```
UUU         UUU  EEEEEEEEEEEEEEE   TTTTTTTTTTTTTTT     PPPPPPPPPPPP           SSSSSSSSSSSS   YYY              YYY
UUU         UUU  EEEEEEEEEEEEEEE   TTTTTTTTTTTTTTT     PPPPPPPPPPPP           SSSSSSSSSSSS   YYY              YYY
UUU         UUU  EEEEEEEEEEEEEEE   TTTTTTTTTTTTTTT     PPPPPPPPPPPP           SSSSSSSSSSSS   YYY              YYY
UUU         UUU  EEE               TTT                 PPP         PPP   SSS                  YYY              YYY
UUU         UUU  EEE               TTT                 PPP         PPP   SSS                  YYY              YYY
UUU         UUU  EEE               TTT                 PPP         PPP   SSS                  YYY              YYY
UUU         UUU  EEE               TTT                 PPP         PPP   SSS                       YYY    YYY
UUU         UUU  EEE               TTT                 PPP         PPP   SSS                       YYY    YYY
UUU         UUU  EEEEEEEEEEE       TTT                 PPPPPPPPPPPP           SSSSSSSSS                 YYY
UUU         UUU  EEEEEEEEEEEEE     TTT                 PPPPPPPPPPPP           SSSSSSSSS                 YYY
UUU         UUU  EEEEEEEEEEEE      TTT                 PPPPPPPPPPPP           SSSSSSSSS                 YYY
UUU         UUU  EEE               TTT                 PPP                          SSS                 YYY
UUU         UUU  EEE               TTT                 PPP                          SSS                 YYY
UUU         UUU  EEE               TTT                 PPP                          SSS                 YYY
UUU         UUU  EEE               TTT                 PPP                          SSS                 YYY
UUU         UUU  EEE               TTT                 PPP                          SSS                 YYY
UUUUUUUUUUUUUUU  EEEEEEEEEEEEEEE   TTT                 PPP                    SSSSSSSSSSSS              YYY
UUUUUUUUUUUUUUU  EEEEEEEEEEEEEEE   TTT                 PPP                    SSSSSSSSSSSS              YYY
UUUUUUUUUUUUUUU  EEEEEEEEEEEEEEE   TTT                 PPP                    SSSSSSSSSSSS              YYY
```

```
SS3SSSSS    AAAAAA    TTTTTTTTTT    SSSSSSSS    SSSSSSSS    SSSSSSSS   44    44   5555555555
SSSSSSSS    AAAAAA    TTTTTTTTTT    SSSSSSSS    SSSSSSSS    SSSSSSSS   44    44   5555555555
SS         AA    AA       TT        SS         SS         SS         44    44   55
SS         AA    AA       TT        SS         SS         SS         44    44   55
SS         AA    AA       TT        SS         SS         SS         44    44   555555
SS         AA    AA       TT        SS         SS         SS         44    44   555555
  SSSSSS   AA    AA       TT          SSSSSS     SSSSSS     SSSSSS   4444444444        55
  SSSSSS   AA    AA       TT          SSSSSS     SSSSSS     SSSSSS   4444444444        55
       SS  AAAAAAAAAA      TT              SS         SS         SS         44         55
       SS  AAAAAAAAAA      TT              SS         SS         SS         44         55
       SS  AA    AA        TT              SS         SS         SS         44    55   55
       SS  AA    AA        TT              SS         SS         SS         44    55   55      ....
SSSSSSSS   AA    AA        TT        SSSSSSSS   SSSSSSSS   SSSSSSSS        44         555555   ....
SSSSSSSS   AA    AA        TT        SSSSSSSS   SSSSSSSS   SSSSSSSS        44         555555   ....

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

```
0000      1          .TITLE  SATSSS45 SATS SYSTEM SERVICE TESTS  $SETPRI (SUCC S.C.)
0000      2          .IDENT  'V04-000'
0000      3
0000      4
0000      5  ;****************************************************************************
0000      6  ;*                                                                          *
0000      7  ;*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY                                 *
0000      8  ;*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.                  *
0000      9  ;*  ALL RIGHTS RESERVED.                                                    *
0000     10  ;*                                                                          *
0000     11  ;*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED   *
0000     12  ;*  ONLY IN  ACCORDANCE WITH  THE  TERMS  OF  SUCH  LICENSE  AND WITH THE   *
0000     13  ;*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR  ANY  OTHER   *
0000     14  ;*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY   *
0000     15  ;*  OTHER PERSON.  NO TITLE TO AND OWNERSHIP OF  THE  SOFTWARE IS  HEREBY   *
0000     16  ;*  TRANSFERRED.                                                            *
0000     17  ;*                                                                          *
0000     18  ;*  THE INFORMATION IN THIS SOFTWARE IS  SUBJECT TO CHANGE WITHOUT NOTICE   *
0000     19  ;*  AND  SHOULD  NOT  BE  CONSTRUED AS  A COMMITMENT BY DIGITAL EQUIPMENT   *
0000     20  ;*  CORPORATION.                                                            *
0000     21  ;*                                                                          *
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  ;++
0000     30  ; FACILITY:      SYSTST (SATS SYSTEM SERVICE TESTS)
0000     31  ;
0000     32  ; ABSTRACT:
0000     33  ;
0000     34  ;               THIS MODULE CONTAINS SUBROUTINES WHICH, WHEN LINKED
0000     35  ; WITH SUCCOMMON.OBJ, FORM TEST MODULE SATSSS45 TO TEST SUCCESSFUL
0000     36  ; OPERATION OF THE $SETPRI SYSTEM SERVICE. THE SERVICE IS INVOKED
0000     37  ; UNDER VARIOUS INPUT CONDITIONS WITH VARYING INPUT PARAMETERS. ONLY
0000     38  ; SUCCESSFUL STATUS CODES ARE EXPECTED IN THIS TEST MODULE.  CORRECT
0000     39  ; OPERATION OF THE SERVICE FOR EACH OF ITS ISSUANCES IS VERIFIED BY
0000     40  ; CHECKING FOR AN SS$ NORMAL STATUS CODE, EXPECTED RETURN ARGUMENTS
0000     41  ; AND EXPECTED FUNCTIONALITY PERFORMED.
0000     42  ;
0000     43  ; ENVIRONMENT: USER MODE IMAGE; NEEDS CMKRNL PRIVILEGE,
0000     44  ;                 DYNAMICALLY ACQUIRES OTHER PRIVILEGES, AS NEEDED.
0000     45  ;
0000     46  ; AUTHOR: THOMAS L. CAFARELLA,           CREATION DATE: NOV, 1977
0000     47  ;
0000     48  ; MODIFIED BY:
0000     49  ;
0000     50  ;               VERSION 1.5 : 25-MAY-79
0000     51  ;
0000     52  ; 01  LDJ  10/11/79    Fixed bug caused by DIB$K_LENGTH change ACG052.RNO mem
0000     53  ;
0000     54  ;--
```

M 9

SATSSS45   SATS SYSTEM SERVICE TESTS $SETPRI (SUCC 16-SEP-1984 00:55:25 VAX/VMS Macro V04-00   Page 2
V04-000   DECLARATIONS   5-SEP-1984 04:31:42 [UETPSY.SRC]SATSSS45.MAR;1   (1)

```
0000    56                  .SBTTL  DECLARATIONS
0000    57  ;
0000    58  ; INCLUDE FILES:
0000    59  ;
0000    60          $PRVDEF                          ; PRIVILEGE BIT DEFINITIONS
0000    61          $PHDDEF                          ; PROCESS HEADER OFFSETS
0000    62          $PQLDEF                          ; PROCESS QUOTA CODES
0000    63          $PCBDEF                          ; PCB LABELS
0000    64          $DIBDEF                          ; DEVICE INFO BLOCK OFFSETS
0000    65  ;
0000    66  ; MACROS:
0000    67  ;
0000    68  ;
0000    69  ; EQUATED SYMBOLS:
0000    70  ;
0000    71  ;
0000    72  ; OWN STORAGE:
0000    73  ;
```

N 9

SATSSS45   SATS SYSTEM SERVICE TESTS $SETPRI (SUCC 16-SEP-1984 00:55:25   VAX/VMS Macro V04-00   Page   3
V04-000   DECLARATIONS   5-SEP-1984 04:31:42   [UETPSY.SRC]SATSSS45.MAR;1   (1)

```
00000000    75              .PSECT  RODATA,RD,NOWRT,NOEXE,LONG
    0000    76  TEST_MOD_NAME::  STRING  C,<SATSSS45>      ; TEST MODULE NAME
    0009    77  TEST_MOD_NAME_D: STRING  I,<SATSSS45>      ; TEST MODULE NAME DESCRIPTOR
    0019    78  MSG1_INP_CTL:    STRING  I,<  SSSPR!4ZW: CONDITIONS:>
    0039    79                                            ; FAO CTL STRING FOR MSG1 IN SUCCOMMON.MAR
    0039    80  MSG3_ERR_CTL::   STRING  I,< *SSSPR!4ZW: !AS>
    0051    81                                            ; FAO CTL STRING FOR MSG3 IN SUCCOMMON.MAR
    0051    82  SUBJPRN:         STRING  I,<SATSSS45 CRE> ; PROCESS & MBX NAME FOR CREATED PROCESS
    0065    83  IMAGNAM:         STRING  I,<SYSTST$RES:SATSUT08.EXE> ; IMAGE NAME FOR CREATED PROC
    0084    84  QUOTALIST:       $QUOTA  CPULM,0           ; INFINITE CPU
    0089    85                   $QUOTA  BYTLM,512         ; BYTE LIMIT FOR BUFFERED I/O
    008E    86                   $QUOTA  FILLM,2           ; OPEN FILE COUNT LIMIT
    0093    87                   $QUOTA  PGFLQUOTA,10      ; PAGING FILE QUOTA
    0098    88                   $QUOTA  PRCLM,2           ; SUBPROCESS QUOTA
    0C9D    89                   $QUOTA  TQELM,3           ; TIMER QUEUE ENTRY QUOTA
    00A2    90                   $QUOTA  LISTEND           ; DEFINES END OF LIST
```

B 10

SATSSS45   SATS SYSTEM SERVICE TESTS $SETPRI (SUCC 16-SEP-1984 00:55:25   VAX/VMS Macro V04-00   Page   4
V04-000   DECLARATIONS   5-SEP-1984 04:31:42   [UETPSY.SRC]SATSSS45.MAR;1   (1)

```
        00000000        92              .PSECT  RWDATA,RD,WRT,NOEXE,LONG
00000008  0000          93  PRIVMASK:       .BLKQ   1               ; ADDR OF PRIVILEGE MASK (IN PHD)
0000000C  0008          94  MBXCHAN:        .BLKL   1               ; CHAN. NO. FOR MAILBOX FOR CREATED PROCESS
          000C          95  MBXCHANINFO:                            ; CHANNEL INFO RETURNED BY GETCHN
00000074  000C          96                  .LONG   DIB$K_LENGTH
00000014' 0010          97                  .ADDRESS .+4
00000088  0014          98                  .BLKB   DIB$K_LENGTH
0000008C  0088          99  MBXUNIT:        .BLKL   1               ; SAVE AREA FOR MAILBOX UNIT NUMBER
          008C         100  MBXBUFF:        STRING  0,120           ; MAILBOX BUFFER FOR CREATED PROCESS
00000110  010C         101  DEST_PIDADR:    .BLKL   1               ; DESTINATION PID ADDR, WRITTEN BY S.S.
00000114  0110         102  ZEROPID:        .BLKL   1               ; PID OF ZEROES
00000000  0114         103  SELFPID:        .LONG   0               ; PID OF THIS PROCESS
0000011C  0118         104  CREPID:         .BLKL   1               ; PID OF CREATED PROCESS
00000120  011C         105  SUBJPID:        .BLKL   1               ; PID OF SUBJECT PROCESS (SELF OR OTHER)
      FF  0120         106  ORIGPRI:        .BYTE   -1              ; ORIGINAL PRIORITY OF SUBJECT PROCESS
00 00 00  0121         107                  .BYTE   0,0,0           ; NEED HI-ORDER 0'S WHEN ...
          0124         108                                         ; ... ORIGPRI USED AS LONGWORD
00000125  0124         109  ESTPRI:         .BLKB   1               ; PRIORITY ESTABLISHED BEFORE ...
          0125         110                                         ; ... SUBJECT SETPRI CHANGED IT
```

SATSSS45
V04-000

C 10
SATS SYSTEM SERVICE TESTS $SETPRI (SUCC 16-SEP-1984 00:55:25   VAX/VMS Macro V04-00   Page   5
CONDITION TABLES   5-SEP-1984 04:31:42   [UETPSY.SRC]SATSSS45.MAR;1   (1)

```
                    0125    112        .SBTTL  CONDITION TABLES
                    0125    113 ;
                    0125    114 ;      ***** CONDITION TABLES FOR SETPRI SYSTEM SERVICE *****
                    0125    115 ;
                    0125    116        COND    1,NOTARG,<PID ADDRESS>,-
                    0125    117                <NOT SPECIFIED>,-
                    0125    118                <SPECIFIED, NON-ZERO>,-
                    0125    119                <SPECIFIED, ZERO>,-
                    0125    120
        00000000'   0170    121                .ADDRESS        0
        0000011C'   0174    122                .ADDRESS        SUBJPID
        00000110'   0178    123                .ADDRESS        ZEROPID
                    017C    124 ;
                    017C    125        COND    2,NOTARG,<PROCESS NAME ADDRESS>,-
                    017C    126                <SPECIFIED>,-
                    017C    127                <NOT SPECIFIED>,-
                    017C    128
        00000051'   01B2    129                .ADDRESS        SUBJPRN
        00000000'   01B6    130                .ADDRESS        0
                    01BA    131 ;
                    01BA    132        COND    3,NOTARG,<PROCESS TYPE>,-
                    01BA    133                <SELF>,-
                    01BA    134                <SUBPROCESS>,-
                    01BA    135                <DETACHED, DIFFERENT GROUP>,-
                    01BA    136                <DETACHED, SAME GROUP, SAME MEMBER>,-
                    01BA    137                <DETACHED, SAME GROUP, DIFFERENT MEMBER>,-
                    01BA    138
        FFFFFFFF    024F    139                .LONG           ^XFFFFFFFF ; PSEUDO-UIC
        00000000    0253    140                .LONG           0          ; PSEUDO-UIC
        0000025B    0257    141                .BLKL           1          ; UIC
        0000025F    025B    142                .BLKL           1          ; UIC
        00000263    025F    143                .BLKL           1          ; UIC
                    0263    144 ;
                    0263    145        COND    4,NULL
                    0264    146
                    0264    147        COND    5,NULL
                    0265    148
        00000000    149        .PSECT SATSSS45,RD,WRT,EXE
```

```
                        0000    151           .SBTTL  TM_SETUP, TM_CLEANUP
                        0000    152   ;++
                        0000    153   ; FUNCTIONAL DESCRIPTION:
                        0000    154   ;
                        0000    155   ;         TM_SETUP AND TM_CLEANUP ARE CALLED TO PERFORM
                        0000    156   ; REQUIRED HOUSEKEEPING AT THE BEGINNING AND END, RESPECTIVELY, OF
                        0000    157   ; TEST MODULE EXECUTION.
                        0000    158   ;
                        0000    159   ; CALLING SEQUENCE:
                        0000    160   ;
                        0000    161   ;     BSBW TM_SETUP    BSBW TM_CLEANUP
                        0000    162   ;
                        0000    163   ; INPUT PARAMETERS:
                        0000    164   ;
                        0000    165   ;     NONE
                        0000    166   ;
                        0000    167   ; IMPLICIT INPUTS:
                        0000    168   ;
                        0000    169   ;     NONE
                        0000    170   ;
                        0000    171   ; OUTPUT PARAMETERS:
                        0000    172   ;
                        0000    173   ;     NONE
                        0000    174   ;
                        0000    175   ; IMPLICIT OUTPUTS:
                        0000    176   ;
                        0000    177   ;     TM_SETUP:  COND TABLE INDEX REGISTERS (R2,3,4,5,6) CLEARED;
                        0000    178   ;                ALL PRIVILEGES ACQUIRED.
                        0000    179   ;
                        0000    180   ; COMPLETION CODES:
                        0000    181   ;
                        0000    182   ;     EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
                        0000    183   ;
                        0000    184   ; SIDE EFFECTS:
                        0000    185   ;
                        0000    186   ;     SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
                        0000    187   ;     (VIA RSB) IF ERROR ENCOUNTERED.
                        0000    188   ;
                        0000    189   ;--
                        0000    190
                        0000    191
                        0000    192
                        0000    193   TM_SETUP::
                52  D4  0000    194           CLRL    R2                         ; INITIALIZE
                53  D4  0002    195           CLRL    R3                         ; .. CONDITION
                54  D4  0004    196           CLRL    R4                         ; .... TABLE
                55  D4  0006    197           CLRL    R5                         ; ...... INDEX
                56  D4  0008    198           CLRL    R6                         ; ........ REGISTERS
              FFF3'  30  000A    199           BSBW    MOD_MSG_PRINT              ; PRINT TEST MODULE BEGIN MSG
00000000'EF  00000000'EF  DE  000D    200           MOVAL   TEST_MOD_SUCC,TMD_ADDR    ; ASSUME END MSG WILL SHOW SUCCESS
      03  00  00000000'8F  F0  0018    201           INSV    #SUCCESS,#0,#3,MOD_MSG_CODE ; ADJUST STATUS CODE FOR SUCCESS
              00000000'EF      0020
                        0025    202           MODE    TO,5$,KRNL                ; KERNEL MODE TO ACCESS PHD
      59  00000000'9F  DO  0048    203           MOVL    @#CTL$GL_PHD,R9           ; GET PROCESS HEADER ADDRESS
00000000'EF  69  DE  004F    204           MOVAL   PHD$Q_PRIVMSK(R9),PRIVMASK ; GET PRIV MASK ADDRESS
                        0056    205           MODE    FROM,5$ ; BACK TO USER MODE
                        0057    206           PRIV    ADD,ALL                   ; GET ALL PRIVILEGES
```

```
                                    0077   207          $SETPRN_S TEST_MOD_NAME_D        ; SET PROCESS NAME
                                    0084   208          SS_CHECK_NORMAL                  ; CHECK STATUS CODE RETURNED FROM SETPRN
                                    00B2   209          $WAKE_S SELFPID                  ; GET MY PID
                                    00C1   210          SS_CHECK NORMAL                  ; CHECK FOR NORMAL RETURN
                                    00EF   211          $HIBER_S                         ; UNDO ABOVE WAKE
                                    00F6   212          SS_CHECK NORMAL                  ; CHECK FOR NORMAL RETURN
                                    0124   213   ;
                                    0124   214   ; THE FOLLOWING CODE ESTABLISHES UIC'S IN THE CONDITION 3 TABLE
                                    0124   215   ;
                                    0124   216          MODE     TO,20$,KRNL             ; KERNEL MODE TO ACCESS PCB
       59    00000000'9F  D0       0147   217          MOVL     @#SCH$GL_CURPCB,R9       ; GET CURRENT PCB ADDRESS
             59    00BC C9  D0     014E   218          MOVL     PCB$L_UIC(R9),R9         ; PICK UP UIC FROM PCB
                                    0153   219          MODE     FROM,20$                ; ... AND GET BACK TO USER MODE
                                    0154   220
                                    0154   221   ; R9 NOW CONTAINS ''MY'' UIC
                                    0154   222   ;
             5A    02  9A          0154   223          MOVZBL   #2,R10                   ; GET COND3 TABLE INDEX NUMBER INTO A REG
       59    00010000 8F  C1       0157   224          ADDL3    #^X10000,R9,COND3_E[R10] ; PUT DIFF GROUP UIC INTO 3RD TABLE ELT
       0000024F'EF4A               015E
             5A          D6        0164   225          INCL     R10                      ; POINT TO 4TH COND3 TABLE ELEMENT
       0000024F'EF4A    59  D0     0166   226          MOVL     R9,COND3_E[R10]          ; PUT MY UIC INTO TABLE
             5A          D6        016E   227          INCL     R10                      ; POINT TO 5TH COND3 TABLE ELEMENT
 0000024F'EF4A    59    01  C1     0170   228          ADDL3    #1,R9,COND3_E[R10]       ; PUT DIFF MEMBER UIC INTO THE TABLE
                                    0179   229          $CREMBX_S CHAN=MBXCHAN, LOGNAM=SUBJPRN, - ; GET MAILBOX FOR PROCESS
                                    0179   230                   MAXMSG=#120, PROMSK=#0, BUFQUO=#240
                                    019E   231          SS_CHECK NORMAL                  ; CHECK NORMAL COMPLETION
                                    01CC   232          $GETCHN_S CHAN=MBXCHAN, -        ; GET CHAN INFO (UNIT NUMBER)
                                    01CC   233                   PRIBUF=MBXCHANINFO
                                    01E6   234          SS_CHECK NORMAL                  ; CHECK NORMAL COMPLETION
 00000088'EF    00000020'EF  3C    0214   235          MOVZWL   MBXCHANINFO+8+DIB$W_UNIT,MBXUNIT ; SAVE MAILBOX UNIT NUMBER
                             05    021F   236          RSB                              ; RETURN TO MAIN ROUTINE
                                    0220   237   TM_CLEANUP::
                                    0220   238          $DELMBX_S  MBXCHAN              ; DELETE TERMINATION MAILBOX
                    FDCF'  30       022E   239          BSBW     MOD_MSG_PRINT          ; PRINT TEST MODULE END MSG
                             05    0231   240          RSB                              ; RETURN TO MAIN ROUTINE
```

```
0232  242              .SATTL  CONDITION SUBROUTINES - SETUP AND CLEANUP
0232  243  ;++
0232  244  ; FUNCTIONAL DESCRIPTION:
0232  245  ;
0232  246  ;              CONDX AND CONDX_CLEANUP ARE SUBROUTINES WHICH ARE EXECUTED
0232  247  ; BEFORE AND AFTER THE VERIFY SUBROUTINE, RESPECTIVELY, WHENEVER A NEW
0232  248  ; CONDITION X VALUE IS SELECTED (SEE FUNCTIONAL DESCRIPTION OF SUCCOMMON
0232  249  ; ROUTINE IN SUCCOMMON.MAR). ANY SETUP FUNCTION PARTICULAR TO THE
0232  250  ; CONDITION X TABLE IS INCLUDED IN THE CONDX SUBROUTINE AND CLEANED
0232  251  ; UP, IF NECESSARY, IN THE CONDX_CLEANUP SUBROUTINE. THIS INCLUDES,
0232  252  ; ESPECIALLY, CODE TO DETECT CONFLICTS AMONG CURRENT ENTRIES IN TWO
0232  253  ; OR MORE CONDITION TABLES. IF A CONFLICT IS DETECTED, A NON-ZERO
0232  254  ; VALUE IS STORED INTO CONFLICT, WHICH CAUSES THE CALLING ROUTINE
0232  255  ; (SUCCOMMON) TO SKIP THE CURRENT ENTRY IN THE CONDITION X TABLE.
0232  256  ;
0232  257  ; CALLING SEQUENCE:
0232  258  ;
0232  259  ;     BSBW CONDX   BSBW CONDX_CLEANUP
0232  260  ;         WHERE X = 1,2,3,4,5
0232  261  ;
0232  262  ; INPUT PARAMETERS:
0232  263  ;
0232  264  ;     CONFLICT = 0
0232  265  ;
0232  266  ; IMPLICIT INPUTS:
0232  267  ;
0232  268  ;     R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
0232  269  ;         FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
0232  270  ;
0232  271  ; OUTPUT PARAMETERS:
0232  272  ;
0232  273  ;     CONFLICT SET TO NON-ZERO IF COND TABLE CONFLICT DETECTED.
0232  274  ;
0232  275  ; IMPLICIT OUTPUTS:
0232  276  ;
0232  277  ;     R2,3,4,5,6 PRESERVED
0232  278  ;
0232  279  ; COMPLETION CODES:
0232  280  ;
0232  281  ;     NONE
0232  282  ;
0232  283  ; SIDE EFFECTS:
0232  284  ;
0232  285  ;     NONE
0232  286  ;
0232  287  ;--
0232  288
0232  289
0232  290
0232  291  COND1::
05   0232  292          RSB                          ; RETURN TO MAIN ROUTINE
     0233  293  COND1_CLEANUP::
05   0233  294          RSB                          ; RETURN TO MAIN ROUTINE
     0234  295  COND2::
05   0234  296          RSB                          ; RETURN TO MAIN ROUTINE
     0235  297  COND2_CLEANUP::
05   0235  298          RSB                          ; RETURN TO MAIN ROUTINE
```

```
                             0236      299 COND3::
00000170'EF42   0000011C'8F  D1 0236   300          CMPL     #SUBJPID,COND1_E[R2]    ; NON-ZERO PID SPECIFIED ?
               20            13 0242   301          BEQLU    10$                     ; YES -- PROCESS IS "OTHER"
               000001B2'EF43 D5 0244   302          TSTL     COND2_E[R3]             ; IS PROCESS NAME SPECIFIED ?
               07            13 024B   303          BEQL     5$                      ; NO -- SUBJECT PROCESS IS "SELF"
            02 54            D1 024D   304          CMPL     R4,#2                   ; DOES CONDITION 3 SPECIFY DIFFERENT GROUP ?
               20            13 0250   305          BEQL     20$                     ; YES -- PROCESS NAME FOR DIFF GROUP IS CONF
               10            11 0252   306          BRB      10$                     ; NO -- MAKE SURE COND 3 SPECIFIES "OTHER"
                             0254      307 5$:
                             0254      308 ;
                             0254      309 ; PROCESS IS "SELF"
                             0254      310 ;
0000024F'EF44   00000000'EF  D1 0254   311          CMPL     ONES,COND3_E[R4]        ; DOES CONDITION 3 SPECIFY "SELF" ?
               1B            13 0260   312          BEQLU    COND3X                  ; YES -- THEN ALL 3 CONDIT'NS ARE CONSISTENT
               0E            11 0262   313          BRB      20$                     ; NO -- INDICATE CONFLICT & GET OUT
                             0264      314 10$:
                             0264      315 ;
                             0264      316 ; PROCESS IS "OTHER"
                             0264      317 ;
0000024F'EF44   00000000'EF  D1 0264   318          CMPL     ONES,COND3_E[R4]        ; DOES CONDITION 3 SPECIFY "SELF" ?
               0B            12 0270   319          BNEQU    COND3X                  ; NO -- THEN ALL 3 CONDITIONS ARE CONSISTENT
                             0272      320 20$:
00000000'EF    00000000'EF  90 0272   321          MOVB     ONES,CONFLICT           ; YES -- INDICATE CONFLICT
                             027D      322 COND3X:
               05            027D      323          RSB                              ; RETURN TO MAIN ROUTINE
                             027E      324 COND3_CLEANUP::
               05            027E      325          RSB                              ; RETURN TO MAIN ROUTINE
                             027F      326 COND4::
               05            027F      327          RSB                              ; RETURN TO MAIN ROUTINE
                             0280      328 COND4_CLEANUP::
               05            0280      329          RSB                              ; RETURN TO MAIN ROUTINE
                             0281      330 COND5::
               05            0281      331          RSB                              ; RETURN TO MAIN ROUTINE
                             0282      332 COND5_CLEANUP::
               05            0282      333          RSB                              ; RETURN TO MAIN ROUTINE
```

SATSSS45
V04-000

H 10
SATS SYSTEM SERVICE TESTS $SETPRI (SUCC 16-SEP-1984 00:55:25   VAX/VMS Macro V04-00   Page 10
FORM_CONDS   5-SEP-1984 04:31:42   [UETPSY.SRC]SATSSS45.MAR;1   (1)

```
                        0283    335              .SBTTL  FORM_CONDS
                        0283    336     ;++
                        0283    337     ; FUNCTIONAL DESCRIPTION:
                        0283    338     ;
                        0283    339     ;              FORM_CONDS FORMATS AND PRINTS INFORMATION ABOUT
                        0283    340     ;  THE CURRENT ELEMENT IN EACH OF THE CONDITION TABLES.
                        0283    341     ;
                        0283    342     ; CALLING SEQUENCE:
                        0283    343     ;
                        0283    344     ;      BSBW FORM_CONDS
                        0283    345     ;
                        0283    346     ; INPUT PARAMETERS:
                        0283    347     ;
                        0283    348     ;      NONE
                        0283    349     ;
                        0283    350     ; IMPLICIT INPUTS:
                        0283    351     ;
                        0283    352     ;      R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
                        0283    353     ;         FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
                        0283    354     ;      FOR X = 1,2,3,4,5 :
                        0283    355     ;                 CONDX_T - TITLE TEXT FOR CONDX TABLE
                        0283    356     ;                 CONDX_TAB - ELEMENT TEXT FOR CONDX TABLE
                        0283    357     ;                 CONDX_C - CONTEXT OF THE CONDX TABLE
                        0283    358     ;                 CONDX_E - DATA ELEMENTS OF THE CONDX TABLE
                        0283    359     ;
                        0283    360     ; OUTPUT PARAMETERS:
                        0283    361     ;
                        0283    362     ;      NONE
                        0283    363     ;
                        0283    364     ; IMPLICIT OUTPUTS:
                        0283    365     ;
                        0283    366     ;      NONE
                        0283    367     ;
                        0283    368     ; COMPLETION CODES:
                        0283    369     ;
                        0283    370     ;      NONE
                        0283    371     ;
                        0283    372     ; SIDE EFFECTS:
                        0283    373     ;
                        0283    374     ;      NONE
                        0283    375     ;
                        0283    376     ;--
                        0283    377
                        0283    378
                        0283    379
                        0283    380     FORM_CONDS::
                        0283    381              $FAO_S  MSG1_INP_CTL,FAO_LEN,FAO_DESC,TESTNUM
                        02A2    382                                          ; FORMAT CONDITIONS HEADER MSG
                 FD5B'  30  02A5    383              BSBW     OUTPUT_MSG         ; ... AND PRINT IT
              14  00  91  02A5    384              CMPB     #COND1_C,#NULL     ; IS CONDITION 1 NULL ?
                  03  12  02A8    385              BNEQU    10$                ; NO -- CONTINUE
                 00BF  31  02AA    386              BRW      FORM_CONDSX        ; YES -- SUBROUTINE IS FINISHED
                        02AD    387     10$:
00000000'EF   00000125'EF   DE  02AD    388              MOVAL    COND1_T,MSG_A      ; SAVE ADDRESS OF CONDITION 1 TITLE FOR FAO
00000000'EF   00000132'EF42  DO  02B8    389              MOVL     COND1_TAB[R2],MSG_B ; SAVE ADDR OF COND 1 CURR TEXT ELT FOR FAO
      00000000'EF   00  90  02C4    390              MOVB     #CONDT_C,MSG_CTXT   ; SAVE CONDITION 1 CONTEXT FOR FAO
                        02CB    391              MOV_VAL COND1_C,CONDT_E[R2],MSG_DATA1 ; GIVE COND 1 DATA VALUE TO FAO
```

```
                    FD32'  30   02CB   392          BSBW    WRITE_MSG2                    ; FORMAT AND WRITE CONDITION 1 MSG
               14    00   91   02CE   393          CMPB    #COND2_C,#NULL                ; IS CONDITION 2 NULL ?
               03         12   02D1   394          BNEQU   20$                           ; NO -- CONTINUE
             0096        31   02D3   395          BRW     FORM_CONDSX                   ; YES -- SUBROUTINE IS FINISHED
                               02D6   396   20$:
  00000000'EF   0000017C'EF  DE   02D6   397          MOVAL   COND2_T,MSG_A                 ; SAVE ADDRESS OF CONDITION 2 TITLE FOR FAO
  00000000'EF   00000192'EF43  DO   02E1   398          MOVL    COND2_TAB[R3],MSG_B           ; SAVE ADDR OF COND 2 CURR TEXT ELT FOR FAO
       00000000'EF   00   90   02ED   399          MOVB    #COND2_C,MSG_CTXT             ; SAVE CONDITION 2 CONTEXT FOR FAO
                               02F4   400          MOV_VAL COND2_C,COND2_E[R3],MSG_DATA1 ; GIVE COND 2 DATA VALUE TO FAO
                    FD09'  30   02F4   401          BSBQ    WRITE_MSG2                    ; FORMAT AND WRITE CONDITION 2 MSG
               14    00   91   02F7   402          CMPB    #COND3_C,#NULL                ; IS CONDITION 3 NULL ?
               03         12   02FA   403          BNEQU   30$                           ; NO -- CONTINUE
             006D        31   02FC   404          BRW     FORM_CONDSX                   ; YES -- SUBROUTINE IS FINISHED
                               02FF   405   30$:
  00000000'EF   000001BA'EF  DE   02FF   406          MOVAL   COND3_T,MSG_A                 ; SAVE ADDRESS OF CONDITION 3 TITLE FOR FAO
  00000000'EF   000001C8'EF44  DO   030A   407          MOVL    COND3_TAB[R4],MSG_B           ; SAVE ADDR OF COND 3 CURR TEXT ELT FOR FAO
       00000000'EF   00   90   0316   408          MOVB    #COND3_C,MSG_CTXT             ; SAVE CONDITION 3 CONTEXT FOR FAO
                               031D   409          MOV_VAL COND3_C,COND3_E[R4],MSG_DATA1 ; GIVE COND 3 DATA VALUE TO FAO
                    FCE0'  30   031D   410          BSBQ    WRITE_MSG2                    ; FORMAT AND WRITE CONDITION 3 MSG
               14    14   91   0320   411          CMPB    #COND4_C,#NULL                ; IS CONDITION 4 NULL ?
               47         13   0323   412          BEQLU   FORM_CONDSX                   ; YES -- SUBROUTINE IS FINISHED
  00000000'EF   00000263'EF  DE   0325   413          MOVAL   COND4_T,MSG_A                 ; SAVE ADDRESS OF CONDITION 4 TITLE FOR FAO
  00000000'EF   00000263'EF45  DO   0330   414          MOVL    COND4_TAB[R5],MSG_B           ; SAVE ADDR OF COND 4 CURR TEXT ELT FOR FAO
       00000000'EF   14   90   033C   415          MOVB    #COND4_C,MSG_CTXT             ; SAVE CONDITION 4 CONTEXT FOR FAO
                               0343   416          MOV_VAL COND4_C,COND4_E[R5],MSG_DATA1 ; GIVE COND 4 DATA VALUE TO FAO
                    FCBA'  30   0343   417          BSBQ    WRITE_MSG2                    ; FORMAT AND WRITE CONDITION 4 MSG
               14    14   91   0346   418          CMPB    #COND5_C,#NULL                ; IS CONDITION 5 NULL ?
               21         13   0349   419          BEQLU   FORM_CONDSX                   ; YES -- SUBROUTINE IS FINISHED
  00000000'EF   00000264'EF  DE   034B   420          MOVAL   COND5_T,MSG_A                 ; SAVE ADDRESS OF CONDITION 5 TITLE FOR FAO
  00000000'EF   00000264'EF46  DO   0356   421          MOVL    COND5_TAB[R6],MSG_B           ; SAVE ADDR OF COND 5 CURR TEXT ELT FOR FAO
       00000000'EF   14   90   0362   422          MOVB    #COND5_C,MSG_CTXT             ; SAVE CONDITION 5 CONTEXT FOR FAO
                               0369   423          MOV_VAL COND5_C,COND5_E[R6],MSG_DATA1 ; GIVE COND 5 DATA VALUE TO FAO
                    FC94'  30   0369   424          BSBQ    WRITE_MSG2                    ; FORMAT AND WRITE CONDITION 5 MSG
                               036C   425   FORM_CONDSX:
                         05   036C   426          RSB                                   ; RETURN TO CALLER
```

J 10

SATSSS45   SATS SYSTEM SERVICE TESTS $SETPRI (SUCC 16-SEP-1984 00:55:25   VAX/VMS Macro V04-00   Page 12
V04-000   VERIFY   5-SEP-1984 04:31:42 [UETPSY.SRC]SATSSS45.MAR;1   (1)

```
036D    428              .SBTTL  VERIFY
036D    429    ;++
036D    430    ; FUNCTIONAL DESCRIPTION:
036D    431    ;
036D    432    ;           VERIFY IS CALLED ONCE FOR EACH COMBINATION OF CONDITION
036D    433    ; TABLE VALUES (AS DETERMINED BY THE INDEX REGISTERS R2,3,4,5,6 FOR
036D    434    ; COND TABLES 1,2,3,4,5, RESPECTIVELY). VERIFY ESTABLISHES THE CONDITIONS
036D    435    ; SPECIFIED BY THE COND TABLES AND ISSUES THE SUBJECT SYSTEM SERVICE
036D    436    ; ($SETPRI). THEN, THE SUCCESSFUL OPERATION OF THE SERVICE IS VERIFIED
036D    437    ; BY EXAMINING THE STATUS CODE RETURNED, THE VALUES FOR RETURN ARGUMENTS
036D    438    ; AND THE FUNCTIONALITY PERFORMED. THE EXAMINATIONS TAKE THE FORM OF
036D    439    ; COMPARISONS AGAINST EXPECTED VALUES. ANY FAILING COMPARISON CAUSES AN
036D    440    ; ERR_EXIT MACRO TO BE EXECUTED (EITHER DIRECTLY, OR INDIRECTLY,
036D    441    ; THROUGH THE SS_CHECK MACRO); ERR_EXIT SETS EFLAG TO NON-ZERO,
036D    442    ; PRINTS ERROR MESSAGES AND CAUSES AN IMMEDIATE RSB TO CALLER.
036D    443    ; WHEN ERR_EXIT IS EXECUTED, FURTHER CALLS TO VERIFY ARE SUPPRESSED,
036D    444    ; AND, AFTER EXECUTING CLEANUP SUBROUTINES, THE IMAGE EXITS.
036D    445    ;
036D    446    ; CALLING SEQUENCE:
036D    447    ;
036D    448    ;     BSBW VERIFY
036D    449    ;
036D    450    ; INPUT PARAMETERS:
036D    451    ;
036D    452    ;     NONE
036D    453    ;
036D    454    ; IMPLICIT INPUTS:
036D    455    ;
036D    456    ;     R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
036D    457    ;        FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
036D    458    ;     FOR X = 1,2,3,4,5 :
036D    459    ;             CONDX_E - ADDRESS OF TABLE OF DATA VALUES FOR CONDX
036D    460    ;                 TABLE. IF THE CONTEXT OF TABLE X IS A SYSTEM SERVICE
036D    461    ;                 ARGUMENT, THE ARGUMENT NAME MAY BE USED AS A SYNONYM
036D    462    ;                 FOR CONDX_E.
036D    463    ;
036D    464    ; OUTPUT PARAMETERS:
036D    465    ;
036D    466    ;     NONE
036D    467    ;
036D    468    ; IMPLICIT OUTPUTS:
036D    469    ;
036D    470    ;     VERIFY HAS NO OUTPUT. SINCE ITS PURPOSE IS TO TEST FOR ERRORS,
036D    471    ;     IT MERELY RETURNS TO CALLER NORMALLY AFTER THE TESTS, PROVIDING
036D    472    ;     ALL WERE SUCCESSFUL; IF AN ERROR IS DISCOVERED, RETURN IS VIA
036D    473    ;     AN ERR_EXIT OR SS_CHECK MACRO, BOTH OF WHICH DOCUMENT DETECTED
036D    474    ;     ERRORS.
036D    475    ;
036D    476    ; COMPLETION CODES:
036D    477    ;
036D    478    ;     EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
036D    479    ;
036D    480    ; SIDE EFFECTS:
036D    481    ;
036D    482    ;     SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
036D    483    ;     (VIA RSB) IF ERROR ENCOUNTERED.
036D    484    ;
```

K 10

SATSSS45   SATS SYSTEM SERVICE TESTS $SETPRI (SUCC 16-SEP-1984 00:55:25 VAX/VMS Macro V04-00   Page 13
V04-000   VERIFY   5-SEP-1984 04:31:42 [UETPSY.SRC]SATSSS45.MAR;1   (1)

```
                              036D      485  ;--
                              036D      486
                              036D      487
                              036D      488
                              036D      489  VERIFY::
           00000000'EF    95  036D      490          TSTB    CFLAG                   ; SHOULD CONDITIONS BE PRINTED ?
                    03    13  0373      491          BEQL    5$                      ; NO -- CONTINUE
                  FF0B    30  0375      492          BSBW    FORM_CONDS              ; YES -- FMT & PRINT ALL CONDS FOR THIS T.C.
                              0378      493  5$:
 0000011C'EF   00000114'EF D0 0378      494          MOVL    SELFPID,SUBJPID         ; ASSUME THE SUBJECT PID IS SELF
               00000110'EF D4  0383     495          CLRL    ZEROPID                 ; CLEAR ZERO PID
 0000024F'EF44 00000000'EF D1 0389      496          CMPL    ONES,COND3_E[R4]        ; IS PROCESS FOR THIS TEST CASE SELF ?
                    03    12  0395      497          BNEQU   7$                      ; NO -- CONTINUE
                  0074    31  0397      498          BRW     10$                     ; YES -- DON'T CREATE A PROCESS
                              039A      499  7$:
                              039A      500          $CREPRC_S PIDADR=CREPID, PRCNAM=SUBJPRN, -
                              039A      501                  UIC=COND3_E[R4], IMAGE=IMAGNAM, -
                              039A      502                  MBXUNT=MBXUNIT, QUOTA=QUOTALIST
                              03D5      503                                          ; CREATE THE SUBJECT PROCESS
                              03D5      504          SS_CHECK NORMAL                 ; ... AND MAKE SURE IT CREATED OK
 0000011C'EF   00000118'EF D0 0403      505          MOVL    CREPID,SUBJPID          ; MAKE THE SUBJCT PID = THE ONE JUST CREATED
                              040E      506  10$:
                              040E      507          $SETPRI_S PIDADR=SUBJPID, PRI=#0, -
                              040E      508                  PRVPRI=ORIGPRI          ; GET ORIGINAL PRIORITY
                              0425      509          SS_CHECK  NORMAL                ; CHECK FOR NORMAL RETURN
                              0453      510          $SETPRI_S PIDADR=SUBJPID, PRI=ORIGPRI ; RESTORE ORIGINAL PRIORITY
                              046A      511          SS_CHECK NORMAL                 ; CHECK FOR NORMAL RETURN
 0000010C'EF   00000170'EF42 D0 0498    512          MOVL    COND1_E[R2],DEST_PIDADR ; GET PID ADDRESS OUT OF TABLE
         59    000001B2'EF43 D0 04A4    513          MOVL    COND2_E[R3],R9          ; PRCNAM ADDR INTO REG FOR INDIRECT REF'RNCE
                    58    D4  04AC      514          CLRL    R8                      ; INITIALIZE PRIORITY VALUE REGISTER
                              04AE      515  15$:
           00000110'EF    D4  04AE      516          CLRL    ZEROPID                 ; ENSURE ZEROPID IS STILL ZERO
                              04B4      517  :
                              04B4      518  : ****** SYSTEM SERVICE CALL WHICH IS THE SUBJECT OF THIS TEST CASE ******
                              04B4      519  :
                              04B4      520          $SETPRI_S PIDADR=@DEST_PIDADR, PRCNAM=(R9), -
                              04B4      521                  PRI=R8, PRVPRI=ESTPRI
           00000000'8F    50 D1 04CB    522          CMPL    R0,#SS$_NORMAL          ; CODE RECEIVED = CODE EXPECTED ?
                    61    13  04D2      523          BEQLU   18$                     ; YES -- CONTINUE
 00000000'EF   00000000'8F D0 04D4      524          MOVL    #SS$_NORMAL,EXPV        ; NO -- LOAD UP EXPECTED AND ...
 00000000'EF       50    D0  04DF      525          MOVL    R0,RECV                 ; ... RECEIVED VALUES, THEN EXIT
                              04E6      526          ERR_EXIT LONG,<INCORRECT STATUS CODE RETURNED FROM SETPRI>
                              0535      527  18$:
           0000010C'EF    D5  0535      528          TSTL    DEST_PIDADR             ; PID RETURNED BY SETPRI ?
                    68    13  053B      529          BEQL    20$                     ; NO -- KEEP GOING
 0000010C'FF   0000011C'EF D1 053D      530          CMPL    SUBJPID,@DEST_PIDADR    ; YES -- IS IT THE CORRECT ONE ?
                    5B    13  0548      531          BEQL    20$                     ; YES -- CONTINUE
 00000000'EF   0000011C'EF D0 054A      532          MOVL    SUBJPID,EXPV            ; NO --LOAD UP EXPECTED AND
 00000000'EF   0000010C'FF D0 0555      533          MOVL    @DEST_PIDADR,RECV       ; ... RECEIVED VALUES, THEN EXIT
                              0560      534          ERR_EXIT LONG,<INCORRECT PID RETURNED BY SETPRI>
                              05A5      535  20$:
                    58    D5  05A5      536          TSTL    R8                      ; SETTING PRIORITY 0 ?
                    09    12  05A7      537          BNEQ    40$                     ; NO -- CONTINUE
         5A    00000120'EF 90 05A9      538          MOVB    ORIGPRI,R10             ; YES -- EXPECT ORIGINAL PRIORITY RETURNED
                    04    11  05B0      539          BRB     42$                     ; .......
                              05B2      540  40$:
      5A   58   01    83  05B2          541          SUBB3   #1,R8,R10               ; COMPUTE EXPECTED PRIORITY TO BE RETURNED
```

L 10

SATSSS45   SATS SYSTEM SERVICE TESTS $SETPRI (SUCC 16-SEP-1984 00:55:25 VAX/VMS Macro V04-00   Page 14
V04-000   VERIFY   5-SEP-1984 04:31:42 [UETPSY.SRC]SATSSS45.MAR;1   (1)

```
                     05B6    542 42$:
        00000124'EF    5A    91   05B6    543          CMPB    R10,ESTPRI           ; IS ESTABLISHED PRIORITY = THAT EXPECTED ?
                       5C    13   05BD    544          BEQLU   50$                  ; YES -- CONTINUE
        00000000'EF    5A    90   05BF    545          MOVB    R10,EXPV             ; NO -- LOAD UP EXPECTED AND
00000000'EF    00000124'EF   90   05C6    546          MOVB    ESTPRI,RECV          ; ... RECEIVED VALUES, THEN EXIT
                     05D1    547          ERR_EXIT BYTE,<PRIORITY VALUE NOT RETAINED BY SETPRI>
                     061B    548 50$:
     FE8D 58   01    1F  9D   061B    549          ACBB    #31,#1,R8,15$        ; LOOP THRU ALL LEGAL PRIORITIES
                     0621    550          $SETPRI_S PIDADR=SUBJPID, PRI=ORIGPRI, -
                     0621    551                   PRVPRI=ESTPRI               ; GET BACK ORIGINAL PRIORITY
                     063C    552          SS_CHECK NORMAL                     ; CHECK FOR NORMAL RETURN
        C0000124'EF    1F    91   066A    553          CMPB    #31,ESTPRI           ; DID SETPRI REMEMBER PREVIOUS PRI (31) ?
                       5C    13   0671    554          BEQLU   60$                  ; YES -- CONTINUE
        00000000'EF    1F    90   0673    555          MOVB    #31,EXPV             ; NO -- LOAD UP EXPECTED AND
00000000'EF    00000124'EF   90   067A    556          MOVB    ESTPRI,RECV          ; ... RECEIVED VALUES, THEN EXIT
                     0685    557          ERR_EXIT BYTE,<PRIORITY VALUE NOT RETAINED BY SETPRI>
                     06CF    558 60$:
0000011C'EF    00000118'EF   D1   06CF    559          CMPL    CREPID,SUBJPID       ; WAS A PROCESS CREATED ?
                       03    13   06DA    560          BEQLU   65$                  ; YES -- CONTINUE
                     0094    31   06DC    561          BRW     VERIFYX              ; NO -- ALL FINISHED
                     06DF    562 65$:
                     06DF    563          $WAKE_S SUBJPID                     ; ALLOW CREATED PROCESS TO FINISH
                     06EE    564          SS_CHECK NORMAL                     ; CHECK FOR NORMAL STATUS CODE
                     071C    565          $QIOW_S CHAN=MBXCHAN, FUNC=#IO$_READVBLK, -
                     071C    566                  P1=MBXBUFF+8, P2=MBXBUFF
                     0745    567                                              ; ... AND  WAIT FOR IT TO SEND MAIL
                     0745    568          SS_CHECK NORMAL                     ; CHECK FOR NORMAL STATUS CODE
                     0773    569 VERIFYX:
                       05   0773    570          RSB                                 ; RETURN TO CALLER
```

```
                        0774    572              .SBTTL  VFY_CLEANUP
                        0774    573  ;++
                        0774    574  ; FUNCTIONAL DESCRIPTION:
                        0774    575  ;
                        0774    576  ;           VFY_CLEANUP EXECUTES SYSTEM SERVICES TO UNDO THE
                        0774    577  ; EFFECT OF THOSE ISSUED IN THE VERIFY SUBROUTINE. VFY_CLEANUP MUST
                        0774    578  ; ASSUME THAT VERIFY MAY NOT HAVE EXECUTED IN ITS ENTIRETY (IF AN
                        0774    579  ; ERROR IS FOUND). ALSO, VFY_CLEANUP MAY ISSUE SS_CHECK OR ERR_EXIT
                        0774    580  ; ONLY AFTER PERFORMING ALL OF ITS CLEANUP OPERATIONS; THIS IS REQUIRED
                        0774    581  ; IN THE EVENT THAT VFY_CLEANUP IS CALLED DURING ERROR PROCESSING,
                        0774    582  ; WHEN PERFORMING THE REQUIRED CLEANUP IS MORE IMPORTANT THAN
                        0774    583  ; POSSIBLY DISCOVERING A SECOND ERROR.
                        0774    584  ;
                        0774    585  ; CALLING SEQUENCE:
                        0774    586  ;
                        0774    587  ;     BSBW VFY_CLEANUP
                        0774    588  ;
                        0774    589  ; INPUT PARAMETERS:
                        0774    590  ;
                        0774    591  ;     NONE
                        0774    592  ;
                        0774    593  ; IMPLICIT INPUTS:
                        0774    594  ;
                        0774    595  ;     R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
                        0774    596  ;     FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
                        0774    597  ;     FOR X = 1,2,3,4,5 :
                        0774    598  ;           CONDX_E - ADDRESS OF TABLE OF DATA VALUES FOR CONDX
                        0774    599  ;           TABLE. IF THE CONTEXT OF TABLE X IS A SYSTEM SERVICE
                        0774    600  ;           ARGUMENT, THE ARGUMENT NAME MAY BE USED AS A SYNONYM
                        0774    601  ;           FOR CONDX_E.
                        0774    602  ;
                        0774    603  ; OUTPUT PARAMETERS:
                        0774    604  ;
                        0774    605  ;     NONE
                        0774    606  ;
                        0774    607  ; IMPLICIT OUTPUTS:
                        0774    608  ;
                        0774    609  ;     NONE
                        0774    610  ;
                        0774    611  ; COMPLETION CODES:
                        0774    612  ;
                        0774    613  ;     EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
                        0774    614  ;
                        0774    615  ; SIDE EFFECTS:
                        0774    616  ;
                        0774    617  ;     SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
                        0774    618  ;     (VIA RSB) IF ERROR ENCOUNTERED.
                        0774    619  ;
                        0774    620  ;--
                        0774    621
                        0774    622
                        0774    623
                        0774    624  VFY_CLEANUP::
0000011C'EF  00000118'EF  D1  0774    625        CMPL    CREPID,SUBJPID          ; WAS A PROCESS CREATED FOR THIS TEST CASE ?
                11   12       077F    626        BNEQU   10$                     ; NO -- DON'T DELETE IT
                             0781    627        $DELPRC_S SUBJPID                ; YES -- DELETE IT
                52   11      0790    628        BRB     VFY_CLEANUPX            ; ... AND GET OUT
```

N 10

SATSSS45   SATS SYSTEM SERVICE TESTS $SETPRI (SUCC 16-SEP-1984 00:55:25   VAX/VMS Macro V04-00   Page 16
V04-000   VFY_CLEANUP   5-SEP-1984 04:31:42 [UETPSY.SRC]SATSSS45.MAR;1   (1)

```
                          0792      629 10$:
00000120'EF   00000000'EF  91 0792  630           CMPB     ONES,ORIGPRI                 ; WAS ORIGINAL PRIORITY EVER CHANGED ?
              45 13 079D   631           BEQLU    VFY_CLEANUPX                 ; NO -- CLEANUP IS COMPLETE
                   079F    632           $SETPRI_S PIDADR=SUBJPID, PRI=ORIGPRI ; YES -- GET BACK ORIGINAL
                   07B6    633           SS_CHECK NORMAL                 ; CHECK FOR NORMAL RETURN
                   07E4    634 VFY_CLEANUPX:
00000120'EF   00000000'EF  90 07E4  635           MOVB     ONES,ORIGPRI                 ; INDICATE PRI NOT CHANGED YET FOR NEXT T.C.
              05 07EF   636           RSB                                  ; RETURN TO CALLER
                 07F0    637           .END
```

B 11

SATSSS45　　　　SATS SYSTEM SERVICE TESTS　$SETPRI (SUCC 16-SEP-1984 00:55:25　VAX/VMS Macro V04-00　　Page 17
Symbol table　　　　　　　　　　　　　　　　　　　　　　　5-SEP-1984 04:31:42　[UETPSY.SRC]SATSSS45.MAR;1　　　　(1)

Symbol	Value		Symbol	Value	
$$$$	= 0000068F R	04	DIB$W_UNIT	= 0000000C	
$$$CHARS	= 00000025		EFLAG	******** X	04
$$$CHARS1	= 00000004		ESTPRI	00000124 R	03
$$$CHARS2	= 0000000A		EXPV	******** X	04
$$$CHARS3	= 00000019		FAO_DESC	******** X	04
$$$CHARS4	= 00000021		FAO_LEN	******** X	04
$$$CHARS5	= 00000026		FORM_CONDS	00000283 RG	04
$$$COND_A	= 00000004		FORM_CONDSX	0000036C R	04
$$$STRINGS	= 00000001		IMAGNAM	00000065 R	02
$$$STRINGS2	= 00000005		IO$_READVBLK	******** X	04
$$T1	= 00000001		LONG	= 00000004 G	
$$T2	= 00000004		MBXBUFF	0000008C R	03
BYTE	= 00000001 G		MBXCHAN	00000008 R	03
CFLAG	******** X	04	MBXCHANINFO	0000000C R	03
CHMRTN	******** X	04	MBXUNIT	00000088 R	03
CHM_CONT	******** X	04	MOD_MSG_CODE	******** X	04
COMP_SC	******** X	04	MOD_MSG_PRINT	******** X	04
CONDT	00000232 RG	04	MSGT_INP_CTL	00000019 R	02
COND1_C	= 00000000		MSG3_ERR_CTL	00000039 RG	02
COND1_CLEANUP	00000233 RG	04	MSG_A	******** X	04
COND1_E	00000170 R	03	MSG_B	******** X	04
COND1_H	00000131 RG	03	MSG_CTXT	******** X	04
COND1_T	00000125 R	03	NOTARG	= 00000000 G	
COND1_TAB	00000132 R	03	NULL	= 00000014 G	
COND2	00000234 RG	04	ONES	******** X	04
COND2_C	= 00000000		ORIGPRI	00000120 R	03
COND2_CLEANUP	00000235 RG	04	OUTPUT_MSG	******** X	04
COND2_E	000001B2 R	03	PCB$L_OIC	= 000000BC	
COND2_H	00000191 RG	03	PCV	******** X	04
COND2_T	0000017C R	03	PHD$Q_PRIVMSK	= 00000000	
COND2_TAB	00000192 R	03	PQL$_BYTLM	= 00000003	
COND3	00000236 RG	04	PQL$_CPULM	= 00000004	
COND3X	0000027D R	04	PQL$_FILLM	= 00000006	
COND3_C	= 00000000		PQL$_LISTEND	= 00000000	
COND3_CLEANUP	0000027E RG	04	PQL$_PGFLQUOTA	= 00000007	
COND3_E	0000024F R	03	PQL$_PRCLM	= 00000008	
COND3_H	000001C7 RG	03	PQL$_TQELM	= 00000009	
COND3_T	000001BA R	03	PRIVMASK	00000000 R	03
COND3_TAB	000001C8 R	03	PRIV_ARGS	= 00000002	
COND4	0000027F RG	04	PROCESS_ERR	******** X	04
COND4_C	= 00000014		QUAD	= 00000008 G	
COND4_CLEANUP	00000280 RG	04	QUOTALIST	00000084 R	02
COND4_H	00000263 RG	03	RECV	******** X	04
COND4_T	00000263 R	03	REST_REGS	******** X	04
COND4_TAB	00000263 R	03	SAVE_REGS	******** X	04
COND5	00000281 RG	04	SCH$GL_CURPCB	******** X	04
COND5_C	= 00000014		SELFPID	00000114 R	03
COND5_CLEANUP	00000282 RG	04	SS$_NORMAL	******** X	
COND5_H	00000264 RG	03	SUBJPID	0000011C R	03
COND5_T	00000264 R	03	SUBJPRN	00000051 R	02
COND5_TAB	00000264 R	03	SUCCESS	******** X	04
CONFLICT	******** X	04	SYS$CMKRNL	******** GX	04
CREPID	00000118 R	03	SYS$CREMBX	******** GX	04
CTL$GL_PHD	******** X	04	SYS$CREPRC	******** GX	04
DESC	= 00000010 G		SYS$DELMBX	******** GX	04
DEST_PIDADR	0000010C R	03	SYS$DELPRC	******** GX	04
DIB$R_LENGTH	= 00000074		SYS$FAO	******** X	04

C 11

SATSSS45   SATS SYSTEM SERVICE TESTS $SETPRI (SUCC 16-SEP-1984 00:55:25 VAX/VMS Macro V04-00   Page 18
Symbol table   5-SEP-1984 04:31:42 [UETPSY.SRC]SATSSS45.MAR;1   (1)

```
SYS$GETCHN                    ********  GX   04
SYS$HIBER                     ********  GX   04
SYS$QIOW                      ********  GX   04
SYS$SETPRI                    ********  GX   04
SYS$SETPRN                    ********  GX   04
SYS$SETPRV                    ********  GX   04
SYS$WAKE                      ********  GX   04
TESTNUM                       ********   X   04
TEST_MOD_NAME                 00000000  RG   02
TEST_MOD_NAME_D               00000009  R    02
TEST_MOD_SUCC                 ********   X   04
TMD_ADDR                      ********   X   04
TM_CLEANUP                    00000220  RG   04
TM_SETUP                      00000000  RG   04
VERIFY                        0000036D  RG   04
VERIFYX                       00000773  R    04
VFY_CLEANUP                   00000774  RG   04
VFY_CLEANUPX                  000007E4  R    04
WORD                       =  00000002   G
WRITE_MSG2                    ********   X   04
ZEROPID                       00000110  R    03
```

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

PSECT name	Allocation		PSECT No.	Attributes										
. ABS .	00000000 (	0.)	00 (0.)	NOPIC	USR	CON	ABS	LCL	NOSHR	NOEXE	NORD	NOWRT	NOVEC	BYTE
ABS	00000000 (	0.)	01 (1.)	NOPIC	USR	CON	ABS	LCL	NOSHR	EXE	RD	WRT	NOVEC	BYTE
RODATA	000000A7 (	167.)	02 (2.)	NOPIC	USR	CON	REL	LCL	NOSHR	NOEXE	RD	NOWRT	NOVEC	LONG
RWDATA	00000265 (	613.)	03 (3.)	NOPIC	USR	CON	REL	LCL	NOSHR	NOEXE	RD	WRT	NOVEC	LONG
SATSSS45	000007F0 (	2032.)	04 (4.)	NOPIC	USR	CON	REL	LCL	NOSHR	EXE	RD	WRT	NOVEC	BYTE

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

Phase	Page faults	CPU Time	Elapsed Time
Initialization	35	00:00:00.11	00:00:00.33
Command processing	137	00:00:00.66	00:00:01.84
Pass 1	301	00:00:09.60	00:00:19.91
Symbol table sort	0	00:00:00.78	00:00:01.40
Pass 2	139	00:00:02.36	00:00:05.01
Symbol table output	16	00:00:00.11	00:00:00.11
Psect synopsis output	2	00:00:00.03	00:00:00.03
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	632	00:00:13.66	00:00:28.63

The working set limit was 1500 pages.
51477 bytes (101 pages) of virtual memory were used to buffer the intermediate code.
There were 30 pages of symbol table space allocated to hold 490 non-local and 60 local symbols.
637 source lines were read in Pass 1, producing 26 object records in Pass 2.
47 pages of virtual memory were used to define 37 macros.

D 11

SATSSS45   SATS SYSTEM SERVICE TESTS $SETPRI (SUCC 16-SEP-1984 00:55:25   VAX/VMS Macro V04-00   Page 19
VAX-11 Macro Run Statistics   5-SEP-1984 04:31:42   [UETPSY.SRC]SATSSS45.MAR;1   (1)

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

Macro library name                          Macros defined
--------------------                        --------------
_$255$DUA28:[SHRLIB]UETP.MLB;1                     9
_$255$DUA28:[SYS.OBJ]LIB.MLB;1                     2
_$255$DUA28:[SYSLIB]STARLET.MLB;2                 23
TOTALS (all libraries)                            34
```

892 GETS were required to define 34 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS$:SATSSS45/OBJ=OBJ$:SATSSS45 MSRC$:SATSSS45/UPDATE=(ENH$:SATSSS45)+EXECML$/LIB+SHRLIB$:UETP/LIB