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(1)	107	TM SETUP, TM CLEANUP
(1)	170	CONDITION SUBROUTINES - SETUP AND CLEANUP
(1)	240	FORM CONDS
(1)	333	VERIFY
(1)	455	VFY_CLEANUP


```
0000 1 .TITLE SATSSS53 SATS SYSTEM SERVICE TESTS $SETEF (SUCC S.C.)
0000 2 .IDENT 'V04-000'
0000 3
0000 4
0000 5 *****
0000 6
0000 7 *
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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 SATSSS53 TO TEST SUCCESSFUL
0000 36 : OPERATION OF THE $SETEF 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: SEP, 1977
0000 47
0000 48 : MODIFIED BY:
0000 49
0000 50 : : VERSION
0000 51 : 01
0000 52 : --
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SATSSS53
V04-000

SATS SYSTEM SERVICE TESTS \$SETEF^{D 2} (SUCC 16-SEP-1984 00:57:38 VAX/VMS Macro V04-00
DECLARATIONS 5-SEP-1984 04:32:17 [UETPSY.SRC]SATSSS53.MAR;1

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```
0000 54 .SBTTL DECLARATIONS
0000 55 :
0000 56 : INCLUDE FILES:
0000 57 :
0000 58 $PRVDEF ; PRIVILEGE BIT DEFINITIONS
0000 59 $PHDDEF ; PROCESS HEADER OFFSETS
0000 60 :
0000 61 : MACROS:
0000 62 :
0000 63 :
0000 64 : EQUATED SYMBOLS:
0000 65 :
0000 66 :
0000 67 : OWN STORAGE:
0000 68 :
```

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```

00000000 70      .PSECT  RODATA,RD,NOWRT,NOEXE, LONG
0000      71 TEST_MOD_NAME:: STRING  C,<SATSSS53>      ; TEST MODULE NAME
0009      72 TEST_MOD_NAME_D: STRING  I,<SATSSS53>      ; TEST MODULE NAME DESCRIPTOR
0019      73 MSG1_INP_CTL:  STRING  I,< SSSEF!4ZW: CONDITIONS:>
0039      74      ; FAO CTL STRING FOR MSG1 IN SUCCOMMON.MAR
0039      75 MSG3_ERR_CTL::  STRING  I,< *SSSEF!4ZW: !AS>
0051      76      ; FAO CTL STRING FOR MSG3 IN SUCCOMMON.MAR

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00000000	78	.PSECT	RWDATA, RD, WRT, NOEXE, LONG	
00000008 0000	79	PRIVMASK:	.BLKQ 1	; ADDR OF PRIVILEGE MASK (IN PHD)
0000000C 0008	80	CLUSTER:	.BLKL 1	; STATE ARGUMENT ON READEP SERVICE

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000C 82
000C 83 :
000C 84 :
000C 85 :
000C 86
000C 87
000C 88
000C 89
000C 90
000C 91
00 0086 92
01 0087 93
02 0088 94
03 0089 95
    008A 96 ;
    008A 97
    008B 98
    008B 99
    008C 100
    008C 101
    008D 102
    008D 103
    008E 104
00000000 105

.SBTTL CONDITION TABLES
***** CONDITION TABLES FOR SETEF 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 SATSSS53,RD,WRT,EXE

```



```
0000 107 .SBTTL TM_SETUP, TM_CLEANUP
0000 108 :++
0000 109 : FUNCTIONAL DESCRIPTION:
0000 110 :
0000 111 : TM SETUP AND TM CLEANUP ARE CALLED TO PERFORM
0000 112 : REQUIRED HOUSEKEEPING AT THE BEGINNING AND END, RESPECTIVELY, OF
0000 113 : TEST MODULE EXECUTION.
0000 114 :
0000 115 : CALLING SEQUENCE:
0000 116 :
0000 117 : BSBW TM_SETUP BSBW TM_CLEANUP
0000 118 :
0000 119 : INPUT PARAMETERS:
0000 120 :
0000 121 : NONE
0000 122 :
0000 123 : IMPLICIT INPUTS:
0000 124 :
0000 125 : NONE
0000 126 :
0000 127 : OUTPUT PARAMETERS:
0000 128 :
0000 129 : NONE
0000 130 :
0000 131 : IMPLICIT OUTPUTS:
0000 132 :
0000 133 : TM_SETUP: COND TABLE INDEX REGISTERS (R2,3,4,5,6) CLEARED;
0000 134 : ALL PRIVILEGES ACQUIRED.
0000 135 :
0000 136 : COMPLETION CODES:
0000 137 :
0000 138 : EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
0000 139 :
0000 140 : SIDE EFFECTS:
0000 141 :
0000 142 : SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
0000 143 : (VIA RSB) IF ERROR ENCOUNTERED.
0000 144 :
0000 145 :--
0000 146 :
0000 147 :
0000 148 :
0000 149 TM_SETUP::
52 D4 0000 150 CLRL R2 ; INITIALIZE
53 D4 0002 151 CLRL R3 ; .. CONDITION
54 D4 0004 152 CLRL R4 ; .... TABLE
55 D4 0006 153 CLRL R5 ; ..... INDEX
56 D4 0008 154 CLRL R6 ; ..... REGISTERS
FFF3' 30 000A 155 BSBW MOD MSG PRINT ; PRINT TEST MODULE BEGIN MSG
00000000'EF 00000000'EF DE 000D 156 MOVAL TEST MOD_SUCC,TMD_ADDR ; ASSUME END MSG WILL SHOW SUCCESS
03 00 00000000'8F F0 0018 157 INSV #SUCCESS,#0,#3,MOD_MSG_CODE ; ADJUST STATUS CODE FOR SUCCESS
00000000'EF 0020
59 00000000'9F D0 0048 158 MODE TO,5$,KRNL ; KERNEL MODE TO ACCESS PHD
00000000'EF 69 DE 004F 159 MOVL @#CTL$GL_PHD,R9 ; GET PROCESS HEADER ADDRESS
0056 160 MOVAL PHD$Q_PRIVMSK(R9),PRIVMASK ; GET PRIV MASK ADDRESS
0057 161 MODE FROM,5$ ; BACK TO USER MODE
162 PRIV ADD,ALL ; GET ALL PRIVILEGES
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	0077	163	\$SETPRN S TEST MOD_NAME_D	; SET PROCESS NAME
	0084	164	SS_CHECK NORMAL	; CHECK STATUS CODE RETURNED FROM SETPRN
05	00B2	165	RSB	; RETURN TO MAIN ROUTINE
	00B3	166	TM_CLEANUP::	
FF4A'	30	00B3	BSBW MOD_MSG_PRINT	; PRINT TEST MODULE END MSG
05	00B6	168	RSB	; RETURN TO MAIN ROUTINE


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00B7 170 .SBTTL CONDITION SUBROUTINES - SETUP AND CLEANUP
00B7 171 :++
00B7 172 : FUNCTIONAL DESCRIPTION:
00B7 173 :
00B7 174 : COND X AND COND X CLEANUP ARE SUBROUTINES WHICH ARE EXECUTED
00B7 175 : BEFORE AND AFTER THE VERIFY SUBROUTINE, RESPECTIVELY, WHENEVER A NEW
00B7 176 : CONDITION X VALUE IS SELECTED (SEE FUNCTIONAL DESCRIPTION OF SUCCOMMON
00B7 177 : ROUTINE IN SUCCOMMON.MAR). ANY SETUP FUNCTION PARTICULAR TO THE
00B7 178 : CONDITION X TABLE IS INCLUDED IN THE COND X SUBROUTINE AND CLEANED
00B7 179 : UP, IF NECESSARY, IN THE COND X CLEANUP SUBROUTINE. THIS INCLUDES,
00B7 180 : ESPECIALLY, CODE TO DETECT CONFLICTS AMONG CURRENT ENTRIES IN TWO
00B7 181 : OR MORE CONDITION TABLES. IF A CONFLICT IS DETECTED, A NON-ZERO
00B7 182 : VALUE IS STORED INTO CONFLICT, WHICH CAUSES THE CALLING ROUTINE
00B7 183 : (SUCCOMMON) TO SKIP THE CURRENT ENTRY IN THE CONDITION X TABLE.
00B7 184 :
00B7 185 : CALLING SEQUENCE:
00B7 186 :
00B7 187 : BSBW COND X BSBW COND X_CLEANUP
00B7 188 : WHERE X = 1,2,3,4,5
00B7 189 :
00B7 190 : INPUT PARAMETERS:
00B7 191 :
00B7 192 : CONFLICT = 0
00B7 193 :
00B7 194 : IMPLICIT INPUTS:
00B7 195 :
00B7 196 : R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
00B7 197 : FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
00B7 198 :
00B7 199 : OUTPUT PARAMETERS:
00B7 200 :
00B7 201 : CONFLICT SET TO NON-ZERO IF COND TABLE CONFLICT DETECTED.
00B7 202 :
00B7 203 : IMPLICIT OUTPUTS:
00B7 204 :
00B7 205 : R2,3,4,5,6 PRESERVED
00B7 206 :
00B7 207 : COMPLETION CODES:
00B7 208 :
00B7 209 : NONE
00B7 210 :
00B7 211 : SIDE EFFECTS:
00B7 212 :
00B7 213 : NONE
00B7 214 :
00B7 215 : --
00B7 216 :
00B7 217 :
00B7 218 :
05 00B7 219 COND1:: RSB ; RETURN TO MAIN ROUTINE
00B7 220
05 00B8 221 COND1_CLEANUP:: RSB ; RETURN TO MAIN ROUTINE
00B8 222
05 00B9 223 COND2:: RSB ; RETURN TO MAIN ROUTINE
00B9 224
05 00BA 225 COND2_CLEANUP:: RSB ; RETURN TO MAIN ROUTINE
00BA 226
```


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	00BB	227	COND3::		
05	00BB	228	RSB		; RETURN TO MAIN ROUTINE
	00BC	229	COND3_CLEANUP::		
05	00BC	230	RSB		; RETURN TO MAIN ROUTINE
	00BD	231	COND4::		
05	00BD	232	RSB		; RETURN TO MAIN ROUTINE
	00BE	233	COND4_CLEANUP::		
05	00BE	234	RSB		; RETURN TO MAIN ROUTINE
	00BF	235	COND5::		
05	00BF	236	RSB		; RETURN TO MAIN ROUTINE
	00C0	237	COND5_CLEANUP::		
05	00C0	238	RSB		; RETURN TO MAIN ROUTINE

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00C1 240 .SBTTL FORM_CONDS
00C1 241 :++
00C1 242 : FUNCTIONAL DESCRIPTION:
00C1 243 :
00C1 244 :         FORM_CONDS FORMATS AND PRINTS INFORMATION ABOUT
00C1 245 :         THE CURRENT ELEMENT IN EACH OF THE CONDITION TABLES.
00C1 246 :
00C1 247 : CALLING SEQUENCE:
00C1 248 :
00C1 249 :         BSBW FORM_CONDS
00C1 250 :
00C1 251 : INPUT PARAMETERS:
00C1 252 :
00C1 253 :         NONE
00C1 254 :
00C1 255 : IMPLICIT INPUTS:
00C1 256 :
00C1 257 :         R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
00C1 258 :         FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
00C1 259 :         FOR X = 1,2,3,4,5 :
00C1 260 :             CONDX_T - TITLE TEXT FOR CONDX TABLE
00C1 261 :             CONDX_TAB - ELEMENT TEXT FOR CONDX TABLE
00C1 262 :             CONDX_C - CONTEXT OF THE CONDX TABLE
00C1 263 :             CONDX_E - DATA ELEMENTS OF THE CONDX TABLE
00C1 264 :
00C1 265 : OUTPUT PARAMETERS:
00C1 266 :
00C1 267 :         NONE
00C1 268 :
00C1 269 : IMPLICIT OUTPUTS:
00C1 270 :
00C1 271 :         NONE
00C1 272 :
00C1 273 : COMPLETION CODES:
00C1 274 :
00C1 275 :         NONE
00C1 276 :
00C1 277 : SIDE EFFECTS:
00C1 278 :
00C1 279 :         NONE
00C1 280 :
00C1 281 : --
00C1 282 :
00C1 283 :
00C1 284 :
00C1 285 FORM_CONDS::
00C1 286 $FAO_S MSG1_INP_CTL,FAO_LEN,FAO_DESC,TESTNUM
00E0 287 : FORMAT CONDITIONS HEADER MSG
14 FF1D' 30 00E0 288 BSBW OUTPUT_MSG : ... AND PRINT IT
00 91 00E3 289 CMPB #COND1_C,#NULL : IS CONDITION 1 NULL ?
03 12 00E6 290 BNEQU 10$ : NO -- CONTINUE
00BF 31 00E8 291 BRW FORM_CONDSX : YES -- SUBROUTINE IS FINISHED
00EB 292 10$:
00EB 293 MOVAL COND1_T,MSG_A : SAVE ADDRESS OF CONDITION 1 TITLE FOR FAO
00F6 294 MOVL COND1_TAB[R2],MSG_B : SAVE ADDR OF COND 1 CURR TEXT ELT FOR FAO
0102 295 MOVB #COND1_C,MSG_CTXT : SAVE CONDITION 1 CONTEXT FOR FAO
0109 296 MOV_VAL COND1_C,COND1_E[R2],MSG_DATA1 : GIVE COND 1 DATA VALUE TO FAO
```

```
00000000'EF 0000000C'EF DE 00EB 293
00000000'EF 0000001C'EF42 DO 00F6 294
00000000'EF 00 90 0102 295
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      FEF4' 30 0109 297      BSBW WRITE_MSG2      ; FORMAT AND WRITE CONDITION 1 MSG
      14 14 91 010C 298      CMPB #COND2_C,#NULL    ; IS CONDITION 2 NULL ?
      03 12 010F 299      BNEQU 20$                ; NO -- CONTINUE
      0096 31 0111 300      BRW FORM_CONDSX          ; YES -- SUBROUTINE IS FINISHED
      0114 301 20$:
00000000'EF 0000008A'EF DE 0114 302      MOVAL COND2_T,MSG_A      ; SAVE ADDRESS OF CONDITION 2 TITLE FOR FAO
00000000'EF 0000008A'EF43 DO 011F 303      MOVL COND2_TAB[R3],MSG_B    ; SAVE ADDR OF COND 2 CURR TEXT ELT FOR FAO
      00000000'EF 14 90 012B 304      MOVB #COND2_C,MSG_CTXT      ; SAVE CONDITION 2 CONTEXT FOR FAO
      FECE' 30 0132 305      MOV VAL COND2_C,COND2_E[R3],MSG_DATA1 ; GIVE COND 2 DATA VALUE TO FAO
      14 14 91 0132 306      BSBW WRITE_MSG2      ; FORMAT AND WRITE CONDITION 2 MSG
      03 12 0135 307      CMPB #COND3_C,#NULL    ; IS CONDITION 3 NULL ?
      006D 31 0138 308      BNEQU 30$                ; NO -- CONTINUE
      013A 309      BRW FORM_CONDSX          ; YES -- SUBROUTINE IS FINISHED
      013D 310 30$:
00000000'EF 0000008B'EF DE 013D 311      MOVAL COND3_T,MSG_A      ; SAVE ADDRESS OF CONDITION 3 TITLE FOR FAO
00000000'EF 0000008B'EF44 DO 0148 312      MOVL COND3_TAB[R4],MSG_B    ; SAVE ADDR OF COND 3 CURR TEXT ELT FOR FAO
      00000000'EF 14 90 0154 313      MOVB #COND3_C,MSG_CTXT      ; SAVE CONDITION 3 CONTEXT FOR FAO
      FEA2' 30 015B 314      MOV VAL COND3_C,COND3_E[R4],MSG_DATA1 ; GIVE COND 3 DATA VALUE TO FAO
      14 14 91 015B 315      BSBW WRITE_MSG2      ; FORMAT AND WRITE CONDITION 3 MSG
      47 13 015E 316      CMPB #COND4_C,#NULL    ; IS CONDITION 4 NULL ?
      00000000'EF 0000008C'EF DE 0163 317      BEQLU FORM_CONDSX      ; YES -- SUBROUTINE IS FINISHED
00000000'EF 0000008C'EF45 DO 016E 318      MOVAL COND4_T,MSG_A      ; SAVE ADDRESS OF CONDITION 4 TITLE FOR FAO
      00000000'EF 14 90 017A 319      MOVL COND4_TAB[R5],MSG_B    ; SAVE ADDR OF COND 4 CURR TEXT ELT FOR FAO
      0181 320      MOVB #COND4_C,MSG_CTXT      ; SAVE CONDITION 4 CONTEXT FOR FAO
      FE7C' 30 0181 321      MOV VAL COND4_C,COND4_E[R5],MSG_DATA1 ; GIVE COND 4 DATA VALUE TO FAO
      14 14 91 0181 322      BSBW WRITE_MSG2      ; FORMAT AND WRITE CONDITION 4 MSG
      21 13 0184 323      CMPB #COND5_C,#NULL    ; IS CONDITION 5 NULL ?
      00000000'EF 0000008D'EF DE 0187 324      BEQLU FORM_CONDSX      ; YES -- SUBROUTINE IS FINISHED
00000000'EF 0000008D'EF46 DO 0189 325      MOVAL COND5_T,MSG_A      ; SAVE ADDRESS OF CONDITION 5 TITLE FOR FAO
      00000000'EF 14 90 0194 326      MOVL COND5_TAB[R6],MSG_B    ; SAVE ADDR OF COND 5 CURR TEXT ELT FOR FAO
      01A0 327      MOVB #COND5_C,MSG_CTXT      ; SAVE CONDITION 5 CONTEXT FOR FAO
      FE56' 30 01A7 328      MOV VAL COND5_C,COND5_E[R6],MSG_DATA1 ; GIVE COND 5 DATA VALUE TO FAO
      01A7 329      BSBW WRITE_MSG2      ; FORMAT AND WRITE CONDITION 5 MSG
      01AA 330 FORM_CONDSX:
      05 01AA 331      RSB      ; RETURN TO CALLER
```



```
01AB 333 .SBTTL VERIFY
01AB 334 :++
01AB 335 : FUNCTIONAL DESCRIPTION:
01AB 336 :
01AB 337 :     VERIFY IS CALLED ONCE FOR EACH COMBINATION OF CONDITION
01AB 338 :     TABLE VALUES (AS DETERMINED BY THE INDEX REGISTERS R2,3,4,5,6 FOR
01AB 339 :     COND TABLES 1,2,3,4,5, RESPECTIVELY). VERIFY ESTABLISHES THE CONDITIONS
01AB 340 :     SPECIFIED BY THE COND TABLES AND ISSUES THE SUBJECT SYSTEM SERVICE
01AB 341 :     ($SETEF). THEN, THE SUCCESSFUL OPERATION OF THE SERVICE IS VERIFIED
01AB 342 :     BY EXAMINING THE STATUS CODE RETURNED, THE VALUES FOR RETURN ARGUMENTS
01AB 343 :     AND THE FUNCTIONALITY PERFORMED. THE EXAMINATIONS TAKE THE FORM OF
01AB 344 :     COMPARISONS AGAINST EXPECTED VALUES. ANY FAILING COMPARISON CAUSES AN
01AB 345 :     ERR_EXIT MACRO TO BE EXECUTED (EITHER DIRECTLY, OR INDIRECTLY,
01AB 346 :     THROUGH THE SS_CHECK MACRO); ERR_EXIT SETS EFLAG TO NON-ZERO,
01AB 347 :     PRINTS ERROR MESSAGES AND CAUSES AN IMMEDIATE RSB TO CALLER.
01AB 348 :     WHEN ERR_EXIT IS EXECUTED, FURTHER CALLS TO VERIFY ARE SUPPRESSED,
01AB 349 :     AND, AFTER EXECUTING CLEANUP SUBROUTINES, THE IMAGE EXITS.
01AB 350 :
01AB 351 : CALLING SEQUENCE:
01AB 352 :
01AB 353 :     BSBW VERIFY
01AB 354 :
01AB 355 : INPUT PARAMETERS:
01AB 356 :
01AB 357 :     NONE
01AB 358 :
01AB 359 : IMPLICIT INPUTS:
01AB 360 :
01AB 361 :     R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
01AB 362 :     FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
01AB 363 :     FOR X = 1,2,3,4,5 :
01AB 364 :         CONDX_E - ADDRESS OF TABLE OF DATA VALUES FOR CONDX
01AB 365 :         TABLE. IF THE CONTEXT OF TABLE X IS A SYSTEM SERVICE
01AB 366 :         ARGUMENT, THE ARGUMENT NAME MAY BE USED AS A SYNONYM
01AB 367 :         FOR CONDX_E.
01AB 368 :
01AB 369 : OUTPUT PARAMETERS:
01AB 370 :
01AB 371 :     NONE
01AB 372 :
01AB 373 : IMPLICIT OUTPUTS:
01AB 374 :
01AB 375 :     VERIFY HAS NO OUTPUT. SINCE ITS PURPOSE IS TO TEST FOR ERRORS,
01AB 376 :     IT MERELY RETURNS TO CALLER NORMALLY AFTER THE TESTS, PROVIDING
01AB 377 :     ALL WERE SUCCESSFUL; IF AN ERROR IS DISCOVERED, RETURN IS VIA
01AB 378 :     AN ERR_EXIT OR SS_CHECK MACRO, BOTH OF WHICH DOCUMENT DETECTED
01AB 379 :     ERRORS.
01AB 380 :
01AB 381 : COMPLETION CODES:
01AB 382 :
01AB 383 :     EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
01AB 384 :
01AB 385 : SIDE EFFECTS:
01AB 386 :
01AB 387 :     SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
01AB 388 :     (VIA RSB) IF ERROR ENCOUNTERED.
01AB 389 :
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01AB 390 ;--
01AB 391
01AB 392
01AB 393
01AB 394 VERIFY::
01AB 395 TSTB CFLAG ; SHOULD CONDITIONS BE PRINTED ?
13 01B1 396 BEQL 5$ ; NO -- CONTINUE
30 01B3 397 BSBW FORM_CONDS ; YES -- FMT & PRINT ALL CONDS FOR THIS T.C.
58 00000000'EF 95 01B6 398 5$: MOVZBL COND1_E[R2],R8 ; GET CLUSTER NO. INTO REGISTER
58 58 05 78 01BE 400 ASHL #5,R8,R8 ; MULT BY 32 TO GET 1ST EVENT FLAG NO.
59 D4 01C2 401 CLRL R9 ; ESTAB OFFSET INTO CLUSTER FOR 1ST FLAG
5A D4 01C4 402 CLRL R10 ; INIT REG TO HOLD EVENT FLAG NO. (EFN)
02 00000086'EF 91 01C6 403 CMPB COND1_E[R2],#2 ; COMMON CLUSTER ?
4B 19 01CE 404 BLSS 15$ ; NO -- BYPASS THE ASSOCIATE SERVICE
01D0 405 $ASCEFC S EFN=R8, NAME=TEST_MOD_NAME_D ; YES -- ASSOCIATE
01E3 406 SS_CHECK NORMAL ; ... CLUSTER & CHECK STATUS CODE
02 00000086'EF 91 0211 407 CMPB COND1_E[R2],#2 ; CLUSTER 2 ?
4D 13 0219 408 BEQL 30$ ; YES -- CLUSTER 2 INITIALLY CLEAR
5A 58 D0 021B 409 15$: MOVL R8,R10 ; ESTAB CURRENT EFN IN REG 10
5B 5A 1F C1 021E 411 ADDL3 #31,R10,R11 ; ESTAB HIGH EFN FOR THIS CLUSTER
0222 412 20$: $CLREF_S EFN=R10 ; CLEAR CURRENT EVENT FLAG
00000000'8F 50 D1 022B 414 CMPL R0,#SS$_WASSET ; WASSET STATUS CODE ?
2E 13 0232 415 BEQLU 25$ ; YES -- GO LOOP FOR ANOTHER CLREF
0234 416 SS_CHECK WASCLR ; NO -- BETTER BE WASCLR, THEN
FFBA 5A 01 5B 3D 0262 417 25$: ACBW R11,#1,R10,20$ ; INCREMENT TO NEXT EFN & LOOP
5A 59 58 81 0268 419 30$: ADDB3 R8,R9,R10 ; COMPUTE EVENT FLAG NUMBER
026C 421 ;
026C 422 ; ***** SYSTEM SERVICE CALL WHICH IS THE SUBJECT OF THIS TEST CASE *****
026C 423 ;
026C 424 $SETEF_S EFN=R10 ; SET EVENT FLAG
00000000'8F 50 D1 0275 425 CMPL R0,#SS$_WASCLR ; CODE RECEIVED = CODE EXPECTED ?
60 13 027C 426 BEQLU 40$ ; YES -- CONTINUE
00000000'EF 00000000'8F D0 027E 427 MOVL #SS$_WASCLR,EXPV ; LOAD UP EXPECTED AND ...
00000000'EF 50 D0 0289 428 MOVL R0,RCV ; ... RECEIVED VALUES, THEN EXIT
0290 429 ERR_EXIT LONG,<INCORRECT STATUS CODE RETURNED FROM SETEF>
02DE 430 40$: $READEFS EFN=R8, STATE=CLUSTER ; READ CURRENT CLUSTER
02DE 431 SS_CHECK WASSET ; ... AND CHECK ITS STATUS
5B D4 031B 433 CLRL R11 ; CLEAR REGISTERS TO ALLOW ...
57 D4 031D 434 CLRL R7 ; ... BYTE OPERATIONS ON THEM
5B 59 01 81 031F 435 ADDB3 #1,R9,R11 ; COMPUTE NUMBER OF 1-BITS TO COMPARE
00000000'EF D4 0323 436 CLRL EXPV ; ESTAB EXPECTED VALUE FOR ...
5B 00 00000000'EF F0 0329 437 INSV ONES,#0,R11,EXPV ; ... POSSIBLE ERR_EXIT
00000000'EF 00000000'EF D0 0336 438 MOVL CLUSTER,RCV ; ESTAB RECEIVED VALUE AS WELL
00000008'EF 5B 00 EC 0341 439 CMPV #0,R11,CLUSTER,ONES ; ARE ALL EXPECTED EVENT FLAGS SET ?
00000000'EF 4B 13 034E 440 BEQL 50$ ; YES -- GO LOOK AT CLEAR FLAGS
0350 441 ERR_EXIT LONG,<EVENT FLAG(S) IN CLUSTER SHOULD BE SET>
039B 442 ; NO -- GENERATE ERROR & EXIT
039B 443 50$: CMPB #31,R9 ; IS CURRENT EFN HIGHEST IN CLUSTER ?
59 1F 91 039B 444
```


SATSSS53
V04-000

SATS SYSTEM SERVICE TESTS \$SETEF^{C 3} (SUCC 16-SEP-1984 00:57:38 VAX/VMS Macro V04-00 Page 14
VERIFY 5-SEP-1984 04:32:17 [UETPSY.SRC]SATSSS53.MAR;1 (1)

00	00000008	57	1F	5E	13	039E	445	BEQL	60\$	:	YES -- THEN CLUSTER IS ALL ONES
				59	83	03A0	446	SUBB3	R9,#31,R7	:	NO -- COMPUTE NO. OF 0-BITS TO COMPARE
				5B	EC	03A4	447	CMPV	R11,R7,CLUSTER,#0	:	ARE ALL EV FLAGS NOT YET SET STILL CLEAR ?
				4F	13	03AD	448	BEQL	60\$	:	YES -- GO LOOK AT NEXT EVENT FLAG
						03AF	449	ERR_EXIT	LONG,<EVENT FLAG(S) IN	:	CLUSTER SHOULD NOT BE SET>
						03FE	450			:	NO -- GENERATE ERROR & EXIT
						03FE	451				
	FE64	59	01	1F	9D	03FE	452	ACBB	#31,#1,R9,30\$	:	INCR TO NEXT EFN IN THIS CLUSTER & LOOP
					05	0404	453	RSB		:	RETURN TO CALLER


```
0405 455 .SBTTL VFY_CLEANUP
0405 456 :++
0405 457 :FUNCTIONAL DESCRIPTION:
0405 458 :
0405 459 :VFY_CLEANUP EXECUTES SYSTEM SERVICES TO UNDO THE
0405 460 :EFFECT OF THOSE ISSUED IN THE VERIFY SUBROUTINE. VFY_CLEANUP MUST
0405 461 :ASSUME THAT VERIFY MAY NOT HAVE EXECUTED IN ITS ENTIRETY (IF AN
0405 462 :ERROR IS FOUND). ALSO, VFY_CLEANUP MAY ISSUE SS_CHECK OR ERR_EXIT
0405 463 :ONLY AFTER PERFORMING ALL OF ITS CLEANUP OPERATIONS; THIS IS REQUIRED
0405 464 :IN THE EVENT THAT VFY_CLEANUP IS CALLED DURING ERROR PROCESSING,
0405 465 :WHEN PERFORMING THE REQUIRED CLEANUP IS MORE IMPORTANT THAN
0405 466 :POSSIBLY DISCOVERING A SECOND ERROR.
0405 467 :
0405 468 :CALLING SEQUENCE:
0405 469 :
0405 470 :BSBW VFY_CLEANUP
0405 471 :
0405 472 :INPUT PARAMETERS:
0405 473 :
0405 474 :NONE
0405 475 :
0405 476 :IMPLICIT INPUTS:
0405 477 :
0405 478 :R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
0405 479 :FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
0405 480 :FOR X = 1,2,3,4,5 :
0405 481 :COND_X_E - ADDRESS OF TABLE OF DATA VALUES FOR CONDX
0405 482 :TABLE. IF THE CONTEXT OF TABLE X IS A SYSTEM SERVICE
0405 483 :ARGUMENT, THE ARGUMENT NAME MAY BE USED AS A SYNONYM
0405 484 :FOR CONDX_E.
0405 485 :
0405 486 :OUTPUT PARAMETERS:
0405 487 :
0405 488 :NONE
0405 489 :
0405 490 :IMPLICIT OUTPUTS:
0405 491 :
0405 492 :NONE
0405 493 :
0405 494 :COMPLETION CODES:
0405 495 :
0405 496 :EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
0405 497 :
0405 498 :SIDE EFFECTS:
0405 499 :
0405 500 :SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
0405 501 : (VIA RSB) IF ERROR ENCOUNTERED.
0405 502 :
0405 503 :--
0405 504 :
0405 505 :
0405 506 :
05 0405 507 VFY_CLEANUP::
0405 508 :RSB
0406 509 :.END ; RETURN TO CALLER
```


=	00000004	G	
	*****	X	04
	*****	X	04
	00000019	R	02
	00000039	RG	02
	*****	X	04
	*****	X	04
	*****	X	04
=	00000000	G	
=	00000014	G	
	*****	X	04
	*****	X	04
	*****	X	04
=	00000000		
	00000000	R	03
=	00000002		
	*****	X	04
=	00000008	G	
	*****	X	04
	*****	X	04
	*****	X	04
	*****	X	04
	*****	X	04
	*****	X	04
	*****	X	04
	*****	GX	04
	*****	GX	04
	*****	GX	04
	*****	X	04
	*****	GX	04
	*****	GX	04
	*****	GX	04
	*****	GX	04
	*****	GX	04
	*****	X	04
	00000000	RG	02
	00000009	R	02
	*****	X	04
	*****	X	04
	000000B3	RG	04
	00000000	RG	04
	000001AB	RG	04
	00000405	RG	04
=	00000002	G	
	*****	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	00000051 (81.)	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
SATSS53	00000406 (1030.)	04 (4.)	NOPIC USR CON REL LCL NOSHR EXE RD WRT NOVEC BYTE

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

Phase	Page faults	CPU Time	Elapsed Time
Initialization	30	00:00:00.07	00:00:00.36
Command processing	107	00:00:00.62	00:00:02.03
Pass 1	228	00:00:05.56	00:00:10.82
Symbol table sort	0	00:00:00.43	00:00:00.42
Pass 2	110	00:00:01.49	00:00:02.41
Symbol table output	13	00:00:00.07	00:00:00.07
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	492	00:00:08.27	00:00:16.16

The working set limit was 1500 pages.
28587 bytes (56 pages) of virtual memory were used to buffer the intermediate code.
There were 20 pages of symbol table space allocated to hold 295 non-local and 28 local symbols.
509 source lines were read in Pass 1, producing 22 object records in Pass 2.
35 pages of virtual memory were used to define 26 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	14
TOTALS (all libraries)	23

620 GETS were required to define 23 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS\$:SATSS53/OBJ=OBJ\$:SATSS53 MSRC\$:SATSS53/UPDATE=(ENH\$:SATSS53)+EXECML\$/LIB+SHRLIB\$:UETP/LIB

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AH-BT13A-SE
VAX/VMS V4.0

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