```
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  EEEEEEEEEEEEE        TTT     PPPPPPPPPPPP        SSSSSSSSS                   YYY
UUU        UUU  EEEEEEEEEEEEE        TTT     PPPPPPPPPPPP        SSSSSSSSS                   YYY
UUU        UUU  EEEEEEEEEEEEE        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
UUUUUUUUUUUUUU  EEEEEEEEEEEEEEE      TTT     PPP          SSSSSSSSSSSS                       YYY
UUUUUUUUUUUUUU  EEEEEEEEEEEEEEE      TTT     PPP          SSSSSSSSSSSS                       YYY
UUUUUUUUUUUUUU  EEEEEEEEEEEEEEE      TTT     PPP          SSSSSSSSSSSS                       YYY
```

```
SSSSSSSS    AAAAAA    TTTTTTTTTT    SSSSSSSS    SSSSSSSS    FFFFFFFFFF         11    5555555555
SSSSSSSS    AAAAAA    TTTTTTTTTT    SSSSSSSS    SSSSSSSS    FFFFFFFFFF         11    5555555555
SS        AA    AA        TT      SS          SS          FF               1111    55
SS        AA    AA        TT      SS          SS          FF               1111    55
SS        AA    AA        TT      SS          SS          FF                 11    555555
SS        AA    AA        TT      SS          SS          FF                 11    555555
    SSSSSS    AA    AA        TT        SSSSSS      SSSSSS    FFFFFFFF         11         55
    SSSSSS    AA    AA        TT        SSSSSS      SSSSSS    FFFFFFFF         11         55
        SS    AAAAAAAAAA      TT              SS          SS    FF             11             55
        SS    AAAAAAAAAA      TT              SS          SS    FF             11             55
        SS    AA    AA        TT              SS          SS    FF             11    55         55
        SS    AA    AA        TT              SS          SS    FF             11    55         55   ....
SSSSSSSS    AA    AA        TT      SSSSSSSS    SSSSSSSS    FF             111111    555555      ....
SSSSSSSS    AA    AA        TT      SSSSSSSS    SSSSSSSS    FF             111111    555555      ....
                                                                                              ....

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
```

```
0000      1                    .TITLE  SATSSF15 - SATS SYSTEM SERVICE TESTS  (FAILING S.C.)
0000      2                    .IDENT  'V04-000'
0000      3
0000      4          ;
0000      5          ;*****************************************************************************
0000      6          ;*                                                                           *
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0000     24          ;*                                                                           *
0000     25          ;*                                                                           *
0000     26          ;*****************************************************************************
0000     27          ;
0000     28
0000     29          ;++
0000     30          ; FACILITY:    SATS SYSTEM SERVICE TESTS
0000     31          ;
0000     32          ; ABSTRACT:     THE SATSSF15 MODULE TESTS THE EXECUTION OF CERTAIN
0000     33          ; VMS SYSTEM SERVICES, INVOKED IN SUCH A WAY AS TO EXPECT FAILING
0000     34          ; STATUS CODES. THE SYSTEM SERVICES TESTED AND THE STATUS CODES
0000     35          ; EXPECTED ARE SUMMARIZED AS ARGUMENTS TO THE TESTSERV MACROS
0000     36          ; WHICH APPEAR NEAR THE END OF THIS LISTING. SUCCESSFUL STATUS
0000     37          ; CODES ARE TESTED IN OTHER MODULES.
0000     38          ;
0000     39          ;
0000     40          ; ENVIRONMENT:  USER MODE IMAGE; NEEDS CMKRNL PRIVILEGE,
0000     41          ;                    DYNAMICALLY ACQUIRES OTHER PRIVILEGES, AS NEEDED.
0000     42          ;
0000     43          ; AUTHOR: THOMAS L. CAFARELLA,           CREATION DATE: MMM, 1978
0000     44          ;         PAUL D. FAY (DISPSERV & TESTSERV MACROS)
0000     45          ;
0000     46          ; MODIFIED BY:
0000     47          ;
0000     48          ;    . : VERSION
0000     49          ; 01   -
0000     50          ;--
```

```
            0000    52              .SBTTL  DECLARATIONS
            0000    53    ;
            0000    54    ;  INCLUDE FILES:
            0000    55    ;
            0000    56              $PHDDEF                              ; PROCESS HEADER OFFSET SYMBOLS
            0000    57              $PCBDEF                              ; PROCESS CONTROL BLOCK OFFSET SYMBS
            0000    58              $STSDEF                              ; STATUS MESSAGE SYMBOLS
            0000    59              $PRVDEF                              ; SYMBOL DEFS FOR PRIVILEGES
            0000    60              $UETPDEF                             ; UETP MSG CODE DEFINITIONS
            0000    61              $SHR_MESSAGES UETP,116,<<TEXT,INFO>>
            0000    62                                                  ; DEFINE UETP$ TEXT
            0000    63                                                  ; GET RID OF MACRO DEFINITIONS
            0000    64              $PSLDEF                              ; ACCESS MODE SYMBOLS
            0000    65    ;
            0000    66    ;  MACROS:
            0000    67    ;
            0000    68    ;
            0000    69    ;  EQUATED SYMBOLS:
            0000    70    ;
00000000    0000    71    WARNING         = 0                           ; WARNING SEVERITY VALUE FOR MSGS
00000001    0000    72    SUCCESS         = 1                           ; SUCCESS SEVERITY VALUE FOR MSGS
00000002    0000    73    ERROR           = 2                           ; ERROR SEVERITY VALUE FOR MSGS
00000003    0000    74    INFO            = 3                           ; INFORMATIONAL SEV VALUE FOR MSGS
00000004    0000    75    SEVERE          = 4                           ; SEVERE (FATAL) SEV VALUE FOR MSGS
00000000    0000    76    TCG_NO          = 0                           ; INITIALIZE TEST CASE GROUP NUMBER
00000000    0000    77    GRP_TOTAL       = 0                           ; INITIALIZE TEST CASE GROUP TOTAL
00007FFF    0000    78    R0_THRU_SP      = ^M<R0,R1,R2,R3,R4,R5,R6,R7,R8,R9,R10,R11,AP,FP,SP>
00000001    0000    79    PRVHND_DCH20    = 1                           ; PRVHND ARG FOR DCLCMH (LOCATION 1)
            0000    80    ;
            0000    81    ;  OWN STORAGE:
            0000    82    ;
```

```
              00000000      84          .PSECT  RODATA,RD,NOWRT,NOEXE,LONG
       BFFC   0000          85 REG_COMP_MASK:  .WORD   ^M<R2,R3,R4,R5,R6,R7,R8,R9,R10,R11,AP,FP> ! ^X8000 -
              0002          86                                         ; REG COMPARE MASK (HIGH-ORDER ...
              0002          87                                         ;  ...  BIT MUST BE ON
              0002          88 ERR_MSG_FAOCTL: STRING  I,<!/!AC!1ZB!1ZB: REGISTER !2UW CONTENTS ALTERED>, -
              0002          89                         <; BEFORE SERVICE CALL: !8XL    AFTER SERVICE CALL: !8XL>
              006E          90 TEST_MOD_NAME:  STRING  C,<SATSSF15>     ; TEST MODULE NAME
              0077          91 TEST_MOD_BEG:   STRING  C,<begun>        ; DISPOSITION FIELD OF TEST MOD MSG
              007D          92 TEST_MOD_SUCC:  STRING  C,<successful>   ; DISPOSITION FIELD OF TEST MOD MSG
              0088          93 TEST_MOD_FAIL:  STRING  C,<failed>       ; DISPOSITION FIELD OF TEST MOD MSG
              008F          94 TEST_MOD_NAME_D: STRING I,<SATSSF15>     ; TEST MODULE NAME DESCRIPTOR
              009F          95 TTNAME:         STRING  I,<TT>           ; TERMINAL LOGICAL NAME
00000000'00000000' 00A9     96 INADR:          .LONG   NOACCESS,NOACCESS ; PAGE ADDRESS OF NOACCESS PSECT
          00000000' 00B1    97 PROT:           .LONG   PRT$C_NA         ; PROTECTION CODE FOR NOACCESS PSECT
FFFFFFFF FFFFFFFF 00B5      98 ONES:           .LONG   -1,-1            ; A QUADWORD OF 1-BITS
              00BD          99 ADDRES_DCH:                              ; ADDRES ARGUMENT FOR DCLCMH
       0000   00BD         100                 .WORD   0                ; ENTRY MASK FOR DCLCMH SERVICE
         02   00BF         101                 REI                      ; RETURN INSTRUCTION FOR DCLCMH SERV
    000000C4  00C0         102 PRVHND_DCH21:   .BLKL   1                ; PRVHND ARGUMENT FOR DCLCMH
    00000000  00C4         103 TYPE_DCH:       .LONG   0                ; TYPE ARGUMENT FOR DCLCMH SERVICE
    00000003  00C8         104 ACMODE_ADS:     .LONG   PSL$C_USER       ; ACMODE ARGUMENT FOR ADJSTK
    00000002  00CC         105 ACMODE_ADS10:   .LONG   PSL$C_SUPER      ; ACMODE ARGUMENT FOR ADJSTK
    00000001  00D0         106 ACMODE_ADS11:   .LONG   PSL$C_EXEC       ; ACMODE ARGUMENT FOR ADJSTK
    00000000  00D4         107 ACMODE_ADS12:   .LONG   PSL$C_KERNEL     ; ACMODE ARGUMENT FOR ADJSTK
    00000000  00D8         108 ADJUST_ADS:     .LONG   0                ; ADJUST ARGUMENT FOR ADJSTK
```

```
        00000000      110              .PSECT    RWDATA,RD,WRT,NOEXE
00000004  0000       111 TPID:         .BLKL     1              ; PROCESS ID FOR THIS PROCESS
00000008  0004       112 CURRENT_TC:   .BLKL     1              ; PTR TO CURRENT TEST CASE
00000044  0008       113 REG_SAVE_AREA: .BLKL    15             ; SAVE AREA FOR ALL REGS (SANS PC)
007480D9  0044       114 MOD_MSG_CODE: .LONG     UETP$_SATSMS   ; TEST MODULE MSG CODE FOR PUTMSG
0000004C  0048       115 CLOB_REG_NO:  .BLKL     1              ; CLOBBERED REG NO (FOR FAO ERR MSG)
00000050  004C       116 REG_BEFORE_SS: .BLKL    1              ; REG CONTENTS BEFORE S.S.
          0050       117                                        ; ... (FOR FAO ERROR MSG)
00000054  0050       118 REG_AFTER_SS: .BLKL     1              ; REG CONTENTS AFTER S.S.
          0054       119                                        ; ... (FOR FAO ERROR MSG)
          0054       120 $$TSTN$$:      STRING  C,<  SF  >      ; ASCII PORTION OF TEST CASE NAME
0000006E' 005C       121 TMN_ADDR:     .ADDRESS TEST_MOD_NAME   ; ADDR OF TEST MOD NAME FOR FAO
00000077' 0060       122 TMD_ADDR:     .ADDRESS TEST_MOD_BEG    ; ADDR OF T.M. DISP FIELD FOR FAO
00000068  0064       123 TS_EP:        .BLKL     1              ; ENTRY PNT FOR CURR TESTSERV MACRO
00000070  0068       124 RETADR:       .BLKL     2              ; RETURN LONGWORDS FOR SETPRT
00000071  0070       125 PRVPRT:       .BLKB     1              ; PROT RETURN BYTE FOR SETPRT
00000079  0071       126 PRIVMASK:     .BLKQ     1              ; ADDR OF PRIVILEGE MASK (IN PHD)
0000007D  0079       127 CHM_CONT:     .BLKL     1              ; CHANGE MODE CONTINUE ADDRESS
00000091  007D       128 REGS:         .BLKL     5              ; AREA FOR COND INDEX REGS (R2-R6)
00000095  0091       129 PRVHND_DCH:   .BLKL     1              ; PRVHND ARGUMENT FOR DCLCMH SERVICE
          0095       130 DESBLK_CEH:                            ; DESBLK ARGUMENT FOR CANEXH
          0095       131 DESBLK_CEH10:                          ; DESBLK ARGUMENT FOR CANEXH
00000099  0095       132               .BLKL     1              ; EXIT CONTROL BLOCK (LINK PTR)
000000A9' 0099       133               .ADDRESS 20$             ; ADDRESS OF ROUTINE ENTRY MASK
00000001  009D       134               .LONG     1              ; ARGUMENT COUNT
000000A5' 00A1       135               .ADDRESS 10$             ; ADDR OF REASON CODE FIELD
000000A9  00A5       136 10$:          .BLKL     1              ; REASON CODE FIELD
0000      00A9       137 20$:          .WORD     0              ; EXIT HANDLER ENTRY MASK
04        00AB       138               RET                      ; EXIT HANDLER RETURN INSTR
00000000  00AC       139 NEWADR_ADS:   .LONG     0              ; NEWADR ARGUMENT FOR ADJSTK SERVICE
```

```
        00000000    141                     .PSECT  SATS_ACCVIO_1,RD,WRT,NOEXE,PAGE
   00000200  0000    142 EMPTY:              .BLKB   512     ; RESERVE A PAGE OF SPACE
             0200    143 ;
             0200    144 ;+
             0200    145 ; **********************************************************************
             0200    146 ; *                                                                    *
             0200    147 ; *       THE ORDER OF STATEMENTS IN THIS PSECT IS CRITICAL.            *
             0200    148 ; *       DO NOT RE-ARRANGE THE VARIABLES. CONSULT SATS                 *
             0200    149 ; *       FUNCTIONAL SPECIFICATION FOR A DESCRIPTION OF THE USE         *
             0200    150 ; *       OF THE EMPTY PSECT (AND ITS COMPANION PSECT, NOACCESS).       *
             0200    151 ; *                                                                    *
             0200    152 ; **********************************************************************
             0200    153 ; -
             0200    154 ;
             0200    155 ; TYPE AAAAA_SSSX1 (TYPE AAAAA_SSSX2 IF NOT DESC) GO HERE:
   000001FF  0200    156 PRVHND_DCH22    = . - 1          ; PRVHND ARG FOR DCLCMH (LAST BYTE IN PAGE
   000001F3  0200    157                 . = . - 13       ; ALLOW ROOM FOR STRING DESCRIPTOR
             01F3    158 ; TYPE AAAAA_SSSX5 GO HERE:
   00000006  01F3    159                 .LONG   6        ; STRING LENGTH (WILL CROSS PSECT BOUNDARY)
   000001FB' 01F7    160                 .ADDRESS .+4     ; STRING ADDRESS
             01FB    161 ; TYPE AAAAA_SSSX3 GO HERE:
   000001FC  01FB    162                 .BLKB   1        ; LOW-ORDER BYTE OF STRING LENGTH
             01FC    163 ; TYPE AAAAA_SSSX2 GO HERE:
   00000200  01FC    164                 .BLKL   1        ; STRING LENGTH
             0200    165 ;
             0200    166 ;
             0200    167 ;
             0200    168 ;
        00000000    169                     .PSECT  SATS_ACCVIO_2,RD,WRT,NOEXE,PAGE
   00000200  0000    170 NOACCESS:           .BLKB   512     ; RESERVE A PAGE OF SPACE
   00000000  0200    171                 . = . - 512      ; RETURN LOC CTR TO BEGINNING OF PSECT
   00000000' 0000    172                 .ADDRESS EMPTY       ; ADDRESS OF ACCESSIBLE STRING
   00000000' 0004    173                 .ADDRESS EMPTY/^X100 ; ADDRESS OF ACCESSIBLE STRING
             0008    174 ;+
             0008    175 ; *** NOTE -- DO NOT CHANGE LOCATION OR SEQUENCE OF ABOVE STATEMENTS!
             0008    176 ; ***     THIS PSECT (NOACCESS) MUST APPEAR IN MEMORY IMMEDIATELY
             0008    177 ; ***     FOLLOWING THE EMPTY PSECT. PSECT NAMES AND OPTIONS WILL BE
             0008    178 ; ***     CHOSEN TO FORCE THE DESIRED PSECT ORDERING.
             0008    179 ; -
             0008    180 ;
             0008    181 ;
             0008    182 ;
             0008    183 ;
        00000000    184                     .PSECT  SATSSF15,RD,WRT,EXE,LONG
```

```
0000    186              .SBTTL SATSSF15
0000    187  ;++
0000    188  ; FUNCTIONAL DESCRIPTION:
0000    189  ;
0000    190  ;            AFTER PERFORMING SOME INITIAL HOUSEKEEPING, SUCH AS
0000    191  ; PRINTING THE MODULE BEGIN MESSAGE AND ACQUIRING ALL PRIVILEGES,
0000    192  ; THE SATSSF15 ROUTINE EXECUTES THE TEST SERV EXEC MACRO TO RUN
0000    193  ; ALL TEST CASES. WHEN THE MACRO COMPLETES ITS EXECUTION, SATSSF15
0000    194  ; PRINTS A TEST MODULE SUCCESS OR FAIL MESSAGE AND EXITS TO THE
0000    195  ; OPERATING SYSTEM. TEST SERV EXEC CALLS THE TC CONTROL/TESTSERV
0000    196  ; CO-ROUTINE PAIR ONCE PER TEST CASE GROUP TO EXECUTE ALL TEST
0000    197  ; CASES IN THAT GROUP. EACH TEST CASE GROUP IS DEFINED BY BOUNDING
0000    198  ; ITS TEST CASES WITH A TC GROUP MACRO BEFORE THE FIRST TEST CASE
0000    199  ; AND A TCEND MACRO AFTER THE LAST ONE. THE TEST CASES THEMSELVES
0000    200  ; ARE DEFINED WITHIN THESE BOUNDS BY PRECEDING EACH WITH A
0000    201  ; NEXT TEST-CASE MACRO. TC_CONTROL/TESTSERV EXECUTES THE CODE
0000    202  ; FOLLOWING EACH NEXT TEST-CASE MACRO IMMEDIATELY BEFORE ISSUING
0000    203  ; THE SYSTEM SERVICE AS REQUESTED IN THE TESTSERV MACRO. TC CONTROL/
0000    204  ; TESTSERV ALSO CHECKS THE RESULTS OF THE SERVICE WITH RESPECT
0000    205  ; TO ITS EXPECTED STATUS CODE AND PRINTS ANY REQUIRED FAILURE
0000    206  ; MESSAGES FOR THE TEST CASE. THE CODE APPEARING AFTER EACH
0000    207  ; NEXT TEST CASE MACRO IS MERELY TO SET UP CONDITIONS REQUIRED
0000    208  ; FOR THE SYSTEM SERVICE AND TO CLEAN UP ANY RESOURCES ACQUIRED
0000    209  ; BY THE PREVIOUS TEST CASE.
0000    210  ;
0000    211  ; CALLING SEQUENCE:
0000    212  ;
0000    213  ;      $ RUN SATSSF15  ...  (DCL COMMAND)
0000    214  ;
0000    215  ; INPUT PARAMETERS:
0000    216  ;
0000    217  ;      NONE
0000    218  ;
0000    219  ; IMPLICIT INPUTS:
0000    220  ;
0000    221  ;      NONE
0000    222  ;
0000    223  ; OUTPUT PARAMETERS:
0000    224  ;
0000    225  ;      NONE
0000    226  ;
0000    227  ; IMPLICIT OUTPUTS:
0000    228  ;
0000    229  ;      MESSAGES TO SYS$OUTPUT ARE THE ONLY OUTPUT FROM SATSSF15.
0000    230  ;      THEY ARE OF THE FORM:
0000    231  ;
0000    232  ;              %UETP-S-SATSMS, TEST MODULE SATSSF15 BEGUN ... (BEGIN MSG)
0000    233  ;              %UETP-S-SATSMS, TEST MODULE SATSSF15 SUCCESSFUL ... (END MSG)
0000    234  ;              %UETP-E-SATSMS, TEST MODULE SATSSF15 FAILED ... (END MSG)
0000    235  ;              %UETP-I-TEXT, ... (VARIABLE INFORMATION ABOUT A TEST MODULE FAILURE)
0000    236  ;
0000    237  ; COMPLETION CODES:
0000    238  ;
0000    239  ;      THE SATSSF15 ROUTINE TERMINATES WITH A $EXIT TO THE
0000    240  ;      OPERATING SYSTEM WITH A STATUS CODE DEFINED BY UETP$_SATSMS.
0000    241  ;
0000    242  ; SIDE EFFECTS:
```

```
                              0000   243 ;
                              0000   244 ;          NONE
                              0000   245 ;
                              0000   246 ;--
                              0000   247
                              0000   248
                              0000   249
                              0000   250 SATSSF15:
                    OFFC      0000   251          .WORD     ^M<R2,R3,R4,R5,R6,R7,R8,R9,R10,R11>
                              0002   252                                               ; ENTRY MASK
                              0002   253          $WAKE_S   TPID                        ; GET PID OF THIS PROCESS
                              0011   254          $HIBER_S                              ; UNDO WAKE
                              0018   255          $SETPRN_S TEST_MOD_NAME_D             ; SET PROCESS NAME
                    0914   30  0025   256          BSBW      MOD_MSG_PRINT               ; PRINT TEST MODULE BEGIN MSG
00000060'EF    0000007D'EF  DE  0028   257          MOVAL     TEST_MOD_SUCC,TMD_ADDR     ; ASSUME END MSG WILL SHOW SUCCESS
00000044'EF  03  00  01     F0  0033   258          INSV      #SUCCESS,#0,#3,MOD_MSG_CODE ; ADJUST STATUS CODE FOR SUCCESS
                              003C   259          MODE      TO,10$,KRNL,NOREGS          ; KERNEL MODE TO ACCESS PHD
          59  00000000'9F  D0  0059   260          MOVL      @#CTL$GL_PHD,R9            ; GET PROCESS HEADER ADDRESS
      00000071'EF  69     DE  0060   261          MOVAL     PHD$Q_PRIVMSK(R9),PRIVMASK ; GET PRIV MASK ADDRESS
                              0067   262          MODE      FROM,TO$                   ; GET BACK TO USER MODE
                              0068   263          PRIV      ADD,ALL                    ; GET ALL PRIVILEGES
                              0088   264          DISPSERV                             ; SET UP DISPLAY INFO FOR TESTSERV
                              021D   265          $SETPRT_S INADR=INADR, RETADR=RETADR, -
                              021D   266                    PROT=PROT, PRVPRT=PRVPRT
                              023E   267                                               ; SET NOACCESS PSECT ...
                              023E   268                                               ; ... FOR NO USER ACCESS
                    05A2   31  023E   269          BRW       EXECUTE                    ; GO EXECUTE ALL TEST CASES
                              0241   270 ;
                              0241   271          TC_GROUP            DCH,1,TS1
                              0268   272 ;
                              0268   273          NEXT_TEST_CASE  SFDCH20
```

```
                                 L 14
0268    274 ;
0268    275 ;++
0268    276 ; ***********************************************************
0268    277 ; *
0268    278 ; *   TEST CASE NAME:         SFDCH20
0268    279 ; *
0268    280 ; *   SYSTEM SERVICE:         DCLCMH
0268    281 ; *
0268    282 ; *   ARGUMENT UNDER TEST:    PRVHND_DCH20
0268    283 ; *
0268    284 ; *   INPUT CONDITIONS:
0268    285 ; *      PREVIOUS HANDLER ADDRESS BUFFER AT LOCATION 1.
0268    286 ; *
0268    287 ; *   EXPECTED RESULTS:
0268    288 ; *      1) SYSTEM STATUS CODE:  ACCVIO
0268    289 ; *      2) REGISTERS R2 THROUGH FP UNCHANGED
0268    290 ; *
0268    291 ; ***********************************************************
0268    292 ;--
0268    293 ;
0268    294 ;
0268    295           NEXT_TEST_CASE  SFDCH21
```

```
0274   296  ;
0274   297  ;++
0274   298  ;  ***********************************************************
0274   299  ;  *
0274   300  ;  *  TEST CASE NAME:          SFDCH21
0274   301  ;  *
0274   302  ;  *  SYSTEM SERVICE:          DCLCMH
0274   303  ;  *
0274   304  ;  *  ARGUMENT UNDER TEST:     PRVHND_DCH21
0274   305  ;  *
0274   306  ;  *  INPUT CONDITIONS:
0274   307  ;  *    PREVIOUS HANDLER ADDRESS BUFFER IN READ-ONLY PSECT.
0274   308  ;  *
0274   309  ;  *  EXPECTED RESULTS:
0274   310  ;  *    1) SYSTEM STATUS CODE:  ACCVIO
0274   311  ;  *    2) REGISTERS R2 THROUGH FP UNCHANGED
0274   312  ;  *
0274   313  ;  ***********************************************************
0274   314  ;--
0274   315  ;
0274   316  ;
0274   317          NEXT_TEST_CASE  SFDCH22
```

N 14

SATSSF15                    - SATS SYSTEM SERVICE TESTS  (FAILING S. 16-SEP-1984 00:43:20  VAX/VMS Macro V04-00    Page  10
V04-000                      SFDCH22                                      5-SEP-1984 04:29:21  [UETPSY.SRC]SATSSF15.MAR;1     (1)

```
0280   318 ;
0280   319 ;++
0280   320 ; *****************************************************************
0280   321 ; *
0280   322 ; *   TEST CASE NAME:              SFDCH22
0280   323 ; *
0280   324 ; *   SYSTEM SERVICE:              DCLCMH
0280   325 ; *
0280   326 ; *   ARGUMENT UNDER TEST:         PRVHND_DCH22
0280   327 ; *
0280   328 ; *   INPUT CONDITIONS:
0280   329 ; *       PREVIOUS HANDLER ADDRESS BUFFER BEGINS IN ACCESSIBLE
0280   330 ; *           PSECT, ENDS IN NON-ACCESSIBLE PSECT.
0280   331 ; *
0280   332 ; *   EXPECTED RESULTS:
0280   333 ; *       1) SYSTEM STATUS CODE:  ACCVIO
0280   334 ; *       2) REGISTERS R2 THROUGH FP UNCHANGED
0280   335 ; *
0280   336 ; *****************************************************************
0280   337 ;--
0280   338 ;
0280   339 ;
0280   340           TCEND
```

SATSSF15
V04-000

B 15
- SATS SYSTEM SERVICE TESTS  (FAILING S. 16-SEP-1984 00:43:20  VAX/VMS Macro V04-00      Page 11
                                        5-SEP-1984 04:29:21  [UETPSY.SRC]SATSSF15.MAR;1         (1)

```
0281   341 ;
0281   342        TC_GROUP        CEH,1,TS2
02A8   343 ;
02A8   344        NEXT_TEST_CASE  SFCEH10
```

SATSSF15
V04-000

C 15
- SATS SYSTEM SERVICE TESTS  (FAILING S. 16-SEP-1984 00:43:20  VAX/VMS Macro V04-00
SFCEH10                                       5-SEP-1984 04:29:21  [UETPSY.SRC]SATSSF15.MAR;1

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```
02A8    345  ;
02A8    346  ;++
02A8    347  ;******************************************************************
02A8    348  ;  *
02A8    349  ;  *   TEST CASE NAME:         SFCEH10
02A8    350  ;  *
02A8    351  ;  *   SYSTEM SERVICE:         CANEXH
02A8    352  ;  *
02A8    353  ;  *   ARGUMENT UNDER TEST:    DESBLK_CEH10
02A8    354  ;  *
02A8    355  ;  *   INPUT CONDITIONS:
02A8    356  ;  *      SPECIFIED EXIT HANDLER NEVER DECLARED
02A8    357  ;  *        WITH A $DCLEXH SYSTEM SERVICE.
02A8    358  ;  *
02A8    359  ;  *   EXPECTED RESULTS:
02A8    360  ;  *      1) SYSTEM STATUS CODE:  NOHANDLER
02A8    361  ;  *      2) REGISTERS R2 THROUGH FP UNCHANGED
02A8    362  ;  *
02A8    363  ;******************************************************************
02A8    364  ;--
02A8    365  ;
02A8    366  ;
02A8    367          TCEND
```

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D 15
- SATS SYSTEM SERVICE TESTS  (FAILING S. 16-SEP-1984 00:43:20   VAX/VMS Macro V04-00        Page  13
                                      5-SEP-1984 04:29:21   [UETPSY.SRC]SATSSF15.MAR;1        (1)

```
02A9    368 ;
02A9    369         TC_GROUP        ADS,1,TS3
02D0    370 ;
02D0    371         NEXT_TEST_CASE  SFADS10
```

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E 15
- SATS SYSTEM SERVICE TESTS  (FAILING S. 16-SEP-1984 00:43:20  VAX/VMS Macro V04-00    Page 14
SFADS10                                    5-SEP-1984 04:29:21  [UETPSY.SRC]SATSSF15.MAR;1        (1)

```
02D0    372 ;
02D0    373 ;++
02D0    374 ; ****************************************************************
02D0    375 ; *
02D0    376 ; *   TEST CASE NAME:          SFADS10
02D0    377 ; *
02D0    378 ; *   SYSTEM SERVICE:          ADJSTK
02D0    379 ; *
02D0    380 ; *   ARGUMENT UNDER TEST:     ACMODE_ADS10
02D0    381 ; *
02D0    382 ; *   INPUT CONDITIONS:
02D0    383 ; *      ATTEMPT TO ADJUST SUPERVISOR STACK
02D0    384 ; *
02D0    385 ; *   EXPECTED RESULTS:
02D0    386 ; *      1) SYSTEM STATUS CODE:  NOPRIV
02D0    387 ; *      2) REGISTERS R2 THROUGH FP UNCHANGED
02D0    388 ; *
02D0    389 ; ****************************************************************
02D0    390 ;--
02D0    391 ;
02D0    392 ;
02D0    393         NEXT_TEST_CASE  SFADS11
```

```
02DC    394  ;
02DC    395  ;++
02DC    396  ;**********************************************************
02DC    397  ;  *
02DC    398  ;  *   TEST CASE NAME:          SFADS11
02DC    399  ;  *
02DC    400  ;  *   SYSTEM SERVICE:          ADJSTK
02DC    401  ;  *
02DC    402  ;  *   ARGUMENT UNDER TEST:     ACMODE_ADS11
02DC    403  ;  *
02DC    404  ;  *   INPUT CONDITIONS:
02DC    405  ;  *      ATTEMPT TO ADJUST EXECUTIVE STACK.
02DC    406  ;  *
02DC    407  ;  *   EXPECTED RESULTS:
02DC    408  ;  *      1) SYSTEM STATUS CODE:  NOPRIV
02DC    409  ;  *      2) REGISTERS R2 THROUGH FP UNCHANGED
02DC    410  ;  *
02DC    411  ;**********************************************************
02DC    412  ;--
02DC    413  ;
02DC    414  ;
02DC    415          NEXT_TEST_CASE  SFADS12
```

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G 15
- SATS SYSTEM SERVICE TESTS (FAILING S. 16-SEP-1984 00:43:20    VAX/VMS Macro V04-00      Page 16
SFADS12                                          5-SEP-1984 04:29:21   [UETPSY.SRC]SATSSF15.MAR;1      (1)

```
02E8   416  ;
02E8   417  ;++
02E8   418  ; **************************************************************
02E8   419  ; *
02E8   420  ; *   TEST CASE NAME:          SFADS12
02E8   421  ; *
02E8   422  ; *   SYSTEM SERVICE:          ADJSTK
02E8   423  ; *
02E8   424  ; *   ARGUMENT UNDER TEST:     ACMODE_ADS12
02E8   425  ; *
02E8   426  ; *   INPUT CONDITIONS:
02E8   427  ; *      ATTEMPT TO ADJUST KERNEL STACK.
02E8   428  ; *
02E8   429  ; *   EXPECTED RESULTS:
02E8   430  ; *      1) SYSTEM STATUS CODE: NOPRIV
02E8   431  ; *      2) REGISTERS R2 THROUGH FP UNCHANGED
02E8   432  ; *
02E8   433  ; **************************************************************
02E8   434  ;--
02E8   435  ;
02E8   436  ;
02E8   437          TCEND
```

```
02E9   438 TS1:
02E9   439        TESTSERV          DCLCMH,ERR,SATS,                                       -
02E9   440                                                                                 =
02E9   441           <1,ADDRES_DCH,                                           >,           =
02E9   442                                                                                 =
02E9   443                                                                                 =
02E9   444           <1,PRVHND_DCH,                                                        =
02E9   445                          PRVHND_DCH20,ACCVIO,     - ; SFDCH20
02E9   446                          PRVHND_DCH21,ACCVIO,     - ; SFDCH21
02E9   447                          PRVHND_DCH22,ACCVIO,     - ; SFDCH22
02E9   448                                                              >,                 =
02E9   449                                                                                 =
02E9   450           <1,TYPE_DCH,                                              -
02E9   451                                                              >,                 -
02E9   452
04D3   453        TS_CLEANUP              ; CLEAN UP & RETURN TO TEST_SERV_EXEC
```

```
04F3    454 TS2:
04F3    455          TESTSERV        CANEXH,ERR,SATS,
04F3    456                                                                                          =
04F3    457             <1,DESBLK_CEH,                                                                =
04F3    458                           DESBLK_CEH10,NOHANDLER, -  ; SFCEH10
04F3    459                                           >,                                              =
04F3    460
05B6    461          TS_CLEANUP              ; CLEAN UP & RETURN TO TEST_SERV_EXEC
```

```
05D6   462 TS3:
05D6   463          TESTSERV         ADJSTK,ERR,SATS,                          -
05D6   464                                                                     -
05D6   465            <1,ACMODE_ADS,                                           -
05D6   466                           ACMODE_ADS10,NOPRIV,    - ; SFADS10
05D6   467                           ACMODE_ADS11,NOPRIV,    - ; SFADS11
05D6   468                           ACMODE_ADS12,NOPRIV,    - ; SFADS12
05D6   469                                               >,                    -
05D6   470                                                                     -
05D6   471            <1,ADJUST_ADS,                                           -
05D6   472                                               >,                    -
05D6   473                                                                     -
05D6   474            <1,NEWADR_ADS,                                           -
05D6   475                                               >,                    -
05D6   476
07C3   477          TS_CLEANUP              ; CLEAN UP & RETURN TO TEST_SERV_EXEC
```

```
                        07E3   478          .SBTTL   EXECUTE & CLEANUP
                        07E3   479 EXECUTE:
                        07E3   480          TEST_SERV_EXEC                        ; EXECUTE ALL T. CASES IN ALL GROUPS
                        0801   481 CLEANUP:
                  0138  30 0801  482          BSBW    MOD_MSG_PRINT              ; PRINT TEST MODULE END MSG
00000044'EF  01   1C    01  F0 0804  483          INSV    #1,#STS$V_INHIB_MSG,#1,MOD_MSG_CODE
                        080D   484                                                ; INHIBIT PRINTING
                        080D   485          $EXIT_S MOD_MSG_CODE                  ; EXIT TO OP SYS WITH MSG CODE
```

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L 15
- SATS SYSTEM SERVICE TESTS (FAILING S. 16-SEP-1984 00:43:20  VAX/VMS Macro V04-00      Page 21
TC_CONTROL                                5-SEP-1984 04:29:21  [UETPSY.SRC]SATSSF15.MAR;1        (1)

```
081A    487          .SBTTL  TC_CONTROL
081A    488  ;++
081A    489  ; FUNCTIONAL DESCRIPTION:
081A    490  ;
081A    491  ;        THE TC CONTROL SUBROUTINE IS CALLED BY THE TEST_SERV_EXEC
081A    492  ; MACRO TO EXECUTE A GROUP OF TEST CASES. A GROUP IS DEFINED BY A TC-GROUP
081A    493  ; MACRO. FOR EACH TC GROUP MACRO, THERE IS A CORRESPONDING TESTSERV MACRO.
081A    494  ; TESTSERV CONTAINS CODE TO EXECUTE SYSTEM SERVICES AND CHECK THE RETURNED
081A    495  ; STATUS CODE VALUES. TESTSERV ARGUMENTS ARE CODED TO SPECIFY ALL THE SYSTEM
081A    496  ; SERVICE ARGUMENT VALUES AND THE EXPECTED STATUS CODE FOR EACH TEST CASE
081A    497  ; DEFINED BY A NEXT TEST CASE MACRO WITHIN THE GROUP. TC CONTROL USES A
081A    498  ; CO-ROUTINE INTERFACE TO ENTER THE CODE OF THE APPROPRIATE TESTSERV MACRO
081A    499  ; IN VARIOUS PLACES. THE FIRST ENTRY OCCURS ONCE PER GROUP TO ALLOW TESTSERV
081A    500  ; TO DO SOME INITIALIZATION. THEN TWO ENTRIES ARE MADE FOR EACH TEST CASE IN
081A    501  ; THE GROUP. THE FIRST ALLOWS TESTSERV TO ISSUE THE SUBJECT SYSTEM SERVICE.
081A    502  ; THE SECOND ENTRY FOR THE TEST CASE CAUSES TESTSERV TO CHECK THE RETURNED
081A    503  ; STATUS CODE, PRINTING A FAILURE MESSAGE IF IT IS NOT THE EXPECTED CODE.
081A    504  ; IF THERE ARE NO MORE TEST CASES IN THE CURRENT GROUP, TESTSERV (NOT TC CONTROL)
081A    505  ; RETURNS DIRECTLY TO TEST SERV EXEC (RSB ACTUALLY ISSUED IN TS CLEANUP MACRO)
081A    506  ; FROM THIS SECOND ENTRY; OTHERWISE, CONTROL RETURNS TO TC CONTROL WHICH
081A    507  ; IN TURN ENTERS TESTSERV AGAIN FOR THE NEXT TEST CASE. THE FAILURE OF A
081A    508  ; TEST CASE DOES NOT CAUSE TERMINATION OF THE TEST MODULE.
081A    509  ;
081A    510  ; CALLING SEQUENCE:
081A    511  ;
081A    512  ;        BSBW TC_CONTROL (ISSUED WITHIN THE TEST_SERV_EXEC MACRO)
081A    513  ;                        (RSB IS ISSUED WITHIN THE TS_CLEANUP MACRO)
081A    514  ;
081A    515  ; INPUT PARAMETERS:
081A    516  ;
081A    517  ;        NONE
081A    518  ;
081A    519  ; IMPLICIT INPUTS:
081A    520  ;
081A    521  ;        ARGUMENTS SPECIFIED ON EACH TESTSERV MACRO MAY BE VIEWED AS
081A    522  ;        INPUTS, SINCE TC_CONTROL AND TESTSERV ACT AS CO-ROUTINES.
081A    523  ;
081A    524  ; OUTPUT PARAMETERS:
081A    525  ;
081A    526  ;        SEVERITY CODE FIELD OF MOD_MSG_CODE (BITS 0,1,2) IS SET TO ERROR
081A    527  ;        IF ANY TEST CASE IN THE CURRENT GROUP FAILS; OTHERWISE IT REMAINS
081A    528  ;        SET TO SUCCESSFUL.
081A    529  ;
081A    530  ; IMPLICIT OUTPUTS:
081A    531  ;
081A    532  ;        %UETP-I-TEXT,   ERROR MESSAGES ARE WRITTEN TO SYS$OUTPUT BY
081A    533  ;                        THE TESTSERV MACRO (CO-ROUTINE WITH TC_CONTROL)
081A    534  ;
081A    535  ; COMPLETION CODES:
081A    536  ;
081A    537  ;        NONE
081A    538  ;
081A    539  ; SIDE EFFECTS:
081A    540  ;
081A    541  ;        NONE
081A    542  ;
081A    543  ;--
```

```
                              081A    544
                              081A    545
                              081A    546
                              081A    547  TC_CONTROL:
        00000064'EF    DD     081A    548         PUSHL   TS_EP                 ; PUSH TESTSERV ENTRY POINT
                       9E  16 0820    549         JSB     a(SP)+                ; ENTER TESTSERV INITIALIZATION
                              0822    550  10$:                                 ; PROCESS NEXT TEST CASE
        00000056'EF    20  90 0822    551         MOVB    #^A/ /,$$TSTN$$+2     ; MAKE SURE T.C. NAME HAS A BLANK
                       002F 30 0829   552         BSBW    REG_SAVE              ; SAVE REGISTERS
        00000004'FF    16     082C    553         JSB     aCURRENT_TC           ; JUMP TO CURRENT TEST CASE
                       0037 30 0832   554         BSBW    REG_REST              ; RESTORE REGS FOR TESTSERV
                       9E  16 0835    555         JSB     a(SP)+                ; LET TESTSERV ISSUE SYSTEM SERVICE
                       0042 30 0837   556         BSBW    REG_COMP              ; COMPARE REGS TO SEE IF ...
                              083A    557                                       ; ... SYSTEM SERVICE CHANGED ANY
                       9E  16 083A    558         JSB     a(SP)+                ; LET TESTSERV CHEK S.S. STATUS CODE
        00000056'EF    2A  91 083C    559         CMPB    #^A/*/,$$TSTN$$+2     ; HAS TESTSERV INDICATED FAILURE ?
                       DD  12 0843    560         BNEQU   10$                   ; NO -- PROCESS NEXT TEST CASE
 00000060'EF  00000088'EF     DE 0845 561         MOVAL   TEST_MOD_FAIL,TMD_ADDR ; YES -- INDICATE FAILED IN END MSG
 00000044'EF  03  00  02       F0 0850 562         INSV    #ERROR,#0,#3,MOD_MSG_CODE ; ADJUST STATUS CODE FOR ERROR
                       C7  11 0859    563         BRB     10$                   ; LOOP BAK TO PROCESS NEXT TEST CASE
                              085B    564  ;
                              085B    565  ;  TC_CONTROL RETURNS TO TEST_SERV_EXEC VIA TESTSERV (IN TS_CLEANUP MACRO)
                              085B    566  ;
```

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SATSSF15                    - SATS SYSTEM SERVICE TESTS  (FAILING S. 16-SEP-1984 00:43:20   VAX/VMS Macro V04-00      Page  23
V04-000                       SUBROUTINES                                            5-SEP-1984 04:29:21   [UETPSY.SRC]SATSSF15.MAR;1       (1)

```
                                   085B      568                    .SBTTL   SUBROUTINES
                                   085B      569     REG_SAVE:
                                   085B      570     ;
                                   085B      571     ;    ***********************************************************
                                   085B      572     ;    *                                                         *
                                   085B      573     ;    *   SAVES R0 THRU SP IN REG_SAVE_AREA                      *
                                   085B      574     ;    *                                                         *
                                   085B      575     ;    ***********************************************************
                                   085B      576     ;
                         7FFF 8F   BB 085B   577              PUSHR    #R0_THRU_SP              ; SAVE ALL REGS ON STACK
     00000008'EF    6E    3C   28 085F        578              MOVC3    #60,(SP),REG_SAVE_AREA  ; SAVE REGS (BEFORE S.S.)
                         7FFF 8F   BA 0867   579              POPR     #R0_THRU_SP             ; CLEAN UP STACK
                                   05 086B   580              RSB                               ; .... AND RETURN
                                   086C      581     ;
                                   086C      582     ;
                                   086C      583     ;
                                   086C      584     ;
                                   086C      585     REG_REST:
                                   086C      586     ;
                                   086C      587     ;
                                   086C      588     ;    ***********************************************************
                                   086C      589     ;    *                                                         *
                                   086C      590     ;    *   RESTORES R0 THRU SP FROM REG_SAVE_AREA                 *
                                   086C      591     ;    *                                                         *
                                   086C      592     ;    ***********************************************************
                                   086C      593     ;
                    5E    3C   C2 086C        594              SUBL2    #60,SP                  ; MOVE SP TO MAKE ROOM FOR REGS
     6E   00000008'EF    3C   28 086F        595              MOVC3    #60,REG_SAVE_AREA,(SP)  ; MOVE REGS ONTO STACK FOR POP
                         7FFF 8F   BA 0877   596              POPR     #R0_THRU_SP             ; RESTORE ALL REGS FOR TESTSERV
                                   05 087B   597              RSB                               ; ... AND RETURN
```

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SATSSF15                    - SATS SYSTEM SERVICE TESTS (FAILING S. 16-SEP-1984 00:43:20  VAX/VMS Macro V04-00    Page 24
V04-000                       SUBROUTINES                              5-SEP-1984 04:29:21  [UETPSY.SRC]SATSSF15.MAR;1    (1)

```
                              087C    599  REG_COMP:
                              087C    600  ;
                              087C    601  ;    ***********************************************************************
                              087C    602  ;    *                                                                     *
                              087C    603  ;    * 1) PUSHES ALL REGS ONTO STACK                                       *
                              087C    604  ;    * 2) COMPARES REGISTER IMAGES FROM STACK WITH CORRESPONDING           *
                              087C    605  ;    *       IMAGES FROM REG_SAVE_AREA FOR ALL REGISTERS SPECIFIED         *
                              087C    606  ;    *       IN REG_COMP_MASK.                                             *
                              087C    607  ;    * 3) FOR EACH UNEQUAL COMPARE, AN ERROR MESSAGE IS PRINTED            *
                              087C    608  ;    *       (USING $FAO AND $OUTPUT SYSTEM SERVICES).                     *
                              087C    609  ;    * 4) POPS ALL REGS OFF OF STACK                                       *
                              087C    610  ;    *                                                                     *
                              087C    611  ;    ***********************************************************************
                              087C    612  ;
                  7FFF 8F  BB 087C    613         PUSHR   #R0_THRU_SP              ; SAVE ALL REGISTERS ON STACK
        56    00000008'EF  DE 0880    614         MOVAL   REG_SAVE_AREA,R6        ; POINT R6 TO BEG OF ...
                              0887    615                                         ; ... REGS (BEFORE S.S.)
        54      5E  D0 0887    616         MOVL    SP,R4                   ; POINT R4 TO BEG OF
                              088A    617                                         ; ... REGS (AFTER S.S.)
        53    FF 8F  98 088A    618         CVTBL   #-1,R3                  ; INITIALIZE REG_COMP_MASK INDEX
                              088E    619  REG_COMP_NEXT:
              53    D6 088E    620         INCL    R3                      ; POINT TO NEXT BIT IN MASK
        53    0F  91 0890    621         CMPB    #15,R3                  ; END OF THE MASK ?
              03  1A 0893    622         BGTRU   REG_COMP_CONT           ; NO -- CONTINUE
            009F  31 0895    623         BRW     REG_COMP_RSB            ; YES -- GO TO COMMON RETURN
                              0898    624  REG_COMP_CONT:
        84      86  D1 0898    625         CMPL    (R6)+,(R4)+             ; REG BEFORE = REG AFTER ?
              F1  13 089B    626         BEQLU   REG_COMP_NEXT           ; YES -- LOOK FOR NEXT REG
   E9 00000000'EF  53  E1 089D    627         BBC     R3,REG_COMP_MASK,REG_COMP_NEXT
                              08A5    628                                         ; NO -- GET NEXT IF BIT NOT SET
      00000048'EF  53  D0 08A5    629         MOVL    R3,CLOB_REG_NO          ; NO -- GIVE REG NUMBER TO FAO
  0000004C'EF  FC A6  D0 08AC    630         MOVL    -4(R6),REG_BEFORE_SS    ; GIVE "BEFORE" CONTENTS TO FAO
  00000050'EF  FC A4  D0 08B4    631         MOVL    -4(R4),REG_AFTER_SS     ; GIVE "AFTER" CONTENTS TO FAO
  00000056'EF  2A  90 08BC    632         MOVB    #^A/*/,$$TSTN$$+2       ; GIVE FAILURE INDIC'N IN ERROR MSG
                              08C3    633  ;
                              08C3    634         $FAO_S  ERR_MSG_FAOCTL,OUTL,OUTD,$$SNAD$$, -
                              08C3    635                 $$ASEQ$$,$$PSEQ$$,CLOB_REG_NO,REG_BEFORE_SS,REG_AFTER_SS
                              08F6    636  ;
   F817 CF  F7E1 CF  B0 08F6    637         MOVW    OUTL,OUTD               ; ACTUAL OUTPUT LEN IN STRING DESC'R
                              08FD    638         PUTMSG  <#UETP$_TEXT,#1,#OUTD>  ; PRINT THE MSG
   F7FB CF  0084 8F  B0 0912    639         MOVW    #OUTE-OUTB,OUTD         ; GET MAX LEN BACK INTO DESCRIPTOR
      00000056'EF  20  90 0919    640         MOVB    #^A/ /,$$TSTN$$+2       ; REMOVE FAIL INDIC'N FOR NEXT MSG
 00000060'EF  00000088'EF  DE 0920    641         MOVAL   TEST_MOD_FAIL,TMD_ADDR  ; INDICATE FAILED IN END MSG
 00000044'EF  03 00  02  F0 092B    642         INSV    #ERROR,#0,#3,MOD_MSG_CODE ; ADJUST STATUS CODE FOR ERROR
              FF57  31 0934    643         BRW     REG_COMP_NEXT           ; GO LOOK FOR NEXT REG TO COMPARE
                              0937    644  REG_COMP_RSB:
                  7FFF 8F  BA 0937    645         POPR    #R0_THRU_SP             ; CLEAN UP STACK
                  05  093B    646         RSB                             ; RETURN TO CALLER
```

```
093C    648 MOD_MSG_PRINT:
093C    649 ;
093C    650 ; ********************************************************************
093C    651 ; *                                                                  *
093C    652 ; *   PRINTS THE TEST MODULE BEGUN/SUCCESSFUL/FAILED MESSAGES        *
093C    653 ; *          (USING THE PUTMSG MACRO).                               *
093C    654 ; *                                                                  *
093C    655 ; ********************************************************************
```

```
                093C   657 ;
                093C   658           PUTMSG   <MOD_MSG_CODE,#2,TMN_ADDR,TMD_ADDR> ; PRINT MSG
         05     0957   659           RSB                              ; ... AND RETURN TO CALLER
                0958   660 ;
                0958   661 CHMRTN:
                0958   662 ; ****************************************************************
                0958   663 ; *
                0958   664 ; *      CHANGE MODE ROUTINE. THIS ROUTINE GETS CONTROL WHENEVER
                0958   665 ; *      A CMKRNL, CMEXEC, OR CMSUP SYSTEM SERVICE IS ISSUED
                0958   666 ; *      BY THE MODE MACRO ('TO' OPTION).  IT MERELY DOES
                0958   667 ; *      A JUMP INDIRECT ON A FIELD SET UP BY MODE. IT HAS
                0958   668 ; *      THE EFFECT OF RETURNING TO THE END OF THE MODE
                0958   669 ; *      MACRO EXPANSION.
                0958   670 ; *
                0958   671 ; ****************************************************************
                0958   672 ;
         0000   0958   673           .WORD    0                       ; ENTRY MASK
00000079'FF  17 095A   674           JMP      @CHM_CONT               ; RETURN TO MODE MACRO IN NEW MODE
                0960   675 ;
                0960   676 ; *      RET INSTR WILL BE ISSUED IN EXPANSION OF 'MODE FROM, ....' MACRO
                0960   677 ;
                0960   678           .END     SATSSF15
```

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| $$$CHARS | = 00000048 | | | PRVHND_DCH20 | = 00000001 | | |
| $$$FIRSTTC$$$ | = 00000000 | | | PRVHND_DCH21 | 000000C0 | R | 02 |
| $$$STRINGS | = 00000000 | | | PRVHND_DCH22 | = 000001FF | R | 04 |
| $$ACT$$ | 000000F3 | R | 06 | PRVPRT | 00000070 | R | 03 |
| $$ARG$$ | 000000FB | R | 06 | PSL$C_EXEC | = 00000001 | | |
| $$ASEQ$$ | 000000EB | R | 06 | PSL$C_KERNEL | = 00000000 | | |
| $$CALL$$ | 000000DF | R | 06 | PSL$C_SUPER | = 00000002 | | |
| $$DISP$$ | 000001E6 | R | 06 | PSL$C_USER | = 00000003 | | |
| $$ERR$$ | 000001A0 | R | 06 | R0_THRU_SP | = 00007FFF | | |
| $$EXP$$ | 000000F7 | R | 06 | REGS | 0000007D | R | 03 |
| $$INIT$$ | 000000E3 | R | 06 | REG_AFTER_SS | 00000050 | R | 03 |
| $$MAXP$$ | = 00000005 | | | REG_BEFORE_SS | 0000004C | R | 03 |
| $$PSEQ$$ | 000000EF | R | 06 | REG_COMP | 0000087C | R | 06 |
| $$SNAD$$ | 000000E7 | R | 06 | REG_COMP_CONT | 00000898 | R | 06 |
| $$T1 | = 00000004 | | | REG_COMP_MASK | 00000000 | R | 02 |
| $$T2 | = 00000009 | | | REG_COMP_NEXT | 0000088E | R | 06 |
| $$TSTN$$ | 00000054 | R | 03 | REG_COMP_RSB | 00000937 | R | 06 |
| ACMODE_ADS | 000000C8 | R | 02 | REG_REST | 0000086C | R | 06 |
| ACMODE_ADS10 | 000000CC | R | 02 | REG_SAVE | 0000085B | R | 06 |
| ACMODE_ADS11 | 000000D0 | R | 02 | REG_SAVE_AREA | 00000008 | R | 03 |
| ACMODE_ADS12 | 000000D4 | R | 02 | RETADR | 00000068 | R | 03 |
| ADDRES_DCH | 000000BD | R | 02 | SATSSF15 | 00000000 | R | 06 |
| ADJUST_ADS | 000000D8 | R | 02 | SEVERE | = 00000004 | | |
| CHMRTN | 00000958 | R | 06 | SHR$K_SHRDEF | = 00000001 | | |
| CHM_CONT | 00000079 | R | 03 | SHR$_TEXT | = 00001130 | | |
| CLEANUP | 00000801 | R | 06 | SS$_ACCVIO | ******** | X | 06 |
| CLOB_REG_NO | 00000048 | R | 03 | SS$_NOHANDLER | ******** | X | 06 |
| CTL$GL_PAD | ******** | X | 06 | SS$_NOPRIV | ******** | X | 06 |
| CURRENT_TC | 00000004 | R | 03 | STS$V_INHIB_MSG | = 0000001C | | |
| DESBLK_CEH | 00000095 | R | 03 | SUCCESS | = 00000001 | | |
| DESBLK_CEH10 | 00000095 | R | 03 | SYS$ADJSTK | ******** | GX | 06 |
| EMPTY | 00000000 | R | 04 | SYS$CANEXH | ******** | GX | 06 |
| ERROR | = 00000002 | | | SYS$CMKRNL | ******** | GX | 06 |
| ERR_MSG_FAOCTL | 00000002 | R | 02 | SYS$DCLCMH | ******** | GX | 06 |
| EXECUTE | 000007E3 | R | 06 | SYS$EXIT | ******** | GX | 06 |
| GRP_TOTAL | = 00000003 | | | SYS$FAO | ******** | X | 06 |
| INADR | 000000A9 | R | 02 | SYS$FAOL | ******** | GX | 06 |
| INFO | = 00000003 | | | SYS$HIBER | ******** | GX | 06 |
| LIB$SIGNAL | ******** | X | 06 | SYS$SETPRN | ******** | GX | 06 |
| MEXIT | = 00000000 | | | SYS$SETPRT | ******** | GX | 06 |
| MOD_MSG_CODE | 00000044 | R | 03 | SYS$SETPRV | ******** | GX | 06 |
| MOD_MSG_PRINT | 0000093C | R | 06 | SYS$WAKE | ******** | GX | 06 |
| NARGS | = 0000000E | | | TC1 | 00000241 | R | 06 |
| NEWADR_ADS | 000000AC | R | 03 | TC2 | 00000281 | R | 06 |
| NOACCESS | 00000000 | R | 05 | TC3 | 000002A9 | R | 06 |
| NSSARGS | = 00000003 | | | TCG_NO | = 00000003 | | |
| ONES | 000000B5 | R | 02 | TC_CONTROL | 0000081A | R | 06 |
| OUTB | 0000011C | R | 06 | TEST_MOD_BEG | 00000077 | R | 02 |
| OUTD | 00000114 | R | 06 | TEST_MOD_FAIL | 00000088 | R | 02 |
| OUTE | 000001A0 | R | 06 | TEST_MOD_NAME | 0000006E | R | 02 |
| OUTL | 000000DB | R | 06 | TEST_MOD_NAME_D | 0000008F | R | 02 |
| PHD$Q_PRIVMSK | = 00000000 | | | TEST_MOD_SUCC | 0000007D | R | 02 |
| PRIVMASK | 00000071 | R | 03 | TMD_ADDR | 00000060 | R | 03 |
| PRIV_ARGS | = 00000002 | | | TMN_ADDR | 0000005C | R | 03 |
| PROT | 000000B1 | R | 02 | TPID | 00000000 | R | 03 |
| PRT$C_NA | ******** | X | 02 | TS1 | 000002E9 | R | 06 |
| PRVHND_DCH | 00000091 | R | 03 | TS2 | 000004F3 | R | 06 |

```
TS3                          000005D6 R    06
TS_EP                        00000064 R    03
TTNAME                       0000009F R    02
TYPE_DCH                     000000C4 R    02
UETP$_SATSMS               = 007480D9
UETP$_TEXT                 = 00741133
WARNING                    = 00000000
```

```
                                    +------------------+
                                    ! 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                  000000DC (    220.)     02 (   2.)  NOPIC   USR  CON  REL  LCL  NOSHR  NOEXE  RD     NOWRT  NOVEC  LONG
RWDATA                  000000B0 (    176.)     03 (   3.)  NOPIC   USR  CON  REL  LCL  NOSHR  NOEXE  RD     WRT    NOVEC  BYTE
SATS_ACCVIO_1           00000200 (    512.)     04 (   4.)  NOPIC   USR  CON  REL  LCL  NOSHR  NOEXE  RD     WRT    NOVEC  PAGE
SATS_ACCVIO_2           00000200 (    512.)     05 (   5.)  NOPIC   USR  CON  REL  LCL  NOSHR  NOEXE  RD     WRT    NOVEC  PAGE
SATSSF15                00000960 (   2400.)     06 (   6.)  NOPIC   USR  CON  REL  LCL  NOSHR  EXE    RD     WRT    NOVEC  LONG
```

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


Phase                   Page faults   CPU Time      Elapsed Time
-----                   -----------   --------      ------------

Initialization               31       00:00:00.07   00:00:00.29
Command processing          107       00:00:00.71   00:00:02.84
Pass 1                      358       00:00:13.33   00:00:22.59
Symbol table sort             0       00:00:01.08   00:00:01.15
Pass 2                      142       00:00:03.02   00:00:03.87
Symbol table output          16       00:00:00.12   00:00:00.12
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        658       00:00:18.37   00:00:30.92
```

The working set limit was 1650 pages.
68551 bytes (134 pages) of virtual memory were used to buffer the intermediate code.
There were 40 pages of symbol table space allocated to hold 637 non-local and 88 local symbols.
678 source lines were read in Pass 1, producing 27 object records in Pass 2.
64 pages of virtual memory were used to define 48 macros.

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


Macro library name                        Macros defined
------------------                        --------------

_$255$DUA28:[SHRLIB]UETP.MLB;1                  19
_$255$DUA28:[SYS.OBJ]LIB.MLB;1                   2
_$255$DUA28:[SYSLIB]STARLET.MLB;2               21
TOTALS (all libraries)                          42
```

1273 GETS were required to define 42 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS$:SATSSF15/OBJ=OBJ$:SATSSF15 MSRC$:SATSSF15/UPDATE=(ENH$:SATSSF15)+EXECML$/LIB+SHRLIB$:UETP/LIB

SAT SSF15
LIS

SATSSF16
LIS

SATSSF14
LIS

SATSSF12
LIS

SATSSF13
LIS