM

MFBAA0,091583001,DAILY  
MFBAB0,091583001  
MFBAC0,091583001,1,1978  
MFBAC1,YES,NO,NO,YES,SALES  
MFBAD0,091583001,1978,FINAL

- D. IT IS THE RESPONSIBILITY OF THE CALLING PROGRAM TO CHECK PARM-ERR AND TAKE APPROPRIATE ACTION WHEN THE REQUESTED PARM-KEY WITH SEQUENTIAL NUMERIC IDENTIFIER ONE THROUGH NINE IS NOT FOUND.
- E. TEST USAGE.
- 1). PARAMETER FILE INFORMATION WILL BE ENTERED INTO THE PARM FILE BY SYSTEM DIVISION PERSONNEL DURING UNIT AND INTEGRATION TESTING. THE ACCEPTANCE TEST TEAM WILL ENTER PARAMETER INFORMATION DURING ACCEPTANCE TESTING.

H.I.S. COMMON ROUTINES

- 2). TEST PARAMETER FILES SHOULD BE PURGED BY THE APPLICATION DIVISION WHEN THE SYSTEM IS PLACED INTO PRODUCTION.

F. PRODUCTION USAGE.

- 1). PARAMETER DESCRIPTIONS SHOULD BE INCLUDED AS AN EXHIBIT IN THE OPERATIONS MANUAL.
- \*-- 2). CSPD PERSONNEL WILL ENTER PARAMETER INFORMATION TO THE --\* PARM FILE FOR ALL PRODUCTION SYSTEMS. A UTL2 ACTIVITY WITH AN "SDUMP" OPTION WILL BE INCLUDED IN EACH PRODUCTION JOB TO PROVIDE AN HISTORICAL RECORD OF THE PARM FILE CONTENTS FOR EACH PROCESS.

## HIS COMMON ROUTINES

## \*-- ROUTINE MMEOL - OBJECT LIBRARY INDEX

## DESCRIPTION -

MMEOL IS A COBOL-74 PROGRAM WHICH SCANS AN OBJECT LIBRARY GENERATED BY OBJLIB AND PRINTS A TABLE OF MODULE NAMES AND THEIR CORRESPONDING CREATION DATE AND TIME. INPUT DATA RESIDES ON FILE R2 IN GFRC SYSTEM STANDARD FORMAT. THIS FILE IS GENERATED BY A PRELIMINARY \$ OBJLIB ACTIVITY IN WHICH ALL PROGRAM MODULES ARE WRITTEN TO A SEQUENTIAL FILE VIA THE EXTRACT \*ALL DIRECTIVE. OUTPUT FROM ACTIVITY 2 IS TO SYSOUT REPORT CODE 00 VIA DISPLAY STATEMENTS. THIS FORM OF OUTPUT ELIMINATES THE NEED FOR THE USER TO DEFINE A SYSTEM OUTPUT FILE.

## CARD COLUMN

|         |         |                                           |
|---------|---------|-------------------------------------------|
| 1       | 8       | 16                                        |
| \$      | IDENT   |                                           |
| \$      | OBJLIB  |                                           |
| \$      | PRMFL   | OT,R,R, CAT/FILE-STRING OF OBJECT LIBRARY |
| \$      | FILE    | 43,Z1S,20L                                |
| EXTRACT | *ALL    |                                           |
| NOWRITE |         |                                           |
| TABLE   |         | (OPTIONAL)                                |
| \$      | OPTION  | CBL74                                     |
| \$      | USE     | MMEOL                                     |
| \$      | ENTRY   | MMEOL                                     |
| \$      | LIBRARY | LO                                        |
| \$      | EXECUTE |                                           |
| \$      | PRMFL   |                                           |
| \$      | FILE    | R2,Z1R                                    |

## ERROR CONDITIONS

- (1) \*\*INPUT DECK ERROR\*\*  
DATA NOT IN OBJLIB FORMAT  
\*\*PROCESSING TERMINATED\*\*

THE DATA IN FILE R2 IS NOT IN OBJECT LIBRARY FORMAT. CHECK CONTENTS OF FILE R2 TO INSURE THAT IT IS A SEQUENTIAL FILE GENERATED BY THE EXTRACT \*ALL DIRECTIVE IN UTILITY PROGRAM OBJLIB.

- (2) \*\*DATA SEQUENCE ERROR\*\*  
\$ OBJECT/DKEND CARD NOT FOUND

HIS COMMON ROUTINES

AN ILLEGAL CARD HAS BEEN ENCOUNTERED DURING PROCESSING. OBJECT  
DECKS MUST BEGIN WITH A \$ OBJECT CARD AND TERMINATE WITH A \$ DKEND  
CARD. A CONTROL CARD OTHER THAN OBJECT OF DKEND WAS READ. INPUT  
FILE IS NOT OBJECT LIBRARY OR BAD MODULE EXISTS ON LIBRARY. ---\*

PERSONAL COMPUTER DISKETTE LABELING STANDARDS  
(INTERNAL LABELS)

THE FOLLOWING CODES ARE USED IN INTERNAL DISKETTE LABELS

| DIV. | BR. | DESCRIPTION                                  | LABEL       |
|------|-----|----------------------------------------------|-------------|
| 00   | 0   | SECURITY OFFICERS (KCMO)                     | 05MF000NNNN |
| 02   | 0   | DATA OPERATIONS (KCMO)                       | 05MF020NNNN |
|      | 1   | PRODUCER PROGRAMS                            | 05MF021NNNN |
|      | 2   | TECHNICAL ASSISTANCE                         | 05MF022NNNN |
|      | 4   | ACCEPTANCE CERTIFICATION                     | 05MF024NNNN |
| 03   | 0   | FINANCIAL SYSTEMS (KCMO)                     | 05MF030NNNN |
|      | 1   | FINANCIAL MANAGEMENT                         | 05MF031NNNN |
|      | 2   | ACCOUNTING                                   | 05MF032NNNN |
|      | 3   | SCOAP ACCOUNTING                             | 05MF033NNNN |
|      | 4   | ABAFAS ACCOUNTING                            | 05MF034NNNN |
| 04   | 0   | PRODUCER PROGRAMS SYSTEMS (KCMO)             | 05MF040NNNN |
|      | 1   | SCOAP COMPLIANCE                             | 05MF041NNNN |
|      | 2   | TOBACCO                                      | 05MF042NNNN |
|      | 3   | PRODUCTION ADJUSTMENT                        | 05MF043NNNN |
|      | 4   | FARM RECORDS                                 | 05MF044NNNN |
|      | 5   | SIGN-UP AND PAYMENTS                         | 05MF045NNNN |
| 05   | 0   | DATA MANAGEMENT & SYSTEMS PROGRAMMING (KCMO) | 05MF050NNNN |
|      | 1   | DESIGN & DATA MANAGEMENT                     | 05MF051NNNN |
|      | 2   | SYSTEMS SUPPORT & PROGRAMMING                | 05MF052NNNN |
|      | 4   | QUALITY CONTROL                              | 05MF054NNNN |
| 06   | 0   | SUPPORT & SPECIAL SYSTEMS (KCMO)             | 05MF060NNNN |
|      | 1   | CONSERVATION AND SPECIAL SYSTEMS             | 05MF061NNNN |
|      | 2   | COE SYSTEMS                                  | 05MF062NNNN |
|      | 3   | SUPPORT SYSTEMS                              | 05MF063NNNN |
| 07   | 0   | GOVERNMENT ACCOUNTING OFFICE (GAO)           | 05MF070NNNN |
| 08   | 0   | COMPUTER SYSTEMS & PROD. MANAGEMENT (KCMO)   | 05MF080NNNN |
|      | 1   | SCHEDULING & COMMODITY BRANCH                | 05MF081NNNN |
|      | 2   | ENTRY & OPERATIONS                           | 05MF082NNNN |
|      | 3   | MANAGEMENT INFORMATION                       | 05MF083NNNN |
| 10   | 0   | INFORMATION RESOURCES MANAGEMENT (WDC)       | 05MF100NNNN |

PERSONAL COMPUTER DISKETTE LABELING STANDARDS  
(INTERNAL LABELS)

| DIV.   | BR. | DESCRIPTION                                 | LABEL           |
|--------|-----|---------------------------------------------|-----------------|
| 11     | 0   | LOANS SYSTEMS (KCMO)                        | 05MF110NNNN     |
|        | 1   | COMMODITY LOANS                             | 05MF111NNNN     |
|        | 2   | MISCELLANEOUS LOANS                         | 05MF112NNNN     |
|        | 3   | COTTON AND LOANS REPORTING                  | 05MF113NNNN     |
| 12     | 0   | ELECTRONIC DATA SYSTEMS, INC. (CONTRACTOR)  | 05MF120NNNN     |
| 13     | 0   | TELECOMMUNICATIONS (KCMO)                   | 05MF130NNNN     |
|        | 1   | COMMUNICATIONS SOFTWARE                     | 05MF131NNNN     |
|        | 2   | EQUIPMENT MANAGEMENT                        | 05MF132NNNN     |
|        | 4   | NETWORK ANALYSIS                            | 05MF134NNNN     |
| 14     | 0   | OFFICE OF THE INSPECTOR GENERAL (OIG)       | 05MF140NNNN     |
| 15     | 0   | FISCAL (KCCO)                               | 05MF150NNNN     |
|        | 1   | INVENTORY CONTROL                           | 05MF151NNNN     |
|        | 2   | PAYMENT                                     | 05MF152NNNN     |
|        | 3   | PROCESSED COMMODITIES                       | 05MF153NNNN     |
|        | 4   | SALES INVOICE                               | 05MF154NNNN     |
|        | 5   | SETTLEMENT                                  | 05MF155NNNN     |
| 16     | 0   | PROCESSED COMMODITIES SYSTEMS (KCMO)        | 05MF160NNNN     |
|        | 1   | ACQUISITIONS & DISPOSITIONS                 | 05MF161NNNN     |
|        | 2   | INVENTORY & SETTLEMENTS                     | 05MF162NNNN     |
|        | 3   | SYSTEM SUPPORT                              | 05MF163NNNN     |
| 17     | 0   | GRAIN SYSTEMS (KCMO)                        | 05MF170NNNN     |
|        | 1   | INVENTORY ACQUISITIONS                      | 05MF171NNNN     |
|        | 2   | INVENTORY CONTROL & DISBURSEMENTS           | 05MF172NNNN     |
|        | 3   | INVENTORY DISPOSITIONS & SETTLEMENTS        | 05MF173NNNN     |
| *-- 20 | 0   | FISCAL (WDC)                                | 05MF200NNNN     |
| 21     | 0   | MANAGEMENT SERVICES (WDC)                   | 05MF210NNNN     |
| 23     | 0   | BUDGET (WDC)                                | 05MF230NNNN --* |
| 25     | 0   | TRAFFIC MANAGEMENT (KCCO)                   | 05MF250NNNN     |
|        | 1   | BULK COMMODITIES                            | 05MF251NNNN     |
|        | 2   | FREIGHT SETTLEMENT                          | 05MF252NNNN     |
|        | 3   | PROCESSED COMMODITIES SERVICES              | 05MF253NNNN     |
| *-- 27 | 0   | AERIAL PHOTOGRAPHY FIELD OFFICE (SALT LAKE) | 05MF270NNNN --* |

PERSONAL COMPUTER DISKETTE LABELING STANDARDS  
(INTERNAL LABELS)

| DIV. | BR. | DESCRIPTION                                 | LABEL           |
|------|-----|---------------------------------------------|-----------------|
| 30   | 0   | WAREHOUSE EXAMINATION (KCCO)                | 05MF300NNNN     |
|      | 1   | CENTRAL EXAMINATION                         | 05MF301NNNN     |
|      | 2   | EASTERN EXAMINATION                         | 05MF302NNNN     |
|      | 3   | EXAMINATION REVIEW                          | 05MF303NNNN     |
|      | 4   | WESTERN EXAMINATION                         | 05MF304NNNN     |
| 33   | 0   | BULK GRAIN INVENTORY (KCCO)                 | 05MF330NNNN     |
|      | 1   | DATA ENTRY SUPPORT                          | 05MF331NNNN     |
|      | 2   | INVENTORY CONTROL & OPERATIONS              | 05MF332NNNN     |
|      | 3   | INVENTORY MANAGEMENT & PLANNING             | 05MF333NNNN     |
| 35   | 0   | COTTON & RICE (KCCO)                        | 05MF350NNNN     |
|      | 1   | COTTON                                      | 05MF351NNNN     |
|      | 2   | RICE                                        | 05MF352NNNN     |
| 37   | 0   | BULK GRAIN MERCHANDISING (KCCO)             | 05MF370NNNN     |
|      | 1   | EASTERN MERCHANDISING                       | 05MF371NNNN     |
|      | 2   | NORTH CENTRAL MERCHANDISING                 | 05MF372NNNN     |
|      | 3   | SOUTH CENTRAL MERCHANDISING                 | 05MF373NNNN     |
|      | 4   | WESTERN MERCHANDISING                       | 05MF374NNNN     |
| 40   | 0   | ADMINISTRATIVE SERVICES (KCMO)              | 05MF400NNNN     |
|      | 1   | MANAGEMENT SERVICES                         | 05MF401NNNN     |
|      | 2   | OPERATING SERVICES                          | 05MF402NNNN     |
| *--  | 41  | CONS. & ENVIRONMENTAL PROTECTION (WDC)      | 05MF410NNNN     |
|      | 42  | COTTON, GRAIN AND RICE (WDC)                | 05MF420NNNN     |
|      | 43  | EMERGENCY OPERATION & LIVESTOCK PROG. (WDC) | 05MF430NNNN     |
|      | 44  | TOBACCO AND PEANUTS (WDC)                   | 05MF440NNNN --* |
|      | 45  | STORAGE CONTRACT (KCCO)                     | 05MF450NNNN     |
|      | 1   | COMPLIANCE                                  | 05MF451NNNN     |
|      | 2   | GRAIN CONTRACT                              | 05MF452NNNN     |
|      | 3   | PROCESSED PRODUCTS                          | 05MF453NNNN     |
|      | 46  | LICENSE AUTHORITY (KCCO)                    | 05MF460NNNN     |
|      | 48  | ACCOUNTING MANAGEMENT STAFF (KCMO)          | 05MF480NNNN     |
|      | 49  | FINANCIAL ACCOUNTING (KCMO)                 | 05MF490NNNN     |
|      | 1   | ASCS ACCOUNTING                             | 05MF491NNNN     |
|      | 2   | CCC ACCOUNTING                              | 05MF492NNNN     |
|      | 3   | SCOAP ACCOUNTING                            | 05MF493NNNN     |

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PERSONAL COMPUTER DISKETTE LABELING STANDARDS  
(INTERNAL LABELS)

| DIV. | BR. | DESCRIPTION                              | LABEL           |
|------|-----|------------------------------------------|-----------------|
| 50   | 0   | ACCOUNTING OPERATIONS (KCMO)             | 05MF500NNNN     |
|      | 1   | DEBT MANAGEMENT                          | 05MF501NNNN     |
|      | 2   | DISBURSEMENTS AND RECEIPTS               | 05MF502NNNN     |
| *--  | 51  | 0 COMMODITY ANALYSIS (WDC)               | 05MF510NNNN     |
|      | 52  | 0 EXECUTIVE CORRESPONDENCE STAFF (WDC)   | 05MF520NNNN     |
|      | 53  | 0 PROGRAM ANALYSIS (WDC)                 | 05MF530NNNN     |
|      | 54  | 0 INFORMATION (WDC)                      | 05MF540NNNN --* |
|      | 55  | 0 CLAIMS & COLLECTIONS (KCCO)            | 05MF550NNNN     |
|      | 1   | DOMESTIC CLAIMS                          | 05MF551NNNN     |
|      | 2   | EXPORT CLAIMS                            | 05MF552NNNN     |
|      | 3   | DISBURSEMENTS & COLLECTIONS              | 05MF553NNNN     |
|      | 56  | 0 LICENSE AUTHORITY (WDC)                |                 |
|      | 60  | 0 PERSONNEL (KCMO)                       | 05MF600NNNN     |
|      | 1   | CLASSIFICATION & ORGANIZATION            | 05MF601NNNN     |
|      | 2   | EMPLOYMENT                               | 05MF602NNNN     |
|      | 3   | EMPLOYEE RELATIONS                       | 05MF603NNNN     |
|      | 4   | EMPLOYEE DEVELOPMENT                     | 05MF604NNNN     |
| *--  | 61  | 0 COMMODITY OPERATIONS (WDC)             | 05MF610NNNN     |
|      | 62  | 0 DAIRY (WDC)                            | 05MF620NNNN     |
|      | 63  | 0 STORAGE CONTRACT (WDC)                 | 05MF630NNNN     |
|      | 64  | 0 HUMAN RESOURCES MANAGEMENT (WDC)       | 05MF640NNNN --* |
|      | 65  | 0 ANALYSIS & PROCEDURES (KCMO)           | 05MF650NNNN     |
|      | 1   | PROGRAM ANALYSIS                         | 05MF651NNNN     |
|      | 2   | GRAIN AND COTTON ANALYSIS                | 05MF652NNNN     |
|      | 3   | ADMINISTRATIVE ANALYSIS                  | 05MF653NNNN     |
|      | 4   | PROCESSED COMMODITIES ANALYSIS           | 05MF654NNNN     |
| *--  | 66  | 0 TRAIL BOSS STAFF (WDC/KCMO)            | 05MF660NNNN --* |
|      | 70  | 0 BUDGET & WORK MEASUREMENT STAFF (KCMO) | 05MF700NNNN     |

PERSONAL COMPUTER DISKETTE LABELING STANDARDS  
(INTERNAL LABELS)

| DIV.   | BR. | DESCRIPTION                                              | LABEL           |
|--------|-----|----------------------------------------------------------|-----------------|
| *-- 71 | 0   | MIDWEST AREA (WDC)                                       | 05MF710NNNN     |
| 72     | 0   | NORTHEAST AREA (WDC)                                     | 05MF720NNNN     |
| 73     | 0   | NORTHWEST AREA (WDC)                                     | 05MF730NNNN     |
| 74     | 0   | SOUTHEAST AREA (WDC)                                     | 05MF740NNNN --* |
| 75     | 0   | ADP TECHNICAL STAFF AND<br>KCMO OFFICE OF DIRECTOR       | 05MF750NNNN     |
|        | 1   | DEPUTY DIRECTOR, SYSTEMS DEVELOPMENT                     | 05MF751NNNN     |
|        | 2   | ASSISTANT DEPUTY DIRECTOR, ADP<br>DESIGN AND DEVELOPMENT | 05MF752NNNN     |
|        | 3   | ASSISTANT DEPUTY DIRECTOR, ADP TECHNICAL                 | 05MF753NNNN     |
|        | 4   | CHIEF, ADP TECHNICAL STAFF                               | 05MF754NNNN     |
|        | 5   | ADP SECURITY OFFICE                                      | 05MF755NNNN     |
|        | 6   | DEPUTY DIRECTOR, MANAGEMENT                              | 05MF756NNNN     |
|        | 7   | DEPUTY DIRECTOR, ACCOUNTING                              | 05MF757NNNN     |
| *-- 76 | 0   | SOUTHWEST AREA (WDC)                                     | 05MF760NNNN     |
| 77     | 0   | OFFICE OF THE DIRECTOR (KCCO)                            | 05MF770NNNN     |
| 79     | 0   | BRUNO AND TERVALON (CONTRACTOR)                          | 05MF790NNNN --* |
| 80     | 0   | PROCESSED COMMODITIES (KCCO)                             | 05MF800NNNN     |
|        | 1   | DAIRY BRANCH                                             | 05MF801NNNN     |
|        | 2   | DOMESTIC OPERATIONS                                      | 05MF802NNNN     |
|        | 3   | EXPORT OPERATIONS                                        | 05MF803NNNN     |
| *-- 82 | 0   | I.B.M. (WDC) (CONTRACTOR)                                | 05MF820NNNN     |
| 83     | 0   | EXEC. APPRAISAL & ANAL. STAFF (WDC-ADMIN)                | 05MF830NNNN --* |
| 85     | 0   | ARTHUR ANDERSEN & CO. (KCMO) (CONTRACTOR)                | 05MF850NNNN     |
| 86     | 0   | NYMA, INC. (CONTRACTOR)                                  | 05MF860NNNN     |
| 87     | 0   | RADAN SYSTEMS, INC. (CONTRACTOR)                         | 05MF870NNNN     |
| 89     | 0   | OFFICE OF THE GENERAL SALES MANAGER (WDC)                | 05MF890NNNN     |

PERSONAL COMPUTER DISKETTE LABELING STANDARDS  
(INTERNAL LABELS)

| DIV. | BR. | DESCRIPTION | LABEL                                      |                 |
|------|-----|-------------|--------------------------------------------|-----------------|
|      | 90  | 0           | 0AO CORPORATION (CONTRACTOR)               | 05MF900NNNN     |
| *--  | 91  | 0           | FOREIGN AGRICULTURE SERVICE (WDC)          | 05MF910NNNN --* |
|      | 93  | 0           | AGRICULTURAL MARKETING SERVICE (WDC-PCIMS) | 05MF930NNNN     |
|      | 94  | 0           | FOOD & NUTRITION SERVICE (WDC-PCIMS)       | 05MF940NNNN     |
| *--  | 96  | 0           | DEP. ADM., MANAGEMENT (WDC)                | 05MF960NNNN     |
|      | 97  | 0           | DEP. ADM., PROGRAM PLANNING & DEV. (WDC)   | 05MF970NNNN     |
|      | 98  | 0           | DEP. ADM., COMMODITY OPERATIONS (WDC)      | 05MF980NNNN     |
|      | 99  | 0           | DEP. ADM., STATE & COUNTY OPERATIONS (WDC) | 05MF990NNNN     |
| KS   | 0   |             | KANSAS ESE SMART SYSTEM                    | 05MFKS0NNNN --* |

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DATE: 29 OCT 93 AT 09:38:40

DEPARTMENT: H:JDL\*

JOB ID: 3826 REPORT NO. 1

FILE ID:

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INITIAL FORM LIST: -NONE

INITIAL CME LIST: -NONE

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PERSONAL COMPUTER DISKETTE LABELING STANDARDS  
(INTERNAL LABELS)

| DIV. | BR. | DESCRIPTION                                   | LABEL           |
|------|-----|-----------------------------------------------|-----------------|
| 11   | 0   | LOANS SYSTEMS (KCMO)                          | 05MF110NNNN     |
|      | 1   | COMMODITY LOANS                               | 05MF111NNNN     |
|      | 2   | MISCELLANEOUS LOANS                           | 05MF112NNNN     |
|      | 3   | COTTON AND LOANS REPORTING                    | 05MF113NNNN     |
| 12   | 0   | ELECTRONIC DATA SYSTEMS, INC. (CONTRACTOR)    | 05MF120NNNN     |
| 13   | 0   | TELECOMMUNICATIONS (KCMO)                     | 05MF130NNNN     |
|      | 1   | COMMUNICATIONS SOFTWARE                       | 05MF131NNNN     |
|      | 2   | EQUIPMENT MANAGEMENT                          | 05MF132NNNN     |
|      | 4   | NETWORK ANALYSIS                              | 05MF134NNNN     |
| 14   | 0   | OFFICE OF THE INSPECTOR GENERAL (OIG)         | 05MF140NNNN     |
| 15   | 0   | FISCAL (KCCO)                                 | 05MF150NNNN     |
|      | 1   | INVENTORY CONTROL                             | 05MF151NNNN     |
|      | 2   | PAYMENT                                       | 05MF152NNNN     |
|      | 3   | PROCESSED COMMODITIES                         | 05MF153NNNN     |
|      | 4   | SALES INVOICE                                 | 05MF154NNNN     |
|      | 5   | SETTLEMENT                                    | 05MF155NNNN     |
| 16   | 0   | PROCESSED COMMODITIES SYSTEMS (KCMO)          | 05MF160NNNN     |
|      | 1   | ACQUISITIONS & DISPOSITIONS                   | 05MF161NNNN     |
|      | 2   | INVENTORY & SETTLEMENTS                       | 05MF162NNNN     |
|      | 3   | SYSTEM SUPPORT                                | 05MF163NNNN     |
| 17   | 0   | GRAIN SYSTEMS (KCMO)                          | 05MF170NNNN     |
|      | 1   | INVENTORY ACQUISITIONS                        | 05MF171NNNN     |
|      | 2   | INVENTORY CONTROL & DISBURSEMENTS             | 05MF172NNNN     |
|      | 3   | INVENTORY DISPOSITIONS & SETTLEMENTS          | 05MF173NNNN     |
| *--  | 20  | 0 FISCAL (WDC)                                | 05MF200NNNN     |
|      | 21  | 0 MANAGEMENT SERVICES (WDC)                   | 05MF210NNNN     |
|      | 23  | 0 BUDGET (WDC)                                | 05MF230NNNN --* |
|      | 25  | 0 TRAFFIC MANAGEMENT (KCCO)                   | 05MF250NNNN     |
|      | 1   | BULK COMMODITIES                              | 05MF251NNNN     |
|      | 2   | FREIGHT SETTLEMENT                            | 05MF252NNNN     |
|      | 3   | PROCESSED COMMODITIES SERVICES                | 05MF253NNNN     |
| *--  | 27  | 0 AERIAL PHOTOGRAPHY FIELD OFFICE (SALT LAKE) | 05MF270NNNN --* |

PERSONAL COMPUTER DISKETTE LABELING STANDARDS  
(INTERNAL LABELS)

| DIV.   | BR. | DESCRIPTION                                 | LABEL           |
|--------|-----|---------------------------------------------|-----------------|
| 30     | 0   | WAREHOUSE EXAMINATION (KCCO)                | 05MF300NNNN     |
|        | 1   | CENTRAL EXAMINATION                         | 05MF301NNNN     |
|        | 2   | EASTERN EXAMINATION                         | 05MF302NNNN     |
|        | 3   | EXAMINATION REVIEW                          | 05MF303NNNN     |
|        | 4   | WESTERN EXAMINATION                         | 05MF304NNNN     |
| 33     | 0   | BULK GRAIN INVENTORY (KCCO)                 | 05MF330NNNN     |
|        | 1   | DATA ENTRY SUPPORT                          | 05MF331NNNN     |
|        | 2   | INVENTORY CONTROL & OPERATIONS              | 05MF332NNNN     |
|        | 3   | INVENTORY MANAGEMENT & PLANNING             | 05MF333NNNN     |
| 35     | 0   | COTTON & RICE (KCCO)                        | 05MF350NNNN     |
|        | 1   | COTTON                                      | 05MF351NNNN     |
|        | 2   | RICE                                        | 05MF352NNNN     |
| 37     | 0   | BULK GRAIN MERCHANDISING (KCCO)             | 05MF370NNNN     |
|        | 1   | EASTERN MERCHANDISING                       | 05MF371NNNN     |
|        | 2   | NORTH CENTRAL MERCHANDISING                 | 05MF372NNNN     |
|        | 3   | SOUTH CENTRAL MERCHANDISING                 | 05MF373NNNN     |
|        | 4   | WESTERN MERCHANDISING                       | 05MF374NNNN     |
| 40     | 0   | ADMINISTRATIVE SERVICES (KCMO)              | 05MF400NNNN     |
|        | 1   | MANAGEMENT SERVICES                         | 05MF401NNNN     |
|        | 2   | OPERATING SERVICES                          | 05MF402NNNN     |
| *-- 41 | 0   | CONS. & ENVIRONMENTAL PROTECTION (WDC)      | 05MF410NNNN     |
| 42     | 0   | COTTON, GRAIN AND RICE (WDC)                | 05MF420NNNN     |
| 43     | 0   | EMERGENCY OPERATION & LIVESTOCK PROG. (WDC) | 05MF430NNNN     |
| 44     | 0   | TOBACCO AND PEANUTS (WDC)                   | 05MF440NNNN --* |
| 45     | 0   | STORAGE CONTRACT (KCCO)                     | 05MF450NNNN     |
|        | 1   | COMPLIANCE                                  | 05MF451NNNN     |
|        | 2   | GRAIN CONTRACT                              | 05MF452NNNN     |
|        | 3   | PROCESSED PRODUCTS                          | 05MF453NNNN     |
| 46     | 0   | LICENSE AUTHORITY (KCCO)                    | 05MF460NNNN     |
| 48     | 0   | ACCOUNTING MANAGEMENT STAFF (KCMO)          | 05MF480NNNN     |
| 49     | 0   | FINANCIAL ACCOUNTING (KCMO)                 | 05MF490NNNN     |
|        | 1   | ASCS ACCOUNTING                             | 05MF491NNNN     |
|        | 2   | CCC ACCOUNTING                              | 05MF492NNNN     |
|        | 3   | SCOAP ACCOUNTING                            | 05MF493NNNN     |

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PERSONAL COMPUTER DISKETTE LABELING STANDARDS  
(INTERNAL LABELS)

| DIV. | BR. | DESCRIPTION                              | LABEL           |
|------|-----|------------------------------------------|-----------------|
| 50   | 0   | ACCOUNTING OPERATIONS (KCMO)             | 05MF500NNNN     |
|      | 1   | DEBT MANAGEMENT                          | 05MF501NNNN     |
|      | 2   | DISBURSEMENTS AND RECEIPTS               | 05MF502NNNN     |
| *--  | 51  | 0 COMMODITY ANALYSIS (WDC)               | 05MF510NNNN     |
|      | 52  | 0 EXECUTIVE CORRESPONDENCE STAFF (WDC)   | 05MF520NNNN     |
|      | 53  | 0 PROGRAM ANALYSIS (WDC)                 | 05MF530NNNN     |
|      | 54  | 0 INFORMATION (WDC)                      | 05MF540NNNN --* |
|      | 55  | 0 CLAIMS & COLLECTIONS (KCCO)            | 05MF550NNNN     |
|      | 1   | DOMESTIC CLAIMS                          | 05MF551NNNN     |
|      | 2   | EXPORT CLAIMS                            | 05MF552NNNN     |
|      | 3   | DISBURSEMENTS & COLLECTIONS              | 05MF553NNNN     |
|      | 56  | 0 LICENSE AUTHORITY (WDC)                |                 |
|      | 60  | 0 PERSONNEL (KCMO)                       | 05MF600NNNN     |
|      | 1   | CLASSIFICATION & ORGANIZATION            | 05MF601NNNN     |
|      | 2   | EMPLOYMENT                               | 05MF602NNNN     |
|      | 3   | EMPLOYEE RELATIONS                       | 05MF603NNNN     |
|      | 4   | EMPLOYEE DEVELOPMENT                     | 05MF604NNNN     |
| *--  | 61  | 0 COMMODITY OPERATIONS (WDC)             | 05MF610NNNN     |
|      | 62  | 0 DAIRY (WDC)                            | 05MF620NNNN     |
|      | 63  | 0 STORAGE CONTRACT (WDC)                 | 05MF630NNNN     |
|      | 64  | 0 HUMAN RESOURCES MANAGEMENT (WDC)       | 05MF640NNNN --* |
|      | 65  | 0 ANALYSIS & PROCEDURES (KCMO)           | 05MF650NNNN     |
|      | 1   | PROGRAM ANALYSIS                         | 05MF651NNNN     |
|      | 2   | GRAIN AND COTTON ANALYSIS                | 05MF652NNNN     |
|      | 3   | ADMINISTRATIVE ANALYSIS                  | 05MF653NNNN     |
|      | 4   | PROCESSED COMMODITIES ANALYSIS           | 05MF654NNNN     |
| *--  | 66  | 0 TRAIL BOSS STAFF (WDC/KCMO)            | 05MF660NNNN --* |
|      | 70  | 0 BUDGET & WORK MEASUREMENT STAFF (KCMO) | 05MF700NNNN     |

PERSONAL COMPUTER DISKETTE LABELING STANDARDS  
(INTERNAL LABELS)

| DIV. | BR. | DESCRIPTION                                              | LABEL           |
|------|-----|----------------------------------------------------------|-----------------|
| *--  | 71  | 0 MIDWEST AREA (WDC)                                     | 05MF710NNNN     |
|      | 72  | 0 NORTHEAST AREA (WDC)                                   | 05MF720NNNN     |
|      | 73  | 0 NORTHWEST AREA (WDC)                                   | 05MF730NNNN     |
|      | 74  | 0 SOUTHEAST AREA (WDC)                                   | 05MF740NNNN --* |
|      | 75  | 0 ADP TECHNICAL STAFF AND<br>KCMO OFFICE OF DIRECTOR     | 05MF750NNNN     |
|      | 1   | DEPUTY DIRECTOR, SYSTEMS DEVELOPMENT                     | 05MF751NNNN     |
|      | 2   | ASSISTANT DEPUTY DIRECTOR, ADP<br>DESIGN AND DEVELOPMENT | 05MF752NNNN     |
|      | 3   | ASSISTANT DEPUTY DIRECTOR, ADP TECHNICAL                 | 05MF753NNNN     |
|      | 4   | CHIEF, ADP TECHNICAL STAFF                               | 05MF754NNNN     |
|      | 5   | ADP SECURITY OFFICE                                      | 05MF755NNNN     |
|      | 6   | DEPUTY DIRECTOR, MANAGEMENT                              | 05MF756NNNN     |
|      | 7   | DEPUTY DIRECTOR, ACCOUNTING                              | 05MF757NNNN     |
| *--  | 76  | 0 SOUTHWEST AREA (WDC)                                   | 05MF760NNNN     |
|      | 77  | 0 OFFICE OF THE DIRECTOR (KCCO)                          | 05MF770NNNN     |
|      | 79  | 0 BRUNO AND TERVALON (CONTRACTOR)                        | 05MF790NNNN --* |
|      | 80  | 0 PROCESSED COMMODITIES (KCCO)                           | 05MF800NNNN     |
|      | 1   | DAIRY BRANCH                                             | 05MF801NNNN     |
|      | 2   | DOMESTIC OPERATIONS                                      | 05MF802NNNN     |
|      | 3   | EXPORT OPERATIONS                                        | 05MF803NNNN     |
| *--  | 82  | 0 I.B.M. (WDC) (CONTRACTOR)                              | 05MF820NNNN     |
|      | 83  | 0 EXEC. APPRAISAL & ANAL. STAFF (WDC-ADMIN)              | 05MF830NNNN --* |
|      | 85  | 0 ARTHUR ANDERSEN & CO. (KCMO) (CONTRACTOR)              | 05MF850NNNN     |
|      | 86  | 0 NYMA, INC. (CONTRACTOR)                                | 05MF860NNNN     |
|      | 87  | 0 RADAN SYSTEMS, INC. (CONTRACTOR)                       | 05MF870NNNN     |
|      | 89  | 0 OFFICE OF THE GENERAL SALES MANAGER (WDC)              | 05MF890NNNN     |

PERSONAL COMPUTER DISKETTE LABELING STANDARDS  
(INTERNAL LABELS)

| DIV.   | BR. | DESCRIPTION                                | LABEL           |
|--------|-----|--------------------------------------------|-----------------|
| 90     | 0   | OAO CORPORATION (CONTRACTOR)               | 05MF900NNNN     |
| *-- 91 | 0   | FOREIGN AGRICULTURE SERVICE (WDC)          | 05MF910NNNN --* |
| 93     | 0   | AGRICULTURAL MARKETING SERVICE (WDC-PCIMS) | 05MF930NNNN     |
| 94     | 0   | FOOD & NUTRITION SERVICE (WDC-PCIMS)       | 05MF940NNNN     |
| *-- 96 | 0   | DEP. ADM., MANAGEMENT (WDC)                | 05MF960NNNN     |
| 97     | 0   | DEP. ADM., PROGRAM PLANNING & DEV. (WDC)   | 05MF970NNNN     |
| 98     | 0   | DEP. ADM., COMMODITY OPERATIONS (WDC)      | 05MF980NNNN     |
| 99     | 0   | DEP. ADM., STATE & COUNTY OPERATIONS (WDC) | 05MF990NNNN     |
| KS     | 0   | KANSAS ESE SMART SYSTEM                    | 05MFKS0NNNN --* |