


```

SSSSSSSS  AAAAAA  TTTTTTTTTT  SSSSSSSS  SSSSSSSS  SSSSSSSS  77777777  000000
SSSSSSSS  AAAAAA  TTTTTTTTTT  SSSSSSSS  SSSSSSSS  SSSSSSSS  77777777  000000
SS          AA      AA      TT          SS          SS          SS          77          00          00
SS          AA      AA      TT          SS          SS          SS          77          00          00
SS          AA      AA      TT          SS          SS          SS          77          00          00
SS          AA      AA      TT          SS          SS          SS          77          00          00
SSSSSSS    AA      AA      TT          SSSSSSS    SSSSSSS    SSSSSSS    77          00          00
SSSSSSS    AA      AA      TT          SSSSSSS    SSSSSSS    SSSSSSS    77          00          00
          SS    AAAAAAAAAA  TT          SS          SS          SS          77          00          00
          SS    AAAAAAAAAA  TT          SS          SS          SS          77          00          00
          SS    AA      AA      TT          SS          SS          SS          77          00          00
          SS    AA      AA      TT          SS          SS          SS          77          00          00
SSSSSSSS   AA      AA      TT          SSSSSSSSS  SSSSSSSSS  SSSSSSSSS  77          00          00
SSSSSSSS   AA      AA      TT          SSSSSSSSS  SSSSSSSSS  SSSSSSSSS  77          00          00

```

```

LL          IIIIII  SSSSSSSS
LL          IIIIII  SSSSSSSS
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)	54	DECLARATIONS
(1)	98	CONDITION TABLES
(1)	135	TM SETUP, TM CLEANUP
(1)	207	CONDITION SUBROUTINES - SETUP AND CLEANUP
(1)	277	FORM CONDS
(1)	370	VERIFY
(1)	507	VFY_CLEANUP

```

0000 1 .TITLE SATSSS70 SATS SYSTEM SERVICE TESTS $EXPREG (SUCC S.C.)
0000 2 .IDENT 'V04-000'
0000 3
0000 4
0000 5 :*****
0000 6 :*
0000 7 :* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY *
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0000 23 :* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL. *
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 SATSSS70 TO TEST SUCCESSFUL
0000 36 : OPERATION OF THE $EXPREG 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: JUN, 1977
0000 47 :
0000 48 : MODIFIED BY:
0000 49 :
0000 50 : : VERSION
0000 51 : 01 -
0000 52 : --

```

```
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 $JPIDEF : $GETJPI ITEM-CODE SYMBOLS
0000 61 $PSLDEF : PROCESSOR STATUS LONGWORD DEFINITIONS
0000 62 :
0000 63 : MACROS:
0000 64 :
0000 65 :
0000 66 : EQUATED SYMBOLS:
0000 67 :
0000 68 :
0000 69 : OWN STORAGE:
0000 70 :
```

```
00000000 72 .PSECT RODATA, RD, NOWRT, NOEXE, LONG
0000 73 TEST_MOD_NAME:: STRING C, <SATSSS70> ; TEST MODULE NAME
0009 74 TEST_MOD_NAME_D: STRING I, <SATSSS70> ; TEST MODULE NAME DESCRIPTOR
0019 75 MSG1_INP_CTL: STRING I, <SSERG!4ZW: CONDITIONS:>
0039 76 ; FAO CTL STRING FOR MSG1 IN SUCCOMMON.MAR
0039 77 MSG3_ERR_CTL:: STRING I, <*SSERG!4ZW: !AS>
0051 78 ; FAO CTL STRING FOR MSG3 IN SUCCOMMON.MAR
0000200 0051 79 PAGESIZE: .LONG 512 ; PAGE SIZE IN BYTES
0055 80 JPITEMS: ; $GETJPI ITEM LIST
0004 0055 81 .WORD 4 ; LEN OF RETURN BUFFER FOR 1ST ITEM
0404 0057 82 .WORD JPIS FREPOVA ; REQUEST ITEM 1
00000009' 0059 83 .ADDRESS INITIALADR ; BUFFER FOR ITEM 1
00000000 005D 84 .LONG 0 ; DON'T NEED LENGTH RETURN
0004 0061 85 .WORD 4 ; LEN OF RETURN BUFFER FOR 2ND ITEM
0405 0063 86 .WORD JPIS FREPIVA ; REQUEST ITEM 2
0000000D' 0065 87 .ADDRESS INITIALADR+4 ; BUFFER FOR ITEM 2
00000000 0069 88 .LONG 0 ; DON'T NEED LENGTH RETURN
00000000 006D 89 .LONG 0 ; END OF $GETJPI ITEM LIST
```



```

0021 98
0021 99 :
0021 100 :
0021 101 :
0021 102 :
0021 103 :
0021 104 :
0021 105 :
00000000 0041 106 .LONG 0 ; PROGRAM
00000001 0045 107 .LONG 1 ; CONTROL
0049 108 :
0049 109 :
0049 110 :
0049 111 :
0049 112 :
0049 113 :
00000001 0082 114 .LONG 1
00000005 0086 115 .LONG 5
000003E8 008A 116 .LONG 1000
008E 117 :
008E 118 :
008E 119 :
008E 120 :
008E 121 :
008E 122 :
008E 123 :
00000000 00BD 124 .LONG PSL$C_KERNEL
00000001 00C1 125 .LONG PSL$C_EXEC
00000002 00C5 126 .LONG PSL$C_SUPER
00000003 00C9 127 .LONG PSL$C_USER
00CD 128 :
00CD 129 :
00CE 130 :
00CE 131 :
00CF 132 :
00000000 133 .PSECT SATSSS70, RD, WRT, EXE

```

.SBTTL CONDITION TABLES
***** CONDITION TABLES FOR EXPREG SYSTEM SERVICE *****
COND 1, LONG, <REGION>, -
<PROGRAM>, -
<CONTROL>, -
COND 2, LONG, <PAGCNT>, -
<SMALL COUNT>, -
<MEDIUM COUNT>, -
<LARGE COUNT>, -
COND 3, LONG, <ACMODE>, -
<KERNEL>, -
<EXEC>, -
<SUPER>, -
<USER>, -
COND 4, NULL
COND 5, NULL

SA
Sy
VF
WOI
WR
PSI
--
\$AI
RO
RW
SA
Ph
--
In
COI
Pa
Sy
Pa
Sy
Psi
Cri
As
Th
42
Th
56
39
Ma
--
--
--
--
TO
80
Th
MA


```

0000 135 .SBTTL TM_SETUP, TM_CLEANUP
0000 136 :++
0000 137 : FUNCTIONAL DESCRIPTION:
0000 138 :
0000 139 : TM SETUP AND TM_CLEANUP ARE CALLED TO PERFORM
0000 140 : REQUIRED HOUSEKEEPING AT THE BEGINNING AND END, RESPECTIVELY, OF
0000 141 : TEST MODULE EXECUTION.
0000 142 :
0000 143 : CALLING SEQUENCE:
0000 144 :
0000 145 : BSBW TM_SETUP BSBW TM_CLEANUP
0000 146 :
0000 147 : INPUT PARAMETERS:
0000 148 :
0000 149 : NONE
0000 150 :
0000 151 : IMPLICIT INPUTS:
0000 152 :
0000 153 : NONE
0000 154 :
0000 155 : OUTPUT PARAMETERS:
0000 156 :
0000 157 : NONE
0000 158 :
0000 159 : IMPLICIT OUTPUTS:
0000 160 :
0000 161 : TM_SETUP: COND TABLE INDEX REGISTERS (R2,3,4,5,6) CLEARED;
0000 162 : ALL PRIVILEGES ACQUIRED.
0000 163 :
0000 164 : COMPLETION CODES:
0000 165 :
0000 166 : EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
0000 167 :
0000 168 : SIDE EFFECTS:
0000 169 :
0000 170 : SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
0000 171 : (VIA RSB) IF ERROR ENCOUNTERED.
0000 172 :
0000 173 :--
0000 174 :
0000 175 :
0000 176 :
0000 177 : TM_SETUP::

```

```

          52 D4 0000 178 CLRL R2 ; INITIALIZE
          53 D4 0002 179 CLRL R3 ; .. CONDITION
          54 D4 0004 180 CLRL R4 ; .... TABLE
          55 D4 0006 181 CLRL R5 ; ..... INDEX
          56 D4 0008 182 CLRL R6 ; ..... REGISTERS
00000000'EF FFF3' 30 000A 183 BSBW MOD MSG PRINT ; PRINT TEST MODULE BEGIN MSG
03 00 00000000'8F F0 0018 184 MOVAL TEST_MOD_SUCC,TMD_ADDR ; ASSUME END MSG WILL SHOW SUCCESS
          00000000'EF 0020 185 INSV #SUCCESS,#0,#3,MOD_MSG_CODE ; ADJUST STATUS CODE FOR SUCCESS
          0025 186 MODE TO,5$,KRNL ; KERNEL MODE TO ACCESS PHD
          59 00000000'9F D0 0048 187 MOVL @#CTL$GL PHD,R9 ; GET PROCESS HEADER ADDRESS
00000000'EF 69 DE 004F 188 MOVAL PHD$Q PRIVMSK(R9),PRIVMASK ; GET PRIV MASK ADDRESS
          0056 189 MODE FROM,5$ ; BACK TO USER MODE
          0057 190 PRIV ADD,ALL ; GET ALL PRIVILEGES

```



```

010D 207 .SBTTL CONDITION SUBROUTINES - SETUP AND CLEANUP
010D 208 :++
010D 209 : FUNCTIONAL DESCRIPTION:
010D 210 :
010D 211 : COND X AND COND X CLEANUP ARE SUBROUTINES WHICH ARE EXECUTED
010D 212 : BEFORE AND AFTER THE VERIFY SUBROUTINE, RESPECTIVELY, WHENEVER A NEW
010D 213 : CONDITION X VALUE IS SELECTED (SEE FUNCTIONAL DESCRIPTION OF SUCCOMMON
010D 214 : ROUTINE IN SUCCOMMON.MAR). ANY SETUP FUNCTION PARTICULAR TO THE
010D 215 : CONDITION X TABLE IS INCLUDED IN THE COND X SUBROUTINE AND CLEANED
010D 216 : UP, IF NECESSARY, IN THE COND X CLEANUP SUBROUTINE. THIS INCLUDES,
010D 217 : ESPECIALLY, CODE TO DETECT CONFLICTS AMONG CURRENT ENTRIES IN TWO
010D 218 : OR MORE CONDITION TABLES. IF A CONFLICT IS DETECTED, A NON-ZERO
010D 219 : VALUE IS STORED INTO CONFLICT, WHICH CAUSES THE CALLING ROUTINE
010D 220 : (SUCCOMMON) TO SKIP THE CURRENT ENTRY IN THE CONDITION X TABLE.
010D 221 :
010D 222 : CALLING SEQUENCE:
010D 223 :
010D 224 : BSBW COND X BSBW COND X_CLEANUP
010D 225 : WHERE X = 1,2,3,4,5
010D 226 :
010D 227 : INPUT PARAMETERS:
010D 228 :
010D 229 : CONFLICT = 0
010D 230 :
010D 231 : IMPLICIT INPUTS:
010D 232 :
010D 233 : R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
010D 234 : FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
010D 235 :
010D 236 : OUTPUT PARAMETERS:
010D 237 :
010D 238 : CONFLICT SET TO NON-ZERO IF COND TABLE CONFLICT DETECTED.
010D 239 :
010D 240 : IMPLICIT OUTPUTS:
010D 241 :
010D 242 : R2,3,4,5,6 PRESERVED
010D 243 :
010D 244 : COMPLETION CODES:
010D 245 :
010D 246 : NONE
010D 247 :
010D 248 : SIDE EFFECTS:
010D 249 :
010D 250 : NONE
010D 251 :
010D 252 : --
010D 253 :
010D 254 :
010D 255 :
05 010D 256 COND1:: : RETURN TO MAIN ROUTINE
010E 257 RSB
05 010E 258 COND1_CLEANUP:: : RETURN TO MAIN ROUTINE
010E 259 RSB
05 010F 260 COND2:: : RETURN TO MAIN ROUTINE
010F 261 RSB
05 0110 262 COND2_CLEANUP:: : RETURN TO MAIN ROUTINE
0110 263 RSB

```

SATSSS70
V04-000

SATS SYSTEM SERVICE TESTS ^{H 12} SXPREG (SUCC 16-SEP-1984 01:00:48 VAX/VMS Macro V04-00
CONDITION SUBROUTINES - SETUP AND CLEANU 5-SEP-1984 04:32:58 [UETPSY.SRC]SATSSS70.MAR;1

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(1)

SA
VO

```
05 0111 264 COND3::
05 0111 265 RSB ; RETURN TO MAIN ROUTINE
05 0112 266 COND3_CLEANUP::
05 0112 267 RSB ; RETURN TO MAIN ROUTINE
05 0113 268 COND4::
05 0113 269 RSB ; RETURN TO MAIN ROUTINE
05 0114 270 COND4_CLEANUP::
05 0114 271 RSB ; RETURN TO MAIN ROUTINE
05 0115 272 CONDS::
05 0115 273 RSB ; RETURN TO MAIN ROUTINE
05 0116 274 CONDS_CLEANUP::
05 0116 275 RSB ; RETURN TO MAIN ROUTINE
```

```

0117 277 .SBTTL FORM_CONDS
0117 278 :++
0117 279 : FUNCTIONAL DESCRIPTION:
0117 280 :
0117 281 : FORM CONDS FORMATS AND PRINTS INFORMATION ABOUT
0117 282 : THE CURRENT ELEMENT IN EACH OF THE CONDITION TABLES.
0117 283 :
0117 284 : CALLING SEQUENCE:
0117 285 :
0117 286 : BSBW FORM_CONDS
0117 287 :
0117 288 : INPUT PARAMETERS:
0117 289 :
0117 290 : NONE
0117 291 :
0117 292 : IMPLICIT INPUTS:
0117 293 :
0117 294 : R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
0117 295 : FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
0117 296 : FOR X = 1,2,3,4,5 :
0117 297 : COND_X_T - TITLE TEXT FOR CONDX TABLE
0117 298 : COND_X_TAB - ELEMENT TEXT FOR CONDX TABLE
0117 299 : COND_X_C - CONTEXT OF THE CONDX TABLE
0117 300 : COND_X_E - DATA ELEMENTS OF THE CONDX TABLE
0117 301 :
0117 302 : OUTPUT PARAMETERS:
0117 303 :
0117 304 : NONE
0117 305 :
0117 306 : IMPLICIT OUTPUTS:
0117 307 :
0117 308 : NONE
0117 309 :
0117 310 : COMPLETION CODES:
0117 311 :
0117 312 : NONE
0117 313 :
0117 314 : SIDE EFFECTS:
0117 315 :
0117 316 : NONE
0117 317 :
0117 318 :--
0117 319 :
0117 320 :
0117 321 :
0117 322 FORM_CONDS::
0117 323 $FAO_S MSG1_INP_CTL,FAO_LEN,FAO_DESC,TESTNUM
0136 324 : FORMAT CONDITIONS HEADER MSG
14 04 91 0136 325 BSBW OUTPUT_MSG : ... AND PRINT IT
03 12 013C 326 CMPB #COND1_C,#NULL : IS CONDITION 1 NULL ?
00E3 31 013E 327 BNEQU 10$ : NO -- CONTINUE
0141 328 BRW FORM_CONDSX : YES -- SUBROUTINE IS FINISHED
0000000'EF 0000021'EF DE 0141 329 10$:
0000000'EF 0000029'EF42 DO 014C 330 MOVAL COND1_T,MSG_A : SAVE ADDRESS OF CONDITION 1 TITLE FOR FAO
0000000'EF 04 90 0158 331 MOVL COND1_TAB[R2],MSG_B : SAVE ADDR OF COND 1 CURR TEXT ELT FOR FAO
015F 332 MOVB #COND1_C,MSG_CTXT : SAVE CONDITION 1 CONTEXT FOR FAO
015F 333 MOV_VAL COND1_C,COND1_E[R2],MSG_DATA1 : GIVE COND 1 DATA VALUE TO FAO

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14 FE92' 30 016B 334 BSBW WRITE_MSG2 ; FORMAT AND WRITE CONDITION 1 MSG
   04 91 016E 335 CMPB #COND2_C,#NULL ; IS CONDITION 2 NULL ?
   03 12 0171 336 BNEQU 20$ ; NO -- CONTINUE
   00AE 31 0173 337 BRW FORM_CONDSX ; YES -- SUBROUTINE IS FINISHED
   0176 338 20$:
00000000'EF 00000049'EF DE 0176 339 MOVAL COND2_T,MSG_A ; SAVE ADDRESS OF CONDITION 2 TITLE FOR FAO
00000000'EF 00000051'EF43 DO 0181 340 MOVL COND2_TAB[R3],MSG_B ; SAVE ADDR OF COND 2 CURR TEXT ELT FOR FAO
   00000000'EF 04 90 018D 341 MOVB #COND2_C,MSG_CTXT ; SAVE CONDITION 2 CONTEXT FOR FAO
   0194 342 MOV_VAL COND2_C,COND2_E[R3],MSG_DATA1 ; GIVE COND 2 DATA VALUE TO FAO
14 FE5D' 30 01A0 343 BSBW WRITE_MSG2 ; FORMAT AND WRITE CONDITION 2 MSG
   04 91 01A3 344 CMPB #COND3_C,#NULL ; IS CONDITION 3 NULL ?
   03 12 01A6 345 BNEQU 30$ ; NO -- CONTINUE
   0079 31 01A8 346 BRW FORM_CONDSX ; YES -- SUBROUTINE IS FINISHED
   01AB 347 30$:
00000000'EF 0000008E'EF DE 01AB 348 MOVAL COND3_T,MSG_A ; SAVE ADDRESS OF CONDITION 3 TITLE FOR FAO
00000000'EF 00000096'EF44 DO 0186 349 MOVL COND3_TAB[R4],MSG_B ; SAVE ADDR OF COND 3 CURR TEXT ELT FOR FAO
   00000000'EF 04 90 01C2 350 MOVB #COND3_C,MSG_CTXT ; SAVE CONDITION 3 CONTEXT FOR FAO
   01C9 351 MOV_VAL COND3_C,COND3_E[R4],MSG_DATA1 ; GIVE COND 3 DATA VALUE TO FAO
14 FE28' 30 01D5 352 BSBW WRITE_MSG2 ; FORMAT AND WRITE CONDITION 3 MSG
   14 91 01D8 353 CMPB #COND4_C,#NULL ; IS CONDITION 4 NULL ?
   47 13 01DB 354 BEQLU FORM_CONDSX ; YES -- SUBROUTINE IS FINISHED
00000000'EF 000000CD'EF DE 01DD 355 MOVAL COND4_T,MSG_A ; SAVE ADDRESS OF CONDITION 4 TITLE FOR FAO
00000000'EF 000000CD'EF45 DO 01E8 356 MOVL COND4_TAB[R5],MSG_B ; SAVE ADDR OF COND 4 CURR TEXT ELT FOR FAO
   00000000'EF 14 90 01F4 357 MOVB #COND4_C,MSG_CTXT ; SAVE CONDITION 4 CONTEXT FOR FAO
   01FB 358 MOV_VAL COND4_C,COND4_E[R5],MSG_DATA1 ; GIVE COND 4 DATA VALUE TO FAO
14 FE02' 30 01FB 359 BSBW WRITE_MSG2 ; FORMAT AND WRITE CONDITION 4 MSG
   14 91 01FE 360 CMPB #COND5_C,#NULL ; IS CONDITION 5 NULL ?
   21 13 0201 361 BEQLU FORM_CONDSX ; YES -- SUBROUTINE IS FINISHED
00000000'EF 000000CE'EF DE 0203 362 MOVAL COND5_T,MSG_A ; SAVE ADDRESS OF CONDITION 5 TITLE FOR FAO
00000000'EF 000000CE'EF46 DO 020E 363 MOVL COND5_TAB[R6],MSG_B ; SAVE ADDR OF COND 5 CURR TEXT ELT FOR FAO
   00000000'EF 14 90 021A 364 MOVB #COND5_C,MSG_CTXT ; SAVE CONDITION 5 CONTEXT FOR FAO
   0221 365 MOV_VAL COND5_C,COND5_E[R6],MSG_DATA1 ; GIVE COND 5 DATA VALUE TO FAO
FDDC' 30 0221 366 BSBW WRITE_MSG2 ; FORMAT AND WRITE CONDITION 5 MSG
   0224 367 FORM_CONDSX:
05 0224 368 RSB ; RETURN TO CALLER

```

```

0225 370 .SBTTL VERIFY
0225 371 :++
0225 372 : FUNCTIONAL DESCRIPTION:
0225 373 :
0225 374 : VERIFY IS CALLED ONCE FOR EACH COMBINATION OF CONDITION
0225 375 : TABLE VALUES (AS DETERMINED BY THE INDEX REGISTERS R2,3,4,5,6 FOR
0225 376 : COND TABLES 1,2,3,4,5, RESPECTIVELY). VERIFY ESTABLISHES THE CONDITIONS
0225 377 : SPECIFIED BY THE COND TABLES AND ISSUES THE SUBJECT SYSTEM SERVICE
0225 378 : ($EXPREG). THEN, THE SUCCESSFUL OPERATION OF THE SERVICE IS VERIFIED
0225 379 : BY EXAMINING THE STATUS CODE RETURNED, THE VALUES FOR RETURN ARGUMENTS
0225 380 : AND THE FUNCTIONALITY PERFORMED. THE EXAMINATIONS TAKE THE FORM OF
0225 381 : COMPARISONS AGAINST EXPECTED VALUES. ANY FAILING COMPARISON CAUSES AN
0225 382 : ERR_EXIT MACRO TO BE EXECUTED (EITHER DIRECTLY, OR INDIRECTLY,
0225 383 : THROUGH THE SS_CHECK MACRO); ERR_EXIT SETS EFLAG TO NON-ZERO,
0225 384 : PRINTS ERROR MESSAGES AND CAUSES AN IMMEDIATE RSB TO CALLER.
0225 385 : WHEN ERR_EXIT IS EXECUTED, FURTHER CALLS TO VERIFY ARE SUPPRESSED,
0225 386 : AND, AFTER EXECUTING CLEANUP SUBROUTINES, THE IMAGE EXITS.
0225 387 :
0225 388 : CALLING SEQUENCE:
0225 389 :
0225 390 : BSBW VERIFY
0225 391 :
0225 392 : INPUT PARAMETERS:
0225 393 :
0225 394 : NONE
0225 395 :
0225 396 : IMPLICIT INPUTS:
0225 397 :
0225 398 : R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
0225 399 : FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
0225 400 : FOR X = 1,2,3,4,5 :
0225 401 : CONDX_E - ADDRESS OF TABLE OF DATA VALUES FOR CONDX
0225 402 : TABLE. IF THE CONTEXT OF TABLE X IS A SYSTEM SERVICE
0225 403 : ARGUMENT, THE ARGUMENT NAME MAY BE USED AS A SYNONYM
0225 404 : FOR CONDX_E.
0225 405 :
0225 406 : OUTPUT PARAMETERS:
0225 407 :
0225 408 : NONE
0225 409 :
0225 410 : IMPLICIT OUTPUTS:
0225 411 :
0225 412 : VERIFY HAS NO OUTPUT. SINCE ITS PURPOSE IS TO TEST FOR ERRORS,
0225 413 : IT MERELY RETURNS TO CALLER NORMALLY AFTER THE TESTS, PROVIDING
0225 414 : ALL WERE SUCCESSFUL; IF AN ERROR IS DISCOVERED, RETURN IS VIA
0225 415 : AN ERR_EXIT OR SS_CHECK MACRO, BOTH OF WHICH DOCUMENT DETECTED
0225 416 : ERRORS.
0225 417 :
0225 418 : COMPLETION CODES:
0225 419 :
0225 420 : EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
0225 421 :
0225 422 : SIDE EFFECTS:
0225 423 :
0225 424 : SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
0225 425 : (VIA RSB) IF ERROR ENCOUNTERED.
0225 426 :
    
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        69 95 0434 484 75$:
        09 12 0434 485      TSTB   (R9)           ; FIRST BYTE OF PAGE = ZERO, AS PROMISED ?
    69 00000000'EF 90 0436 486      BNEQ   80$           ; NO -- GO INDICATE NON-ZERO ERROR
        1A 11 0438 487      MOVB   ONES,(R9)       ; DO A STORE -- NO ACCVIO EXPECTED
        00000008'EF 90 043F 488      BRB    90$           ; GO LOOK AT NEXT PAGE
        00000000'EF 94 0441 489 80$:
        00000000'EF 90 0441 490      MOVB   ONES,NZERR      ; INDICATE NON-ZERO ERROR FOUND
        00000000'EF 94 044C 491      CLRB   EXPV          ; LOAD UP EXPECTED AND
        00000000'EF 69 0452 492      MOVB   (R9),RECV     ; ... RECEIVED VALUES, THEN EXIT
        0A 11 0459 493      BRB    100$          ; GO PROCESS ERROR
    FFCF 59 5A 00000015'EF F1 045B 494 90$:
        03 000000BD'EF44 D1 045B 495      ACBL   RETADR+4,R10,R9,75$ ; INCR (OR DECR) TO NEXT PAGE & LOOP
        01 13 0465 496 100$:
        00000008'EF 95 0465 497      CMPL   ACMODE[R4],#PSL$C_USER ; USER MODE ?
        4D 13 046D 498      BEQLU  110$          ; YES -- DON'T CHANGE MODE
        00000000'EF 95 046F 499      MODE  FROM,63$      ; CHANGE MODE BACK TO USER
        00000008'EF 95 0470 500 110$:
        4D 13 0470 501      TSTB   NZERR          ; WAS A NON-ZERO ERROR ENCOUNTERED ?
        00000000'EF 95 0476 502      BEQL   VERIFYX       ; NO -- ALL FINISHED
        00000000'EF 95 0478 503      ERR_EXIT BYTE,<A PAGE IN THE EXPANSION AREA IS NON-ZERO>
        05 04C5 504 VERIFYX:
        05 04C5 505      RSB                    ; RE'URN TO CALLER
    
```

```

04C6 507 .SBTTL VFY_CLEANUP
04C6 508 :++
04C6 509 : FUNCTIONAL DESCRIPTION:
04C6 510 :
04C6 511 : VFY_CLEANUP EXECUTES SYSTEM SERVICES TO UNDO THE
04C6 512 : EFFECT OF THOSE ISSUED IN THE VERIFY SUBROUTINE. VFY_CLEANUP MUST
04C6 513 : ASSUME THAT VERIFY MAY NOT HAVE EXECUTED IN ITS ENTIRETY (IF AN
04C6 514 : ERROR IS FOUND). ALSO, VFY_CLEANUP MAY ISSUE SS CHECK OR ERR EXIT
04C6 515 : ONLY AFTER PERFORMING ALL OF ITS CLEANUP OPERATIONS; THIS IS REQUIRED
04C6 516 : IN THE EVENT THAT VFY_CLEANUP IS CALLED DURING ERROR PROCESSING,
04C6 517 : WHEN PERFORMING THE REQUIRED CLEANUP IS MORE IMPORTANT THAN
04C6 518 : POSSIBLY DISCOVERING A SECOND ERROR.
04C6 519 :
04C6 520 : CALLING SEQUENCE:
04C6 521 :
04C6 522 : BSBW VFY_CLEANUP
04C6 523 :
04C6 524 : INPUT PARAMETERS:
04C6 525 :
04C6 526 : NONE
04C6 527 :
04C6 528 : IMPLICIT INPUTS:
04C6 529 :
04C6 530 : R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
04C6 531 : FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
04C6 532 : FOR X = 1,2,3,4,5 :
04C6 533 : COND_X_E - ADDRESS OF TABLE OF DATA VALUES FOR COND_X
04C6 534 : TABLE. IF THE CONTEXT OF TABLE X IS A SYSTEM SERVICE
04C6 535 : ARGUMENT, THE ARGUMENT NAME MAY BE USED AS A SYNONYM
04C6 536 : FOR COND_X_E.
04C6 537 :
04C6 538 : OUTPUT PARAMETERS:
04C6 539 :
04C6 540 : NCNE
04C6 541 :
04C6 542 : IMPLICIT OUTPUTS:
04C6 543 :
04C6 544 : NONE
04C6 545 :
04C6 546 : COMPLETION CODES:
04C6 547 :
04C6 548 : EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
04C6 549 :
04C6 550 : SIDE EFFECTS:
04C6 551 :
04C6 552 : SS CHECK AND ERR EXIT MACROS CAUSE PREMATURE EXIT
04C6 553 : (VIA RSB) IF ERROR ENCOUNTERED.
04C6 554 :
04C6 555 :--
04C6 556 :
04C6 557 :
04C6 558 :
04C6 559 VFY_CLEANUP::
04C6 560 MOVQ RETADR,INADR_DVA ; PAGE RANGE TO DELETE
04D1 561 MODE TO,10$,KRNL ; INTO KERNEL FOR DELTVA
04F4 562 $DELTVA_S INADR=INADR_DVA, -
04F4 563 ACMODE=ACMODE[R4] ; GET RID OF ACQUIRED SPACE

```

0000019'EF 0000011'EF 7D

SATSSS70
V04-000

SATS SYSTEM SERVICE TESTS \$EXPREG (SUCC 16-SEP-1984 01:00:48 VAX/VMS Macro V04-00 Page 16
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05 050A 564
050B 565
0539 566
053A 567

MODE FROM,10\$
SS_CHECK NORMAL
RSB
.END

; BACK TO USER MODE
; CHECK FOR NORMAL RETURN FROM DELTVA
; RETURN TO CALLER

SA
VO

SATSSS70
Symbol table

SSSS	= 00000482	R	04	FORM_CONDS	00000117	RG	04
SSSCHARS	= 00000028			FORM_CONDSX	00000224	R	04
SSSCHARS1	= 00000006			INADR_DVA	00000019	R	03
SSSCHARS2	= 00000004			INITIALADR	00000009	R	03
SSSCHARS3	= 00000005			JPIS_FREPOVA	= 00000404		
SSSCHARS4	= 00000004			JPIS_FREPIVA	= 00000405		
SSSCHARS5	= 00000000			JPITEMS	00000055	R	02
SSSCOND_A	= 00000003			LONG	= 00000004	G	
SSSTRINGS	= 00000001			MOD_MSG_CODE	*****	X	04
SSSTRINGS2	= 00000005			MOD_MSG_PRINT	*****	X	04
SST1	= 00000000			MSGT_INP_CTL	00000019	R	02
SST2	= 00000004			MSG3_ERR_CTL	00000039	RG	02
ACMODE	000000BD	R	03	MSG_A	*****	X	04
BYTE	= 00000001	G		MSG_B	*****	X	04
CFLAG	*****	X	04	MSG_CTXT	*****	X	04
CHMRTN	*****	X	04	MSG_DATA1	*****	X	04
CHM_CONT	*****	X	04	NOTARG	= 00000000	G	
COMP_SC	*****	X	04	NULL	= 00000014	G	
COND1	0000010D	RG	04	NZERR	00000008	R	03
COND1_C	= 00000004			ONES	*****	X	04
COND1_CLEANUP	0000010E	RG	04	OUTPUT_MSG	*****	X	04
COND1_E	00000041	R	03	PAGCNT	00000082	R	03
COND1_H	00000028	RG	03	PAGESIZE	00000051	R	02
COND1_T	00000021	R	03	PCV	*****	X	04
COND1_TAB	00000029	R	03	PHD\$Q_PRIVMSK	= 00000000		
COND2	0000010F	RG	04	PRIVMASK	00000000	R	03
COND2_C	= 00000004			PRIV_ARGS	= 00000002		
COND2_CLEANUP	00000110	RG	04	PROCESS_ERR	*****	X	04
COND2_E	00000082	R	03	PSL\$C_EXEC	= 00000001		
COND2_H	00000050	RG	03	PSL\$C_KERNEL	= 00000000		
COND2_T	00000049	R	03	PSL\$C_SUPER	= 00000002		
COND2_TAB	00000051	R	03	PSL\$C_USER	= 00000003		
COND3	00000111	RG	04	QUAD	= 00000008	G	
COND3_C	= 00000004			REC_V	*****	X	04
COND3_CLEANUP	00000112	RG	04	REGION	00000041	R	03
COND3_E	000000BD	R	03	REST_REGS	*****	X	04
COND3_H	00000095	RG	03	RETADR	00000011	R	03
COND3_T	0000008E	R	03	SAVE_REGS	*****	X	04
COND3_TAB	00000096	R	03	SS\$NORMAL	*****	X	04
COND4	00000113	RG	04	SUCCESS	*****	X	04
COND4_C	= 00000014			SYSS\$CMEXEC	*****	GX	04
COND4_CLEANUP	00000114	RG	04	SYSS\$CMKRNL	*****	GX	04
COND4_H	000000CD	RG	03	SYSS\$DELTVA	*****	GX	04
COND4_T	000000CD	R	03	SYSS\$EXPREG	*****	GX	04
COND4_TAB	000000CD	R	03	SYSS\$FAO	*****	X	04
COND5	00000115	RG	04	SYSS\$GETJPI	*****	GX	04
COND5_C	= 00000014			SYSS\$SETPRN	*****	GX	04
COND5_CLEANUP	00000116	RG	04	SYSS\$SETPRV	*****	GX	04
COND5_H	000000CE	RG	03	TESTNUM	*****	X	04
COND5_T	000000CE	R	03	TEST_MOD_NAME	00000000	RG	02
COND5_TAB	000000CE	R	03	TEST_MOD_NAME_D	00000009	R	02
CTL\$GL_PHD	*****	X	04	TEST_MOD_SUCC_D	*****	X	04
DESC	= 00000010	G		TMD_ADDR	*****	X	04
EFLAG	*****	X	04	TM_CLEANUP	00000109	RG	04
EXPV	*****	X	04	TM_SETUP	00000000	RG	04
FAO_DESC	*****	X	04	VERIFY	00000225	RG	04
FAO_LEN	*****	X	04	VFRIFYX	000004C5	R	04

SATSSS70
Symbol table

SATS SYSTEM SERVICE TESTS \$EXPREG (SUCC 16-SEP-1984 01:00:48 VAX/VMS Macro V04-00
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(1)

SA
VO

VFY_CLEANUP
WORD
WRITE_MSG2

000004C6 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	00000071 (113.)	02 (2.)	NOPIC USR CON REL LCL NOSHR NOEXE RD NOWRT NOVEC LONG
RWDATA	000000CF (207.)	03 (3.)	NOPIC USR CON REL LCL NOSHR NOEXE RD WRT NOVEC LONG
SATSSS70	0000053A (1338.)	04 (4.)	NOPIC USR CON REL LCL NOSHR EXE RD WRT NOVEC BYTE

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

Phase	Page faults	CPU Time	Elapsed Time
Initialization	36	00:00:00.09	00:00:00.34
Command processing	135	00:00:00.61	00:00:02.78
Pass 1	276	00:00:08.14	00:00:19.00
Symbol table sort	0	00:00:00.68	00:00:01.52
Pass 2	121	00:00:02.01	00:00:04.56
Symbol table output	14	00:00:00.10	00:00:00.20
Psect synopsis output	2	00:00:00.02	00:00:00.26
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	586	00:00:11.65	00:00:28.66

The working set limit was 1500 pages.
42361 bytes (83 pages) of virtual memory were used to buffer the intermediate code.
There were 30 pages of symbol table space allocated to hold 453 non-local and 44 local symbols.
567 source lines were read in Pass 1, producing 24 object records in Pass 2.
39 pages of virtual memory were used to define 30 macros.

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

Macro library name	Macros defined
_\$255\$DUA28:[SHRLIB]UETP.MLB;1	9
_\$255\$DUA28:[SYS.OBJ]LIB.MLB;1	1
_\$255\$DUA28:[SYSLIB]STARLET.MLB;2	17
TOTALS (all libraries)	27

801 GETS were required to define 27 macros.

There were no errors, warnings or information message .

MACRO/LIS=LIS\$:SATSSS70/OBJ=OBJ\$:SATSSS70 MSRC\$:SATSSS70/UPDATE=(ENHS:SATSSS70)+EXECMLS/LIB+SHRLIBS:UETP/LIB

0424 AH-BT13A-SE
VAX/VMS V4.0

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The image displays a grid of 144 small terminal window screenshots, arranged in 12 rows and 12 columns. Each window shows a different screen of the VAX/VMS operating system, including various system utilities, error messages, and data. Several windows are highlighted with larger, clearer text labels:

- SATSS553 LIS (bottom left)
- SATSS554 LIS (middle left)
- SATSS555 LIS (bottom middle)
- SATSS556 LIS (top middle)
- SATSS560 LIS (middle right)
- SATSS561 LIS (bottom right)
- SATSS570 LIS (middle right)
- SATSS571 LIS (top right)
- SATSS572 LIS (middle right)
- SATSS573 LIS (middle right)