


```

SSSSSSSS  AAAAAA  TTTTTTTTTT  SSSSSSSS  SSSSSSSS  SSSSSSSS  44  44  11
SSSSSSSS  AAAAAA  TTTTTTTTTT  SSSSSSSS  SSSSSSSS  SSSSSSSS  44  44  11
SS        AA      AA      TT      SS        SS        SS        44  44  1111
SS        AA      AA      TT      SS        SS        SS        44  44  1111
SS        AA      AA      TT      SS        SS        SS        44  44  11
SS        AA      AA      TT      SS        SS        SS        44  44  11
SSSSSSSS  AA      AA      TT      SSSSSSSS  SSSSSSSS  SSSSSSSS  44  44  11
SSSSSSSS  AA      AA      TT      SSSSSSSS  SSSSSSSS  SSSSSSSS  444444444444  11
SS        AA      AA      TT      SS        SS        SS        44  44  11
SS        AA      AA      TT      SS        SS        SS        44  44  11
SS        AA      AA      TT      SSSSSSSS  SSSSSSSS  SSSSSSSS  44  44  11
SS        AA      AA      TT      SSSSSSSS  SSSSSSSS  SSSSSSSS  44  44  11
SSSSSSSS  AA      AA      TT      SSSSSSSS  SSSSSSSS  SSSSSSSS  44  44  111111
SSSSSSSS  AA      AA      TT      SSSSSSSS  SSSSSSSS  SSSSSSSS  44  44  111111

```

```

....
....
....
....

```

```

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)	54	DECLARATIONS
(1)	102	CONDITION TABLES
(1)	127	TM SETUP, TM CLEANUP
(1)	214	CONDITION SUBROUTINES - SETUP AND CLEANUP
(1)	284	FORM CONDS
(1)	377	VERIFY
(1)	461	VFY_CLEANUP

```

0000 1 .TITLE SATSSS41 SATS SYSTEM SERVICE TESTS $EXIT (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 SATSSS41 TO TEST SUCCESSFUL
0000 36 : OPERATION OF THE $EXIT 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 : V03-001 LDJ0001 Larry D. Jones, 23-Jun-1983
0000 51 : Removed quota list to use default sysboot quota values.
0000 52 :--

```



```

00000000 73 .PSECT RODATA, RD, NOWRT, NOEXE, LONG
0000 74 TEST_MOD_NAME:: STRING C,<SATSSS41> ; TEST MODULE NAME
0009 75 TEST_MCD_NAME_D: STRING I,<SATSSS41> ; TEST MODULE NAME DESCRIPTOR
0019 76 MSG1_INP_CTL: STRING I,< SSEXI!4ZW: CONDITIONS:>
0039 77 ; ; FAO CTL STRING FOR MSG1 IN SUCCOMMON.MAR
0039 78 MSG3_ERR_CTL:: STRING I,< *SSEXI!4ZW: !AS> ; FAO CTL STRING FOR MSG3 IN SUCCOMMON.MAR
0051 79 ; ;
0051 80 CRENAME: STRING I,<SATSSS41 CRE> ; PROCESS & MBX NAME FOR CREATED PROCESS
0065 81 IMAGNAM: STRING I,<SYSTST$RES:SATSUT09.EXE> ; IMAGE NAME FOR CREATED PROCESS
0084 82 ; ;
0084 83 :QUOTALIST: $QUOTA CPULM,0 ; INFINITE CPU
0084 84 : $QUOTA BYTLM,512 ; BYTE LIMIT FOR BUFFERED I/O
0084 85 : $QUOTA FILLM,2 ; OPEN FILE COUNT LIMIT
0084 86 : $QUOTA PGFLQUOTA,10 ; PAGING FILE QUOTA
0084 87 : $QUOTA PRCLM,2 ; SUBPROCESS QUOTA
0084 88 : $QUOTA TQELM,3 ; TIMER QUEUE ENTRY QUOTA
0084 89 : $QUOTA LISTEND ; DEFINES END OF LIST

```

00000000	91	.PSECT	RWDATA,RD,WRT,NOEXE, LONG	
00000008	92	PRIVMASK:	.BLKQ 1	: ADDR OF PRIVILEGE MASK (IN PHD)
0000000C	93	MBXCHAN:	.BLKL 1	: CHAN NO. FOR MAILBOX FOR CREATED PROCESS
	94	MBXCHANINFO:		: CHANNEL INFO RETURNED BY GETCHN
00000074	95		.LONG DIBSK_LENGTH	
00000014	96		.ADDRESS +4	
00000088	97		.BLKB DIBSK_LENGTH	
0000008C	98	MBXUNIT:	.BLKL 1	: SAVE AREA FOR MAILBOX UNIT NUMBER
	99	MBXBUFF:	STRING 0,120	: MAILBOX BUFFER FOR CREATED PROCESS
00000110	100	CREPID:	.BLKL 1	: PID OF CREATED PROCESS

```
0110 102
0110 103 :
0110 104 :
0110 105 :
0110 106
0110 107
0110 108
0110 109
0110 110
0110 111
00000000 019C 112
000001A4 01A0 113
000001A8 01A4 114
000001AC 01A8 115
01AC 116 :
01AC 117
01AD 118
01AD 119
01AE 120
01AE 121
01AF 122
01AF 123
01B0 124
00000000 125
```

```
.SBTTL CONDITION TABLES
***** CONDITION TABLES FOR EXIT SYSTEM SERVICE *****
COND 1,NOTARG,<PROCESS TYPE>,-
      <SUBPROCESS>,-
      <DETACHED, DIFFERENT GROUP>,-
      <DETACHED, SAME GROUP, SAME MEMBER>,-
      <DETACHED, SAME GROUP, DIFFERENT MEMBER>,-
      .LONG 0 : PSEUDO-UIC
      .BLKL 1 : UIC
      .BLKL 1 : UIC
      .BLKL 1 : UIC
COND 2,NULL
COND 3,NULL
COND 4,NULL
COND 5,NULL
.PSECT SATSSS41,RD,WRT,EXE
```



```

0000 127 .SBTTL TM_SETUP, TM_CLEANUP
0000 128 :++
0000 129 : FUNCTIONAL DESCRIPTION:
0000 130 :
0000 131 :           TM SETUP AND TM CLEANUP ARE CALLED TO PERFORM
0000 132 : REQUIRED HOUSEKEEPING AT THE BEGINNING AND END, RESPECTIVELY, OF
0000 133 : TEST MODULE EXECUTION.
0000 134 :
0000 135 : CALLING SEQUENCE:
0000 136 :
0000 137 :           BSBW TM_SETUP  BSBW TM_CLEANUP
0000 138 :
0000 139 : INPUT PARAMETERS:
0000 140 :
0000 141 :           NONE
0000 142 :
0000 143 : IMPLICIT INPUTS:
0000 144 :
0000 145 :           NONE
0000 146 :
0000 147 : OUTPUT PARAMETERS:
0000 148 :
0000 149 :           NONE
0000 150 :
0000 151 : IMPLICIT OUTPUTS:
0000 152 :
0000 153 :           TM_SETUP:  COND TABLE INDEX REGISTERS (R2,3,4,5,6) CLEARED;
0000 154 :                   ALL PRIVILEGES ACQUIRED.
0000 155 :
0000 156 : COMPLETION CODES:
0000 157 :
0000 158 :           EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
0000 159 :
0000 160 : SIDE EFFECTS:
0000 161 :
0000 162 :           SS CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
0000 163 : (VIA RSB) IF ERROR ENCOUNTERED.
0000 164 :
0000 165 : --
0000 166 :
0000 167 :
0000 168 :
0000 169 TM_SETUP::
0000 170 CLRL  R2           ; INITIALIZE
0000 171 CLRL  R3           ; .. CONDITION
0000 172 CLRL  R4           ; .... TABLE
0000 173 CLRL  R5           ; ..... INDEX
0000 174 CLRL  R6           ; ..... REGISTERS
0000 175 BSBW  MOD MSG PRINT ; PRINT TEST MODULE BEGIN MSG
0000 176 MOVAL TEST_MOD_SUCC,TMD_ADDR ; ASSUME END MSG WILL SHOW SUCCESS
0000 177 INSV  #SUCCESS,#0,#3,MOD_MSG_CODE ; ADJUST STATUS CODE FOR SUCCESS
0000 178
0000 179 MODE  TO,SS,KRNL   ; KERNEL MODE TO ACCESS PHD
0000 180 MOVL  @#CTL$GL PHD,R9 ; GET PROCESS HEADER ADDRESS
0000 181 MOVAL PHD$Q PRIVMSK(R9),PRIVMSK ; GET PRIV MASK ADDRESS
0000 182 MODE  FROM,SS ; BACK TO USER MODE
0000 183 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 176
03 00 00000000'8F FO 0018 177
00000000'EF 0020
59 00000000'9F D0 0048 179
00000000'EF 69 DE 004F 180
0056 181
0057 182

```

```

0077 183 $SETPRN S TEST MOD_NAME_D ; SET PROCESS NAME
0084 184 SS_CHECK NORMAL ; CHECK STATUS CODE RETURNED FROM SETPRN
00B2 185 :
00B2 186 : THE FOLLOWING CODE ESTABLISHES UIC'S IN THE CONDITION 1 TABLE
00B2 187 :
00B2 188 :
59 00000000'9F D0 00D5 189 MODE TO,20$,KRNL ; KERNEL MODE TO ACCESS PCB
59 00BC C9 D0 00DC 190 MOVL @#SCH$GL_CURPCB,R9 ; GET CURRENT PCB ADDRESS
00E1 191 MOVL PCB$L_UIC(R9),R9 ; PICK UP UIC FROM PCB
00E2 192 MODE FROM,20$ ; ... AND GET BACK TO USER MODE
00E2 193 :
00E2 194 : R9 NOW CONTAINS 'MY' UIC
00E2 195 :
59 SA 01 9A 00E2 195 MOVZBL #1,R10 ; GET COND1 TABLE INDEX NUMBER INTO A REG
00010000 8F C1 00E5 196 ADDL3 #^X10000,R9,COND1_E[R10] ; PUT DIFF GROUP UIC INTO 2ND TABLE ELT
0000019C'EF4A SA D6 00F2 197 INCL R10 ; POINT TO 3RD COND1 TABLE ELEMENT
C000019C'EF4A 59 D0 00F4 198 MOVL R9,COND1_E[R10] ; PUT MY UIC INTO TABLE
0000019C'EF4A 59 SA D6 00FC 199 INCL R10 ; POINT TO 4TH COND1 TABLE ELEMENT
0000019C'EF4A 59 01 C1 00FE 200 ADDL3 #1,R9,COND1_E[R10] ; PUT DIFF MEMBER UIC INTO THE TABLE
0107 201 $CREMBX_S CHAN=MBXCHAN, LOGNAM=CRENAME, - ; GET MAILBOX FOR PROCESS
0107 202 MAXMSG=#120, PROMSK=#0, BUFQUO=#240
012C 203 SS_CHECK NORMAL ; CHECK NORMAL COMPLETION
015A 204 $GETCHN_S CHAN=MBXCHAN, - ; GET CHAN INFO (UNIT NUMBER)
015A 205 PRIBUF=MBXCHANINFO
0174 206 SS_CHECK NORMAL ; CHECK NORMAL COMPLETION
00000088'EF 00000020'EF 3C 01A2 207 MOVZWL MBXCHANINFO+8+DIB$W_UNIT,MBXUNIT ; SAVE MAILBOX UNIT NUMBER
05 01AD 208 RSB ; RETURN TO MAIN ROUTINE
01AE 209 TM_CLEANUP::
01AE 210 $DELMBX_S MBXCHAN ; DELETE TERMINATION MAILBOX
FE41' 30 01BC 211 BSBW MOD_MSG_PRINT ; PRINT TEST MODULE END MSG
05 01BF 212 RSB ; RETURN TO MAIN ROUTINE

```

```

01C0 214 .SBTTL CONDITION SUBROUTINES - SETUP AND CLEANUP
01C0 215 :++
01C0 216 : FUNCTIONAL DESCRIPTION:
01C0 217 :
01C0 218 : COND1 AND COND1 CLEANUP ARE SUBROUTINES WHICH ARE EXECUTED
01C0 219 : BEFORE AND AFTER THE VERIFY SUBROUTINE, RESPECTIVELY, WHENEVER A NEW
01C0 220 : CONDITION X VALUE IS SELECTED (SEE FUNCTIONAL DESCRIPTION OF SUCCOMMON
01C0 221 : ROUTINE IN SUCCOMMON.MAR). ANY SETUP FUNCTION PARTICULAR TO THE
01C0 222 : CONDITION X TABLE IS INCLUDED IN THE COND1 SUBROUTINE AND CLEANED
01C0 223 : UP, IF NECESSARY, IN THE COND1 CLEANUP SUBROUTINE. THIS INCLUDES,
01C0 224 : ESPECIALLY, CODE TO DETECT CONFLICTS AMONG CURRENT ENTRIES IN TWO
01C0 225 : OR MORE CONDITION TABLES. IF A CONFLICT IS DETECTED, A NON-ZERO
01C0 226 : VALUE IS STORED INTO CONFLICT, WHICH CAUSES THE CALLING ROUTINE
01C0 227 : (SUCCOMMON) TO SKIP THE CURRENT ENTRY IN THE CONDITION X TABLE.
01C0 228 :
01C0 229 : CALLING SEQUENCE:
01C0 230 :
01C0 231 : BSBW COND1 BSBW COND1_CLEANUP
01C0 232 : WHERE X = 1,2,3,4,5
01C0 233 :
01C0 234 : INPUT PARAMETERS:
01C0 235 :
01C0 236 : CONFLICT = 0
01C0 237 :
01C0 238 : IMPLICIT INPUTS:
01C0 239 :
01C0 240 : R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
01C0 241 : FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
01C0 242 :
01C0 243 : OUTPUT PARAMETERS:
01C0 244 :
01C0 245 : CONFLICT SET TO NON-ZERO IF COND TABLE CONFLICT DETECTED.
01C0 246 :
01C0 247 : IMPLICIT OUTPUTS:
01C0 248 :
01C0 249 : R2,3,4,5,6 PRESERVED
01C0 250 :
01C0 251 : COMPLETION CODES:
01C0 252 :
01C0 253 : NONE
01C0 254 :
01C0 255 : SIDE EFFECTS:
01C0 256 :
01C0 257 : NONE
01C0 258 :
01C0 259 : --
01C0 260 :
01C0 261 :
01C0 262 :
05 01C0 263 COND1:: ; RETURN TO MAIN ROUTINE
01C0 264 RSB
05 01C1 265 COND1_CLEANUP:: ; RETURN TO MAIN ROUTINE
01C1 266 RSB
05 01C2 267 COND2:: ; RETURN TO MAIN ROUTINE
01C2 268 RSB
05 01C3 269 COND2_CLEANUP:: ; RETURN TO MAIN ROUTINE
01C3 270 RSB

```

SATSSS41
V04-000

SATS SYSTEM SERVICE TESTS \$EXIT (SUCC S 16-SEP-1984 00:53:26 VAX/VMS Macro V04-00
CONDITION SUBROUTINES - SETUP AND CLEANU 5-SEP-1984 04:31:16 [UETPSY.SRC]SATSSS41.MAR;1

Page 9
(1)

SAT
V04

```
05 01C4 271 COND3::
05 01C4 272 RSB ; RETURN TO MAIN ROUTINE
05 01C5 273 COND3_CLEANUP::
05 01C5 274 RSB ; RETURN TO MAIN ROUTINE
05 01C6 275 COND4::
05 01C6 276 RSB ; RETURN TO MAIN ROUTINE
05 01C7 277 COND4_CLEANUP::
05 01C7 278 RSB ; RETURN TO MAIN ROUTINE
05 01C8 279 COND5::
05 01C8 280 RSB ; RETURN TO MAIN ROUTINE
05 01C9 281 COND5_CLEANUP::
05 01C9 282 RSB ; RETURN TO MAIN ROUTINE
```

```

01CA 284 .SBTTL FORM_CONDS
01CA 285 :
01CA 286 : FUNCTIONAL DESCRIPTION:
01CA 287 :
01CA 288 : FORM_CONDS FORMATS AND PRINTS INFORMATION ABOUT
01CA 289 : THE CURRENT ELEMENT IN EACH OF THE CONDITION TABLES.
01CA 290 :
01CA 291 : CALLING SEQUENCE:
01CA 292 :
01CA 293 : BSBW FORM_CONDS
01CA 294 :
01CA 295 : INPUT PARAMETERS:
01CA 296 :
01CA 297 : NONE
01CA 298 :
01CA 299 : IMPLICIT INPUTS:
01CA 300 :
01CA 301 : R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
01CA 302 : FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
01CA 303 : FOR X = 1,2,3,4,5 :
01CA 304 : CONDX_T - TITLE TEXT FOR CONDX TABLE
01CA 305 : CONDX_TAB - ELEMENT TEXT FOR CONDX TABLE
01CA 306 : CONDX_C - CONTEXT OF THE CONDX TABLE
01CA 307 : CONDX_E - DATA ELEMENTS OF THE CONDX TABLE
01CA 308 :
01CA 309 : OUTPUT PARAMETERS:
01CA 310 :
01CA 311 : NONE
01CA 312 :
01CA 313 : IMPLICIT OUTPUTS:
01CA 314 :
01CA 315 : NONE
01CA 316 :
01CA 317 : COMPLETION CODES:
01CA 318 :
01CA 319 : NONE
01CA 320 :
01CA 321 : SIDE EFFECTS:
01CA 322 :
01CA 323 : NONE
01CA 324 :
01CA 325 : --
01CA 326 :
01CA 327 :
01CA 328 :
01CA 329 FORM_CONDS::
01CA 330 $FAO_S MSG1_INP_CTL,FAO_LEN,FAO_DESC,TESTNUM
01E9 331 : FORMAT CONDITIONS HEADER MSG
01E9 332 BSBW OUTPUT_MSG : ... AND PRINT IT
14 00 91 01EC 333 CMPB #COND1_C,#NULL : IS CONDITION 1 NULL ?
03 12 01EF 334 BNEQU 10$ : NO -- CONTINUE
00BF 31 01F1 335 BRW FORM_CONDSX : YES -- SUBROUTINE IS FINISHED
01F4 336 10$:
01F4 337 MOVAL COND1_T,MSG_A : SAVE ADDRESS OF CONDITION 1 TITLE FOR FAO
01FF 338 MOVL COND1_TAB[R2],MSG_B : SAVE ADDR OF COND 1 CURR TEXT ELT FOR FAO
020B 339 MOVB #COND1_C,MSG_CTXT : SAVE CONDITION 1 CONTEXT FOR FAO
0212 340 MOV_VAL COND1_C,COND1_F[R2],MSG_DATA1 ; GIVE COND 1 DATA VALUE TO FAO

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      FDEB' 30 0212 341      BSBW  WRITE_MSG2      ; FORMAT AND WRITE CONDITION 1 MSG
      14 14 91 0215 342      CMPB  #COND2_C,#NULL      ; IS CONDITION 2 NULL ?
      03 12 0218 343      BNEQU  20$      ; NO -- CONTINUE
      0096 31 021A 344      BRW    FORM_CONDSX      ; YES -- SUBROUTINE IS FINISHED
      021D 345
00000000'EF 000001AC'EF DE 021D 346 20$: MOVAL  COND2_T,MSG_A      ; SAVE ADDRESS OF CONDITION 2 TITLE FOR FAO
00000000'EF 000001AC'EF43 DO 0228 347      MOVL  COND2_TAB[R3],MSG_B      ; SAVE ADDR OF COND 2 CURR TEXT ELT FOR FAO
      00000000'EF 14 90 0234 348      MOVB  #COND2_C,MSG_CTXT      ; SAVE CONDITION 2 CONTEXT FOR FAO
      FDC2' 30 023B 349      MOV_VAL COND2_C,COND2_E[R3],MSG_DATA1 ; GIVE COND 2 DATA VALUE TO FAO
      14 14 91 023E 350      BSBW  WRITE_MSG2      ; FORMAT AND WRITE CONDITION 2 MSG
      03 12 0241 351      CMPB  #COND3_C,#NULL      ; IS CONDITION 3 NULL ?
      006D 31 0243 352      BNEQU  30$      ; NO -- CONTINUE
      0246 353      BRW    FORM_CONDSX      ; YES -- SUBROUTINE IS FINISHED
      0246 354 30$: MOVAL  COND3_T,MSG_A      ; SAVE ADDRESS OF CONDITION 3 TITLE FOR FAO
00000000'EF 000001AD'EF DE 0246 355      MOVL  COND3_TAB[R4],MSG_B      ; SAVE ADDR OF COND 3 CURR TEXT ELT FOR FAO
00000000'EF 000001AD'EF44 DO 0251 356      MOVB  #COND3_C,MSG_CTXT      ; SAVE CONDITION 3 CONTEXT FOR FAO
      00000000'EF 14 90 025D 357      MOV_VAL COND3_C,COND3_E[R4],MSG_DATA1 ; GIVE COND 3 DATA VALUE TO FAO
      FD99' 30 0264 358      BSBW  WRITE_MSG2      ; FORMAT AND WRITE CONDITION 3 MSG
      14 14 91 0267 359      CMPB  #COND4_C,#NULL      ; IS CONDITION 4 NULL ?
      47 13 026A 361      BEQLU  FORM_CONDSX      ; YES -- SUBROUTINE IS FINISHED
      00000000'EF 000001AE'EF DE 026C 362      MOVAL  COND4_T,MSG_A      ; SAVE ADDRESS OF CONDITION 4 TITLE FOR FAO
00000000'EF 000001AE'EF45 DO 0277 363      MOVL  COND4_TAB[R5],MSG_B      ; SAVE ADDR OF COND 4 CURR TEXT ELT FOR FAO
      00000000'EF 14 90 0283 364      MOVB  #COND4_C,MSG_CTXT      ; SAVE CONDITION 4 CONTEXT FOR FAO
      FD73' 30 028A 365      MOV_VAL COND4_C,COND4_E[R5],MSG_DATA1 ; GIVE COND 4 DATA VALUE TO FAO
      14 14 91 028D 366      BSBW  WRITE_MSG2      ; FORMAT AND WRITE CONDITION 4 MSG
      21 13 0290 367      CMPB  #COND5_C,#NULL      ; IS CONDITION 5 NULL ?
      00000000'EF 000001AF'EF DE 0292 368      BEQLU  FORM_CONDSX      ; YES -- SUBROUTINE IS FINISHED
00000000'EF 000001AF'EF46 DO 029D 369      MOVAL  COND5_T,MSG_A      ; SAVE ADDRESS OF CONDITION 5 TITLE FOR FAO
      00000000'EF 14 90 02A9 370      MOVL  COND5_TAB[R6],MSG_B      ; SAVE ADDR OF COND 5 CURR TEXT ELT FOR FAO
      FD4D' 30 02B0 371      MOVB  #COND5_C,MSG_CTXT      ; SAVE CONDITION 5 CONTEXT FOR FAO
      02B0 372      MOV_VAL COND5_C,COND5_E[R6],MSG_DATA1 ; GIVE COND 5 DATA VALUE TO FAO
      02B3 373      BSBW  WRITE_MSG2      ; FORMAT AND WRITE CONDITION 5 MSG
      05 02B3 374 FORM_CONDSX: ; RETURN TO CALLER
      02B3 375      RSB
```

```

02B4 377 .SBTTL VERIFY
02B4 378 :++
02B4 379 : FUNCTIONAL DESCRIPTION:
02B4 380 :
02B4 381 : VERIFY IS CALLED ONCE FOR EACH COMBINATION OF CONDITION
02B4 382 : TABLE VALUES (AS DETERMINED BY THE INDEX REGISTERS R2,3,4,5,6 FOR
02B4 383 : COND TABLES 1,2,3,4,5, RESPECTIVELY). VERIFY ESTABLISHES THE CONDITIONS
02B4 384 : SPECIFIED BY THE COND TABLES AND ISSUES THE SUBJECT SYSTEM SERVICE
02B4 385 : ($EXIT). THEN, THE SUCCESSFUL OPERATION OF THE SERVICE IS VERIFIED
02B4 386 : BY EXAMINING THE STATUS CODE RETURNED, THE VALUES FOR RETURN ARGUMENTS
02B4 387 : AND THE FUNCTIONALITY PERFORMED. THE EXAMINATIONS TAKE THE FORM OF
02B4 388 : COMPARISONS AGAINST EXPECTED VALUES. ANY FAILING COMPARISON CAUSES AN
02B4 389 : ERR_EXIT MACRO TO BE EXECUTED (EITHER DIRECTLY, OR INDIRECTLY,
02B4 390 : THROUGH THE SS_CHECK MACRO); ERR_EXIT SETS EFLAG TO NON-ZERO,
02B4 391 : PRINTS ERROR MESSAGES AND CAUSES AN IMMEDIATE RSB TO CALLER.
02B4 392 : WHEN ERR_EXIT IS EXECUTED, FURTHER CALLS TO VERIFY ARE SUPPRESSED,
02B4 393 : AND, AFTER EXECUTING CLEANUP SUBROUTINES, THE IMAGE EXITS.
02B4 394 :
02B4 395 : CALLING SEQUENCE:
02B4 396 :
02B4 397 : BSBW VERIFY
02B4 398 :
02B4 399 : INPUT PARAMETERS:
02B4 400 :
02B4 401 : NONE
02B4 402 :
02B4 403 : IMPLICIT INPUTS:
02B4 404 :
02B4 405 : R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
02B4 406 : FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
02B4 407 : FOR X = 1,2,3,4,5 :
02B4 408 : CONDX_E - ADDRESS OF TABLE OF DATA VALUES FOR CONDX
02B4 409 : TABLE. IF THE CONTEXT OF TABLE X IS A SYSTEM SERVICE
02B4 410 : ARGUMENT, THE ARGUMENT NAME MAY BE USED AS A SYNONYM
02B4 411 : FOR CONDX_E.
02B4 412 :
02B4 413 : OUTPUT PARAMETERS:
02B4 414 :
02B4 415 : NONE
02B4 416 :
02B4 417 : IMPLICIT OUTPUTS:
02B4 418 :
02B4 419 : VERIFY HAS NO OUTPUT. SINCE ITS PURPOSE IS TO TEST FOR ERRORS,
02B4 420 : IT MERELY RETURNS TO CALLER NORMALLY AFTER THE TESTS, PROVIDING
02B4 421 : ALL WERE SUCCESSFUL; IF AN ERROR IS DISCOVERED, RETURN IS VIA
02B4 422 : AN ERR_EXIT OR SS_CHECK MACRO, BOTH OF WHICH DOCUMENT DETECTED
02B4 423 : ERRORS.
02B4 424 :
02B4 425 : COMPLETION CODES:
02B4 426 :
02B4 427 : EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
02B4 428 :
02B4 429 : SIDE EFFECTS:
02B4 430 :
02B4 431 : SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
02B4 432 : (VIA RSB) IF ERROR ENCOUNTERED.
02B4 433 :
  
```

```

02B4 434 :--
02B4 435
02B4 436
02B4 437
02B4 438 VERIFY::
00000000'EF 95 02B4 439 TSTB CFLAG ; SHOULD CONDITIONS BE PRINTED ?
03 13 02BA 440 BEQL 5$ ; NO -- CONTINUE
FFOB 30 02BC 441 BSBW FORM_CONDS ; YES -- FMT & PRINT ALL CONDS FOR THIS T.C.
0000010C'EF D4 02BF 442 5$:
02BF 443 CLRRL CREPID ; INDICATE CREATED PROCESS NOT YET CREATED
02C5 444 $CREPRC_S PIDADR=CREPID, PRCNAM=CRENAME, -
02C5 445 UIC=COND1 E[R2], IMAGE=IMAGNAM, -
02C5 446 MBXUNT=MBXUNIT;, QUOTA=QUOTALIST
02FC 447 ; CREATE THE SUBJECT PROCESS
02FC 448 SS CHECK NORMAL ; ... AND MAKE SURE IT CREATED OK
032A 449 $QIOW_S CHAN=MBXCHAN, FUNC=#IOS READVBLK, -
032A 450 P1=MBXBUFF+8, P2=MBXBUFF
0353 451 ; WAIT FOR CREATED PROCESS TO SEND MAIL
0000010C'EF 00000098'EF D1 0381 452 SS CHECK NORMAL ; CHECK FOR NORMAL STATUS CODE
69 13 038C 453 CMPL MBXBUFF+12,CREPID ; DID CREATED PROC RETURN EXPECTED STATUS ?
00000000'EF 0000010C'EF D0 038E 454 BEQLU VERIFYX ; YES -- ALL IS OK
00000000'EF 00000098'EF D0 0399 455 MOVL CREPID,EXPV ; NO -- LOAD UP EXPECTED AND
03A4 456 MOVL MBXBUFF+12,RECV ; ... RECEIVED VALUES, THEN EXIT
03F7 457 ERR_EXIT LONG,<INCORRECT EXIT STATUS CODE RETURNED IN MAILBOX>
05 03F7 458 VERIFYX:
459 RSB ; RETURN TO CALLER
  
```



```

03F8 461      .SBTTL VFY_CLEANUP
03F8 462      :++
03F8 463      : FUNCTIONAL DESCRIPTION:
03F8 464      :
03F8 465      :           VFY_CLEANUP EXECUTES SYSTEM SERVICES TO UNDO THE
03F8 466      : EFFECT OF THOSE ISSUED IN THE VERIFY SUBROUTINE. VFY_CLEANUP MUST
03F8 467      : ASSUME THAT VERIFY MAY NOT HAVE EXECUTED IN ITS ENTIRETY (IF AN
03F8 468      : ERROR IS FOUND). ALSO, VFY_CLEANUP MAY ISSUE SS CHECK OR ERR_EXIT
03F8 469      : ONLY AFTER PERFORMING ALL OF ITS CLEANUP OPERATIONS; THIS IS REQUIRED
03F8 470      : IN THE EVENT THAT VFY_CLEANUP IS CALLED DURING ERROR PROCESSING,
03F8 471      : WHEN PERFORMING THE REQUIRED CLEANUP IS MORE IMPORTANT THAN
03F8 472      : POSSIBLY DISCOVERING A SECOND ERROR.
03F8 473      :
03F8 474      : CALLING SEQUENCE:
03F8 475      :
03F8 476      :     BSBW VFY_CLEANUP
03F8 477      :
03F8 478      : INPUT PARAMETERS:
03F8 479      :
03F8 480      :     NONE
03F8 481      :
03F8 482      : IMPLICIT INPUTS:
03F8 483      :
03F8 484      :     R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
03F8 485      :     FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
03F8 486      :     FOR X = 1,2,3,4,5 :
03F8 487      :     CONDX_E - ADDRESS OF TABLE OF DATA VALUES FOR CONDX
03F8 488      :     TABLE. IF THE CONTEXT OF TABLE X IS A SYSTEM SERVICE
03F8 489      :     ARGUMENT, THE ARGUMENT NAME MAY BE USED AS A SYNONYM
03F8 490      :     FOR CONDX_E.
03F8 491      :
03F8 492      : OUTPUT PARAMETERS:
03F8 493      :
03F8 494      :     NONE
03F8 495      :
03F8 496      : IMPLICIT OUTPUTS:
03F8 497      :
03F8 498      :     NONE
03F8 499      :
03F8 500      : COMPLETION CODES:
03F8 501      :
03F8 502      :     EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
03F8 503      :
03F8 504      : SIDE EFFECTS:
03F8 505      :
03F8 506      :     SS CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
03F8 507      :     (VIA RSB) IF ERROR ENCOUNTERED.
03F8 508      :
03F8 509      : --
03F8 510      :
03F8 511      :
03F8 512      :
03F8 513      VFY_CLEANUP::
05 03F8 514      RSB           ; RETURN TO CALLER
03F9 515      .END

```

\$\$\$\$	= 000003AE R	04	FAO_LEN	***** X	04
\$\$\$CHARS	= 0000002E		FORM_CONDS	000001CA RG	04
\$\$\$CHARS1	= 0000000A		FORM_CONDSX	000002B3 R	04
\$\$\$CHARS2	= 00000019		IMAGNAM	00000065 R	02
\$\$\$CHARS3	= 00000021		IOS_READVBLK	***** X	04
\$\$\$CHARS4	= 00000026		LONG	= 00000004 G	
\$\$\$CHARS5	= 00000000		MBXBUFF	0000008C R	03
\$\$\$COND_A	= 00000003		MBXCHAN	00000008 R	03
\$\$\$STRINGS	= 00000001		MBXCHANINFO	0000000C R	03
\$\$\$STRINGS2	= 00000005		MBXUNIT	00000088 R	03
\$BT1	= 00000001		MOD_MSG_CODE	***** X	04
\$BT2	= 00000004		MOD_MSG_PRINT	***** X	04
BYTE	= 00000001 G		MSGT_INP_CTL	00000019 R	02
CFLAG	***** X	04	MSG3_ERR_CTL	00000039 RG	02
CHMRTN	***** X	04	MSG_A	***** X	04
CHM_CONT	***** X	04	MSG_B	***** X	04
COMP_SC	***** X	04	MSG_CTXT	***** X	04
COND	000001C0 RG	04	NOTARG	= 00000000 G	
COND1_C	= 00000000		NULL	= 00000014 G	
COND1_CLEANUP	000001C1 RG	04	OUTPUT_MSG	***** X	04
COND1_E	0000019C R	03	PCBSL_OIC	= 000000BC	
COND1_H	0000011D RG	03	PCV	***** X	04
COND1_T	00000110 R	03	PHDSQ_PRIVMSK	= 00000000	
COND1_TAB	0000011E R	03	PRIVMASK	00000000 R	03
COND2	000001C2 RG	04	PRIV_ARGS	= 00000002	
COND2_C	= 00000014		PROCESS_ERR	***** X	04
COND2_CLEANUP	000001C3 RG	04	QUAD	= 00000008 G	
COND2_H	000001AC RG	03	RECV	***** X	04
COND2_T	000001AC R	03	REST_REGS	***** X	04
COND2_TAB	000001AC R	03	SAVE_REGS	***** X	04
COND3	000001C4 RG	04	SCHSGL_CURPCB	***** X	04
COND3_C	= 00000014		SS\$ NORMAL	***** X	04
COND3_CLEANUP	000001C5 RG	04	SUCCESS	***** X	04
COND3_H	000001AD RG	03	SYSSCMKRN	***** GX	04
COND3_T	000001AD R	03	SYSSCREMBX	***** GX	04
COND3_TAB	000001AD R	03	SYSSCREPRC	***** GX	04
COND4	000001C6 RG	04	SYSSDELMBX	***** GX	04
COND4_C	= 00000014		SYSSFAO	***** X	04
COND4_CLEANUP	000001C7 RG	04	SYSSGETCHN	***** GX	04
COND4_H	000001AE RG	03	SYSSQIOW	***** GX	04
COND4_T	000001AE R	03	SYSSSETPRN	***** GX	04
COND4_TAB	000001AE R	03	SYSSSETPRV	***** GX	04
COND5	000001C8 RG	04	TESTNUM	***** X	04
COND5_C	= 00000014		TEST_MOD_NAME	00000000 RG	02
COND5_CLEANUP	000001C9 RG	04	TEST_MOD_NAME_D	00000009 R	02
COND5_H	000001AF RG	03	TEST_MOD_SUCC	***** X	04
COND5_T	000001AF R	03	TMC_ADDR	***** X	04
COND5_TAB	000001AF R	03	TM_CLEANUP	000001AE RG	04
CRENAME	00000051 R	02	TM_SETUP	00000000 RG	04
CREPID	0000010C R	03	VERIFY	000002B4 RG	04
CTLSGL_PHD	***** X	04	VERIFYX	000003F7 R	04
DESC	= 00000010 G		VFY_CLEANUP	000003F8 RG	04
DIBSK_LENGTH	= 00000074		WORD	= 00000002 G	
DIBSW_UNIT	= 0000000C		WRITE_MSG2	***** X	04
EFLAG	***** X	04			
EXPV	***** X	04			
FAO_DESC	***** 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	00000084 (132.)	02 (2.)	NOPIC USR CON REL LCL NOSHR NOEXE RD NOWRT NOVEC LONG
RWDATA	000001B0 (432.)	03 (3.)	NOPIC USR CON REL LCL NOSHR NOEXE RD WRT NOVEC LONG
SATSSS41	000003F9 (1017.)	04 (4.)	NOPIC USR CON REL LCL NOSHR EXE RD WRT NOVEC BYTE

! Performance indicators !

Phase	Page faults	CPU Time	Elapsed Time
Initialization	35	00:00:00.11	00:00:00.31
Command processing	135	00:00:00.71	00:00:01.40
Pass 1	269	00:00:07.47	00:00:14.13
Symbol table sort	0	00:00:00.73	00:00:00.99
Pass 2	107	00:00:01.81	00:00:02.45
Symbol table output	13	00:00:00.08	00:00:00.13
Psect synopsis output	3	00:00:00.03	00:00:00.04
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	564	00:00:10.95	00:00:19.47

The working set limit was 1500 pages.
39263 bytes (77 pages) of virtual memory were used to buffer the intermediate code.
There were 30 pages of symbol table space allocated to hold 473 non-local and 23 local symbols.
515 source lines were read in Pass 1, producing 23 object records in Pass 2.
42 pages of virtual memory were used to define 32 macros.

! Macro library statistics !

Macro library name	Macros defined
-\$255\$DUA28:[SHRLIB]UETP.MLB;1	8
-\$255\$DUA28:[SYS.OBJ]LIB.MLB;1	2
-\$255\$DUA28:[SYSLIB]STARLET.MLB;2	19
TOTALS (all libraries)	29

864 CLTS were required to define 29 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS\$:SATSSS41/OBJ=OBJ\$:SATSSS41 MSRC\$:SATSSS41/UPDATE=(ENH\$:SATSSS41)+EXECMLS/LIB+SHRLIB\$:UETP/LIB

0423 AH-BT13A-SE
VAX/VMS V4.0

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