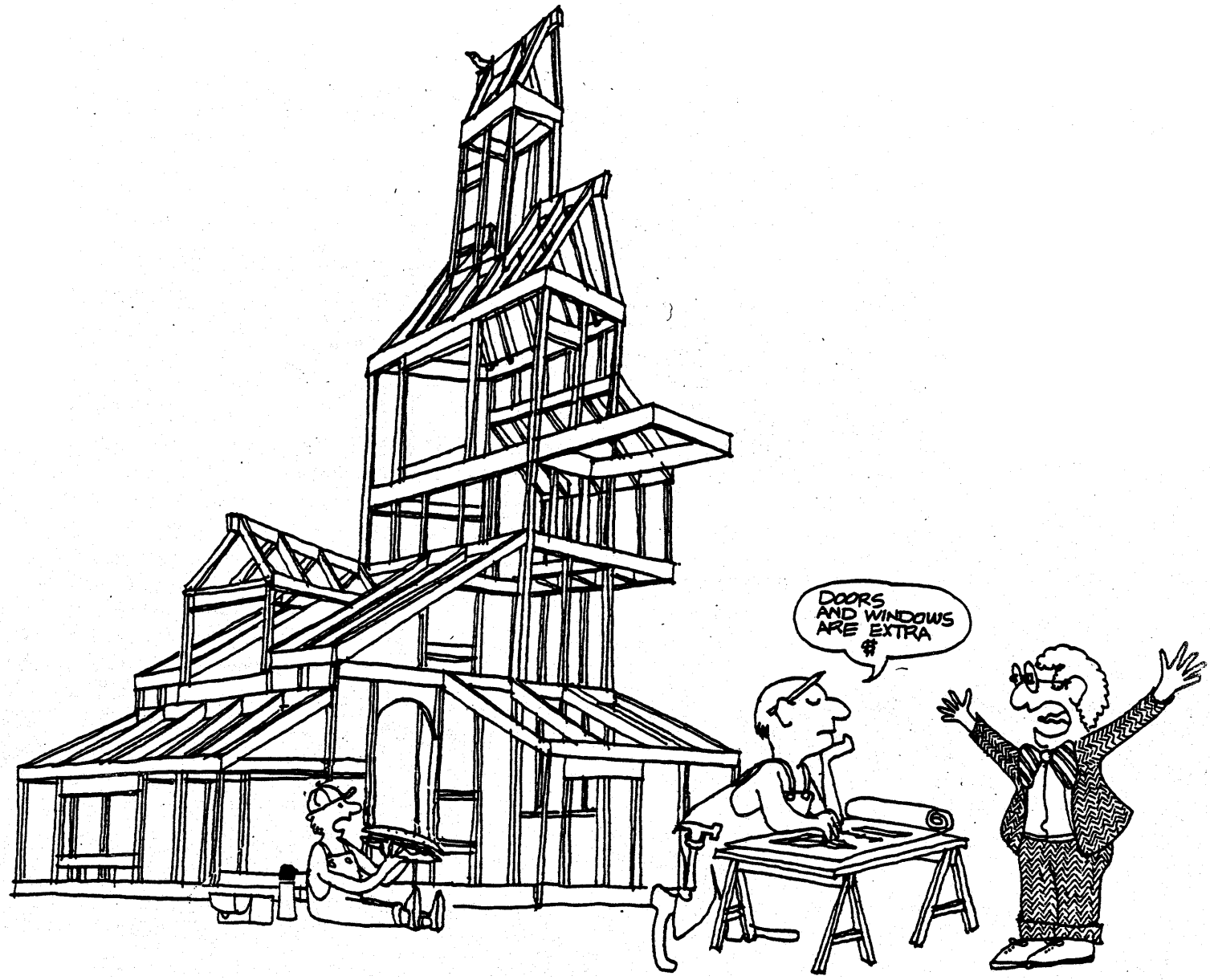
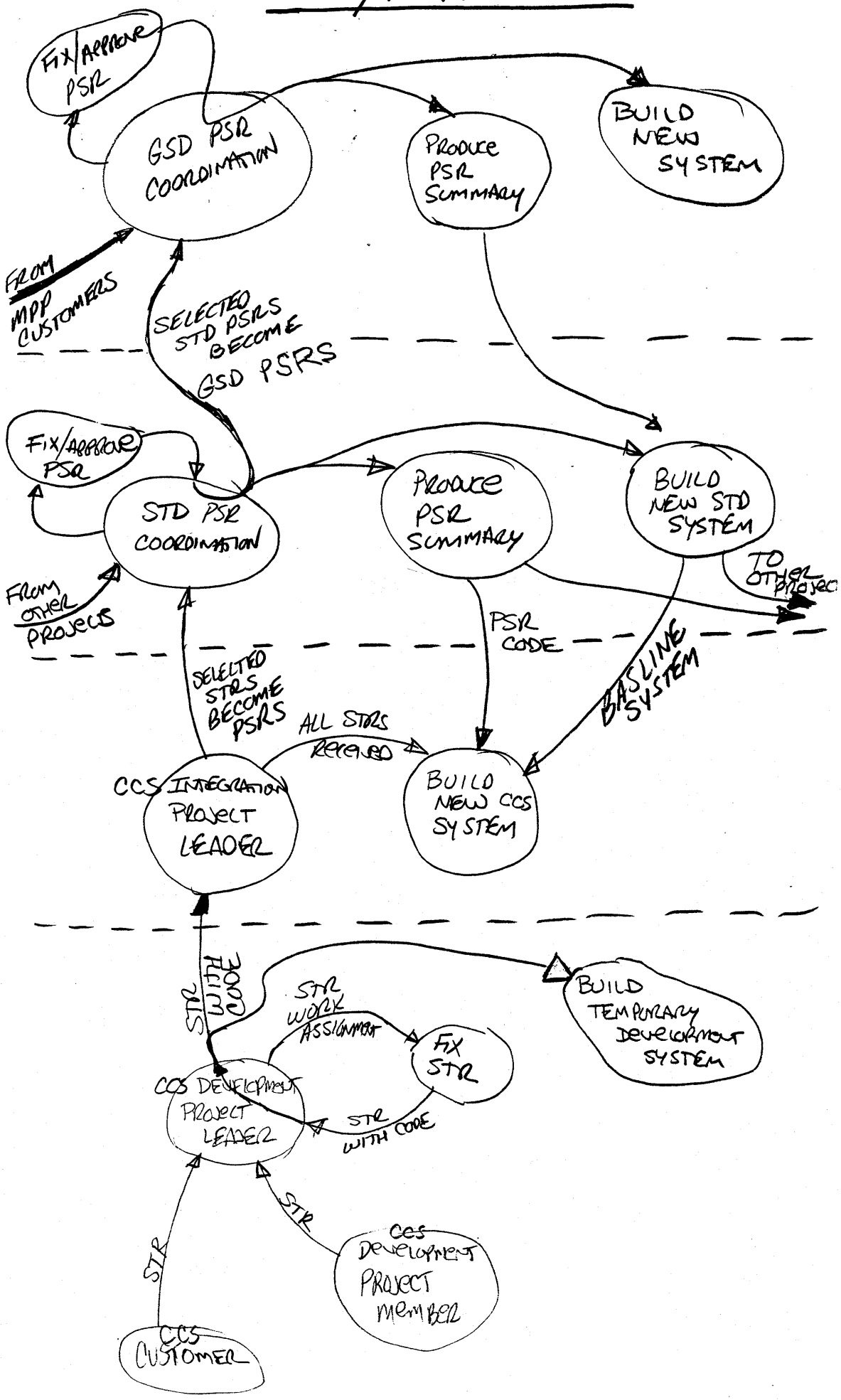
MP-32 MPX/OS V3

CONSTRUCTION NOTEBOOK



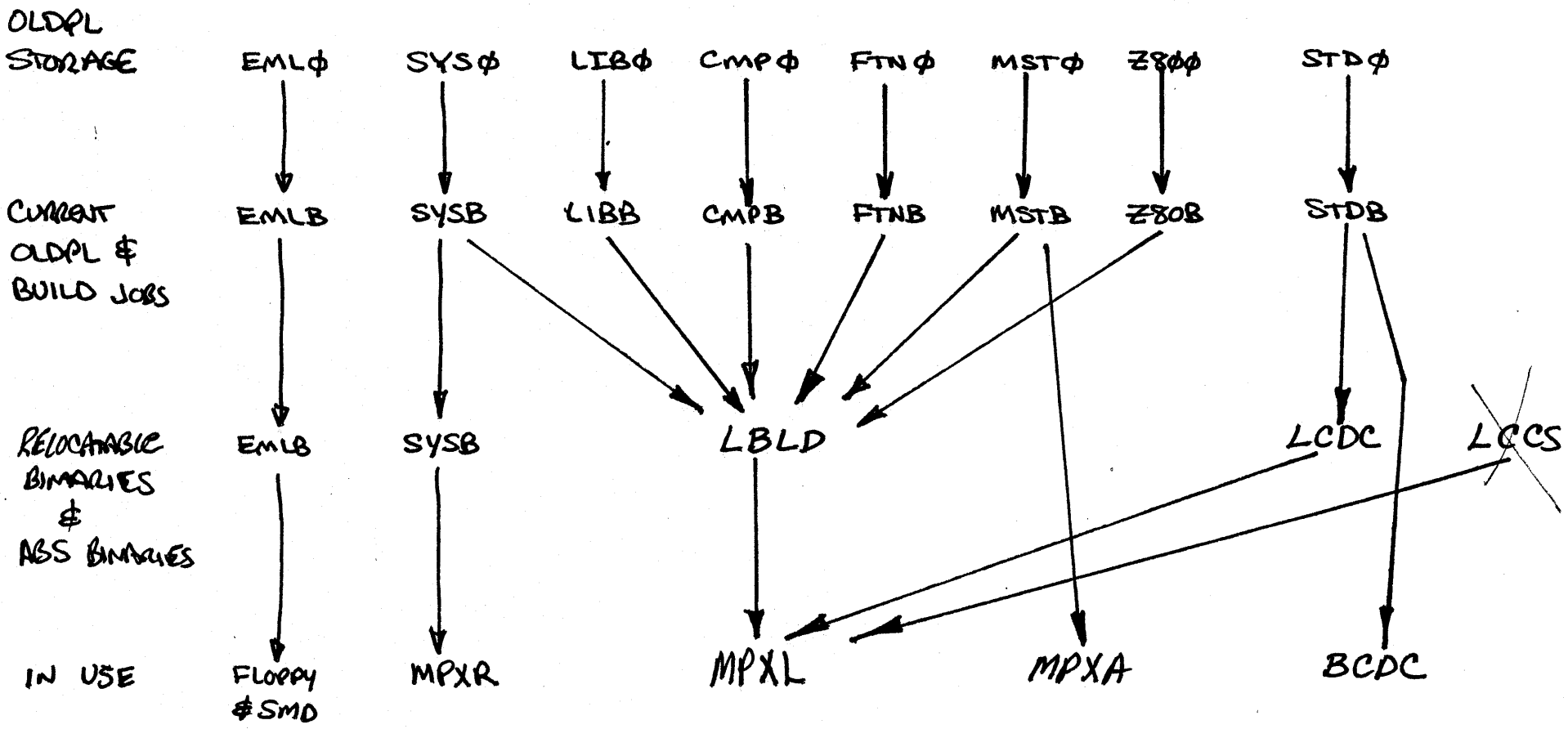
STR/PSR FLOW

9-13-82



OWNERNAME FLOW

9-13-82



M P - 3 2 P R O D U C T S E T

S M F G

This ownername contains some of the files that create the Deliverable entities that comprise the MPX/OS System as used on the MP-32.

The deliverables and the jobs that create them are listed below:

DELIVERABLE	CREATION JOB	DESCRIPTION
U DISK FORMATTER Floppy disk	fmtr-fd.run,emlb	Formats SMD prior to initialization.
EMULATOR Floppy	eml-fd.run,emlb	Full MP-60 Emulator on floppy disk
TAPEBOOT Floppy	boot-fd.run,emlb	Overlays Full Emulator to load binary program from tape for SMD initialization.
INSTALL Program Binary Tape	install.run,sysb	Program to place initial system on SMD.
DUMPSYS Tape	dumpsys.bld,sysb	Initial microcode, boot, resident, and library placed on SMD by INSTALL.
FMPTAPE Tape	fmptape.bld,sysb	Initial setup and job files placed on SMD by INSTALL.
QWIKSTART Floppy	qwik-fd.run,emlb	Shortened Emulator on floppy disk. Reads full emulator from SMD.
Release Tape 01	make-tape01,smfg	FMP dump of EML0, EMLB, SYS0, SYSB
Release Tape 02	make-tape02,smfg	FMP dump of LIB0, LIBB, CMP0, CMPB, FTN0, FTNB, MST0, MSTB, Z800*, Z80B*, STD0*, STDB*, TDVB
Release Tape 03	make-tape03,smfg	FMP dump of SMFG, MPXR, MPXL, MPXS, JOBS, FJOB, MPXA, BCDC*, MAIL*, LBLD, LCDC*, OS*
Release Tape 04	Make-tape04,smfg	FMP dump of SYSL
Release Tape 05	Make-tape05,smfg	FMP dump of EMLL,LBLL,LIBL, CMPL,FTNL
Release Tape 06	Make-tape06,smfg	FMP dump of MSTL,Z80L,STDL,

			BCDL,LCDL
DSKUTIL	Tape	dskutil.run,sysb	Stand-alone program to investigate SMD data.

* NOTE: Ownernames marked with * may not be present on all release tapes.

The above materials constitute MPX/OS V3 and the MP-32 PRODUCT SET. Offical modifications to this software are released by the Information Sciences Division (formerly Systems Technology Division). Modifications are coordinated through PSR Coordinator, Information Sciences Division, Control Data Corporation, Sunnyvale, CA.

Contained in ownernames EMLB, SYSB, LIBB, CMPB, FTNB, MSTB, Z80B, STDB and SMFG are job files each called BLD-PLAN.RUN. When these files are executed, the output produces a MP-32 MPX/OS V3 CONSTRUCTION NOTEBOOK. The first page or pages of each section of the notebook provide an overview of the process used to re-construct the products included in the files having that particular ownername.

A convention has been established for the naming of the files involved in the re-construction process. The 14 character portion of the MPX/OS filename always includes a suffix which follows a period (.). The suffix is 2 or 3 characters long and is taken from the following set:

- .pl - UPDATE Program Library
- .bld - A job used to build a product or portion of a product
- .lst - Listing produced by execution of a .bld or .run file.
- .rel - A relocatable binary
- .abs - An absolute binary
- .dsm - Deadstart Microcode
- .run - A job used to copy information or produce a file
- .inc - Ratfor Include text
- .doc - Documentation
- .txt - Text

The period which preceeds the suffix is the only period allowed in the filename.

Because of the 14 character limitation, additional naming rules are necessary:

1. Oldpl names must be 3 characters or less.

2. Product names must be 6 characters or less, or use an alias which is 6 characters or less (ex: COPYSBF vs CPYSBF).

As a product is re-constructed, the process moves through files having 3 ownernames. The jobs that create Oldpls with various modifications (GSD PSRs, STD PSRs, and LOCAL mods) are found in ownername XXX0 where XXX is one of the product groups. The intermediate Oldpls are placed in the XXX0 ownername, but the final result of the XXX0 jobs is an Oldpl which is placed in the XXXB ownername. The products are built from this "LOCAL" Oldpl (whose edition is always ZZ).

The .bld jobs which produce the product binaries are found

in the XXXB ownername. The relocatable binaries produced are placed in a common ownername; usually LBLD, but also LCDC. The listing output of the .bld jobes are placed in the XXXL ownername.

The LBLD (or LCDC) ownername contains product relocatables, jobs that produce product absolutes, and a job to produce an MPX/OS Library.

The re-construction process is split across ownernames so that individual operations may be carried out without loading all the files necessary to accomplish all operations. For example, if COPYCF must be modified, only ownername MSTB need be loaded. When the modification is complete and tested, then ownername LBLD and LCDC are loaded, a new absolute is made and a new Library created. If the modification is to be included in the LOCAL Oldpl, then MSBO would be loaded and the appropriate jobs run.

The following chart relates the various products to the ownernames where they reside:

PRODUCT	PL OWNER	BUILD OWNER	LIST OWNER	BINARY OWNERNAME
UDISKFMTR	EMLO	EMLB	EMLL	EMLB / Floppy
EMULATOR	EMLO	EMLB	EMLL	EMLB / Floppy / smd
TAPEBOOT	EMLO	EMLB	EMLL	EMLB / Floppy
QWIKSTART	EMLO	EMLB	EMLL	EMLB / Floppy
MPX-RESIDENT	SYSO	SYSB	SYSL	SYSB / MPXR
BLKDEBLK	SYSO	SYSB	SYSL	LBLD / MPXL
TASKMON	SYSO	SYSB	SYSL	LBLD / MPXL
MPXBOOT	SYSO	SYSB	SYSL	SYSB / smd
INSTALL	SYSO	SYSB	SYSL	SYSB / Tape
DUMPSYS		SYSB	SYSL	smd, MPXR & MPXL / Tape
DSKUTIL	SYSO	SYSB	SYSL	SYSB / Tape
FMPTAPE		SYSB		JOBS, FJOB, MPXS / Tape
CATLIST	LIBO	LIBB	LIBL	LBLD / MPXL
COPYL	LIBO	LIBB	LIBL	LBLD / MPXL
COSY	LIBO	LIBB	LIBL	LBLD / MPXL
FMP	LIBO	LIBB	LIBL	LBLD / MPXL
PCC	LIBO	LIBB	LIBL	LBLD / MPXL
PRELIB	LIBO	LIBB	LIBL	LBLD / MPXL
UTIL	LIBO	LIBB	LIBL	LBLD / MPXL
UPDATE	LIBO	LIBB	LIBL	LBLD / MPXL
CMP	CMPO	CMPB	CMPL	LBLD / MPXL
COMPASS	CMPO	CMPB	CMPL	LBLD
FTN	FTNO	FTNB	FTNL	LBLD / MPXL
IPL	FTNO	FTNB	FTNL	LBLD / MPXL
FTNCMP	FTNO	FTNB	FTNL	LBLD / MPXL
RUNTIME	FTNO	FTNB	FTNL	LBLD / MPXL
RCL	FTNO	FTNB	FTNL	LBLD / MPXL
COPYCF	MSTO	MSTB	MSTL	LBLD / MPXL
COPYSCF	MSTO	MSTB	MSTL	LBLD / MPXL
SYSDUMP	MSTO	MSTB	MSTL	MPXA
TDUMP	MSTO	MSTB	MSTL	LBLD / MPXL

ED	MSTO	MSTB	MSTL	LBLD / MPXL
EDI	MSTO	MSTB	MSTL	LBLD / MPXL
RATFOR	MSTO	MSTB	MSTL	LBLD / MPXL
SS	MSTO	MSTB	MSTL	LBLD / MPXL
REF. MAN.	MSTO	MSTB	MSTL	na
Z80ASM	Z800	Z80B	Z80L	LBLD / MPXL
Z80LDR	Z800	Z80B	Z80L	LBLD / MPXL
STLIB	STDO	STDB	STDL	BCDC
STPRM	STDO	STDB	STDL	BCDC
FMT	STDO	STDB	STDL	LCDC / MPXL
MAIL	STDO	STDB	STDL	BCDC
XREFUP	STDO	STDB	STDL	LCDC / MPXL
ITEMIZE	STDO	STDB	STDL	LCDC / MPXL
LISTF	STDO	STDB	STDL	LCDC / MPXL
ZAP	STDO	STDB	STDL	LCDC / MPXL
DAYERR	STDO	STDB	STDL	BCDC
FMAINT	STDO	STDB	STDL	BCDC
TCYB	STDO	STDB	STDL	BCDC
REF. MAN.	STDO	STDB	STDL	na

It is suggested that the person responsible for maintenance of this system at a site create a "system-build" SMD disk pack and load release tapes 01, 02, and 03 on the pack. Then each ownername should be dumped to its own mini-tape. Then, when a particular product is to be modified, its ownername can be loaded on the production system, the mods checked out, and then moved back to the "build" pack for long-term storage.

NOTES concerning the System Build Process

1. One assembly error is expected in the SYSQS module at levels AB & AC. See build job comments.

2. Resident AB is exactly identical to FNOC's Resident C2 except JLDR which contains an additional mod (CCS0130C). All relocatable binaries except JLDR have been block-by-block compared to those that built C2.

3. The emulator of AB/AC is that of FNOC as of 3/15/84, except for the addition of PLSS02 mod. I.E. PLSS01 and CCS0156 are included and PLSS02 was added.

4. Here is a narative of the System Build Process:

   a. Run all EML and SYS build jobs except EML-SYS.RUN and MPXBOOT.RUN. Call the result tape of DUMPSYS.BLD "TEMP-DUMPSYS". FMP dump the files EML-SYS.RUN, EML.ABS, MPXBOOT.RUN, & MPXBOOT.REL to be loaded on the new pack.

   b. Use new floppy disk Formatter and format a new SMD pack. Note: formatter runs in two phases as seen by the patterns of the lights on the SMD controller. Phase 1 has lights 4,5,6,&7 of the BUS OUT register flashing and runs 6:36 min after the the microrun lite is lit. Phase 2 has lights 1,4,5,6,&7 flashing and runs an additional 4:33 min for a total time of 11:09 ..... Insure that the above happens as described...it's the only way to insure that the SMD has been properly formatted.

   c. At this point one should load the new "FULL EMULATOR" floppy and proceed. Because of an un-resolved bug, one must do the following instead:

      (1). Mount an existing, MPX/OS V3 SMD disk with a good emulator.

      (2). Using QWIKSTRT floppy, deadstart & get "What Resident?" message.

      (3). Master clear and REMOVE THE GOOD SMD DISK PACK...

      (4). Mount the new SMD disk back on the drive.

   d. Load & deadstart the TAPEBOOT floppy. (Use the TAPEBOOT that matcnes the emulator loaded in "c." above.)

   e. MC and <esc>@I which loads INSTALL binary from INSTALL tape. Run the INSTALL program with "TEMP-DUMPSYS" and FMPTAPE. The interactions for INSTALL are described in the Installation Handbook (17329115 B). Additionally, note the following:

      (1). Enter SYSTEM01 as the DEVICE IDENTIFIER.

      (2). The MP-32 disk is a Double-density 858 (1867-20).

      (3). For a single-disk system, the disk IS a system device.

      (4). 1500 is a good number of labels in the label file.

      (5). Use TR as the MPX Resident and TL as the MPX library

edition numbers during the load process. You will later load Release Tape03 to the disk to get the working resident and library.

(6). After the Load Summary is output, the FMP tape may run away. Not to worry.

f. MC & deadstart QWIKSTRT. (Use the QWIKSTRT that matches the emulator loaded in "c." above.)

g. Bring up the system.

h. Load the EML-SYS and MPXBOOT jobs and binaries FMP dumped in "a." above, using JB LOADALL,FJOB.

i. Run EML-SYS.RUN and MPXBOOT.RUN to place the new emulator and boot on the new SMD.

j. MC, deadstart the new QWIKSTRT.

k. Bring up the system, test microcode and boot. If good, continue, else go to "a.".

l. Mount original build disk. DS & run old QWIKSTRT. Run EML-SYS.RUN and MPXBOOT.RUN to put new emulator and boot on the build disk.

m. Continue with Library builds.

n. When library is ready (LIBRARY.BLD,LBLD), re-DS and run new library.

o. Run DUMPSYS.BLD again, picking up new microcode, boot, & library.

p. Build is now finished.

t. Now do a complete installation to prove-out all components:

(1). Format a new disk with new FORMATTER floppy.

(2). Load a full emulator (See step "c." above).

(3). Run INSTALL with final DUMPSYS tape.

(4). DS & run new QWIKSTRT

(5). Load Release-Tape03 on the new pack with JB LOADALL,FJOB. Files of LBLD and LCDC may then be released.

(6). Pack is ready to use.

Manuals peculiar to the MP-32:

MP-32 General Information Manual	03/23/77	17329200 A
MP-60 MPX/OS V3.0 Reference Manual	02/01/83	17329125 A
MP-32 MP-60 Emulation Reference Manual	03/11/83	17329120 C
Interactive Terminal System V2 RM	02/01/83	17329140 A
MP-60 SOFTWARE TOOLS User's Manual	12/27/82	17329105 D
MASS Reference Manual	12/30/82	17328900 C
MPX/OS V3 Installation HB	03/15/83	17329115 B
Microtec Z-80 Relocatable Macro Assembler RM	10/01/79	CCSYSTM-023-RMA
Microtec Z-80 Linking Loader Manual	10/01/79	CCSYSTM-024-LL
MP-32 COMPASS RM	01/03/83	14061305 A
MPX/OS V3 Operator's Guide	01/05/83	17329145 A
BSC/Multiport Memory (Model 65109) Hardware RM	78/07/25	41618400 03
Unreleased Internal Software Tools User's Manual	82/06/14	1732xxxx A
MPX/OS V3 System Release Bulletin	(Not Yet)	????
Systems Technology Division PSR Summary	(Not Yet)	????

Manuals used by both MPP and MP-32 systems:

MP-60 UPDATE Reference Manual	80/03/05	14351100 B
MP-60 UTILITY Reference Manual	80/03/15	14063800 B
MP-60 PRELIB Reference Manual	79/02/15	14062200 E
MP-60 FORTRAN Reference Manual	82/10/01	14061100 G
Program Command Console RM	78/12/12	14391700

E Q U I P M E N T M A I N T A I N A N C E M A N U A L S

Basic Microprogrammable Processor HW Maint	39451400	B
Breakpoint Controller and Breakpoint Panel HW Maint	96729000	B
I/O TTY Controller HW Maint	96728900	B
512-, 2048-, and 8192 Instr Micromemory HW Maint	96767900	C
Model 65109 HW Maint	96767820	01
Model 65109 ODS RM	96767860	01
Model 65109 Micro Diagnostic RM	96767870	
Model 65109 CYBER-18 Emulator RM	96768600	01
Multiple-Port Memory HW Maint	96767710	02
MOS Memory and Interface HW Maint	96768600	B
65109-19 Floppy Disk Drive HW Maint	75736120	H
SMD Hardware RM	83317300	E
SMD HW Maint	83311300	W
SMD Controller Formatter HW Maint	83312400	N
SMD Drive Interface Hardware Maint/Ref Manual	96761300	C
Magnetic Tape Formatter Field Service / RM	49760400	C
Magnetic Tape Transport RM	49756300	E
Magnetic Tape Transport Field Service Manual	49756400	V
Magnetic Tape Transport Parts Identification	49756500	V
Magnetic Tape Transport Controller HW Ref/Maint	89600866	A
Line Printer Prep and Instruction	44677817	B
Line Printer Parts Identification	95445067	H
Line Printer Key to Logic Symbol	95390100	G
1811-2/752 HW Maint	62957400	G
1811-2/752 Op Guide	62957300	E
751-10 Terminal Subsystem Operator's Guide	62951400	F
1811-1/751 HW Maint	60475021	A
60144-2 Programmable Multiple Access Controller	44619400	D
2558-3 HW Maint	74873946	C
2558-3 Installation	74873993	C
Micro Programmable Communications Line Adapter (MPCLA)	60475570	02
Buffered Communications Line Adapter	96768550	02

(Above list does not contain all available hardware manuals.)

A S D M P P M A N U A L S

MPX/OS V2. Reference Manual	10817300 D
MPX/OS V2. Operator's Guide	10992100 A
MPX/OS Systems Version 2.0 Installation Handbook	11110000 A
MICRO Reference Manual	14062700 C
MPX-60 Computer System Family Reference Manual	14306500 D
TEXT EDITOR Reference Manual	14624000

O B S O L E T E M A N U A L S

MP-60 MPX/OS Reference Manual	(Version 1.0)	78/02/24	17329110 A
MP-60 COSY Reference Manual	(Obsoleted by UPDATE)	75/02/15	14062100 A

```
*JOB(ID=MAKE-TAPE01)
*SCHED(CM=5,PL=5000,TL=99999,SCR=100,MT=1)
#
#  THIS JOB MAKES MP-32 SOFTWARE RELEASE TAPE 01.
#  RELEASE TAPE 01 CONTAINS:
#    MPX/OS VERSION 3 SOURCE CODE
#    JOB FILES THAT BUILD EACH MODULE
#    MODULE BINARIES
#    A JOB FILE THAT PRODUCES AN MPX-RESIDENT
#
#    MP-32 VERSION OF MP-60 EMULATOR SOURCE CODE
#    JOB FILES THAT BUILD EACH MICROCODE MODULE
#    MICROCODE MODULE BINARIES
#    JOB FILES TO BUILD THE MICROCODE FLOPPY DISKS
#
*EQUIP(10=MT)
*FMP
*DUMP,0,10,SYS0,FMP
*DUMP,0,10,SYSB,FMP
*DUMP,0,10,EML0,FMP
*DUMP,0,10,EMLB,FMP
*VERIFY,10
*OUT
*UNLOAD(10)
*CLOSE(52)
*CATLIST(U=SYS0/SYSB/EML0/EMLB,O=E,K=CATLIST)
*EOJ
```

```
*JOB(ID=MAKE-TAPE02)
*SCHED(CM=5,PL=5000,TL=99999,SCR=100,MT=1)
#
#  THIS JOB MAKES MP-32 SOFTWARE RELEASE TAPE 02.
#  RELEASE TAPE 02 CONTAINS:
#     MPX/OS PRODUCT SET LIBRARY SOURCE CODE
#     JOB FILES THAT BUILD EACH PRODUCT
#
#     THE PRODUCTS ARE DIVIDED INTO SEVERAL "OWNERS":
#        LIB0/LIBB - LIBRARY PROGRAMS OBTAINED FROM GSD (WAS ASD)
#        CMP0/CMPB - MP-32 VERSION OF COMPASS PRODUCT
#        FTN0/FTNB - THE FORTRAN PRODUCT
#        MST0/MSTB - LIBRARY PROGRAMS ORIGINATING WITH STD (WAS GPD)
#        Z800/Z80B - MICROTEC Z80 CROSS ASSEMBLER AND LOADER
#        STD0/STDB - UNSUPPORTED MP-32 SOFTWARE TOOLS
#        TDVB      - STD SOFTWARE TOOLS IN DEVELOPMENT
#
*EQUIP(10=MT)
*FMP
*DUMP,0,10,LIB0,FMP
*DUMP,0,10,LIBB,FMP
*DUMP,0,10,CMP0,FMP
*DUMP,0,10,CMPB,FMP
*DUMP,0,10,FTN0,FMP
*DUMP,0,10,FTNB,FMP
*DUMP,0,10,MST0,FMP
*DUMP,0,10,MSTB,FMP
*DUMP,0,10,Z800,FMP
*DUMP,0,10,Z80B,FMP
*DUMP,0,10,STD0,FMP
*DUMP,0,10,STDB,FMP
*DUMP,0,10,TDVB,FMP
*VERIFY,10
*OUT
*UNLOAD(10)
*CLOSE(52)
*CATLIST(O=E,K=CATLIST,U=LIB0/LIBB/CMP0/CMPB/FTN0/FTNB/MST0/MSTB)
*CATLIST(O=E,K=CATLIST,U=Z800/Z80B/STD0/STDB/TDVB)
*EOJ
```

```
*JOB(ID=MAKE-TAPE03)
*SCHED(CM=5,PL=5000,TL=99999,SCR=100,MT=1)
#
#  THIS JOB MAKES MP-32 SOFTWARE RELEASE TAPE 03.
#  RELEASE TAPE 03 CONTAINS:
#    OWNER          CONTENT
#
#    SMFG       JOBS THAT WRITE RELEASE TAPES &  OVERVIEW DOCUMENTS
#
#    MPXR       MPX/OS RESIDENT BINARY(IES)
#    MPXL       MPX/OS LIBRARY BINARY(IES)
#    MPXS       MPX/OS INITIALIZATION FILES
#
#    JOBS       STANDARD UTILITY JOBS
#    FJOB       UTILITY JOBS TO MANAGE USER FILES
#
#    MPXA       BINARY FILES USED BY JOBS/FJOB
#    BCDC       BINARY FILES USED BY JOBS/FJOB
#    MAIL       FILES USED BY UNSUPPORTED PRODUCT "MAIL"
#
#    LBLD       BINARY FILES AND JOBS TO BUILD A LIBRARY
#    LCDC       BINARY FILES AND JOBS OF UNSUPPORTED LIBRARY ADDITIONS
#
#    OS         VARIOUS DOCUMENTS & LISTS FROM SVLOPS MP-32 DEVELOPMENT
#
*EQUIP(10=MT)
*FMP
*DUMP,O,10,SMFG,FMP
*DUMP,F,10,MPX-RESIDENT,MPXR,AC,****
*DUMP,F,10,MPX-LIBRARY,MPXL,AC,****
*DUMP,F,10,MPX-LIBRARY,MPXL,MN,****
*DUMP,O,10,MPXS,FMP
*DUMP,O,10,JOBS,FMP
*DUMP,O,10,FJOB,FMP
*DUMP,O,10,MPXA,FMP
*DUMP,O,10,BCDC,FMP
*DUMP,O,10,MAIL,FMP
*DUMP,O,10,LBLD,FMP
*DUMP,O,10,LCDC,FMP
*DUMP,O,10,OS,FMP
*VERIFY,10
*OUT
*UNLOAD(10)
*CLOSE(52)
*CATLIST(O=E,K=CATLIST,U=SMFG/MPXS/JOBS/FJOB/MPXA/BCDC/MAIL)
*CATLIST(O=E,K=CATLIST,U=OS/LBLD/LCDC)
*EOJ
```

```
*JOB(ID=TAPE04)
*SCHED(CM=5,PL=5000,SCR=100,TL=99999,MT=1)
*EQUIP(10=MT)
*[illegible]
*IDENT,5,SYSTEM01
*DUMP,0,10,SYSL,FMP
*VERIFY,10
*OUT
*UNLOAD(10)
*CLOSE(52)
*CATLIST(U=SYSL,K=CATLIST,O=E)
*EOJ
```

```
*JOB(ID=TAPE05)
*SCHED(CM=5,PL=5000,SCR=100,TL=99999,MT=1)
*EQUIP(10=MT)
*[illegible]P
*IDENT,5,SYSTEM01
*DUMP,0,10,EMLL,FMP
*DUMP,0,10,LBLL,FMP
*DUMP,0,10,LIBL,FMP
*DUMP,0,10,CMPL,FMP
*DUMP,0,10,FTNL,FMP
*VERIFY,10
*OUT
*UNLOAD(10)
*CLOSE(52)
*CATLIST(U=EMLL/LBLL/LIBL/CMPL/FTNL,K=CATLIST,O=E)
*EOJ
```

```
*JOB(ID=TAPE06)
*SCHED(CM=5,PL=5000,SCR=100,TL=99999,MT=1)
*EQUIP(10=MT)
*[illegible]P
*[illegible]ENT,5,SYSTEM01
*DUMP,0,10,MSTL,FMP
*DUMP,0,10,Z80L,FMP
*DUMP,0,10,STDL,FMP
*DUMP,0,10,BCDL,FMP
*DUMP,0,10,LCDL,FMP
*VERIFY,10
*OUT
*UNLOAD(10)
*CLOSE(52)
*CATLIST(U=MSTL/Z80L/STDL/BCDL/LCDL,K=CATLIST,O=E)
*EOJ
```

```
   STOP*ENDST*
*SAVEPF(62,BLD-PLAN.LST,SMFL,01,     )
*EOJ    BLD-PLAN
```

M P - 3 2 P R O D U C T S E T

E M L

The MP-32 MP-60 Emulator source code is kept here. Build jobs and binaries are also kept here. The MP-32 MP-60 Emulator is maintained by Information Sciences Division (SVLOPS).

EML0/EMLB owner last dumped on _____

File Name	Description	Last Build
eml.pl,eml0,AA,eml0	Former PSR level PL	*1
eml-pl-sps.bld,eml0,01,eml0	Build current PSR level	
eml-pl-sps.lst,eml1,01,eml1	Listing of above .bld job	
eml.pl,eml0,AB,eml0	Current PSR level PL	_____
eml-pl-loc.bld,eml0,01,eml0	Build PL with Local mods	
eml-pl-loc.lst,eml1,01,eml1	Listing of above .bld job	
eml.pl,emlb,ZZ,emlb	Local (working) PL	_____
eml.bld,emlb,01,emlb	Build the MP-60 Emulator	
eml.lst,eml1,01,eml1	Listing of above .bld job	
eml.dsm,emlb,01,emlb		_____
eml-fd.run,emlb,01,emlb	Make MP-60 Emulator Floppy	
eml-fd.lst,eml1,01,eml1	Listing of above .run job	
Floppy Disk		
eml.abs,emlb,01,emlb		_____
eml-sys.run,emlb,01,emlb	Place Emulator on System Disk	
eml-sys.lst,eml1,01,eml1	Listing of above .run job	
System Disk		
qwik.bld,emlb,01,emlb	Build Qwikstrt Microcode	
qwik.lst,eml1,01,eml1	Listing of above .bld job	
qwik.dsm,emlb,01,emlb		_____
qwik-fd.run,emlb,01,emlb	Make Qwikstrt Floppy Disk	
qwik-fd.lst,eml1,01,eml1	Listing of above .run job	
Floppy Disk		
boot.bld,emlb,01,emlb	Build Tapeboot Microcode	
boot.lst,eml1,01,eml1	Listing of above .bld job	
boot.dsm,emlb,01,emlb		_____
boot-fd.run,emlb,01,emlb	Make Tapeboot Floppy Disk	
boot-fd.lst,eml1,01,eml1	Listing of above .run job	
Floppy Disk		
fmtr.bld,emlb,01,emlb	Build Micro Disk Formatter	
fmtr.lst,eml1,01,eml1	Listing of above .bld job	
fmtr.dsm,emlb,01,emlb		_____
fmtr-fd.run,emlb,01,emlb	Make UDSKFMTR Floppy Disk	
fmtr-fd.lst,eml1,01,eml1	Listing of above .run job	
Floppy Disk		
wfloppy.bld,emlb,01,emlb	Build WFLOPPY Utility Program	
wfloppy.lst,eml1,01,eml1	Listing of above .bld job	
wfloppy.rel,emlb,01,emlb		_____
bld-plan.txt,emlb,01,emlb	Contains this text	
bld-plan.run,emlb,01,emlb	Produce Product Build Doc	

Integration instructions for next release:

1. None. Complete at PSR Level AB.

NOTES:

*1 This is the former PSR level. It was the "Current" PSR level PL at the previous release. Normally this PL does not appear on the Release Tapes.

```
   STOP*ENDST*
*OPEN(10,EML.PL,EMLB,ZZ,     ,R)
*XREFUP(P=10)
```

CDC MP60 XREFUP V1.00 TODAY: 09/18/84 09:00:00

OLDPL VERSION: 2
MASTER CHARACTER: /
OLDPL PRODUCED: 08/30/84
16:31:13

OLDPL AUDIT:		TOTAL	YANKED	ACTIVE	RUNNING
DECK	YANK$$$	1	0	1	1
COMDECK	HISTORY	32	0	32	33
COMDECK	IDENT	3	0	3	36
COMDECK	NOSUM	2	0	2	38
COMDECK	DOCU	43	0	43	81
COMDECK	INTRUPT	83	0	83	164
COMDECK	F2	73	0	73	237
COMDECK	STATMODE	112	0	112	349
COMDECK	INTMASK	79	0	79	428
COMDECK	TRNSFORM	45	0	45	473
COMDECK	EQUATES	81	0	81	554
COMDECK	F1	52	0	52	606
COMDECK	AUTO1	128	0	128	734
COMDECK	AUTO2	202	0	202	936
COMDECK	TBOOT	125	0	125	1061
COMDECK	AUTO3	80	0	80	1141
COMDECK	EMUL	376	0	376	1517
COMDECK	INSTR	3489	0	3489	5006
COMDECK	ENDFIN	3	0	3	5009
DECK	EMULATOR	16	0	16	5025
DECK	QWIKSTRT	13	0	13	5038
DECK	TAPEBOOT	13	0	13	5051
DECK	WFLOPPY	93	0	93	5144
DECK	BOOTMAC	149	0	149	5293
DECK	SMDFMTR	878	0	878	6171
DECK	UDSKFMTR	1036	0	1036	7207

DECKS MODIFIED BY A GIVEN IDENT:

IDENT	LINES	DECKS OR COMDECKS MODIFIED)
LEV-AC	3	HISTORY

IDENTS THAT MODIFY A GIVEN DECK:

DECK	LINES	IDENT(S) THAT MODIFY THE DECK
YANK$$$	1	
HISTORY	29	LEV-AC
IDENT	3	
NOSUM	2	
DOCU	43	
INTRUPT	83	
F2	73	
STATMODE	112	
INTMASK	79	
TRNSFORM	45	
EQUATES	81	
F1	52	
AUTO1	128	
AUTO2	202	
TBOOT	125	
AUTO3	80	

EMUL	376
INSTR	1441
ENDFIN	3
EMULATOR	16
QWIKSTRT	13
TAPEBOOT	13
WFLOPPY	93
BOOTMAC	149
SMDFMTR	878
UDSKFMTR	1036

DECKS THAT CALL A GIVEN COMMON DECK:

COMDECK	DECKS CALLING THE COMMON DECK
IDENT	EMULATOR QWIKSTRT TAPEBOOT
NOSUM	QWIKSTRT TAPEBOOT
DOCU	EMULATOR
INTRUPT	EMULATOR
F2	EMULATOR QWIKSTRT TAPEBOOT
STATMODE	EMULATOR QWIKSTRT TAPEBOOT
INTMASK	EMULATOR QWIKSTRT TAPEBOOT
TRNSFORM	EMULATOR QWIKSTRT TAPEBOOT
EQUATES	EMULATOR QWIKSTRT TAPEBOOT
F1	EMULATOR QWIKSTRT TAPEBOOT
AUTO1	EMULATOR QWIKSTRT TAPEBOOT
AUTO2	EMULATOR QWIKSTRT
TBOOT	TAPEBOOT
AUTO3	EMULATOR QWIKSTRT TAPEBOOT
EMUL	EMULATOR
INSTR	EMULATOR
ENDFIN	EMULATOR QWIKSTRT TAPEBOOT

COMMON DECKS CALLED BY A GIVEN DECK OR COMDECK:

DECK	COMMON DECKS CALLED BY THE DECK				
EMULATOR	IDENT	DOCU	INTRUPT	F2	INTMASK
	STATMODE	TRNSFORM	EQUATES	F1	AUTO1
	AUTO2	AUTO3	EMUL	INSTR	ENDFIN
QWIKSTRT	IDENT	NOSUM	F2	STATMODE	INTMASK
	TRNSFORM	EQUATES	F1	AUTO1	AUTO2
	AUTO3	ENDFIN			
TAPEBOOT	IDENT	NOSUM	F2	STATMODE	INTMASK
	TRNSFORM	EQUATES	F1	AUTO1	TBOOT
	AUTO3	ENDFIN			

NULL IDENTS:

NULL DECKS:

COMMON DECKS NOT CALLED:

HISTORY

```
XREFUP FINISHED.
  *CLOSE(10)
  *LISTF
```

```
*JOB(ID=EML-PL-SPS.BLD)
*SCHED(CM=9,TL=9999,PL=10000,SCR=40)
#
#  This job builds a higher PSR Level release Oldpl from one of
#  a given level and the appropriate PSR code.
#
#  PSR code is obtained from the Systems Technology Division
#  (of CDC) PSR Summaries.
#
#------------
#  This portion of the job is temporary.  It resequences the Level AB
#  OLDPL and prepares for AC generation.
#
*OPEN(5,EML.PL,EMLO,AB,EMLO,R)
*UPDATE(F,P=5,N=6,*=/,O=A,S=7)
/FINIS
*CLOSE(6)
*REWIND(7)
*UPDATE(F,I=7,N=10,*=/,O=A)
*CLOSE(7)
*REWIND(10)
#------------
*RELEASE(EML.PL,EMLO,AC,EMLO)
#-----*OPEN(10,EML.PL,EMLO,AB,EMLO,R)
*UPDATE(P=10,N=20,O=A,*=/)
// PLACE PSR CODE AFTER THIS LINE.
/IDENT LEV-AC
/INSERT HISTORY.3
LEV-AC              08 AUG 84              Fariss, G. B.
     THIS POINT DIVIDES LEVEL AC FROM HIGHER LEVELS.

/FINIS
*SAVEPF(20,EML.PL,EMLO,AC,EMLO)
*SAVEPF(62,EML-PL-SPS.LST,EMLL,01,EMLL)
*EOJ
```

```
*JOB(ID=EML-PL-LOC.BLD)
*SCHED(CM=9,TL=9999,PL=10000,SCR=40)
#
#  This job adds local-site modifications to the standard Oldpl
#  and builds the final Oldpl (always Edition ZZ).
#
*RELEASE(EML.PL,EMLB,ZZ,EMLB)
*OPEN(10,EML.PL,EMLO,AC,EMLO,R)  # Change the edition as appropriate
*UPDATE(P=10,N=20,O=A,*=/)
// PLACE LOCAL-MOD CODE AFTER THIS LINE.
/FINIS
*SAVEPF(20,EML.PL,EMLB,ZZ,EMLB)
*SAVEPF(62,EML-PL-LOC.LST,EMLL,01,EMLL)
*EOJ
```

```
*JOB(ID=EML.BLD)
*SCHED(CM=10,PL=41000,SCR=100,TL=99999)
#
# This job builds the MP-32 MP-60 Emulator and produces a Deadstart
# Binary Object file and a Pure Binary Object file.
#
*OPEN(1,EML.PL,EMLB,ZZ,EMLB,R)
*UPDATE(Q,P=1,C=2,*=/)
/COMPILE EMULATOR
/FINIS
*MASS(I=2,L,P=10,X=11)
*SAVEPF(10,EML.OSM,EMLB,01,EMLB)
*SAVEPF(11,EML.ABS,EMLB,01,EMLB)
*SAVEPF(62,EML.LST,EMLL,01,EMLL)
*EOJ
```

```
*JOB(ID=EML-FD.RUN)
*SCHED(CM=10,PL=41000,SCR=100,TL=99999,FDD=1)
#
#  This job makes a new MP-32 MP-60 Emulator Floppy Disk.
#
*OPEN(10,EML.DSM,EMLB,01,EMLB,R)
*OPEN(2,WFLOPPY.REL,EMLB,01,EMLB,R)
*EQUIP(20=FDD)
*LOAD(2)
*RUN
EMULATOR            PSR AB       MPX/OS V3
G       N  1  1  0  4  1  4  0  0  G            I                  @
*SAVEPF(62,EML-FD.LST,EMLL,01,EMLL)
*EOJ
```

```
*JOB(ID=EML-SYS.RUN)
*SCHED(CM=12,PL=1000,SCR=10,TL=99999)
#
#This job replaces the MP-60 Emulator on the current system disk.
#
*OPEN(1,EML.ABS,EMLB,01,EMLB,R)
*PRELIB
*MICR
*ALT(ALT=1)
*ENDPLIB
*SAVEPF(62,EML-SYS.LST,EMLL,01,EMLL)
*EOJ
```

```
*JOB(ID=QWIK.BLD)
*SCHED(CM=10,PL=5000,TL=100)
#
#  This job builds the QWIKSTRT deadstart microcode module.
#
*OPEN(1,EML.PL,EMLB,ZZ,EMLB,R)
*UPDATE(Q,P=1,C=2,*=/)
/COMPILE QWIKSTRT
/FINIS
*MASS(I=2,L,P=10)
*SAVEPF(10,QWIK.DSM,EMLB,01,EMLB)
*SAVEPF(62,QWIK.LST,EMLL,01,EMLL)
*EOJ
```

```
*JOB(ID=QWIK-FD.RUN)
*SCHED(CM=9,PL=5000,TL=100,FDD=1)
#
# This job makes a new QWIKSTRT floppy disk.
#
*OPEN(10,QWIK.DSM,EMLB,01,EMLB,R)
*OPEN(2,WFLOPPY.REL,EMLB,01,EMLB,R)
*EQUIP(20=FDD)
*LOAD(2)
*RUN
QWIKSTRT            PSR AB       MPX/OS V3
G       N  1  1  0  4  1  4  0  0  G              I                    ∂
*SAVEPF(62,QWIK-FD.LST,EMLL,01,EMLL)
*EOJ
```

```
*JOB(ID=BOOT.BLD)
*SCHED(CM=10,PL=2000,SCR=10,TL=99999)
#
# This job builds the TAPEBOOT deadstart microcode module.  TAPEBOOT is
# used to load the INSTALL or DSKUTIL programs.
#
*OPEN(1,EML.PL,EMLB,ZZ,EMLB,R)
*UPDATE(Q,P=1,C=2,*=/)
/COMPILE TAPEBOOT
/FINIS
*MASS(I=2,L,P=10)
*SAVEPF(10,BOOT.OSM,EMLB,01,EMLB)
*SAVEPF(62,BOOT.LST,EMLL,01,EMLL)
*EOJ
```

```
*JOB(ID=BOOT-FD.RUN)
*SCHED(CM=9,PL=2000,SCR=10,TL=99999,FDD=1)
#
# This job makes a TAPEBOOT floppy disk.  TAPEBOOT is used to load
# the INSTALL or DSKUTIL programs.
#
*OPEN(10,BOOT.DSM,EMLB,01,EMLB,R)
*OPEN(2,WFLOPPY.REL,EMLB,01,EMLB,R)
*EQUIP(20=FDD)
*LOAD(2)
*RUN
TAPEBOOT            PSR AB       MPX/OS V3
G       N  1  1  0  4  1  4  0  0  G              I                  @
*SAVEPF(62,BOOT-FD.LST,EMLL,01,EMLL)
*EOJ
```

```
*JOB(ID=FMTR.BLD)
*SCHED(CM=9,PL=5000,TL=100)
#
# This job builds the SMDFMTR deadstart microcode module.
# The module formats a dual-density 858 disk pack.
#
# Note:  There are three ways to format a disk pack, all in
#        various stages of dis-repair:
#          1. The FCR Command deck on emi.pl called SMDFMTR
#             has no corresponding source code; however, it
#             is the one currently in use and is extracted
#             from the Oldpl by this job.
#          2. The microcode source deck on emi.pl called
#             UDSKFMTR.  This code formats the disk, tests it,
#             and then exercises the DMA vs Memory accesses.
#             It is quite complicated to run and is probably
#             not worth fooling with.
#          3. There exist (SMDFIX-INS.BLD,OS,01,OS ???)
#             some modifications to the program INSTALL on
#             os.pl that will enable the INSTALL program to
#             optionally format the disk.  Obviously, these
#             modifications are not yet operational.
#                                        GBF  5-30-84
*OPEN(1,EML.PL,EMLB,ZZ,EMLB,R)
*UPDATE(Q,P=1,C=2,*=/)
/COMPILE SMDFMTR
/FINIS
*COPYCF(2,10,1,1,80)     # Remove the sequence numbers
*SAVEPF(10,FMTR.DSM,EMLB,01,EMLB)
*SAVEPF(62,FMTR.LST,EMLL,01,EMLL)
*EOJ
```

```
*JOB(ID=FMTR-FD.RUN)
*SCHED(CM=9,PL=5000,TL=100,FDD=1)
#
# This job makes a new FMTR floppy disk.
#
# Note:  See notes in FMTR.BLD,EMLB.  GBF 7-08-82
#
*OPEN(10,FMTR.DSM,EMLB,01,EMLB,R)
*OPEN(2,WFLOPPY.REL,EMLB,01,EMLB,R)
*EQUIP(20=FDD)
*LOAD(2)
*RUN
SMDFMTR              PSR AB      MPX/OS V3 [SAME AS "SMD-FORMATTER" 01/20/80 DWD]
G       N  1  6  0  8  1  4  0  0  G                                K    G          G
*SAVEPF(62,FMTR-FD.LST,EMLL,01,EMLL)
*EOJ
```

```
*JOB(ID=WFLOPPY.BLD)
*SCHED(CM=10,PL=1000,TL=100)
#
#  This job builds the WFLOPPY Utility Program which is used by the
#  "-fd" jobs to write deadstart microcode floppy disks.
#
*OPEN(1,EML.PL,EMLB,ZZ,EMLB,R)
*UPDATE(Q,P=1,C=2,*=/)
/COMPILE WFLOPPY
/FINIS
*FTN(I=2,X=3,L,R)
*SAVEPF(3,WFLOPPY.REL,EMLB,01,EMLB)
*SAVEPF(62,WFLOPPY.LST,EMLL,01,EMLL)
*EOJ
```

```
   STOP*ENDST*
*SAVEPF(62,BLD-PLAN.LST,EMLL,01,     )
*EOJ     BLD-PLAN
```

M P - 3 2 P R O D U C T S E T

S Y S

The MPX/OS V3 Resident source code is kept here. Build jobs and binaries are also kept here. MPX/OS V3 is maintained by CDC Information Sciences Division. Government Systems Division maintains MPX/OS V2.

SYS0 owner last dumped on _____

SYSB owner last dumped on _____

File Name	Description	Last Build
os.pl,sys0,AA,sys0	Previous PSR level PL	*1
os-pl-sps.bld,sys0,01,sys0	Build current PSR level	
os-pl-sps.lst,sysl,01,sysl	Listing of above .bld job	
os.pl,sys0,AB,sys0	Current PSR level PL	_____
os-pl-loc.bld,sys0,01,sys0	Build PL with Local mods	
os-pl-loc.lst,sysl,01,sysl	Listing of above .bld job	
os.pl,sysb,ZZ,sysb	Local (working) PL	_____
bcf.bld,sysb,01,sysb	Batch Control Facility	
bcf.lst,sysl,01,sysl	Listing of above .bld job	
bcf.rel,sysb,01,sysb		_____
bclamgr.bld,sysb,01,sysb	BCLA Manager	
bclamgr.lst,sysl,01,sysl	Listing of above .bld job	
bclamgr.rel,sysb,01,sysb		_____
cccmgr.bld,sysb,01,sysb	CCC Manager	
cccmgr.lst,sysl,01,sysl	Listing of above .bld job	
cccmgr.rel,sysb,01,sysb		_____
crdmgr.bld,sysb,01,sysb	Card Reader Manager	
crdmgr.lst,sysl,01,sysl	Listing of above .bld job	
crdmgr.rel,sysb,01,sysb		_____
crtmgr.bld,sysb,01,sysb	Operator CRT Manager	
crtmgr.lst,sysl,01,sysl	Listing of above .bld job	
crtmgr.rel,sysb,01,sysb		_____
ctt.bld,sysb,01,sysb	Char Translation Tables	
ctt.lst,sysl,01,sysl	Listing of above .bld job	
ctt.rel,sysb,01,sysb		_____
daydmp.bld,sysb,01,sysb	Dayfile Dump	
daydmp.lst,sysl,01,sysl	Listing of above .bld job	
daydmp.rel,sysb,01,sysb		_____
daymgr.bld,sysb,01,sysb	Dayfile Manager	
daymgr.lst,sysl,01,sysl	Listing of above .bld job	
daymgr.rel,sysb,01,sysb		_____
dcf.bld,sysb,01,sysb	Device Control Facility	
dcf.lst,sysl,01,sysl	Listing of above .bld job	
dcf.rel,sysb,01,sysb		_____
dmf.bld,sysb,01,sysb	Dayfile Management Facility	
dmf.lst,sysl,01,sysl	Listing of above .bld job	
dmf.rel,sysb,01,sysb		_____
ermgr.bld,sysb,01,sysb	Error Manager	
ermgr.lst,sysl,01,sysl	Listing of above .bld job	
ermgr.rel,sysb,01,sysb		_____
esrs.bld,sysb,01,sysb	Executive Service Requests	
esrs.lst,sysl,01,sysl	Listing of above .bld job	

```
  esrs.rel,sysb,01,sysb
                                                    ------
evnmgr.bld,sysb,01,sysb          Event Manager
  evnmgr.lst,sysl,01,sysl        Listing of above .bld job
  evnmgr.rel,sysb,01,sysb
                                                    ------
fcf.bld,sysb,01,sysb             File Control Facility
  fcf.lst,sysl,01,sysl           Listing of above .bld job
  fcf.rel,sysb,01,sysb
                                                    ------
fddmgr.bld,sysb,01,sysb          Flexible Disk Manager
  fddmgr.lst,sysl,01,sysl        Listing of above .bld job
  fddmgr.rel,sysb,01,sysb
                                                    ------
filemgr.bld,sysb,01,sysb         File Manager
  filemgr.lst,sysl,01,sysl       Listing of above .bld job
  filemgr.rel,sysb,01,sysb
                                                    ------
icf.bld,sysb,01,sysb             Interactive Comm Facility
  icf.lst,sysl,01,sysl           Listing of above .bld job
  icf.rel,sysb,01,sysb
                                                    ------
intrcom.bld,sysb,01,sysb         InterCPU Communication
  intrcom.lst,sysl,01,sysl       Listing of above .bld job
  intrcom.rel,sysb,01,sysb
                                                    ------
ioits.bld,sysb,01,sysb           Interactive part of IOMGR
  ioits.lst,sysl,01,sysl         Listing of above .bld job
  ioits.rel,sysb,01,sysb
                                                    ------
iomgr.bld,sysb,01,sysb           Manager of device managers
  iomgr.lst,sysl,01,sysl         Listing of above .bld job
  iomgr.rel,sysb,01,sysb
                                                    ------
its.bld,sysb,01,sysb             ITS utility routines
  its.lst,sysl,01,sysl           Listing of above .bld job
  its.rel,sysb,01,sysb
                                                    ------
jldr.bld,sysb,01,sysb            Job Loader
  jldr.lst,sysl,01,sysl          Listing of above .bld job
  jldr.rel,sysb,01,sysb
                                                    ------
jmgr.bld,sysb,01,sysb            Job Manager
  jmgr.lst,sysl,01,sysl          Listing of above .bld job
  jmgr.rel,sysb,01,sysb
                                                    ------
lof.bld,sysb,01,sysb             Log-On Facility
  lof.lst,sysl,01,sysl           Listing of above .bld job
  lof.rel,sysb,01,sysb
                                                    ------
lowmem.bld,sysb,01,sysb          Resident Tables
  lowmem.lst,sysl,01,sysl        Listing of above .bld job
  lowmem.rel,sysb,01,sysb
                                                    ------
lptmgr.bld,sysb,01,sysb          Line Printer Manager
  lptmgr.lst,sysl,01,sysl        Listing of above .bld job
  lptmgr.rel,sysb,01,sysb
                                                    ------
mt05mgr.bld,sysb,01,sysb         Magnetic Tape Manager
  mt05mgr.lst,sysl,01,sysl       Listing of above .bld job
  mt05mgr.rel,sysb,01,sysb
                                                    ------
ocf.bld,sysb,01,sysb             Operator Control Facility
  ocf.lst,sysl,01,sysl           Listing of above .bld job
  ocf.rel,sysb,01,sysb
                                                    ------
opfmgr.bld,sysb,01,sysb          Connection to Cyber CRT
  opfmgr.lst,sysl,01,sysl        Listing of above .bld job
  opfmgr.rel,sysb,01,sysb
                                                    ------
pdump.bld,sysb,01,sysb           Panic Dump
  pdump.lst,sysl,01,sysl         Listing of above .bld job
  pdump.rel,sysb,01,sysb
                                                    ------
rbtmgr.bld,sysb,01,sysb          200UT Pseudo Manager
  rbtmgr.lst,sysl,01,sysl        Listing of above .bld job
  rbtmgr.rel,sysb,01,sysb
                                                    ------
smdmgr.bld,sysb,01,sysb          Storage Module Drive Manager
  smdmgr.lst,sysl,01,sysl        Listing of above .bld job
```

```
  smdmgr.rel,sysb,01,sysb
stdio.bld,sysb,01,sysb                  ------
  stdio.lst,sysl,01,sysl                Print Files, Read Cards
  stdio.rel,sysb,01,sysb                Listing of above .bld job
sysbio.bld,sysb,01,sysb                 ------
  sysbio.lst,sysl,01,sysl               System Blocker/Deblocker
  sysbio.rel,sysb,01,sysb               Listing of above .bld job
sysqs.bld,sysb,01,sysb                  ------
  sysqs.lst,sysl,01,sysl                Manage I/O Queues
  sysqs.rel,sysb,01,sysb                Listing of above .bld job
systinit.bld,sysb,01,sysb               ------
  systinit.lst,sysl,01,sysl             Initialize MPX/OS
  systinit.rel,sysb,01,sysb             Listing of above .bld job
taskmgr.bld,sysb,01,sysb                ------
  taskmgr.lst,sysl,01,sysl              Manage all Tasks
  taskmgr.rel,sysb,01,sysb              Listing of above .bld job
uclamgr.bld,sysb,01,sysb                ------
  uclamgr.lst,sysl,01,sysl              MPCLA Device Manager
  uclamgr.rel,sysb,01,sysb              Listing of above .bld job
                                        ------

    res.bld,sysb,01,sysb                  Build a Resident from .rel's
      res.lst,sysl,01,sysl                Listing of above .bld job
      mpx-resident,mpxr,__,****           MPX/OS Resident Module

blkdeblk.bld,sysb,01,sysb               Build BLKDEBLK for Library
  blkdeblk.lst,sysl,01,sysl             Listing of above .bld job
  sys-bkdbk.rel,lbld,01,lbld            ------
taskmon.bld,sysb,01,sysb                Build TASKMON for Library
  taskmon.lst,sysl,01,sysl              Listing of above .bld job
  sys-tskmon.rel,lbld,01,lbld           ------

mpxboot.bld,sysb,01,sysb                Preliminary OS Interactions
  mpxboot.lst,sysl,01,sysl              Listing of above .bld job
  mpxboot.rel,sysb,01,sysb              ------
    mpxboot.run,sysb,01,sysb            Put boot on system disk
      mpxbt-run.lst,sysl,01,sysl          Listing of above .run job
      System Disk

install.bld,sysb,01,sysb                Program to make new Sys Disk
  install.lst,sysl,01,sysl              Listing of above .bld job
  install.rel,sysb,01,sysb              ------
    install.run,sysb,01,sysb            Put INSTALL on Mag Tape
      inst-run.lst,sysl,01,sysl           Listing of above .run job
      Magnetic Tape
dumpsys.bld,sysb,01,sysb                Initial disk load data
  dumpsys.lst,sysl,01,sysl              Listing of above .bld job
  Magnetic Tape

dskutil.bld,sysb,01,sysb                Inspect/Change Disk program
  dskutil.lst,sysl,01,sysl              Listing of above .bld job
  dskutil.rel,sysb,01,sysb              ------
    dskutil.run,sysb,01,sysb            Put DSKUTIL on Mag Tape
      dskutl-run.lst,sysl,01,sysl         Listing of above .run job
      Magnetic Tape

listcom.bld,sysb,01,sysb                Lists all MPX/OS Common Decks
  listcom.lst,sysl,01,sysl              Listing of above .bld job

fmptape.bld,sysb,01,sysb                Make Disk files for INSTALL
```

fmptape.lst,sysl,01,sysl Listing of above .bld job
Magnetic Tape

bld-plan.txt,sysb,01,sysb Contains this text
bld-plan.run,sysb,01,sysb Produce Product Build Doc

Integration instructions for next release:

1. None. Complete at PSR Level AB.

NOTES:
*1 This is the previous Oldpl. It was the "current" Oldpl for the previous PSR level. It normally does not appear on the Release Tapes.

```
   STOP*ENDST*
*OPEN(10,OS.PL,SYSB,ZZ,     ,R)
*XREFUP(P=10)
```

CDC MP60 XREFUP V1.00 TODAY: 09/18/84 10:58:49

OLDPL VERSION: 2
MASTER CHARACTER: /
OLDPL PRODUCED: 08/13/84
13:23:14

OLDPL AUDIT:		TOTAL	YANKED	ACTIVE	RUNNING
DECK	YANK$$$	1	0	1	1
COMDECK	HISTORY	1112	0	1112	1113
COMDECK	SITE	82	0	82	1195
COMDECK	REG-0	26	0	26	1221
COMDECK	PGFEQU	13	0	13	1234
COMDECK	JCTEQU	95	0	95	1329
COMDECK	TCTEQU	152	0	152	1481
COMDECK	JMPEQU	22	0	22	1503
COMDECK	DISPCOS	11	0	11	1514
COMDECK	USTEQU	33	0	33	1547
COMDECK	HRWTYPS	37	0	37	1584
COMDECK	DEVLBL	29	0	29	1613
COMDECK	LBLFLE	71	0	71	1684
COMDECK	ESTEQU	41	0	41	1725
COMDECK	DETEQU	40	0	40	1765
COMDECK	MQFMEQU	10	0	10	1775
COMDECK	DMSEQU	40	0	40	1815
COMDECK	RETEQU	86	0	86	1901
COMDECK	LTEQU	131	0	131	2032
COMDECK	FDTEQU	43	0	43	2075
COMDECK	SGTEQU	21	0	21	2096
COMDECK	VNTEQU	31	0	31	2127
COMDECK	QPTEQU	65	0	65	2192
COMDECK	IOCMDS	37	0	37	2229
COMDECK	IOEQUS	22	0	22	2251
COMDECK	TSKMEQU	12	0	12	2263
COMDECK	MULTICPU	28	0	28	2291
COMDECK	OSPOOL	8	0	8	2299
COMDECK	RTWDEQU	7	0	7	2306
COMDECK	MACROS	16	0	16	2322
COMDECK	PITEQU	49	0	49	2371
COMDECK	RTTEQU	50	0	50	2421
COMDECK	TRTEQU	29	0	29	2450
COMDECK	UETEQU	181	0	181	2631
COMDECK	DISKIO	221	0	221	2852
COMDECK	CRTIO	129	0	129	2981
COMDECK	ITSEQU	63	0	63	3044
COMDECK	TERMCLS	52	0	52	3096
COMDECK	SQSEQU	145	0	145	3241
COMDECK	DAYEQU	24	0	24	3265
COMDECK	EVCEQU	15	0	15	3280
COMDECK	JPPEQU	178	0	178	3458
DECK	LISTCOM	50	0	50	3508
DECK	LSTHIST	2	0	2	3510
DECK	LOWMEM	2776	0	2776	6286
DECK	PDUMP	425	0	425	6711
DECK	ESRS	2069	0	2069	8780
DECK	IOMGR	2230	0	2230	11010
DECK	IOITS	2205	0	2205	13215
DECK	ERMGR	665	0	665	13880
DECK	EVNMGR	1260	0	1260	15140
DECK	INTRCOM	441	0	441	15581
DECK	TASKMGR	1492	0	1492	17073

DECK	DAYMGR	990	0	990	18063
DECK	DAYDMP	852	0	852	18915
DECK	SYSQS	2564	0	2564	21479
DECK	FILEMGR	2721	0	2721	24200
DECK	SYSBIO	854	0	854	25054
DECK	STDIO	722	0	722	25776
DECK	ITS	1726	0	1726	27502
DECK	ICF	2921	0	2921	30423
DECK	LOF	942	0	942	31365
DECK	OCF	3112	0	3112	34477
DECK	FCF	1004	0	1004	35481
DECK	DMF	767	0	767	36248
DECK	DCF	1299	0	1299	37547
DECK	BCF	628	0	628	38175
DECK	SMDMGR	1935	0	1935	40110
DECK	FDDMGR	812	0	812	40922
DECK	CRTMGR	660	0	660	41582
DECK	BCLAMGR	927	0	927	42509
DECK	UCLAMGR	1144	0	1144	43653
DECK	CRDMGR	680	0	680	44333
DECK	MT05MGR	787	0	787	45120
DECK	LPTMGR	431	0	431	45551
DECK	CCCMGR	1770	0	1770	47321
DECK	MQMGR	1636	0	1636	48957
DECK	RBTMGR	2653	0	2653	51610
DECK	SYSTINIT	1614	0	1549	53159
COMDECK	JMGRBDB	1180	0	1180	54339
DECK	LISTBDB	59	0	59	54398
DECK	JMGR	3243	0	3238	57636
DECK	JLDR	2206	0	2206	59842
DECK	OPFMGR	1007	0	1007	60849
DECK	CTT	363	0	363	61212
DECK	TAPEBOOT	133	0	133	61345
DECK	INSTALL	3349	0	3349	64694
DECK	MPXBOOT	880	0	880	65574
DECK	DSKUTIL	1651	0	1651	67225
DECK	TASKMON	33	0	33	67258
DECK	BLKDEBLK	1369	0	1369	68627

DECKS MODIFIED BY A GIVEN IDENT:

IDENT	LINES	DECKS OR COMDECKS MODIFIED
LEV-AC	3	HISTORY
LEVAC001	119	HISTORY SYSTINIT
LEVAC002	21	HISTORY JMGR

IDENTS THAT MODIFY A GIVEN DECK:

DECK	LINES	IDENT(S) THAT MODIFY THE DECK
YANK$$$	1	
HISTORY	1094	LEVAC002 LEVAC001 LEV-AC
SITE	82	
REG-O	26	
PGFEQU	13	
JCTEQU	95	
TCTEQU	152	
JMPEQU	22	
DISPCDS	11	
USTEQU	33	
HRWTYPS	37	

DEVLBL 29
LBLFLE 71
ESTEQU 41
DETEQU 40
MQFMEQU 10
DMSEQU 40
RETEQU 86
LTEQU 131
FDTEQU 43
SGTEQU 21
VNTEQU 31
QPTEQU 65
IOCMDS 37
IOEQUS 22
TSKMEQU 12
MULTICPU 28
OSPOOL 8
RTWDEQU 7
MACROS 16
PITEQU 49
RTTEQU 50
TRTEQU 29
UETEQU 181
DISKIO 221
CRTIO 129
ITSEQU 63
TERMCLS 52
SQSEQU 145
DAYEQU 24
EVCEQU 15
JPPEQU 178
LISTCOM 50
LSTHIST 2
LOWMEM 728
PDUMP 425
ESRS 21
IOMGR 182
IOITS 157
ERMGR 665
EVNMGR 1260
INTRCOM 441
TASKMGR 1492
DAYMGR 990
DAYDMP 852
SYSQS 516
FILEMGR 673
SYSBIO 854
STDIO 722
ITS 1726
ICF 873
LOF 942
DCF 1064
FCF 1004
DMF 767
DCF 1299
BCF 628
SMDMGR 1935
FDDMGR 812
CRTMGR 660
BCLAMGR 927
UCLAMGR 1144
CRDMGR 680

MTO5MGR	787	
LPTMGR	431	
CCCMGR	1770	
MQMGR	1636	
RBTMGR	605	
SYSTINIT	1565	LEVAC001
JMGRBDB	1180	
LISTBDB	59	
JMGR	1189	LEVAC002
JLDR	158	
OPFMGR	1007	
CTT	363	
TAPEBOOT	133	
INSTALL	1301	
MPXBOOT	880	
DSKUTIL	1651	
TASKMON	33	
BLKDEBLK	1369	

DECKS THAT CALL A GIVEN COMMON DECK:

COMDECK	DECKS CALLING THE COMMON DECK				
HISTORY	LSTHIST				
SITE	LISTCOM	LOWMEM	PDUMP	ESRS	IOMGR
	IOITS	ERMGR	EVNMGR	INTRCOM	TASKMGR
	DAYMGR	SYSQS	FILEMGR	ITS	ICF
	LOF	SYSTINIT	JMGR	JLDR	MPXBOOT
REG-O	LISTCOM	LOWMEM	ESRS	IOMGR	IOITS
	ERMGR	EVNMGR	INTRCOM	TASKMGR	SYSQS
PGFEQU	LISTCOM	LOWMEM	ESRS	IOMGR	IOITS
	EVNMGR	INTRCOM	TASKMGR	SYSQS	SYSTINIT
JCTEQU	LISTCOM	LOWMEM	ESRS	IOMGR	IOITS
	ERMGR	EVNMGR	INTRCOM	TASKMGR	DAYMGR
	DAYDMP	SYSQS	FILEMGR	OCF	SYSTINIT
TCTEQU	LISTCOM	LOWMEM	PDUMP	ESRS	IOMGR
	IOITS	ERMGR	EVNMGR	INTRCOM	TASKMGR
	DAYMGR	DAYDMP	SYSQS	FILEMGR	OCF
	DMF	MQMGR	RBTMGR	SYSTINIT	JMGR
	JLDR	OPFMGR			
JMPEQU	LISTCOM	SYSQS			
DISPCDS	LISTCOM	INTRCOM	SYSQS		
USTEQU	LISTCOM	IOMGR	IOITS	ERMGR	EVNMGR
	INTRCOM	SYSQS	FILEMGR	STDIO	ITS
	ICF	OCF	FCF	DMF	DCF
	BCF	FDDMGR	CRTMGR	BCLAMGR	UCLAMGR
	CRDMGR	MTO5MGR	LPTMGR	CCCMGR	MQMGR
	RBTMGR	OPFMGR			
HRWTYPS	LISTCOM	LOWMEM	ESRS	IOMGR	IOITS
	ERMGR	EVNMGR	INTRCOM	SYSQS	FILEMGR
	ITS	ICF	LOF	DCF	RBTMGR
	SYSTINIT	JMGR	JLDR	OPFMGR	
DEVLBL	LISTCOM	INTRCOM	FILEMGR	FCF	SYSTINIT
LBLFLE	LISTCOM	INTRCOM	FILEMGR	FCF	SYSTINIT
ESTEQU	LISTCOM	LOWMEM	PDUMP	ESRS	IOMGR
	IOITS	ERMGR	EVNMGR	INTRCOM	FILEMGR
	ITS	ICF	FCF	DCF	RBTMGR
	SYSTINIT				
DETEQU	LISTCOM	LOWMEM	IOMGR	IOITS	ERMGR
	EVNMGR	INTRCOM	FILEMGR	FDDMGR	CRTMGR
	BCLAMGR	UCLAMGR	CRDMGR	MTO5MGR	LPTMGR
	CCCMGR	MQMGR	RBTMGR	SYSTINIT	OPFMGR

MQFMEQU	LISTCOM	MQMGR			
DMSEQU	LISTCOM	IOITS	RBTMGR		
RETEQU	LISTCOM	LOWMEM	IOMGR	IOITS	ERMGR
	EVNMGR	INTRCOM	TASKMGR	DAYDMP	FILEMGR
	FDDMGR	CRTMGR	BCLAMGR	UCLAMGR	CRDMGR
	MT05MGR	LPTMGR	CCCMGR	MQMGR	RBTMGR
	OPFMGR				
LTEQU	LISTCOM	LOWMEM	IOMGR	IOITS	ERMGR
	EVNMGR	INTRCOM	TASKMGR	DAYDMP	FILEMGR
	ICF	MQMGR	SYSTINIT		
FDTEQU	LISTCOM	LOWMEM	IOMGR	ERMGR	EVNMGR
	INTRCOM	DAYDMP	FILEMGR	FCF	SYSTINIT
SGTEQU	LISTCOM	LOWMEM	IOMGR	ERMGR	EVNMGR
	INTRCOM	FILEMGR	SYSTINIT		
VNTEQU	LISTCOM	LOWMEM	PDUMP	EVNMGR	TASKMGR
QPTEQU	LISTCOM	LOWMEM	SYSQS	STDIO	LOF
	DCF	BCF			
IOCMDS	LISTCOM	IOMGR	IOITS	ERMGR	EVNMGR
	INTRCOM	DCF	FDDMGR	CRTMGR	BCLAMGR
	UCLAMGR	CRDMGR	MT05MGR	LPTMGR	CCCMGR
	MQMGR	RBTMGR	OPFMGR		
IOEQUS	LISTCOM	LOWMEM	IOMGR	EVNMGR	INTRCOM
	TASKMGR	DAYMGR	DAYDMP	SYSQS	FILEMGR
	STDIO	ITS	ICF	LOF	FCF
	DCF	BCF	RBTMGR	SYSTINIT	
TSKMEQU	LISTCOM	INTRCOM	TASKMGR		
MULTICPU	LISTCOM	LOWMEM	ESRS	INTRCOM	TASKMGR
	SYSQS	SYSTINIT			
OSPOOL	LISTCOM	LOWMEM	INTRCOM	SYSTINIT	
RTWDEQU	LISTCOM	ESRS	INTRCOM	TASKMGR	SYSQS
	SYSTINIT				
MACROS	LISTCOM	LOWMEM	ESRS	DAYMGR	SYSTINIT
PITEQU	LISTCOM	IOITS	ERMGR	ITS	ICF
	CRTMGR	BCLAMGR	UCLAMGR	RBTMGR	SYSTINIT
	OPFMGR				
RTTEQU	LISTCOM	IOITS	ERMGR	FILEMGR	ITS
	ICF	LOF	OCF	DMF	DCF
	RBTMGR	SYSTINIT			
TRTEQU	LISTCOM	FILEMGR	ICF		
UETEQU	LISTCOM	IOMGR	IOITS	ERMGR	DAYMGR
	FILEMGR	ITS	ICF	LOF	OCF
	FCF	DMF	DCF	BCF	
DISKIO	LISTCOM	SYSTINIT	MPXBOOT		
CRTIO	LISTCOM	SYSTINIT	MPXBOOT		
ITSEQU	LISTCOM	STDIO	ITS	ICF	LOF
	OCF	FCF	DMF	DCF	BCF
TERMCLS	LISTCOM	ITS	ICF	LOF	RBTMGR
SQSEQU	LISTCOM	SYSQS	STDIO	ICF	OCF
	BCF				
DAYEQU	LISTCOM	TASKMGR	DAYMGR	DAYDMP	OCF
	DMF				
EVCEQU	LISTCOM	LOWMEM	SYSQS	STDIO	OCF
	BCF				
JPPEQU	LISTCOM	ESRS	TASKMGR	SYSQS	LISTBDB
	JMGR	JLDR			
JMGRBDB	LISTBDB	JMGR	JLDR		

COMMON DECKS CALLED BY A GIVEN DECK OR COMDECK:

DECK	COMMON DECKS CALLED BY THE DECK				
LISTCOM	SITE	REG-0	PGFEQU	JCTEQU	TCTEQU

	JMPEQU	DISPCDS	USTEQU	HRWTYPS	DEVLBL
	LBLFLE	ESTEQU	DETEQU	MQFMEQU	DMSEQU
	RETEQU	LTEQU	FDTEQU	SGTEQU	VNTEQU
	QPTEQU	IOCMDS	IOEQUS	TSKMEQU	MULTICPU
	OSPOOL	RTWDEQU	MACROS	PITEQU	RTTEQU
	TRTEQU	UETEQU	DISKIO	CRTIO	ITSEQU
	TERMCLS	SQSEQU	DAYEQU	EVCEQU	JPPEQU
LSTHIST	HISTORY				
LOWMEM	SITE	MACROS	REG-0	PGFEQU	MULTICPU
	OSPOOL	IOEQUS	HRWTYPS	ESTEQU	DETEQU
	LTEQU	FDTEQU	SGTEQU	RETEQU	JCTEQU
	TCTEQU	VNTEQU	EVCEQU	QPTEQU	
PDUMP	SITE	TCTEQU	ESTEQU	VNTEQU	
ESRS	SITE	REG-0	PGFEQU	MACROS	JCTEQU
	TCTEQU	JPPEQU	ESTEQU	RTWDEQU	HRWTYPS
	MULTICPU				
IOMGR	SITE	REG-0	PGFEQU	JCTEQU	TCTEQU
	USTEQU	HRWTYPS	ESTEQU	DETEQU	RETEQU
	LTEQU	FDTEQU	SGTEQU	UETEQU	IOCMDS
	IOEQUS				
IOITS	SITE	REG-0	PGFEQU	JCTEQU	TCTEQU
	USTEQU	HRWTYPS	ESTEQU	DETEQU	DMSEQU
	RETEQU	LTEQU	UETEQU	RTTEQU	PITEQU
	IOCMDS				
ERMGR	SITE	REG-0	JCTEQU	TCTEQU	USTEQU
	HRWTYPS	ESTEQU	DETEQU	RETEQU	LTEQU
	FDTEQU	SGTEQU	UETEQU	RTTEQU	PITEQU
	IOCMDS				
EVNMGR	SITE	REG-0	PGFEQU	JCTEQU	TCTEQU
	USTEQU	HRWTYPS	ESTEQU	DETEQU	RETEQU
	LTEQU	FDTEQU	SGTEQU	VNTEQU	IOCMDS
	IOEQUS				
INTRCOM	SITE	REG-0	PGFEQU	JCTEQU	TCTEQU
	DISPCDS	USTEQU	HRWTYPS	DEVLBL	LBLFLE
	ESTEQU	DETEQU	RETEQU	LTEQU	FDTEQU
	SGTEQU	IOCMDS	IOEQUS	TSKMEQU	MULTICPU
	OSPOOL	RTWDEQU			
TASKMGR	SITE	REG-0	PGFEQU	JCTEQU	TCTEQU
	JPPEQU	LTEQU	RETEQU	VNTEQU	DAYEQU
	TSKMEQU	MULTICPU	RTWDEQU	IOEQUS	
DAYMGR	SITE	IOEQUS	JCTEQU	TCTEQU	UETEQU
	DAYEQU	MACROS			
DAYDMP	IOEQUS	JCTEQU	TCTEQU	FDTEQU	LTEQU
	RETEQU	DAYEQU			
SYSQS	SITE	REG-0	PGFEQU	MULTICPU	RTWDEQU
	JCTEQU	TCTEQU	SQSEQU	JMPEQU	JPPEQU
	EVCEQU	QPTEQU	IOEQUS	HRWTYPS	USTEQU
	DISPCDS				
FILEMGR	SITE	JCTEQU	TCTEQU	USTEQU	HRWTYPS
	DEVLBL	LBLFLE	ESTEQU	DETEQU	RETEQU
	LTEQU	FDTEQU	SGTEQU	UETEQU	TRTEQU
	RTTEQU	IOEQUS			
STDIO	IOEQUS	SQSEQU	QPTEQU	USTEQU	EVCEQU
	ITSEQU				
ITS	SITE	TERMCLS	RTTEQU	PITEQU	ESTEQU
	UETEQU	ITSEQU	IOEQUS	USTEQU	HRWTYPS
ICF	SITE	PITEQU	RTTEQU	UETEQU	TRTEQU
	ESTEQU	LTEQU	HRWTYPS	TERMCLS	IOEQUS
	USTEQU	SQSEQU	ITSEQU		
LDF	SITE	TERMCLS	RTTEQU	UETEQU	ITSEQU
	QPTEQU	HRWTYPS	IOEQUS		
OCF	JCTEQU	TCTEQU	UETEQU	ITSEQU	USTEQU

	RTTEQU	EVCEQU	SQSEQU	DAYEQJ	
FCF	ITSEQU	ESTEQU	LBLFLE	DEVLBL	FDTEQU
	UETEQU	IOEQUS	USTEQU		
DMF	USTEQU	TCTEQU	RTTEQU	UETEQJ	ITSEQU
	DAYEQU				
DCF	IOEQUS	HRWTYPS	IOCMDS	USTEQJ	ITSEQJ
	UETEQU	QPTEQU	RTTEQU	ESTEQJ	
BCF	IOEQUS	USTEQU	EVCEQU	UETEQJ	ITSEQJ
	SQSEQU	QPTEQU			
FDDMGR	DETEQU	RETEQU	USTEQU	IOCMDS	
CRTMGR	DETEQU	RETEQU	PITEQU	USTEQJ	IOCMDS
BCLAMGR	DETEQU	RETEQU	PITEQU	USTEQJ	IOCMDS
UCLAMGR	DETEQU	RETEQU	PITEQU	USTEQU	IOCMDS
CRDMGR	DETEQU	RETEQU	USTEQU	IOCMDS	
MTO5MGR	DETEQU	RETEQU	USTEQU	IOCMDS	
LPTMGR	DETEQU	RETEQU	USTEQU	IOCMDS	
CCCMGR	DETEQU	RETEQU	USTEQU	IOCMDS	
MQMGR	DETEQU	MQFMEQU	RETEQU	TCTEQU	USTEQJ
	IOCMDS	LTEQU			
RBTMGR	ESTEQU	DETEQU	DMSEQU	RETEQJ	PITEQJ
	RTTEQU	USTEQU	TCTEQU	IOCMDS	IOEQUS
	HRWTYPS	TERMCLS			
SYSTINIT	SITE	PGFEQU	MACROS	MULTICPU	JCTEQJ
	TCTEQU	ESTEQU	DETEQU	LTEQU	FDTEQU
	SGTEQU	PITEQU	RTTEQU	DEVLBL	LBLFLE
	IOEQUS	HRWTYPS	OSPOOL	RTWDEQU	DISKIO
	CRTIO				
LISTBDB	JPPEQU	JMGRBDB			
JMGR	SITE	TCTEQU	HRWTYPS	JPPEQU	JMGRBDB
JLDR	SITE	TCTEQU	HRWTYPS	JPPEQU	JMGRBDB
OPFMGR	DETEQU	RETEQJ	TCTEQU	PITEQJ	USTEQJ
	IOCMDS	HRWTYPS			
MPXBOOT	SITE	DISKIO	CRTIO		

NULL IDENTS:

NULL DECKS:

COMMON DECKS NOT CALLED:

```
XREFUP FINISHED.
  *CLOSE(10)
  *LISTF
```

```
*JOB(ID=OS-PL-SPS.BLD)
*SCHED(CM=9,TL=9999,PL=10000,SCR=40)
#
#  This job builds a higher PSR Level release Oldpl from one of
#  a given level and the appropriate PSR code.
#
#  PSR code is obtained from the Systems Technology Division
#  (of CDC) PSR Summaries.
#
#-------------------------------------------------------------------------
#  This portion of the job is temporary.  It resequences the Level AB
#  OLDPL and prepares for AC generation.
#
*OPEN(5,OS.PL,SYS0,AB,SYS0,R)
*release(os-pl.txt,sys0,AC,sys0,0)
*allocate(os-pl.txt,sys0,AC,sys0,480,2200)
*open(7,os-pl.txt,sys0,AC,sys0)
*release(os.pl,sys0,TZ,sys0,0)
*allocate(os.pl,sys0,TZ,sys0,480,2200)
*open(6,os.pl,sys0,TZ,sys0)
*UPDATE(F,P=5,N=6,*=/,D=A,S=7)
/FINIS
*CLOSE(6)
*release(os.pl,sys0,TZ,sys0,0)
*REWIND(7)
*release(os.pl,sys0,TZ,sys0,0)
*allocate(os.pl,sys0,TZ,sys0,480,2200)
*open(10,os.pl,sys0,TZ,sys0)
*UPDATE(F,I=7,N=10,*=/,D=A)
*CLOSE(7)
*REWIND(10)
#-------------------------------------------------------------------------
*RELEASE(OS.PL,SYS0,AC,SYS0)
#-----    *OPEN(10,OS.PL,SYS0,AB,SYS0,R)
*UPDATE(P=10,N=20,D=A)
// PLACE PSR CODE AFTER THIS LINE.
/IDENT LEV-AC
/INSERT HISTORY.3
LEV-AC              08 AUG 84              Fariss, G. B.
      THIS POINT DIVIDES LEVEL AC FROM HIGHER LEVELS.

/COMPILE HISTORY
/IDENT LEVAC001
/INSERT HISTORY.3
LEVAC001 SYSTINIT  13 Aug 84              Fariss, G. B.
      This mod changes the manner in which the machine identifier
      is entered.  One can now type a single letter to specify the
      machine being used.  Also, the 8-character IDs have been changed.

/D SYSTINIT.702,705
**        RMFID     Request Mainframe Identifier
*
*         This section requests the Mainframe Identifier as a single
*         character which corresponds to a table entry.  If invalid
*         input is encountered, the entire table is displayed.  A CR
*         entry defaults to the first table entry.
/D SYSTINIT.726,766
          LDD,RC    MFIDT+1                 Default to "A" entry
```

```
         LDC,RA    RESAREA
         FSK,NE    CRTETX,RA            If not default (CR-only)
         UJP       RMF5                    Go use default (same as "A" entry)
         LDC,RA    RESAREA+1
         FSK,EQ    CRTETX,RA            If only 1 character entered
         UJP       RMF6                    Invalid entry
         LDC,RA    RESAREA
         FSK,LT    $60,RA               If not lower-case
         LDI,RA    -$20,RA                 Convert to upper
         LDI,RA    -'A',RA              A=0
         MPI,RA    4,RA
         FSK,GE    0,RA                 If in or above valid range
         UJP       RMF6                    Invalid entry
         FSK,LE    MFIDTE,RA            If in valid range
         UJP       RMF6                    Invalid entry
         LDD,RC    MFIDT+1,RA           Get the machine id
/I SYSTINIT.770
RMF6     SPACE     1
RMF6     BSS       0
         LDCA,RC   MFIDTM               Display ID table if invalid entry
         LDI,RD    MFIDTML
         UJP       RMF1                 Go ask again
MF       SPACE     1
/D SYSTINIT.782,785
*        The order of entries in the table may be re-arranged
*        to suit the particular site.  i.e. a single-machine
*        site would want it's identifier as A= to allow a CR
*        default entry.
*
*        The table at level AC (8/84) lists all the MP-32s that
*        have been built. (seven)
/D SYSTINIT.787,801
MFIDTM   TEXTC     ,Enter the letter that corresponds to your Machine ID:
         GEN,C     $0D,$0A
MFIDT    BSS       0
         TEXT      16,  A=YODA          FNOC Machine A
         TEXT      16,  B=E.T.          FNOC Machine B
         TEXT      16,  C=STANLEY       Former STANLEY machine
         TEXT      12,  D=OLIVER        LMSC in Austin (8/84)
         GEN,C     $0D,$0A,00,00
         TEXT      16,  E=SSDF32A       Prototype (19" rack)
         TEXT      16,  F=MPLS32A       Former ISD, Minneapolis
         TEXT      16,  G=LJL32A        Former La Jolla check-out machine
         TEXT      12,  H=.NOID.
/D SYSTINIT.1418
MFMSG    TEXTC     ,Which Machine?
/COMPILE SYSTINIT
/IDENT LEVAC002
/INSERT HISTORY.3
LEVAC002 SYSTINIT  13 Aug 84            Fariss, G. B.
```

This mod changes "VERSION" to "MACHINE ID" on the header produced on the list output of each job. The order in which Resident, Library, and Machine ID are displayed is also changed.

At some later time, one might want to change the info passed to JMGR from the OS so that 2 words of Machine ID are passed. Currently, only 4 characters are passed and the remaining 4 characters are blank filled by JMGR.

```
/D JMGR.2281
         LD,R1      ='    '                Change JCIVNUM to 2 wds later...
         STD,R0     OUTREW+INFO2MID
/D JMGR.3174,3175
INFO2    TEXT       40, RESIDENT EDITION = XX   LIBRARY EDITION
         TEXT       28,= XX   MACHINE ID = XXXXXXXX
/D JMGR.3178,3179
INFO2LED EQU        21
INFO2MID EQU        15
/COMPILE JMGR
/FINIS
*SAVEPF(20,OS.PL,SYSO,AC,SYSO)
*SAVEPF(62,OS-PL-SPS.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=OS-PL-LOC.BLD)
*SCHED(CM=9,TL=9999,PL=10000,SCR=40)
#
#  This job adds local-site modifications to the standard Oldpl
#  and builds the final Oldpl (always Edition ZZ).
#
*RELEASE(OS.PL,SYSB,ZZ,SYSB)
*OPEN(10,OS.PL,SYSO,AC,SYSO,R)  # Change the edition as appropriate
*UPDATE(P=10,N=20,O=A)
// PLACE LOCAL-MOD CODE AFTER THIS LINE.
/FINIS
*SAVEPF(20,OS.PL,SYSB,ZZ,SYSB)
*SAVEPF(62,OS-PL-LOC.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=BCF)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,Q,*=/)
/COMPILE BCF
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,BCF.REL,SYSB,01,SYSB)
*SAVEPF(62,BCF.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=BCLAMGR)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,Q,*=/)
/COMPILE BCLAMGR
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,BCLAMGR.REL,SYSB,01,SYSB)
*SAVEPF(62,BCLAMGR.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=CCCMGR)
*SCHED(CM=9,PL=15000,TL=99999,SCR=200)
*OPEN(10,OS.P_,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,Q,*=/)
/COMPILE CCCMGR
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,CCCMGR.REL,SYSB,01,SYSB)
*SAVEPF(62,CCCMGR.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=CRDMGR)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*MODATE(P=10,C,Q,*=/)
/COMPILE CRDMGR
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,CRDMGR.REL,SYSB,01,SYSB)
*SAVEPF(62,CRDMGR.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=CRTMGR)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*ALLOCATE(P=10,C,Q,*=/)
/COMPILE CRTMGR
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,CRTMGR.REL,SYSB,01,SYSB)
*SAVEPF(62,CRTMGR.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=CTT)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,Q,*=/)
/COMPILE CTT
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,CTT.REL,SYSB,01,SYSB)
*SAVEPF(62,CTT.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=DAYDMP)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,Q,*=/)
/COMPILE DAYDMP
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,DAYDMP.REL,SYSB,01,SYSB)
*SAVEPF(62,DAYDMP.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=DAYMGR)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,Q,*=/)
/COMPILE DAYMGR
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,DAYMGR.REL,SYSB,01,SYSB)
*SAVEPF(62,DAYMGR.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=DCF)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,Q,*=/)
/COMPILE DCF
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,DCF.REL,SYSB,01,SYSB)
*SAVEPF(62,DCF.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=DMF)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,Q,*=/)
/COMPILE DMF
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,DMF.REL,SYSB,01,SYSB)
*SAVEPF(62,DMF.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=ERMGR)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,0,*=/)
/COMPILE ERMGR
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,ERMGR.REL,SYSB,01,SYSB)
*SAVEPF(62,ERMGR.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=ESRS)
*SCHED(CM=9,PL=4000,TL=99999,SCR=40,PL=60000)
*OPEN(10,OS.P_,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,Q,*=/)
/COMPILE ESRS
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,ESRS.REL,SYSB,01,SYSB)
*SAVEPF(62,ESRS.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=EVNMGR)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS.P_,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,0,*=/)
/COMPILE EVNMGR
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,EVNMGR.REL,SYSB,01,SYSB)
*SAVEPF(62,EVNMGR.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=FCF)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,0,*=/)
/COMPILE FCF
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,FCF.REL,SYSB,01,SYSB)
*SAVEPF(62,FCF.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=FDDMGR)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*MODATE(P=10,C,Q,*=/)
/COMPILE FDDMGR
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,FDDMGR.REL,SYSB,01,SYSB)
*SAVEPF(62,FDDMGR.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=FILEMGR)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS.P_,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,Q,*=/)
/COMPILE FILEMGR
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,FILEMGR.REL,SYSB,01,SYSB)
*SAVEPF(62,FILEMGR.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=ICF)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,Q,*=/)
/COMPILE ICF
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,ICF.REL,SYSB,01,SYSB)
*SAVEPF(62,ICF.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=INTRCOM)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,Q,*=/)
/COMPILE INTRCOM
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,INTRCOM.REL,SYSB,01,SYSB)
*SAVEPF(62,INTRCOM.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=IOITS)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS,PL,SYSB,ZZ,SYSB,R)
*MODATE(P=10,C,Q,*=/)
/COMPILE IOITS
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,IOITS.REL,SYSB,01,SYSB)
*SAVEPF(62,IOITS.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=IOMGR)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,0,*=/)
/COMPILE IOMGR
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,IOMGR.REL,SYSB,01,SYSB)
*SAVEPF(62,IOMGR.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=ITS)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,Q,*=/)
/COMPILE ITS
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,ITS.REL,SYSB,01,SYSB)
*SAVEPF(62,ITS.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=JLDR)
*SCHED(CM=9,PL=7000,TL=99999,SCR=50)
*OPEN(10,OS,PL,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,Q,*=/)
/COMPILE JLDR
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,JLDR.REL,SYSB,01,SYSB)
*SAVEPF(62,JLDR.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=JMGR)
*SCHED(CM=9,PL=15000,TL=99999,SCR=200)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,Q,*=/)
/COMPILE JMGR
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,JMGR.REL,SYSB,01,SYSB)
*SAVEPF(62,JMGR.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=LOF)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,0,*=/)
/COMPILE LOF
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,LOF.REL,SYSB,01,SYSB)
*SAVEPF(62,LOF.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=LOWMEM)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,Q,*=/)
/COMPILE LOWMEM
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,LOWMEM.REL,SYSB,01,SYSB)
*SAVEPF(62,LOWMEM.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=LPTMGR)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,Q,*=/)
/COMPILE LPTMGR
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,LPTMGR.REL,SYSB,01,SYSB)
*SAVEPF(62,LPTMGR.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=MT05MGR)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,Q,*=/)
/COMPILE MT05MGR
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,MT05MGR.REL,SYSB,01,SYSB)
*SAVEPF(62,MT05MGR.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=OCF)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,Q,*=/)
/COMPILE OCF
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,OCF.REL,SYSB,01,SYSB)
*SAVEPF(62,OCF.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=OPFMGR)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,Q,*=/)
/COMPILE OPFMGR
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,OPFMGR.REL,SYSB,01,SYSB)
*SAVEPF(62,OPFMGR.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=PDUMP)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,Q,*=/)
/COMPILE PDUMP
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,PDUMP.REL,SYSB,01,SYSB)
*SAVEPF(62,PDUMP.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=RBTMGR)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,Q,*=/)
/COMPILE RBTMGR
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,RBTMGR.REL,SYSB,01,SYSB)
*SAVEPF(62,RBTMGR.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=SMDMGR)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,Q,*=/)
/COMPILE SMDMGR
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,SMDMGR.REL,SYSB,01,SYSB)
*SAVEPF(62,SMDMGR.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=STDIO)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,Q,*=/)
/COMPILE STDIO
/FINIS
*CLOSE(10)
*REWIND(56)
#  STDIO ASSEMBLES WITH 1 ERROR AT LEVEL A8.  "FDCFV" AND "CDF" ARE
#  UNDEFINED.  THE ERROR OCCURS IN COMMON DECK ITSEQU.  THIS ERROR HAS
#  NO EFFECT ON THE OPERATION OF STDIO.
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,STDIO.REL,SYSB,01,SYSB)
*SAVEPF(62,STDIO.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=SYSBIO)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,Q,*=/)
/COMPILE SYSBIO
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,SYSBIO.REL,SYSB,01,SYSB)
*SAVEPF(62,SYSBIO.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=SYSQS)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,Q,*=/)
/COMPILE SYSQS
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,SYSQS.REL,SYSB,01,SYSB)
*SAVEPF(62,SYSQS.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=SYSTINIT)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,Q,*=/)
/COMPILE SYSTINIT
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,SYSTINIT.REL,SYSB,01,SYSB)
*SAVEPF(62,SYSTINIT.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=TASKMGR)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,Q,*=/)
/COMPILE TASKMGR
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,TASKMGR.REL,SYSB,01,SYSB)
*SAVEPF(62,TASKMGR.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=UCLAMGR)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS,PL,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,Q,*=/)
/COMPILE UCLAMGR
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,UCLAMGR.REL,SYSB,01,SYSB)
*SAVEPF(62,UCLAMGR.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=RES.BLD)
*SCHED(CM=17,PL=2000,TL=99999,SCR=100)
*OPEN(10,LOWMEM.REL,SYSB,01,SYSB,R)
*OPEN(11,PDUMP.REL,SYSB,01,SYSB,R)
*OPEN(12,ESRS.REL,SYSB,01,SYSB,R)
*OPEN(13,IOMGR.REL,SYSB,01,SYSB,R)
*OPEN(14,IOITS.REL,SYSB,01,SYSB,R)
*OPEN(15,ERMGR.REL,SYSB,01,SYSB,R)
*OPEN(16,EVNMGR.REL,SYSB,01,SYSB,R)
*OPEN(17,INTRCOM.REL,SYSB,01,SYSB,R)
*OPEN(18,TASKMGR.REL,SYSB,01,SYSB,R)
*OPEN(39,DAYMGR.REL,SYSB,01,SYSB,R)
*OPEN(19,SYSQS.REL,SYSB,01,SYSB,R)
*OPEN(20,FILEMGR.REL,SYSB,01,SYSB,R)
*OPEN(21,SYSBIO.REL,SYSB,01,SYSB,R)
*OPEN(38,STDIO.REL,SYSB,01,SYSB,R)
*OPEN(22,ITS.REL,SYSB,01,SYSB,R)
*OPEN(23,ICF.REL,SYSB,01,SYSB,R)
*OPEN(24,LOF.REL,SYSB,01,SYSB,R)
*OPEN(25,OCF.REL,SYSB,01,SYSB,R)
*OPEN(26,FCF.REL,SYSB,01,SYSB,R)
*OPEN(27,DMF.REL,SYSB,01,SYSB,R)
*OPEN(28,DCF.REL,SYSB,01,SYSB,R)
*OPEN(29,BCF.REL,SYSB,01,SYSB,R)
*OPEN(30,SMDMGR.REL,SYSB,01,SYSB,R)
*OPEN(31,FDDMGR.REL,SYSB,01,SYSB,R)
*OPEN(32,CRTMGR.REL,SYSB,01,SYSB,R)
*OPEN(33,BCLAMGR.REL,SYSB,01,SYSB,R)
*OPEN(34,UCLAMGR.REL,SYSB,01,SYSB,R)
*OPEN(35,CRDMGR.REL,SYSB,01,SYSB,R)
*OPEN(36,MT05MGR.REL,SYSB,01,SYSB,R)
*OPEN(37,LPTMGR.REL,SYSB,01,SYSB,R)
*OPEN(40,RBTMGR.REL,SYSB,01,SYSB,R)
*OPEN(41,DAYDMP.REL,SYSB,01,SYSB,R)
*OPEN(42,CCCMGR.REL,SYSB,01,SYSB,R)
*OPEN(44,OPFMGR.REL,SYSB,01,SYSB,R)
*OPEN(45,CTT.REL,SYSB,01,SYSB,R)
*OPEN(46,SYSTINIT.REL,SYSB,01,SYSB,R)
*OPEN(47,JLDR.REL,SYSB,01,SYSB,R)
*OPEN(48,JMGR.REL,SYSB,01,SYSB,R)
*RELEASE(MPX-RESIDENT,MPXR,AC,****,0)
*ALLOCATE(MPX-RESIDENT,MPXR,AC,****,1,800,NS,,0,5,SYSTEM01)
*OPEN(01,MPX-RESIDENT,MPXR,AC,****,W)
*PRELIB
*MPX(NMPX=01)
*ALT(ALT=10)
*ALT(ALT=11)
*ALT(ALT=12)
*ALT(ALT=13)
*ALT(ALT=14)
*ALT(ALT=15)
*ALT(ALT=16)
*ALT(ALT=17)
*ALT(ALT=18)
*ALT(ALT=39)
*ALT(ALT=41)
*ALT(ALT=19)
*ALT(ALT=20)
```

```
*ALT(ALT=21)
*ALT(ALT=38)
*ALT(ALT=22)
*ALT(ALT=23)
*ALT(ALT=24)
*ALT(ALT=25)
*ALT(ALT=26)
*ALT(ALT=27)
*ALT(ALT=28)
*ALT(ALT=29)
*ALT(ALT=30)
*ALT(ALT=31)
*ALT(ALT=32)
*ALT(ALT=33)
*ALT(ALT=34)
*ALT(ALT=35)
*ALT(ALT=36)
*ALT(ALT=37)
*ALT(ALT=42)
*ALT(ALT=40)
*ALT(ALT=44)
*ALT(ALT=45)
*ALT(ALT=46)
*JLDR
*ALT(ALT=47)
*JMTR
*ALT(ALT=48)
*ENDPLIB
*CLOSE(01)
*RELEASE(MPX-RESIDENT,MPXR,AC,****,R)
*SAVEPF(62,RES.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=BLKDEBLK.BLD)
*SCHED(CM=10,PL=60000,TL=99999,SCR=40)
#
#  This job builds the I/O Blocking and Deblocking routines  BLKDEBLK.
#
*OPEN(1,OS.PL,SYSB,ZZ,SYSB,R)
*UPDATE(O,P=1,*=/,C=2)
/COMPILE BLKDEBLK
/FINIS
*REWIND(2)
*CMP(I=2,X=3,C,L)
*SAVEPF(3,SYS-BKDBK.REL,LBLD,01,LBLD)
*SAVEPF(62,B_KDEBLK.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=TASKMON.BLD)
*SCHED(CM=10,PL=60000,TL=99999,SCR=40)
#
#  This job builds the Task initialization/termination routine  TASKMON.
#
*OPEN(1,OS.PL,SYSB,ZZ,SYSB,R)
*UPDATE(Q,P=1,*=/,C=2)
/COMPILE TASKMON
/FINIS
*REWIND(2)
*CMP(I=2,X=3,C,L)
*SAVEPF(3,SYS-TSKMON.REL,LBLD,01,LBLD)
*SAVEPF(62,TASKMON.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=BOOT.BLD)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,Q,*=/)
/COMPILE MPXBOOT
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,MPXBOOT.REL,SYSB,01,SYSB)
*SAVEPF(62,MPXBOOT.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=MPXBOOT.RUN)                    ***  BOOT TO DISK  ***
*SCHED(CM=12,PL=1000,SCR=10,TL=99999)
*OPEN(10,MPXBOOT.REL,SYSB,01,SYSB,R)
*PLIB
*BOOT(FWA=F000)
*ALT(ALT=10)
*ENDPLIB
*SAVEPF(62,MPXBT-RUN.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=INSTALL.BLD)
*SCHED(CM=9,SCR=40,PL=15000,TL=99999)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,Q,*=/)
/COMPILE INSTALL
/FINIS
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,install.rel,sysb,01,sysb)
*SAVEPF(62,INSTALL.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=INSTALL.RUN)
*SCHED(CM=9,SCR=40,PL=15000,TL=99999,MT=1)
#
# This job creates an INSTALL tape, to be read by the TAPEBOOT
# portion of the emulator microcode.
#
*OPEN(20,install.rel,sysb,01,sysb,r)
*EQUIP(35=MT)
*PRELIB
*ABS(NABS=35)
*ORIGIN(ID=INSTALL,FWA=C000)
*ALT(ALT=20)
*ENDPLIB
*SAVEPF(62,INST-RUN.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=DUMPSYS.BLD)
*SCHED(CM=9,TL=99999,PL=1000,MT=1)
#
# This job builds a tape for use with the INSTALL program when
# initializing a new system disk.
#
# Note:  Prelib creates a very short first (header) record on the
#        tape.  This record is shorter than "noise size" and when
#        it is read in by the tape driver (MT05MGR) it is seen as an
#        irrecoverable tape error.
#
#        In order to verify the tape, make the following temporary
#        patch to MT05MGR:
#             Replace the 2nd entry in the ALAMSK table with
#                $FE4D
#             making the first word $1241FE4D instead of $1241FF4D
#
#        This causes the driver to ignore short-record errors.
#
*EQUIP(10=MT)
*OPEN(20,MPX-RESIDENT,MPXR,AC,****,R)
*PRELIB
*DUMPSYS(NSYS=10,DMPX=20,DLIB=58,MICR,BOOT,ID=MPXV3LAC)
*ENDPLIB
*SAVEPF(62,DUMPSYS.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=DSKUTIL)
*SCHED(CM=9,SCR=40,PL=15000,TL=99999)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,Q,*=/)
/COMPILE DSKUTIL
/FINIS
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(20,DSKUTIL.REL,SYSB,01,SYSB)
*SAVEPF(62,DSKUTIL.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=DSKUTIL,RUN)
*SCHED(CM=9,SCR=40,PL=15000,TL=99999,MT=1)
#
#  This job places the DSKUTIL program on magnetic tape for
#  the TAPEBOOT microcode to read (instead of INSTALL).
#
*OPEN(20,DSKUTIL.REL,SYSB,01,SYSB,R)
*EQUIP(35=MT)
*PRELIB
*ABS(NABS=35)
*ORIGIN(ID=INSTALL,FWA=C000)
*ALT(ALT=20)
*ENDPLIB
*UNLOAD(35)
*SAVEPF(62,DSKUTL-RUN.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=LISTCOM)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
*OPEN(10,OS.PL,SYSB,ZZ,SYSB,R)
*UPDATE(P=10,C,Q,*=/)
/COMPILE LISTCOM
/FINIS
*CLOSE(10)
*REWIND(56)
*CMP(I=56,L,X=20,R=2,C)
*SAVEPF(62,LISTCOM.LST,SYSL,01,SYSL)
*EOJ
```

```
*JOB(ID=FMPTAPE.BLD)
*SCHED(CM=5,PL=5000,SCR=100,TL=99999,MT=1)
#
# This job builds an FMP tape to be used as part of the system installation
# procedure.  The tape should contain the files needed to bring up a system
# once the install is complete, and allow the installer to load, create, or
# alter any additional files.
#
*EQUIP(10=MT)
*FMP
*IDENT,5,SYSTEM01
*DUMP,F,10,USER.FILE,MPXS,00,****
*DUMP,F,10,PORT.FILE,MPXS,00,****
*DUMP,F,10,VERIFY,FJOB,01,FJOB
*DUMP,F,10,LOADALL,FJOB,01,FJOB
*DUMP,O,10,JOBS,FMP
*VERIFY,10
*OUT
*UNLOAD(10)
*CLOSE(52)
*CATLIST(U=MPXS/FJOB/JOBS,K=CATLIST,O=E)
*SAVEPF(62,FMPTAPE.LST,SYSL,01,SYSL)
*EOJ
```

STOP*ENDST*
*ITEMIZE

ITEMIZE 09/18/84 11:00:11

PROCESSING: LOWMEM.REL,SYSB

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME		
1.	LOWMEM	6E137475		141D	REL	MM/DD/YY	HH:MM:SS		
		ENTRY:	ABORT	ABORTJM	ALLOCATE	ASNGC	AVHT		
			AVMEM	BCFSIOO	BKSP	BSY	CALL		
			CCCTCT	CEST	CLEAR	CLKINT	...MORE		
		EXTERNAL:	SYSTINIT	APIP	SENDMSG	DISPATCH	JABRT		
			IOI	MERMSG	IHC	MERMSG	MERMSG		
			DAYFILQY	ABORTQZ	REWDQZ	READLUQZ	WRITLUQZ		
			WEOFQZ	FORMATQZ	FUNCQZ	ERASEQZ	BKSPQZ		
			SEOFQZ	DIAGQZ	ULOCQZ	JNLDQZ	READDSQZ		
			WRITDSQZ	SELECTQZ	CLEARQZ	UINTQZ	BSYQZ		
			CLREVTQZ	DEFEVTQZ	DTERCVQZ	MUSTQZ	SETEVTQZ		
			SETITMQZ	STATUSQZ	USTQZ	JTYPQZ	XALOCATE		
			XCLOSE	DEVICEX	DEVICEQZ	EXPANDQZ	XMODIFY		
			XOPEN	XRELEASE	SAVEQZ	OCRMRETX	DAYFILQZ		
			CTOIQZ	CTOCQZ	CTORQZ	SYSMESQZ	DUMPDQZ		
			DMPDRTQZ	DATEQZ	TIMEQZ	TETIMEQZ	TSCHEDQZ		
			PFAULTQZ	ENABLEQZ	JBINFOQZ	CNGDTQZ	STATGCQZ		
			GETGCQZ	RETGCQZ	CALLX	OWAITX	TSTATUSX		
			TASKRSQZ	TSKCNGQZ	RETURNX	DELJOBQZ	OPNMEMQZ		
			RELMEMQZ	ROUTEQZ	SYSQSQZ	JOBINQZ	SQSRTNQZ		
			TRMQZ	XTSKEX	ABRTJMQZ	TSKINFQZ	TSKMEMQZ		
			NXTNUMQZ	GETSPCQZ	RETSPCQZ	UETPQZ	SYSRETQZ		
			SETPAGQZ	ASNGCX	RELGCX	MGETGCX	DEFGCX		
			WRTMEM	SCHED	IOTOI	CHKITMQZ	...MORE		

PROCESSING: PDUMP.REL,SYSB

2.	PDUMP	5F4B3983		010F	REL	MM/DD/YY	HH:MM:SS		
		ENTRY:	SYSABRT						
		EXTERNAL:	SYSRES	SYSLIB	SYSDATE	CURRENT	RDYLIST		
			IDLLIST	STTDIR	AVMEM	IVMEM	HIGHPAGE		
			PMMAP	PMMAPL	ENDSPCE	FWASPCE	SPCETB		
			SYSTINIT	ESRSQSO	QPTT	JCTO	ESTB		
			ESTE	DETB	ABORTQZ	READLUQZ	IOITS		
			ERMGR	BSYQZ	SENDMSG	CALLX	CTOCQZ		
			DUMPDQZ	ROUTEQZ	OCRMRETX	PICKI	STDIO		
			CFM	ICFINIT	LOFINIT	OCF	FCF		
			DMF	DCF	BCF	SMDMGR	FDDMGR		
			CRTMGR	BCLAMGR	UCLAMGR	CRDMGR	MTO5MGR		
			LPTMGR	CCCMGR	RBTMGR	OPFMGR	TADC		
			PRMPT	MSTRCPU	STATEND				

PROCESSING: ESRS.REL,SYSB

3.	ESRS	9A3C89C9		03C3	REL	MM/DD/YY	HH:MM:SS		
		ENTRY:	ABORTQZ	ABRTJMQZ	ASNGCX	CNGDTQZ	DEFGCX		

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME	
			DELJOBQZ	GETGCQZ	GETSPCQY	GETSPCQZ	JABRT	
			JBINFOQZ	MGET	MGETGCX	MPUT	...MORE	
		EXTERNAL:	DISPATCH	GCBLOCK	GCBLKE	GLOBTAB	SCHED	
			AVMEM	PARMSZ	SYSDATE	SYSBDATE	SYSJDAY	
			MSTRCPU	CPUTIME	DAYFILQY	JCTO	SYSSEC	
			SYSMID	ENDSPCE	SPCETB	FWASPCE	SYSABRT	
			STTDIR	STATET	JABT2	SENDMSG	JABT	
			LOWPAGE	HIGHPAGE	PMMAP			

PROCESSING: IOMGR.REL,SYSB

4.	IOMGR	64408F32	0366	REL	MM/DD/YY	HH:MM:SS		
		ENTRY:	BKSPQZ	CLEARQZ	CRP	DIAGQZ	DMS	
			ERASEQZ	FORMATQZ	FUNCQZ	IOI	IOTOI	
			READDSQZ	READLUQZ	REWOQZ	SELECTQZ	...MORE	
		EXTERNAL:	IOITS	MSSPT	MSTPC	MSSF1	MSSF2	
			GETSPCQY	DISPATCH	SCHED	JABRT	ERMGR	
			RETSPCQY	RDYLIST	DETB	RRETRY	SETEVTQY	
			MVEMEM					

PROCESSING: IOITS.REL,SYSB

5.	IOITS	6340906F	061C	REL	MM/DD/YY	HH:MM:SS		
		ENTRY:	CONVTAB	IOITS	UETPQZ			
		EXTERNAL:	GETSPCQY	JABRT	DISPATCH	DMS	RDMEM	
			SCHED	VCP	PITB	RTTB	CRP	
			RRETRY	TINBF	ERMGR	IBLT	UETBS	
			FACTCTA	SETEVTQY	RETSPCQY	FACTAB	UETBS	
			FACTCTA	JCTITS	TCTICF	WRTMEM	SETEOP	

PROCESSING: ERMGR.REL,SYSB

6.	ERMGR	683090C3	01D5	REL	MM/DD/YY	HH:MM:SS		
		ENTRY:	ERMGR	ERMGRV	MERMSG	RRETRY		
		EXTERNAL:	DAYFILQY	CTOIQY	IOREC			

PROCESSING: EVNMGR.REL,SYSB

7.	EVNMGR	73078FD6	01BC	REL	MM/DD/YY	HH:MM:SS		
		ENTRY:	BSYQZ	CHKITMQZ	CLREVTQZ	DATEQZ	DEFEVTQZ	
			DTERCVQZ	ENABLEQZ	MUSTQZ	PFAULTQZ	SETEVTQY	
			SETEVTQZ	SETITMQZ	STATUSQZ	TETIMEQZ	...MORE	
		EXTERNAL:	DISPATCH	WRTMEM	UTAB	JABRT	TSCHEDL	
			TSCHEDL	TSCHEDL	SYSDATE	EVENTL	EVENTL	
			RETSPCQY	GETSPCQY	EVENTL	SCHED	MVEMEM	
			RDMEM					

PROCESSING: INTRCOM.REL,SYSB

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
8.	INTRCOM	73125DCD		00C0	REL	MM/DD/YY	HH:MM:SS

ENTRY: APIP SENDMSG

EXTERNAL:

MSTRCPU	MSGTOM	MSGTOS	PAUSVALU	CPUCON
CPUTIME	RTSCHED	SYSABRT	DISPATCH	RDYLIST
STTDIR	STATET	IDLDIR	TOPBTM	

PROCESSING: TASKMGR.REL,SYSB

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
9.	TASKMGR	5E27568I		03E3	REL	MM/DD/YY	HH:MM:SS

ENTRY:

CALLX	CLRTCTQY	DISPATCH	DWAITX	PUTTCTQY
RESCHED	RETURNX	RTSCHED	SCHED	TASKRSQZ
TSKCNGQZ	TSTATUSX	XTSKEX		

EXTERNAL:

CPUASG	GETSPCQY	WRTMEM	JABRT	MVEMEM
RETPAGES	SENDMSG	STTDIR	STATET	RDMEM
IDLDIR	RETSPCQY	EVENTL	EVENTL	MGET
JMPP	JMTRPG	PARM	JLDRPG	JLDR
TDFRW	MSTRCPU	JMTRPG	MPUT	TLOWPR
THIGHPR	THIGHPR	JCTO	RDYLIST	SYSABRT
IDLLIST	CURRENT	XPLNK	STATENXT	STATEND
CPUCON	TSCHEDL	TSCHEDL	CPUTIME	SYSSECM

PROCESSING: DAYMGR.REL,SYSB

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
10.	DAYMGR	741C8406		028C	REL	MM/DD/YY	HH:MM:SS

ENTRY:

CTOCQZ	CTOIQY	CTOIQZ	CTORQZ	DAYAIN
DAYFILQY	DAYFILQZ	DAYFMSG	DAYLUC	DAYMGR
DMBF	DMBUF	DMBUFC	DOFBF	...MORE

EXTERNAL:

DISPATCH	TCTOCF	RDMEM	GETSPCQY	SETEVTQY
SCHED	RETSPCQY	TIMEQY	WRTMEM	MUST
PARMDAY	PARMDAY	PACK	PACKC	SAVEQ
PARMDAY	PARMDAY	PACKD	DMFEVTQ	SETEVTQ
SYSMESQ	DEFEVTQ	SETITMQ	CLOSE	OPEN
PACKD	CTOC	PARMDAY	SYSDATE	SYSDATE
SYSRES	TCTDAY			

PROCESSING: SYSQS.REL,SYSB

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
11.	SYSQS	5936869F		05EF	REL	MM/DD/YY	HH:MM:SS

ENTRY:

INITSQS	JOBINQZ	QTOTS	ROUTEQZ	SQSRTNQZ
SYSQSQZ	TRMQZ			

EXTERNAL:

GETSPCQY	RDMEM	WRTMEM	DISPATCH	SCHED
TCTSQS	TCTSQS	TCTSQS	TCTSQS	SETEVTQY
TCTSQS	TCTSQS	TLOWPR	MUSTQZ	TCTSQS
RETSPCQY	TCTSQS	TCTSQS	AVMEM	AVHT
JCTO	JMTRPG	MGET	JMCI	TDFRW
MSTRCPU	SYSLIB	SYSRES	SYSVER	MPXACCES
TIMEQY	SYSDATE	PARMSQS	SENDMSG	STTDIR
STATET	JLDRPG	JMTRPG	MPUT	CLRTCTQY
PUTTCTQY	SQSRTN	PARMSQS	PARMSQS	GETSPCE

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME		
			SYSSEC	JOBINIT	RETSPCE	SQSSIOQ	SETEVTQ		
			RELEASE	PARMSQS	NXTNUM	ODF	JCTOF		
			PICK	PARMSQS	CONVTAB	PICKC	CLOSE		
			MAXSECL	TLOWPR	THIGHPR	THIGHPR	IVMEM		
			MAXHT	ULOC	READLU	UST	WRITLU		
			QPTT	DEFEVTQ	PARMSQS	SETITMQ	OPEN		
			ALLOCATE	CTOC	PARMSQS				

PROCESSING: FILEMGR.REL,SYSB

12.	FILEMGR	6C1F5932	0868	REL	MM/DD/YY	HH:MM:SS			
		ENTRY:	DEVICEQZ	DEVICEX	EXPANDQZ	OCRMRETX	SAVEQZ		
			XALOCATE	XCLOSE	XMODIFY	XOPEN	XRELEASE		
		EXTERNAL:	TCTFM	JABRT	DISPATCH	TCTFM	JCTO		
			WRTMEM	TCTFM	TCTFM	TCTFM	SCHED		
			TCTFM	TCTFM	RDMEM	DAYFILQY	SYSSEC		
			MAXDT	MSESTB	MSESTE	SYSDLST	SYSDLST		
			SYSDT	MPXACCES	MSESTB	JCTO	MAXDID		
			TCTFM	WRITLU	UST	PARMFM	RETSPCE		
			NHRPT	OCRMRET	ESTB	ESTE	TRL		
			RTTB	ITEST	CEST	PIWEST	PIREST		
			GETSPCE	PARMFM	NWPHR	MAXTRAKS	MAXSEG		
			SYSBDATE	FDTFL	FDTFL	PFMEST	ULOC		
			READLU	IDBUFA	RTTB				

PROCESSING: SYSBIO.REL,SYSB

13.	SYSBIO	63078945	0358	REL	MM/DD/YY	HH:MM:SS			
		ENTRY:	PACK	PACKC	PACKD	PACKO	PICK		
			PICKC	PICKD	PICKI				
		EXTERNAL:	UST	ULOC	UTYP	BKSP	RETSPCE		
			GETSPCE	MPXACCES	ALLOCATE	OPEN	PARMSE		
			READLU	WRITLU	EXPANDQ				

PROCESSING: STDIO.REL,SYSB

14.	STDIO	5D3B99C3	01D3	REL	MM/DD/YY	HH:MM:SS			
		ENTRY:	STDIO						
		EXTERNAL:	MUST	PARMSTD	PARMSTD	QPTT	PARMSTD		
			ODF	GETSPCE	PICK	PARMSTD	CTOI		
			PICKI	READLU	UST	SYSSEC	MPXACCES		
			NXTNUM	ALLOCATE	PACK	PACKC	CLOSE		
			RELEASE	SYSQS	IDC	RETSPCE	WRITLU		
			PICKC						

PROCESSING: ITS.REL,SYSB

15.	ITS	963B88A4	041B	REL	MM/DD/YY	HH:MM:SS			
		ENTRY:	CFM	CHW	CPS	DCI	FUP		

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ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME

		GFT	GPI	GPIC	GPS	HCI
		IDC	IDS	IHC	MPM	...MORE
	EXTERNAL:	IDBUFA	OPEN	CLOSE	PICK	PICKC
		RDTB	ESTB	ESTE	ABORT	RTTB
		TMM	TMM	MAXSECL	DAYFILEQ	CTOI
		CLEAR	UST	ULOC	READLU	WRITDS
		UTYP	PICKD	PACKD	GETSPCE	SYSDATE
		TIMEQY	SYSMID	SYSRES	SYSSEC	AVMEM
		IVMEM	UETPQ	PICKI		

PROCESSING: ICF.REL,SYSB

16. ICF 964C93FB 05C4 REL MM/DD/YY HH:MM:SS

ENTRY:	ICFINIT				
EXTERNAL:	RTTB	PITB	ABORT	PARMICF	RDTB
	RDTB	RTTB	UETPQ	DEFEVTQ	SETITMQ
	MUST	PARMICF	PARMICF	UETBS	RETSPCE
	GPI	PARMICF	WIL	IDC	DCI
	STA	MPM	TIMECQY	DAYFILEQ	UTYP
	DEVICEQ	GETSPCE	ROUTEQ	PARMICF	FACTAB
	NTB	ULOC	UST	READDS	IHC
	CFM	TRL	TIMEQY	TINFO	TINFOL
	TINFO	FUP	PACKD	PICKC	CLOSE
	SOD	CPS	PSTBL	PSTBL	ODF
	MAXSECL	PARMICF	PARMICF	GPS	WIM
	CHW	CLEAR	CTOI	PICK	PICKI
	READLU	TMM	WRITDS		

PROCESSING: LOF.REL,SYSB

17. LOF 93409782 020D REL MM/DD/YY HH:MM:SS

ENTRY:	LOFINIT				
EXTERNAL:	MUST	PARMLOF	PARMLOF	UETBS	ABORT
	STA	RTTB	RDTB	DAYFILEQ	PARMLOF
	WIM	GPI	UETPQ	QPTT	UTYP
	DEVICEQ	GETSPCE	WIL	FUP	CHW
	MAXSECL	FACTAB	CFM	IDC	RBTDET

PROCESSING: OCF.REL,SYSB

18. OCF 904C943B 0584 REL MM/DD/YY HH:MM:SS

ENTRY:	OCF				
EXTERNAL:	MUST	PARMOCF	PARMOCF	UETBS	GETSPCE
	PARMOCF	WIM	RETSPCE	UETPQ	DEFEVTQ
	PARMOCF	SETITMQ	RTTB	RTTB	TCTOCF
	INFMSG	TASKRSQ	SYSMESQ	GPIC	SQSOCFQ
	SYSQS	DCI	DELJOB	QTOTS	QTOTS
	QTOTS	IDS	WIL	JCTQ	CURRENT
	TCTOCF	RDYLIST	HCI		

PROCESSING: FCF.REL,SYSB

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
19.	FCF	994C9756		0269	REL	MM/DD/YY	HH:MM:SS

ENTRY: FCF

EXTERNAL:

MUST	PARMFCF	PARMFCF	UETBS	GETSPCE
PARMFCF	WIM	RETSPCE	UETPQ	GPI
REWD	FDTFL	ULOC	MSESTB	MSESTE
MAXTRAKS	IDS	GFT	PARMFCF	RELEASE
READLU	UST			

PROCESSING: DMF.REL,SYSB

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
20.	DMF	994293F3		05CC	REL	MM/DD/YY	HH:MM:SS

ENTRY: DMF DMFEVTQ

EXTERNAL:

DEFEVTQ	PARMDMF	MUST	PARMDMF	PARMDMF
UETBS	PARMDMF	WIM	RETSPCE	UETPQ
RTTB	RTTB	DMBUF	DMBUF	DMBUF
DMBF	SYSRES	DAYFILEQ	GFT	GPI
DCI	IDS	DUMPDQ	SAVEQ	CLOSE
GETSPCE	DMBUF			

PROCESSING: DCF.REL,SYSB

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
21.	DCF	9B4C976C		0253	REL	MM/DD/YY	HH:MM:SS

ENTRY: DCF

EXTERNAL:

MUST	PARMDCF	PARMDCF	UETBS	GETSPCE
PARMDCF	WIM	RETSPCE	UETPQ	SUTLEN
SUTB	UTYP	DEVICEQ	PARMDCF	PARMDCF
PARMDCF	PARMDCF	QPTT	CTOI	RTTB
GPS	DCFSIOO	SETEVTQ	GPIC	ESTB
ESTE	IDS	RTTB	RDTB	DCI

PROCESSING: BCF.REL,SYSB

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
22.	BCF	9D4C98C0		00FF	REL	MM/DD/YY	HH:MM:SS

ENTRY: BCF

EXTERNAL:

MUST	PARMBCF	PARMBCF	UETBS	PARMBCF
WIM	UETPQ	GPI	DCI	BCFSIOO
SETEVTQ	GETSPCE	SQSBCFD	SYSQS	QPTT
DAYFILEQ				

PROCESSING: SMDMGR.REL,SYSB

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
23.	SMDMGR	65109890		02F5	REL	MM/DD/YY	HH:MM:SS

ENTRY: SMDMGR USTAT

EXTERNAL:

SYSRETQ	SYSABRT	DAYFILEQ	MSTPC	MSSPT
NWPHR	SETPAGQ			

PROCESSING: FDDMGR.REL,SYSB

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
24.	FDDMGR	72199A06		018C	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	FDDMGR				
		EXTERNAL:	SYSRETQ	SETPAGQ			

PROCESSING: CRTMGR.REL,SYSB

25.	CRTMGR	75088A95		00FD	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	CRTMGR				
		EXTERNAL:	SYSRETQ				

PROCESSING: BCLAMGR.REL,SYSB

26.	BCLAMGR	70255FAC		01F2	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	BCLAMGR				
		EXTERNAL:	SYSRETQ	PRMPT	CRBUF		

PROCESSING: UCLAMGR.REL,SYSB

27.	UCLAMGR	5D255FAF		01EF	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	UCLAMGR				
		EXTERNAL:	SYSRETQ	PRMPT	ERMGRV		

PROCESSING: CRDMGR.REL,SYSB

28.	CRDMGR	75089A05		018D	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	CRDMGR				
		EXTERNAL:	SYSRETQ	SETPAGQ			

PROCESSING: MT05MGR.REL,SYSB

29.	MT05MGR	64147BB8		01F2	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	MT05MGR				
		EXTERNAL:	SYSRETQ	SETPAGQ			

PROCESSING: LPTMGR.REL,SYSB

30.	LPTMGR	6A0D88CE		02C4	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	LPTMGR				
		EXTERNAL:	SYSRETQ	SETPAGQ			

PROCESSING: RBTMGR.REL,SYSB

31.	RBTMGR	661B85A3		05EF	REL	MM/DD/YY	HH:MM:SS		
		ENTRY:	RBTMGR						
		EXTERNAL:	SYSRETQ	UST	PARMRBT	PARMRBT	GETSPCE		

ITEM NAME CHECKSUM REC LEN TYPE DATE TIME

	PARMRBT	PARMRBT	RTTB	PITB	RDTB
	DAYFILEQ	DEVICEQ	RETSPCE	IHC	CTOC
	CLOSE	READLU	WRITLU	ABORT	CLEAR
	CTOI				

PROCESSING: DAYDMP.REL,SYSB

32. DAYDMP 6E1E8503 0198 REL MM/DD/YY HH:MM:SS

ENTRY:	DAYDMP	DMPDRTQZ	DUMPDQZ		
EXTERNAL:	TCTDD	TCTDD	WRTMEM	SCHED	DISPATCH
	TCTDD	JABRT	TCTDD	JCTO	TCTDD
	JCTO	TCTDD	RETSPCQY	DAYAIN	GETSPCQY
	JCTO	RDMEM	DAYFILQY	PARMDD	DMPDRTQ
	PICKD	PARMDD	PACKD	PICK	PACK
	PICKC	PACKC	DAYLUC		

PROCESSING: CCCMGR.REL,SYSB

33. CCCMGR 731A924A 0A48 REL MM/DD/YY HH:MM:SS

ENTRY:	CCCMGR				
EXTERNAL:	SYSRETQ	DAYFILEQ	RETSPCE	SETPAGQ	GETSPCE
	PARMCCC				

PROCESSING: OPFMGR.REL,SYSB

4. OPFMGR 690D9788 020A REL MM/DD/YY HH:MM:SS

ENTRY:	OPFMGR				
EXTERNAL:	SYSRETQ	SELECT	UST	READLU	GETSPCE
	PARMOPF	DEVICEQ	PARMOPF	TDAC	MCHN
	WRITLU	TADC			

PROCESSING: CTT.REL,SYSB

35. CTT 9A388A7F 0140 REL MM/DD/YY HH:MM:SS

ENTRY:	TADC	TDAC			

PROCESSING: SYSTINIT.REL,SYSB

36. SYSTINIT 620858C7 0790 REL MM/DD/YY HH:MM:SS

ENTRY:	CRBUF	ENDSPCE	FWASPCE	PRMPT	RESEND
	SINTEND	SPCETB	SYSTINIT	TINBF	
EXTERNAL:	SYSRES	MSTRCPU	PMMAPL	PMMAP	AVMEM
	IVMEM	GCSIZE	GLOBTAB	PMMAP	HIGHPAGE
	LOWPAGE	PMMAP	PMMAP	JMTRPG	JLDRPG
	MAXHT	AVHT	URESTB	JRESTE	DEVMAX
	MAXDT	MSESTB	MSESTE	FDTFL	FDTFL
	SYSDLSTE	SYSDLST	SYSDT	PFLT	IDBUFA
	JCTO	TCTSB	TCTSE	RTTB	RTTB

ITEM NAME CHECKSUM REC LEN TYPE DATE TIME

PITB	PITB	RDTB	SYSMID	MAXSECL
SYSSEC	SYSLIB	SYSBDATE	SYSBDATE	SYSBDATE
SYSDATE	SYSJDAY	SYSCLOK	CPUCON	SCHED
CLKINT	IDLDIR	XPLNK	CPUTIME	DISPATCH
TCTBCF	TCTDCF	TCTDMF	TCTFCF	TCTLOF
TCTOCF	TCTICF	TCTSQS	TCTSTD	TCTDAY
CCCTCT	SYSABRT	CPUASG	EST8	ESTE
GCBLOCK	JCTITS	JQACC	MPXACCES	

PROCESSING: JLDR.REL,SYSB

37. JLDR 954392C7 08C6 REL MM/DD/YY HH:MM:SS
EXTERNAL:

PARM	PARM	ABORTJM	TSKEX	PARM
PARM	PARM	OPENMEM	PARM	ABORT
ABORTJM	ALLOCATE	ASNGC	BKSP	BSY
CALL	CLEAR	CLOSE	CLREVTQ	CNGDTQ
CTOC	CTOI	CTOR	DATE	DAYFILEQ
DEFEVTQ	DEFGC	DELJOB	DEVICE	DEVICEQ
DIAG	DTERCVQ	DUMPDQ	DWAIT	ENABLE
ERASE	EXPANDQ	FORMATQ	FUNC	GETGC
JOBINFO	MGETGC	MODIFY	MUST	OPEN
OPENMEM	PFAULT	READLU	READDS	RELEASE
RELGC	RELMEM	RETGC	RETURN	REWD
ROUTEQ	SAVEQ	SELECT	SEOF	SETEVTQ
SETITMQ	STATGC	STATUS	STDFEXPS	STDPSEG
TASKRSQ	TETIME	TIME	TSCHED	TSKCNGQ
TSTATUS	UINT	ULOC	UNLD	UST
UTYP	WEOF	WRITDS	WRITLU	STDPSEG
UST	ULOC	UTYP	BKSP	READLU
WRITLU	ALLOCATE	OPEN	STDPSEG	STDFEXPS
EXPANDQ	TSCHED			

PROCESSING: JMGR.REL,SYSB

38. JMGR 95428CC0 03CD REL MM/DD/YY HH:MM:SS
EXTERNAL:

DAYFILEQ	CTOI	CTOC	UTYP	UST
REWD	WEOF	UNLD	SEOF	DEVICEQ
CALL	PARM	PARM	TSKEX	CLOSE
ULOC	MAXDID	ALLOCATE	OPEN	RELEASE
MODIFY	SAVEQ	TASKINFO	TRM	JOBINFO
DATE	TIME	ABORTJM	PARM	PARM
PARM	OPENMEM	STDPSEG	BKSP	READLU
WRITLU	STDPSEG	STDFEXPS	EXPANDQ	TSCHED
MUST	RETURN	SELECT		

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
ABORT	LOWMEM	ICF	ITS	JLDR	LOF	RBTMGR
ABORTJM	LOWMEM	JLDR	JLDR	JMGR		
ABORTQZ	ESRS	LOWMEM	PDUMP			
ABRTJMQZ	ESRS	LOWMEM				
ALLOCATE	LOWMEM	JLDR SYSQS	JLDR	JMGR	STDIO	SYSBIO
APIP	INTRCOM	LOWMEM				
ASNGC	LOWMEM	JLDR				
ASNGCX	ESRS	LOWMEM				
AVHT	LOWMEM	SYSQS	SYSTINIT			
AVMEM	LOWMEM	ESRS	ITS	PDUMP	SYSQS	SYSTINIT
BCF	BCF	LOWMEM	PDUMP			
BCFSIOO	LOWMEM	BCF				
BCLAMGR	BCLAMGR	LOWMEM	PDUMP			
BMGP	LOWMEM	JLDR	JLDR	JMGR	SYSBIO	
BKSPQZ	IOMGR	LOWMEM				
BSY	LOWMEM	JLDR				
BSYQZ	EVNMGR	LOWMEM	PDUMP			
CALL	LOWMEM	JLDR	JMGR			
CALLX	TASKMGR	LOWMEM	PDUMP			
CCCMGR	CCCMGR	LOWMEM	PDUMP			
CCCTCT	LOWMEM	SYSTINIT				
CEST	LOWMEM	FILEMGR				
CFM	ITS	ICF	LOF	PDUMP		
CHKITMQZ	EVNMGR	LOWMEM				
CHW	ITS	ICF	LOF			
CLEAR	LOWMEM	ICF	ITS	JLDR	RBTMGR	

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
CLEARQZ	IOMGR	LOWMEM				
CLKINT	LOWMEM	SYSTINIT				
CLOSE	LOWMEM	DAYMGR JMGR	DMF RBTMGR	ICF STDIO	ITS SYSQS	JLDR
CLREVTQ	LOWMEM	JLDR				
CLREVTQZ	EVNMGR	LOWMEM				
CLRTCTQY	TASKMGR	SYSQS				
CNGDTQ	LOWMEM	JLDR				
CNGDTQZ	ESRS	LOWMEM				
CONVTAB	IOITS	SYSQS				
CPS	ITS	ICF				
CPUASG	LOWMEM	SYSTINIT	TASKMGR			
CPUCON	LOWMEM	INTRCOM	SYSTINIT	TASKMGR		
CPUERR	LOWMEM					
CPUTIME	LOWMEM	ESRS	INTRCOM	SYSTINIT	TASKMGR	
CRBUF	SYSTINIT	BCLAMGR				
CRDMGR	CRDMGR	LOWMEM	PDUMP			
CRP	IOMGR	IOITS				
CRTMGR	CRTMGR	LOWMEM	PDUMP			
CTOC	LOWMEM	DAYMGR	JLDR	JMGR	RBTMGR	SYSQS
CTOCQZ	DAYMGR	LOWMEM	PDUMP			
CTOI	LOWMEM	DCF RBTMGR	ICF STDIO	ITS	JLDR	JMGR
CTOIQZ	DAYMGR	LOWMEM				
CTOIQY	DAYMGR	ERMGR				
CTOR	LOWMEM	JLDR				
CTORQZ	DAYMGR	LOWMEM				
CURRENT	LOWMEM	OCF	PDUMP	TASKMGR		

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
DATE	LOWMEM	JLDR	JMGR			
DATEQZ	EVNMGR	LOWMEM				
DAYAIN	DAYMGR	DAYDMP				
DAYDMP	DAYDMP	LOWMEM				
DAYFILEQ	LOWMEM	BCF JLDR	CCCMGR JMGR	DMF LOF	ICF RBTMGR	ITS SMDMGR
DAYFILQY	DAYMGR	DAYDMP	ERMGR	ESRS	FILEMGR	LOWMEM
DAYFILQZ	DAYMGR	LOWMEM				
DAYFMSG	DAYMGR					
DAYLUC	DAYMGR	DAYDMP				
DAYMGR	DAYMGR	LOWMEM				
DCF	DCF	LOWMEM	PDUMP			
DCFSIOO	LOWMEM	DCF				
DCI	ITS	BCF	DCF	DMF	ICF	OCF
DEFEVTQ	LOWMEM	DAYMGR SYSOS	DMF	ICF	JLDR	OCF
DEFEVTQZ	EVNMGR	LOWMEM				
DEFGC	LOWMEM	JLDR				
DEFGCX	ESRS	LOWMEM				
DELJOB	LOWMEM	JLDR	OCF			
DELJOBQZ	ESRS	LOWMEM				
DEST	LOWMEM					
DETB	LOWMEM	IOMGR	PDUMP			
DEVICE	LOWMEM	JLDR				
DEVICEQ	LOWMEM	DCF OPFMGR	ICF RBTMGR	JLDR	JMGR	LOF
DEVICEX	FILEMGR	LOWMEM				
DEVICEQZ	FILEMGR	LOWMEM				

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
DEVMAX	LOWMEM	SYSTINIT				
DEVTAB	LOWMEM					
DIAG	LOWMEM	JLDR				
DIAGQZ	IOMGR	LOWMEM				
DISPATCH	TASKMGR	DAYDMP	DAYMGR	ESRS	EVNMGR	FILEMGR
		INTRCOM	IOITS	IOMGR	LOWMEM	SYSQS
		SYSTINIT				
DMAERR	LOWMEM					
DMBF	DAYMGR	DMF				
DMBUF	DAYMGR	DMF	DMF	DMF	DMF	
DMBUFC	DAYMGR					
DMF	DMF	LOWMEM	PDUMP			
DMFEVTQ	DMF	DAYMGR				
DMPORTQ	LOWMEM	DAYDMP				
DMPORTQZ	DAYDMP	LOWMEM				
DMS	IOMGR	IOITS				
DOFBF	DAYMGR					
DTERCVQ	LOWMEM	JLDR				
DTERCVQZ	EVNMGR	LOWMEM				
DUMPDQ	LOWMEM	DMF	JLDR			
DUMPDQZ	DAYDMP	LOWMEM	PDUMP			
DWAIT	LOWMEM	JLDR				
DWAITX	TASKMGR	LOWMEM				
ENABLE	LOWMEM	JLDR				
ENABLEQZ	EVNMGR	LOWMEM				
ENDSPCE	SYSTINIT	ESRS	PDUMP			
ERASE	LOWMEM	JLDR				
ESEQZ	IOMGR	LOWMEM				

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
ERMGR	ERMGR	IOITS	IOMGR	PDUMP		
ERMGRV	ERMGR	UCLAMGR				
ERRLOG	????????	LOWMEM				
ESRSQSO	LOWMEM	PDUMP				
ESTB	LOWMEM	DCF	FILEMGR	ITS	PDUMP	SYSTINIT
ESTE	LOWMEM	DCF	FILEMGR	ITS	PDUMP	SYSTINIT
EVENTL	LOWMEM	EVNMGR	EVNMGR	EVNMGR	TASKMGR	TASKMGR
EXPANDQ	LOWMEM	JLDR	JLDR	JMGR	SYSBIO	
EXPANDQZ	FILEMGR	LOWMEM				
FACTAB	LOWMEM	ICF	IOITS	LOF		
FACTCTA	LOWMEM	IOITS	IOITS			
FCF	FCF	LOWMEM	PDUMP			
FDDMGR	FDDMGR	LOWMEM	PDUMP			
FDTFL	LOWMEM	FCF	FILEMGR	FILEMGR	SYSTINIT	SYSTINIT
FORMATQ	LOWMEM	JLDR				
FORMATQZ	IOMGR	LOWMEM				
FUNC	LOWMEM	JLDR				
FUNCQZ	IOMGR	LOWMEM				
FUP	ITS	ICF	LOF			
FWASPCE	SYSTINIT	ESRS	PDUMP			
GCBLKE	LOWMEM	ESRS				
GCBLOCK	LOWMEM	ESRS	SYSTINIT			
GCSIZE	LOWMEM	SYSTINIT				
GETGC	LOWMEM	JLDR				
GETGCQZ	ESRS	LOWMEM				
GETSPCE	LOWMEM	BCF	CCCMGR	DCF	DMF	FCF
		FILEMGR	ICF	ITS	LOF	OCF

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
		OPFMGR	RBTMGR	STDIO	SYSBIO	SYSQS
GETSPCQZ	ESRS	LOWMEM				
GETSPCQY	ESRS	DAYDMP	DAYMGR	EVNMGR	IOITS	IOMGR
		SYSQS	TASKMGR			
GFT	ITS	DMF	FCF			
GLOBTAB	LOWMEM	ESRS	SYSTINIT			
GPI	ITS	BCF	DMF	FCF	ICF	LOF
GPIC	ITS	DCF	OCF			
GPS	ITS	DCF	ICF			
HCI	ITS	OCF				
HIGHPAGE	LOWMEM	ESRS	PDUMP	SYSTINIT		
IBLT	LOWMEM	IOITS				
ICFINIT	ICF	LOWMEM	PDUMP			
IDBUFA	LOWMEM	FILEMGR	ITS	SYSTINIT		
IOS	ITS	ICF	LOF	STDIO		
IDLDIR	LOWMEM	INTRCOM	SYSTINIT	TASKMGR		
IOLLIST	LOWMEM	PDUMP	TASKMGR			
IOS	ITS	DCF	DMF	FCF	OCF	
IHC	ITS	ICF	LOWMEM	RBTMGR		
INFMSG	DAYMGR	OCF				
INITSQS	SYSQS	LOWMEM				
IOI	IOMGR	LOWMEM				
IOITS	IOITS	IOMGR	PDUMP			
IOREC	LOWMEM	ERMGR				
IOTOI	IOMGR	LOWMEM				
ITEST	LOWMEM	FILEMGR				
IVMEM	LOWMEM	ITS	PDUMP	SYSQS	SYSTINIT	
QRT	ESRS	DAYDMP	EVNMGR	FILEMGR	IOITS	IOMGR

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
		LOWMEM	TASKMGR			
JABT	LOWMEM	ESRS				
JABT2	LOWMEM	ESRS				
JBINFOQZ	ESRS	LOWMEM				
JCTO	LOWMEM	DAYDMP FILEMGR TASKMGR	DAYDMP OCF	DAYDMP PDUMP	ESRS SYSQS	FILEMGR SYSTINIT
JCTOF	LOWMEM	SYSQS				
JCTITS	LOWMEM	IOITS	SYSTINIT			
JLDR	LOWMEM	TASKMGR				
JLDRPG	LOWMEM	SYSQS	SYSTINIT	TASKMGR		
JMCI	LOWMEM	SYSQS				
JMPP	LOWMEM	TASKMGR				
JMTRPG	LOWMEM	SYSQS	SYSQS	SYSTINIT	TASKMGR	TASKMGR
JOBINFO	LOWMEM	JLDR	JMGR			
JOBINIT	LOWMEM	SYSQS				
JOBINQZ	SYSQS	LOWMEM				
JQACC	????????	SYSTINIT				
JTRM	LOWMEM					
LOFINIT	LOF	LOWMEM	PDUMP			
LOWPAGE	LOWMEM	ESRS	SYSTINIT			
LPTMGR	LPTMGR	LOWMEM	PDUMP			
MAXDID	LOWMEM	FILEMGR	JMGR			
MAXDT	LOWMEM	FILEMGR	SYSTINIT			
MAXHT	LOWMEM	SYSQS	SYSTINIT			
MAXSECL	LOWMEM	ICF	ITS	LOF	SYSQS	SYSTINIT
MAXSEG	LOWMEM	FILEMGR				
MAXTRAKS	LOWMEM	FCF	FILEMGR			

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
MCHN	LOWMEM	OPFMGR				
MERMSG	ERMGR	LOWMEM	LOWMEM	LOWMEM		
MGETGC	LOWMEM	JLDR				
MGETGCX	ESRS	LOWMEM				
MGET	ESRS	SYSQS	TASKMGR			
MODIFY	LOWMEM	JLDR	JMGR			
MPM	ITS	ICF				
MPUT	ESRS	SYSQS	TASKMGR			
MPXACCES	LOWMEM	FILEMGR	STDIO	SYSBIO	SYSQS	SYSTINIT
MSCLOK	LOWMEM					
MSEST3	LOWMEM	FCF	FILEMGR	FILEMGR	SYSTINIT	
MSESTE	LOWMEM	FCF	FILEMGR	SYSTINIT		
MSGTOM	LOWMEM	INTRCOM				
MSGTOS	LOWMEM	INTRCOM				
MSSF1	LOWMEM	IOMGR				
MSSF2	LOWMEM	IOMGR				
MSSPT	LOWMEM	IOMGR	SMDMGR			
MSTPC	LOWMEM	IOMGR	SMDMGR			
MSTRCPU	LOWMEM	ESRS TASKMGR	INTRCOM	PDUMP	SYSQS	SYSTINIT
MTOSMGR	MTOSMGR	LOWMEM	PDUMP			
MTCTO1	LOWMEM					
MTCTO2	LOWMEM					
MTCTO3	LOWMEM					
MUST	LOWMEM	BCF ICF STDIO	DAYMGR JLDR	DCF JMGR	DMF LOF	FCF OCF
MUSTQZ	EVNMGR	LOWMEM	SYSQS			

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
MVEMEM	ESRS	EVNMGR	IOMGR	LOWMEM	TASKMGR	
NMRPT	LOWMEM	FILEMGR				
NMMTB	LOWMEM					
NMMTE	LOWMEM					
NTB	ITS	ICF				
NWPHR	LOWMEM	FILEMGR	SMDMGR			
NXTNUM	LOWMEM	STDIO	SYSQS			
NXTNUMQZ	ESRS	LOWMEM				
OCF	OCF	LOWMEM	PDUMP			
OCRMRET	LOWMEM	FILEMGR				
OCRMRETX	FILEMGR	LOWMEM	PDUMP			
ODF	ITS	ICF	STDIO	SYSQS		
OPEN	LOWMEM	DAYMGR SYSBIO	ITS SYSQS	JLDR	JLDR	JMGR
OPNMEM	LOWMEM	JLDR	JLDR	JMGR		
OPFMGR	OPFMGR	LOWMEM	PDUMP			
OPNMEMQZ	ESRS	LOWMEM				
PACK	SYSBIO	DAYDMP	DAYMGR	STDIO		
PACKC	SYSBIO	DAYDMP	DAYMGR	STDIO		
PACKO	SYSBIO	DAYDMP	DAYMGR	ITS		
PACKO	SYSBIO	DAYMGR	ICF			
PARM	LOWMEM	JLDR JLDR JMGR	JLDR JMGR TASKMGR	JLDR JMGR	JLDR JMGR	JLDR JMGR
PARMBCF	LOWMEM	BCF	BCF	BCF		
PARMBCLA	LOWMEM					
PARMCCC	LOWMEM	CCCMGR				
PARMCR	LOWMEM					

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
PARMCRT	LOWMEM					
PARMDAY	LOWMEM	DAYMGR	DAYMGR	DAYMGR	DAYMGR	DAYMGR
PARMDCF	LOWMEM	DCF DCF	DCF DCF	DCF	DCF	DCF
PARMDD	LOWMEM	DAYDMP	DAYDMP			
PARMDMF	LOWMEM	DMF	DMF	DMF	DMF	
PARMFCF	LOWMEM	FCF	FCF	FCF	FCF	
PARMFDD	LOWMEM					
PARMFM	LOWMEM	FILEMGR	FILEMGR			
PARMIB	LOWMEM					
PARMICF	LOWMEM	ICF ICF	ICF ICF	ICF	ICF	ICF
PARMIE	LOWMEM					
PARMLOF	LOWMEM	LOF	LOF	LOF		
PARMLP	LOWMEM					
PARMMT9	LOWMEM					
PARMOCF	LOWMEM	OCF	OCF	OCF	OCF	
PARMOPF	LOWMEM	OPFMGR	OPFMGR			
PARMRBT	LOWMEM	RBTMGR	RBTMGR	RBTMGR	RBTMGR	
PARMSB	LOWMEM					
PARMSE	LOWMEM	SYSBIO				
PARMSMD	LOWMEM					
PARMSQS	LOWMEM	SYSQS SYSQS	SYSQS SYSQS	SYSQS	SYSQS	SYSQS
PARMSTD	LOWMEM	STDIO	STDIO	STDIO	STDIO	
PARMSZ	LOWMEM	ESRS				
PARMUCLA	LOWMEM					
PAUSVALU	LOWMEM	INTRCOM				
PAULT	LOWMEM	JLDR				

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
PFAULTQZ	EVNMGR	LOWMEM				
PFLT	LOWMEM	SYSTINIT				
PFMEST	LOWMEM	FILEMGR				
PICKI	SYSBIO	ICF	ITS	PDUMP	STDIO	
PICK	SYSBIO	DAYDMP	ICF	ITS	STDIO	SYSQS
PICKC	SYSBIO	DAYDMP	ICF	ITS	STDIO	SYSQS
PICKD	SYSBIO	DAYDMP	ITS			
PIREST	LOWMEM	FILEMGR				
PITB	LOWMEM	ICF	IOITS	RBTMGR	SYSTINIT	SYSTINIT
PIWEST	LOWMEM	FILEMGR				
PMMAP	LOWMEM	ESRS SYSTINIT	PDUMP	SYSTINIT	SYSTINIT	SYSTINIT
PMMAPL	LOWMEM	PDUMP	SYSTINIT			
PRMPT	SYSTINIT	BCLAMGR	PDUMP	UCLAMGR		
PSTBL	ITS	ICF	ICF			
PUTTCTQY	TASKMGR	SYSQS				
QPTT	LOWMEM	BCF SYSQS	DCF	LOF	PDUMP	STDIO
QTOTS	SYSQS	OCF	OCF	OCF		
RBTDET	LOWMEM	LOF				
RBTMGR	RBTMGR	LOWMEM	PDUMP			
RDMEM	ESRS	DAYDMP LOWMEM	DAYMGR SYSQS	EVNMGR TASKMGR	FILEMGR	IOITS
RDTB	LOWMEM	DCF RBTMGR	ICF SYSTINIT	ICF	ITS	LOF
RDYLIST	LOWMEM	INTRCOM	IOMGR	OCF	PDUMP	TASKMGR
READDS	LOWMEM	ICF	JLDR			
READLU	LOWMEM	FCF JLDR	FILEMGR JMGR	ICF OPFMGR	ITS RBTMGR	JLDR STDIO

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
		SYSBIO	SYSQS			
RQLUQZ	IOMGR	LOWMEM	PDUMP			
READDSQZ	IOMGR	LOWMEM				
RELEASE	LOWMEM	FCF	JLDR	JMGR	STDIO	SYSQS
RELGC	LOWMEM	JLDR				
RELGCX	ESRS	LOWMEM				
RELMEM	LOWMEM	JLDR				
RELMEMQZ	ESRS	LOWMEM				
RESCHED	TASKMGR					
RESEND	SYSTINIT					
RETGC	LOWMEM	JLDR				
RETGCQZ	ESRS	LOWMEM				
RETPAGES	ESRS	TASKMGR				
RETSPCE	LOWMEM	CCCMGR ICF SYSQS	DCF OCF	DMF RBTMGR	FCF STDIO	FILEMGR SYSBIO
RETSPCQZ	ESRS	LOWMEM				
RETSPCQY	ESRS	DAYDMP SYSQS	DAYMGR TASKMGR	EVNMGR	IOITS	IOMGR
RETURN	LOWMEM	JLDR	JMGR			
RETURNX	TASKMGR	LOWMEM				
REWD	LOWMEM	FCF	JLDR	JMGR		
REWDQZ	IOMGR	LOWMEM				
ROUTEQ	LOWMEM	ICF	JLDR			
ROUTEQZ	SYSQS	LOWMEM	PDUMP			
RRETRY	ERMGR	IOITS	IOMGR			
RTSCHED	TASKMGR	INTRCOM	LOWMEM			
RTTB	LOWMEM	DCF FILEMGR	DCF ICF	DMF ICF	DMF IOITS	FILEMGR ITS

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
		LOF SYSTINIT	OCF	OCF	RBTMGR	SYSTINIT
SAVEQ	LOWMEM	DAYMGR	DMF	JLDR	JMGR	
SAVEQZ	FILEMGR	LOWMEM				
SCHED	TASKMGR	DAYDMP IOITS	DAYMGR IOMGR	ESRS LOWMEM	EVNMGR SYSQS	FILEMGR SYSTINIT
SELECT	LOWMEM	JLDR	JMGR	OPFMGR		
SELECTQZ	IOMGR	LOWMEM				
SENDMSG	INTRCOM	ESRS	LOWMEM	PDUMP	SYSQS	TASKMGR
SEOF	LOWMEM	JLDR	JMGR			
SEOFQZ	IOMGR	LOWMEM				
SETEVTQ	LOWMEM	BCF	DAYMGR	OCF	JLDR	SYSQS
SETEVTQZ	EVNMGR	LOWMEM				
SETEOP	IOMGR	IOITS				
SETEVTQY	EVNMGR	DAYMGR	IOITS	IOMGR	SYSQS	
SETITMQ	LOWMEM	DAYMGR	ICF	JLDR	OCF	SYSQS
SETITMQZ	EVNMGR	LOWMEM				
SETPAGQ	LOWMEM	CCCMGR SMDMGR	CRDMGR	FDDMGR	LPTMGR	MTO5MGR
SETPAGQZ	IOMGR	LOWMEM				
SINTEND	SYSTINIT					
SMDMGR	SMDMGR	LOWMEM	PDUMP			
SOD	ITS	ICF				
SPCETB	SYSTINIT	ESRS	PDUMP			
SQSBCFO	LOWMEM	BCF				
SQSOCFO	LOWMEM	OCF				
SQSRTN	LOWMEM	SYSQS				
SQSRTNQZ	SYSQS	LOWMEM				
SQSSIOO	LOWMEM	SYSQS				

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
STA	ITS	ICF	LOF			
STATEND	LOWMEM	PDUMP	TASKMGR			
STATENXT	LOWMEM	TASKMGR				
STATET	LOWMEM	ESRS	INTRCOM	SYSQS	TASKMGR	
STATGC	LOWMEM	JLDR				
STATUS	LOWMEM	JLDR				
STATUSQZ	EVNMGR	LOWMEM				
STATGCQZ	ESRS	LOWMEM				
STDBS	LOWMEM					
STDFEXPS	LOWMEM	JLDR	JLDR	JMGR		
STDIO	STDIO	LOWMEM	PDUMP			
STDPSEG	LOWMEM	JLDR	JLDR	JLDR	JMGR	JMGR
STTDIR	LOWMEM	ESRS	INTRCOM	PDUMP	SYSQS	TASKMGR
SUTEB	LOWMEM	DCF				
SUTLEN	LOWMEM	DCF				
SYSABRT	PDUMP	ESRS TASKMGR	INTRCOM	LOWMEM	SMOMGR	SYSTINIT
SYSBDATE	LOWMEM	ESRS	FILEMGR	SYSTINIT	SYSTINIT	SYSTINIT
SYSCLOK	LOWMEM	SYSTINIT				
SYSDATE	LOWMEM	DAYMGR PDUMP	DAYMGR SYSQS	ESRS SYSTINIT	EVNMGR	ITS
SYSDLST	LOWMEM	FILEMGR	FILEMGR	SYSTINIT		
SYSDLSTE	LOWMEM	SYSTINIT				
SYSDT	LOWMEM	FILEMGR	SYSTINIT			
SYSJDAY	LOWMEM	ESRS	SYSTINIT			
SYSLIB	LOWMEM	PDUMP	SYSQS	SYSTINIT		
SYSMESQ	LOWMEM	DAYMGR	OCF			
SYSMID	LOWMEM	ESRS	ITS	SYSTINIT		

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
SYSMESQZ	DAYMGR	LOWMEM				
SYSOHD	LOWMEM					
SYSQS	LOWMEM	BCF	OCF	STDIO		
SYSQSQZ	SYSQS	LOWMEM				
SYSRES	LOWMEM	DAYMGR SYSTINIT	DMF	ITS	PDUMP	SYSQS
SYSRETQ	LOWMEM	BCLAMGR LPTMGR UCLAMGR	CCCMGR MTO5MGR	CRDMGR OPFMGR	CRTMGR RBTMGR	FDDMGR SMDMGR
SYSRETQZ	IOMGR	LOWMEM				
SYSSEC	LOWMEM	ESRS SYSTINIT	FILEMGR	ITS	STDIO	SYSQS
SYSSECM	????????	TASKMGR				
SYSTINIT	SYSTINIT	LOWMEM.	PDUMP			
SYSVER	LOWMEM	SYSQS				
TADC	CTT	OPFMGR	PDUMP			
TASKINFO	LOWMEM	JMGR				
TASKMEM	LOWMEM					
TASKRSQ	LOWMEM	JLDR	OCF			
TASKRSQZ	TASKMGR	LOWMEM				
TCTBCF	LOWMEM	SYSTINIT				
TCTDAY	LOWMEM	DAYMGR	SYSTINIT			
TCTDCF	LOWMEM	SYSTINIT				
TCTDD	LOWMEM	DAYDMP DAYDMP	DAYDMP	DAYDMP	DAYDMP	DAYDMP
TCTDMF	LOWMEM	SYSTINIT				
TCTFCF	LOWMEM	SYSTINIT				
TCTFM	LOWMEM	FILEMGR FILEMGR	FILEMGR FILEMGR	FILEMGR FILEMGR	FILEMGR	FILEMGR
TCTICF	LOWMEM	IOITS	SYSTINIT			

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
TCTLOF	LOWMEM	SYSTINIT				
TCTOCF	LOWMEM	DAYMGR	OCF	OCF	SYSTINIT	
TCTSB	LOWMEM	SYSTINIT				
TCTSE	LOWMEM	SYSTINIT				
TCTSQS	LOWMEM	SYSQS	SYSQS	SYSQS	SYSQS	SYSQS
		SYSQS	SYSQS	SYSQS	SYSQS	SYSTINIT
TCTSTD	LOWMEM	SYSTINIT				
TDAC	CTT	OPFMGR				
TDFRW	LOWMEM	SYSQS	TASKMGR			
TETIME	LOWMEM	JLDR				
TETIMEQZ	EVNMGR	LOWMEM				
THIGHPR	LOWMEM	SYSQS	SYSQS	TASKMGR	TASKMGR	
TIME	LOWMEM	JLDR	JMGR			
TIMEQZ	EVNMGR	LOWMEM				
TIMECQY	EVNMGR	ICF				
TIMEQY	EVNMGR	DAYMGR	ICF	ITS	SYSQS	
TINSF	SYSTINIT	IOITS				
TINFO	ITS	ICF	ICF			
TINFOL	ITS	ICF				
TLOWPR	LOWMEM	SYSQS	SYSQS	TASKMGR		
TMM	LOWMEM	ICF	ITS	ITS		
TOPBTM	????????	INTRCOM				
TRL	LOWMEM	FILEMGR	ICF			
TRM	LOWMEM	JMGR				
TRMQZ	SYSQS	LOWMEM				
TSCHED	LOWMEM	JLDR	JLDR	JMGR		
TSCHEDL	LOWMEM	EVNMGR	EVNMGR	EVNMGR	TASKMGR	TASKMGR

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
TSCHEDQZ	EVNMGR	LOWMEM				
TSKCNGQ	LOWMEM	JLDR				
TSKCNGQZ	TASKMGR	LOWMEM				
TSKEX	LOWMEM	JLDR	JMGR			
TSKINFQZ	ESRS	LOWMEM				
TSKMEMQZ	ESRS	LOWMEM				
TSTATUS	LOWMEM	JLDR				
TSTATUSX	TASKMGR	LOWMEM				
UCLAMGR	JCLAMGR	LOWMEM	PDUMP			
UETBS	LOWMEM	BCF IOITS	DCF IOITS	DMF LOF	FCF OCF	ICF
UETPQ	LOWMEM	BCF ITS	DCF LOF	DMF OCF	FCF	ICF
UETPQZ	IOITS	LOWMEM				
UINT	LOWMEM	JLDR				
UINTQZ	IOMGR	LOWMEM				
ULOC	LOWMEM	FCF JLDR	FILEMGR JMGR	ICF SYSBIO	ITS SYSQS	JLDR
ULOCQZ	IOMGR	LOWMEM				
UNLD	LOWMEM	JLDR	JMGR			
UNLDQZ	IOMGR	LOWMEM				
URESTB	LOWMEM	SYSTINIT				
URESTE	LOWMEM	SYSTINIT				
UST	LOWMEM	FCF JLDR SYSBIO	FILEMGR JMGR SYSQS	ICF OPFMGR	ITS RBTMGR	JLDR STDIO
USTAT	SMOMGR					
USTQZ	EVNMGR	LOWMEM				
UTAB	LOWMEM	EVNMGR				

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
UTYP	LOWMEM	OCF	ICF	ITS	JLDR	JLDR
		JMGR	LOF	SYSBIO		
UTYPQZ	EVNMGR	LOWMEM				
VCP	IOMGR	IOITS				
WEOF	LOWMEM	JLDR	JMGR			
WEOFQZ	IOMGR	LOWMEM				
WIL	ITS	ICF	LOF	OCF		
WIM	ITS	BCF	DCF	DMF	FCF	ICF
		LOF	OCF			
WRITDS	LOWMEM	ICF	ITS	JLDR		
WRITLU	LOWMEM	FILEMGR	JLDR	JLDR	JMGR	OPFMGR
		RBTMGR	STDIO	SYSBIO	SYSQS	
WRITLUQZ	IOMGR	LOWMEM				
WRITDSQZ	IOMGR	LOWMEM				
WRTMEM	ESRS	DAYDMP	DAYMGR	EVNMGR	FILEMGR	IOITS
		LOWMEM	SYSQS	TASKMGR		
XALOCATE	FILEMGR	LOWMEM				
XCLOSE	FILEMGR	LOWMEM				
XMODIFY	FILEMGR	LOWMEM				
XOPEN	FILEMGR	LOWMEM				
XPLNK	LOWMEM	SYSTINIT	TASKMGR			
XRELEASE	FILEMGR	LOWMEM				
XTSKEX	TASKMGR	LOWMEM				

ITEMIZE COMPLETE.
*ITEMIZE

ITEMIZE 09/18/84 11:01:13

PROCESSING: SYS-BKDBK.REL,LBLD

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME		
1.	BLKDEBLK	782165E4		028C	REL	MM/DD/YY	HH:MM:SS		
		ENTRY:	BLKFSZE	PACK		PACKC	PACKD	PACKO	
			PICK	PICKC		PICKD	PICKI		
		EXTERNAL:	UST	ULOC		UTYP	PARM	BKSP	
			CRTDCON	CRTBUFL		JMTRTEMC	READLU	PARM	
			ABORTJM	CRTBUFL		WRITLU	JCIJPL	JCIJPC	
			JCIJSCRL	JCIJNUM		JACC	ALLOCATE	OPEN	
			PARM	PARM		LUNITBL	LUNITBL	STDPSEG	
			STDFEXPS	EXPANDQ		STDFEXPS	BDBWTIME	TSCHED	
			STDPSEG						

PROCESSING: SYS-TSKMON.REL,LBLD

2.	TSKMON	5C0E9487		000B	REL	MM/DD/YY	HH:MM:SS		
		ENTRY:	TSKMON						
		EXTERNAL:	PARM	PACKO		RETURN			

PROCESSING: MPXBOOT.REL,SYSB

3.	MPXBOOT	63104CC6		0607	REL	MM/DD/YY	HH:MM:SS		
		ENTRY:	MPXBOOT						

PROCESSING: INSTALL.REL,SYSB

4.	TO.INSTL	5D0D7D5A		0010	REL	MM/DD/YY	HH:MM:SS		
		ENTRY:	CCCP	CCCR		CCI	CFOI	CRI	
			CTOIOC	HCI		ITI	LPI	MSI	
			OPSEND	SELI		START	SYSABRT		
		EXTERNAL:	INSTSTRT						
5.	COMIOC	6D1D9204		0092	REL	MM/DD/YY	HH:MM:SS		
		ENTRY:	CFO	CIO		CTO	IOCC	IOI	
			IOICRT	SEL		SIO	SPG		
		EXTERNAL:	CFOI	CTOIOC		SELI	MSI	LPI	
			CRI	MTI		ITI	CCI	CCCR	
			CCCP	SIOC		OPSEND	OPSEND		
6.	LCTT	924C89C1		01CA	REL	MM/DD/YY	HH:MM:SS		
		ENTRY:	MTC	MTI					
		EXTERNAL:	IOI						
7.	SYSTINST	63083FBE		1999	REL	MM/DD/YY	HH:MM:SS		
		ENTRY:	INSTSTRT	SIOC					
		EXTERNAL:	SIO	CIO		MTC			

ITEMIZE 09/18/84 11:01:15

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME

PROCESSING: DSKUTIL.REL,SYSB

8.	TO.INSTL	5D0D7D59		0011	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	CCCP	CCCR	CCI	CFOI		CRI
			CTOIOC	HCI	ITI	LPI		MSI
			MTI	OPSEND	SELI	START		...MORE
		EXTERNAL:	DSKUTIL					
9.	COMIOC	6D1D9204		0092	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	CFO	CIO	CTO	IOCC		IOI
			IOICRT	SEL	SIO	SPG		
		EXTERNAL:	CFOI	CTOIOC	SELI	MSI		LPI
			CRI	MTI	ITI	CCI		CCCR
			CCCP	SIOC	OPSEND	OPSEND		
10.	DSKUTIL	67134A45		1E45	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	DSKUTIL	SIOC				
		EXTERNAL:	SIO	CIO				

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT
ABORTJM	????????	BLKDEBLK
ALLOCATE	????????	BLKDEBLK
BDBWTIME	????????	BLKDEBLK
BKSP	????????	BLKDEBLK
BLKFSZE	BLKDEBLK	
CCCP	TO.INSTL	COMIOC
CCCP	TO.INSTL	DUPLICATE ENTRYPOINT
CCCR	TO.INSTL	COMIOC
CCCR	TO.INSTL	DUPLICATE ENTRYPOINT
CCI	TO.INSTL	COMIOC
CCI	TO.INSTL	DUPLICATE ENTRYPOINT
CFO	COMIOC	
CFO	COMIOC	DUPLICATE ENTRYPOINT
CFOI	TO.INSTL	COMIOC
CFOI	TO.INSTL	DUPLICATE ENTRYPOINT
CIO	COMIOC	SYSTINST
CIO	COMIOC	DUPLICATE ENTRYPOINT
CRI	TO.INSTL	COMIOC
CRI	TO.INSTL	DUPLICATE ENTRYPOINT
CRTBUFL	????????	BLKDEBLK BLKDEBLK
CRTDCON	????????	BLKDEBLK
CTO	COMIOC	
CTO	COMIOC	DUPLICATE ENTRYPOINT
CTOIOC	TO.INSTL	COMIOC
CTOIOC	TO.INSTL	DUPLICATE ENTRYPOINT
DSKUTIL	DSKUTIL	TO.INSTL

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT
EXPANDQ	????????	BLKDEBLK
HCI	TO.INSTL	
HCI	TO.INSTL	DUPLICATE ENTRYPOINT
INSTSTRT	SYSTINST	TO.INSTL
IOCC	COMIOC	
IOCC	COMIOC	DUPLICATE ENTRYPOINT
IOI	COMIOC	LCTT
IOI	COMIOC	DUPLICATE ENTRYPOINT
IOICRT	COMIOC	
IOICRT	COMIOC	DUPLICATE ENTRYPOINT
ITI	TO.INSTL	COMIOC
ITI	TO.INSTL	DUPLICATE ENTRYPOINT
JACC	????????	BLKDEBLK
JCIJPL	????????	BLKDEBLK
JCIJPC	????????	BLKDEBLK
JCIJSCRL	????????	BLKDEBLK
JCIJNUM	????????	BLKDEBLK
JMTRTEMC	????????	BLKDEBLK
LPI	TO.INSTL	COMIOC
LPI	TO.INSTL	DUPLICATE ENTRYPOINT
LUNITBL	????????	BLKDEBLK BLKDEBLK
MPXBOOT	MPXBOOT	
MSI	TO.INSTL	COMIOC
MSI	TO.INSTL	DUPLICATE ENTRYPOINT
MTC	LCTT	SYSTINST
MTI	LCTT	COMIOC
MTI	TO.INSTL	DUPLICATE ENTRYPOINT

ITEMIZE 09/18/84 11:01:16

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT
OPEN	????????	BLKDEBLK
OPSEND	TD.INSTL	COMIOC COMIOC
OPSEND	TD.INSTL	DUPLICATE ENTRYPOINT
PACK	BLKDEBLK	
PACKC	BLKDEBLK	
PACKD	BLKDEBLK	
PACKO	BLKDEBLK	TSKMON
PARM	????????	BLKDEBLK BLKDEBLK BLKDEBLK BLKDEBLK TSKMON
PICK	BLKDEBLK	
PICKC	BLKDEBLK	
PICKD	BLKDEBLK	
PICKI	BLKDEBLK	
READLU	????????	BLKDEBLK
RETURN	????????	TSKMON
S	COMIOC	
SEL	COMIOC	DUPLICATE ENTRYPOINT
SELI	TD.INSTL	COMIOC
SELI	TD.INSTL	DUPLICATE ENTRYPOINT
SIO	COMIOC	SYSTINST
SIO	COMIOC	DUPLICATE ENTRYPOINT
SIOC	SYSTINST	COMIOC COMIOC
SIOC	DSKUTIL	DUPLICATE ENTRYPOINT
SPG	COMIOC	
SPG	COMIOC	DUPLICATE ENTRYPOINT
START	TD.INSTL	
START	TD.INSTL	DUPLICATE ENTRYPOINT
STDFEXPS	????????	BLKDEBLK BLKDEBLK

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT
STOPSEG	????????	BLKDEBLK BLKDEBLK
SYSABRT	TO.INSTL	
SYSABRT	TO.INSTL	DUPLICATE ENTRYPOINT
TSCHED	????????	BLKDEBLK
TSKMON	TSKMON	
ULOC	????????	BLKDEBLK
UST	????????	BLKDEBLK
UTYP!	????????	BLKDEBLK
WRITLU	????????	BLKDEBLK

```
ITEMIZE  COMPLETE.
   *SAVEPF(62,BLD-PLAN.LST,SYSL,01,     )
   *EOJ    BLD-PLAN
```

M P - 3 2 P R O D U C T S E T

L I B

This set of products is common to the military MPP and commercial MP-32 hardware. The source Oldpl (PRODUCT-SET-P1,MPMP,xx,****) is obtained from CDC Government Systems Division CEM Coordinator. This Oldpl is modified by the P1-PL-SPS.BLD job to become the base for the MP-32 usage of the products.

The Products CALCOMP, EDIT, ENFRPT, and FMT are not used on the MP-32.

LIB0 owner last dumped on _____

LIBB owner last dumped on _____

File Name	Description	Last Build
product-set-pl,lib0,__,lib0	GSD PSRed Oldpl	_____
pl-pl-gps.bld,lib0,01,lib0	Build next GSD PSR Level PL	
pl-pl-gps.lst,libl,01,libl	Listing of above .bld job	
product-set-pl,lib0,__,lib0	Next GSD PSR Level Pl	*1
std-mods.pl,lib0,__,lib0	Oldpl of Mods to GSD P1	_____
std-mds-pl.bld,lib0,01,lib0	Build next STD PSR Level Modpl	
std-mds-pl.lst,libl,01,libl	Listing of above .bld job	
std-mods.pl,lib0,__,lib0	Next STD PSR Level MODPL	*3
pl-pl-sps.bld,lib0,01,lib0	Build next STD PSR Level PL	
pl-pl-sps.lst,libl,01,libl	Listing of above .bld job	
pl.pl,lib0,__,lib0	STD PSRed PL	_____
pl-pl-loc.bld,lib0,01,lib0	Build PL with Local Mods	
pl-pl-loc.lst,libl,01,libl	Listing of above .bld job	
pl.pl,libb,ZZ,libb	Local (working) PL	_____
catlist.bld,libb,01,libb	Build CATLIST	
catlist.lst,libl,01,libl	Listing of above .bld job	
lib-catlst.rel,lbld,01,lbld		_____
lib-catlst.bld,lbld,01,lbld	Build Abs CATLIST	
lib-catlst.lst,lbll,01,lbll	Listing of above .bld job	
lib-catlst.abs,lbld,01,lbld		_____
copyl.bld,libb,01,libb	Build COPYL	
copyl.lst,libl,01,libl	Listing of above .bld job	
lib-copyl.rel,lbld,01,lbld		_____
lib-copyl.bld,lbld,01,lbld	Build Abs COPYL	
lib-copyl.lst,lbll,01,lbll	Listing of above .bld job	
lib-copyl.abs,lbld,01,lbld		_____
cosy.bld,libb,01,libb	Build COSY	
cosy.lst,libl,01,libl	Listing of above .bld job	
lib-cosy.rel,lbld,01,lbld		_____
lib-cosy.bld,lbld,01,lbld	Build Abs COSY	
lib-cosy.lst,lbll,01,lbll	Listing of above .bld job	
lib-cosy.abs,lbld,01,lbld		_____
fmp.bld,libb,01,libb	Build FMP	
fmp.lst,libl,01,libl	Listing of above .bld job	
lib-fmp.rel,lbld,01,lbld		_____
lib-fmp.bld,lbld,01,lbld	Build Abs FMP	
lib-fmp.lst,lbll,01,lbll	Listing of above .bld job	

```
            lib-fmp.abs,lbld,01,lbld
        pcc.bld,libb,01,libb                    Build PCC
          pcc.lst,libl,01,libl                  Listing of above .bld job
          lib-pcc.rel,lbld,01,lbld
        prelib.bld,libb,01,libb                 Build PRELIB
          prelib.lst,libl,01,libl               Listing of above .bld job
          lib-prelib.rel,lbld,01,lbld
            lib-prelib.bld,lbld,01,lbld         Build Abs PRELIB
              lib-prelib.lst,lbll,01,lbll         Listing of above .bld job
              lib-prelib.abs,lbld,01,lbld
        util.bld,libb,01,libb                   Build UTIL
          util.lst,libl,01,libl                 Listing of above .bld job
          lib-util.rel,lbld,01,lbld
            lib-util.bld,lbld,01,lbld           Build Abs UTIL
              lib-util.lst,lbll,01,lbll           Listing of above .bld job
              lib-util.abs,lbld,01,lbld

bld-plan.txt,libb,01,libb               Contains this text
  bld-plan.run,libb,01,libb             Produce Product Build Doc

update.pl,lib0,__,lib0                  GSD PSRed Oldpl
  upd-pl-gps.bld,lib0,01,lib0           Build next GSD PSR Level PL
    upd-pl-gps.lst,libl,01,libl         Listing of above .bld job
    update.pl,lib0,__,lib0              Next GSD PSR Level PL       *2

  upd-pl-sps.bld,lib0,01,lib0           Build next STD PSR Level PL
    upd-pl-sps.lst,libl,01,libl         Listing of above .bld job
    update.pl,lib0,__,lib0              STD PSRed PL
      upd-pl-loc.bld,lib0,01,lib0       Build PL with Local Mods
        upd-pl-loc.lst,libl,01,libl     Listing of above .bld job
        update.pl,libb,ZZ,libb          Local (working) PL
          update.bld,libb,01,libb           Build UPDATE
            update.lst,libl,01,libl         Listing of above .bld job
            lib-update.rel,lbld,01,lbld
              lib-update.bld,lbld,01,lbld   Build Abs UPDATE
                lib-update.lst,lbll,01,lbll   Listing of above .bld job
                lib-update.abs,lbld,01,lbld
```

Integration Instructions for next release:

1. The current base is not the GSD pl. Use the Oldpl available from GSD. The PSR Level 57 GSD Oldpl is available at SVLOPS.
2. Eliminate the UPDATE.PL and use the source from the GSD PL.
3. Add any PSR code not included on the GSD tape.

NOTES:

*1 This is a temporary Oldpl. It is build by pl-pl-gps.bld and then, when all is well, the first Oldpl is released and the second Oldpl becomes the base Oldpl. The pl-pl-gps.bld job is then modified to use the new PSR Level as a base and produce the next PSR Level.

Normally, the temporary Oldpl does not appear on Release Tapes.

*2 Same as *1 above; for update.pl.

*3 Same as *1 above; for std-mods.pl.

```
   STOP*ENDST*
*OPEN(10,P1.PL,LIBB,ZZ,      ,R)
*XREFUP(P=10)
```

CDC MP60 XREFUP V1.00 TODAY: 09/18/84 13:33:53

OLDPL VERSION: 2
MASTER CHARACTER: /
OLDPL PRODUCED: 08/21/84
14:31:55

OLDPL AUDIT:		TOTAL	YANKED	ACTIVE	RUNNING
DECK	YANK$$$	1	0	1	1
DECK	MICRO	179	0	179	180
DECK	UASM	853	0	853	1033
DECK	CTABLE	39	0	39	1072
DECK	CCHAIN	101	0	101	1173
DECK	LIST	236	0	236	1409
DECK	LOOKUP	394	0	394	1803
DECK	STABLE	169	0	169	1972
DECK	FIND	40	0	40	2012
DECK	VALUE	71	0	71	2083
DECK	CPUNCH	41	0	41	2124
DECK	PCC	4612	0	4371	6495
DECK	PRELIBOS	6287	0	6198	12693
DECK	UTILITY	1415	0	1414	14107
DECK	FMP	3763	0	3739	17846
DECK	COPYL	489	0	489	18335
DECK	COSY	3136	0	3135	21470
DECK	CATLIST	916	0	892	22362
DECK	HISTORY	58	0	58	22420

DECKS MODIFIED BY A GIVEN IDENT:

IDENT	LINES	DECKS OR COMDECKS MODIFIED		
P164	97	PCC		
P165	111	PCC		
P166	290	PCC		
P179	17	PRELIBOS		
P261	7	CATLIST		
STD001	5	UTILITY	COSY	HISTORY
STD002	274	PRELIBOS	HISTORY	
STD003	33	FMP	HISTORY	
STD004	20	FMP	HISTORY	
STD005	392	PCC	HISTORY	
STD006	40	PCC	HISTORY	
STD007	48	PRELIBOS	HISTORY	
STD008	253	PCC	HISTORY	
STD009	7	PCC	HISTORY	
STD010	38	FMP	HISTORY	
CATLIST1	43	CATLIST	HISTORY	
CATLIST2	9	CATLIST	HISTORY	
LEV-AA	2	HISTORY		
LEV-AB	3	HISTORY		
LEV-AC	3	HISTORY		

IDENTS THAT MODIFY A GIVEN DECK:

DECK	LINES	IDENT(S) THAT MODIFY THE DECK
YANK$$$	1	
MICRO	0	
UASM	0	
CTABLE	0	

CCHAIN	0					
LIST	0					
LOOKUP	0					
STABLE	0					
FIND	0					
VALUE	0					
CPUNCH	0					
PCC	0	P165	P166	STD005	STD008	P164
		STD009	STD006			
PRELIBOS	0	STD002	P179	STD007		
UTILITY	0	STD001				
FMP	0	STD003	STD010	STD004		
COPYL	0					
COSY	0	STD001				
CATLIST	0	CATLIST1	P261	CATLIST2		
HISTORY	0	LEV-AC	LEV-AB	LEV-AA	CATLIST2	CATLIST1
		STD010	STD009	STD008	STD007	STD006
		STD005	STD004	STD003	STD002	STD001

DECKS THAT CALL A GIVEN COMMON DECK:

COMDECK	DECKS CALLING THE COMMON DECK

COMMON DECKS CALLED BY A GIVEN DECK OR COMDECK:

DECK	COMMON DECKS CALLED BY THE DECK

NULL IDENTS:

NULL DECKS:

COMMON DECKS NOT CALLED:

```
XREFJP FINISHED.
  *CLOSE(10)
  *LISTF
```

```
*JOB(ID=P1-PL-GPS.BLD)
*SCHED(CM=9,PL=65000,TL=9999,SCR=150)
#
#  This job adds Government Systems Division (formerly Aerospace Systems
#  Division) PSRs to the GSD Oldpl at a given level and produces a
#  higher PSR level Oldpl.
#
*OPEN(10,PRODUCT-SET-P1,LIB0,??,LIB0,R)
*UPDATE(F,P=10,N=11,*=/,O=A24)
/FINIS
*SAVEPF(11,PRODUCT-SET-P1,LIB0,**,LIB0)
*SAVEPF(62,P1-PL-GPS.LST,LIBL,01,LIBL)
*EOJ
```

```
*JOB(ID=P1-PL-SPS.BLD)
*SCHED(CM=10,TL=9999,PL=60000,SCR=100)
#
#  This job adds Systems Technology Division modifications to the
#  "PRODUCT-SET-P1" Oldpl of Government Systems Division.
#
*OPEN(10,STD-MODS.PL,LIBO,AC,LIBO,R)
*UPDATE(Q,P=10,*=+,C=11)
+COMPILE P1-PL
+FINIS
*REWIND(11)
*COPYCF(11,12,1,1,80)    # REMOVE SEQUENCE NUMBERS
*REWIND(12)
*CLOSE(10)
*CLOSE(11)
*OPEN(13,PRODUCT-SET-P1,LIBO,??,LIBO,R)
*UPDATE(I=12,P=13,N=14,*=/)
*SAVEPF(14,P1.PL,LIBO,AC,LIBO)
*SAVEPF(62,P1-PL-SPS.LST,LIBL,01,LIBL)
*EOJ
```

```
*job(id=pl-pl-loc.bld)
*sched(cm=10,tl=9999,pl=60000,scr=100)
#
#    This job adds LOCAL Mods to the STD PSRed OLDPL and builds an
#    OLDPL called:  P1.PL,LIBB,ZZ,LIBB
#
*open(1,pl.pl,lib0,AC,lib0,r)
*update(p=1,n=2,*=/)
// Place local modifications here.
/FINIS
*savepf(2,pl.pl,libb,ZZ,libb)
*savepf(62,pl-pl-loc.lst,libl,01,libl)
*eoj
```

```
*JOB(ID=CATLIST.BLD)
*SCHED(CM=9,TL=99999,PL=60000,SCR=100)
#
#  This job builds the MPX/OS V3 File Label Listing program  CATLIST.
#
*OPEN(10,P1.PL,LIBB,ZZ,LIBB,R)
*UPDATE(C,P=10,Q,*=/,O=A24)
/C CATLIST
/FINIS
*REWIND(56)
*CMP(I=56,X,C,L)
*SAVEPF(57,LIB=CATLST.REL,LBLD,01,LBLD)
*SAVEPF(62,CATLIST.LST,LIBL,01,LIBL)
*EOJ
```

```
*JOB(ID=LIB-CATLST.BLD)
*SCHED(CM=3,TL=99999,PL=1000,SCR=100)
*OPEN(1,LIB-CATLST.REL,LBLD,01,LBLD,R)
*OPEN(2,SYS-TSKMON.REL,LBLD,01,LBLD,R)
*OPEN(3,SYS-BKOBK.REL,LBLD,01,LBLD,R)
*RELEASE(LIB-CATLST.ABS,LBLD,01,LBLD)
*ALLOCATE(LIB-CATLST.ABS,LBLD,01,LBLD,480,100)
*OPEN(10,LIB-CATLST.ABS,LBLD,01,LBLD,W)
*MAP
*LOAD(1,2,3)
*ABS(10)
*CLOSE(10)
*RELEASE(LIB-CATLST.ABS,LBLD,01,LBLD,R)
*SAVEPF(62,LIB-CATLST.LST,LBLL,01,LBLL)
*EOJ
```

```
*JOB(ID=COPYL.BLD)
*SCHED(CM=9,TL=99999,PL=2000,SCR=100)
*OPEN(10,PL.PL,LIBB,ZZ,LIBB,R)
*UPDATE(C,P=10,Q,*=/)
/U COPYL
/FINIS
*REWIND(56)
*CMP(I=56,X,C,L)
*SAVEPF(57,LIB=COPYL.REL,LBLD,01,LBLD)
*SAVEPF(62,COPYL.LST,LIBL,01,LIBL)
*EOJ
```

```
*JOB(ID=LIB-COPYL.BLD)
*SCHED(CM=3,TL=99999,PL=1000,SCR=100)
*OPEN(1,LIB-COPYL.REL,LBLD,01,LBLD,R)
*OPEN(3,SYS-TSKMON.REL,LBLD,01,LBLD,R)
*OPEN(4,SYS-BKDBK.REL,LBLD,01,LBLD,R)
*RELEASE(LIB-COPYL.ABS,LBLD,01,LBLD)
*ALLOCATE(LIB-COPYL.ABS,LBLD,01,LBLD,480,100)
*OPEN(10,LIB-COPYL.ABS,LBLD,01,LBLD,W)
*MAP
*LOAD(1,3,4)
*ABS(10)
*CLOSE(10)
*RELEASE(LIB-COPYL.ABS,LBLD,01,LBLD,R)
*SAVEPF(62,LIB-COPYL.LST,LBLL,01,LBLL)
*EOJ
```

```
*JOB(ID=COSY.BLD)
*SCHED(CM=9,TL=99999,PL=60000,SCR=100)
*OPEN(10,P1.PL,LIBB,ZZ,LIBB,R)
*MODATE(C,P=10,Q,*=/)
/C COSY
/FINIS
*REWIND(56)
*CMP(I=56,X,C,L)
*SAVEPF(57,LIB-COSY.REL,LBLD,01,LBLD)
*SAVEPF(62,COSY.LST,LIBL,01,LIBL)
*EOJ
```

```
*JOB(ID=LIB-COSY.BLD)
*SCHED(CM=4,TL=99999,PL=1000,SCR=100)
*OPEN(1,LIB-COSY.REL,LBLD,01,LBLD,R)
*OPEN(3,SYS-TSKMON.REL,LBLD,01,LBLD,R)
*OPEN(4,SYS-BKDBK.REL,LBLD,01,LBLD,R)
*RELEASE(LIB-COSY.ABS,LBLD,01,LBLD)
*ALLOCATE(LIB-COSY.ABS,LBLD,01,LBLD,480,100)
*OPEN(10,LIB-COSY.ABS,LBLD,01,LBLD,W)
*MAP
*LOAD(1,3,4)
*ABS(10)
*CLOSE(10)
*RELEASE(LIB-COSY.ABS,LBLD,01,LBLD,R)
*SAVEPF(62,LIB-COSY.LST,LBLL,01,LBLL)
*EOJ
```

```
*JOB(ID=FMP.BLD)
*SCHED(CM=9,TL=99999,PL=60000,SCR=100)
*OPEN(10,P1.PL,LIBB,ZZ,LIBB,R)
*UPDATE(C,P=10,Q,*=/)
/C FMP
/FINIS
*REWIND(56)
*CMP(I=56,X,C,L)
*SAVEPF(57,LIB=FMP.REL,LBLD,01,LBLD)
*SAVEPF(62,FMP.LST,LIBL,01,LIBL)
*EOJ
```

```
*JOB(ID=LIB-FMP.BLD)
*SCHED(CM=4,TL=99999,PL=1000,SCR=100)
*OPEN(1,LIB-FMP.REL,LBLD,01,LBLD,R)
*OPEN(3,SYS-TSKMON.REL,LBLD,01,LBLD,R)
*OPEN(4,SYS-BKDBK.REL,LBLD,01,LBLD,R)
*RELEASE(LIB-FMP.ABS,LBLD,01,LBLD)
*ALLOCATE(LIB-FMP.ABS,LBLD,01,LBLD,480,100)
*OPEN(10,LIB-FMP.ABS,LBLD,01,LBLD,W)
*MAP
*LOAD(1,3,4)
*ABS(10)
*CLOSE(10)
*RELEASE(LIB-FMP.ABS,LBLD,01,LBLD,R)
*SAVEPF(62,LIB-FMP.LST,LBLL,01,LBLL)
*EOJ
```

```
*JOB(ID=PCC.BLD)
*SCHED(CM=9,TL=99999,PL=60000,SCR=100)
*OPEN(10,P1.PL,LIBB,ZZ,LIBB,R)
*MODIFY(C,P=10,Q,*=/)
/C PCC
/FINIS
*REWIND(56)
*CMP(I=56,X,C,L)
*SAVEPF(57,LIB=PCC.REL,LBLD,01,LBLD)
*SAVEPF(62,PCC.LST,LIBL,01,LIBL)
*EOJ
```

```
*JOB(ID=PRELIB.BLD)
*SCHED(CM=9,TL=99999,PL=60000,SCR=100)
*OPEN(10,P1.PL,LIBB,ZZ,LIBB,R)
*UPDATE(C,P=10,Q,*=/)
/*PRELIBOS
/FINIS
*REWIND(56)
*CMP(I=56,X,C,L)
*SAVEPF(57,LIB-PRELIB.REL,LBLD,01,LBLD)
*SAVEPF(62,PRELIB.LST,LIBL,01,LIBL)
*EOJ
```

```
*JOB(ID=LIB-PRELIB.BLD)
*SCHED(CM=6,TL=99999,PL=1000,SCR=100)
*OPEN(1,LIB-PRELIB.REL,LBLD,01,LBLD,R)
*OPEN(3,SYS-TSKMON.REL,LBLD,01,LBLD,R)
*OPEN(4,SYS-BKDBK.REL,LBLD,01,LBLD,R)
*RELEASE(LIB-PRELIB.ABS,LBLD,01,LBLD)
*ALLOCATE(LIB-PRELIB.ABS,LBLD,01,LBLD,480,100)
*OPEN(10,LIB-PRELIB.ABS,LBLD,01,LBLD,W)
*MAP
*LOAD(1,3,4)
*ABS(10)
*CLOSE(10)
*RELEASE(LIB-PRELIB.ABS,LBLD,01,LBLD,R)
*SAVEPF(62,LIB-PRELIB.LST,LBLL,01,LBLL)
*EOJ
```

```
*JOB(ID=UTIL.BLD)
*SCHED(CM=9,TL=99999,PL=60000,SCR=100)
*OPEN(10,P1.PL,LIBB,ZZ,LIBB,R)
*UPDATE(C,P=10,Q,*=/,O=A24)
/UTILITY
/FINIS
*REWIND(56)
*CMP(I=56,X,C,L)
*SAVEPF(57,LIB-UTIL.REL,LBLD,01,LBLD)
*SAVEPF(62,UTIL.LST,LIBL,01,LIBL)
*EOJ
```

```
*JOB(ID=LIB-JTIL.BLD)
*SCHED(CM=3,TL=99999,PL=1000,SCR=100)
*OPEN(1,LIB-UTIL.REL,LBLD,01,LBLD,R)
*OPEN(3,SYS-TSKMON.REL,LBLD,01,LBLD,R)
*OPEN(4,SYS-BKDBK.REL,LBLD,01,LBLD,R)
*RELEASE(LIB-UTIL.ABS,LBLD,01,LBLD)
*ALLOCATE(LIB-UTIL.ABS,LBLD,01,LBLD,480,100)
*OPEN(10,LIB-UTIL.ABS,LBLD,01,LBLD,W)
*MAP
*LOAD(1,3,4)
*ABS(10)
*CLOSE(10)
*RELEASE(LIB-UTIL.ABS,LBLD,01,LBLD,R)
*SAVEPF(62,LIB-UTIL.LST,LBLL,01,LBLL)
*EOJ
```

STOP*ENDST*
*ITEMIZE

PROCESSING: LIB-CATLST.REL,LBLD

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
1.	CATLIST	731B54E5		02AE	REL	MM/DD/YY	HH:MM:SS

ENTRY: CATLIST

EXTERNAL:

PARM	PARM	DATE	PARM	TIME
PACKD	OPEN	READLU	UST	OPENMEM
ULOC	CLOSE	PACK	PACKD	PACKC
ABORT	BSY	DEVICE	PICK	PICKC
PICKD	PICKI	WRITLU		

PROCESSING: LIB-COPYL.REL,LBLD

2.	COPYL	70408885		0601	REL	MM/DD/YY	HH:MM:SS

ENTRY: COPYL

EXTERNAL:

PARM	PACK	REWD	UTYP	PARM
PICKD	PACKD	PICK	PICKC	PACKC
WEOF	PARM			

PROCESSING: LIB-COSY.REL,LBLD

3.	COSY	9C4071E0		1AA6	REL	MM/DD/YY	HH:MM:SS

ENTRY: COSY

EXTERNAL:

PARM	ABORT	DATE	PARM	TIME
OPENMEM	UTYP	PARM	PACKC	PARM
SEOF	REWD	ULOC	PACKD	BKSP
UST	PICKC	WEOF	PARM	PACK
WRITLU	PACKD	READLU	PICKD	PICKI
PICK				

PROCESSING: LIB-FMP.REL,LBLD

4.	FMP	994286C5		08FA	REL	MM/DD/YY	HH:MM:SS

ENTRY: FMP

EXTERNAL:

DATE	PARM	PARM	TIME	OPEN
PARM	DEVICE	ULOC	READLU	UST
CLOSE	WRITLU	PARM	REWD	SEOF
ALLOCATE	RELEASE	MODIFY	WEOF	BKSP
PACK	PICK	PARM	UNLD	

PROCESSING: LIB-PCC.REL,LBLD

5.	PCC	8F4C8FFC		0CC3	REL	MM/DD/YY	HH:MM:SS

ENTRY: PCC

EXTERNAL:

PARM	PFAULT	PORT	DEVICEQ	PARM
ABORT	WRITLU	UST	PACKD	PACKC

ITEMIZE

09/18/84 13:34:23

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME

CLOSE	PACK	PARM	ALLOCATE	OPEN
PICKD	PICK	PICKC	PACKD	RELEASE
READLU	BSY	CLEAR		

PROCESSING: LIB-PRELIB.REL,LBLD

6.	PRELIB	66185E5E		3C35	REL	MM/DD/YY HH:MM:SS
	ENTRY:	PRELIB				
	EXTERNAL:	PARM	UTYP	PARM	PARM	REWD
		DATE	TIME	PFAULT	OPENMEM	PARM
		DEVICE	PARM	SEOF	PICKC	PACKC
		ULOC	WEOF	READLU	UST	PACK
		PARM	ABORT	WRITLU	PACKD	PACKD
		PICKD	PICKI	PICK		

PROCESSING: LIB-UTIL.REL,LBLD

7.	UTILITY	5F07323F		2354	REL	MM/DD/YY HH:MM:SS
	ENTRY:	UTIL				
	EXTERNAL:	PICK	PICKD	PACKD	READLU	PACKD
		UTYP	PARM	WEOF	UST	PACK
		WRITLU	PICKC	PACKC	REWD	SEOF
		BKSP	PARM	PARM	PARM	PARM

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
ABORT	????????	CATLIST	COSY	PCC	PRELIB	
ALLOCATE	????????	FMP	PCC			
BKSP	????????	COSY	FMP	UTILITY		
BSY	????????	CATLIST	PCC			
CATLIST	CATLIST					
CLEAR	????????	PCC				
CLOSE	????????	CATLIST	FMP	PCC		
COPYL	COPYL					
COSY	COSY					
DATE	????????	CATLIST	COSY	FMP	PRELIB	
DEVICE	????????	CATLIST	FMP	PRELIB		
DEVICEQ	????????	PCC				
FMP	FMP					
MODIFY	????????	FMP				
OPEN	????????	CATLIST	FMP	PCC		
OPENMEM	????????	CATLIST	COSY	PRELIB		
PACKD	????????	CATLIST UTILITY	COPYL	COSY	PCC	PRELIB
PACK	????????	CATLIST PRELIB	COPYL UTILITY	COSY	FMP	PCC
PACKO	????????	CATLIST	COSY	PCC	PRELIB	UTILITY
PACKC	????????	CATLIST UTILITY	COPYL	COSY	PCC	PRELIB
PARM	????????	CATLIST COPYL COSY FMP PRELIB UTILITY	CATLIST COSY FMP PCC PRELIB UTILITY	CATLIST COSY FMP PCC PRELIB UTILITY	COPYL COSY FMP PCC PRELIB UTILITY	COPYL COSY FMP PRELIB PRELIB UTILITY
PCC	PCC					

ITEMIZE 09/18/84 13:34:25

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
PFAULT	????????	PCC	PRELIB			
P[illegible]K	????????	CATLIST PRELIB	COPYL UTILITY	COSY	FMP	PCC
PICKC	????????	CATLIST UTILITY	COPYL	COSY	PCC	PRELIB
PICKD	????????	CATLIST UTILITY	COPYL	COSY	PCC	PRELIB
PICKI	????????	CATLIST	COSY	PRELIB		
PORT	????????	PCC				
PRELIB	PRELIB					
READLU	????????	CATLIST UTILITY	COSY	FMP	PCC	PRELIB
RELEASE	????????	FMP	PCC			
REWD	????????	COPYL	COSY	FMP	PRELIB	UTILITY
SEOF	????????	COSY	FMP	PRELIB	UTILITY	
TIME	????????	CATLIST	COSY	FMP	PRELIB	
U[illegible]C	????????	CATLIST	COSY	FMP	PRELIB	
UNLD	????????	FMP				
UST	????????	CATLIST UTILITY	COSY	FMP	PCC	PRELIB
UTIL	UTILITY					
UTYP	????????	COPYL	COSY	PRELIB	UTILITY	
WEOF	????????	COPYL	COSY	FMP	PRELIB	UTILITY
WRITLU	????????	CATLIST UTILITY	COSY	FMP	PCC	PRELIB

```
ITEMIZE  COMPLETE.
   *OPEN(10,UPDATE.PL,LIBB,ZZ,     ,R)
   *XREFUP(P=10)
```

CDC MP60 XREFUP V1.00 TODAY: 09/18/84 13:34:27

OLDPL VERSION: 2
MASTER CHARACTER: /
OLDPL PRODUCED: 08/21/84
15:49:11

OLDPL AUDIT:		TOTAL	YANKED	ACTIVE	RUNNING
DECK	YANK$$$	2	0	2	2
DECK	UPDATE	187	0	158	160
COMDECK	BLKSIZE	5	0	3	163
COMDECK	BP	3	0	3	166
COMDECK	CALLEROR	3	0	3	169
COMDECK	CCCCCCCC	4	0	4	173
COMDECK	CCDATA	11	0	11	184
COMDECK	CSIPTR	5	0	4	188
COMDECK	CTAB	3	0	3	191
COMDECK	DIRDEF	3	0	3	194
COMDECK	DV2NLF	3	0	3	197
COMDECK	DVCODES	5	0	5	202
COMDECK	ERORDATA	3	0	3	205
COMDECK	ETMASK	3	0	3	208
COMDECK	FILEDATA	3	0	3	211
COMDECK	HBITS	3	0	3	214
COMDECK	HDATA	3	0	3	217
COMDECK	HMASKS	3	0	3	220
COMDECK	IDMASK	3	0	3	223
COMDECK	IDNLIST	3	0	3	226
COMDECK	INPUNIT	3	0	3	229
COMDECK	IOMASK	3	0	3	232
COMDECK	LLDATA	3	0	3	235
COMDECK	LUNR	3	0	3	238
COMDECK	MODTABS	3	0	3	241
COMDECK	NCDKLIST	3	0	3	244
COMDECK	NCPW	3	0	3	247
COMDECK	NLBITS	9	0	9	256
COMDECK	NPLRDATA	5	0	3	259
COMDECK	NPLWDATA	5	0	3	262
COMDECK	OBLKNUM	3	0	3	265
COMDECK	OCDKLIST	3	0	3	268
COMDECK	OPLRDATA	5	0	3	271
COMDECK	PASTN	3	0	3	274
COMDECK	PLHEADER	3	0	3	277
COMDECK	PURGYANK	3	0	3	280
COMDECK	PYTABS	3	0	3	283
COMDECK	RITEOPTS	5	0	5	288
COMDECK	SCIDATA	3	0	3	291
COMDECK	SEARCH	3	0	3	294
COMDECK	SNMASK	3	0	3	297
COMDECK	SPTR	5	0	3	300
COMDECK	TFLUN	3	0	3	303
COMDECK	TFRWDATA	5	0	3	306
COMDECK	TLDATA	3	0	3	309
COMDECK	ADFI	3	0	3	312
COMDECK	CACN	3	0	3	315
DECK	ALLOC1	209	0	201	516
DECK	ALLOC2	73	0	73	589
DECK	APPLY	243	0	226	815
DECK	BCSF	56	0	56	871
DECK	BPYTAB	98	0	93	964
DECK	CDIRTV	82	0	73	1037

DECK	CDNAME	36	0	35	1072
DECK	CID	42	0	40	1112
DECK	COPY	42	0	42	1154
DECK	ERDR	46	0	44	1198
DECK	IFILES	196	0	153	1351
DECK	MP1	130	0	118	1469
DECK	MP2	400	0	368	1837
DECK	PCCARD	145	0	142	1979
DECK	PCR	82	0	79	2058
DECK	RCL	78	0	78	2136
DECK	RDBLOCK	52	0	36	2172
DECK	RDLINE	60	0	48	2220
DECK	RITE	143	0	140	2360
DECK	RPLT	77	0	67	2427
DECK	SAF	116	0	109	2536
DECK	SCY	111	0	97	2633
DECK	SDIRE	23	0	23	2656
DECK	SEQNUM	55	0	55	2711
DECK	SID	139	0	135	2846
DECK	SQZ	41	0	41	2887
DECK	STMGR	29	0	1	2888
DECK	TERM	247	0	194	3082
DECK	UNSQZ	34	0	34	3116
DECK	UPD8	78	16	53	3169
DECK	VCN	33	0	33	3202
DECK	WRBLOCK	42	0	29	3231
DECK	WRLINE	35	0	27	3258
DECK	XCDK	95	0	84	3342
DECK	XIS	52	0	51	3393
DECK	HISTORY	15	0	15	3408

CKS MODIFIED BY A GIVEN IDENT:

IDENT	LINES	DECKS OR COMDECKS MODIFIED				
U001BF	338	UPDATE	ALLOC1	ALLOC2	CDNAME	CID
		ERDR	IFILES	MP1	MP2	RITE
		SAF	SID	TERM	UPD8	
P140	353	UPDATE	BLKSIZE	NPLRDATA	NPLWDATA	OPLRDATA
		TERWDATA	ALLOC1	ALLOC2	BPYTAB	IFILES
		MP1	MP2	PCR	RITE	RPLT
		SAF	SCY	SID	TERM	WRBLOCK
		WRLINE				
P141	274	SPTR	ALLOC1	IFILES	MP1	MP2
		RDBLOCK	RDLINE	RPLT	SAF	SCY
		SID	STMGR	UPD8	XCDK	
P129	44	TERM				
P135	11	MP2	SAF	UPD8		
P145	17	UPDATE	APPLY	SAF	SID	TERM
		UPD8				
P146	1	UPD8				
P136	7	UPDATE	SCY	SID		
P154	12	ALLOC1	APPLY	MP2	XIS	
P155	9	APPLY	MP2			
P160	4	APPLY				
P163	3	APPLY				
P167	3	SAF				
P171	72	UPDATE	CCDATA	NLBITS	ALLOC1	APPLY
		BPYTAB	CDIRTV	MP2	PCCARD	TERM
P172	12	CSIPTR	APPLY	MP2		
P183	2	SID				
P184	4	SID				

P189	28	UPDATE	APPLY	MP2	RCL	RITE
P204	3	MP2				
P205	16	UPD8				
P213	1	APPLY				
P240	2	APPLY				
UPDATE1	5	YANK$$$	HISTORY			
LEV-AA	2	HISTORY				
LEV-AB	3	HISTORY				
LEV-AC	3	HISTORY				

IDENTS THAT MODIFY A GIVEN DECK:

DECK	LINES	IDENT(S) THAT MODIFY THE DECK				
YANK$$$	1	UPDATE1				
UPDATE	147	U0018F	P171	P189	P140	P136
		P145				
BLKSIZE	3	P140				
BP	3					
CALLEROR	3					
CCCCCCCC	4					
CCDATA	9	P171				
CSIPTR	3	P172				
CTAB	3					
DIRDEF	3					
DV2NLF	5					
DVCODES	3					
ERORDATA	3					
ETMASK	3					
FILEDATA	3					
HBITS	3					
HDATA	3					
HMASKS	3					
IDMASK	3					
IDNLIST	3					
INPUNIT	3					
IOMASK	3					
LLDATA	3					
LUNR	3					
MODTABS	3					
NCDKLIST	7					
NCPW	3					
NLBITS	3	P171				
NPLRDATA	3	P140				
NPLWDATA	3	P140				
OBLKNUM	3					
OCDKLIST	3					
OPLRDATA	3	P140				
PASTN	3					
PLHEADER	3					
PURGYANK	5					
PYTABS	3					
RITEOPTS	3					
SCIDATA	3					
SEARCH	3					
SNMASK	3					
SPTR	3	P141				
TFLUN	3					
TFRWDATA	81	P140				
TLDATA	24					
ADFI	214					
CACN	56					

ALLOC1	89	U0018F	P140	P171	P141	P154
ALLOC2	73	U0018F	P140			
APPLY	20	P145	P171	P189	P160	P213
		P240	P154	P155	P163	P172
BCSF	36					
BPYTAB	43	P140	P171			
CDIRTV	65	P171				
CDNAME	110	U0018F				
CID	345	U0018F				
COPY	0					
EROR	140	U0018F				
IFILES	79	U0018F	P140	P141		
MP1	73	P140	P141	U0018F		
MP2	22	U0018F	P140	P154	P135	P172
		P204	P141	P155	P171	P189
PCCARD	45	P171				
PCR	140	P140				
RCL	70	P189				
RDBLOCK	109	P141				
RDLINE	97	P141				
RITE	23	P140	P189	U0018F		
RPLT	55	P141	P140			
SAF	127	P141	P140	P167	P135	P145
		U0018F				
SCY	41	P141	P140	P136		
SDIRE	29					
SEQNUM	101					
SID	34	P141	P140	P183	P145	P184
		P136	U0018F			
SQZ	50					
STMGR	33	P141				
TERM	19	U0018F	P140	P129	P171	P145
UNSQZ	27					
UPD8	76	P141	P135	P145	P146	U0018F
		P205				
VCN	50					
WRBLOCK	3	P140				
WRLINE	338	P140				
XCDK	3	P141				
XIS	353	P154				
HISTORY	274	LEV-AC	LEV-AB	LEV-AA	UPDATE1	

DECKS THAT CALL A GIVEN COMMON DECK:

COMDECK	DECKS CALLING THE COMMON DECK				
BLKSIZE	ALLOC1	IFILES	TERM	WRLINE	
BP	ALLOC1	APPLY	MP2	RPLT	
CALLEROR	ALLOC1	APPLY	CDNAME	EROR	MP1
	MP2	SAF	SCY	SID	XIS
CCCCCCCC	ALLOC1	ALLOC2	APPLY	BCSF	BPYTAB
	CDIRTV	CDNAME	CID	COPY	EROR
	IFILES	MP1	MP2	PCCARD	PCR
	RCL	RDBLOCK	RDLINE	RITE	RPLT
	SAF	SCY	SDIRE	SEQNUM	SID
	SQZ	TERM	UNSQZ	UPD8	VCN
	WRBLOCK	WRLINE	XCDK	XIS	
CCDATA	ALLOC1	BCSF	COPY	EROR	IFILES
	MP2	PCCARD	PCR	RCL	RDLINE
	RITE	TERM	UPD8		
CSIPTR	ALLOC1	APPLY	BPYTAB	COPY	IFILES
	MP2	PCR	RITE	SAF	SCY

	SID	TERM			
CTAB	ALLOC1	CID	PCCARD		
DV2NLF	ALLOC1	IFILES	MP2	PCR	SAF
	SID				
DVCODES	ALLOC1	APPLY	BCSF	BPYTAB	CDIRTV
	CDNAME	IFILES	MP1	MP2	PCR
	RCL	RDLINE	RITE	RPLT	SAF
	SCY	SID	UPD8	XCDK	
ERORDATA	ALLOC1	EROR	MP2	RITE	TERM
ETMASK	ALLOC1	APPLY	MP2		
HBITS	ALLOC1	APPLY	BPYTAB	COPY	IFILES
	MP2	PCR	RDLINE	SAF	SCY
	SID	TERM			
HDATA	ALLOC2	APPLY	BPYTAB	COPY	IFILES
	MP2	PCR	RDLINE	RITE	RPLT
	SAF	SCY	SEQNUM	SID	SQZ
	TERM	WRLINE	XCDK		
HMASKS	ALLOC1	APPLY			
IDMASK	ALLOC1	APPLY	BCSF	MP1	MP2
	RPLT	SCY	SEQNUM		
IDNLIST	ALLOC2	APPLY	BCSF	BPYTAB	IFILES
	MP2	PCR	RITE	RPLT	SAF
	SEQNUM	SID	TERM	XIS	
INPUNIT	ALLOC1	PCCARD	RCL	SAF	
IOMASK	ALLOC1	BCSF	MP1	MP2	RITE
	RPLT	SCY	TERM	XCDK	
LLDATA	ALLOC2	APPLY	BPYTAB	CDIRTV	CID
	COPY	EROR	IFILES	MP2	PCCARD
	RCL	RITE	RPLT	SAF	SCY
	SEQNUM	SID	SQZ	TERM	UNSQZ
	VCN	XIS			
LUNR	ALLOC1	SAF			
MODTABS	ALLOC2	APPLY	IFILES	MP1	MP2
	RPLT	SAF	SID		
NCDKLIST	ALLOC2	APPLY	BCSF	BPYTAB	IFILES
	MP2	PCR	TERM	UPD8	XCDK
NCPW	ALLOC1	SQZ			
NLBITS	ALLOC1	APPLY	BCSF	BPYTAB	CDNAME
	IFILES	MP2	TERM	XIS	
NPLRDATA	ALLOC2	IFILES	UPD8	XCDK	
NPLWDATA	ALLOC2	BPYTAB	IFILES	MP1	MP2
	PCR	RITE	SID	TERM	
OBLKNUM	ALLOC1				
OCDKLIST	ALLOC2	IFILES	MP2	SCY	UPD8
OPLRDATA	ALLOC2	COPY	IFILES	MP2	RPLT
	SCY	UPD8			
PASTN	ALLOC1	XIS			
PLHEADER	ALLOC2	IFILES	TERM		
PURGYANK	ALLOC1	APPLY	BPYTAB	MP1	MP2
PYTABS	ALLOC2	BCSF	BPYTAB	IFILES	MP2
RITEOPTS	ALLOC2	BPYTAB	MP1	MP2	PCCARD
	PCR	RCL	RITE	SID	UPD8
	XCDK				
SCIDATA	ALLOC2	RCL	RDLINE	RITE	RPLT
	SQZ	UNSQZ	WRLINE		
SEARCH	ALLOC1	APPLY	BCSF	BPYTAB	CDNAME
	CID	MP2	PCR	RITE	SAF
	SCY	SDIRE	SEQNUM	SID	XCDK
	XIS				
SNMASK	ALLOC1	APPLY	IFILES	MP2	RPLT
	SCY	SEQNUM			
SPTR	ALLOC1	XCDK			

TFRWDATA	ALLOC2	IFILES	MP1	RPLT	SAF
	SCY	SID			
TLDATA	ALLOC1	ERDR	IFILES	MP1	MP2
	PCR	RITE	SID	TERM	
FILEDATA	ALLOC1	IFILES	MP1	MP2	PCR
	RDLINE	RPLT	SCY	TERM	WRBLOCK
	XCDK				
ADFI	MP2	SAF	SID	UPD8	
CACN	APPLY	MP2	SID	UPD8	

COMMON DECKS CALLED BY A GIVEN DECK OR COMDECK:

DECK	COMMON DECKS CALLED BY THE DECK				
ALLOC1	CCCCCCCC	BLKSIZE	BP	CALLERDR	CCDATA
	CSIPTR	CTAB	DV2NLF	DVCODES	ERDRDATA
	ETMASK	FILEDATA	HBITS	HMASKS	IDMASK
	INPUNIT	IOMASK	LUNR	NCPW	NLBITS
	OBLKNUM	PASTN	PURGYANK	SEARCH	SNMASK
	SPTR	TLDATA			
ALLOC2	CCCCCCCC	HDATA	IDNLIST	LLDATA	MODTABS
	NCDKLIST	NPLRDATA	NPLWDATA	OCDKLIST	OPLRDATA
	PLHEADER	PYTABS	RITEOPTS	SCIDATA	TFRWDATA
APPLY	BP	CALLERDR	CSIPTR	DVCODES	ETMASK
	HBITS	HMASKS	IDMASK	NLBITS	PURGYANK
	SEARCH	SNMASK	HDATA	IDNLIST	LLDATA
	MODTABS	NCDKLIST	CACN	CCCCCCCC	
BCSF	CCDATA	DVCODES	IDMASK	IOMASK	NLBITS
	SEARCH	IDNLIST	NCDKLIST	PYTABS	CCCCCCCC
BPYTAB	CSIPTR	DVCODES	HBITS	NLBITS	PURGYANK
	SEARCH	HDATA	IDNLIST	LLDATA	NCDKLIST
	NPLWDATA	PYTABS	RITEOPTS	CCCCCCCC	
CDIRTV	DVCODES	LLDATA	CCCCCCCC		
CDNAME	CALLERDR	DVCODES	NLBITS	SEARCH	CCCCCCCC
CID	CTAB	SEARCH	LLDATA	CCCCCCCC	
COPY	CCDATA	HBITS	HDATA	OPLRDATA	LLDATA
	CSIPTR	CCCCCCCC			
ERDR	CALLERDR	CCDATA	ERDRDATA	TLDATA	LLDATA
	CCCCCCCC				
IFILES	BLKSIZE	CCDATA	CSIPTR	DV2NLF	DVCODES
	FILEDATA	HBITS	NLBITS	SNMASK	TLDATA
	HDATA	IDNLIST	LLDATA	MODTABS	NCDKLIST
	NPLRDATA	NPLWDATA	OCDKLIST	OPLRDATA	PLHEADER
	PYTABS	TFRWDATA	CCCCCCCC		
MP1	CALLERDR	DVCODES	FILEDATA	IDMASK	IOMASK
	PURGYANK	TLDATA	MODTABS	NPLWDATA	RITEOPTS
	TFRWDATA	CCCCCCCC			
MP2	BP	CALLERDR	CCDATA	CSIPTR	DV2NLF
	DVCODES	ERDRDATA	ETMASK	FILEDATA	HBITS
	IDMASK	IOMASK	NLBITS	PURGYANK	SEARCH
	SNMASK	TLDATA	HDATA	IDNLIST	LLDATA
	MODTABS	NCDKLIST	NPLWDATA	OCDKLIST	OPLRDATA
	PYTABS	RITEOPTS	CACN	ADFI	CCCCCCCC
PCCARD	CCDATA	CTAB	INPUNIT	LLDATA	RITEOPTS
	CCCCCCCC				
PCR	CCDATA	CSIPTR	DV2NLF	DVCODES	FILEDATA
	HBITS	SEARCH	TLDATA	HDATA	IDNLIST
	NCDKLIST	NPLWDATA	RITEOPTS	CCCCCCCC	
RCL	CCDATA	DVCODES	INPUNIT	LLDATA	RITEOPTS
	SCIDATA	CCCCCCCC			
RDBLOCK	CCCCCCCC				
RDLINE	CCDATA	DVCODES	FILEDATA	HBITS	HDATA

```
                SCIDATA   CCCCCCCC
  RITE          CCDATA    CSIPTR    DVCODES   ERORDATA  IOMASK
                SEARCH    TLDATA    HDATA     IDNLIST   LLDATA
                NPLWDATA  RITEOPTS  SCIDATA   CCCCCCCC
  RPLT          BP        DVCODES   FILEDATA  IOMASK    IOMASK
                SNMASK    HDATA     IDNLIST   LLDATA    MODTABS
                OPLRDATA  SCIDATA   TFRWDATA  CCCCCCCC
  SAF           CALLERDR  CSIPTR    DV2NLF    DVCODES   HBITS
                INPUNIT   LUNR      SEARCH    HDATA     IDNLIST
                LLDATA    MODTABS   TFRWDATA  ADFI      CCCCCCCC
  SCY           CALLERDR  CSIPTR    DVCODES   FILEDATA  HBITS
                IOMASK    IOMASK    SEARCH    SNMASK    HDATA
                LLDATA    OCDKLIST  OPLRDATA  TFRWDATA  CCCCCCCC
  SDIRE         SEARCH    CCCCCCCC
  SEQNUM        IOMASK    SEARCH    SNMASK    HDATA     IDNLIST
                LLDATA    CCCCCCCC
  SID           CALLERDR  CSIPTR    DV2NLF    DVCODES   HBITS
                SEARCH    TLDATA    HDATA     IDNLIST   LLDATA
                MODTABS   NPLWDATA  RITEOPTS  TFRWDATA  ADFI
                CACN      CCCCCCCC
  SQZ           NCPW      HDATA     LLDATA    SCIDATA   CCCCCCCC
  TERM          BLKSIZE   CCDATA    CSIPTR    ERORDATA  FILEDATA
                HBITS     IOMASK    NLBITS    TLDATA    HDATA
                IDNLIST   LLDATA    NCDKLIST  NPLWDATA  PLHEADER
                CCCCCCCC
  UNSQZ         LLDATA    SCIDATA   CCCCCCCC
  UPD8          CCDATA    DVCODES   NCDKLIST  NPLRDATA  OCDKLIST
                OPLRDATA  RITEOPTS  ADFI      CACN      CCCCCCCC
  VCN           LLDATA    CCCCCCCC
  WRBLOCK       FILEDATA  CCCCCCCC
  WRLINE        BLKSIZE   HDATA     SCIDATA   CCCCCCCC
  XCDK          DVCODES   FILEDATA  IOMASK    SEARCH    SPTR
                HDATA     NCDKLIST  NPLRDATA  RITEOPTS  CCCCCCCC
  XIS           CALLERDR  NLBITS    PASTN     SEARCH    IDNLIST
                LLDATA    CCCCCCCC

NULL IDENTS:

  P164      P165      P166      P180      P179

NULL DECKS:


COMMON DECKS NOT CALLED:

  TFLUN     DIRDEF
```

```
XREFUP FINISHED.
  *CLOSE(10)
  *LISTF
```

```
*JOB(ID=UPD-PL-GPS.BLD)
*SCHED(CM=9,PL=65000,TL=9999,SCR=150)
#
#  This job adds Government Systems Division (formerly Aerospace Systems
#  Division) PSRs to the GSD Oldpl at a given level and produces a
#  higher PSR level Oldpl.
#
*OPEN(10,UPDATE.PL,LIBO,36,LIBO,R)
*UPDATE(F,P=10,N=11,*=/,O=A24)
/FINIS
*SAVEPF(11,UPDATE.PL,LIBO,**,LIBO,R)
*SAVEPF(62,UPD-PL-GPS.LST,LIBL,OL,LIBL)
*EOJ
```

```
*JOB(ID=UPD-PL-SPS.BLD)
*SCHED(CM=10,TL=9999,PL=60000,SCR=100)
#
#  This job adds Systems Technology Division modifications to the
#  portion of the "PRODUCT-SET-P1" Oldpl of GSD which contains
#  the UPDATE product.  This Oldpl(UPDATE.PL) was extracted from
#  an early GSD release by STD.  When the STD version of UPDATE
#  is upgraded to current GSD PSR levels, the UPDATE product
#  should be built from the P1.PL and this set of PLs/jobs deleted.
#
*OPEN(10,STD-MODS.PL,LIB0,AC,LIB0,R)
*UPDATE(Q,P=10,*=+,C=11)
+COMPILE UPD-PL
+FINIS
*REWIND(11)
*COPYCF(11,12,1,1,80)    # REMOVE SEQUENCE NUMBERS
*REWIND(12)
*CLOSE(10)
*CLOSE(11)
*OPEN(13,UPDATE.PL,LIB0,36,LIB0,R)
*UPDATE(I=12,P=13,N=14,*=/)
*SAVEPF(14,UPDATE.PL,LIB0,AC,LIB0)
*SAVEPF(62,UPD-PL-SPS.LST,LIBL,01,LIBL)
*EOJ
```

```
*job(id=upd-pl-loc.bld)
*sched(cm=10,tl=9999,pl=60000,scr=100)
#
#   This job adds LOCAL Mods to the STD PSRed OLDPL and builds an
#   OLDPL called:  UPDATE.PL,LIBB,ZZ,LIBB
#
*open(1,update.pl,lib0,AC,lib0,r)
*update(p=1,n=2,*=/)
// Place local modifications here.
/FINIS
*savepf(2,update.pl,libb,ZZ,libb)
*savepf(62,upd-pl-loc.lst,libl,OL,libl)
*eoj
```

```
*JOB(ID=UPDATE.BLD)
*SCHED(CM=11,TL=99999,PL=65000,SCR=100)
#
#  This job builds the UPDATE product.
#
*OPEN(10,UPDATE.PL,LIBB,ZZ,LIBB,R)
*UPDATE(P=10,*=/,C=11,Q)
/C UPDATE
/FINIS
*REWIND(11)
*CMP(I=11,X=12,C,L)
*UPDATE(P=10,*=/,C=13,Q)
/C BLKSIZE.XIS                    # EVERYTHING EXCEPT "UPDATE" DECK
/FINIS
*REWIND(13)
*FTN(I=13,X=12,L,R)
*SAVEPF(12,LIB-UPDATE.REL,LBLD,01,LBLD)
*SAVEPF(62,UPDATE.LST,LIBL,01,LIBL)
*EOJ
```

```
*JOB(ID=LIB-UPDATE.BLD)
*SCHED(CM=11,TL=99999,PL=65000,SCR=100)
#
#  THIS JOB RE-BUILDS  LIB-UPDATE.ABS  FROM  LIB-UPDATE.REL.
#
#  !!!!WARNING!!!!    FTN-RUNTM.REL  ROUTINES ARE
#                     OBTAINED FROM THE LIBRARY.  IF THESE ROUTINES
#                     CHANGE DURING A NEW LIBRARY BUILD, RUN THIS JOB
#                     USING THE NEW LIBRARY AND BUILD YET ANOTHER NEW
#                     LIBRARY TO INCLUDE THE NEWEST ROUTINES.
#
*OPEN(12,LIB-UPDATE.REL,LBLD,01,LBLD,R)
*OPEN(31,FTN-RUNTM.REL,LBLD,01,LBLD,R)
*OPEN(33,SYS-BKOBK.REL,LBLD,01,LBLD,R)
*OPEN(34,SYS-TSKMON.REL,LBLD,01,LBLD,R)
*RELEASE(LIB-UPDATE.ABS,LBLD,01,LBLD,0)
*ALLOCATE(LIB-UPDATE.ABS,LBLD,01,LBLD,480,100)
*OPEN(30,LIB-UPDATE.ABS,LBLD,01,LBLD)
*MAP
*LOAD(12,31,33,34)
*ABS(30)
*CLOSE(30)
*RELEASE(LIB-UPDATE.ABS,LBLD,01,LBLD,R)
*SAVEPF(62,LIB-UPDATE.LST,LBLL,01,LBLL)
*EOJ
```

STOP*ENDST*
*ITEMIZE

ITEMIZE 09/18/84 13:34:40

PROCESSING: LIB-UPDATE.REL,LBLD

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
1.	UPDATE	561A9B7F		001F	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	UPDATE					
	EXTERNAL:	PARM	UPD8				
2.	ALLOC1	7832937E		0012	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	ALLOC1					
3.	ALLOC2	78319381		000F	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	ALLOC2					
4.	APPLY	653F8D0B		0288	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	APPLY					
	EXTERNAL:	ISHFT%	Q8QINDEC	Q8QLGIN1	Q8QENGIN	CID	
		CDNAME	EROR				
5.	BCSF	9D4C88F8		00A1	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	BCSF					
	EXTERNAL:	XCDK	ISHFT%	CDNAME			
6.	BPYTAB	7C1D8597		00F4	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	BPYTAB					
	EXTERNAL:	CID	CDNAME	ISHFT%	RITE	WRLINE	
		EROR					
7.	CDIRTV	68159547		0146	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	CDIRTV					
	EXTERNAL:	EROR					
8.	CDNAME	6F269130		006E	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	CDNAME					
	EXTERNAL:	EROR					
9.	CID	9C469B54		006B	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	CID					
	EXTERNAL:	EROR					
10.	COPY	9C408F1D		0069	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	COPY					
	EXTERNAL:	RDBLOCK	SQZ	ISHFT%	WRLINE	WRBLOCK	
11.	EROR	9A3D8FCE		00BF	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	EROR					
	EXTERNAL:	Q8QINGOT	Q8QARRAY	Q8QLGOT1	Q8QENGOT	IFUNIT	
		RITE	Q8QSTOP				
12.	IFILES	71169510		0183	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	IFILES					

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME	
		EXTERNAL:	FDATE	FTIME	IESR	JTYP	Q8QREWND	
			RDBLOCK	EROR	SQZ	ISHFT%	WRLINE	
13.	MP1	923FAD67		0158	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	MP1					
		EXTERNAL:	RCL	SAF	SID	BPYTAB	ISHFT%	
			WRBLOCK	RDBLOCK	EROR			
14.	MP2	923FA986		0439	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	MP2					
		EXTERNAL:	ISHFT%	CDNAME	Q8QREWND	Q8QENFIL	RDBLOCK	
			RPLT	APPLY	RITE	BPYTAB	WRBLOCK	
			CID	SDIRE	XCDK	Q8QINGOT	Q8QARRAY	
			Q8QLGOT1	Q8QENGOT	EROR			
15.	PCCARD	5D289B03		0198	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	PCCARD					
		EXTERNAL:	VCN	EROR				
16.	PCR	8F4C8CEB		00D4	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	PCR					
		EXTERNAL:	CID	CDNAME	EROR	WRBLOCK	SDIRE	
			ISHFT%	SEQNUM	RITE	XCDK	RCL	
17.	RCL	8D4C92FE		00C1	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	RCL					
		EXTERNAL:	Q8QINGIN	Q8QARRAY	Q8QLGIN1	Q8QENGIN	IFUNIT	
			SQZ	CDIRTV	BPYTAB	RITE	VCN	
			EROR					
18.	RDBLOCK	5E2871EF		00A4	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	RDBLOCK					
		EXTERNAL:	LOCF	IBDB	PICKD	PICKI	PICKC	
			ISHFT%	Q8QINGOT	Q8QLGOT1	Q8QENGOT	EROR	
19.	RDLINE	5F2692FF		0097	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	RDLINE					
		EXTERNAL:	RDBLOCK	ISHFT%	UNSQZ	CDIRTV		
20.	RITE	8D468A18		0182	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	RITE					
		EXTERNAL:	WRLINE	UNSQZ	Q8QINGOT	Q8QARRAY	Q8QLGOT1	
			Q8QENGOT					
21.	RPLT	8D3F92F9		0092	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	RPLT					
		EXTERNAL:	RDLINE	ISHFT%	RDBLOCK			
22.	SAF	8C4E98A1		011E	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	SAF					
		EXTERNAL:	VCN	EROR	XIS	ISHFT%	RITE	
			RCL	CID	CDNAME	SDIRE	WRLINE	
			SCY					

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
23.	SCY	8C4C658A		0105	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	SCY				
		EXTERNAL:	CID	CDNAME	XIS	EROR	RITE
			RDBLOCK	RDLINE	UNSQZ	ISHFT%	WRLINE
24.	SDIRE	67489649		0044	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	SDIRE				
		EXTERNAL:	EROR				
25.	SEQNUM	571D8E14		007D	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	SEQNUM				
26.	SID	8C469A35		018A	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	SID				
		EXTERNAL:	CID	EROR	CDNAME	SDIRE	RITE
			RCL	XIS	ISHFT%	WRLINE	SCY
			BPYTAB				
27.	SQZ	8C3E857D		0042	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	SQZ				
28.	TERM	8B4A8AFB		0297	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	TERM				
		EXTERNAL:	Q8QINGOT	Q8QARRAY	Q8QLGOT1	Q8QENGOT	SQZ
			ISHFT%	WRLINE	WRBLOCK	MINO%	RDBLOCK
			Q8QENFIL	Q8QREWND			
29.	UNSQZ	50418C5C		0032	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	UNSQZ				
		EXTERNAL:	SEQNUM				
30.	UPD8	8A3F982D		007A	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	UPD8				
		EXTERNAL:	PCCARD	IFILES	COPY	RCL	EROR
			PCR	MP1	MP2	BCSF	TERM
31.	VCN	894C916B		0054	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	VCN				
		EXTERNAL:	EROR				
32.	WRBLOCK	591A7014		027F	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	WRBLOCK				
		EXTERNAL:	LOCF	IBDB	PACKD	ISHFT%	PACKO
			PACKC	Q8QINGOT	Q8QLGOT1	Q8QENGOT	EROR
33.	WRLINE	5A189341		0055	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	WRLINE				
		EXTERNAL:	WRBLOCK				
34.	XCDK	874C9AC1		00D3	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	XCDK				
		EXTERNAL:	RDBLOCK	RDLINE	RITE	CID	CDNAME

ITEMIZE 09/18/84 13:34:43

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
			EROR				
5.	XIS	87468C40		007F	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	XIS				
		EXTERNAL:	EROR	CID		CDNAME	VCN

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
ALLOC1	ALLOC1					
ALLOC2	ALLOC2					
APPLY	APPLY	MP2				
BCSF	BCSF	UPD8				
BPYTAB	BPYTAB	MP1	MP2	RCL	SID	
CDIRTV	CDIRTV	RCL	RDLINE			
CDNAME	CDNAME	APPLY	BCSF	BPYTAB	MP2	PCR
		SAF	SCY	SID	XCDK	XIS
CID	CID	APPLY	BPYTAB	MP2	PCR	SAF
		SCY	SID	XCDK	XIS	
COPY	COPY	UPD8				
EROR	EROR	APPLY	BPYTAB	CDIRTV	CDNAME	CID
		IFILES	MP1	MP2	PCCARD	PCR
		RCL	RDBLOCK	SAF	SCY	SDIRE
		SID	UPD8	VCN	WRBLOCK	XCDK
		XIS				
FDATE	????????	IFILES				
FNAME	????????	IFILES				
IBDB	????????	RDBLOCK	WRBLOCK			
IESR	????????	IFILES				
IFILES	IFILES	UPD8				
IFUNIT	????????	EROR	RCL			
ISHFT%	????????	APPLY	BCSF	BPYTAB	COPY	IFILES
		MP1	MP2	PCR	RDBLOCK	RDLINE
		RPLT	SAF	SCY	SID	TERM
		WRBLOCK				
LOCF	????????	RDBLOCK	WRBLOCK			
MIN0%	????????	TERM				
MP1	MP1	UPD8				
MP2	MP2	UPD8				
PACKD	????????	WRBLOCK				

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
PACKO	????????	WRBLOCK				
PACKC	????????	WRBLOCK				
PARM	????????	UPDATE				
PCCARD	PCCARD	UPD8				
PCR	PCR	UPD8				
PICKD	????????	RDBLOCK				
PICKI	????????	RDBLOCK				
PICKC	????????	RDBLOCK				
Q8QARRAY	????????	EROR	MP2	RCL	RITE	TERM
Q8QENGIN	????????	APPLY	RCL			
Q8QENGOT	????????	EROR WRBLOCK	MP2	RDBLOCK	RITE	TERM
Q8QENFIL	????????	MP2	TERM			
Q8QINDEC	????????	APPLY				
Q8QINGOT	????????	EROR WRBLOCK	MP2	RDBLOCK	RITE	TERM
Q8QINGIN	????????	RCL				
Q8QLGIN1	????????	APPLY	RCL			
Q8QLGOT1	????????	EROR WRBLOCK	MP2	RDBLOCK	RITE	TERM
Q8QREWND	????????	IFILES	MP2	TERM		
Q8QSTOP	????????	EROR				
RCL	RCL	MP1	PCR	SAF	SID	UPD8
RDBLOCK	RDBLOCK	COPY RPLT	IFILES SCY	MP1 TERM	MP2 XCDK	RDLINE
RDLINE	RDLINE	RPLT	SCY	XCDK		
RITE	RITE	BPYTAB SAF	EROR SCY	MP2 SID	PCR XCDK	RCL
RPLT	RPLT	MP2				

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
SAF	SAF	MP1				
SCY	SCY	SAF	SID			
SDIRE	SDIRE	MP2	PCR	SAF	SID	
SEQNUM	SEQNUM	PCR	UNSQZ			
SID	SID	MP1				
SQZ	SQZ	COPY	IFILES	RCL	TERM	
TERM	TERM	UPD8				
UNSQZ	UNSQZ	RDLINE	RITE	SCY		
UPD8	UPD8	UPDATE				
UPDATE	UPDATE					
UTYP	????????	IFILES				
VCN	VCN	PCCARD	RCL	SAF	XIS	
WRBLOCK	WRBLOCK	COPY WRLINE	MP1	MP2	PCR	TERM
WRLINE	WRLINE	BPYTAB SCY	COPY SID	IFILES TERM	RITE	SAF
XCDK	XCDK	BCSF	MP2	PCR		
XIS	XIS	SAF	SCY	SID		

```
ITEMIZE  COMPLETE.
   *SAVEPF(62,BLD-PLAN,LST,LIBL,01,     )
   *EOJ    BLD-PLAN
```

M P - 3 2 P R O D U C T S E T

C M P

This is the COMPASS product. The base for this product is the GSD COMPASS; however, extensive modifications have been made since the base was obtained (at PSR Level 27?). Therefore, this COMPASS is maintained independently of the GSD P2 Oldpl and is used exclusively on the MP-32.

CMP0/CMPB owner last dumped on _____

File Name	Description	Last Build
cmp.ol,cmp0,??,cmp0	GSD PSRed Oldpl	_____
cmp-pl-gps.bld,cmp0,01,cmp0	Build next GSR PSR Level PL	
cmp-pl-gps.lst,cmpl,01,cmpl	Listing of above .bld job	
cmp.pl,cmp0,__,cmp0	Next GSD PSR Level PL	*1
std-mods.pl,cmp0,__,cmp0	Oldpl of Mods to GSD PL	_____
std-mds-pl.bld,cmp0,01,cmp0	Built next STD PSR Level Modpl	
std-mds-pl.lst,cmpl,01,cmpl	Listing of above .bld job	
std-mods.pl,cmp0,__,cmp0	Next STD PSR Level Modpl	*2
cmp-pl-sps.bld,cmp0,01,cmp0	Build next STD PSR Level PL	
cmp-pl-sps.lst,cmpl,01,cmpl	Listing of above .bld job	
cmp.pl,cmp0,__,cmp0	STD PSRed PL	_____
cmp-pl-loc.bld,cmp0,01,cmp0	Build PL with Local Mods	
cmp-pl-loc.lst,cmpl,01,cmpl	Listing of above .bld job	
cmp.pl,cmpb,ZZ,cmpb	Local (working) PL	_____
cmp.bld,cmpb,01,cmpb	Build CMP	
cmp.lst,cmpl,01,cmpl	Listing of above .bld job	
cmp-cmp.rel,lbld,01,lbld		_____
cmp-cmp.bld,lbld,01,lbld	Build Abs CMP	
cmp-cmp.lst,lbll,01,lbll	Listing of above .bld job	
cmp-cmp.abs,lbld,01,lbld		_____
compass.bld,cmpb,01,cmpb	Build COMPASS	
compass.lst,cmpl,01,cmpl	Listing of above .bld job	
cmp-compas.rel,lbld,01,lbld		_____
bld-plan.txt,cmpb,01,cmpb	Contains this text	
bld-plan.run,cmpb,01,cmpb	Produce Product Build Doc	

Integration Instructions for next release:

1. Analyze PSRs against GSD COMPASS and see if any should be applied here.

NOTES:

*1 This is a temporary Oldpl. It is build by cmp-pl-gps.bld and then, when all is well, the first Oldpl is released and the second Oldpl becomes the base Oldpl. The cmp-pl-gps.bld job is then modified to use the new PSR Level as a base and produce the next PSR Level.

Normally, the temporary Oldpl does not appear on Release Tapes.

*2 Same as *1 above for STD-MODS.PL

```
   STOP*ENDST*
*OPEN(10,CMP.PL,CMPB,ZZ,      ,R)
*XREFUP(P=10)
```

CDC MP60 XREFUP V1.00 TODAY: 09/18/84 14:46:08

OLDPL VERSION: 2
MASTER CHARACTER: /
OLDPL PRODUCED: 08/21/84
  16:39:52

OLDPL AUDIT:

		TOTAL	YANKED	ACTIVE	RUNNING
DECK	YANK$$$	1	0	1	1
DECK	COMPASS	11251	0	10710	10711
DECK	CMP	11	0	11	10722
COMDECK	HISTORY	61	0	61	10783

DECKS MODIFIED BY A GIVEN IDENT:

IDENT	LINES	DECKS OR COMDECKS MODIFIED
STD014	11	COMPASS HISTORY
STD015	11	COMPASS HISTORY
STD016	9	COMPASS HISTORY
STD017	21	COMPASS HISTORY
STD018	166	COMPASS HISTORY
STD019	328	COMPASS HISTORY
STD020	53	COMPASS HISTORY
STD021	244	COMPASS HISTORY
STD022	220	COMPASS HISTORY
STD023	87	COMPASS HISTORY
STD024	507	COMPASS HISTORY
STD025	37	COMPASS HISTORY
STD026	6	COMPASS HISTORY
LEV-AA	5	HISTORY
LEV-AB	3	HISTORY
LEV-AC	3	HISTORY

IDENTS THAT MODIFY A GIVEN DECK:

DECK	LINES	IDENT(S) THAT MODIFY THE DECK				
YANK$$$	1					
COMPASS	0	STD024	STD018	STD016	STD021	STD019
		STD015	STD022	STD017	STD014	STD026
		STD020	STD025	STD023		
CMP	0					
HISTORY	0	LEV-AC	LEV-AB	LEV-AA	STD026	STD025
		STD024	STD023	STD022	STD021	STD020
		STD019	STD018	STD017	STD016	STD015
		STD014				

DECKS THAT CALL A GIVEN COMMON DECK:

COMDECK	DECKS CALLING THE COMMON DECK

COMMON DECKS CALLED BY A GIVEN DECK OR COMDECK:

DECK	COMMON DECKS CALLED BY THE DECK

NULL IDENTS:

NULL DECKS:

COMMON DECKS NOT CALLED:

HISTORY

```
XREFUP FINISHED.
  *CLOSE(10)
  *LISTF
```

```
*job(id=cmp-pl-gps.bld)
*sched(cm=10,ti=9999,pl=60000,scr=100)
#
#  This job adds Government Systems Division (formerly Aerospace Systems
#  Division) PSRs to the GSD Oldpl at a given level and produces a
#  higher PSR Level Oldpl.
#
*open(1,cmp.pl,cmp0,??,cmp0,r)
*update(p=1,n=2,*=/)
/FINIS
*savepf(2,cmp.pl,cmp0,**,cmp0)
*savepf(62,cmp-pl-gps.ist,cmpl,01,cmpl)
*eoj
```

```
*Job(id=cmp-pl-sps.bld)
*sched(cm=10,tl=9999,pl=60000,scr=100)
#
#  This job adds Systems Technology Division modifications to the
#  "PRODUCT-SET-P2" Oldpl of Government Systems Division.
#
#  NOTE:  The current "PRODUCT-SET-P2" in use here is called
#         "CMP.PL,CMP0,??,CMP0" because it's exact source is
#         unknown.
#
*OPEN(10,STD-MODS.PL,CMP0,AC,CMP0,R)
*UPDATE(Q,P=10,*=+,C=11)
+COMPILE CMP-PL
+FINIS
*REWIND(11)
*COPYCF(11,12,1,1,80)  # REMOVE SEQUENCE NUMBERS
*REWIND(12)
*CLOSE(10)
*CLOSE(11)
*OPEN(13,CMP.PL,CMP0,??,CMP0,R)
*UPDATE(I=12,P=13,N=14,*=/)
*SAVEPF(14,CMP.PL,CMP0,AC,CMP0)
*SAVEPF(62,CMP-PL-SPS.LST,CMPL,01,CMPL)
*EOJ
```

```
*job(id=cmp-pl-loc.bld)
*sched(cm=10,tl=9999,pl=60000,scr=100)
#
#   This job adds LOCAL Mods to the STD PSRed OLDPL and builds an
#   OLDPL called:  CMP.PL,CMPB,ZZ,CMPB
#
*open(1,cmp.pl,cmp0,AC,cmp0,r)
*update(p=1,n=2,*=/)
// Place local modifications here.
/FINIS
*savepf(2,cmp.pl,cmpb,ZZ,cmpb)
*savepf(62,cmp-pl-loc.lst,cmpl,OL,cmpl)
*eoj
```

```
*JOB(ID=CMP.BLD)
*SCHED(CM=9,TL=99999,PL=1000,SCR=100)
*OPEN(10,CMP.PL,CMPB,ZZ,CMPB,R)
*MODATE(C,P=10,Q,*=/)
/C CMP
/FINIS
*REWIND(56)
*CMP(I=56,X=31,C,L)
*SAVEPF(31,CMP-CMP.REL,LBLD,01,LBLD)
*SAVEPF(62,CMP.LST,CMPL,01,CMPL)
*EOJ
```

```
*JOB(ID=CMP-CMP.BLD)
*SCHED(CM=4,TL=99999,PL=1000,SCR=100)
*OPEN(1,CMP-CMP.REL,LBLD,01,LBLD,R)
*OPEN(2,CMP-COMPAS.REL,LBLD,01,LBLD,R)
*OPEN(3,SYS-TSKMON.REL,LBLD,01,LBLD,R)
*OPEN(4,SYS-BKDBK.REL,LBLD,01,LBLD,R)
*RELEASE(CMP-CMP.ABS,LBLD,01,LBLD)
*ALLOCATE(CMP-CMP.ABS,LBLD,01,LBLD,480,100)
*OPEN(10,CMP-CMP.ABS,LBLD,01,LBLD,W)
*MAP
*LOAD(1,2,3,4)
*ABS(10)
*CLOSE(10)
*RELEASE(CMP-CMP.ABS,LBLD,01,LBLD,R)
*SAVEPF(62,CMP-CMP.LST,LBLL,01,LBLL)
*EOJ
```

```
*JOB(ID=COMPASS.BLD)
*SCHED(CM=10,TL=99999,PL=60000,SCR=100)
*OPEN(10,CMP.PL,CMPB,ZZ,CMPB,R)
*UPDATE(C,P=10,Q,*=/)
/*COMPASS
/FINIS
*REWIND(56)
*CMP(I=56,X=31,C,L)
*SAVEPF(31,CMP-COMPAS.REL,LBLD,01,LBLD)
*SAVEPF(62,COMPASS.LST,CMPL,01,CMPL)
*EOJ
```

STOP*ENDST*
*ITEMIZE

ITEMIZE 09/18/84 14:46:23

PROCESSING: CMP-CMP.REL,LBLD

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
1.	CMP	9C428FBC		0003	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	CMP				
		EXTERNAL:	COMPASS				

PROCESSING: CMP-COMPAS.REL,LBLD

2.	COMPASS	78004315		1C7A	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	COMPASS	INLST			
		EXTERNAL:	PARM	OPENMEM	WEOF	UTYP	BKSP
			CLOSE	PARM	PARM	RELEASE	PACK
			PICKC	PACKC	PICKI	PARM	PICK
			PICKD	PACKD	PACKO	DATE	PARM
			REWD	TIME			

ITEMIZE 09/18/84 14:46:24

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT
BKSP	????????	COMPASS
CLOSE	????????	COMPASS
CMP	CMP	
COMPASS	COMPASS	CMP
DATE	????????	COMPASS
INLST	COMPASS	
OPENMEM	????????	COMPASS
PACK	????????	COMPASS
PACKC	????????	COMPASS
PACKD	????????	COMPASS
PACKO	????????	COMPASS
PARM	????????	COMPASS COMPASS COMPASS COMPASS COMPASS
PICKC	????????	COMPASS
PICKI	????????	COMPASS
PICK	????????	COMPASS
PICKO	????????	COMPASS
RELEASE	????????	COMPASS
REWD	????????	COMPASS
TIME	????????	COMPASS
UTYP	????????	COMPASS
WEOF	????????	COMPASS

```
ITEMIZE  COMPLETE.
   *SAVEPF(62,BLD-PLAN.LST,CMPL,01,     )
   *EDJ     BLD-PLAN
```

M P - 3 2 P R O D U C T S E T

F T N

This is the FORTRAN product. It is common to the military MPP and commercial MP-32 hardware. The source Oldpl (PRODUCT-SET-P2,MPMP,__,****) is obtained from CDC Government Systemd Division CEM Coordinator. This Oldpl is modified by the P2-PL-SPS.BLD job to become the base for MP-32 usage of the product.

The Products COMPASS, MICRO, A80, and L80 from GSD P2 are not used on the MP-32.

The SPCL.PL consists of Fortran Runtime routines that were created for usage on the MP-32. Some provide access to Macroinstructions available only with the MP-32 version of the MP-60 Emulator; others are more generally useful.

FTN0 owner last dumped on ______

FTNB owner last dumped on ______

File Name	Description	Last Build
product-set-p2,ftn0,__,ftn0	GSD PSRed Oldpl	______
p2-pl-gps.bld,ftn0,01,ftn0	Build next GSD PSR Level PL	
p2-set-p2.lst,ftn1,01,ftn1	Listing of above .bld job	
product-set-p2,ftn0,__,ftn0	Next GSD PSR Level PL	*1
std-mods.pl,ftn0,__,ftn0	Oldpl of mods to GSD P2	______
std-mds-pl.bld,ftn0,01,ftn0	Build next STD PSR Level Modpl	
std-mds-pl.lst,ftn1,01,ftn1	Listing of above .bld job	
std-mods.pl,ftn0,__,ftn0	Next STD PSR Level Modpl	*2
p2-pl-sps.bld,ftn0,01,ftn0	Build next STD PSR Level PL	
p2-pl-sps.lst,ftn1,01,ftn1	Listing of above .bld job	
p2.pl,ftn0,__,ftn0	STD PSRed PL	______
p2-pl-loc.bld,ftn0,01,ftn0	Build PL with Local Mods	
p2-pl-loc.lst,ftn1,01,ftn1	Listing of above .bld job	
p2.pl,ftnb,ZZ,ftnb	Local (working) PL	______
ftn.bld,ftnb,01,ftnb	Build FTN	
ftn-1.lst,ftn1,01,ftn1	Listing of above .bld job	
ftn-2.lst,ftn1,01,ftn1	CMP Listing of FTN assembly	
ftn-ftn.rel,lbld,01,lbld		______
ftn-ftn.bld,lbld,01,lbld	Build Abs FTN	
ftn-ftn.lst,lbll,01,lbll	Listing of above .bld job	
ftn-ftn.abs,lbld,01,lbld		______
ipl.bld,ftnb,01,ftnb	Build IPL	
ipl.lst,ftn1,01,ftn1	Listing of above .bld job	
ftn-ipl.rel,lbld,01,lbld		______
ftn-ipl.bld,lbld,01,lbld	Build Abs IPL	
ftn-ipl.lst,lbll,01,lbll	Listing of above .bld job	
ftn-ipl.abs,lbld,01,lbld		______
ftn-ipl1.bld,lbld,01,lbld	Build Abs IPL1	
ftn-ipl1.lst,lbll,01,lbll	Listing of above .bld job	
ftn-ipl1.abs,lbld,01,lbld		______
ftn-ipl2.bld,lbld,01,lbld	Build Abs IPL2	

```
            ftn-ipl2.lst,lbll,01,lbll   Listing of above .bld job
            ftn-ipl2.abs,lbld,01,lbld                              ------
        ftncmp.bld,ftnb,01,ftnb         Build FTNCMP
          ftncmp.lst,ftnl,01,ftnl       Listing of above .bld job
          ftn-ftncmp.rel,lbld,01,lbld                              ------
            ftn-ftncmp.bld,lbld,01,lbld Build Abs FTNCMP
              ftn-ftncmp.lst,lbll,01,lbll Listing of above .bld job
              ftn-ftncmp.abs,lbld,01,lbld                          ------
        runtm-skel.bld,ftnb,01,ftnb     Build the Skeleton Binary
          runtm-skel.lst,ftnl,01,ftnl   Listing of above .bld job
          runtm-skel.rel,ftnb,01,ftnb                              ------
            runtm.bld,ftnb,01,ftnb          Build FTN Runtime
              runtm.lst,ftnl,01,ftnl        Listing of above .bld job
              ftn-runtm.rel,lbld,01,lbld                           ------

spcl.pl,ftn0,__,ftn0                    STD PSRed PL                 ------
  spc-pl-sps.bld,ftn0,01,ftn0           Build next PSR Level PL
    spc-pl-sps.lst,ftnl,01,ftnl         Listing of above .bld job
    spcl.pl,ftn0,__,ftn0                Next PSR Level PL            *2

  spc-pl-loc.bld,ftn0,01,ftn0           Build LOCAL PL
    spc-pl-loc.lst,ftnl,01,ftnl         Listing of above .bld job
    spcl.pl,ftnb,ZZ,ftnb                Local (working) PL           ------
      spcl.bld,ftnb,01,ftnb               Build Spcl Runtime
        spcl.lst,ftnl,01,ftnl             Listing of above .bld job
        ftn-spcl.rel,lbld,01,lbld                                  ------

bld-plan.txt,ftnb,01,ftnb           Contains this text
  bld-plan.run,ftnb,01,ftnb         Produce Product Build Doc
```

Integration Instructions for next release:

1. The current base is not known to be identical to the GSD release Oldpl at level 52. The offical GSD PSR level 59 oldpl is available at SVLOPS.
2. There are extensive STD modifications to the (PSR level 52) GSD FORTRAN. There are a Major PSRs from GSD. There is a new FORTRAN being produced by GSD. All these factors will bear on the future of FORTRAN on the MP-32.

NOTES:

*1 This is a temporary Oldpl. It is build by p2-pl-gps.bld and then, when all is well, the first Oldpl is released and the second Oldpl becomes the base Oldpl. The p2-pl-gps.bld job is then modified to use the new PSR Level as a base and produce the next PSR Level.

Normally, the temporary Oldpl does not appear on Release Tapes.

*2 Same as *1 above; for spcl.pl.

```
   STOP*ENDST*
*OPEN(10,P2.PL,FTNB,ZZ,     )
*XREFUP(P=10)
```

CDC MP60 XREFUP V1.00 TODAY: 09/18/84 15:13:35

OLDPL VERSION: 2
MASTER CHARACTER: /
OLDPL PRODUCED: 09/10/84
13:21:40

OLDPL AUDIT:		TOTAL	YANKED	ACTIVE	RUNNING
DECK	YANK$$$	3	0	3	3
COMDECK	FTNCOMPL	487	0	483	486
DECK	FTN	2119	5	2112	2598
DECK	PASS4	329	0	326	2924
DECK	PASS3	683	0	682	3606
DECK	PASS2	1355	12	1350	4956
DECK	PASS1	3918	0	3907	8863
DECK	ARITH	1521	0	1519	10382
DECK	DOLOOPS	1495	0	1495	11877
DECK	CYCLOPS	3593	0	3592	15469
DECK	PROTO	1735	0	1731	17200
DECK	IOPRO	826	0	811	18011
DECK	STEXT	2122	0	2118	20129
DECK	LEXICAL	1885	0	1884	22013
DECK	MANAGER	720	0	720	22733
DECK	IOSTMTS	1705	0	1705	24438
DECK	ASCIIINP	621	0	621	25059
DECK	ASCIIOUT	765	0	735	25794
DECK	BINARY	260	0	260	26054
DECK	CONTROL	629	0	624	26678
DECK	FCLOSE	59	0	59	26737
DECK	FORMAT	333	0	333	27070
DECK	Q8QARRAY	109	0	109	27179
DECK	BUFFER	121	0	121	27300
DECK	IFUNIT	135	0	135	27435
DECK	Q8QERROR	124	0	124	27559
DECK	Q8QSTP	117	0	117	27676
DECK	FTNDATM	83	0	83	27759
DECK	TAPEHAND	192	0	192	27951
DECK	ESRUTIL	190	0	189	28140
DECK	FAULT	116	0	116	28256
DECK	ASNCS	160	0	160	28416
DECK	ADSNCS	190	0	190	28606
DECK	ATAN	129	0	129	28735
DECK	ATANH	87	0	87	28822
DECK	ARCTAN	189	0	189	29011
DECK	DARCTAN	208	0	208	29219
DECK	MODULAR	103	0	103	29322
DECK	ABSVALUE	32	0	32	29354
DECK	TRUNCATE	63	0	63	29417
DECK	SNGLDBLE	20	0	20	29437
DECK	POSSDIFF	47	0	47	29484
DECK	SQROOT	98	0	98	29582
DECK	MAXMIN	176	0	176	29758
DECK	MASKING	51	0	51	29809
DECK	SIGNTRAN	74	0	74	29883
DECK	CONVERT	34	0	34	29917
DECK	FLOATEXP	280	0	280	30197
DECK	INTEXP	194	0	194	30391
DECK	AEXP	96	0	96	30487
DECK	ADEXP	179	0	179	30666
DECK	LOGS	158	0	158	30824
DECK	DLOGS	164	0	164	30988

DECK	AMATHER	178	0	178	31166
DECK	IPL	67	0	67	31233
DECK	FTNCMP	20	0	20	31253
DECK	FTNINT1	398	0	398	31651
DECK	FTNINT2	423	0	422	32073
DECK	FTNINT3	508	0	507	32580
DECK	FTNINT4	93	0	93	32673
COMDECK	HISTORY	106	0	106	32779

DECKS MODIFIED BY A GIVEN IDENT:

IDENT	LINES	DECKS OR COMDECKS MODIFIED				
P173	5	CONTROL				
P182	7	PASS2				
P228	4	PASS3				
P229	2	STEXT				
P242	10	FTN	PASS2			
P232	35	IOPRO				
P248	8	PROTO	LEXICAL			
P249	16	ASCIIOUT				
P251	34	PASS1				
P256	2	ARITH				
P264	2	PASS1				
P290	21	FTNCOMPL	PASS1	DOLOOPS	PROTO	
P272	9	ARITH				
STD027	8	YANK$$$	HISTORY			
STD028	8	YANK$$$	HISTORY			
STD029	8	FTNCOMPL	FTNINT2	FTNINT3	HISTORY	
STD030	22	FTN	PASS4	HISTORY		
STD031	6	ESRUTIL	HISTORY			
STD032	17	FTN	PASS3	HISTORY		
STD033	149	FTNCOMPL	PASS2	ARITH	CYCLOPS	PROTO
		STEXT	HISTORY			
STD034	48	ASCIIOUT	HISTORY			
STD035	6	ASCIIINP	HISTORY			
LEV-AA	5	HISTORY				
PLSS1	7	FTNCOMPL	HISTORY			
LEV-AB	3	HISTORY				
LEV-AC	3	HISTORY				

IDENTS THAT MODIFY A GIVEN DECK:

DECK	LINES	IDENT(S) THAT MODIFY THE DECK			
YANK$$$	1	STD028	STD027		
FTNCOMPL	0	STD029	PLSS1	STD033	P290
FTN	0	STD032	STD030	P242	
PASS4	0	STD030			
PASS3	0	STD032	P228		
PASS2	0	STD033	P242	P182	
PASS1	0	P251	P290	P264	
ARITH	0	P272	STD033	P256	
DOLOOPS	0	P290			
CYCLOPS	0	STD033			
PROTO	0	STD033	P290	P248	
IOPRO	0	P232			
STEXT	483	STD033	P229		
LEXICAL	58	P248			
MANAGER	321				
IOSTMTS	673				
ASCIIINP	1339	STD035			

ASCIIOUT	1843	STD034	P249			
BINARY	1488					
CONTROL	1493	P173				
FCLOSE	1521					
FORMAT	1712					
Q8QARRAY	806					
BUFFER	47					
IFUNIT	1884					
Q8QERROR	720					
Q8QSTP	1705					
FTNDATM	618					
TAPEHAND	734					
ESRUTIL	260	STD031				
FAULT	629					
ASNCS	333					
ADSNCS	109					
ATAN	121					
ATANH	135					
ARCTAN	124					
DARCTAN	117					
MODULAR	83					
ABSVALUE	192					
TRUNCATE	189					
SNGLDBLE	116					
POSSDIFF	160					
SQROOT	190					
MAXMIN	129					
MASKING	87					
SIGNTRAN	189					
CONVERT	208					
FLOATEXP	103					
INTEXP	32					
AEXP	63					
ADEXP	20					
LOGS	47					
DLOGS	98					
AMATHER	176					
IPL	51					
FTNCMP	74					
FTNINT1	34					
FTNINT2	280	STD029				
FTNINT3	194	STD029				
FTNINT4	96					
HISTORY	179	LEV-AC	LEV-AB	PLSS1	LEV-AA	STD035
		STD034	STD033	STD032	STD031	STD030
		STD029	STD028	STD027		

DECKS THAT CALL A GIVEN COMMON DECK:

COMDECK	DECKS CALLING THE COMMON DECK				
FTNCOMPL	FTN	PASS4	PASS3	PASS2	PASS1
	ARITH	DOLOOPS	CYCLOPS	PROTO	IOPRO
	LEXICAL	MANAGER	IOSTMTS		

COMMON DECKS CALLED BY A GIVEN DECK OR COMDECK:

DECK	COMMON DECKS CALLED BY THE DECK
FTN	FTNCOMPL
PASS4	FTNCOMPL
PASS3	FTNCOMPL

```
  PASS2         FTNCOMPL
  PASS1         FTNCOMPL
  ARITH         FTNCOMPL
  DO_OOPS       FTNCOMPL
  CYCLOPS       FTNCOMPL
  PROTO         FTNCOMPL
  IOPRO         FTNCOMPL
  LEXICAL       FTNCOMPL
  MANAGER       FTNCOMPL
  IOSTMTS       FTNCOMPL

NULL IDENTS:


NULL DECKS:


COMMON DECKS NOT CALLED:

  HISTORY
```

```
XREFUP FINISHED.
  *LISTF
```

```
*JOB(ID=P2-PL-GPS.BLD)
*SCHED(CM=9,PL=65000,TL=9999,SCR=150)
#
#  This job adds Government Systems Division (formerly Aerospace Systems
#  Division) PSRs to the GSD Oldpl at a given level and produces a
#  higher PSR level Oldpl.
#
*OPEN(10,PRODUCT-SET-P2,FTN0,52,FTN0,R)
*UPDATE(F,P=10,N=11,*=/,0=A24)
/FINIS
*SAVEPF(11,PRODUCT-SET-P2,LIB0,**,LIB0)
*SAVEPF(62,P2-SET-P2.LST,FTNL,01,FTNL)
*EOJ
```

```
*JOB(ID=P2-PL-SPS.BLD)
*SCHED(CM=10,TL=9999,PL=65000,SCR=150)
#
#  This job adds Systems Technology Division modifications to the
#  "PRODUCT-SET-P2" Oldpl of Government Systems Division.
#
*OPEN(10,STD-MODS.PL,FTN0,AC,FTN0,R)
*UPDATE(Q,P=10,*=+,C=11)
+COMPILE P2-PL
+FINIS
*CLOSE(25)
*REWIND(11)
*COPYCF(11,12,1,1,80)    # REMOVE SEQUENCE NUMBERS
*REWIND(12)
*CLOSE(10)
*CLOSE(11)
*OPEN(13,PRODUCT-SET-P2,FTN0,52,FTN0,R)
*UPDATE(I=12,P=13,N=14,*=/)
*SAVEPF(14,P2.PL,FTN0,AC,FTN0)
*SAVEPF(62,P2-PL-SPS.LST,FTNL,01,FTNL)
*EOJ
```

```
*job(id=p2-pl-loc.bld)
*sched(cm=10,ti=9999,pl=60000,scr=100)
#
#    This job adds LOCAL Mods to the STD PSRed OLDPL and builds an
#    OLDPL called:  P2.PL,FTNB,ZZ,FTNB
#
*open(1,p2.pl,ftn0,AC,ftn0,r)
*update(p=1,n=2,*=/)
// Place local modifications here.
/FINIS
*savepf(2,p2.pl,ftnb,ZZ,ftnb)
*savepf(62,p2-pl-loc.lst,ftnl,01,ftnl)
*eoj
```

```
*JOB(ID=FTN.BLD)
*SCHED(CM=12,PL=65530,TL=99999,SCR=150)
#
#   BUILD PRODUCTION FTN.
#
*OPEN(10,P2.PL,FTNB,ZZ,FTNB,R)
*UPDATE(P=10,Q,*=/,C=11)
/C FTN
/C MANAGER
/C PASS1
/C ARITH
/C DOLOOPS
/C LEXICAL
/C IOSTMTS
/C PASS2
/C CYCLOPS
/C IOPRO
/C PROTO
/C STEXT
/C PASS3
/C PASS4
/FINIS
*REWIND(11)
#
#  NOTE: MAX SCRATCH SPACE IS NOT ENOUGH TO HOLD LISTING AND BINARY.
#        THE LISTING FILE IS ALLOCATED EXPLICITLY TO AVOID SCRATCH
#        SPACE LIMITATIONS.
*RELEASE(FTN-2.LST,FTNL,01,FTNL,Q)
*ALLOCATE(FTN-2.LST,FTNL,01,FTNL,480,3000,S,RW)
*OPEN(13,FTN-2.LST,FTNL,01,FTNL)
#
*CMP(I=11,X=12,L=13,C)
*SAVEPF(12,FTN-FTN.REL,LBLD,01,LBLD)
#
*CLOSE(13)
*RELEASE(FTN-2.LST,FTNL,01,FTNL,R)
#
*SAVEPF(62,FTN-1.LST,FTNL,01,FTNL)
*EOJ
```

```
*JOB(ID=FTN-FTN.BLD)          # MAKE  FTN-FTN.ABS
*SCHED(CM=12,TL=99999,PL=1000,SCR=100)
*OPEN(1,FTN-FTN.REL,LBLD,01,LBLD,R)
*OPEN(2,SYS-TSKMON.REL,LBLD,01,LBLD,R)
*OPEN(3,SYS-BKDBK.REL,LBLD,01,LBLD,R)
*RELEASE(FTN-FTN.ABS,LBLD,01,LBLD)
*ALLOCATE(FTN-FTN.ABS,LBLD,01,LBLD,480,100)
*OPEN(10,FTN-FTN.ABS,LBLD,01,LBLD,W)
*MAP
*LOAD(1,2,3)
*ABS(10)
*CLOSE(1)
*CLOSE(10)
*RELEASE(FTN-FTN.ABS,LBLD,01,LBLD,R)
*SAVEPF(62,FTN-FTN.LST,LBLL,01,LBLL)
*EOJ
```

```
*JOB(ID=IPL.BLD)
*SCHED(CM=9,PL=65000,TL=99999,SCR=100)
#
#  BUILD FTN-TO-FTNCMP TRANSITION TASK.
#
*OPEN(10,P2.PL,FTNB,ZZ,FTNB,R)
*UPDATE(C,P=10,Q,*=/)
/C IPL
/FINIS
*REWIND(56)
*CMP(I=56,X,L,C)
*SAVEPF(57,FTN-IPL.REL,LBLD,01,LBLD)
*SAVEPF(62,IPL.LST,FTNL,01,FTNL)
*EOJ
```

```
*JOB(ID=FTN-IPL.BLD)          # MAKE  FTN-IPL.ABS
*SCHED(CM=3,PL=1000,SCR=50,TL=99999)
*OPEN(1,FTN-IPL.REL,LBLD,01,LBLD,R)
*RELEASE(FTN-IPL.ABS,LBLD,01,LBLD)
*ALLOCATE(FTN-IPL.ABS,LBLD,01,LBLD,480,100)
*OPEN(10,FTN-IPL.ABS,LBLD,01,LBLD,W)
*MAP
*LOAD(1)
*ABS(10)
*CLOSE(10)
*RELEASE(FTN-IPL.ABS,LBLD,01,LBLD,R)
*SAVEPF(62,FTN-IPL.LST,LBLL,01,LBLL)
*EOJ
```

```
*JOB(ID=FTN-IPL1.BLD)       # MAKE  FTN-IPL1.ABS
*SCHED(CM=3,PL=1000,SCR=50,TL=99999)
*OPEN(1,FTN-IPL.REL,LBLD,01,LBLD)
*RELEASE(FTN-IPL1.ABS,LBLD,01,LBLD)
*ALLOCATE(FTN-IPL1.ABS,LBLD,01,LBLD,480,100)
*OPEN(10,FTN-IPL1.ABS,LBLD,01,LBLD,W)
*MAP
*LOAD(1)
*ABS(10)
*CLOSE(10)
*RELEASE(FTN-IPL1.ABS,LBLD,01,LBLD,R)
*SAVEPF(62,FTN-IPL1.LST,LBLL,01,LBLL)
*EOJ
```

```
*JOB(ID=FTN-IPL2.BLD)        # MAKE  FTN-IPL2.ABS
*SCHED(CM=3,PL=1000,SCR=50,TL=99999)
*OPEN(1,FTN-IPL.REL,LBLD,01,LBLD)
*RELEASE(FTN-IPL2.ABS,LBLD,01,LBLD)
*ALLOCATE(FTN-IPL2.ABS,LBLD,01,LBLD,480,100)
*OPEN(10,FTN-IPL2.ABS,LBLD,01,LBLD,W)
*MAP
*LOAD(1)
*ABS(10)
*CLOSE(10)
*RELEASE(FTN-IPL2.ABS,LBLD,01,LBLD,R)
*SAVEPF(62,FTN-IPL2.LST,LBLL,01,LBLL)
*EOJ
```

```
*JOB(ID=FTNCMP.BLD)
*SCHED(CM=9,PL=65000,TL=99999,SCR=100)
#
#  BUILD DRIVER THAT CALLS COMPASS AFTER FTN IS DONE.
#
*OPEN(10,P2.PL,FTNB,ZZ,FTNB,R)
*UPDATE(C,P=10,Q,*=/)
/C FTNCMP
/FINIS
*REWIND(56)
*CMP(I=56,X=20,L,R=2)
*SAVEPF(20,FTN-FTNCMP.REL,LBLD,01,LBLD)
*SAVEPF(62,FTNCMP.LST,FTNL,01,FTNL)
*EOJ
```

```
*JOB(ID=FTN-FTNCMP.BLD)
*SCHED(CM=10,PL=1000,SCR=50,TL=99999)
*OPEN(1,FTN-FTNCMP.REL,LBLD,01,LBLD,R)
*OPEN(2,CMP-CJMPAS.REL,LBLD,01,LBLD,R)
*OPEN(3,SYS-TSKMON.REL,LBLD,01,LBLD,R)
*OPEN(4,SYS-BKDBK.REL,LBLD,01,LBLD,R)
*RELEASE(FTN-FTNCMP.ABS,LBLD,01,LBLD)
*ALLOCATE(FTN-FTNCMP.ABS,LBLD,01,LBLD,480,100)
*OPEN(10,FTN-FTNCMP.ABS,LBLD,01,LBLD,W)
*MAP
*LOAD(1,2,3,4)
*ABS(10)
*CLOSE(10)
*RELEASE(FTN-FTNCMP.ABS,LBLD,01,LBLD,R)
*SAVEPF(62,FTN-FTNCMP.LST,LBLL,01,LBLL)
*EOJ
```

```
*JOB(ID=RUNTM.BLD)
*SCHED(CM=9,PL=65000,TL=99999,SCR=100)
#
#     THIS JOB BUILDS THE FTN RUN-TIME LIBRARY ROUTINES.
#
*OPEN(10,P2.PL,FTNB,ZZ,FTNB,R)
*UPDATE(C,P=10,Q,O=A24,*=/)
/C ASCIIINP
/C ASCIIOUT
/C BINARY
/C BUFFER
/C CONTROL
/C FORMAT
/C IFUNIT
/C TAPEHAND
/C Q8QARRAY
/C Q8QERROR
/C Q8QSTP
/C ABSVALUE
/C ADEXP
/C ADSNCS
/C AEXP
/C AMATHER
/C ASNCS
/C ATAN
/C ATANH
/C ARCTAN
/C CONVERT
/C DARCTAN
/C DLOGS
/C ESRUTIL
/C FCLOSE
/C FAULT
/C FLOATEXP
/C FTNDATM
/C FTNINT1
/C FTNINT2
/C FTNINT3
/C FTNINT4
/C INTEXP
/C LOGS
/C MASKING
/C MAXMIN
/C MODULAR
/C POSSDIFF
/C SIGNTRAN
/C SNGLDBLE
/C SQROOT
/C TRUNCATE
/FINIS
*REWIND(56)
*CMP(I=56,X,L,C)
*OPEN(40,RUNTM-SKEL.REL,FTNB,01,FTNB)
*COPYL(40,57,41)
*SAVEPF(41,FTN-RUNTM.REL,LBLD,01,LBLD)
*SAVEPF(62,RUNTM.LST,FTNL,01,FTNL)
*EOJ
```

```
*JOB(ID=SPC-PL-SPS.BLD)
*SCHED(CM=9,TL=9999,PL=10000,SCR=40)
#
#  This job builds a higher PSR Level release Oldpl from one of
#  a given level and the appropriate PSR code.
#
#  PSR code is obtained from the Systems Technology Division
#  (of CDC) PSR Summaries.
#
#-------------
#  This portion of the job is temporary.  It resequences the Level AB
#  OLDPL and prepares for AC generation.
#
*OPEN(5,SPCL.PL,FTN0,AB,FTN0,R)
*UPDATE(F,P=5,N=6,*=/,0=A,S=7)
/FINIS
*CLOSE(6)
*REWIND(7)
*UPDATE(F,I=7,N=10,*=/,0=A)
*CLOSE(7)
*REWIND(10)
#------------
*RELEASE(SPCL.PL,FTN0,AC,FTN0)
#----*OPEN(10,SPCL.PL,FTN0,AB,FTN0,R)
*UPDATE(P=10,N=20,0=A,*=/)
// PLACE PSR CODE AFTER THIS LINE.
/IDENT LEV-AC
/INSERT HISTORY.3
LEV-AC              23 AUG 84                Fariss, G. B.
     THIS POINT DIVIDES LEVEL AC FROM HIGHER LEVELS.

/FINIS
*SAVEPF(20,SPCL.PL,FTN0,AC,FTN0)
*SAVEPF(62,SPC-PL-SPS.LST,FTNL,01,FTNL)
*EOJ
```

```
*JOB(ID=SPC-PL-LOC.BLD)
*SCHED(CM=9,TL=9999,PL=10000,SCR=40)
#
#  This job adds local-site modifications to the standard Oldpl
#  and builds the final Oldpl (always Edition ZZ).
#
*RELEASE(SPCL.PL,FTNB,ZZ,FTNB)
*OPEN(10,SPCL.PL,FTN0,AC,FTN0,R)  # Change the edition as appropriate
*UPDATE(P=10,N=20,O=A,*=/)
// PLACE LOCAL-MOD CODE AFTER THIS LINE.
/FINIS
*SAVEPF(20,SPCL.PL,FTNB,ZZ,FTNB)
*SAVEPF(62,SPC-PL-LOC.LST,FTNL,01,FTNL)
*EOJ
```

```
*JOB(ID=SPCL.BLD)
*SCHED(CM=9,PL=15000,TL=99999,SCR=40)
#
#     THIS JOB BUILDS THE SPECIAL FTN CALLABLES THAT SUPPORT MPX/OS V3
#     EMULATOR AND OPERATING SYSTEM FEATURES.
#
*OPEN(9,SPCL.PL,FTNB,ZZ,FTNB,R)
*UPDATE(F,P=9,C=20,*=/)
/FINIS
*REWIND(20)
*CMP(I=20,X=30,R=2,L,C)
*SAVEPF(30,FTN-SPCL.REL,LBLD,01,LBLD)
*SAVEPF(62,SPCL.LST,FTNL,01,FTNL)
*EOJ
```

STOP*ENDST*
*ITEMIZE

ITEMIZE 09/18/84 15:14:11

PROCESSING: FTN-FTN.REL,LBLD

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME	
1.	FTN	99388A0D		0782	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	COMPASSC	CUNIT	DPROTO	DREG	DUMPT	
			EOFPRO	ERROR	FTN	HNAME	LUNIT	
			PRINT	PRINTD	PRINTL	PRINTOP	...MORE	
		EXTERNAL:	PARM	PICKD	ABORT	PACKD	DATE	
			PARM	OPENMEM	PARM	MANAGER	OPNTAB	
			PASS1	PACKC	PASS2	PICKC	PASS3	
			WEOF	PASS4	REWD	PARM	PARM	
			PARM	RELMEM	CALL	PARM	XICHAR	
			RLFULL	PICK	IXCHAR	PACK	PROTOLOC	
			PROTONM	REG.EQU	ALLOCATE	CLOSE	OPEN	
			RELEASE					
2.	PASS4	7B4E8BCF		00BD	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	PASS4					
		EXTERNAL:	JACC	RCOMPASS	COMPASSC	CUNIT	PACKO	
			QFTNSTAT	WCOMP.99	CLOSE	MODIFY	PARM	
			EOFPRO	TABORT	OPEN	ULOC	XICHAR	
			JCIJNUM					
3.	PASS3	7C4E8A5B		0231	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	PASS3					
		EXTERNAL:	LUNIT	HNAME	PRINTL	PRINT	PRINTR	
			TYPETAB	CBNT	CBNT	CBNT		
4.	PASS2	7D4E88CA		03C2	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	FUNFLAG	MEMORY	P2.500IO	PASS2		
		EXTERNAL:	OPNTAB	EXTTAB	EXTTAB	EXTTAB	PCALL	
			RRLIST	WCOMPASS	BSSLAB	DREAD	EWRITE	
			REWIND	BACKSP	ENDFILE	BUFFERIN	BUFFEROT	
			ENCODE	DECODE	R.WDS	CYCLOPS	GENLAB	
			WSTKCMP	ERROR	EXTTAB	CLSTAB	DOVER	
			VETOF	P.EQU	P.GBP	P.GBS	P.GIF	
			P.SVE	P.JPS	P.RTR	P.RST	P.GBF	
			P.TFP	P.LST	P.UGO	P.CJP	P.AJP	
			P.AIF	P.SBL	P.IDOA	P.IDOB	P.IDOC	
			P.EBL	P.TDOA	P.ASG	P.PST	P.ENT	
			P.RET	P.BSA	P.LFP	P.FPCA	P.FPL	
			P.FPC	P.FPW	P.LIT	P.EXT	P.ETY	
			P.GXT	P.XSB	P.END	P.ENP	P.TMP	
5.	PASS1	7E4E7FB3		0CD9	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	CBNT	PASS1	RECVR	RSYMBOL	RSYMBOLA	
			VETOF	WSYMBOL	WSYMBOLA			
		EXTERNAL:	READCARD	TYPE	DOLAB	PLABEL	ERROR	
			OPNTAB	INCTAB	ARITH	RCOUNT	GIFN	
			WRLIST	TYPEA	DOPROC	LABREF	WCOMPASS	

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME		
			DOVAR	ARITHC	DOEXT	FMTPRC	IOSTMT		
			DOEND	CLSTAB	DUMPT	IXCHAR	HNAME		
			CONVERT	DECTAB	XLABEL	GENLAB	DOVER		
			SCANNER	HNAME	CVTE0	CVTE1	CVTE2		
			CVTE3	EXLB2					
6.	ARITH	753D919D		04E7	REL	MM/DD/YY	HH:MM:SS		
		ENTRY:	ARITH	ARITHC	GIFN	RCOUNT			
		EXTERNAL:	DOEXT	RSYMBOL	WSYMBOL	DOVAR	CONVERT		
			RSYMBOLA	WSYMBOLA	ERROR	CVTE0	CVTE1		
			CVTE2	CVTE3					
7.	DOLOOPS	6C105BC0		04D0	REL	MM/DD/YY	HH:MM:SS		
		ENTRY:	DOEND	DOEXT	DOLAB	DOPROC	DOVAR		
			DOVER	EXLB2	LABREF	PLABEL	XLABEL		
		EXTERNAL:	ERROR	INCTAB	RECVR	MOVE	DECTAB		
			WRLIST	RLFULL	PACKLAB	CLSTAB	SCANNER		
			GENLAB	CONVERT					
8.	CYCLOPS	6D065857		0E3C	REL	MM/DD/YY	HH:MM:SS		
		ENTRY:	CYCLOPS	LITERAL	R.WDS				
		EXTERNAL:	P.XOR	P.OR	P.AND	P.NOT	P.ADD		
			P.SUB	P.MLT	P.DIV	P.UNM	P.LDXI		
			P.LDX	P.ADX	P.SBX	P.MPX	P.MPIX		
			P.ADIX	P.STR	P.TST	P.UGO	P.BJPF		
			P.BJPT	P.LAB	P.CVRT	P.FN	P.STRR		
			P.RTJ	P.RTJI	P.ARG	P.FN2	P.ARG2		
			P.LDXI2	P.STRL	ERROR	DECTAB	INCTAB		
			MEMORY	GENLAB	PCALL	SRCHF	MOVE		
			PRINTD	GLBNAME	CLSTAB	OPNTAB			
9.	PROTO	603D8C13		0478	REL	MM/DD/YY	HH:MM:SS		
		ENTRY:	BSSLAB	EXTTAB	GLBNAME	PCALL	REG.EQU		
			SRCHF						
		EXTERNAL:	DPROTO	DREG	INCTAB	MEMORY	WCOMPASS		
			LITERAL	DECTAB	FUNFLAG	P.STRT			
10.	IOPRO	67408D8D		0200	REL	MM/DD/YY	HH:MM:SS		
		ENTRY:	BACKSP	BUFFERIN	BUFFEROT	DECODE	DREAD		
			ENCODE	ENDFILE	EWRITE	REWIND			
		EXTERNAL:	PCALL	P2.500IO	R.WDS	CYCLOPS	INCTAB		
			MEMORY	DECTAB	P.IAIO	P.IBRW	P.TRM		
			P.IED	P.BUF	P.FN	P.RTJT	P.ARG		
			P.BALD	P.BAST	P.ARY	P.ARYI	P.ARYO		
			P.SBL	P.EBL					
11.	STEXT	583B9060		0A27	REL	MM/DD/YY	HH:MM:SS		
		ENTRY:	PROTOLOC	PROTONM	P.ADD	P.ADIX	P.ADX		
			P.AIF	P.AJP	P.AND	P.ARG	P.ARG2		
			P.ARY	P.ARYI	P.ARYO	P.ASG	...MORE		
12.	LEXICAL	70295481		0715	REL	MM/DD/YY	HH:MM:SS		
		ENTRY:	CONVERT	CVTE0	CVTE1	CVTE2	CVTE3		

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME	
			GENLAB	PACKLAB	SCANNER	TYPE		TYPEA
		EXTERNAL:	ERROR	INCTAB	RECVR	PRINTD		PICTURE
			IXCHAR					
13.	MANAGER	68295D9B	0203	REL	MM/DD/YY	HH:MM:SS		
		ENTRY:	CLSTAB	DECTAB	INCTAB	IXCHAR		MANAGER
			MOVE	OPNTAB	PICTURE	XICHAR		
14.	IOSTMTS	690C53AF	05DC	REL	MM/DD/YY	HH:MM:SS		
		ENTRY:	FMTPRC	IOSTMT	RLFULL			
		EXTERNAL:	DOEXT	ERROR	PACKLAB	_ABREF		WCOMPASS
			WRLIST	DOVAR	CONVERT	GIFN		SCANNER
			DOPROC	INCTAB	RECVR	DECTAB		PRINTD
			CLSTAB	OPNTAB				

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
ABORT	????????	FTN				
ALLOCATE	????????	FTN				
ARITH	ARITH	PASS1				
ARITHC	ARITH	PASS1				
BACKSP	IOPRO	PASS2				
BSSLAB	PROTO	PASS2				
BUFFERIN	IOPRO	PASS2				
BUFFEROT	IOPRO	PASS2				
CALL	????????	FTN				
CBNT	PASS1	PASS3	PASS3	PASS3		
CLOSE	????????	FTN	PASS4			
CLSTAB	MANAGER	CYCLOPS	DOLOOPS	IOSTMTS	PASS2	PASS1
COMPASSC	FTN	PASS4				
CONVERT	LEXICAL	ARITH	DOLOOPS	IOSTMTS	PASS1	
COMMIT	FTN	PASS4				
CVTE0	LEXICAL	ARITH	PASS1			
CVTE1	LEXICAL	ARITH	PASS1			
CVTE2	LEXICAL	ARITH	PASS1			
CVTE3	LEXICAL	ARITH	PASS1			
CYCLOPS	CYCLOPS	IOPRO	PASS2			
DATE	????????	FTN				
DECODE	IOPRO	PASS2				
DECTAB	MANAGER	CYCLOPS PROTO	DOLOOPS	IOPRO	IOSTMTS	PASS1
DOEND	DOLOOPS	PASS1				
DOEXT	DOLOOPS	ARITH	IOSTMTS	PASS1		
DOLAB	DOLOOPS	PASS1				

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
DOPROC	DOLOOPS	IOSTMTS	PASS1			
DOVAR	DOLOOPS	ARITH	IOSTMTS	PASS1		
DOVER	DOLOOPS	PASS2	PASS1			
DPROTO	FTN	PROTO				
DREAD	IOPRO	PASS2				
DREG	FTN	PROTO				
DUMPT	FTN	PASS1				
ENCODE	IOPRO	PASS2				
ENDFILE	IOPRO	PASS2				
EOFPRO	FTN	PASS4				
ERROR	FTN	ARITH PASS2	CYCLOPS PASS1	DOLOOPS	IOSTMTS	LEXICAL
EWRITE	IOPRO	PASS2				
EXL82	DOLOOPS	PASS1				
EXTAB	PROTO	PASS2	PASS2	PASS2	PASS2	
FMTPRC	IOSTMTS	PASS1				
FTN	FTN					
FUNFLAG	PASS2	PROTO				
GENLAB	LEXICAL	CYCLOPS	DOLOOPS	PASS2	PASS1	
GIFN	ARITH	IOSTMTS	PASS1			
GLBNAME	PROTO	CYCLOPS				
HNAME	FTN	PASS3	PASS1	PASS1		
INCTAB	MANAGER	CYCLOPS PASS1	DOLOOPS PROTO	IOPRO	IOSTMTS	LEXICAL
IOSTMT	IOSTMTS	PASS1				
IXCHAR	MANAGER	FTN	LEXICAL	PASS1		
JACC	????????	PASS4				
JUNUM	????????	PASS4				

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
LABREF	DOLOOPS	IOSTMTS	PASS1			
LITERAL	CYCLOPS	PROTO				
LUNIT	FTN	PASS3				
MANAGER	MANAGER	FTN				
MEMORY	PASS2	CYCLOPS	IOPRO	PROTO		
MODIFY	????????	PASS4				
MOVE	MANAGER	CYCLOPS	DOLOOPS			
OPENMEM	????????	FTN				
OPEN	????????	FTN	PASS4			
OPNTAB	MANAGER	CYCLOPS	FTN	IOSTMTS	PASS2	PASS1
P.ADD	STEXT	CYCLOPS				
P.ADX	STEXT	CYCLOPS				
P.ADIX	STEXT	CYCLOPS				
P.AIF	STEXT	PASS2				
P.AJP	STEXT	PASS2				
P.AND	STEXT	CYCLOPS				
P.ARG	STEXT	CYCLOPS	IOPRO			
P.ARG2	STEXT	CYCLOPS				
P.ARY	STEXT	IOPRO				
P.ARYI	STEXT	IOPRO				
P.ARYO	STEXT	IOPRO				
P.ASG	STEXT	PASS2				
P.BALD	STEXT	IOPRO				
P.BAST	STEXT	IOPRO				
P.BJPF	STEXT	CYCLOPS				
P.BJPT	STEXT	CYCLOPS				
P.CSA	STEXT	PASS2				

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT
P.BUF	STEXT	IOPRO
P.CJP	STEXT	PASS2
P.CVRT	STEXT	CYCLOPS
P.DIV	STEXT	CYCLOPS
P.EBL	STEXT	IOPRO PASS2
P.ENT	STEXT	PASS2
P.END	STEXT	PASS2
P.ENP	STEXT	PASS2
P.EQU	STEXT	PASS2
P.ETY	STEXT	PASS2
P.EXT	STEXT	PASS2
P.FN	STEXT	CYCLOPS IOPRO
P.FN2	STEXT	CYCLOPS
P.FPCA	STEXT	PASS2
P.FPL	STEXT	PASS2
P.FPC	STEXT	PASS2
P.FPW	STEXT	PASS2
P.GBP	STEXT	PASS2
P.GBS	STEXT	PASS2
P.GBF	STEXT	PASS2
P.GIF	STEXT	PASS2
P.GRTJ	STEXT	
P.GXT	STEXT	PASS2
P.IAIO	STEXT	IOPRO
P.IBRW	STEXT	IOPRO
P.IDDA	STEXT	PASS2
P.IDDB	STEXT	PASS2

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT
P.IDOC	STEXT	PASS2
P.IED	STEXT	IOPRO
P.JPS	STEXT	PASS2
P.LAB	STEXT	CYCLOPS
P.LDXI	STEXT	CYCLOPS
P.LDX	STEXT	CYCLOPS
P.LDXI2	STEXT	CYCLOPS
P.LFP	STEXT	PASS2
P.LIT	STEXT	PASS2
P.LOAD	STEXT	
P.LST	STEXT	PASS2
P.MLT	STEXT	CYCLOPS
P.MPX	STEXT	CYCLOPS
P.MPIX	STEXT	CYCLOPS
P.NOT	STEXT	CYCLOPS
P.OR	STEXT	CYCLOPS
P.PST	STEXT	PASS2
P.RET	STEXT	PASS2
P.RST	STEXT	PASS2
P.RTR	STEXT	PASS2
P.RTJ	STEXT	CYCLOPS
P.RTJI	STEXT	CYCLOPS
P.RTJT	STEXT	IOPRO
P.SBL	STEXT	IOPRO PASS2
P.SBX	STEXT	CYCLOPS
P.STR	STEXT	CYCLOPS
P.STRR	STEXT	CYCLOPS

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
P.STRL	STEXT	CYCLOPS				
P.STRT	STEXT	PROTO				
P.SUB	STEXT	CYCLOPS				
P.SVE	STEXT	PASS2				
P.TDDA	STEXT	PASS2				
P.TFP	STEXT	PASS2				
P.TMP	STEXT	PASS2				
P.TRM	STEXT	IOPRO				
P.TST	STEXT	CYCLOPS				
P.UGO	STEXT	CYCLOPS	PASS2			
P.UNM	STEXT	CYCLOPS				
P.XOR	STEXT	CYCLOPS				
P.XSB	STEXT	PASS2				
P2.500IO	PASS2	IOPRO				
PACKD	????????	FTN				
PACKC	????????	FTN				
PACK	????????	FTN				
PACKD	????????	PASS4				
PACKLAB	LEXICAL	DOLOOPS	IOSTMTS			
PARM	????????	FTN FTN	FTN FTN	FTN PASS4	FTN	FTN
PASS1	PASS1	FTN				
PASS2	PASS2	FTN				
PASS3	PASS3	FTN				
PASS4	PASS4	FTN				
PCALL	PROTO	CYCLOPS	IOPRO	PASS2		
PICKD	????????	FTN				

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT
PICKC	????????	FTN
PICK	????????	FTN
PICTURE	MANAGER	LEXICAL
PLABEL	DOLOOPS	PASS1
PRINT	FTN	PASS3
PRINTD	FTN	CYCLOPS IOSTMTS LEXICAL
PRINTL	FTN	PASS3
PRINTOP	FTN	
PRINTR	FTN	PASS3
PROTOLOC	STEXT	FTN
PROTONM	STEXT	FTN
QFTNSTAT	FTN	PASS4
R.WDS	CYCLOPS	IOPRO PASS2
RCOMPASS	FTN	PASS4
RCOUNT	ARITH	PASS1
READCARD	FTN	PASS1
RECVR	PASS1	DOLOOPS IOSTMTS LEXICAL
REG.EQU	PROTO	FTN
RELEASE	????????	FTN
RELMEM	????????	FTN
REWD	????????	FTN
REWIND	IOPRO	PASS2
RLFULL	IOSTMTS	DOLOOPS FTN
RRLIST	FTN	PASS2
RSYMBOL	PASS1	ARITH
RSYMBOLA	PASS1	ARITH
SCANNER	LEXICAL	DOLOOPS IOSTMTS PASS1

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT			
SRCHF	PROTO	CYCLOPS			
TABORT	FTN	PASS4			
TYPETAB	FTN	PASS3			
TYPE	LEXICAL	PASS1			
TYPEA	LEXICAL	PASS1			
ULOC	????????	PASS4			
VETOF	PASS1	PASS2			
WCOMPASS	FTN	IOSTMTS	PASS2	PASS1	PROTO
WCOMP.99	FTN	PASS4			
WEOF	????????	FTN			
WRLIST	FTN	DOLOOPS	IOSTMTS	PASS1	
WSTKCMP	FTN	PASS2			
WSYMBOL	PASS1	ARITH			
WSYMBOLA	PASS1	ARITH			
XICHAR	MANAGER	FTN	PASS4		
XLABEL	DOLOOPS	PASS1			

ITEMIZE COMPLETE.
*ITEMIZE

PROCESSING: FTN-RUNTM.REL,LBLD

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME	
1.	ASCIIINP	75136CD4		0192	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	Q8QENGIN	Q8QINDEC	Q8QINGIN	Q8QLGIN1	Q8QLGIN2		
	EXTERNAL:	Q8QIOINT	READIN	Q8QIFRMT	SAVREG	RESTREG		
		Q8QITERM	Q8QIOTAB	Q8QISCAN	Q8QERROR	ABORT		
		Q8QTABLE	PACK					
2.	ASCIIOJT	750D655F		0203	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	Q8QENGOT	Q8QINENC	Q8QINGOT	Q8QLGOT1	Q8QLGOT2		
	EXTERNAL:	Q8QIOINT	Q8QIFRMT	SAVREG	RESTREG	Q8QITERM		
		Q8QISCAN	Q8QERROR	ABORT	WRITOUT	Q8QTABLE		
		Q8QTABLE	IFNCHK					
3.	BINARY	680D912B		0073	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	Q8QENBIN	Q8QENBOT	Q8QINBIN	Q8QINBOT	Q8QLBIN1		
		Q8QLBIN2	Q8QLBOT1	Q8QLBOT2				
	EXTERNAL:	READIN	Q8QIOINT	WRITOUT	PICKC	Q8QSTAT.		
		PACKC	Q8QIOTAB					
4.	BUFFER	7808996F		002A	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	Q8QBUFIN	Q8QBUFOT					
	EXTERNAL:	Q8QIOINT	Q8QIOTAB	READLU	WRITLU	Q8QERROR		
		ABORT						
5.	CONTROL	6A116342		0249	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	ABPACKD	ABPICKD	ACTIVECK	ILLUNIT	Q8QENTRY		
		Q8QEXITS	Q8QIOINT	Q8QIOTAB	Q8QSTAT.	Q8QTABLE		
		READIN	RESTREG	SAVREG	USTUP	...MORE		
	EXTERNAL:	Q8QERROR	ABORT	PACKC	PICKC	PARM		
		OPENMEM	PARM	UST	PICKD	PACKD		
		PICK	PACK	PARM	UTYP			
6.	FORMAT	780C8CA1		00F1	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	Q8QIFRMT	Q8QISCAN	Q8QITERM				
	EXTERNAL:	Q8QERROR	ABORT					
7.	IFUNIT	6D158A63		002E	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	IFUNIT						
	EXTERNAL:	ILLUNIT	Q8QIOTAB	PARM	UST	UTYP		
8.	TAPEHAND	632D611A		005C	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	Q8QBACKS	Q8QENFIL	Q8QREWND				
	EXTERNAL:	ACTIVECK	WEOF	USTUP	PICKC	PACKC		
		Q8QSTAT.	ABPACKD	Q8QIOTAB	ILLUNIT	PARM		
		UTYP	REWD	ABPICKD	BKSP	Q8QIOINT		
9.	Q8QARRAY	5C256D42		0023	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	Q8QARRAY						

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
10.	Q8QERROR	5A255E48		0120	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	Q8QERROR					
	EXTERNAL:	PACK					
11.	Q8QSTP	5A278E78		0014	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	Q8QPAUSE	Q8QSTOP				
	EXTERNAL:	CTOC	PARM	Q8QEXITS	PACK		
12.	ABSVALUE	7D21574E		0016	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	ABS%	DABS%	IABS%			
13.	ADEXP	6E4B9A08		007F	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	DEXP					
	EXTERNAL:	MATHE%S	MATHE%P				
14.	ADSNCS	7B188C11		0080	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	DCOS	DSIN				
	EXTERNAL:	MATHE%S	MATHE%P				
15.	AEXP	9E4A8756		0039	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	EXP					
	EXTERNAL:	MATHE%S	MATHE%P				
16.	AMATHER	761D6C57		0034	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	ARCHKI%	DVCHKI%	ENABLE%	FNCHKI%	MATHE%P	
		MATHE%S	OVCHKI%				
	EXTERNAL:	ENABLE	PARM	Q8QERROR			
17.	ASNCS	6B3C913E		005E	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	COS	SIN				
	EXTERNAL:	MATHE%S	MATHE%P				
18.	ATAN	9E389E1F		0072	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	TAN					
	EXTERNAL:	MATHE%S	MATHE%P				
19.	ATANH	763B9E50		0041	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	TANH					
	EXTERNAL:	EXP					
20.	ARCTAN	7D0F9BF6		0095	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	ATAN	ATAN2				
	EXTERNAL:	MATHE%S	MATHE%P				
21.	CONVERT	770E5D76		0013	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	DFLOAT%	FLOAT%	IFIX%			
22.	DARCTAN	672D5ED9		00C3	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	DATAN	DATAN2				
	EXTERNAL:	MATHE%S	MATHE%P				
23.	DLOGS	68439020		0078	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	DLOG	DLOG10	DLOG2%			

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME		
		EXTERNAL:	MATHE%S	MATHE%P					
24.	ESRUTIL	66136142	0048	REL	MM/DD/YY	HH:MM:SS			
		ENTRY:	IAPAC	IAPA4	IAPAW	IBDB	IESR		
			LOCF						
		EXTERNAL:	ABORT	PARM	PARM	PARM	PARM		
25.	FCLOSE	66279373	0010	REL	MM/DD/YY	HH:MM:SS			
		ENTRY:	FCLOSE						
		EXTERNAL:	PARM	Q8QIOTAB	PICKC	PACKC	Q8QSTAT.		
			CLOSE						
26.	FAULT	654E8A6F	0024	REL	MM/DD/YY	HH:MM:SS			
		ENTRY:	IARCHK	IDVCHK	IFNCHK	IOVERFL			
		EXTERNAL:	DVCHKI%	FNCHKI%	ARCHKI%	OVCHKI%			
27.	FLOATEXP	651E578E	00E0	REL	MM/DD/YY	HH:MM:SS			
		ENTRY:	DED%	DED%%1	DER%	RED%	RER%		
		EXTERNAL:	ALOG	EXP	MATHE%S	MATHE%P	DLOG		
			DEXP						
28.	FTNDATM	78076483	0018	REL	MM/DD/YY	HH:MM:SS			
		ENTRY:	FDATE	FTIME	SECOND				
		EXTERNAL:	DATE	PARM	TIME	PARM			
29.	FTNINT1	68078018	007E	REL	MM/DD/YY	HH:MM:SS			
		ENTRY:	FTNPACK	FTNPACKC	FTNPACKD	FTNPACKO	FTNPICK		
			FTNPICKC	FTNPICKD	FTNPICKI				
		EXTERNAL:	PACK	PARM	PARM	PACKC	PACKD		
			PACKO	PICK	PICKC	PICKD	PICKI		
30.	FTNINT2	68077F67	002F	REL	MM/DD/YY	HH:MM:SS			
		ENTRY:	FTNCTOC	FTNCTOI	FTNULOC	FTNUST	FTNUTYP		
		EXTERNAL:	CTOC	PARM	CTOI	ULOC	UST		
			UTYP						
31.	FTNINT3	6B077E41	0055	REL	MM/DD/YY	HH:MM:SS			
		ENTRY:	FTNALLOC	FTNCLOSE	FTNERASE	FTNMODFY	FTNOPEN		
			FTNREAD	FTNRELES	FTNSEOF	FTNUNLD	FTNWRITE		
		EXTERNAL:	ALLOCATE	PARM	CLOSE	ERASE	MODIFY		
			OPEN	READLU	RELEASE	SEOF	UNLD		
			WRITLU						
32.	FTNINT4	6B077D88	000E	REL	MM/DD/YY	HH:MM:SS			
		ENTRY:	FTNPARM						
		EXTERNAL:	PARM						
33.	INTEXP	5E118B24	0076	REL	MM/DD/YY	HH:MM:SS			
		ENTRY:	DEI%	IEI%	REI%				
		EXTERNAL:	MATHE%S	MATHE%P					
34.	LOGS	9340983E	004E	REL	MM/DD/YY	HH:MM:SS			
		ENTRY:	ALOG	ALOG10	ALOG2%				

ITEM	NAME	CHECKSUM	REC	_EN	TYPE	DATE	TIME	
		EXTERNAL:	MATHE%S	MATHE%P				
35.	MASKING	6920656E	0026	REL	MM/DD/YY	HH:MM:SS		
		ENTRY:	AND%	ISHFT%	NOT%	OR%	XOR%	
36.	MAXMIN	6920870C	0086	REL	MM/DD/YY	HH:MM:SS		
		ENTRY:	AMAX0%	AMAX1%	AMIN0%	AMIN1%	DMAX1%	
			DMIN1%	MAX0%	MAX1%	MIN0%	MIN1%	
37.	MODULAR	661F6941	0049	REL	MM/DD/YY	HH:MM:SS		
		ENTRY:	AMOD%	DMOD	MOD%			
		EXTERNAL:	MATHE%S	MATHE%P				
38.	POSSDIFF	68176643	0023	REL	MM/DD/YY	HH:MM:SS		
		ENTRY:	DDIM%	DIM%	IDIM%			
39.	SIGNTRAN	58147726	003D	REL	MM/DD/YY	HH:MM:SS		
		ENTRY:	DSIGN%	ISIGN%	SIGN%			
		EXTERNAL:	MATHE%S	MATHE%P				
40.	SNGLDBLE	681F6C62	000C	REL	MM/DD/YY	HH:MM:SS		
		ENTRY:	DBLE%	SNGL%				
41.	SQROOT	5D0A8D60	0030	REL	MM/DD/YY	HH:MM:SS		
		ENTRY:	DSQRT	SQRT	SQRTF			
		EXTERNAL:	MATHE%S	MATHE%P				
42.	TRUNCATE	681C5651	0018	REL	MM/DD/YY	HH:MM:SS		
		ENTRY:	AINT%	DINT%	IDINT%	INT%		

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT
ABORT	????????	ASCIIINP ASCIIOUT BUFFER CONTROL ESRUTIL FORMAT
ABPACKD	CONTROL	TAPEHAND
ABPICKD	CONTROL	TAPEHAND
ABS%	ABSVALUE	
ACTIVECK	CONTROL	TAPEHAND
AINT%	TRUNCATE	
ALLOCATE	????????	FTNINT3
ALOG	LOGS	FLOATEXP
ALOG10	LOGS	
ALOG2%	LOGS	
AMAX0%	MAXMIN	
AMAX1%	MAXMIN	
AMIN0%	MAXMIN	
AMIN1%	MAXMIN	
AMOD%	MODULAR	
AND%	MASKING	
ARCHKI%	AMATHER	FAULT
ATAN	ARCTAN	
ATAN2	ARCTAN	
BKSP	????????	TAPEHAND
CLOSE	????????	FCLOSE FTNINT3
COS	ASNCS	
CTOC	????????	FTNINT2 Q8QSTP
CTOI	????????	FTNINT2
DABS%	ABSVALUE	

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT
DATAN	DARCTAN	
DATAN2	DARCTAN	
DATE	????????	FTNDATM
DBLE%	SNGLDBLE	
DCOS	ADSNCS	
DDIM%	POSSDIFF	
DED%	FLOATEXP	
DED%%1	FLOATEXP	
DEI%	INTEXP	
DER%	FLOATEXP	
DEXP	ADEXP	FLOATEXP
DFLOAT%	CONVERT	
DIM%	POSSDIFF	
DINT%	TRUNCATE	
DLOG	DLOGS	FLOATEXP
DLOG10	DLOGS	
DLOG2%	DLOGS	
DMAX1%	MAXMIN	
DMIN1%	MAXMIN	
DMOD	MODULAR	
DSIGN%	SIGNTRAN	
DSIN	ADSNCS	
DSQRT	SQROOT	
DVCHKI%	AMATHER	FAULT
ENABLE%	AMATHER	
ENABLE	????????	AMATHER
ERASE	????????	FTNINT3

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT	
EXP	AEXP	ATANH	FLOATEXP
FCLOSE	FCLOSE		
FDATE	FTNDATM		
FLOAT%	CONVERT		
FNCHKI%	AMATHER	FAULT	
FTIME	FTNDATM		
FTNALLOC	FTNINT3		
FTNCTOC	FTNINT2		
FTNCTOI	FTNINT2		
FTNCLOSE	FTNINT3		
FTNERASE	FTNINT3		
FTNMODFY	FTNINT3		
FTNOPEN	FTNINT3		
FTNPACK	FTNINT1		
FTNPACKC	FTNINT1		
FTNPACKD	FTNINT1		
FTNPACKO	FTNINT1		
FTNPICK	FTNINT1		
FTNPICKC	FTNINT1		
FTNPICKD	FTNINT1		
FTNPICKI	FTNINT1		
FTNPARM	FTNINT4		
FTNREAD	FTNINT3		
FTNRELES	FTNINT3		
FTNSEOF	FTNINT3		
FTNULOC	FTNINT2		

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
FTNUST	FTNINT2					
FTNUTYP	FTNINT2					
FTNUNLD	FTNINT3					
FTNWRITE	FTNINT3					
IABS%	ABSVALUE					
IAPAC	ESRUTIL					
IAPAH	ESRUTIL					
IAPAW	ESRUTIL					
IARCHK	FAULT					
IBDB	ESRUTIL					
IDIM%	POSSDIFF					
IDINT%	TRUNCATE					
IDVCHK	FAULT					
IEI%	INTEXP					
IER	ESRUTIL					
IFIX%	CONVERT					
IFNCHK	FAULT	ASCIIOUT				
IFUNIT	IFUNIT					
ILLUNIT	CONTROL	IFUNIT	TAPEHAND			
INT%	TRUNCATE					
IOVERFL	FAULT					
ISHFT%	MASKING					
ISIGN%	SIGNTRAN					
LOCF	ESRUTIL					
MATHE%S	AMATHER	ADEXP	ADSNCS	AEXP	ARCTAN	ASNCS
		ATAN	DARCTAN	DLOGS	FLOATEXP	INTEXP
		LOGS	MODULAR	SIGNTRAN	SQROOT	
MATHE%P	AMATHER	ADEXP	ADSNCS	AEXP	ARCTAN	ASNCS

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
		ATAN	DARCTAN	D_LOGS	FLOATEXP	INTEXP
		LOGS	MODULAR	SIGNTRAN	SQROOT	
MAX0%	MAXMIN					
MAX1%	MAXMIN					
MIN0%	MAXMIN					
MIN1%	MAXMIN					
MOD%	MODULAR					
MODIFY	????????	FTNINT3				
NOT%	MASKING					
OPENMEM	????????	CONTROL				
OPEN	????????	FTNINT3				
OR%	MASKING					
OVCHKI%	AMATHER	FAULT				
PACK	????????	ASCIIINP	CONTROL	FTNINT1	Q8QERROR	Q8QSTP
PACKC	????????	BINARY	CONTROL	FCLOSE	FTNINT1	TAPEHAND
PACKD	????????	CONTROL	FTNINT1			
PACKO	????????	FTNINT1				
PARM	????????	AMATHER	CONTROL	CONTROL	CONTROL	ESRUTIL
		ESRUTIL	ESRUTIL	ESRUTIL	FCLOSE	FTNDATM
		FTNDATM	FTNINT1	FTNINT1	FTNINT2	FTNINT3
		FTNINT4	IFUNIT	Q8QSTP	TAPEHAND	
PICKC	????????	BINARY	CONTROL	FCLOSE	FTNINT1	TAPEHAND
PICKD	????????	CONTROL	FTNINT1			
PICK	????????	CONTROL	FTNINT1			
PICKI	????????	FTNINT1				
Q8QARRAY	Q8QARRAY					
Q8QBUFIN	BUFFER					
Q8QBUFOT	BUFFER					
Q8QBACKS	TAPEHAND					

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT
Q8QENGIN	ASCIIINP	
Q8QERROR	Q8QERROR	AMATHER ASCIIINP ASCIIOUT BUFFER CONTROL FORMAT
Q8QENGOT	ASCIIOUT	
Q8QENBIN	BINARY	
Q8QENBOT	BINARY	
Q8QENTRY	CONTROL	
Q8QEXITS	CONTROL	Q8QSTP
Q8QENFIL	TAPEHAND	
Q8QINDEC	ASCIIINP	
Q8QINGIN	ASCIIINP	
Q8QIOINT	CONTROL	ASCIIINP ASCIIOUT BINARY BUFFER TAPEHAND
Q8QIFRMT	FORMAT	ASCIIINP ASCIIOUT
Q8QITERM	FORMAT	ASCIIINP ASCIIOUT
Q8QIOTAB	CONTROL	ASCIIINP BINARY BUFFER FCLOSE IFUNIT TAPEHAND
Q8QISCAN	FORMAT	ASCIIINP ASCIIOUT
Q8QINENC	ASCIIOUT	
Q8QINGOT	ASCIIOUT	
Q8QINBIN	BINARY	
Q8QINBOT	BINARY	
Q8QLGIN1	ASCIIINP	
Q8QLGIN2	ASCIIINP	
Q8QLGOT1	ASCIIOUT	
Q8QLGOT2	ASCIIOUT	
Q8QLBIN1	BINARY	
Q8QLBIN2	BINARY	
Q8QLBOT1	BINARY	

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT		
Q8QLBOT2	BINARY			
Q8QPAUSE	Q8QSTP			
Q8QREWND	TAPEHAND			
Q8QSTAT.	CONTROL	BINARY	FCLOSE	TAPEHAND
Q8QSTOP	Q8QSTP			
Q8QTABLE	CONTROL	ASCIIINP	ASCIIOUT	ASCIIOUT
READIN	CONTROL	ASCIIINP	BINARY	
READLU	????????	BUFFER	FTNINT3	
RED%	FLOATEXP			
REI%	INTEXP			
RELEASE	????????	FTNINT3		
RER%	FLOATEXP			
RESTREG	CONTROL	ASCIIINP	ASCIIOUT	
REWD	????????	TAPEHAND		
SAVREG	CONTROL	ASCIIINP	ASCIIOUT	
SECOND	FTNDATM			
SEOF	????????	FTNINT3		
SIGN%	SIGNTRAN			
SIN	ASNCS			
SNGL%	SNGLDBLE			
SQRT	SQROOT			
SQRTF	SQROOT			
TAN	ATAN			
TANH	ATANH			
TIME	????????	FTNDATM		
ULOC	????????	FTNINT2		
UNLD	????????	FTNINT3		

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT
UST	????????	CONTROL FTNINT2 IFUNIT
USTUP	CONTROL	TAPEHAND
UTYP	????????	CONTROL FTNINT2 IFUNIT TAPEHAND
WEOF	????????	TAPEHAND
WRITOUT	CONTROL	ASCIIOUT BINARY
WRITLU	????????	BUFFER FTNINT3
XOR%	MASKING	

ITEMIZE COMPLETE.
*ITEMIZE

PROCESSING: FTN-SPCL.REL,LBLD

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
1.	MOVW	92408978		0010	REL	MM/DD/YY	HH:MM:SS
		ENTRY: MOVW					
2.	FILLW	62469386		000D	REL	MM/DD/YY	HH:MM:SS
		ENTRY: FILLW					
3.	MOVC	9240898A		0012	REL	MM/DD/YY	HH:MM:SS
		ENTRY: MOVC					
4.	FILLC	76469386		000D	REL	MM/DD/YY	HH:MM:SS
		ENTRY: FILLC					
5.	MOVT	92408972		0019	REL	MM/DD/YY	HH:MM:SS
		ENTRY: MOVT					
6.	MOVP	92408978		0017	REL	MM/DD/YY	HH:MM:SS
		ENTRY: MOVP					
7.	MOVN	9240897A		0017	REL	MM/DD/YY	HH:MM:SS
		ENTRY: MOVN					
8.	MOVA	92408988		0013	REL	MM/DD/YY	HH:MM:SS
		ENTRY: MOVA					
9.	MOVU	92408978		0012	REL	MM/DD/YY	HH:MM:SS
		ENTRY: MOVU					
10.	LDF	934B99B4		000B	REL	MM/DD/YY	HH:MM:SS
		ENTRY: LDF					
11.	STF	8C3B99AB		0014	REL	MM/DD/YY	HH:MM:SS
		ENTRY: STF					
12.	TADC	894E9A9C		0100	REL	MM/DD/YY	HH:MM:SS
		ENTRY: TADC					
13.	TDAC	894B9E5C		0040	REL	MM/DD/YY	HH:MM:SS
		ENTRY: TDAC					
14.	TAXC	894E869C		0100	REL	MM/DD/YY	HH:MM:SS
		ENTRY: TAXC					
15.	TXAC	89379E5C		0040	REL	MM/DD/YY	HH:MM:SS
		ENTRY: TXAC					
16.	DAYFILE	72226190		0009	REL	MM/DD/YY	HH:MM:SS
		ENTRY: DAYFILE					

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
		EXTERNAL: DAYFILEQ					
17.	WAITEVN	63186879		0012	REL	MM/DD/YY	HH:MM:SS
		ENTRY: WAITEVN					
		EXTERNAL: ABORT	MUST	PARM	PARM		
18.	QARG	8E4E8D48		0050	REL	MM/DD/YY	HH:MM:SS
		ENTRY: QARG					
		EXTERNAL: PARM	PACK	RETURN			
19.	MOVITC	5E1D898D		0009	REL	MM/DD/YY	HH:MM:SS
		ENTRY: MOVITC					
20.	MOVCTI	5E178993		0009	REL	MM/DD/YY	HH:MM:SS
		ENTRY: MOVCTI					
21.	FILLBYT	77005F8A		0009	REL	MM/DD/YY	HH:MM:SS
		ENTRY: FILLBYT					
22.	THREAD	6A238D8C		000E	REL	MM/DD/YY	HH:MM:SS
		ENTRY: THREAD					
23.	UNTHREAD	581C6A68		0008	REL	MM/DD/YY	HH:MM:SS
		ENTRY: UNTHREAD					
24.	MOVAA	71408989		0015	REL	MM/DD/YY	HH:MM:SS
		ENTRY: MOVAA					
25.	MOVUA	71408976		0014	REL	MM/DD/YY	HH:MM:SS
		ENTRY: MOVUA					
26.	MOVWA	71408976		0012	REL	MM/DD/YY	HH:MM:SS
		ENTRY: MOVWA					

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT
ABORT	????????	WAITEVN
DAYFILE	DAYFILE	
DAYFILEQ	????????	DAYFILE
FILLW	FILLW	
FILLC	FILLC	
FILLBYT	FILLBYT	
LDF	LDF	
MOVA	MOVA	
MOVAA	MOVAA	
MOVC	MOVC	
MOVCTI	MOVCTI	
MOVITC	MOVITC	
MOVN	MOVN	
MOVP	MOVP	
MOVT	MOVT	
MOVU	MOVU	
MOVUA	MOVUA	
MOVW	MOVW	
MOVWA	MOVWA	
MUST	????????	WAITEVN
PACK	????????	QARG
PARM	????????	QARG WAITEVN WAITEVN
QARG	QARG	
RETURN	????????	QARG
STF	STF	
TADC	TADC	

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT
TAXC	TAXC	
TDAC	TDAC	
THREAD	THREAD	
TXAC	TXAC	
UNTHREAD	UNTHREAD	
WAITEVN	WAITEVN	

```
ITEMIZE  COMPLETE.
   *SAVEPF(62,BLD-PLAN.LST,FTNL,01,     )
   *EOJ     BLD-PLAN
```

M P - 3 2 P R O D U C T S E T

M S T

These are the "MP-60 Software Tools". These tools are released to MP-32 Customers and Maintained by CDC Systems Technology Division. They are described in CDC/STD publication 17329105 which is produced by job MST-DOC.BLD below. MASS is described separately in CDC/STD publication 17328900.

MST0 owner last dumped on ______

MSTB owner last dumped on ______

File Name	Description	Last Build
mst.pl,mst0,__,mst0	PSRed PL	------
mst-pl-sps.bld,mst0,01,mst0	Build next PSR Level PL	
mst-pl-sps.lst,mst1,01,mst1	Listing of above .bld job	
mst.pl,mst0,__,mst0	Next PSR Level PL	*1
mst-pl-loc.bld,mst0,01,mst0	Build PL with Local Mods	
mst-pl-loc.lst,mst1,01,mst1	Listing of above .bld job	
mst.pl,mstb,ZZ,mstb	Local (working) PL	------
copycf.bld,mstb,01,mstb	Build COPYCF	
copycf.lst,mst1,01,mst1	Listing of above .bld job	
mst-copycf.rel,lbld,01,lbld		------
mst-copycf.bld,lbld,01,lbld	Build Abs COPYCF	
mst-copycf.lst,lbll,01,lbll	Listing of above .bld job	
mst-copycf.abs,lbld,01,lbld		------
copyscf.bld,mstb,01,mstb	Build COPYSCF	
copyscf.lst,mst1,01,mst1	Listing of above .bld job	
mst-copyscf.rel,lbld,01,lbld		------
mst-copyscf.bld,lbld,01,lbld	Build Abs COPYSCF	
mst-copyscf.lst,lbll,01,lbll	Listing of above .bld job	
mst-copyscf.abs,lbld,01,lbld		------
sysdump.bld,mstb,01,mstb	Build SYSDUMP	
sysdump.lst,mst1,01,mst1	Listing of above .bld job	
mst-sysdmp.rel,mpxa,01,mpxa		------
tdump.bld,mstb,01,mstb	Build TDUMP	
tdump.lst,mst1,01,mst1	Listing of above .bld job	
mst-tdump.rel,lbld,01,lbld		------
mst-tdump.bld,lbld,01,lbld	Build Abs TDUMP	
mst-tdump.lst,lbll,01,lbll	Listing of above .bld job	
mst-tdump.abs,lbld,01,lbld		------
ed.bld,mstb,01,mstb	Build ED	
ed.lst,mst1,01,mst1	Listing of above .bld job	
mst-ed.rel,lbld,01,lbld		------
mst-ed.bld,lbld,01,lbld	Build Abs ED	
mst-ed.lst,lbll,01,lbll	Listing of above .bld job	
mst-ed.abs,lbld,01,lbld		------
edi.bld,mstb,01,mstb	Build EDI	
edi.lst,mst1,01,mst1	Listing of above .bld job	
mst-edi.rel,lbld,01,lbld		------
mst-edi.bld,lbld,01,lbld	Build Abs EDI	
mst-edi.lst,lbll,01,lbll	Listing of above .bld job	
mst-edi.abs,lbld,01,lbld		------

```
    ratfor.bld,mstb,01,mstb                 Build RATFOR
      ratfor.lst,msti,01,msti               Listing of above .bld job
      mst-ratfor.rel,lbld,01,lbld                                    ------
        mst-ratfor.bld,lbld,01,lbld         Build Abs RATFOR
          mst-ratfor.lst,lbll,01,lbll       Listing of above .bld job
          mst-ratfor.abs,lbld,01,lbld                                ------
    mst-doc.bld,mstb,01,mstb                Document all above
      mst-doc.lst,msti,01,msti              Listing of above .bld job
      mst.doc,mstb,01,mstb                  Listable 17329105        ------

mas.pl,mst0,__,mst0                       PSRed PL                   ------
  mas-pl-sps.bld,mst0,01,mst0             Build next PSR Level PL
    mas-pl-sps.lst,msti,01,msti           Listing of above .bld job
    mas.pl,mst0,__,mst0                   Next PSR Level PL            *2

  mas-pl-loc.bld,mst0,01,mst0             Build PL with Local Mods
    mas-pl-loc.lst,msti,01,msti           Listing of above .bld job
  . mas.pl,mstb,ZZ,mstb                   Local (working) PL         ------
    . mass.bld,mstb,01,mstb                 Build MASS
        mass.lst,msti,01,msti               Listing of above .bld job
        mst-mass.rel,lbld,01,lbld                                    ------
          mst-mass.bld,lbld,01,lbld         Build Abs MASS
            mst-mass.lst,lbll,01,lbll       Listing of above .bld job
            mst-mass.abs,lbld,01,lbld                                ------

bld-plan.txt,mstb,01,mstb                     Contains this text
  bld-plan.run,mstb,01,mstb                     Produce Product Build Doc
```

Integration Instructions for next release:

1. None. Complete.

NOTES:

*1 This is a temporary Oldpl. It is build by mst-pl-sps.bld and then, when all is well, the first Oldpl is released and the second Oldpl becomes the base Oldpl. The mst-pl-sps.bld job is then modified to use the new PSR Level as a base and produce the next PSR Level.

Normally, the temporary Oldpl does not appear on Release Tapes.

*2 Same as *1 above; for mas.pl.

```
   STOP*ENDST*
*OPEN(10,MST.PL,MSTB,ZZ,     ,R)
*XREFUP(P=10)
```

CDC MP60 XREFUP V1.00 TODAY: 09/18/84 15:36:03

OLDPL VERSION: 2
MASTER CHARACTER: /
OLDPL PRODUCED: 08/23/84
  13:28:33

OLDPL AUDIT:		TOTAL	YANKED	ACTIVE	RUNNING
DECK	YANK$$$	1	0	1	1
COMDECK	HISTORY	54	0	54	55
COMDECK	F-TITLE	138	0	138	193
DECK	COPYCF	183	0	183	376
COMDECK	F-COPYCF	65	0	65	441
DECK	COPYSCF	204	0	204	645
COMDECK	F-CPYSCF	57	0	57	702
DECK	SYSDUMP	1291	0	1291	1993
COMDECK	F-SYSDMP	166	0	166	2159
DECK	TDUMP	230	0	230	2389
COMDECK	F-TDUMP	91	0	91	2480
DECK	ED	4072	0	4072	6552
COMDECK	F-ED-RM	596	0	596	7148
COMDECK	F-ED-UG	1965	0	1965	9113
COMDECK	COUTLN	6	0	6	9119
COMDECK	CLINE	8	0	8	9127
COMDECK	CDEFIO	6	0	6	9133
COMDECK	CFOR	6	0	6	9139
COMDECK	CLOOK	8	0	8	9147
COMDECK	CKEYWD	10	0	10	9157
COMDECK	LUNS	13	0	13	9170
COMDECK	IBUF	5	0	5	9175
COMDECK	TITLE	5	0	5	9180
DECK	RATFOR	1749	0	1749	10929
COMDECK	F-RATFOR	609	0	609	11538
DECK	MST-DOC	9	0	9	11547

DECKS MODIFIED BY A GIVEN IDENT:

IDENT	LINES	DECKS OR COMDECKS MODIFIED
LEV-AC	3	HISTORY

IDENTS THAT MODIFY A GIVEN DECK:

DECK	LINES	IDENT(S) THAT MODIFY THE DECK
YANK$$$	1	
HISTORY	51	LEV-AC
F-TITLE	138	
COPYCF	183	
F-COPYCF	65	
COPYSCF	204	
F-CPYSCF	57	
SYSDUMP	1291	
F-SYSDMP	166	
TDUMP	230	
F-TDUMP	91	
ED	2024	
F-ED-RM	596	
F-ED-UG	1965	
COUTLN	6	
CLINE	8	

```
  CDEFIO        6
  CFOR          6
  CLOOK         8
  CKEYWD       10
  LUNS         13
  IBUF          5
  TITLE         5
  RATFOR     1749
  F-RATFOR    609
  MST-DOC       9

DECKS THAT CALL A GIVEN COMMON DECK:

  COMDECK      DECKS CALLING THE COMMON DECK

  F-TITLE      MST-DOC
  F-COPYCF     MST-DOC
  F-CPYSCF     MST-DOC
  F-SYSDMP     MST-DOC
  F-TDUMP      MST-DOC
  F-ED-RM      MST-DOC
  F-ED-UG      MST-DOC
  COUTLN       RATFOR
  CLINE        RATFOR
  CDEFIO       RATFOR
  CFOR         RATFOR
  CLOOK        RATFOR
  CKEYWD       RATFOR
  LUNS         RATFOR
  IBUF         RATFOR
  TITLE        RATFOR
  F-RATFOR     MST-DOC

COMMON DECKS CALLED BY A GIVEN DECK OR COMDECK:

  DECK         COMMON DECKS CALLED BY THE DECK

  RATFOR       COUTLN   CLINE    CDEFIO   CFOR     CLOOK
               CKEYWD   LUNS     TITLE    IBUF
  MST-DOC      F-TITLE  F-ED-RM  F-RATFOR F-SYSDMP F-TDUMP
               F-COPYCF F-CPYSCF F-ED-UG

NULL IDENTS:


NULL DECKS:


COMMON DECKS NOT CALLED:

  HISTORY
```

```
XREFUP FINISHED.
  *CLOSE(10)
  *LISTF
```

```
*JOB(ID=MST-PL-SPS.BLD)
*SCHED(CM=9,TL=9999,PL=10000,SCR=40)
#
#  This job builds a higher PSR Level release Oldpl from one of
#  a given level and the appropriate PSR code.
#
#  PSR code is obtained from the Systems Technology Division
#  (of CDC) PSR Summaries.
#
#------------
#  This portion of the job is temporary.  It resequences the Level AB
#  OLDPL and prepares for AC generation.
#
*OPEN(5,MST.PL,MSTO,AB,MSTO,R)
*UPDATE(F,P=5,N=6,*=/,O=A,S=7)
/FINIS
*CLOSE(6)
*REWIND(7)
*UPDATE(F,I=7,N=10,*=/,O=A)
*CLOSE(7)
*REWIND(10)
#------------
*RELEASE(MST.PL,MSTO,AC,MSTO)
#----*OPEN(10,MST.PL,MSTO,AB,MSTO,R)
*UPDATE(P=10,N=20,O=A,*=/)
// PLACE PSR CODE AFTER THIS LINE.
/IDENT LEV-AC
/INSERT HISTORY.3
LEV-AC                23 AUG 84                Fariss, G. B.
      THIS POINT DIVIDES LEVEL AC FROM HIGHER LEVELS.

/FINIS
*SAVEPF(20,MST.PL,MSTO,AC,MSTO)
*SAVEPF(62,MST-PL-SPS.LST,MSTL,01,MSTL)
*EOJ
```

```
*JOB(ID=MST-PL-LOC.BLD)
*SCHED(CM=9,TL=9999,PL=10000,SCR=40)
#
#  This job adds local-site modifications to the standard Oldpl
#  and builds the final Oldpl (always Edition ZZ).
#
*RELEASE(MST.PL,MSTB,ZZ,MSTB)
*OPEN(10,MST.PL,MSTO,AC,MSTO,R)  # Change the edition as appropriate
*UPDATE(P=10,N=20,O=A,*=/)
// PLACE LOCAL-MOD CODE AFTER THIS LINE.
/FINIS
*SAVEPF(20,MST.PL,MSTB,ZZ,MSTB)
*SAVEPF(62,MST-PL-LOC.LST,MSTL,01,MSTL)
*EOJ
```

```
*JOB(ID=COPYCF.BLD)
*SCHED(CM=10,TL=99999,PL=600000,SCR=100)
#
#  This job builds the MPX/OS Utility program COPYCF.
#
*OPEN(1,MST.PL,MSTB,ZZ,MSTB,R)
*UPDATE(P=1,*=/,Q,C=2)
/COMPILE COPYCF
/FINIS
*REWIND(2)
*FTN(I=2,X=3,L,R)
*SAVEPF(3,MST-COPYCF.REL,LBLD,01,LBLD)
*SAVEPF(62,COPYCF.LST,MSTL,01,MSTL)
*EOJ
```

```
*JOB(ID=MST-COPYCF.BLD)
*SCHED(CM=5,TL=99999,PL=1000,SCR=100)
*OPEN(1,MST-COPYCF.REL,LBLD,01,LBLD,R)
*OPEN(2,FTN-RUNTM.REL,LBLD,01,LBLD,R)
*OPEN(3,SYS-TSKMON.REL,LBLD,01,LBLD,R)
*OPEN(4,SYS-BKDBK.REL,LBLD,01,LBLD,R)
*RELEASE(MST-COPYCF.ABS,LBLD,01,LBLD)
*ALLOCATE(MST-COPYCF.ABS,LBLD,01,LBLD,480,100)
*OPEN(10,MST-COPYCF.ABS,LBLD,01,LBLD,W)
*MAP
*LOAD(1,2,3,4)
*ABS(10)
*CLOSE(10)
*RELEASE(MST-COPYCF.ABS,LBLD,01,LBLD,R)
*SAVEPF(62,MST-COPYCF.LST,LBLL,01,LBLL)
*EOJ
```

```
*JOB(ID=COPYSCF.BLD)
*SCHED(CM=10,TL=99999,PL=600000,SCR=100)
#
#  This job builds the MPX/OS Utility program COPYSCF.
#
*OPEN(1,MST.PL,MSTB,ZZ,MSTB,R)
*UPDATE(P=1,*=/,Q,C=2)
/COMPILE COPYSCF
/FINIS
*REWIND(2)
*FTN(I=2,X=3,L,R)
*SAVEPF(3,MST-CPYSCF.REL,LBLD,01,LBLD)
*SAVEPF(62,COPYSCF.LST,MSTL,01,MSTL)
*EOJ
```

```
*JOB(ID=MST-CPYSCF.BLD)
*SCHED(CM=4,TL=99999,PL=1000,SCR=100)
*OPEN(1,MST-CPYSCF.REL,LBLD,01,LBLD,R)
*OPEN(2,FTN-RJNTM.REL,LBLD,01,LBLD,R)
*OPEN(3,SYS-TSKMON.REL,LBLD,01,LBLD,R)
*OPEN(4,SYS-BKOBK.REL,LBLD,01,LBLD,R)
*RELEASE(MST-CPYSCF.ABS,LBLD,01,LBLD)
*ALLOCATE(MST-CPYSCF.ABS,LBLD,01,LBLD,480,100)
*OPEN(10,MST-CPYSCF.ABS,LBLD,01,LBLD,W)
*MAP
*LOAD(1,2,3,4)
*ABS(10)
*CLOSE(10)
*RELEASE(MST-CPYSCF.ABS,LBLD,01,LBLD,R)
*SAVEPF(62,MST-CPYSCF.LST,LBLL,01,LBLL)
*EOJ
```

```
*JOB(ID=SYSDUMP.BLD)
*SCHED(CM=10,PL=3000,TL=99999,SCR=20)
#
#  This job builds the MPX/OS V3 Interpretive Dump program  SYSDUMP.
#
*OPEN(10,MST.PL,MSTB,ZZ,MSTB,R)
*UPDATE(P=10,C=11,*=/,Q)
/COMPILE SYSDJMP
/FINIS
*FTN(I=11,X=12,L,R)
*SAVEPF(12,MST-SYSDMP.REL,MPXA,01,MPXA)
*SAVEPF(62,SYSDUMP.LST,MSTL,01,MSTL)
*EOJ
```

```
*JOB(ID=TDUMP.BLD)
*SCHED(CM=10,PL=70000,TL=99999,SCR=100)
#
#  This job builds the MPX/DS File/Tape Dump program  TDJMP.
#
*OPEN(10,MST.PL,MSTB,ZZ,MSTB,R)
*UPDATE(Q,P=10,*=/,C=11)
/COMPILE TDUMP
/FINIS
*FTN(I=11,X=12,L,R)
*SAVEPF(12,MST-TDUMP.REL,LBLD,01,LBLD)
*SAVEPF(62,TDUMP.LST,MSTL,01,MSTL)
*EOJ
```

```
*JOB(ID=MST-TDUMP.BLD)
*SCHED(CM=4,TL=99999,PL=1000,SCR=100)
*OPEN(1,MST-TDUMP.REL,LBLD,01,LBLD,R)
*OPEN(2,FTN-RUNTM.REL,LBLD,01,LBLD,R)
*OPEN(3,SYS-TSKMON.REL,LBLD,01,LBLD,R)
*OPEN(4,SYS-BKDBK.REL,LBLD,01,LBLD,R)
*RELEASE(MST-TDUMP.ABS,LBLD,01,LBLD)
*ALLOCATE(MST-TDUMP.ABS,LBLD,01,LBLD,480,100)
*OPEN(10,MST-TDUMP.ABS,LBLD,01,LBLD,W)
*MAP
*LOAD(1,2,3,4)
*ABS(10)
*CLOSE(10)
*RELEASE(MST-TDUMP.ABS,LBLD,01,LBLD,R)
*SAVEPF(62,MST-TDUMP.LST,LBLL,01,LBLL)
*EOJ
```

```
*JOB(ID=ED.BLD)
*SCHED(CM=10,PL=9000,TL=99999,SCR=100)
#
#  This job builds the batch-callable version of ED which is called
#  from the MPX library by *ED.
#
*OPEN(10,MST.PL,MSTB,ZZ,MSTB,R)
*UPDATE(P=10,C=12,*=/,Q)
/IDENT BATCH
//  This IDENT is not to be placed on the OLDPL.  Its purpose is to
//  generate the batch version of ED.  (called with control card *ED.)
/I ED.1
84        IDENT     ED
ED        TITLE     ED - Batch Callable Text Editor
/I ED.115
          SPACE     1
          ENTRY     ED
ED        EQU       *                    Batch ED Entry Point
/I ED.62
BEDIT     SET       0                    Build the Batch Editor
/I ED.4072
          END       ED
/COMPILE ED
/FINIS
*REWIND(12)
*CMP(I=12,L,X=13,C)
*REWIND(13)
*SAVEPF(13,MST-ED.REL,LBLD,01,LBLD)
*SAVEPF(62,ED.LST,MSTL,01,MSTL)
*EOJ
```

```
*JOB(ID=MST-ED.BLD)
*SCHED(CM=10,PL=9000,TL=99999,SCR=100)
*OPEN(13,MST-ED.REL,LBLD,01,LBLD,R)
*OPEN(14,SYS-BKDBK.REL,LBLD,01,LBLD,R)
*OPEN(15,SYS-TSKMON.REL,LBLD,01,LBLD,R)
*MAP
*LOAD(13,14,15)
*RELEASE(MST-ED.ABS,LBLD,01,LBLD)
*ALLOCATE(MST-ED.ABS,LBLD,01,LBLD,480,50)
*OPEN(16,MST-ED.ABS,LBLD,01,LBLD)
*ABS(16)
*CLOSE(16)
*RELEASE(MST-ED.ABS,LBLD,01,LBLD,R)
*SAVEPF(62,MST-ED.LST,LBLL,01,LBLL)
*EOJ
```

```
*JOB(ID=EDI.BLD)
*SCHED(CM=10,PL=9000,TL=99999,SCR=100)
#
#  This job builds the interactive version of ED which is called
#  from the MPX library by *EDI.  This version is only to be called
#  by the canned job that invokes ED for any interactive user.
#  The canned job is:  JOB-DEFAULT,JOBS,01.
#
*OPEN(10,MST.PL,MSTB,ZZ,MSTB,R)
*UPDATE(P=10,C=12,*=/,Q)
/IDENT INTRCTVE
//  This IDENT is not to be placed on the OLDPL.  Its purpose is to
//  generate the interactive version of ED.  This version is only to be called
//  from within the JJ default job "JOB-DEFAULT,JOBS".  When it is called
//  its name is *EDI.
/I ED.1
84        IDENT     EDI
EDI       TITLE     EDI - Interactive Text Editor
/I ED.115
          SPACE     1
          ENTRY     EDI
EDI       EQU       *                    Interactive ED Entry Point
/I ED.62
BEDIT     SET       1                    Build the Interactive Editor
/I ED.4072
          END       EDI
/COMPILE ED
/FINIS
*REWIND(12)
*COPY(I=12,L,X=13,C)
*REWIND(13)
*SAVEPF(13,MST-EDI.REL,LBLD,01,LBLD)
*SAVEPF(62,EDI.LST,MSTL,01,MSTL)
*EOJ
```

```
*JOB(ID=MST-EDI.BLD)
*SCHED(CM=10,PL=9000,TL=99999,SCR=100)
*OPEN(13,MST-EDI.REL,LBLD,01,LBLD,R)
*OPEN(14,SYS-BKDBK.REL,LBLD,01,LBLD,R)
*OPEN(15,SYS-TSKMON.REL,LBLD,01,LBLD,R)
*MAP
*LOAD(13,14,15)
*RELEASE(MST-EDI.ABS,LBLD,01,LBLD)
*ALLOCATE(MST-EDI.ABS,LBLD,01,LBLD,480,50)
*OPEN(16,MST-EDI.ABS,LBLD,01,LBLD)
*ABS(16)
*CLOSE(16)
*RELEASE(MST-EDI.ABS,LBLD,01,LBLD,R)
*SAVEPF(62,MST-EDI.LST,LBLL,01,LBLL)
*EOJ
```

```
*JOB(ID=RATFOR.BLD)
*SCHED(CM=10,TL=9999,PL=100000,SCR=20)
#
#  This job builds the Kernighan & Plauger version of Ratfor as
#  obtained from Addison-Wesley and Modified/Installed by CDC.
#
*OPEN(20,MST.PL,MSTB,ZZ,MSTB,R)
*UPDATE(Q,P=20,C=30)
/COMPILE RATFOR
/FINIS
*REWIND(30)
*RATFOR(I=30,F=31)
*CLOSE(30)
*REWIND(31)
*FTN(I=31,X=32,L,R)
*SAVEPF(32,MST-RATFOR.REL,LBLD,01,LBLD)
*SAVEPF(62,RATFOR.LST,MSTL,01,MSTL)
*EOJ
```

```
*JOB(ID=MST-RATFOR.BLD)
*SCHED(CM=10,TL=9999,PL=100000,SCR=20)
#
#  THIS JOB RE-BUILDS  MST-RATFOR.ABS,LBLD  FROM  MST-RATFOR.REL,LBLD.
#
#  !!!!WARNING!!!!   FTN-RUNTM.REL  AND  FTN-SPCL.REL  ROUTINES ARE
#                    OBTAINED FROM THE LIBRARY.  IF THESE ROUTINES
#                    CHANGE DURING A NEW LIBRARY BUILD, RUN THIS JOB
#                    USING THE NEW LIBRARY AND BUILD YET ANOTHER NEW
#                    LIBRARY TO INCLUDE THE NEWEST ROUTINES.
#
*OPEN(30,MST-RATFOR.REL,LBLD,01,LBLD,R)
*OPEN(33,SYS-BKDBK.REL,LBLD,01,LBLD,R)
*OPEN(34,SYS-TSKMON.REL,LBLD,01,LBLD,R)
*RELEASE(MST-RATFOR.ABS,LBLD,01,LBLD,0)
*ALLOCATE(MST-RATFOR.ABS,LBLD,01,LBLD,480,200)
*OPEN(36,MST-RATFOR.ABS,LBLD,01,LBLD)
*MAP
*LOAD(30,33,34)
*ABS(36)
*CLOSE(36)
*RELEASE(MST-RATFOR.ABS,LBLD,01,LBLD,R)
*SAVEPF(62,MST-RATFOR.LST,LBLL,01,LBLL)
*EOJ
```

```
*JOB(ID=MST-DOC.BLD)
*SCHED(CM=10,TL=9999,PL=60000,SCR=100)
#
# THIS JOB CREATES THE DOCUMENTATION FOR THE MST TOOLS.
# THE DOCUMENT IS "MP-60 SOFTWARE TOOL USER'S MANUAL" 17329105.
#
*OPEN(1,MST.PL,MSTB,ZZ,MSTB,R)
*UPDATE(Q,P=1,C=2,*=/)
/COMPILE MST-DOC
/FINIS
*COPYSCF(2)              # List it
*REWIND(2)
#
# The following COPYCF would not be necessary if UPDATE had
# implemented the control statement "D" option.
#
*COPYCF(2,3,,1,80)       # Remove UPDATE sequence numbers
*CLOSE(2)
*REWIND(3)
#  IF CHANGES WERE MADE TO SECTIONS OF THE DOCUMENT, PAGE NUMBERING
#  WITHIN THE TABLE OF CONTENTS (IN DECK F-TITLE) MAY NOW BE IN
#  ERROR.  RUN THIS JOB USING THE FMT PARAMETER "C" AND GENERATE A
#  TABLE OF CONTENTS AT THE END OF THE DOCUMENT.  THEN MAKE ADDITIONAL
#  MODS TO F-TITLE TO CORRECT THE PRE-FORMATTED TABLE OF CONTENTS THAT
#  APPEARS AT THE BEGINNING OF THE DOCUMENT.
#
#--  *FMT(I=3,L=4,C)
*FMT(I=3,L=4)
*SAVEPF(4,MST.DOC,MSTB,01,MSTB)
*SAVEPF(62,MST-DOC.LST,MSTL,01,MSTL)
*EOJ
```

STOP*ENDST*
*ITEMIZE

PROCESSING: MST-COPYCF.REL,LBLD,01,LBLD

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
1.	COPYCF	791A8C9A		02EC	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	COPYCF					
	EXTERNAL:	ENABLE%	IAPAC	Q8QINDEC	Q8QLGIN1	Q8QENGIN	
		Q8QINGIN	Q8QARRAY	IFUNIT	ISHFT%	Q8QINGOT	
		Q8QLGOT1	Q8QENGOT	Q8QSTOP			

PROCESSING: MST-CPYSCF.REL,LBLD,01,LBLD

2.	COPYSCF	691D6760		0226	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	COPYSCF					
	EXTERNAL:	ENABLE%	IAPAC	IESR	UTYP	IAPAW	
		LOCF	READLU	UST	BKSP	Q8QINGOT	
		Q8QENGOT	Q8QINGIN	Q8QARRAY	Q8QLGIN1	Q8QENGIN	
		IFUNIT	ISHFT%	Q8QLGOT1	SEOF		

PROCESSING: MST-SYSDMP.REL,MPXA,01,MPXA

3.	SYSDUMP	57095411		088A	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	SYSDUMP					
	EXTERNAL:	ENABLE%	Q8QINGOT	Q8QENGOT	READBUF	Q8QBUFOT	
		IFUNIT	Q8QSTOP	Q8QREWND	GETWRD	Q8QARRAY	
		Q8QLGOT1	GREPLY	ISHFT%	AND%	DMPEVT	
		DMPQPT	DMPJCT	DMPEST	DMPDET	DMPPROG	
		DMPSTATE	FTNULOC	Q8QBUFIN	DMPPAGE		
4.	GREPLY	6C0499D2		008D	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	GREPLY					
	EXTERNAL:	Q8QINGIN	Q8QARRAY	Q8QLGIN1	Q8QENGIN	Q8QINDEC	
		Q8QINGOT	Q8QENGOT				
5.	DMPEVT	650E8F34		0066	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	DMPEVT					
	EXTERNAL:	GETWRD	Q8QINGOT	Q8QLGOT1	Q8QENGOT		
6.	DMPQPT	6B0E8E49		0145	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	DMPQPT					
	EXTERNAL:	GETWRD	ISHFT%	AND%	Q8QINGOT	Q8QLGOT1	
		Q8QENGOT					
7.	DMPJCT	780E8D6F		0226	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	DMPJCT					
	EXTERNAL:	GETWRD	Q8QINGOT	Q8QLGOT1	Q8QENGOT	ISHFT%	
		AND%	DMPTCT	Q8QARRAY	CHKTHRD		
8.	DMPTCT	780E8B56		0435	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	DMPTCT					

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
		EXTERNAL:	GETWRD	ISHFT%	AND%	Q8QINGOT	Q8QLGOT1
			Q8QENGOT	Q8QARRAY	DMPRET	CHKTHRD	
9.	DMPRET	760E8E33	015A	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	DMPRET				
		EXTERNAL:	GETWRD	ISHFT%	AND%	Q8QINGOT	Q8QLGOT1
			Q8QENGOT	SHOWEST	DMPLKT		
10.	DMPLKT	700E8E2D	0166	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	DMPLKT				
		EXTERNAL:	GETWRD	ISHFT%	AND%	Q8QINGOT	Q8QENGOT
			Q8QLGOT1	DMPFDT			
11.	DMPFDT	770E8EC8	00D1	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	DMPFDT				
		EXTERNAL:	GETWRD	ISHFT%	AND%	Q8QINGOT	Q8QLGOT1
			Q8QENGOT	DMPSGT			
12.	DMPSGT	740E8F0B	0081	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	DMPSGT				
		EXTERNAL:	GETWRD	Q8QINGOT	Q8QLGOT1	Q8QENGOT	ISHFT%
			AND%				
13.	SHOWEST	67145C5A	002E	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	SHOWEST				
		EXTERNAL:	GETWRD	Q8QINGOT	Q8QLGOT1	Q8QENGOT	
14.	DMPEST	680E8F06	0094	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	DMPEST				
		EXTERNAL:	GETWRD	ISHFT%	AND%	Q8QINGOT	Q8QLGOT1
			Q8QENGOT				
15.	DMPDET	760E8EE0	008B	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	DMPDET				
		EXTERNAL:	GETWRD	ISHFT%	AND%	Q8QINGOT	Q8QLGOT1
			Q8QENGOT				
16.	CHKTHRD	74157048	0043	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	CHKTHRD				
		EXTERNAL:	ISHFT%	AND%			
17.	DMPPROG	6913682E	0061	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	DMPPROG				
		EXTERNAL:	Q8QINGOT	Q8QENGOT	Q8QARRAY	Q8QLGOT1	GETWRD
18.	GETWRD	66268A83	00D5	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	GETWRD				
		EXTERNAL:	Q8QINGOT	Q8QLGOT1	Q8QENGOT	AND%	FTNULOC
			Q8QBUFIN	IFUNIT	Q8QSTOP		
19.	DMPSTATE	67215A87	0080	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	DMPSTATE				
		EXTERNAL:	READBUF	ISHFT%	Q8QINGOT	Q8QLGOT1	Q8QARRAY

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
			Q8QENGOT				
20.	READBUF	6B15787A		0021	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	READBUF				
		EXTERNAL:	Q8QBUFIN	IFUNIT			
21.	DMPPAGE	7A1869E7		00A8	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	DMPPAGE				
		EXTERNAL:	Q8QINGOT	Q8QLGOT1	Q8QENGOT	Q8QARRAY	

PROCESSING: MST-TDUMP.REL,LBLD,01,LBLD

22.	TDUMP	5B4889B8		00DA	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	TDUMP				
		EXTERNAL:	ENABLE%	QARG	MAXO%	MINO%	Q8QREWND
			READBUF	DMPBLK	Q8QINGOT	Q8QENGOT	IESR
			ABORT	SEOF	UST	Q8QLGOT1	
23.	READBUF	6B157808		0093	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	READBUF				
		EXTERNAL:	Q8QBUFIN	IFUNIT	Q8QINGOT	Q8QLGOT1	Q8QENGOT
24.	DMPBLK	6F178E21		017C	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	DMPBLK				
		EXTERNAL:	Q8QINGOT	Q8QLGOT1	Q8QENGOT	Q8QARRAY	Q8QSTOP

PROCESSING: MST-ED.REL,LBLD,01,LBLD

25.	ED	9A4BB5E8		09D7	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	ED				
		EXTERNAL:	PARM	PACKD	PARM	ABORT	PICKD
			PORT	JCIJNUM	PACK	UTYP	PARM
			ROUTEQ	PARM	UST	PICK	CLOSE
			PARM	PARM	RELEASE	PACKC	OPEN
			PICKC	SELECT	JCIJSCRL	BLKFSZE	PARM
			SAVEQ	ULOC	WRITLU	EXPANDQ	READLU
			ALLOCATE	JOBINFO			

PROCESSING: MST-EDI.REL,LBLD,01,LBLD

26.	EDI	9A488CFE		09C1	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	EDI				
		EXTERNAL:	PARM	PORT	JCIJNUM	PACK	PARM
			ABORT	UTYP	PARM	ROUTEQ	PARM
			UST	PICK	CLOSE	PARM	PARM
			RELEASE	PACKC	OPEN	PICKD	PICKC
			SELECT	JCIJSCRL	BLKFSZE	PACKD	PARM
			SAVEQ	ULOC	WRITLU	EXPANDQ	READLU
			ALLOCATE	JOBINFO			

PROCESSING: MST-RATFOR.REL,LBLD,01,LBLD

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME	
27.	RATFOR	5E1C8B4B		004E	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	RATFOR					
		EXTERNAL:	ENABLE%	PARSE	OUTTAB	OUTSTR	OUTDON	
			REMARK	Q8QREWND	IESR	ABORT	Q8QSTOP	
28.	ALLDIG	751C932E		006D	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	ALLDIG					
		EXTERNAL:	TYPE					
29.	BALPAR	7C1C92EA		0099	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	BALPAR					
		EXTERNAL:	GETTOK	SYNERR	OUTSTR	PBSTR		
30.	BRKNXT	65099434		005D	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	BRKNXT					
		EXTERNAL:	OUTGO	SYNERR				
31.	CDACOD	6D279DA1		00E1	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	CDACOD					
		EXTERNAL:	OUTTAB	OUTSTR	GETTOK	SYNERR	OUTCH	
			ITOC	LOOKUP	OUTDON			
32.	CLOWER	77119031		0057	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	CLOWER					
33.	CTOIT	68389014		0082	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	CTOIT					
34.	DEFTOK	6C1F98B8		00C4	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	DEFTOK					
		EXTERNAL:	GTOK	LOOKUP	GETDEF	INSTAL	PBSTR	
35.	DOCODE	77189C04		007F	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	DOCODE					
		EXTERNAL:	OUTTAB	OUTSTR	LABGEN	OUTNUM	GETTOK	
			SYNERR	PBSTR	OUTDON			
36.	DOSTAT	7A0C8C77		0014	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	DOSTAT					
		EXTERNAL:	OUTCON					
37.	EATUP	6A4E8A90		00E1	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	EATUP					
		EXTERNAL:	GETTOK	PBSTR	SYNERR	OUTSTR		
38.	ELSEIF	711D8C86		0014	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	ELSEIF					
		EXTERNAL:	OUTGO	OUTCON				
39.	EQUAL	6E3E8A37		0067	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	EQUAL					

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
40.	ERROR	683D8D79		0017	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	ERROR				
		EXTERNAL:	REMARK	Q8QREWND	IESR	ABORT	
41.	FORCOD	6A1C8C4F		013F	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	FORCOD				
		EXTERNAL:	LABGEN	OUTCON	GETTOK	SYNERR	PBSTR
			OUTTAB	EATUP	OUTDON	OUTNUM	OUTSTR
			OUTCH	OUTGO	LENGTH	SCOPY	
42.	FORS	99408D3E		004E	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	FORS				
		EXTERNAL:	OUTNUM	LENGTH	OUTTAB	OUTSTR	OUTDON
			OUTGO	OUTCON			
43.	GETCH	704A89BD		01DF	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	GETCH				
		EXTERNAL:	Q8QINGIN	Q8QLGIN1	Q8QENGIN	IFUNIT	ISHFT%
			Q8QINGOT	Q8QLGOT1	Q8QENGOT	IESR	ABORT
			CLOWER	TYPE	HEADER	PUTSRC	INMAP
44.	GETDEF	73248B06		0095	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	GETDEF				
		EXTERNAL:	NGETCH	REMARK	GTOK	ERROR	
45.	GETTOK	691F8AA7		00E0	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	GETTOK				
		EXTERNAL:	DEFTOK	EQUAL	SYNERR	TYPE	LOOKUP
			REMARK	CTOIT	ERROR	Q8QREWND	
46.	GTOK	983B8EC7		01CD	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	GTOK				
		EXTERNAL:	NGETCH	PUTBAK	TYPE	SYNERR	OUTDON
			OUTCH	RELATE			
47.	HEADER	72189E65		0036	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	HEADER				
		EXTERNAL:	FDATE	FTIME	Q8QINGOT	Q8QARRAY	Q8QLGOT1
			Q8QENGOT				
48.	IFCODE	72249C7C		0014	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	IFCODE				
		EXTERNAL:	LABGEN	IFGO			
49.	IFGO	96499877		0019	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	IFGO				
		EXTERNAL:	OUTTAB	OUTSTR	BALPAR	OUTCH	OUTGO
50.	INITKW	6B0A9681		000A	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	INITKW				
		EXTERNAL:	INSTAL				

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
51.	INMAP	66419230		0061	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	INMAP					
52.	INSTAL	75158C31		005A	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	INSTAL					
	EXTERNAL:	LENGTH	PUTLIN	REMARK	SCOPY		
53.	ITOC	96388FEA		0080	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	ITOC					
	EXTERNAL:	IABS%	MOD%				
54.	LABELC	672B9D6C		002E	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	LABELC					
	EXTERNAL:	LENGTH	SYNERR	OUTSTR	OUTTAB		
55.	LABGEN	6E209D53		0045	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	LABGEN					
56.	LENGTH	5F229146		0052	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	LENGTH					
57.	LEX	934A86D0		00EF	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	LEX					
	EXTERNAL:	GETTOK	ALLDIG	EQUAL			
58.	LOOKJP	5E109006		008E	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	LOOKUP					
	EXTERNAL:	SCOPY					
59.	NGETCH	6E209A2A		0061	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	NGETCH					
	EXTERNAL:	GETCH					
60.	OTHERC	5E189784		0016	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	OTHERC					
	EXTERNAL:	OUTTAB	OUTSTR	EATUP	OUTDON		
61.	OUTCH	683A8B68		0031	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	OUTCH					
	EXTERNAL:	OUTDON					
62.	OUTCON	610C8B80		001C	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	OUTCON					
	EXTERNAL:	OUTNUM	OUTTAB	OUTSTR	OUTDON		
63.	OUTDON	610C8B84		0017	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	OUTDON					
	EXTERNAL:	PUTLIN					
64.	OUTGO	613A8B83		0015	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	OUTGO					
	EXTERNAL:	OUTTAB	OUTSTR	OUTNUM	OUTDON		

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
65.	OUTMAP	6F0A8B3A		0058	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	OUTMAP					
66.	OUTNUM	580D8868		0029	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	OUTNUM					
	EXTERNAL:	ITOC	OUTCH				
67.	OUTSTR	5C088B1C		0070	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	OUTSTR					
	EXTERNAL:	OUTCH	OUTNUM				
68.	OUTTAB	6F188B79		0012	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	OUTTAB					
	EXTERNAL:	OUTCH					
69.	PARSE	6A4E8BAC		01D4	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	PARSE					
	EXTERNAL:	RATPRM	INITKW	LEX	IFCODE	DOCODE	
		WHILEC	FORCOD	REPCOD	LABELC	CDACOD	
		ELSEIF	SYNERR	ERROR	OTHERC	BRKNXT	
		PBSTR	UNSTAK				
70.	PBSTR	5D4D8C67		0024	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	PBSTR					
	EXTERNAL:	LENGTH	PUTBAK				
71.	PUTBAK	6E0F8B7F		001E	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	PUTBAK					
	EXTERNAL:	ERROR					
72.	PUTCH	673A8B38		0064	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	PUTCH					
	EXTERNAL:	Q8QINGOT	Q8QLGOT1	Q8QENGOT	OUTMAP		
73.	PUTLIN	660C8B6B		0028	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	PUTLIN					
	EXTERNAL:	PUTCH					
74.	PUTSRC	5D178AAF		00DD	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	PUTSRC					
	EXTERNAL:	Q8QINGOT	Q8QLGOT1	Q8QENGOT			
75.	RATPRM	5B218B05		008A	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	RATPRM					
	EXTERNAL:	QARG	ERROR	Q8QREWND			
76.	RELATE	592592A3		00F8	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	RELATE					
	EXTERNAL:	NGETCH	PUTBAK	SCOPY	LENGTH		
77.	REMARK	5B1F90C0		01DE	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	REMARK					

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
		EXTERNAL:	Q8QINGOT	Q8QLGOT1	Q8QENGOT		
78.	REPCOD	5E268F7E		001E	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	REPCOD				
		EXTERNAL:	OUTCON	LABGEN			
79.	SCOPY	534C9055		003A	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	SCOPY				
80.	SYNERR	5A04915E		003C	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	SYNERR				
		EXTERNAL:	REMARK	PUTSRC			
81.	TYPE	8B368F2D		006D	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	TYPE				
82.	UNSTAK	69168BDC		00AF	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	UNSTAK				
		EXTERNAL:	OUTCON	DOSTAT	WHILES	FORS	UNTILS
83.	UNTILS	5E0E8B29		0061	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	UNTILS				
		EXTERNAL:	OUTNUM	LEX	IFGO	OUTGO	OUTCON
84.	WHILEC	63249673		0020	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	WHILEC				
		EXTERNAL:	OUTCON	LABGEN	OUTNUM	IFGO	
85.	WHILES	6314967F		0014	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	WHILES				
		EXTERNAL:	OUTGO	OUTCON			

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
ABORT	????????	ED	EDI	ERROR	GETCH	RATFOR
		TDUMP				
ALLDIG	ALLDIG	LEX				
ALLOCATE	????????	ED	EDI			
AND%	????????	CHKTHRD	DMPDET	DMPEST	DMPFDT	DMPJCT
		DMPLKT	DMPQPT	DMPRET	DMPSGT	DMPTCT
		GETWRD	SYSDUMP			
BALPAR	BALPAR	IFGO				
BKSP	????????	COPYSCF				
BLKFSZE	????????	ED	EDI			
BRKNXT	BRKNXT	PARSE				
CDACOD	CDACOD	PARSE				
CHKTHRD	CHKTHRD	DMPJCT	DMPTCT			
CLOSE	????????	ED	EDI			
CLOWER	CLOWER	GETCH				
COPYCF	COPYCF					
COPYSCF	COPYSCF					
CTOIT	CTOIT	GETTOK				
DEFTOK	DEFTOK	GETTOK				
DMPBLK	DMPBLK	TDUMP				
DMPDET	DMPDET	SYSDUMP				
DMPEVT	DMPEVT	SYSDUMP				
DMPEST	DMPEST	SYSDUMP				
DMPFDT	DMPFDT	DMPLKT				
DMPJCT	DMPJCT	SYSDUMP				
DMPLKT	DMPLKT	DMPRET				
DMPPROG	DMPPROG	SYSDUMP				
DMPPAGE	DMPPAGE	SYSDUMP				

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
DMPQPT	DMPQPT	SYSDUMP				
DMPRET	DMPRET	DMPTCT				
DMPSTATE	DMPSTATE	SYSDUMP				
DMPSGT	DMPSGT	DMPFDT				
DMPTCT	DMPTCT	DMPJCT				
DOCODE	DOCODE	PARSE				
DOSTAT	DOSTAT	UNSTAK				
EATUP	EATUP	FORCOD	OTHERC			
ED	ED					
EDI	EDI					
ELSEIF	ELSEIF	PARSE				
ENABLE%	????????	COPYCF	COPYSCF	RATFOR	SYSDUMP	TDUMP
EQUAL	EQUAL	GETTOK	LEX			
ERROR	ERROR	GETDEF	GETTOK	PARSE	PUTBAK	RATPRM
EXPANDQ	????????	ED	EDI			
FDATE	????????	HEADER				
FORCOD	FORCOD	PARSE				
FORS	FORS	UNSTAK				
FTIME	????????	HEADER				
FTNULOC	????????	GETWRD	SYSDUMP			
GETCH	GETCH	NGETCH				
GETDEF	GETDEF	DEFTOK				
GETTOK	GETTOK	BALPAR LEX	CDACOD	DOCODE	EATUP	FORCOD
GETWRD	GETWRD	DMPDET DMPLKT DMPTCT	DMPEVT DMPPROG SHOWEST	DMPEST DMPQPT SYSDUMP	DMPFDT DMPRET	DMPJCT DMPSGT
GREPLY	GREPLY	SYSDUMP				

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
GTOK	GTOK	DEFTOK	GETDEF			
HEADER	HEADER	GETCH				
IABS%	????????	ITOC				
IAPAC	????????	COPYCF	COPYSCF			
IAPAW	????????	COPYSCF				
IESR	????????	COPYSCF	ERROR	GETCH	RATFOR	TDUMP
IFCODE	IFCODE	PARSE				
IFGO	IFGO	IFCODE	UNTILS	WHILEC		
IFUNIT	????????	COPYCF READBUF	COPYSCF SYSDUMP	GETCH	GETWRD	READBUF
INITKW	INITKW	PARSE				
INMAP	INMAP	GETCH				
INSTAL	INSTAL	DEFTOK	INITKW			
ISHFT%	????????	CHKTHRD DMPFDT DMPSGT	COPYCF DMPJCT DMPSTATE	COPYSCF DMPLKT DMPTCT	DMPDET DMPQPT GETCH	DMPEST DMPRET SYSDUMP
ITOC	ITOC	CDACOD	OUTNUM			
JCIJNUM	????????	ED	EDI			
JCIJSCRL	????????	ED	EDI			
JOBINFO	????????	ED	EDI			
LABELC	LABELC	PARSE				
LABGEN	LABGEN	DOCODE	FORCOD	IFCODE	REPCOD	WHILEC
LENGTH	LENGTH	FORCOD RELATE	FORS	INSTAL	LABELC	PBSTR
LEX	LEX	PARSE	UNTILS			
LOCF	????????	COPYSCF				
LOOKUP	LOOKUP	CDACOD	DEFTOK	GETTOK		
MAXO%	????????	TDUMP				
MINO%	????????	TDUMP				

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
MOD%	????????	ITOC				
NGETCH	NGETCH	GETDEF	GTOK	RELATE		
OPEN	????????	ED	EDI			
OTHERC	OTHERC	PARSE				
OUTCH	OUTCH	CDACOD OUTSTR	FORCOD OUTTAB	GTOK	IFGO	OUTNUM
OUTCON	OUTCON	OOSTAT UNSTAK	ELSEIF UNTILS	FORCOD WHILEC	FORS WHILES	REPCOD
OUTDON	OUTDON	CDACOD OTHERC	DOCODE OUTCH	FORCOD OUTCON	FORS OUTGO	GTOK RATFOR
OUTGO	OUTGO	BRKNXT UNTILS	ELSEIF WHILES	FORCOD	FORS	IFGO
OUTMAP	OUTMAP	PUTCH				
OUTNUM	OUTNUM	DOCODE OUTSTR	FORCOD UNTILS	FORS WHILEC	OUTCON	OUTGO
OUTSTR	OUTSTR	BALPAR FORS OUTGO	CDACOD IFGO RATFOR	DOCODE LABELC	EATUP OTHERC	FORCOD OUTCON
OUTTAB	OUTTAB	CDACOD LABELC	DOCODE OTHERC	FORCOD OUTCON	FORS OUTGO	IFGO RATFOR
PACKD	????????	ED	EDI			
PACK	????????	ED	EDI			
PACKC	????????	ED	EDI			
PARM	????????	ED ED EDI	ED ED EDI	ED EDI EDI	ED EDI EDI	ED EDI
PARSE	PARSE	RATFOR				
PBSTR	PBSTR	BALPAR PARSE	DEFTOK	DOCODE	EATUP	FORCOD
PICKD	????????	ED	EDI			
PICK	????????	ED	EDI			
PICKC	????????	ED	EDI			

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
PORT	????????	ED	EDI			
PUTBAK	PUTBAK	GTOK	PBSTR	RELATE		
PUTCH	PUTCH	PUTLIN				
PUTLIN	PUTLIN	INSTAL	OUTDON			
PUTSRC	PUTSRC	GETCH	SYNERR			
Q8QARRAY	????????	COPYCF	COPYSCF	DMPBLK	DMPJCT	DMPPROG
		DMPPAGE	DMPSTATE	DMPTCT	GREPLY	HEADER
		SYSDUMP				
Q8QBUFOT	????????	SYSDUMP				
Q8QBUFIN	????????	GETWRD	READBUF	READBUF	SYSDUMP	
Q8QENGIN	????????	COPYCF	COPYSCF	GETCH	GREPLY	
Q8QENGOT	????????	COPYCF	COPYSCF	DMPBLK	DMPDET	DMPEVT
		DMPEST	DMPFDT	DMPJCT	DMPLKT	DMPPROG
		DMPPAGE	DMPQPT	DMPRET	DMPSGT	DMPSTATE
		DMPTCT	GETCH	GETWRD	GREPLY	HEADER
		PUTCH	PUTSRC	READBUF	REMARK	SHOWEST
		SYSDUMP	TDUMP			
Q8QINDEC	????????	COPYCF	GREPLY			
Q8QINGIN	????????	COPYCF	COPYSCF	GETCH	GREPLY	
Q8QINGOT	????????	COPYCF	COPYSCF	DMPBLK	DMPDET	DMPEVT
		DMPEST	DMPFDT	DMPJCT	DMPLKT	DMPPROG
		DMPPAGE	DMPQPT	DMPRET	DMPSGT	DMPSTATE
		DMPTCT	GETCH	GETWRD	GREPLY	HEADER
		PUTCH	PUTSRC	READBUF	REMARK	SHOWEST
		SYSDUMP	TDUMP			
Q8QLGIN1	????????	COPYCF	COPYSCF	GETCH	GREPLY	
Q8QLGOT1	????????	COPYCF	COPYSCF	DMPBLK	DMPDET	DMPEVT
		DMPEST	DMPFDT	DMPJCT	DMPLKT	DMPPROG
		DMPPAGE	DMPQPT	DMPRET	DMPSGT	DMPSTATE
		DMPTCT	GETCH	GETWRD	HEADER	PUTCH
		PUTSRC	READBUF	REMARK	SHOWEST	SYSDUMP
		TDUMP				
Q8QREWND	????????	ERROR	GETTOK	RATFOR	RATPRM	SYSDUMP
		TDUMP				
Q8QSTOP	????????	COPYCF	DMPBLK	GETWRD	RATFOR	SYSDUMP
Q8QG	????????	RATPRM	TDUMP			

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
RATFOR	RATFOR					
RATPRM	RATPRM	PARSE				
READLU	????????	COPYSCF	ED	EDI		
READBUF	READBUF	DMPSTATE	SYSDUMP	TDUMP		
READBUF	READBUF	DUPLICATE ENTRYPOINT				
RELATE	RELATE	GTOK				
RELEASE	????????	ED	EDI			
REMARK	REMARK	ERROR SYNERR	GETDEF	GETTOK	INSTAL	RATFOR
REPCOD	REPCOD	PARSE				
ROUTEQ	????????	ED	EDI			
SAVEQ	????????	ED	EDI			
SCOPY	SCOPY	FORCOD	INSTAL	LOOKUP	RELATE	
SELECT	????????	ED	EDI			
SOF	????????	COPYSCF	TDUMP			
SHOWEST	SHOWEST	DMPRET				
SYNERR	SYNERR	BALPAR FORCOD	BRKNXT GETTOK	CDACOD GTOK	DOCODE LABELC	EATUP PARSE
SYSDUMP	SYSDUMP					
TDUMP	TDUMP					
TYPE	TYPE	ALLDIG	GETCH	GETTOK	GTOK	
ULOC	????????	ED	EDI			
UNSTAK	UNSTAK	PARSE				
UNTILS	UNTILS	UNSTAK				
UST	????????	COPYSCF	ED	EDI	TDUMP	
UTYP	????????	COPYSCF	ED	EDI		
WHILEC	WHILEC	PARSE				
WHILES	WHILES	UNSTAK				

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT
WRITLU	????????	ED
		EDI

```
ITEMIZE  COMPLETE.
   *OPEN(10,MAS.PL,MSTB,ZZ,     ,R)
   *XREFUP(P=10)
```

CDC MP6D XREFUP V1.00 TODAY: 09/18/84 15:36:37

OLDPL VERSION: 2
MASTER CHARACTER: /
OLDPL PRODUCED: 08/23/84
                 15:37:39

OLDPL AUDIT:		TOTAL	YANKED	ACTIVE	RUNNING
DECK	YANK$$$	1	0	1	1
DECK	MASS	284	0	284	285
DECK	BLGO32	33	0	33	318
DECK	CODE32	516	0	516	834
DECK	CONHEX	17	0	17	851
DECK	CREAD32	90	0	90	941
DECK	CROSS32	97	0	97	1038
DECK	DEAD32	226	0	226	1264
DECK	EVAL32	47	0	47	1311
DECK	EVALU8	119	0	119	1430
DECK	INIT32	43	0	43	1473
DECK	LIST32	209	0	209	1682
DECK	MAP32	131	0	131	1813
DECK	PSEUDO32	383	0	383	2196
DECK	RCROSS32	69	0	69	2265
DECK	TABLES32	188	0	188	2453
DECK	VALUE32	66	0	66	2519
COMDECK	HISTORY	19	0	19	2538

DECKS MODIFIED BY A GIVEN IDENT:

IDENT	LINES	DECKS OR COMDECKS MODIFIED
LEV-AC	3	HISTORY

IDENTS THAT MODIFY A GIVEN DECK:

DECK	LINES	IDENT(S) THAT MODIFY THE DECK
YANK$$$	1	
MASS	284	
BLGO32	33	
CODE32	516	
CONHEX	17	
CREAD32	90	
CROSS32	97	
DEAD32	226	
EVAL32	47	
EVALU8	119	
INIT32	43	
LIST32	209	
MAP32	131	
PSEUDO32	383	
RCROSS32	69	
TABLES32	188	
VALUE32	66	
HISTORY	16	LEV-AC

DECKS THAT CALL A GIVEN COMMON DECK:

COMDECK	DECKS CALLING THE COMMON DECK

COMMON DECKS CALLED BY A GIVEN DECK OR COMDECK:

DECK COMMON DECKS CALLED BY THE DECK

ALL IDENTS:

NULL DECKS:

COMMON DECKS NOT CALLED:

HISTORY

```
XREFUP FINISHED.
  *CLOSE(10)
  *LISTF
```

```
*JOB(ID=MASS.BLD)
*SCHED(CM=12,TL=99999,PL=60000,SCR=100)
#
#  This job builds the MASS Microcode Assembler.
#
*OPEN(10,MAS.PL,MSTB,ZZ,MSTB,R)
*UPDATE(C,P=10,Q,*=/)
/COMPILE MASS
/FINIS
*REWIND(56)
*CMP(I=56,X,C,L)
*REWIND(56)
*UPDATE(C,P=10,Q,*=/)
/C BLGO32
/C CODE32
/C CONHEX
/C CREAD32
/C CROSS32
/C DEAD32
/C EVAL32
/C EVALU8
/C INIT32
/C LIST32
/C MAP32
/C PSEUDO32
/C RCROSS32
/C TABLES32
/C VALUE32
/FINIS
*REWIND(56)
*FTN(I=56,X,L,R)
*SAVEPF(57,MST-MASS.REL,LBLD,01,LBLD)
*SAVEPF(62,MASS.LST,MSTL,01,MSTL)
*EOJ
```

```
*JOB(ID=MST-MASS.BLD)
*SCHED(CM=8,TL=99999,PL=1000,SCR=100)
*OPEN(1,MST-MASS.REL,LBLD,01,LBLD,R)
*OPEN(2,FTN-RUNTM.REL,LBLD,01,LBLD,R)
*OPEN(3,SYS-TSKMON.REL,LBLD,01,LBLD,R)
*OPEN(4,SYS-BKDBK.REL,LBLD,01,LBLD,R)
*RELEASE(MST-MASS.ABS,LBLD,01,LBLD)
*ALLOCATE(MST-MASS.ABS,LBLD,01,LBLD,480,100)
*OPEN(10,MST-MASS.ABS,LBLD,01,LBLD,W)
*MAP
*LOAD(1,2,3,4)
*ABS(10)
*CLOSE(10)
*RELEASE(MST-MASS.ABS,LBLD,01,LBLD,R)
*SAVEPF(62,MST-MASS.LST,LBLL,01,LBLL)
*EOJ
```

STOP*ENDST*
*ITEMIZE

PROCESSING: MST-MASS.REL,LBLD,01,LBLD

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME	
1.	MASS	924E8C12		007A	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	IFL	IPCHR	MASS				
	EXTERNAL:	INIT32 PARM PARM	CODE32 DATE	LIST32 PARM	CREAD32 TIME	PSEUDO32 OPENMEM		
2.	BLGO32	8A31983E		0052	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	BLGO32						
	EXTERNAL:	Q8QINGOT	Q8QARRAY	Q8QLGOT1	Q8QENGOT	Q8QENFIL		
3.	CODE32	892E9390		080A	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	CODE32						
	EXTERNAL:	LIST32	VALUE	IPCHR	ISHFT%			
4.	CONHEX	7708916A		002D	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	CONHEX						
	EXTERNAL:	ISHFT%						
5.	CREAD32	782A876F		012F	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	CREAD32						
	EXTERNAL:	IFUNIT	Q8QINGIN	Q8QLGIN1	Q8QENGIN	Q8QINGOT		
		Q8QLGOT1	Q8QENGOT	IPCHR	Q8QREWND	Q8QSTOP		
6.	CROSS32	692A7D26		0166	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	CROSS32						
	EXTERNAL:	RCROSS32	Q8QINGOT	Q8QARRAY	Q8QLGOT1	Q8QENGOT		
		ISHFT%						
7.	DEAD32	88389A83		0418	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	DEAD32						
	EXTERNAL:	Q8QINGOT	Q8QLGOT1	Q8QARRAY	Q8QENGOT	CONHEX		
		MIN0%	Q8QINENC	Q8QENFIL				
8.	EVAL	9A399E2B		0068	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	EVAL						
9.	EVALU8	6521907C		0117	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	EVALU8						
	EXTERNAL:	LIST32	Q8QINGOT	Q8QARRAY	Q8QLGOT1	Q8QENGOT		
		VALUE						
10.	INIT32	832F9650		003B	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	INIT32						
	EXTERNAL:	IFUNIT	Q8QREWND	LIST32				
11.	LIST32	80348937		0354	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	LIST32						

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
		EXTERNAL:	Q8QINGOT	Q8QENGOT	Q8QLGOT1	Q8QARRAY	ISHFT%
12.	MAP32	804E8CDC		02D0	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	MAP32				
		EXTERNAL:	Q8QINGOT	Q8QARRAY	Q8QLGOT1	Q8QENGOT	
13.	PSEUDO32	68008280		04C8	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	PSEUDO32				
		EXTERNAL:	TABLE32	EVAL	LIST32	ISHFT%	IPCHR
			XOR%	NOT%	BLGO32	DEAD32	MAP32
			CROSS32	INIT32	Q8QSTOP	VALUE	CREAD32
			EVALU8				
14.	RCROSS32	5A1979E1		009D	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	RCROSS32	WCROSS			
		EXTERNAL:	IFUNIT	Q8QINBOT	Q8QLBOT1	Q8QENBOT	Q8QREWND
			IFL	Q8QINBIN	Q8QLBIN1	Q8QENBIN	Q8QSTOP
15.	TABLE32	663889FF		0194	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	TABLE32				
		EXTERNAL:	LIST32	ISHFT%	WCROSS		
16.	VALUE	644E92E6		00A4	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	VALUE				
		EXTERNAL:	IPCHR	TABLE32	EVAL		

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
BLGO32	BLGO32	PSEUDO32				
CODE32	CODE32	MASS				
CONHEX	CONHEX	DEAD32				
CREAD32	CREAD32	MASS	PSEUDO32			
CROSS32	CROSS32	PSEUDO32				
DATE	????????	MASS				
DEAD32	DEAD32	PSEUDO32				
EVAL	EVAL	PSEUDO32	VALUE			
EVALU8	EVALU8	PSEUDO32				
IFL	MASS	RCROSS32				
IFUNIT	????????	CREAD32	INIT32	RCROSS32		
INIT32	INIT32	MASS	PSEUDO32			
IPCHR	MASS	CODE32	CREAD32	PSEUDO32	VALUE	
ISHFT%	????????	CODE32	CONHEX	CROSS32	LIST32	PSEUDO32
		TABLE32				
LIST32	LIST32	CODE32	EVALU8	INIT32	MASS	PSEUDO32
		TABLE32				
MAP32	MAP32	PSEUDO32				
MASS	MASS					
MINO%	????????	DEAD32				
NOT%	????????	PSEUDO32				
OPENMEM	????????	MASS				
PARM	????????	MASS	MASS	MASS		
PSEUDO32	PSEUDO32	MASS				
Q8QARRAY	????????	BLGO32	CROSS32	DEAD32	EVALU8	LIST32
		MAP32				
Q8QENGOT	????????	BLGO32	CREAD32	CROSS32	DEAD32	EVALU8
		LIST32	MAP32			

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT
Q8QENFIL	????????	BLGO32 DEAD32
Q8QENGIN	????????	CREAD32
Q8QENBOT	????????	RCROSS32
Q8QENBIN	????????	RCROSS32
Q8QINGOT	????????	BLGO32 CREAD32 CROSS32 DEAD32 EVALU8 LIST32 MAP32
Q8QINGIN	????????	CREAD32
Q8QINENC	????????	DEAD32
Q8QINBOT	????????	RCROSS32
Q8QINBIN	????????	RCROSS32
Q8QLGOT1	????????	BLGO32 CREAD32 CROSS32 DEAD32 EVALU8 LIST32 MAP32
Q8QLGIN1	????????	CREAD32
Q8QLBOT1	????????	RCROSS32
Q8QLBIN1	????????	RCROSS32
Q8QREWND	????????	CREAD32 INIT32 RCROSS32
Q8QSTOP	????????	CREAD32 PSEUDO32 RCROSS32
RCROSS32	RCROSS32	CROSS32
TABLE32	TABLE32	PSEUDO32 VALUE
TIME	????????	MASS
VALUE	VALUE	CODE32 EVALU8 PSEUDO32
WCROSS	RCROSS32	TABLE32
XOR%	????????	PSEUDO32

```
ITEMIZE  COMPLETE.
   *SAVEPF(62,BLD-PLAN.LST,MSTL,01,     )
   *EOJ    BLD-PLAN
```

M P - 3 2 P R O D U C T S E T

Z 8 0

These are the Z80 cross products. They are used to generate the various download modules for MPCLA execution. They were obtained from MICROTEC in Sunnyvale and were inplemented on the MP-32 by G. Fariss. MICROTEC no longer supports this version of the assembler and loader.

Z800/Z80B owner last dumped on ______

File Name	Description	Last Build
z80.pl,z800,__,z800	PSRed PL	------
z80-pl-sps.bld,z800,01,z800	Build next PSR Level PL	
z80-pl-sps.lst,z801,01,z801	Listing of above .bld job	
z80.pl,z800,__,z800	Next PSR Level PL	*1
z80-pl-loc.bld,z800,01,z800	Build PL with Local Mods	
z80-pl-loc.lst,z801,01,z801	Listing of above .bld job	
z80.pl,z80b,ZZ,z80b	Local (working) PL	------
z80asm.bld,z80b,01,z80b	Build Z80ASM	
z80asm.lst,z801,01,z801	Listing of above .bld job	
z80-z80asm.rel,lbld,01,lbld		------
z80-z80asm.bld,lbld,01,lbld	Build Abs Z80ASM	
z80-z80asm.lst,lbll,01,lbll	Listing of above .bld job	
z80-z80asm.abs,lbld,01,lbld		------
z80ldr.bld,z80b,01,z80b	Build Z80LDR	
z80ldr.lst,z801,01,z801	Listing of above .bld job	
z80-z80ldr.rel,lbld,01,lbld		------
z80-z80ldr.bld,lbld,01,lbld	Build Abs Z80LDR	
z80-z80ldr.lst,lbll,01,lbll	Listing of above .bld job	
z80-z80ldr.abs,lbld,01,lbld		------
bld-plan.txt,z80b,01,z80b	Contains this text	
bld-plan.run,z80b,01,z80b	Produce Product Build Doc	

Integration Instructions for next release:
 1. None. Complete.

NOTES:
 *1 This is a temporary Oldpl. It is build by z80-pl-sps.bld and then, when all is well, the first Oldpl is released and the second Oldpl becomes the base Oldpl. The z80-pl-sps.bld job is then modified to use the new PSR Level as a base and produce the next PSR Level.

 Normally, the temporary Oldpl does not appear on Release Tapes.

```
   STOP*ENDST*
*OPEN(10,Z80.PL,Z80B,ZZ,      ,R)
*XREFUP(P=10)
```

CDC MP60 XREFUP V1.00 TODAY: 09/18/84 15:54:10

OLDPL VERSION: 2
MASTER CHARACTER: /
OLDPL PRODUCED: 08/23/84
16:23:17

OLDPL AUDIT:		TOTAL	YANKED	ACTIVE	RUNNING
DECK	YANK$$$	1	0	1	1
COMDECK	HISTORY	16	0	16	17
DECK	LHIST	2	0	2	19
COMDECK	Z80ADSC	165	0	165	184
COMDECK	Z80ACMN	28	0	26	210
COMDECK	Z80LDSC	115	0	115	325
COMDECK	Z80LCMN	29	0	29	354
DECK	QARG	144	0	144	498
DECK	Z80CASM	246	0	41	539
DECK	Z80AINIT	343	0	308	847
DECK	Z80AIO	200	0	152	999
DECK	Z80AP1	528	0	503	1502
DECK	Z80AP2	364	0	339	1841
DECK	Z80ACD	480	0	456	2297
DECK	Z80AOPRD	187	0	164	2461
DECK	Z80AOPCD	367	0	343	2804
DECK	Z80ALBL	115	0	92	2896
DECK	Z80ASYM	107	0	84	2980
DECK	Z80ASCN	490	0	467	3447
DECK	Z80ACST	137	0	114	3561
DECK	Z80AMCD	184	0	160	3721
DECK	Z80AMCR	108	0	84	3805
DECK	Z80ALOT	137	0	105	3910
DECK	Z80AOUT	323	0	300	4210
DECK	Z80AROT	104	0	81	4291
DECK	Z80ASYT	189	0	164	4455
DECK	Z80AXRF	85	0	61	4516
DECK	Z80AVHX	54	0	31	4547
DECK	Z80AAHX	64	0	41	4588
DECK	Z80ATST	526	0	526	5114
DECK	Z80LINK	618	0	610	5724
DECK	Z80LINT	160	0	156	5880
DECK	Z80LIO	141	0	125	6005
DECK	Z80LOBJ	540	0	538	6543
DECK	Z80LLBL	81	0	81	6624
DECK	Z80LSYM	112	0	111	6735
DECK	Z80LSCN	75	0	75	6810
DECK	Z80LNMS	87	0	86	6896
DECK	Z80LCIN	93	0	93	6989
DECK	Z80LOUT	177	0	177	7166
DECK	Z80LHIN	54	0	54	7220
DECK	Z80LVHX	46	0	46	7266
DECK	Z80LAHX	56	0	56	7322
DECK	Z80LEQU	118	0	17	7339
DECK	Z80LERR	144	0	144	7483
DECK	Z80LTST	70	0	70	7553

CKS MODIFIED BY A GIVEN IDENT:

IDENT	LINES	DECKS OR COMDECKS MODIFIED
AINSTALL	261	Z80ACMN Z80CASM Z80AINIT Z80AIO Z80AMCR Z80ALOT Z80ASYT

ACOMMON	671	Z80CASM	Z80AINIT	Z80AIO	Z80AP1	Z80AP2
		Z80ACD	Z80AOPRD	Z80AOPCD	Z80ALBL	Z80ASYM
		Z80ASCN	Z80ACST	Z80AMCD	Z80AMCR	Z80ALOT
		Z80AOUT	Z80AROT	Z80ASYT	Z80AXRF	Z80AVHX
		Z80AAHX				
A7805251	2	Z80AP2				
A7805252	4	Z80AP2				
A7805253	10	Z80ALOT				
A7805254	2	Z80ACD				
A7806271	2	Z80ACD				
A7807311	4	Z80AP1				
A7807312	4	Z80ALOT				
A7807313	2	Z80AXRF				
A7807314	1	Z80ACD				
A7905081	1	Z80ASCN				
A8011202	2	Z80AMCD				
A8011203	3	Z80AOUT				
A8107011	1	Z80ACD				
AENHANC1	2	Z80AOPCD				
LINSTALL	196	Z80LINK	Z80LINT	Z80LIO	Z80LEQU	
L7805251	1	Z80LINK				
L7806201	2	Z80LOBJ				
L7806202	2	Z80LOBJ				
L7806203	7	Z80LSYM				
L7807311	1	Z80LNMS				
L8011202	1	Z80LLBL				
LEV-AA	5	HISTORY				
LEV-AB	3	HISTORY				
LEV-AC	3	HISTORY				

IDENTS THAT MODIFY A GIVEN DECK:

DECK	LINES	IDENT(S) THAT MODIFY THE DECK				
YANK$$$	1					
HISTORY	5	LEV-AC	LEV-AB	LEV-AA		
LHIST	2					
Z80ADSC	165					
Z80ACMN	26	AINSTALL				
Z80LDSC	115					
Z80LCMN	29					
QARG	144					
Z80CASM	239	AINSTALL	ACOMMON			
Z80AINIT	243	AINSTALL	ACOMMON			
Z80AIO	112	AINSTALL	ACOMMON			
Z80AP1	524	ACOMMON	A7807311			
Z80AP2	359	ACOMMON	A7805252	A7805251		
Z80ACD	473	ACOMMON	A7806271	A7805254	A8107011	A7807314
Z80AOPRD	186	ACOMMON				
Z80AOPCD	365	ACOMMON	AENHANC1			
Z80ALBL	114	ACOMMON				
Z80ASYM	106	ACOMMON				
Z80ASCN	488	ACOMMON	A7905081			
Z80ACST	136	ACOMMON				
Z80AMCD	182	ACOMMON	A8011202			
Z80AMCR	105	ACOMMON	AINSTALL			
Z80ALOT	127	ACOMMON	A7807312	A7805253	AINSTALL	
Z80AOUT	319	ACOMMON	A8011203			
Z80AROT	103	ACOMMON				
Z80ASYT	186	ACOMMON	AINSTALL			
Z80AXRF	83	ACOMMON	A7807313			
Z80AVHX	53	ACOMMON				

Z80AAHX	63	ACOMMON
Z80ATST	526	
Z80LINK	596	LINSTALL L7805251
Z80LINT	125	LINSTALL
Z80LIO	135	LINSTALL
Z80LOBJ	538	L7806202 L7806201
Z80LLBL	80	L8011202
Z80LSYM	106	L7806203
Z80LSCN	75	
Z80LNMS	87	L7807311
Z80LCIN	93	
Z80LOUT	177	
Z80LHIN	54	
Z80LVHX	46	
Z80LAHX	56	
Z80LEQU	113	LINSTALL
Z80LERR	144	
Z80LTST	70	

DECKS THAT CALL A GIVEN COMMON DECK:

COMDECK	DECKS CALLING THE COMMON DECK				
HISTORY	LHIST				
Z80ADSC	Z80CASM				
Z80ACMN	Z80CASM	Z80AINIT	Z80AIO	Z80AP1	Z80AP2
	Z80ACD	Z80AOPRD	Z80AOPCD	Z80ALBL	Z80ASYM
	Z80ASCN	Z80ACST	Z80AMCD	Z80AMCR	Z80ALOT
	Z80AOUT	Z80AROT	Z80ASYT	Z80AXRF	Z80AVHX
	Z80AAHX				

MMON DECKS CALLED BY A GIVEN DECK OR COMDECK:

DECK	COMMON DECKS CALLED BY THE DECK	
LHIST	HISTORY	
Z80CASM	Z80ADSC	Z80ACMN
Z80AINIT	Z80ACMN	
Z80AIO	Z80ACMN	
Z80AP1	Z80ACMN	
Z80AP2	Z80ACMN	
Z80ACD	Z80ACMN	
Z80AOPRD	Z80ACMN	
Z80AOPCD	Z80ACMN	
Z80ALBL	Z80ACMN	
Z80ASYM	Z80ACMN	
Z80ASCN	Z80ACMN	
Z80ACST	Z80ACMN	
Z80AMCD	Z80ACMN	
Z80AMCR	Z80ACMN	
Z80ALOT	Z80ACMN	
Z80AOUT	Z80ACMN	
Z80AROT	Z80ACMN	
Z80ASYT	Z80ACMN	
Z80AXRF	Z80ACMN	
Z80AVHX	Z80ACMN	
Z80AAHX	Z80ACMN	

NULL IDENTS:

NULL DECKS:

COMMON DECKS NOT CALLED:

Z8OLDSC Z8OLCMN

```
XREFUP FINISHED.
  *CLOSE(10)
  *LISTF
```

```
*JOB(ID=Z80-PL-SPS.BLD)
*SCHED(CM=9,PL=65000,TL=99999,SCR=100)
#
#  This job builds a higher PSR Level release Oldpl from one of
#  a given level and the appropriate PSR code.
#
#  PSR code is obtained from the Systems Technology Division
#  (of CDC) PSR Summaries.
#
*OPEN(1,Z80.PL,Z800,AB,Z800,R)
*UPDATE(F,P=1,N=11,O=A24,*=/)
/IDENT LEV-AC
/INSERT HISTORY.3
LEV-AC              23 AUG 84                Fariss, G. B.
      THIS POINT DIVIDES LEVEL AC FROM HIGHER LEVELS.

/FINIS
*SAVEPF(11,Z80.PL,Z800,AC,Z800)
*SAVEPF(62,Z80-PL-SPS.LST,Z80L,01,Z80L)
*EOJ
```

```
*JOB(ID=Z80-PL-LOC.BLD)
*SCHED(CM=9,PL=65000,TL=99999,SCR=100)
#
#  This job adds local-site modifications to the standard Oldpl
#  and builds the final Oldpl (always edition ZZ).
#
*OPEN(1,Z80.PL,Z800,AC,Z800,R)
*UPDATE(F,P=1,N=11,O=A24,*=/)
/FINIS
*SAVEPF(11,Z80.PL,Z80B,ZZ,Z80B)
*SAVEPF(62,Z80-PL-LOC.LST,Z80L,01,Z80L)
*EOJ
```

```
*JOB(ID=Z80ASM.BLD)
*SCHED(CM=13,PL=100000,SCR=200,TL=99999)
#
#  This job builds the MICROTEC Z80 Cross Assembler.
#
*OPEN(1,Z80.PL,Z80B,ZZ,Z80B,R)
*UPDATE(*=/,P=1,C,Q)
/COMPILE Z80CASM.Z80AAHX          DISABLE FOR PARTIAL COMPILE
/FINIS
*FTN(I=56,X=2,L,R)
*SAVEPF(2,Z80-Z80ASM.REL,LBLD,01,LBLD)
*SAVEPF(62,Z80ASM.LST,Z80L,01,Z80L)
*EOJ
```

```
*job(id=z80-z80asm.bld)
*sched(cm=10)
#
#  THIS JOB RE-BUILDS  Z80-Z80ASM.ABS,LBLD  FROM  Z80-Z80ASM.REL,LBLD.
#
#  !!!!WARNING!!!!   FTN-RUNTM.REL  AND  FTN-SPCL.REL  ROUTINES ARE
#                    OBTAINED FROM THE LIBRARY.  IF THESE ROUTINES
#                    CHANGE DURING A NEW LIBRARY BUILD, RUN THIS JOB
#                    USING THE NEW LIBRARY AND BUILD YET ANOTHER NEW
#                    LIBRARY TO INCLUDE THE NEWEST ROUTINES.
#
*open(1,z80-z80asm.rel,ibid,01,ibid,r)
*release(z80-z80asm.abs,ibid,01,ibid,0)
*allocate(z80-z80asm.abs,ibid,01,ibid,480,100)
*open(2,z80-z80asm.abs,ibid,01,ibid)
*map
*load(1)
*abs(2)
*close(2)
*release(z80-z80asm.abs,ibid,01,ibid,r)
*savepf(62,z80-z80asm.lst,ibil,01,ibil)
*eoj
```

```
*JOB(ID=Z80LDR.BLD)
*SCHED(CM=11,PL=10000,SCR=200,TL=99999)
#
#  This Job builds the MICROTEC Z80 Cross Loader.
#
*OPEN(1,Z80.PL,Z80B,ZZ,Z80B,R)
*UPDATE(*=/,P=1,C,Q)
/COMPILE Z80LINK.Z80LERR
/FINIS
*FTN(I=56,X=2,L,R)
*SAVEPF(2,Z80-Z80LDR.REL,LBLD,01,LBLD)
*SAVEPF(62,Z80LDR.LST,Z80L,01,Z80L)
*EOJ
```

```
*job(id=z80-z80ldr.bld)
*sched(cm=10)
#
#  THIS JOB RE-BUILDS  Z80-Z80LDR.ABS,LBLD  FROM  Z80-Z80LDR.REL,LBLD.
#
#  !!!!WARNING!!!!   FTN-RUNTM.REL  AND  FTN-SPCL.REL  ROUTINES ARE
#                    OBTAINED FROM THE LIBRARY.  IF THESE ROUTINES
#                    CHANGE DURING A NEW LIBRARY BUILD, RUN THIS JOB
#                    USING THE NEW LIBRARY AND BUILD YET ANOTHER NEW
#                    LIBRARY TO INCLUDE THE NEWEST ROUTINES.
#
*open(1,z80-z80ldr.rel,lbld,01,lbld,r)
*release(z80-z80ldr.abs,lbld,01,lbld,0)
*allocate(z80-z80ldr.abs,lbld,01,lbld,480,100)
*open(2,z80-z80ldr.abs,lbld,01,lbld)
*map
*load(1)
*abs(2)
*close(2)
*release(z80-z80ldr.abs,lbld,01,lbld,r)
*savepf(62,z80-z80ldr.lst,lbll,01,lbll)
*eoj
```

STOP*ENDST*
*ITEMIZE

ITEMIZE 09/18/84 15:54:25

PROCESSING: Z80-Z80ASM.REL,LBLD

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
1.	Z80CASM	64248218		0084	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	Z80CASM				
		EXTERNAL:	ENABLE%	INIT	PASS1	Q8QREWND	PASS2
			Q8QINGOT	Q8QLGOT1	Q8QENGOT	Q8QARRAY	SYMTA
			LUOPS				
2.	INIT	96419444		0247	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	INIT				
		EXTERNAL:	QARG	Q8QREWND	IESR	UTYP	LUOPS
			IEI%	LABEL			
3.	LUOPS	603A8FD2		008D	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	LUOPS				
		EXTERNAL:	LOCF	ISHFT%	IESR	ALLOCATE	Q8QSTOP
			OPEN	FCLOSE	IAPAW	RELEASE	CLOSE
4.	INOUT	62418EE1		01A9	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	INOUT				
		EXTERNAL:	Q8QINGIN	Q8QARRAY	Q8QLGIN1	Q8QENGIN	IFUNIT
			Q8QINGOT	Q8QLGOT1	Q8QENGOT	Q8QSTOP	IESR
			ULOC	Q8QBUFIN	Q8QBUFOT		
5.	PASS1	7E4E869D		05EF	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	PASS1				
		EXTERNAL:	INOUT	MCREF	LABEL	OPCOD	SCAN
			MCDEF	CONST	SYMBL	CODEZ	
6.	PASS2	7D4E88D6		03B6	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	PASS2				
		EXTERNAL:	INOUT	XREFT	SCAN	LOUT	OUT
			CONST	CODEZ			
7.	CODEZ	624096CD		04CD	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	CODEZ				
		EXTERNAL:	OPRND				
8.	OPRND	6C3F88FD		0194	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	OPRND				
		EXTERNAL:	SYMBL	SCAN			
9.	OPCOD	6C3F9946		034A	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	OPCOD				
		EXTERNAL:	SYMBL				
10.	LABEL	674E9D0B		008F	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	LABEL				
		EXTERNAL:	SYMBL	XREFT			

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
11.	SYMBL	603691E1		008C	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	SYMBL					
12.	SCAN	8C4C998E		0503	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	SCAN					
	EXTERNAL:	CONST	LABEL	IEI%	RER%		
13.	CONST	68409079		0113	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	CONST					
14.	MCDEF	6C4C99DA		01C0	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	MCDEF					
	EXTERNAL:	INOUT	OPCOD				
15.	MCREF	6C4C8CE0		008A	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	MCREF					
	EXTERNAL:	INOUT					
16.	LOUT	9340892C		015F	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	LOUT					
	EXTERNAL:	VHEX	Q8QINGOT	Q8QARRAY	Q8QLGOT1	Q8QENGOT	
		AHEX					
17.	OUT	903A8886		0309	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	OUT					
	EXTERNAL:	ROUT					
18.	ROUT	8D40898F		00CC	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	ROUT					
	EXTERNAL:	VHEX	INOUT				
19.	SYMTA	6836901E		026D	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	SYMTA					
	EXTERNAL:	Q8QINGOT	Q8QLGOT1	Q8QENGOT	AHEX	XREFT	
		INOUT					
20.	XREFT	533D9A18		0081	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	XREFT					
	EXTERNAL:	INOUT					
21.	VHEX	89479A64		0023	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	VHEX					
22.	AHEX	9E479A48		003C	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	AHEX					

ITEMIZE 09/18/84 15:54:26

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
AHEX	AHEX	LOUT	SYMTA			
ALLOCATE	????????	LUOPS				
CLOSE	????????	LUOPS				
CODEZ	CODEZ	PASS1	PASS2			
CONST	CONST	PASS1	PASS2	SCAN		
ENABLE%	????????	Z80CASM				
FCLOSE	????????	LUOPS				
IAPAW	????????	LUOPS				
IEI%	????????	INIT	SCAN			
IESR	????????	INIT	INOUT	LUOPS		
IFUNIT	????????	INOUT				
INIT	INIT	Z80CASM				
INOUT	INOUT	MCDEF SYMTA	MCREF XREFT	PASS1	PASS2	ROUT
ISHFT%	????????	LUOPS				
LABEL	LABEL	INIT	PASS1	SCAN		
LOCF	????????	LUOPS				
LOUT	LOUT	PASS2				
LUOPS	LUOPS	INIT	Z80CASM			
MCDEF	MCDEF	PASS1				
MCREF	MCREF	PASS1				
OPCOD	OPCOD	MCDEF	PASS1			
OPEN	????????	LUOPS				
OPRND	OPRND	CODEZ				
OUT	OUT	PASS2				
PASS1	PASS1	Z80CASM				
PASS2	PASS2	Z80CASM				

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT			
Q8QARRAY	????????	INOUT	LOUT	Z80CASM	
Q8QBUFIN	????????	INOUT			
Q8QBUFOT	????????	INOUT			
Q8QENGOT	????????	INOUT	LOUT	SYMTA	Z80CASM
Q8QENGIN	????????	INOUT			
Q8QINGOT	????????	INOUT	LOUT	SYMTA	Z80CASM
Q8QINGIN	????????	INOUT			
Q8QLGOTI	????????	INOUT	LOUT	SYMTA	Z80CASM
Q8QLGINI	????????	INOUT			
Q8QREWND	????????	INIT	Z80CASM		
Q8QSTOP	????????	INOUT	LUOPS		
QARG	????????	INIT			
RELEASE	????????	LUOPS			
RER%	????????	SCAN			
ROUT	ROUT	OUT			
SCAN	SCAN	OPRND	PASS1	PASS2	
SYMBL	SYMBL	LABEL	OPCOD	OPRND	PASS1
SYMTA	SYMTA	Z80CASM			
ULOC	????????	INOUT			
UTYP	????????	INIT			
VHEX	VHEX	LOUT	ROUT		
XREFT	XREFT	LABEL	PASS2	SYMTA	
Z80CASM	Z80CASM				

ITEMIZE COMPLETE.
*ITEMIZE

ITEMIZE 09/18/84 15:54:29

PROCESSING: Z80-Z80LDR.REL,LBLD

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME	
1.	Z80LINK	5C297E69		062A	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	Z80LINK						
	EXTERNAL:	ENABLE%	INIT	Q8QINGOT	Q8QENGOT	INOUT		
		COMIN	SYMBL	SCAN	LABEL	EQUAT		
		OBJ	ERROR	NAMES	AHEX	Q8QLGOT1		
		Q8QREWND	CLREL					
2.	CLREL	70438050		004A	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	CLREL						
	EXTERNAL:	FCLOSE	IAPAW	LOCF	IESR	RELEASE		
		Q8QSTOP						
3.	INIT	96419558		0133	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	INIT						
	EXTERNAL:	QARG	Q8QREWND	IESR	UTYP	IEI%		
4.	INOUT	62418FC5		00C5	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	INOUT						
	EXTERNAL:	Q8QINGIN	Q8QARRAY	Q8QLGIN1	Q8QENGIN	IFUNIT		
		Q8QINGOT	Q8QLGOT1	Q8QENGOT				
5.	OBJ	904D8F84		063B	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	OBJ						
	EXTERNAL:	INOUT	HEXIN	SYMBL	OUT	LABEL		
		ERROR	NAMES					
6.	LABEL	674E9D35		0065	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	LABEL						
	EXTERNAL:	SYMBL						
7.	SYMBL	603691B2		00EB	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	SYMBL						
8.	SCAN	8C4C9E11		0080	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	SCAN						
9.	NAMES	5E4E920E		008C	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	NAMES						
	EXTERNAL:	AHEX						
10.	COMIN	6E4091D9		008D	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	COMIN						
11.	OUT	903A8A51		016E	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	OUT						
	EXTERNAL:	VHEX	INOUT	NAMES				

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
12.	HEXIN	694A8764		0032	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	HEXIN					
13.	VHEX	39479A64		0023	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	VHEX					
14.	AHEX	9E479A4A		003D	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	AHEX					
15.	EQUAT	663E8A98		0006	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	EQUAT					
16.	ERROR	683D88E3		01AD	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	ERROR					
	EXTERNAL:	Q8QINGOT Q8QLGOT1 Q8QENGOT AHEX					

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ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT		
AHEX	AHEX	ERROR	NAMES	Z80LINK
CLREL	CLREL	Z80LINK		
COMIN	COMIN	Z80LINK		
ENABLE%	????????	Z80LINK		
EQUAT	EQUAT	Z80LINK		
ERROR	ERROR	OBJ	Z80LINK	
FCLOSE	????????	CLREL		
HEXIN	HEXIN	OBJ		
IAPAW	????????	CLREL		
IEI%	????????	INIT		
IESR	????????	CLREL	INIT	
IFUNIT	????????	INOUT		
INIT	INIT	Z80LINK		
INOUT	INOUT	OBJ	OUT	Z80LINK
LABEL	LABEL	OBJ	Z80LINK	
LOCF	????????	CLREL		
NAMES	NAMES	OBJ	OUT	Z80LINK
OBJ	OBJ	Z80LINK		
OUT	OUT	OBJ		
Q8QARRAY	????????	INOUT		
Q8QENGOT	????????	ERROR	INOUT	Z80LINK
Q8QENGIN	????????	INOUT		
Q8QINGOT	????????	ERROR	INOUT	Z80LINK
Q8QINGIN	????????	INOUT		
Q8QLGOTI	????????	ERROR	INOUT	Z80LINK
Q8QLGIN1	????????	INOUT		

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ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT		
QBOREWND	????????	INIT	Z8OLINK	
QBSTOP	????????	CLREL		
QARG	????????	INIT		
RELEASE	????????	CLREL		
SCAN	SCAN	Z8OLINK		
SYMBL	SYMBL	LABEL	OBJ	Z8OLINK
UTYP	????????	INIT		
VHEX	VHEX	OUT		
Z8OLINK	Z8OLINK			

```
ITEMIZE  COMPLETE.
   *SAVEPF(52,BLD-PLAN.LST,Z80L,01,     )
   *EOJ     BLD-PLAN
```

M P - 3 2 P R O D U C T S E T

S T D

STD is for Systems Technology Division of CDC. These are tools developed by STD and which have not been released to Customers. If they were to be released, they would be moved to the MST owner.

STDO/STDB owner last dumped on _____

File Name	Description	Last Build
std.pl,std0,__,std0	PSRed PL	------
std-pl-sps.bld,std0,01,std0	Build next PSR Level PL	
std-pl-sps.lst,stdl,01,stdl	Listing of above .bld job	
std.pl,std0,__,std0	Next PSR Level PL	*1
std-pl-loc.bld,std0,01,std0	Build PL with Local Mods	
std-pl-loc.lst,stdl,01,stdl	Listing of above .bld job	
std.pl,stdb,ZZ,stdb	Local (working) PL	------
stlib.bld,stdb,01,stdb	Build ST Library	
stlib.lst,stdl,01,stdl	Listing of above .bld job	
std-st-def.inc,bcdc,01,bcdc	ST Definitions	------
std-stlib.rel,bcdc,01,bcdc		------
stprm.bld,stdb,01,stdb	Build ST Primatives	
stprm.lst,stdl,01,stdl	Listing of above .bld job	
std-stprm.rel,bcdc,01,bcdc		------
fmt.bld,stdb,01,stdb	Build text formatter	
fmt.lst,stdl,01,stdl	Listing of above .bld job	
std-fmt.rel,lcdc,01,lcdc		------
std-fmt.bld,lcdc,01,lcdc	Build FMT abs	
std-fmt.lst,lcdl,01,lcdl	Listing of above .bld job	
std-fmt.abs,lcdc,01,lcdc		------
mail.bld,stdb,01,stdb	Build MAIL	
mail.lst,stdl,01,stdl	Listing of above .bld job	
std-mail.rel,bcdc,01,bcdc		------
std-mail.bld,bcdc,01,bcdc	Build MAIL abs	
std-mail.lst,lcdl,01,lcdl	Listing of above .bld job	
std-mail.abs,bcdc,01,bcdc		------
xrefup.bld,stdb,01,stdb	Build XREFUP	
xrefup.lst,stdl,01,stdl	Listing of above .bld job	
std-xrefup.rel,lcdc,01,lcdc		------
std-xrefup.bld,lcdc,01,lcdc	Build XREFUP abs	
std-xrefup.lst,lcdl,01,lcdl	Listing of above .bld job	
std-xrefup.abs,lcdc,01,lcdc		------
itemize.bld,stdb,01,stdb	Build ITEMIZE	
itemize.lst,stdl,01,stdl	Listing of above .bld job	
std-itemiz.rel,lcdc,01,lcdc		------
std-itemiz.bld,lcdc,01,lcdc	Build ITEMIZE abs	
std-itemiz.lst,lcdl,01,lcdl	Listing of above .bld job	
std-itemiz.abs,lcdc,01,lcdc		------
listf.bld,stdb,01,stdb	Build LISTF	
listf.lst,stdl,01,stdl	Listing of above .bld job	
std-listf.rel,lcdc,01,lcdc		------
std-listf.bld,lcdc,01,lcdc	Build LISTF abs	
std-listf.lst,lcdl,01,lcdl	Listing of above .bld job	
std-listf.abs,lcdc,01,lcdc		------

zap.bld,stdb,01,stdb	Build ZAP
zap.lst,stdl,01,stdl	Listing of above .bld job
std-zap.rel,lcdc,01,lcdc	------
std-zap.bld,lcdc,01,lcdc	Build ZAP abs
std-zap.lst,lcdl,01,lcdl	Listing of above .bld job
std-zap.abs,lcdc,01,lcdc	------
dayerr.bld,stdb,01,stdb	Build DAYERR
dayerr.lst,stdl,01,stdl	Listing of above .bld job
std-dayerr.rel,bcdc,01,bcdc	------
fmaint.bld,stdb,01,stdb	Build FMAINT
fmaint.lst,stdl,01,stdl	Listing of above .bld job
std-fmaint.rel,bcdc,01,bcdc	------
tcyb.bld,stdb,01,stdb	Build TCYB
tcyb.lst,stdl,01,stdl	Listing of above .bld job
std-tcyb.rel,bcdc,01,bcdc	------
std-doc.bld,stdb,01,stdb	Build STD Documentation
std-doc.lst,stdl,01,stdl	Listing of above .bld job
std.doc,stdb,01,stdb	------
bld-plan.txt,stdb,01,stdb	Contains this text
bld-plan.run,stdb,01,stdb	Produce Product Build Doc

Integration Instructions for next release:

1. None. Complete.

NOTES:

1. This is a temporary Oldpl. It is build by std-pl-sps.bld and then, when all is well, the first Oldpl is released and the second Oldpl becomes the base Oldpl. The std-pl-sps.bld job is then modified to use the new PSR Level as a base and produce the next PSR Level.

   Normally, the temporary Oldpl does not appear on Release Tapes.

```
   STOP*ENDST*
*OPEN(10,STD.PL,STD8,ZZ,     ,R)
*XREFUP(P=10)
```

OLDPL VERSION: 2
MASTER CHARACTER: /
OLDPL PRODUCED: 09/04/84
13:58:00

OLDPL AUDIT:		TOTAL	YANKED	ACTIVE	RUNNING
DECK	YANK$$$	1	0	1	1
COMDECK	HISTORY	30	0	30	31
COMDECK	F-TITLE	150	0	150	181
COMDECK	OSSYM	21	0	21	202
COMDECK	IO	21	0	21	223
COMDECK	ARGS	8	0	8	231
COMDECK	CSCLUN	8	0	8	239
COMDECK	CSPAWN	13	0	13	252
COMDECK	CFMTBF	6	0	6	258
COMDECK	CRAWTT	8	0	8	266
COMDECK	SPSYM	14	0	14	280
COMDECK	CLOOK	8	0	8	288
DECK	STCOMDEF	154	0	154	442
DECK	STLIB	473	0	473	915
COMDECK	F-STLIB	181	0	181	1096
COMDECK	STPRIMC	25	0	25	1121
DECK	STPRIM	1045	0	1045	2166
COMDECK	F-STPRM	196	0	196	2362
COMDECK	CINBUF	5	0	5	2367
COMDECK	COUT	9	0	9	2376
COMDECK	CPAGE	19	0	19	2395
COMDECK	CPARAM	11	0	11	2406
COMDECK	CLUNS	10	0	10	2416
COMDECK	CCMDS	5	0	5	2421
DECK	FMT	784	0	784	3205
DECK	FMTUTES	429	0	429	3634
COMDECK	F-FMT	146	0	146	3780
COMDECK	MAILSYM	16	0	16	3796
COMDECK	CMAIL	19	0	19	3815
COMDECK	CMAILB	8	0	8	3823
DECK	MAIL	970	0	970	4793
COMDECK	F-MAIL	212	0	212	5005
COMDECK	CXREFUP	17	0	17	5022
DECK	XREFUP	788	0	788	5810
COMDECK	F-XREFUP	84	0	84	5894
COMDECK	CITEMIZ	14	0	14	5908
COMDECK	CITEMTH	8	0	8	5916
DECK	ITEMIZE	904	0	904	6820
COMDECK	F-ITEMIZ	114	0	114	6934
DECK	LISTF	213	0	213	7147
COMDECK	F-LISTF	100	0	100	7247
DECK	ZAP	134	0	134	7381
COMDECK	F-ZAP	82	0	82	7463
DECK	DAYERR	26	0	26	7489
COMDECK	F-DAYERR	48	0	48	7537
DECK	FMAINT	94	0	94	7631
COMDECK	F-FMAINT	51	0	51	7682
DECK	TCYB	509	0	509	8191
DECK	FROM32	773	0	773	8964
COMDECK	F-TCYB	79	0	79	9043
DECK	STD-DOC	13	0	13	9056

DECKS MODIFIED BY A GIVEN IDENT:

IDENT	LINES	DECKS OR COMDECKS MODIFIED
LEV-AC	3	HISTORY

ENTS THAT MODIFY A GIVEN DECK:

DECK	LINES	IDENT(S) THAT MODIFY THE DECK
YANK$$$	1	
HISTORY	27	LEV-AC
F-TITLE	150	
OSSYM	21	
IO	21	
ARGS	8	
CSCLUN	8	
CSPAWN	13	
CFMTBF	6	
CRAWTT	8	
SPSYM	14	
CLOOK	8	
STCOMDEF	154	
STLIB	473	
F-STLIB	181	
STPRIMC	25	
STPRIM	1045	
F-STPRM	196	
CINBUF	5	
COUT	9	
CPAGE	19	
CPARAM	11	
CLUNS	10	
CCMDS	5	
FMT	784	
FMTUTES	429	
F-FMT	146	
MAILSYM	16	
CMAIL	19	
CMAILB	8	
MAIL	970	
F-MAIL	212	
CXREFUP	17	
XREFUP	788	
F-XREFUP	84	
CITEMIZ	14	
CITEMTH	8	
ITEMIZE	904	
F-ITEMIZ	114	
LISTF	213	
F-LISTF	100	
ZAP	134	
F-ZAP	82	
DAYERR	26	
F-DAYERR	48	
FMAINT	94	
F-FMAINT	51	
TCYB	509	
FROM32	773	
F-TCYB	79	
STD-DOC	13	

DECKS THAT CALL A GIVEN COMMON DECK:

COMDECK	DECKS CALLING THE COMMON DECK
F-TITLE	STD-DOC
F-STLIB	STD-DOC
STPRIMC	STPRIM
F-STPRM	STD-DOC
CINBUF	FMT
COUT	FMT
CPAGE	FMT
CPARAM	FMT
CLUNS	FMT
CCMDS	FMT
F-FMT	STD-DOC
MAILSYM	MAIL
CMAIL	MAIL
CMAILB	MAIL
F-MAIL	STD-DOC
CXREFUP	XREFUP
F-XREFUP	STD-DOC
CITEMIZ	ITEMIZE
CITEMTH	ITEMIZE
F-ITEMIZ	STD-DOC
F-LISTF	STD-DOC
F-ZAP	STD-DOC
F-DAYERR	STD-DOC
F-FMAINT	STD-DOC
F-TCYB	STD-DOC

COMMON DECKS CALLED BY A GIVEN DECK OR COMDECK:

DECK	COMMON DECKS CALLED BY THE DECK				
STPRIM	STPRIMC				
FMT	CLUNS	CPARAM	CPAGE	COUT	CINBUF
	CCMDS				
MAIL	MAILSYM	CMAIL	CMAILB		
XREFUP	CXREFUP				
ITEMIZE	CITEMIZ	CITEMTH			
STD-DOC	F-TITLE	F-STLIB	F-STPRM	F-MAIL	F-FMT
	F-XREFUP	F-ITEMIZ	F-LISTF	F-ZAP	F-DAYERR
	F-FMAINT	F-TCYB			

NULL IDENTS:

NULL DECKS:

COMMON DECKS NOT CALLED:

HISTORY	OSSYM	IO	ARGS	CSCLUN	CSPAWN
CFMTBF	CRAWTT	SPSYM	CLOOK		

```
XREFUP FINISHED.
  *CLOSE(10)
  *LISTF
```

```
*job(id=std-pl-sps.bld)
*sched(cm=10,tl=9999,pl=60000,scr=100)
#
#    This job builds a higher PSR level release Oldpl from one of
#    a given level and the appropriate PSR code.
#
#    PSR code is obtained from the Systems Technology Division
#    (of CDC) PSR summaries.
#
#------------
#  This portion of the job is temporary.  It resequences the Level AB
#  OLDPL and prepares for AC generation.
#
*OPEN(5,STD.PL,STD0,AB,STD0,R)
*UPDATE(F,P=5,N=6,*=/,O=A,S=7)
/FINIS
*CLOSE(6)
*REWIND(7)
*UPDATE(F,I=7,N=10,*=/,O=A)
*CLOSE(7)
*REWIND(10)
#-----------
*release(std.pl,std0,AC,std0,r)
#-----*open(10,std.pl,std0,AA,std0,r)
*uodate(p=10,n=2,*=/)
// PLACE PSR CODE AFTER THIS LINE.
/IDENT LEV-AC
/INSERT HISTORY.3
LEV-AC              04 SEP 84                Fariss, G. B.
     THIS POINT DIVIDES LEVEL AC FROM HIGHER LEVELS.

/FINIS
*savepf(2,std.pl,std0,AC,std0)
*savepf(62,std-pl-sps.lst,std1,01,std1)
*eoj
```

```
*JOB(ID=STD-PL-LOC.BLD)
*SCHED(CM=9,TL=9999,PL=10000,SCR=40)
#
#  This job adds local-site modifications to the standard Oldpl
#  and builds the final Oldpl (always Edition ZZ).
#
*RELEASE(STD.PL,STDB,ZZ,STDB)
*OPEN(10,STD.PL,STD0,AC,STD0,R)  # Change the edition as appropriate
*UPDATE(P=10,N=20,O=A,*=/)
// PLACE LOCAL-MOD CODE AFTER THIS LINE.
/FINIS
*SAVEPF(20,STD.PL,STDB,ZZ,STDB)
*SAVEPF(62,STD-PL-LOC.LST,STDL,01,STDL)
*EOJ
```

```
*job(id=stlib.bld)
*sched(cm=12,ti=9999,pl=100000,scr=60)
#
#  Build the Software Tools Definitions and Library routines.
#
*open(10,std.pl,stdb,ZZ,stdb,r)
*update(q,p=10,c=11,*=/)
/COMPILE STCOMDEF
/FINIS
*savepf(11,std-st-def.inc,bcdc,01,bcdc)
*close(11)
*update(p=10,c=12,*=/,q)
/COMPILE STLIB
/FINIS
*open(41,std-st-def.inc,bcdc,01,bcdc,r)
*ratfor(i=12,f=13)
*rewind(13)
*ftn(i=13,x=14,l,r)
*savepf(14,std-stlib.rel,bcdc,01,bcdc)
*map
*load(14)
*savepf(62,stlib.lst,stdl,01,stdl)
*eoj
```

```
*job(id=stprm.bld)
*sched(cm=10,tl=9999,pl=100000,scr=60)
#
#  Build the Software Tools Primative routines.
#
*open(10,std.pl,stdb,ZZ,stdb,r)
*update(q,p=10,c=11,*=/)
/COMPILE STPRIM
/FINIS
*open(41,std-st-def.inc,bcdc,01,bcdc,r)
*ratfor(i=11,f=13)
*rewind(13)
*ftn(i=13,x=14,l,r)
*savepf(14,std-stprm.rel,bcdc,01,bcdc)
*map
*load(14)
*savepf(62,stprm.lst,stdl,01,stdl)
*eoj
```

```
*JOB(ID=FMT.BLD)
*SCHED(CM=10,TL=999,PL=100000,SCR=40)
#
#  Build the FMT text formatter.
#
*OPEN(10,STD.PL,STDB,ZZ,STDB,R)
*UPDATE(P=10,Q,C=11,O=A24,*=/)
/COMPILE,FMT
/FINIS
*REWIND(11)
*RATFOR(I=11,F=12)
*REWIND(12)
*REWIND(10)
*UPDATE(P=10,Q,C=13,O=A24,*=/)
/COMPILE,FMTUTES
/FINIS
*REWIND(13)
*CMP(I=13,L,R,X=14)
*FTN(I=12,X=14,L,R)
*SAVEPF(14,STD-FMT.REL,LCDC,01,LCDC)
*SAVEPF(62,FMT.LST,STDL,01,STDL)
*EOJ
```

```
*job(id=std-fmt.bld)
*sched(cm=10)
*open(1,std-fmt.rel,lcdc,01,lcdc,r)
*release(std-fmt.abs,lcdc,01,lcdc,0)
*allocate(std-fmt.abs,lcdc,01,lcdc,480,100)
*open(2,std-fmt.abs,lcdc,01,lcdc)
*map
*load(1)
*abs(2)
*close(2)
*release(std-fmt.abs,lcdc,01,lcdc,r)
*savepf(62,std-fmt.lst,lcdl,01,lcdl)
*eoj
```

```
*job(id=mail.bld)
*sched(cm=13,tl=999,pl=100000,scr=500)
#
#  Build the inter-user message program; MAIL.
#
*open(10,std.pl,stdb,ZZ,stdb,r)
*update(q,p=10,c=11,*=/)
/COMPILE MAIL
/FINIS
*OPEN(41,std-st-def.inc,bcdc,01,bcdc,r)
*ratfor(i=11,f=12)
*rewind(12)
*ftn(i=12,x=13,l,r)
*savepf(13,std-mail.rel,bcdc,01,bcdc)
*savepf(62,mail.lst,stdl,01,stdl)
*eoj
```

```
*JOB(ID=STD-MAIL.BLD)
*SCHED(CM=10,TL=9999,PL=60000,SCR=100)
*OPEN(1,STD-MAIL.REL,BCDC,01,BCDC,R)
*OPEN(2,STD-STLIB.REL,BCDC,01,BCDC,R)
*OPEN(3,STD-STPRM.REL,BCDC,01,BCDC,R)
*RELEASE(STD-MAIL.ABS,BCDC,01,BCDC,0)
*ALLOCATE(STD-MAIL.ABS,BCDC,01,BCDC,480,100)
*OPEN(4,STD-MAIL.ABS,BCDC,01,BCDC)
*MAP
*LOAD(1,2,3)
*ABS(4)
*CLOSE(4)
*RELEASE(STD-MAIL.ABS,BCDC,01,BCDC,R)
*SAVEPF(62,STD-MAIL.LST,BCDL,01,BCDL)
*EOJ
```

```
*job(id=xrefup.bld)
*sched(cm=10,tl=9999,pl=60000)
#
#  Build the XREFUP tool.
#
*open(10,std.pl,stdb,ZZ,stdb,r)
*update(q,p=10,c=11,*=/)
/COMPILE XREFUP
/FINIS
*open(41,std-st-def.inc,bcdc,01,bcdc,r)
*ratfor(i=11,f=12)
*rewind(12)
*ftn(i=12,x=13,i,r)
*rewind(13)
*savepf(13,std-xrefup.rel,lcdc,01,lcdc,r)
*savepf(62,xrefup.lst,stdl,01,stdl)
*eoj
```

```
*JOB(ID=STD-XREFUP.BLD)
*SCHED(CM=10,TL=9999,PL=60000,SCR=100)
*OPEN(1,STD-XREFUP.REL,LCDC,01,LCDC,R)
*RELEASE(STD-XREFUP.ABS,LCDC,01,LCDC,0)
*ALLOCATE(STD-XREFUP.ABS,LCDC,01,LCDC,480,100)
*OPEN(4,STD-XREFUP.ABS,LCDC,01,LCDC)
*MAP
*LOAD(1)
*ABS(4)
*CLOSE(4)
*RELEASE(STD-XREFUP.ABS,LCDC,01,LCDC,R)
*SAVEPF(62,STD-XREFUP.LST,LCDL,01,LCDL)
*EOJ
```

```
*job(id=itemize.bld)
*sched(cm=10,tl=9999,pl=60000,scr=10)
#
#  Build the ITEMIZE tool.
#
*open(10,std.pl,stdb,ZZ,stdb,r)
*update(q,p=10,c=11,*=/)
/COMPILE ITEMIZE
/FINIS
*open(41,std-st-def.inc,bcdc,01,bcdc,r)
*ratfor(i=11,f=12)
*rewind(12)
*ftn(i=12,x=13,l,r)
*savepf(13,std-itemiz.rel,lcdc,01,lcdc)
*savepf(62,itemize.lst,stdl,01,stdl)
*eoj
```

```
*JOB(ID=STD-ITEMIZ.BLD)
*SCHED(CM=10,TL=9999,PL=60000,SCR=100)
*OPEN(1,STD-ITEMIZ.REL,LCDC,01,LCDC,R)
*OPEN(2,STD-STLIB.REL,BCDC,01,BCDC,R)
*OPEN(3,STD-STPRM.REL,BCDC,01,BCDC,R)
*RELEASE(STD-ITEMIZ.ABS,LCDC,01,LCDC,0)
*ALLOCATE(STD-ITEMIZ.ABS,LCDC,01,LCDC,480,100)
*OPEN(4,STD-ITEMIZ.ABS,LCDC,01,LCDC)
*MAP
*LOAD(1,2,3)
*ABS(4)
*CLOSE(4)
*RELEASE(STD-ITEMIZ.ABS,LCDC,01,LCDC,R)
*SAVEPF(62,STD-ITEMIZ.LST,LCDL,01,LCDL)
*EOJ
```

```
*job(id=listf.bld)
*sched(cm=10,pl=100000,tl=999,scr=100)
#
#  Build the LISTF tool.
#
*open(10,std.pl,stdb,ZZ,stdb,r)
*update(q,p=10,c=11,*=/)
/COMPILE LISTF
/FINIS
*open(41,std-st-def.inc,bcdc,01,bcdc,r)
*ratfor(i=11,f=12)
*rewind(12)
*ftn(i=12,x=13,l,r)
*savepf(13,std-listf.rel,lcdc,01,lcdc)
*savepf(62,listf.lst,stdl,01,stdl)
*eoj
```

```
*JOB(ID=STD-LISTF.BLD)
*SCHED(CM=10,TL=9999,PL=60000,SCR=100)
*OPEN(1,STD-LISTF.REL,LCDC,01,LCDC,R)
*OPEN(2,STD-STLIB.REL,BCDC,01,BCDC,R)
*OPEN(3,STD-STPRM.REL,BCDC,01,BCDC,R)
*RELEASE(STD-LISTF.ABS,LCDC,01,LCDC,0)
*ALLOCATE(STD-LISTF.ABS,LCDC,01,LCDC,480,100)
*OPEN(4,STD-LISTF.ABS,LCDC,01,LCDC)
*MAP
*LOAD(1,2,3)
*ABS(4)
*CLOSE(4)
*RELEASE(STD-LISTF.ABS,LCDC,01,LCDC,R)
*SAVEPF(62,STD-LISTF.LST,LCDL,01,LCDL)
*EOJ
```

```
*job(id=zap.bld)
*sched(cm=10,pl=100000,tl=999,scr=100)
#
#  Build the ZAP tool.
#
*open(10,std.pl,stdb,ZZ,stdb,r)
*update(q,p=10,c=11,*=/)
/COMPILE ZAP
/FINIS
*open(41,std-st-def.inc,bcdc,01,bcdc,r)
*ratfor(i=11,f=12)
*rewind(12)
*ftn(i=12,x=13,l,r)
*savepf(13,std-zap.rel,lcdc,01,lcdc)
*savepf(62,zap.lst,stdl,01,stdl)
*eoj
```

```
*JOB(ID=STD-ZAP.BLD)
*SCHED(CM=10,TL=9999,PL=60000,SCR=100)
*OPEN(1,STD-ZAP.REL,LCDC,01,LCDC,R)
*OPEN(2,STD-STLIB.REL,BCDC,01,BCDC,R)
*OPEN(3,STD-STPRM.REL,BCDC,01,BCDC,R)
*RELEASE(STD-ZAP.ABS,LCDC,01,LCDC,0)
*ALLOCATE(STD-ZAP.ABS,LCDC,01,LCDC,480,100)
*OPEN(4,STD-ZAP.ABS,LCDC,01,LCDC)
*MAP
*LOAD(1,2,3)
*ABS(4)
*CLOSE(4)
*RELEASE(STD-ZAP.ABS,LCDC,01,LCDC,R)
*SAVEPF(62,STD-ZAP.LST,LCDL,01,LCDL)
*EOJ
```

```
*job(id=dayerr.bld)
*sched(cm=10,ti=999,PL=10000)
#
#  Build the DAYERR tool.
#
*open(10,std.pl,stdb,ZZ,stdb,r)
*update(q,p=10,c=11,*=/)
/COMPILE DAYERR
/FINIS
*OPEN(41,STD-ST-DEF.INC,BCDC,01,BCDC,R)
*ratfor(i=11,f=12)
*rewind(12)
*ftn(i=12,x=13,l,r)
*savepf(13,std-dayerr.rel,bcdc,01,bcdc)
*savepf(62,dayerr.lst,stdl,01,stdl)
*eoj
```

```
*JOB(ID=FMAINT.BLD)
*SCHED(CM=10,TL=999999,PL=1000,SCR=100)
#
#  Build the FMAINT tool.
#
*open(10,std.pl,stdb,ZZ,stdb,r)
*update(q,p=10,c=11,*=/)
/COMPILE FMAINT
/FINIS
*FTN(I=11,X=12,L,R)
*SAVEPF(12,STD-FMAINT.REL,BCDC,01,BCDC)
*SAVEPF(62,FMAINT.LST,STDL,01,STDL)
*EOJ
```

```
*JOB(ID=TCYB.BLD)
*SCHED(CM=10,PL=13000,TL=99999,SCR=100)
#
# BUILD TRANSFER-TO-CYBER PROGRAM "TCYB".
#
*OPEN(10,STD.PL,STDB,ZZ,STDB,R)
*UPDATE(Q,P=10,C=11,*=/)
/COMPILE TCYB
/FINIS
*REWIND(11)
*CMP(I=11,X=12,L,R=2,C)
*SAVEPF(12,STD-TCYB.REL,BCDC,01,BCDC)
#
# LIST THE CYBER PROGRAM THAT RECEIVES THE TRANSFER.
#
*UPDATE(Q,P=10,C=13,*=/)
/COMPILE FROM32
/FINIS
*REWIND(13)
*COPYSCF(13)
*SAVEPF(62,tcyb.lst,std1,01,std1)
*EOJ
```

```
*job(id=std-doc.bld)
*sched(cm=10,tl=9999,pl=60000,scr=100)
#
# This job generates the documentation for the STD tools.
#
*open(1,std.pl,stdb,ZZ,stdb,r)
*update(q,p=1,*=/,c=2)
/COMPILE STD-DOC
/FINIS
*copyscf(2)          # List the FMT input.
*rewind(2)
#
# Now strip the update sequence numbers.  If update
# had included the "D" switch, this would not be necessary.
#
*copycf(2,3,1,1,80)
*close(2)
*rewind(3)
#
# Now format the file.
#
# Use fmt with "c" parameter if changes are made that would
# result in changes to the table of contents.  Take the
# T.C. produced at the end of the document and use it to
# correct the formatted table of contents in Condeck F-TITLE.
#
#-- *fmt(i=3,l=4,c)
*fmt(i=3,l=4)
*savepf(4,std.doc,stdb,01,stdb)
*savepf(62,std-doc.lst,stdl,01,stdl)
*eoj
```

STOP*ENDST*
*ITEMIZE

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PROCESSING: STD-STLIB.REL,BCDC,01,BCDC

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
1.	ADDSET	79179B2B		0061	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	ADDSET					
2.	CANT	9C4E916B		001F	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	CANT					
	EXTERNAL:	PUTLIN	ENDST				
3.	CLOWER	7711902C		005C	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	CLOWER					
4.	CONCAT	7B0C916E		002E	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	CONCAT					
	EXTERNAL:	STCOPY	SCOPY				
5.	CTOIF	7638900D		0088	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	CTOIF					
	EXTERNAL:	INDEX					
6.	CUPPER	77088F33		005C	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	CUPPER					
7.	EQUAL	6E3E8A37		0067	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	EQUAL					
8.	ERROR	683D8D7F		0011	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	ERROR					
	EXTERNAL:	REMARK	ENDST				
9.	FCOPY	604C9075		001A	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	FCOPY					
	EXTERNAL:	GETCH	PUTCH				
10.	FOLD	99409372		0029	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	FOLD					
	EXTERNAL:	CLOWER					
11.	GETC	984A8B50		004C	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	GETC					
	EXTERNAL:	GETCH					
12.	GTOKEN	73008F7A		011A	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	GTOKEN					
13.	GETWRD	66268AE7		00A1	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	GETWRD					
14.	INDEX	5E419B38		0062	REL	MM/DD/YY	HH:MM:SS
	ENTRY:	INDEX					

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
15.	ITOC	96388FEA		00B0	REL	MM/DD/YY	HH:MM:SS
		ENTRY: ITOC					
		EXTERNAL: IABS% MOD%					
16.	ITOH	9638901F		0076	REL	MM/DD/YY	HH:MM:SS
		ENTRY: ITOH					
		EXTERNAL: ISHFT%					
17.	LENGTH	5F229146		0052	REL	MM/DD/YY	HH:MM:SS
		ENTRY: LENGTH					
18.	PUTC	8F3A8B88		0014	REL	MM/DD/YY	HH:MM:SS
		ENTRY: PUTC					
		EXTERNAL: PUTCH					
19.	PUTDEC	6A178B39		005A	REL	MM/DD/YY	HH:MM:SS
		ENTRY: PUTDEC					
		EXTERNAL: ITOC PUTC					
20.	SCOPY	534C9055		003A	REL	MM/DD/YY	HH:MM:SS
		ENTRY: SCOPY					
21.	SKIPBL	6A18966A		0025	REL	MM/DD/YY	HH:MM:SS
		ENTRY: SKIPBL					
22.	STCOPY	5C029C56		003A	REL	MM/DD/YY	HH:MM:SS
		ENTRY: STCOPY					
23.	TYPE	8B368F30		006A	REL	MM/DD/YY	HH:MM:SS
		ENTRY: TYPE					
24.	UPPER	583F8F71		0029	REL	MM/DD/YY	HH:MM:SS
		ENTRY: UPPER					
		EXTERNAL: CUPPER					

PROCESSING: STD-STPRM.REL,BCDC,01,BCDC

25.	AMOVE	79429044		0045	REL	MM/DD/YY	HH:MM:SS		
		ENTRY: AMOVE							
		EXTERNAL: R4MFN	LOCF	IESR	MODIFY	R4ERR			
26.	ASSIGN	770E8BE7		00AF	REL	MM/DD/YY	HH:MM:SS		
		ENTRY: ASSIGN							
		EXTERNAL: R4ERR							
27.	CLOSEF	7710 9025		0067	REL	MM/DD/YY	HH:MM:SS		
		ENTRY: CLOSEF							
		EXTERNAL: IBDB	PICKC	PUTCHI	PACKC	IESR			
		CLOSE	IAPAW	LOCF	RELEASE				
28.	CREATE	68189A24		007A	REL	MM/DD/YY	HH:MM:SS		
		ENTRY: CREATE							

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME	
		EXTERNAL:	R4MFN	LOCF	IESR	ALLOCATE	OPENF	
			R4ERR					
29.	ENDST	6641983A	0052		REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	ENDST					
		EXTERNAL:	PUTCHI	IBDB	PACKC	CLOSEF	Q8QSTOP	
30.	FLUSH	71438A71	001A		REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	FLUSH					
		EXTERNAL:	PUTCH					
31.	GDATE	73489E16	0072		REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	GDATE					
		EXTERNAL:	IESR	DATE	IAPAC			
32.	GETARG	66238AFC	009C		REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	GETARG					
		EXTERNAL:	IAPAW	GTOKEN				
33.	GETCH	704A8A1E	017D		REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	GETCH	GETLIN				
		EXTERNAL:	R4ERR	PUTCHI	IBDB	PACKC	LOCF	
			PICKD	PICK	IAPAW			
34.	GTIME	733B9669	0029		REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	GTIME					
		EXTERNAL:	IESR	TIME	IAPAC			
35.	INITST	630D9653	0038		REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	INITST					
		EXTERNAL:	GETARG					
36.	INMAP	66419258	0046		REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	INMAP					
37.	INSUB	74418C22	0068		REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	INSUB					
		EXTERNAL:	SCOPY					
38.	ISATTY	62039E40	0048		REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	ISATTY					
		EXTERNAL:	IESR	UTYP				
39.	MARKL	664E8D7A	001A		REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	MARKL					
40.	OPENF	6A3F999E	00F3		REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	OPENF					
		EXTERNAL:	IESR	UTYP	R4ERR	R4MFN	LOCF	
			OPEN	ULOC	IAPAW			
41.	OUTMAP	6F0A8B4C	0046		REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	OUTMAP					

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME	
42.	OUTSUB	5B188AF0		008F	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	OUTSUB						
	EXTERNAL:	SCOPY						
43.	PROMPT	5F099013		007F	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	PROMPT						
	EXTERNAL:	LENGTH	ISATTY	PUTLIN	PUTCHI	GETLIN		
44.	PUTCH	673A8A60		013A	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	PUTCH	PUTLIN					
	EXTERNAL:	R4ERR	I8DB	PICKC	LOCF	PACKD		
		R4OUTL	PACKO	PACK				
45.	PUTCHI	67118B88		0014	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	PUTCHI						
	EXTERNAL:	PUTCH						
46.	R4ERR	5B5B9A58		0035	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	R4ERR						
	EXTERNAL:	Q8QINGOT	Q8QLGOT1	Q8QENGOT	IESR	ABORT		
		CTOI						
47.	R4MFN	5F5891FE		0097	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	R4MFN						
	EXTERNAL:	IESR	JOBINFO	IAPAW	GTOKEN	CUPPER		
48.	R4OUTL	592F9024		0066	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	R4OUTL						
	EXTERNAL:	LOCF	IBDB	PACK	R4ERR	IAPAW		
49.	REMARK	581F9262		003C	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	REMARK						
	EXTERNAL:	PUTCH	PUTCHI					
50.	REMOVE	57259272		001E	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	REMOVE						
	EXTERNAL:	R4MFN	LOCF	IESR	RELEASE			
51.	SCRATF	58268D4D		004F	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	SCRATF						
	EXTERNAL:	CUPPER	IESR	TIME	IAPAC	SCOPY		
52.	SEEKL	604A9A25		006F	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	SEEKL						
	EXTERNAL:	IESR	ULOC	R4ERR	IBDB	PICKI		
		GETLIN						

PROCESSING: STD-FMT.REL,LCDC,01,LCDC

53.	FMTUTES	651D57BD		00CD	REL	MM/DD/YY	HH:MM:SS	
	ENTRY:	CLRLUN	DEFLUN	GETIN	PUTC	PUTCH		

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME	
		EXTERNAL:	PUTCI	PUTLIN	SPACER	ZARG		
			PICKD	PACKD	PICKC	PACKC	PICK	
			PARM	PACK	ABORT	PARM	RETURN	
54.	FMT	99428B83		003C	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	FMT					
		EXTERNAL:	ENABLE%	INIT	GETIN	COMAND	TEXT	
			TBLCONT	SPACE	CLRLUN			
55.	ADDLINE	751D75EE		00A5	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	ADDLINE					
		EXTERNAL:	WIDTH	ADDSPACE	BRK			
56.	ADDSPACE	6E2A77AC		00BB	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	ADDSPACE					
		EXTERNAL:	ADDSCNTS					
57.	ADDSCNTS	7B1D66D6		0083	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	ADDSCNTS					
		EXTERNAL:	SPACER					
58.	BRK	9D3D948E		0031	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	BRK					
		EXTERNAL:	PUT					
59.	COMAND	6E1C90FA		01A4	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	COMAND					
		EXTERNAL:	GETVAL	BRK	GETTL	SET	SPACE	
			DEFLUN	PUTTC	CLRLUN			
60.	CTOIT	683B901F		0077	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	CTOIT					
61.	GETTL	6C4A8B0A		0081	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	GETTL					
62.	GETVAL	771E8B39		0050	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	GETVAL					
		EXTERNAL:	CTOIT					
63.	INIT	9641961A		0071	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	INIT					
		EXTERNAL:	ZARG	IESR	DATE	IAPAW	DEFLUN	
64.	ITOC	963B8FF2		00AA	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	ITOC					
		EXTERNAL:	IABS%	MOD%				
65.	LEADBL	711E9E66		0035	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	LEADBL					
66.	PFOOT	5B499071		001F	REL	MM/DD/YY	HH:MM:SS	
		ENTRY:	PFOOT					

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
		EXTERNAL: SKIP PUTCI PUTTL					
67.	PHEAD	68479A82		001C	REL	MM/DD/YY	HH:MM:SS
		ENTRY: PHEAD					
		EXTERNAL: PUTCI PUTTL SKIP					
68.	PUT	8F3A8B76		0049	REL	MM/DD/YY	HH:MM:SS
		ENTRY: PUT					
		EXTERNAL: PHEAD PUTCI PUTLIN SKIP PFOOT					
69.	PUTTC	6C3A8B09		0081	REL	MM/DD/YY	HH:MM:SS
		ENTRY: PUTTC					
		EXTERNAL: ITOC PUTCH PUT					
70.	PUTTL	633A8B18		006F	REL	MM/DD/YY	HH:MM:SS
		ENTRY: PUTTL					
		EXTERNAL: ITOC WIDTH PUTCI PUTC					
71.	SET	8C4A8B74		0048	REL	MM/DD/YY	HH:MM:SS
		ENTRY: SET					
72.	SKIP	8C449670		001F	REL	MM/DD/YY	HH:MM:SS
		ENTRY: SKIP					
		EXTERNAL: PUTCI					
73.	SPACE	673F9E64		0038	REL	MM/DD/YY	HH:MM:SS
		ENTRY: SPACE					
		EXTERNAL: BRK PHEAD SKIP PFOOT					
74.	TBLCONT	5C1F5F20		007C	REL	MM/DD/YY	HH:MM:SS
		ENTRY: TBLCONT					
		EXTERNAL: SPACE CLRLUN DEFLUN GETIN BRK					
75.	TEXT	884A873D		004E	REL	MM/DD/YY	HH:MM:SS
		ENTRY: TEXT					
		EXTERNAL: BRK LEADBL UNDERL WIDTH PUT ADDLINE					
76.	UNDERL	58159B50		004A	REL	MM/DD/YY	HH:MM:SS
		ENTRY: UNDERL					
77.	WIDTH	60469B1F		006C	REL	MM/DD/YY	HH:MM:SS
		ENTRY: WIDTH					

PROCESSING: STD-MAIL.REL,BCDC,01,BCDC

78.	MAILDRV	6E1C6089		000A	REL	MM/DD/YY	HH:MM:SS
		ENTRY: MAILDRV					
		EXTERNAL: ENABLE% INITST MAIL ENDST					
79.	MAIL	924E9576		0103	REL	MM/DD/YY	HH:MM:SS
		ENTRY: MAIL					

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME	
		EXTERNAL:	MALINT	PROMPT	GTOKEN	FOLD	EQUAL	
			OPENF	GETLIN	ADDUSR	CLOSEF	INDEX	
			MALCMD	LSTWHO	SDMAIL	RMAIL	CLEANF	
80.	ADDUSR	681999F1	018B	REL	MM/DD/YY	HH:MM:SS		
		ENTRY: ADDUSR						
		EXTERNAL:	SCRATF	CREATE	MERROR	CLOSEF	EQUAL	
			PUTLIN	PUTCHI	INDEX	MLOOK	MCOMNT	
			ITOC	MGNAME	ISATTY	PROMPT	CTOIF	
81.	CLEANF	6E1D9A86	0017	REL	MM/DD/YY	HH:MM:SS		
		ENTRY: CLEANF						
		EXTERNAL:	REMOVE	MCOMNT	ENDST			
82.	DOCCST	680C9C08	0090	REL	MM/DD/YY	HH:MM:SS		
		ENTRY: DOCCST						
		EXTERNAL:	OPENF	MERROR	GETLIN	EQUAL	PUTCHI	
			PUTLIN	OUTNAM	CLOSEF			
83.	DOTOST	680C8B09	0082	REL	MM/DD/YY	HH:MM:SS		
		ENTRY: DOTOST						
		EXTERNAL:	OPENF	MERROR	PUTLIN	GETLIN	EQUAL	
			OUTNAM	CLOSEF	PUTCHI			
84.	GETMID	6F26885B	0037	REL	MM/DD/YY	HH:MM:SS		
		ENTRY: GETMID						
		EXTERNAL:	IESR	JOBINFO	IAPAC			
85.	GSBJCT	75089D57	003D	REL	MM/DD/YY	HH:MM:SS		
		ENTRY: GSBJCT						
		EXTERNAL:	ISATTY	PROMPT	GETLIN			
86.	LSTWHO	6B0D8AAA	00D3	REL	MM/DD/YY	HH:MM:SS		
		ENTRY: LSTWHO						
		EXTERNAL:	OPENF	MERROR	GETLIN	EQUAL	MLOOK	
			INDEX	MCOMNT	MGNAME	LENGTH	MGDEFN	
			CLOSEF					
87.	MALCMD	652A9264	0126	REL	MM/DD/YY	HH:MM:SS		
		ENTRY: MALCMD						
		EXTERNAL:	SCOPY	OPENF	GETLIN	GTOKEN	FOLD	
			ADDUSR	CLOSEF	MCOMNT			
88.	MAILID	692A95E9	00A5	REL	MM/DD/YY	HH:MM:SS		
		ENTRY: MAILID						
		EXTERNAL:	IESR	JOBINFO	IAPAW	SCOPY	LENGTH	
			GTOKEN	MCOMNT	CLEANF	ENDST		
89.	MALINP	641E92C8	00CA	REL	MM/DD/YY	HH:MM:SS		
		ENTRY: MALINP						
		EXTERNAL:	CREATE	MERROR	PSTMRK	OPENF	DOTOST	
			PUTCHI	GSBJCT	PUTLIN	ISATTY	MCOMNT	
			GETLIN	CLOWER	CLOSEF	CLEANF	ENDST	

DOCCST

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME		
90.	MALINT	641A92D7		00BD	REL	MM/DD/YY	HH:MM:SS		
	ENTRY:	MALINT							
	EXTERNAL:	QARG	ASSIGN	OPENF	GETLIN	GTOKEN			
		MINO%	MINSTAL	CLOSEF	MCOMNT	ENDST			
91.	MCOMNT	64189054		003E	REL	MM/DD/YY	HH:MM:SS		
	ENTRY:	MCOMNT							
	EXTERNAL:	PUTCH	PUTCHI						
92.	MERROR	63188D6A		0022	REL	MM/DD/YY	HH:MM:SS		
	ENTRY:	MERROR							
	EXTERNAL:	MCOMNT	CLEANF						
93.	MGDEFN	6C1A9B72		0028	REL	MM/DD/YY	HH:MM:SS		
	ENTRY:	MGDEFN							
	EXTERNAL:	LENGTH	SCOPY						
94.	MGNAME	65239148		0053	REL	MM/DD/YY	HH:MM:SS		
	ENTRY:	MGNAME							
	EXTERNAL:	SCOPY							
95.	MINSTAL	5E256527		0063	REL	MM/DD/YY	HH:MM:SS		
	ENTRY:	MINSTAL							
	EXTERNAL:	LENGTH	MCOMNT	SCOPY					
96.	MLOOK	67438FCB		00C5	REL	MM/DD/YY	HH:MM:SS		
	ENTRY:	MLOOK							
	EXTERNAL:	CLOWER							
97.	OUTNAM	6F0D8A71		011D	REL	MM/DD/YY	HH:MM:SS		
	ENTRY:	OUTNAM							
	EXTERNAL:	INDEX	MLOOK	MGNAME	PUTLIN	LENGTH			
		PUTCHI	GETMID	MGDEFN	GTOKEN				
98.	PSTMRK	5D118AE1		00A8	REL	MM/DD/YY	HH:MM:SS		
	ENTRY:	PSTMRK							
	EXTERNAL:	GDATE	GTIME	PUTLIN	PUTCHI	MAILID			
		OUTNAM	CREATE	CLOSEF					
99.	RMAIL	61429D71		011C	REL	MM/DD/YY	HH:MM:SS		
	ENTRY:	RMAIL							
	EXTERNAL:	SCOPY	LENGTH	MAILID	OPENF	GETLIN			
		EQUAL	PUTCHI	PROMPT	CLOWER	CLOSEF			
		PUTLIN	CREATE	MCOMNT	REMOVE				
100.	SDMAIL	631F9083		0205	REL	MM/DD/YY	HH:MM:SS		
	ENTRY:	SDMAIL							
	EXTERNAL:	MALINP	OPENF	MERROR	CLOSEF	GETLIN			
		EQUAL	CREATE	MCOMNT	PUTLIN	PUTCHI			
		MGNAME	SCOPY	MLOOK	INDEX	MGDEFN			
		GTOKEN	LENGTH	OUTNAM					

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ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
101.	OTOC	90389095		0007	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	OTOC				

PROCESSING: STD-XREFUP.REL,LCDC,01,LCDC

102.	XREFUP	520D9A7D		001C	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	XREFUP				
		EXTERNAL:	ENABLE%	PARAMS	RDTABS	PRTHDR	SETTAB
			RDDK	PRTDKX			
103.	PARAMS	621B8D10		008D	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	PARAMS				
		EXTERNAL:	ISHFT%	LOCF	QARG	ERROR	
104.	RDTABS	6B188AA6		00F8	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	RDTABS				
		EXTERNAL:	IESR	REWD	LOCF	READLU	UST
			ERROR	ULOC	COSYBF		
105.	COSYBF	7A1A8C11		0075	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	COSYBF				
106.	PRTHDR	6B088B1E		0079	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	PRTHDR				
		EXTERNAL:	IESR	DATE	IAPAW	TIME	Q8QINGOT
			Q8QARRAY	Q8QLGOT1	Q8QENGOT		
107.	SETTAB	6B288B47		0044	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	SETTAB				
		EXTERNAL:	ISHFT%				
108.	RDDK	8D4897A2		03F2	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	RDDK				
		EXTERNAL:	ISHFT%	RDBLK	ATDKT	ATIDT	GCDN
			Q8QINGOT	Q8QLGOT1	Q8QENGOT		
109.	RDBLK	62489D42		0051	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	RDBLK				
		EXTERNAL:	IESR	ULOC	LOCF	READLU	UST
			ERROR				
110.	GCDN	984C9B45		004C	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	GCDN				
111.	ATIDT	6A389631		006A	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	ATIDT				
		EXTERNAL:	ISHFT%	ERROR			
112.	ATDKT	6A3B9AEF		00A5	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	ATDKT				
		EXTERNAL:	ISHFT%	ERROR			

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
113.	PRTDKX	640587A3		03F8	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	PRTDKX				
		EXTERNAL:	Q8QINGOT Q8QENGOT ISHFT% Q8QINENC Q8QLGOT1 Q8QARRAY				
114.	ERROR	683D8D2B		0065	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	ERROR				
		EXTERNAL:	Q8QINGOT Q8QLGOT1 Q8QENGOT Q8QSTOP				

PROCESSING: STD-ITEMIZ.REL,LCDC,01,LCDC

115.	ITEMIZE	6D0174A9		00E9	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	ITEMIZE				
		EXTERNAL:	ENABLE%	INITST	PARAMS	ASSIGN	Q8QSTOP
			EJECT	GETCH	CUPPER	OFN	PFN
			DOFILE	FCLOSE	PXREF	Q8QINGOT	Q8QENGOT
116.	PARAMS	62188D15		0088	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	PARAMS				
		EXTERNAL:	ISHFT%	LOCF	QARG	ERROR	
117.	PFN	8F499167		0058	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	PFN				
		EXTERNAL:	Q8QINGOT Q8QARRAY Q8QLGOT1 Q8QENGOT EJECT				
118.	OFN	904990AC		0113	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	OFN				
		EXTERNAL:	IESR	JOBINFO	IAPAW	GTOKEN	CUPPER
			UTYP	LOCF	OPEN	Q8QINGOT	Q8QLGOT1
			Q8QENGOT				
119.	DOFILE	6F1398F0		00A6	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	DOFILE				
		EXTERNAL:	RDBLK	Q8QINGOT	Q8QENGOT	ABSBIN	RELBIN
			EJECT	ABSDIR	RELDIR		
120.	RDBLK	6248902A		0069	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	RDBLK				
		EXTERNAL:	IESR	ULOC	Q8QBUFIN	IFUNIT	
121.	ABSBIN	751F3C35		0068	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	ABSBIN				
		EXTERNAL:	Q8QINENC Q8QLGOT1 Q8QENGOT Q8QINGOT				
122.	RELBIN	641C91A8		01F2	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	RELBIN				
		EXTERNAL:	EJECT	CXREF	RDBLK	Q8QINGOT	Q8QLGOT1
			Q8QARRAY	Q8QENGOT			
123.	CXREF	763788F1		01A9	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	CXREF				

ITEM NAME CHECKSUM REC LEN TYPE DATE TIME

EXTERNAL: LOCF THREAD WALK

124. PXREF 69378C43 0157 REL MM/DD/YY HH:MM:SS
ENTRY: PXREF
EXTERNAL: EJECT Q8QINGOT Q8QENGOT WALK Q8QARRAY
Q8QLGOT1

125. WALK 884E92FC 0098 REL MM/DD/YY HH:MM:SS
ENTRY: WALK
EXTERNAL: ISHFT% Q8QINGOT Q8QLGOT1 Q8QENGOT Q8QSTOP

126. ABSDIR 75188C03 0098 REL MM/DD/YY HH:MM:SS
ENTRY: ABSDIR
EXTERNAL: EJECT Q8QINGOT Q8QLGOT1 Q8QARRAY Q8QENGOT

127. RELDIR 64189286 0115 REL MM/DD/YY HH:MM:SS
ENTRY: RELDIR
EXTERNAL: Q8QINGOT Q8QLGOT1 Q8QARRAY Q8QENGOT EJECT

128. EJECT 664599F7 00A5 REL MM/DD/YY HH:MM:SS
ENTRY: EJECT
EXTERNAL: IESR DATE IAPAW TIME Q8QINGOT
Q8QARRAY Q8QLGOT1 Q8QENGOT

129. DUMPIT 72069206 0069 REL MM/DD/YY HH:MM:SS
ENTRY: DUMPIT
EXTERNAL: LOCF Q8QINGOT Q8QLGOT1 Q8QENGOT

PROCESSING: STD-LISTF.REL,LCDC,01,LCDC

130. LISTF 6D468ADD 01AE REL MM/DD/YY HH:MM:SS
ENTRY: LISTF
EXTERNAL: ENABLE% INITST PARAMS ASSIGN Q8QSTOP
GETCH CUPPER NEWPG OPENF PUTLIN
PUTCH CLOSEF ENDST

131. PARAMS 62188D15 0088 REL MM/DD/YY HH:MM:SS
ENTRY: PARAMS
EXTERNAL: ISHFT% LOCF QARG ERROR

132. NEWPG 6A4A8803 0087 REL MM/DD/YY HH:MM:SS
ENTRY: NEWPG
EXTERNAL: IESR DATE IAPAC PUTLIN ITOC
PUTCH

PROCESSING: STD-ZAP.REL,LCDC,01,LCDC

133. ZAP 854E8EB6 0109 REL MM/DD/YY HH:MM:SS
ENTRY: ZAP
EXTERNAL: ENABLE% INITST PARAMS ASSIGN Q8QSTOP
PUTLIN PUTCH GETCH CUPPER REMOVE

ITEM	NAME	CHECKSUM	REC	LEN	TYPE	DATE	TIME
			ENDST				
4.	PARAMS	62188D15		0088	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	PARAMS				
		EXTERNAL:	ISHFT%	LOCF	QARG	ERROR	

PROCESSING: STD-DAYERR.REL,BCDC,01,BCDC

135.	DAYERR	691C8633		005E	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	DAYERR				
		EXTERNAL:	ENABLE%	INITST	ASSIGN	PUTLIN	GETLIN
			ENDST				

PROCESSING: STD-FMAINT.REL,BCDC,01,BCDC

136.	FMAINT	680E9C3C		025A	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	FMAINT				
		EXTERNAL:	ENABLE%	Q8QINGOT	Q8QENGOT	Q8QINGIN	Q8QARRAY
			Q8QLGIN1	Q8QENGIN	IFUNIT	Q8QINDEC	FTNULOC
			Q8QBUFIN	Q8QLGOT1	FTNRELES		

PROCESSING: STD-TCYB.REL,BCDC,01,BCDC

137.	TCYB	884C7CFE		099F	REL	MM/DD/YY	HH:MM:SS
		ENTRY:	TCYB				
		EXTERNAL:	CLOSE	OPEN	PARM	READLU	UST
			PACK	CTOC	ULOC	UNLO	PICKD
			PARM	PICK	WRITLU	PICKC	RELEASE
			WEOF	ABORT	BKSP	TIME	REWD
			CTOI	CTOR	PACKC	PACKD	PACKO
			PICKI				

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
ABORT	????????	FMTUTES	R4ERR	TCYB		
ABSBIN	ABSBIN	DOFILE				
ABSDIR	ABSDIR	DOFILE				
ADDLINE	ADDLINE	TEXT				
ADDSET	ADDSET					
ADDSPACE	ADDSPACE	ADDLINE				
ADDSCNTS	ADDSCNTS	ADDSPACE				
ADDUSR	ADDUSR	MAIL	MALCMD			
ALLOCATE	????????	CREATE				
AMOVE	AMOVE					
ASSIGN	ASSIGN	DAYERR	ITEMIZE	LISTF	MALINT	ZAP
ATDKT	ATDKT	RDDK				
ATIDT	ATIDT	RDDK				
BKSP	????????	TCYB				
BRK	BRK	ADDLINE	COMAND	SPACE	TBLCONT	TEXT
CANT	CANT					
CLEANF	CLEANF	MAIL	MAILID	MALINP	MERROR	
CLOSEF	CLOSEF	ADDUSR LSTWHO PSTMRK	DOCCST MAIL RMAIL	DOTOST MALCMD SDMAIL	ENDST MALINP	LISTF MALINT
CLOSE	????????	CLOSEF	TCYB			
CLOWER	CLOWER	FOLD	MALINP	MLOOK	RMAIL	
CLRLUN	FMTUTES	COMAND	FMT	TBLCONT		
COMAND	COMAND	FMT				
CONCAT	CONCAT					
COSYBF	COSYBF	RDTABS				
CREATE	CREATE	ADDUSR	MALINP	PSTMRK	RMAIL	SDMAIL

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
CTOC	????????	TCYB				
CTOIF	CTOIF	ADDUSR				
CTOI	????????	R4ERR	TCYB			
CTOIT	CTOIT	GETVAL				
CTOR	????????	TCYB				
CUPPER	CUPPER	ITEMIZE UPPER	LISTF ZAP	OFN	R4MFN	SCRATF
CXREF	CXREF	RELBIN				
DATE	????????	EJECT	GDATE	INIT	NEWPG	PRTHDR
DAYERR	DAYERR					
DEFLUN	FMTUTES	COMAND	INIT	TBLCONT		
DOCCST	DOCCST	MALINP				
DOFILE	DOFILE	ITEMIZE				
DOTOST	DOTOST	MALINP				
DUMPIT	DUMPIT					
EJECT	EJECT	ABSDIR RELBIN	DOFILE RELDIR	ITEMIZE	PFN	PXREF
ENABLE%	????????	DAYERR MAILDRV	FMAINT XREFUP	FMT ZAP	ITEMIZE	LISTF
ENDST	ENDST	CANT MAILDRV	CLEANF MAILID	DAYERR MALINP	ERROR MALINT	LISTF ZAP
EQUAL	EQUAL	ADDUSR RMAIL	DOCCST SDMAIL	DOTOST	LSTWHO	MAIL
ERROR	ERROR	ATOKT	ATIDT	PARAMS	RDBLK	RDTABS
ERROR	ERROR	DUPLICATE ENTRYPOINT				
FCLOSE	????????	ITEMIZE				
FCOPY	FCOPY					
FLUSH	FLUSH					
FMAINT	FMAINT					

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
FMT	FMT					
FOLD	FOLD	MAIL	MALCMD			
FTNRELES	????????	FMAINT				
FTNULOC	????????	FMAINT				
GCDN	GCDN	RDDK				
GDATE	GDATE	PSTMRK				
GETARG	GETARG	INITST				
GETCH	GETCH	FCOPY	GETC	ITEMIZE	LISTF	ZAP
GETC	GETC					
GETIN	FMTUTES	FMT	TBLCONT			
GETLIN	GETCH	DAYERR MAIL RMAIL	DOCCST MALCMD SDMAIL	DOTOST MALINP SEEKL	GSBJCT MALINT	LSTWHO PROMPT
GETMID	GETMID	OUTNAM				
GETTL	GETTL	COMAND				
GETVAL	GETVAL	COMAND				
GETWRD	GETWRD					
GSBJCT	GSBJCT	MALINP				
GTIME	GTIME	PSTMRK				
GTOKEN	GTOKEN	GETARG OFN	MAIL OUTNAM	MAILID R4MFN	MALCMD SDMAIL	MALINT
IABS%	????????	ITOC	ITOC			
IAPAW	????????	CLOSEF MAILID R4OUTL	EJECT OFN	GETARG OPENF	GETCH PRTHDR	INIT R4MFN
IAPAC	????????	GDATE	GETMID	GTIME	NEWPG	SCRATF
IBDB	????????	CLOSEF SEEKL	ENDST	GETCH	PUTCH	R4OUTL
IESR	????????	AMOVE GETMID NEWPG	CLOSEF GTIME OFN	CREATE INIT OPENF	EJECT ISATTY PRTHDR	GDATE MAILID R4ERR

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
		R4MFN SCRATF	RDBLK SEEKL	RDBLK	RDTABS	REMOVE
IFUNIT	????????	FMAINT	RDBLK			
INDEX	INDEX	ADDUSR SDMAIL	CTOIF	LSTWHO	MAIL	OUTNAM
INITST	INITST	DAYERR	ITEMIZE	LISTF	MAILDRV	ZAP
INIT	INIT	FMT				
INMAP	INMAP					
INSUB	INSUB					
ISATTY	ISATTY	ADDUSR	GSBJCT	MALINP	PROMPT	
ISHFT%	????????	ATOKT PARAMS WALK	ATIDT PARAMS	ITOH PRTOKX	PARAMS RDOK	PARAMS SETTAB
ITEMIZE	ITEMIZE					
ITOC	ITOC	PUTDEC				
ITOC	ITOC	DUPLICATE ENTRYPOINT				
ITOH	ITOH					
JOBINFO	????????	GETMID	MAILID	OFN	R4MFN	
LEADBL	LEADBL	TEXT				
LENGTH	LENGTH	LSTWHO PROMPT	MAILID RMAIL	MGDEFN SDMAIL	MINSTAL	OUTNAM
LISTF	LISTF					
LOCF	????????	AMOVE GETCH PARAMS RDTABS	CLOSEF OFN PARAMS REMOVE	CREATE OPENF PUTCH	CXREF PARAMS R4OUTL	DUMPIT PARAMS RDBLK
LSTWHO	LSTWHO	MAIL				
MAILDRV	MAILDRV					
MAIL	MAIL	MAILDRV				
MAILID	MAILID	PSTMRK	RMAIL			
MALCMD	MALCMD	MAIL				

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
MALINT	MALINT	MAIL				
MALINP	MALINP	SDMAIL				
MARKL	MARKL					
MCOMNT	MCOMNT	ADDUSR MALINP SDMAIL	CLEANF MALINT	LSTWHO MERROR	MAILID MINSTAL	MALCMD RMAIL
MERROR	MERROR	ADDUSR SDMAIL	DOCCST	DOTOST	LSTWHO	MALINP
MGDEFN	MGDEFN	LSTWHO	OUTNAM	SDMAIL		
MGNAME	MGNAME	ADDUSR	LSTWHO	OUTNAM	SDMAIL	
MINO%	????????	MALINT				
MINSTAL	MINSTAL	MALINT				
MLOOK	MLOOK	ADDUSR	LSTWHO	OUTNAM	SDMAIL	
MOD%	????????	ITOC	ITOC			
MODIFY	????????	AMOVE				
NEWPG	NEWPG	LISTF				
OFN	OFN	ITEMIZE				
OPENF	OPENF	CREATE MAIL SDMAIL	DOCCST MALCMD	DOTOST MALINP	LISTF MALINT	LSTWHO RMAIL
OPEN	????????	OFN	OPENF	TCYB		
OTOC	OTOC					
OUTMAP	OUTMAP					
OUTNAM	OUTNAM	DOCCST	DOTOST	PSTMRK	SDMAIL	
OUTSUB	OUTSUB					
PACKC	????????	CLOSEF	ENDST	FMTUTES	GETCH	TCYB
PACKD	????????	FMTUTES	PUTCH	TCYB		
PACKO	????????	PUTCH	TCYB			
PACK	????????	FMTUTES	PUTCH	R4OUTL	TCYB	

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
PARAMS	PARAMS	ITEMIZE	XREFUP			
PARAMS	PARAMS	DUPLICATE ENTRYPOINT				
PARAMS	PARAMS	DUPLICATE ENTRYPOINT				
PARAMS	PARAMS	DUPLICATE ENTRYPOINT				
PARM	????????	FMTUTES	FMTUTES	TCYB	TCYB	
PFN	PFN	ITEMIZE				
PFOOT	PFOOT	PUT	SPACE			
PHEAD	PHEAD	PUT	SPACE			
PICKC	????????	CLOSEF	FMTUTES	PUTCH	TCYB	
PICKD	????????	FMTUTES	GETCH	TCYB		
PICK	????????	FMTUTES	GETCH	TCYB		
PICKI	????????	SEEKL	TCYB			
PROMPT	PROMPT	ADDUSR	GSBJCT	MAIL	RMAIL	
PRTDKX	PRTDKX	XREFUP				
PRTHDR	PRTHDR	XREFUP				
PSTMRK	PSTMRK	MALINP				
PUT	PUT	BRK	PUTTC	TEXT		
PUTCH	PUTCH	FCOPY	FLUSH	PUTC	PUTCHI	REMARK
PUTC	PUTC	PUTDEC				
PUTCHI	PUTCHI	ADDUSR GETCH PSTMRK	CLOSEF MALINP REMARK	DOCCST MCOMNT RMAIL	DOTOST OUTNAM SDMAIL	ENDST PROMPT
PUTC	FMTUTES	DUPLICATE ENTRYPOINT				
PUTCH	FMTUTES	DUPLICATE ENTRYPOINT				
PUTCI	FMTUTES	PFOOT	PHEAD	PUT	PUTTL	SKIP
PUTDEC	PUTDEC					
PUTLIN	PUTCH	CANT	PROMPT			
PUTLIN	FMTUTES	DUPLICATE ENTRYPOINT				

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
PUTTC	PUTTC	COMAND				
PUTTL	PUTTL	PFOOT	PHEAD			
PXREF	PXREF	ITEMIZE				
Q8QARRAY	????????	ABSDIR	EJECT	FMAINT	PFN	PRTDKX
		PRTHDR	PXREF	RELBIN	RELDIR	
Q8QBUFIN	????????	FMAINT	RDBLK			
Q8QENGOT	????????	ABSBIN	ABSDIR	DOFILE	DUMPIT	EJECT
		ERROR	FMAINT	ITEMIZE	OFN	PFN
		PRTDKX	PRTHDR	PXREF	R4ERR	RDDK
		RELBIN	RELDIR	WALK		
Q8QENGIN	????????	FMAINT				
Q8QINGOT	????????	ABSBIN	ABSDIR	DOFILE	DUMPIT	EJECT
		ERROR	FMAINT	ITEMIZE	OFN	PFN
		PRTDKX	PRTHDR	PXREF	R4ERR	RDDK
		RELBIN	RELDIR	WALK		
Q8QINENC	????????	ABSBIN	PRTDKX			
Q8QINGIN	????????	FMAINT				
Q8QINDEC	????????	FMAINT				
Q8QLGOT1	????????	ABSBIN	ABSDIR	DUMPIT	EJECT	ERROR
		FMAINT	OFN	PFN	PRTDKX	PRTHDR
		PXREF	R4ERR	RDDK	RELBIN	RELDIR
		WALK				
Q8QLGIN1	????????	FMAINT				
Q8QSTOP	????????	ENDST	ERROR	ITEMIZE	LISTF	WALK
		ZAP				
QARG	????????	MALINT	PARAMS	PARAMS	PARAMS	PARAMS
R4ERR	R4ERR	AMOVE	ASSIGN	CREATE	GETCH	OPENF
		PUTCH	R4OUTL	SEEKL		
R4MFN	R4MFN	AMOVE	CREATE	OPENF	REMOVE	
R4OUTL	R4OUTL	PUTCH				
RDBLK	RDBLK	DOFILE	RDDK			
RDBLK	RDBLK	DUPLICATE ENTRYPOINT				
RDDK	RDDK	XREFUP				

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
RDTABS	RDTABS	XREFUP				
READLJ	????????	RDBLK	RDTABS	TCYB		
RELBIN	RELBIN	DOFILE				
RELDIR	RELDIR	DOFILE				
RELEASE	????????	CLOSEF	REMOVE	TCYB		
REMARK	REMARK	ERROR				
REMOVE	REMOVE	CLEANF	RMAIL	ZAP		
RETURN	????????	FMTUTES				
REWD	????????	RDTABS	TCYB			
RMAIL	RMAIL	MAIL				
SCOPY	SCOPY	CONCAT MGNAME SDMAIL	INSUB MINSTAL	MAILID OUTSUB	MALCMD RMAIL	MGDEFN SCRATF
SCRATF	SCRATF	ADDUSR				
SDMAIL	SDMAIL	MAIL				
SEEKL	SEEKL					
SET	SET	COMAND				
SETTAB	SETTAB	XREFUP				
SKIPBL	SKIPBL					
SKIP	SKIP	PFOOT	PHEAD	PUT	SPACE	
SPACER	FMTUTES	ADDSCNTS				
SPACE	SPACE	COMAND	FMT	TBLCONT		
STCOPY	STCOPY	CONCAT				
TBLCONT	TBLCONT	FMT				
TCYB	TCYB					
TEXT	TEXT	FMT				
THREAD	????????	CXREF				
TIME	????????	EJECT	GTIME	PRTHDR	SCRATF	TCYB

ENTRYPOINT	MODULE	MODULES REFERENCING THE ENTRYPOINT				
TYPE	TYPE					
ULOC	????????	OPENF TCYB	RDBLK	RDBLK	RDTABS	SEEKL
UNDERL	UNDERL	TEXT				
UNLD	????????	TCYB				
UPPER	UPPER					
UST	????????	RDBLK	RDTABS	TCYB		
UTYP	????????	ISATTY	OFN	OPENF		
WALK	WALK	CXREF	PXREF			
WEOF	????????	TCYB				
WIDTH	WIDTH	ADDLINE	PUTTL	TEXT		
WRITLU	????????	TCYB				
XREFUP	XREFUP					
ZAP	ZAP					
ZMG	FMTUTES	INIT				

```
ITEMIZE  COMPLETE.
   *SAVEPF(62,BLD-PLAN.LST,STDL,01,     )
   *EOJ    BLD-PLAN
```

***** END OF LIST *****