

```

UUU      UUU  EEEEEEEEEEEEEEE  TTTTTTTTTTTTTTT  PPPPPPPPPPP  SSSSSSSSSSS  YYY      YYY
UUU      UUU  EEEEEEEEEEEEEEE  TTTTTTTTTTTTTTT  PPPPPPPPPPP  SSSSSSSSSSS  YYY      YYY
UUU      UUU  EEEEEEEEEEEEEEE  TTTTTTTTTTTTTTT  PP P P P P P P P P P P  SSSSSSSSSSS  YYY      YYY
UUU      UUU  EEE      TTT      PPP      PPP  SSS      YYY      YYY
UUU      UUU  EEE      TTT      PPP      PPP  SSS      YYY      YYY
UUU      UUU  EEE      TTT      PPP      PPP  SSS      YYY      YYY
UUU      UUU  EEE      TTT      PPP      PPP  SSS      YYY      YYY
UUU      UUU  EEE      TTT      PPP      PPP  SSS      YYY      YYY
UUU      UUU  EEE      TTT      PPP      PPP  SSS      YYY      YYY
UUU      UUU  EEE      TTT      PPP      PPP  SSS      YYY      YYY
UUU      UUU  EEE      TTT      PPP      PPP  SSS      YYY      YYY
UUU      UUU  EEE      TTT      PPP      PPP  SSS      YYY      YYY
UUU      UUU  EEE      TTT      PPP      PPP  SSS      YYY      YYY
UUU      UUU  EEE      TTT      PPP      PPP  SSS      YYY      YYY
UUU      UUU  EEE      TTT      PPP      PPP  SSS      YYY      YYY
UUU      UUU  EEE      TTT      PPP      PPP  SSS      YYY      YYY
UUUUUUUUUUUUUUUU  EEEEEEEEEEEEEEE  TTT      PPP      PPP  SSS      YYY      YYY
UUUUUUUUUUUUUUUU  EEEEEEEEEEEEEEE  TTT      PPP      PPP  SSS      YYY      YYY
UUUUUUUUUUUUUUUU  EEEEEEEEEEEEEEE  TTT      PPP      PPP  SSS      YYY      YYY

```

```

SSSSSSSS  AAAAAA  TTTTTTTTTT  SSSSSSSS  SSSSSSSS  SSSSSSSS  888888  11
SSSSSSSS  AAAAAA  TTTTTTTTTT  SSSSSSSS  SSSSSSSS  SSSSSSSS  888888  11
SS         AA      AA      TT         SS         SS         SS         88      88      1111
SS         AA      AA      TT         SS         SS         SS         88      88      1111
SS         AA      AA      TT         SS         SS         SS         88      88      11
SS         AA      AA      TT         SS         SS         SS         88      88      11
SSSSSSS   AA      AA      TT         SSSSSSS   SSSSSSS   SSSSSSS   888888  11
SSSSSSS   AA      AA      TT         SSSSSSS   SSSSSSS   SSSSSSS   888888  11
SS         AA      AA      TT         SS         SS         SS         88      88      11
SS         AA      AA      TT         SS         SS         SS         88      88      11
SS         AA      AA      TT         SS         SS         SS         88      88      11
SS         AA      AA      TT         SS         SS         SS         88      88      11
SSSSSSSS  AA      AA      TT         SSSSSSSS  SSSSSSSS  SSSSSSSS  888888  111111
SSSSSSSS  AA      AA      TT         SSSSSSSS  SSSSSSSS  SSSSSSSS  888888  111111

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

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```

LL         IIIIII  SSSSSSSS
LL         IIIIII  SSSSSSSS
LL         II     SS
LL         II     SS
LL         II     SS
LL         II     SS
LL         II     SSSSSS
LL         II     SSSSSS
LL         II     SS
LL         II     SS
LL         II     SS
LL         II     SS
LLLLLLLLLL IIIIII  SSSSSSSS
LLLLLLLLLL IIIIII  SSSSSSSS

```

(1)	56	DECLARATIONS
(1)	93	CONDITION TABLES
(1)	120	TM_SETUP, TM_CLEANUP
(1)	196	CONDITION SUBROUTINES - SETUP AND CLEANUP
(1)	266	FORM_CONDS
(1)	359	VERIFY
(1)	485	VFY_CLEANUP

```
0000 1 .TITLE SATSSS81 SATS SYSTEM SERVICE TESTS $ADJWSL (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 SATSSS81 TO TEST SUCCESSFUL
0000 36 : OPERATION OF THE $ADJWSL 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: AUG, 1977
0000 47 :
0000 48 : MODIFIED BY:
0000 49 :
0000 50 : V03-001 KDM0002 Kathleen D. Morse 28-Jun-1982
0000 51 : Added $SSDEF.
0000 52 :
0000 53 : 01 -
0000 54 : --
```

```
0000 56 .SBTTL DECLARATIONS
0000 57 :
0000 58 : INCLUDE FILES:
0000 59 :
0000 60 $PRVDEF ; PRIVILEGE BIT DEFINITIONS
0000 61 $PHDDEF ; PROCESS HEADER OFFSETS
0000 62 $SSDEF ; SYSTEM STATUS CODE DEFINITIONS
0000 63 :
0000 64 : MACROS:
0000 65 :
0000 66 :
0000 67 : EQUATED SYMBOLS:
0000 68 :
0000 69 :
0000 70 : OWN STORAGE:
0000 71 :
```

SATSSS81  
V04-000

```
00000000 73 .PSECT RODATA, RD, NOWRT, NOEXE, LONG
0000 74 TEST_MOD_NAME:: STRING C, <SATSSS81> ; TEST MODULE NAME
0009 75 TEST_MOD_NAME_D: STRING I, <SATSSS81> ; TEST MODULE NAME DESCRIPTOR
0019 76 MSG1_INP_CTL: STRING I, <SSAWS!4ZW: CONDITIONS:>
0039 77 ; FAO CTL STRING FOR MSG1 IN SUCCOMMON.MAR
0039 78 MSG3_ERR_CTL:: STRING I, <*SSAWS!4ZW: !AS>
0051 79 ; FAO CTL STRING FOR MSG3 IN SUCCOMMON.MAR
01E84800 0051 80 MAXPAGCNT: .LONG 32000000 ; A PAGCNT VALUE GREATER THAN MAX POSSIBLE
FE17B800 0055 81 MINPAGCNT: .LONG -32000000 ; A PAGCNT VALUE LESS THAN MINIMUM POSSIBLE
```



```
0024 93 .SBTTL CONDITION TABLES
0024 94 :
0024 95 ***** CONDITION TABLES FOR ADJWSL SYSTEM SERVICE *****
0024 96 :
0024 97 COND 1,NOTARG,<NEW WORKING SET VALUE>,-
0024 98 <1 GREATER THAN VALUE AT ENTRY>,-
0024 99 <UPPER LIMIT>,-
0024 100 <1 GREATER THAN UPPER LIMIT>,-
0024 101 <LOWER LIMIT>,-
0024 102 <1 LESS THAN LOWER LIMIT>,-
0024 103
00000014' 00B8 104 .ADDRESS WSETENTR_P1
00000018' 00BC 105 .ADDRESS WSETULIM
00000018' 00C0 106 .ADDRESS WSETULIM
0000001C' 00C4 107 .ADDRESS WSETLLIM
0000001C' 00C8 108 .ADDRESS WSETLLIM
00CC 109 :
00CC 110 COND 2,NULL
00CD 111 COND 3,NULL
00CD 112
00CE 113 COND 4,NULL
00CE 114
00CF 115 COND 5,NULL
00CF 116
00D0 117
00000000 118 .PSECT SATSSS81, RD, WRT, EXE
```

```

0000 120 .SBTTL TM_SETUP, TM_CLEANUP
0000 121 :++
0000 122 : FUNCTIONAL DESCRIPTION:
0000 123 :
0000 124 : TM SETUP AND TM CLEANUP ARE CALLED TO PERFORM
0000 125 : REQUIRED HOUSEKEEPING AT THE BEGINNING AND END, RESPECTIVELY, OF
0000 126 : TEST MODULE EXECUTION.
0000 127 :
0000 128 : CALLING SEQUENCE:
0000 129 :
0000 130 : BSBW TM_SETUP BSBW TM_CLEANUP
0000 131 :
0000 132 : INPUT PARAMETERS:
0000 133 :
0000 134 : NONE
0000 135 :
0000 136 : IMPLICIT INPUTS:
0000 137 :
0000 138 : NONE
0000 139 :
0000 140 : OUTPUT PARAMETERS:
0000 141 :
0000 142 : NONE
0000 143 :
0000 144 : IMPLICIT OUTPUTS:
0000 145 :
0000 146 : TM_SETUP: COND TABLE INDEX REGISTERS (R2,3,4,5,6) CLEARED;
0000 147 : ALL PRIVILEGES ACQUIRED.
0000 148 :
0000 149 : COMPLETION CODES:
0000 150 :
0000 151 : EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
0000 152 :
0000 153 : SIDE EFFECTS:
0000 154 :
0000 155 : SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
0000 156 : (VIA RSB) IF ERROR ENCOUNTERED.
0000 157 :
0000 158 :--
0000 159 :
0000 160 :
0000 161 :
0000 162 :

```

```

00000000'EF 00000000'EF 52 D4 0000 163 TM_SETUP:: CLRL R2 ; INITIALIZE
03 00 00000000'8F 53 D4 0002 164 CLRL R3 ; .. CONDITION
00000000'EF 54 D4 0004 165 CLRL R4 ; .... TABLE
00000000'EF 55 D4 0006 166 CLRL R5 ; ..... INDEX
00000000'EF 56 D4 0008 167 CLRL R6 ; ..... REGISTERS
00000000'EF 30 000A 168 BSBW MOD_MSG_PRINT ; PRINT TEST MODULE BEGIN MSG
00000000'EF 59 00000000'9F 69 D0 0048 169 MOVAL TEST_MOD_SUCC,TMD_ADDR ; ASSUME END MSG WILL SHOW SUCCESS
00000000'EF 00000000'EF 69 DE 004F 170 INSV #SUCCESS,#0,#3,MOD_MSG_CODE ; ADJUST STATUS CODE FOR SUCCESS
00020 171
0025 171 MODE TO,5$,KRNL ; KERNEL MODE TO ACCESS PHD
0048 172 MOVL @#CTL$GL_PHD,R9 ; GET PROCESS HEADER ADDRESS
004F 173 MOVAL PHD$Q_PRIVMSK(R9),PRIVMSK ; GET PRIV MASK ADDRESS
0056 174 MODE FROM,5$ ; BACK TO USER MODE
0057 175 PRIV ADD,ALL ; GET ALL PRIVILEGES

```

			0077	176	\$SETPRN S TEST MOD_NAME_D	:	SET PROCESS NAME
			0084	177	SS CHECK NORMAL	:	CHECK STATUS CODE RETURNED FROM SETPRN
			00AE	178	\$ADJWSL S #0,WSETENTR	:	GET WORKING SET VALUE AT ENTRY
			00BD	179	SS CHECK NORMAL	:	CHECK NORMAL RETURN
00000014'EF	00000010'EF	01	C1	00E7	180	ADDL3 #1,WSETENTR,WSETENTR_P1	: REMEMBER WSETENTR PLUS 1
				00F3	181	\$ADJWSL S MAXPAGCNT,WSETULIM	: GET UPPER LIMIT FOR WORKING SET
				0106	182	SS CHECK NORMAL	: CHECK NORMAL RETURN
				0130	183	\$ADJWSL S MINPAGCNT,WSETLLIM	: GET LOWER LIMIT FOR WORKING SET
				0143	184	SS CHECK NORMAL	: CHECK NORMAL RETURN
				016D	185	SUBL3 WSETLLIM,WSETENTR,PAGCNT	: GET INCR FROM ENTRY TO LLIM
				0178			
				017D	186	\$ADJWSL S PAGCNT	: ... AND GET BACK TO ENTRY VALUE
				018C	187	SS CHECK NORMAL	: CHECK NORMAL RETURN
				0186	188	RSB	: RETURN TO MAIN ROUTINE
				0187	189	TM_CLEANUP::	
				0187	190	\$ADJWSL S #0,WSETLM	: GET CURRENT W.S. VALUE
00000010'EF	0000000C'EF		C3	01C6	191	SUBL3 WSETLM,WSETENTR,PAGCNT	: COMPUTE DISTANCE TO ENTRY VALUE
	00000008'EF			01D1			
				01D6	192	\$ADJWSL S PAGCNT	: ... AND GO BACK THERE
				01E5	193	BSBW MOD_MSG_PRINT	: PRINT TEST MODULE END MSG
				01E8	194	RSB	: RETURN TO MAIN ROUTINE

```

01E9 196 .SBTTL CONDITION SUBROUTINES - SETUP AND CLEANUP
01E9 197 :++
01E9 198 : FUNCTIONAL DESCRIPTION:
01E9 199 :
01E9 200 : COND1 AND COND2 CLEANUP ARE SUBROUTINES WHICH ARE EXECUTED
01E9 201 : BEFORE AND AFTER THE VERIFY SUBROUTINE, RESPECTIVELY, WHENEVER A NEW
01E9 202 : CONDITION X VALUE IS SELECTED (SEE FUNCTIONAL DESCRIPTION OF SUCCOMMON
01E9 203 : ROUTINE IN SUCCOMMON.MAR). ANY SETUP FUNCTION PARTICULAR TO THE
01E9 204 : CONDITION X TABLE IS INCLUDED IN THE COND1 SUBROUTINE AND CLEANED
01E9 205 : UP, IF NECESSARY, IN THE COND2 CLEANUP SUBROUTINE. THIS INCLUDES,
01E9 206 : ESPECIALLY, CODE TO DETECT CONFLICTS AMONG CURRENT ENTRIES IN TWO
01E9 207 : OR MORE CONDITION TABLES. IF A CONFLICT IS DETECTED, A NON-ZERO
01E9 208 : VALUE IS STORED INTO CONFLICT, WHICH CAUSES THE CALLING ROUTINE
01E9 209 : (SUCCOMMON) TO SKIP THE CURRENT ENTRY IN THE CONDITION X TABLE.
01E9 210 :
01E9 211 : CALLING SEQUENCE:
01E9 212 :
01E9 213 : BSBW COND1 BSBW COND2_CLEANUP
01E9 214 : WHERE X = 1,2,3,4,5
01E9 215 :
01E9 216 : INPUT PARAMETERS:
01E9 217 :
01E9 218 : CONFLICT = 0
01E9 219 :
01E9 220 : IMPLICIT INPUTS:
01E9 221 :
01E9 222 : R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
01E9 223 : FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
01E9 224 :
01E9 225 : OUTPUT PARAMETERS:
01E9 226 :
01E9 227 : CONFLICT SET TO NON-ZERO IF COND TABLE CONFLICT DETECTED.
01E9 228 :
01E9 229 : IMPLICIT OUTPUTS:
01E9 230 :
01E9 231 : R2,3,4,5,6 PRESERVED
01E9 232 :
01E9 233 : COMPLETION CODES:
01E9 234 :
01E9 235 : NONE
01E9 236 :
01E9 237 : SIDE EFFECTS:
01E9 238 :
01E9 239 : NONE
01E9 240 :
01E9 241 : --
01E9 242 :
01E9 243 :
01E9 244 :
05 01E9 245 COND1:: ; RETURN TO MAIN ROUTINE
01E9 246 RSB
01EA 247 COND1_CLEANUP:: ; RETURN TO MAIN ROUTINE
05 01EA 248 RSB
01EB 249 COND2:: ; RETURN TO MAIN ROUTINE
05 01EB 250 RSB
01EC 251 COND2_CLEANUP:: ; RETURN TO MAIN ROUTINE
05 01EC 252 RSB

```

SATSSSB1  
V04-000

SATS SYSTEM SERVICE TESTS \$ADJWSL (SUCC 16-SEP-1984 01:05:00 VAX/VMS Macro V04-00  
CONDITION SUBROUTINES - SETUP AND CLEANU 5-SEP-1984 04:33:47 [UETPSY.SRC]SATSSSB1.MAR;1

Page 9  
(1)

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

```

01F3 266 .SBTTL FORM_CONDS
01F3 267 :++
01F3 268 : FUNCTIONAL DESCRIPTION:
01F3 269 :
01F3 270 : FORM CONDS FORMATS AND PRINTS INFORMATION ABOUT
01F3 271 : THE CURRENT ELEMENT IN EACH OF THE CONDITION TABLES.
01F3 272 :
01F3 273 : CALLING SEQUENCE:
01F3 274 :
01F3 275 : BSBW FORM_CONDS
01F3 276 :
01F3 277 : INPUT PARAMETERS:
01F3 278 :
01F3 279 : NONE
01F3 280 :
01F3 281 : IMPLICIT INPUTS:
01F3 282 :
01F3 283 : R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
01F3 284 : FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
01F3 285 : FOR X = 1,2,3,4,5 :
01F3 286 : CONDX_T - TITLE TEXT FOR CONDX TABLE
01F3 287 : CONDX_TAB - ELEMENT TEXT FOR CONDX TABLE
01F3 288 : CONDX_C - CONTEXT OF THE CONDX TABLE
01F3 289 : CONDX_E - DATA ELEMENTS OF THE CONDX TABLE
01F3 290 :
01F3 291 : OUTPUT PARAMETERS:
01F3 292 :
01F3 293 : NONE
01F3 294 :
01F3 295 : IMPLICIT OUTPUTS:
01F3 296 :
01F3 297 : NONE
01F3 298 :
01F3 299 : COMPLETION CODES:
01F3 300 :
01F3 301 : NONE
01F3 302 :
01F3 303 : SIDE EFFECTS:
01F3 304 :
01F3 305 : NONE
01F3 306 :
01F3 307 :--
01F3 308 :
01F3 309 :
01F3 310 :
01F3 311 FORM_CONDS::
01F3 312 $FAO_S MSG1_INP_CTL,FAO_LEN,FAO_DESC,TESTNUM
0212 313 : FORMAT CONDITIONS HEADER MSG
0212 314 BSBW OUTPUT_MSG : ... AND PRINT IT
14 00 91 0215 315 CMPB #COND1_C,#NULL : IS CONDITION 1 NULL ?
03 12 0218 316 PNEQU 10$ : NO -- CONTINUE
00BF 31 021A 317 BRW FORM_CONDSX : YES -- SUBROUTINE IS FINISHED
021D 318 10$:
00000000'EF 00000024'EF DE 021D 319 MOVAL COND1_T,MSG_A : SAVE ADDRESS OF CONDITION 1 TITLE FOR FAO
00000000'EF 0000003B'EF42 D0 0228 320 MOVL COND1_TAB[R2],MSG_B : SAVE ADDR OF COND 1 CURR TEXT ELT FOR FAO
00000000'EF 00 90 0234 321 MOVB #COND1_C,MSG_CTXT : SAVE CONDITION 1 CONTEXT FOR FAO
023B 322 MOV_VAL COND1_C,COND1_E[R2],MSG_DATA1 ; GIVE COND 1 DATA VALUE TO FAO

```

```

      FDC2' 30 023B 323          BSBW  WRITE_MSG2          : FORMAT AND WRITE CONDITION 1 MSG
      14 14 91 023E 324          CMPB  #COND2_C,#NULL        : IS CONDITION 2 NULL ?
      03 12 0241 325          BNEQU 20$                : NO -- CONTINUE
      0096 31 0243 326          BRW   FORM_CONDSX         : YES -- SUBROUTINE IS FINISHED
                                0246 327
00000000'EF 000000CC'EF DE 0246 328 20$: MOVAL COND2_T,MSG_A          : SAVE ADDRESS OF CONDITION 2 TITLE FOR FAO
00000000'EF 000000CC'EF43 DO 0251 329      MOVL COND2_TAB[R3],MSG_B       : SAVE ADDR OF COND 2 CURR TEXT ELT FOR FAO
      00000000'EF 14 90 025D 330      MOVB  #COND2_C,MSG_CTXT        : SAVE CONDITION 2 CONTEXT FOR FAO
                                0264 331      MOV_VAL COND2_C,COND2_E[R3],MSG_DATA1 : GIVE COND 2 DATA VALUE TO FAO
      FD99' 30 0264 332          BSBW  WRITE_MSG2          : FORMAT AND WRITE CONDITION 2 MSG
      14 14 91 0267 333          CMPB  #COND3_C,#NULL        : IS CONDITION 3 NULL ?
      03 12 026A 334          BNEQU 30$                : NO -- CONTINUE
      006D 31 026C 335          BRW   FORM_CONDSX         : YES -- SUBROUTINE IS FINISHED
                                026F 336 30$:
00000000'EF 000000CD'EF DE 026F 337      MOVAL COND3_T,MSG_A          : SAVE ADDRESS OF CONDITION 3 TITLE FOR FAO
00000000'EF 000000CD'EF44 DO 027A 338      MOVL COND3_TAB[R4],MSG_B       : SAVE ADDR OF COND 3 CURR TEXT ELT FOR FAO
      00000000'EF 14 90 0286 339      MOVB  #COND3_C,MSG_CTXT        : SAVE CONDITION 3 CONTEXT FOR FAO
                                028D 340      MOV_VAL COND3_C,COND3_E[R4],MSG_DATA1 : GIVE COND 3 DATA VALUE TO FAO
      FD70' 30 028D 341          BSBW  WRITE_MSG2          : FORMAT AND WRITE CONDITION 3 MSG
      14 14 91 0290 342          CMPB  #COND4_C,#NULL        : IS CONDITION 4 NULL ?
      47 13 0293 343          BEQLU FORM_CONDSX         : YES -- SUBROUTINE IS FINISHED
      00000000'EF 000000CE'EF DE 0295 344      MOVAL COND4_T,MSG_A          : SAVE ADDRESS OF CONDITION 4 TITLE FOR FAO
00000000'EF 000000CE'EF45 DO 02A0 345      MOVL COND4_TAB[R5],MSG_B       : SAVE ADDR OF COND 4 CURR TEXT ELT FOR FAO
      00000000'EF 14 90 02AC 346      MOVB  #COND4_C,MSG_CTXT        : SAVE CONDITION 4 CONTEXT FOR FAO
                                02B3 347      MOV_VAL COND4_C,COND4_E[R5],MSG_DATA1 : GIVE COND 4 DATA VALUE TO FAO
      FD4A' 30 02B3 348          BSBW  WRITE_MSG2          : FORMAT AND WRITE CONDITION 4 MSG
      14 14 91 02B6 349          CMPB  #COND5_C,#NULL        : IS CONDITION 5 NULL ?
      21 13 02B9 350          BEQLU FORM_CONDSX         : YES -- SUBROUTINE IS FINISHED
      00000000'EF 000000CF'EF DE 02BB 351      MOVAL COND5_T,MSG_A          : SAVE ADDRESS OF CONDITION 5 TITLE FOR FAO
00000000'EF 000000CF'EF46 DO 02C6 352      MOVL COND5_TAB[R6],MSG_B       : SAVE ADDR OF COND 5 CURR TEXT ELT FOR FAO
      00000000'EF 14 90 02D2 353      MOVB  #COND5_C,MSG_CTXT        : SAVE CONDITION 5 CONTEXT FOR FAO
                                02D9 354      MOV_VAL COND5_C,COND5_E[R6],MSG_DATA1 : GIVE COND 5 DATA VALUE TO FAO
      FD24' 30 02D9 355          BSBW  WRITE_MSG2          : FORMAT AND WRITE CONDITION 5 MSG
                                02DC 356 FORM_CONDSX:
      05 02DC 357          RSB   : RETURN TO CALLER
```

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

```
02DD 416 :--
02DD 417
02DD 418
02DD 419
02DD 420 VERIFY::
00000000'EF 95 02DD 421 TSTB CFLAG : SHOULD CONDITIONS BE PRINTED ?
03 13 02E3 422 BEQL 5$ : NO -- CONTINUE
FF0B 30 02E5 423 BSBW FORM_CONDS : YES -- FMT & PRINT ALL CONDS FOR THIS T.C.
52 95 02E8 424 5$:
12 12 02E8 425 TSTB R2 : FIRST CONDITION 1 ELEMENT ?
00AF 31 02EA 426 BNEQ 10$ : NO -- LOOK AT NEXT ELEMENT
02EC 427 $ADJWSL_S #1,WSETLM : YES -- ADJUST TO ENTRY VALUE + 1
02FB 428 BRW -50$ : ... AND GO DO SOME VERIFICATION
02FE 429 10$:
01 52 91 02FE 430 CMPB R2,#1 : 2ND CONDITION 1 ELEMENT ?
00000018'EF 00000010'EF 12 0301 431 BNEQ 20$ : NO -- LOOK AT NEXT ELEMENT
00000008'EF C3 0303 432 SUBL3 WSETENR,WSETULIM,PAGCNT : GET OFFSET TO UPPER LIMIT
030E 433 $ADJWSL_S PAGCNT,WSETLM : ... AND ADJUST TO IT
0084 31 0313 434 BRW -50$ : VERIFY THE SUBJECT SERVICE
02 52 91 0329 435 20$:
2L 12 0329 436 CMPB R2,#2 : 3RD CONDITION 1 ELEMENT ?
00000018'EF 00000010'EF C3 032C 437 BNEQ 30$ : NO -- GO CHECK NEXT ELEMENT
00000008'EF 00000008'EF D6 032E 438 SUBL3 WSETENR,WSETULIM,PAGCNT : FIND OUT HOW FAR AWAY ULIM IS
00000008'EF 0339 439 INCL PAGCNT : GO ONE FURTHER
0053 31 0344 440 $ADJWSL_S PAGCNT,WSETLM : ADJUST TO ONE BEYOND UPPER LIMIT
03 52 91 0357 441 BRW -50$ : ... AND VERIFY IT
035A 442 30$:
0000001C'EF 00000010'EF 12 035A 443 CMPB R2,#3 : 4TH CONDITION 1 ELEMENT ?
00000008'EF C3 035D 444 BNEQ 40$ : NO -- MUST BE THE 5TH
035F 445 SUBL3 WSETENR,WSETLLIM,PAGCNT : COMPUTE DISTANCE TO LOWER LIMIT
036A 446 $ADJWSL_S PAGCNT,WSETLM : ... AND ADJUST TO THERE
29 11 0382 447 BRB -50$ : GO VERIFY SERVICE
0000001C'EF 00000010'EF C3 0384 448 40$:
00000008'EF 0384 449 SUBL3 WSETENR,WSETLLIM,PAGCNT : FIND DISTANCE TO LOWER LIMIT
00000008'EF D7 038F 450 DECL PAGCNT : ... AND GO ONE BELOW IT
039A 451 $ADJWSL_S PAGCNT,WSETLM : ISSUE SUBJECT SERVICE
03AD 452 50$:
01 50 D1 03AD 453 CMPL R0,#SS$_NORMAL : VERIFY SUBJECT SERVICE
5D 13 0380 454 BEQL 60$ : CODE RETURNED = CODE EXPECTED ?
00000000'EF 01 D0 0382 455 MOVL #SS$_NORMAL,EXPV : YES -- MORE TO VERIFY
00000000'EF 50 D0 0389 456 MOVL R0,RECV : NO -- LOAD UP EXPECTED AND
03C0 457 ERR_EXIT LONG,<INCORRECT STATUS CODE RETURNED FROM ADJWSL> : ... RECEIVED VALUES, THEN EXIT
040F 458 60$:
51 00000088'EF42 D0 040F 459 MOVL COND1 E[R2],R1 : GET EXPECTED VALUE SAFELY INTO REGISTER
61 0000000C'EF D1 0417 460 CMPL WSETLM,(R1) : IS COMPUTED W.S. VALUE = THAT EXPECTED ?
03 12 041E 461 BNEQ 65$ : NO -- COULD BE AN ERROR
007E 31 0420 462 BRW 80$ : YES -- ON TO MORE VERIFICATION
0423 463 65$:
52 95 0423 464 TSTB R2 : FIRST CONDITION 1 ELEMENT ?
1A 12 0425 465 BNEQ 70$ : NO -- THEN IT REALLY IS AN ERROR
00000010'EF 0000000C'EF D1 0427 466 CMPL WSETLM,WSETENR : IS W.S. AT ENTRY VALUE ?
0D 12 0432 467 BNEQ 70$ : NO -- THAT'S AN ERROR
00000018'EF 00000010'EF D1 0434 468 CMPL WSETENR,WSETULIM : IS W.S. AT UPPER LIMIT ?
```

		60	13	043F	469	BEQL	80\$		: YES -- THEN IT'S OK
				0441	470	70\$:			
00000000'EF	00000000'EF	61	D0	0441	471	MOVL	(R1),EXPV		: LOAD EXPECTED AND
	0000000C'EF		D0	0448	472	MOVL	WSETLM,RCV		: ... RECEIVED VALUES, THEN EXIT
				0453	473	ERR_EXIT	LONG,<INCORRECT WSETLM VALUE RETURNED BY ADJWSL>		
				04A1	474	80\$:			
				04A1	475	\$ADJWSL	S #0,WSETLM_VFY		: GET CURRENT WSETLM TO VERIFY IT
00000020'EF	0000000C'EF		D1	04B0	476	SS_CHECK	NORMAL		: CHECK NORMAL RETURN
		59	13	04DA	477	CPL	WSETLM,WSETLM_VFY		: DID ADJWSL REMEMBER W.S. VALUE ?
00000000'EF	0000000C'EF		D0	04E5	478	BEQL	VERIFYX		: YES -- ALL TESTS PASSED
00000000'EF	00000020'EF		D0	04E7	479	MOVL	WSETLM,EXPV		: NO -- LOAD EXPECTED AND
			D0	04F2	480	MOVL	WSETLM_VFY,RCV		: ... RECEIVED VALUES, THEN EXIT
				04FD	481	ERR_EXIT	LONG,<WSETLM NOT PRESERVED BY ADJWSL>		
				0540	482	VERIFYX:			
		05	05	0540	483	RSB			: RETURN TO CALLER

```

0541 485 .SBTTL VFY_CLEANUP
0541 486 :++
0541 487 : FUNCTIONAL DESCRIPTION:
0541 488 :
0541 489 : VFY_CLEANUP EXECUTES SYSTEM SERVICES TO UNDO THE
0541 490 : EFFECT OF THOSE ISSUED IN THE VERIFY SUBROUTINE. VFY_CLEANUP MUST
0541 491 : ASSUME THAT VERIFY MAY NOT HAVE EXECUTED IN ITS ENTIRETY (IF AN
0541 492 : ERROR IS FOUND). ALSO, VFY_CLEANUP MAY ISSUE SS CHECK OR ERR_EXIT
0541 493 : ONLY AFTER PERFORMING ALL OF ITS CLEANUP OPERATIONS; THIS IS REQUIRED
0541 494 : IN THE EVENT THAT VFY_CLEANUP IS CALLED DURING ERROR PROCESSING,
0541 495 : WHEN PERFORMING THE REQUIRED CLEANUP IS MORE IMPORTANT THAN
0541 496 : POSSIBLY DISCOVERING A SECOND ERROR.
0541 497 :
0541 498 : CALLING SEQUENCE:
0541 499 :
0541 500 : BSBW VFY_CLEANUP
0541 501 :
0541 502 : INPUT PARAMETERS:
0541 503 :
0541 504 : NONE
0541 505 :
0541 506 : IMPLICIT INPUTS:
0541 507 :
0541 508 : R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
0541 509 : FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
0541 510 : FOR X = 1,2,3,4,5 :
0541 511 : CONDX_E - ADDRESS OF TABLE OF DATA VALUES FOR CONDX
0541 512 : TABLE. IF THE CONTEXT OF TABLE X IS A SYSTEM SERVICE
0541 513 : ARGUMENT, THE ARGUMENT NAME MAY BE USED AS A SYNONYM
0541 514 : FOR CONDX_E.
0541 515 :
0541 516 : OUTPUT PARAMETERS:
0541 517 :
0541 518 : NONE
0541 519 :
0541 520 : IMPLICIT OUTPUTS:
0541 521 :
0541 522 : NONE
0541 523 :
0541 524 : COMPLETION CODES:
0541 525 :
0541 526 : EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
0541 527 :
0541 528 : SIDE EFFECTS:
0541 529 :
0541 530 : SS CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
0541 531 : (VIA RSB) IF ERROR ENCOUNTERED.
0541 532 :
0541 533 :--
0541 534 :
0541 535 :
0541 536 :
0541 537 VFY_CLEANUP::
0541 538 $ADJWSL S #0,WSETLM ; GET CURRENT W.S. VALUE
0541 539 SS CHECK NORMAL ; CHECK NORMAL RETURN
0541 540 SUBL3 WSETLM,WSETENTR,PAGCNT ; COMPJTE DISTANCE TO ENTRY VALUE
0550 540
0585 540

```

0000010'EF 0000000C'EF C3 057A 0585  
00000008'EF

SATSSS81  
V04-000

SATS SYSTEM SERVICE TESTS \$ADJWSL (SUCC 16-SEP-1984 01:05:00 VAX/VMS Macro V04-00  
VFY\_CLEANUP 5-SEP-1984 04:33:47 [UETPSY.SRC]SATSSS81.MAR;1

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(1)

05 058A 541  
0599 542  
05C3 543  
05C4 544

\$ADJWSL S PAGCNT  
SS CHECK NORMAL  
RSB  
.END

: : : AND GO BACK THERE  
: CHECK NORMAL RETURN  
: RETURN TO CALLER

SSSS	= 00000507	R	04	MINPAGCNT	00000055	R	02
SSSCHARS	= 0000001E			MOD_MSG_CODE	*****	X	04
SSSCHARS1	= 0000001D			MOD_MSG_PRINT	*****	X	04
SSSCHARS2	= 0000000B			MSGT_INP_CTL	00000019	R	02
SSSCHARS3	= 0000001A			MSG3_ERR_CTL	00000039	RG	02
SSSCHARS4	= 0000000B			MSG_A	*****	X	04
SSSCHARS5	= 00000017			MSG_B	*****	X	04
SSSCOND_A	= 00000004			MSG_CTXT	*****	X	04
SSSTRINGS	= 00000001			NOTARG	= 00000000	G	
SSSTRINGS2	= 00000005			NULL	= 00000014	G	
SST2	= 00000004			OUTPUT_MSG	*****	X	04
BYTE	= 00000001	G		PAGCNT	00000008	R	03
CFLAG	*****	X	04	PCV	*****	X	04
CHMRTN	*****	X	04	PHDSQ_PRIVMSK	= 00000000		
CHM_CONT	*****	X	04	PRIVMASK	00000000	R	03
COMP_SC	*****	X	04	PRIV_ARGS	= 00000002		
CONDT	000001E9	RG	04	PROCESS_ERR	*****	X	04
COND1_C	= 00000000			QUAD	= 00000008	G	
COND1_CLEANUP	000001EA	RG	04	RCV	*****	X	04
COND1_E	000000B8	R	03	REST_REGS	*****	X	04
COND1_H	0000003A	RG	03	SAVE_REGS	*****	X	04
COND1_T	00000024	R	03	SS\$ NORMAL	= 00000001		
COND1_TAB	0000003B	R	03	SUCCESS	*****	X	04
COND2	000001EB	RG	04	SYSSADJWSL	*****	GX	04
COND2_C	= 00000014			SYSSCMKRNL	*****	GX	04
COND2_CLEANUP	000001EC	RG	04	SYSSFAO	*****	X	04
COND2_H	000000CC	RG	03	SYSSSETPRN	*****	GX	04
COND2_T	000000CC	R	03	SYSSSETPRV	*****	GX	04
COND2_TAB	000000CC	R	03	TESTNUM	*****	X	04
COND3	000001ED	RG	04	TEST_MOD_NAME	00000000	RG	02
COND3_C	= 00000014			TEST_MOD_NAME_D	00000009	R	02
COND3_CLEANUP	000001EE	RG	04	TEST_MOD_SUCC	*****	X	04
COND3_H	000000CD	RG	03	TMD_ADDR	*****	X	04
COND3_T	000000CD	R	03	TM_CLEANUP	000001B7	RG	04
COND3_TAB	000000CD	R	03	TM_SETUP	00000000	RG	04
COND4	000001EF	RG	04	VERIFY	000002DD	RG	04
COND4_C	= 00000014			VERIFYX	00000540	R	04
COND4_CLEANUP	000001F0	RG	04	VFY_CLEANUP	00000541	RG	04
COND4_H	000000CE	RG	03	WORD	= 00000002	G	
COND4_T	000000CE	R	03	WRITE MSG2	*****	X	04
COND4_TAB	000000CE	R	03	WSETENTR	00000010	R	03
COND5	000001F1	RG	04	WSETENTR_P1	00000014	R	03
COND5_C	= 00000014			WSETLLIM	0000001C	R	03
COND5_CLEANUP	000001F2	RG	04	WSETLM	0000000C	R	03
COND5_H	000000CF	RG	03	WSETLM_VFY	00000020	R	03
COND5_T	000000CF	R	03	WSETULIM	00000018	R	03
COND5_TAB	000000CF	R	03				
CTL\$GC_PHD	*****	X	04				
DESC	= 00000010	G					
EFLAG	*****	X	04				
EXPV	*****	X	04				
FAO_DESC	*****	X	04				
FAO_LEN	*****	X	04				
FORM_CONDS	000001F3	RG	04				
FORM_CONDSX	000002DC	R	04				
LONG	= 00000004	G					
MAXPAGCNT	00000051	R	02				

-----  
! 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	00000059 ( 89.)	02 ( 2.)	NOPIC USR CON REL LCL NOSHR NOEXE RD NOWRT NOVEC LONG
RWDATA	000000D0 ( 208.)	03 ( 3.)	NOPIC USR CON REL LCL NOSHR NOEXE RD WRT NOVEC LONG
SATSSS81	000005C4 ( 1476.)	04 ( 4.)	NOPIC USR CON REL LCL NOSHR EXE RD WRT NOVEC BYTE

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

Phase	Page faults	CPU Time	Elapsed Time
Initialization	35	00:00:00.10	00:00:01.54
Command processing	136	00:00:00.71	00:00:05.37
Pass 1	283	00:00:09.17	00:00:20.16
Symbol table sort	0	00:00:01.16	00:00:02.13
Pass 2	115	00:00:02.10	00:00:03.84
Symbol table output	12	00:00:00.08	00:00:00.33
Psect synopsis output	3	00:00:00.03	00:00:00.03
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	586	00:00:13.36	00:00:33.41

The working set limit was 1500 pages.  
49896 bytes (98 pages) of virtual memory were used to buffer the intermediate code.  
There were 40 pages of symbol table space allocated to hold 703 non-local and 39 local symbols.  
544 source lines were read in Pass 1, producing 23 object records in Pass 2.  
32 pages of virtual memory were used to define 23 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	11
TOTALS (all libraries)	20

1003 GETS were required to define 20 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS\$:SATSSS81/OBJ=OBJ\$:SATSSS81 MSRC\$:SATSSS81/UPDATE=(ENH\$:SATSSS81)+EXECMLS/LIB+SHRLIB\$:UETP/LIB

