


```

SSSSSSSS  AAAAAA  TTTTTTTTTT  SSSSSSSS  SSSSSSSS  SSSSSSSS  SSSSSSSSSS  SSSSSSSSSS
SSSSSSSS  AAAAAA  TTTTTTTTTT  SSSSSSSS  SSSSSSSS  SSSSSSSS  SSSSSSSSSS  SSSSSSSSSS
SS          AA      AA      TT          SS          SS          SS          5555555555  5555555555
SS          AA      AA      TT          SS          SS          SS          5555555555  5555555555
SS          AA      AA      TT          SS          SS          SS          5555555555  5555555555
SS          AA      AA      TT          SS          SS          SS          5555555555  5555555555
SSSSSSSS  AA      AA      TT          SSSSSSS  SSSSSSS  SSSSSSS  55555555  55555555
SSSSSSSS  AA      AA      TT          SSSSSSS  SSSSSSS  SSSSSSS  55555555  55555555
          SS  AAAAAAAAAA  TT          SS          SS          SS          55          55
          SS  AAAAAAAAAA  TT          SS          SS          SS          55          55
          SS  AA      AA      TT          SS          SS          SS          55          55
          SS  AA      AA      TT          SS          SS          SS          55          55
SSSSSSSS  AA      AA      TT          SSSSSSSS  SSSSSSSS  SSSSSSSS  55555555  55555555
SSSSSSSS  AA      AA      TT          SSSSSSSS  SSSSSSSS  SSSSSSSS  55555555  55555555

```

```

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

```

(1)	56	DECLARATIONS
(1)	87	CONDITION TABLES
(1)	112	TM SETUP, TM CLEANUP
(1)	196	CONDITION SUBROUTINES - SETUP AND CLEANUP
(1)	266	FORM CONDS
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(1)	460	VFY_CLEANUP

```

0000 1 .TITLE SATSSS55 SATS SYSTEM SERVICE TESTS $READEB 5 (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 SATSSS55 TO TEST SUCCESSFUL
0000 36 : OPERATION OF THE $READEB 5 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: OCT, 1977
0000 47
0000 48 : MODIFIED BY:
0000 49
0000 50 : VERSION 1.50 : 25-MAY-79
0000 51
0000 52 : 01 PJT 06/21/79 Changed ACBB for READEB 5 cluster to ACBW to fix
0000 53 : access violation on COMET.
0000 54 :--

```



```

00000000 72 .PSECT RODATA, RD, NOWRT, NOEXE, LONG
0000 73 TEST_MOD_NAME:: STRING C, <SATSS55> ; TEST MODULE NAME
0009 74 TEST_MOD_NAME_D: STRING I, <SATSS55> ; TEST MODULE NAME DESCRIPTOR
0019 75 MSG1_INP_CTL: STRING I, < SSREF!4ZW: CONDITIONS:>
0039 76 ; FAO CTL STRING FOR MSG1 IN SUCCOMMON.MAR
0039 77 MSG3_ERR_CTL:: STRING I, < *SSREF!4ZW: !AS>
0051 78 ; FAO CTL STRING FOR MSG3 IN SUCCOMMON.MAR
52 54 53 20 4D 4F 44 4E 41 52 20 41 0051 79 SET_CLR_MASK: .ASCII /A RANDOM STRING / ; BIT STRING TO DEFINE 4 CLUSTERS
20 47 4E 49 005D
0061 80 CLUS2_NAME: STRING I, <SATSS55_CL2> ; CLUSTER 2 NAME
0075 81 CLUS3_NAME: STRING I, <SATSS55_CL3> ; CLUSTER 3 NAME

```

SATSS55
V04-000

SATS SYSTEM SERVICE TESTS \$BREADF (SUCC 16-SEP-1984 00:58:17 VAX/VMS Macro V04-00
DECLARATIONS 5-SEP-1984 04:32:28 [UETPSY.SRC]SATSS55.MAR;1

Page 4
(1)

00000000 83 .PSECT RWDATA, RD, WRT, NOEXE, LONG
00000008 0000 84 PRIVMASK: .BLKQ 1 ; ADDR OF PRIVILEGE MASK (IN PHD)
0000000C 0008 85 CURR_STATE: .BLKL 1 ; CURRENT STATE OF CURRENT CLUSTER

```
.SBTTL CONDITION TABLES
***** CONDITION TABLES FOR REDEF SYSTEM SERVICE *****
COND 1,NOTARG,<CLUSTER NUMBER>,-
      <CLUSTER 0 (PROCESS-LOCAL)>,-
      <CLUSTER 1 (PROCESS-LOCAL)>,-
      <CLUSTER 2 (COMMON)>,-
      <CLUSTER 3 (COMMON)>,-
      .BYTE 0      : CLUSTER NUMBER 0
      .BYTE 1      : CLUSTER NUMBER 1
      .BYTE 2      : CLUSTER NUMBER 2
      .BYTE 3      : CLUSTER NUMBER 3
COND 2,NULL
COND 3,NULL
COND 4,NULL
COND 5,NULL
.PSECT SATSS55,RD,WRT,EXE
```



```

0000 112 .SBTTL TM_SETUP, TM_CLEANUP
0000 113 :++
0000 114 : FUNCTIONAL DESCRIPTION:
0000 115 :
0000 116 : TM SETUP AND TM_CLEANUP ARE CALLED TO PERFORM
0000 117 : REQUIRED HOUSEKEEPING AT THE BEGINNING AND END, RESPECTIVELY, OF
0000 118 : TEST MODULE EXECUTION.
0000 119 :
0000 120 : CALLING SEQUENCE:
0000 121 :
0000 122 : BSBW TM_SETUP BSBW TM_CLEANUP
0000 123 :
0000 124 : INPUT PARAMETERS:
0000 125 :
0000 126 : NONE
0000 127 :
0000 128 : IMPLICIT INPUTS:
0000 129 :
0000 130 : NONE
0000 131 :
0000 132 : OUTPUT PARAMETERS:
0000 133 :
0000 134 : NONE
0000 135 :
0000 136 : IMPLICIT OUTPUTS:
0000 137 :
0000 138 : TM_SETUP: COND TABLE INDEX REGISTERS (R2,3,4,5,6) CLEARED;
0000 139 : ALL PRIVILEGES ACQUIRED.
0000 140 :
0000 141 : COMPLETION CODES:
0000 142 :
0000 143 : EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
0000 144 :
0000 145 : SIDE EFFECTS:
0000 146 :
0000 147 : SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
0000 148 : (VIA RSB) IF ERROR ENCOUNTERED.
0000 149 :
0000 150 :--
0000 151 :
0000 152 :
0000 153 :
0000 154 TM_SETUP::
0000 155 CLRL R2 ; INITIALIZE
0000 156 CLRL R3 ; .. CONDITION
0000 157 CLRL R4 ; .... TABLE
0000 158 CLRL R5 ; ..... INDEX
0000 159 CLRL R6 ; ..... REGISTERS
0000 160 BSBW MOD MSG PRINT ; PRINT TEST MODULE BEGIN MSG
0000 161 MOVAL TEST_MOD_SUCC,TMD_ADDR ; ASSUME END MSG WILL SHOW SUCCESS
0000 162 INSV #SUCCESS,#0,#3,MOD_MSG_CODE ; ADJUST STATUS CODE FOR SUCCESS
0000 163 MODE TO,5$,KRNL ; KERNEL MODE TO ACCESS PHD
0000 164 MOVL @#CTL$GL PHD,R9 ; GET PROCESS HEADER ADDRESS
0000 165 MOVAL PHD$Q PRIVMSK(R9),PRIVMSK ; GET PRIV MASK ADDRESS
0000 166 MODE FROM,5$ ; BACK TO USER MODE
0000 167 PRIV ADD,ALL ; GET ALL PRIVILEGES

```

```

52 D4 0000
53 D4 0002
54 D4 0004
55 D4 0006
56 D4 0008
FFF3' 30 000A
00000000'EF 00000000'EF DE 000D
03 00 00000000'8F FO 0018
00000000'EF 0020
59 00000000'9F DO 0048
00000000'EF 69 DE 004F
0056
0057

```

```
0077 168 $SETPRN S TEST MOD_NAME_D ; SET PROCESS NAME
0084 169 SS_CHECK NORMAL ; CHECK STATUS CODE RETURNED FROM SETPRN
5A 01 90 00B2 170 MOVB #1,R10 ; INDICATE 1ST SETUP PASS
00B5 171 10$:
00B5 172 $ASCEFC S EFN=#64, NAME=CLUS2_NAME ; ASSOCIATE CLUSTER 2
00CC 173 SS_CHECK NORMAL ; CHECK ITS COMPLETION
00FA 174 $ASCEFC S EFN=#96, NAME=CLUS3_NAME ; ASSOCIATE CLUSTER 3
0111 175 SS_CHECK NORMAL ; CHECK ITS COMPLETION
58 D4 013F 176 CLRL R8 ; INDICATE EVENT FLAG 0
0141 177 20$:
3A 00000051'EF 58 E0 0141 178 BBS R8,SET CLR_MASK,30$ ; $SETEF IF BIT FOR THIS FLAG IS SET
0149 179 $CLREF_S EFN=R8 ; ... OTHERWISE, ISSUE $CLREF
68 50 E8 0152 180 BLBS R0,40$ ; IF NORMAL COMPL'N, PROCESS NEXT EVENT FLAG
0155 181 SS_CHECK NORMAL ; USE SS_CHECK TO TERMINATE TEST MODULE
0183 182 30$:
0183 183 $SETEF_S EFN=R8 ; SET CURRENT EVENT FLAG
2E 50 E8 018C 184 BLBS R0,40$ ; IF NORMAL COMPL'N, PROCESS NEXT EVENT FLAG
018F 185 SS_CHECK NORMAL ; USE SS_CHECK TO TERMINATE TEST MODULE
01BD 186 40$:
FF7C 58 01 007F 8F 3D 01BD 187 ACBW #127,#1,R8,20$ ; GO DO NEXT EVENT FLAG
FEEA 5A 01 02 9D 01C5 188 ACBB #2,#1,R10,10$ ; LOOP THROUGH SETUP CODE TWICE
05 01CB 189 RSB ; RETURN TO MAIN ROUTINE
01CC 190 TM_CLEANUP::
01CC 191 $DACEFC_S EFN=#64 ; DISASSOCIATE CLUSTER 2
01D9 192 $DACEFC_S EFN=#96 ; DISASSOCIATE CLUSTER 3
FE17' 30 01E6 193 BSBW MOD_MSG_PRINT ; PRINT TEST MODULE END MSG
05 01E9 194 RSB ; RETURN TO MAIN ROUTINE
```

```

01EA 196 .SBTTL CONDITION SUBROUTINES - SETUP AND CLEANUP
01EA 197 :++
01EA 198 : FUNCTIONAL DESCRIPTION:
01EA 199 :
01EA 200 : CONDX AND CONDX CLEANUP ARE SUBROUTINES WHICH ARE EXECUTED
01EA 201 : BEFORE AND AFTER THE VERIFY SUBROUTINE, RESPECTIVELY, WHENEVER A NEW
01EA 202 : CONDITION X VALUE IS SELECTED (SEE FUNCTIONAL DESCRIPTION OF SUCCOMMON
01EA 203 : ROUTINE IN SUCCOMMON.MAR). ANY SETUP FUNCTION PARTICULAR TO THE
01EA 204 : CONDITION X TABLE IS INCLUDED IN THE CONDX SUBROUTINE AND CLEANED
01EA 205 : UP, IF NECESSARY, IN THE CONDX CLEANUP SUBROUTINE. THIS INCLUDES,
01EA 206 : ESPECIALLY, CODE TO DETECT CONFLICTS AMONG CURRENT ENTRIES IN TWO
01EA 207 : OR MORE CONDITION TABLES. IF A CONFLICT IS DETECTED, A NON-ZERO
01EA 208 : VALUE IS STORED INTO CONFLICT, WHICH CAUSES THE CALLING ROUTINE
01EA 209 : (SUCCOMMON) TO SKIP THE CURRENT ENTRY IN THE CONDITION X TABLE.
01EA 210 :
01EA 211 : CALLING SEQUENCE:
01EA 212 :
01EA 213 : BSBW CONDX BSBW CONDX_CLEANUP
01EA 214 : WHERE X = 1,2,3,4,5
01EA 215 :
01EA 216 : INPUT PARAMETERS:
01EA 217 :
01EA 218 : CONFLICT = 0
01EA 219 :
01EA 220 : IMPLICIT INPUTS:
01EA 221 :
01EA 222 : R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
01EA 223 : FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
01EA 224 :
01EA 225 : OUTPUT PARAMETERS:
01EA 226 :
01EA 227 : CONFLICT SET TO NON-ZERO IF COND TABLE CONFLICT DETECTED.
01EA 228 :
01EA 229 : IMPLICIT OUTPUTS:
01EA 230 :
01EA 231 : R2,3,4,5,6 PRESERVED
01EA 232 :
01EA 233 : COMPLETION CODES:
01EA 234 :
01EA 235 : NONE
01EA 236 :
01EA 237 : SIDE EFFECTS:
01EA 238 :
01EA 239 : NONE
01EA 240 :
01EA 241 : --
01EA 242 :
01EA 243 :
01EA 244 :
05 01EA 245 COND1:: ; RETURN TO MAIN ROUTINE
01EA 246 RSB
01EB 247 COND1_CLEANUP:: ; RETURN TO MAIN ROUTINE
05 01EB 248 RSB
01EC 249 COND2:: ; RETURN TO MAIN ROUTINE
05 01EC 250 RSB
01ED 251 COND2_CLEANUP:: ; RETURN TO MAIN ROUTINE
05 01ED 252 RSB

```

SATSSSS5
V04-000

SATS SYSTEM SERVICE TESTS \$REDEF (SUCC 16-SEP-1984 00:58:17 VAX/VMS Macro V04-00
CONDITION SUBROUTINES - SETUP AND CLEANU 5-SEP-1984 04:32:28 [UETPSY.SRC]SATSSSS5.MAR;1

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SA
V04

```
05 01EE 253 COND3::
05 01EE 254 RSB ; RETURN TO MAIN ROUTINE
05 01EF 255 COND3_CLEANUP::
05 01EF 256 RSB ; RETURN TO MAIN ROUTINE
05 01F0 257 COND4::
05 01F0 258 RSB ; RETURN TO MAIN ROUTINE
05 01F1 259 COND4_CLEANUP::
05 01F1 260 RSB ; RETURN TO MAIN ROUTINE
05 01F2 261 COND5::
05 01F2 262 RSB ; RETURN TO MAIN ROUTINE
05 01F3 263 COND5_CLEANUP::
05 01F3 264 RSB ; RETURN TO MAIN ROUTINE
```

```

01F4 266 .SBTTL FORM_CONDS
01F4 267 :++
01F4 268 : FUNCTIONAL DESCRIPTION:
01F4 269 :
01F4 270 : FORM CONDS FORMATS AND PRINTS INFORMATION ABOUT
01F4 271 : THE CURRENT ELEMENT IN EACH OF THE CONDITION TABLES.
01F4 272 :
01F4 273 : CALLING SEQUENCE:
01F4 274 :
01F4 275 : BSBW FORM_CONDS
01F4 276 :
01F4 277 : INPUT PARAMETERS:
01F4 278 :
01F4 279 : NONE
01F4 280 :
01F4 281 : IMPLICIT INPUTS:
01F4 282 :
01F4 283 : R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
01F4 284 : FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
01F4 285 : FOR X = 1,2,3,4,5 :
01F4 286 : CONDX_T - TITLE TEXT FOR CONDX TABLE
01F4 287 : CONDX_TAB - ELEMENT TEXT FOR CONDX TABLE
01F4 288 : CONDX_C - CONTEXT OF THE CONDX TABLE
01F4 289 : CONDX_E - DATA ELEMENTS OF THE CONDX TABLE
01F4 290 :
01F4 291 : OUTPUT PARAMETERS:
01F4 292 :
01F4 293 : NONE
01F4 294 :
01F4 295 : IMPLICIT OUTPUTS:
01F4 296 :
01F4 297 : NONE
01F4 298 :
01F4 299 : COMPLETION CODES:
01F4 300 :
01F4 301 : NONE
01F4 302 :
01F4 303 : SIDE EFFECTS:
01F4 304 :
01F4 305 : NONE
01F4 306 :
01F4 307 :--
01F4 308 :
01F4 309 :
01F4 310 :
01F4 311 FORM_CONDS::
01F4 312 $FAO_S MSG1_INP_CTL,FAO_LEN,FAO_DESC,TESTNUM
0213 313 : FORMAT CONDITIONS HEADER MSG
01F4 314 BSBW OUTPUT_MSG : ... AND PRINT IT
14 00 91 0216 315 CMPB #COND1_C,#NULL : IS CONDITION 1 NULL ?
03 12 0219 316 BNEQU 10$ : NO -- CONTINUE
00BF 31 021B 317 BRW FORM_CONDSX : YES -- SUBROUTINE IS FINISHED
021E 318 10$:
00000000'EF 0000000C'EF DE 021E 319 MOVAL COND1_T,MSG_A : SAVE ADDRESS OF CONDITION 1 TITLE FOR FAO
00000000'EF 0000001C'EF42 D0 0229 320 MOVL COND1_TAB[R2],MSG_B : SAVE ADDR OF COND 1 CURR TEXT ELT FOR FAO
00000000'EF 00 90 0235 321 MOVB #COND1_C,MSG_CTXT : SAVE CONDITION 1 CONTEXT FOR FAO
023C 322 MOV_VAL COND1_C,COND1_E[R2],MSG_DATA1 ; GIVE COND 1 DATA VALUE TO FAO

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      FDC1' 30 023C 323      BSBW  WRITE_MSG2      ; FORMAT AND WRITE CONDITION 1 MSG
    14 14 91 023F 324      CMPB  #COND2_C,#NULL      ; IS CONDITION 2 NULL ?
      03 12 0242 325      BNEQU  20$      ; NO -- CONTINUE
    0096 31 0244 326      BRW    FORM_CONDSX      ; YES -- SUBROUTINE IS FINISHED
      0247 327 20$:
00000000'EF 0000008A'EF DE 0247 328      MOVAL  COND2_T,MSG_A      ; SAVE ADDRESS OF CONDITION 2 TITLE FOR FAO
00000000'EF 0000008A'EF43 D0 0252 329      MOVL  COND2_TAB[R3],MSG_B ; SAVE ADDR OF COND 2 CURR TEXT ELT FOR FAO
      00000000'EF 14 90 025E 330      MOVB  #COND2_C,MSG_CTXT ; SAVE CONDITION 2 CONTEXT FOR FAO
      0265 331      MOV VAL COND2_C,COND2_E[R3],MSG_DATA1 ; GIVE COND 2 DATA VALUE TO FAO
      FD98' 30 0265 332      BSBW  WRITE_MSG2      ; FORMAT AND WRITE CONDITION 2 MSG
    14 14 91 0268 333      CMPB  #COND3_C,#NULL      ; IS CONDITION 3 NULL ?
      03 12 026B 334      BNEQU  30$      ; NO -- CONTINUE
    006D 31 026D 335      BRW    FORM_CONDSX      ; YES -- SUBROUTINE IS FINISHED
      0270 336 30$:
00000000'EF 0000008B'EF DE 0270 337      MOVAL  COND3_T,MSG_A      ; SAVE ADDRESS OF CONDITION 3 TITLE FOR FAO
00000000'EF 0000008B'EF44 D0 027B 338      MOVL  COND3_TAB[R4],MSG_B ; SAVE ADDR OF COND 3 CURR TEXT ELT FOR FAO
      00000000'EF 14 90 0287 339      MOVB  #COND3_C,MSG_CTXT ; SAVE CONDITION 3 CONTEXT FOR FAO
      028E 340      MOV VAL COND3_C,COND3_E[R4],MSG_DATA1 ; GIVE COND 3 DATA VALUE TO FAO
      FD6F' 30 028E 341      BSBW  WRITE_MSG2      ; FORMAT AND WRITE CONDITION 3 MSG
    14 14 91 0291 342      CMPB  #COND4_C,#NULL      ; IS CONDITION 4 NULL ?
      47 13 0294 343      BEQLU  FORM_CONDSX      ; YES -- SUBROUTINE IS FINISHED
      00000000'EF 0000008C'EF DE 0296 344      MOVAL  COND4_T,MSG_A      ; SAVE ADDRESS OF CONDITION 4 TITLE FOR FAO
00000000'EF 0000008C'EF45 D0 02A1 345      MOVL  COND4_TAB[R5],MSG_B ; SAVE ADDR OF COND 4 CURR TEXT ELT FOR FAO
      00000000'EF 14 90 02AD 346      MOVB  #COND4_C,MSG_CTXT ; SAVE CONDITION 4 CONTEXT FOR FAO
      02B4 347      MOV VAL COND4_C,COND4_E[R5],MSG_DATA1 ; GIVE COND 4 DATA VALUE TO FAO
      FD49' 30 02B4 348      BSBW  WRITE_MSG2      ; FORMAT AND WRITE CONDITION 4 MSG
    14 14 91 02B7 349      CMPB  #COND5_C,#NULL      ; IS CONDITION 5 NULL ?
      21 13 02BA 350      BEQLU  FORM_CONDSX      ; YES -- SUBROUTINE IS FINISHED
      00000000'EF 0000008D'EF DE 02BC 351      MOVAL  COND5_T,MSG_A      ; SAVE ADDRESS OF CONDITION 5 TITLE FOR FAO
00000000'EF 0000008D'EF46 D0 02C7 352      MOVL  COND5_TAB[R6],MSG_B ; SAVE ADDR OF COND 5 CURR TEXT ELT FOR FAO
      00000000'EF 14 90 02D3 353      MOVB  #COND5_C,MSG_CTXT ; SAVE CONDITION 5 CONTEXT FOR FAO
      02DA 354      MOV VAL COND5_C,COND5_E[R6],MSG_DATA1 ; GIVE COND 5 DATA VALUE TO FAO
      FD23' 30 02DA 355      BSBW  WRITE_MSG2      ; FORMAT AND WRITE CONDITION 5 MSG
      02DD 356 FORM_CONDSX:
    05 02DD 357      RSB      ; RETURN TO CALLER

```

```
02DE 359 .SBTTL VERIFY
02DE 360 :++
02DE 361 : FUNCTIONAL DESCRIPTION:
02DE 362 :
02DE 363 : VERIFY IS CALLED ONCE FOR EACH COMBINATION OF CONDITION
02DE 364 : TABLE VALUES (AS DETERMINED BY THE INDEX REGISTERS R2,3,4,5,6 FOR
02DE 365 : COND TABLES 1,2,3,4,5, RESPECTIVELY). VERIFY ESTABLISHES THE CONDITIONS
02DE 366 : SPECIFIED BY THE COND TABLES AND ISSUES THE SUBJECT SYSTEM SERVICE
02DE 367 : ($REDEF). THEN, THE SUCCESSFUL OPERATION OF THE SERVICE IS VERIFIED
02DE 368 : BY EXAMINING THE STATUS CODE RETURNED, THE VALUES FOR RETURN ARGUMENTS
02DE 369 : AND THE FUNCTIONALITY PERFORMED. THE EXAMINATIONS TAKE THE FORM OF
02DE 370 : COMPARISONS AGAINST EXPECTED VALUES. ANY FAILING COMPARISON CAUSES AN
02DE 371 : ERR_EXIT MACRO TO BE EXECUTED (EITHER DIRECTLY, OR INDIRECTLY,
02DE 372 : THROUGH THE SS_CHECK MACRO); ERR_EXIT SETS EFLAG TO NON-ZERO,
02DE 373 : PRINTS ERROR MESSAGES AND CAUSES AN IMMEDIATE RSB TO CALLER.
02DE 374 : WHEN ERR_EXIT IS EXECUTED, FURTHER CALLS TO VERIFY ARE SUPPRESSED,
02DE 375 : AND, AFTER EXECUTING CLEANUP SUBROUTINES, THE IMAGE EXITS.
02DE 376 :
02DE 377 : CALLING SEQUENCE:
02DE 378 :
02DE 379 : BSBW VERIFY
02DE 380 :
02DE 381 : INPUT PARAMETERS:
02DE 382 :
02DE 383 : NONE
02DE 384 :
02DE 385 : IMPLICIT INPUTS:
02DE 386 :
02DE 387 : R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
02DE 388 : FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
02DE 389 : FOR X = 1,2,3,4,5 :
02DE 390 : COND_X_E - ADDRESS OF TABLE OF DATA VALUES FOR CONDX
02DE 391 : TABLE. IF THE CONTEXT OF TABLE X IS A SYSTEM SERVICE
02DE 392 : ARGUMENT, THE ARGUMENT NAME MAY BE USED AS A SYNONYM
02DE 393 : FOR CONDX_E.
02DE 394 :
02DE 395 : OUTPUT PARAMETERS:
02DE 396 :
02DE 397 : NONE
02DE 398 :
02DE 399 : IMPLICIT OUTPUTS:
02DE 400 :
02DE 401 : VERIFY HAS NO OUTPUT. SINCE ITS PURPOSE IS TO TEST FOR ERRORS,
02DE 402 : IT MERELY RETURNS TO CALLER NORMALLY AFTER THE TESTS, PROVIDING
02DE 403 : ALL WERE SUCCESSFUL; IF AN ERROR IS DISCOVERED, RETURN IS VIA
02DE 404 : AN ERR_EXIT OR SS_CHECK MACRO, BOTH OF WHICH DOCUMENT DETECTED
02DE 405 : ERRORS.
02DE 406 :
02DE 407 : COMPLETION CODES:
02DE 408 :
02DE 409 : EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
02DE 410 :
02DE 411 : SIDE EFFECTS:
02DE 412 :
02DE 413 : SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
02DE 414 : (VIA RSB) IF ERROR ENCOUNTERED.
02DE 415 :
```

```

02DE 416 :--
02DE 417
02DE 418
02DE 419
02DE 420 VERIFY::
00000000'EF 95 02DE 421 TSTB CFLAG ; SHOULD CONDITIONS BE PRINTED ?
03 13 02E4 422 BEQL 5$ ; NO -- CONTINUE
FF0B 30 02E6 423 BSBW FORM_CONDS ; YES -- FMT & PRINT ALL CONDS FOR THIS T.C.
58 00000086'EF42 9A 02E9 424 5$:
59 58 05 78 02E9 425 MOVZBL COND1_E[R2],R8 ; GET CLUSTER NO. INTO REGISTER
5A 59 1F C1 02F1 426 ASHL #5,R8,R9 ; MULT BY 32 TO GET 1ST EVENT FLAG NO.
57 20 90 02F5 427 ADDL3 #31,R9,R10 ; ESTABLISH HIGH EFN FOR THIS CLUSTER
5B 00000051'EF48 D0 02F9 428 MOVB #32,R7 ; SET UP LENGTH AND ...
58 58 D5 02FC 429 MOVL SET_CLR_MASK[R8],R11 ; ... MASK FOR LATER COMPARE
0B 12 0304 430 TSTL R8 ; IS THIS CLUSTER 0 ?
57 18 90 0306 431 BNEQU 10$ ; NO -- CONTINUE
5B 5B 18 00 EF 0308 432 MOVB #24,R7 ; YES -- COMPARE ONLY 24 EVENT FLAGS
5A 17 9A 030B 433 EXTZV #0,#24,R11,R11 ; ZERO HIGH-BYTE OF MASK REGISTER
0310 434 MOVZBL #23,R10 ; DO NOT READEF FOR EV FLAGS 24 - 31
0313 435 10$:
0313 436 :
0313 437 : ***** SYSTEM SERVICE CALL WHICH IS THE SUBJECT OF THIS TEST CASE *****
0313 438 :
0313 439 $REDEF _S EFN=R9, STATE=Curr_STATE ; GET STATE OF CURRENT EF
0D 00000051'EF 59 E0 0322 440 BBS _R9,SET CLR MASK,20$ ; BRANCH IF CURR EF SHOULD BE SET
00000000'EF 00000000'8F D0 032A 441 MOVL #$$$_WASCLR,EXPV ; INDICATE EXPECTED STATUS CODE
0B 11 0335 442 BRB 30$ ; ... AND GO TEST FOR IT
00000000'EF 00000000'8F D0 0337 443 20$:
0337 444 MOVL #$$$_WASSET,EXPV ; INDICATE EXPECTED STATUS CODE
00000000'EF 50 D1 0342 445 30$:
56 13 0342 446 CMPL R0,EXPV ; CODE RECEIVED = CODE EXPECTED ?
00000000'EF 50 D0 0349 447 BEQLU 40$ ; YES -- CONTINUE
034B 448 MOVL R0,RECV ; NO -- LOAD RECV'D VALUE, THEN EXIT
0352 449 ERR_EXIT LONG,<INCORRECT STATUS CODE RETURNED FROM READEF>
5B 00000008'EF 57 00 ED 03A1 450 40$:
5C 13 03A1 451 CMPZV #0,R7,Curr_STATE,R11 ; IS CURR CLUSTER = THAT EXPECTED ?
00000000'EF 5B D0 03AA 452 BEQLU 50$ ; YES -- GO READ NEXT EF IN THIS CLUSTER
00000000'EF 00000008'EF D0 03AC 453 MOVL R11,EXPV ; LOAD UP EXPECTED AND ...
03B3 454 MOVL CURR_STATE,RECV ; ... RECEIVED VALUES, THEN EXIT
03BE 455 ERR_EXIT LONG,<UNEXPECTED CLUSTER STATE AFTER READEF>
FF05 59 01 5A 3D 0408 456 50$:
05 040E 457 ACBW R10,#1,R9,10$ ; LOOP TO READEF UNTIL CLUSTER EXHAUSTED
RSB ; RETURN TO CALLER
    
```



```

040F 460 .SBTTL VFY_CLEANUP
040F 461 :++
040F 462 : FUNCTIONAL DESCRIPTION:
040F 463 :
040F 464 : VFY_CLEANUP EXECUTES SYSTEM SERVICES TO UNDO THE
040F 465 : EFFECT OF THOSE ISSUED IN THE VERIFY SUBROUTINE. VFY_CLEANUP MUST
040F 466 : ASSUME THAT VERIFY MAY NOT HAVE EXECUTED IN ITS ENTIRETY (IF AN
040F 467 : ERROR IS FOUND). ALSO, VFY_CLEANUP MAY ISSUE SS_CHECK OR ERR_EXIT
040F 468 : ONLY AFTER PERFORMING ALL OF ITS CLEANUP OPERATIONS; THIS IS REQUIRED
040F 469 : IN THE EVENT THAT VFY_CLEANUP IS CALLED DURING ERROR PROCESSING,
040F 470 : WHEN PERFORMING THE REQUIRED CLEANUP IS MORE IMPORTANT THAN
040F 471 : POSSIBLY DISCOVERING A SECOND ERROR.
040F 472 :
040F 473 : CALLING SEQUENCE:
040F 474 :
040F 475 : BSBW VFY_CLEANUP
040F 476 :
040F 477 : INPUT PARAMETERS:
040F 478 :
040F 479 : NONE
040F 480 :
040F 481 : IMPLICIT INPUTS:
040F 482 :
040F 483 : R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
040F 484 : FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
040F 485 : FOR X = 1,2,3,4,5 :
040F 486 : CONDX_E - ADDRESS OF TABLE OF DATA VALUES FOR CONDX
040F 487 : TABLE. IF THE CONTEXT OF TABLE X IS A SYSTEM SERVICE
040F 488 : ARGUMENT, THE ARGUMENT NAME MAY BE USED AS A SYNONYM
040F 489 : FOR CONDX_E.
040F 490 :
040F 491 : OUTPUT PARAMETERS:
040F 492 :
040F 493 : NONE
040F 494 :
040F 495 : IMPLICIT OUTPUTS:
040F 496 :
040F 497 : NONE
040F 498 :
040F 499 : COMPLETION CODES:
040F 500 :
040F 501 : EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
040F 502 :
040F 503 : SIDE EFFECTS:
040F 504 :
040F 505 : SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
040F 506 : (VIA RSB) IF ERROR ENCOUNTERED.
040F 507 :
040F 508 :--
040F 509 :
040F 510 :
040F 511 :
05 040F 512 VFY_CLEANUP::
040F 513 RSB ; RETURN TO CALLER
0410 514 .END

```

SATSS55
Symbol table

```

SSSS = 000003C8 R 04
SSSCHARS = 00000025
SSSCHARS1 = 00000019
SSSCHARS2 = 00000019
SSSCHARS3 = 00000012
SSSCHARS4 = 00000012
SSSCHARS5 = 00000000
SSSCOND A = 00000003
SSSTRINGS = 00000001
SSSTRINGS2 = 00000005
SST1 = 00000000
SST2 = 00000004
BYTE = 00000001 G
CFLAG ***** X 04
CHMRTN ***** X 04
CHM CONT ***** X 04
CLUS2_NAME 00000061 R 02
CLUS3_NAME 00000075 R 02
COMP SC ***** X 04
CONDT = 000001EA RG 04
COND1_C = 00000000
COND1_CLEANUP 000001EB RG 04
COND1_E 00000086 R 03
COND1_H 0000001B RG 03
COND1_T 0000000C R 03
COND1_TAB 0000001C R 03
COND2 000001EC RG 04
COND2_C = 00000014
COND2_CLEANUP 000001ED RG 04
COND2_H 0000008A RG 03
COND2_T 0000008A R 03
COND2_TAB 0000008A R 03
COND3 000001EE RG 04
COND3_C = 00000014
COND3_CLEANUP 000001EF RG 04
COND3_H 0000008B RG 03
COND3_T 0000008B R 03
COND3_TAB 0000008B R 03
COND4 000001F0 RG 04
COND4_C = 00000014
COND4_CLEANUP 000001F1 RG 04
COND4_H 0000008C RG 03
COND4_T 0000008C R 03
COND4_TAB 0000008C R 03
COND5 000001F2 RG 04
COND5_C = 00000014
COND5_CLEANUP 000001F3 RG 04
COND5_H 0000008D RG 03
COND5_T 0000008D R 03
COND5_TAB 0000008D R 03
CTLSGC PHD ***** X 04
CURR_STATE 00000008 R 03
DESC = 00000010 G
EFLAG ***** X 04
EXPV ***** X 04
FAO_DESC ***** X 04
FAO_LEN ***** X 04

```

```

FORM_CONDS 000001F4 RG 04
FORM_CONDSX 000002DD R 04
LONG = 00000004 G
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_CTX? ***** X 04
NOTARG = 00000000 G
NULL = 00000014 G
OUTPUT_MSG ***** X 04
PCV ***** X 04
PHDSQ PRIVMSK = 00000000
PRIVMASK 00000000 R 03
PRIV_ARGS = 00000002
PROCESS_ERR ***** X 04
QUAD = 00000008 G
RCV ***** X 04
REST_REGS ***** X 04
SAVE_REGS ***** X 04
SET_CLR_MASK 00000051 R 02
SS$NORMAL ***** X 04
SS$WASCLR ***** X 04
SS$WASSET ***** X 04
SUCCESS ***** X 04
SYSSASCEFC ***** GX 04
SYSSCLREF ***** GX 04
SYSSCMKRN ***** GX 04
SYSSDACEFC ***** GX 04
SYSSFAO ***** X 04
SYSSREADF ***** GX 04
SYSSSETEF ***** GX 04
SYSSSETPRN ***** GX 04
SYSSSETPRV ***** 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 000001CC RG 04
TM_SETUP 00000000 RG 04
VERIFY 000002DE RG 04
VFY_CLEANUP 0000040F RG 04
WORD = 00000002 G
WRITE_MSG2 ***** X 04

```

! 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	00000089 (137.)	02 (2.)	NOPIC USR CON REL LCL NOSHR NOEXE RD NOWRT NOVEC LONG
RWDATA	0000008E (142.)	03 (3.)	NOPIC USR CON REL LCL NOSHR NOEXE RD WRT NOVEC LONG
SATSS55	00000410 (1040.)	04 (4.)	NOPIC USR CON REL LCL NOSHR EXE RD WRT NOVEC BYTE

! Performance indicators !

Phase	Page faults	CPU Time	Elapsed Time
Initialization	37	00:00:00.08	00:00:00.29
Command processing	135	00:00:00.64	00:00:02.21
Pass 1	230	00:00:05.65	00:00:11.79
Symbol table sort	0	00:00:00.44	00:00:00.56
Pass 2	111	00:00:01.62	00:00:02.96
Symbol table output	14	00:00:00.08	00:00:00.09
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	531	00:00:08.54	00:00:17.93

The working set limit was 1500 pages.
29450 bytes (58 pages) of virtual memory were used to buffer the intermediate code.
There were 20 pages of symbol table space allocated to hold 298 non-local and 31 local symbols.
514 source lines were read in Pass 1, producing 23 object records in Pass 2.
36 pages of virtual memory were used to define 27 macros.

! Macro library statistics !

Macro library name	Macros defined
-\$255\$DUA28:[SHRLIB]UETP.MLB;1	8
-\$255\$DUA28:[SYS.OBJ]LIB.MLB;1	1
-\$255\$DUA28:[SYSLIB]STARLET.MLB;2	15
TOTALS (all libraries)	24

625 GETS were required to define 24 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS\$:SATSS55/OBJ=OBJ\$:SATSS55 MSRC\$:SATSS55/UPDATE=(ENH\$:SATSS55)+EXECMLS/LIB+SHRLIB\$:UETP/LIB

