

UUU	UUU	EEEEEEEEEEEEEEEE	TTTTTTTTTTTTTTTT	PPPPPPPPPPPP	SSSSSSSSSSSS	YYY	YYY
UUU	UUU	EEEEEEEEEEEEEEEE	TTTTTTTTTTTTTTTT	PPPPPPPPPPPP	SSSSSSSSSSSS	YYY	YYY
UUU	UUU	EEEEEEEEEEEEEEEE	TTTTTTTTTTTTTTTT	PPPPPPPPPPPP	SSSSSSSSSSSS	YYY	YYY
UUU	UUU	EEE	TTT	PPP	SSS	YYY	YYY
UUU	UUU	EEE	TTT	PPP	SSS	YYY	YYY
UUU	UUU	EEE	TTT	PPP	SSS	YYY	YYY
UUU	UUU	EEE	TTT	PPP	SSS	YYY	YYY
UUU	UUU	EEE	TTT	PPP	SSS	YYY	YYY
UUU	UUU	EEE	TTT	PPP	SSS	YYY	YYY
UUU	UUU	EEE	TTT	PPP	SSS	YYY	YYY
UUU	UUU	EEE	TTT	PPP	SSS	YYY	YYY
UUU	UUU	EEE	TTT	PPP	SSS	YYY	YYY
UUU	UUU	EEE	TTT	PPP	SSS	YYY	YYY
UUU	UUU	EEE	TTT	PPP	SSS	YYY	YYY
UUU	UUU	EEE	TTT	PPP	SSS	YYY	YYY
UUU	UUU	EEE	TTT	PPP	SSS	YYY	YYY
UUU	UUU	EEE	TTT	PPP	SSS	YYY	YYY
UUUUUUUUUUUUUUUU	UUUUUUUUUUUUUUUU	EEEEEEEEEEEEEEEE	TTTTTTTTTTTTTTTT	PPPPPPPPPPPP	SSSSSSSSSSSS	YYY	YYY
UUUUUUUUUUUUUUUU	UUUUUUUUUUUUUUUU	EEEEEEEEEEEEEEEE	TTTTTTTTTTTTTTTT	PPPPPPPPPPPP	SSSSSSSSSSSS	YYY	YYY
UUUUUUUUUUUUUUUU	UUUUUUUUUUUUUUUU	EEEEEEEEEEEEEEEE	TTTTTTTTTTTTTTTT	PPPPPPPPPPPP	SSSSSSSSSSSS	YYY	YYY

```

SSSSSSSS  AAAAAA  TTTTTTTTTT  SSSSSSSS  SSSSSSSS  SSSSSSSS  333333  999999
SSSSSSSS  AAAAAA  TTTTTTTTTT  SSSSSSSS  SSSSSSSS  SSSSSSSS  333333  999999
SS        AA      AA      TT        TT        TT        33      33  99      99
SS        AA      AA      TT        TT        TT        33      33  99      99
SS        AA      AA      TT        TT        TT        33      33  99      99
SS        AA      AA      TT        TT        TT        33      33  99      99
SSSSSSS   AA      AA      TT        TT        TT        33      33  99999999
SSSSSSS   AA      AA      TT        TT        TT        33      33  99999999
SS        AAAAAAAAAA  TT        TT        TT        33      33  99
SS        AAAAAAAAAA  TT        TT        TT        33      33  99
SS        AA      AA      TT        TT        TT        33      33  99
SS        AA      AA      TT        TT        TT        33      33  99
SSSSSSSS  AA      AA      TT        TT        TT        333333  999999
SSSSSSSS  AA      AA      TT        TT        TT        333333  999999

```

```

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

```

```

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

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(1)	54	DECLARATIONS
(1)	82	CONDITION TABLES
(1)	100	TM SETUP, TM CLEANUP
(1)	163	CONDITION SUBROUTINES - SETUP AND CLEANUP
(1)	233	FORM CONDS
(1)	326	VERIFY
(1)	435	VFY CLEANUP
(1)	490	WAKAST

```

0000 1 .TITLE SATSSS39 SATS SYSTEM SERVICE TESTS $HIBER (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 SATSSS39 TO TEST SUCCESSFUL
0000 36 OPERATION OF THE $HIBER 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: FEB, 1977
0000 47
0000 48 MODIFIED BY:
0000 49
0000 50 : VERSION
0000 51 01 -
0000 52 --

```

SATSSS39  
V04-000

SATS SYSTEM SERVICE TESTS \$HIBER (SUCC M 15 16-SEP-1984 00:52:42 VAX/VMS Macro V04-00  
DECLARATIONS 5-SEP-1984 04:31:04 [UETPSY.SRC]SATSSS39.MAR;1

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(1)

S  
V

```
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 :
```



SATSSS39  
V04-000

SYS SYSTEM SERVICE TESTS \$HIBER (SUCC 16-SEP-1984 00:52:42 VAX/VMS Macro V04-00  
DECLARATIONS 5-SEP-1984 04:31:04 [UETPSY.SRC]SATSSS39.MAR;1

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(1)

00000000 79 .PSECT RWDATA,RD,WRT,NOEXE,LONG  
00000008 0000 80 PRIVMASK: .BLKQ 1 ; ADDR OF PRIVILEGE MASK (IN PHD)

```
0008 82 .SBTTL CONDITION TABLES
0008 83 :
0008 84 :
0008 85 :
0008 86 ***** CONDITION TABLES FOR HIBER SYSTEM SERVICE *****
0008 87 COND 1,NOTARG,<ORDER OF WAKE & HIBER>,-
0008 88 <WAKE BEFORE HIBER>,-
0008 89 <HIBER BEFORE WAKE>,-
004B 90 COND 2,NULL
004C 91 COND 3,NULL
004C 92 COND 4,NULL
004D 93 COND 5,NULL
004E 94
004E 95
004F 96
00000000 97
.PSECT SATSSS39,RD,WRT,EXE
```



```

0000 100 .SBTTL TM_SETUP, TM_CLEANUP
0000 101 :++
0000 102 : FUNCTIONAL DESCRIPTION:
0000 103 :
0000 104 : TM SETUP AND TM CLEANUP ARE CALLED TO PERFORM
0000 105 : REQUIRED HOUSEKEEPING AT THE BEGINNING AND END, RESPECTIVELY, OF
0000 106 : TEST MODULE EXECUTION.
0000 107 :
0000 108 : CALLING SEQUENCE:
0000 109 :
0000 110 : BSBW TM_SETUP BSBW TM_CLEANUP
0000 111 :
0000 112 : INPUT PARAMETERS:
0000 113 :
0000 114 : NONE
0000 115 :
0000 116 : IMPLICIT INPUTS:
0000 117 :
0000 118 : NONE
0000 119 :
0000 120 : OUTPUT PARAMETERS:
0000 121 :
0000 122 : NONE
0000 123 :
0000 124 : IMPLICIT OUTPUTS:
0000 125 :
0000 126 : TM_SETUP: COND TABLE INDEX REGISTERS (R2,3,4,5,6) CLEARED;
0000 127 : ALL PRIVILEGES ACQUIRED.
0000 128 :
0000 129 : COMPLETION CODES:
0000 130 :
0000 131 : EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
0000 132 :
0000 133 : SIDE EFFECTS:
0000 134 :
0000 135 : SS CHECK AND ERR EXIT MACROS CAUSE PREMATURE EXIT
0000 136 : (VIA RSB) IF ERROR ENCOUNTERED.
0000 137 :
0000 138 :--
0000 139 :
0000 140 :
0000 141 :
0000 142 TM_SETUP::
0000 143 CLRL R2 ; INITIALIZE
0000 144 CLRL R3 ; .. CONDITION
0000 145 CLRL R4 ; .... TABLE
0000 146 CLRL R5 ; ..... INDEX
0000 147 CLRL R6 ; ..... REGISTERS
0000 148 BSBW MOD MSG PRINT ; PRINT TEST MODULE BEGIN MSG
0000 149 MOVAL TEST MOD_SUCC,TMD_ADDR ; ASSUME END MSG WILL SHOW SUCCESS
0000 150 INSV #SUCCESS,#0,#3,MOD_MSG_CODE ; ADJUST STATUS CODE FOR SUCCESS
0000 151
0000 152 MODE TO,5$,KRNL ; KERNEL MODE TO ACCESS PHD
0000 153 MOVL @#CTL$GL PHD,R9 ; GET PROCESS HEADER ADDRESS
0000 154 MOVAL PHD$Q PRIVMSK(R9),PRIVMASK ; GET PRIV MASK ADDRESS
0000 155 MODE FROM,5$ ; BACK TO USER MODE
0000 156 PRIV ADD,ALL ; GET ALL PRIVILEGES

```

```

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

```

```
0077 156 $SETPRN S TEST MOD_NAME_D ; SET PROCESS NAME
0084 157 SS CHECK NORMAL ; CHECK STATUS CODE RETURNED FROM SETPRN
05 0082 158 RSB ; RETURN TO MAIN ROUTINE
FF4A' 30 0083 159 TM_CLEANUP::
05 0083 160 BSBW MOD_MSG_PRINT ; PRINT TEST MODULE FND MSG
05 0086 161 RSB ; RETURN TO MAIN ROUTINE
```

```

00B7 163 .SBTTL CONDITION SUBROUTINES - SETUP AND CLEANUP
00B7 164 :++
00B7 165 : FUNCTIONAL DESCRIPTION:
00B7 166 :
00B7 167 : COND X AND COND X CLEANUP ARE SUBROUTINES WHICH ARE EXECUTED
00B7 168 : BEFORE AND AFTER THE VERIFY SUBROUTINE, RESPECTIVELY, WHENEVER A NEW
00B7 169 : CONDITION X VALUE IS SELECTED (SEE FUNCTIONAL DESCRIPTION OF SUCCOMMON
00B7 170 : ROUTINE IN SUCCOMMON.MAR). ANY SETUP FUNCTION PARTICULAR TO THE
00B7 171 : CONDITION X TABLE IS INCLUDED IN THE COND X SUBROUTINE AND CLEANED
00B7 172 : UP, IF NECESSARY, IN THE COND X CLEANUP SUBROUTINE. THIS INCLUDES,
00B7 173 : ESPECIALLY, CODE TO DETECT CONFLICTS AMONG CURRENT ENTRIES IN TWO
00B7 174 : OR MORE CONDITION TABLES. IF A CONFLICT IS DETECTED, A NON-ZERO
00B7 175 : VALUE IS STORED INTO CONFLICT, WHICH CAUSES THE CALLING ROUTINE
00B7 176 : (SUCCOMMON) TO SKIP THE CURRENT ENTRY IN THE CONDITION X TABLE.
00B7 177 :
00B7 178 : CALLING SEQUENCE:
00B7 179 :
00B7 180 : BSBW COND X BSBW COND X_CLEANUP
00B7 181 : WHERE X = 1,2,3,4,5
00B7 182 :
00B7 183 : INPUT PARAMETERS:
00B7 184 :
00B7 185 : CONFLICT = 0
00B7 186 :
00B7 187 : IMPLICIT INPUTS:
00B7 188 :
00B7 189 : R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
00B7 190 : FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
00B7 191 :
00B7 192 : OUTPUT PARAMETERS:
00B7 193 :
00B7 194 : CONFLICT SET TO NON-ZERO IF COND TABLE CONFLICT DETECTED.
00B7 195 :
00B7 196 : IMPLICIT OUTPUTS:
00B7 197 :
00B7 198 : R2,3,4,5,6 PRESERVED
00B7 199 :
00B7 200 : COMPLETION CODES:
00B7 201 :
00B7 202 : NONE
00B7 203 :
00B7 204 : SIDE EFFECTS:
00B7 205 :
00B7 206 : NONE
00B7 207 :
00B7 208 :--
00B7 209 :
00B7 210 :
00B7 211 :
05 00B7 212 COND1:: RSB ; RETURN TO MAIN ROUTINE
00B7 213 COND1_CLEANUP:: RSB ; RETURN TO MAIN ROUTINE
05 00B8 214 COND2:: RSB ; RETURN TO MAIN ROUTINE
00B8 215 COND2_CLEANUP:: RSB ; RETURN TO MAIN ROUTINE
05 00B9 216 COND3:: RSB ; RETURN TO MAIN ROUTINE
00B9 217 COND3_CLEANUP:: RSB ; RETURN TO MAIN ROUTINE
05 00BA 218 COND4:: RSB ; RETURN TO MAIN ROUTINE
00BA 219 COND4_CLEANUP:: RSB ; RETURN TO MAIN ROUTINE

```

```
05 00BB 220 COND3::
05 00BB 221 RSB ; RETURN TO MAIN ROUTINE
05 00BC 222 COND3_CLEANUP::
05 00BC 223 RSB ; RETURN TO MAIN ROUTINE
05 00BD 224 COND4::
05 00BD 225 RSB ; RETURN TO MAIN ROUTINE
05 00BE 226 COND4_CLEANUP::
05 00BE 227 RSB ; RETURN TO MAIN ROUTINE
05 00BF 228 COND5::
05 00BF 229 RSB ; RETURN TO MAIN ROUTINE
05 00C0 230 COND5_CLEANUP::
05 00C0 231 RSB ; RETURN TO MAIN ROUTINE
```

```

00C1 233 .SBTTL FORM_CONDS
00C1 234 :++
00C1 235 : FUNCTIONAL DESCRIPTION:
00C1 236 :
00C1 237 : FORM CONDS FORMATS AND PRINTS INFORMATION ABOUT
00C1 238 : THE CURRENT ELEMENT IN EACH OF THE CONDITION TABLES.
00C1 239 :
00C1 240 : CALLING SEQUENCE:
00C1 241 :
00C1 242 : BSBW FORM_CONDS
00C1 243 :
00C1 244 : INPUT PARAMETERS:
00C1 245 :
00C1 246 : NONE
00C1 247 :
00C1 248 : IMPLICIT INPUTS:
00C1 249 :
00C1 250 : R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
00C1 251 : FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
00C1 252 : FOR X = 1,2,3,4,5 :
00C1 253 : CONDX_T - TITLE TEXT FOR CONDX TABLE
00C1 254 : CONDX_TAB - ELEMENT TEXT FOR CONDX TABLE
00C1 255 : CONDX_C - CONTEXT OF THE CONDX TABLE
00C1 256 : CONDX_E - DATA ELEMENTS OF THE CONDX TABLE
00C1 257 :
00C1 258 : OUTPUT PARAMETERS:
00C1 259 :
00C1 260 : NONE
00C1 261 :
00C1 262 : IMPLICIT OUTPUTS:
00C1 263 :
00C1 264 : NONE
00C1 265 :
00C1 266 : COMPLETION CODES:
00C1 267 :
00C1 268 : NONE
00C1 269 :
00C1 270 : SIDE EFFECTS:
00C1 271 :
00C1 272 : NONE
00C1 273 :
00C1 274 : --
00C1 275 :
00C1 276 :
00C1 277 :
00C1 278 FORM_CONDS::
00C1 279 $FAO_S MSG1_INP_CTL,FAO_LEN,FAO_DESC,TESTNUM
00E0 280 : FORMAT CONDITIONS HEADER MSG
00E0 281 BSBW OUTPUT_MSG : ... AND PRINT IT
14 00 91 00E3 282 CMPB #COND1_C,#NULL : IS CONDITION 1 NULL ?
03 12 00E6 283 BNEQU 10$ : NO -- CONTINUE
00BF 31 00E8 284 BRW FORM_CONDSX : YES -- SUBROUTINE IS FINISHED
00EB 285 10$:
00EB 286 MOVAL COND1_T,MSG_A : SAVE ADDRESS OF CONDITION 1 TITLE FOR FAO
00000000'EF 00000008'EF DE 00EB 287 MOVL (COND1_TAB[R2],MSG_B : SAVE ADDR OF COND 1 CURR TEXT ELT FOR FAO
00000000'EF 0000001F'EF42 D0 00F6 288 MOVB #COND1_C,MSG_CTXT : SAVE CONDITION 1 CONTEXT FOR FAO
00000000'EF 00 90 0102 289 MOV_VAL COND1_C,COND1_E[R2],MSG_DATA1 : GIVE COND 1 DATA VALUE TO FAO

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```

    FEF4' 30 0109 290      BSBW  WRITE_MSG2      : FORMAT AND WRITE CONDITION 1 MSG
    14 14 91 010C 291      CMPB  #COND2_C,#NULL      : IS CONDITION 2 NULL ?
    03 12 010F 292      BNEQU 20$              : NO -- CONTINUE
    0096 31 0111 293      BRW   FORM_CONDSX      : YES -- SUBROUTINE IS FINISHED
    0114 294 20$:
00000000'EF 0000004B'EF DE 0114 295      MOVAL COND2_T,MSG_A      : SAVE ADDRESS OF CONDITION 2 TITLE FOR FAO
00000000'EF 0000004B'EF43 D0 011F 296      MOVL  COND2_TAB[R3],MSG_B : SAVE ADDR OF COND 2 CURR TEXT ELT FOR FAO
    00000000'EF 14 90 012B 297      MOVB  #COND2_C,MSG_CTXT : SAVE CONDITION 2 CONTEXT FOR FAO
    0132 298      MOV_VAL COND2_C,COND2_E[R3],MSG_DATA1 : GIVE COND 2 DATA VALUE TO FAO
    FECB' 30 0132 299      BSBW  WRITE_MSG2      : FORMAT AND WRITE CONDITION 2 MSG
    14 14 91 0135 300      CMPB  #COND3_C,#NULL      : IS CONDITION 3 NULL ?
    03 12 0138 301      BNEQU 30$              : NO -- CONTINUE
    006D 31 013A 302      BRW   FORM_CONDSX      : YES -- SUBROUTINE IS FINISHED
    013D 303 30$:
00000000'EF 0000004C'EF DE 013D 304      MOVAL COND3_T,MSG_A      : SAVE ADDRESS OF CONDITION 3 TITLE FOR FAO
00000000'EF 0000004C'EF44 D0 0148 305      MOVL  COND3_TAB[R4],MSG_B : SAVE ADDR OF COND 3 CURR TEXT ELT FOR FAO
    00000000'EF 14 90 0154 306      MOVB  #COND3_C,MSG_CTXT : SAVE CONDITION 3 CONTEXT FOR FAO
    015B 307      MOV_VAL COND3_C,COND3_E[R4],MSG_DATA1 : GIVE COND 3 DATA VALUE TO FAO
    FEA2' 30 015B 308      BSBW  WRITE_MSG2      : FORMAT AND WRITE CONDITION 3 MSG
    14 14 91 015E 309      CMPB  #COND4_C,#NULL      : IS CONDITION 4 NULL ?
    47 13 0161 310      BEQLU FORM_CONDSX      : YES -- SUBROUTINE IS FINISHED
    00000000'EF 0000004D'EF DE 0163 311      MOVAL COND4_T,MSG_A      : SAVE ADDRESS OF CONDITION 4 TITLE FOR FAO
    00000000'EF 0000004D'EF45 D0 016E 312      MOVL  COND4_TAB[R5],MSG_B : SAVE ADDR OF COND 4 CURR TEXT ELT FOR FAO
    00000000'EF 14 90 017A 313      MOVB  #COND4_C,MSG_CTXT : SAVE CONDITION 4 CONTEXT FOR FAO
    0181 314      MOV_VAL COND4_C,COND4_E[R5],MSG_DATA1 : GIVE COND 4 DATA VALUE TO FAO
    FE7C' 30 0181 315      BSBW  WRITE_MSG2      : FORMAT AND WRITE CONDITION 4 MSG
    14 14 91 0184 316      CMPB  #COND5_C,#NULL      : IS CONDITION 5 NULL ?
    21 13 0187 317      BEQLU FORM_CONDSX      : YES -- SUBROUTINE IS FINISHED
    00000000'EF 0000004E'EF DE 0189 318      MOVAL COND5_T,MSG_A      : SAVE ADDRESS OF CONDITION 5 TITLE FOR FAO
    00000000'EF 0000004E'EF46 D0 0194 319      MOVL  COND5_TAB[R6],MSG_B : SAVE ADDR OF COND 5 CURR TEXT ELT FOR FAO
    00000000'EF 14 90 01A0 320      MOVB  #COND5_C,MSG_CTXT : SAVE CONDITION 5 CONTEXT FOR FAO
    01A7 321      MOV_VAL COND5_C,COND5_E[R6],MSG_DATA1 : GIVE COND 5 DATA VALUE TO FAO
    FE56' 30 01A7 322      BSBW  WRITE_MSG2      : FORMAT AND WRITE CONDITION 5 MSG
    01AA 323 FORM_CONDSX:
    05 01AA 324      RSB              : RETURN TO CALLER

```

```
01AB 326 .SBTTL VERIFY
01AB 327 :
01AB 328 : *+
01AB 329 : FUNCTIONAL DESCRIPTION:
01AB 330 :
01AB 331 : VERIFY IS CALLED ONCE FOR EACH COMBINATION OF CONDITION
01AB 332 : TABLE VALUES (AS DETERMINED BY THE INDEX REGISTERS R2,3,4,5,6 FOR
01AB 333 : COND TABLES 1,2,3,4,5, RESPECTIVELY). VERIFY ESTABLISHES THE CONDITIONS
01AB 334 : SPECIFIED BY THE COND TABLES AND ISSUES THE SUBJECT SYSTEM SERVICE
01AB 335 : ($HIBER). THEN, THE SUCCESSFUL OPERATION OF THE SERVICE IS VERIFIED
01AB 336 : BY EXAMINING THE STATUS CODE RETURNED, THE VALUES FOR RETURN ARGUMENTS
01AB 337 : AND THE FUNCTIONALITY PERFORMED. THE EXAMINATIONS TAKE THE FORM OF
01AB 338 : COMPARISONS AGAINST EXPECTED VALUES. ANY FAILING COMPARISON CAUSES AN
01AB 339 : ERR_EXIT MACRO TO BE EXECUTED (EITHER DIRECTLY, OR INDIRECTLY,
01AB 340 : THROUGH THE SS_CHECK MACRO); ERR_EXIT SETS EFLAG TO NON-ZERO,
01AB 341 : PRINTS ERROR MESSAGES AND CAUSES AN IMMEDIATE RSB TO CALLER.
01AB 342 : WHEN ERR_EXIT IS EXECUTED, FURTHER CALLS TO VERIFY ARE SUPPRESSED,
01AB 343 : AND, AFTER EXECUTING CLEANUP SUBROUTINES, THE IMAGE EXITS.
01AB 344 :
01AB 345 : CALLING SEQUENCE:
01AB 346 :
01AB 347 : BSBW VERIFY
01AB 348 :
01AB 349 : INPUT PARAMETERS:
01AB 350 :
01AB 351 : NONE
01AB 352 :
01AB 353 : IMPLICIT INPUTS:
01AB 354 :
01AB 355 : R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
01AB 356 : FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
01AB 357 : FOR X = 1,2,3,4,5 :
01AB 358 : CONDX_E - ADDRESS OF TABLE OF DATA VALUES FOR CONDX
01AB 359 : TABLE. IF THE CONTEXT OF TABLE X IS A SYSTEM SERVICE
01AB 360 : ARGUMENT, THE ARGUMENT NAME MAY BE USED AS A SYNONYM
01AB 361 : FOR CONDX_E.
01AB 362 :
01AB 363 : OUTPUT PARAMETERS:
01AB 364 :
01AB 365 : NONE
01AB 366 :
01AB 367 : IMPLICIT OUTPUTS:
01AB 368 :
01AB 369 : VERIFY HAS NO OUTPUT. SINCE ITS PURPOSE IS TO TEST FOR ERRORS,
01AB 370 : IT MERELY RETURNS TO CALLER NORMALLY AFTER THE TESTS, PROVIDING
01AB 371 : ALL WERE SUCCESSFUL; IF AN ERROR IS DISCOVERED, RETURN IS VIA
01AB 372 : AN ERR_EXIT OR SS_CHECK MACRO, BOTH OF WHICH DOCUMENT DETECTED
01AB 373 : ERRORS.
01AB 374 :
01AB 375 : COMPLETION CODES:
01AB 376 :
01AB 377 : EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
01AB 378 :
01AB 379 : SIDE EFFECTS:
01AB 380 :
01AB 381 : SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
01AB 382 : (VIA RSB) IF ERROR ENCOUNTERED.
```

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01AB 383 :--
01AB 384
01AB 385
01AB 386
01AB 387 VERIFY::
00000000'EF 95 01AB 388 TSTB CFLAG ; SHOULD CONDITIONS BE PRINTED ?
03 13 01B1 389 BEQL 5$ ; NO -- CONTINUE
FF0B 30 01B3 390 BSBW FORM_CONDS ; YES -- FMT & PRINT ALL CONDS FOR THIS T.C.
52 95 01B6 391 5$: TSTB R2 ; FIRST CONDITION 1 ELEMENT ?
03 13 01B8 392 BEQL 40$ ; YES -- PROCESS IT
0190 31 01BA 393 BRW 50$ ; NO -- GO PROCESS 2ND ELEMENT
01BD 394 40$:
01BD 395 $WAKE S ; A SERIES OF WAKES BEFORE HIBER
01C8 396 SS_CHECK NORMAL ; CHECK FOR NORMAL RETURN
01F6 397 $WAKE S ; ONLY ONE WAKE SHOULD REMAIN OUTSTANDING
0201 398 SS_CHECK NORMAL
022F 400 $WAKE S
023A 401 SS_CHECK NORMAL
0268 402 $WAKE S
0273 403 SS_CHECK NORMAL
02A1 404 $WAKE S
02AC 405 SS_CHECK NORMAL
02DA 406 :
02DA 407 : ***** SYSTEM SERVICE CALL WHICH IS THE SUBJECT OF THIS TEST CASE *****
02DA 408 :
02DA 409 $HIBER_S
00000000'8F 50 D1 02E1 410 CMPL RO,#SS$ _NORMAL ; DID IT RETURN NORMALLY ?
03 12 02E8 411 BNEQU 10$ ; NO -- PROCESS ERROR
0121 31 02EA 412 BRW VERIFYX ; YES -- TIME TO LEAVE
00000000'EF 00000000'8F D0 02ED 413 10$: MOVL #SS$ _NORMAL,EXPV ; LOAD UP EXPECTED AND
00000000'EF 50 D0 02F8 414 MOVL RO,RECV ; ... RECEIVED VALUES, THEN EXIT
02FF 415 ERR_EXIT LONG,<INCORRECT STATUS CODE RETURNED FROM HIBER>
034D 416 50$:
034D 417 $SETAST_S #1 ; ENABLE USER MODE AST'S
0356 418 $SETIMR_S ,DAYTIM_STM,WAKAST ; SCHEDULE AST IN 15 SECONDS
036D 419 SS_CHECK NORMAL ; CHECK SETIMR RETURN
039B 420 :
039B 421 : ***** SYSTEM SERVICE CALL WHICH IS THE SUBJECT OF THIS TEST CASE *****
039B 422 :
039B 423 :
039B 424 $HIBER_S
00000000'8F 50 D1 03A2 425 CMPL RO,#SS$ _NORMAL ; DID IT RETURN NORMALLY ?
03 12 03A9 426 BNEQU 60$ ; NO -- PROCESS ERROR
0060 31 03AB 427 BRW VERIFYX ; YES -- TIME TO LEAVE
00000000'EF 00000000'8F D0 03AE 428 60$: MOVL #SS$ _NORMAL,EXPV ; LOAD UP EXPECTED AND
00000000'EF 50 D0 03B9 429 MOVL RO,RECV ; ... RECEIVED VALUES, THEN EXIT
03C0 430 ERR_EXIT LONG,<INCORRECT STATUS CODE RETURNED FROM HIBER>
040E 431 VERIFYX:
05 040E 432 RSB ; RETURN TO CALLER
040E 433

```



```

040F 435      .SBTTL VFY_CLEANUP
040F 436      :++
040F 437      : FUNCTIONAL DESCRIPTION:
040F 438      :
040F 439      :           VFY CLEANUP EXECUTES SYSTEM SERVICES TO UNDO THE
040F 440      : EFFECT OF THOSE ISSUED IN THE VERIFY SUBROUTINE. VFY CLEANUP MUST
040F 441      : ASSUME THAT VERIFY MAY NOT HAVE EXECUTED IN ITS ENTIRETY (IF AN
040F 442      : ERROR IS FOUND). ALSO, VFY_CLEANUP MAY ISSUE SS CHECK OR ERR_EXIT
040F 443      : ONLY AFTER PERFORMING ALL OF ITS CLEANUP OPERATIONS; THIS IS REQUIRED
040F 444      : IN THE EVENT THAT VFY_CLEANUP IS CALLED DURING ERROR PROCESSING,
040F 445      : WHEN PERFORMING THE REQUIRED CLEANUP IS MORE IMPORTANT THAN
040F 446      : POSSIBLY DISCOVERING A SECOND ERROR.
040F 447      :
040F 448      : CALLING SEQUENCE:
040F 449      :
040F 450      :           BSBW VFY_CLEANUP
040F 451      :
040F 452      : INPUT PARAMETERS:
040F 453      :
040F 454      :           NONE
040F 455      :
040F 456      : IMPLICIT INPUTS:
040F 457      :
040F 458      :           R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
040F 459      :           FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
040F 460      :           FOR X = 1,2,3,4,5 :
040F 461      :           COND_X_E - ADDRESS OF TABLE OF DATA VALUES FOR CONDX
040F 462      :           TABLE. IF THE CONTEXT OF TABLE X IS A SYSTEM SERVICE
040F 463      :           ARGUMENT, THE ARGUMENT NAME MAY BE USED AS A SYNONYM
040F 464      :           FOR CONDX_E.
040F 465      :
040F 466      : OUTPUT PARAMETERS:
040F 467      :
040F 468      :           NONE
040F 469      :
040F 470      : IMPLICIT OUTPUTS:
040F 471      :
040F 472      :           NONE
040F 473      :
040F 474      : COMPLETION CODES:
040F 475      :
040F 476      :           EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
040F 477      :
040F 478      : SIDE EFFECTS:
040F 479      :
040F 480      :           SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
040F 481      :           (VIA RSB) IF ERROR ENCOUNTERED.
040F 482      :
040F 483      : --
040F 484      :
040F 485      :
040F 486      :
040F 487      : VFY_CLEANUP::
05 040F 488      : RSB                                ; RETURN TO CALLER

```

```
0001 0000 0410 490 .SBTTL WAKAST
      30 0410 491 WAKAST:
      04 0410 492 .WORD 0
      04 0412 493 BSBW 10$
      04 0415 494 RET
      04 0416 495 10$:
      04 0416 496 $WAKE S
      05 0421 497 SS CHECK NORMAL
      05 044F 498 RSB
      0450 499 .END

; ENTRY MASK TO WAKAST
; EXECUTE AST -- SS_CHECK MUST BE IN SUBRTN
; RETURN FROM AST

; WAKE UP HIBERNATING TEST MODULE
; CHECK WAKE RETURN
; RETURN TO CALLER
```

=====  
\$CHARS = 000003CA R 04  
\$CHARS1 = 00000029  
\$CHARS2 = 00000011  
\$CHARS3 = 00000011  
\$CHARS4 = 00000000  
\$CHARS5 = 00000000  
\$COND A = 00000001  
\$STRINGS = 00000001  
\$STRINGS2 = 00000005  
\$T1 = 00000000  
\$T2 = 00000004  
BYTE = 00000001 G  
CFLAG \*\*\*\*\* X 04  
CHMRTN \*\*\*\*\* X 04  
CHM CONT \*\*\*\*\* X 04  
COMP SC \*\*\*\*\* X 04  
COND1 = 000000B7 RG 04  
COND1\_C = 00000000  
COND1\_CLEANUP = 000000B8 RG 04  
COND1\_E = 0000004B R 03  
COND1\_H = 0000001E RG 03  
COND1\_T = 00000008 R 03  
COND1\_TAB = 0000001F R 03  
COND2 = 000000B9 RG 04  
COND2\_C = 00000014  
COND2\_CLEANUP = 000000BA RG 04  
COND2\_H = 0000004B RG 03  
COND2\_T = 0000004B R 03  
COND2\_TAB = 0000004B R 03  
COND3 = 000000BB RG 04  
COND3\_C = 00000014  
COND3\_CLEANUP = 000000BC RG 04  
COND3\_H = 0000004C RG 03  
COND3\_T = 0000004C R 03  
COND3\_TAB = 0000004C R 03  
COND4 = 000000BD RG 04  
COND4\_C = 00000014  
COND4\_CLEANUP = 000000BE RG 04  
COND4\_H = 0000004D RG 03  
COND4\_T = 0000004D R 03  
COND4\_TAB = 0000004D R 03  
COND5 = 000000BF RG 04  
COND5\_C = 00000014  
COND5\_CLEANUP = 000000C0 RG 04  
COND5\_H = 0000004E RG 03  
COND5\_T = 0000004E R 03  
COND5\_TAB = 0000004E R 03  
CTLSGC\_PHD \*\*\*\*\* X 04  
DAYTIM\_STM = 00000051 R 02  
DESC = 00000010 G  
EFLAG \*\*\*\*\* X 04  
EXPV \*\*\*\*\* X 04  
FAO\_DESC \*\*\*\*\* X 04  
FAO\_LEN \*\*\*\*\* X 04  
FORM\_CONDS = 000000C1 RG 04  
FORM\_CONDSX = 000001AA R 04

LONG  
MOD\_MSG\_CODE  
MOD\_MSG\_PRINT  
MSGT\_INP\_CTL  
MSG3\_ERR\_CTL  
MSG\_A  
MSG\_B  
MSG\_CTXT  
NOTARG  
NULL  
OUTPUT\_MSG  
PCV  
PHDSQ\_PRIVMSK  
PRIVMSK  
PRIV\_ARGS  
PROCESS\_ERR  
QUAD  
RECV  
REST\_REGS  
SAVE\_REGS  
SS\$NORMAL  
SUCCESS  
SYSSCMKRN  
SYS\$FAO  
SYSSHIBER  
SYSS\$SETAST  
SYSS\$SETIMR  
SYSS\$SETPRN  
SYSS\$SETPRV  
SYSSWAKE  
TESTNUM  
TEST\_MOD\_NAME  
TEST\_MOD\_NAME\_D  
TEST\_MOD\_SUCC\_D  
TMD\_ADDR  
TM\_CLEANUP  
TM\_SETUP  
VERIFY  
VERIFYX  
VFY\_CLEANUP  
WAKAST  
WORD  
WRITE\_MSG2

=====  
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  
= 00000000  
00000000 R 03  
= 00000002  
\*\*\*\*\* X 04  
= 00000008 G  
\*\*\*\*\* X 04  
\*\*\*\*\* X 04  
\*\*\*\*\* X 04  
\*\*\*\*\* X 04  
\*\*\*\*\* X 04  
\*\*\*\*\* GX 04  
\*\*\*\*\* X 04  
\*\*\*\*\* X 04  
\*\*\*\*\* GX 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  
0000040E R 04  
0000040F RG 04  
00000410 R 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	00000059 ( 89.)	02 ( 2.)	NOPIC USR CON REL LCL NOSHR NOEXE RD NOWRT NOVEC LONG
RWDATA	0000004F ( 79.)	03 ( 3.)	NOPIC USR CON REL LCL NOSHR NOEXE RD WRT NOVEC LONG
SATSSS39	00000450 ( 1104.)	04 ( 4.)	NOPIC USR CON REL LCL NOSHR EXE RD WRT NOVEC BYTE

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

Phase	Page faults	CPU Time	Elapsed Time
Initialization	35	00:00:00.09	00:00:00.38
Command processing	138	00:00:00.62	00:00:01.64
Pass 1	230	00:00:05.66	00:00:10.88
Symbol table sort	0	00:00:00.43	00:00:00.49
Pass 2	103	00:00:01.55	00:00:01.99
Symbol table output	13	00:00:00.08	00:00:00.08
Psect synopsis output	3	00:00:00.02	00:00:00.06
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	524	00:00:08.45	00:00:15.52

The working set limit was 1500 pages.  
29210 bytes (58 pages) of virtual memory were used to buffer the intermediate code.  
There were 20 pages of symbol table space allocated to hold 294 non-local and 31 local symbols.  
499 source lines were read in Pass 1, producing 23 object records in Pass 2.  
36 pages of virtual memory were used to define 27 macros.

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

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

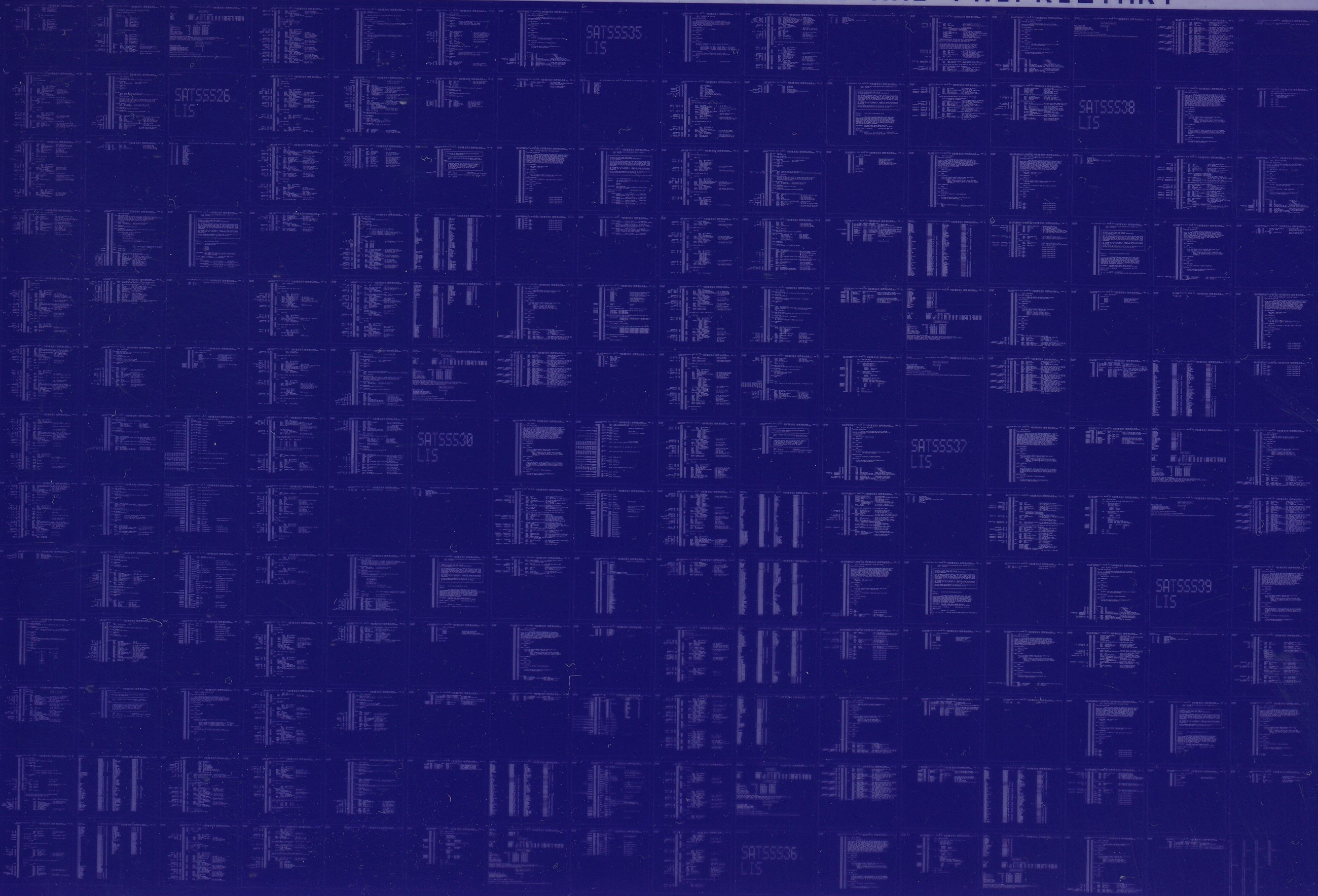
632 GETS were required to define 24 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS\$:SATSSS39/OBJ=OBJ\$:SATSSS39 MSRCS\$:SATSSS39/UPDATE=(ENH\$:SATSSS39)+EXECMLS/LIB+SHRLIB\$:UETP/LIB

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