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Volume IV

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STRUCTURAL ANALYSIS VIA GENERALIZED INTERACTIVE GRAPHICS
STAGING
Volume IV — Appendices to System Manual

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This technical report has been reviewed and is approved for publication.

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number):

STAGING (STructural Analysis via Generalized INteractive Graphics) has been developed to give engineers an interactive graphics system for constructing and studying finite element models and for reviewing the results of a finite element analysis.

Volume IV includes appendices to the System Manual. These appendices list the various STAGING procedures, loader directives, and cross-referenced tables of all entry names that occur in the STAGING system.

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FOREWARD

This final report was prepared by the Columbus Laboratories of Battelle Memorial Institute, Columbus, Ohio, for the Structures and Dynamics Division, Air Force Flight Dynamics Laboratory, Wright-Patterson Air Force Base, Ohio. The work was performed under Contract No. F-33615-75-C-3125, which was initiated under Project No. 2401, "Structures and Dynamics", Task No. 02, "Design and Analysis Methods for Aerospace Vehicle Structures". Initially, Mr. L. Bernier (FBR) was the AFFDL project engineer for this effort, after which Mr. B.H. Groomes (FBR) was assigned the responsibility.

STAGING, as described in this report, represents a three-year combined Air Force-Navy effort, with specific support and contributions from Dr. Charles P. Porier, Chief, Scientific Systems Analysis Branch, ASD Computer Center, Wright-Patterson Air Force Base, Ohio, Messers. James M. McKee and Michael E. Golden, Computation Mathematics and Logistics Department, Code 1844, Mr. Paul Mayer and Miss Jane A. Figula, Structures Department, Code 1730.5, The David W. Taylor Naval Ship Research and Development Center, Bethesda, Maryland. The technical graphics expertise of these government researchers are gratefully acknowledged.

The report consists of four volumes. Volume I, "Final Summary Report", presents an overview of the capabilities of the STAGING (STructural Analysis via Generalized INteractive Graphics) system. Volume II, "Users Guide", gives detailed instructions on how to use STAGING for finite element analysis. Volume III, "System Manual", describes the internal structure of STAGING and details procedures for installation and Maintainance of the System on CDC CYBER and 6000 series mainframe computers. Volume IV, "Appendices to the System Manual", includes lists of STAGING procedures, loader directives and cross-referenced tables of all entry names that occur in STAGING.

The program manager of this development was Dr. L. E. Hulbert of the Transportation and Structures Department. He was supported by N. D. Ghadiali of the same department and by a number of specialists from the Computer, Information Systems, and Education Department including:

E. Edwards K. Cadmus

D. Kasik C. Scofield

W. Young F. Drobot

Kevin Cadmus was a major contributor to the preparation of this volume.

The work reported herein was conducted during the period of June 28, 1976 through June 1979. Some work on STAGING was carried out under contract F33615.

The present report was submitted for publication in September, 1979.

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APPENDIX A

STAGING PROCEDURES

APPENDIX A

STAGING PROCEDURES

This section contains listings of various STAGING procedures. In most cases two versions of each procedure are provided. The first, called the "PROFIL" version, is written in the University of Washington Control Language. The second, called the "PROCFIL" version, is written in the standard CYBER Control Language. Below is a list of the names of the procedures provided in this appendix:

A
C
R
STAGING
MENUGENABS
MPDBGENABS
SUPPORTLIB
MENUGEN
MENUTABLE
MPDBNEW
MPDBADD
STAGINGGEN
XGPRIME
UPDATE
NEWLIB

PROFIL VERSION

```
A(*LFN=,*PFN1=,*PFN2=,*PFN3=,*PFN4=,*ID=STAGING3)
/*
/*  ATTACH A PERMANENT FILE
/*
RETURN(*LFN)
IFC(NE,*PFN1,,L1)
ATTACH(*LFN,$_*PFN1_*PFN2_*PFN3_*PFN4_$,ID=*ID,PW=XR)
ELSE(L1)
ATTACH(*LFN,ID=*ID,PW=XR)
ENDIF(L1)
REVERT.
EXIT(S)
REVERT(ABORT)
```

PROCFIL VERSION

```
.PROC,A,LFN=,PFN1=,PFN2=,PFN3=,PFN4=,ID=STAGING3.
.*
.*  ATTACH A PERMANENT FILE
.*
RETURN(LFN)
ATTACH(LFN,PFN1_PFN2_PFN3_PFN4,#ID=ID,PW=XR)
REVERT.
EXIT(S)
REVERT(ABORT)
```

Figure A-1. Procedure A

PROFIL VERSION

```
C(*LFN=,*PFN1=,*PFN2=,*PFN3=,*PFN4=,*ID=STAGING3)
/*
/*  CATALOG A PERMANENT FILE
/*
IFC(EQ,*PFN1,,L1)
CATALOG(*LFN,ID=*ID,XR=XR,PW=XR,RP=999)
ELSE(L1)
CATALOG(*LFN,$_*PFN1_*PFN2_*PFN3_*PFN4_$,ID=*ID,XR=XR,PW=XR,RP=999)
ENDIF(L1)
REVERT.
EXIT(S)
IFC(EQ,*PFN1,,L3)
BEGIN,P,*FILE,*LFN,ID=*ID.
CATALOG(*LFN,ID=*ID,XR=XR,PW=XR,RP=999)
ELSE(L3)
BEGIN,P,*FILE,*PFN1,*PFN2,*PFN3,*PFN4,ID=*ID.
CATALOG(*LFN,$_*PFN1_*PFN2_*PFN3_*PFN4_$,ID=*ID,XR=XR,PW=XR,RP=999)
ENDIF(L3)
SKIP(1)
EXIT(S)
REVERT.
```

PROCFIL VERSION

```
.PROC,C,LFN=,PFN1=,PFN2=,PFN3=,PFN4=,ID=STAGING3.
.*
.*  CATALOG A PERMANENT FILE
.*
CATALOG(LFN,PFN1_PFN2_PFN3_PFN4,#ID=ID,XR=XR,PW=XR,RP=999)
REVERT.
EXIT(S)
RETURN(JUNK)
PURGE(JUNK,PFN1_PFN2_PFN3_PFN4,#ID=ID,PW=XR,LC=1)
RETURN(JUNK)
CATALOG(LFN,PFN1_PFN2_PFN3_PFN4,#ID=ID,XR=XR,PW=XR,RP=999)
SKIP(L4)
EXIT(S)
ENDIF(L4)
REVERT.
```

Figure A-2. Procedure C

```
PROFIL VERSION
                R(*LFN)
                /*
                /*  REQUEST A PERMANENT FILE
                /*
                RETURN(*LFN)
                REQUEST(*LFN,*PF)
                SKIP(1)
                EXIT(S)
                REVERT.


PROCFIL VERSION
                .PROC,R,LFN=.
                .*
                .*  REQUEST A PERMANENT FILE
                .*
                RETURN(LFN)
                REQUEST(LFN,*PF)
                SKIP(L1)
                EXIT(S)
                ENDIF(L1)
                REVERT.
```

Figure A-3. Procedure R

```
PROFIL VERSION:
              STAGING(*CY=1,*ETL=500)
              /*
              /* RUN (COMPIO) VERSION OF STAGING SYSTEM
              /*
              RETURN(ST)
              RETURN(PROCFIL)
              ATTACH(PROCFIL,DUMMYPROCFILFORBATTELLE,ID=STAGING3,CY=1)
              ATTACH(ST,STAGINGABS,ID=STAGING3,CY=*CY)
              ETL(*ETL)
              ST.
              RETURN(GLOBAL,EXEC,DANDE,PREP,POST,MATER,PROCFIL)
              SKIP(1)
              EXIT(S)
              REVERT.


PROCFIL VERSION
              .PROC,STAGING,CY=1,ETL=300.
              .*
              .* RUN STAGING3 VERSION OF STAGING3
              .*
              RETURN(ST)
              ATTACH(ST,STAGINGABS,ID=STAGING3,#CY=CY)
              #ETL(ETL)
              ST.
              RETURN(ST,MATER,GLOBAL,EXEC,DANDE,PREP,POST)
              SKIP(L1)
              EXIT(S)
              ENDIF(L1)
              REVERT.
```

Figure A-4. Procedure STAGING

```
PROFIL VERSION:
              MENUGENABS.
              /*
              /* CREATE NEW MENU GENERATOR ABSOLUTE
              /*
              BEGIN,A,*FILE,BIN,MENUGENBIN.
              BEGIN,A,*FILE,SUPLIB,SUPPORTLIB.
              BEGIN,R,*FILE,MENG.
              LOAD(BIN)
              LDSET(LIB=SUPLIB)
              NOGO(MENG)
              BEGIN,C,*FILE,MENG,MENUGENABS.
              SKIP(1)
              EXIT(S)
              RETURN(MENG,BIN,SUPLIB)
              REVERT.

PROCFIL VERSION
              .PROC,MENUGENABS,TYPE=REGEN.
              .*
              .* CREATE NEW MENU GENERATOR ABSOLUTE
              .*
              IFE,$TYPE$.EQ.$REGEN$,L2.
              BEGIN,A,PROCFIL,OLDPL,MENUGENPL.
              BEGIN,A,PROCFIL,IN,MENUGENIN.
              BEGIN,A,PROCFIL,BINOLD,MENUGENBIN.
              BEGIN,R,PROCFIL,NEWPL.
              BEGIN,R,PROCFIL,INNEW.
              BEGIN,R,PROCFIL,BINNEW.
              UPDATE(N,I=IN,L=1)
              FTN(I,Z,R=3,OPT=2,S=CPCTEXT)
              COPYL(BINOLD,LGO,BINNEW,,RA)
              BEGIN,C,PROCFIL,BINNEW,MENUGENBIN.
              COPYBF(#DATA,INNEW)
              BEGIN,C,PROCFIL,INNEW,MENUGENIN.
              BEGIN,C,PROCFIL,NEWPL,MENUGENPL.
              RETURN(OLDPL,NEWPL,BINOLD,LGO,BINNEW,INNEW)
              ENDIF(L2)
              BEGIN,A,PROCFIL,BIN,MENUGENBIN.
              BEGIN,A,PROCFIL,SUPLIB,SUPPORTLIB.
              BEGIN,R,PROCFIL,MENG.
              LOAD(BINNEW)
              LDSET(LIB=SUPLIB)
              NOGO(MENG)
              BEGIN,C,PROCFIL,MENG,MENUGENABS.
              SKIP(L1)
              EXIT(S)
              ENDIF(L1)
              RETURN(MENG,BIN,SUPLIB)
              REVERT.
              .DATA
              *ID MENUNEW
              .EOR
```

Figure A-5. Procedure MENUGENABS

```
PROFIL VERSION
              MPDBGENABS(*TYPE=ADD)
              /*
              /* GENERATE NEW MPDB ABSOLUTE (MPDBNEWABS OR MPDBADDABS)
              /*
              BEGIN,A,*FILE,OLDPL,STAGINGPL.
              UPDATE(Q,I=*DATA,L=0)
              FTN(I,R=3,B=BIN)
              BEGIN,A,*FILE,LIB,SUPPORTLIB.
              LIBRARY(LIB)
              LOAD(BIN)
              NOGO(ABS)
              BEGIN,C,*FILE,ABS,MPDB,*TYPE,ABS.
              REVERT.
              /DATA
              *ID MPDB
              *C MPDB_*TYPE
              /EOR



PROCFIL VERSION:
              .PROC,MPDBGENABS,TYPE=NEW.
              .*
              .* GENERATE NEW MPDB ABSOLUTE (FOR CREATE OR REVISE)
              .*
              BEGIN,A,PROCFIL,OLDPL,STAGINGPL.
              UPDATE(Q,I=#DATA,L=0)
              FTN(I,R=3,B=BIN)
              BEGIN,A,PROCFIL,LIB,SUPPORT,LIB.
              LIBRARY(LIB)
              LOAD(BIN)
              NOGO(ABS)
              BEGIN,C,PROCFIL,ABS,MPDB,TYPE,ABS.
              SKIP(L1)
              EXIT(S)
              ENDIF(L1)
              REVERT.
              .DATA
              *ID MPDBGEN
              *C MPDB_TYPE
              .EOR
```

Figure A-6. Procedure MPDBGENABS

```
SUPPORTLIB.
/*
/* COMBINE LIBRARIES TO FORM NEW STAGING SUPPORT LIBRARY
/*
BEGIN,A,*FILE,BIN1,DATABASE,BIN.
BEGIN,A,*FILE,BIN2,RECOVERY,BIN.
BEGIN,A,*FILE,BIN3,XYGRAPH,BIN.
BEGIN,A,*FILE,BIN4,PERMFILE,BIN.
BEGIN,A,*FILE,BIN5,CONVERSION,BIN.
BEGIN,A,*FILE,BIN6,NEWCOMPIO,BIN.
EDITLIB(I=*DATA,L=0)
BEGIN,C,*FILE,LIB,SUPPORTLIB.
REWIND(LIB)
ITEMIZE(LIB,E)
SKIP(1)
EXIT(S)
RETURN(BIN1,BIN2,BIN3,BIN4,BIN5,BIN6,LIB)
REVERT.
/DATA
LIBRARY(LIB,NEW)
ADD(*,BIN1)
ADD(*,BIN2)
ADD(*,BIN3)
ADD(*,BIN4)
ADD(*,BIN5)
ADD(*,BIN6)
FINISH.
ENDRUN.
/EOR
```

Figure A-7A. Procedure SUPPORTLIB (PROFIL Version)

```
.PROC,SUPPORTLIB.
.*
.* COMBINE LIBRARIES TO FORM NEW STAGING3 SUPPORT LIBRARY
.*
BEGIN,A,PROCFIL,BIN1,DATABASE,BIN.
BEGIN,A,PROCFIL,BIN2,RECOVERY,BIN.
BEGIN,A,PROCFIL,BIN3,XYGRAPH,BIN.
BEGIN,A,PROCFIL,BIN4,PERMFILE,BIN.
BEGIN,A,PROCFIL,BIN5,CONVERSION,BIN.
BEGIN,A,PROCFIL,BIN6,NEWCOMPIO,BIN.
BEGIN,R,PROCFIL,LIB.
EDITLIB(I=#DATA,L=0)
BEGIN,C,PROCFIL,LIB,SUPPORTLIB.
REWIND(LIB)
ITEMIZE(LIB,E)
SKIP(L1)
EXIT(S)
ENDIF(L1)
RETURN(BIN1,BIN2,BIN3,BIN4,BIN5,BIN6,LIB)
REVERT.
.DATA
LIBRARY(LIB,NEW)
ADD(*,BIN1)
ADD(*,BIN2)
ADD(*,BIN3)
ADD(*,BIN4)
ADD(*,BIN5)
ADD(*,BIN6)
FINISH.
ENDRUN.
.EOR
```

Figure A-7B. Procedure SUPPORTLIB (PROCLIB Version)

```
PROFIL VERSION
                MENUGENABS.
                /*
                /* CREATE NEW MENU GENERATOR ABSOLUTE
                /*
                BEGIN,A,*FILE,BIN,MENUGENBIN.
                BEGIN,A,*FILE,SUPLIB,SUPPORTLIB.
                BEGIN,R,*FILE,MENG.
                LOAD(BIN)
                LDSET(LIB=SUPLIB)
                NOGO(MENG)
                BEGIN,C,*FILE,MENG,MENUGENABS.
                SKIP(1)
                EXIT(S)
                RETURN(MENG,BIN,SUPLIB)
                REVERT.


PROCFIL VERSION
                .PROC,MENUGEN,PREFIX=EXEC.
                .*
                .* CREATE NEW MENUS FOR NEW COMMAND TREE
                .*
                RETURN(TAPE9,TAPE31,TAPE32)
                BEGIN,R,PROCFIL,MENUS.
                BEGIN,R,PROCFIL,TAPE10.
                BEGIN,A,PROCFIL,MENG,MENUGENABS.
                BEGIN,A,PROCFIL,TAPE5,PREFIX,MENU,SOURCE.
                MENG(PL=777777)
                BEGIN,C,PROCFIL,TAPE10,PREFIX,MENUDRIVER.
                BEGIN,C,PROCFIL,MENUS,PREFIX,MENU.
                SKIP(L1)
                EXIT(S)
                ENDIF(L1)
                RETURN(TAPE9,TAPE31,TAPE32)
                REVERT.
```

Figure A-8. Procedure MENUGEN

```
MENUTABLE.
/*
/* REGENERATE THE TABLE OF MENU DRIVERS
/*
BEGIN,A,*FILE,OLDPL,STAGINGPL.
BEGIN,R,*FILE,TABLE.
BEGIN,A,*FILE,IN,GLOBAL,MENUDRIVER.
UPDATE(Q,I=IN,L=0)
FTN(I,Z,R=3,B=TABLE,S=0)
BEGIN,A,*FILE,IN,EXEC,MENUDRIVER.
UPDATE(Q,I=IN,L=0)
FTN(I,Z,R=3,B=TABLE,S=0)
BEGIN,A,*FILE,IN,PRE,MENUDRIVER.
UPDATE(Q,I=IN,L=0)
FTN(I,Z,R=3,B=TABLE,S=0)
BEGIN,A,*FILE,IN,POST,MENUDRIVER.
UPDATE(Q,I=IN,L=0)
FTN(I,Z,R=3,B=TABLE,S=0)
BEGIN,A,*FILE,IN,DISPLAY,MENUDRIVER.
UPDATE(Q,I=IN,L=0)
FTN(I,Z,R=3,B=TABLE,S=0)
BEGIN,C,*FILE,TABLE,MENUTABLE.
RETURN(TABLE)
SKIP(1)
EXIT(S)
REVERT.
```

Figure A-9A. Procedure MENUTABLE (PROFIL Version)

```
.PROC,MENUTABLE.
.*
.* REGENERATE THE TALBE OF MENU DRIVERS
.*
BEGIN,A,PROCFIL,OLDPL,STAGINGPL.
BEGIN,R,PROCFIL,TABLE.
BEGIN,A,PROCFIL,IN,GLOBAL,MENUDRIVER.
UPDATE(Q,I=IN,L=0)
FTN(I,Z,L=TABLIST,R=3,B=TABLE,S=0)
BEGIN,A,PROCFIL,IN,DISPLAY,MENUDRIVER.
UPDATE(Q,I=IN,L=0)
FTN(I,Z,L=TABLIST,R=3,B=TABLE,S=0)
BEGIN,A,PROCFIL,IN,EXEC,MENUDRIVER.
UPDATE(Q,I=IN,L=0)
FTN(I,Z,L=TABLIST,R=3,B=TABLE,S=0)
BEGIN,A,PROCFIL,IN,PRE,MENUDRIVER.
UPDATE(Q,I=IN,L=0)
FTN(I,Z,L=TABLIST,R=3,B=TABLE,S=0)
BEGIN,A,PROCFIL,IN,POST,MENUDRIVER.
UPDATE(Q,I=IN,L=0)
FTN(I,Z,L=TABLIST,R=3,B=TABLE,S=0)
BEGIN,C,PROCFIL,TABLE,MENUTABLE.
RETURN(TABLE)
SKIP(L1)
EXIT(S)
ENDIF(L1)
REVERT.
```

Figure A-9B. Procedure MENUTABLE (PROCFIL Version)

FIGURE A.9B - PROCEDURE MENUTABLE (PROCFIL VERSION)

```
PROFIL VERSION
              MPDBNEW.
              /*
              /* RECONSTRUCT AN EMPTY STAGING MATERIAL PROPERTY DATA BASE
              /*
              BEGIN,R,*FILE,MATER.
              BEGIN,A,*FILE,ABS,MPDBNEWABS.
              ABS.
              BEGIN,C,*FILE,MATER,MPDB.
              RETURN(MATER,ABS)
              REVERT.
```

```
PROCFIL VERSION
              .PROC,MPDBNEW.
              .*
              .* RECONSTRUCT STAGING MATERIAL PROPERTIES DATA BASE
              .*
              BEGIN,R,PROCFIL,MATER.
              BEGIN,A,PROCFIL,ABS,MPDBNEWABS.
              ABS.
              BEGIN,C,PROCFIL,MATER,MPDB.
              RETURN(MATER,ABS)
              REVERT.
```

Figure A-10. Procedure MPDBNEW

```
PROFIL VERSION
                MPDBADD.
                /*
                /* MODIFY STAGING MPDB WITH ADDITIONS OR REVISIONS ON TAPE1
                /*
                BEGIN,A,*FILE,MATER,MPDB.
                BEGIN,A,*FILE,ABS,MPDBADDABS.
                ABS.
                EXTEND(MATER)
                RETURN(MATER,TAPE1,ABS)
                REVERT.


PROCFIL VERSION
                .PROC,MPDBADD.
                .*
                .* MODIFY STAGING MPDB WITH ADDITIONS OR REVISIONS ON TAPE1
                .*
                BEGIN,A,PROCFIL,MATER,MPDB.
                BEGIN,A,PROCFIL,ABS,MPDBADDABS.
                ABS.
                EXTEND(MATER)
                RETURN(MATER,TAPE1,ABS)
                REVERT.
```

Figure A-11. Procedure MPDBADD

```
WPVERSION.
/*
/* CREATE NECESSARY MODIFICATIONS FOR WRIGHT-PATTERSON AFB
/*
RETURN(BIN1,BIN2,BIN3)
RETURN(IN1,IN2,IN3)
COPYBR(*DATA,IN1)
COPYBR(*DATA,IN2)
COPYBR(*DATA,IN3)
REWIND(IN1,IN2,IN3)
RETURN(*DATA)
BEGIN,A,*FILE,OLDPL,STAGINGPL.
UPDATE(I=IN1,L=1)
FTN(I,Z,R=3,B=BIN1)
BEGIN,A,*FILE,OLDPL,INTERTEKPL.
UPDATE(I=IN2,L=1)
FTN(I,Z,R=3,B=BIN2)
BEGIN,A,*FILE,OLDPL,PERMFILEPL.
UPDATE(I=IN3,L=1)
FTN(I,Z,R=3,B=BIN3,S=SCPTEXT,S=PFMTEXT,S=IOTEXT)
REWIND(BIN1,BIN2,BIN3)
BEGIN,R,*FILE,BIN.
COPYBR(BIN1,BIN,999)
COPYBR(BIN2,BIN,999)
COPYBR(BIN3,BIN,999)
BEGIN,C,*FILE,BIN,WPAFB,MODBIN.
ITEMIZE(BIN,E)
SKIP(1)
EXIT(S)
RETURN(OLDPL,COMPILE,BIN,BIN1,BIN2,BIN3)
REVERT.
/DATA
*ID WPAFB1
*D GLOINT.31
      DATA IAC/7HD700370/
/EOR
*ID WPAFB2
*I GINIT.21
      CALL SETBAUD(120)
/EOR
*ID WPAFB3
*D PERMFIL.717,721
*D PERMFIL.724
          SA2    LSD         GET LEFT SHIFTED ACCOUNT AND
          LX2    48          FLOP IT OVER FOR WPAFB
          BX6    X1+X2
*D PERMFIL.772,774
*D PERMFIL.699
*D PERMFIL.416
*I PERMFIL.359
          EQ     AC=ID       DONT BOTHER WITH ACCOUNT CHECK
*D USERTBL.2,264
      SUBROUTINE USERTBL(IARRAY)
```

Figure A-12. Procedure WPVERSION (PROFIL Only)

```
STAGINGGEN(*MAP=PART,*BIN=NONE)
/*
/* GENERATE (COMPIO) VERSION OF STAGING
/*
BEGIN,A,*FILE,TABLE,MENUTABLE.
COPYBR(TABLE,LOADIN,99)
IFC(NE,*BIN,NONE,L2)
REWIND(*BIN)
COPYBR(*BIN,LOADIN,99)
ENDIF(L2)
BEGIN,R,*FILE,ST.
BEGIN,A,*FILE,SEGDIR,SEGDIR.
BEGIN,A,*FILE,LIB,STAGINGLIB.
BEGIN,A,*FILE,SUPLIB,SUPPORTLIB.
BEGIN,A,*FILE,GRLIB,INTERTEK,LIB.
LIBRARY(LIB,SUPLIB)
MAP(*MAP)
RFL(67700)
SEGLOAD(I=SEGDIR,B=ST)
LOAD(LOADIN)
LDSET(PRESET=ZERO,LIB=GRLIB)
NOGO.
BEGIN,C,*FILE,ST,STAGINGABS.
SKIP(1)
EXIT(S)
LIBRARY.
RETURN(*BIN,SEGDIR,LIB,GRLIB,SUPLIB,ST,LOADIN,TABLE)
REVERT.
```

Figure A-13A. Procedure STAGINGGEN (PROFIL Version)

```
.PROC,STAGINGGEN,MAP=PART.
.*
.* GENERATE STAGING ABSOLUTE
.*
BEGIN,A,PROCFIL,TABLE,MENUTABLE.
COPYBR(TABLE,LOADIN,99)
BEGIN,A,PROCFIL,WPMODS,WPMODSBIN.
COPYBR(WPMODS,LOADIN,99)
REWIND(LOADIN)
BEGIN,R,PROCFIL,ST.
BEGIN,A,PROCFIL,SEGDIR,SEGDIR.
BEGIN,A,PROCFIL,LIB,STAGING,LIB.
BEGIN,A,PROCFIL,SUPLIB,SUPPORT,LIB.
BEGIN,A,PROCFIL,GRLIB,INTERTEK,LIB.
LIBRARY(LIB,SUPLIB)
#MAP(MAP)
RFL(67700)
SEGLOAD(I=SEGDIR,B=ST)
LOAD(LOADIN)
LDSET(PRESET=ZERO,LIB=GRLIB)
NOGO.
BEGIN,C,PROCFIL,ST,STAGING,ABS.
SKIP(L1)
EXIT(S)
ENDIF(L1)
LIBRARY.
RETURN(BIN,SEGDIR,LIB,GRLIB,SUPLIB,ST,LOADIN,TABLE)
```

Figure A-13B. Procedure STAGINGEN (PROCFIL Version)

```
LOADGP(*[illegible]*[illegible]
/*
/* [illegible]
/*
BEGIN,A,*FILE,[illegible]LIB.
LIBRARY([illegible]
BEGIN,A,*[illegible],[illegible]LNLP.
IFC(EQ,*NEWLOADF,YES,L1)
BEGIN,A,*FILE,AUTOBIN,AUTOBIN.
BEGIN,A,*FILE,OLDAUTO,GPRIMEPRE.
BEGIN,R,*FILE,NEWAUTO.
BEGIN,A,*FILE,LIB1,TEKLIB.
BEGIN,A,*FILE,LIB2,CAMVNEWLIB.
BEGIN,A,*FILE,LIB4,UTILITYLIB.
BEGIN,A,*FILE,LIB5,RIOLIB.
BEGIN,A,*FILE,[illegible]CAMV,PRELOAD.
PRE(NEWAUTO,[illegible],AUTOBIN,OLDAUTO,LIB1,LIB2,LIB3,LIB4,[illegible]
RETURN(LIB1,[illegible],LIB4,LIB5)
BEGIN,C,*FILE,NEWAUTO,GPRIMEPRE.
RETURN(PRE,OLDAUTO,NEWAUTO,AUTOBIN)
BEGIN,R,*FILE,NEWABS.
BEGIN,R,*FILE,LOADFIL.
REWIND(LOADF)
COPYBR(LOADF,LOADFIL,2)
BEGIN,A,*FILE,VLIB,VLIB.
COPYBR(VLIB,LOADFIL)
COPYBF(LOADF,LOADFIL)
BEGIN,C,*FILE,LOADFIL,GPRIME,LOADF.
RETURN(VLIB,TRASH,LOADF)
ENDIF(L1)
BEGIN,A,*FILE,LOADFIL,GPRIME,LOADF.
BEGIN,A,*FILE,LIB1,GENERLB.
BEGIN,A,*FILE,LIB2,SUPPORTLIB.
RFL(67700)
MAP(ON)
LDSET(LIB=LIB1/LIB2/LIB3)
LOAD(LOADFIL)
NOGO.
REWIND(OVFILE)
BEGIN,A,*FILE,OLDABS,GPRIME.
BEGIN,A,*FILE,TSK,CAMV,TSKLOAD.
TSK(NEWABS,OVFILE,OLDABS)
BEGIN,C,*FILE,NEWABS,GPRIME.
SKIP(1)
EXIT(S)
LIBRARY.
REVERT.
/DATA
*C AUTO,OVLY
*ID UNDO
*D GM033178A.1
/EOR
```

Figure A-14. Procedure LOADGP (PROFIL Only)

```
XGPRIME(*MODE=INITIAL)
/*
/* EXECUTE GPRIME FROM STAGING
/*
DISCONT(INPUT,OUTPUT)
REWIND(OUTPUT,DESKRCH)
RETURN(TAPE1,TAPE61,TAPE62,SMF,AUTO,UMF,MACRODB)
ATTACH(SMF,SMF,ID=STAGING3)
ATTACH(AUTO,GPRIME,ID=STAGING3)
REQUEST(UMF,*PF)
IFC(EQ,*MODE,INITIAL,L1)
ATTACH(MACRODB,MACRODB,ID=STAGING3)
COPYBF(MACRODB,UMF)
RETURN(MACRODB)
ELSE(L1)
COPYBF(DESKRCH,UMF)
ENDIF(L1)
CONNECT(TAPE61,TAPE62)
AUTO(*DATA)
SKIP(1)
EXIT(S)
REWIND(UMF,DESKRCH)
COPYBF(UMF,DESKRCH)
RETURN(AUTO,SMF,UMF,HC,*DATA,TAPE61,TAPE62)
REVERT.
/DATA
*RESTART
*RATE,960
*INTERACTIVE,STORAGE
END
/EOR
```

Figure A-15A. Procedure XGPRIME (PROFIL Version)

```
.PROC,XGPRIME,MODE=INITIAL,CCLFILE=#FILE,CCLDATA=#DATA.
IFE(FILE(OUTPUT,AS),LAB4)
DISCONT(INPUT,OUTPUT)
ENDIF(LAB4)
RETURN,SMF,UMF,GPRIME,TAPE0,MACRODB.
FETCH,SMF,CAGM.
ATTACH,GPRIME,GPRIME,ID=CAGM,LC=1,MR=1.
REWIND(DESKRCH,UMF)
IFE($MODE$.EQ.$INITIAL$,LAB13)
ATTACH,MACRODB,MACRODB,ID=CARK,MR=1.
COPYBF(MACRODB,UMF)
RETURN,MACRODB.
SKIP(LAB14)
ENDIF(LAB13)
COPYBF(DESKRCH,UMF)
ENDIF(LAB14)
RETURN,TAPE61,TAPE62.
CONNECT,TAPE61,TAPE62.
IFE(FILE(INFILE,AS),LAB20)
REWIND,CCLDATA,INFILE.
COPYBR,INFILE,CCLDATA.
REWIND,CCLDATA.
ENDIF(LAB20)
GPRIME(CCLDATA)
RETURN,TAPE61,TAPE62.
REWIND,UMF,DESKRCH.
COPYBF,UMF,DESKRCH.
RETURN(AUTO,SMF,UMF,HC,CCLDATA)
BEGIN,RESTART,CCLFILE.
EXIT.
DMP,60000.
REWIND,UMF,DESKRCH.
COPYBF,UMF,DESKRCH.
RETURN,UMF.
RETURN(TAPE61,TAPE62,AUTO,SMF,HC,CCLDATA)
BEGIN,RESTART,CCLFILE.
EXIT.
BEGIN,RESTART,CCLFILE.
.DATA
*RESTART
*RATE,480
*INTERACTIVE,STORAGE
END
```

Figure A-15B. Procedure XGPRIME (PROCFIL Version)

```
UPDATE(*PREFIX=STAGING)
/*
/* STAGING SYSTEM MAINTENANCE PROCEDURE
/*
/* VALID PREFIXES: STAGING
/*                 INTERTEK
/*                 DATABASE
/*                 CONVERSION
/*                 PERMFILE
/*                 RECOVERY
/*                 XYGRAPH
/*                 MENUGEN
/*
BEGIN,A,*FILE,IN,*PREFIX,IN.
BEGIN,A,*FILE,OLDPL,*PREFIX,PL.
BEGIN,A,*FILE,BINOLD,*PREFIX,BIN.
BEGIN,R,*FILE,NEWPL.
BEGIN,R,*FILE,BINNEW.
BEGIN,R,*FILE,EMPTY.
UPDATE(N,I=IN,O=LISTING)
RETURN(BIN)
FTN(I,Z,L=LISTING,R=3,B=BIN,S=SCPTEXT)
COPYL(BINOLD,BIN,BINNEW,,RA)
BEGIN,C,*FILE,NEWPL,*PREFIX,PL.
BEGIN,C,*FILE,BINNEW,*PREFIX,BIN.
COPYBF(*DATA,EMPTY)
BEGIN,C,*FILE,EMPTY,*PREFIX,IN.
RETURN(BINOLD,BIN,BINNEW,IN,EMPTY,OLDPL,NEWPL)
IFC(EQ,*PREFIX,STAGING,L1)
BEGIN,NEWLIB,*FILE,STAGING.
ELSE(L1)
IFC(EQ,*PREFIX,INTERTEK,L2)
BEGIN,NEWLIB,*FILE,INTERTEK.
ELSE(L2)
IFC(EQ,*PREFIX,MENUGEN,L3)
BEGIN,MENUGENABS,*FILE.
ELSE(L3)
BEGIN,SUPPORTLIB,*FILE.
ENDIF(L3)
ENDIF(L2)
ENDIF(L1)
/*
/* IF PREFIX WAS STAGING, PROCEDURE STSEG IS NECESSARY TO BUILD ABSOLUTE
/*
SKIP(1)
EXIT(S)
REVERT.
/DATA
*ID NEW
/EOR
```

Figure A-16A. Procedure Update (PROFIL Version)

```
.PROC,UPDATE,PREFIX=STAGING.
.* STAGING SYSTEM MAINTENANCE PROCEDURE
.* VALID PREFIXES: STAGING
.*                  INTERTEK
.*                  DATABASE
.*                  CONVERSION
.*                  PERMFILE
.*                  RECOVERY
.*                  XYGRAPH
.*                  MENUGEN
BEGIN,A,PROCFIL,IN,PREFIX,IN.
BEGIN,A,PROCFIL,OLDPL,PREFIX,OLDPL.
BEGIN,A,PROCFIL,BINOLD,PREFIX,BIN.
BEGIN,R,PROCFIL,NEWPL.
BEGIN,R,PROCFIL,BINNEW.
BEGIN,R,PROCFIL,EMPTY.
UPDATE(N,I=IN,O=LISTING)
RETURN(BIN)
FTN(I,Z,L=LISTING,R=3,B=BIN,S=SCPTEXT)
COPYL(BINOLD,BIN,BINNEW,,RA)
BEGIN,C,PROCFIL,NEWPL,PREFIX,PL.
BEGIN,C,PROCFIL,BINNEW,PREFIX,BIN.
COPYBF(#DATA,EMPTY)
BEGIN,C,PROCFIL,EMPTY,PREFIX,IN.
RETURN(BINOLD,BIN,BINNEW,IN,EMPTY,OLDPL,NEWPL)
IFE,$PREFIX$.EQ.$STAGING$,L1.
BEGIN,NEWLIB,PROCFIL,STAGING.
ENDIF(L1)
IFE,$PREFIX$.EQ.$INTERTEK$,L2.
BEGIN,NEWLIB,PROCFIL,INTERTEK.
ENDIF(L2)
IFE,$PREFIX$.EQ.$MENUGEN$,L3.
BEGIN,MENUGENABS,PROCFIL.
ENDIF(L3)
IFE,$PREFIX$.EQ.$DATABASE$,L4.
BEGIN,SUPPORTLIB,PROCFIL.
ENDIF(L4)
IFE,$PREFIX$.EQ.$CONVERSION$,L5.
BEGIN,SUPPORTLIB,PROCFIL.
ENDIF(L5)
IFE,$PREFIX$.EQ.$PERMFILE$,L6.
BEGIN,SUPPORTLIB,PROCFIL.
ENDIF(L6)
IFE,$PREFIX$.EQ.$RECOVERY$,L7.
BEGIN,SUPPORTLIB,PROCFIL.
ENDIF(L7)
IFE,$PREFIX$.EQ.$XYGRAPH$,L8.
BEGIN,SUPPORTLIB,PROCFIL.
ENDIF(L8)
SKIP(L9)
EXIT(S)
ENDIF(L9)
REVERT.
.DATA
*ID NEW
.EOR
```

Figure A-16B. Procedure Update (PROCFIL Version)

PROFIL VERSION

```
NEWLIB(*PREFIX=STAGING)
/*
/* CREATE NEW STAGING OR INTERTEK LIBRARY
/*
BEGIN,R,*FILE,LIB.
BEGIN,A,*FILE,BIN,*PREFIX,BIN.
EDITLIB(I=*DATA,L=0)
BEGIN,C,*FILE,LIB,*PREFIX,LIB.
REWIND(LIB)
ITEMIZE(LIB,E)
SKIP(1)
EXIT(S)
RETURN(BIN,LIB)
REVERT.
/DATA
LIBRARY(LIB,NEW)
ADD(*,BIN)
FINISH.
ENDRUN.
/EOR
```

PROCFIL VERSION

```
.PROC,NEWLIB,PREFIX=STAGING.
.*
.* CREATE NEW STAGING OR INTERTEK LIBRARY
.*
BEGIN,R,PROCFIL,LIB.
BEGIN,A,PROCFIL,BIN,PREFIX,BIN.
EDITLIB(I=#DATA,L=0)
BEGIN,C,PROCFIL,LIB,PREFIX,LIB.
REWIND(LIB)
ITEMIZE(LIB,E)
SKIP(L1)
EXIT(S)
ENDIF(L1)
RETURN(BIN,LIB)
REVERT.
.DATA
LIBRARY(LIB,NEW)
ADD(*,BIN)
FINISH.
ENDRUN.
.EOR
```

Figure A-17. Procedure NEWLIB

APPENDIX B

STAGING LOADER DIRECTIVES

APPENDIX B

STAGING LOADER DIRECTIVES

This section contains the list of loader directives that are input to the CYBER Loader Version 1.4. The list is presented in six tables which correspond to the six segment levels of the STAGING segmentation scheme:

- ROOT
- SWAPPABLE COMMON BLOCKS
- APPLICATION SUBROUTINES
- MISCESSLANEOUS SUBROUTINES
- GRAPHICS SUBROUTINES
- SYSTEM AND DATA HANDLER SUBROUTINES

```
*
* TEKTRONIX VERSION OF STAGING
*
BEGIN  TREE    DRIVE
* DRIVER IS THE MAIN PROGRAM
* OF THE STAGING SYSTEM
DRIVE  INCLUDE DRIVER
DRIVE  INCLUDE GLOINT
DRIVE  INCLUDE ATT
DRIVE  INCLUDE RCOVER
DRIVE  INCLUDE SWITCH
DRIVE  INCLUDE STARTM
DRIVE  INCLUDE EXTABLE
DRIVE  INCLUDE DETABLE
DRIVE  INCLUDE PRTABLE
DRIVE  INCLUDE PPTABLE
DRIVE  INCLUDE GLTABLE
DRIVE  INCLUDE GLINIT
* COMMON BLOCK DMTBL MUST BE LOW IN
* CORE FOR PROPER OPERATION OF DATA HANDLER
DRIVE  GLOBAL  DMTBL
DRIVE  GLOBAL  ACTSTR
DRIVE  GLOBAL  ATTRIB
DRIVE  GLOBAL  AXDAD
DRIVE  GLOBAL  CATS
DRIVE  GLOBAL  CHDAT
DRIVE  GLOBAL  CHECK
DRIVE  GLOBAL  CHKDF
DRIVE  GLOBAL  CNTDE
DRIVE  GLOBAL  CODES
DRIVE  GLOBAL  CREATR
DRIVE  GLOBAL  DEFORM
DRIVE  GLOBAL  DRAWBUF
DRIVE  GLOBAL  EDITT
DRIVE  GLOBAL  ELEMEN
DRIVE  GLOBAL  ERASEC
DRIVE  GLOBAL  ERROR
DRIVE  GLOBAL  EXMENU
DRIVE  GLOBAL  GLIN
DRIVE  GLOBAL  GLOBAL
DRIVE  GLOBAL  LIMIT
DRIVE  GLOBAL  MASKS
DRIVE  GLOBAL  MAXSSS
DRIVE  GLOBAL  MCODES
DRIVE  GLOBAL  MENUS
DRIVE  GLOBAL  PERMEN
DRIVE  GLOBAL  PIC
DRIVE  GLOBAL  PLANE
DRIVE  GLOBAL  ROTANG
DRIVE  GLOBAL  SWTCH
DRIVE  GLOBAL  TERMT
DRIVE  GLOBAL  VU3D
DRIVE  GLOBAL  ZZFILE
```

Table B-1. Root Level

```
        LEVEL
* THIS LEVEL IS FOR SHARING CORE
* BETWEEN GROUPS OF COMMON BLOCKS
B1      TREE    BL1
BL1     INCLUDE BL1INT
BL1     INCLUDE ATT1
BL1     GLOBAL  DATBAS-SAVE
BL1     GLOBAL  PXY777-SAVE
BL1     GLOBAL  IDENTS-SAVE
BL1     GLOBAL  MENBLK-SAVE
BL1     GLOBAL  CNINT-SAVE
*
B2      TREE    BL2
BL2     INCLUDE BL2INT
BL2     GLOBAL  TBLOCK-SAVE
```

Table B-2. Swappable Common Blocks Level

```
        LEVEL
TREE1   TREE    MEN1-(EX,GL)
*
MEN1    INCLUDE EXSTAR
MEN1    INCLUDE REACT
MEN1    INCLUDE FILNAM
*
EX      INCLUDE IEXDEC
EX      INCLUDE EXEC
EX      INCLUDE EXECC
EX      INCLUDE FILATT
*
GL      TREE    GL0-(GL1,GL2,GL3,GL4)
*
GL0     INCLUDE IGLDEC
GL0     INCLUDE MORDRW
GL0     INCLUDE MOAXES
GL0     INCLUDE MOLAX
GL0     INCLUDE MOZSRS
GL0     INCLUDE MORCNT
GL0     INCLUDE MOZCRS
GL0     INCLUDE MOZPLS
*
GL1     INCLUDE GLSTOP
GL1     INCLUDE GLCHCK
GL1     INCLUDE GLCLOK
GL1     INCLUDE GLHIST
GL1     INCLUDE GLLUP
GL1     INCLUDE GLLDN
*
GL2     INCLUDE GLSTDB
GL2     INCLUDE GLSTDS
GL2     INCLUDE GLDEFP
GL2     INCLUDE GLDEFS
GL2     INCLUDE IGNM
*
GL3     INCLUDE FRONTVU
GL3     INCLUDE SIDEVU
GL3     INCLUDE TOPVU
GL3     INCLUDE MOFILL
GL3     INCLUDE MODRW
GL3     INCLUDE SVIEW
GL3     INCLUDE SVIEWP
GL3     INCLUDE MOSPLT
GL3     INCLUDE MOSOS
GL3     INCLUDE MOFRE
GL3     INCLUDE MOFRZ
GL3     INCLUDE MOASHK
GL3     INCLUDE MOISHK
GL3     INCLUDE MOSSHK
*
GL4     INCLUDE SROTET
GL4     INCLUDE SROTST
```

Figure B-3. Application Routine Level

```
POST   TREE    PP
PP     INCLUDE IPPDEC
PP     INCLUDE PRINCP
PP     INCLUDE PRINC3
PP     INCLUDE EQSTR
PP     INCLUDE PROOT
*
PR     TREE    PRO-(PR1-(PR11,PR12),PR2)
* THERE ARE TWO PREPROCESSOR TREES---
*   PR---DRAFTING PACKAGE
*   PRM--MATERIAL PROPERTY DATA BASE
PRO    INCLUDE IPRDEC
PRO    INCLUDE DRAWFR
PRO    GLOBAL  PDRAW-SAVE
*
PR1    INCLUDE ICPART
*
PR11   INCLUDE CNNEW
PR11   INCLUDE CNELEM
PR11   INCLUDE CNNODE
*
PR12   INCLUDE CNTERM
PR12   INCLUDE CNTER
PR12   INCLUDE CNSORT
*
PR2    INCLUDE NODE
PR2    INCLUDE GRID
PR2    INCLUDE CHNGP1
PR2    INCLUDE CHNGP2
PR2    INCLUDE BDSTR
PR2    INCLUDE FIXDAT
PR2    INCLUDE SETLN
PR2    INCLUDE SETND
PR2    INCLUDE IDRNXT
PR2    INCLUDE CLROUT
*
PRM    TREE    PRMO-(PRM1,PRM2)
*
PRMO   INCLUDE CNTABL
*
PRM1   INCLUDE MYINIT
PRM1   INCLUDE ASUB4
PRM1   INCLUDE ASUB5
PRM1   INCLUDE ASUB7
PRM1   INCLUDE DISPLB
PRM1   INCLUDE DRELN
PRM1   INCLUDE ELNAM
PRM1   INCLUDE GETRAG
PRM1   INCLUDE INTSUB
PRM1   INCLUDE LIBIN
*
PRM2   INCLUDE MATDEF
PRM2   INCLUDE MATIN
PRM2   INCLUDE LIBINS
```

Figure B-3. Application Routines Level (Cont'd)

```
DE      TREE    DE0-(DE1,DE2,DE3,DE4,DE5,DE7,DE9)
*
DE0     INCLUDE IDEDEC
DE0     INCLUDE ICKRNG
DE0     INCLUDE ALLON
DE0     INCLUDE ALLOFF
DE0     INCLUDE ASUBS
DE0     INCLUDE IECPRC
DE0     GLOBAL  IGSIGS-SAVE
*
DE1     INCLUDE DZRST
DE1     INCLUDE ETYPSV
DE1     INCLUDE CNTPRD
DE1     INCLUDE RNGDEL
DE1     INCLUDE RNGDRW
DE1     INCLUDE PONPEN
DE1     INCLUDE PTYPE
DE1     INCLUDE EQNUM
DE1     INCLUDE EMERG
DE1     INCLUDE EMERGE
DE1     INCLUDE DRWATA
DE1     INCLUDE DRWATT
DE1     INCLUDE DELPIC
DE1     INCLUDE EONPD
DE1     INCLUDE EONPEN
DE1     INCLUDE PORG
*
DE2     INCLUDE EDINIT
DE2     INCLUDE ELREPL
DE2     INCLUDE ELREPP
DE2     INCLUDE RETAIN
DE2     INCLUDE RETAIS
DE2     INCLUDE EMOVE
DE2     INCLUDE MXYI
DE2     INCLUDE MXYP
DE2     INCLUDE EUPPNT
*
DE3     INCLUDE DYDRDE
DE3     INCLUDE DYLOAD
DE3     INCLUDE DYSFPU
DE3     INCLUDE DYSSTP
DE3     INCLUDE DYUNDE
DE3     INCLUDE ICKSL
DE3     INCLUDE ATTLST
DE3     INCLUDE ATTPRC
DE3     INCLUDE ATTREN
DE3     INCLUDE ATTRNG
DE3     INCLUDE ATTRNP
DE3     INCLUDE LANODE
DE3     INCLUDE LFNODE
DE3     INCLUDE NODON
DE3     INCLUDE NODAEL
DE3     INCLUDE NODFEL
DE3     INCLUDE LFNOD
```

Figure B-3. Application Routines Level (Cont'd)

```
DE4     TREE    DE40-(DE41,DE42)
*
DE40    INCLUDE PROCXA
DE40    INCLUDE SORTXY
DE40    INCLUDE GETDAT

DE41    INCLUDE INITXY
DE41    INCLUDE INTFLG
DE41    INCLUDE TABLIN
DE41    INCLUDE PROCTIT
DE41    INCLUDE TABVAL
DE41    INCLUDE TABIND
*
DE42    INCLUDE PROCCHR
DE42    INCLUDE TABDEL
*
DE5     INCLUDE ECHOND
DE5     INCLUDE ECPROC
DE5     INCLUDE ECREAN
DE5     INCLUDE ERD
DE5     INCLUDE ERDOWD
DE5     INCLUDE ERDOWN
DE5     INCLUDE ERNDLD
*
DE7     INCLUDE EACTPN
DE7     INCLUDE EADOWN
DE7     INCLUDE EALLS
DE7     INCLUDE EATS
DE7     INCLUDE EATF
DE7     INCLUDE ENDOWN
DE7     INCLUDE EPUTDN
DE7     INCLUDE ESERCH
DE7     INCLUDE ASERCH
DE7     INCLUDE SSAOFF
*
DE9     INCLUDE CNTOR
DE9     INCLUDE CNTPRE
DE9     INCLUDE CNTINT
DE9     INCLUDE CNTITL
DE9     INCLUDE CNTIT2
DE9     INCLUDE GETCNT
```

Figure B-3. Application Routines Level (Cont'd)

```
        LEVEL
MISC    TREE    M0-(M1,M3,M5,M8)
*
M0      INCLUDE EQPEN
M0      INCLUDE STRACT
*
M1      INCLUDE CORSHF
M1      INCLUDE RASTOU
M1      INCLUDE GIFETS
M1      INCLUDE CNELM
M1      INCLUDE ELNCHK
M1      INCLUDE ECHKL
M1      INCLUDE IENEXT
M1      GLOBAL  IENX-SAVE
*
M3      TREE    M30-(M31,M32,M33)
*
M30     INCLUDE TYPNAM
M30     INCLUDE PAGER
M30     INCLUDE ERASER
M30     INCLUDE IPICK
M30     INCLUDE PUTEDT
M30     INCLUDE SELATT
M30     INCLUDE GLTOP
*
M31     INCLUDE TABACT
M31     INCLUDE TABACX
M31     INCLUDE TABPRC
M31     INCLUDE TABXYP
M31     INCLUDE TABXYM
M31     INCLUDE TABSCX
M31     INCLUDE TABSCL
M31     INCLUDE TABDM
M31     INCLUDE TABXI
M31     INCLUDE PUTLST
M31     INCLUDE SSOFF
M31     INCLUDE DACTSN
M31     INCLUDE PUTNAM
*
M32     INCLUDE GIASID
M32     INCLUDE EXINIT
M32     INCLUDE DEINIT
M32     INCLUDE PRINIT
M32     INCLUDE PPINIT
M32     INCLUDE DEINIT1
M32     INCLUDE IGPCKM
M32     INCLUDE IPPRMT
M32     INCLUDE IREAD
M32     INCLUDE MENNIT
M32     INCLUDE INDATA
M32     GLOBAL  INPUT-SAVE
```

Figure B-4. Miscellaneous Level

```
M33     INCLUDE MOPUT
M33     INCLUDE MOREC
M33     INCLUDE PLINIT
M33     INCLUDE SPSEL
M33     INCLUDE PUTATT
M33     INCLUDE ACTATT
M33     INCLUDE PROFAC
M33     INCLUDE REPFA
M33     INCLUDE QTITLE
*
M5      INCLUDE RESTART
M5      INCLUDE GRFNIT
M5      INCLUDE GRDNIT
M5      INCLUDE INIT2D
M5      INCLUDE INIT3N
M5      INCLUDE CLRPIC
M5      INCLUDE XYERAS
M5      INCLUDE SETWZ
M5      INCLUDE SET1
M5      INCLUDE MOBOTH
M5      INCLUDE GINIT
M5      INCLUDE GIZOOM
*
M8      TREE    M80-(M81,M82)
*
M80     INCLUDE ICKBYT
*
M81     TREE    M810-(M811,M812,M813,M814)
*
M810    INCLUDE METAZZ
M810    INCLUDE LINZZ
M810    INCLUDE QIKGRF
M810    INCLUDE LEGNDG
M810    INCLUDE LINESG
M810    INCLUDE NUMBRG
M810    INCLUDE SCALZZ
M810    INCLUDE SETSMG
M810    INCLUDE RSETMG
M810    GLOBAL  IGSCOM-SAVE
*
M811    INCLUDE TITLEG
M811    INCLUDE POINTG
*
M812    TREE    M8120-(M8121,M8122)
*
M8120   INCLUDE MLTPLG
M8120   INCLUDE SEGMTG
*
M8121   INCLUDE GRIDG
*
M8122   INCLUDE LABELG
```

Figure B-4. Miscellaneous Level (Cont'd)

```
M813   TREE    M8130-(M8131,M8132)
*
M8130  INCLUDE SETUPG
M8131  INCLUDE OBJCTG
M8132  INCLUDE SUBJEG
*
M814   TREE    M8140-(M8141,M8142)
*
M8140  INCLUDE LTEST
M8140  INCLUDE STEST
M8140  GLOBAL  TMCOM2
*
M8141  INCLUDE SCAN
M8141  INCLUDE SHELL
M8141  INCLUDE CONHUL
M8141  INCLUDE TRIORD
M8141  INCLUDE TMESH3
*
M8142  INCLUDE TMESH2
*
M82    TREE    M820-(M821,M822)
*
M820   INCLUDE IDRWLN
M820   INCLUDE IDRWEL
M820   INCLUDE IDRWND
M820   INCLUDE IDRWAT
M820   INCLUDE DRWACT
M820   INCLUDE GETCSS
M820   INCLUDE GETCEN
M820   INCLUDE GETCOR
M820   INCLUDE EQUEUP
M820   GLOBAL  EQARR-SAVE
*
M821   INCLUDE DRWSS
M821   INCLUDE IDRWSS
M821   INCLUDE IDRWST
M821   INCLUDE IDRW
M821   INCLUDE ICON
*
M822   INCLUDE ARROW
M822   INCLUDE IARSET
```

Figure B-4. Miscellaneous Level (Cont'd)

```
        LEVEL
GRAPH   TREE    G0-(G11,G12,G13,G14)
*
*
G0      INCLUDE COMPIO
G0      INCLUDE GERASE
G0      INCLUDE GFLUSH
G0      INCLUDE GPRESET
G0      INCLUDE GCGARR
G0      INCLUDE GCGMM
G0      INCLUDE GCGTYP
G0      INCLUDE GCSSF
G0      INCLUDE GCRCAT
G0      INCLUDE GCUCAT
G0      INCLUDE GCRESI
G0      INCLUDE GCUPXY
G0      INCLUDE GISUBF
G0      INCLUDE GIALRM
G0      INCLUDE GCDRAW
G0      INCLUDE GCDSF
G0      INCLUDE GCUNPK
G0      INCLUDE GCDRIT
G0      INCLUDE GCCHMM
G0      INCLUDE GCFILL
G0      INCLUDE GCWORK
G0      INCLUDE GCDLIM
G0      INCLUDE GULIN
G0      INCLUDE GCC
G0      INCLUDE GCHIGH
G0      INCLUDE GITEM
G0      INCLUDE GCUPSF
G0      INCLUDE GIDELT
G0      INCLUDE GUBUF
G0      INCLUDE GCPKDS
G0      INCLUDE GCUNPK
G0      INCLUDE IDISER
G0      INCLUDE DELETE
G0      GLOBAL  TEKCOM
G0      GLOBAL  GCGI1
G0      GLOBAL  GCGI
G0      GLOBAL  GCBUF
G0      GLOBAL  GCCODE
G0      GLOBAL  GCDR
G0      GLOBAL  GCGU
```

Figure B-5. Graphics Routine Level

```
G11     INCLUDE GIBUTN
G11     INCLUDE GISNGL
G11     INCLUDE GITRAK
G11     INCLUDE GCINPC
G11     INCLUDE TRKOFF
G11     INCLUDE GICLRQ
*
G12     INCLUDE ESLOT
G12     INCLUDE ONPEN
G12     INCLUDE SETCAT
G12     INCLUDE GICAT
G12     INCLUDE GIDAE
G12     INCLUDE TABPEN
G12     INCLUDE GUTEXT
G12     INCLUDE GUSETP
G12     INCLUDE DELSF
G12     INCLUDE GISHOW
*
G13     INCLUDE GIDUP
G13     INCLUDE SETVU
G13     INCLUDE GIDFON
G13     INCLUDE ERASEM
G13     INCLUDE ACOSIN=
G13     INCLUDE ATAN2
G13     INCLUDE SYS=AID
G13     INCLUDE GCMAT
G13     INCLUDE GC3DA
G13     INCLUDE CNVTOU
*
G14     INCLUDE MEXTN
G14     INCLUDE MITEM
G14     INCLUDE ICAN
G14     INCLUDE IDINF
G14     INCLUDE GIXTND
```

Figure B-5. Graphics Routine Level (Cont'd)

```
        LEVEL
SYS     TREE     S0-(S1,DB)
*
S0      INCLUDE SCALST
S0      INCLUDE EDITTI
S0      INCLUDE UTORAS
S0      INCLUDE ICCHR
S0      INCLUDE IBEAUT
S0      INCLUDE IALATT
S0      INCLUDE NAMFNM
S0      INCLUDE UNPACK
S0      INCLUDE GET.PUT
S0      INCLUDE SQRT
S0      INCLUDE SYSAID=
S0      INCLUDE SINCOS=
S0      INCLUDE CNVTOC
S0      INCLUDE GCGET
S0      INCLUDE GCSET
S0      INCLUDE FORSYS=
S0      INCLUDE Q8NTRY=
S0      INCLUDE CLSF.RM
S0      INCLUDE OPEN.SQ
S0      INCLUDE OPEN.RM
S0      INCLUDE OSUB.RM
S0      INCLUDE OPEX.SQ
S0      INCLUDE GOTOER=
S0      INCLUDE ITOJ=
S0      INCLUDE FORUTL=
S0      INCLUDE FECMSK=
S0      INCLUDE Z.SQ
S0      INCLUDE GET.SQ
S0      INCLUDE BTRT.SQ
S0      INCLUDE PUT.SQ
S0      INCLUDE REW.SQ
S0      INCLUDE WEOX.SQ
S0      INCLUDE ERR.RM
S0      INCLUDE CLSF.SQ
S0      INCLUDE CLSF.RM
S0      INCLUDE CIO.RM
S0      INCLUDE CHWR.SQ
S0      INCLUDE CLSV.SQ
S0      INCLUDE FSU.SQ
S0      INCLUDE MOVE.RM
S0      INCLUDE WAR.SQ
S0      INCLUDE SKFL.SQ
S0      INCLUDE RLEQ.RM
S0      INCLUDE SYS.RM
S0      GLOBAL  AOB.RM-SAVE
S0      GLOBAL  CLSF.FO-SAVE
S0      GLOBAL  CLSV.FO-SAVE
S0      GLOBAL  CON.RM-SAVE
S0      GLOBAL  FCL.C.-SAVE
S0      GLOBAL  GET.BT-SAVE
S0      GLOBAL  GET.FO-SAVE
S0      GLOBAL  GET.RT-SAVE
```

Figure B-6. System and Data Handler Level

```
S0      GLOBAL  JMPS.RM-SAVE
S0      GLOBAL  PUT.FO-SAVE
S0      GLOBAL  PUT.RT-SAVE
S0      GLOBAL  Q8.IO.-SAVE
S0      GLOBAL  REW.FO-SAVE
S0      GLOBAL  SKFL.FO-SAVE
S0      GLOBAL  STP.END-SAVE
S0      GLOBAL  TERM.RM-SAVE
S0      GLOBAL  MEMC.RM-SAVE
S0      GLOBAL  OPEN.FO-SAVE
S0      GLOBAL  OPES.FO-SAVE
*
S1      INCLUDE YIELD1=
S1      INCLUDE YIELD=
S1      INCLUDE HOLD
S1      INCLUDE DMP
S1      INCLUDE DMP.CPK
S1      INCLUDE COPYFL
S1      INCLUDE IPPUT
S1      INCLUDE PERMFIL
S1      INCLUDE ICRACK
S1      INCLUDE ICHKED
S1      INCLUDE COMPAC
S1      INCLUDE GIERR
S1      INCLUDE CLOCK=
S1      INCLUDE REQUEST
S1      INCLUDE MCT.RM
S1      INCLUDE ALOG
S1      INCLUDE EXP
S1      INCLUDE XTOY=
S1      INCLUDE SYS=1ST
S1      INCLUDE XTOI=
S1      GLOBAL  ICHKD-SAVE
*
DB      TREE    DB0-(DB1,DB2,DB3)
*
DB0     INCLUDE IDBFND
DB0     INCLUDE CPC
DB0     INCLUDE PDUMP
DB0     INCLUDE IGFTR
DB0     INCLUDE DMREAD
DB0     INCLUDE DMWRITE
DB0     INCLUDE DMGTBD
DB0     INCLUDE DMRLBD
DB0     INCLUDE DMSTGT
DB0     INCLUDE DMBDAD
DB0     INCLUDE DMFV
DB0     INCLUDE SYSTEM
DB0     INCLUDE INBUF
DB0     INCLUDE OUTBUF
DB0     INCLUDE READR
DB0     INCLUDE RWRITE
DB0     INCLUDE RWRITER
DB0     INCLUDE FCHPRAM
DB0     INCLUDE SETPRAM
DB0     INCLUDE FETSTAT
DB0     INCLUDE WRITE
```

Figure B-6. System and Data Handler Level (Cont'd)

```
DB0     INCLUDE DBCHBD
DB0     INCLUDE IFATT
DB0     INCLUDE IGATT
DB0     INCLUDE ISACT
DB0     INCLUDE IDBRSV
DB0     INCLUDE NUMFNM
DB0     INCLUDE DBRITE
DB0     INCLUDE IDBRIT
DB0     INCLUDE IDBUPP
DB0     INCLUDE MBEAD
DB0     INCLUDE GETSIZ
*
DB1     INCLUDE DMFLSH
DB1     INCLUDE DMINIT
DB1     INCLUDE DBINIT
DB1     INCLUDE CLOSE
DB1     INCLUDE RFILEB
DB1     INCLUDE WRITER
DB1     INCLUDE SETFETR
DB1     INCLUDE DZSAVE
DB1     INCLUDE DBLKUP
DB1     INCLUDE DBCHNM
DB1     INCLUDE RETURN
*
DB2     INCLUDE ACTIVA
DB2     INCLUDE NEXTIN
DB2     INCLUDE ICKACT
DB2     INCLUDE IDBCAN
DB2     INCLUDE DBCHA
DB2     INCLUDE DBUPT
DB2     INCLUDE IDBADB
DB2     INCLUDE DBDEL
DB2     INCLUDE EADDEL
DB2     GLOBAL  NSAVE-SAVE
*
DB3     INCLUDE DBTGET
DB3     INCLUDE GETCES
DB3     INCLUDE GETLIM
DB3     INCLUDE ICKATT
DB3     INCLUDE IDBARR
DB3     INCLUDE IDBTFM
DB3     INCLUDE IGETCH
DB3     INCLUDE SPCHK
DB3     GLOBAL  IATTYP-SAVE
DB3     GLOBAL  TABLEC-SAVE
        END     DRIVER
```

Figure B-6. System and Data Handler Level (Cont'd)

APPENDIX C

STAGING SYSTEM CROSS-REFERENCE

APPENDIX C
STAGING SYSTEM CROSS-REFERENCE

This appendix is an alphabetized listing of all entry names that occur in the STAGING system. Each entry has information associated with it, such as:

entry classification - indicates whether the entry name is the name of the object module (MAIN) or a secondary entry point (SECONDARY);

description - a brief explanation of an entry name's function (if available);

length - length of object module in octal words;

language - source language of object module;

secondary entry point information - for a main entry point: a list of secondary entry points (if any) - for a secondary entry point: the associated main entry point;

names of callers - names of all modules that contain this entry name as an external reference - if entry has none, then a message to that effect will appear;

names of callees - names of all external references by this module - if there are none then a message to that effect will appear - in the case of a secondary entry point this information is not applicable;

An example of two entries is given below, "SINCOS =" and "SIN.", where the latter is a secondary entry point for the former:

```
SINCOS =  ENTRY CLASS: MAIN            SEGMENT: (SØ)
          DESC: TRIGONOMETRIC SINE     OR COSINE OF X
          LENGTH:  66 LANGUAGE: COMPASS
          SECONDARY ENTRY POINTS:
            COS.        SIN.
          THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
          CAN CALL THE FOLLOWING:
            SYS1ST

SIN.      ENTRY CLASS: SECONDARY       SEGMENT: (SØ)
          DESC: (NOT AVAILABLE)
          SECONDARY ENTRY POINT FOR:   SINCOS =
          CAN BE CALLED BY:
            SROTET     SETVU     GC3DA     CNVTOC
```

```
ABNORM.     ENTRY CLASS: SECONDARY   SEGMENT:   (S0)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : FORSYS=
            CAN BE CALLED BY:
               GOTOER=

AB1.        ENTRY CLASS: SECONDARY   SEGMENT:   (S0)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : FORSYS=
            CAN BE CALLED BY:
               Q8.IO.   STP.END

ACOSIN=     ENTRY CLASS: MAIN        SEGMENT:   (G13)
            DESC: COMPUTE THE INVERSE SINE OR COSINE OF X.
            LENGTH:     71    LANGUAGE: COMPASS
            SECONDARY ENTRY POINTS:
               ACOS.
            THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
            CAN CALL THE FOLLOWING:
               SYS1ST.

ACOS.       ENTRY CLASS: SECONDARY   SEGMENT:   (G13)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : ACOSIN=
            CAN BE CALLED BY:
               GC30A    CNVTOU

ACTATT      ENTRY CLASS: MAIN        SEGMENT:   (M33)
            DESC: PROCESS CROSSHAIR PICK OF ATTRIBUTE NAME DISPLAYED BY #SELATT#
            LENGTH:     25    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               ATTOFF
            CAN BE CALLED BY:
               DETABLE  PROCXA
            CAN CALL THE FOLLOWING:
               SELATC

ACTIVA      ENTRY CLASS: MAIN        SEGMENT:   (DB2)
            DESC: ACTIVATE BEAD FOR DISPLAY
            LENGTH:    141    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               BDSTR    FIXCAT   ASUB4    ALLON    ASUBS
               RNGDRW   NODAEL   NODFEL   LFNOD    ECPROC
               ASERCH   TABACT
            CAN CALL THE FOLLOWING:
               DBDAD    DBDLF    DBDRT    DBDAC    IDBDLF
               ICKACT

ALLOFF      ENTRY CLASS: MAIN        SEGMENT:   (DE0)
            DESC: DELETE AND DEACTIVATE ALL BEADS ON A LEVEL
            LENGTH:     24    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
```

```
            DETABLE
         CAN CALL THE FOLLOWING:
            DELETE

ALLON    ENTRY CLASS: MAIN          SEGMENT:    (DE0)
         DESC: ACTIVATE ALL BEADS ON A LEVEL
         LENGTH:    112    LANGUAGE: FTN
         SECONDARY ENTRY POINTS:
            ALLSON
         CAN BE CALLED BY:
            DETABLE
         CAN CALL THE FOLLOWING:
            IDRW     IDISER    ACTIVA    NEXTIN    NEXTB

ALLSON   ENTRY CLASS: SECONDARY    SEGMENT:    (DE0)
         DESC: ACTIVATE ALL NODES OR ELEMENTS IN ACTIVE SUBSTRUCTURES ONLY
         SECONDARY ENTRY POINT FOR : ALLON
         CAN BE CALLED BY:
            DETABLE

ALOG10.  ENTRY CLASS: SECONDARY    SEGMENT:    (S1)
         DESC: (NOT AVAILABLE)
         SECONDARY ENTRY POINT FOR : ALOG
         CAN BE CALLED BY:
            SCALZZ    SETSMG    SETUPG    LABELG    OBJCTG
            SUBJEG

ALOG     ENTRY CLASS: MAIN          SEGMENT:    (S1)
         DESC: COMPUTE COMMON AND NATURAL LOGARITHMS. OPT=ALL
         LENGTH:     73    LANGUAGE: COMPASS
         SECONDARY ENTRY POINTS:
            ALOG.     ALOG10.
         THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
         CAN CALL THE FOLLOWING:
            SYS1ST.

ALOG.    ENTRY CLASS: SECONDARY    SEGMENT:    (S1)
         DESC: (NOT AVAILABLE)
         SECONDARY ENTRY POINT FOR : ALOG
         CAN BE CALLED BY:
            XTOY=

AMAC.SQ  ENTRY CLASS: SECONDARY    SEGMENT:    (S0)
         DESC: (NOT AVAILABLE)
         SECONDARY ENTRY POINT FOR : GET.SQ
         CAN BE CALLED BY:
            BTRT.SQ   FSU.SQ

ANBL.SQ  ENTRY CLASS: SECONDARY    SEGMENT:    (S0)
         DESC: (NOT AVAILABLE)
         SECONDARY ENTRY POINT FOR : GET.SQ
         CAN BE CALLED BY:
            BTRT.SQ

ARROW    ENTRY CLASS: MAIN          SEGMENT:    (M822)
         DESC: DRAW AN ARROW ALONG WITH ANY OF THE COORDINATE AXES
```

```
            LENGTH:     362    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               MOAXES   IDRWAT
            CAN CALL THE FOLLOWING:
               IDRWLN   IARSET   GCMAT    UTORAS   SQRT.

ASERCHA     ENTRY CLASS: SECONDARY   SEGMENT:   (DE7)
            DESC: SEARCH FOR ALL BEADS ON A LEVEL WITH SPECIFIED ATTRIBUTES
            SECONDARY ENTRY POINT FOR : ASERCH
            CAN BE CALLED BY:
               DETABLE

ASERCH      ENTRY CLASS: MAIN        SEGMENT:   (DE7)
            DESC: SEARCH FOR ALL BEADS IN ACTIVE SUBSTRUCTURES BY ATTRIBUTE
            LENGTH:     106    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               ASERCHA
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               ELNCHK   PUTEDT   PUTAT    IDRW     IDISER
               ICHKED   COMPAC   ACTIVA   NEXTIN   NEXTB
               ICKATT

ASUB5       ENTRY CLASS: MAIN        SEGMENT:   (DE0)
            DESC: ACTIVATE STRUCTURES OR SUBSTRUCTURES BY NAME
            LENGTH:      22    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               PUTNM    MBEAD    ACTIVA

ASUB4       ENTRY CLASS: MAIN        SEGMENT:   (PRM1)
            DESC: PROCESS SUBSTRUCTURE PICKS FOR MATERIAL PROPERTY GENERATION
            LENGTH:      37    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               PRTABLE
            CAN CALL THE FOLLOWING:
               DRELN    PUTNM    DRWSS    MBEAD    ACTIVA

ASUB5       ENTRY CLASS: MAIN        SEGMENT:   (PRM1)
            DESC: PROCESS ELEMENT PICKS FOR MATERIAL PROPERTY GENERATION
            LENGTH:      41    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               PRTABLE
            CAN CALL THE FOLLOWING:
               MBEAD

ASUB7S      ENTRY CLASS: SECONDARY   SEGMENT:   (PRM1)
            DESC: SET FLAG TO INDICATE THAT MP TO BE DEFINED FOR ALL ELEMENTS
            SECONDARY ENTRY POINT FOR : ASUB7
            CAN BE CALLED BY:
```

```
                PRTABLE

ASUB7           ENTRY CLASS: MAIN          SEGMENT:    (PRM1)
                DESC: PROCESS ELEMENT TYPE FOR MATERIAL PROPERTY GENERATION
                LENGTH:      41    LANGUAGE: FTN
                SECONDARY ENTRY POINTS:
                   ASUB7S
                CAN BE CALLED BY:
                   PRTABLE
                CAN CALL THE FOLLOWING:
                   CNELM

ATAN2           ENTRY CLASS: MAIN          SEGMENT:    (G13)
                DESC: ARCTAN OF RATIO OF Y TO X. OPT = ALL.
                LENGTH:      73    LANGUAGE: COMPASS
                SECONDARY ENTRY POINTS:
                   ATAN2.
                THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
                CAN CALL THE FOLLOWING:
                   SYSAID.

ATAN2.          ENTRY CLASS: SECONDARY     SEGMENT:    (G13)
                DESC: (NOT AVAILABLE)
                SECONDARY ENTRY POINT FOR : ATAN2
                CAN BE CALLED BY:
                   GC3DA     CNVTOU

ATTLSC          ENTRY CLASS: SECONDARY     SEGMENT:    (DE3)
                DESC: CHECK TO SEE IF MORE ATTRIBUTE NAES ARE TO BE DISPLAYED
                SECONDARY ENTRY POINT FOR : ATTLST
                CAN BE CALLED BY:
                   ATTPRC

ATTLST          ENTRY CLASS: MAIN          SEGMENT:    (DE3)
                DESC: DISPLAY ATTRIBUTE NAMES FOR THIS DATA BASE LEVEL
                LENGTH:      70    LANGUAGE: FTN
                SECONDARY ENTRY POINTS:
                   ATTLSC
                CAN BE CALLED BY:
                   DETABLE
                CAN CALL THE FOLLOWING:
                   TYPVAL    SETCAT

ATTOFF          ENTRY CLASS: SECONDARY     SEGMENT:    (M33)
                DESC: TURN OFF ATTRIBUTE DISPLAY
                SECONDARY ENTRY POINT FOR : ACTATT
                CAN BE CALLED BY:
                   DETABLE

ATTPRC          ENTRY CLASS: MAIN          SEGMENT:    (DE3)
                DESC: PROCESS ATTRIBUTE PICK
                LENGTH:      33    LANGUAGE: FTN
                HAS NO SECONDARY ENTRY POINTS
                CAN BE CALLED BY:
                   DETABLE
                CAN CALL THE FOLLOWING:
```

```
            ATTLSC    PUTEDT

ATTREC      ENTRY CLASS: SECONDARY    SEGMENT:    (DE3)
            DESC: CHECK TO SEE IF MORE ATTRIBUTES ARE TO BE PUT UP FOR RENAME
            SECONDARY ENTRY POINT FOR : ATTREN
            CAN BE CALLED BY:
               ATTRNP

ATTREN      ENTRY CLASS: MAIN         SEGMENT:    (DE3)
            DESC: (NOT AVAILABLE)
            LENGTH:     142     LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               ATTREC
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               PUTEDT    IBEAUT

ATTRNG      ENTRY CLASS: MAIN         SEGMENT:    (DE3)
            DESC: NOW PUT THE NEW ATTRIBUTE NAME TOGETHER FOR THIS DATA BASE
            LENGTH:     127     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               PUTEDT    IDISER    IBEAUT    ICHKED    COMPAC
               IFATT

ATTRNP      ENTRY CLASS: MAIN         SEGMENT:    (DE3)
            DESC: PROCESS TYPE-IN FOR ATTRIBUTE RENAME
            LENGTH:      55     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               ATTREC    ICHKED    COMPAC

ATT1        ENTRY CLASS: MAIN         SEGMENT:    (BL1)
            DESC: INITIALIZE MODEL DATA BASE DATA HANDLER CONSTANTS
            LENGTH:       3     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               ATT
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

ATT         ENTRY CLASS: MAIN         SEGMENT:    (DRIVE)
            DESC: CONTAINS ONLY DATA STATEMENTS
            LENGTH:       4     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GLOINT
            CAN CALL THE FOLLOWING:
               ATT1

BDSTR       ENTRY CLASS: MAIN         SEGMENT:    (PR2)
            DESC: INITIALIZE NODE STRING PICKING IN DRAFTING
```

```
            LENGTH:     115    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               CNCT3D
            CAN BE CALLED BY:
               PRTABLE
            CAN CALL THE FOLLOWING:
               SETLN     SETND     IDRNXT    CNELM     IDRW
               ONPEN     MBEAD     ACTIVA    DBCHA     DBUPT
               DBDNT

BFN.        ENTRY CLASS: SECONDARY    SEGMENT:    (S0)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : FORUTL=
            CAN BE CALLED BY:
               FORSYS=

BL1INT      ENTRY CLASS: MAIN         SEGMENT:    (BL1)
            DESC: BRING SEGMENT BL1 COMMON BLOCKS INTO CORE
            LENGTH:       3    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DRIVER    GLOINT    CNTOR
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

BL2INT      ENTRY CLASS: MAIN         SEGMENT:    (BL2)
            DESC: BRING SEGMENT BL2 COMMON BLOCKS INTO CORE
            LENGTH:       3    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               CNTOR
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

BTRT.SQ     ENTRY CLASS: MAIN         SEGMENT:    (S0)
            DESC: (NOT AVAILABLE)
            LENGTH:     114    LANGUAGE: COMPASS
            SECONDARY ENTRY POINTS:
               PUT.C
            THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
            CAN CALL THE FOLLOWING:
               ANBL.SQ   AMAC.SQ   RM.RCLA

CBD.        ENTRY CLASS: SECONDARY    SEGMENT:    (S0)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : FORUTL=
            CAN BE CALLED BY:
               FORSYS=

CHNGP1      ENTRY CLASS: MAIN         SEGMENT:    (PR2)
            DESC: GET TYPE-IN TO CHANGE GRID UNITS IN DRAFTING
            LENGTH:      40    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               PRTABLE
            CAN CALL THE FOLLOWING:
               PUTEDT    IBEAUT
```

```
CHNGP2      ENTRY CLASS: MAIN          SEGMENT:    (PR2)
            DESC: CHANGE GRID UNITS IN DRAFTING
            LENGTH:      52    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               PRTABLE
            CAN CALL THE FOLLOWING:
               GRID     GIDELT   GOTOER.  ICHKED   COMPAC

CHWR.SQ     ENTRY CLASS: MAIN          SEGMENT:    (SO)
            DESC: (NOT AVAILABLE)
            LENGTH:       7    LANGUAGE: COMPASS
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               OPEN.SQ  PUT.SQ
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

CIO.RM      ENTRY CLASS: MAIN          SEGMENT:    (SO)
            DESC: (NOT AVAILABLE)
            LENGTH:      40    LANGUAGE: COMPASS
            SECONDARY ENTRY POINTS:
               RM.CIO   RM.RCLA  RM.RCLP
            THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

CLEAR2      ENTRY CLASS: MAIN          SEGMENT:    (PR1)
            DESC: SET ALL VALUES BETWEEN ADDRESSES SPECIFIED TO SPECIFIED VALUE
            LENGTH:       6    LANGUAGE: COMPASS
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               ICPART   CNELEM   CNNODE
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

CLOCK=      ENTRY CLASS: MAIN          SEGMENT:    (S1)
            DESC: ACCESS SYSTEM CLOCKS FOR FORTRAN.
            LENGTH:      31    LANGUAGE: COMPASS
            SECONDARY ENTRY POINTS:
               TIME
            THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
            CAN CALL THE FOLLOWING:
               SYS=

CLOSE       ENTRY CLASS: MAIN          SEGMENT:    (DB1)
            DESC: CLOSE DATA HANDLER FILE
            LENGTH:       4    LANGUAGE: COMPASS
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DMFLSH
            CAN CALL THE FOLLOWING:
               CPC

CLRFETR     ENTRY CLASS: SECONDARY     SEGMENT:    (DB1)
            DESC: DATA HANDLER FET ROUTINE
            SECONDARY ENTRY POINT FOR : SETFETR
            CAN BE CALLED BY:
               DMFLSH   DMINIT
```

```
CLRLIB      ENTRY CLASS: SECONDARY    SEGMENT:    (PRM2)
            DESC: RESET MATERIAL PROPERTY DATA BASE SCREEN OPTIONS
            SECONDARY ENTRY POINT FOR : LIBINS
            CAN BE CALLED BY:
               PRTABLE

CLROUT      ENTRY CLASS: MAIN         SEGMENT:    (PR2)
            DESC: SAVE DRAFTING DATA BASE
            LENGTH:     42    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               PRTABLE
            CAN CALL THE FOLLOWING:
               GIDELT    TRKOFF    DZSAVE    RETURN

CLRPIC      ENTRY CLASS: MAIN         SEGMENT:    (M5)
            DESC: (NOT AVAILABLE)
            LENGTH:    142    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE   INTSUB    DZRST     PROCXA    INITXY
               TABDEL    INIT2D    INIT3N    XYERAS
            CAN CALL THE FOLLOWING:
               SETWZ     SET1      GISUBF    GIDELT    GIDAE
               GISHOW    DBOAD     DBORT     DBDAC     IOBDLF

CLSF.RM     ENTRY CLASS: MAIN         SEGMENT:    (S0)
            DESC: (NOT AVAILABLE)
            LENGTH:     23    LANGUAGE: COMPASS
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               FORSYS=   YIELD=    RETURN
            CAN CALL THE FOLLOWING:
               ERR.RM    MCT.RM

CLSF.RM     ENTRY CLASS: MAIN         SEGMENT:    (S0)
            DESC: (NOT AVAILABLE)
            LENGTH:     23    LANGUAGE: COMPASS
            HAS NO SECONDARY ENTRY POINTS
            THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

CLSF.SQ     ENTRY CLASS: MAIN         SEGMENT:    (S0)
            DESC: (NOT AVAILABLE)
            LENGTH:    133    LANGUAGE: COMPASS
            SECONDARY ENTRY POINTS:
               RSPT.SQ
            THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
            CAN CALL THE FOLLOWING:
               ERR.RM    RM.CIO    RM.RCLA

CLSV.SC     ENTRY CLASS: MAIN         SEGMENT:    (S0)
            DESC: (NOT AVAILABLE)
            LENGTH:    125    LANGUAGE: COMPASS
            HAS NO SECONDARY ENTRY POINTS
```

```
            CAN BE CALLED BY:
               GET.SQ    PUT.SQ
            CAN CALL THE FOLLOWING:
               RSPT.SQ   RM.CIO

CNCTBD      ENTRY CLASS: SECONDARY    SEGMENT:    (PR2)
            DESC: CONNECT NODES CREATED IN DRAFTING
            SECONDARY ENTRY POINT FOR : BDSTR
            CAN BE CALLED BY:
               PRTABLE

CNELEM      ENTRY CLASS: MAIN         SEGMENT:    (PR11)
            DESC: CONVERSION(1) - CREATE ELEMENT BEAD
            LENGTH:     246     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DRAWER
            CAN CALL THE FOLLOWING:
               ICPART    CLEAR2    CNELM     IDBRSV    DBRITE
               DBLEFT    DBSET

CNELM       ENTRY CLASS: MAIN         SEGMENT:    (M1)
            DESC: LOOK AT ATTRIBUTE TYPES
            LENGTH:      36     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               BDSTR     FIXDAT    CNELEM    ASUB7     ELNCHK
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

CNNEW       ENTRY CLASS: MAIN         SEGMENT:    (PR1[illegible])
            DESC: INITIALIZE DUMMY DRAFTING DATA BASE
            LENGTH:     314     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DRAWER
            CAN CALL THE FOLLOWING:
               REQUEST   DMGTBD    IFATT     ISACT     IDBRSV
               DMINIT    RETURN

CNNODE      ENTRY CLASS: MAIN         SEGMENT:    (PR11)
            DESC: CONVERSION(1) - CREATE NODE BEAD
            LENGTH:     122     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DRAWER
            CAN CALL THE FOLLOWING:
               CLEAR2    GETCOR    DMSET     IDBRSV

CNSORT      ENTRY CLASS: MAIN         SEGMENT:    (PR12)
            DESC: CONVERSION(1) - HASH-SORT NAMES AND ASSOCIATED BEAD ADDRESSES
            LENGTH:      70     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               CNTERM    CNTFR
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS
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CNTABL      ENTRY CLASS: MAIN          SEGMENT:    (PRM0)
            DESC: CONVERSION(1) - CREATE TABLE
            LENGTH:     362    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               MATIN     LIBINS
            CAN CALL THE FOLLOWING:
               PUTLIN    IDBFND    DMSET     IDBRSV    DBRITE
               DBLEFT    IDBLFT

CNTERM      ENTRY CLASS: MAIN          SEGMENT:    (PR12)
            DESC: CONVERSION(1) - TERMINATION
            LENGTH:     762    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DRAWFR
            CAN CALL THE FOLLOWING:
               CNTER     CNSORT    RESTART   EDITTI    IDBFND
               DMRLBD    DBRITE    DBLEFT    DBDNN     DBDNP
               IDBRIT    IDBLFT    IDBDNN    IDBDNP    IDBGET
               DBLKUP    DBUPT     IDBADB    DBARR

CNTER       ENTRY CLASS: MAIN          SEGMENT:    (PR12)
            DESC: CONVERSION(1) - SET UP- AND DOWN-POINTERS
            LENGTH:     223    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               CNTERM
            CAN CALL THE FOLLOWING:
               CNSORT    IDBFND    DBDNN     DBDNP     IDBRIT
               IDBDNN    IDBNAM    DBUPT

CNTINT      ENTRY CLASS: MAIN          SEGMENT:    (DE9)
            DESC: CONTOUR - INITIALIZE CONTOUR VALUES
            LENGTH:      61    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               RSETMG    GCXMIN    GCYMIN    GCYMAX

CNTITL      ENTRY CLASS: MAIN          SEGMENT:    (DE9)
            DESC: GET TYPE-IN FOR CONTOUR PLOT TITLE
            LENGTH:      34    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               PUTEDT

CNTIT2      ENTRY CLASS: MAIN          SEGMENT:    (DE9)
            DESC: PROCESS TYPE-IN FOR CONTOUR PLOT TITLE
            LENGTH:      14    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
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          DESC: MAKE TYPE-IN VALUES CONTIGUOUS
          LENGTH:      46    LANGUAGE: FTN
          SECONDARY ENTRY POINTS:
             COMPACS
          CAN BE CALLED BY:
             MOURW     SVIEWP    SROTET    CHNGP2    GETRAG
             ICCPPC    ETYPSV    RNGDFL    RNGDRW    PTYPE
             EQNUM     ELRLPP    EMOVE     DYSFPU    DYSSTP
             ATTRNG    ATTSNP    ERNOLD    EATS      ESERCH
             ASERCH    SSADFF    CNTPRE    TABXYP    TABSCL
             TABDM     PRDFAC
          THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

COMPIO    ENTRY CLASS: MAIN          SEGMENT:    (G0)
          DESC: FTN I/O FOR TEKTRONIX 4010/12/14
          LENGTH:    1371    LANGUAGE: COMPASS
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
             GINIT     GERASE    GFLUSH    GIALRM    GCDRAW
             GCWORK    GCDLIM    GIBUTN    GCINPC    GIDFON
          CAN CALL THE FOLLOWING:
             SYS=      MSG=

CONHUL    ENTRY CLASS: MAIN          SEGMENT:    (M8141)
          DESC: CONTOUR - DETERMINE CONVEX HULL OF POINTS TO BE CONTOURED
          LENGTH:     155    LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
             CNTOX
          CAN CALL THE FOLLOWING:
             PUTLIN

COPYFL    ENTRY CLASS: MAIN          SEGMENT:    (S1)
          DESC: COPY ONE SEQUENTIAL FILE TO ANOTHER
          LENGTH:      43    LANGUAGE: COMPASS
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
             FILATT    GLCHCK    DRAWFR
          CAN CALL THE FOLLOWING:
             SYS=

CORSHF    ENTRY CLASS: MAIN          SEGMENT:    (M1)
          DESC: (NOT AVAILABLE)
          LENGTH:      31    LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
             FIXDAT    PCNPEN    MXYP
          THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

COS.      ENTRY CLASS: SECONDARY     SEGMENT:    (S0)
          DESC: (NOT AVAILABLE)
          SECONDARY ENTRY POINT FOR : SINCOS=
          CAN BE CALLED BY:
             SROTET    SETVU     SC30A     CNVTOC

CPC       ENTRY CLASS: MAIN          SEGMENT:    (DB0)
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            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

CNTOR       ENTRY CLASS: MAIN          SEGMENT:    (DE9)
            DESC: CONTOUR - MAIN CONTOURING MODULE
            LENGTH:     160     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               BL1INT    BL2INT    METAZZ    LINESG    OBJCTG
               SUBJEG    SCAN      CONHUL    TRIORD    TMESH3
               TMESH2    PUTLIN

CNTPRD      ENTRY CLASS: MAIN          SEGMENT:    (DE1)
            DESC: CONTOUR - PUT UP CURRENT CONTOUR PARAMETERS TO BE MODIFIED BY TYP
            LENGTH:      54     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               PUTEDT    IGEAUT

CNTPRE      ENTRY CLASS: MAIN          SEGMENT:    (DE9)
            DESC: CONTOUR - EDIT AND ACCEPT TYPED-IN PARAMETERS
            LENGTH:     110     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               PUTEDT    IDISER    ICHKED    COMPAC    COMPACS

CNVTOC      ENTRY CLASS: MAIN          SEGMENT:    (S0)
            DESC: SCALING - CONVERT FROM USER SPACE TO CARTESIAN COORDINATES
            LENGTH:      34     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               MODRW     PTYPE     GETCEN    GETCOR
            CAN CALL THE FOLLOWING:
               COS.      SIN.

CNVTOU      ENTRY CLASS: MAIN          SEGMENT:    (G13)
            DESC: SCALING - CONVERT CARTESIAN COORDINATES TO USERS SPACE
            LENGTH:      37     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               MOPUT
            CAN CALL THE FOLLOWING:
               ACOS.     ATAN2.    SQRT.

COMPACS     ENTRY CLASS: SECONDARY     SEGMENT:    (S1)
            DESC: SQUEEZE TYPE-IN VALUES INTO ARRAYS
            SECONDARY ENTRY POINT FOR : COMPAC
            CAN BE CALLED BY:
               SVIEWP    CNTPRE    ELNCHK    TABXYP    ICHKED

COMPAC      ENTRY CLASS: MAIN          SEGMENT:    (S1)
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          DESC: SYSTEM I/O ROUTINE
          LENGTH:     253    LANGUAGE: COMPASS
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
             READR    RWRITE    RWRITER  WRITE    CLOSE
             WRITER
          THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

CRAK      ENTRY CLASS: SECONDARY    SEGMENT:    (S1)
          DESC: ERROR RECOVERY COMMAND PARSER
          SECONDARY ENTRY POINT FOR : DMP.CRK
          CAN BE CALLED BY:
             DMP

DACTSN    ENTRY CLASS: MAIN         SEGMENT:    (M31)
          DESC: DISPLAY ACTIVE STRUCTURE AND SUBSTRUCTURE NAMES
          LENGTH:      71    LANGUAGE: FTN
          SECONDARY ENTRY POINTS:
             DACTS
          CAN BE CALLED BY:
             DETABLE  TABACX
          CAN CALL THE FOLLOWING:
             TYPNAM   IDISER   IDBORT

DACTS     ENTRY CLASS: SECONDARY    SEGMENT:    (M31)
          DESC: PUT UP REST OF STRUCTURE AND SUBSTRUCTURE NAMES
          SECONDARY ENTRY POINT FOR : DACTSN
          CAN BE CALLED BY:
             TABPRC   SSOFF

IDARR     ENTRY CLASS: SECONDARY    SEGMENT:    (DB3)
          DESC: (NOT AVAILABLE)
          SECONDARY ENTRY POINT FOR : IDBARR
          CAN BE CALLED BY:
             CNTERM   ECPROC   ECHKL

DATT      ENTRY CLASS: SECONDARY    SEGMENT:    (DB0)
          DESC: GET NTH ATTRIBUTE
          SECONDARY ENTRY POINT FOR : IDBUPP
          CAN BE CALLED BY:
             GLSTDB   PRINCP   EQSTR    MATDEF   EUPPNT
             GETCNT   GETDAT   PUTATT   IDRWEL   IDRWAT
             GETCEN   GETCOR   ICKATT   IGETCH

DBCHA     ENTRY CLASS: MAIN         SEGMENT:    (DB2)
          DESC: CHANGE ATTRIBUTE VALUE IN DATA BASE
          LENGTH:      66    LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
             PRINCP   EQSTR    BDSTR    FIXDAT   MATDEF
             EUPPNT   EATS     IDBADB
          CAN CALL THE FOLLOWING:
             IFATT    DBSET    IDBTYP   IDBSTA   IDBCAN

DBCHBD    ENTRY CLASS: MAIN         SEGMENT:    (DB0)
          DESC: CHECK IF BEAD IS ALREADY ON THE CHANGE LIST
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            LENGTH:    126    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DBRITE    IDBCAN    DBUPT     IDBARR
            CAN CALL THE FOLLOWING:
               DMGTBD    DMSET     IDBTYP    IDBLEN    IDBGET

DBCHNM      ENTRY CLASS: MAIN          SEGMENT:    (DB1)
            DESC: CHANGE NAME OF EXISTING BEAD
            LENGTH:    213    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               EATS
            CAN CALL THE FOLLOWING:
               DBRITE    DBLEFT    DBNAME    IDBRIT    IDBLFT
               IDBTYP    IDBNAM    DBLKUP

DBDAC       ENTRY CLASS: SECONDARY    SEGMENT:    (DB0)
            DESC: SET ACTIVE FLAG
            SECONDARY ENTRY POINT FOR : DBRITE
            CAN BE CALLED BY:
               INTSUB    CLRPIC    IDRWAT    ACTIVA

DBDAD       ENTRY CLASS: SECONDARY    SEGMENT:    (DB0)
            DESC: SET ≠IDDAD≠
            SECONDARY ENTRY POINT FOR : DBRITE
            CAN BE CALLED BY:
               INTSUB    DZRST     CLRPIC    ICKBYT    IDRWAT
               DRWACT    IDRWSS    IDRWST    IDRW      DELETE
               ACTIVA

DBDEL       ENTRY CLASS: MAIN          SEGMENT:    (DB2)
            DESC: DELETE A BEAD AT A LEVEL AND ALL REFERENCES TO IT
            LENGTH:    106    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DRAWER    EQNUM     EQPEN
            CAN CALL THE FOLLOWING:
               DBRITE    DBLEFT    IDBRIT    IDBLFT    IDBUPN
               IDBDNN    IDBTYP    IDBUPP    IDBDNP    DBUPT
               DBDNT

DBDLF       ENTRY CLASS: SECONDARY    SEGMENT:    (DB0)
            DESC: SET LEFT ACTIVE POINTER
            SECONDARY ENTRY POINT FOR : DBRITE
            CAN BE CALLED BY:
               MXYP      DELETE    ACTIVA    IDBCAN

DBDNN       ENTRY CLASS: SECONDARY    SEGMENT:    (DB0)
            DESC: SET NUMBER OF DOWN POINTERS
            SECONDARY ENTRY POINT FOR : DBRITE
            CAN BE CALLED BY:
               CNTERM    CNTER     DBUPT

DBDNP       ENTRY CLASS: SECONDARY    SEGMENT:    (DB0)
            DESC: SET NTH DOWN POINTER
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          SECONDARY ENTRY POINT FOR : DBRITE
          CAN BE CALLED BY:
             CNTERM   CNTER    ELEEPP   IDBCAN   DBUPT

DBONT     ENTRY CLASS: SECONDARY   SEGMENT:   (DB2)
          DESC: SET OR REMOVE THE DOWN POINTER OF THE BEAD LISTED
          SECONDARY ENTRY POINT FOR : DBUPT
          CAN BE CALLED BY:
             BOSTR    FIXCAT   EMERGE   PORG     ERD
             ERNOLD   EADOWN   ESERCH   DBDEL    EADDEL

DBORT     ENTRY CLASS: SECONDARY   SEGMENT:   (DB0)
          DESC: SET RIGHT ACTIVE POINTER
          SECONDARY ENTRY POINT FOR : DBRITE
          CAN BE CALLED BY:
             REACT    INTSUB   DZRST    RESTART  CLRPIC
             TABACT   DELETE   ACTIVA   IDBCAN

DBINIT    ENTRY CLASS: MAIN        SEGMENT:   (DB1)
          DESC: INITIALIZE CREATED DATA BASE
          LENGTH:    404    LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
             REACT    FILATT   DRAWFR
          CAN CALL THE FOLLOWING:
             ICCHR    DMSET    DMGET    IFATT    IDBRSV
             DMINIT   RETURN

DBLEFT    ENTRY CLASS: SECONDARY   SEGMENT:   (DB0)
          DESC: SET LEFT POINTER IN DATA BASE
          SECONDARY ENTRY POINT FOR : DBRITE
          CAN BE CALLED BY:
             CNELEM   CNTERM   CNTABL   DBCHNM   IDBCAN
             IDBACB   DBDEL

DBLEN     ENTRY CLASS: SECONDARY   SEGMENT:   (DB0)
          DESC: SET BEAD LENGTH
          SECONDARY ENTRY POINT FOR : DBRITE
          CAN BE CALLED BY:
             IDBRSV   IDBCAN

DBLKUP    ENTRY CLASS: MAIN        SEGMENT:   (DB1)
          DESC: ALLOWS APPLICATION TO DELETE AND ADD BEADS
          LENGTH:    146    LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
             CNTERM   DZRST    EQNUM    ECPROC   EQPEN
             DZSAVE   DBCHNM
          CAN CALL THE FOLLOWING:
             DBTYP    IDBRIT   IDBTYP   IDBNAM

DBNAME    ENTRY CLASS: SECONDARY   SEGMENT:   (DB0)
          DESC: SET NAME IN BEAD
          SECONDARY ENTRY POINT FOR : DBRITE
          CAN BE CALLED BY:
             DBCHNM   IDBACB
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DBRITE      ENTRY CLASS: MAIN          SEGMENT:   (DB0)
            DESC: SET RIGHT POINTER IN DATA BASE
            LENGTH:    356    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               DBLEFT    DBUPS     DBUPN     DBUPP     DBONN
               DBONP     DBTYP     DBLEN     DBOAD     DBSTAT
               DBNAME    DBSET     DBDLF     DBDRT     DBDAC
            CAN BE CALLED BY:
               CNELEM    CNTERM    CNTABL    DBCHNM    IDBCAN
               IDBADB    DBDFL
            CAN CALL THE FOLLOWING:
               DMSET     DBCHBD    IDBUPS    IDBTYP    IDBOAD
               IDBSTA

DBSET       ENTRY CLASS: SECONDARY   SEGMENT:   (DB0)
            DESC: SET NTH LOCATION IN BEAD
            SECONDARY ENTRY POINT FOR : DBRITE
            CAN BE CALLED BY:
               CNELEM    IDBCAN    DBCHA     DBUPT

DBSTAT      ENTRY CLASS: SECONDARY   SEGMENT:   (DB0)
            DESC: SET START OF ATTRIBUTE LIST
            SECONDARY ENTRY POINT FOR : DBRITE
            CAN BE CALLED BY:
               DBUPT     IDBADB

DBTGET      ENTRY CLASS: MAIN          SEGMENT:   (DB3)
            DESC: GET VALUE IN TABLE
            LENGTH:    133    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GETDAT
            CAN CALL THE FOLLOWING:
               DMSET     DMGET     IDBTYP    IDBSTA    IDBARR

DBTYP       ENTRY CLASS: SECONDARY   SEGMENT:   (DB0)
            DESC: SET TYPE
            SECONDARY ENTRY POINT FOR : DBRITE
            CAN BE CALLED BY:
               DBLKUP    IDBADB

DBUPN       ENTRY CLASS: SECONDARY   SEGMENT:   (DB0)
            DESC: SET NUMBER OF UP POINTERS
            SECONDARY ENTRY POINT FOR : DBRITE
            CAN BE CALLED BY:
               DBUPT

DBUPP       ENTRY CLASS: SECONDARY   SEGMENT:   (DB0)
            DESC: SET NTH UP-POINTER
            SECONDARY ENTRY POINT FOR : DBRITE
            CAN BE CALLED BY:
               IDBCAN    DBUPT

DBUPS       ENTRY CLASS: SECONDARY   SEGMENT:   (DB0)
            DESC: SET START OF UP-POINTERS
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          SECONDARY ENTRY POINT FOR : DBRITE
          CAN BE CALLED BY:
             DBUPT     IDBADB

DBUPT     ENTRY CLASS: MAIN          SEGMENT:    (DB2)
          DESC: SET OR REMOVE THE UP POINTER OF THE BEAD LISTED
          LENGTH:     361     LANGUAGE: FTN
          SECONDARY ENTRY POINTS:
             DBDNT
          CAN BE CALLED BY:
             BDSTR     FIXBAT    CNTERM    CNTER     EMERGE
             PORG      ELRFPP    ERD       ERNDLD    EADOWN
             ESERCH    DBDEL
          CAN CALL THE FOLLOWING:
             DBCHSO    DBUPS     DBUPN     DBUPP     DBDNN
             DBDNP     DBSTAT    DBSET     IDBUPS    IDBUPN
             IDBDNN    IDBTYP    IDBSTA    IDBUPP    IDBDNP
             IDBGET    IDBCAN

DEINIT1   ENTRY CLASS: MAIN          SEGMENT:    (M32)
          DESC: (NOT AVAILABLE)
          LENGTH:      41     LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
             DRAWER    MYINIT    DEINIT    PRINIT    PPINIT
          CAN CALL THE FOLLOWING:
             GIBAT     EDITTI    GIERR

DEINIT    ENTRY CLASS: MAIN          SEGMENT:    (M32)
          DESC: INITIALIZE DISPLAY-AND-EDIT MENUS
          LENGTH:      16     LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
             EXTABLE
          CAN CALL THE FOLLOWING:
             STARTM    DEINIT1

DELETE    ENTRY CLASS: MAIN          SEGMENT:    (G0)
          DESC: DEACTIVATE BEAD AND ERASE THE PICTURE FROM THE SCREEN
          LENGTH:     127     LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
             ALLOFF    RNGDEL    EQNUM     DELPIC    RETAIN
             SSAOFF    EUPEN     SSOFF
          CAN CALL THE FOLLOWING:
             GIDELT    DBDAD     DBDLF     DBDRT     IDBDAD
             IDBDLF    ICKACT

DELPIC    ENTRY CLASS: MAIN          SEGMENT:    (DE1)
          DESC: DELETE AND DEACTIVATE ALL PICKED BEADS ON A LEVEL
          LENGTH:      15     LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
             DETABLE
          CAN CALL THE FOLLOWING:
             DELETE    MBEAD
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DELSF      ENTRY CLASS: MAIN          SEGMENT:    (G12)
           DESC: DELETE INTERTEK SUBFILE
           LENGTH:     60    LANGUAGE: FTN
           HAS NO SECONDARY ENTRY POINTS
           CAN BE CALLED BY:
              MOFRZ
           CAN CALL THE FOLLOWING:
              GIDELT    GISHOW

DETABLE    ENTRY CLASS: MAIN          SEGMENT:    (DRIVE)
           DESC: DISPLAY-AND-EDIT SUBROUTINE SWITCH TABLE
           LENGTH:     507    LANGUAGE: COMPASS
           HAS NO SECONDARY ENTRY POINTS
           CAN BE CALLED BY:
              STARTM    GLINIT
           CAN CALL THE FOLLOWING:
              SWITCHS   IDEDEC    ALLON     ALLSON    ALLOFF
              ASUBS     DZRST     ETYPSV    CNTPRD    RNGDEL
              RNGDRW    PONPEN    PTYPE     EQNUM     EMERG
              EMERGE    DRWATA    DRWATT    DELPIC    EONPD
              EONPEN    EDINIT    ECHNIT    ELREPL    ELREPP
              RETAIN    RETAIS    EMOVE     EMOVEP    MXYI
              MXYP      DYDRDE    DYLOAD    DYMODE    DYTIMS
              DYSFPU    DYSFPR    DYSSTP    DYUNDE    DYDEF
              ATTLST    ATTPRC    ATTREN    ATTRNG    ATTRNP
              LANODE    LFNODE    NODON     NODAEL    NODFEL
              ECHOND    ECHONU    ECPROC    ECREAN    ERDOWD
              ERDOWU    ERDD      ERDU      ERNDLD    ERNADD
              ERNADU    EACTPN    EACTP     EADOWN    EAUP
              EALLS     EALLD     EALLSS    EATS      EATCH
              ENDOWN    ENUP      EPUTDN    EPUTUP    ESERCH
              ASERCH    ASEFCHA   SSAOFF    CNTOR     CNTPRE
              CNTINT    CNTITL    CNTIT2    GETCNT    PROCXA
              PROCYA    REPXY     RSCXY     TABRDR    INITXY
              GSLXLY    GSLXGY    GSGXLY    GSGXGY    LSSLD
              LSSDH     LSLDH     TABLIN    PROCTIT   TABVAL
              TABIND    PROCCHR   TABDEL    EQPEN     EQPENN
              STRACT    SSTACT    ELEACT    NODACT    INIT2D
              INIT3N    CLRPIC    XYERAS    XYRET1    XYRET
              SELATT    SELAT1    TABACT    TABACX    TABACY
              TABPRC    TABXYP    TABXYM    TABSCX    TABSCY
              TABSCL    TABDM     TABXI     TABYI     TABXC
              TABYD     TABXN     TABYN     PUTLST    SSOFF
              DACTSN    PUTNAM    PUTNMM    EXINIT    MOPU
              MOREC     MOCYL     MOSPH     PLINIT    SPSBL
              SPSBLC    PUTATT    ACTATT    ATTOFF    FROFAC
              REPFA     QTITLE    DRWSS     ONPEN     ONPENE
              ONPENN    TABPEN    DZSAVE    EADDEL

DISPLB     ENTRY CLASS: MAIN          SEGMENT:    (PRM1)
           DESC: DISPLAY GENERIC MATERIAL NAMES
           LENGTH:     64    LANGUAGE: FTN
           HAS NO SECONDARY ENTRY POINTS
           CAN BE CALLED BY:
              PRTABLE
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            CAN CALL THE FOLLOWING:
               TYPVAL   DMGET

DMBOAD      ENTRY CLASS: MAIN          SEGMENT:   (DB0)
            DESC: (NOT AVAILABLE)
            LENGTH:     46    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DMRLBD   DMSTGT
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

DMFLSH      ENTRY CLASS: MAIN          SEGMENT:   (DB1)
            DESC: FLUSH DATA HANDLER FILE
            LENGTH:    140    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               RESTART  DMINIT
            CAN CALL THE FOLLOWING:
               DMWRITE  OUTBUF   RWRITER  FCHPRAM  FETSTAT
               CLOSE    SETFETR  CLRFETR

DMFV        ENTRY CLASS: MAIN          SEGMENT:   (DB0)
            DESC: (NOT AVAILABLE)
            LENGTH:    140    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DMGTBD   DMRLBD   DMSTGT
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

DMGET       ENTRY CLASS: SECONDARY     SEGMENT:   (DB0)
            DESC: GET DATA HANDLER BEAD FIELD
            SECONDARY ENTRY POINT FOR : DMSTGT
            CAN BE CALLED BY:
               IGNM     DISPLB   LIBIN    LIBINS   DZRST
               RESTART  IGPCKM   GCGARR   GCSSF    IGFTR
               IFATT    IGATT    IDBRIT   IDBUPP   DBINIT
               DBTGET   IDBARR

DMGTBD      ENTRY CLASS: MAIN          SEGMENT:   (DB0)
            DESC: RESERVE SPACE FOR NEW DATA HANDLER BEAD
            LENGTH:    373    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               CNNEW    RESTART  GCRESI   DBCHBD   IDBRSV
            CAN CALL THE FOLLOWING:
               DMREAD   DMWRITE  DMFV     SYSTEM   FCHPRAM

DMINIT      ENTRY CLASS: MAIN          SEGMENT:   (DB1)
            DESC: INITIALIZE DATA HANDLER FILE
            LENGTH:    365    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               STARTM   CNNEW    MYINIT   GINIT    DBINIT
            CAN CALL THE FOLLOWING:
               GOTOER.  ITOJ.    SYSTEM   INBUF    OUTBUF
               READR    FCHPRAM  FETSTAT  DMFLSH   RFILEB
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                WRITER   SETFETR  CLRFETR

DMP         ENTRY CLASS: MAIN          SEGMENT:   (S1)
            DESC: ERROR RECOVERY DEBUG DUMP ROUTINE
            LENGTH:     570    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
                HOLD
            CAN CALL THE FOLLOWING:
                IBEAUT   GETLIN   PUTLIN   GOTOER.  CRAK
                IOCTAL

DMP.CRK     ENTRY CLASS: MAIN          SEGMENT:   (S1)
            DESC: (NOT AVAILABLE)
            LENGTH:      50    LANGUAGE: COMPASS
            SECONDARY ENTRY POINTS:
                CRAK
            THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

DMREAD      ENTRY CLASS: MAIN          SEGMENT:   (DB0)
            DESC: (NOT AVAILABLE)
            LENGTH:     127    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
                DMGTBD   DMRLBD   DMSTGT
            CAN CALL THE FOLLOWING:
                INBUF    READR    FETSTAT

DMRLBD      ENTRY CLASS: MAIN          SEGMENT:   (DB0)
            DESC: RELEASE DATA HANDLER BEAD
            LENGTH:     270    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
                CNTERM   GIBUTN   GICLRQ   IFATT    IDBCAN
            CAN CALL THE FOLLOWING:
                DMREAD   DMWRITE  DMBDAD   DMFV     SYSTEM
                FCHPRAM  SETPRAM

DMSET       ENTRY CLASS: SECONDARY     SEGMENT:   (DB0)
            DESC: SET VALUES INTO DATA HANDLER BEAD FIELDS
            SECONDARY ENTRY POINT FOR : DMSTGT
            CAN BE CALLED BY:
                ICPART   CNNODE   CNTABL   DZRST    RESTART
                GCGARR   GCSSF    DBCHBD   IFATT    DBRITE
                DBINIT   DZSAVE   DBTGET   IDBARR

DMSTGT      ENTRY CLASS: MAIN          SEGMENT:   (DB0)
            DESC: (NOT AVAILABLE)
            LENGTH:     606    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
                DMSET    DMGET
            THIS ENTRY IS NOT INVOKED BY  NY OTHER PROGRAMS
            CAN CALL THE FOLLOWING:
                GOTOER.  PDUMP    DMREAD   DMWRITE  DMBDAD
                DMFV     SYSTEM
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DMWRITE    ENTRY CLASS: MAIN          SEGMENT:   (DB0)
           DESC: (NOT AVAILABLE)
           LENGTH:    204    LANGUAGE: FTN
           HAS NO SECONDARY ENTRY POINTS
           CAN BE CALLED BY:
              DMGTBD   DMRLBD   DMSTGT   DMFLSH
           CAN CALL THE FOLLOWING:
              OUTBUF   RWRITE   RWRITER  FETSTAT  WRITE

DRAWFR     ENTRY CLASS: MAIN          SEGMENT:   (PR0)
           DESC: INITIALIZE DRAFTING PACKAGE
           LENGTH:    151    LANGUAGE: FTN
           HAS NO SECONDARY ENTRY POINTS
           CAN BE CALLED BY:
              PRTABLE
           CAN CALL THE FOLLOWING:
              GRID     SETND    CNNEW    CNELEM   CNNODE
              CNTERM   GRDNIT   INIT2D   DEINIT1  COPYFL
              IDBFND   DBINIT   RETURN   DBDEL

DRELN      ENTRY CLASS: MAIN          SEGMENT:   (PRM1)
           DESC: (NOT AVAILABLE)
           LENGTH:    154    LANGUAGE: FTN
           HAS NO SECONDARY ENTRY POINTS
           CAN BE CALLED BY:
              ASU84
           CAN CALL THE FOLLOWING:
              GETGEN   GITEM    GUTEXT   GUSETP   IDINF
              UTORAS   IGCHR    IBEAUT   IDBDNN   IDBORT
              IDBDNP   IDBNAM

DRIVER     ENTRY CLASS: TRANSFER      SEGMENT:   (DRIVE)
           DESC: THE EXECUTIVE AND MAIN PROGRAM
           LENGTH:   1005    LANGUAGE: FTN
           HAS NO SECONDARY ENTRY POINTS
           THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
           CAN CALL THE FOLLOWING:
              GLOINT   MARK     EXITT    SWITCH   ISWTCHD
              BL1INT   GRFNIT   PAGER    ERASEN   IPICK
              PUTEDT   IGPCKM   IGCFV    IPPRMT   IREAD
              MENNIT   GISUBF   GCDRAW   GCHIGH   GCWIDE
              GITEM    GIDELT   IDISER   GISNGL   GISTR
              GIPARM   GICLRQ   GUTEXT   GUSETP   GISHOW
              QBNTRY.  STOP.    GOTOER.  IGFTR    IGSON
              IGLNK    IGACT    IGRUT    IGTBL    IGPSX
              IGPSY    IGOPT

DRWACT     ENTRY CLASS: MAIN          SEGMENT:   (M820)
           DESC: REDRAW ALL ACTIVE BEADS ON THIS LEVEL THAT ARE DRAWN
           LENGTH:    352    LANGUAGE: FTN
           SECONDARY ENTRY POINTS:
              DRWONE   DRWARR   DRWNOC
           CAN BE CALLED BY:
              MORDRW   MOASHK
           CAN CALL THE FOLLOWING:
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            IDRWAT   IDRW     GIDELT   IDISER   OBDAD
            IDBDAD   IDBDRT   IDBDAC   ICKACT

DRWARR      ENTRY CLASS: SECONDARY   SEGMENT:   (M820)
            DESC: DRAW ALL BEADS IN THE ARRAY IN THE ARGUMENT LIST
            SECONDARY ENTRY POINT FOR : DRWACT
            CAN BE CALLED BY:
               EQUEUP

DRWATA      ENTRY CLASS: MAIN        SEGMENT:   (DE1)
            DESC: DRAW THE ATTRIBUTE FOR ALL BEADS ON THIS LEVEL THAT ARE ACTIVE
            LENGTH:     33    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               IDRWAT   IDBDRT   IDBDAC

DRWATT      ENTRY CLASS: MAIN        SEGMENT:   (DE1)
            DESC: DRAW THE ATTRIBUTE FOR EACH BEAD PICKED
            LENGTH:     21    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               IDRWAT   MBEAD

DRWNOC      ENTRY CLASS: SECONDARY   SEGMENT:   (M820)
            DESC: REDRAW ALL ACTIVE BEADS WITHOUT ERASING THE ORIGINAL VERSION
            SECONDARY ENTRY POINT FOR : DRWACT
            CAN BE CALLED BY:
               DYDRDE

DRWONE      ENTRY CLASS: SECONDARY   SEGMENT:   (M820)
            DESC: DRAW THE ONE BEAD IN THE ARGUMENT LIST
            SECONDARY ENTRY POINT FOR : DRWACT
            CAN BE CALLED BY:
               MOISHK   ELREPP   MXYP     EUPPNT   ERD
               ERNDLD   EADOWN   EATS

DRWSS       ENTRY CLASS: MAIN        SEGMENT:   (M821)
            DESC: DRAW ALL ACTIVE SUBSTRUCTURES
            LENGTH:     26    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE  ASU64
            CAN CALL THE FOLLOWING:
               IDRW     IDBDRT

DXIT.SQ     ENTRY CLASS: SECONDARY   SEGMENT:   (SD)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : GET.SQ
            CAN BE CALLED BY:
               SKFL.SQ

DYDEF       ENTRY CLASS: SECONDARY   SEGMENT:   (DE3)
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          DESC: SET DEFORMED PLOT MODE
          SECONDARY ENTRY POINT FOR : DYUNDE
          CAN BE CALLED BY:
             DETABLE

DYDRDE    ENTRY CLASS: MAIN          SEGMENT:    (DE3)
          DESC: DRAW DEFORMED PLOT FOR ALL ACTIVE BEADS
          LENGTH:      23    LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
             DETABLE
          CAN CALL THE FOLLOWING:
             DRWNOC

DYLOAD    ENTRY CLASS: MAIN          SEGMENT:    (DE3)
          DESC: PUT UP ≠LOAD STEP≠ TYPE-IN FOR DEFORMED PLOTS
          LENGTH:      52    LANGUAGE: FTN
          SECONDARY ENTRY POINTS:
             DYMODE    DYTIMS
          CAN BE CALLED BY:
             DETABLE
          CAN CALL THE FOLLOWING:
             PUTEDT    IBEAUT

DYMODE    ENTRY CLASS: SECONDARY     SEGMENT:    (DE3)
          DESC: PUT UP ≠MODE SHAPE≠ TYPE-IN FOR DEFORMED PLOTS
          SECONDARY ENTRY POINT FOR : DYLOAD
          CAN BE CALLED BY:
             DETABLE

DYSFPR    ENTRY CLASS: SECONDARY     SEGMENT:    (DE3)
          DESC: CRACK SCALE, FACTOR, OR TIME-SLICE TYPE-IN
          SECONDARY ENTRY POINT FOR : DYSFPU
          CAN BE CALLED BY:
             DETABLE

DYSFPU    ENTRY CLASS: MAIN          SEGMENT:    (DE3)
          DESC: PUT UP SCALE FACTOR TYPE-IN
          LENGTH:      71    LANGUAGE: FTN
          SECONDARY ENTRY POINTS:
             DYSFPR
          CAN BE CALLED BY:
             DETABLE
          CAN CALL THE FOLLOWING:
             PUTEDT    IDISER    IBEAUT    ICHKED    COMPAC

DYSSTP    ENTRY CLASS: MAIN          SEGMENT:    (DE3)
          DESC: PROCESS STEP FOR DEFORMED MODE
          LENGTH:      53    LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
             DETABLE
          CAN CALL THE FOLLOWING:
             ICKSL     PUTEDT    IDISER    IBEAUT    ICHKED
             COMPAC
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DYTIMS      ENTRY CLASS: SECONDARY    SEGMENT:    (DE3)
            DESC: PUT UP *TIME STEP* TYPE-IN FOR DEFORMED PLOTS
            SECONDARY ENTRY POINT FOR : DYLOAD
            CAN BE CALLED BY:
               DETABLE

DYUNDE      ENTRY CLASS: MAIN         SEGMENT:    (DE3)
            DESC: SET UNDEFORMED PLOT MODE
            LENGTH:     25    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               DYDEF
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               ICKSL

DZRST       ENTRY CLASS: MAIN         SEGMENT:    (DE1)
            DESC: RESTORE CHANGED BEADS TO ORIGINAL STATE
            LENGTH:     145    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               CLRPIC    DMSET     DMGET     DBDAD     DBDRT
               IDBGET    DBLKUP

DZSAVE      ENTRY CLASS: MAIN         SEGMENT:    (DB1)
            DESC: SAVE THE CHANGED DATA BASE
            LENGTH:     22    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE  CLROUT
            CAN CALL THE FOLLOWING:
               DMSET     DBLKUP

EACTPN      ENTRY CLASS: MAIN         SEGMENT:    (DE7)
            DESC: ACTIVATE A BEAD FROM A PICK ON A DISPLAYED ITEM
            LENGTH:     26    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               EACTP
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               PUTNM     ESLOT     MBEAD

EACTP       ENTRY CLASS: SECONDARY    SEGMENT:    (DE7)
            DESC: CHECK IF THERE ARE MORE NAMES FOR ACTIVATION
            SECONDARY ENTRY POINT FOR : EACTPN
            CAN BE CALLED BY:
               DETABLE

EADDEL      ENTRY CLASS: MAIN         SEGMENT:    (DB2)
            DESC: ADD ALL ACTIVE ELEMENTS TO SUBSTRUCTURE
            LENGTH:     25    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
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            DETABLE
        CAN CALL THE FOLLOWING:
            IDBDRT    DRONT

EADOWN  ENTRY CLASS: MAIN          SEGMENT:    (DE7)
        DESC: ADD DOWN-POINTERS FROM A CROSSHAIR PICK OF A DISPLAYED ITEM
        LENGTH:     100     LANGUAGE: FTN
        SECONDARY ENTRY POINTS:
            EAUP
        CAN BE CALLED BY:
            DETABLE   ENDOWN
        CAN CALL THE FOLLOWING:
            DRWONE    IDBDAD    MBEAD    ICKACT    DBUPT
            DBDNT

EALLD   ENTRY CLASS: SECONDARY     SEGMENT:    (DE7)
        DESC: ACTIVATE ALL BEADS FOR THIS DATA BASE LEVEL
        SECONDARY ENTRY POINT FOR : EALLS
        CAN BE CALLED BY:
            DETABLE

EALLSS  ENTRY CLASS: SECONDARY     SEGMENT:    (DE7)
        DESC: ACTIVATE ALL BEADS IN THE ACTIVE SUBSTRUCTURE
        SECONDARY ENTRY POINT FOR : EALLS
        CAN BE CALLED BY:
            DETABLE

EALLS   ENTRY CLASS: MAIN          SEGMENT:    (DE7)
        DESC: ACTIVATE ALL BEADS ON SCREEN
        LENGTH:      41     LANGUAGE: FTN
        SECONDARY ENTRY POINTS:
            EALLD     EALLSS
        CAN BE CALLED BY:
            DETABLE
        CAN CALL THE FOLLOWING:
            ESLOT     IDBLFT    IDBDLF

EATCH   ENTRY CLASS: SECONDARY     SEGMENT:    (DE7)
        DESC: DO ACTUAL CHANGING OF ATTRIBUTES
        SECONDARY ENTRY POINT FOR : EATS
        CAN BE CALLED BY:
            DETABLE

EATF    ENTRY CLASS: MAIN          SEGMENT:    (DE7)
        DESC: START ATTRIBUTE CHANGES BY TYPE-IN
        LENGTH:     117     LANGUAGE: FTN
        HAS NO SECONDARY ENTRY POINTS
        CAN BE CALLED BY:
            EATS
        CAN CALL THE FOLLOWING:
            PUTEDT    PUTATT    PUTAT     IBEAUT    IDBNAM

EATS    ENTRY CLASS: MAIN          SEGMENT:    (DE7)
        DESC: PROCESS FIRST TABLE OF CHANGED ATTRIBUTES
        LENGTH:     304     LANGUAGE: FTN
        SECONDARY ENTRY POINTS:
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            EATCH
        CAN BE CALLED BY:
            DETABLE
        CAN CALL THE FOLLOWING:
            IECPRC    EATF      ELNCHK    ECHKL     IENEXT
            IENIT     PUTEOT    PUTAT     DRWONE    EQUEUP
            IDISER    ICHKED    COMPAC    IDBDAC    DBCHNM
            ICKAGT    DBCHA

EAUP        ENTRY CLASS: SECONDARY   SEGMENT:   (DE7)
        DESC: ADD UP-POINTERS FROM A CROSSHAIR PICK OF A DISPLAYED ITEM
        SECONDARY ENTRY POINT FOR : EADOWN
        CAN BE CALLED BY:
            DETABLE  ENDOWN

ECHKL       ENTRY CLASS: MAIN        SEGMENT:   (M1)
        DESC: CHECK IF LIMITS OF DISPLAY ARE MODIFIED
        LENGTH:     56    LANGUAGE: FTN
        HAS NO SECONDARY ENTRY POINTS
        CAN BE CALLED BY:
            FIXDWT   EUPPNT   EATS
        CAN CALL THE FOLLOWING:
            IDBRIT   IDBARR   DBARR

ECHNIT      ENTRY CLASS: SECONDARY   SEGMENT:   (DE2)
        DESC: ELIMINATE THE ACTIVE FOR EDITING LIST
        SECONDARY ENTRY POINT FOR : EDINIT
        CAN BE CALLED BY:
            DETABLE

ECHOND      ENTRY CLASS: MAIN        SEGMENT:   (DE5)
        DESC: START CHANGE DOWN POINTERS MODE
        LENGTH:     27    LANGUAGE: FTN
        SECONDARY ENTRY POINTS:
            ECHONU
        CAN BE CALLED BY:
            DETABLE  ERDOWN
        CAN CALL THE FOLLOWING:
            IDISER

ECHONU      ENTRY CLASS: SECONDARY   SEGMENT:   (DE5)
        DESC: START CHANGE UP-POINTERS MODE
        SECONDARY ENTRY POINT FOR : ECHOND
        CAN BE CALLED BY:
            DETABLE  ERDOWN

ECPROC      ENTRY CLASS: MAIN        SEGMENT:   (DE5)
        DESC: PROCESS NAME TYPE-IN TO CREATE A NEW BEAD
        LENGTH:     64    LANGUAGE: FTN
        HAS NO SECONDARY ENTRY POINTS
        CAN BE CALLED BY:
            DETABLE
        CAN CALL THE FOLLOWING:
            IECPRC   DBLKUP   ACTIVA   IDBADB   IDBARR
            DBARR
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ECREAN      ENTRY CLASS: MAIN          SEGMENT:   (DE5)
            DESC: INITIATE NAME TYPE-IN FOR CREATION
            LENGTH:     54    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               PUTEDT    IDEAUT    IDBLFT    IDBNAM

EDINIT      ENTRY CLASS: MAIN          SEGMENT:   (DE2)
            DESC: INITIALIZE EDITING
            LENGTH:     20    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               ECHNIT
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               IDBTYP

EDITTI      ENTRY CLASS: MAIN          SEGMENT:   (S0)
            DESC: INITIALIZE *EDITT* COMMON BLOCK
            LENGTH:     27    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GLINIT    CNTERM    GRFNIT    DEINIT1
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

ELEACT      ENTRY CLASS: SECONDARY     SEGMENT:   (M0)
            DESC: SET ELEMENTS AS THE LEVEL TO WORK ON
            SECONDARY ENTRY POINT FOR : STRACT
            CAN BE CALLED BY:
               DETABLE   PRTABLE   PRINCP    EQSTR

ELNAM       ENTRY CLASS: MAIN          SEGMENT:   (PRM1)
            DESC: TYPE ELEMENT NAMES
            LENGTH:     52    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               PRTABLE
            CAN CALL THE FOLLOWING:
               TYPVAL

ELNCHK      ENTRY CLASS: MAIN          SEGMENT:   (M1)
            DESC: CHECK IF NODE IS OUTSIDE DISPLAY SPACE LIMIT
            LENGTH:    107    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               EATS      ESEARCH   ASERCH    SSAOFF
            CAN CALL THE FOLLOWING:
               CNELM     COMPACS

ELREPC      ENTRY CLASS: SECONDARY     SEGMENT:   (DE2)
            DESC: PROCESS NEXT NODAL REPLACEMENT
            SECONDARY ENTRY POINT FOR : ELREPL
            CAN BE CALLED BY:
               ELREPP
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ELREPL      ENTRY CLASS: MAIN          SEGMENT:    (DE2)
            DESC: PROCESS TYPE-IN FOR NODAL REPLACEMENT
            LENGTH:     117    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               ELREPC
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               PUTEDT    IBEAUT    IDBDNN    IDBDNP    IDBNAM

ELREPP      ENTRY CLASS: MAIN          SEGMENT:    (DE2)
            DESC: REPLACE NODES BY TYPED-IN VALUES
            LENGTH:     137    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               ICKRNG    ELREPC    PUTEDT    DRWONE    IDISER
               IBEAUT    ICHKED    COMPAC    DBDNP     IDBDNP
               DBUPT

EMERGE      ENTRY CLASS: MAIN          SEGMENT:    (DE1)
            DESC: PROCESS DOWN-POINTERS IN A MERGE
            LENGTH:      43    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE  EMERG
            CAN CALL THE FOLLOWING:
               IDBDNN    IDBDNP    MBEAD     DBUPT     DBDNT

EMERG       ENTRY CLASS: MAIN          SEGMENT:    (DE1)
            DESC: CHECK FOR MORE NAMES IN A MERGE BY A NAME MODE
            LENGTH:      16    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               EMERGE    PUTNM

EMOVEP      ENTRY CLASS: SECONDARY     SEGMENT:    (DE2)
            DESC: ENTRY TO PROCESS THE MOVE TYPE-IN
            SECONDARY ENTRY POINT FOR : EMOVE
            CAN BE CALLED BY:
               DETABLE

EMOVE       ENTRY CLASS: MAIN          SEGMENT:    (DE2)
            DESC: PUT UP CENTROID FOR NODE, ELEMENT, OR SUBSTRUCTURE
            LENGTH:     106    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               EMOVEP
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               MXYTP     PUTEDT    GETCEN    IDISER    IBEAUT
               ICHKED    COMPAC
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ENDOWN      ENTRY CLASS: MAIN          SEGMENT:    (DE7)
            DESC: ADD DOWN-POINTERS BY NAME
            LENGTH:      30     LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               ENUP
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               EADOWN    EADUP     EPUTD

ENUP        ENTRY CLASS: SECONDARY     SEGMENT:    (DE7)
            DESC: ADD UP-POINTERS BY NAME
            SECONDARY ENTRY POINT FOR : ENDOWN
            CAN BE CALLED BY:
               DETABLE

EONPD       ENTRY CLASS: MAIN          SEGMENT:    (DE1)
            DESC: ACTIVATE CROSSHAIRS FOR NEXT LEVEL DOWN IN DATA BASE
            LENGTH:      10     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               ONPEN

EONPEN      ENTRY CLASS: MAIN          SEGMENT:    (DE1)
            DESC: TURN ON CROSSHAIRS IN EDITING
            LENGTH:      11     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               ONPEN

EPUTDN      ENTRY CLASS: MAIN          SEGMENT:    (DE7)
            DESC: DISPLAY NAMES OF 1ST SET OF DOWN-POINTERS
            LENGTH:     156     LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               EPUTD     EPUTUP
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               TYPNAM    IDISER    IDGRIT    IDBUPN    IDBDNN
               IDBUPP    IDBDNP

EPUTD       ENTRY CLASS: SECONDARY     SEGMENT:    (DE7)
            DESC: DISPLAY REST OF DOWN-POINTERS
            SECONDARY ENTRY POINT FOR : EPUTDN
            CAN BE CALLED BY:
               ENDOWN

EPUTUP      ENTRY CLASS: SECONDARY     SEGMENT:    (DE7)
            DESC: DISPLAY NAMES OF UP-POINTERS
            SECONDARY ENTRY POINT FOR : EPUTDN
            CAN BE CALLED BY:
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                DETABLE

EQNUM       ENTRY CLASS: MAIN          SEGMENT:    (DE1)
            DESC: DELETE BEADS BY NUMBER
            LENGTH:     127     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
                DETABLE
            CAN CALL THE FOLLOWING:
                ICKRNG    PUTEDT    PUTLS     EQUEUP    IDISER
                DELETE    ICHKED    COMPAC    IDBRIT    DBLKUP
                DBDEL

EQPENN      ENTRY CLASS: SECONDARY     SEGMENT:    (M0)
            DESC: DELETE BEADS BY NAME
            SECONDARY ENTRY POINT FOR : EQPEN
            CAN BE CALLED BY:
                DETABLE

EQPEN       ENTRY CLASS: MAIN          SEGMENT:    (M0)
            DESC: DELETE PICKED BEADS
            LENGTH:      60     LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
                EQPENN
            CAN BE CALLED BY:
                DETABLE   PRTABLE
            CAN CALL THE FOLLOWING:
                PUTNM     EQUEUP    DELETE    MBEAD     DBLKUP
                DBDEL

EQSTR       ENTRY CLASS: MAIN          SEGMENT:    (PP)
            DESC: CALCULATE EFFECTIVE STRESSES
            LENGTH:     151     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
                PPTABLE
            CAN CALL THE FOLLOWING:
                ELEACT    SQRT.     ISACT     DBATT     NEXTIN
                NEXTB     DBCHA

EQUEUP      ENTRY CLASS: MAIN          SEGMENT:    (M820)
            DESC: SAVES THE UP-POINTERS FOR A BEAD
            LENGTH:     122     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
                EQNUM     MXYP      EUPPNT    EATS      EQPEN
            CAN CALL THE FOLLOWING:
                DRWARR    IDBUPN    IDBDAD    IDBUPP    ICKACT

ERASEM      ENTRY CLASS: MAIN          SEGMENT:    (G13)
            DESC: ERASE AND REDRAW
            LENGTH:      17     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
                MORCNT    MOZCRS    MOZPLS    MOSPLT    MOSOS
                MOBOTH
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            CAN CALL THE FOLLOWING:
               GCDRAW    GIDFON

ERASEN      ENTRY CLASS: SECONDARY    SEGMENT:    (M30)
            DESC: ERASE SCREEN AND NO REDRAW
            SECONDARY ENTRY POINT FOR : ERASER
            CAN BE CALLED BY:
               DRIVER    GLTABLE   MORDRW    PAGER     IPICK
               GLTOP

ERASER      ENTRY CLASS: MAIN         SEGMENT:    (M30)
            DESC: ERASE SCREEN AND REDRAW ONLY MINIMAL DAE S
            LENGTH:     122     LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               ERASEN
            CAN BE CALLED BY:
               STARTM    GLTABLE   PAGER     IPICK
            CAN CALL THE FOLLOWING:
               TYPNAM    TYPVAL    PUTEDT    SELATT    SELATC1
               SELAT1    GERASE    GCDRAW    GIDELT

ERDD        ENTRY CLASS: SECONDARY    SEGMENT:    (DE5)
            DESC: SAME AS #ERDOWN# EXCEPT REMOVE IS FOR DISPLAYED ITEM
            SECONDARY ENTRY POINT FOR : ERDOWD
            CAN BE CALLED BY:
               DETABLE

ERDOWD      ENTRY CLASS: MAIN         SEGMENT:    (DE5)
            DESC: SET PARAMETERS FOR REMOVAL OF DOWN-POINTERS
            LENGTH:      32     LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               ERDOWU    ERDD      ERDU
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               ERD       ERDOWN

ERDOWN      ENTRY CLASS: MAIN         SEGMENT:    (DE5)
            DESC: PUT UP FIRST GROUP OF DOWN-POINTERS NAMES
            LENGTH:     124     LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               ERDOW
            CAN BE CALLED BY:
               ERDOWD
            CAN CALL THE FOLLOWING:
               ECHOND    ECHONU    TYPNAM    IDBUPN    IDBDNN
               IDBUPP    IDBDNP

ERDOWU      ENTRY CLASS: SECONDARY    SEGMENT:    (DE5)
            DESC: SAME AS #ERDOWN# EXCEPT REMOVE IS FOR UP-POINTERS
            SECONDARY ENTRY POINT FOR : ERDOWD
            CAN BE CALLED BY:
               DETABLE

ERDOW       ENTRY CLASS: SECONDARY    SEGMENT:    (DE5)
            DESC: PUT UP REST OF DOWN-POINTERS NAMES
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            SECONDARY ENTRY POINT FOR : ERDOWN
            CAN BE CALLED BY:
               ERD

 ERDU       ENTRY CLASS: SECONDARY   SEGMENT:   (DE5)
            DESC: SAME AS #ERDOWN# EXCEPT REMOVE IS FOR DISPLAYED ITEMS UP-POINTERS
            SECONDARY ENTRY POINT FOR : ERDOWD
            CAN BE CALLED BY:
               DETABLE

 ERD        ENTRY CLASS: MAIN        SEGMENT:   (DE5)
            DESC: ACTUALLY REMOVE UP- AND DOWN-POINTER
            LENGTH:    113    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               ERDOWD
            CAN CALL THE FOLLOWING:
               ERDOW    DRWONE   IDBDAD   MBEAD    ICKACT
               DBUPT    DBONT

 ERNADD     ENTRY CLASS: SECONDARY   SEGMENT:   (DE5)
            DESC: ADD DOWN POINTERS BY NUMBER
            SECONDARY ENTRY POINT FOR : ERNDLD
            CAN BE CALLED BY:
               DETABLE

 ERNADU     ENTRY CLASS: SECONDARY   SEGMENT:   (DE5)
            DESC: ADD UP-POINTERS BY NUMBER
            SECONDARY ENTRY POINT FOR : ERNDLD
            CAN BE CALLED BY:
               DETABLE

 ERNDLD     ENTRY CLASS: MAIN        SEGMENT:   (DE5)
            DESC: DELETE DOWN-POINTERS BY NUMBER
            LENGTH:    207    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               ERNADD   ERNADU
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               ICKRNG   PUTEOT   PUTLS    DRWONE   IDISER
               ICHKED   COMPAC   IDBRIT   IDBDAD   ICKACT
               DBUPT    DBONT

 ERR.RM     ENTRY CLASS: MAIN        SEGMENT:   (SQ)
            DESC: (NOT AVAILABLE)
            LENGTH:    404    LANGUAGE: COMPASS
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               CLSF.FO  CLSV.FO  GET.FO   JMPS.RM  PUT.FO
               REW.FO   SKFL.FO  MEMC.RM  OPEN.FO  OPES.FO
               CLSF.RM  OPEN.SQ  OPEN.RM  OSUB.RM  OPEX.SQ
               GET.SQ   PUT.SQ   REW.SQ   WEOX.SQ  CLSF.SQ
               CLSF.RM  SKFL.SQ  RLEQ.RM
            CAN CALL THE FOLLOWING:
               RM.CIO   RM.RCLA  SYS=     MSG=
```

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ESERCH      ENTRY CLASS: MAIN          SEGMENT:   (DE7)
            DESC: SEARCH ALL ELEMENTS BY ATTRIBUTE RANGE
            LENGTH:     131     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               ELSCHK    PUTEOT    PUTAT     IDISER    ICHKED
               COMPAC    ICKATT    DBUPT     DBDNT     ICKATT

ESLOT       ENTRY CLASS: MAIN          SEGMENT:   (G12)
            DESC: ACTIVATE PART OF LEVEL FOR EDITING
            LENGTH:      74     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               ETYPSV    FACTPN    EALLS
            CAN CALL THE FOLLOWING:
               IDISER

ETYPSV      ENTRY CLASS: MAIN          SEGMENT:   (DE1)
            DESC: ACTIVATE ALL NODE OR ELEMENT NUMBERS TYPED-IN
            LENGTH:      66     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               ICKRNG    PUTEOT    PUTLS     IDISER    ESLOT
               ICHKED    COMPAC

EUPPNT      ENTRY CLASS: MAIN          SEGMENT:   (DE2)
            DESC: DO DATA BASE UPDATE FOR MOVED POINT
            LENGTH:     100     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               MXYS
            CAN CALL THE FOLLOWING:
               ECHKL     DBWONE    EQUEUP    DBATT     DBCHA

EXECC       ENTRY CLASS: MAIN          SEGMENT:   (EX)
            DESC: CALL A PROCEDURE IN FILE PROAIDS
            LENGTH:     225     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               EXEC
            CAN CALL THE FOLLOWING:
               EXSTAR    EXSTOP    UNPACK    IYIELD1   IYIELDE
               IYIELDS

EXEC        ENTRY CLASS: MAIN          SEGMENT:   (EX)
            DESC: CONSTRUCT A CALL TO A PROCEDURE
            LENGTH:      25     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               EXTABLE
            CAN CALL THE FOLLOWING:
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            EXECC    IGDFV

EXINIT      ENTRY CLASS: MAIN          SEGMENT:    (M32)
            DESC: START EXECUTIVE MENUS ONLY
            LENGTH:      17    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE  PRTABLE  PPTABLE
            CAN CALL THE FOLLOWING:
               STARTM   GIDELT

EXITT       ENTRY CLASS: SECONDARY    SEGMENT:    (DRIVE)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : RCOVER
            CAN BE CALLED BY:
               DRIVER

EXIT        ENTRY CLASS: SECONDARY    SEGMENT:    (S0)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : FORSYS=
            CAN BE CALLED BY:
               RCOVER

EXP         ENTRY CLASS: MAIN          SEGMENT:    (S1)
            DESC: EXPONENTIAL FUNCTION. E TO POWER X. OPT=ALL.
            LENGTH:      75    LANGUAGE: COMPASS
            SECONDARY ENTRY POINTS:
               EXP.
            THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
            CAN CALL THE FOLLOWING:
               SYS1ST.

EXP.        ENTRY CLASS: SECONDARY    SEGMENT:    (S1)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : EXP
            CAN BE CALLED BY:
               XTOY=

EXSTAR      ENTRY CLASS: MAIN          SEGMENT:    (MEN1)
            DESC: SAVE AND RESTORE APPROPRIATE STAGING FILES
            LENGTH:     234    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               EXSTOP
            CAN BE CALLED BY:
               EXECC    GLCLOK
            CAN CALL THE FOLLOWING:
               STARTA   REACT    RESTART  GITEM    GIDELT
               GUTEXT   GUSETP   STOP.    IPFUT    PERMFIL
               TIME     RETURN

EXSTOP      ENTRY CLASS: SECONDARY    SEGMENT:    (MEN1)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : EXSTAR
            CAN BE CALLED BY:
               EXECC    GLCLOK
```

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EXTABLE   ENTRY CLASS: MAIN          SEGMENT:   (DRIVE)
          DESC: (NOT AVAILABLE)
          LENGTH:      27    LANGUAGE: COMPASS
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
             START    DEINIT
          CAN CALL THE FOLLOWING:
             SWITCH   IEXEC    EXEC     FILATT   DEINIT
             PRINIT   PPINIT

FCHPRAM   ENTRY CLASS: MAIN          SEGMENT:   (DB0)
          DESC: (NOT AVAILABLE)
          LENGTH:       6    LANGUAGE: COMPASS
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
             DMSTOP   DMRLSD   DMFLSH   DMINIT
          THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

FECMSK=   ENTRY CLASS: MAIN          SEGMENT:   (S0)
          DESC: INITIALIZE CONSTANTS.
          LENGTH:      41    LANGUAGE: COMPASS
          HAS NO SECONDARY ENTRY POINTS
          THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
          THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

FETSTAT   ENTRY CLASS: MAIN          SEGMENT:   (DB0)
          DESC: (NOT AVAILABLE)
          LENGTH:      13    LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
             DMREAD   DMWRITE  DMFLSH   DMINIT
          THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

FILATT    ENTRY CLASS: MAIN          SEGMENT:   (EX)
          DESC: ATTACH THE DATA BASE FILE AND INITIALIZE IT FOR D-AND-E
          LENGTH:     160    LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
             EXTABLE
          CAN CALL THE FOLLOWING:
             FILNAM   GNINIT   PAGER    IDISER   ICCHR
             COPYFL   IFFUT    REQUEST  DBINIT   RETURN

FILNAM    ENTRY CLASS: MAIN          SEGMENT:   (MEN1)
          DESC: SET UP FILE NAE FOR DATA BASE FILE
          LENGTH:      43    LANGUAGE: FTN
          SECONDARY ENTRY POINTS:
             GLFILN
          CAN BE CALLED BY:
             FILATT
          CAN CALL THE FOLLOWING:
             PUTEDT

FIXDAT    ENTRY CLASS: MAIN          SEGMENT:   (PR2)
          DESC: FIX DRAFTING ENDPOINT
          LENGTH:     206    LANGUAGE: FTN
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            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               PRTABLE
            CAN CALL THE FOLLOWING:
               SETLN     SFTND     IDRNXT    CORSHF    RASTOU
               GIFETS    CNELM     ECHKL     IDRWAT    IDRW
               GITRAK    ACTIVA    DBCHA     DBUPT     DBONT

FORSYS=     ENTRY CLASS: MAIN          SEGMENT:    (S0)
            DESC: FORTRAN OBJECT LIBRARY UTILITIES.
            LENGTH:     602    LANGUAGE: COMPASS
            SECONDARY ENTRY POINTS:
               EXIT      STOP.     ABNORM.   AB1.      SYSEND.
               SYSE3.    SYSERR.
            THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
            CAN CALL THE FOLLOWING:
               CLSF.RM   OPEN.SQ   OPEN.RM   CBD.      BFN.
               GET.Z     PUT.SQ    SKFL.SQ   SYS=      MSG=

FORUTL=     ENTRY CLASS: MAIN          SEGMENT:    (S0)
            DESC: FCL MISC. UTILITIES.
            LENGTH:      16    LANGUAGE: COMPASS
            SECONDARY ENTRY POINTS:
               CBD.      BFN.
            THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

FRONTVU     ENTRY CLASS: MAIN          SEGMENT:    (GL3)
            DESC: MOD PICTURE - SET X-Y PLANE
            LENGTH:      13    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GLTABLE
            CAN CALL THE FOLLOWING:
               MORDRW    SETVU

FSU.SQ      ENTRY CLASS: MAIN          SEGMENT:    (S0)
            DESC: (NOT AVAILABLE)
            LENGTH:     106    LANGUAGE: COMPASS
            SECONDARY ENTRY POINTS:
               RMU0.SQ   RMU2.SQ
            THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
            CAN CALL THE FOLLOWING:
               GXIT.SQ   GRTJ.SQ   AMAC.SQ   MOVE.RM

GCCHMM      ENTRY CLASS: MAIN          SEGMENT:    (G0)
            DESC: INTERTEK - CHECK PICKED POINT WITHIN AREA
            LENGTH:      71    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GCORIT
            CAN CALL THE FOLLOWING:
               GCGMM     GCGONE    GCGLID

GCC         ENTRY CLASS: MAIN          SEGMENT:    (G0)
            DESC: INTERTEK - DETERMINE LINE VISIBILITY
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            LENGTH:      30     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GCDRAW
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

GCDLIM      ENTRY CLASS: MAIN          SEGMENT:    (G0)
            DESC: INTERTEK - RETRIEVE SCALE, WINDOW, AND CLIP LIMITS
            LENGTH:     102     LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               GCSTOR
            CAN BE CALLED BY:
               GIPETS    GCDRAW    GITRAK
            CAN CALL THE FOLLOWING:
               COMPIO    GCGTM     GCGTUB    GCGET

GCDRAW      ENTRY CLASS: MAIN          SEGMENT:    (G0)
            DESC: INTERTEK - CONTROL DISPLAY FILE OR ITEM INTERPRETATION
            LENGTH:     255     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DRIVER    MOZCRS    LIBINS    MXYI      PAGER
               ERASER    GITEM     IDISER    GIBUTN    GISHOW
               GIDUP     GIDFON    ERASEM    GIXTND
            CAN CALL THE FOLLOWING:
               COMPIO    GCGTYP    GCGSF     GCDSF     GCUNPK
               GCDRIT    GCWORK    GCCLIM    GCSTUB

GCDRIT      ENTRY CLASS: MAIN          SEGMENT:    (G0)
            DESC: INTERTEK - INTERPRET ITEM
            LENGTH:      64     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GCDRAW    GCDSF
            CAN CALL THE FOLLOWING:
               GCRCAT    GCUCAT    GCCHMM    GCFILL    GCWORK

GCDSF       ENTRY CLASS: MAIN          SEGMENT:    (G0)
            DESC: INTERTEK - INTERPRET SUBFILE
            LENGTH:      57     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GCDRAW
            CAN CALL THE FOLLOWING:
               GCGRIT    GCRCAT    GCUNPC    GCDRIT

GCFILL      ENTRY CLASS: MAIN          SEGMENT:    (G0)
            DESC: INTERTEK - RETRIEVE DISPLAY INSTRUCTIONS FROM ITEM
            LENGTH:     106     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GCDRIT    GIDUP
            CAN CALL THE FOLLOWING:
               GCGARR    GCGLEN    GCGONE    GCGLID

GCGARR      ENTRY CLASS: MAIN          SEGMENT:    (G0)
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            DESC: INTERTEK - RETRIEVE AN ARRAY FROM A BEAD
            LENGTH:     46    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               GCSARR
            CAN BE CALLED BY:
               GCGMM    GCFILL   GIBUTN   GISNGL   GIDUP
            CAN CALL THE FOLLOWING:
               OMSET    OMGET

GCGETW      ENTRY CLASS: SECONDARY   SEGMENT:   (S0)
            DESC: INTERTEK - RETRIEVE A BIT STRING FROM A WORD IN *IBUF*
            SECONDARY ENTRY POINT FOR : GCGET
            CAN BE CALLED BY:
               GCUPXY   GULIN    GUTEXT

GCGET       ENTRY CLASS: MAIN        SEGMENT:   (S0)
            DESC: INTERTEK - RETRIEVE A BIT STRING FROM A WORD
            LENGTH:     16    LANGUAGE: COMPASS
            SECONDARY ENTRY POINTS:
               GCGETW
            CAN BE CALLED BY:
               GCGMM    GCSSF    GCUCAT   GCUNPK   GCWORK
               GCDLIM   GCUNPK   GIBUTN
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

GCGLEN      ENTRY CLASS: SECONDARY   SEGMENT:   (G0)
            DESC: INTERTEK - GET BEAD LENGTH
            SECONDARY ENTRY POINT FOR : GCSSF
            CAN BE CALLED BY:
               GCFILL   GISNGL   GIDUP

GCGLFT      ENTRY CLASS: SECONDARY   SEGMENT:   (G0)
            DESC: INTERTEK - GET A LEFT POINTER
            SECONDARY ENTRY POINT FOR : GCSSF
            CAN BE CALLED BY:
               GITEM    GIDELT   GIDUP

GCGLID      ENTRY CLASS: SECONDARY   SEGMENT:   (G0)
            DESC: INTERTEK - GET LENGTH OF ID FROM ITEM
            SECONDARY ENTRY POINT FOR : GCSSF
            CAN BE CALLED BY:
               GCCHMM   GCFILL   GIDUP

GCGMM       ENTRY CLASS: MAIN        SEGMENT:   (G0)
            DESC: INTERTEK - RETRIEVE ITEM AREA
            LENGTH:    121    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GIZOOM   GCCHMM   GCDLIM
            CAN CALL THE FOLLOWING:
               GCGARR   GCGTYP   GCGET

GCGONE      ENTRY CLASS: SECONDARY   SEGMENT:   (G0)
            DESC: INTERTEK - GET A FULL WORD FROM ITEM
            SECONDARY ENTRY POINT FOR : GCSSF
            CAN BE CALLED BY:
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            GCUCAT    GCCHMM    GCFILL    GIBUTN    GISNGL
            GICLRQ    GIDUP     GIXTND

GCGRIT      ENTRY CLASS: SECONDARY    SEGMENT:    (G0)
            DESC: INTERTEK - GET A RIGHT POINTER
            SECONDARY ENTRY POINT FOR : GCSSF
            CAN BE CALLED BY:
            GCCSF     GITEM     GIDELT    GIDUP

GCGSF       ENTRY CLASS: SECONDARY    SEGMENT:    (G0)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : GCSSF
            CAN BE CALLED BY:
            GCDRAW    GITEM     GIDUP     GIXTND

GCGTUB      ENTRY CLASS: SECONDARY    SEGMENT:    (G0)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : GCGTYP
            CAN BE CALLED BY:
            GCDLIM

GCGTYP      ENTRY CLASS: MAIN         SEGMENT:    (G0)
            DESC: INTERTEK - RETURN ENTITY TYPE
            LENGTH:     33    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
            GCGTUB
            CAN BE CALLED BY:
            GIZOOM    GCGMM     GCSSF     GCDRAW    GITEM
            GIDELT    GITRAK    GIDAE     GISHOW    GIDUP
            GIXTND
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

GCHIGH      ENTRY CLASS: MAIN         SEGMENT:    (G0)
            DESC: INTERTEK - RETURN CHARACTER HEIGHT
            LENGTH:     112   LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
            GCWIDE    GCXMIN    GCYMIN    GCYMAX
            CAN BE CALLED BY:
            DRIVER    PUTEDT    GLTOP     MENNIT
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

GCINPC      ENTRY CLASS: MAIN         SEGMENT:    (G11)
            DESC: (NOT AVAILABLE)
            LENGTH:     36    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
            GIBUTN    GITRAK
            CAN CALL THE FOLLOWING:
            COMPIO

GCMAT       ENTRY CLASS: MAIN         SEGMENT:    (G13)
            DESC: (NOT AVAILABLE)
            LENGTH:     67    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
            SROTET    ARROW
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            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

GCPKDS      ENTRY CLASS: MAIN          SEGMENT:    (G0)
            DESC: INTERTEK - PUT A NEW SUBFILE OR DAE INTO ENTITY
            LENGTH:      30    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GIDELT    GISHOW
            CAN CALL THE FOLLOWING:
               GCSETI

GCRCAT      ENTRY CLASS: MAIN          SEGMENT:    (G0)
            DESC: INTERTEK - RETRIEVE CATEGORY INTERPRETATION
            LENGTH:      22    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GCOSF     GCDRIT    GIBUTN
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

GCRESI      ENTRY CLASS: MAIN          SEGMENT:    (G0)
            DESC: INTERTEK - RESERVE SPACE FOR AN ENTITY
            LENGTH:      65    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GISUBF    GITEM     GIBUTN    GIDAE     GIDUP
               GIXTND
            CAN CALL THE FOLLOWING:
               GIERR     DMGTBD

GCSARR      ENTRY CLASS: SECONDARY     SEGMENT:    (G0)
            DESC: INTERTEK - SET AN ARRAY INTO A BEAD
            SECONDARY ENTRY POINT FOR : GCGARR
            CAN BE CALLED BY:
               GITEM     GIBUTN    GIDUP     GIXTND

GCSETI      ENTRY CLASS: SECONDARY     SEGMENT:    (S0)
            DESC: INTERTEK - SET A BIT STRING INTO A WORD
            SECONDARY ENTRY POINT FOR : GCSET
            CAN BE CALLED BY:
               GIASID    GCSSF     GITEM     GCUPSF    GCPKDS
               GICAT

GCSETW      ENTRY CLASS: SECONDARY     SEGMENT:    (S0)
            DESC: INTERTEK - SET AN ENTIRE WORD INTO ≠IBUF≠
            SECONDARY ENTRY POINT FOR : GCSET
            CAN BE CALLED BY:
               GCUPXY    GUSETP

GCSET       ENTRY CLASS: MAIN          SEGMENT:    (S0)
            DESC: INTERTEK - SET A BIT STRING INTO A WORD IN ≠IBUF≠
            LENGTH:      37    LANGUAGE: COMPASS
            SECONDARY ENTRY POINTS:
               GCSETW    GCSETI
            CAN BE CALLED BY:
               GULIN     GUTEXT    GUSETP
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS
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GCSLFT      ENTRY CLASS: SECONDARY   SEGMENT:   (G0)
            DESC: INTERTEK - SET LEFT POINTER
            SECONDARY ENTRY POINT FOR : GCSSF
            CAN BE CALLED BY:
               GITEM    GIDELT   GIDUP

GCSONE      ENTRY CLASS: SECONDARY   SEGMENT:   (G0)
            DESC: INTERTEK - SET A FULL WORD FROM ITEM
            SECONDARY ENTRY POINT FOR : GCSSF
            CAN BE CALLED BY:
               GIBUTN   GIXIND

GCSRIT      ENTRY CLASS: SECONDARY   SEGMENT:   (G0)
            DESC: INTERTEK - SET A RIGHT POINTER
            SECONDARY ENTRY POINT FOR : GCSSF
            CAN BE CALLED BY:
               GITEM    GIDELT   GIDUP

GCSSF       ENTRY CLASS: MAIN        SEGMENT:   (G0)
            DESC: INTERTEK - SET SUBFILE TO WHICH ITEM BELONGS
            LENGTH:    236    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               GCGSF    GCGLEN   GCSLFT   GCGLFT   GCSRIT
               GCGRIT   GCSONE   GCGONE   GCGLID
            CAN BE CALLED BY:
               GITEM    GIDUP
            CAN CALL THE FOLLOWING:
               GCGTYP   GCGET    GCSETI   DMSET    DMGET

GCSTUB      ENTRY CLASS: SECONDARY   SEGMENT:   (G0)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : GCDLIM
            CAN BE CALLED BY:
               GCDRAW   GITPAK

GCUCAT      ENTRY CLASS: MAIN        SEGMENT:   (G0)
            DESC: INTERTEK - UNPACK CATEGORIES IN ITEM
            LENGTH:     56    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GCDRIT   GIBUTN   GIDUP
            CAN CALL THE FOLLOWING:
               GCGONE   GCGET

GCUNPC      ENTRY CLASS: SECONDARY   SEGMENT:   (G0)
            DESC: INTERTEK - UNPACK SUBFILE CATEGORY LIST
            SECONDARY ENTRY POINT FOR : GCUNPK
            CAN BE CALLED BY:
               GCOSF    GCUPSF

GCUNPK      ENTRY CLASS: MAIN        SEGMENT:   (G0)
            DESC: INTERTEK - UNPACK SUBFILE OR DAE LIST
            LENGTH:     75    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               GCUNPC
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            CAN BE CALLED BY:
               GCDRAW   GIDELT   GISHOW
            CAN CALL THE FOLLOWING:
               GCGET

GCUNPK      ENTRY CLASS: MAIN          SEGMENT:   (G0)
            DESC: INTERTEK - UNPACK SUBFILE OR DAE LIST
            LENGTH:     75    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

GCUPSF      ENTRY CLASS: MAIN          SEGMENT:   (G0)
            DESC: INTERTEK - UPDATE SUBFILE CATEGORY LIST
            LENGTH:    117    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GITEM    GIDUP
            CAN CALL THE FOLLOWING:
               GCUNPC   GCSETI

GCUPXY      ENTRY CLASS: MAIN          SEGMENT:   (G0)
            DESC: INTERTEK - UPDATE X,Y AND AREA FOR ITEM IN ≠IBUF≠
            LENGTH:    102    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GULIN    GUTEXT   GUSETP
            CAN CALL THE FOLLOWING:
               GCGETW   GCSFTW

GCWIDE      ENTRY CLASS: SECONDARY     SEGMENT:   (G0)
            DESC: INTERTEK - RETURN CHARACTER WIDTH
            SECONDARY ENTRY POINT FOR : GCHIGH
            CAN BE CALLED BY:
               DRIVER   LIBINS   PUTEDT   MENNIT   IDISER

GCWORK      ENTRY CLASS: MAIN          SEGMENT:   (G0)
            DESC: INTERTEK - INTERPRET DISPLAY INSTRUCTIONS
            LENGTH:    752    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GCDRAW   GCDRIT
            CAN CALL THE FOLLOWING:
               COMPIO   GCC      SQRT.    GCGET    GOTOER.

GCXMIN      ENTRY CLASS: SECONDARY     SEGMENT:   (G0)
            DESC: INTERTEK - RETURN SCREEN X MIN
            SECONDARY ENTRY POINT FOR : GCHIGH
            CAN BE CALLED BY:
               CNTINT   INITXY   INIT2D   GLTOP

GCYMAX      ENTRY CLASS: SECONDARY     SEGMENT:   (G0)
            DESC: INTERTEK - RETURN SCREEN Y MAX
            SECONDARY ENTRY POINT FOR : GCHIGH
            CAN BE CALLED BY:
               CNTINT   INITXY   INIT2D   GLTOP
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GCYMIN      ENTRY CLASS: SECONDARY    SEGMENT:    (G0)
            DESC: INTERNAL - RETURN SCREEN Y MIN
            SECONDARY ENTRY POINT FOR : GCHIGH
            CAN BE CALLED BY:
               CNTINT    INITKY    INIT2D

GC3DA       ENTRY CLASS: MAIN         SEGMENT:    (G13)
            DESC: (NOT AVAILABLE)
            LENGTH:      67    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               SETVU
            CAN CALL THE FOLLOWING:
               ACOS.    ATAN2.    SQRT.    COS.    SIN.

GERASE      ENTRY CLASS: MAIN         SEGMENT:    (G0)
            DESC: ERASE SCREEN
            LENGTH:      10    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               ERASER    HOLD
            CAN CALL THE FOLLOWING:
               COMPIO

GETCEN      ENTRY CLASS: MAIN         SEGMENT:    (M820)
            DESC: DETERMINE CENTER OF AN ELEMENT
            LENGTH:     235    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DRELN    FMOVE    MXYI    GETCNT    IDRWEL
               IDRWAD
            CAN CALL THE FOLLOWING:
               CNVTOC    GOTOER.    IDBONN    IDBTYP    IDBONP
               DBATT

GETCES      ENTRY CLASS: MAIN         SEGMENT:    (DB3)
            DESC: DETERMINE CENTER OF STRUCTURE
            LENGTH:      25    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               IDRWAT
            CAN CALL THE FOLLOWING:
               GETLIM

GETCNT      ENTRY CLASS: MAIN         SEGMENT:    (DE9)
            DESC: CONTOUR - FETCH ATTRIBUTE DATA FROM ACTIVATED NODES AND ELEMENTS
            LENGTH:     130    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               GETCPN    SMELL    IDISER    IDBORT    DBATT

GETCOR      ENTRY CLASS: MAIN         SEGMENT:    (M820)
            DESC: GET THE COORDINATE OF THIS NODE
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            LENGTH:     216    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               CNNODE    PORG     IDRWEL    IDRWND    IDRWAT
            CAN CALL THE FOLLOWING:
               CNVTOC    DBATT

GETCSS      ENTRY CLASS: MAIN          SEGMENT:    (M820)
            DESC: GET CENTER OF SUBSTRUCTURE
            LENGTH:      20    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               IDRWAT
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

GETDAT      ENTRY CLASS: MAIN          SEGMENT:    (DE40)
            DESC: X-Y PLOTS - GET X-Y DATA FOR PLOT
            LENGTH:     270    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               PROCXA
            CAN CALL THE FOLLOWING:
               IDISER    IDBORT    IDBNAM    DBATT     DBTGET

GETLIM      ENTRY CLASS: MAIN          SEGMENT:    (DB3)
            DESC: GET THE LIMITS OF THE DISPLAY
            LENGTH:      33    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               SET1      GETCES
            CAN CALL THE FOLLOWING:
               IDBARR

GETLIN      ENTRY CLASS: SECONDARY     SEGMENT:    (S0)
            DESC: READ FROM TERMINAL WITHOUT RECORD MANAGER
            SECONDARY ENTRY POINT FOR : GET.PUT
            CAN BE CALLED BY:
               GLCLOK    INDATA    HOLD      DMP

GETRAG1     ENTRY CLASS: SECONDARY     SEGMENT:    (PRM1)
            DESC: GET RANGE OF ELEMENT NUMBERS
            SECONDARY ENTRY POINT FOR : GETRAG
            CAN BE CALLED BY:
               PRTABLE

GETRAG      ENTRY CLASS: MAIN          SEGMENT:    (PRM1)
            DESC: GETS A RANGE OF ELEMENT NUMBERS FOR ATTRIBUTE GENERATION
            LENGTH:     104    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               GETRAG1
            CAN BE CALLED BY:
               PRTABLE
            CAN CALL THE FOLLOWING:
               PUTEDT    PUTLS     IDISER    ICHKED    COMPAC

GETSIZ      ENTRY CLASS: MAIN          SEGMENT:    (DB0)
```

```
          DESC: BLAUTIFICATION -GET TEXT SIZE DEPENDING ON ZOOM LEVEL
          LENGTH:      21     LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
             MOLAX     METAZZ    IDRWND    IDRWAT
          THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

GET.PUT   ENTRY CLASS: MAIN          SEGMENT:    (S0)
          DESC: (NOT AVAILABLE)
          LENGTH:     142     LANGUAGE: COMPASS
          SECONDARY ENTRY POINTS:
             GETLIN    PUTLIN
          THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
          THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

GET.SQ    ENTRY CLASS: MAIN          SEGMENT:    (S0)
          DESC: (NOT AVAILABLE)
          LENGTH:    1060     LANGUAGE: COMPASS
          SECONDARY ENTRY POINTS:
             SKGT.SQ  GXIT.SQ  GRTJ.SQ  ANBL.SQ  AMAC.SQ
             DXIT.SQ
          THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
          CAN CALL THE FOLLOWING:
             ERR.RM    RSPT.SQ  RM.CIO    RM.RCLA   RM.RCLP
             CLSV.SQ   RMU0.SQ  RMU2.SQ   WNB=

GET.Z     ENTRY CLASS: SECONDARY    SEGMENT:    (S0)
          DESC: (NOT AVAILABLE)
          SECONDARY ENTRY POINT FOR : Z.SQ
          CAN BE CALLED BY:
             FORSYS=

GFLUSH    ENTRY CLASS: MAIN          SEGMENT:    (G0)
          DESC: FLUSH GRAPHICS DRIVER BUFFER
          LENGTH:      10     LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
             GIERR     PDUMP
          CAN CALL THE FOLLOWING:
             COMPIO

GIALRM    ENTRY CLASS: MAIN          SEGMENT:    (G0)
          DESC: INTERTEK - RING MY CHIMES
          LENGTH:      10     LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
             MO/CRS    PONPEN    MXYI      PAGER
          CAN CALL THE FOLLOWING:
             COMPIO

GIASID    ENTRY CLASS: MAIN          SEGMENT:    (M32)
          DESC: INTERTEK - ASSIGN CATEGORY TO KEYBOARD KEY
          LENGTH:      40     LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
             MENNIT
```

```
            CAN CALL THE FOLLOWING:
               GCSETI

GIBUTN      ENTRY CLASS: MAIN          SEGMENT:   (G11)
            DESC: INTERTEK - BUTTON PICK PROCESSOR
            LENGTH:     602    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               IPICK
            CAN CALL THE FOLLOWING:
               COMPIO    GCGARR    GCSARR    GCSONE    GCGONE
               GCRCAT    GCUCAT    GCRESI    GCDRAW    GCINPC
               GCGET     GOTOER.   DMRLBD

GICAT       ENTRY CLASS: MAIN          SEGMENT:   (G12)
            DESC: INTERTEK - SET PICK CATEGORY
            LENGTH:      75    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GLINIT    GLDEFP    GRFNIT    IPICK     DEINIT1
               MENNIT    SETCAT
            CAN CALL THE FOLLOWING:
               GCSETI    GIERR

GICLRQ      ENTRY CLASS: MAIN          SEGMENT:   (G11)
            DESC: INTERTEK - CLEAR PICK QUEUES
            LENGTH:      33    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DRIVER
            CAN CALL THE FOLLOWING:
               GCGONE    DMRLBD

GIDAE1      ENTRY CLASS: SECONDARY     SEGMENT:   (G12)
            DESC: INTERTEK - SET DAE ZOOM, WINDOW, AND CLIP LIMITS
            SECONDARY ENTRY POINT FOR : GIDAE
            CAN BE CALLED BY:
               GIZOOM

GIDAE       ENTRY CLASS: MAIN          SEGMENT:   (G12)
            DESC: INTERTEK - CREATE DAE
            LENGTH:     142    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               GIDAE1
            CAN BE CALLED BY:
               MOSPLT    CLRPIC    GINIT     MENNIT
            CAN CALL THE FOLLOWING:
               GCGTYP    GCRESI    ITOJ.

GIDELT      ENTRY CLASS: MAIN          SEGMENT:   (G0)
            DESC: INTERTEK - DELETE ENTITY
            LENGTH:     156    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DRIVER    EXSTAR    MOAXES    MOZCRS    MOSOS
               CHNGP2    CLROUT    PONPEN    MXYI      PROCXA
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AD-A089 383 BATTELLE COLUMBUS LABS OH F/G 13/13
STRUCTURAL ANALYSIS VIA GENERALIZED INTERACTIVE GRAPHICS - STAG--ETC(U)
SEP 79 L E HULBERT, C SCOFIELD F33615-76-C-3125
UNCLASSIFIED AFFDL-TR-79-3074 NL

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            TABDEL   CLRPIC   TYPNAM   ERASER   PUTEDT
            SELATT   GLTOP    EXINIT   IPPRMT   IDRWAT
            DRWACT   IDISER   DELETE   DELSF
         CAN CALL THE FOLLOWING:
            GCGTYP   GCSLFT   GCGLFT   GCSRIT   GCGRIT
            GCUNPK   GCPKDS

GIDFON   ENTRY CLASS: MAIN        SEGMENT:   (G13)
         DESC: INTERTEK - ERASE SCREEN AND REDRAW DISPLAY FILE
         LENGTH:    22    LANGUAGE: FTN
         HAS NO SECONDARY ENTRY POINTS
         CAN BE CALLED BY:
            ERASEM
         CAN CALL THE FOLLOWING:
            COMPIO   GCDRAW

GIDUP    ENTRY CLASS: MAIN        SEGMENT:   (G13)
         DESC: INTERTEK - DUPLICATE ITEM
         LENGTH:    231    LANGUAGE: FTN
         HAS NO SECONDARY ENTRY POINTS
         CAN BE CALLED BY:
            MOFR2
         CAN CALL THE FOLLOWING:
            GCGARR   GCSARR   GCGTYP   GCSSF    GCGSF
            GCGLEN   GCSLFT   GCGLFT   GCSRIT   GCGRIT
            GCGONE   GCGLID   GCUCAT   GCRESI   GCDRAW
            GCFILL   GCUPSF

GIERR    ENTRY CLASS: MAIN        SEGMENT:   (S1)
         DESC: INTERTEK - REPORT ERROR
         LENGTH:    122    LANGUAGE: FTN
         HAS NO SECONDARY ENTRY POINTS
         CAN BE CALLED BY:
            DEINIT1  GCRESI   GULIN   GITEM   GICAT
            GUTEXT   GUSETP   GISHOW   GIXTND
         CAN CALL THE FOLLOWING:
            GFLUSH   PUTLIN   GOTOER.

GIFETS   ENTRY CLASS: MAIN        SEGMENT:   (M1)
         DESC: INTERTEK - FETCH LAST CROSSHAIR LOCATION
         LENGTH:    26    LANGUAGE: FTN
         HAS NO SECONDARY ENTRY POINTS
         CAN BE CALLED BY:
            MORCNT   MOZCRS   FIXDAT   PONPEN   MXYP
         CAN CALL THE FOLLOWING:
            GCDLIM

GINIT    ENTRY CLASS: MAIN        SEGMENT:   (M5)
         DESC: INTERTEK - INITIALIZE INTERTEK
         LENGTH:    431    LANGUAGE: FTN
         HAS NO SECONDARY ENTRY POINTS
         CAN BE CALLED BY:
            GRFNIT
         CAN CALL THE FOLLOWING:
            COMPIO   GPRESET  GISUBF   GIDAE    GISHOW
            GOTOER.  REQUEST  DMINIT   RETURN
```

```
GIPARM      ENTRY CLASS: SECONDARY   SEGMENT:   (G11)
            DESC: INTERTEK - GET PARAMETER PICK INFORMATION
            SECONDARY ENTRY POINT FOR : GISNGL
            CAN BE CALLED BY:
               DRIVER

GISHOW      ENTRY CLASS: MAIN        SEGMENT:   (G12)
            DESC: INTERTEK - TURN SUBFILE ON OR OFF IN A DAE
            LENGTH:    155    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DRIVER   MOFRE    MOFRZ    GRID     CLRPIC
               GINIT    IPPRMT   DELSF
            CAN CALL THE FOLLOWING:
               GCGTYP   GCDRAW   GCUNPK   GCPKDS   GIERR

GISNGL      ENTRY CLASS: MAIN        SEGMENT:   (G11)
            DESC: INTERTEK - GET SINGLE PICK INFORMATION
            LENGTH:    151    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               GISTR    GIPARM
            CAN BE CALLED BY:
               DRIVER
            CAN CALL THE FOLLOWING:
               GCGARR   GCGLEN   GCGONE

GISTR       ENTRY CLASS: SECONDARY   SEGMENT:   (G11)
            DESC: INTERTEK - GET STRING PICK INFORMATION
            SECONDARY ENTRY POINT FOR : GISNGL
            CAN BE CALLED BY:
               DRIVER

GISUBF      ENTRY CLASS: MAIN        SEGMENT:   (G0)
            DESC: INTERTEK - SUBFILE CREATOR
            LENGTH:     20    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DRIVER   MOFRZ    GRID     CLRPIC   GINIT
               TYPNAM   PUTEDT   SELATT   MENNIT
            CAN CALL THE FOLLOWING:
               GCRESI

GITEM       ENTRY CLASS: MAIN        SEGMENT:   (G0)
            DESC: INTERTEK - ITEM CREATOR
            LENGTH:    374    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DRIVER   EXSTAR   MOAXES   MOZCRS   GRID
               DRELN    LIBINS   PONPEN   MXYI     TYPNAM
               PUTEDT   SELATT   GLTOP    IPPRMT   MENNIT
               IDISER   MITEM
            CAN CALL THE FOLLOWING:
               GCSARR   GCGTYP   GCSSF    GCGSF    GCSLFT
               GCGLFT   GCSRIT   GCGRIT   GCRESI   GCDRAW
               GCUPSF   GCSETI   GIERR
```

```
GITRAK      ENTRY CLASS: MAIN          SEGMENT:   (G11)
            DESC: INTERTEK - TURN ON CROSSHAIRS
            LENGTH:     45     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               MORCNT    MOZCRS    FIXDAT    PONPEN    MXYI
               TRKOFF
            CAN CALL THE FOLLOWING:
               GCGTYP    GCDLIM    GCSTUB    GCINPC

GIXTND      ENTRY CLASS: MAIN          SEGMENT:   (G14)
            DESC: INTERTEK - EXTEND ITEM
            LENGTH:    134     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GRID      MEXTN
            CAN CALL THE FOLLOWING:
               GCSARR    GCGTYP    GCGSF     GCSONE    GCGONE
               GCRESI    GCDRAW    GIERR

GIZOOM      ENTRY CLASS: MAIN          SEGMENT:   (M5)
            DESC: INTERTEK - CHANGE DAE CONSTANTS
            LENGTH:     56     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               SETWZ
            CAN CALL THE FOLLOWING:
               GCGMM     GCGTYP    GIDAE1

GLCHCK      ENTRY CLASS: MAIN          SEGMENT:   (GL1)
            DESC: SAVE DATA BASE ON TOP OF OLD FILE
            LENGTH:    161     LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               GLCHCT
            CAN BE CALLED BY:
               GLTABLE
            CAN CALL THE FOLLOWING:
               REACT     GLFILN    RESTART   IDISER    ICCHR
               COPYFL    IPFUT     REQUEST   RETURN

GLCHCT      ENTRY CLASS: SECONDARY     SEGMENT:   (GL1)
            DESC: SAVE DATA BASE ON NEW FILE
            SECONDARY ENTRY POINT FOR : GLCHCK
            CAN BE CALLED BY:
               GLTABLE

GLCLOK      ENTRY CLASS: MAIN          SEGMENT:   (GL1)
            DESC: LET USER ISSUE INTERCOM COMMANDS
            LENGTH:    251     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GLTABLE
            CAN CALL THE FOLLOWING:
               MARK      EXSTAR    EXSTOP    GLTOP     ICCHR
               GETLIN    PUTLIN    IYIELD1
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```
GLDEFP      ENTRY CLASS: MAIN          SEGMENT:   (GL2)
            DESC: PROCESS PICKS FOR DEFINITIONS (NOT OPERATIVE)
            LENGTH:    120    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GLTABLE
            CAN CALL THE FOLLOWING:
               IGNM     IGPCKM   GICAT    PUTLIN   IGDEF

GLDEFS      ENTRY CLASS: MAIN          SEGMENT:   (GL2)
            DESC: SET UP PICK FOR DEFINITION (NOT OPERATIVE)
            LENGTH:     22    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GLTABLE
            CAN CALL THE FOLLOWING:
               GLTOP    PUTLIN

GLFILN      ENTRY CLASS: SECONDARY     SEGMENT:   (MEN1)
            DESC: SET UP FILE FOR SAVING DATA BASE IN ≠GLOBAL≠
            SECONDARY ENTRY POINT FOR : FILNAM
            CAN BE CALLED BY:
               GLTABLE  GLCHCK

GLFIN       ENTRY CLASS: SECONDARY     SEGMENT:   (DRIVE)
            DESC: TERMINATE ≠GLOBAL≠ MODE
            SECONDARY ENTRY POINT FOR : GLINIT
            CAN BE CALLED BY:
               GLTABLE

GLHIST      ENTRY CLASS: MAIN          SEGMENT:   (GL1)
            DESC: TRACE HISTORY OF DOWN-POINTERS
            LENGTH:    107    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GLTABLE
            CAN CALL THE FOLLOWING:
               GLTOP    IGPCKM   IBEAUT   PUTLIN   IGFTR

GLINIT      ENTRY CLASS: MAIN          SEGMENT:   (DRIVE)
            DESC: INITIALIZE ≠GLOBAL≠ MENUS
            LENGTH:    141    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               GLFIN
            CAN BE CALLED BY:
               IPICK
            CAN CALL THE FOLLOWING:
               SWITCHS  EXTABLE  DETABLE  PRTABLE  PPTABLE
               GLTABLE  TRKOFF   SETCAT   GICAT    EDITTI
               IGFTR

GLLDN       ENTRY CLASS: MAIN          SEGMENT:   (GL1)
            DESC: DISPLAY NEXT LEVEL DOWN IN COMMAND TREE
            LENGTH:    123    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
```

```
            CAN BE CALLED BY:
               GLTABLE
            CAN CALL THE FOLLOWING:
               GLTOP     IGPCKM    PUTLIN    IGSON     IGLNK

GLLUP       ENTRY CLASS: MAIN          SEGMENT:   (GL1)
            DESC: DISPLAY NEXT LEVEL UP IN COMMAND TREE
            LENGTH:      76    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GLTABLE
            CAN CALL THE FOLLOWING:
               GLTOP     IGPCKM    PUTLIN    IGFTR     IGLNK

GLOINT      ENTRY CLASS: MAIN          SEGMENT:   (DRIVE)
            DESC: INITIALIZE THE GLOBAL COMMAND TREE AND COMMON BLOCK VARIABLES
            LENGTH:      20    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DRIVER
            CAN CALL THE FOLLOWING:
               ATT       BL1INT    GUBUF

GLSTDB      ENTRY CLASS: MAIN          SEGMENT:   (GL2)
            DESC: GET STATISTICS ABOUT DATA BASE
            LENGTH:     334    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GLTABLE
            CAN CALL THE FOLLOWING:
               GLTOP     IBEAUT    NAMFNM    PUTLIN    IGATT
               IDBRIT    IDBLFT    IDBNAM    DBATT

GLSTDS      ENTRY CLASS: MAIN          SEGMENT:   (GL2)
            DESC: GET STATISTICS ABOUT DISPLAY FILE
            LENGTH:     275    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GLTABLE
            CAN CALL THE FOLLOWING:
               GLTOP     IBEAUT    PUTLIN    IDBDRT    IDBNAM

GLSTOP      ENTRY CLASS: MAIN          SEGMENT:   (GL1)
            DESC: STOP THE S T A G I N G  SYSTEM
            LENGTH:       7    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GLTABLE
            CAN CALL THE FOLLOWING:
               STOP.

GLTABLE     ENTRY CLASS: MAIN          SEGMENT:   (DRIVE)
            DESC: GLOBAL MENU SUBROUTINE SWITCH TABLE
            LENGTH:     141    LANGUAGE: COMPASS
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
```

```
            GLINIT
         CAN CALL THE FOLLOWING:
            SWITCHS   GLFIN     GLFILN    IGLDEC    MOAXNF
            MOZSRS    MORCNT    MOZCRS    MOZPLS    MOZMIN
            GLSTOP    GLCHCK    GLCHCT    GLCLOK    GLHIST
            GLLUP     GLLDN     GLSTDB    GLSTDS    GLDEFP
            GLDEFS    FRONTVU   SIDEVU    TOPVU     MOFILL
            MODRW     SVIEW     SVIEWP    MOSPLT    MOSOS
            MOFRE     MOFRZ     MOASHK    MOISHK    MOSSHK
            MOUSHK    SROTET    SROTST    ERASER    ERASEN
            MOREC     MOCYL     MOSPH     ONPENS

GLTOP    ENTRY CLASS: MAIN          SEGMENT:   (M30)
         DESC: MOVE ALPHA CURSOR TO HOME ON SCREEN
         LENGTH:      51    LANGUAGE: FTN
         HAS NO SECONDARY ENTRY POINTS
         CAN BE CALLED BY:
            GLCLOK    GLHIST    GLLUP     GLLDN     GLSTDB
            GLSTDS    GLDEFS
         CAN CALL THE FOLLOWING:
            ERASEN    GCHIGH    GCXMIN    GCYMAX    GITEM
            GIDELT    GUTEXT    GUSETP

GOTOER=  ENTRY CLASS: MAIN          SEGMENT:   (S0)
         DESC: COMPUTED GO TO ERROR PROCESSOR.
         LENGTH:      14    LANGUAGE: COMPASS
         SECONDARY ENTRY POINTS:
            GOTOER.
         THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
         CAN CALL THE FOLLOWING:
            ABNORM.   SYSERR.

GOTOER.  ENTRY CLASS: SECONDARY    SEGMENT:   (S0)
         DESC: (NOT AVAILABLE)
         SECONDARY ENTRY POINT FOR : GOTOER=
         CAN BE CALLED BY:
            DRIVER    IGLDEC    IPRDEC    CHNGP2    IDEDEC
            MXYP      SETWZ     GINIT     IDRWEL    IDRWAT
            GETGEN    SETUPG    IDRW      ICON      GCWORK
            GIBUTN    DMP       GIERR     DMSTGT    CMINIT

GPRESET  ENTRY CLASS: MAIN          SEGMENT:   (G0)
         DESC: INTERTEK - INITIALIZE CONSTANTS IN COMMON BLOCK
         LENGTH:       3    LANGUAGE: FTN
         HAS NO SECONDARY ENTRY POINTS
         CAN BE CALLED BY:
            GINIT
         THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

GRDNIT   ENTRY CLASS: MAIN          SEGMENT:   (M5)
         DESC: INITIALIZE DATA BASE DEPENDENT GRAPHICS INFO
         LENGTH:     146    LANGUAGE: FTN
         HAS NO SECONDARY ENTRY POINTS
         CAN BE CALLED BY:
            REACT     FILATT    DRAWFR
         CAN CALL THE FOLLOWING:
```

```
            INIT2D    IDCHR     IBEAUT    ISACT     IDBRIT
            IDBLFT    IDBNAM

GRFNIT      ENTRY CLASS: MAIN          SEGMENT:    (M5)
            DESC: INITIALIZE GRAPHICS FOR INTERTEK
            LENGTH:     71     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DRIVER
            CAN CALL THE FOLLOWING:
               GINIT     GICAT     SETVU     EDITTI

GRIDG       ENTRY CLASS: MAIN          SEGMENT:    (M8121)
            DESC: X-Y PLOTS - DRAW X-Y PLOT GRID
            LENGTH:     573    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               PROCXA
            CAN CALL THE FOLLOWING:
               LINESG    SETSMG    MLTPLG    SEGMTG    XTOI.

GRID        ENTRY CLASS: MAIN          SEGMENT:    (PR2)
            DESC: DRAW DRAFTING PACKAGE GRID
            LENGTH:     225    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               PRTABLE   DRAWFR    CHNGP2
            CAN CALL THE FOLLOWING:
               GISUBF    GULIN     GITEM     GUSETP    GISHOW
               GIXTND

GRTJ.SQ     ENTRY CLASS: SECONDARY     SEGMENT:    (S0)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : GET.SQ
            CAN BE CALLED BY:
               FSU.SQ

GSGXGY      ENTRY CLASS: SECONDARY     SEGMENT:    (DE41)
            DESC: X-Y PLOTS - SET LINEAR X / LINEAR Y
            SECONDARY ENTRY POINT FOR : INTFLG
            CAN BE CALLED BY:
               DETABLE

GSGXLY      ENTRY CLASS: SECONDARY     SEGMENT:    (DE41)
            DESC: X-Y PLOTS - SET LINEAR X / LOG Y
            SECONDARY ENTRY POINT FOR : INTFLG
            CAN BE CALLED BY:
               DETABLE

GSLXGY      ENTRY CLASS: SECONDARY     SEGMENT:    (DE41)
            DESC: X-Y PLOTS - SET LOG X / LINEAR Y
            SECONDARY ENTRY POINT FOR : INTFLG
            CAN BE CALLED BY:
               DETABLE

GSLXLY      ENTRY CLASS: SECONDARY     SEGMENT:    (DE41)
```

```
            DESC: X-Y PLOTS - SET LOG X / LOG Y
            SECONDARY ENTRY POINT FOR : INTFLG
            CAN BE CALLED BY:
               DETABLE

GUBUF       ENTRY CLASS: MAIN          SEGMENT:   (G0)
            DESC: INTERTEK - INITIALIZE ≠IBUF≠
            LENGTH:     20    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GLOINT
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

GULIN       ENTRY CLASS: MAIN          SEGMENT:   (G0)
            DESC: INTERTEK - PACK LINE DISPLAY INFORMATION
            LENGTH:    121    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GRID      PUTEDT    LINZZ     IDRWLN    GUTEXT
            CAN CALL THE FOLLOWING:
               GCUPXY    GCGETW    GCSET     GIERR

GUSETP      ENTRY CLASS: MAIN          SEGMENT:   (G12)
            DESC: INTERTEK - ESTABLISH ITEM STARTING POSITICN
            LENGTH:     60    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DRIVER    EXSTAR    MOAXES    MOZCRS    GRID
               DRELN     LIBINS    PONPEN    MXYI      TYPNAM
               PUTEDT    SELATT    GLTOP     IPPRMT    MENNIT
               LINZZ     IDRWEL    IDRWND    IDISER
            CAN CALL THE FOLLOWING:
               GCUPXY    GCSET     GCSETW    GIERR

GUTEXT      ENTRY CLASS: MAIN          SEGMENT:   (G12)
            DESC: INTERTEK - PACK CHARACTERS INTO ≠IBUF≠
            LENGTH:    245    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DRIVER    EXSTAR    MOLAX     MOZCRS    DRELN
               LIBINS    PCNPEN    MXYI      TYPNAM    PUTEDT
               SELATT    GLTOP     IPPRMT    MENNIT    METAZZ
               IDRWND    IDRWAT    IDISER
            CAN CALL THE FOLLOWING:
               GCUPXY    GULIN     GCGETW    GCSET     GIERR

GXIT.SQ     ENTRY CLASS: SECONDARY     SEGMENT:   (S0)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : GET.SQ
            CAN BE CALLED BY:
               Z.SQ      FSU.SQ

HOLD        ENTRY CLASS: MAIN          SEGMENT:   (S1)
            DESC: ERROR RECOVERY INQUIRY
            LENGTH:    327    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
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            CAN BE CALLED BY:
               RCOVER
            CAN CALL THE FOLLOWING:
               GERASE    ICCHR     IBEAUT    GETLIN    PUTLIN
               IYIELD1   DMP       IOCTAL

 IALATT     ENTRY CLASS: MAIN          SEGMENT:    (S0)
            DESC: MAKE UP ALPHANUMERIC VALUE FOR ATTRIBUTE
            LENGTH:      53     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               PUTATT    IDRWAT
            CAN CALL THE FOLLOWING:
               ICCHR     IBEAUT

 IARSET     ENTRY CLASS: MAIN          SEGMENT:    (M822)
            DESC: SET UP ARROW DRAWING
            LENGTH:     130     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               ARROW
            CAN CALL THE FOLLOWING:
               SQRT.

 IBEAUT     ENTRY CLASS: MAIN          SEGMENT:    (S0)
            DESC: CONVERT NUMBER TO CHARACTERS
            LENGTH:     300     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GLHIST    GLSTD3    GLSTDS    SVIEW     SROTST
               CHNGP1    OPELN     MATIN     LIBINS    ICKRNG
               CNTPRO    ELREPL    ELREPP    EMOVE     DYLOAD
               DYSFPU    DYSSTP    ATTREN    ATTRNG    ECREAN
               EATF      GRDNIT    TYPNAM    TABPRC    TABXYM
               TABSCX    PUTLST    MOPUT     REPFA     NUMBRG
               IDRWAY    IALATT    NAMFNM    HOLD      CMP
               IGETCH
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

 ICAN       ENTRY CLASS: MAIN          SEGMENT:    (G14)
            DESC: CHECK IF NEW INFORMATION WILL FIT IN DISPLAY FILE
            LENGTH:      11     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               MOFRZ
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

 ICCHR      ENTRY CLASS: MAIN          SEGMENT:    (S0)
            DESC: COUNT THE NUMBER OF CHARACTERS IN AN ARRAY
            LENGTH:      13     LANGUAGE: COMPASS
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               STARTM    FILATT    GLCHCK    GLCLOK    DRELN
               MATIN     LIBINS    IECPRC    PROCXA    GRDNIT
               TYPNAM    PUTEDT    SELATT    INDATA    IDRWND
               IDRWAT    IALATT    HOLD      IPFUT     DBINIT
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            IGETCH
          THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

ICHKED    ENTRY CLASS: MAIN          SEGMENT:   (S1)
          DESC: CHECK TO SEE IF ALL NUMERIC TYPE-IN INPUT IS CORRECT
          LENGTH:    131    LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
            MODRW     SVIEWP    SROTET    CHNGP2    GETRAG
            IECPRC    ETYPSV    RNGDEL    RNGDRW    PTYPE
            EQNUM     ELREPP    EMOVE     DYSFPU    DYSSTP
            ATTRNG    ATTRNP    ERNDLD    EATS      ESERCH
            ASERCH    SSAOFF    CNTPFE    TABXYP    TABSCL
            TABDM     PROFAC
          CAN CALL THE FOLLOWING:
            ICRACK    COMPACS

ICKACT    ENTRY CLASS: MAIN          SEGMENT:   (DB2)
          DESC: CHECK IF BEAD IS ACTIVE
          LENGTH:     21    LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
            ERO       ERNDLD    EADOWN    EATS      ORWACT
            EQUEUP    DELETE    ACTIVA    IDBCAN
          CAN CALL THE FOLLOWING:
            IDBDRT

ICKATT    ENTRY CLASS: MAIN          SEGMENT:   (DB3)
          DESC: CHECK IF THE VALUES IN A BEAD ARE WITHIN RANGE
          LENGTH:     46    LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
            ESERCH    ASERCH    SSAOFF
          CAN CALL THE FOLLOWING:
            DBATT

ICKBYT    ENTRY CLASS: MAIN          SEGMENT:   (M80)
          DESC: GRAPHICS CHECKING - CHECK IF ≠IBUF≠ WILL BE OVERFLOWED
          LENGTH:     44    LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
            METAZZ    LINZZ     IDRWLN
          CAN CALL THE FOLLOWING:
            MEXTN     MITEM     DEDAD

ICKRNG    ENTRY CLASS: MAIN          SEGMENT:   (DE0)
          DESC: CHECK IF TYPE-IN VALUE IS IN THE DATA BASE
          LENGTH:     75    LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
            ETYPSV    RNGDEL    RNGDRW    EQNUM     ELREPP
            ERNDLD
          CAN CALL THE FOLLOWING:
            IBEAUT    IDBFND    IDBRIT    IDBLFT

ICKSL     ENTRY CLASS: MAIN          SEGMENT:   (DE3)
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          DESC: CHECK IF DISPLACEMENT SLICE IS ACTIVE IN DATA BASE
          LENGTH:     66    LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
             DYSSTP   DYUNDE
          CAN CALL THE FOLLOWING:
             ISACT

ICON      ENTRY CLASS: MAIN          SEGMENT:   (M821)
          DESC: SET UP CONNECTIVITY ARRAYS FOR DRAWING
          LENGTH:    207    LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
             IDRWEL
          CAN CALL THE FOLLOWING:
             GOTOER.

ICPART    ENTRY CLASS: MAIN          SEGMENT:   (PR1)
          DESC: CONVERSION(1) - DUMP OVERFLOW INFO INTO SUBSTRUCTURE BEAD
          LENGTH:     63    LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
             ONELEM
          CAN CALL THE FOLLOWING:
             CLEAR2   DMSET

ICRACK    ENTRY CLASS: MAIN          SEGMENT:   (S1)
          DESC: (NOT AVAILABLE)
          LENGTH:    467    LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
             MATIN    LIBINS   IPFUT    ICHKED
          CAN CALL THE FOLLOWING:
             UNPACK

IDBADB    ENTRY CLASS: MAIN          SEGMENT:   (DB2)
          DESC: ADD A BEAD AT A LEVEL
          LENGTH:    226    LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
             IDRNXT   CNTERM   ECPROC
          CAN CALL THE FOLLOWING:
             IDBRSV   DBRITE   DBLEFT   DBUPS    DBTYP
             DBSTAT   DBNAME   IDBRIT   IDBLFT   IDBUPN
             IDBDWN   IDBTYP   IDBNAM   DBCHA

IDBARR    ENTRY CLASS: MAIN          SEGMENT:   (DB3)
          DESC: CHANGE VALUES IN NO MANS LAND
          LENGTH:    105    LANGUAGE: FTN
          SECONDARY ENTRY POINTS:
             DBARR
          CAN BE CALLED BY:
             ECPROC   ECHKL    DBTGET   GETLIM   IDBTFM
          CAN CALL THE FOLLOWING:
             DMSET    DMGET    DBCHBD   IDBTYP   IDBSTA
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IDBCAN      ENTRY CLASS: MAIN          SEGMENT:    (DB2)
            DESC: (NOT AVAILABLE)
            LENGTH:     342    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DBCHA     DBUPT
            CAN CALL THE FOLLOWING:
               DMRLBD    DBCHBD    IDBRSV    DBRITE    DBLEFT
               DBUPP     DBDNP     DBLEN     DBSET     DBDLF
               DBDRT     IDBFIT    IDBLFT    IDBUPN    IDBDNN
               IDBTYP    IDBLEN    IDBSTA    IDBDLF    IDBDRT
               IDBUPP    IDBDNP    IDBGET    ICKACT

IDBCOL      ENTRY CLASS: SECONDARY    SEGMENT:    (DB3)
            DESC: GET COLUMN DIMENSION
            SECONDARY ENTRY POINT FOR : IDBTFM
            CAN BE CALLED BY:
               TABPRC

IDBDAC      ENTRY CLASS: SECONDARY    SEGMENT:    (DB0)
            DESC: ACTIVE ATTRIBUTE
            SECONDARY ENTRY POINT FOR : IDBRIT
            CAN BE CALLED BY:
               DRWATA    EATS      DRWACT

IDBDAD      ENTRY CLASS: SECONDARY    SEGMENT:    (DB0)
            DESC: ≠IDDAD≠
            SECONDARY ENTRY POINT FOR : IDBRIT
            CAN BE CALLED BY:
               MOFRZ     IDEDEC    MXYP      ERD       ERNOLD
               EADOWN    ICRWEL    IDRWAT    DRWACT    EQUEUP
               IDRWSS    IDRWST    IDRW      DELETE    DBRITE

IDBDEP      ENTRY CLASS: SECONDARY    SEGMENT:    (DB3)
            DESC: GET DEPTH DIMENSION
            SECONDARY ENTRY POINT FOR : IDBTFM
            CAN BE CALLED BY:
               TABPRC

IDBDLF      ENTRY CLASS: SECONDARY    SEGMENT:    (DB0)
            DESC: ACTIVE LEFT POINTER
            SECONDARY ENTRY POINT FOR : IDBRIT
            CAN BE CALLED BY:
               REACT     INTSUB    MXYP      EALLS     RESTART
               CLRPIC    DELETE    ACTIVA    NEXTIN    IDBCAN

IDBDNN      ENTRY CLASS: SECONDARY    SEGMENT:    (DB0)
            DESC: NUMBER OF DOWN-POINTERS
            SECONDARY ENTRY POINT FOR : IDBRIT
            CAN BE CALLED BY:
               CNTERM    CNTER     DRELN     MATDEF    IDEDEC
               EMERGE    PORG      ELREPL    MXYP      NODAEL
               NODFEL    EADOWN    EPUTDN    IDRWEL    GETCEN
               IDRWSS    IDRWST    NEXTIN    IDBCAN    DBUPT
               IDBADB    DBDEL
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IDBDNP      ENTRY CLASS: SECONDARY   SEGMENT:   (DB0)
            DESC: GET NTH DOWN-POINTER
            SECONDARY ENTRY POINT FOR : IDBUPP
            CAN BE CALLED BY:
               CNTERM   DRELN    MATDEF   EMERGE   PORG
               ELREPL   ELREPP   MXYP     NODAEL   NODFEL
               ERDOWN   EPUTDN   IDRWEL   GETCEN   IDRWSS
               IDRWST   NEXTIN   IDBCAN   DBUPT    DBDEL

IDBDRT      ENTRY CLASS: SECONDARY   SEGMENT:   (DB0)
            DESC: ACTIVE RIGHT-POINTER
            SECONDARY ENTRY POINT FOR : IDBRIT
            CAN BE CALLED BY:
               GLSTDS   MOFFZ    DRELN    MATDEF   IDEDEC
               DRWATA   RETAIN   LANODE   NODAEL   SSAOFF
               GETCNT   GETCAT   IENEXT   DACTSN   DRWACT
               DRWSS    NEXTIN   ICKACT   IDBCAN   EADDEL

IDBFND      ENTRY CLASS: MAIN        SEGMENT:   (DB0)
            DESC: FIND A BEAD ADDRESS
            LENGTH:    212    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DRAWFR   CNTERM   CNTER    CNTABL   MATDEF
               ICKRNG   IECPRC   SPCHK
            CAN CALL THE FOLLOWING:
               IDBRIT   IDBLFT   IDBNAM

IDBFTY      ENTRY CLASS: SECONDARY   SEGMENT:   (DB3)
            DESC: GET FORMAT TYPE
            SECONDARY ENTRY POINT FOR : IDBTFM
            CAN BE CALLED BY:
               TABACT

IDBGET      ENTRY CLASS: SECONDARY   SEGMENT:   (DB0)
            DESC: GET NTH WORD
            SECONDARY ENTRY POINT FOR : IDBUPP
            CAN BE CALLED BY:
               CNTERM   DZRST    DBCHBD   IDBCAN   DBUPT

IDBLEN      ENTRY CLASS: SECONDARY   SEGMENT:   (DB0)
            DESC: BEAD LENGTH
            SECONDARY ENTRY POINT FOR : IDBRIT
            CAN BE CALLED BY:
               DBCHBD   IDBUPP   IDBCAN

IDBLFT      ENTRY CLASS: SECONDARY   SEGMENT:   (DB0)
            DESC: LEFT DATA BASE POINTER
            SECONDARY ENTRY POINT FOR : IDBRIT
            CAN BE CALLED BY:
               GLSTDB   IDRNXT   CNTERM   CNTABL   MYINIT
               ICKRNG   ECREAN   EALLS    GRDNIT   IDBFND
               DBCHNM   IDBCAN   IDBADB   DBDEL

IDBNAM      ENTRY CLASS: SECONDARY   SEGMENT:   (DB0)
            DESC: GET NAME
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            SECONDARY ENTRY POINT FOR : IDBUPP
            CAN BE CALLED BY:
               GLSTDB    GLSTDS    IDRNXT    CNTER     MYINIT
               DRELN     ELRFPL    ECREAN    EATF      GETDAT
               GRDNIT    TYPNAM    IDRWAT    IDBFND    DBLKUP
               DBCHNM    IDBADB

IDBNDM      ENTRY CLASS: SECONDARY   SEGMENT:   (DB3)
            DESC: GET NUMBER OF DIMENSION
            SECONDARY ENTRY POINT FOR : IDBTFM
            CAN BE CALLED BY:
               TABPRC

IDBRIT      ENTRY CLASS: MAIN        SEGMENT:   (DB0)
            DESC: GRAB RIGHT DATA BASE POINTER
            LENGTH:    212    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               IDBLFT    IDBUPS    IDBUPN    IDBDNN    IDBTYP
               IDBLEN    IDBDAD    IDBSTA    IDBDLF    IDBDRT
               IDBDAC
            CAN BE CALLED BY:
               GLSTDB    CNTERM    CNTER     MATDEF    ICKRNG
               RNGDEL    RNGDRW    EQNUM     PORG      MXYP
               ERNDLD    EPUTDN    ESERCH    ECHKL     GRDNIT
               TABACT    PUTNAM    IDBFND    DBLKUP    DBCHNM
               NEXTIN    IDBCAN    IDBADB    DBDEL
            CAN CALL THE FOLLOWING:
               DMGET

IDBROW      ENTRY CLASS: SECONDARY   SEGMENT:   (DB3)
            DESC: GET ROW DIMENSION
            SECONDARY ENTRY POINT FOR : IDBTFM
            CAN BE CALLED BY:
               TABPRC

IDBRSV      ENTRY CLASS: MAIN        SEGMENT:   (DB0)
            DESC: RESERVE A BEAD OF NEW LENGTH
            LENGTH:     26    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               CNNEW     CNELEM    CNNODE    CNTABL    IFATT
               DBINIT    IDBCAN    IDBADB
            CAN CALL THE FOLLOWING:
               DMGTBD    DBLEN

IDBSTA      ENTRY CLASS: SECONDARY   SEGMENT:   (DB0)
            DESC: START OF ATTRIBUTE LIST
            SECONDARY ENTRY POINT FOR : IDBRIT
            CAN BE CALLED BY:
               DBRITE    IDBUPP    IDBCAN    DBCHA     DBUPT
               DBTGET    IDBARR

IDBTFM      ENTRY CLASS: MAIN        SEGMENT:   (DB3)
            DESC: GET TABLE FORMAT
            LENGTH:    135    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
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            IDBROW   IDBCOL   IDBDEP   IDBFTY   IDBNDM
          THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
          CAN CALL THE FOLLOWING:
            IDBTYP   IDBARR

IDBTYP    ENTRY CLASS: SECONDARY   SEGMENT:   (DB0)
          DESC: TYPE
          SECONDARY ENTRY POINT FOR : IDBRIT
          CAN BE CALLED BY:
            MOISHK   EDINIT   TYPNAM   GETCEN   DBCHBD
            IFATT    DBRITE   IDBUPP   DBLKUP   DBCHNM
            IDECAN   DBCHA    DBUPT    IDBADB   CBDEL
            DBTGET   IDBARR   IDBTFM

IDBUPN    ENTRY CLASS: SECONDARY   SEGMENT:   (DB0)
          DESC: NUMBER OF UP-POINTERS
          SECONDARY ENTRY POINT FOR : IDBRIT
          CAN BE CALLED BY:
            IDEDEC   MXYP     LFNOD    ERDOWN   EPUTDN
            EQUEUP   IDBCAN   DBUPT    IDBADB   DBDEL

IDBUPP    ENTRY CLASS: MAIN        SEGMENT:   (DB0)
          DESC: GET NTH UP-POINTER
          LENGTH:    173    LANGUAGE: FTN
          SECONDARY ENTRY POINTS:
            IDBDNP   IDBNAM   IDBGET   DBATT
          CAN BE CALLED BY:
            MXYP     LFNOD    ERDOWN   EPUTDN   EQUEUP
            IDBCAN   DBUPT    DBDEL
          CAN CALL THE FOLLOWING:
            DMGET    ISACT    IDBUPS   IDBTYP   IDBLEN
            IDBSTA

IDBUPS    ENTRY CLASS: SECONDARY   SEGMENT:   (DB0)
          DESC: START OF UP-POINTER
          SECONDARY ENTRY POINT FOR : IDBRIT
          CAN BE CALLED BY:
            DBRITE   IDBUPP   DBUPT

IDEDEC    ENTRY CLASS: MAIN        SEGMENT:   (DE0)
          DESC: DISPLAY AND EDIT MENU DECISION FUNCTION
          LENGTH:    266    LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
            DETABLE
          CAN CALL THE FOLLOWING:
            NAMFNM   GOTOER.  IGATT    IDBUPN   IDBDNN
            IDBDAD   IDBDRT

IDINF     ENTRY CLASS: MAIN        SEGMENT:   (G14)
          DESC: SPLIT UP SEAD ADDRESS
          LENGTH:      7    LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
            DRELN    TYPNAM
          THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS
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IDISER      ENTRY CLASS: MAIN          SEGMENT:    (G0)
            DESC: DISPLAY AND EDIT ERRORS
            LENGTH:     332    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DRIVER    FILATT    GLCHCK    MOORW     SVIEWP
               MOFRZ     SROTET    MYINIT    GETRAG    MATIN
               ALLON     IECPRC    ETYPSV    RNGDEL    RNGDRW
               PTYPE     EQNUM     ELREPP    EMOVE     DYSFPU
               DYSSTP    ATTRNG    NODON     ECHOND    ERNOLD
               EATS      EPUTDN    ESERCH    ASERCH    SSAOFF
               CNTPRE    GETCNT    PROCXA    GETDAT    IENEXT
               SELATT    TABACT    TABPRC    TABXYP    TABSCL
               TABDM     DACTSN    PUTATT    PROFAC    DRWACT
               ESLOT     ONPEN
            CAN CALL THE FOLLOWING:
               GCDRAW    GCWIDE    GITEM     GIDELT    GUTEXT
               GUSETP

IDRNXT      ENTRY CLASS: MAIN          SEGMENT:    (PR2)
            DESC: GET NEXT BEAD AND NUMBER FOR ASSIGNMENT
            LENGTH:      37    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               BDSTR     FIXDAT
            CAN CALL THE FOLLOWING:
               IDBLFT    IDBNAM    IDBADB

IDRWAT      ENTRY CLASS: MAIN          SEGMENT:    (M820)
            DESC: DRAW BEAD AND ADD THE ATTRIBUTE
            LENGTH:     351    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               FIXDAT    DRWATA    DRWATT    DRWACT
            CAN CALL THE FOLLOWING:
               GETCSS    GETCEN    GETCOR    IDRW      ARROW
               GIDELT    GUTEXT    MEXTN     UTORAS    ICCHR
               IBEAUT    IALATT    NAMFNM    GOTOER.   IGATT
               DBDAD     DBDAD     IDBDAD    IDBNAM    DBATT
               GETSIZ    GETCES

IDRWEL      ENTRY CLASS: MAIN          SEGMENT:    (M820)
            DESC: DRAW ELEMENT BEAD
            LENGTH:     417    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               IDRWSS    IDRW
            CAN CALL THE FOLLOWING:
               IDRWLN    IDRWND    GETCEN    GETCOR    ICON
               GUSETP    UTORAS    GOTOER.   IDBONN    IDBDAD
               IDBONP    DBATT

IDRWLN      ENTRY CLASS: MAIN          SEGMENT:    (M820)
            DESC: DRAW LINE IN 2D OR 3D
            LENGTH:      40    LANGUAGE: FTN
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            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               IDRWEL    ARROW
            CAN CALL THE FOLLOWING:
               ICKBYT    GULIN

 IDRWND     ENTRY CLASS: MAIN          SEGMENT:    (M820)
            DESC: DRAW NODE BEAD
            LENGTH:      65     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               IDRWEL    IDRW
            CAN CALL THE FOLLOWING:
               GETCOR    GUTEXT    GUSETP    UTORAS    ICCHR
               GETSIZ    IGETCH

 IDRWSS     ENTRY CLASS: MAIN          SEGMENT:    (M821)
            DESC: DRAW SUBSTRUCTURE BEAD
            LENGTH:     103     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               IDRWST    IDRW
            CAN CALL THE FOLLOWING:
               IDRWEL    DBDAD     IDBDNN    IDBDAD    IDBDNP

 IDRWST     ENTRY CLASS: MAIN          SEGMENT:    (M821)
            DESC: DRAW STRUCTURE BEAD
            LENGTH:      67     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               IDRW
            CAN CALL THE FOLLOWING:
               IDRWSS    DBDAD     IDBDNN    IDBDAD    IDBDNP

 IDRW       ENTRY CLASS: MAIN          SEGMENT:    (M821)
            DESC: DRAW ANY LEVEL BEAD IF UNDISPLAYED
            LENGTH:     100     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               BDSTR     FIXDAT    ALLON     RNGDRW    NODAEL
               NODFEL    LFNOD     ASERCH    IDRWAT    DRWACT
               DRWSS
            CAN CALL THE FOLLOWING:
               IDRWEL    IDRWND    IDRWSS    IDRWST    MEXTN
               MITEM     GOTOER.   DBDAD     IDBDAD

 IECPRC     ENTRY CLASS: MAIN          SEGMENT:    (DE0)
            DESC: CHECK IF NAME TYPE-IN IS IN DATA BASE
            LENGTH:     147     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               ICPROC    EATS
            CAN CALL THE FOLLOWING:
               PUTEDT    IDISER    ICCHR     ICHKED    COMPAC
               IDBFND
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IENEXT      ENTRY CLASS: MAIN          SEGMENT:   (M1)
            DESC: GET NEXT BEAD IN CYCLING THROUGH ACTIVE BEADS FOR EDITING
            LENGTH:    105    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               IENIT
            CAN BE CALLED BY:
               EATS
            CAN CALL THE FOLLOWING:
               IDISER   IUBDRT   NEXTIN   NEXTB

IENIT       ENTRY CLASS: SECONDARY   SEGMENT:   (M1)
            DESC: INITIALIZE #IENEXT#
            SECONDARY ENTRY POINT FOR : IENEXT
            CAN BE CALLED BY:
               EATS

IEXDEC      ENTRY CLASS: MAIN          SEGMENT:   (EX)
            DESC: EXECUTIVE MENU DECISION FUNCTION
            LENGTH:     53    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               EXTABLE
            CAN CALL THE FOLLOWING:
               NAMFNM   IGATT

IFATT       ENTRY CLASS: MAIN          SEGMENT:   (DB0)
            DESC: FETCH THE LOCATION OF ALPHANUMBERIC ATTRIBUTE
            LENGTH:    150    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               CNNEW    MATDEF   ATTRNG   DBINIT   DBCHA
            CAN CALL THE FOLLOWING:
               DMRLBD   DMSET    DMGET    IGATT    ISACT
               IDBRSV   NUMFNM   IDBTYP

IGACT       ENTRY CLASS: SECONDARY   SEGMENT:   (DB0)
            DESC: RETRIEVE ACTION INDICATOR FROM MENU BEAD
            SECONDARY ENTRY POINT FOR : IGFTR
            CAN BE CALLED BY:
               DRIVER

IGATT       ENTRY CLASS: MAIN          SEGMENT:   (DB0)
            DESC: (NOT AVAILABLE)
            LENGTH:     45    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               IEXDEC   GLSTDB   IDEDEC   SELATT   PUTATT
               IDRWAT   IFATT    ISACT    IGETCH
            CAN CALL THE FOLLOWING:
               DMGET

IGDEF       ENTRY CLASS: SECONDARY   SEGMENT:   (DB0)
            DESC: RETRIEVE DEFINITION FIELD FROM MENU BEAD
            SECONDARY ENTRY POINT FOR : IGFTR
            CAN BE CALLED BY:
               GLDEFP
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IGDFV      ENTRY CLASS: SECONDARY   SEGMENT:   (M32)
           DESC: RETRIEVE DEFAULT VALUE FROM MENU BEAD
           SECONDARY ENTRY POINT FOR : IGPCKM
           CAN BE CALLED BY:
              DRIVER   EXEC

IGDVN      ENTRY CLASS: SECONDARY   SEGMENT:   (DB0)
           DESC: RETRIEVE DEFAULT INFO COUNTER FROM MENU BEAD
           SECONDARY ENTRY POINT FOR : IGFTR
           CAN BE CALLED BY:
              IGPCKM

IGDVS      ENTRY CLASS: SECONDARY   SEGMENT:   (DB0)
           DESC: RETRIEVE DEFAULT INFO FROM MENU BEAD
           SECONDARY ENTRY POINT FOR : IGFTR
           CAN BE CALLED BY:
              IGPCKM

IGETCH     ENTRY CLASS: MAIN        SEGMENT:   (DB3)
           DESC: GET ATTRIBUTE NAME ABBREVIATION
           LENGTH:    132    LANGUAGE: FTN
           HAS NO SECONDARY ENTRY POINTS
           CAN BE CALLED BY:
              IDKWND
           CAN CALL THE FOLLOWING:
              IGCHR    IBEAUT   IGATT    DBATT

IGFTR      ENTRY CLASS: MAIN        SEGMENT:   (DB0)
           DESC: RETRIEVE POINTER TO FATHER FROM MENU BEADS
           LENGTH:    360    LANGUAGE: FTN
           SECONDARY ENTRY POINTS:
              IGSON    IGLNK    IGACT    IGRUT    IGTBL
              IGPSY    IGPSY    IGDEF    IGPNC    IGPNW
              IGPS     IGPRC    IGPRW    IGPRS    IGPCN
              IGPCS    IGDVN    IGDVS    IGOPT
           CAN BE CALLED BY:
              DRIVER   STARTM   GLINIT   GLHIST   GLLUP
           CAN CALL THE FOLLOWING:
              DMGET

IGLDEC     ENTRY CLASS: MAIN        SEGMENT:   (GL0)
           DESC: GLOBAL MENU DECISION FUNCTION
           LENGTH:    123    LANGUAGE: FTN
           HAS NO SECONDARY ENTRY POINTS
           CAN BE CALLED BY:
              GLTABLE
           CAN CALL THE FOLLOWING:
              GOTOER.

IGLNK      ENTRY CLASS: SECONDARY   SEGMENT:   (DB0)
           DESC: RETRIEVE POINTER TO NEXT BROTHER FROM MENU BEAD
           SECONDARY ENTRY POINT FOR : IGFTR
           CAN BE CALLED BY:
              DRIVER   GLLUP    GLLDN    MENNIT
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IGNM        ENTRY CLASS: MAIN          SEGMENT:    (GL2)
            DESC: (NOT AVAILABLE)
            LENGTH:      35    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GLDEFP
            CAN CALL THE FOLLOWING:
               DMGET

IGOPT       ENTRY CLASS: SECONDARY     SEGMENT:    (OB0)
            DESC: RETRIEVE OPTION FIELD FROM MENU BEAD
            SECONDARY ENTRY POINT FOR : IGFTR
            CAN BE CALLED BY:
               DRIVER

IGPCKM      ENTRY CLASS: MAIN          SEGMENT:    (M32)
            DESC: RETRIEVE PICK MESSAGE
            LENGTH:     140    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               IGPRMM    IGDFV
            CAN BE CALLED BY:
               DRIVER    GLHIST    GLLUP    GLLDN    GLDEFP
               MENNIT
            CAN CALL THE FOLLOWING:
               IGPNC     IGPNW     IGPS     IGPRC    IGPRW
               IGPRS     IGPCN     IGPCS    IGDVN    IGDVS
               DMGET

IGFCN       ENTRY CLASS: SECONDARY     SEGMENT:    (OB0)
            DESC: RETRIEVE 3 WORDS IN ID BLOCK FOR PICK MSG FROM MENU BEAD
            SECONDARY ENTRY POINT FOR : IGFTR
            CAN BE CALLED BY:
               IGPCKM

IGPCS       ENTRY CLASS: SECONDARY     SEGMENT:    (OB0)
            DESC: RETRIEVE ADDR OF ID WORDS FROM MENU BEAD
            SECONDARY ENTRY POINT FOR : IGFTR
            CAN BE CALLED BY:
               IGPCKM

IGPNC       ENTRY CLASS: SECONDARY     SEGMENT:    (OB0)
            DESC: RETRIEVE 3 CHARACTERS IN PICK MESSAGE FROM MENU BEAD
            SECONDARY ENTRY POINT FOR : IGFTR
            CAN BE CALLED BY:
               IGPCKM

IGPNW       ENTRY CLASS: SECONDARY     SEGMENT:    (OB0)
            DESC: RETRIEVE 3 WORDS IN PICK MESSAGE FROM MENU BEAD
            SECONDARY ENTRY POINT FOR : IGFTR
            CAN BE CALLED BY:
               IGPCKM

IGPRC       ENTRY CLASS: SECONDARY     SEGMENT:    (OB0)
            DESC: RETRIEVE 3 CHARACTERS IN PROMPTING MESSAGE FROM MENU BEAD
            SECONDARY ENTRY POINT FOR : IGFTR
            CAN BE CALLED BY:
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                IGPCKM

IGPRMM      ENTRY CLASS: SECONDARY   SEGMENT:   (M32)
            DESC: RETRIEVE PROMPT MESSAGE FROM MENU BEAD
            SECONDARY ENTRY POINT FOR : IGPCKM
            CAN BE CALLED BY:
                IPPRMT

IGPRS       ENTRY CLASS: SECONDARY   SEGMENT:   (DB0)
            DESC: RETRIEVE ADDR OF PROGMPTING MESSAGE FROM MENU BEAD
            SECONDARY ENTRY POINT FOR : IGFTR
            CAN BE CALLED BY:
                IGPCKM

IGPRW       ENTRY CLASS: SECONDARY   SEGMENT:   (DB0)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : IGFTR
            CAN BE CALLED BY:
                IGPCKM

IGPSX       ENTRY CLASS: SECONDARY   SEGMENT:   (DB0)
            DESC: RETRIEVE X-POSITION ON SCREEN FROM MENU BEAD
            SECONDARY ENTRY POINT FOR : IGFTR
            CAN BE CALLED BY:
                DRIVER

IGPSY       ENTRY CLASS: SECONDARY   SEGMENT:   (DB0)
            DESC: RETRIEVE Y-POSITION ON SCREEN FROM MENU BEAD
            SECONDARY ENTRY POINT FOR : IGFTR
            CAN BE CALLED BY:
                DRIVER

IGPS        ENTRY CLASS: SECONDARY   SEGMENT:   (DB0)
            DESC: RETRIEVE ADDR OF PICK MESSAGE FROM MENU BEAD
            SECONDARY ENTRY POINT FOR : IGFTR
            CAN BE CALLED BY:
                IGPCKM

IGRUT       ENTRY CLASS: SECONDARY   SEGMENT:   (DB0)
            DESC: RETRIEVE SUBROUTINE NAME FROM MENU BEAD
            SECONDARY ENTRY POINT FOR : IGFTR
            CAN BE CALLED BY:
                DRIVER

IGSON       ENTRY CLASS: SECONDARY   SEGMENT:   (DB0)
            DESC: RETRIEVE BEAD ADDRESS OF SON FROM MENU BEAD
            SECONDARY ENTRY POINT FOR : IGFTR
            CAN BE CALLED BY:
                DRIVER   GLLON

IGTBL       ENTRY CLASS: SECONDARY   SEGMENT:   (DB0)
            DESC: RETRIEVE ADDRESS OF SUBROUTINE FROM MENU BEAD
            SECONDARY ENTRY POINT FOR : IGFTR
            CAN BE CALLED BY:
                DRIVER
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INBUF      ENTRY CLASS: MAIN          SEGMENT:   (060)
           DESC: (NOT AVAILABLE)
           LENGTH:     17    LANGUAGE: FTN
           HAS NO SECONDARY ENTRY POINTS
           CAN BE CALLED BY:
              DMREAD   DMINIT
           THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

INDATA     ENTRY CLASS: MAIN          SEGMENT:   (M32)
           DESC: READ TEXT INPUT AND FORMAT IT FOR CRACKING ALGORITHMS
           LENGTH:    164    LANGUAGE: FTN
           HAS NO SECONDARY ENTRY POINTS
           CAN BE CALLED BY:
              IREAD
           CAN CALL THE FOLLOWING:
              ICCHR    GETLIN

INITXY     ENTRY CLASS: MAIN          SEGMENT:   (DE41)
           DESC: X-Y PLOTS - INITIALIZE X-Y PLOTS
           LENGTH:    133    LANGUAGE: FTN
           HAS NO SECONDARY ENTRY POINTS
           CAN BE CALLED BY:
              DETABLE
           CAN CALL THE FOLLOWING:
              CLRPIC   RSETMG   GCXMIN   GCYMIN   GCYMAX

INIT2D     ENTRY CLASS: MAIN          SEGMENT:   (M5)
           DESC: INITIALIZE 2D DRAWING MODE
           LENGTH:     72    LANGUAGE: FTN
           HAS NO SECONDARY ENTRY POINTS
           CAN BE CALLED BY:
              DETABLE  DRAWFR   GRDNIT   INIT3N
           CAN CALL THE FOLLOWING:
              CLRPIC   GCXMIN   GCYMIN   GCYMAX   SETVU

INIT3N     ENTRY CLASS: MAIN          SEGMENT:   (M5)
           DESC: INITIALIZE 3D MODE
           LENGTH:     23    LANGUAGE: FTN
           HAS NO SECONDARY ENTRY POINTS
           CAN BE CALLED BY:
              DETABLE
           CAN CALL THE FOLLOWING:
              INIT2D   CLRPIC   SETVU

INTFLG     ENTRY CLASS: MAIN          SEGMENT:   (DE41)
           DESC: X-Y PLOTS - SET FLAGS FOR GRID STYLE
           LENGTH:    162    LANGUAGE: FTN
           SECONDARY ENTRY POINTS:
              GSLXLY   GSLXGY   GSGXLY   GSGXGY   LSSLD
              LSSDH    LSLDH
           THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
           CAN CALL THE FOLLOWING:
              SETSMG

INTSUBM    ENTRY CLASS: SECONDARY     SEGMENT:   (PRM1)
           DESC: INITIALIZE MATERIAL PROPERTY GENERATION
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            SECONDARY ENTRY POINT FOR : INTSUB
            CAN BE CALLED BY:
               MYINIT

INTSUBS     ENTRY CLASS: SECONDARY   SEGMENT:   (PRM1)
            DESC: INITIALIZE MATERIAL PROPERTY DEFINITION FOR ENTIRE STRUCTURE
            SECONDARY ENTRY POINT FOR : INTSUB
            CAN BE CALLED BY:
               PRTABLE

INTSUBS     ENTRY CLASS: SECONDARY   SEGMENT:   (PRM1)
            DESC: INITIALIZE MATERIAL PROPERTY DEFINITION FOR PICKED ELEMENTS
            SECONDARY ENTRY POINT FOR : INTSUB
            CAN BE CALLED BY:
               PRTABLE

INTSUB      ENTRY CLASS: MAIN        SEGMENT:   (PRM1)
            DESC: INITIALIZE MATERIAL PROPERTY DATA BASE PROCESSING
            LENGTH:    115    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               INTSUBS  INTSUBS  INTSUBM
            CAN BE CALLED BY:
               PRTABLE
            CAN CALL THE FOLLOWING:
               CLRPIC   ONPENN   DBOAD    DBORT    DBDAC
               IDBDLF

IOCTAL      ENTRY CLASS: MAIN        SEGMENT:   (S1)
            DESC: CONVERT INTEGER TO OCTAL REPRESENTATION
            LENGTH:     37    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               HOLD     DMP
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

IPFUT       ENTRY CLASS: MAIN        SEGMENT:   (S1)
            DESC: DO PERM FILE MANIPULATION FROM FORTRAN
            LENGTH:    221    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               EXSTAR   FILATT   GLCHCK
            CAN CALL THE FOLLOWING:
               ICCHR    UNPACK   PERMFIL  ICRACK

IPICK       ENTRY CLASS: MAIN        SEGMENT:   (M30)
            DESC: PROCESS BUTTON PICK
            LENGTH:    104    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DRIVER   PAGER
            CAN CALL THE FOLLOWING:
               GLINIT   ERASER   ERASEN   GIBUTN   GICAT

IPPDEC      ENTRY CLASS: MAIN        SEGMENT:   (PP)
            DESC: POST-PROCESSOR MENU DECISION FUNCTION
            LENGTH:     11    LANGUAGE: FTN
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            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               PPTABLE
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

IPPRMT      ENTRY CLASS: MAIN          SEGMENT:    (M32)
            DESC: DISPLAY PROMPTING MESSAGE
            LENGTH:     336    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DRIVER
            CAN CALL THE FOLLOWING:
               IGPRMM    GITEM    GIDELT    GUTEXT    GUSETP
               GISHOW

IPROEC      ENTRY CLASS: MAIN          SEGMENT:    (PR0)
            DESC: PRE-PROCESSOR MENU DECSION FUNCTION
            LENGTH:      25    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               PRTABLE
            CAN CALL THE FOLLOWING:
               GOTOER.

IREAD       ENTRY CLASS: MAIN          SEGMENT:    (M32)
            DESC: READ A TEXT STRING INTO NVALS IN EDITT COMMON BLOCK
            LENGTH:     156    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DRIVER
            CAN CALL THE FOLLOWING:
               INDATA

ISACT       ENTRY CLASS: MAIN          SEGMENT:    (DB0)
            DESC: SCAN THE ACTIVE ATTRIBUTE LIST OF THE LEVEL FOR THE NAME GIVEN
            LENGTH:      70    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               PRINCP    EOSTR    CNNEW    ICKSL    GRDNIT
               IFATT     IDBUPP
            CAN CALL THE FOLLOWING:
               IGATT     NUMFNM

ISWTCHD     ENTRY CLASS: SECONDARY     SEGMENT:    (DRIVE)
            DESC: CALL THE SITUATION DEPENDENT FUNCTION
            SECONDARY ENTRY POINT FOR : SWITCH
            CAN BE CALLED BY:
               DRIVER

ITOJ=       ENTRY CLASS: MAIN          SEGMENT:    (S0)
            DESC: INTEGER TO INTEGER EXPONENTIATION.
            LENGTH:      16    LANGUAGE: COMPASS
            SECONDARY ENTRY POINTS:
               ITOJ.
            THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS
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ITOJ.       ENTRY CLASS: SECONDARY   SEGMENT:   (S0)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : ITOJ=
            CAN BE CALLED BY:
               SETUPG   GIDAE    DMINIT   RFILEB   SETFETR

IYIELDE     ENTRY CLASS: SECONDARY   SEGMENT:   (S1)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : YIELD=
            CAN BE CALLED BY:
               EXECC    YIELD1=

IYIELDS     ENTRY CLASS: SECONDARY   SEGMENT:   (S1)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : YIELD=
            CAN BE CALLED BY:
               EXECC    YIELD1=

IYIELD1     ENTRY CLASS: SECONDARY   SEGMENT:   (S1)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : YIELD1=
            CAN BE CALLED BY:
               EXECC    GLCLOK   HOLD

IYIELD      ENTRY CLASS: SECONDARY   SEGMENT:   (S1)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : YIELD=
            CAN BE CALLED BY:
               YIELD1=

LABELG      ENTRY CLASS: MAIN        SEGMENT:   (M8122)
            DESC: X-Y PLOTS - GENERATE X-Y PLOT LABELS
            LENGTH:    1002    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               PROCXA
            CAN CALL THE FOLLOWING:
               NUMBRG   SETSMG   MLTPLG   SEGMTG   ALOG10.
               XTOI.

LANODE      ENTRY CLASS: MAIN        SEGMENT:   (DE3)
            DESC: DRAW ALL ELEMENTS THAT OWN ALL THE NODES DISPLAYED ON THE SCREEN
            LENGTH:     24    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               LFNOD    IDBURT

LEGNDG      ENTRY CLASS: MAIN        SEGMENT:   (M810)
            DESC: (NOT AVAILABLE)
            LENGTH:     26    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               NUMBRG   TITLEG
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            CAN CALL THE FOLLOWING:
               METAZZ

LFNODE      ENTRY CLASS: MAIN          SEGMENT:    (DE3)
            DESC: DRAW ALL ELEMENTS THAT OWN ALL THE NODES PICKED BY THE USER
            LENGTH:      17    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               LFNOD     MBEAD

LFNOD       ENTRY CLASS: MAIN          SEGMENT:    (DE3)
            DESC: MAKE THE CALL TO #IDRW# FOR LANODE AND LFNODE
            LENGTH:      57    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               LANODE    LFNODE
            CAN CALL THE FOLLOWING:
               IDRW      IDBUPN    IDBUPP    ACTIVA

LIBINSA     ENTRY CLASS: SECONDARY     SEGMENT:    (PRM2)
            DESC: PROCESS MATERIAL PROPERTY LIBRARY REQUEST
            SECONDARY ENTRY POINT FOR : LIBINS
            CAN BE CALLED BY:
               PRTABLE

LIBINS      ENTRY CLASS: MAIN          SEGMENT:    (PRM2)
            DESC: PROCESS MATERIAL PROPERTY DATA BASE
            LENGTH:     532    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               LIBINSA   CLRLIB
            CAN BE CALLED BY:
               PRTABLE
            CAN CALL THE FOLLOWING:
               CNTABL    MATCEF    PUTEDT    GCDRAW    GCWIDE
               GITEM     GUTEXT    GUSETP    ICCHR     IBEAUT
               ICRACK    DMGET

LIBIN       ENTRY CLASS: MAIN          SEGMENT:    (PRM1)
            DESC: PROCESS GENERIC MATERIAL TYPE
            LENGTH:     114    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               PRTABLE
            CAN CALL THE FOLLOWING:
               TYPVAL    DMGET

LINESG      ENTRY CLASS: MAIN          SEGMENT:    (M810)
            DESC: CREATE X-Y PLOT OR CONTOUR PLOT LINE SEGMENT
            LENGTH:     103    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               CNTOR     QIKGRF    GRIDG     SCAN
            CAN CALL THE FOLLOWING:
               METAZZ
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LINZZ       ENTRY CLASS: MAIN          SEGMENT:   (M610)
            DESC: 4060/IGS - DRAWS A LINE WITH BEAM ON OR OFF
            LENGTH:     67    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               META7Z
            CAN CALL THE FOLLOWING:
               ICKBYT    SCALZZ    GULIN     GUSETP    UTORAS

LSLOH       ENTRY CLASS: SECONDARY    SEGMENT:   (DE41)
            DESC: X-Y PLOTS - SET LONG DASH PLOT
            SECONDARY ENTRY POINT FOR : INTFLG
            CAN BE CALLED BY:
               DETABLE

LSSDH       ENTRY CLASS: SECONDARY    SEGMENT:   (DE41)
            DESC: X-Y PLOTS - SET SHORT DASH PLOT
            SECONDARY ENTRY POINT FOR : INTFLG
            CAN BE CALLED BY:
               DETABLE

LSSLD       ENTRY CLASS: SECONDARY    SEGMENT:   (DE41)
            DESC: X-Y PLOTS - SET SOLID LINE PLOT
            SECONDARY ENTRY POINT FOR : INTFLG
            CAN BE CALLED BY:
               DETABLE

LTEST       ENTRY CLASS: MAIN          SEGMENT:   (M8140)
            DESC: CONTOUR PACKAGE CRITERIA TESTER
            LENGTH:     46    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               TMESH2
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

MARK        ENTRY CLASS: SECONDARY    SEGMENT:   (DRIVE)
            DESC: INITIALIZE RECOVERY PACKAGE
            SECONDARY ENTRY POINT FOR : RCOVER
            CAN BE CALLED BY:
               DRIVER    GLCLOK

MATDEF      ENTRY CLASS: MAIN          SEGMENT:   (PRM2)
            DESC: (NOT AVAILABLE)
            LENGTH:    301    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               MATIN     LIBINS
            CAN CALL THE FOLLOWING:
               IDBFND    IFATT     IDBRIT    IDBDNN    IDBDRT
               IDBDNP    DBATT     DBCHA

MATINS      ENTRY CLASS: SECONDARY    SEGMENT:   (PRM2)
            DESC: RETRIEVE USER INPUT FOR MPDB
            SECONDARY ENTRY POINT FOR : MATIN
            CAN BE CALLED BY:
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            PRTABLE

MATIN       ENTRY CLASS: MAIN          SEGMENT:   (PRM2)
            DESC: ROUTINE TO INPUT MATERIAL PROPERTIES FROM (TYPE-IN)
            LENGTH:    301    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               MATINS
            CAN BE CALLED BY:
               PRTABLE
            CAN CALL THE FOLLOWING:
               CNTABL    MATDEF    PUTEDT    IDISER    ICCHR
               IBEAUT    ICRACK

MBEAD       ENTRY CLASS: MAIN          SEGMENT:   (DB0)
            DESC: MAKE A BEAD ADDRESS FROM ID ARRAY
            LENGTH:     11    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               MOISHK    BDSTR     ASUB4     ASUB5     ASUBS
               EMERGE    DRWATT    DELPIC    RETAIN    LFNODE
               NODFEL    ERD       EACTPN    EADOWN    EQPEN
               TABPRC    SSOFF
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

MCT.RM      ENTRY CLASS: MAIN          SEGMENT:   (S1)
            DESC: (NOT AVAILABLE)
            LENGTH:    227    LANGUAGE: COMPASS
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               CLSF.RM   OPEN.RM   CLSF.RM
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

MENNIT      ENTRY CLASS: MAIN          SEGMENT:   (M32)
            DESC: START GLOBAL AND EXECUTIVE MENUS
            LENGTH:    273    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DRIVER
            CAN CALL THE FOLLOWING:
               STARTM    GIASID    IGPCKM    GISUBF    GCHIGH
               GCWIDE    GITEM     GICAT     GIDAE     GUTEXT
               GUSETP    IGLNK

METAZZ      ENTRY CLASS: MAIN          SEGMENT:   (M810)
            DESC: 4060/IGS - LOW-LEVEL DRIVER WHICH FORMATS ALL PLOT COMMANDS
            LENGTH:    545    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               CNTOR     QIKGRF    LEGNDG    LINESG    POINTG
               MLTPLG    SEGMTG
            CAN CALL THE FOLLOWING:
               ICKBYT    LINZZ     SCALZZ    GUTEXT    MEXTN
               MITEM     UTORAS    GETSIZ

MEXTN       ENTRY CLASS: MAIN          SEGMENT:   (G14)
            DESC: GRAPHICS CHECKING - EXTENDS AN EXISTING ITEM
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            LENGTH:      20     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               ICKBYT    METAZZ    IDRWAT    IDRW
            CAN CALL THE FOLLOWING:
               GIXTND

MITEM       ENTRY CLASS: MAIN          SEGMENT:    (G14)
            DESC: GRAPHICS CHECKING - GENERATE AN ITEM
            LENGTH:      40     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               ICKBYT    METAZZ    IDRW
            CAN CALL THE FOLLOWING:
               GITEM

MLTPLG      ENTRY CLASS: MAIN          SEGMENT:    (M8120)
            DESC: (NOT AVAILABLE)
            LENGTH:      64     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GRIDS     LABELG
            CAN CALL THE FOLLOWING:
               METAZZ

MOASHK      ENTRY CLASS: MAIN          SEGMENT:    (GL3)
            DESC: MOD PICTURE - SHRINK ALL ELEMENTS ON SCREEN
            LENGTH:      21     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GLTABLE   MOZSRS
            CAN CALL THE FOLLOWING:
               MOUSHK    DRWACT

MOAXES      ENTRY CLASS: MAIN          SEGMENT:    (GL0)
            DESC: MOD PICTURE - DRAW 3D AXES
            LENGTH:     130     LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               MOAXNF    MOAXET
            THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
            CAN CALL THE FOLLOWING:
               MOLAX     ARROW     GITEM     GIDELT    GUSETP
               UTORAS

MOAXET      ENTRY CLASS: SECONDARY     SEGMENT:    (GL0)
            DESC: REDRAW AXES
            SECONDARY ENTRY POINT FOR : MOAXES
            CAN BE CALLED BY:
               MORDRW

MOAXNF      ENTRY CLASS: SECONDARY     SEGMENT:    (GL0)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : MOAXES
            CAN BE CALLED BY:
               GLTABLE
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MOBOTH      ENTRY CLASS: MAIN          SEGMENT:    (M5)
            DESC: MOD PICTURE - RESET ZOOM AND VIRTUAL WINDOW FOR *IDAEM*
            LENGTH:      20     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               MOZSRS
            CAN CALL THE FOLLOWING:
               SETWZ     ERASEM

MOCYL       ENTRY CLASS: SECONDARY     SEGMENT:    (M33)
            DESC: MOD PICTURE - SET POLAR OR CYLINDRICAL ENTRY MODE FOR PLOT LIMITS
            SECONDARY ENTRY POINT FOR : MOREC
            CAN BE CALLED BY:
               DETABLE   GLTABLE

MODRW       ENTRY CLASS: MAIN          SEGMENT:    (GL3)
            DESC: MOD PICTURE - REDRAW ALL ACTIVELY DISPLAYED BEADS IN NEWLY SPECIF
            LENGTH:     122     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GLTABLE
            CAN CALL THE FOLLOWING:
               MORDRW    PUTEDT    IDISER    SCALST    CNVTOC
               ICHKED    COMPAC

MOFILL      ENTRY CLASS: MAIN          SEGMENT:    (GL3)
            DESC: MOD PICTURE - RESCALE TO CURRENT MINS AND MAXES
            LENGTH:      41     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GLTABLE
            CAN CALL THE FOLLOWING:
               MORDRW    SCALST

MOFRE       ENTRY CLASS: MAIN          SEGMENT:    (GL3)
            DESC: MOD PICTURE - GENERATE FREE COPY OF WORKING DAE
            LENGTH:      21     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GLTABLE
            CAN CALL THE FOLLOWING:
               GISHOW

MOFRZ       ENTRY CLASS: MAIN          SEGMENT:    (GL3)
            DESC: MOD PICTURE - GENERATE FROZEN COPY OF WORKING DAE
            LENGTH:     141     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GLTABLE
            CAN CALL THE FOLLOWING:
               GISUBF    IDISER    DELSF     GISHOW    GIDUP
               ICAN      ICBDAD    IDBDRT

MOISHK      ENTRY CLASS: MAIN          SEGMENT:    (GL3)
            DESC: MOD PICTURE - SHRINK ALL PICKED ELEMENTS ON SCREEN
            LENGTH:      25     LANGUAGE: FTN
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            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GLTABLE
            CAN CALL THE FOLLOWING:
               DRWONE    IGBTYP    MBEAD

MOLAX       ENTRY CLASS: MAIN          SEGMENT:    (GL0)
            DESC: MOD PICTURE - LABEL 3D AXES WITH CHARACTERS X, Y, AND Z
            LENGTH:      53     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               MOAXES
            CAN CALL THE FOLLOWING:
               GUTEXT    UTORAT    GETSIZ

MOPUT       ENTRY CLASS: MAIN          SEGMENT:    (M33)
            DESC: DISPLAY SCALE LIMITS IN USER COORDINATE TERMS
            LENGTH:     130     LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               MOPU
            CAN BE CALLED BY:
               MOREC
            CAN CALL THE FOLLOWING:
               PUTEDT    PLINIT    CNVTOU    IBEAUT

MOPU        ENTRY CLASS: SECONDARY     SEGMENT:    (M33)
            DESC: UNUSED
            SECONDARY ENTRY POINT FOR : MOPUT
            CAN BE CALLED BY:
               DETABLE

MORCNT      ENTRY CLASS: MAIN          SEGMENT:    (GL0)
            DESC: MOD PICTURE - RECENTER DISPLAY FILE AROUND CROSSHAIRS
            LENGTH:      34     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GLTABLE
            CAN CALL THE FOLLOWING:
               GIFETS    SETWZ     GITRAK    ERASEM

MORDRW      ENTRY CLASS: MAIN          SEGMENT:    (GL0)
            DESC: MOD PICTURE - REDRAW ACTIVE BEADS
            LENGTH:      20     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               FRONTVU   SIDEVU    TOPVU     MOFILL    MODRW
               SVIEWP    SROTET
            CAN CALL THE FOLLOWING:
               MOAXET    ERASEN    DRWACT

MOREC       ENTRY CLASS: MAIN          SEGMENT:    (M33)
            DESC: MOD PICTURE - SET RECTANGULAR ENTRY MODE FOR PLOT LIMITS
            LENGTH:      26     LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               MOCYL     MOSPH
            CAN BE CALLED BY:
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            DETABLE  GLTABLE
         CAN CALL THE FOLLOWING:
            MOPUT

MORGUE.  ENTRY CLASS: SECONDARY   SEGMENT:   (S1)
         DESC: (NOT AVAILABLE)
         SECONDARY ENTRY POINT FOR : SYS=1ST
         CAN BE CALLED BY:
            SYS=AID

MOSOS    ENTRY CLASS: MAIN        SEGMENT:   (GL3)
         DESC: MOD PICTURE - DEACTIVATE SPLIT-SCREEN MODE
         LENGTH:     33    LANGUAGE: FTN
         HAS NO SECONDARY ENTRY POINTS
         CAN BE CALLED BY:
            GLTABLE  MOZSRS
         CAN CALL THE FOLLOWING:
            SETWZ    GIDELT   ERASEM

MOSPH    ENTRY CLASS: SECONDARY   SEGMENT:   (M33)
         DESC: MOD PICTURE - SET SPHERICAL COORDINATES ENTRY MODE FOR PLOT LIMIT:
         SECONDARY ENTRY POINT FOR : MOREC
         CAN BE CALLED BY:
            DETABLE  GLTABLE

MOSPLT   ENTRY CLASS: MAIN        SEGMENT:   (GL3)
         DESC: MOD PICTURE - DECREASE THE ZOOM OF ITEM TO FIT NEXT SPLIT ON SCRE:
         LENGTH:     45    LANGUAGE: FTN
         HAS NO SECONDARY ENTRY POINTS
         CAN BE CALLED BY:
            GLTABLE
         CAN CALL THE FOLLOWING:
            SETWZ    GIDAE    ERASEM

MOSSHK   ENTRY CLASS: MAIN        SEGMENT:   (GL3)
         DESC: MOD PICTURE - SET SHRINK MODE
         LENGTH:     13    LANGUAGE: FTN
         SECONDARY ENTRY POINTS:
            MOUSHK
         CAN BE CALLED BY:
            GLTABLE
         THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

MOUSHK   ENTRY CLASS: SECONDARY   SEGMENT:   (GL3)
         DESC: MOD PICTURE - TERMINATE SHRINK MODE
         SECONDARY ENTRY POINT FOR : MOSSHK
         CAN BE CALLED BY:
            GLTABLE  MOASHK

MOVE.RM  ENTRY CLASS: MAIN        SEGMENT:   (S0)
         DESC: (NOT AVAILABLE)
         LENGTH:     64    LANGUAGE: COMPASS
         HAS NO SECONDARY ENTRY POINTS
         CAN BE CALLED BY:
            PUT.SQ   FSU.SQ
         THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS
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MOZCRS      ENTRY CLASS: MAIN          SEGMENT:   (GL0)
            DESC: MOD PICTURE - ZOOM AROUND CROSSHAIRS
            LENGTH:    161    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GLTABLE
            CAN CALL THE FOLLOWING:
               GIFETS    SETWZ     GIALRM    GCDRAW    GITEM
               GIDELT    GITRAK    GUTEXT    GUSETP    ERASEM

MOZMIN      ENTRY CLASS: SECONDARY     SEGMENT:   (GL0)
            DESC: DECREASE ZOOM LEVEL 50 PER CENT
            SECONDARY ENTRY POINT FOR : MOZPLS
            CAN BE CALLED BY:
               GLTABLE

MOZPLS      ENTRY CLASS: MAIN          SEGMENT:   (GL0)
            DESC: MOD PICTURE - ZOOM ONE LEVEL MORE (ENLARGE)
            LENGTH:     24     LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               MOZMIN
            CAN BE CALLED BY:
               GLTABLE
            CAN CALL THE FOLLOWING:
               SETWZ     ERASEM

MOZSRS      ENTRY CLASS: MAIN          SEGMENT:   (GL0)
            DESC: MOD PICTURE - RESTORE ORIGINAL PICTURE
            LENGTH:     15     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GLTABLE
            CAN CALL THE FOLLOWING:
               MOSOS     MOASHK    MOBOTH

MSG=        ENTRY CLASS: SECONDARY     SEGMENT:   (S0)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : SYS.RM
            CAN BE CALLED BY:
               COMPIO    Q8.IO.    FORSYS=   PUT.SQ    ERR.RM
               YIELD=    PERMFIL   REQUEST

MXYI        ENTRY CLASS: MAIN          SEGMENT:   (DE2)
            DESC: INITIALIZE MOVING A NODE BY CROSSHAIRS
            LENGTH:    104     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               MXYP      GETCEN    GIALRM    GCDRAW    GITEM
               GIDELT    GITRAK    GUTEXT    GUSETP    UTORAS

MXYP        ENTRY CLASS: MAIN          SEGMENT:   (DE2)
            DESC: PROCESS THE CROSSHAIR MOVE OF NODE
            LENGTH:    325     LANGUAGE: FTN
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            SECONDARY ENTRY POINTS:
               MXYTP
            CAN BE CALLED BY:
               DETABLE   MXYI
            CAN CALL THE FOLLOWING:
               EUPPNT    CORSHF    RASTOU    GIFETS    DRWONE
               EQUEUP    TRKOFF    GOTOER.   DBOLF     IDBRIT
               IDBUPN    IDBONN    IDBOAD    IDBOLF    IDBUPP
               IDBONP

MXYTP       ENTRY CLASS: SECONDARY   SEGMENT:   (DE2)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : MXYP
            CAN BE CALLED BY:
               EMOVE

MYINIT      ENTRY CLASS: MAIN        SEGMENT:   (PRM1)
            DESC: INITIALIZE MPDB PROCESSING
            LENGTH:    121    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               PRTABLE
            CAN CALL THE FOLLOWING:
               INTSUBM   DEINIT1   IDISER    PERMFIL   IDBLFT
               IDBNAM    DMINIT    RETURN

NAMFNM      ENTRY CLASS: MAIN        SEGMENT:   (S0)
            DESC: CONSTRUCT ATTRIBUTE NAME FROM NUMBER
            LENGTH:     35    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               IEXDEC    GLSTOB    IDEDEC    SELATT    PUTATT
               IDRWAT
            CAN CALL THE FOLLOWING:
               IBEAUT

NEXTB       ENTRY CLASS: SECONDARY   SEGMENT:   (DB2)
            DESC: GET NEXT BEAD
            SECONDARY ENTRY POINT FOR : NEXTIN
            CAN BE CALLED BY:
               PRINCP    EQSTR     ALLON     ASERCH    IENEXT

NEXTIN      ENTRY CLASS: MAIN        SEGMENT:   (DB2)
            DESC: INITIALIZE NEXT BEAD FOR LOOKING ALL PIECES OF DATA BASE
            LENGTH:    133    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               NEXTB
            CAN BE CALLED BY:
               PRINCP    EQSTR     ALLON     ASERCH    IENEXT
            CAN CALL THE FOLLOWING:
               IDBRIT    IDBONN    IDBOLF    IDBORT    IDBONP

NODACT      ENTRY CLASS: SECONDARY   SEGMENT:   (M0)
            DESC: SET NODES AS THE LEVEL TO WORK ON
            SECONDARY ENTRY POINT FOR : STRACT
            CAN BE CALLED BY:
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                DETABLE   PRTABLE

NODAEL      ENTRY CLASS: MAIN          SEGMENT:    (DE3)
            DESC: DRAW ALL NODES OWNED BY ALL ELEMENTS ON SCREEN
            LENGTH:      55    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               IDRW      IDBDNN    IDBDRT    IDBDNP    ACTIVA

NODE        ENTRY CLASS: MAIN          SEGMENT:    (PR2)
            DESC: (NOT AVAILABLE)
            LENGTH:       3    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               PRTABLE
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

NODFEL      ENTRY CLASS: MAIN          SEGMENT:    (DE3)
            DESC: DRAW ALL NODES FOR EACH ELEMENT PICKED BY THE USER
            LENGTH:      44    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               IDRW      IDBDNN    IDBDNP    MBEAD     ACTIVA

NODON       ENTRY CLASS: MAIN          SEGMENT:    (DE3)
            DESC: CHECK IF ANY NODES ARE ACTIVE TO BE CONNECTED
            LENGTH:      12    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               IOISER

NUMBRG      ENTRY CLASS: MAIN          SEGMENT:    (M810)
            DESC: (NOT AVAILABLE)
            LENGTH:      36    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               LABELG    SCAN
            CAN CALL THE FOLLOWING:
               LEGNDG    IBEAUT

NUMFNM      ENTRY CLASS: MAIN          SEGMENT:    (DB0)
            DESC: GENERATE ATTRIBUTE NUMBER FROM NAME
            LENGTH:     107    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               IFATT     ISACT
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

OBJCTG      ENTRY CLASS: MAIN          SEGMENT:    (M8131)
            DESC: SET OBJECT SPACE FOR X-Y PLOT
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            LENGTH:     211     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               CNTOR     SETUPG
            CAN CALL THE FOLLOWING:
               ALOG10.

ONPENA      ENTRY CLASS: SECONDARY    SEGMENT:    (G12)
            DESC: TURN ALL ITEMS OF TYPE ≠IACTYP≠ ON AS STRING PICKS
            SECONDARY ENTRY POINT FOR : ONPEN
            CAN BE CALLED BY:
               TABPEN

ONPENE      ENTRY CLASS: SECONDARY    SEGMENT:    (G12)
            DESC: TURN ONLY ELEMENTS ON AS STRING PICK
            SECONDARY ENTRY POINT FOR : ONPEN
            CAN BE CALLED BY:
               DETABLE

ONPENN      ENTRY CLASS: SECONDARY    SEGMENT:    (G12)
            DESC: TURN ONLY NODES ON AS STRING PICK
            SECONDARY ENTRY POINT FOR : ONPEN
            CAN BE CALLED BY:
               DETABLE   INTSUB

ONPENS      ENTRY CLASS: SECONDARY    SEGMENT:    (G12)
            DESC: TURN ALL ITEMS OF ALL TYPES ON AS STRING PICKS
            SECONDARY ENTRY POINT FOR : ONPEN
            CAN BE CALLED BY:
               GLTABLE

ONPEN       ENTRY CLASS: MAIN         SEGMENT:    (G12)
            DESC: ACTIVATE ITEMS IN ACTIVE TYPE TO LIGHT-PEN
            LENGTH:     100     LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               ONPENE    ONPENN    ONPENA    ONPENS
            CAN BE CALLED BY:
               DETABLE   PRTABLE   BDSTR     EONPD     EONPEN
               RETAIS
            CAN CALL THE FOLLOWING:
               IDISER    SETCAT

OPEN.RM     ENTRY CLASS: MAIN         SEGMENT:    (SQ)
            DESC: (NOT AVAILABLE)
            LENGTH:     237     LANGUAGE: COMPASS
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               FORSYS=   YIELD=
            CAN CALL THE FOLLOWING:
               OSUB.RM   ERR.RM    MCT.RM

OPEN.SQ     ENTRY CLASS: MAIN         SEGMENT:    (SQ)
            DESC: (NOT AVAILABLE)
            LENGTH:     262     LANGUAGE: COMPASS
            SECONDARY ENTRY POINTS:
               OPXX.SQ
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            CAN BE CALLED BY:
               FORSYS=
            CAN CALL THE FOLLOWING:
               OPEX.SQ   ERR.RM   RSPT.SQ   RM.CIO   CHWR.SQ

OPEX.SQ     ENTRY CLASS: MAIN          SEGMENT:   (S0)
            DESC: (NOT AVAILABLE)
            LENGTH:      14    LANGUAGE: COMPASS
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               OPEN.SQ
            CAN CALL THE FOLLOWING:
               OPXX.SQ   ERR.RM   RSPT.SQ   RM.CIO

OPXX.SQ     ENTRY CLASS: SECONDARY     SEGMENT:   (S0)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : OPEN.SQ
            CAN BE CALLED BY:
               OPEX.SQ

OSUB.RM     ENTRY CLASS: MAIN          SEGMENT:   (S0)
            DESC: (NOT AVAILABLE)
            LENGTH:      65    LANGUAGE: COMPASS
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               OPEN.RM
            CAN CALL THE FOLLOWING:
               ERR.RM

OUTBUF      ENTRY CLASS: MAIN          SEGMENT:   (DB0)
            DESC: DATA HANDLER FOR LOW LEVEL OUTPUT ROUTINE
            LENGTH:      17    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DMWRITE   DMFLSH   DMINIT
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

PAGER       ENTRY CLASS: MAIN          SEGMENT:   (M30)
            DESC: WAIT FOR USER TO PICK ERASE OR REDRAW
            LENGTH:      66    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DRIVER   FILATT   TYPNAM   PUTEDT   SELATT
            CAN CALL THE FOLLOWING:
               ERASER   ERASEN   IPICK   GIALRM   GCDRAW

PDUMP       ENTRY CLASS: MAIN          SEGMENT:   (DB0)
            DESC: DATA HANDLER ERROR DUMP
            LENGTH:      24    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DMSTGT
            CAN CALL THE FOLLOWING:
               GFLUSH   PUTLIN

PERMFIL     ENTRY CLASS: MAIN          SEGMENT:   (S1)
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          DESC: PERMANENT FILE FUNCTIONS
          LENGTH:   1177    LANGUAGE: COMPASS
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
             STARTM    EXSTAR    MYINIT    IPFUT
          CAN CALL THE FOLLOWING:
             SYS=      MSG=

PLINIT    ENTRY CLASS: MAIN          SEGMENT:    (M33)
          DESC: SET UP INITIAL VOLUME FOR ELEMENTS SEARCHED
          LENGTH:      13    LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
             DETABLE   PONPEN    MOPUT
          THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

POINTG    ENTRY CLASS: MAIN          SEGMENT:    (M811)
          DESC: DISPLAY A DTA POINT ON AN X-Y PLOT
          LENGTH:      24    LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
             CINGRF
          CAN CALL THE FOLLOWING:
             METAZZ

PONPEN    ENTRY CLASS: MAIN          SEGMENT:    (DE1)
          DESC: SET UP RECTANGLE TO GENERATE DOWN-POINTERS
          LENGTH:     157    LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
             DETABLE
          CAN CALL THE FOLLOWING:
             PORG      CORSHF    RASTOU    GIFETS    PLINIT
             SCALTM    GITEM     GIDELT    GITRAK    GUTEXT
             GUSETP

PORG      ENTRY CLASS: MAIN          SEGMENT:    (DE1)
          DESC: LOOK FOR ELEMENTS LYING WITHIN SQUARE OR VOLUME
          LENGTH:     101    LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
             PONPEN    PTYPE
          CAN CALL THE FOLLOWING:
             GETJOR    IDBFIT    IDBDNN    IDBDNP    DBUPT
             DBDNT

PPINIT    ENTRY CLASS: MAIN          SEGMENT:    (M32)
          DESC: (NOT AVAILABLE)
          LENGTH:      16    LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
             EXTABLE
          CAN CALL THE FOLLOWING:
             STARTM    DEINIT1

PPTABLE   ENTRY CLASS: MAIN          SEGMENT:    (DRIVE)
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            DESC: (NOT AVAILABLE)
            LENGTH:      23    LANGUAGE: COMPASS
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               STARTM   GLINIT
            CAN CALL THE FOLLOWING:
               SWITCHS  IPPDEC   PRINCP   EQSTR    EXINIT

 PRINCP     ENTRY CLASS: MAIN         SEGMENT:   (PP)
            DESC: CALCULATE PRINCIPAL STRESSES
            LENGTH:     172    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               PPTABLE
            CAN CALL THE FOLLOWING:
               PRINC3   ELEACT   ISACT    DBATT    NEXTIN
               NEXT3    DBCHA

 PRINC3     ENTRY CLASS: MAIN         SEGMENT:   (PP)
            DESC: CALCULATE PRINCIPAL VALUES FROM COMPONENTS
            LENGTH:     136    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               PRINCP
            CAN CALL THE FOLLOWING:
               PROOT

 PRINIT     ENTRY CLASS: MAIN         SEGMENT:   (M32)
            DESC: INITIALIZE PRE-PROCESSOR MENU
            LENGTH:      16    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               EXTABLE
            CAN CALL THE FOLLOWING:
               STARTM   DEINIT1

 PROCCHR    ENTRY CLASS: MAIN         SEGMENT:   (DE42)
            DESC: X-Y PLOTS - PROCESS PLOT CHARACTER TYPE-IN
            LENGTH:      12    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

 PROCTIT    ENTRY CLASS: MAIN         SEGMENT:   (DE41)
            DESC: X-Y PLOTS - PROCESS TITLE TYPE-IN
            LENGTH:      14    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

 PROCXA     ENTRY CLASS: MAIN         SEGMENT:   (DE40)
            DESC: MOD PICTURE - PROCESS X-AXIS ATTRIBUTE
            LENGTH:     527    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
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            PROCYA    REPXY     RSCXY     TABRDR
         CAN BE CALLED BY:
            DETABLE   TABIND
         CAN CALL THE FOLLOWING:
            SORTXY    GETDAT    CLPPIC    ACTATT    QIKGRF
            SETSMG    TITLEG    SETUPG    GRIDG     LABELG
            SUBJEG    GIDELT    IDISER    ICCHR

PROCYA   ENTRY CLASS: SECONDARY    SEGMENT:    (DE40)
         DESC: MOD PICTURE - PROCESS Y-AXIS ATTRIBUTE
         SECONDARY ENTRY POINT FOR : PROCXA
         CAN BE CALLED BY:
            DETABLE   TABIND

PROFAC   ENTRY CLASS: MAIN         SEGMENT:    (M33)
         DESC: PROCESS REPEAT FACTOR
         LENGTH:     42    LANGUAGE: FTN
         HAS NO SECONDARY ENTRY POINTS
         CAN BE CALLED BY:
            DETABLE
         CAN CALL THE FOLLOWING:
            PUTEDT    IDISER    ICHKED    COMPAC

PROOT    ENTRY CLASS: MAIN         SEGMENT:    (PP)
         DESC: FIND ROOTS OF REAL POLYNOMIAL
         LENGTH:    500    LANGUAGE: FTN
         HAS NO SECONDARY ENTRY POINTS
         CAN BE CALLED BY:
            PRINC3
         CAN CALL THE FOLLOWING:
            SQRT.

PRTABLE  ENTRY CLASS: MAIN         SEGMENT:    (DRIVE)
         DESC: PRE-PROCESSOR MENU SUBROUTINE SWITCH TABLE
         LENGTH:    123    LANGUAGE: COMPASS
         HAS NO SECONDARY ENTRY POINTS
         CAN BE CALLED BY:
            STARTM    GLINIT
         CAN CALL THE FOLLOWING:
            SWITCHS   IPRDEC    DRAWFR    NODE      GRID
            CHNGP1    CHNGP2    BDSTR     CNCTBD    FIXDAT
            SETLN     SETND     CLROUT    MYINIT    ASUB4
            ASUB5     ASUB7     ASUB7S    DISPLB    ELNAM
            GETRAG    GETFAG1   INTSUB    INTSUB5   INTSUBS
            LIBIN     MATIN     MATINS    LIBINS    LIBINSA
            CLRLIB    EOPEN     ELEACT    NODACT    PUTNAM
            EXINIT    ONPEN

PTYPE    ENTRY CLASS: MAIN         SEGMENT:    (DE1)
         DESC: PROCESS TYPE-IN POINTS, AREA, OR VOLUME
         LENGTH:    100    LANGUAGE: FTN
         HAS NO SECONDARY ENTRY POINTS
         CAN BE CALLED BY:
            DETABLE
         CAN CALL THE FOLLOWING:
            PORG      PUTEDT    IDISER    CNVTOC    ICHKED
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                COMPAC

PUTATT      ENTRY CLASS: MAIN          SEGMENT:    (M33)
            DESC: DISPLAY 1ST GROUP OF ATTRIBUTES ACTIVE ON THIS LEVEL
            LENGTH:     156     LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               PUTAT
            CAN BE CALLED BY:
               DETABLE   EATF
            CAN CALL THE FOLLOWING:
               PUTEDT    IDISER    IALATT    NAMFNM    IGATT
               DBATT

PUTAT       ENTRY CLASS: SECONDARY    SEGMENT:    (M33)
            DESC: IF MORE THAN MAXSCR ACTIVE ATTRIBUTES, DISPLAY THE NEXT BATCH
            SECONDARY ENTRY POINT FOR : PUTATT
            CAN BE CALLED BY:
               EATS      EATF      ESERCH    ASERCH    SSAOFF

PUTEDT      ENTRY CLASS: MAIN          SEGMENT:    (M30)
            DESC: FORMAT TYPE-INS FOR USER
            LENGTH:     377     LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DRIVER    FILNAM    MODRW     SVIEW     SVIEWP
               SROTET    SROTST    CHNGP1    GETRAG    MATIN
               LIBINS    IECPRC    ETYPSV    CNTPRD    RNGDEL
               RNGDRW    PTYPE     EONUM     ELREPL    ELREPP
               EMOVE     DYLOAD    DYSFPU    DYSSTP    ATTPRC
               ATTREN    ATTRNG    ECREAN    ERNDLD    EATS
               EATF      ESERCH    ASERCH    SSAOFF    CNTPRE
               CNTITL    ERASER    TABPRC    TABXYP    TABXYM
               TABSCX    TABSCL    TABDM     PUTLST    MOPUT
               SPSBL     PUTATT    PROFAC    REPFA     QTITLE
            CAN CALL THE FOLLOWING:
               PAGER     GISUBF    GULIN     GCHIGH    GCWIDE
               GITEM     GIDFLT    GUTEXT    GUSETP    ICCHR

PUTLIN      ENTRY CLASS: SECONDARY    SEGMENT:    (S0)
            DESC: PUT LINE OF TEXT TO TERMINAL WITHOUT RECORD MANAGER
            SECONDARY ENTRY POINT FOR : GET.PUT
            CAN BE CALLED BY:
               GLCLOK    GLHIST    GLLUP     GLLDN     GLSTDB
               GLSTDS    GLDEFP    GLDEFS    CNTABL    CNTOR
               CONHUL    TMESH2    HOLD      DMP       GIERR
               PDUMP

PUTLST      ENTRY CLASS: MAIN          SEGMENT:    (M31)
            DESC: PUT UP #SET# TYPE-IN FOR NODE AND ELEMENT RANGES
            LENGTH:     51     LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               PUTLS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               PUTEDT    IBEAUT
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PUTLS      ENTRY CLASS: SECONDARY   SEGMENT:   (M31)
           DESC: RE-DISPLAY ERRONEOUS NODE AND ELEMENT TYPE-INS
           SECONDARY ENTRY POINT FOR : PUTLST
           CAN BE CALLED BY:
              GETRAG   ETYPSV   RNGDEL   RNGDRW   EQNUM
              ERNDLD

PUTNAM     ENTRY CLASS: MAIN        SEGMENT:   (M31)
           DESC: PUT UP FIRST GROUP OF NAMES OF CROSSHAIR PICK
           LENGTH:    105    LANGUAGE: FTN
           SECONDARY ENTRY POINTS:
              PUTNM    PUTNMM
           CAN BE CALLED BY:
              DETABLE  PRTABLE
           CAN CALL THE FOLLOWING:
              TYPNAM   IOBFIT

PUTNMM     ENTRY CLASS: SECONDARY   SEGMENT:   (M31)
           DESC: PUT UP ALL BUT THE LAST BEAD (FOR MERGING)
           SECONDARY ENTRY POINT FOR : PUTNAM
           CAN BE CALLED BY:
              DETABLE

PUTNM      ENTRY CLASS: SECONDARY   SEGMENT:   (M31)
           DESC: PUT UP NEXT GROUP OF NAMES OF CROSSHAIR PICK
           SECONDARY ENTRY POINT FOR : PUTNAM
           CAN BE CALLED BY:
              ASUB4    ASUBS    EMERG    EACTPN   EQPEN

PUT.C      ENTRY CLASS: SECONDARY   SEGMENT:   (S0)
           DESC: (NOT AVAILABLE)
           SECONDARY ENTRY POINT FOR : BTRT.SQ
           CAN BE CALLED BY:
              FCL.C.

PUT.SQ     ENTRY CLASS: MAIN        SEGMENT:   (S0)
           DESC: (NOT AVAILABLE)
           LENGTH:   1403    LANGUAGE: COMPASS
           HAS NO SECONDARY ENTRY POINTS
           CAN BE CALLED BY:
              FORSYS=
           CAN CALL THE FOLLOWING:
              REW.SQ   WEOP.SQ  ERR.RM   RM.CIO   RM.RCLA
              RM.RCLP  CHWR.SQ  CLSV.SQ  MOVE.RM  WAR.SQ
              RLEQ.RM  WNB=     MSG=

QIKGRF     ENTRY CLASS: MAIN        SEGMENT:   (M810)
           DESC: (NOT AVAILABLE)
           LENGTH:     70    LANGUAGE: FTN
           HAS NO SECONDARY ENTRY POINTS
           CAN BE CALLED BY:
              PROCXA
           CAN CALL THE FOLLOWING:
              METAZZ   LINESG   SETSMG   POINTG
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QTITLE      ENTRY CLASS: MAIN          SEGMENT:   (M33)
            DESC: X-Y PLOTS - DISPLAY OLD X- AND Y-AXIS AND GRAPH TITLES
            LENGTH:      34    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               OFTABLE
            CAN CALL THE FOLLOWING:
               PUTEDT

Q8NTRY=     ENTRY CLASS: MAIN          SEGMENT:   (S0)
            DESC: FCL INITIALIZATION ROUTINE.
            LENGTH:       3    LANGUAGE: COMPASS
            SECONDARY ENTRY POINTS:
               Q8NTRY.
            THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

Q8NTRY.     ENTRY CLASS: SECONDARY     SEGMENT:   (S0)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : Q8NTRY=
            CAN BE CALLED BY:
               DRIVER

RASTOU      ENTRY CLASS: MAIN          SEGMENT:   (M1)
            DESC: SCALING - CONVERT RASTERS TO USER UNITS
            LENGTH:      23    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               FIXDAT   PONPEN   MXYP
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

RCOVER      ENTRY CLASS: MAIN          SEGMENT:   (DRIVE)
            DESC: ERROR RECOVERY TRAP ROUTINE
            LENGTH:      72    LANGUAGE: COMPASS
            SECONDARY ENTRY POINTS:
               MARK     EXITT
            THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
            CAN CALL THE FOLLOWING:
               EXIT     HOLD

REACT       ENTRY CLASS: MAIN          SEGMENT:   (MEN1)
            DESC: (NOT AVAILABLE)
            LENGTH:     115    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               EXSTAR   GLCHCK
            CAN CALL THE FOLLOWING:
               GRDNIT   D8DRT    ID8DLF   DBINIT

READR       ENTRY CLASS: MAIN          SEGMENT:   (DB0)
            DESC: (NOT AVAILABLE)
            LENGTH:                    LANGUAGE: COMPASS
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DMREAD   DMINIT
            CAN CALL THE FOLLOWING:
```

```
            CPC

REPFA       ENTRY CLASS: MAIN          SEGMENT:   (M33)
            DESC: X-Y PLOTS - DISPLAY REPEAT FACTOR FOR X-Y PLOT LONE
            LENGTH:     23    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               PUTEOT    IBEAUT

REPXY       ENTRY CLASS: SECONDARY   SEGMENT:   (DE40)
            DESC: X-Y PLOTS - REPLOTS X-Y PLOT
            SECONDARY ENTRY POINT FOR : PROCXA
            CAN BE CALLED BY:
               DETABLE

REQUEST     ENTRY CLASS: MAIN          SEGMENT:   (S1)
            DESC: FTN-CALLABLE EQUIPMENT REQUEST PROCESSOR
            LENGTH:    423    LANGUAGE: COMPASS
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               FILATT    GLCHCK    CNNEW    GINIT
            CAN CALL THE FOLLOWING:
               SYS=      MSG=

RESTART     ENTRY CLASS: MAIN          SEGMENT:   (M5)
            DESC: FLUSH APPROPRIATE INFO NEEDED TO RESTART APPLICATION
            LENGTH:    344    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               EXSTAR    GLCHCK    CNTERM
            CAN CALL THE FOLLOWING:
               DMGTBD    DMSET     DMGET     DBDRT     IDBDLF
               DMFLSH

RETAIN      ENTRY CLASS: MAIN          SEGMENT:   (DE2)
            DESC: DEACTIVATE ALL BEADS EXCEPT THOSE THAT ARE PICKED
            LENGTH:     54    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               DELETE    IDBDRT    MBEAD

RETAIS      ENTRY CLASS: MAIN          SEGMENT:   (DE2)
            DESC: INITIALIZE THE ≠RETAIN≠ PROCESS
            LENGTH:     10    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               ONPEN

RETURN      ENTRY CLASS: MAIN          SEGMENT:   (DB1)
            DESC: FTN-CALLABLE FILE RETURN/UNLOAD
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            LENGTH:      70    LANGUAGE: COMPASS
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               STARTM    EXSTAR    FILATT    GLCHCK    DRAWFR
               CLROUT    CANEW     MYINIT    GINIT     OBINIT
            CAN CALL THE FOLLOWING:
               CLSF.RM   SYS=

REW.SQ      ENTRY CLASS: MAIN          SEGMENT:    (SO)
            DESC: (NOT AVAILABLE)
            LENGTH:      33    LANGUAGE: COMPASS
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               PUT.SQ
            CAN CALL THE FOLLOWING:
               ERR.RM    RSPT.SQ   RM.CIO

RFILEB      ENTRY CLASS: MAIN          SEGMENT:    (OB1)
            DESC: (NOT AVAILABLE)
            LENGTH:      35    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               OMINIT
            CAN CALL THE FOLLOWING:
               ITOJ.

RLEQ.RM     ENTRY CLASS: MAIN          SEGMENT:    (SO)
            DESC: (NOT AVAILABLE)
            LENGTH:      42    LANGUAGE: COMPASS
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               PUT.SQ    WAR.SQ
            CAN CALL THE FOLLOWING:
               ERR.RM

RMU0.SQ     ENTRY CLASS: SECONDARY     SEGMENT:    (SO)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : FSU.SQ
            CAN BE CALLED BY:
               GET.SQ

RMU2.SQ     ENTRY CLASS: SECONDARY     SEGMENT:    (SO)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : FSU.SQ
            CAN BE CALLED BY:
               GET.SQ

RM.CIO      ENTRY CLASS: SECONDARY     SEGMENT:    (SO)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : CIO.RM
            CAN BE CALLED BY:
               OPEN.SQ   OPEX.SQ   GET.SQ   PUT.SQ    REW.SQ
               WEOX.SQ   ERR.RM    CLSF.SQ   CLSV.SQ   WAR.SQ

RM.RCLA     ENTRY CLASS: SECONDARY     SEGMENT:    (SO)
            DESC: (NOT AVAILABLE)
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            SECONDARY ENTRY POINT FOR : CIO.RM
            CAN BE CALLED BY:
               GET.SQ   BTRT.SQ  PUT.SQ   ERR.RM   CLSF.SQ
               WAR.SQ

RM.RCLP     ENTRY CLASS: SECONDARY   SEGMENT:   (S0)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : CIO.RM
            CAN BE CALLED BY:
               GET.SQ   PUT.SQ

RNGDEL      ENTRY CLASS: MAIN        SEGMENT:   (DE1)
            DESC: DELETE ALL NODES AND ELEMENTS RANGES
            LENGTH:    101    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               ICKRNG   PUTEDT   PUTLS    IDISER   DELETE
               ICHKED   COMPAC   IDBRIT

RNGDRW      ENTRY CLASS: MAIN        SEGMENT:   (DE1)
            DESC: DISPLAY NODES AND ELEMENTS IN TYPE-IN RANGE
            LENGTH:    107    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               ICKRNG   PUTEDT   PUTLS    IDRW     IDISER
               ICHKED   COMPAC   IDBRIT   ACTIVA

RSCXY       ENTRY CLASS: SECONDARY   SEGMENT:   (DE40)
            DESC: X-Y PLOTS - RESCALE ON X-Y PLOT TO ABSOLUTE MINS AND MAXES
            SECONDARY ENTRY POINT FOR : PROCXA
            CAN BE CALLED BY:
               DETABLE

RSETMG      ENTRY CLASS: MAIN        SEGMENT:   (M810)
            DESC: 4060/IGS - INITS MODE ARRAY AND SCALING INTERFACE W/ INTERTEK
            LENGTH:    214    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               CNTINT   INITXY
            CAN CALL THE FOLLOWING:
               SCALST

RSPT.SQ     ENTRY CLASS: SECONDARY   SEGMENT:   (S0)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : CLSF.SQ
            CAN BE CALLED BY:
               OPEN.SQ  OPEX.SQ  GET.SQ   REW.SQ   CLSV.SQ

RWRITER     ENTRY CLASS: MAIN        SEGMENT:   (DB0)
            DESC: (NOT AVAILABLE)
            LENGTH:     11    LANGUAGE: COMPASS
            HAS NO SECONDARY ENTRY POINTS
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            CAN BE CALLED BY:
               DMWRITE  DMFLSH
            CAN CALL THE FOLLOWING:
               CPC

RWRITE      ENTRY CLASS: MAIN          SEGMENT:   (DB0)
            DESC: (NOT AVAILABLE)
            LENGTH:      6    LANGUAGE: COMPASS
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DMWRITE
            CAN CALL THE FOLLOWING:
               CPC

SCALST      ENTRY CLASS: MAIN          SEGMENT:   (S0)
            DESC: SCALING - SET UP SCALE FACTORS
            LENGTH:     70    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               MOFILL   MODRW    SET1     RSETMG
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

SCALZZ      ENTRY CLASS: MAIN          SEGMENT:   (M810)
            DESC: (NOT AVAILABLE)
            LENGTH:     66    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               METAZZ   LINZZ
            CAN CALL THE FOLLOWING:
               ALOG10.

SCAN        ENTRY CLASS: MAIN          SEGMENT:   (M8141)
            DESC: CONTOUR - TRACE THRU TRIANGULAR GRID TO EXTEND CONTOUR LINE
            LENGTH:    465    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               CNTOR
            CAN CALL THE FOLLOWING:
               LINESG   NUMBRG

SEGMTG      ENTRY CLASS: MAIN          SEGMENT:   (M8120)
            DESC: DRAW GROUP OF LINE SEGMENTS
            LENGTH:     27    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GRIDG    LABELG
            CAN CALL THE FOLLOWING:
               METAZZ

SELATC1     ENTRY CLASS: SECONDARY     SEGMENT:   (M30)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : SELATT
            CAN BE CALLED BY:
               ERASER

SELATC      ENTRY CLASS: SECONDARY     SEGMENT:   (M30)
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            DESC: DISPLAY NEXT BATCH OF ATTRIBUTE NAMES
            SECONDARY ENTRY POINT FOR : SELATT
            CAN BE CALLED BY:
               ACTATT

SELATT      ENTRY CLASS: MAIN          SEGMENT:   (M30)
            DESC: DISPLAY ATTRIBUTE NAMES FOR PICKING
            LENGTH:     362    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               SELATC   SELATC1   SELAT1
            CAN BE CALLED BY:
               DETABLE   ERASER
            CAN CALL THE FOLLOWING:
               PAGER    GISUBF    GITEM     GIDELT    IDISER
               SETCAT   GUTEXT    GUSETP    ICCHR     NAMFNM
               IGATT

SELAT1      ENTRY CLASS: SECONDARY    SEGMENT:   (M30)
            DESC: DISPLAY ATTRIBUTE NAMES FOR PICKING WITHOUT ≠DELETE ATTRIBUTE≠
            SECONDARY ENTRY POINT FOR : SELATT
            CAN BE CALLED BY:
               DETABLE   ERASER

SETCAT      ENTRY CLASS: MAIN          SEGMENT:   (G12)
            DESC: SET CATEGORIES FOR CROSSHAIR PICKS
            LENGTH:      20    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GLINIT   ATTLST   TYPNAM   SELATT   TABACX
               TABPRC   ONPEN
            CAN CALL THE FOLLOWING:
               GICAT

SETFETR     ENTRY CLASS: MAIN          SEGMENT:   (DB1)
            DESC: (NOT AVAILABLE)
            LENGTH:      31    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               CLRFETR
            CAN BE CALLED BY:
               DMFLSH   DMINIT
            CAN CALL THE FOLLOWING:
               ITOJ.

SETLN       ENTRY CLASS: MAIN          SEGMENT:   (PR2)
            DESC: SET LINE MODE IN DRAFTING
            LENGTH:       5    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               PRTABLE  BDSTR    FIXDAT
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

SETND       ENTRY CLASS: MAIN          SEGMENT:   (PR2)
            DESC: SET NODE MODE IN DRAFTING
            LENGTH:       4    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
```

```
            PRTABLE  DRAWER   BDSTR    FIXDAT
          THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

SETPRAP   ENTRY CLASS: MAIN          SEGMENT:   (DB0)
          DESC: (NOT AVAILABLE)
          LENGTH:      6    LANGUAGE: COMPASS
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
            DMRLBD
          THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

SETSMG    ENTRY CLASS: MAIN          SEGMENT:   (M810)
          DESC: 4060/IGS -
          LENGTH:    275    LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
            PROCXA   INTFLG   QIKGRF   TITLEG   GRIDG
            LABELG
          CAN CALL THE FOLLOWING:
            ALOG10.  XTOY.

SETUPG    ENTRY CLASS: MAIN          SEGMENT:   (M8130)
          DESC: SET UP GRID SPACE FOR X-Y PLOT OR CONTOUR PLOT
          LENGTH:    251    LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
            PROCXA
          CAN CALL THE FOLLOWING:
            OBJCTG   SUBJEG   GOTOER.  ITOJ.    ALOG10.

SETVU     ENTRY CLASS: MAIN          SEGMENT:   (G13)
          DESC: MOD PICTURE - CALCULATE NEW PERSPECTIVE VIEW
          LENGTH:    260    LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
            FRONTVU  SIDEVU   TOPVU    SVIEWP   SROTET
            GRFNIT   INIT2D   INIT3N
          CAN CALL THE FOLLOWING:
            GC3DA    SQRT.    COS.     SIN.

SETWZ     ENTRY CLASS: MAIN          SEGMENT:   (M5)
          DESC: MOD PICTURE - RESET THE VIRTUAL WINDOW AND PICTURE LIMITS TO EXIS
          LENGTH:    136    LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
            MORCNT   MOZCRS   MOZPLS   MOSPLT   MOSOS
            CLRPIC   MOBOTH
          CAN CALL THE FOLLOWING:
            GIZOOM   GOTOER.

SET1      ENTRY CLASS: MAIN          SEGMENT:   (M5)
          DESC: SCALING - GET THE DISPLAY SPACE FOR THE MODEL FROM A SUBSTRUCTURE
          LENGTH:     37    LANGUAGE: FTN
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
            CLRPIC
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            CAN CALL THE FOLLOWING:
               SCALST   GETLIM

SHELL       ENTRY CLASS: MAIN          SEGMENT:   (M8141)
            DESC: A SHELL SORT INCREASING X AND DECREASING Y
            LENGTH:     64    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GETCNT
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

SIDEVU      ENTRY CLASS: MAIN          SEGMENT:   (GL3)
            DESC: MOD PICTURE - SET Y-Z PLANE
            LENGTH:     13    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GLTABLE
            CAN CALL THE FOLLOWING:
               MORORW   SETVU

SINCOS=     ENTRY CLASS: MAIN          SEGMENT:   (S0)
            DESC: TRIGONOMETRIC SINE OR COSINE OF X. OPT=ALL.
            LENGTH:     66    LANGUAGE: COMPASS
            SECONDARY ENTRY POINTS:
               COS.     SIN.
            THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
            CAN CALL THE FOLLOWING:
               SYS1ST.

SIN.        ENTRY CLASS: SECONDARY     SEGMENT:   (S0)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : SINCOS=
            CAN BE CALLED BY:
               SROTET   SETVU    GC30A    CNVTOC

SKFL.SQ     ENTRY CLASS: MAIN          SEGMENT:   (S0)
            DESC: (NOT AVAILABLE)
            LENGTH:     51    LANGUAGE: COMPASS
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               FORSYS=
            CAN CALL THE FOLLOWING:
               SKGT.SQ  DXIT.SQ  ERR.RM

SKGT.SQ     ENTRY CLASS: SECONDARY     SEGMENT:   (S0)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : GET.SQ
            CAN BE CALLED BY:
               SKFL.SQ

SORTXY      ENTRY CLASS: MAIN          SEGMENT:   (DE40)
            DESC: X-Y PLOTS - SORT X- OR Y- DATA
            LENGTH:     75    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               PROCXA
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            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

SPCHK       ENTRY CLASS: MAIN          SEGMENT:    (OB3)
            DESC: (NOT AVAILABLE)
            LENGTH:      47    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
            CAN CALL THE FOLLOWING:
               IOBFND

SPSBLC      ENTRY CLASS: SECONDARY     SEGMENT:    (M33)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : SPSBL
            CAN BE CALLED BY:
               DETABLE

SPSBL       ENTRY CLASS: MAIN          SEGMENT:    (M33)
            DESC: X-Y PLOTS - SET UP TYPE-IN OF NEW PLOT SYMBOL
            LENGTH:      35    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               SPSBLC
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               PUTEDT

SQRT        ENTRY CLASS: MAIN          SEGMENT:    (S0)
            DESC: COMPUTE THE SQUARE ROOT OF X. OPT=ALL.
            LENGTH:      43    LANGUAGE: COMPASS
            SECONDARY ENTRY POINTS:
               SQRT.
            THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
            CAN CALL THE FOLLOWING:
               SYS1ST.

SQRT.       ENTRY CLASS: SECONDARY     SEGMENT:    (S0)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : SQRT
            CAN BE CALLED BY:
               EQSTR     PROOT     STEST     ARROW     IARSET
               TMESH2    GCWORK    SETVU     GC3DA     CNVTOU

SROTET      ENTRY CLASS: MAIN          SEGMENT:    (GL4)
            DESC: MOD PICTURE - ROTATE IMAGE FROM HOST
            LENGTH:     221    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GL1ABLE
            CAN CALL THE FOLLOWING:
               MORDRW    PUTEDT    IDISER    SETVU     GCMAT
               COS.      SIN.      ICHKED    COMPAC

SROTST      ENTRY CLASS: MAIN          SEGMENT:    (GL4)
            DESC: MOD PICTURE - PUT CURRENT ROTATION ANGLES AND ASK FOR INCREMENTS
            LENGTH:      37    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
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            CAN BE CALLED BY:
               GLTABLE
            CAN CALL THE FOLLOWING:
               PUTEDT    IBEAUT

SSAOFF      ENTRY CLASS: MAIN          SEGMENT:    (DE7)
            DESC: DEACTIVATE ACTIVE BEADS ON A LEVEL
            LENGTH:     103    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               ELNCHK    PUTEDT    PUTAT     IDISER    DELETE
               ICHKED    COMPAC    IDBORT    ICKATT

SSOFF       ENTRY CLASS: MAIN          SEGMENT:    (M31)
            DESC: DEACTIVATE PICKED BEAD
            LENGTH:      22    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               DACTS     DELETE    MBEAD

SSTACT      ENTRY CLASS: SECONDARY     SEGMENT:    (M0)
            DESC: SET SUBSTRUCTURES AS THE LEVEL TO WORK ON
            SECONDARY ENTRY POINT FOR : STRACT
            CAN BE CALLED BY:
               DETABLE

STARTA      ENTRY CLASS: SECONDARY     SEGMENT:    (DRIVE)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : STARTM
            CAN BE CALLED BY:
               EXSTAR

STARTM      ENTRY CLASS: MAIN          SEGMENT:    (DRIVE)
            DESC: START UP THE MENU ON THE SPECIFIED LOCAL FILE NAME
            LENGTH:     233    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               STARTA
            CAN BE CALLED BY:
               EXINIT    DEINIT    PRINIT    PPINIT    MENNIT
            CAN CALL THE FOLLOWING:
               EXTABLE   DETABLE   PRTABLE   PPTABLE   ERASER
               ICCHR     PERMFIL   IGFTR     DMINIT    RETURN

STEST       ENTRY CLASS: MAIN          SEGMENT:    (M8140)
            DESC: CONTOURING PACKAGE CRITERIA TESTER
            LENGTH:     317    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               TMESH3    TMESH2
            CAN CALL THE FOLLOWING:
               SQRT.
```

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STOP.       ENTRY CLASS: SECONDARY   SEGMENT:   (SD)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : FORSYS=
            CAN BE CALLED BY:
               DRIVER   EXSTAR   GLSTOP

STRACT      ENTRY CLASS: MAIN        SEGMENT:   (MD)
            DESC: SET STRUCTURES AS THE LEVEL TO WORK ON
            LENGTH:     23    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               SSTACT   ELEACT   NODACT
            CAN BE CALLED BY:
               DETABLE
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

SUBJEG      ENTRY CLASS: MAIN        SEGMENT:   (M8132)
            DESC: SET SUBJECT SPACE FOR X-Y PLOT OR CONTOUR PLOT
            LENGTH:    122    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               CNTOR    PROCXA   SETUPG
            CAN CALL THE FOLLOWING:
               ALOG10.

SVIEWP      ENTRY CLASS: MAIN        SEGMENT:   (GL3)
            DESC: PROCESS VIEW TYPE-IN
            LENGTH:    203    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GLTABLE
            CAN CALL THE FOLLOWING:
               MORDRW   PUTEDT   IDISER   SETVU    ICHKED
               COMPAC   COMPACS

SVIEW       ENTRY CLASS: MAIN        SEGMENT:   (GL3)
            DESC: DISPLAY VIEW TYPE-IN VALUES
            LENGTH:     65    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               GLTABLE
            CAN CALL THE FOLLOWING:
               PUTEDT   IBEAUT

SWITCHS     ENTRY CLASS: SECONDARY   SEGMENT:   (DRIVE)
            DESC: SAVE ADDRESS OF SUBROUTINE TABLE AND DECISION FUNCTION
            SECONDARY ENTRY POINT FOR : SWITCH
            CAN BE CALLED BY:
               EXTABLE  DETABLE  PRTABLE  PPTABLE  GLTABLE
               GLINIT

SWITCH      ENTRY CLASS: MAIN        SEGMENT:   (DRIVE)
            DESC: CALL SUBROUTINE SPECIFIED IN COMMAND TREE
            LENGTH:     20    LANGUAGE: COMPASS
            SECONDARY ENTRY POINTS:
               SWITCHS  ISWTCHD
            CAN BE CALLED BY:
```

```
            DRIVER
          THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

SYSAID=   ENTRY CLASS: MAIN        SEGMENT:   (S0)
          DESC: LINK BETWEEN SYS=AID AND INITIALIZATION CODE.
          LENGTH:      1    LANGUAGE: COMPASS
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
            Q8.IO.   SYS=1ST
          THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

SYSAID.   ENTRY CLASS: SECONDARY   SEGMENT:   (G13)
          DESC: (NOT AVAILABLE)
          SECONDARY ENTRY POINT FOR : SYS=AID
          CAN BE CALLED BY:
            ATAN2

SYSEND.   ENTRY CLASS: SECONDARY   SEGMENT:   (S0)
          DESC: (NOT AVAILABLE)
          SECONDARY ENTRY POINT FOR : FORSYS=
          CAN BE CALLED BY:
            SYSTEM

SYSERR.   ENTRY CLASS: SECONDARY   SEGMENT:   (S0)
          DESC: (NOT AVAILABLE)
          SECONDARY ENTRY POINT FOR : FORSYS=
          CAN BE CALLED BY:
            Q8.IO.   GOTOER=   SYSTEM

SYSE3.    ENTRY CLASS: SECONDARY   SEGMENT:   (S0)
          DESC: (NOT AVAILABLE)
          SECONDARY ENTRY POINT FOR : FORSYS=
          CAN BE CALLED BY:
            SYSTEM

SYSTEM    ENTRY CLASS: MAIN        SEGMENT:   (DB0)
          DESC: USER CALLABLE ERROR PROCESSOR.
          LENGTH:     21    LANGUAGE: COMPASS
          HAS NO SECONDARY ENTRY POINTS
          CAN BE CALLED BY:
            DMGTBD   DMRLBD   DMSTGT   DMINIT
          CAN CALL THE FOLLOWING:
            SYSEND.  SYSE3.   SYSERR.  WEOS.SQ

SYS1ST.   ENTRY CLASS: SECONDARY   SEGMENT:   (S1)
          DESC: (NOT AVAILABLE)
          SECONDARY ENTRY POINT FOR : SYS=1ST
          CAN BE CALLED BY:
            ACOSIN=  SYS=AID  SQRT     SINCOS=  ALOG
            EXP

SYS=AID   ENTRY CLASS: MAIN        SEGMENT:   (G13)
          DESC: AUXILIARY MATH LIBRARY LINK FOR ERRORS.
          LENGTH:      7    LANGUAGE: COMPASS
          SECONDARY ENTRY POINTS:
            SYSAID.
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            THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
            CAN CALL THE FOLLOWING:
               SYS1ST.  MORGUE.

SYS=1ST     ENTRY CLASS: MAIN          SEGMENT:   (S1)
            DESC: MATH LIBRARY LINK TO ERROR MESSAGE PROCESSOR.
            LENGTH:     62    LANGUAGE: COMPASS
            SECONDARY ENTRY POINTS:
               SYS1ST.  MORGUE.
            THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
            CAN CALL THE FOLLOWING:
               SYSAID=

SYS=        ENTRY CLASS: SECONDARY   SEGMENT:   (S0)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : SYS.RM
            CAN BE CALLED BY:
               COMPIO    QB.IO.    FORSYS=  ERR.RM    YIELD=
               COPYFL    PERMFIL   CLOCK=   REQUEST   RETURN

SYS.RM      ENTRY CLASS: MAIN          SEGMENT:   (S0)
            DESC: PROCESS SYSTEM REQUEST.
            LENGTH:     40    LANGUAGE: COMPASS
            SECONDARY ENTRY POINTS:
               SYS=      WNB=      MSG=
            THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

TABACT      ENTRY CLASS: MAIN          SEGMENT:   (M31)
            DESC: X-Y PLOTS - ACTIVATE TABLES FOR X-Y PLOT
            LENGTH:     53    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               IDISER    DEBRT     IDBRIT    ACTIVA    IDBFTY

TABACX      ENTRY CLASS: MAIN          SEGMENT:   (M31)
            DESC: X-Y PLOTS - GET TABLE FOR Y-AXIS
            LENGTH:     23    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               TABACY
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               DACTSN    SETCAT

TABACY      ENTRY CLASS: SECONDARY   SEGMENT:   (M31)
            DESC: X-Y PLOTS - GET TABLE FOR X-AXIS
            SECONDARY ENTRY POINT FOR : TABACX
            CAN BE CALLED BY:
               DETABLE

TABDEL      ENTRY CLASS: MAIN          SEGMENT:   (DE42)
            DESC: X-Y PLOTS - DELETE CURVE FROM X-Y PLOT
            LENGTH:    124    LANGUAGE: FTN
```

```
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               TABRDR   CLRPIC   GIDELT

TABOM       ENTRY CLASS: MAIN          SEGMENT:   (M31)
            DESC: X-Y PLOTS - PROCESS TYPE-IN FOR PART OF TABLE TO PLOT
            LENGTH:     107    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               PUTEDT   IDISER   ICHKED   COMPAC

TABIND      ENTRY CLASS: MAIN          SEGMENT:   (DE41)
            DESC: X-Y PLOTS - USE INDEX OF TABLE ON AXIS
            LENGTH:      16    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE  TABVAL
            CAN CALL THE FOLLOWING:
               PROCXA   PROCYA

TABLIN      ENTRY CLASS: MAIN          SEGMENT:   (DE41)
            DESC: X-Y PLOTS - PROCESS PICK OF CURVE ON X-Y PLOT
            LENGTH:      20    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

TABPEN      ENTRY CLASS: MAIN          SEGMENT:   (G12)
            DESC: X-Y PLOTS - ACTIVATE LINES ON GRAPH FOR PICK
            LENGTH:      10    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               ONPENA

TABPRC      ENTRY CLASS: MAIN          SEGMENT:   (M31)
            DESC: X-Y PLOTS - PROCESS TABLE NAME AND DISPLAY DIMENSIONALITY OF TABL
            LENGTH:     147    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               PUTEDT   DACTS    IDISER   SETCAT   IBEAUT
               MBEAD    IDBROW   IDBCOL   IDBDEP   IDBNDM

TABRDR      ENTRY CLASS: SECONDARY     SEGMENT:   (DE40)
            DESC: X-Y PLOTS - REDRAW ONE LINE ON GRAPH
            SECONDARY ENTRY POINT FOR : PROCXA
            CAN BE CALLED BY:
               DETABLE  TABDEL
```

```
TABSCL      ENTRY CLASS: MAIN          SEGMENT:    (M31)
            DESC: X-Y PLOTS - PROCESS SCALE/OFFSET TYPE-IN
            LENGTH:      56    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               PUTEDT    IDISER    ICHKED    COMPAC

TABSCX      ENTRY CLASS: MAIN          SEGMENT:    (M31)
            DESC: X-Y PLOTS - PUT UP CURRENT LINE SCALE/OFFSET (X-AXIS)
            LENGTH:      53    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               TABSCY
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               PUTEDT    IBEAUT

TABSCY      ENTRY CLASS: SECONDARY     SEGMENT:    (M31)
            DESC: X-Y PLOTS - PUT UP CURRENT LINE SCALE/OFFSET (Y-AXIS)
            SECONDARY ENTRY POINT FOR : TABSCX
            CAN BE CALLED BY:
               DETABLE

TABVAL      ENTRY CLASS: MAIN          SEGMENT:    (DE41)
            DESC: X-Y PLOTS - USE VALUE OF TABLE ON AXIS
            LENGTH:      15    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               TABIND

TABXD       ENTRY CLASS: SECONDARY     SEGMENT:    (M31)
            DESC: X-Y PLOTS - SORT X DECREASING
            SECONDARY ENTRY POINT FOR : TABXI
            CAN BE CALLED BY:
               DETABLE

TABXI       ENTRY CLASS: MAIN          SEGMENT:    (M31)
            DESC: X-Y PLOTS - SORT X INCREASING
            LENGTH:      37    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               TABYI     TABXD     TABYD     TABXN     TABYN
            CAN BE CALLED BY:
               DETABLE
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

TABXN       ENTRY CLASS: SECONDARY     SEGMENT:    (M31)
            DESC: X-Y PLOTS - DO NOT SORT X
            SECONDARY ENTRY POINT FOR : TABXI
            CAN BE CALLED BY:
               DETABLE
```

```
TABXYM      ENTRY CLASS: MAIN          SEGMENT:    (M31)
            DESC: X-Y PLOTS - PUT UP CURRENT MINS AND MAXES FOR X-Y PLOT
            LENGTH:      44    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               PUTEDT    IBEAUT

TABXYP      ENTRY CLASS: MAIN          SEGMENT:    (M31)
            DESC: X-Y PLOTS - PROCESS TYPE-IN OF NEW MINS AND MAXES
            LENGTH:      73    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DETABLE
            CAN CALL THE FOLLOWING:
               PUTEDT    IDISER    ICHKED    COMPAC    COMPACS

TABYD       ENTRY CLASS: SECONDARY     SEGMENT:    (M31)
            DESC: X-Y PLOTS - SORT Y DECREASING
            SECONDARY ENTRY POINT FOR : TABXI
            CAN BE CALLED BY:
               DETABLE

TABYI       ENTRY CLASS: SECONDARY     SEGMENT:    (M31)
            DESC: X-Y PLOTS - SORT Y INCREASING
            SECONDARY ENTRY POINT FOR : TABXI
            CAN BE CALLED BY:
               DETABLE

TABYN       ENTRY CLASS: SECONDARY     SEGMENT:    (M31)
            DESC: X-Y PLOTS - DO NOT SORT Y
            SECONDARY ENTRY POINT FOR : TABXI
            CAN BE CALLED BY:
               DETABLE

TIME        ENTRY CLASS: SECONDARY     SEGMENT:    (S1)
            DESC: RETURN CURRENT CLOCK TIME
            SECONDARY ENTRY POINT FOR : CLOCK=
            CAN BE CALLED BY:
               EXSTAR

TITLEG      ENTRY CLASS: MAIN          SEGMENT:    (M811)
            DESC: CREATE TITLE FOR X-Y PLOT OR CONTOUR PLOT
            LENGTH:     252    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               PROCXA
            CAN CALL THE FOLLOWING:
               LEGNDG    SETSMG

TMESH2      ENTRY CLASS: MAIN          SEGMENT:    (M8142)
            DESC: CONTOUR - CREATE TRIANGULAR MESH OVER CONVEX HULL
            LENGTH:    1057    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
```

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            CNTOR
         CAN CALL THE FOLLOWING:
            LTEST    STEST    PUTLIN   SQRT.

TMESH3   ENTRY CLASS: MAIN        SEGMENT:   (M8141)
         DESC: CONTOUR - ITERATIVELY IMPROVE TRIANGULATION
         LENGTH:     64    LANGUAGE: FTN
         HAS NO SECONDARY ENTRY POINTS
         CAN BE CALLED BY:
            CNTOR
         CAN CALL THE FOLLOWING:
            STEST

TOPVU    ENTRY CLASS: MAIN        SEGMENT:   (GL3)
         DESC: MOD PICTURE - SET X-Z PLANE
         LENGTH:     13    LANGUAGE: FTN
         HAS NO SECONDARY ENTRY POINTS
         CAN BE CALLED BY:
            GLTABLE
         CAN CALL THE FOLLOWING:
            MORDRW   SETVU

TRIORD   ENTRY CLASS: MAIN        SEGMENT:   (M8141)
         DESC: CONTOUR - REORDER THE LINE INDICES
         LENGTH:     41    LANGUAGE: FTN
         HAS NO SECONDARY ENTRY POINTS
         CAN BE CALLED BY:
            CNTOR
         THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

TRKOFF   ENTRY CLASS: MAIN        SEGMENT:   (G11)
         DESC: TURN OFF TRACKING SYMBOL (CROSSHAIRS)
         LENGTH:     30    LANGUAGE: FTN
         HAS NO SECONDARY ENTRY POINTS
         CAN BE CALLED BY:
            GLINIT   CLROUT   MXYP
         CAN CALL THE FOLLOWING:
            GITRAK

TYPNAM   ENTRY CLASS: MAIN        SEGMENT:   (M30)
         DESC: PUT UP NAMES FOR PICKING
         LENGTH:    264    LANGUAGE: FTN
         SECONDARY ENTRY POINTS:
            TYPVAL
         CAN BE CALLED BY:
            ERDOWN   EPUTON   ERASER   DACTSN   PUTNAM
         CAN CALL THE FOLLOWING:
            PAGER    GISUBF   GITEM    GIDELT   SETCAT
            GUTEXT   GUSETP   IDINF    ICCHR    IBEAUT
            IDBTYP   IDBNAM

TYPVAL   ENTRY CLASS: SECONDARY   SEGMENT:   (M30)
         DESC: DISPLAY THE ALPHANUMERIC STRING IN *NAMES*
         SECONDARY ENTRY POINT FOR : TYPNAM
         CAN BE CALLED BY:
            DISPLB   ELNAM    LIBIN    ATTLST   ERASER
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UNPACK      ENTRY CLASS: MAIN          SEGMENT:   (SO)
            DESC: GET NEXT CHARACTER FOR #IBEAUT#
            LENGTH:     23    LANGUAGE: FTN
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               EXECC    IPFUT    ICRACK
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

UTORAS      ENTRY CLASS: MAIN          SEGMENT:   (SO)
            DESC: SCALING - CONVERT USER UNITS TO RASTERS
            LENGTH:    212    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
               UTORAT
            CAN BE CALLED BY:
               MOAXES   DRELN    MXYI    METAZZ   LINZZ
               IDRWEL   IDRWND   IDRWAT  ARROW
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

UTORAT      ENTRY CLASS: SECONDARY     SEGMENT:   (SO)
            DESC: SCALING - GET X,Y,Z FROM PARAMETER LIST RATHER THEN COMMON BLOCK
            SECONDARY ENTRY POINT FOR : UTORAS
            CAN BE CALLED BY:
               MOLAX

WAR.SQ      ENTRY CLASS: MAIN          SEGMENT:   (SO)
            DESC: (NOT AVAILABLE)
            LENGTH:    260    LANGUAGE: COMPASS
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               PUT.SQ   WEOX.SQ
            CAN CALL THE FOLLOWING:
               RM.CIO   RM.RCLA  RLEQ.RM

WEOP.SQ     ENTRY CLASS: SECONDARY     SEGMENT:   (SO)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : WEOX.SQ
            CAN BE CALLED BY:
               PUT.SQ

WEOS.SQ     ENTRY CLASS: SECONDARY     SEGMENT:   (SO)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : WEOX.SQ
            CAN BE CALLED BY:
               SYSTEM

WEOX.SQ     ENTRY CLASS: MAIN          SEGMENT:   (SO)
            DESC: (NOT AVAILABLE)
            LENGTH:    144    LANGUAGE: COMPASS
            SECONDARY ENTRY POINTS:
               WEOP.SQ  WEOS.SQ
            THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
            CAN CALL THE FOLLOWING:
               ERR.RM   RM.CIO   WAR.SQ

WNB=        ENTRY CLASS: SECONDARY     SEGMENT:   (SO)
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```
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : SYS.RM
            CAN BE CALLED BY:
               GET.SQ    PUT.SQ

WRITER      ENTRY CLASS: MAIN          SEGMENT:    (DB1)
            DESC: (NOT AVAILABLE)
            LENGTH:      11    LANGUAGE: COMPASS
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DMINIT
            CAN CALL THE FOLLOWING:
               CPC

WRITE       ENTRY CLASS: MAIN          SEGMENT:    (DB0)
            DESC: (NOT AVAILABLE)
            LENGTH:       6    LANGUAGE: COMPASS
            HAS NO SECONDARY ENTRY POINTS
            CAN BE CALLED BY:
               DMWRITE
            CAN CALL THE FOLLOWING:
               CPC

XTOI=       ENTRY CLASS: MAIN          SEGMENT:    (S1)
            DESC: REAL TO INTEGER EXPONENTIATION.
            LENGTH:      10    LANGUAGE: COMPASS
            SECONDARY ENTRY POINTS:
               XTOI.
            THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
            THIS PROGRAM DOES NOT INVOKE ANY OTHER PROGRAMS

XTOI.       ENTRY CLASS: SECONDARY     SEGMENT:    (S1)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : XTOI=
            CAN BE CALLED BY:
               GRIOG     LABELG

XTOY=       ENTRY CLASS: MAIN          SEGMENT:    (S1)
            DESC: REAL TO REAL EXPONENTIATION.
            LENGTH:       7    LANGUAGE: COMPASS
            SECONDARY ENTRY POINTS:
               XTOY.
            THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
            CAN CALL THE FOLLOWING:
               ALOG.     EXP.

XTOY.       ENTRY CLASS: SECONDARY     SEGMENT:    (S1)
            DESC: (NOT AVAILABLE)
            SECONDARY ENTRY POINT FOR : XTOY=
            CAN BE CALLED BY:
               SETSMG

XYERAS      ENTRY CLASS: MAIN          SEGMENT:    (M5)
            DESC: X-Y PLOTS - ERASE BUT NO DEACTIVATE
            LENGTH:      52    LANGUAGE: FTN
            SECONDARY ENTRY POINTS:
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            XYRET1    XYRET
         CAN BE CALLED BY:
            DETABLE
         CAN CALL THE FOLLOWING:
            CLRPIC

XYRET1   ENTRY CLASS: SECONDARY   SEGMENT:   (M5)
         DESC: X-Y PLOTS - ERASE AND DEACTIVATE, RETURN TO ACTIVATE-AND-DRAW MOD
         SECONDARY ENTRY POINT FOR : XYERAS
         CAN BE CALLED BY:
            DETABLE

XYRET    ENTRY CLASS: SECONDARY   SEGMENT:   (M5)
         DESC: X-Y PLOTS - ERASE AND DEACTIVATE, STAY IN NO DRAW MODE
         SECONDARY ENTRY POINT FOR : XYERAS
         CAN BE CALLED BY:
            DETABLE.

YIELD1=  ENTRY CLASS: MAIN        SEGMENT:   (S1)
         DESC: FORTRAN CALLABLE 1-CALL PROGRAM PREEMPT
         LENGTH:     13    LANGUAGE: COMPASS
         SECONDARY ENTRY POINTS:
            IYIELD1
         THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
         CAN CALL THE FOLLOWING:
            IYIELDE  IYIELDS  IYIELD

YIELD=   ENTRY CLASS: MAIN        SEGMENT:   (S1)
         DESC: (NOT AVAILABLE)
         LENGTH:    437    LANGUAGE: COMPASS
         SECONDARY ENTRY POINTS:
            IYIELDE  IYIELDS  IYIELD
         THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
         CAN CALL THE FOLLOWING:
            CLSF.RM  OPEN.RM  SYS=     MSG=

Z.SQ     ENTRY CLASS: MAIN        SEGMENT:   (S0)
         DESC: (NOT AVAILABLE)
         LENGTH:    101    LANGUAGE: COMPASS
         SECONDARY ENTRY POINTS:
            GET.Z
         THIS ENTRY IS NOT INVOKED BY ANY OTHER PROGRAMS
         CAN CALL THE FOLLOWING:
            GXIT.SQ
```


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