```
MMM        MMM    SSSSSSSSSSS       GGGGGGGGGGGG    FFFFFFFFFFFFFF     IIIIIIIII     LLL
MMM        MMM    SSSSSSSSSSS       GGGGGGGGGGGG    FFFFFFFFFFFFFF     IIIIIIIII     LLL
MMM        MMM    SSSSSSSSSSS       GGGGGGGGGGGG    FFFFFFFFFFFFFF     IIIIIIIII     LLL
MMMMMM  MMMMMM    SSS                   GGG         FFF                  III         LLL
MMMMMM  MMMMMM    SSS                   GGG         FFF                  III         LLL
MMMMMM  MMMMMM    SSS                   GGG         FFF                  III         LLL
MMM  MMM  MMM     SSS                   GGG         FFF                  III         LLL
MMM  MMM  MMM     SSS                   GGG         FFF                  III         LLL
MMM  MMM  MMM     SSS                   GGG         FFF                  III         LLL
MMM        MMM       SSSSSSSSS          GGG         FFFFFFFFFFFF         III         LLL
MMM        MMM       SSSSSSSSS          GGG         FFFFFFFFFFFF         III         LLL
MMM        MMM       SSSSSSSSS          GGG         FFFFFFFFFFFF         III         LLL
MMM        MMM             SSS    GGG   GGGGGGGGG   FFF                  III         LLL
MMM        MMM             SSS    GGG   GGGGGGGGG   FFF                  III         LLL
MMM        MMM             SSS    GGG   GGGGGGGGG   FFF                  III         LLL
MMM        MMM             SSS    GGG         GGG   FFF                  III         LLL
MMM        MMM             SSS    GGG         GGG   FFF                  III         LLL
MMM        MMM    SSSSSSSSSSS         GGGGGGGGG     FFF              IIIIIIIII    LLLLLLLLLLLLLL
MMM        MMM    SSSSSSSSSSS         GGGGGGGGG     FFF              IIIIIIIII    LLLLLLLLLLLLLL
MMM        MMM    SSSSSSSSSSS         GGGGGGGGG     FFF              IIIIIIIII    LLLLLLLLLLLLLL
```

```
CCCCCCCC  VV      VV  TTTTTTTTTT  MM      MM  SSSSSSSS    GGGGGGGG
CCCCCCCC  VV      VV  TTTTTTTTTT  MM      MM  SSSSSSSS    GGGGGGGG
CC        VV      VV      TT      MMMM  MMMM  SS          GG
CC        VV      VV      TT      MMMM  MMMM  SS          GG
CC        VV      VV      TT      MM MM MM MM SS          GG
CC        VV      VV      TT      MM  MM  MM  SS          GG
CC        VV      VV      TT      MM      MM  SSSSSS      GG
CC        VV      VV      TT      MM      MM  SSSSSS      GG
CC        VV      VV      TT      MM      MM      SS  GG  GGGGGG
CC         VV    VV       TT      MM      MM      SS  GG     GG
CC         VV    VV       TT      MM      MM      SS  GG     GG
CCCCCCCC    VV  VV        TT      MM      MM  SSSSSSSS    GGGGGG
CCCCCCCC     VV           TT      MM      MM  SSSSSSSS    GGGGGG


LL            IIIIII  SSSSSSSS
LL            IIIIII  SSSSSSSS
LL              II    SS
LL              II    SS
LL              II    SS
LL              II    SSSSSS
LL              II    SSSSSS
LL              II        SS
LL              II        SS
LL              II        SS
LLLLLLLLLL    IIIIII  SSSSSSSS
LLLLLLLLLL    IIIIII  SSSSSSSS
```

```
0001              PROGRAM CVTMSG
0002      C
0003      C Version:        'V04-000'
0004      C
0005      C*********************************************************************
0006      C*                                                                   *
0007      C*    COPYRIGHT (c) 1978, 1980, 1982, 1984 BY                        *
0008      C*    DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.         *
0009      C*    ALL RIGHTS RESERVED.                                           *
0010      C*                                                                   *
0011      C*    THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED *
0012      C*    ONLY IN  ACCORDANCE  WITH  THE  TERMS  OF  SUCH  LICENSE  AND WITH THE *
0013      C*    INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR  ANY  OTHER  *
0014      C*    COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY  *
0015      C*    OTHER PERSON.  NO TITLE TO AND OWNERSHIP OF  THE  SOFTWARE IS  HEREBY   *
0016      C*    TRANSFERRED.                                                   *
0017      C*                                                                   *
0018      C*    THE INFORMATION IN THIS SOFTWARE IS  SUBJECT TO CHANGE WITHOUT NOTICE *
0019      C*    AND  SHOULD  NOT  BE  CONSTRUED AS  A COMMITMENT BY DIGITAL EQUIPMENT *
0020      C*    CORPORATION.                                                   *
0021      C*                                                                   *
0022      C*    DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE  OR  RELIABILITY OF ITS *
0023      C*    SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.        *
0024      C*                                                                   *
0025      C*                                                                   *
0026      C*********************************************************************
0027
0028      C---
0029      C
0030      C Abstract:
0031      C
0032      C The following is a mutation of SYSMSG.FOR for the purpose of translating
0033      C MDL message file data into syntax appropriate for the Message File Compiler
0034      C
0035      C Author: Tim Halvorsen, Dec 1980
0036      C
0037      C Modified by:
0038      C
0039      C         V004    TMH0004         Tim Halvorsen   20-Jan-1981
0040      C                 Output /MACRO whenever the macro suffix is non-null
0041      C                 as well as when the macro name is different.
0042      C                 Use macro name prefix on single C constructs with $C_
0043      C                 infix rather than no prefix at all, which is incorrect.
0044      C
0045      C         V003    TMH0003         Tim Halvorsen   19-Jan-1981
0046      C                 Accept macro name suffixes and output them correctly
0047      C                 when generating a /MACRO=macnam construct.
0048      C
0049      C         V002    TMH0002         Tim Halvorsen   22-Oct-1980
0050      C                 Fix OPEN_OUTPUT to extract file name portion of output
0051      C                 filespec correctly when no directory portion is present.
0052      C
0053      C         001     TMH0001         Tim Halvorsen   10-Mar-1980
0054      C                 Generate .LITERAL statement for MDL C constructs
0055      C---
0056
0057      C
```

```
0058    C BASIC VARIABLES USED:                                                         000
0059    C                                                                               000
0060    C        FACILITIES = ARRAY OF FACILITY NAME STRINGS (INDEXED BY FACNUM)        000
0061    C        MACRO_NAME = MACRO NAME STRING                                         C00
0062    C        MACRO_SUFFIX = MACRO SUFFIX STRING                                     000
0063    C        PREFIX = SYMBOL PREFIX STRING                                          004
0064    C        NAME = NAME RETURNED BY GETIDENT (CURRENT TOKEN)                       005
0065    C        COL = CURRENT COLUMN NUMBER                                            005
0066    C        LINE = CURRENT LINE                                                    005
0067    C        SYMBOL_NAME = MESSAGE GLOBAL SYMBOL NAME                               005
0068    C        NUM = VALUE RETURNED BY GETNUM                                         005
0069    C        OUTLINE = OUTPUT LINE (NEW FORMAT)                                     005
0070    C        OUTCOL = OUTPUT COLUMN                                                 005
0071    C                                                                               005
0072            INCLUDE 'SRC$:CVTMSGCOM'                                                005
0116            LOGICAL*1 GETNUM,GETIDENT,GENCMP,UNBLNK,GETLIN,NEXTFILE                  005
0117    C                                                                               006
0118    C       READ THE FACILITY NAME TABLE (SUBSYSIDS.DAT)                            006
0119    C                                                                               006
0120            CALL MAKSUBS                                                            006
0121    C                                                                               006
0122    C       OPEN THE LIST OF FILE SPECIFICATIONS AND OUTPUT FILE                    006
0123    C                                                                               006
0124            CALL SETUPFILE                                                          006
0125            ERRCNT=0                                                                006
0126    C                                                                               006
0127    C       OPEN THE NEXT MDL FILE TO PROCESS                                       007
0128    C                                                                               007
0129    60      IF (NEXTFILE().EQ..FALSE.) GOTO 2000                                    007
0130            CALL OPEN_OUTPUT                                                        007
0131    70      MACRO_NAME(1)=0                                                         007
0132            LASTPREFIX(1)=0                                                         007
0133            LASTFACNUM=-1                                                           007
0134    C                                                                               007
0135    C       EXAMINE THE NEXT LINE IN THE MDL FILE                                   007
0136    C                                                                               007
0137    100     IF (GETLIN().EQ..FALSE.) GOTO 60                                        008
0138            IF (UNBLNK().EQ.';') GOTO 100                                           008
0139            IF (UNBLNK().EQ.0) GOTO 100                                             008
0140            IF (GETIDENT().EQ..FALSE.) GOTO 90                                      008
0141            IF (GENCMP(%REF('$STRUCT'),NAME)) GOTO 200                              008
0142            IF (GENCMP(%REF('C'),NAME)) GOTO 300                                    008
0143            IF (GENCMP(%REF('K'),NAME)) GOTO 300                                    008
0144            IF (GENCMP(%REF('V'),NAME)) GOTO 400                                    008
0145            IF (GENCMP(%REF('F'),NAME)) GOTO 100                                    008
0146            IF (GENCMP(%REF('S'),NAME)) GOTO 100                                    008
0147            IF (GENCMP(%REF('L'),NAME)) GOTO 100                                    009
0148            IF (GENCMP(%REF('M'),NAME)) GOTO 100                                    009
0149            IF (GENCMP(%REF('P'),NAME)) GOTO 100                                    009
0150    90      CALL ERROR(1,SYNTAX)                                                    009
0151            GOTO 100                                                                009
0152                                                                                    009
0153    200     CALL STRUCT                                                            009
0154            GOTO 70                                                                 009
0155                                                                                    009
0156    300     CALL EVALC                                                             009
0157            GOTO 100                                                                010
```

```
0158
0159      400     CALL SKIPV
0160              GOTO 100
0161
0162      2000    CLOSE (UNIT=3)
0163              IF (ERRCNT.NE.0) THEN
0164                  TYPE 2299,ERRCNT
0165              END IF
0166              CALL EXIT
0167
0168      2299    FORMAT(' Errors detected:',I5)
0169              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	329	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	50	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	144	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG

Total Space Allocated   65071

ENTRY POINTS

Address	Type	Name
0-00000000		CVTMSG

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	2-00000000	L*1	GETNUM	4-00000008	I*4	INDEX
6-00000090	I*4	LASTFACNUM	4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL	5-00000000	I*4	OUTFLAG
2-00000004	I*4	SYNTAX									

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
0-0000001D	60	0-00000033	70	0-000000E0	90	0-00000046	100	0-000000EB	200	0-000000F5	300
0-000000FF	400	0-00000109	2000	1-0000001C	2299'						

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FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name	Type	Name	Type	Name	Type	Name
	ERROR		EVALC		FOR$CLOSE		FOR$EXIT	L*1	GENCMP	L*1	GETIDENT
L*1	GETLIN		MAKSUBS	L*1	NEXTFILE		OPEN_OUTPUT		SETUPFILE		SKIPV
	STRUCT	L*1	UNBLNK								

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```
0001    C
0002    C      CONSTRUCT THE FACILITIES ARRAY BY READING THE
0003    C      FILE 'SUBSYSIDS'
0004    C
0005           SUBROUTINE MAKSUBS
0006           INCLUDE 'SRC$:CVTMSGCOM'
0050           LOGICAL*1 FACNAM(MAXSYMSIZ)
0051
0052           DO 10 I=1,MAXFAC+1
0053    10     FACILITIES(1,I)=0
0054
0055           OPEN (UNIT=1,NAME='SUBSYSIDS',TYPE='OLD',READONLY,ERR=900)
0056
0057    100    READ(1,99,END=400) FACNUM,FACLEN,(FACNAM(I),I=1,FACLEN)
0058    99     FORMAT(I5,Q,120A1)
0059           IF(FACLEN.GT.MAXSYMSIZ-1) THEN
0060                   FACNAM(MAXSYMSIZ)=0
0061                   CALL ERROR(14,SUBNAMLONG)
0062           END IF
0063           FACNAM(FACLEN+1)=0
0064           CALL MOVNAM(FACNAM,FACILITIES(1,FACNUM+1))
0065           GOTO 100
0066
0067    400    CLOSE(UNIT=1)
0068           RETURN
0069
0070    900    CALL ERROR(15,FILNOTFND)
0071           RETURN
0072           END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes							
0	$CODE	190	PIC CON REL LCL	SHR	EXE	RD	NOWRT	LONG		
1	$PDATA	26	PIC CON REL LCL	SHR	NOEXE	RD	NOWRT	LONG		
2	$LOCAL	136	PIC CON REL LCL	NOSHR	NOEXE	RD	WRT	LONG		
3	TEXT	324	PIC OVR REL GBL	SHR	NOEXE	RD	WRT	LONG		
4	VARS	24	PIC OVR REL GBL	SHR	NOEXE	RD	WRT	LONG		
5	LOGVAR	4	PIC OVR REL GBL	SHR	NOEXE	RD	WRT	LONG		
6	OUT	164	PIC OVR REL GBL	SHR	NOEXE	RD	WRT	LONG		
7	FACNAMS	64032	PIC OVR REL GBL	SHR	NOEXE	RD	WRT	LONG		

Total Space Allocated   64900

ENTRY POINTS

Address	Type	Name
0-00000000		MAKSUBS

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	2-00000028	I*4	FACLEN	2-00000024	I*4	FACNUM
2-00000030	I*4	FILNOTFND	2-00000020	I*4	I	4-00000008	I*4	INDEX	6-00000090	I*4	LASTFACNUM
4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL	5-00000000	I*4	OUTFLAG	2-0000002C	I*4	SUBNAMLONG

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
2-00000000	L*1	FACNAM	32	(32)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
**	10	1-00000012	99'	0-00000030	100	0-000000AC	400	0-000000B5	900

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name	Type	Name
	ERROR		FOR$CLOSE		FOR$OPEN		MOVNAM

```
0001    C
0002    C      OPEN THE FILE CONTAINING THE LIST OF FILES
0003    C
0004           SUBROUTINE SETUPFILE
0005           INCLUDE 'SRC$:CVTMSGCOM'
0049           OPEN (UNIT=3,NAME='FILES',TYPE='OLD',READONLY,ERR=100)
0050           RETURN
0051    100    CALL ERROR(9,FILNOTFND)
0052           RETURN
0053           END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	30	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	10	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	56	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG

Total Space Allocated   64644

ENTRY POINTS

Address	Type	Name
0-00000000		SETUPFILE

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	2-00000000	I*4	FILNOTFND	4-00000008	I*4	INDEX
6-00000090	I*4	LASTFACNUM	4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL	5-00000000	I*4	OUTFLAG

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label
0-00000015	100

FUNCTIONS AND SUBROUTINES REFERENCED

Type Name   Type Name

      ERROR   FOR$OPEN

```
0001    C
0002    C    OPEN THE NEXT FILE IN THE LIST OF FILES TO PROCESS
0003    C
0004         LOGICAL FUNCTION NEXTFILE*1
0005         INCLUDE 'SRC$:CVTMSGCOM'
0049    50   CLOSE (UNIT=1)
0050         NEXTFILE=.FALSE.
0051         READ(3,99,END=300) I,FSPEC
0052    99   FORMAT(Q,80A1)
0053         FSPEC(I+1)=0
0054         OPEN (UNIT=1,NAME=FSPEC,TYPE='OLD',READONLY,ERR=100)
0055         NEXTFILE=.TRUE.
0056    300  RETURN
0057    100  CALL ERROR(10,FILNOTFND)
0058         GOTO 50
0059         END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	109	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	10	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	80	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG

Total Space Allocated   64747

ENTRY POINTS

Address	Type	Name
0-00000000	L*1	NEXTFILE

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	2-00000008	I*4	FILNOTFND	2-00000004	I*4	I
4-00000008	I*4	INDEX	6-00000090	I*4	LASTFACNUM	4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL
5-00000000	I*4	OUTFLAG									

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label
0-00000009	50	1-00000004	99'	0-00000063	100	0-0000005E	300

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name
	ERROR		FOR$CLOSE		FOR$OPEN

```
0001      C
0002      C         PROCESS MESSAGE DEFINITION LINE
0003      C
C004                SUBROUTINE GETMSG
0005                INCLUDE 'SRC$:CVTMSGCOM'
0049                LOGICAL*1 TEXT(128)
0050                LOGICAL*1 GETNUM,GETIDENT,GENCMP,UNBLNK,IDENT
0051                LOGICAL*1 IDSTR(20)
0052                LOGICAL*1 VECT(7)
0053                LOGICAL*1 NEED_BLANK
0054                LOGICAL*1 FACNAM(MAXSYMSIZ)
0055                LOGICAL*1 LITERAL_NAME(MAXSYMSIZ)
0056      C
0057      C         OUTPUT .LITERAL IF ";MSG" NOT FOUND TO SIGNIFY MESSAGE DEFINITION
0058      C
0059                CALL CONCAT(PREFIX,SYMBOL_NAME,LITERAL_NAME)
0060                COL=COL+1
0061                IF (.NOT.GETIDENT().OR..NOT.GENCMP(NAME,%REF('MSG'))) THEN
0062                    CALL CONCAT(PREFIX,%REF('FACILITY'),NAME)
0063                    IF(IDENT(NAME,LITERAL_NAME)) RETURN
0064                    CALL BUFFER(%REF('       .LITERAL        '))
0065                    CALL BUFFER(LITERAL_NAME)
0066                    CALL BUFFER(%REF('='))
0067                    CALL BUFNUM(CODE)
0068                    CALL OUTPUT_LINE
0069                    RETURN
0070                END IF
0071      C
0072      C         IF THE FACILITY LINE HAS NOT YET BEEN OUTPUT, THEN
0073      C         OUTPUT IT NOW.
0074      C
0075                NEED_BLANK=.FALSE.
0076                FACNUM=(CODE.AND.'0FFF0000'X)/2**16
0077                CALL MOVNAM(FACILITIES(1,FACNUM+1),FACNAM)
0078                IF(FACNUM.EQ.LASTFACNUM.AND.IDENT(PREFIX,LASTPREFIX)) GOTO 20
0079                IF(IDENT(MACRO_NAME,%REF('SHR'))) CALL MOVNAM(MACRO_NAME,FACNAM)
0080                CALL BUFFER(%REF('        .FACILITY        '))
0081                CALL BUFFER(FACNAM)
0082                CALL BUFFER(%REF(','))
0083                CALL BUFNUM(FACNUM)
0084                IF ((CODE.AND.'8000'X).EQ.0) CALL BUFFER(%REF(' /SHARED'))
0085                IF (CODE.GE.0) CALL BUFFER(%REF(' /SYSTEM'))
0086                CALL CONCAT(FACNAM,%REF('$_'),NAME)
0087                IF (.NOT.IDENT(NAME,PREFIX)) THEN
0088                    CALL BUFFER(%REF(' /PREFIX='))
0089                    CALL BUFFER(PREFIX)
0090                END IF
0091                IF (.NOT.IDENT(FACNAM,MACRO_NAME).OR.LENGTH(MACRO_SUFFIX).NE.0) THEN
0092                    CALL BUFFER(%REF(' /MACRO='))
0093                    CALL BUFFER(%REF('$'))
0094                    CALL BUFFER(MACRO_NAME)
0095                    IF (LENGTH(MACRO_SUFFIX).NE.0) THEN
0096                        CALL BUFFER(MACRO_SUFFIX)
0097                    ELSE
0098                        CALL BUFFER(%REF('DEF'))
0099                    END IF
0100                END IF
```

```
0101                 CALL OUTPUT_LINE
0102                 CALL MOVNAM(PREFIX,LASTPREFIX)
0103                 LASTFACNUM=FACNUM
0104                 CURNUM=1
0105                 CURSEV=7
0106                 NEED_BLANK=.TRUE.
0107        20       CONTINUE
0108        C
0109        C        IF THE SEVERITY HAS CHANGED, OUTPUT A SEVERITY STATEMENT
0110        C
0111                 IF ((CODE.AND.7).NE.CURSEV) THEN
0112                     CURSEV=CODE.AND.7
0113                     IF (.NOT.NEED_BLANK) CALL OUTPUT_LINE
0114                     CALL BUFFER(%REF('        .SEVERITY        '))
0115                     IF (CURSEV.EQ.0) CALL BUFFER(%REF('WARNING'))
0116                     IF (CURSEV.EQ.1) CALL BUFFER(%REF('SUCCESS'))
0117                     IF (CURSEV.EQ.2) CALL BUFFER(%REF('ERROR'))
0118                     IF (CURSEV.EQ.3) CALL BUFFER(%REF('INFORMATIONAL'))
0119                     IF (CURSEV.EQ.4) CALL BUFFER(%REF('FATAL'))
0120                     IF (CURSEV.GE.5 .AND. CURSEV.LE.7) CALL BUFFER(%REF('?UNKNOWN?'))
0121                     CALL OUTPUT_LINE
0122                     NEED_BLANK=.TRUE.
0123                 END IF
0124        C
0125        C        IF THE MESSAGE NUMBER IS NOT PREV+1, THEN OUTPUT A .BASE STATEMENT
0126        C
0127                 IF ((CODE.AND.'7FF8'X)/2**3.NE.CURNUM) THEN
0128                     CURNUM = (CODE.AND.'7FF8'X)/2**3
0129                     IF (.NOT.NEED_BLANK) CALL OUTPUT_LINE
0130                     CALL BUFFER(%REF('        .BASE           '))
0131                     CALL BUFNUM(CURNUM)
0132                     CALL OUTPUT_LINE
0133                     NEED_BLANK=.TRUE.
0134                 END IF
0135                 CURNUM = CURNUM + 1
0136
0137                 IF(NEED_BLANK) CALL OUTPUT_LINE
0138
0139                 DO 50 I=1,7
0140        50       VECT(I)=0
0141                 GOTO 200
0142        150      IF (UNBLNK().NE.',') GOTO 1000
0143                 COL=COL+1
0144        200      IF (UNBLNK().EQ.'<') GOTO 800
0145                 IF (GETIDENT()) GOTO 300
0146        250      CALL ERROR(11,BADMSGSYNTAX)
0147                 GOTO 2000
0148        300      IF (GENCMP(NAME,%REF('IDENT'))) GOTO 500
0149        C        IF (GENCMP(NAME,%REF('DETAIL'))) GOTO 550
0150        C        IF (GENCMP(NAME,%REF('USERVAL'))) GOTO 600
0151                 IF (GENCMP(NAME,%REF('FAOCNT'))) GOTO 650
0152        C        IF (GENCMP(NAME,%REF('LANG'))) GOTO 700
0153                 GOTO 250
0154        500      IF (UNBLNK().NE.'=') GOTO 250
0155                 COL=COL+1
0156                 IF (GETIDENT().EQ..FALSE.) GOTO 250
0157                 VECT(7)=LENGTH(NAME)
```

```
0158                  CALL MOVNAM(NAME,IDSTR)
0159                  GOTO 150
0160        550       ASSIGN 570 TO RETURN
0161                  GOTO 750
0162        570       VECT(1)=NUM
0163                  GOTO 150
0164        600       ASSIGN 620 TO RETURN
0165                  GOTO 750
0166        620       VECT(3)=NUM
0167                  GOTO 150
0168        650       ASSIGN 670 TO RETURN
0169                  GOTO 750
0170        670       VECT(2)=NUM
0171                  GOTO 150
0172        700       ASSIGN 720 TO RETURN
0173                  GOTO 750
0174        720       VECT(5)=NUM
0175                  GOTO 150
0176
0177        750       IF (UNBLNK().NE.'=') GOTO 250
0178                  COL=COL+1
0179                  IF (GETNUM().EQ..FALSE.) GOTO 250
0180                  GOTO RETURN
0181
0182        800       COL=COL+1
0183                  IF (IDFLAG.EQ..FALSE..OR.VECT(7).NE.0) GOTO 830
0184                  VECT(7)=LENGTH(SYMBOL_NAME)
0185                  DO 820 I=1,MAXSYMSIZ
0186                  IDSTR(I)=SYMBOL_NAME(I)
0187                  IF (IDSTR(I).EQ.0) GOTO 830
0188        820       CONTINUE
0189                  CALL ERROR(12,IDTOOLONG)
0190        830       TMPPTR=1
0191        845       IF (LINE(COL).EQ.'>') GOTO 900
0192        850       TEXT(TMPPTR)=LINE(COL)
0193                  TMPPTR=TMPPTR+1
0194                  COL=COL+1
0195                  IF (COL.LE.120) GOTO 845
0196                  GOTO 250
0197        900       COL=COL+1
0198                  IF (LINE(COL).EQ.'>') GOTO 850
0199                  TEXT(TMPPTR)=0
0200                  GOTO 150
0201
0202        1000      IF (UNBLNK().NE.';'.AND.UNBLNK().NE.0) GOTO 250
0203                  CALL BUFFER(%REF('         '))
0204                  CALL BUFFER(SYMBOL_NAME)
0205                  IF (OUTCOL.LT.9) THEN
0206                          CALL BUFFER(%REF('                    '))
0207                  ELSE
0208                          CALL BUFFER(%REF('          '))
0209                  END IF
0210                  DO 1010 I=1,LENGTH(TEXT)
0211                  IF (TEXT(I).EQ.'>'.OR.TEXT(I).EQ.'<') GOTO 1020
0212        1010      CONTINUE
0213                  CALL BUFFER(%REF('<'))
0214                  CALL BUFFER(TEXT)
```

```
0215                CALL BUFFER(%REF('>'))
0216                GOTO 1030
0217        1020    CALL BUFFER(%REF(''''))
0218                CALL BUFFER(TEXT)
0219                CALL BUFFER(%REF(''''))
0220        1030    IF (VECT(2).NE.0) THEN
0221                    CALL BUFFER(%REF(' /FAO='))
0222                    CALL BUFNUM(VECT(2))
0223                END IF
0224                IF (VECT(7).NE.0) THEN
0225                    CALL BUFFER(%REF(' /IDENT='))
0226                    CALL BUFFER(IDSTP)
0227                END IF
0228                CALL OUTPUT_LINE
0229
0230        2000    RETURN
0231                END
```

GETMSG   F 8
                               16-Sep-1984 02:16:11   VAX-11 FORTRAN V3.4-56   Page 19   GE
                               5-Sep-1984 15:13:15   DISK$VMSMASTER:[MSGFIL.SRC]CVTMSG.FOR;1

PROGRAM SECTIONS   FU

	Name	Bytes	Attributes
0	$CODE	1323	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	211	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	764	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG

     Total Space Allocated   66846

ENTRY POINTS

Address	Type	Name
0-00000000		GETMSG

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
2-000000E4	I*4	BADMSGSYNTAX	4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL
6-00000088	I*4	CURNUM	6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	2-000000DC	I*4	FACNUM
2-000000E0	I*4	I	2-000000EC	I*4	IDFLAG	2-000000F0	I*4	IDTOOLONG	4-00000008	I*4	INDEX
6-00000090	I*4	LASTFACNUM	2-000000DB	L*1	NEED_BLANK	4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL
5-00000000	I*4	OUTFLAG	2-000000E8	I*4	RETURN	2-000000F4	I*4	TMPPTR			

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
2-0000009B	L*1	FACNAM	32	(32)
3-000000E4	L*1	FSPEC	80	(80)
2-00000080	L*1	IDSTR	20	(20)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
2-000000BB	L*1	LITERAL_NAME	32	(32)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
3-000000C4	L*1	SYMBOL_NAME	32	(32)
2-00000000	L*1	TEXT	128	(128)
2-00000094	L*1	VECT	7	(7)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
0-000001AB	20	**	50	0-000002A8	150	0-000002BE	200	0-000002D9	250	0-000002E5	300
0-000002FF	500	**	550	0-00000337	570	**	600	0-00000342	620	0-0000034D	650
0-00000357	670	**	700	0-00000362	720	0-0000036D	750	0-0000039D	800	**	820
0-000003DC	830	0-000003E0	845	0-000003F1	850	0-00000420	900	0-00000443	1000	**	1010
0-000004DA	1020	0-000004F5	1030	0-0000052A	2000						

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name	Type	Name	Type	Name	Type	Name
	BUFFER		BUFNUM		CONCAT		ERROR	L*1	GENCMP	L*1	GETIDENT
L*1	GETNUM	L*1	IDENT	I*4	LENGTH		MOVNAM		OUTPUT_LINE	L*1	UNBLNK

```
0001   C
0002   C       PROCESS MDL $STRUCT STATEMENT
0003   C
0004           SUBROUTINE STRUCT
0005           INCLUDE 'SRC$:CVTMSGCOM'
0049           LOGICAL*1 GETIDENT.UNBLNK,GETNUM,GETLIN
0050           IF (GETIDENT().EQ..FALSE.) GOTO 100
0051           CALL MOVNAM(NAME,MACRO_NAME)
0052           MACRO_SUFFIX(')=0
0053   100     IF (UNBLNK().EQ.';'.OR.UNBLNK().EQ.0) GOTO 300
0054           IF (UNBLNK().NE.',') GOTO 200
0055           COL=COL+1
0056           IF (GETIDENT().EQ..FALSE.) GOTO 200
0057           CALL MOVNAM(NAME,MACRO_SUFFIX)
0058           IF (UNBLNK().EQ.';'.OR.UNBLNK().EQ.0) GOTO 300
0059   200     CALL ERROR(1,SYNTAX)
0060   300     IF (GETLIN().EQ..FALSE.) GOTO 800
0061           IF (UNBLNK().EQ.';') GOTO 300
0062           IF (UNBLNK().EQ.0) GOTO 300
0063           IF (UNBLNK().EQ.'E') GOTO 900
0064           IF (UNBLNK().EQ.'C') GOTO 500
0065           IF (UNBLNK().EQ.'K') GOTO 500
0066           IF (UNBLNK().EQ.'V') GOTO 600
0067           IF (UNBLNK().EQ.'F') GOTO 300
0068           IF (UNBLNK().EQ.'S') GOTO 300
0069           IF (UNBLNK().EQ.'L') GOTO 300
0070           IF (UNBLNK().EQ.'M') GOTO 300
0071           IF (UNBLNK().EQ.'P') GOTO 300
0072           CALL ERROR(7,UNRECOGNIZE)
0073           GOTO 300
0074
0075   500     COL=COL+1
0076           CALL EVALC
0077           GOTO 300
0078
0079   600     CALL SKIPV
0080           GOTO 300
0081
0082   800     CALL ERROR(8,MISSINGEND)
0083           RETURN
0084
0085   900     CALL BUFFER(%REF('        .END'))
0086           CALL OUTPUT_LINE
0087           RETURN
0088           END
```

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PROGRAM SECTIONS

	Name	Bytes	Attributes									
0	$CODE	372	PIC	CON	REL	LCL		SHR	EXE	RD	NOWRT	LONG
1	$PDATA	18	PIC	CON	REL	LCL		SHR	NOEXE	RD	NOWRT	LONG
2	$LOCAL	92	PIC	CON	REL	LCL	NOSHR		NOEXE	RD	WRT	LONG
3	TEXT	324	PIC	OVR	REL	GBL		SHR	NOEXE	RD	WRT	LONG
4	VARS	24	PIC	OVR	REL	GBL		SHR	NOEXE	RD	WRT	LONG
5	LOGVAR	4	PIC	OVR	REL	GBL		SHR	NOEXE	RD	WRT	LONG
6	OUT	164	PIC	OVR	REL	GBL		SHR	NOEXE	RD	WRT	LONG
7	FACNAMS	64032	PIC	OVR	REL	GBL		SHR	NOEXE	RD	WRT	LONG

        Total Space Allocated   65030

ENTRY POINTS

Address	Type	Name
0-00000000		STRUCT

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	2-00000000	L*1	GETNUM	4-00000008	I*4	INDEX
6-00000090	I*4	LASTFACNUM	2-0000000C	I*4	MISSINGEND	4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL
5-00000000	I*4	OUTFLAG	2-00000004	I*4	SYNTAX	2-00000008	I*4	UNRECOGNIZE			

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
0-00000023	100	0-0000007C	200	0-00000084	300	0-00000141	500	0-00000151	600	0-0000015B	800
0-00000164	900										

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name	Type	Name	Type	Name	Type	Name
	BUFFER		ERROR		EVALC	L*1	GETIDENT	L*1	GETLIN		MOVNAM
	OUTPUT_LINE		SKIPV	L*1	UNBLNK						

```
0001    C
0002    C       EVALUATE MDL C STATEMENT
0003    C
0004            SUBROUTINE EVALC
0005            INCLUDE 'SRC$:CVTMSGCOM'
0049            LOGICAL*1 GENCMP,UNBLNK
0050            IF (UNBLNK().EQ.'<') GOTO 100
0051            CALL GETCVAL
0052            RETURN
0053    100     COL=COL+1
0054            CALL GETCLST
0055            RETURN
0056            END
```

PROGRAM SECTIONS

```
    Name                              Bytes    Attributes

  0 $CODE                                43    PIC CON REL LCL    SHR    EXE   RD NOWRT LONG
  2 $LOCAL                               12    PIC CON REL LCL NOSHR NOEXE   RD   WRT LONG
  3 TEXT                                324    PIC OVR REL GBL    SHR NOEXE   RD   WRT LONG
  4 VARS                                 24    PIC OVR REL GBL    SHR NOEXE   RD   WRT LONG
  5 LOGVAR                                4    PIC OVR REL GBL    SHR NOEXE   RD   WRT LONG
  6 OUT                                 164    PIC OVR REL GBL    SHR NOEXE   RD   WRT LONG
  7 FACNAMS                           64032    PIC OVR REL GBL    SHR NOEXE   RD   WRT LONG

    Total Space Allocated            64603
```

ENTRY POINTS

```
    Address   Type  Name

  0-00000000        EVALC
```

VARIABLES

```
    Address   Type  Name          Address   Type  Name         Address   Type  Name        Address   Type  Name

  4-00000014  I*4   BINVAL        4-0000000C  I*4   CODE        4-00000004  I*4   COL        6-00000088  I*4   CURNUM
  6-0000008C  I*4   CURSEV        4-00000010  I*4   ERRCNT      2-00000000  L*1   GENCMP     4-00000008  I*4   INDEX
  6-00000090  I*4   LASTFACNUM    4-00000000  I*4   NUM         6-00000000  I*4   OUTCOL     5-00000000  I*4   OUTFLAG
```

ARRAYS

```
    Address   Type  Name             Bytes   Dimensions

  7-00000000  L*1   FACILITIES       64032   (32, 2001)
  3-000000E4  L*1   FSPEC               80   (80)
  6-00000094  L*1   LASTPREFIX          16   (16)
  3-00000000  L*1   LINE               132   (132)
  3-00000094  L*1   MACRO_NAME          16   (16)
  3-00000134  L*1   MACRO_SUFFIX        16   (16)
  3-000000A4  L*1   NAME                32   (32)
  6-00000004  L*1   OUTLINE            132   (132)
  3-00000084  L*1   PREFIX              16   (16)
  3-000000C4  L*1   SYMBOL_NAME         32   (32)
```

LABELS

```
    Address   Label

  0-0000001D  100
```

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name
	GETCLST		GETCVAL	L*1	UNBLNK

FU

```
0001      C
0002      C         ROUTINE TO HANDLE MDL C<[NAME][,[CON][,[BASE][,INCR]]] SYNTAX
0003      C
0004                SUBROUTINE GETCLST
0005                INCLUDE 'SRC$:CVTMSGCOM'
0049                LOGICAL*1 GETIDENT,UNBLNK,GETNUM,GETLIN
0050                BASE=0
0051                INCR=1
0052                CALL MOVNAM(MACRO_NAME,PREFIX)
0053                IF (GETIDENT().EQ..FALSE.) GOTO 100
0054                CALL MOVNAM(NAME,PREFIX)
0055      100       IF (UNBLNK().NE.',') GOTO 200
0056                COL=COL+1
0057                IF (GETIDENT().EQ..FALSE.) GOTO 200
0058                IF (LENGTH(PREFIX)+LENGTH(NAME).GE.MAXSYMSIZ) THEN
0059                        CALL ERROR(2,NAMTOOLONG)
0060                        PREFIX(1)=0
0061                END IF
0062                CALL CONCAT(PREFIX,NAME,PREFIX)
0063                GOTO 250
0064      200       CALL CONCAT(PREFIX,%REF('$C_'),PREFIX)
0065      250       IF (UNBLNK().NE.',') GOTO 400
0066                COL=COL+1
0067                IF (GETNUM()) BASE=NUM
0068                IF (UNBLNK().NE.',') GOTO 400
0069                COL=COL+1
0070                IF (GETNUM().EQ..FALSE.) GOTO 500
0071                INCR=NUM
0072      400       IF (UNBLNK().EQ.';'.OR.UNBLNK().EQ.0) GOTO 700
0073      500       CALL ERROR(1,SYNTAX)
0074      700       IF (GETLIN().NE..TRUE.) GOTO 1500
0075                IF (UNBLNK().EQ.'>') GOTO 1600
0076      C         IF (GETIDENT().NE..TRUE.) GOTO 900
0077                IF (.NOT.GETIDENT()) GOTO 700
0078                CALL MOVNAM(NAME,SYMBOL_NAME)
0079                IF (UNBLNK().EQ.',') GOTO 800
0080                CODE=BASE
0081                BASE=BASE+INCR
0082                GOTO 850
0083      800       IF (BASE.NE.0.OR.INCR.NE.1) CALL ERROR(5,BASE)
0084                COL=COL+1
0085                IF (GETNUM()) GOTO 820
0086                CALL ERROR(3,NONUMBER)
0087      820       CODE=NUM
0088      850       CONTINUE
0089      900       IF (UNBLNK().NE.';'.AND.UNBLNK().NE.0) GOTO 500
0090                CALL GETMSG
0091                GOTO 700
0092      1500      CALL ERROR(6,NOCLOSEANGLE)
0093      1600      RETURN
0094                END
```

PROGRAM SECTIONS

```
   Name                              Bytes    Attributes

   0 $CODE                             422    PIC CON REL LCL    SHR   EXE   RD NOWRT LONG
   1 $PDATA                             24    PIC CON REL LCL    SHR NOEXE   RD NOWRT LONG
   2 $LOCAL                            176    PIC CON REL LCL NOSHR NOEXE   RD  WRT LONG
   3 TEXT                              324    PIC OVR REL GBL    SHR NOEXE   RD  WRT LONG
   4 VARS                               24    PIC OVR REL GBL    SHR NOEXE   RD  WRT LONG
   5 LOGVAR                              4    PIC OVR REL GBL    SHR NOEXE   RD  WPT LONG
   6 OUT                               164    PIC OVR REL GBL    SHR NOEXE   RD  WRT LONG
   7 FACNAMS                         64032    PIC OVR REL GBL    SHR NOEXE   RD  WRT LONG

     Total Space Allocated           65170
```

ENTRY POINTS

```
   Address  Type  Name

   0-00000000      GETCLST
```

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
2-00000000	I*4	BASE	4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL
6-00000088	I*4	CURNUM	6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	2-00000004	I*4	INCR
4-00000008	I*4	INDEX	6-00000090	I*4	LASTFACNUM	2-00000008	I*4	NAMTOOLONG	2-00000014	I*4	NOCLOSEANGLE
2-00000010	I*4	NONUMBER	4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL	5-00000000	I*4	OUTFLAG
2-0000000C	I*4	SYNTAX									

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
0-0000002B	100	0-0000007C	200	0-00000084	250	0-000000D0	400	0-000000E9	500	0-000000F1	700
0-0000013E	800	0-0000016B	820	0-00000176	850	**	900	0-0000019C	1500	0-000001A5	1600

FUNCTIONS AND SUBROUTINES REFERENCED   FU

Type	Name	Type	Name	Type	Name	Type	Name	Type	Name	Type	Nam.
	CONCAT		ERROR	L*1	GETIDENT	L*1	GETLIN		GETMSG	L*1	GETNUM
I*4	LENGTH		MOVNAM	L*1	UNBLNK						

```
0001      C         ROUTINE TO HANDLE MDL "C SYMBOL,VALUE" SYNTAX
0002      C
0003      C
0004                SUBROUTINE GETCVAL
0005                INCLUDE 'SRC$:CVTMSGCOM'
0049                LOGICAL*1 GETIDENT,UNBLNK,GETNUM
0050                CALL CONCAT(MACRO_NAME,%REF('$C_'),PREFIX)
0051                IF (GETIDENT().EQ..FALSE.) GOTO 100
0052                CALL MOVNAM(NAME,SYMBOL_NAME)
0053                IF (UNBLNK().NE.',') GOTO 100
0054                COL=COL+1
0055                IF (GETNUM().EQ..FALSE.) GOTO 100
0056                CODE=NUM
0057                IF (UNBLNK().NE.';'.AND.UNBLNK().NE.0) GOTO 100
0058                CALL GETMSG
0059                RETURN
0060      100       CALL ERROR(1,SYNTAX)
0061                RETURN
0062                END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	121	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	8	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	52	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG

Total Space Allocated   64729

ENTRY POINTS

Address	Type	Name
0-00000000		GETCVAL

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	4-00000008	I*4	INDEX	6-00000090	I*4	LASTFACNUM
4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL	5-00000000	I*4	OUTFLAG	2-00000000	I*4	SYNTAX

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label
0-00000070	100

FUNCTIONS AND SUBROUTINES REFERENCED   FU

Type	Name	Type	Name	Type	Name	Type	Name	Type	Name	Type	Name
	CONCAT		ERROR	L*1	GETIDENT		GETMSG	L*1	GETNUM		MOVNAM
L*1	UNBLNK										

```
0001     C
0002     C     SKIP ALL LINES WHICH ARE PART OF THE MDL V STATEMENT
0003     C
0004           SUBROUTINE SKIPV
0005           INCLUDE 'SRC$:CVTMSGCOM'
0049           LOGICAL*1 GETLIN,UNBLNK
0050     100   IF (GETLIN().NE..TRUE.) GOTO 300
0051           IF (UNBLNK().EQ.'>') RETURN
0052           GOTO 100
0053     300   CALL ERROR(6,NOCLOSEANGLE)
0054           RETURN
0055           END
```

PROGRAM SECTIONS   PR

	Name	Bytes	Attributes
0	$CODE	46	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	4	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	24	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG

    Total Space Allocated   64622

ENTRY POINTS   EN

Address	Type	Name
0-00000000		SKIPV

VARIABLES   VA

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	FRRCNT	4-00000008	I*4	INDEX	6-00000090	I*4	LASTFACNUM
2-00000000	I*4	NOCLOSEANGLE	4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL	5-00000000	I*4	OUTFLAG

ARRAYS   AR

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-C0000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS   LA

Address	Label	Address	Label
0-00000009	100	0-00000025	300

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name
	ERROR	L*1	GETLIN	L*1	UNBLNK

```
0001     C                                                                        00
0002     C          OUTPUT AN ERROR MESSAGE                                       00
0003     C                                                                        00
0004              SUBROUTINE ERROR(MSGID)                                         00
0005              INCLUDE 'SRC$:CVTMSGCOM'                                        00
0049     C OUTPUT CONTENTS OF 'LINE' VIA PRINT                                    00
0050     C AND ERROR MESSAGE                                                      00
0051              TYPE 99                                                         00
0052     99       FORMAT('$%SYSMSG-E-')                                           00
0053              GOTO (1,2,3,4,5,6,7,8,9,10,11,12,13,14,15),MSGID                00
0054              TYPE 1000                                                       00
0055              GOTO 200                                                        00
0056     1000     FORMAT('+error in error processing')                           00
0057     1        TYPE 101                                                        00
0058              GOTO 200
0059     101      FORMAT('+syntax error')
0060     2        TYPE 102
0061              GOTO 200
0062     102      FORMAT('+symbol or string too long')
0063     3        TYPE 103
0064              GOTO 200
0065     103      FORMAT('+missing value')
0066     4        TYPE 104
0067              GOTO 200
0068     104      FORMAT('+line too long')
0069     5        TYPE 105
0070              GOTO 200
0071     105      FORMAT('+start or increment value error')
0072     6        TYPE 106
0073              GOTO 200
0074     106      FORMAT('+missing close angle bracket')
0075     7        TYPE 107
0076              GOTO 200
0077     107      FORMAT('+unrecognizable statement type')
0078     8        TYPE 108
0079              GOTO 200
0080     108      FORMAT('+missing end statement')
0081     9        TYPE 109
0082              GOTO 210
0083     109      FORMAT('+can''t open FILES.DAT')
0084     10       TYPE 110,FSPEC
0085              GOTO 210
0086     110      FORMAT('+can''t open ',80A1)
0087     11       TYPE 111
0088              GOTO 200
0089     111      FORMAT('+syntax error in message definition')
0090     12       TYPE 112
0091              GOTO 200
0092     112      FORMAT('+message identifier too long')
0093     13       TYPE 113
0094              GOTO 200
0095     113      FORMAT('+message identified by value is already in use')
0096     14       TYPE 114
0097              GOTO 200
0098     114      FORMAT('+facility name too long')
0099     15       TYPE 115
0100              GOTO 210
```

```
0101    115    FORMAT('+can''t open SRCD$:[1,2]SUBSYSIDS.DAT')
0102    200    TYPE 97,FSPEC
0103    97     FORMAT(11X,'in file ',80a1)
0104           TYPE 98,(LINE(K),K=1,LENGTH(LINE))
0105    98     FORMAT(11X,120A1)
0106    210    ERRCNT=ERRCNT+1
0107           END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	591	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	495	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	28	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT L NG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG

    Total Space Allocated   65662

ENTRY POINTS

Address	Type	Name
0-00000000		ERROR

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	4-00000008	I*4	INDEX	2-00000000	I*4	K
6-00000090	I*4	LASTFACNUM	AP-00000004@	I*4	MSGID	4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL
5-00000000	I*4	OUTFLAG									

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
0-0000005D	1	0-00000077	2	0-00000091	3	0-000000AB	4	0-000000C5	5	0-000000DF	6
0-000000F9	7	0-00000113	8	0-0000012D	9	0-00000147	10	0-0000016B	11	0-00000184	12
0-0000019D	13	0-000001B6	14	0-000001CF	15	1-000001D7	97'	1-000001E8	98'	1-00000000	99'
1-0000002B	101'	1-0000003B	102'	1-00000058	103'	1-00000069	104'	1-0000007A	105'	1-0000009C	106'

1-000000BB 107'   1-000000DC 108'   1-000000F5 109'   1-0000010D 110'   1-00000120 111'   1-00000146 112'
1-00000165 113'   1-00000196 114'   1-000001B0 115'   0-000001E8 200   0-00000248 210   1-0000000E 1000'

FUNCTIONS AND SUBROUTINES REFERENCED

Type Name

I*4   LENGTH

```
0001    C
0002    C         EVALUATE A CONSTANT EXPRESSION
0003    C
0004              LOGICAL FUNCTION GETNUM*1
0005              INCLUDE 'SRC$:CVTMSGCOM'
0049              LOGICAL*1 GETVAL
0050              LOGICAL*1 BINOPS(8)
0051              DATA BINOPS/'+','-','*','/','&','!','\','a'/
0052              GETNUM=.FALSE.
0053              NUM=0
0054              IF (GETVAL().EQ..FALSE.) GOTO 300
0055              GETNUM=.TRUE.
0056              NUM=BINVAL
0057    100       DO 200 I=1,8
0058              IF (LINE(COL).EQ.BINOPS(I)) GOTO 400
0059    200       CONTINUE
0060    300       RETURN
0061    400       COL=COL+1
0062              IF (GETVAL().EQ..TRUE.) GOTO 500
0063              CALL ERROR(3,MISSINGVALUE)
0064              GOTO 300
0065    500       GOTO (610,620,630,640,650,660,670,680),I
0066    610       NUM=NUM+BINVAL
0067              GOTO 100
0068    620       NUM=NUM-BINVAL
0069              GOTO 100
0070    630       NUM=NUM*BINVAL
0071              GOTO 100
0072    640       NUM=NUM/BINVAL
0073              GOTO 100
0074    650       NUM=NUM.AND.BINVAL
0075              GOTO 100
0076    660       NUM=NUM.OR.BINVAL
0077              GOTO 100
0078    670       NUM=NUM.XOR.BINVAL
0079              GOTO 100
0080    680       NUM=NUM*2**BINVAL
0081              GOTO 100
0082              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	246	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	4	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	40	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG

Total Space Allocated   64838

ENTRY POINTS

Address	Type	Name
0-00000000	L*1	GETNUM

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	2-0000000C	I*4	I	4-00000008	I*4	INDEX
6-00000090	I*4	LASTFACNUM	2-00000010	I*4	MISSINGVALUE	4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL
5-00000000	I*4	OUTFLAG									

ARRAYS

Address	Type	Name	Bytes	Dimensions
2-00000000	L*1	BINOPS	8	(8)
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
0-0000002D	100	**	200	0-0000004A	300	0-0000004F	400	0-0000006B	500	0-0000007F	610
0-0000008C	620	0-00000099	630	0-000000A6	640	0-000000B4	650	0-000000C5	660	0-000000D3	670
0-000000E1	680										

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name
	ERROR	L*1	GETVAL

FL

```
0001      C                                                              00
0002      C         GET A TERM VALUE (USED BY GETNUM)                    00
0003      C                                                              00
0004                LOGICAL FUNCTION GETVAL*1                            00
0005                INCLUDE 'SRC$:CVTMSGCOM'                             00
0049                LOGICAL*1 UNBLNK,TMP                                 00
0050                SIGN=0                                               00
0051                BINVAL=0                                             00
0052                GETVAL=.FALSE.                                       00
0053                IF (UNBLNK().NE.'-') GOTO 100                        00
0054                SIGN=1                                               00
0055                COL=COL+1                                            00
0056      100       IF (LINE(COL).NE.'^') GOTO 180                       00
0057                IF (LINE(COL+1).NE.'X') GOTO 180
0058                DO 150 COL=COL+2,120
0059                TMP=LINE(COL)
0060                IF ((TMP.LE.'9').AND.(TMP.GE.'0')) GOTO 130
0061                IF ((TMP.GT.'F').OR.(TMP.LT.'A')) GOTO 400
0062                TMP=TMP-'A'+'9'+1
0063      130       GETVAL=.TRUE.
0064                BINVAL=BINVAL*16+(TMP-'0')
0065      150       CONTINUE
0066                GOTO 300
0067      180       DO 200 COL=COL,120
0068                IF (LINE(COL).LT.'0') GOTO 400
0069                IF (LINE(COL).GT.'9') GOTO 400
0070                GETVAL=.TRUE.
0071                BINVAL=BINVAL*10+(LINE(COL)-'0')
0072      200       CONTINUE
0073      300       CALL ERROR(4,TOOLONG)
0074                GETVAL=.FALSE.
0075      400       IF (SIGN.EQ.1) BINVAL=-BINVAL
0076                RETURN
0077                END
```

GETVAL   E 10
16-Sep-1984 02:16:11   VAX-11 FORTRAN V3.4-56   Page 44
  5-Sep-1984 15:13:15   DISK$VMSMASTER:[MSGFIL.SRC]CVTMSG.FOR;1

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	283	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	4	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	32	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG

    Total Space Allocated   64867

ENTRY POINTS

Address	Type	Name
0-00000000	L*1	GETVAL

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	4-00000008	I*4	INDEX	6-00000090	I*4	LASTFACNUM
4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL	5-00000000	I*4	OUTFLAG	2-00000004	I*4	SIGN
2-00000000	L*1	TMP	2-00000008	I*4	TOOLONG						

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
0-0000002B	100	0-0000008E	130	**	150	0-000000AF	180	**	200	0-000000FB	300
0-00000106	400										

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name
	ERROR	L*1	UNBLNK

```
0001      C
0002      C     GET THE NEXT STRING TOKEN IN THE LINE, FALSE IF NONE
0003      C
0004            LOGICAL FUNCTION GETIDENT*1
0005            INCLUDE 'SRC$:CVTMSGCOM'
0049            LOGICAL*1 UNBLNK
0050            I=1
0051            GETIDENT=.FALSE.
0052            IF (UNBLNK().EQ.'.'.OR.UNBLNK().EQ.0) GOTO 400
0053            DO 200 COL=COL,120
0054            IF (LINE(COL).EQ.'$') GOTO 100
0055            IF (LINE(COL).EQ.' ') GOTO 100
0056            IF ((LINE(COL).GE.'A').AND.(LINE(COL).LE.'Z')) GOTO 100
0057            IF (GETIDENT.EQ..FALSE.) GOTO 400
0058            IF ((LINE(COL).LT.'0').OR.(LINE(COL).GT.'9')) GOTO 400
0059      100   GETIDENT=.TRUE.
0060      C     TRUNCATE ANY TOKENS GREATER THAN MAXTOKSIZ
0061            IF (I.GE.MAXTOKSIZ) GOTO 200
0062            NAME(I)=LINE(COL)
0063            I=I+1
0064      200   CONTINUE
0065            CALL ERROR(4,TOOLONG)
0066      400   NAME(I)=0
0067            RETURN
0068            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	199	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	4	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	32	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	64783	

ENTRY POINTS

Address	Type	Name
0-00000000	L*1	GETIDENT

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	2-00000004	I*4	I	4-00000008	I*4	INDEX
6-00000090	I*4	LASTFACNUM	4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL	5-00000000	I*4	OUTFLAG
2-00000008	I*4	TOOLONG									

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label	Address	Label	Address	Label
0-0000007F	100	0-000000A1	200	0-000000B8	400

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name
	ERROR	L*1	UNBLNK

```
0001    C
0002    C       FUNCTION TO COMPARE 2 STRINGS GENERICALLY
0003    C
0004            LOGICAL FUNCTION GENCMP*1(STRNG1,STRNG2)
0005            LOGICAL*1 STRNG1(100),STRNG2(100)
0006            GENCMP=.FALSE.
0007            IF (STRNG1(1).EQ.0.OR.STRNG2(1).EQ.0) GOTO 300
0008            DO 100 I=1,100
0009            IF (STRNG1(I).EQ.0.OR.STRNG2(I).EQ.0) GOTO 200
0010            IF (STRNG1(I).NE.STRNG2(I)) GOTO 300
0011    100     CONTINUE
0012    200     GENCMP=.TRUE.
0013    300     RETURN
0014            END
```

PROGRAM SECTIONS

Name	Bytes	Attributes
0 $CODE	92	PIC CON REL LCL SHR EXE RD NOWRT LONG
2 $LOCAL	48	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
Total Space Allocated	140	

ENTRY POINTS

Address	Type	Name
0-00000000	L*1	GENCMP

VARIABLES

Address	Type	Name
2-00000004	I*4	I

ARRAYS

Address	Type	Name	Bytes	Dimensions
AP-00000004a	L*1	STRNG1	100	(100)
AP-00000008a	L*1	STRNG2	100	(100)

LABELS

Address	Label	Address	Label	Address	Label
**	100	0-00000053	200	0-00000057	300

```
0001      C
0002      C     FUNCTION TO COMPARE 2 STRINGS EXACTLY
0003      C
0004            LOGICAL FUNCTION IDENT*1(STRNG1,STRNG2)
0005            LOGICAL*1 STRNG1(100),STRNG2(100)
0006            IDENT=.FALSE.
0007            DO 100 I=1,100
0008            IF (STRNG1(I).NE.STRNG2(I)) GOTO 300
0009            IF (STRNG1(I).EQ.0.AND.STRNG2(I).EQ.0) GOTO 200
0010            IF (STRNG1(I).EQ.0.OR.STRNG2(I).EQ.0) GOTO 300
0011      100   CONTINUE
0012      200   IDENT=.TRUE.
0013      300   RETURN
0014            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	92	PIC CON REL LCL SHR EXE RD NOWRT LONG
2	$LOCAL	48	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
	Total Space Allocated	140	

ENTRY POINTS

Address	Type	Name
0-00000000	L*1	IDENT

VARIABLES

Address	Type	Name
2-00000004	I*4	I

ARRAYS

Address	Type	Name	Bytes	Dimensions
AP-00000004@	L*1	STRNG1	100	(100)
AP-00000008@	L*1	STRNG2	100	(100)

LABELS

Address	Label	Address	Label	Address	Label
**	100	0-00000053	200	0-00000057	300

```
0001    C
0002    C       CONCATINATE 2 STRINGS TOGETHER, OUTPUT IN THIRD ARGUMENT
0003    C
0004            SUBROUTINE CONCAT(STRNG1,STRNG2,STRNG3)
0005            INCLUDE 'SRC$:CVTMSGCOM'
0049            LOGICAL*1 STRNG1(100),STRNG2(100),STRNG3(100),STRNG4(100)
0050            DO 100 I=1,99
0051            STRNG4(I)=STRNG2(I)
0052            IF (STRNG4(I).EQ.0) GOTO 200
0053    100     CONTINUE
0054            CALL ERROR(2,TOOLONG)
0055            GOTO 600
0056    200     DO 300 I=1,99
0057            STRNG3(I)=STRNG1(I)
0058            IF (STRNG3(I).EQ.0) GOTO 400
0059    300     CONTINUE
0060            CALL ERROR(2,TOOLONG)
0061            GOTO 600
0062    400     DO 500 J=1,99
0063            STRNG3(I-1+J)=STRNG4(J)
0064            IF (STRNG3(I-1+J).EQ.0) GOTO 600
0065    500     CONTINUE
0066            CALL ERROR(2,TOOLONG)
0067    600     RETURN
0068            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	164	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	4	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	184	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG

Total Space Allocated   64900

ENTRY POINTS

Address	Type	Name
0-0000C000		CONCAT

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	2-00000064	I*4	I	4-00000008	I*4	INDEX
2-0000006C	I*4	J	6-00000090	I*4	LASTFACNUM	4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL
5-00000000	I*4	OUTFLAG	2-00000068	I*4	TOOLONG						

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
AP-0000004@	L*1	STRNG1	100	(100)
AP-0000008@	L*1	STRNG2	100	(100)
AP-000000C@	L*1	STRNG3	100	(100)
2-00000000	L*1	STRNG4	100	(100)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
**	100	0-0000004E	200	**	300	0-00000075	400	**	500	0-000000A3	600

FUNCTIONS AND SUBROUTINES REFERENCED

Type Name

ERROR

```
0001   C
0002   C        RETURN THE LENGTH OF AN ASCIZ STRING
0003   C
0004            INTEGER FUNCTION LENGTH(STRNG)
0005            INCLUDE 'SRC$:CVTMSGCOM'
0049            LOGICAL*1 STRNG(100)
0050            DO 100 LENGTH=1,100
0051            IF (STRNG(LENGTH).EQ.0) GOTO 200
0052   100      CONTINUE
0053            CALL ERROR(2,TOOLONG)
0054   200      LENGTH=LENGTH-1
0055            RETURN
0056            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	62	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	4	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	40	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	64654	

ENTRY POINTS

Address	Type	Name
0-00000000	I*4	LENGTH

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	4-00000008	I*4	INDEX	6-000C0090	I*4	LASTFACNUM
4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL	5-00000000	I*4	OUTFLAG	2-00000004	I*4	TOOLONG

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
AP-00000004a	L*1	STRNG	100	(100)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label	Address	Label
**	100	0-00000036	200

FUNCTIONS AND SUBROUTINES REFERENCED

  Type Name

        ERROR

```
0001    C
0002    C       MOVE AN ASCIZ STRING TO ANOTHER BUFFER
0003    C
0004            SUBROUTINE MOVNAM(STRNG1,STRNG2)
0005            INCLUDE 'SRC$:CVTMSGCOM'
0049            LOGICAL*1 STRNG1(100),STRNG2(100)
0050            DO 100 I=1,100
0051            STRNG2(I)=STRNG1(I)
0052            IF (STRNG2(I).EQ.0) GOTO 200
0053    100     CONTINUE
0054            CALL ERROR(2,TOOLONG)
0055    200     RETURN
0056            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	69	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	4	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	60	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG

Total Space Allocated   64681

ENTRY POINTS

Address	Type	Name
0-00000000		MOVNAM

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	2-00000000	I*4	I	4-00000008	I*4	INDEX
6-00000090	I*4	LASTFACNUM	4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL	5-00000000	I*4	OUTFLAG
2-00000004	I*4	TOOLONG									

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
AP-00000004@	L*1	STRNG1	100	(100)
AP-00000008@	L*1	STRNG2	100	(100)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label	Address	Label
**	100	0-00000044	200

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name
	ERROR

00
00
00
00
00
00
00
00
00
00
00
00
00
00
00
00
00
00
00
00
00
00

PR

EN

```
0001      C
0002      C          SEARCH FOR THE NEXT NONBLANK CHARACTER
0003      C
0004                 LOGICAL FUNCTION UNBLNK*1
0005                 INCLUDE 'SRC$:CVTMSGCOM'
0049                 IF (COL.GT.120) GOTO 150
0050                 DO 100 COL=COL,120
0051                 IF (LINE(COL).GE.''11.AND.LINE(COL).LE.''14) GOTO 100
0052                 IF (LINE(COL).NE.' ') GOTO 200
0053      100        CONTINUE
0054      150        COL=121
0055      200        UNBLNK=LINE(COL)
0056                 RETURN
0057                 END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes									
0	$CODE	92	PIC CON REL LCL		SHR	EXE	RD	NOWRT	LONG
2	$LOCAL	4	PIC CON REL LCL	NOSHR	NOEXE		RD	WRT	LONG
3	TEXT	324	PIC OVR REL GBL		SHR	NOEXE	RD	WRT	LONG
4	VARS	24	PIC OVR REL GBL		SHR	NOEXE	RD	WRT	LONG
5	LOGVAR	4	PIC OVR REL GBL		SHR	NOEXE	RD	WRT	LONG
6	OUT	164	PIC OVR REL GBL		SHR	NOEXE	RD	WRT	LONG
7	FACNAMS	64032	PIC OVR REL GBL		SHR	NOEXE	RD	WRT	LONG

Total Space Allocated   64644

ENTRY POINTS

Address	Type	Name
0-00000000	L*1	UNBLNK

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	4-00000008	I*4	INDEX	6-00000090	I*4	LASTFACNUM
4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL	5-00000000	I*4	OUTFLAG			

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label	Address	Label	Address	Label
0-0000003E	100	0-00000047	150	0-0000004C	200

```
0001      C
0002      C         GET THE NEXT LINE FROM THE INPUT FILE
0003      C
0004                LOGICAL*1 FUNCTION GETLIN
0005                INCLUDE 'SRC$:CVTMSGCOM'
0049                LOGICAL*1 UNBLNK
0050                READ(1,99,END=100) LEN,(LINE(K),K=1,LEN)
0051      99        FORMAT(Q,120A1)
0052                LINE(LEN+1)=0
0053                COL=1
0054                GETLIN=.TRUE.
0055      C
0056      C         OUTPUT THE LINE IF COMMENT OR NULL LINE
0057      C
0058                IF (UNBLNK().EQ.';'.OR.UNBLNK().EQ.0) THEN
0059                      BIAS=OUTCOL+1-COL
0060                      CALL BUFFER(LINE)
0061                      IF (UNBLNK().EQ.';') OUTLINE(BIAS+COL) = '!'
0062                      CALL OUTPUT_LINE
0063                END IF
0064                RETURN
0065
0066      100       GETLIN=.FALSE.
0067                RETURN
0068                END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	195	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	6	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	32	PIC CON REL LCl NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG

Total Space Allocated   64781

ENTRY POINTS

Address	Type	Name
0-00000000	L*1	GETLIN

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
2-0000000C	I*4	BIAS	4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL
6-00000088	I*4	CURNUM	6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	4-00000008	I*4	INDEX
2-00000008	I*4	K	6-00000090	I*4	LASTFACNUM	2-00000004	I*4	LEN	4-00000000	I*4	NUM
6-00000000	I*4	OUTCOL	5-00000000	I*4	OUTFLAG						

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label	Address	Label
1-00000000	99'	0-000000C0	100

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name
	BUFFER		OUTPUT_LINE	L*1	UNBLNK

```
0001    C
0002    C         OUTPUT AN ASCIZ STRING TO THE OUTPUT LINE BUFFER
0003    C
0004              SUBROUTINE BUFFER(STRING)
0005              INCLUDE 'SRC$:CVTMSGCOM'
0049              LOGICAL*1 STRING(128)
0050              DO 10 I=1,128
0051              IF (STRING(I).EQ.0) GOTO 100
0052              IF (OUTCOL.GT.132) GOTO 200
0053              OUTCOL = OUTCOL+1
0054              OUTLINE(OUTCOL)=STRING(I)
0055    10        CONTINUE
0056    100       RETURN
0057    200       CALL ERROR(4,LINE_OVERFLOW)
0058              RETURN
0059              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	88	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	4	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	40	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG

Total Space Allocated   64680

ENTRY POINTS

Address	Type	Name
0-00000000		BUFFER

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	2-00000000	I*4	I	4-00000008	I*4	INDEX
6-00000090	I*4	LASTFACNUM	2-00000004	I*4	LINE_OVERFLOW	4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL
5-00000000	I*4	OUTFLAG									

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
AP-0000004a	L*1	STRING	128	(128)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label	Address	Label	Address	Label
**	10	0-0000004E	100	0-0000004F	200

BUFFER

D 12
16-Sep-1984 02:16:11   VAX-11 FORTRAN V3.4-56   Page 69
5-Sep-1984 15:13:15   DISK$VMSMASTER:[MSGFIL.SRC]CVTMSG.FOR;1

LIS
V04

FUNCTIONS AND SUBROUTINES REFERENCED

Type Name

      ERROR

```
0001      C
0002      C      OUTPUT A DECIMAL NUMBER TO THE OUTPUT LINE BUFFER
0003      C
0004             SUBROUTINE BUFNUM(NUMBER)
0005             LOGICAL*1 CHARS(9)
0006             CHARACTER*8 STRING
0007             EQUIVALENCE (STRING(1:1),CHARS)
0008             CALL FOR$CNV_OUT_I(%VAL(NUMBER),STRING)
0009             CHARS(9)=0
0010             DO 10 I=1,8
0011             IF (CHARS(I).NE.' ') GOTO 20
0012      10     CONTINUE
0013      20     CALL BUFFER(%REF(CHARS(I)))
0014             RETURN
0015             END
```

PROGRAM SECTIONS

        Name   Bytes   Attributes

    0 $CODE   60   PIC CON REL LCL   SHR   EXE   RD NOWRT LONG
    2 $LOCAL   44   PIC CON REL LCL NOSHR NOEXE   RD   WRT LONG

        Total Space Allocated   104

ENTRY POINTS

      Address Type Name

    0-00000000   BUFNUM

VARIABLES

      Address Type Name   Address Type Name   Address Type Name

    2-0000000C I*4 I   AP-0000000a I*4 NUMBER   2-00000000 CHAR STRING

ARRAYS

      Address Type Name   Bytes Dimensions

    2-00000000 L*1 CHARS   9 (9)

LABELS

      Address Label   Address Label

        **   10   0-0000002A 20

FUNCTIONS AND SUBROUTINES REFERENCED

    Type Name   Type Name

          BUFFER   FOR$CNV_OUT_I

```
0001    C
0002    C       OUTPUT THE CURRENT OUTPUT LINE BUFFER TO THE OUTPUT FILE
0003    C
0004            SUBROUTINE OUTPUT LINE
0005            INCLUDE 'SRC$:CVTMSGCOM'
0049            WRITE(2,100)(OUTLINE(K),K=1,OUTCOL)
0050    100     FORMAT(128A1)
0051            OUTCOL=0
0052            RETURN
0053            END
```

OUTPUT_LINE

H 12
16-Sep-1984 02:16:11   VAX-11 FORTRAN V3.4-56   Page 73
5-Sep-1984 15:13:15   DISK$VMSMASTER:[MSGFIL.SRC]CVTMSG.FOR;1

LIS
V04

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	75	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	6	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	4	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	324	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	24	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOGVAR	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	OUT	164	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FACNAMS	64032	PIC OVR REL GBL SHR NOEXE RD WRT LONG

Total Space Allocated   64633

ENTRY POINTS

Address	Type	Name
0-00000000		OUTPUT_LINE

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000014	I*4	BINVAL	4-0000000C	I*4	CODE	4-00000004	I*4	COL	6-00000088	I*4	CURNUM
6-0000008C	I*4	CURSEV	4-00000010	I*4	ERRCNT	4-00000008	I*4	INDEX	2-00000000	I*4	K
6-00000090	I*4	LASTFACNUM	4-00000000	I*4	NUM	6-00000000	I*4	OUTCOL	5-00000000	I*4	OUTFLAG

ARRAYS

Address	Type	Name	Bytes	Dimensions
7-00000000	L*1	FACILITIES	64032	(32, 2001)
3-000000E4	L*1	FSPEC	80	(80)
6-00000094	L*1	LASTPREFIX	16	(16)
3-00000000	L*1	LINE	132	(132)
3-00000094	L*1	MACRO_NAME	16	(16)
3-00000134	L*1	MACRO_SUFFIX	16	(16)
3-000000A4	L*1	NAME	32	(32)
6-00000004	L*1	OUTLINE	132	(132)
3-00000084	L*1	PREFIX	16	(16)
3-000000C4	L*1	SYMBOL_NAME	32	(32)

LABELS

Address	Label
1-00000000	100'

```
0001    C
0002    C        OPEN THE OUTPUT FILE
0003    C
0004             SUBROUTINE OPEN_OUTPUT
0005             INCLUDE 'SRC$:CVTMSGCOM'
0049             LOGICAL*1 STRING(128)
0050             CLOSE (UNIT=2)
0051             CALL MOVNAM(FSPEC,STRING)
0052             DO 10 POS=LENGTH(STRING),1,-1
0053             IF (STRING(POS).EQ.'.') GOTO 20
0054    10       CONTINUE
0055    20       IF(STRING(POS).EQ.'.') CALL MOVNAM(%REF('.MSG'),STRING(POS))
0056             DO 30 POS=POS,1,-1
0057             IF (STRING(POS).EQ.']'.OR.STRING(POS).EQ.'>'
0058           1         .OR.STRING(POS).EQ.':') GOTO 40
0059    30       CONTINUE
0060    40       POS=POS+1
0061    C        THE OUTPUT FILE WILL BE PUT IN THE DEFAULT DIRECTORY, SAME NAME, .MSG
0062             OPEN(UNIT=2,NAME=STRING(POS),TYPE='NEW',CARRIAGECONTROL='LIST',ERR=100)
0063             OUTCOL=0
0064             RETURN
0065    100      CALL ERROR(9,FILNOTFND)
0066             RETURN
0067             END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes									
0	$CODE	158	PIC CON REL LCL		SHR	EXE	RD	NOWRT	LONG
1	$PDATA	9	PIC CON REL LCL		SHR	NOEXE	RD	NOWRT	LONG
2	$LOCAL	220	PIC CON REL LCL	NOSHR	NOEXE		RD	WRT	LONG
3	TEXT	324	PIC OVR REL GBL		SHR	NOEXE	RD	WRT	LONG
4	VARS	24	PIC OVR REL GBL		SHR	NOEXE	RD	WRT	LONG
5	LOGVAR	4	PIC OVR REL GBL		SHR	NOEXE	RD	WRT	LONG
6	OUT	164	PIC OVR REL GBL		SHR	NOEXE	RD	WRT	LONG
7	FACNAMS	64032	PIC OVR REL GBL		SHR	NOEXE	RD	WRT	LONG

    Total Space Allocated   64935

ENTRY POINTS

    Address   Type   Name

    0-00000000   OPEN_OUTPUT

VARIABLES

     Address   Type Name   Address   Type Name   Address   Type Name   Address   Type Name

     4-00000014 I*4 BINVAL   4-0000000C I*4 CODE   4-00000004 I*4 COL   6-00000088 I*4 CURNUM
     6-0000008C I*4 CURSEV   4-00000010 I*4 ERRCNT   2-00000084 I*4 FILNOTFND   4-00000008 I*4 INDEX
     6-00000090 I*4 LASTFACNUM   4-00000000 I*4 NUM   6-00000000 I*4 OUTCOL   5-00000000 I*4 OUTFLAG
     2-00000080 I*4 POS

ARRAYS

     Address   Type Name   Bytes Dimensions

     7-00000000 L*1 FACILITIES   64032 (32, 2001)
     3-000000E4 L*1 FSPEC   80 (80)
     6-00000094 L*1 LASTPREFIX   16 (16)
     3-00000000 L*1 LINE   132 (132)
     3-00000094 L*1 MACRO_NAME   16 (16)
     3-00000134 L*1 MACRO_SUFFIX   16 (16)
     3-000000A4 L*1 NAME   32 (32)
     6-00000004 L*1 OUTLINE   132 (132)
     3-00000084 L*1 PREFIX   16 (16)
     2-00000000 L*1 STRING   128 (128)
     3-000000C4 L*1 SYMBOL_NAMc   32 (32)

LABELS

     Address   Label   Address   Label   Address   Label   Address   Label   Address   Label

        **   10   0-00000036   20   **   30   0-00000077   40   0-00000095 100

FUNCTIONS AND SUBROUTINES REFERENCED

     Type Name   Type Name   Type Name   Type Name   Type Name

           ERROR   FOR$CLOSE   FOR$OPEN   I*4 LENGTH   MOVNAM

COMMAND QUALIFIERS

   FORTRAN /LIS=LIS$:CVTMSG/OBJ=OBJ$:CVTMSG MSRC$:CVTMSG

   /CHECK=(NOBOUNDS,OVERFLOW,NOUNDERFLOW)
   /DEBUG=(NOSYMBOLS,TRACEBACK)
   /STANDARD=(NOSYNTAX,NOSOURCE_FORM)
   /SHOW=(NOPREPROCESSOR,NOINCLUDE,MAP)
   /F77 /NOG_FLOATING /I4 /OPTIMIZE /WARNINGS /NOD_LINES /NOCROSS_REFERENCE /NOMACHINE_CODE /CONTINUATIONS=19

OPEN_OUTPUT

K 12
16-Sep-1984 02:16:11   VAX-11 FORTRAN V3.4-56   Page 76   LI
5-Sep-1984 15:13:15   DISK$VMSMASTER:[MSGFIL.SRC]CVTMSG.FOR;1   V0

COMPILATION STATISTICS

Run Time: 24.98 seconds
Elapsed Time: 88.10 seconds
Page Faults: 238
Dynamic Memory: 212 pages

MSGINT
MDL

SDLGENREQ
REQ

MSGDEF
SDL

MAIN
LIS

CVTMSGCOM
FOR

LISTING
LIS

CVTMSG
LIS

MSG
REQ