



```

MM      MM      TTTTTTTTTT  HH      HH      JJ      MM      MM      AAAAAA  XX      XX      000000
MM      MM      TTTTTTTTTT  HH      HH      JJ      MM      MM      AAAAAA  XX      XX      000000
MMMM    MMMM      TT        HH      HH      JJ      MMMM    MMMM  AA      AA  XX      XX      00      00
MMMM    MMMM      TT        HH      HH      JJ      MMMM    MMMM  AA      AA  XX      XX      00      00
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MM      MM      TT        HHHHHHHHHH  JJ      MM      MM      AA      AA  XX      XX      00      00
MM      MM      TT        HHHHHHHHHH  JJ      MM      MM      AA      AA  XX      XX      00      00
MM      MM      TT        HH      HH      JJ      MM      MM      AAAAAAAAAA  XX      XX      0000      00
MM      MM      TT        HH      HH      JJ      MM      MM      AAAAAAAAAA  XX      XX      0000      00
MM      MM      TT        HH      HH      JJ      MM      MM      AA      AA  XX      XX      00      00
MM      MM      TT        HH      HH      JJ      MM      MM      AA      AA  XX      XX      00      00
MM      MM      TT        HH      HH      JJ      MM      MM      AA      AA  XX      XX      000000
MM      MM      TT        HH      HH      JJ      MM      MM      AA      AA  XX      XX      000000

```

```

LL      IIIIII  SSSSSSSS
LL      IIIIII  SSSSSSSS
LL      II     SS
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LL      II     SS
LL      II     SSSSSS
LL      II     SSSSSS
LL      II     SS
LL      II     SS
LL      II     SS
LL      II     SS
LLLLLLLLLLLL IIIIII  SSSSSSSS
LLLLLLLLLLLL IIIIII  SSSSSSSS

```

(2)	48
(3)	57
(4)	83

HISTORY	; Detailed Current Edit History
DECLARATIONS	
MTH\$JMAX0, MTH\$AJMAX0	

```
0000 1 .TITLE MTHSJMAXO JMAXO and AJMAXO functions
0000 2 .IDENT /1-002/ ; File: MTHJMAXO.MAR
0000 3
0000 4
0000 5 *****
0000 6 *
0000 7 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY *
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0000 17 *
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0000 20 * CORPORATION. *
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0000 22 * DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS *
0000 23 * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL. *
0000 24 *
0000 25 *
0000 26 *****
0000 27
0000 28
0000 29 FACILITY: MATH LIBRARY
0000 30 ++
0000 31 ABSTRACT:
0000 32
0000 33
0000 34 --
0000 35
0000 36 VERSION: 0
0000 37
0000 38 HISTORY:
0000 39
0000 40 AUTHOR:
0000 41 Jonathan M. Taylor, 12-JUL-77: Version 0
0000 42
0000 43 MODIFIED BY:
0000 44
0000 45
0000 46
```

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```
0000 48 .SBTTL HISTORY ; Detailed Current Edit History
0000 49
0000 50
0000 51 : Edit History for Version 0 of MTHJMAX0
0000 52 :
0000 53 : 0-2 - Fix access violation. TNH 16-Aug-78
0000 54 : 1-001 - Update version number and copyright notice. JBS 16-NOV-78
0000 55 : 1-002 - Add "_" to the PSECT directive. JBS 22-DEC-78
```

```
0000 57      .SBTTL  DECLARATIONS
0000 58
0000 59 :
0000 60 : INF  UDE FILES:
0000 61 :
0000 62 :
0000 63 :
0000 64 : EXTERNAL SYMBOLS:
0000 65 :
0000 66 :
0000 67 :
0000 68 : MACROS:
0000 69 :
0000 70 :
0000 71 :
0000 72 : PSECT DECLARATIONS:
00000000 73 : .PSECT  _MTH$CODE      PIC, SHR, LONG, EXE, NOWRT
0000 74 :
0000 75 :
0000 76 : EQUATE^ SYMBOLS:
0000 77 :
0000 78 :
0000 79 :
0000 80 : OWN STORAGE:
0000 81 :
```

```

0000 83      .SBTTL  MTH$JMAXO, MTH$AJMAXO
0000 84
0000 85      :++
0000 86      : FUNCTIONAL DESCRIPTION:
0000 87      :
0000 88
0000 89      : CALLING SEQUENCE:
0000 90      :     NONE
0000 91      :
0000 92
0000 93      : INPUT PARAMETERS:
0000 94      :     NONE
0000 95
0000 96      : IMPLICIT INPUTS:
0000 97      :     NONE
0000 98
0000 99      : OUTPUT PARAMETERS:
0000 100     :     NONE
0000 101
0000 102     : IMPLICIT OUTPUTS:
0000 103     :     NONE
0000 104
0000 105     : COMPLETION CODES:
0000 106     :     NONE
0000 107
0000 108     : SIDE EFFECTS:
0000 109     :     NONE
0000 110
0000 111     :--
0000 112
0000 113
0000 114
0000 115
09 0000 0000 116     .ENTRY  MTH$JMAXO,      ^M<>
0000 10 0002 117     BSB      MAXL                ; R0 = max arg
0000 04 0004 118     RET
0000 0005 119
50 0000 0005 120     .ENTRY  MTH$AJMAXO,     ^M<>
0000 04 10 0007 121     BSB      MAXL                ; R0 = max arg
50 50 4E 0009 122     CVTLF   RO, RO              ; float it
0000 04 000C 123     RET
0000 000D 124
0000 000D 125     :+
0000 000D 126     : MAXL returns the maximum of INTEGER*4 args.
0000 000D 127     :-
0000 000D 128
0000 000D 129     MAXL:
51 6C 9A 000D 130     MOVZBL  (AP), R1                ; R1 = number of args
0000 8C D5 0010 131     TSTL    (AP)+                ; AP -> first arg adr
50 9C D0 0012 132 1$:  MOVL    @(AP)+, R0          ; get trial max
0000 08 11 0015 133     BRB     3$                ; check arg count
50 00 BC D1 0017 134 2$:  CMPL   @0(AP),R0          ; if this arg is greater then trial max
0000 F5 14 0018 135     BGTR   1$                ; then it becomes trial max
0000 8C D5 001D 136     TSTL   (AP)+                ; else ignore it
50 F5 51 F5 001F 137 3$:  SOBGTR R1, 2$          ; check arg count
0000 05 0022 138     RSB
0000 0023 139

```

MTHSJMAXO  
1-C02

JMAXO and AJMAXO functions  
MTHSJMAXO, MTHSAJMAXO

N 4

16-SEP-1984 01:45:39 VAX/VMS Macro V04-00  
6-SEP-1984 11:26:31 [MTHRTL.SRC]MTHJMAXO.MAR;1

Page 5  
(4)

M1  
2-

0023 140  
0023 141 .END



MTH\$JMAX0  
Symbol table

JMAX0 and AJMAX0 functions

B 5

16-SEP-1984 01:45:39  
6-SEP-1984 11:26:31

VAX/VMS Macro V04-00  
[MTHRTL.SRC]MTHJMAX0.MAR;1

Page 6  
(4)

MAXL 0000000D R 01  
MTH\$AJMAX0 00000005 RG 01  
MTH\$JMAX0 00000000 RG 01

-----  
! Psect synopsis !  
-----

PSECT name	Allocation	PSECT No.	Attributes
ABS	00000000 ( 0.)	00 ( 0.)	NOPIC USR CON ABS LCL NOSHR NOEXE NORD NOWRT NOVEC BYTE
MTH\$CODE	00000023 ( 35.)	01 ( 1.)	PIC USR CON REL LCL SHR EXE RD NOWRT NOVEC LONG

-----  
! Performance indicators !  
-----

Phase	Page faults	CPU Time	Elapsed Time
Initialization	30	00:00:00.10	00:00:00.72
Command processing	122	00:00:00.48	00:00:02.55
Pass 1	71	00:00:00.45	00:00:01.64
Symbol table sort	0	00:00:00.01	00:00:00.01
Pass 2	39	00:00:00.32	00:00:01.70
Symbol table output	2	00:00:00.01	00:00:00.02
Psect synopsis output	2	00:00:00.02	00:00:00.02
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	268	00:00:01.39	00:00:06.66

The working set limit was 750 pages.  
1511 bytes (3 pages) of virtual memory were used to buffer the intermediate code.  
There were 10 pages of symbol table space allocated to hold 3 non-local and 3 local symbols.  
141 source lines were read in Pass 1, producing 13 object records in Pass 2.  
0 pages of virtual memory were used to define 0 macros.

-----  
! Macro library statistics !  
-----

Macro library name	Macros defined
_\$255\$DUA28:[SYSLIB]STARLET.MLB;2	0

0 GETS were required to define 0 macros.

There were no errors, warnings or information messages.

MACRO/ENABLE=SUPPRESSION/DISABLE=(GLOBAL,TRACEBACK)/LIS=LIS\$:MTHJMAX0/OBJ=OBJ\$:MTHJMAX0 MSRCS:MTHJMAX0/UPDATE=(ENHS:MTHJMAX0)

[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]
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MTHMINO LIS	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	MTHMAX1 LIS	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]
[Terminal Screen]	MTHJDMNT LIS	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	MTHMSGDEF LIS	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]
[Terminal Screen]	[Terminal Screen]	MTHJHMNT LIS	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	MTHSGN LIS	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]
[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	MTHMAX0 LIS	[Terminal Screen]	[Terminal Screen]	MTHMOD LIS	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]
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MTHJINT LIS	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	MTHRANDOM LIS	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]	[Terminal Screen]
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