


```

FFFFFFFFF 000000 RRRRRRRR JJ DDDDDDDD AAAAAA TTTTTTTTTT EEEEEEEEE
FFFFFFFFF 000000 RRRRRRRR JJ DDDDDDDD AAAAAA TTTTTTTTTT EEEEEEEEE
FF 00 00 RR RR JJ DD DD AA AA TT EE
FF 00 00 RR RR JJ DD DD AA AA TT EE
FF 00 00 RR RR JJ DD DD AA AA TT EE
FF 00 00 RR RR JJ DD DD AA AA TT EE
FFFFFFFFF 00 00 RRRRRRRR JJ DD DD AA AA TT EEEEEEEE
FFFFFFFFF 00 00 RRRRRRRR JJ DD DD AA AA TT EEEEEEEE
FF 00 00 RR RR JJ DD DD AAAAAAAAAA TT EE
FF 00 00 RR RR JJ DD DD AAAAAAAAAA TT EE
FF 00 00 RR RR JJ DD DD AA AA TT EE
FF 00 00 RR RR JJ DD DD AA AA TT EE
FF 000000 RR RR JJJJJJ DDDDDDDD AA AA TT EEEEEEEEE
FF 000000 RR RR JJJJJJ DDDDDDDD AA AA TT EEEEEEEEE

```

```

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

```

(2)	49	HISTORY	; Detailed Current Edit History
(3)	57	DECLARATIONS	
(4)	83	FOR\$JDATE	- return month, day, year as INTEGER*4

FC
SY
CC
FA
FC
FC
FC
ST
ST
TR

PS
--
:
:

PH
--
In
CC
Pa
Sy
Pa
Sy
Pa
Cr
As

TH
21
TH
20
O

Ma
--
-1
O
TH
MA

```

0000 1 .TITLE FORSJDATE ; Time and Date as long integers
0000 2 .IDENT /1-002/ ; File: FORJDATE.MAR
0000 3
0000 4
0000 5 *****
0000 6 *
0000 7 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY *
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0000 24 *
0000 25 *
0000 26 *****
0000 27
0000 28
0000 29 FACILITY: FORTRAN SYSTEM LIBRARY
0000 30 ++
0000 31 ABSTRACT:
0000 32
0000 33 Return current month, day, and year as INTEGER*4 values.
0000 34
0000 35 --
0000 36
0000 37 VERSION: 0
0000 38
0000 39 HISTORY:
0000 40
0000 41 AUTHOR:
0000 42 Jonathan M. Taylor, 17-Aug-77: Version 0
0000 43
0000 44 MODIFIED BY:
0000 45
0000 46
0000 47

```

FOR\$JDATE
1-002

; Time and Date as Long integers N 8 15-SEP-1984 23:54:37 VAX/VMS Macro V04-00 Page 2
HISTORY ; Detailed Current Edit History 6-SEP-1984 10:57:10 [FORRTL.SRC]FORJDATE.MAR;1 (2)

0000 49 .SBTTL HISTORY ; Detailed Current Edit History
0000 50
0000 51
0000 52 ; Edit History for Version 0 of FOR\$JDATE
0000 53
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 : INCLUDE FILES:
0000 61 : oerr.mar
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 _FOR$CODE PIC, SHR, LONG, EXE, NOWRT
0000 74 :
0000 75 :
0000 76 : EQUATED SYMBOLS:
0000 77 :
0000 78 :
0000 79 :
0000 80 : OWN STORAGE:
0000 81 : none
```

```

0000 83      .SBTTL FOR$JDATE - return month, day, year as INTEGER*4
0000 84
0000 85      :++
0000 86      : FUNCTIONAL DESCRIPTION:
0000 87      :
0000 88      : FOR$JDATE uses system service $NUMTIM to get date information.
0000 89      : This information is converted to the appropriate type and stored
0000 90      : through the addresses passed as parameters.
0000 91
0000 92      : CALLING SEQUENCE:
0000 93      :
0000 94      : CALL FOR$JDATE (month.wl.r, day.wl.r, year.wl.r)
0000 95
0000 96      : INPUT PARAMETERS:
0000 97      :
0000 98      : month.wl.r      adr of longword to place month (1-12) integer
0000 99      : day.wl.r        adr of longword to place day (1-31) integer
0000 100     : year.wl.r       adr of longword to place year (0-99)integer
0000 101
0000 102     : IMPLICIT INPUTS:
0000 103     : NONE
0000 104
0000 105     : OUTPUT PARAMETERS:
0000 106     : NONE
0000 107
0000 108     : IMPLICIT OUTPUTS:
0000 109     : NONE
0000 110
0000 111     : COMPLETION CODES:
0000 112     : NONE
0000 113
0000 114     : SIDE EFFECTS:
0000 115     : SIGNALs Integer Overflow (this should never happen)
0000 116
0000 117     :--
0000 118
0000 119
0000 120
0000 121
  
```

50	50	50	00000064	8F	7B	0018	127	EDIV	#100, R0, R0, R0		
			0C BC	50	D0	0021	128	MOVL	R0, @12(AP)		: return year
			04 BC	8E	32	0025	129	CVTWL	(SP)+, @4(AP)		: return month
			08 BC	6E	32	0029	130	CVTWL	(SP), @8(AP)		: return day
					04	002D	131	RET			: return
						002E	132				
						002E	133				
						002E	134	.END			

```

4000 0000 121      .ENTRY FOR$JDATE,      ^M<IV>
0000 0002 122      SUBL #16, SP
0000 0005 123      MOVL SP, R0
0000 0008 124      $NUMTIM_S (R0)
0000 0013 125      MOVZWL (SP)+, R0
0000 0016 126      CLRL R1
0000 0018 127      EDIV #100, R0, R0, R0
0000 0021 128      MOVL R0, @12(AP)
0000 0025 129      CVTWL (SP)+, @4(AP)
0000 0029 130      CVTWL (SP), @8(AP)
0000 002D 131      RET
0000 002E 132
0000 002E 133
0000 002E 134      .END
  
```

```

: save 8 words for $NUMTIM
: R0 -> data area
: get system time values
: R0 = 'year since 0'
: as a quadword value
: R0 = two digit year value
: return year
: return month
: return day
: return
  
```

FOR\$JDATE
Symbol table

; Time and Date as long integers D 9

15-SEP-1984 23:54:37 VAX/VMS Macro V04-00
6-SEP-1984 10:57:10 [FORRTL.SRC]FORJDATE.MAR;1

Page 5
(4)

FOR\$JDATE 00000000 RG 01
SYSSNUMTIM ***** G 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		
FOR\$CODE	0000002E (46.)	01 (1.)	PIC	USR	CON	REL	LCL	SHR	EXE	RD	NOWRT	NOVEC	LONG		

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

Phase	Page faults	CPU Time	Elapsed Time
Initialization	29	00:00:00.06	00:00:01.34
Command processing	111	00:00:00.55	00:00:04.32
Pass 1	97	00:00:00.51	00:00:02.82
Symbol table sort	0	00:00:00.00	00:00:00.00
Pass 2	38	00:00:00.28	00:00:01.34
Symbol table output	2	00:00:00.00	00:00:00.01
Psect synopsis output	2	00:00:00.02	00:00:00.13
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	281	00:00:01.44	00:00:09.96

The working set limit was 1050 pages.
1669 bytes (4 pages) of virtual memory were used to buffer the intermediate code.
There were 10 pages of symbol table space allocated to hold 2 non-local and 0 local symbols.
134 source lines were read in Pass 1, producing 11 object records in Pass 2.
2 pages of virtual memory were used to define 2 macros.

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

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

13 GETS were required to define 2 macros.

There were no errors, warnings or information messages.

MACRO/ENABLE=SUPPRESSION/DISABLE=(GLOBAL,TRACEBACK)/LIS=LIS\$:FORJDATE/OBJ=OBJ\$:FORJDATE MSRC\$:FORJDATE/UPDATE=(ENH\$:FORJDATE)

FORINTLND LIS

FORMSG LIS

FORIOBEG LIS

FORTOEND LIS

FORLEX LIS

FORMLTAB LIS

FORINQUIR LIS

FORIOELEM LIS

FORIDATE LIS

FORLIB LIS