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SSSSSSSS  AAAAAA  TTTTTTTTTT  SSSSSSSS  SSSSSSSS  SSSSSSSS  333333  77777777
SSSSSSSS  AAAAAA  TTTTTTTTTT  SSSSSSSS  SSSSSSSS  SSSSSSSS  333333  77777777
SS         AA      AA      TT         SS         SS         SS         33         33         77
SS         AA      AA      TT         SS         SS         SS         33         33         77
SS         AA      AA      TT         SS         SS         SS         33         33         77
SS         AA      AA      TT         SS         SS         SS         33         33         77
SSSSSSS   AA      AA      TT         SSSSSS   SSSSSS   SSSSSS   33         33         77
SSSSSSS   AA      AA      TT         SSSSSS   SSSSSS   SSSSSS   33         33         77
SS         AA      AA      TT         SS         SS         SS         33         33         77
SS         AA      AA      TT         SS         SS         SS         33         33         77
SS         AA      AA      TT         SS         SS         SS         33         33         77
SS         AA      AA      TT         SS         SS         SS         33         33         77
SS         AA      AA      TT         SS         SS         SS         33         33         77
SSSSSSSS  AA      AA      TT         SSSSSSSS  SSSSSSSS  SSSSSSSS  333333  77
SSSSSSSS  AA      AA      TT         SSSSSSSS  SSSSSSSS  SSSSSSSS  333333  77

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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

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(1)	56	DECLARATIONS
(1)	107	CONDITION TABLES
(1)	146	TM SETUP, TM CLEANUP
(1)	237	CONDITION SUBROUTINES - SETUP AND CLEANUP
(1)	330	FORM CONDS
(1)	423	VERIFY
(1)	541	VFY_CLEANUP

```

0000 1      .TITLE  SATSSS37 SATS SYSTEM SERVICE TESTS $SUSPND (SUCC 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:      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 SATSSS37 TO TEST SUCCESSFUL
0000 36 : OPERATION OF THE $SUSPND SYSTEM SERVICE. THE SERVICE IS INVOKED
0000 37 : UNDER VARIOUS INPUT CONDITIONS WITH VARYING INPUT PARAMETERS. ONLY
0000 38 : SUCCESSFUL STATUS CODES ARE EXPECTED IN THIS TEST MODULE. CORRECT
0000 39 : OPERATION OF THE SERVICE FOR EACH OF ITS ISSUANCES IS VERIFIED BY
0000 40 : CHECKING FOR AN SSS NORMAL STATUS CODE, EXPECTED RETURN ARGUMENTS
0000 41 : AND EXPECTED FUNCTIONALITY PERFORMED.
0000 42 :
0000 43 : ENVIRONMENT:  USER MODE IMAGE; NEEDS CMKRNL PRIVILEGE,
0000 44 :                DYNAMICALLY ACQUIRES OTHER PRIVILEGES, AS NEEDED.
0000 45 :
0000 46 : AUTHOR: THOMAS L. CAFARELLA,          CREATION DATE: JUL, 1977
0000 47 :
0000 48 : MODIFIED BY:
0000 49 :
0000 50 :                VERSION 1.50 : 25-MAY-79
0000 51 :
0000 52 : 01 LDJ 10/11/79      Fixed bug caused by DIB$K_LENGTH change ACG052.RNO mem
0000 53 :
0000 54 :--

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```
0000 56 .SBTTL DECLARATIONS
0000 57 :
0000 58 : INCLUDE FILES:
0000 59 :
0000 60 $PRVDEF ; PRIVILEGE BIT DEFINITIONS
0000 61 $PHDDEF ; PROCESS HEADER OFFSETS
0000 62 $PQLDEF ; PROCESS QUOTA CODES
0000 63 $PCBDEF ; PCB LABELS
0000 64 $DIBDEF ; DEVICE INFO BLOCK OFFSETS
0000 65 :
0000 66 : MACROS:
0000 67 :
0000 68 :
0000 69 : EQUATED SYMBOLS:
0000 70 :
0000 71 :
0000 72 : OWN STORAGE:
0000 73 :
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```
00000000 75 .PSECT RODATA, RD, NOWRT, NOEXE, LONG
0000 76 TEST_MOD_NAME:: STRING C, <SATSSS37> ; TEST MODULE NAME
0009 77 TEST_MOD_NAME_D: STRING I, <SATSSS37> ; TEST MODULE NAME DESCRIPTOR
0019 78 MSG1_INP_CTL: STRING I, <SSSUS!4ZW: CONDITIONS:>
0039 79 ; FAO CTL STRING FOR MSG1 IN SUCCOMMON.MAR
0039 80 MSG3_ERR_CTL:: STRING I, <*SSSUS!4ZW: !AS>
0051 81 ; FAO CTL STRING FOR MSG3 IN SUCCOMMON.MAR
0051 82 SUBJPRN: STRING I, <SATSSS37 CRE> ; PROCESS & MBX NAME FOR CREATED PROCESS
0065 83 IMAGNAM: STRING I, <SYSTST$RES: SAT$UT08.EXE> ; IMAGE NAME FOR CREATED PROC
0084 84 QUOTALIST: $QUOTA CPULM, 0 ; INFINITE CPU
0089 85 $QUOTA BYTLM, 512 ; BYTE LIMIT FOR BUFFERED I/O
008E 86 $QUOTA FILLM, 2 ; OPEN FILE COUNT LIMIT
0093 87 $QUOTA PGFLQUOTA, 10 ; PAGING FILE QUOTA
0098 88 $QUOTA PRCLM, 2 ; SUBPROCESS QUOTA
009D 89 $QUOTA TQELM, 3 ; TIMER QUEUE ENTRY QUOTA
00A2 90 $QUOTA LISTEND ; DEFINES END OF LIST
```



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0000 146 .SBTTL TM_SETUP, TM_CLEANUP
0000 147 :++
0000 148 : FUNCTIONAL DESCRIPTION:
0000 149 :
0000 150 :         TM_SETUP AND TM_CLEANUP ARE CALLED TO PERFORM
0000 151 : REQUIRED HOUSEKEEPING AT THE BEGINNING AND END, RESPECTIVELY, OF
0000 152 : TEST MODULE EXECUTION.
0000 153 :
0000 154 : CALLING SEQUENCE:
0000 155 :
0000 156 :         BSBW TM_SETUP   BSBW TM_CLEANUP
0000 157 :
0000 158 : INPUT PARAMETERS:
0000 159 :
0000 160 :         NONE
0000 161 :
0000 162 : IMPLICIT INPUTS:
0000 163 :
0000 164 :         NONE
0000 165 :
0000 166 : OUTPUT PARAMETERS:
0000 167 :
0000 168 :         NONE
0000 169 :
0000 170 : IMPLICIT OUTPUTS:
0000 171 :
0000 172 :         TM_SETUP: COND TABLE INDEX REGISTERS (R2,3,4,5,6) CLEARED;
0000 173 :                   ALL PRIVILEGES ACQUIRED.
0000 174 :
0000 175 : COMPLETION CODES:
0000 176 :
0000 177 :         EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
0000 178 :
0000 179 : SIDE EFFECTS:
0000 180 :
0000 181 :         SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
0000 182 : (VIA RSB) IF ERROR ENCOUNTERED.
0000 183 :
0000 184 : --

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0000 188 TM_SETUP::
          52 D4 0000 189 CLRL R2 ; INITIALIZE
          53 D4 0002 190 CLRL R3 ; .. CONDITION
          54 D4 0004 191 CLRL R4 ; .... TABLE
          55 D4 0006 192 CLRL R5 ; ..... INDEX
          56 D4 0008 193 CLRL R6 ; ..... REGISTERS
          FFF3' 30 000A 194 BSBW MOD MSG PRINT ; PRINT TEST MODULE BEGIN MSG
00000000'EF 00000000'EF DE C00D 195 MOVAL TEST MOD_SUCC,TMD_ADDR ; ASSUME END MSG WILL SHOW SUCCESS
          03 00 00000000'8F FO 0018 196 INSV #SUCCESS,#0,#3,MOD_MSG_CODE ; ADJUST STATUS CODE FOR SUCCESS
          00000000'EF 0020
          59 00000000'9F D0 0048 197 MODE TO,5$,KRNL ; KERNEL MODE TO ACCESS PHD
          00000000'EF 69 DE 004F 198 MOVL @#CTL$GL PHD,R9 ; GET PROCESS HEADER ADDRESS
          0056 200 MODE FROM,5$ ; BACK TO USER MODE
          0057 201 PRIV ADD,ALL ; GET ALL PRIVILEGES

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0077 202 $SETPRN S TEST MOD_NAME_D ; SET PROCESS NAME
0084 203 SS_CHECK NORMAL ; CHECK STATUS CODE RETURNED FROM SETPRN
00B2 204 $WAKE S SELFPID ; GET MY PID
00C1 205 SS_CHECK NORMAL ; CHECK FOR NORMAL RETURN
00EF 206 $HTBER S ; UNDO ABOVE WAKE
00F6 207 SS_CHECK NORMAL ; CHECK FOR NORMAL RETURN
0124 208
0124 209 : THE FOLLOWING CODE ESTABLISHES UIC'S IN THE CONDITION 3 TABLE
0124 210 :
0124 211 MODE TO,20$,KRNL ; KERNEL MODE TO ACCESS PCB
59 00000000'9F D0 0147 212 MOVL @#SCH$GL CURPCB,R9 ; GET CURRENT PCB ADDRESS
59 00BC C9 D0 014E 213 MOVL PCB$UIC(R9),R9 ; PICK UP UIC FROM PCB
0153 214 MODE FROM,20$ ; ... AND GET BACK TO USER MODE
0154 215
0154 216 : R9 NOW CONTAINS 'MY' UIC
0154 217 :
59 5A 02 9A 0154 218 MOVZBL #2,R10 ; GET COND3 TABLE INDEX NUMBER INTO A REG
59 00010000 8F C1 0157 219 ADDL3 #^X10000,R9,COND3_E[R10] ; PUT DIFF GROUP UIC INTO 3RD TABLE ELT
0000024A'EF4A 5A D6 0164 220 INCL R10 ; POINT TO 4TH COND3 TABLE ELEMENT
0000024A'EF4A 59 D0 0166 221 MOVL R9,COND3_E[R10] ; PUT MY UIC INTO TABLE
0000024A'EF4A 5A D6 016E 222 INCL R10 ; POINT TO 5TH COND3 TABLE ELEMENT
0000024A'EF4A 59 01 0170 223 ADDL3 #1,R9,COND3_E[R10] ; PUT DIFF MEMBER UIC INTO THE TABLE
0179 224 $CREMBX_S CHAN=MBXCHAN, LOGNAM=SUBJPRN, - ; GET MAILBOX FOR PROCESS
0179 225 MAXMSG=#120, PROMSK=#0, BUFQUO=#240
019E 226 SS_CHECK NORMAL ; CHECK NORMAL COMPLETION
01CC 227 $GETCHN_S CHAN=MBXCHAN, - ; GET CHAN INFO (UNIT NUMBER)
01CC 228 PRIBUF=MBXCHANINFO
01E6 229 SS_CHECK NORMAL ; CHECK NORMAL COMPLETION
0000088'EF 0000020'EF 3C 0214 230 MOVZWL MBXCHANINFO+8+DIB$W_UNIT,MBXUNIT ; SAVE MAILBOX UNIT NUMBER
05 021F 231 RSB ; RETURN TO MAIN ROUTINE
0220 232 TM_CLEANUP:
0220 233 $DELMBX_S MBXCHAN ; DELETE TERMINATION MAILBOX
FDCF' 30 022E 234 BSBW MOD_MSG_PRINT ; PRINT TEST MODULE END MSG
05 0231 235 RSB ; RETURN TO MAIN ROUTINE

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0232 237 .SBTTL CONDITION SUBROUTINES - SETUP AND CLEANUP
0232 238 :++
0232 239 : FUNCTIONAL DESCRIPTION:
0232 240 :
0232 241 : COND $X$  AND COND $X$  CLEANUP ARE SUBROUTINES WHICH ARE EXECUTED
0232 242 : BEFORE AND AFTER THE VERIFY SUBROUTINE, RESPECTIVELY, WHENEVER A NEW
0232 243 : CONDITION  $X$  VALUE IS SELECTED (SEE FUNCTIONAL DESCRIPTION OF SUCCOMMON
0232 244 : ROUTINE IN SUCCOMMON.MAR). ANY SETUP FUNCTION PARTICULAR TO THE
0232 245 : CONDITION  $X$  TABLE IS INCLUDED IN THE COND $X$  SUBROUTINE AND CLEANED
0232 246 : UP, IF NECESSARY, IN THE COND $X$  CLEANUP SUBROUTINE. THIS INCLUDES,
0232 247 : ESPECIALLY, CODE TO DETECT CONFLICTS AMONG CURRENT ENTRIES IN TWO
0232 248 : OR MORE CONDITION TABLES. IF A CONFLICT IS DETECTED, A NON-ZERO
0232 249 : VALUE IS STORED INTO CONFLICT, WHICH CAUSES THE CALLING ROUTINE
0232 250 : (SUCCOMMON) TO SKIP THE CURRENT ENTRY IN THE CONDITION  $X$  TABLE.
0232 251 :
0232 252 : CALLING SEQUENCE:
0232 253 :
0232 254 : BSBW COND $X$  BSBW COND $X$ _CLEANUP
0232 255 : WHERE  $X$  = 1,2,3,4,5
0232 256 :
0232 257 : INPUT PARAMETERS:
0232 258 :
0232 259 : CONFLICT = 0
0232 260 :
0232 261 : IMPLICIT INPUTS:
0232 262 :
0232 263 : R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
0232 264 : FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
0232 265 :
0232 266 : OUTPUT PARAMETERS:
0232 267 :
0232 268 : CONFLICT SET TO NON-ZERO IF COND TABLE CONFLICT DETECTED.
0232 269 :
0232 270 : IMPLICIT OUTPUTS:
0232 271 :
0232 272 : R2,3,4,5,6 PRESERVED
0232 273 :
0232 274 : COMPLETION CODES:
0232 275 :
0232 276 : NONE
0232 277 :
0232 278 : SIDE EFFECTS:
0232 279 :
0232 280 : NONE
0232 281 :
0232 282 :--
0232 283 :
0232 284 :
0232 285 :
05 0232 286 COND1:: RSB ; RETURN TO MAIN ROUTINE
0233 287 COND1_CLEANUP:: RSB ; RETURN TO MAIN ROUTINE
05 0233 288 COND1_CLEANUP:: RSB ; RETURN TO MAIN ROUTINE
0234 289 COND2:: RSB ; RETURN TO MAIN ROUTINE
05 0234 290 COND2:: RSB ; RETURN TO MAIN ROUTINE
0235 291 COND2_CLEANUP:: RSB ; RETURN TO MAIN ROUTINE
05 0235 292 COND2_CLEANUP:: RSB ; RETURN TO MAIN ROUTINE
0235 293

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0000016B'EF42 0000011C'8F D1 0236 294 COND3::
                13 0236 295          CMPL  #SUBJPID,COND1_E[R2] ; NON-ZERO PID SPECIFIED ?
                07 0242 296          BEQLU 10$ ; YES -- PROCESS IS 'OTHER'
000001AD'EF43 D5 0244 297          TSTL  COND2_E[R3] ; IS PROCESS NAME SPECIFIED ?
                02 07 13 024B 298          BEQL  5$ ; NO -- SUBJECT PROCESS IS 'SELF'
                54 D1 024D 299          CMPL  R4,#2 ; DOES CONDITION 3 SPECIFY DIFFERENT GROUP ?
                20 13 0250 300          BEQL 20$ ; YES -- PROCESS NAME FOR DIFF GROUP IS CONF
                10 11 0252 301          BRB   10$ ; NO -- MAKE SURE COND 3 SPECIFIES 'OTHER'
                0254 302 5$:
                0254 303 ;
                0254 304 ; PROCESS IS 'SELF'
                0254 305 ;
0000024A'EF44 00000000'EF D1 0254 306          CMPL  ONES,COND3_E[R4] ; DOES CONDITION 3 SPECIFY 'SELF' ?
                1B 13 0260 307          BEQLU COND3X ; YES -- THEN ALL 3 CONDIT'NS ARE CONSISTENT
                OE 11 0262 308          BRB   20$ ; NO -- INDICATE CONFLICT & GET OUT
                0264 309 10$:
                0264 310 ;
                0264 311 ; PROCESS IS 'OTHER'
                0264 312 ;
0000024A'EF44 00000000'EF D1 0264 313          CMPL  ONES,COND3_E[R4] ; DOES CONDITION 3 SPECIFY 'SELF' ?
                0B 12 0270 314          BNEQU COND3X ; NO -- THEN ALL 3 CONDITIONS ARE CONSISTENT
00000000'EF 00000000'EF 90 0272 315 20$:
                0272 316          MOVBL ONES,CONFLICT ; YES -- INDICATE CONFLICT
                027D 317 COND3X:
                05 027D 318          RSB ; RETURN TO MAIN ROUTINE
                027E 319 COND3_CLEANUP::
                05 027E 320          RSB ; RETURN TO MAIN ROUTINE
                027F 321 COND4::
                05 027F 322          RSB ; RETURN TO MAIN ROUTINE
                0280 323 COND4_CLEANUP::
                05 0280 324          RSB ; RETURN TO MAIN ROUTINE
                0281 325 COND5::
                05 0281 326          RSB ; RETURN TO MAIN ROUTINE
                0282 327 COND5_CLEANUP::
                05 0282 328          RSB ; RETURN TO MAIN ROUTINE

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0283 330 .SBTTL FORM_CONDS
0283 331 :++
0283 332 : FUNCTIONAL DESCRIPTION:
0283 333 :
0283 334 : FORM_CONDS FORMATS AND PRINTS INFORMATION ABOUT
0283 335 : THE CURRENT ELEMENT IN EACH OF THE CONDITION TABLES.
0283 336 :
0283 337 : CALLING SEQUENCE:
0283 338 :
0283 339 : BSBW FORM_CONDS
0283 340 :
0283 341 : INPUT PARAMETERS:
0283 342 :
0283 343 : NONE
0283 344 :
0283 345 : IMPLICIT INPUTS:
0283 346 :
0283 347 : R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
0283 348 : FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
0283 349 : FOR X = 1,2,3,4,5 :
0283 350 : COND_X_T - TITLE TEXT FOR CONDX TABLE
0283 351 : COND_X_TAB - ELEMENT TEXT FOR CONDX TABLE
0283 352 : COND_X_C - CONTEXT OF THE CONDX TABLE
0283 353 : COND_X_E - DATA ELEMENTS OF THE CONDX TABLE
0283 354 :
0283 355 : OUTPUT PARAMETERS:
0283 356 :
0283 357 : NONE
0283 358 :
0283 359 : IMPLICIT OUTPUTS:
0283 360 :
0283 361 : NONE
0283 362 :
0283 363 : COMPLETION CODES:
0283 364 :
0283 365 : NONE
0283 366 :
0283 367 : SIDE EFFECTS:
0283 368 :
0283 369 : NONE
0283 370 :
0283 371 :--
0283 372 :
0283 373 :
0283 374 :
0283 375 FORM_CONDS::
0283 376 $FAO_S MSG1_INP_CTL,FAO_LEN,FAO_DESC,TESTNUM
02A2 377 :
02A2 378 BSBW OUTPUT_MSG : FORMAT CONDITIONS HEADER MSG
14 00 91 02A5 379 CMPB #COND1_C,#NULL : ... AND PRINT IT
03 12 02A8 380 BNEQU 10$ : IS CONDITION 1 NULL ?
00BF 31 02AA 381 BRW FORM_CONDSX : NO -- CONTINUE
02AD 382 10$: : YES -- SUBROUTINE IS FINISHED
00000000'EF 00000120'EF DE 02AD 383 MOVAL COND1_T,MSG_A : SAVE ADDRESS OF CONDITION 1 TITLE FOR FAO
00000000'EF 0000012D'EF42 D0 02B8 384 MOVL COND1_TAB[R2],MSG_B : SAVE ADDR OF COND 1 CURR TEXT ELT FOR FAO
00000000'EF 00 90 02C4 385 MOVB #COND1_C,MSG_CTXT : SAVE CONDITION 1 CONTEXT FOR FAO
02CB 386 MOV_VAL COND1_C,COND1_E[R2],MSG_DATA1 : GIVE COND 1 DATA VALUE TO FAO

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      FD32' 30 02CB 387      BSBW WRITE_MSG2      ; FORMAT AND WRITE CONDITION 1 MSG
    14 00 91 02CE 388      CMPB #COND2_C,#NULL      ; IS CONDITION 2 NULL ?
      03 12 02D1 389      BNEQU 20$      ; NO -- CONTINUE
    0096 31 02D3 390      BRW FORM_CONDSX      ; YES -- SUBROUTINE IS FINISHED
      02D6 391 20$:
00000000'EF 00000177'EF DE 02D6 392      MOVAL COND2_T,MSG_A      ; SAVE ADDRESS OF CONDITION 2 TITLE FOR FAO
00000000'EF 0000018D'EF43 D0 02E1 393      MOVL COND2_TAB[R3],MSG_B      ; SAVE ADDR OF COND 2 CURR TEXT ELT FOR FAO
      00000000'EF 00 90 02ED 394      MOVB #COND2_C,MSG_CTXT      ; SAVE CONDITION 2 CONTEXT FOR FAO
      02F4 395      MOV VAL COND2_C,COND2_E[R3],MSG_DATA1 ; GIVE COND 2 DATA VALUE TO FAO
    FD09' 30 02F4 396      BSBW WRITE_MSG2      ; FORMAT AND WRITE CONDITION 2 MSG
    14 00 91 02F7 397      CMPB #COND3_C,#NULL      ; IS CONDITION 3 NULL ?
      03 12 02FA 398      BNEQU 30$      ; NO -- CONTINUE
    006D 31 02FC 399      BRW FORM_CONDSX      ; YES -- SUBROUTINE IS FINISHED
      02FF 400 30$:
00000000'EF 000001B5'EF DE 02FF 401      MOVAL COND3_T,MSG_A      ; SAVE ADDRESS OF CONDITION 3 TITLE FOR FAO
00000000'EF 000001C3'EF44 D0 030A 402      MOVL COND3_TAB[R4],MSG_B      ; SAVE ADDR OF COND 3 CURR TEXT ELT FOR FAO
      00000000'EF 00 90 031E 403      MOVB #COND3_C,MSG_CTXT      ; SAVE CONDITION 3 CONTEXT FOR FAO
      031D 404      MOV VAL COND3_C,COND3_E[R4],MSG_DATA1 ; GIVE COND 3 DATA VALUE TO FAO
    FCE0' 30 031D 405      BSBW WRITE_MSG2      ; FORMAT AND WRITE CONDITION 3 MSG
    14 14 91 0320 406      CMPB #COND4_C,#NULL      ; IS CONDITION 4 NULL ?
      47 13 0323 407      BEQLU FORM_CONDSX      ; YES -- SUBROUTINE IS FINISHED
    00000000'EF 0000025E'EF DE 0325 408      MOVAL COND4_T,MSG_A      ; SAVE ADDRESS OF CONDITION 4 TITLE FOR FAO
00000000'EF 0000025E'EF45 D0 0330 409      MOVL COND4_TAB[R5],MSG_B      ; SAVE ADDR OF COND 4 CURR TEXT ELT FOR FAO
      00000000'EF 14 90 033C 410      MOVB #COND4_C,MSG_CTXT      ; SAVE CONDITION 4 CONTEXT FOR FAO
      0343 411      MOV VAL COND4_C,COND4_E[R5],MSG_DATA1 ; GIVE COND 4 DATA VALUE TO FAO
    FCBA' 30 0343 412      BSBW WRITE_MSG2      ; FORMAT AND WRITE CONDITION 4 MSG
    14 14 91 0346 413      CMPB #COND5_C,#NULL      ; IS CONDITION 5 NULL ?
      21 13 0349 414      BEQLU FORM_CONDSX      ; YES -- SUBROUTINE IS FINISHED
    00000000'EF 0000025F'EF DE 034B 415      MOVAL COND5_T,MSG_A      ; SAVE ADDRESS OF CONDITION 5 TITLE FOR FAO
00000000'EF 0000025F'EF46 D0 0356 416      MOVL COND5_TAB[R6],MSG_B      ; SAVE ADDR OF COND 5 CURR TEXT ELT FOR FAO
      00000000'EF 14 90 0362 417      MOVB #COND5_C,MSG_CTXT      ; SAVE CONDITION 5 CONTEXT FOR FAO
      0369 418      MOV VAL COND5_C,COND5_E[R6],MSG_DATA1 ; GIVE COND 5 DATA VALUE TO FAO
    FC94' 30 0369 419      BSBW WRITE_MSG2      ; FORMAT AND WRITE CONDITION 5 MSG
      036C 420 FORM_CONDSX:
    05 036C 421      RSB      ; RETURN TO CALLER

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036D 423 .SBTTL VERIFY
036D 424 :++
036D 425 : FUNCTIONAL DESCRIPTION:
036D 426 :
036D 427 : VERIFY IS CALLED ONCE FOR EACH COMBINATION OF CONDITION
036D 428 : TABLE VALUES (AS DETERMINED BY THE INDEX REGISTERS R2,3,4,5,6 FOR
036D 429 : COND TABLES 1,2,3,4,5, RESPECTIVELY). VERIFY ESTABLISHES THE CONDITIONS
036D 430 : SPECIFIED BY THE COND TABLES AND ISSUES THE SUBJECT SYSTEM SERVICE
036D 431 : ($SUSPND). THEN, THE SUCCESSFUL OPERATION OF THE SERVICE IS VERIFIED
036D 432 : BY EXAMINING THE STATUS CODE RETURNED, THE VALUES FOR RETURN ARGUMENTS
036D 433 : AND THE FUNCTIONALITY PERFORMED. THE EXAMINATIONS TAKE THE FORM OF
036D 434 : COMPARISONS AGAINST EXPECTED VALUES. ANY FAILING COMPARISON CAUSES AN
036D 435 : ERR_EXIT MACRO TO BE EXECUTED (EITHER DIRECTLY, OR INDIRECTLY,
036D 436 : THROUGH THE SS_CHECK MACRO); ERR_EXIT SETS EFLAG TO NON-ZERO,
036D 437 : PRINTS ERROR MESSAGES AND CAUSES AN IMMEDIATE RSB TO CALLER.
036D 438 : WHEN ERR_EXIT IS EXECUTED, FURTHER CALLS TO VERIFY ARE SUPPRESSED,
036D 439 : AND, AFTER EXECUTING CLEANUP SUBROUTINES, THE IMAGE EXITS.
036D 440 :
036D 441 : CALLING SEQUENCE:
036D 442 :
036D 443 : BSBW VERIFY
036D 444 :
036D 445 : INPUT PARAMETERS:
036D 446 :
036D 447 : NONE
036D 448 :
036D 449 : IMPLICIT INPUTS:
036D 450 :
036D 451 : R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
036D 452 : FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
036D 453 : FOR X = 1,2,3,4,5 :
036D 454 : CONDX_E - ADDRESS OF TABLE OF DATA VALUES FOR CONDX
036D 455 : TABLE. IF THE CONTEXT OF TABLE X IS A SYSTEM SERVICE
036D 456 : ARGUMENT, THE ARGUMENT NAME MAY BE USED AS A SYNONYM
036D 457 : FOR CONDX_E.
036D 458 :
036D 459 : OUTPUT PARAMETERS:
036D 460 :
036D 461 : NCNE
036D 462 :
036D 463 : IMPLICIT OUTPUTS:
036D 464 :
036D 465 : VERIFY HAS NO OUTPUT. SINCE ITS PURPOSE IS TO TEST FOR ERRORS,
036D 466 : IT MERELY RETURNS TO CALLER NORMALLY AFTER THE TESTS, PROVIDING
036D 467 : ALL WERE SUCCESSFUL; IF AN ERROR IS DISCOVERED, RETURN IS VIA
036D 468 : AN ERR_EXIT OR SS_CHECK MACRO, BOTH OF WHICH DOCUMENT DETECTED
036D 469 : ERRORS.
036D 470 :
036D 471 : COMPLETION CODES:
036D 472 :
036D 473 : EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
036D 474 :
036D 475 : SIDE EFFECTS:
036D 476 :
036D 477 : SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
036D 478 : (VIA RSB) IF ERROR ENCOUNTERED.
036D 479 :
  
```

```

036D 480 :--
036D 481
036D 482
036D 483
036D 484
00000000'EF 95 036D 485 TSTB CFLAG ; SHOULD CONDITIONS BE PRINTED ?
03 13 0373 486 BEQL 5$ ; NO -- CONTINUE
FF0B 30 0375 487 BSBW FORM_CONDS ; YES -- FMT & PRINT ALL CONDS FOR THIS T.C.
0378 488 5$:
0000011C'EF 00000114'EF D0 0378 489 MOVL SELFPID,SUBJPID ; ASSUME THE SUBJECT PID IS SELF
00000110'EF D4 0383 490 CLRL ZEROPID ; CLEAR ZERO PID
0000024A'EF44 00000000'EF D1 0389 491 CMPL ONES,COND3_E[R4] ; IS PROCESS FOR THIS TEST CASE SELF ?
03 12 0395 492 BNEQU 7$ ; NO -- CONTINUE
0076 31 0397 493 BRW 10$ ; YES -- DON'T CREATE A PROCESS
039A 494 7$:
039A 495 $CREPRC_S PIDADR=CREPID, PRCNAM=SUBJPRN, -
039A 496 UIC=COND3_E[R4], IMAGE=IMAGNAM, -
039A 497 MBXUNT=MBXUNIT, QUOTA=QUOTALIST
03D5 498 ; CREATE THE SUBJECT PROCESS
03D5 499 SS_CHECK NORMAL ; ... AND MAKE SURE IT CREATED OK
0000011C'EF 00000118'EF D0 0403 500 MOVL CREPID,SUBJPID ; MAKE THE SUBJCT PID = THE ONE JUST CREATED
0B 11 040E 501 BRB 12$ ; ... AND CONTINUE
0410 502 10$:
0410 503 $RESUME_S ; ISSUE PRELIM RESUME FOR SELF ...
041B 504 ; ... TO OFFSET UPCOMING SUSPND
041B 505 12$:
0000010C'EF 0000016B'EF42 D0 041B 506 MOVL COND1_E[R2],DEST_PIDADR ; GET PID ADDRESS OUT OF TABLE
59 000001AD'EF43 D0 0427 507 MOVL COND2_E[R3],R9 ; PRCNAM ADDR INTO REG FOR INDIRECT REF'RNCE
042F 508 ;
042F 509 ; ***** SYSTEM SERVICE CALL WHICH IS THE SUBJECT OF THIS TEST CASE *****
042F 510 ;
042F 511 ;
00000000'8F 50 D1 043E 512 $SUSPND_S PIDADR=@DEST_PIDADR, PRCNAM=(R9)
61 13 0445 513 CMPL RO,#SS$_NORMAL ; CODE RECEIVED = CODE EXPECTED ?
00000000'EF 00000000'8F D0 0447 514 BEQLU 18$ ; YES -- CONTINUE
00000000'EF 50 D0 0452 515 MOVL #SS$_NORMAL,EXPV ; NO -- LOAD UP EXPECTED AND
0459 516 MOVL RO,RCV ; ... RECEIVED VALUES, THEN EXIT
ERR_EXIT LONG,<INCORRECT STATUS CODE RETURNED FROM SUSPND>
04A8 517 18$:
0000010C'EF D5 04A8 518 TSTL DEST_PIDADR ; PID RETURNED BY SUSPND ?
68 13 04AE 519 BEQL 20$ ; NO -- KEEP GOING
0000010C'FF 0000011C'EF D1 04B0 520 CMPL SUBJPID,@DEST_PIDADR ; YES -- IS IT THE CORRECT ONE ?
5B 13 04BB 521 BEQL 20$ ; YES -- CONTINUE
00000000'EF 0000011C'EF D0 04BD 522 MOVL SUBJPID,EXPV ; NO --LOAD UP EXPECTED AND
00000000'EF 0000010C'FF D0 04C8 523 MOVL @DEST_PIDADR,RCV ; ... RECEIVED VALUES, THEN EXIT
ERR_EXIT LONG,<INCORRECT PID RETURNED BY SUSPND>
04D3 524
0518 525 20$:
0000011C'EF 00000118'EF D1 0518 526 CMPL CREPID,SUBJPID ; WAS A PROCESS CREATED ?
03 13 0523 527 BEQLU 30$ ; YES -- CONTINUE
00D1 31 0525 528 BRW VERIFYX ; NO -- ALL FINISHED
0528 529 30$:
0528 530 $RESUME_S SUBJPID ; ISSUE OFFSETTING RESUME
0537 531 SS_CHECK NORMAL ; ... AND CHECK IT
0565 532 $WAKE_S SUBJPID ; ALLOW CREATED PROCESS TO FINISH
0574 533 SS_CHECK NORMAL ; CHECK FOR NORMAL STATUS CODE
05A2 534 $QIOW_S CHAN=MBXCHAN, FUNC=#IO$ READVBLK, -
05A2 535 P1=MBXBUFF+8, P2=MBXBUFF
05CB 536 ; ... AND WAIT FOR IT TO SEND MAIL

```


SATSSS37
V04-000

SATS SYSTEM SERVICE TESTS ^{J 13} \$SUSPND (SUCC 16-SEP-1984 00:51:44 VAX/VMS Macro V04-00
VERIFY 5-SEP-1984 04:30:50 [UETPSY.SRC]SATSSS37 MAR;1 Page 14
(1)

05CB 537 SS_CHECK NORMAL
05F9 538 VERIFYX:
05 05F9 539 RSB

; CHECK FOR NORMAL STATUS CODE
; RETURN TO CALLER

```

05FA 541 .SBTTL VFY_CLEANUP
05FA 542 :++
05FA 543 : FUNCTIONAL DESCRIPTION:
05FA 544 :
05FA 545 : VFY_CLEANUP EXECUTES SYSTEM SERVICES TO UNDO THE
05FA 546 : EFFECT OF THOSE ISSUED IN THE VERIFY SUBROUTINE. VFY_CLEANUP MUST
05FA 547 : ASSUME THAT VERIFY MAY NOT HAVE EXECUTED IN ITS ENTIRETY (IF AN
05FA 548 : ERROR IS FOUND). ALSO, VFY_CLEANUP MAY ISSUE SS CHECK OR ERR_EXIT
05FA 549 : ONLY AFTER PERFORMING ALL OF ITS CLEANUP OPERATIONS; THIS IS REQUIRED
05FA 550 : IN THE EVENT THAT VFY_CLEANUP IS CALLED DURING ERROR PROCESSING,
05FA 551 : WHEN PERFORMING THE REQUIRED CLEANUP IS MORE IMPORTANT THAN
05FA 552 : POSSIBLY DISCOVERING A SECOND ERROR.
05FA 553 :
05FA 554 : CALLING SEQUENCE:
05FA 555 :
05FA 556 : BSBW VFY_CLEANUP
05FA 557 :
05FA 558 : INPUT PARAMETERS:
05FA 559 :
05FA 560 : NONE
05FA 561 :
05FA 562 : IMPLICIT INPUTS:
05FA 563 :
05FA 564 : R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
05FA 565 : FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
05FA 566 : FOR X = 1,2,3,4,5 :
05FA 567 : COND_X E - ADDRESS OF TABLE OF DATA VALUES FOR CONDX
05FA 568 : TABLE. IF THE CONTEXT OF TABLE X IS A SYSTEM SERVICE
05FA 569 : ARGUMENT, THE ARGUMENT NAME MAY BE USED AS A SYNONYM
05FA 570 : FOR CONDX_E.
05FA 571 :
05FA 572 : OUTPUT PARAMETERS:
05FA 573 :
05FA 574 : NONE
05FA 575 :
05FA 576 : IMPLICIT OUTPUTS:
05FA 577 :
05FA 578 : NONE
05FA 579 :
05FA 580 : COMPLETION CODES:
05FA 581 :
05FA 582 : EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
05FA 583 :
05FA 584 : SIDE EFFECTS:
05FA 585 :
05FA 586 : SS CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
05FA 587 : (VIA RSB) IF ERROR ENCOUNTERED.
05FA 588 :
05FA 589 :--
05FA 590 :
05FA 591 :
05FA 592 :
05FA 593 VFY_CLEANUP::
05FA 594 Cmpl CREPID,SUBJPID ; WAS A PROCESS CREATED FOR THIS TEST CASE ?
0605 595 BNEQU VFY_CLEANUPX ; NO -- JUST EXIT
0607 596 $DELPRC_S SOB JPID ; YES -- DELETE IT
0616 597 VFY_CLEANUPX:

```

000011C'EF 0000118'EF D1
OF 12

SATSSS37
V04-000

SATS SYSTEM SERVICE TESTS \$SUSPND (SUCC 16-SEP-1984 00:51:44 VAX/VMS Macro V04-00
VFY_CLEANUP 5-SEP-1984 04:30:50 [UETPSY.SRC]SATSSS37.MAR;1

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(1)

S
V

05 0616 598 RSB
0617 599 .END

; RETURN TO CALLER

SATSSS37
Symbol table

\$\$\$\$	= 000004DD	R	04	DIBSW_UNIT	= 0000000C		
\$\$\$CHARS	= 00000020			EFLAG	*****	X	04
\$\$\$CHARS1	= 00000004			EXPV	*****	X	04
\$\$\$CHARS2	= 0000000A			FAO_DESC	*****	X	04
\$\$\$CHARS3	= 00000019			FAO_LEN	*****	X	04
\$\$\$CHARS4	= 00000021			FORM_CONDS	00000283	RG	04
\$\$\$CHARS5	= 00000026			FORM_CONDSX	0000036C	R	04
\$\$\$COND_A	= 00000004			IMAGNAM	00000065	R	02
\$\$\$STRINGS	= 00000001			IOS_READVBLK	*****	X	04
\$\$\$STRINGS2	= 00000005			LONG	= 00000004	G	
\$\$T1	= 00000001			MBXBUF	0000008C	R	03
\$\$T2	= 00000004			MBXCHAN	00000008	R	03
BYTE	= 00000001	G		MBXCHANINFO	0000000C	R	03
CFLAG	*****	X	04	MBXUNIT	00000088	R	03
CHMRTN	*****	X	04	MOD_MSG_CODE	*****	X	04
CHM_CONT	*****	X	04	MOD_MSG_PRINT	*****	X	04
COMP_SC	*****	X	04	MSGT_INP_CTL	00000019	R	02
COND	00000232	RG	04	MSG3_ERR_CTL	00000039	RG	02
COND1_C	= 00000000			MSG_A	*****	X	04
COND1_CLEANUP	00000233	RG	04	MSG_B	*****	X	04
COND1_E	0000016B	R	03	MSG_CTXT	*****	X	04
COND1_H	0000012C	RG	03	NOTARG	= 00000000	G	
COND1_T	00000120	R	03	NULL	= 00000014	G	
COND1_TAB	0000012D	R	03	ONES	*****	X	04
COND2	00000234	RG	04	OUTPUT_MSG	*****	X	04
COND2_C	= 00000000			PCBSL_OIC	= 000000BC		
COND2_CLEANUP	00000235	RG	04	PCV	*****	X	04
COND2_E	000001AD	R	03	PHD\$Q_PRIVMSK	= 00000000		
COND2_H	0000018C	RG	03	PQLS_BYTLM	= 00000003		
COND2_T	00000177	R	03	PQLS_CPULM	= 00000004		
COND2_TAB	0000018D	R	03	PQLS_FILLM	= 00000006		
COND3	00000236	RG	04	PQLS_LISTEND	= 00000000		
COND3X	0000027D	R	04	PQLS_PGFLQUOTA	= 00000007		
COND3_C	= 00000000			PQLS_PRCLM	= 00000008		
COND3_CLEANUP	0000027E	RG	04	PQLS_TQELM	= 00000009		
COND3_E	0000024A	R	03	PRIVMASK	00000000	R	03
COND3_H	000001C2	RG	03	PRIV_ARGS	= 00000002		
COND3_T	000001B5	R	03	PROCESS_ERR	*****	X	04
COND3_TAB	000001C3	R	03	QUAD	= 00000008	G	
COND4	0000027F	RG	04	QUOTALIST	00000084	R	02
COND4_C	= 00000014			RECV	*****	X	04
COND4_CLEANUP	00000280	RG	04	REST_REGS	*****	X	04
COND4_H	0000025E	RG	03	SAVE_REGS	*****	X	04
COND4_T	0000025E	R	03	SCH\$GL_CURPCB	*****	X	04
COND4_TAB	0000025E	R	03	SELPID	00000114	R	03
COND5	00000281	RG	04	SS\$ NORMAL	*****	X	04
COND5_C	= 00000014			SUBJPID	0000011C	R	03
COND5_CLEANUP	00000282	RG	04	SUBJPRN	00000051	R	02
COND5_H	0000025F	RG	03	SUCCESS	*****	X	04
COND5_T	0000025F	R	03	SYSSCMKRNL	*****	GX	04
COND5_TAB	0000025F	R	03	SYSSCREMBX	*****	GX	04
CONFLICT	*****	X	04	SYSSCREPRC	*****	GX	04
CREPID	00000118	R	03	SYSSDELMBX	*****	GX	04
CTL\$GL_PHD	*****	X	04	SYSSDELPRC	*****	GX	04
DESC	= 00000010	G		SYSSFAO	*****	X	04
DEST_PIDADR	0000010C	R	03	SYSSGETCHN	*****	GX	04
DIB\$K_LENGTH	= 00000074			SYSSHIBER	*****	GX	04

SATSSS37
Symbol table

```

SYSSQIOW          ***** GX 04
SYSSRESUME        ***** GX 04
SYSSSETPRN        ***** GX 04
SYSSSETPRV        ***** GX 04
SYSSSUSPND        ***** GX 04
SYSSWAKE          ***** 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           000005F9 R 04
VFY_CLEANUP       000005FA RG 04
VFY_CLEANUPX      00000616 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
\$ABSS	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
SATSSS37	00000617 (1559.)	04 (4.)	NOPIC USR CON REL LCL NOSHR EXE RD WRT NOVEC BYTE

! Performance indicators !

Phase	Page faults	CPU Time	Elapsed Time
Initialization	35	00:00:00.09	00:00:00.36
Command processing	138	00:00:00.78	00:00:04.88
Pass 1	288	00:00:09.15	00:00:16.95
Symbol table sort	0	00:00:00.74	00:00:00.90
Pass 2	122	00:00:02.20	00:00:02.69
Symbol table output	19	00:00:00.10	00:00:00.12
Psect synopsis output	1	00:00:00.04	00:00:00.04
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	605	00:00:13.10	00:00:25.94

The working set limit was 1650 pages.
47640 bytes (94 pages) of virtual memory were used to buffer the intermediate code.
There were 30 pages of symbol table space allocated to hold 489 non-local and 47 local symbols.
599 source lines were read in Pass 1, producing 25 object records in Pass 2.
48 pages of virtual memory were used to define 38 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	24
TOTALS (all libraries)	35

896 GETS were required to define 35 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS\$:SATSSS37/OBJ=OBJ\$:SATSSS37 MSRC\$:SATSSS37/UPDATE=(ENH\$:SATSSS37)+EXECML\$/LIB+SHRLIB\$:UETP/LIB

0422 AH-BT13A-SE
VAX/VMS V4.0

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