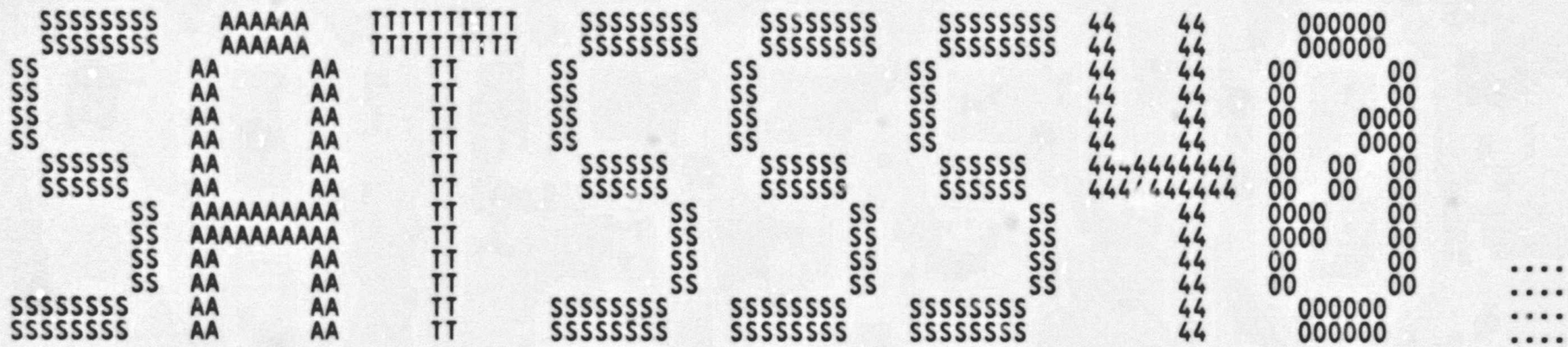
```
UUU         UUU  EEEEEEEEEEEEEEE  TTTTTTTTTTTTTTT  PPPPPPPPPPPP       SSSSSSSSSSS  YYY         YYY
UUU         UUU  EEEEEEEEEEEEEEE  TTTTTTTTTTTTTTT  PPPPPPPPPPPP       SSSSSSSSSSS  YYY         YYY
UUU         UUU  EEEEEEEEEEEEEEE  TTTTTTTTTTTTTTT  PPPPPPPPPPPP       SSSSSSSSSSS  YYY         YYY
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  EEE                    TTT        PPP         PPP  SSS                 YYY   YYY
UUU         UUU  EEEEEEEEEEE            TTT        PPPPPPPPPPPP      SSSSSSSSS             YYY
UUU         UUU  EEEEEEEEEEE            TTT        PPPPPPPPPPPP      SSSSSSSSS             YYY
UUU         UUU  EEEEEEEEEEE            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
UUU         UUU  EEE                    TTT        PPP                        SSS          YYY
UUUUUUUUUUUUUUUU  EEEEEEEEEEEEEEE      TTT        PPP                 SSSSSSSSSSS         YYY
UUUUUUUUUUUUUUUU  EEEEEEEEEEEEEEE      TTT        PPP                 SSSSSSSSSSS         YYY
UUUUUUUUUUUUUUUU  EEEEEEEEEEEEEEE      TTT        PPP                 SSSSSSSSSSS         YYY
UUUUUUUUUUUUUUUU  EEEEEEEEEEEEEEE      TTT        PPP                 SSSSSSSSSSS         YYY
```


SATSSS40

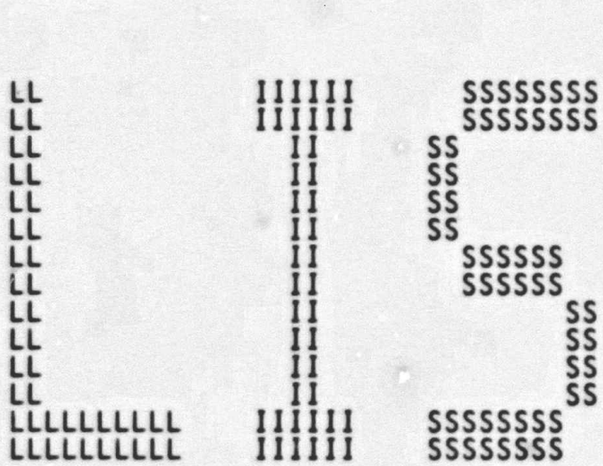

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Table of contents

```
0000     1          .TITLE  SATSSS40 SATS SYSTEM SERVICE TESTS  $WAKE (SUCC S.C.)
0000     2          .IDENT  'V04-000'
0000     3
0000     4  ;
0000     5  ;**********************************************************************************
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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 SATSSS40 TO TEST SUCCESSFUL
0000    36  ; OPERATION OF THE $WAKE SYSTEM SERVICE. THE SERVICE IS INVOKED
0000    37  ; UNDER VARIOUS INPUT CONDITIONS WITH VARYING INPUT PARAMETERS. ONLY
0000    38  ; SUCCESSFUL STATUS CODES ARE EXPECTED IN THIS TEST MODULE.  CORRECT
0000    39  ; OPERATION OF THE SERVICE FOR EACH OF ITS ISSUANCES IS VERIFIED BY
0000    40  ; CHECKING FOR AN SS$_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: OCT, 1977
0000    47  ;
0000    48  ; MODIFIED BY:
0000    49  ;
0000    50  ;                VERSION 1.5 : 25-MAY-79
0000    51  ; 01  LDJ  10/11/79     Fixed bug caused by DIB$K_LENGTH change ACG052.RNO mem
0000    52  ;
0000    53  ;--
```

```
0000     55          .SBTTL  DECLARATIONS
0000     56 ;
0000     57 ; INCLUDE FILES:
0000     58 ;
0000     59          $PRVDEF                         ; PRIVILEGE BIT DEFINITIONS
0000     60          $PHDDEF                         ; PROCESS HEADER OFFSETS
0000     61          $PQLDEF                         ; PROCESS QUOTA CODES
0000     62          $PCBDEF                         ; PCB LABELS
0000     63          $DIBDEF                         ; DEVICE INFO BLOCK OFFSETS
0000     64 ;
0000     65 ; MACROS:
0000     66 ;
0000     67 ;
0000     68 ; EQUATED SYMBOLS:
0000     69 ;
0000     70 ;
0000     71 ; OWN STORAGE:
0000     72 ;
```

```
00000000     74          .PSECT  RODATA,RD,NOWRT,NOEXE,LONG
     0000    75 TEST_MOD_NAME:: STRING  C,<SATSSS40>     ; TEST MODULE NAME
     0009    76 TEST_MOD_NAME_D: STRING I,<SATSSS40>     ; TEST MODULE NAME DESCRIPTOR
     0019    77 MSG1_INP_CTL:   STRING  I,<  SSWAK!4ZW: CONDITIONS:>
     0039    78                                          ; FAO CTL STRING FOR MSG1 IN SUCCOMMON.MAR
     0039    79 MSG3_ERR_CTL::  STRING  I,< *SSWAK!4ZW: !AS>
     0051    80                                          ; FAO CTL STRING FOR MSG3 IN SUCCOMMON.MAR
     0051    81 SUBJPRN:        STRING  I,<SATSSS40_CRE> ; PROCESS & MBX NAME FOR CREATED PROCESS
     0065    82 IMAGNAM:        STRING  I,<SYSTST$RES:SATSUT06.EXE> ; IMAGE NAME FOR CREATED PROC
     0084    83 QUOTALIST:      $QUOTA  CPULM,0          ; INFINITE CPU
     0089    84                 $QUOTA  BYTLM,512        ; BYTE LIMIT FOR BUFFERED I/O
     008E    85                 $QUOTA  FILLM,2          ; OPEN FILE COUNT LIMIT
     0093    86                 $QUOTA  PGFLQUOTA,10     ; PAGING FILE QUOTA
     0098    87                 $QUOTA  PRCLM,2          ; SUBPROCESS QUOTA
     009D    88                 $QUOTA  TQELM,3          ; TIMER QUEUE ENTRY QUOTA
     00A2    89                 $QUOTA  LISTEND          ; DEFINES END OF LIST
```

```
                00000000     91          .PSECT  RWDATA,RD,WRT,NOEXE,LONG
00000008  0000  00000008     92 PRIVMASK:        .BLKQ   1               ; ADDR OF PRIVILEGE MASK (IN PHD)
0000000C  0008  0000000C     93 MBXCHAN:         .BLKL   1               ; CHAN. NO. FOR MAILBOX FOR CREATED PROCESS
          000C  00000074     94 MBXCHANINFO:                             ; CHANNEL INFO RETURNED BY GETCHN
00000074  000C  00000074     95                  .LONG   DIB$K_LENGTH
00000014' 0010  00000088     96                  .ADDRESS .+4
00000088  0014  00000088     97                  .BLKB   DIB$K_LENGTH
0000008C  0088  0000008C     98 MBXUNIT:         .BLKL   1               ; SAVE AREA FOR MAILBOX UNIT NUMBER
          008C  00000110     99 MBXBUFF:         STRING  0,120           ; MAILBOX BUFFER FOR CREATED PROCESS
00000110  010C  00000110    100 DEST_PIDADR:     .BLKL   1               ; DESTINATION PID ADDR, WRITTEN BY S.S.
00000114  0110  00000114    101 ZEROPID:         .BLKL   1               ; PID OF ZEROES
00000000  0114  00000000    102 SELFPID:         .LONG   0               ; PID OF THIS PROCESS
0000011C  0118  0000011C    103 CREPID:          .BLKL   1               ; PID OF CREATED PROCESS
00000120  011C  00000120    104 SUBJPID:         .BLKL   1               ; PID OF SUBJECT PROCESS (SELF OR OTHER)
```

```
                        0120   106          .SBTTL  CONDITION TABLES
                        0120   107 ;
                        0120   108 ;       ***** CONDITION TABLES FOR WAKE SYSTEM SERVICE *****
                        0120   109 ;
                        0120   110          COND    1,NOTARG,<PID ADDRESS>,-
                        0120   111            <NOT SPECIFIED>,-
                        0120   112            <SPECIFIED, NON-ZERO>,-
                        0120   113            <SPECIFIED, ZERO>,-
                        0120   114
00000000'               016B   115              .ADDRESS    0
0000011C'               016F   116              .ADDRESS    SUBJPID
00000110'               0173   117              .ADDRESS    ZEROPID
                        0177   118 ;
                        0177   119          COND    2,NOTARG,<PROCESS NAME ADDRESS>,-
                        0177   120            <SPECIFIED>,-
                        0177   121            <NOT SPECIFIED>,-
                        0177   122
00000051'               01AD   123              .ADDRESS    SUBJPRN
00000000'               01B1   124              .ADDRESS    0
                        01B5   125 ;
                        01B5   126          COND    3,NOTARG,<PROCESS TYPE>,-
                        01B5   127            <SELF>,-
                        01B5   128            <SUBPROCESS>,-
                        01B5   129            <DETACHED, DIFFERENT GROUP>,-
                        01B5   130            <DETACHED, SAME GROUP, SAME MEMBER>,-
                        01B5   131            <DETACHED, SAME GROUP, DIFFERENT MEMBER>,-
                        01B5   132
FFFFFFFF                024A   133              .LONG       ^XFFFFFFFF ; PSEUDO-UIC
00000000                024E   134              .LONG       0          ; PSEUDO-UIC
00000256                0252   135              .BLKL       1          ; UIC
0000025A                0256   136              .BLKL       1          ; UIC
0000025E                025A   137              .BLKL       1          ; UIC
                        025E   138 ;
                        025E   139          COND    4,NULL
                        025F   140
                        025F   141          COND    5,NULL
                        0260   142
                    00000000   143          .PSECT  SATSSS40,RD,WRT,EXE
```

```
                                                K 1
0000   145          .SBTTL  TM_SETUP, TM_CLEANUP
0000   146 ;++
0000   147 ; FUNCTIONAL DESCRIPTION:
0000   148 ;
0000   149 ;                   TM_SETUP AND TM_CLEANUP ARE CALLED TO PERFORM
0000   150 ; REQUIRED HOUSEKEEPING AT THE BEGINNING AND END, RESPECTIVELY, OF
0000   151 ; TEST MODULE EXECUTION.
0000   152 ;
0000   153 ; CALLING SEQUENCE:
0000   154 ;
0000   155 ;       BSBW TM_SETUP   BSBW TM_CLEANUP
0000   156 ;
0000   157 ; INPUT PARAMETERS:
0000   158 ;
0000   159 ;       NONE
0000   160 ;
0000   161 ; IMPLICIT INPUTS:
0000   162 ;
0000   163 ;       NONE
0000   164 ;
0000   165 ; OUTPUT PARAMETERS:
0000   166 ;
0000   167 ;       NONE
0000   168 ;
0000   169 ; IMPLICIT OUTPUTS:
0000   170 ;
0000   171 ;       TM_SETUP:  COND TABLE INDEX REGISTERS (R2,3,4,5,6) CLEARED;
0000   172 ;                  ALL PRIVILEGES ACQUIRED.
0000   173 ;
0000   174 ; COMPLETION CODES:
0000   175 ;
0000   176 ;       EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
0000   177 ;
0000   178 ; SIDE EFFECTS:
0000   179 ;
0000   180 ;       SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
0000   181 ;       (VIA RSB) IF ERROR ENCOUNTERED.
0000   182 ;
0000   183 ;--
0000   184
0000   185
0000   186
0000   187 TM_SETUP::
                52   D4  0000   188          CLRL    R2                          ; INITIALIZE
                53   D4  0002   189          CLRL    R3                          ; .. CONDITION
                54   D4  0004   190          CLRL    R4                          ; .... TABLE
                55   D4  0006   191          CLRL    R5                          ; ...... INDEX
                56   D4  0008   192          CLRL    R6                          ; ........ REGISTERS
            FFF3'    30  000A   193          BSBW    MOD_MSG_PRINT               ; PRINT TEST MODULE BEGIN MSG
00000000'EF 00000000'EF  DE  000D   194      MOVAL   TEST_MOD_SUCC,TMD_ADDR      ; ASSUME END MSG WILL SHOW SUCCESS
   03   00 00000000'8F   F0  0018   195          INSV    #SUCCESS,#0,#3,MOD_MSG_CODE ; ADJUST STATUS CODE FOR SUCCESS
           00000000'EF      0020
                            0025   196          MODE    TO,5$,KRNL                  ; KERNEL MODE TO ACCESS PHD
        59 00000000'9F   D0  0048   197          MOVL    @#CTL$GL_PHD,R9             ; GET PROCESS HEADER ADDRESS
        000000C0'EF   69 DE  004F   198          MOVAL   PHD$Q_PRIVMSK(R9),PRIVMASK ; GET PRIV MASK ADDRESS
                            0056   199          MODE    FROM,5$ ; BACK TO USER MODE
                            0057   200          PRIV    ADD,ALL                     ; GET ALL PRIVILEGES
```

```
                                                L 1
                     0077   201          $SETPRN_S TEST_MOD_NAME_D       ; SET PROCESS NAME
                     0084   202          SS_CHECK  NORMAL                ; CHECK STATUS CODE RETURNED FROM SETPRN
                     00B2   203          $WAKE_S SELFPID                 ; GET MY PID
                     00C1   204          SS_CHECK NORMAL                 ; CHECK FOR NORMAL RETURN
                     00EF   205          $HIBER_S                        ; UNDO ABOVE WAKE
                     00F6   206          SS_CHECK NORMAL                 ; CHECK FOR NORMAL RETURN
                     0124   207 ;
                     0124   208 ; THE FOLLOWING CODE ESTABLISHES UIC'S IN THE CONDITION 3 TABLE
                     0124   209 ;
                     0124   210          MODE    TO,20$,KRNL             ; KERNEL MODE TO ACCESS PCB
 59  00000000'9F    D0  0147   211          MOVL    @#SCH$GL_CURPCB,R9      ; GET CURRENT PCB ADDRESS
     59  00BC C9    D0  014E   212          MOVL    PCB$L_UIC(R9),R9        ; PICK UP UIC FROM PCB
                     0153   213          MODE    FROM,20$                ; ... AND GET BACK TO USER MODE
                     0154   214 ;
                     0154   215 ; R9 NOW CONTAINS "MY" UIC
                     0154   216 ;
        5A    02    9A  0154   217          MOVZBL  #2,R10                  ; GET COND3 TABLE INDEX NUMBER INTO A REG
 59  00010000 8F    C1  0157   218          ADDL3   #^X10000,R9,COND3_E[R10] ; PUT DIFF GROUP UIC INTO 3RD TABLE ELT
   0000024A'EF4A               015E
        5A    D6  0164   219          INCL    R10                     ; POINT TO 4TH COND3 TABLE ELEMENT
0000024A'EF4A   59  D0  0166   220          MOVL    R9,COND3_E[R10]         ; PUT MY UIC INTO TABLE
        5A    D6  016E   221          INCL    R10                     ; POINT TO 5TH COND3 TABLE ELEMENT
0000024A'EF4A   59  01  C1  0170   222          ADDL3   #1,R9,COND3_E[R10]      ; PUT DIFF MEMBER UIC INTO THE TABLE
                     0179   223          $CREMBX_S CHAN=MBXCHAN, LOGNAM=SUBJPRN, - ; GET MAILBOX FOR PROCESS
                     0179   224                    MAXMSG=#120, PROMSK=#0, BUFQUO=#240
                     019E   225          SS_CHECK NORMAL                 ; CHECK NORMAL COMPLETION
                     01CC   226          $GETCHN_S CHAN=MBXCHAN, -       ; GET CHAN INFO (UNIT NUMBER)
                     01CC   227                    PRIBUF=MBXCHANINFO
                     01E6   228          SS_CHECK NORMAL                 ; CHECK NORMAL COMPLETION
00000088'EF  00000020'EF  3C  0214   229          MOVZWL  MBXCHANINFO+8+DIB$W_UNIT,MBXUNIT ; SAVE MAILBOX UNIT NUMBER
                  05  021F   230          RSB                             ; RETURN TO MAIN ROUTINE
                     0220   231 TM_CLEANUP::
                     0220   232          $DELMBX_S  MBXCHAN              ; DELETE TERMINATION MAILBOX
            FDCF'    30  022E   233          BSBW    MOD_MSG_PRINT           ; PRINT TEST MODULE END MSG
                  05  0231   234          RSB                             ; RETURN TO MAIN ROUTINE
```

```
                        0232   236          .SBTTL  CONDITION SUBROUTINES - SETUP AND CLEANUP
                        0232   237 ;++
                        0232   238 ; FUNCTIONAL DESCRIPTION:
                        0232   239 ;
                        0232   240 ;               CONDX AND CONDX_CLEANUP ARE SUBROUTINES WHICH ARE EXECUTED
                        0232   241 ; BEFORE AND AFTER THE VERIFY SUBROUTINE, RESPECTIVELY, WHENEVER A NEW
                        0232   242 ; CONDITION X VALUE IS SELECTED (SEE FUNCTIONAL DESCRIPTION OF SUCCOMMON
                        0232   243 ; ROUTINE IN SUCCOMMON.MAR). ANY SETUP FUNCTION PARTICULAR TO THE
                        0232   244 ; CONDITION X TABLE IS INCLUDED IN THE CONDX SUBROUTINE AND CLEANED
                        0232   245 ; UP, IF NECESSARY, IN THE CONDX_CLEANUP SUBROUTINE. THIS INCLUDES,
                        0232   246 ; ESPECIALLY, CODE TO DETECT CONFLICTS AMONG CURRENT ENTRIES IN TWO
                        0232   247 ; OR MORE CONDITION TABLES. IF A CONFLICT IS DETECTED, A NON-ZERO
                        0232   248 ; VALUE IS STORED INTO CONFLICT, WHICH CAUSES THE CALLING ROUTINE
                        0232   249 ; (SUCCOMMON) TO SKIP THE CURRENT ENTRY IN THE CONDITION X TABLE.
                        0232   250 ;
                        0232   251 ; CALLING SEQUENCE:
                        0232   252 ;
                        0232   253 ;       BSBW CONDX   BSBW CONDX_CLEANUP
                        0232   254 ;         WHERE X = 1,2,3,4,5
                        0232   255 ;
                        0232   256 ; INPUT PARAMETERS:
                        0232   257 ;
                        0232   258 ;       CONFLICT = 0
                        0232   259 ;
                        0232   260 ; IMPLICIT INPUTS:
                        0232   261 ;
                        0232   262 ;       R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
                        0232   263 ;         FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
                        0232   264 ;
                        0232   265 ; OUTPUT PARAMETERS:
                        0232   266 ;
                        0232   267 ;       CONFLICT SET TO NON-ZERO IF COND TABLE CONFLICT DETECTED.
                        0232   268 ;
                        0232   269 ; IMPLICIT OUTPUTS:
                        0232   270 ;
                        0232   271 ;       R2,3,4,5,6 PRESERVED
                        0232   272 ;
                        0232   273 ; COMPLETION CODES:
                        0232   274 ;
                        0232   275 ;       NONE
                        0232   276 ;
                        0232   277 ; SIDE EFFECTS:
                        0232   278 ;
                        0232   279 ;       NONE
                        0232   280 ;
                        0232   281 ;--
                        0232   282
                        0232   283
                        0232   284
                        0232   285 COND1::
                        0232   286          RSB                                ; RETURN TO MAIN ROUTINE
                        0233   287 COND1_CLEANUP::
                        0233   288          RSB                                ; RETURN TO MAIN ROUTINE
                        0234   289 COND2::
                        0234   290          RSB                                ; RETURN TO MAIN ROUTINE
                        0235   291 COND2_CLEANUP::
                        0235   292          RSB                                ; RETURN TO MAIN ROUTINE
```

```
                        0236   293 COND3::
0000016B'EF42 0000011C'8F D1 0236   294         CMPL    #SUBJPID,COND1_E[R2]    ; NON-ZERO PID SPECIFIED ?
                20 13 0242   295         BEQLU   10$                     ; YES -- PROCESS IS "OTHER"
              0000C1AD'EF43 D5 0244   296         TSTL    COND2_E[R3]             ; IS PROCESS NAME SPECIFIED ?
                07 13 024B   297         BEQL    5$                      ; NO -- SUBJECT PROCESS IS "SELF"
           02   54 D1 024D   298         CMPL    R4,#2                   ; DOES CONDITION 3 SPECIFY DIFFERENT GROUP ?
                20 13 0250   299         BEQL    20$                     ; YES -- PROCESS NAME FOR DIFF GROUP IS CONF
                10 11 0252   300         BRB     10$                     ; NO -- MAKE SURE COND 3 SPECIFIES "OTHER"
                        0254   301 5$:
                        0254   302 ;
                        0254   303 ; PROCESS IS "SELF"
                        0254   304 ;
0000024A'EF44 00000000'EF D1 0254   305         CMPL    ONES,COND3_E[R4]        ; DOES CONDITION 3 SPECIFY "SELF" ?
                1B 13 0260   306         BEQLU   COND3X                  ; YES -- THEN ALL 3 CONDIT'NS ARE CONSISTENT
                0E 11 0262   307         BRB     20$                     ; NO -- INDICATE CONFLICT & GET OUT
                        0264   308 10$:
                        0264   309 ;
                        0264   310 ; PROCESS IS "OTHER"
                        0264   311 ;
0000024A'EF44 00000000'EF D1 0264   312         CMPL    ONES,COND3_E[R4]        ; DOES CONDITION 3 SPECIFY "SELF" ?
                0B 12 0270   313         BNEQU   COND3X                  ; NO -- THEN ALL 3 CONDITIONS ARE CONSISTENT
                        0272   314 20$:
  00000000'EF 00000000'EF 90 0272   315         MOVB    ONES,CONFLICT           ; YES -- INDICATE CONFLICT
                        027D   316 COND3X:
                05 027D   317         RSB                             ; RETURN TO MAIN ROUTINE
                        027E   318 COND3_CLEANUP::
                05 027E   319         RSB                             ; RETURN TO MAIN ROUTINE
                        027F   320 COND4::
                05 027F   321         RSB                             ; RETURN TO MAIN ROUTINE
                        0280   322 COND4_CLEANUP::
                05 0280   323         RSB                             ; RETURN TO MAIN ROUTINE
                        0281   324 COND5::
                05 0281   325         RSB                             ; RETURN TO MAIN ROUTINE
                        0282   326 COND5_CLEANUP::
                05 0282   327         RSB                             ; RETURN TO MAIN ROUTINE
```

```
                                0283   329          .SBTTL  FORM_CONDS
                                0283   330 ;++
                                0283   331 ; FUNCTIONAL DESCRIPTION:
                                0283   332 ;
                                0283   333 ;               FORM_CONDS FORMATS AND PRINTS INFORMATION ABOUT
                                0283   334 ;  THE CURRENT ELEMENT IN EACH OF THE CONDITION TABLES.
                                0283   335 ;
                                0283   336 ; CALLING SEQUENCE:
                                0283   337 ;
                                0283   338 ;       BSBW FORM_CONDS
                                0283   339 ;
                                0283   340 ; INPUT PARAMETERS:
                                0283   341 ;
                                0283   342 ;       NONE
                                0283   343 ;
                                0283   344 ; IMPLICIT INPUTS:
                                0283   345 ;
                                0283   346 ;       R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
                                0283   347 ;         FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
                                0283   348 ;       FOR X = 1,2,3,4,5 :
                                0283   349 ;               CONDX_T - TITLE TEXT FOR CONDX TABLE
                                0283   350 ;               CONDX_TAB - ELEMENT TEXT FOR CONDX TABLE
                                0283   351 ;               CONDX_C - CONTEXT OF THE CONDX TABLE
                                0283   352 ;               CONDX_E - DATA ELEMENTS OF THE CONDX TABLE
                                0283   353 ;
                                0283   354 ; OUTPUT PARAMETERS:
                                0283   355 ;
                                0283   356 ;       NONE
                                0283   357 ;
                                0283   358 ; IMPLICIT OUTPUTS:
                                0283   359 ;
                                0283   360 ;       NONE
                                0283   361 ;
                                0283   362 ; COMPLETION CODES:
                                0283   363 ;
                                0283   364 ;       NONE
                                0283   365 ;
                                0283   366 ; SIDE EFFECTS:
                                0283   367 ;
                                0283   368 ;       NONE
                                0283   369 ;
                                0283   370 ;--
                                0283   371
                                0263   372
                                0283   373
                                0233   374 FORM_CONDS::
                                0283   375          $FAO_S  MSG1_INP_CTL,FAO_LEN,FAO_DESC,TESTNUM
                                02A2   376                                          ; FORMAT CONDITIONS HEADER MSG
                    FD5B'   30  02A2   377          BSBW    OUTPUT_MSG              ; ... AND PRINT IT
                 14   00    91  02A5   378          CMPB    #COND1_C,#NULL          ; IS CONDITION 1 NULL ?
                      03    12  02A8   379          BNEQU   10$                     ; NO -- CONTINUE
                    00BF    31  02AA   380          BRW     FORM_CONDSX             ; YES -- SUBROUTINE IS FINISHED
                                02AD   381 10$:
  00000000'EF   00000120'EF   DE  02AD   382          MOVAL   COND1_T,MSG_A           ; SAVE ADDRESS OF CONDITION 1 TITLE FOR FAO
00000000'EF   0000012D'EF42   D0  02B8   383          MOVL    COND1_TAB[R2],MSG_B     ; SAVE ADDR OF COND 1 CURR TEXT ELT FOR FAO
          00000000'EF    00   90  02C4   384          MOVB    #COND1_C,MSG_CTXT       ; SAVE CONDITION 1 CONTEXT FOR FAO
                                02CB   385          MOV_VAL COND1_C,COND1_E[R2],MSG_DATA1 ; GIVE COND 1 DATA VALUE TO FAO
```

```
                     FD32'   30   02CB    386          BSBW    WRITE_MSG2                      ; FORMAT AND WRITE CONDITION 1 MSG
                  14   00    91   02CE    387          CMPB    #COND2_C,#NULL                  ; IS CONDITION 2 NULL ?
                       03    12   02D1    388          BNEQU   20$                             ; NO -- CONTINUE
                     0096    31   02D3    389          BRW     FORM_CONDSX                     ; YES -- SUBROUTINE IS FINISHED
                             02D6    390 20$:
  00000000'EF   00000177'EF    DE   02D6    391          MOVAL   COND2_T,MSG_A                   ; SAVE ADDRESS OF CONDITION 2 TITLE FOR FAO
00000000'EF   0000018D'EF43    D0   02E1    392          MOVL    COND2_TAB[R3],MSG_B             ; SAVE ADDR OF COND 2 CURR TEXT ELT FOR FAO
        00000000'EF   00       90   02ED    393          MOVB    #COND2_C,MSG_CTXT               ; SAVE CONDITION 2 CONTEXT FOR FAO
                              02F4    394          MOV_VAL COND2_C,COND2_E[R3],MSG_DATA1 ; GIVE COND 2 DATA VALUE TO FAO
                     FD09'   30   02F4    395          BSBW    WRITE_MSG2                      ; FORMAT AND WRITE CONDITION 2 MSG
                  14   00    91   02F7    396          CMPB    #COND3_C,#NULL                  ; IS CONDITION 3 NULL ?
                       03    12   02FA    397          BNEQU   30$                             ; NO -- CONTINUE
                     006D    31   02FC    398          BRW     FORM_CONDSX                     ; YES -- SUBROUTINE IS FINISHED
                             02FF    399 30$:
  00000000'EF   000001B5'EF    DE   02FF    400          MOVAL   COND3_T,MSG_A                   ; SAVE ADDRESS OF CONDITION 3 TITLE FOR FAO
00000000'EF   000001C3'EF44    D0   030A    401          MOVL    COND3_TAB[R4],MSG_B             ; SAVE ADDR OF COND 3 CURR TEXT ELT FOR FAO
        00000000'EF   00       90   0316    402          MOVB    #COND3_C,MSG_CTXT               ; SAVE CONDITION 3 CONTEXT FOR FAO
                              031D    403          MOV_VAL COND3_C,COND3_E[R4],MSG_DATA1 ; GIVE COND 3 DATA VALUE TO FAO
                     FCE0'   30   031D    404          BSBW    WRITE_MSG2                      ; FORMAT AND WRITE CONDITION 3 MSG
                  14   14    91   0320    405          CMPB    #COND4_C,#NULL                  ; IS CONDITION 4 NULL ?
                       47    13   0323    406          BEQLU   FORM_CONDSX                     ; YES -- SUBROUTINE IS FINISHED
  00000000'EF   0000025E'EF    DE   0325    407          MOVAL   COND4_T,MSG_A                   ; SAVE ADDRESS OF CONDITION 4 TITLE FOR FAO
00000000'EF   0000025E'EF45    D0   0330    408          MOVL    COND4_TAB[R5],MSG_B             ; SAVE ADDR OF COND 4 CURR TEXT ELT FOR FAO
        00000000'EF   14       90   033C    409          MOVB    #COND4_C,MSG_CTXT               ; SAVE CONDITION 4 CONTEXT FOR FAO
                              0343    410          MOV_VAL COND4_C,COND4_E[R5],MSG_DATA1 ; GIVE COND 4 DATA VALUE TO FAO
                     FCBA'   30   0343    411          BSBW    WRITE_MSG2                      ; FORMAT AND WRITE CONDITION 4 MSG
                  14   14    91   0346    412          CMPB    #COND5_C,#NULL                  ; IS CONDITION 5 NULL ?
                       21    13   0349    413          BEQLU   FORM_CONDSX                     ; YES -- SUBROUTINE IS FINISHED
  00000000'EF   0000025F'EF    DE   034B    414          MOVAL   COND5_T,MSG_A                   ; SAVE ADDRESS OF CONDITION 5 TITLE FOR FAO
00000000'EF   0000025F'EF46    D0   0356    415          MOVL    COND5_TAB[R6],MSG_B             ; SAVE ADDR OF COND 5 CURR TEXT ELT FOR FAO
        00000000'EF   14       90   0362    416          MOVB    #COND5_C,MSG_CTXT               ; SAVE CONDITION 5 CONTEXT FOR FAO
                              0369    417          MOV_VAL COND5_C,COND5_E[R6],MSG_DATA1 ; GIVE COND 5 DATA VALUE TO FAO
                     FC94'   30   0369    418          BSBW    WRITE_MSG2                      ; FORMAT AND WRITE CONDITION 5 MSG
                             036C    419 FORM_CONDSX:
                       05    036C    420          RSB                                     ; RETURN TO CALLER
```

```
                        .SBTTL  VERIFY
                ;++
                ; FUNCTIONAL DESCRIPTION:
                ;
                ;               VERIFY IS CALLED ONCE FOR EACH COMBINATION OF CONDITION
                ; TABLE VALUES (AS DETERMINED BY THE INDEX REGISTERS R2,3,4,5,6 FOR
                ; COND TABLES 1,2,3,4,5, RESPECTIVELY). VERIFY ESTABLISHES THE CONDITIONS
                ; SPECIFIED BY THE COND TABLES AND ISSUES THE SUBJECT SYSTEM SERVICE
                ; ($WAKE). THEN, THE SUCCESSFUL OPERATION OF THE SERVICE IS VERIFIED
                ; BY EXAMINING THE STATUS CODE RETURNED, THE VALUES FOR RETURN ARGUMENTS
                ; AND THE FUNCTIONALITY PERFORMED. THE EXAMINATIONS TAKE THE FORM OF
                ; COMPARISONS AGAINST EXPECTED VALUES. ANY FAILING COMPARISON CAUSES AN
                ; ERR_EXIT MACRO TO BE EXECUTED (EITHER DIRECTLY, OR INDIRECTLY,
                ; THROUGH THE SS_CHECK MACRO); ERR_EXIT SETS EFLAG TO NON-ZERO
                ; PRINTS ERROR MESSAGES AND CAUSES AN IMMEDIATE RSB TO CALLER.
                ; WHEN ERR_EXIT IS EXECUTED, FURTHER CALLS TO VERIFY ARE SUPPRESSED,
                ; AND, AFTER EXECUTING CLEANUP SUBROUTINES, THE IMAGE EXITS.
                ;
                ; CALLING SEQUENCE:
                ;
                ;       BSBW VERIFY
                ;
                ; INPUT PARAMETERS:
                ;
                ;       NONE
                ;
                ; IMPLICIT INPUTS:
                ;
                ;       R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
                ;         FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
                ;       FOR X = 1,2,3,4,5 :
                ;               CONDX_E - ADDRESS OF TABLE OF DATA VALUES FOR CONDX
                ;                 TABLE. IF THE CONTEXT OF TABLE X IS A SYSTEM SERVICE
                ;                 ARGUMENT, THE ARGUMENT NAME MAY BE USED AS A SYNONYM
                ;                 FOR CONDX_E.
                ;
                ; OUTPUT PARAMETERS:
                ;
                ;       NONE
                ;
                ; IMPLICIT OUTPUTS:
                ;
                ;       VERIFY HAS NO OUTPUT. SINCE ITS PURPOSE IS TO TEST FOR ERRORS,
                ;       IT MERELY RETURNS TO CALLER NORMALLY AFTER THE TESTS, PROVIDING
                ;       ALL WERE SUCCESSFUL; IF AN ERROR IS DISCOVERED, RETURN IS VIA
                ;       AN ERR_EXIT OR SS_CHECK MACRO, BOTH OF WHICH DOCUMENT DETECTED
                ;       ERRORS.
                ;
                ; COMPLETION CODES:
                ;
                ;       EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
                ;
                ; SIDE EFFECTS:
                ;
                ;       SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
                ;       (VIA RSB) IF ERROR ENCOUNTERED.
                ;
```

```
                                036D   ;--
                                036D
                                036D
                                036D
                                036D   VERIFY::
           00000000'EF   95     036D           TSTB    CFLAG                      ; SHOULD CONDITIONS BE PRINTED ?
                    03   13     0373           BEQL    5$                         ; NO -- CONTINUE
                  FF0B   30     0375           BSBW    FORM_CONDS                 ; YES -- FMT & PRINT ALL CONDS FOR THIS T.C.
                                0378   5$:
0000011C'EF  00000114'EF   D0   0378           MOVL    SELFPID,SUBJPID            ; ASSUME THE SUBJECT PID IS SELF
             00000110'EF   D4   0383           CLRL    ZEROPID                    ; CLEAR ZERO PID
0000024A'EF44 00000000'EF  D1   0389           CMPL    ONES,COND3_E[R4]           ; IS PROCESS FOR THIS TEST CASE SELF ?
                    03   12     0395           BNEQU   7$                         ; NO -- CONTINUE
                  0074   31     0397           BRW     10$                        ; YES -- DON'T CREATE A PROCESS
                                039A   7$:
                                039A           $CREPRC_S PIDADR=CREPID, PRCNAM=SUBJPRN, -
                                039A                   UIC=COND3_E[R4], IMAGE=IMAGNAM, -
                                039A                   QUOTA=QUOTALIST,MBXUNT=MBXUNIT
                                03D5                                              ; CREATE THE SUBJECT PROCESS
                                03D5           SS_CHECK NORMAL                    ; ... AND MAKE SURE IT CREATED OK
0000011C'EF  00000118'EF   D0   0403           MOVL    CREPID,SUBJPID             ; MAKE THE SUBJCT PID = THE ONE JUST CREATED
                                040E   10$:
0000010C'EF  0000016B'EF42 D0   040E           MOVL    COND1_E[R2],DEST_PIDADR    ; GET PID ADDRESS OUT OF TABLE
         59  000001AD'EF43 D0   041A           MOVL    COND2_E[R3],R9             ; PRCNAM ADDR INTO REG FOR INDIRECT REF'RNCE
                                0422   ;
                                0422   ; ****** SYSTEM SERVICE CALL WHICH IS THE SUBJECT OF THIS TEST CASE ******
                                0422   ;
                                0422           $WAKE_S PIDADR=@DEST_PIDADR, PRCNAM=(R9)
      00000000'8F   50   D1     0431           CMPL    R0,#SS$_NORMAL             ; CODE RECEIVED = CODE EXPECTED ?
                    5F   13     0438           BEQLU   18$                        ; YES -- CONTINUE
00000000'EF  00000000'8F   D0   043A           MOVL    #SS$_NORMAL,EXPV           ; NO -- LOAD UP EXPECTED AND ...
      00000000'EF   50   D0     0445           MOVL    R0,RECV                    ; ... RECEIVED VALUES, THEN EXIT
                                044C           ERR_EXIT LONG,<INCORRECT STATUS CODE RETURNED FROM WAKE>
                                0499   18$:
           0000010C'EF   D5     0499           TSTL    DEST_PIDADR                ; PID RETURNED BY WAKE ?
                    66   13     049F           BEQL    20$                        ; NO -- KEEP GOING
0000010C'FF  0000011C'EF   D1   04A1           CMPL    SUBJPID,@DEST_PIDADR       ; YES -- IS IT THE CORRECT ONE ?
                    59   13     04AC           BEQL    20$                        ; YES -- CONTINUE
00000000'EF  0000011C'EF   D0   04AE           MOVL    SUBJPID,EXPV               ; NO --LOAD UP EXPECTED AND
00000000'EF  0000010C'FF   D0   04B9           MOVL    @DEST_PIDADR,RECV          ; ... RECEIVED VALUES, THEN EXIT
                                04C4           ERR_EXIT LONG,<INCORRECT PID RETURNED BY WAKE>
                                0507   20$:
0000011C'EF  00000118'EF   D1   0507           CMPL    CREPID,SUBJPID             ; WAS A PROCESS CREATED ?
                    37   13     0512           BEQLU   30$                        ; YES -- GO WAIT FOR IT TO COMPLETE
                                0514           $HIBER_S                           ; NO -- OFFSET SUBJECT WAKE WITH HIBER
                                051B           SS_CHECK NORMAL                    ; CHECK FOR NORMAL RETURN
                    57   11     0549           BRB     VERIFYX                    ; ... AND GO EXIT
                                054B   30$:
                                054B           $QIOW_S CHAN=MBXCHAN, FUNC=#IO$_READVBLK, -
                                054B                   P1=MBXBUFF+8, P2=MBXBUFF
                                0574                                              ; WAIT FOR CREATED PROCESS TO SEND MAIL
                                0574           SS_CHECK NORMAL                    ; CHECK FOR NORMAL STATUS CODE
                                05A2   VERIFYX:
                    05          05A2           RSB                                ; RETURN TO CALLER
```

```
                        05A3    534          .SBTTL  VFY_CLEANUP
                        05A3    535 ;++
                        05A3    536 ; FUNCTIONAL DESCRIPTION:
                        05A3    537 ;
                        05A3    538 ;               VFY_CLEANUP EXECUTES SYSTEM SERVICES TO UNDO THE
                        05A3    539 ; EFFECT OF THOSE ISSUED IN THE VERIFY SUBROUTINE. VFY_CLEANUP MUST
                        05A3    540 ; ASSUME THAT VERIFY MAY NOT HAVE EXECUTED IN ITS ENTIRETY (IF AN
                        05A3    541 ; ERROR IS FOUND). ALSO, VFY_CLEANUP MAY ISSUE SS_CHECK OR ERR_EXIT
                        05A3    542 ; ONLY AFTER PERFORMING ALL OF ITS CLEANUP OPERATIONS; THIS IS REQUIRED
                        05A3    543 ; IN THE EVENT THAT VFY_CLEANUP IS CALLED DURING ERROR PROCESSING,
                        05A3    544 ; WHEN PERFORMING THE REQUIRED CLEANUP IS MORE IMPORTANT THAN
                        05A3    545 ; POSSIBLY DISCOVERING A SECOND ERROR.
                        05A3    546 ;
                        05A3    547 ; CALLING SEQUENCE:
                        05A3    548 ;
                        05A3    549 ;       BSBW VFY_CLEANUP
                        05A3    550 ;
                        05A3    551 ; INPUT PARAMETERS:
                        05A3    552 ;
                        05A3    553 ;       NONE
                        05A3    554 ;
                        05A3    555 ; IMPLICIT INPUTS:
                        05A3    556 ;
                        05A3    557 ;       R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
                        05A3    558 ;         FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
                        05A3    559 ;       FOR X = 1,2,3,4,5 :
                        05A3    560 ;               CONDX_E - ADDRESS OF TABLE OF DATA VALUES FOR CONDX
                        05A3    561 ;                 TABLE. IF THE CONTEXT OF TABLE X IS A SYSTEM SERVICE
                        05A3    562 ;                 ARGUMENT, THE ARGUMENT NAME MAY BE USED AS A SYNONYM
                        05A3    563 ;                 FOR CONDX_E.
                        05A3    564 ;
                        05A3    565 ; OUTPUT PARAMETERS:
                        05A3    566 ;
                        05A3    567 ;       NONE
                        05A3    568 ;
                        05A3    569 ; IMPLICIT OUTPUTS:
                        05A3    570 ;
                        05A3    571 ;       NONE
                        05A3    572 ;
                        05A3    573 ; COMPLETION CODES:
                        05A3    574 ;
                        05A3    575 ;       EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
                        05A3    576 ;
                        05A3    577 ; SIDE EFFECTS:
                        05A3    578 ;
                        05A3    579 ;       SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
                        05A3    580 ;       (VIA RSB) IF ERROR ENCOUNTERED.
                        05A3    581 ;
                        05A3    582 ;--
                        05A3    583
                        05A3    584
                        05A3    585
                        05A3    586 VFY_CLEANUP::
0000011C'EF   00000118'EF  D1   05A3    587          CMPL    CREPID,SUBJPID          ; WAS A PROCESS CREATED FOR THIS TEST CASE ?
                     0F    12   05AE    588          BNEQU   VFY_CLEANUPX            ; NO -- JUST EXIT
                           05B0    589          $DELPRC_S SOBJPID               ; YES -- DELETE IT
                           05BF    590 VFY_CLEANUPX:
```

```
 05  05BF    591          RSB                             ; RETURN TO CALLER
     05C0    592          .END
```

```
$$$$                    = 000004CE R     04
$$$CHARS                = 0000001E
$$$CHARS1               = 00000004
$$$CHARS2               = 0000000A
$$$CHARS3               = 00000019
$$$CHARS4               = 00000021
$$$CHARS5               = 00000026
$$$COND_A               = 00000004
$$$STRINGS              = 00000001
$$$STRINGS2             = 00000005
$$T1                    = 00000001
$$T2                    = 0000C004
BYTE                    = 00000001   G
CFLAG                     ********     X   04
CHMRTN                    ********     X   04
CHM_CONT                  ********     X   04
COMP_SC                   ********     X   04
COND1                     00000232 RG    04
COND1_C                 = 00000000
COND1_CLEANUP             00000233 RG    04
COND1_E                   0000016B R     03
COND1_H                   0000012C RG    03
COND1_T                   00000120 R     03
COND1_TAB                 0000012D R     03
COND2                     00000234 RG    04
COND2_C                 = 00000000
COND2_CLEANUP             00000235 RG    04
COND2_E                   000001AD R     03
COND2_H                   0000018C RG    03
COND2_T                   00000177 R     03
COND2_TAB                 0000018D R     03
COND3                     00000236 RG    04
COND3X                    0000027D R     04
COND3_C                 = 00000000
COND3_CLEANUP             0000027E RG    04
COND3_E                   0000024A R     03
COND3_H                   000001C2 RG    03
COND3_T                   000001B5 R     03
COND3_TAB                 000001C3 R     03
COND4                     0000027F RG    04
COND4_C                 = 00000014
COND4_CLEANUP             00000280 RG    04
COND4_H                   0000025E RG    03
COND4_T                   0000025E R     03
COND4_TAB                 0000025E R     03
COND5                     00000281 RG    04
COND5_C                 = 00000014
COND5_CLEANUP             00000282 RG    04
COND5_H                   0000025F RG    03
COND5_T                   0000025F R     03
COND5_TAB                 0000025F R     03
CONFLICT                  ********       X 04
CREPID                    00000118 R     03
CTL$GL_PHD                ********       X 04
DESC                    = 00000010   G
DEST_PIDADR               0000010C R     03
DIB$R_LENGTH            = 00000074
DIB$W_UNIT              = 0000000C
EFLAG                     ********     X   04
EXPV                      ********     X   04
FAO_DESC                  ********     X   04
FAO_LEN                   ********     X   04
FORM_CONDS                00000283 RG    04
FORM_CONDSX               0000036C R     04
IMAGNAM                   00000065 R     02
IO$_READVBLK              ********       X 04
LONG                    = 00000004   G
MBXBUFF                   0000008C R     03
MBXCHAN                   00000008 R     03
MBXCHANINFO               0000000C R     03
MBXUNIT                   00000C88 R     03
MOD_MSG_CODE              ********     X   04
MOD_MSG_PRINT             ********     X   04
MSGT_INP_CTL              00000019 R     02
MSG3_ERR_CTL              00000039 RG    02
MSG_A                     ********     X   04
MSG_B                     ********     X   04
MSG_CTXT                  ********     X   04
NOTARG                  = 00000000   G
NULL                    = 00000014   G
ONES                      ********     X   04
OUTPUT_MSG                ********     X   04
PCB$L_OIC               = 000000BC
PCV                       ********     X   04
PHD$Q_PRIVMSK           = 00000000
PQL$_BYTLM              = 00000003
PQL$_CPULM              = 00000004
PQL$_FILLM              = 00000006
PQL$_LISTEND            = 00000000
PQL$_PGFLQUOTA          = 00000007
PQL$_PRCLM              = 00000008
PQL$_TQELM              = 00000009
PRIVMASK                  00000000 R     03
PRIV_ARGS               = 00000002
PROCESS_ERR               ********       X 04
QUAD                    = 00000008   G
QUOTALIST                 00000084 R     02
RECV                      ********     X   04
REST_REGS                 ********     X   04
SAVE_REGS                 ********     X   04
SCH$GL_CURPCB             ********     X   04
SELFPID                   00000114 R     03
SS$_NORMAL                ********     X   04
SUBJPID                   0000011C R     03
SUBJPRN                   00000051 R     02
SUCCESS                   ********     X   04
SYS$CMKRNL                ********   GX    04
SYS$CREMBX                ********   GX    04
SYS$CREPRC                ********   GX    04
SYS$DELMBX                ********   GX    04
SYS$DELPRC                ********   GX    04
SYS$FAO                   ********     X   04
SYS$GETCHN                ********   GX    04
SYS$HIBER                 ********   GX    04
```

```
SYS$QIOW                        ********  GX   04
SYS$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                         000005A2 R      04
VFY_CLEANUP                     000005A3 RG     04
VFY_CLEANUPX                    000005BF 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	00000260 (608.)	03 (3.)	NOPIC USR CON REL LCL NOSHR NOEXE RD WRT NOVEC LONG
SATSSS40	000005C0 (1472.)	04 (4.)	NOPIC USR CON REL LCL NOSHR EXE RD WRT NOVEC BYTE

Performance indicators

Phase	Page faults	CPU Time	Elapsed Time
Initialization	29	00:00:00.06	00:00:00.33
Command processing	107	00:00:00.68	00:00:02.45
Pass 1	295	00:00:08.90	00:00:15.63
Symbol table sort	0	00:00:00.75	00:00:00.83
Pass 2	128	00:00:02.15	00:00:02.76
Symbol table output	17	00:00:00.12	00:00:00.14
Psect synopsis output	2	00:00:00.03	00:00:00.04
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	580	00:00:12.70	00:00:22.18

The working set limit was 1350 pages.
46712 bytes (92 pages) of virtual memory were used to buffer the intermediate code.
There were 30 pages of symbol table space allocated to hold 487 non-local and 44 local symbols.
592 source lines were read in Pass 1, producing 24 object records in Pass 2.
46 pages of virtual memory were used to define 36 macros.

```
                          +----------------------------+
                          ! 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                       22
TOTALS (all libraries)                                  33

884 GETS were required to define 33 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS$:SATSSS40/OBJ=OBJ$:SATSSS40 MSRC$:SATSSS40/UPDATE=(ENH$:SATSSS40)+EXECML$/LIB+SHRLIB$:UETP/LIB
```

SATSS552
LIS

SATSS542
LIS

SATSS540
LIS

SATSS550
LIS

SATSS544
LIS

SATSS546
LIS

SATSS543
LIS

SATSS545
LIS

SATSS541
LIS

SATSS547
LIS