```
FFFFFFFFFFFFFFF    000000000    RRRRRRRRRRR    RRRRRRRRRRR    TTTTTTTTTTTTTTT  LLL
FFFFFFFFFFFFFFF    000000000    RRRRRRRRRRR    RRRRRRRRRRR    TTTTTTTTTTTTTTT  LLL
FFFFFFFFFFFFFFF    000000000    RRRRRRRRRRR    RRRRRRRRRRR    TTTTTTTTTTTTTTT  LLL
FFF              000      000    RRR      RRR    RRR      RRR       TTT         LLL
FFF              000      000    RRR      RRR    RRR      RRR       TTT         LLL
FFF              000      000    RRR      RRR    RRR      RRR       TTT         LLL
FFF              000      000    RRR      RRR    RRR      RRR       TTT         LLL
FFF              000      000    RRR      RRR    RRR      RRR       TTT         LLL
FFFFFFFFFFF      000      000    RRRRRRRRRRR    RRRRRRRRRRR       TTT         LLL
FFFFFFFFFFF      000      000    RRRRRRRRRRR    RRRRRRRRRRR       TTT         LLL
FFFFFFFFFFF      000      000    RRRRRRRRRRR    RRRRRRRRRRR       TTT         LLL
FFF              000      000    RRR   RRR       RRR   RRR         TTT         LLL
FFF              000      000    RRR   RRR       RRR   RRR         TTT         LLL
FFF              000      000    RRR   RRR       RRR   RRR         TTT         LLL
FFF              000      000    RRR      RRR    RRR      RRR       TTT         LLL
FFF              000      000    RRR      RRR    RRR      RRR       TTT         LLL
FFF              000      000    RRR      RRR    RRR      RRR       TTT         LLL
FFF                000000000    RRR      RRR    RRR      RRR       TTT       LLLLLLLLLLLLLLL
FFF                000000000    RRR      RRR    RRR      RRR       TTT       LLLLLLLLLLLLLLL
FFF                000000000    RRR      RRR    RRR      RRR       TTT       LLLLLLLLLLLLLLL
```

```
FFFFFFFFFF    000000    RRRRRRRR    IIIIII    DDDDDDDD      AAAAAA    TTTTTTTTTT    EEEEEEEEEE
FFFFFFFFFF    000000    RRRRRRRR    IIIIII    DDDDDDDD      AAAAAA    TTTTTTTTTT    EEEEEEEEEE
FF           00    00   RR    RR      II      DD    DD    AA    AA        TT        EE
FF           00    00   RR    RR      II      DD    DD    AA    AA        TT        EE
FF           00    00   RR    RP      II      DD    DD    AA    AA        TT        EE
FF           00    00   RR    RR      II      DD    DD    AA    AA        TT        EE
FFFFFFFF     00    00   RRRRRRRR      II      DD    DD    AA    AA        TT        EEEEEEEE
FFFFFFFF     00    00   RRRRRRRR      II      DD    DD    AA    AA        TT        EEEEEEEE
FF           00    00   RR  RR        II      DD    DD    AAAAAAAAAA      TT        EE
FF           00    00   RR  RR        II      DD    DD    AAAAAAAAAA      TT        EE
FF           00    00   RR    RR      II      DD    DD    AA    AA        TT        EE            ....
FF           00    00   RR    RR      II      DD    DD    AA    AA        TT        EE            ....
FF           000000     RR    RR    IIIIII    DDDDDDDD    AA    AA        TT        EEEEEEEEEE     ....
FF           000000     RR    RR    IIIIII    DDDDDDDD    AA    AA        TT        EEEEEEEEEE     ....

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             II             SS
LLLLLLLLLL   IIIIII     SSSSSSSS
LLLLLLLLLL   IIIIII     SSSSSSSS
```

FOR$DATE
1-002

I 15
; Time and date as short integers   15-SEP-1984 23:53:01 VAX/VMS Macro V04-00   Page 1
                                        6-SEP-1984 10:56:21 [FORRTL.SRC]FORIDATE.MAR;1   (1)

FC
1-

```
0000      1          .TITLE  FOR$DATE        ; Time and date as short integers
0000      2          .IDENT  /1-002/         ; File: FORIDATE.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 one-word integer 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$IDATE
1-002

J 15
; Time and date as short integers   15-SEP-1984 23:53:01   VAX/VMS Macro V04-00   Page 2
HISTORY ; Detailed Current Edit History   6-SEP-1984 10:56:21   [FORRTL.SRC]FORIDATE.MAR;1   (2)

```
0000    49              .SBTTL  HISTORY         ; Detailed Current Edit History
0000    50
0000    51
0000    52  ; Edit History for Version 0 of FOR$IDATE
0000    53  ;
0000    54  ; 0-2   - Remove FOR$FLAG_JACKET.   TNH 11-July-78
0000    55  ; 1-001 - Update version number and copyright notice.  JBS 16-NOV-78
0000    56  ; 1-002 - Add "_" to the PSECT directive.  JBS 22-DEC-78
```

K 15

FOR$DATE   ; Time and date as short integers   15-SEP-1984 23:53:01 VAX/VMS Macro V04-00   Page 3
1-002   DECLARATIONS   6-SEP-1984 10:56:21 [FORRTL.SRC]FORIDATE.MAR;1   (3)

```
        0000    58              .SBTTL  DECLARATIONS
        0000    59
        0000    60 ;
        0000    61 ; INCLUDE FILES:
        0000    62 ;     oerr.mar
        0000    63
        0000    64 ;
        0000    65 ; EXTERNAL SYMBOLS:
        0000    66 ;
        0000    67
        0000    68 ;
        0000    69 ; MACROS:
        0000    70 ;
        0000    71
        0000    72 ;
        0000    73 ; PSECT DECLARATIONS:
     00000000   74              .PSECT  _FOR$CODE        PIC, SHR, LONG, EXE, NOWRT
        0000    75
        0000    76 ;
        0000    77 ; EQUATED SYMBOLS:
        0000    78 ;
        0000    79
        0000    80 ;
        0000    81 ; OWN STORAGE:
        0000    82 ;     none
```

FOR$IDATE   L 15
1-002   ; Time and date as short integers   15-SEP-1984 23:53:01   VAX/VMS Macro V04-00   Page   4
            FOR$IDATE - return month, day, year as I   6-SEP-1984 10:56:21   [FORRTL.SRC]FORIDATE.MAR;1   (4)

```
                          0000   84              .SBTTL  FOR$IDATE - return month, day, year as INTEGER*2
                          0000   85
                          0000   86  ;++
                          0000   87  ; FUNCTIONAL DESCRIPTION:
                          0000   88  ;
                          0000   89  ;       FOR$IDATE uses system service $NUMTIM to get date information.
                          0000   90  ;       This information is converted to the appropriate type and stored
                          0000   91  ;       through the addresses passed as parameters.
                          0000   92  ;
                          0000   93  ; CALLING SEQUENCE:
                          0000   94  ;
                          0000   95  ;       CALL FOR$IDATE (month.ww.r, day.ww.r, year.ww.r)
                          0000   96  ;
                          0000   97  ; INPUT PARAMETERS:
                          0000   98  ;
                          0000   99  ;       month.ww.r      adr of word to place month (1-12) integer
                          0000  100  ;       day.ww.r        adr of word to place day (1-31) integer
                          0000  101  ;       year.ww.r       adr of word to place year (0-99)integer
                          0000  102  ;
                          0000  103  ; IMPLICIT INPUTS:
                          0000  104  ;       NONE
                          0000  105  ;
                          0000  106  ; OUTPUT PARAMETERS:
                          0000  107  ;       NONE
                          0000  108  ;
                          0000  109  ; IMPLICIT OUTPUTS:
                          0000  110  ;       NONE
                          0000  111  ;
                          0000  112  ; COMPLETION CODES:
                          0000  113  ;       NONE
                          0000  114  ;
                          0000  115  ; SIDE EFFECTS:
                          0000  116  ;       SIGNALs Integer Overflow (this should never happen)
                          0000  117  ;
                          0000  118  ;--
                          0000  119
                          0000  120
                          0000  121
                   4000   0000  122              .ENTRY  FOR$IDATE,          ^M<IV>
          5E   10   C2    0002  123              SUBL    #16, SP                 ; save 8 words for $NUMTIM
          50   5E   DO    0005  124              MOVL    SP, RO                  ; RO -> data area
                          0008  125              $NUMTIM_S           (RO)        ; get system time values
          50   8E   3C    0013  126              MOVZWL  (SP)+, RO               ; RO = "year since 0"
               51   D4    0016  127              CLRL    R1                      ; RO is now a quadword value
50 50 50 00000064 8F 7B   0018  128              EDIV    #100, RO, RO, RO        ; RO = two digit year value
       OC BC   50   B0    0021  129              MOVW    RO, a12(AP)             ; return year
       04 BC   8E   B0    0025  130              MOVW    (SP)+, a4(AP)           ; return month
       08 BC   6E   B0    0029  131              MOVW    (SP), a8(AP)            ; return day
                     04   002D  132              RET                             ; return
                          002E  133
                          002E  134
                          002E  135              .END
```

```
FOR$DATE        00000000 RG    01
SYS$NUMTIM      ******** 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$CODF                   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   00:00:00.05   00:00:00.84
Command processing              105   00:00:00.55   00:00:03.53
Pass 1                           98   00:00:00.53   00:00:02.79
Symbol table sort                 0   00:00:00.00   00:00:00.00
Pass 2                           38   00:00:00.34   00:00:01.47
Symbol table output               2   00:00:00.02   00:00:00.12
Psect synopsis output             2   00:00:00.01   00:00:00.01
Cross-reference output            0   00:00:00.00   00:00:00.00
Assembler run totals            276   00:00:01.52   00:00:08.78
```

The working set limit was 900 pages.
1677 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.
135 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$:FORIDATE/OBJ=OBJ$:FORIDATE MSRC$:FORIDATE/UPDATE=(ENH$:FORIDATE)

FORFIND
LIS

FORFMTINT
LIS

FOREXITHA
LIS

FORENODEF
LIS

FORENCOMF
LIS

FORIDATE
LIS

FORENDFIL
LIS

FORERRSNS
LIS

FOREXIT
LIS

FORERROR
LIS

FORFMTCP
LIS

FORENCOMO
LIS

FORINIDES
LIS