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BBBBBBBBBBBBBB      AAAAAAAAAA      CCCCCCCCCCCCCC      KKK      KKK      UUU      UUU      PPPPPPPPPPPP
BBBBBBBBBBBBBB      AAAAAAAAAA      CCCCCCCCCCCCCC      KKK      KKK      UUU      UUU      PPPPPPPPPPPP
BBBBBBBBBBBBBB      AAAAAAAAAA      CCCCCCCCCCCCCC      KKK      KKK      UUU      UUU      PPPPPPPPPPPP
BBB      BBB      AAA      AAA      CCC      KKK      KKK      UUU      UUU      PPP      PPP
BBB      BBB      AAA      AAA      CCC      KKK      KKK      UUU      UUU      PPP      PPP
BBB      BBB      AAA      AAA      CCC      KKK      KKK      UUU      UUU      PPP      PPP
BBB      BBB      AAA      AAA      CCC      KKK      KKK      UUU      UUU      PPP      PPP
BBB      BBB      AAA      AAA      CCC      KKK      KKK      UUU      UUU      PPP      PPP
BBB      BBB      AAA      AAA      CCC      KKK      KKK      UUU      UUU      PPP      PPP
BBB      BBB      AAA      AAA      CCC      KKK      KKK      UUU      UUU      PPP      PPP
BBB      BBB      AAA      AAA      CCC      KKK      KKK      UUU      UUU      PPP      PPP
BBBBBBBBBBBBBB      AAA      AAA      CCC      KKKKKKKKK      UUU      UUU      PPPPPPPPPPPP
BBBBBBBBBBBBBB      AAA      AAA      CCC      KKKKKKKKK      UUU      UUU      PPPPPPPPPPPP
BBBBBBBBBBBBBB      AAA      AAA      CCC      KKKKKKKKK      UUU      UUU      PPPPPPPPPPPP
BBB      BBB      AAAAAAAAAAAAAAAAAA      CCC      KKK      KKK      UUU      UUU      PPP
BBB      BBB      AAAAAAAAAAAAAAAAAA      CCC      KKK      KKK      UUU      UUU      PPP
BBB      BBB      AAAAAAAAAAAAAAAAAA      CCC      KKK      KKK      UUU      UUU      PPP
BBB      BBB      AAA      AAA      CCC      KKK      KKK      UUU      UUU      PPP
BBB      BBB      AAA      AAA      CCC      KKK      KKK      UUU      UUU      PPP
BBB      BBB      AAA      AAA      CCC      KKK      KKK      UUU      UUU      PPP
BBB      BBB      AAA      AAA      CCC      KKK      KKK      UUU      UUU      PPP
BBB      BBB      AAA      AAA      CCC      KKK      KKK      UUU      UUU      PPP
BBBBBBBBBBBBBB      AAA      AAA      CCCCCCCCCCCCCC      KKK      KKK      UUUUUUUUUUUUUUU      PPP
BBBBBBBBBBBBBB      AAA      AAA      CCCCCCCCCCCCCC      KKK      KKK      UUUUUUUUUUUUUUU      PPP
BBBBBBBBBBBBBB      AAA      AAA      CCCCCCCCCCCCCC      KKK      KKK      UUUUUUUUUUUUUUU      PPP
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CCCCCCCC RRRRRRRR EEEEEEEEE AA AAAA TTTTTTTTT EEEEEEEEE DDDDDDD I I I I I RRRRRRR
CCCCCCCC RRRRRRRR EEEEEEEEE AA AAAA TTTTTTTTT EEEEEEEEE DDDDDDD I I I I I RRRRRRR
CC RR RR EE AA AA TT EE DD DD II II RR RR RR
CC RR RR EE AA AA TT EE DD DD II II RR RR RR
CC RR RR EE AA AA TT EE DD DD II II RR RR RR
CC RRRRRRRR EEEEEEEE AA AA TT TT EE EEEEEEE DD DD II II RRRRRRR
CC RRRRRRRR EEEEEEEE AA AA TT TT EE EEEEEEE DD DD II II RRRRRRR
CC RR RR EE AA AA TT TT EE DD DD II II RR RR RR
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1 0001 0 MODULE CREATEDIR(%TITLE 'Create directory'
2 0002 0 IDENT = 'V04-000'
3 0003 0 ) =
4 0004 1 BEGIN
5 0005 1
6 0006 1 *****
7 0007 1 *
8 0008 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY *
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25 0025 1 *
26 0026 1 *
27 0027 1 *****
28 0028 1
29 0029 1 **
30 0030 1 FACILITY:
31 0031 1 Backup/Restore
32 0032 1
33 0033 1 ABSTRACT:
34 0034 1 This module contains the routines that create directories.
35 0035 1
36 0036 1 ENVIRONMENT:
37 0037 1 VAX/VMS user mode.
38 0038 1
39 0039 1 AUTHOR: M. Jack, CREATION DATE: 28-Sep-1980
40 0040 1
41 0041 1 MODIFIED BY:
42 0042 1
43 0043 1 V03-006 ACG0373 Andrew C. Goldstein, 11-Nov-1983 15:46
44 0044 1 Fix directory creation path in /INCREMENTAL case;
45 0045 1 allow directory creation over dangling entries.
46 0046 1
47 0047 1 V03-005 KBT0586 Keith B. Thompson 15-Aug-1983
48 0048 1 Remove ref. to LIB$EXTRACT_CONCEAL and change accordingly
49 0049 1
50 0050 1 V03-004 MLJ0112 Martin L. Jack, 19-Jul-1983 16:51
51 0051 1 Fix uninitialized backup date in /INCREMENTAL case.
52 0052 1
53 0053 1 V03-003 ACG0313 Andrew C. Goldstein, 12-Feb-1983 16:09
54 0054 1 Add routine subtitles
55 0055 1
56 0056 1 V03-002 MLJ53474 Martin L. Jack, 4-Feb-1983 0:15
57 0057 1 Track ACG0275 in LIB$CREATE_DIR.

```

CREATEDIR  
V04-000

Create directory

J 16  
15-Sep-1984 23:52:12  
14-Sep-1984 11:53:50

VAX-11 Bliss-32 V4.0-742  
[BACKUP.SRC]CREATEDIR.B32;1

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|   |    |      |   |   |                                                              |
|---|----|------|---|---|--------------------------------------------------------------|
| : | 58 | 0058 | 1 | : |                                                              |
| : | 59 | 0059 | 1 | : |                                                              |
| : | 60 | 0060 | 1 | : | V03-001 MLJ0101 Martin L. Jack, 13-Nov-1982 19:24            |
| : | 61 | 0061 | 1 | : | Fix ADDRESSING_MODE(GENERAL) errors.                         |
| : | 62 | 0062 | 1 | : |                                                              |
| : | 63 | 0063 | 1 | : | V02-003 MLJ0063 Martin L. Jack, 31-Dec-1981 11:05            |
| : | 64 | 0064 | 1 | : | Readapt from new LIB\$CREATE_DIR to handle root directories. |
| : | 65 | 0065 | 1 | : |                                                              |
| : | 66 | 0066 | 1 | : | V02-002 MLJ0062 Martin L. Jack, 3-Dec-1981 12:30             |
| : | 67 | 0067 | 1 | : | Set backup date of created directory, return file ID and     |
| : | 68 | 0068 | 1 | : | backup date of directory, and consider lookups that return a |
| : | 69 | 0069 | 1 | : | file ID of all ones to be nonexistent, all to support        |
| : | 70 | 0070 | 1 | : | /INCREMENTAL.                                                |
| : | 71 | 0071 | 1 | : |                                                              |
| : | 72 | 0072 | 1 | : | V02-001 MLJ0036 Martin L. Jack, 28-Aug-1981 17:32            |
| : | 73 | 0073 | 1 | : | Make use of new NAM block descriptors.                       |
| : | 74 | 0074 | 1 | : | --                                                           |

CREATEDIR  
V04-000

Create directory

K 16  
15-Sep-1984 23:52:12  
14-Sep-1984 11:53:50

VAX-11 Bliss-32 V4.0-742  
[BACKUP.SRC]CREATEDIR.B32;1

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: 76      0075 1 REQUIRE 'SRCS:COMMON';
: 77      1181 1 LIBRARY 'SYSSLIBRARY:LIB';
: 78      1182 1
: 79      1183 1
: 80      1184 1 FORWARD ROUTINE
: 81      1185 1          CREATE_DIR;          ! Create directory file
: 82      1186 1
: 83      1187 1
: 84      1188 1 EXTERNAL ROUTINE
: 85      1189 1          LIB$CVT_OTB:        ADDRESSING_MODE(GENERAL);
: 86      1190 1          ! Convert octal to binary
: 87      1191 1
: 88      1192 1 EXTERNAL LITERAL          ! Completion status codes
: 89      1193 1          LIB$_INVFILSPE;    ! Invalid file specification
: 90      1194 1
: 91      1195 1
: 92      1196 1 G$DEFINE();              ! Define common area

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: 94 1197 1 %SBTTL 'CREATE_DIR - create a directory file'
: 95 1198 1 GLOBAL ROUTINE CREATE_DIR (
: 96 1199 1     DEV DIR SPEC: REF BBLOCK,
: 97 1200 1     OWNER UIC,
: 98 1201 1     PROT VALUE,
: 99 1202 1     MAX VERSIONS,
100 1203 1     FILE_ID: REF BBLOCK,
101 1204 1     BAKDATE: REF VECTOR
102 1205 1 ) =
103 1206 1
104 1207 1 ++
105 1208 1 FUNCTIONAL DESCRIPTION:
106 1209 1
107 1210 1     This routine creates directory files.
108 1211 1
109 1212 1 FORMAL PARAMETERS:
110 1213 1
111 1214 1     DEV_DIR_SPEC Address of a descriptor for the device and directory
112 1215 1     specification. This string is a standard RMS file
113 1216 1     specification; it must not contain a node name, file
114 1217 1     name, file type, file version, or wild card characters;
115 1218 1     it must contain an explicit directory; it must
116 1219 1     reference a disk device. The string must be no longer
117 1220 1     than 255 characters.
118 1221 1
119 1222 1     OWNER_UIC A longword passed by immediate value that specifies the
120 1223 1     owner UIC of the created directories. If zero, the
121 1224 1     owner UIC is that of the parent directory.
122 1225 1
123 1226 1     PROT_VALUE A word passed by immediate value that specifies the
124 1227 1     file protection. If all ones, the file protection is
125 1228 1     that of the parent directory with delete access dropped
126 1229 1     for all access categories.
127 1230 1
128 1231 1     MAX_VERSIONS A word passed by immediate value that specifies the
129 1232 1     default maximum number of versions for files cataloged
130 1233 1     in the created directories.
131 1234 1
132 1235 1     FILE_ID The address of an array of three words that receives
133 1236 1     the file ID of the lowest level directory.
134 1237 1
135 1238 1     BAKDATE The address of a quadword that receives the backup date
136 1239 1     of the lowest level directory.
137 1240 1 IMPLICIT INPUTS:
138 1241 1
139 1242 1     OUTPUT_CHAN Assigned to the output volume.
140 1243 1     QUAL Qualifiers.
141 1244 1     COM_O_BSRDATE Date of backup.
142 1245 1
143 1246 1 IMPLICIT OUTPUTS:
144 1247 1
145 1248 1     NONE
146 1249 1
147 1250 1 COMPLETION STATUS:
148 1251 1
149 1252 1     $$$_NORMAL Normal successful completion; all specified directories
150 1253 1     already exist

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151 1254 1 |
152 1255 1 |      SSS_CREATED      Normal successful completion; one or more directories
153 1256 1 |      created
154 1257 1 |
155 1258 1 |      LIBS_INVFILSPE   File specification did not contain an explicit
156 1259 1 |      directory or contained a node name, file name, file
157 1260 1 |      type, file version, or wildcard, or device not a disk
158 1261 1 |
159 1262 1 |      $PARSE errors
160 1263 1 |      $QIO errors
161 1264 1 |
162 1265 1 |  SIDE EFFECTS:
163 1266 1 |
164 1267 1 |      Directory files created as requested.
165 1268 1 |
166 1269 1 |  --
167 1270 1 |
168 1271 2 | BEGIN
169 1272 2 | LOCAL
170 1273 2 | FAB:      $FAB_DECL,      ! FAB for $PARSE
171 1274 2 | NAM:      $NAM_DECL,      ! NAM block for $PARSE
172 1275 2 | ESA_BUFFER: VECTOR[NAM$C_MAXRSS, BYTE], ! Expanded string area
173 1276 2 | NAME_BUFFER: VECTOR[39+6, BYTE], ! Directory name buffer
174 1277 2 | NAME_DESC: BLOCK[DSC$K_2_BLN, BYTE], ! Directory name descriptor
175 1278 2 | RECATTR:  BLOCK[ATR$$_RECATTR, BYTE]
176 1279 2 | VOLATILE, ! Record attributes
177 1280 2 | UCHAR:    BLOCK[ATR$$_UCHAR, BYTE]
178 1281 2 | VOLATILE, ! File characteristics
179 1282 2 | FPRO:     BLOCK[ATR$$_FPRO, BYTE]
180 1283 2 | VOLATILE, ! File protection
181 1284 2 | UIC:      BLOCK[ATR$$_UIC, BYTE]
182 1285 2 | VOLATILE, ! File owner UIC
183 1286 2 | BAK:      VECTOR[2]
184 1287 2 | VOLATILE, ! File backup date
185 1288 2 | HEADER:   BLOCK[ATR$$_HEADER, BYTE]
186 1289 2 | VOLATILE, ! File header
187 1290 2 | FIB:      BLOCK[FIB$C_LENGTH, BYTE], ! FIB
188 1291 2 | FIB_DESC: VECTOR[2], ! Descriptor for FIB
189 1292 2 | ATR:      BLOCKVECTOR[7, 8, BYTE], ! Attribute descriptors
190 1293 2 | IOSB:     VECTOR[4, WORD], ! I/O status block
191 1294 2 | GROUP,    ! Binary group number
192 1295 2 | MEMBER,   ! Binary member number
193 1296 2 | DIR_LENGTH, ! Length of residual directory string
194 1297 2 | DIR_ADDRESS, ! Address of residual directory string
195 1298 2 | PREV_ADDRESS, ! Address of previous directory segment
196 1299 2 | REALDIR_ADDRESS, ! Temporary pointer
197 1300 2 | STATUS_2, ! Status return
198 1301 2 | STATUS_3, ! Status return
199 1302 2 | FINAL_STATUS; ! Status return
200 1303 2 | BIND
201 1304 2 | DIR_TYP_VER = UPLIT BYTE ('.DIR;1');
202 1305 2 | ! File type and version string
203 1306 2 | LABEL
204 1307 2 | PROCESS; ! Block exited when processing complete
205 1308 2 | BUILTIN
206 1309 2 | LOCC, ! LOCC instruction
207 1310 2 | ROT; ! Rotate longword

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1311  
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1315  
P 1316 SFAB INIT(FAB=FAB,  
P 1317 FNS=.DEV_DIR_SPEC[DSC$W_LENGTH],  
P 1318 FNA=.DEV_DIR_SPEC[DSC$A_POINTER],  
1319 NAM=NAM);  
P 1320 SNAM INIT(NAM=NAM,  
P 1321 NOP=<NOCONCEAL>,  
1322 ESA=ESA_BUFFER,  
1323 ESS=NAM$C_MAXRSS);  
1324  
1325  
1326  
1327  
1328  
1329  
1330  
1331 STATUS_2 = $PARSE(FAB=FAB);  
1332 IF NOT .STATUS_2 AND .STATUS_2 NEQ RMS$_DNF THEN RETURN .STATUS_2;  
1333  
1334 ! Get the length and address of the directory string without brackets.  
1335  
1336 DIR_LENGTH = .NAM[NAM$B_DIR] - 2; ! Length without brackets  
1337 DIR_ADDRESS = .NAM[NAM$C_DIR] + 1; ! Address without bracket  
1338  
1339 ! If there is a root directory locate the real directory and squish  
1340 them together  
1341  
1342 IF .NAM [ NAM$V_ROOT_DIR ]  
1343 THEN  
1344 BEGIN  
1345  
1346 REGISTER  
1347 R0 = 0,  
1348 R1 = 1;  
1349  
1350 LOCAL  
1351 TERMINATOR: BYTE;  
1352  
1353 TERMINATOR = ..NAM [ NAM$L_DIR ] + 2; ! Close = Open+2  
1354  
1355 IF NOT LOCC( TERMINATOR, DIR_LENGTH, .DIR_ADDRESS; R0, R1 )  
1356 THEN  
1357 RETURN LIB$_INVFILSPE; ! No Root Found  
1358  
1359 REALDIR_ADDRESS = .R1;  
1360  
1361 ! Found the terminator of the root directory, the real directory  
1362 will be 2 past it, i.e. "[ROOT.][DIR]"  
1363 REALDIR_ADDRESS-^  
1364  
1365 ! Move what is left over 2 in order to get rid of the "[[" to get:  
1366 "[ROOT.DIR]"  
1367 REALDIR_ADDRESS-^
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265 1368 2      !
266 1369 2      CHSMOVE( .RO, .REALDIR_ADDPESS+2, .REALDIR_ADDRESS );
267 1370 2      !
268 1371 2      ! Adjust the direcorey length
269 1372 2      !
270 1373 2      DIR_LENGTH = .DIR_LENGTH - 2
271 1374 2      !
272 1375 2      END
273 1376 2      ELSE
274 1377 2      !
275 1378 2      ! If no root then the real directory is the uic directory
276 1379 2      !
277 1380 2      REALDIR_ADDRESS = .DIR_ADDRESS;
278 1381 2      !
279 1382 2      ! If the directory is in UIC format, get the octal conversion
280 1383 2      !
281 1384 2      IF .NAM [ NAMS_V_GRP_MBR ]
282 1385 2      THEN
283 1386 2      BEGIN
284 1387 2      !
285 1388 2      ! Convert the group part
286 1389 2      !
287 1390 2      IF NOT LIB$CVT_OTB( 3, .REALDIR_ADDRESS, GROUP)
288 1391 2      THEN
289 1392 2      RETURN LIB$_INVFILSPE;          ! Invalid group number
290 1393 2      !
291 1394 2      ! Convert the member part
292 1395 2      !
293 1396 2      IF NOT LIB$CVT_OTB( 3, .REALDIR_ADDRESS + 3, MEMBER)
294 1397 2      THEN
295 1398 2      RETURN LIB$_INVFILSPE          ! Invalid member number
296 1399 2      !
297 1400 2      END;
298 1401 2      !
299 1402 2      !+
300 1403 2      ! Set up the FIB to look up the MFD.
301 1404 2      !-
302 1405 2      !
303 1406 2      CH$FILL(0, FIB$_LENGTH, FIB);
304 1407 2      FIB[FIB$_ACCTL] = FIB$_WRITE OR FIB$_NOREAD OR FIB$_NOWRITE;
305 1408 2      FIB[FIB$_NMCTL] = FIB$_SUPERSEDE;
306 1409 2      FIB[FIB$_FID_NUM] = FID$_MFD;
307 1410 2      FIB[FIB$_FID_SEQ] = FID$_MFD;
308 1411 2      !
309 1412 2      !+
310 1413 2      ! Set up the FIB descriptor.
311 1414 2      !-
312 1415 2      !
313 1416 2      FIB_DESC[0] = FIB$_LENGTH;
314 1417 2      FIB_DESC[1] = FIB;
315 1418 2      !
316 1419 2      !+
317 1420 2      ! Set up the name descriptor. The length is filled in as need be.
318 1421 2      !-
319 1422 2      !
320 1423 2      NAME_DESC[DSC$_A_POINTER] = NAME_BUFFER;
321 1424 2      !

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322 1425 2  |*
323 1426 2  |* Beginning of block that is exited when processing is complete. FINAL_STATUS
324 1427 2  |* contains the status to be returned to caller.
325 1428 2  |*
326 1429 2  |*
327 1430 2  |*
328 1431 2  |*
329 1432 2  |*
330 1433 2  |* Loop to look up directories.
331 1434 2  |*
332 1435 2  |*
333 1436 2  |*
334 1437 2  |*
335 1438 2  |*
336 1439 2  |*
337 1440 2  |*
338 1441 2  |* Copy the file ID to FIB$W_DID so that the next lookup is done in that
339 1442 2  |* directory.
340 1443 2  |*
341 1444 2  |*
342 1445 2  |* FIB[FIB$W_DID_NUM] = .FIB[FIB$W_FID_NUM];
343 1446 2  |* FIB[FIB$W_DID_SEQ] = .FIB[FIB$W_FID_SEQ];
344 1447 2  |* FIB[FIB$W_DID_RVN] = .FIB[FIB$W_FID_RVN];
345 1448 2  |*
346 1449 2  |*
347 1450 2  |*
348 1451 2  |* Locate the next directory name.
349 1452 2  |*
350 1453 2  |*
351 1454 2  |* BEGIN ! block to use output registers
352 1455 2  |* REGISTER
353 1456 2  |*   RO = 0,
354 1457 2  |*   R1 = 1;
355 1458 2  |* LOCAL
356 1459 2  |*   NAME_LENGTH,
357 1460 2  |*   NAME_ADDRESS;
358 1461 2  |*
359 1462 2  |* NAME_ADDRESS = .DIR ADDRESS; ! Save starting point
360 1463 2  |* LOC(REF(REF('.'), DIR_LENGTH, .DIR_ADDRESS; RO, R1);
361 1464 2  |* NAME_LENGTH = .DIR_LENGTH - .RO; ! Length preceding dot or end
362 1465 2  |* DIR_ADDRESS = .R1 + 1; ! Prune to string following dot
363 1466 2  |* RO = .RO - 1;
364 1467 2  |* DIR_LENGTH = .RO;
365 1468 2  |*
366 1469 2  |*
367 1470 2  |* Construct the directory name concatenated with '.DIR;1' in the name
368 1471 2  |* buffer, and a descriptor for this name in the name descriptor.
369 1472 2  |*
370 1473 2  |*
371 1474 2  |* NAME_DESC[DSC$W_LENGTH] = .NAME_LENGTH + 6;
372 1475 2  |* CH$MOVE(6, DIR_TYP_VER, CH$MOVE(.NAME_LENGTH, .NAME_ADDRESS, NAME_BUFFER));
373 1476 2  |* END; ! block to use output registers
374 1477 2  |*
375 1478 2  |*
376 1479 2  |* Look up the directory at the current level. If the directory
377 1480 2  |* does not exist, exit the loop to begin creating directories.
378 1481 2  |*

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```

379 1482 4
380 P 1483 4 FINAL STATUS = $QIOW(
381 P 1484 4     FONC=IOS$ ACCESS,
382 P 1485 4     CHAN=.OUTPUT_CHAN,
383 P 1486 4     IOSB=IOSB,
384 P 1487 4     P1=FIB DESC,
385 1488 4     P2=NAME DESC);
386 1489 4 IF .FINAL STATUS THEN FINAL STATUS = .IOSB[0];
387 1490 4 IF .FIB[FIB$W_FID_NUM] EQL 65535
388 1491 4 AND .FIB[FIB$W_FID_SEQ] EQL 65535
389 1492 4 AND .FIB[FIB$B_FID_NMX] EQL 255
390 1493 4 THEN FINAL STATUS = SSS$ NOSUCHFILE;
391 1494 4 IF .FINAL STATUS EQL SSS$ NOSUCHFILE
392 1495 4 THEN EXIT[LOOP];
393 1496 4 IF NOT .FINAL STATUS THEN LEAVE PROCESS;
394 1497 4
395 1498 4 ! Save the directory ID and previous name string in case we
396 1499 4 ! need to back out.
397 1500 4
398 1501 4
399 1502 4 PREV_ADDRESS = .DIR_ADDRESS - .NAME_DESC[DSC$W_LENGTH] + 6 - 1;
400 1503 4 FILE_ID[FIB$W_NUM] = .FIB[FIB$W_DID_NUM];
401 1504 4 FILE_ID[FIB$W_SEQ] = .FIB[FIB$W_DID_SEQ];
402 1505 4 FILE_ID[FIB$W_RVN] = .FIB[FIB$W_DID_RVN];
403 1506 4
404 1507 4
405 1508 4 !+
406 1509 4 ! If no more directory levels were specified, all specified directories
407 1510 4 ! already exist. We do a read attributes on the last directory found
408 1511 4 ! for one of several reasons: (1) to get the attributes to propagate
409 1512 4 ! to the next directory level to be created. (2) to get the backup
410 1513 4 ! date of the directory for an incremental scan. (3) to ensure that
411 1514 4 ! the directory exists, and we haven't just hit a dangling directory
412 1515 4 ! entry.
413 1516 4 !-
414 1517 4 IF .DIR_LENGTH LEQ 0
415 1518 4 THEN
416 1519 4     BEGIN
417 1520 4     FINAL STATUS = SSS$ NORMAL;
418 1521 4     EXIT[LOOP];
419 1522 4     END;
420 1523 4 END;
421 1524 4
422 1525 4 !+
423 1526 4 ! We have reached the level at which directories do not yet exist. FIB$W_DID
424 1527 4 ! now contains the file ID of the directory in which the new directory must be
425 1528 4 ! cataloged and the filename descriptor contains the name of the new directory.
426 1529 4 !-
427 1530 4
428 1531 4 !+
429 1532 4 ! Set up the attribute list. Because of dependencies later in the routine,
430 1533 4 ! the file header attribute must be last, preceded by the owner UIC attribute.
431 1534 4 !-
432 1535 4
433 1536 4 ATR[0, ATR$W_TYPE] = ATR$C_RECATTR; ! Record attributes
434 1537 4 ATR[0, ATR$W_SIZE] = ATR$S_RECATTR;
435 1538 4 ATR[0, ATR$L_ADDR] = RECATTR;

```

```

: 436 1539 3 ATR[1, ATRSW_TYPE] = ATRSC_UCHAR;      ! File characteristics
: 437 1540 3 ATR[1, ATRSW_SIZE] = ATRSS_UCHAR;
: 438 1541 3 ATR[1, ATRSL_ADDR] = UCHAR;
: 439 1542 3 ATR[2, ATRSW_TYPE] = ATRSC_FPRO;      ! File protection
: 440 1543 3 ATR[2, ATRSW_SIZE] = ATRSS_FPRO;
: 441 1544 3 ATR[2, ATRSL_ADDR] = FPRO;
: 442 1545 3 ATR[3, ATRSW_TYPE] = ATRSC_BAKDATE;   ! File backup date
: 443 1546 3 ATR[3, ATRSW_SIZE] = ATRSS_BAKDATE;
: 444 1547 3 ATR[3, ATRSL_ADDR] = BAK;
: 445 1548 3 ATR[4, ATRSW_TYPE] = ATRSC_UIC;      ! File owner UIC
: 446 1549 3 ATR[4, ATRSW_SIZE] = ATRSS_UIC;
: 447 1550 3 ATR[4, ATRSL_ADDR] = UIC;
: 448 1551 3 ATR[5, ATRSW_TYPE] = ATRSC_HEADER;   ! File header
: 449 1552 3 ATR[5, ATRSW_SIZE] = ATRSS_HEADER;
: 450 1553 3 ATR[5, ATRSL_ADDR] = HEADER;
: 451 1554 3 ATR[6, 0,0,32,0] = 0;                ! End of list
: 452 1555
: 453 1556 !+
: 454 1557 ! Back out to the previous directory level if the last lookup failed,
: 455 1558 ! to do the read attributes on the last directory file.
: 456 1559 !-
: 457 1560
: 458 1561 3 IF NOT .FINAL_STATUS
: 459 1562 3 THEN
: 460 1563 4 BEGIN
: 461 1564 4 FIB[FIBSW_FID_NUM] = .FIB[FIBSW_DID_NUM];
: 462 1565 4 FIB[FIBSW_FID_SEQ] = .FIB[FIBSW_DID_SEQ];
: 463 1566 4 FIB[FIBSW_FID_RVN] = .FIB[FIBSW_DID_RVN];
: 464 1567 3 END;
: 465 1568 3 FIB[FIBSW_DID_NUM] = 0;
: 466 1569 3 FIB[FIBSW_DID_SEQ] = 0;
: 467 1570 3 FIB[FIBSW_DID_RVN] = 0;
: 468 1571
: 469 1572 !+
: 470 1573 3 ! Read the attributes of the last directory file found so that they
: 471 1574 3 ! may be propagated to the directories created. If this fails with a
: 472 1575 3 ! NOSUCHFILE error, back out one level in case we had a dangling directory
: 473 1576 3 ! entry.
: 474 1577 3 !-
: 475 1578
: 476 1579 3 WHILE 1 DO
: 477 1580 4 BEGIN
: 478 P 1581 4 STATUS_3 = $QIOW(
: 479 P 1582 4 FUNC=IOS_ACCESS,
: 480 P 1583 4 CHAN=.OUTPUT_CHAN,
: 481 P 1584 4 IOSB=IOSB,
: 482 P 1585 4 P1=FIB_DESC,
: 483 1586 4 P5=ATR);
: 484 1587 4 IF .STATUS_3 THEN STATUS_3 = .IOSB[0];
: 485 1588 4 IF .STATUS_3
: 486 1589 4 THEN EXITLOOP
: 487 1590 4
: 488 1591 4 ! If we got a NOSUCHFILE error and a previous level exists,
: 489 1592 4 ! attempt to back up.
: 490 1593 4 !
: 491 1594 4 ELSE IF .STATUS_3 EQL SSS_NOSUCHFILE AND .PREV_ADDRESS NEQ 0
: 492 1595 4 THEN

```

```

493 1596 5 BEGIN
494 1597 5 FINAL_STATUS = .STATUS_3;
495 1598 5 FIB[FIB$W_FID_NUM] = .FILE_ID[FIB$W_NUM];
496 1599 5 FIB[FIB$W_FID_SEQ] = .FILE_ID[FIB$W_SEQ];
497 1600 5 FIB[FIB$W_FID_RVN] = .FILE_ID[FIB$W_RVN];
498 1601 5 DIR_LENGTH = .DIR_LENGTH - .PREV_ADDRESS + .DIR_ADDRESS;
499 1602 5 DIR_ADDRESS = .PREV_ADDRESS;
500 1603 5 PREV_ADDRESS = 0;
501 1604 5
502 1605 5 !+
503 1606 5 ! Locate the next directory name.
504 1607 5 !-
505 1608 5
506 1609 6 BEGIN ! block to use output registers
507 1610 6 REGISTER
508 1611 6 R0 = 0;
509 1612 6 R1 = 1;
510 1613 6 LOCAL
511 1614 6 NAME_LENGTH,
512 1615 6 NAME_ADDRESS;
513 1616 6
514 1617 6 NAME_ADDRESS = .DIR_ADDRESS; ! Save starting point
515 1618 6 LOCCT%REF(%C'.'), DIR_LENGTH, .DIR_ADDRESS; R0, R1);
516 1619 6 NAME_LENGTH = .DIR_LENGTH - .R0; ! Length preceding dot or end
517 1620 6 DIR_ADDRESS = .R1 + 1; ! Prune to string following dot
518 1621 6 R0 = .R0 - 1;
519 1622 6 DIR_LENGTH = .R0;
520 1623 6
521 1624 6 !+
522 1625 6 ! Construct the directory name concatenated with '.DIR;1' in the name
523 1626 6 ! buffer, and a descriptor for this name in the name descriptor.
524 1627 6 !-
525 1628 6
526 1629 6 NAME_DESC[DSC$W_LENGTH] = .NAME_LENGTH + 6;
527 1630 6 CH$MOVE(6, DIR_TYP_VER, CH$MOVE(.NAME_LENGTH, .NAME_ADDRESS, NAME_BUFFER));
528 1631 6 END; ! block to use output registers
529 1632 6 END
530 1633 5
531 1634 5 ! Otherwise we can't back out. Report the error.
532 1635 5 !-
533 1636 4 ELSE
534 1637 5 BEGIN
535 1638 5 FINAL_STATUS = .STATUS_3;
536 1639 5 LEAVE_PROCESS;
537 1640 4 END;
538 1641 3 END;
539 1642 3
540 1643 3 !+
541 1644 3 ! Exit now in the /INCREMENTAL restore case where all directories exist.
542 1645 3 !-
543 1646 3
544 1647 3 IF .FINAL_STATUS
545 1648 3 THEN LEAVE_PROCESS;
546 1649 3
547 1650 3 !+
548 1651 3 ! Delete the file header attribute from the attribute list, since it is not
549 1652 3 ! valid (or necessary) for creates.

```

```

550 1653 3 :-
551 1654 3
552 1655 3 ATR[5, 0,0,32,0] = 0;
553 1656 3 BAK[0] = BAK[1] = 0;
554 1657 4 IF (.QUAL[QUAL_REC0] OR .QUAL[QUAL_INCR])           : If /RECORD or /INCREMENTAL
555 1658 3 AND .HEADER[FH2$B_STRUCLEV] EQL 2
556 1659 3 THEN
557 1660 3     BEGIN
558 1661 3     BAK[0] = .COM_0_BSRDATE[0];
559 1662 3     BAK[1] = .COM_0_BSRDATE[1];
560 1663 3     END;
561 1664 3
562 1665 3 !+
563 1666 3 :- Copy the file ID to FIB$W_DID to create the directory.
564 1667 3 :-
565 1668 3
566 1669 3 FIB[FIB$W_DID_NUM] = .FIB[FIB$W_FID_NUM];
567 1670 3 FIB[FIB$W_DID_SEQ] = .FIB[FIB$W_FID_SEQ];
568 1671 3 FIB[FIB$W_DID_RVN] = .FIB[FIB$W_FID_RVN];
569 1672 3
570 1673 3 !+
571 1674 3 :- Establish the allocation of the created directories. A Structure Level 1
572 1675 3 :- directory is allocated zero blocks; a Structure Level 2 directory is
573 1676 3 :- allocated one block. (This block is later initialized.) In both cases,
574 1677 3 :- the file is marked contiguous.
575 1678 3 :-
576 1679 3
577 1680 3 FIB[FIB$W_EXCTL] = FIB$M_EXTEND OR FIB$M_FILCON OR FIB$M_ALCON;
578 1681 3 FIB[FIB$W_NMCTL] = FIB$M_SUPERSEDE;           ! To handle superseding -1 file ID
579 1682 3 IF .HEADER[FH2$B_STRUCLEV] EQL 2 THEN FIB[FIB$L_EXSZ] = 1;
580 1683 3
581 1684 3 !+
582 1685 3 :- Set up the end of file pointer. It points to the highest allocated block
583 1686 3 :- plus one (with a first free byte of zero). Note that EFBLK is stored in
584 1687 3 :- inverted format.
585 1688 3 :-
586 1689 3
587 1690 3 RECATTR[FAT$L_EFBLK] = ROT(.FIB[FIB$L_EXSZ] + 1, 16);
588 1691 3
589 1692 3 !+
590 1693 3 :- Establish the owner UIC of the created directories.
591 1694 3 :-
592 1695 3
593 1696 3 IF .OWNER_UIC NEQ 0
594 1697 3 THEN
595 1698 3     UIC = .OWNER_UIC;
596 1699 3
597 1700 3 !+
598 1701 3 :- Establish the file protection of the created directories.
599 1702 3 :-
600 1703 3
601 1704 3 FPRO = .FPRO OR %X'8888';
602 1705 3 IF .PROT_VALUE<0,16> NEQ %X'FFFF'
603 1706 3 THEN
604 1707 3     FPRO = .PROT_VALUE<0,16>;
605 1708 3
606 1709 3 !+

```

```

: 607      1710 3  ! Establish the default version limit of the created directories.
: 608      1711 3  !-
: 609      1712 3  !-
: 610      1713 3  RECATTR[FAT$W_VERSIONS] = .MAX_VERSIONS;
: 611      1714 3  !-
: 612      1715 3  !+
: 613      1716 3  ! Loop to create directories.
: 614      1717 3  !-
: 615      1718 3  !-
: 616      1719 3  WHILE 1 DO
: 617      1720 4  BEGIN
: 618      1721 4
: 619      1722 4  !+
: 620      1723 4  ! Create and access the file.
: 621      1724 4  !-
: 622      1725 4
: 623      P 1726 4  FINAL STATUS = $QIOW(
: 624      P 1727 4  FOUNC=IOS$ CREATE OR IOS$ CREATE OR IOS$ ACCESS,
: 625      P 1728 4  CHAN=.OUTPUT_CHAN,
: 626      P 1729 4  IOSB=IOSB,
: 627      P 1730 4  P1=FIB_DESC,
: 628      P 1731 4  P2=NAME_DESC,
: 629      P 1732 4  P5=ATR);
: 630      1733 4  IF .FINAL_STATUS THEN FINAL STATUS = .IOSB[0];
: 631      1734 4  IF NOT .FINAL_STATUS THEN LEAVE PROCESS;
: 632      1735 4
: 633      1736 4  !+
: 634      1737 4  ! If the directory is Structure Level 2, write the first block of the
: 635      1738 4  ! file.
: 636      1739 4  !-
: 637      1740 4
: 638      1741 4  IF .HEADER[FH2$B_STRUCLEV] EQL 2
: 639      1742 4  THEN
: 640      1743 5  BEGIN
: 641      1744 5  LOCAL
: 642      1745 5  BLOCK_BUFFER: VECTOR[256,WORD]; ! Block buffer
: 643      1746 5
: 644      1747 5  BLOCK_BUFFER[0] = -1; ! End of block marker
: 645      1748 5  CH$FILL(0, 510, BLOCK_BUFFER[1]); ! Fill rest of block
: 646      P 1749 5  FINAL STATUS = $QIOW(
: 647      P 1750 5  FOUNC=IOS$ WRITEVBLK,
: 648      P 1751 5  CHAN=.OUTPUT_CHAN,
: 649      P 1752 5  IOSB=IOSB,
: 650      P 1753 5  P1=BLOCK_BUFFER,
: 651      P 1754 5  P2=512,
: 652      1755 5  P3=1);
: 653      1756 5  IF .FINAL_STATUS THEN FINAL STATUS = .IOSB[0];
: 654      1757 5  IF NOT .FINAL_STATUS THEN LEAVE PROCESS;
: 655      1758 4  END;
: 656      1759 4
: 657      1760 4  !+
: 658      1761 4  ! Deaccess the file.
: 659      1762 4  !-
: 660      1763 4
: 661      P 1764 4  FINAL STATUS = $QIOW(
: 662      P 1765 4  FOUNC=IOS$ DEACCESS,
: 663      P 1766 4  CHAN=.OUTPUT_CHAN,

```

```

664 1767 4      IOSB=IOSB);
665 1768 4      IF .FINAL_STATUS THEN FINAL_STATUS = .IOSB[0];
666 1769 4      IF NOT .FINAL_STATUS THEN LEAVE PROCESS;
667 1770 4
668 1771 4      !+
669 1772 4      !- If no more directory levels were specified, they have all been created.
670 1773 4      !-
671 1774 4
672 1775 4      IF .DIR_LENGTH LEQ 0
673 1776 4      THEN
674 1777 5          BEGIN
675 1778 5              FINAL_STATUS = $$$_CREATED;
676 1779 5              LEAVE PROCESS;
677 1780 4          END;
678 1781 4
679 1782 4      !+
680 1783 4      !- Locate the next directory name.
681 1784 4      !-
682 1785 4
683 1786 5      BEGIN ! block to use output registers
684 1787 5      REGISTER
685 1788 5          R0 = 0;
686 1789 5          R1 = 1;
687 1790 5      LOCAL
688 1791 5          NAME_LENGTH,
689 1792 5          NAME_ADDRESS;
690 1793 5
691 1794 5      NAME_ADDRESS = .DIR_ADDRESS;          ! Save starting point
692 1795 5      LOCCTXREF(XC'.'), DIR_LENGTH, .DIR_ADDRESS; R0, R1);
693 1796 5      NAME_LENGTH = .DIR_LENGTH - .R0;    ! Length preceding dot or end
694 1797 5      DIR_ADDRESS = R1 + 1;              ! Prune to string following dot
695 1798 5      R0 = .R0 - 1;
696 1799 5      DIR_LENGTH = .R0;
697 1800 5
698 1801 5      !+
699 1802 5      !- Construct the directory name concatenated with '.DIR;1' in the name
700 1803 5      !- buffer, and a descriptor for this name in the name descriptor.
701 1804 5      !-
702 1805 5
703 1806 5      NAME_DESC[DSC$W_LENGTH] = .NAME_LENGTH + 6;
704 1807 5      CH$MOVE(6, DIR_TYP_VER, CH$MOVE(.NAME_LENGTH, .NAME_ADDRESS, NAME_BUFFER));
705 1808 4      END; ! block to use output registers
706 1809 4
707 1810 4      !+
708 1811 4      !- Copy the file ID of the created directory to FIB$W_DID so that the next
709 1812 4      !- directory is cataloged in the directory just created.
710 1813 4      !-
711 1814 4
712 1815 4      FIB[FIB$W_DID_NUM] = .FIB[FIB$W_FID_NUM];
713 1816 4      FIB[FIB$W_DID_SEQ] = .FIB[FIB$W_FID_SEQ];
714 1817 4      FIB[FIB$W_DID_RVN] = .FIB[FIB$W_FID_RVN];
715 1818 4      END;
716 1819 3
717 1820 3      !+
718 1821 3      !- End of block that is exited when processing is complete. FINAL_STATUS
719 1822 3      !- contains the status that is to be returned to caller.
720 1823 3      !-

```



```

: 721      1824      3
: 722      1825      2 END; ! of block PROCESS
: 723      1826      2
: 724      1827      2 !+
: 725      1828      2 ! Return the status.
: 726      1829      2 !-
: 727      1830      2
: 728      1831      2 FILE_ID[FIDSW_NUM] = .FIB[FIBSW_FID_NUM];
: 729      1832      2 FILE_ID[FIDSW_SEQ] = .FIB[FIBSW_FID_SEQ];
: 730      1833      2 FILE_ID[FIDSW_RVN] = .FIB[FIBSW_FID_RVN];
: 731      1834      2 BAKDATE[0] = .BAK[0];
: 732      1835      2 BAKDATE[1] = .BAK[1];
: 733      1836      2 RETURN .FINAL_STATUS;
: 734      1837      1 END;

```

```

.TITLE CREATEDIR Create directory
.IDENT \V04-000\

.PSECT COMMON,NOEXE, OVR,2

00000 GLOBAL_BASE:
      .BLKB 0
00000 FREE_LIST:
      .BLKB 8
00008 INPUT_WAIT:
      .BLKB 8
00010 REREAD_WAIT:
      .BLKB 8
00018 OUTPUT_WAIT:
      .BLKB 8
00020 JPI_UIC: .BLKB 4
00024 JPI_USERNAME:
      .BLKB 12
00030 JPI_DATE:
      .BLKB 8
00038 JPI_NODE_DESC:
      .BLKB 8
00040 JPI_CURPRIV:
      .BLKB 8
00048 SYI_VERSION:
      .BLKB 4
0004C SYI_SID: .BLKB 4
00050 RWSV_HOLD_LIST:
      .BLKB 8
00058 RWSV_CRC16:
      .BLKB 64
00098 RWSV_AUTODIN:
      .BLKB 64
000D8 RWSV_FILESET_ID:
      .BLKB 8
000E0 RWSV_VOLUME_ID:
      .BLKB 12
000EC RWSV_VOL_NUMBER:
      .BLKB 2
000EE RWSV_SEG_NUMBER:
      .BLKB 2

```



001C6 COM\_FLAGS:  
          .BLKB 2  
001C8 COM\_PADDING:  
          .BLKB 1  
001C9 COM\_BUFF\_COUNT:  
          .BLKB 1  
001CA COM\_I\_SETCOUNT:  
          .BLKB 1  
001CB COM\_O\_SETCOUNT:  
          .BLKB 1  
001CC COM\_I\_STRUCNAME:  
          .BLKB 12  
001D8 COM\_O\_STRUCNAME:  
          .BLKB 12  
001E4 COM\_O\_BSRDATE:  
          .BLKB 8  
001EC ALT\_SSNAME:  
          .BLKB 32  
0020C INPUT\_FUNC:  
          .BLKB 1  
0020D INPUT\_RTYPE:  
          .BLKB 1  
0020E OUTPUT\_FUNC:  
          .BLKB 1  
0020F FAST\_STRUCLEV:  
          .BLKB 1  
00210 INPUT\_BEG:  
          .BLKB 0  
00210 INPUT\_CHAN:  
          .BLKB 4  
00214 INPUT\_FLAGS:  
          .BLKB 2  
00216 INPUT\_PADDING:  
          .BLKB 2  
00218 INPUT\_FAB:  
          .BLKB 4  
0021C INPUT\_NAM:  
          .BLKB 4  
00220 INPUT\_BCB:  
          .BLKB 4  
00224 INPUT\_QUAL:  
          .BLKB 4  
00228 INPUT\_BAD:  
          .BLKB 4  
0022C INPUT\_BLOCK:  
          .BLKB 4  
00230 INPUT\_MAXBLOCK:  
          .BLKB 4  
00234 INPUT\_MEDIA\_ID:  
          .BLKB 4  
00238 INPUT\_NAMEDESC:  
          .BLKB 8  
00240 INPUT\_STATBLK:  
          .BLKB 8  
00248 INPUT\_HDR\_BEG:  
          .BLKB 0  
00248 INPUT\_CREDATE:

CREATEDIR  
V04-000

Create directory  
CREATE\_DIR - create a directory file

N 1  
15-Sep-1984 23:52:12  
14-Sep-1984 11:53:50

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[BACKUP.SRC]CREATEDIR.B32;1

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|       |                  |       |     |
|-------|------------------|-------|-----|
| 00250 | INPUT_REVDATE:   | .BLKB | 8   |
| 00258 | INPUT_EXPDATE:   | .BLKB | 8   |
| 00260 | INPUT_BAKDATE:   | .BLKB | 8   |
| 00268 | INPUT_FILEOWNER: | .BLKB | 8   |
| 0026C | INPUT_FILECHAR:  | .BLKB | 4   |
| 00270 | INPUT_RECATTR:   | .BLKB | 4   |
| 00290 | INPUT_HDR_END:   | .BLKB | 32  |
| 00290 | INPUT_END:       | .BLKB | 0   |
| 00290 | INPUT_PROC_LIST: | .BLKB | 0   |
| 00294 | INPUT_PLACEMENT: | .BLKB | 4   |
| 0029C | INPUT_VBN_LIST:  | .BLKB | 8   |
| 002A4 | INPUT_PLACE_LEN: | .BLKB | 8   |
| 002A6 | INPUT_PADDING_2: | .BLKB | 2   |
| 002A8 | OUTPUT_BEG:      | .BLKB | 2   |
| 002A8 | OUTPUT_CHAN:     | .BLKB | 0   |
| 002AC | OUTPUT_FLAGS:    | .BLKB | 4   |
| 002AE | OUTPUT_PADDING:  | .BLKB | 2   |
| 002B0 | OUTPUT_FAB:      | .BLKB | 2   |
| 002B4 | OUTPUT_NAM:      | .BLKB | 4   |
| 002B8 | OUTPUT_BCB:      | .BLKB | 4   |
| 002BC | OUTPUT_QUAL:     | .BLKB | 4   |
| 002C0 | OUTPUT_BAD:      | .BLKB | 4   |
| 002C4 | OUTPUT_BLOCK:    | .BLKB | 4   |
| 002C8 | OUTPUT_MAXBLOCK: | .BLKB | 4   |
| 002CC | OUTPUT_DEVGEOM:  | .BLKB | 4   |
| 002D4 | OUTPUT_ATTBUF:   | .BLKB | 8   |
| 00364 | OUTPUT_END:      | .BLKB | 144 |
| 00364 | LIST_TOTFILES:   | .BLKB | 0   |
|       |                  | .BLKB | 4   |

F  
V  
.....

00368 LIST\_TOTSIZE:  
          .BLKB 4  
0036C VERIFY\_FAB:  
          .BLKB 4  
00370 VERIFY\_USE COUNT:  
          .BLKB 4  
00374 VERIFY\_QUAL:  
          .BLKB 4  
00378 COMPARE\_BCB:  
          .BLKB 4  
0037C FAST\_BUFFER:  
          .BLKB 4  
00380 FAST\_BUFFER SIZE:  
          .BLKB 4  
00384 FAST\_RVN:  
          .BLKB 1  
00385 FAST\_PADDING:  
          .BLKB 1  
00386 DIR\_VERLIMIT:  
          .BLKB 2  
00388 FAST\_VOL\_BEG:  
          .BLKB 0  
00388 FAST\_IMAP SIZE:  
          .BLKB 4  
0038C FAST\_IMAP:  
          .BLKB 4  
00390 FAST\_HDR\_OFFSET:  
          .BLKB 4  
00394 FAST\_BOOT\_LBN:  
          .BLKB 4  
00398 FAST\_VOL\_END:  
          .BLKB 0  
00398 JOUR\_BUFFER:  
          .BLKB 4  
0039C JOUR\_DIR:  
          .BLKB 4  
003A0 JOUR\_HIBLK:  
          .BLKB 4  
003A4 JOUR\_EFBLK:  
          .BLKB 4  
003A8 JOUR\_INBLK:  
          .BLKB 4  
003AC JOUR\_FFBYTE:  
          .BLKB 2  
003AE JOUR\_INBYTE:  
          .BLKB 2  
003B0 JOUR\_STRUCT LEV:  
          .BLKB 2  
003B2 JOUR\_COUNT:  
          .BLKB 1  
003B3 JOUR\_REVERSE:  
          .BLKB 1  
003B4 JOUR\_EXSZ:  
          .BLKB 2  
003B6 JOUR\_PADDING:  
          .BLKB 2  
003B8 CHKPT\_HIGH\_SP:

CREATEDIR  
V04-000

Create directory  
CREATE\_DIR - create a directory file

C 2  
15-Sep-1984 23:52:12  
14-Sep-1984 11:53:50

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[BACKUP.SRC]CREATEDIR.B32;1

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|       |                  |       |     |
|-------|------------------|-------|-----|
| 003BC | CHKPT_LOW_SP:    | .BLKB | 4   |
| 003C0 | CHKPT_STACK:     | .BLKB | 4   |
| 003C4 | CHKPT_VARS:      | .BLKB | 4   |
| 003C8 | CHKPT_STATUS:    | .BLKB | 4   |
| 003CC | DIR_BEG:         | .BLKB | 0   |
| 003CC | DIR_CHAN:        | .BLKB | 4   |
| 003D0 | DIR_NAM:         | .BLKB | 4   |
| 003D4 | DIR_DEV_DESC:    | .BLKB | 4   |
| 003D8 | DIR_SEL_DIR:     | .BLKB | 8   |
| 003E0 | DIR_SEL_NTV:     | .BLKB | 8   |
| 003E8 | DIR_STRUCLEV:    | .BLKB | 1   |
| 003E9 | DIR_LEVELS:      | .BLKB | 1   |
| 003EA | DIR_FLAGS:       | .BLKB | 1   |
| 003EB | DIR_STATUS:      | .BLKB | 1   |
| 003EC | DIR_STRING:      | .BLKB | 320 |
| 0052C | DIR_STACK:       | .BLKB | 612 |
| 00790 | DIR_SP:          | .BLKB | 4   |
| 00794 | DIR_SEL_LATEST:  | .BLKB | 4   |
| 00798 | DIR_END:         | .BLKB | 0   |
| 00798 | DIR_SCANLIMIT:   | .BLKB | 36  |
| 007BC | INPUT_MTL:       | .BLKB | 4   |
| 007C0 | OUTPUT_MTL:      | .BLKB | 4   |
| 007C4 | CURRENT_MTL:     | .BLKB | 4   |
| 007C8 | CURRENT_VCB:     | .BLKB | 4   |
| 007CC | CURRENT_WCB:     | .BLKB | 4   |
| 007D0 | ACL_FIB_DESCR:   | .BLKB | 8   |
| 007D8 | ACL_FIB:         | .BLKB | 64  |
| 00818 | ACL_LENGTH:      | .BLKB | 4   |
| 0081C | ACL_BUFFER:      | .BLKB | 4   |
| 00820 | CRYP_IN_CONTEXT: | .BLKB | 4   |
| 00824 | CRYP_OU_CONTEXT: | .BLKB | 4   |

```

00828 CRYP_DA_CONTEXT: .BLKB 4
0082C CRYP_DATA_ENCIV: .BLKB 4
00834 CRYP_DATA_CODE: .BLKB 8
00838 CRYP_DATA_KEY: .BLKB 4
00840 CRYP_DATA_IV: .BLKB 8
00848 CRYP_DATA_CKSM: .BLKB 8

```

.PSECT CODE,NOWRT,2

31 3B 52 49 44 2E 00000 P.AAA: .ASCII \.DIR;1\ :

```

DIR_TYP_VER= P.AAA
.EXTRN LIB$CVT_OTB, LIB$ INVFILSPE
.EXTRN SYSSPARSE, SYSSQIDW

```

OFFC 00000

```

.ENTRY CREATE DIR, Save R2,R3,R4,R5,R6,R7,R8,R9,- R10,R11 : 1198
MOVAB -1708(SP), SP
MOVCS #0, (SP), #0, #80, $RMS_PTR : 1319
MOVW #20483, $RMS_PTR
MOVB #2, $RMS_PTR+22
MOVB #2, $RMS_PTR+31
MOVAB NAM, $RMS_PTR+40
MOVL DEV DIR SPEC, R0
MOVL 4(R0), $RMS_PTR+44
MOVB (R0), $RMS_PTR+52
MOVCS #0, (SP), #0, #96, $RMS_PTR : 1323
MOVW #24578, $RMS_PTR
MOVB #16, $RMS_PTR+8
MNEGB #1, $RMS_PTR+10
MOVAB ESA_BUFFER, $RMS_PTR+12
PUSHAB FAB : 1331
CALLS #1, SYSSPARSE
BLBS STATUS_2, 1$ : 1332
CMPL STATUS_2, #114762
BEQL 1$
RET
MOVZBL NAM+58, DIR_LENGTH 1$: : 1336
SUBL2 #2, DIR_LENGTH
ADDL3 #1, NAM+72, DIR_ADDRESS : 1337
BBC #5, NAM+53, 2$ : 1342
ADDB3 #2, @NAM+72, TERMINATOR : 1353
LOCC TERMINATOR, DIR_LENGTH, (DIR_ADDRESS) : 1355
BEQL 4$
MOVL R1, REALDIR_ADDRESS : 1359
MOVCS R0, 2(REALDIR_ADDRESS), (REALDIR_ADDRESS) : 1369
SUBL2 #2, DIR_LENGTH
BRB 3$ : 1373

```

```

0050 8F 00 5E F954 CE 9E 00002
6E 00 2C 00007
      B0 AD 5003 8F B0 00010
      C6 AD 02 90 00016
      CF AD 02 90 0001A
      D8 AD FF50 CD 9E 0001E
      DC AD 04 AC D0 00024
      E4 AD 04 A0 D0 00028
0060 8F 00 6E 00 2C 00031
      FF50 CD 00 00038
      FF58 CD 6002 8F B0 0003B
      FF5A CD 10 90 00042
      FF5C CD 01 8E 00047
      00000000G 00 FE50 CD 9E 0004C
      0001C04A 8F B0 AD 9F 00053
      01 FB 00056
      50 E8 0005D
      50 D1 00060
      01 13 00067
      04 00069
      56 8A AD 9A 0006A 1$:
      56 02 C2 0006E
      5A 98 AD 01 C1 00071
      18 85 AD 05 E1 00076
      50 98 BD 02 81 0007B
      6A 56 50 3A 00080
      37 13 00084
      51 D0 00086
      67 02 50 28 00089
      A7 02 C2 0008E
      56 03 11 00091

```

|      |           |      |           |          |       |       |       |        |                                          |      |
|------|-----------|------|-----------|----------|-------|-------|-------|--------|------------------------------------------|------|
| 2A   | 86        | AD   |           | 5A       | DO    | 00093 | 2\$:  | MOVL   | DIR_ADDRESS, REALDIR_ADDRESS             | 1380 |
|      |           |      | 4080      | 03       | E1    | 00096 | 3\$:  | BBC    | #3, -NAM+54, 5\$                         | 1384 |
|      |           |      |           | 8F       | BB    | 0009B |       | PUSHR  | #^M<R7,SP>                               | 1390 |
|      | 00000000G | 00   |           | 03       | DD    | 0009F |       | PUSHL  | #3                                       |      |
|      |           | 12   |           | 03       | FB    | 000A1 |       | CALLS  | #3, LIB\$CVT_OTB                         |      |
|      |           |      | 04        | 50       | E9    | 000A8 |       | BLBC   | RO, 4\$                                  |      |
|      |           |      | 03        | AE       | 9F    | 000AB |       | PUSHAB | MEMBER                                   | 1396 |
|      |           |      |           | A7       | 9F    | 000AE |       | PUSHAB | 3(REALDIR_ADDRESS)                       |      |
|      | 00000000G | 00   |           | 03       | DD    | 000B1 |       | PUSHL  | #3                                       |      |
|      |           | 08   |           | 03       | FB    | 000B3 |       | CALLS  | #3, LIB\$CVT_OTB                         |      |
|      |           | 50   | 00000000G | 50       | E8    | 000BA |       | BLBS   | RO, 5\$                                  |      |
|      |           |      |           | 8F       | DO    | 000BD | 4\$:  | MOVL   | #LIB\$_INVFILSPE, RO                     | 1398 |
|      |           |      |           | 04       | 000C4 |       |       | RET    |                                          |      |
| 0040 | 8F        | 00   |           | 00       | 2C    | 000C5 | 5\$:  | MOVCS  | #0, (SP), #0, #64, FIB                   | 1406 |
|      |           |      | 0250      | CE       | 000CC |       |       |        |                                          |      |
|      |           | 0250 | CE        | 0501     | 8F    | 3C    | 000CF | MOVZWL | #1281, FIB                               | 1407 |
|      |           | 0264 | CE        | 0400     | 8F    | B0    | 000D6 | MOVW   | #1024, FIB+20                            | 1408 |
|      |           | 0254 | CE        | 00040004 | 8F    | DO    | 000DD | MOVL   | #262148, FIB+4                           | 1409 |
|      |           | 0248 | CE        | 40       | 8F    | 9A    | 000E6 | MOVZBL | #64, FIB_DESC                            | 1416 |
|      |           | 024C | CE        | 0250     | CE    | 9E    | 000EC | MOVAB  | FIB, FIB_DESC+4                          | 1417 |
|      |           | FE1C | CD        | FE20     | CD    | 9E    | 000F3 | MOVAB  | NAME_BUFFER, NAME_DESC+4                 | 1423 |
|      |           |      |           |          | 5B    | D4    | 000FA | CLRL   | PREV_ADDRESS                             | 1436 |
|      |           |      | 59        | 0254     | CE    | 3C    | 000FC | MOVZWL | FIB+4, R9                                | 1445 |
|      |           |      | 57        | 14       | AC    | DO    | 00101 | MOVL   | FILE_ID, R7                              | 1503 |
|      |           | 025A | CE        |          | 59    | B0    | 00105 | MOVW   | R9, FIB+10                               | 1445 |
|      |           | 025C | CE        | 0256     | CE    | DO    | 0010A | MOVL   | FIB+6, FIB+12                            | 1446 |
|      |           |      | 53        |          | 5A    | DO    | 00111 | MOVL   | DIR_ADDRESS, NAME_ADDRESS                | 1462 |
|      | 6A        |      | 56        |          | 2E    | 3A    | 00114 | LOCC   | #46, DIR_LENGTH, (DIR_ADDRESS)           | 1463 |
|      | 52        |      | 56        |          | 50    | C3    | 00118 | SUBL3  | RO, DIR_LENGTH, NAME_LENGTH              | 1464 |
|      |           |      | 5A        | 01       | A1    | 9E    | 0011C | MOVAB  | 1(R1), DIR_ADDRESS                       | 1465 |
|      |           |      | 56        |          | 70    | 9E    | 00120 | MOVAB  | -(R0), DIR_LENGTH                        | 1467 |
| FE18 | CD        |      | 52        |          | 06    | A1    | 00123 | ADDW3  | #6, NAME_LENGTH, NAME_DESC               | 1474 |
| FE20 | CD        |      | 63        |          | 52    | 28    | 00129 | MOVCS  | NAME_LENGTH, (NAME_ADDRESS), NAME_BUFFER | 1475 |
|      | 63        | FEC6 | CF        |          | 06    | 28    | 0012F | MOVCS  | #6, DIR_TYP_VER, (R3)                    |      |
|      |           |      |           |          | 7E    | 7C    | 00135 | CLRQ   | -(SP)                                    | 1488 |
|      |           |      |           |          | 7E    | 7C    | 00137 | CLRQ   | -(SP)                                    |      |
|      |           |      | FE18      |          | CD    | 9F    | 00139 | PUSHAB | NAME_DESC                                |      |
|      |           |      | 025C      |          | CE    | 9F    | 0013D | PUSHAB | FIB_DESC                                 |      |
|      |           |      |           |          | 7E    | 7C    | 00141 | CLRQ   | -(SP)                                    |      |
|      |           |      | 0228      |          | CE    | 9F    | 00143 | PUSHAB | IOSB                                     |      |
|      |           |      |           |          | 32    | DD    | 00147 | PUSHL  | #50                                      |      |
|      |           |      | 00000000' |          | EF    | DD    | 00149 | PUSHL  | OUTPUT_CHAN                              |      |
|      |           |      |           |          | 7E    | D4    | 0014F | CLRL   | -(SP)                                    |      |
|      | 00000000G | 00   |           | 0C       | FB    | 00151 |       | CALLS  | #12, SYSSQIOW                            |      |
|      |           | 58   |           | 50       | DO    | 00158 |       | MOVL   | RO, FINAL_STATUS                         |      |
|      |           | 05   |           | 58       | E9    | 0015B |       | BLBC   | FINAL_STATUS, 7\$                        | 1489 |
|      |           | 58   | 0208      | CE       | 3C    | 0015E |       | MOVZWL | IOSB, FINAL_STATUS                       |      |
|      |           | 59   | 0254      | CE       | 3C    | 00163 | 7\$:  | MOVZWL | FIB+4, R9                                | 1490 |
|      | FFFF      | 8F   |           | 59       | B1    | 00168 |       | CMPW   | R9, #65535                               |      |
|      |           |      |           | 16       | 12    | 0016D |       | BNEQ   | 8\$                                      |      |
|      | FFFF      | 8F   | 0256      | CE       | B1    | 0016F |       | CMPW   | FIB+6, #65535                            | 1491 |
|      |           |      |           | 0D       | 12    | 00176 |       | BNEQ   | 8\$                                      |      |
|      | FF        | 8F   | 0259      | CE       | 91    | 00178 |       | CMPB   | FIB+9, #255                              | 1492 |
|      |           |      |           | 05       | 12    | 0017E |       | BNEQ   | 8\$                                      |      |
|      |           | 58   | 0910      | 8F       | 3C    | 00180 |       | MOVZWL | #2320, FINAL_STATUS                      | 1493 |
|      | 00000910  | 8F   |           | 58       | D1    | 00185 | 8\$:  | CML    | FINAL_STATUS, #2320                      | 1494 |
|      |           |      |           | 28       | 13    | 0018C |       | BEQL   | 11\$                                     |      |



|           |      |           |      |    |       |             |                              |                             |      |
|-----------|------|-----------|------|----|-------|-------------|------------------------------|-----------------------------|------|
|           | 03   |           | 58   | E8 | 0018E | BLBS        | FINAL_STATUS, 9\$            | 1496                        |      |
|           |      |           | 0299 | 31 | 00191 | BRW         | 28\$                         |                             |      |
| 51        | 51   | FE18      | CD   | 3C | 00194 | 9\$: MOVZWL | NAME_DESC, R1                | 1502                        |      |
|           | 5A   |           | 51   | C3 | 00199 | SUBL3       | R1, DIR_ADDRESS, R1          |                             |      |
|           | 5B   | 05        | A1   | 9E | 0019D | MOVAB       | S(R1), PREV_ADDRESS          |                             |      |
|           | 67   | 025A      | CE   | D0 | 001A1 | MOVL        | FIB+10, (R7)                 | 1503                        |      |
| 04        | A7   | 025E      | CE   | B0 | 001A6 | MOVW        | FIB+14, 4(R7)                | 1505                        |      |
|           |      |           | 56   | D5 | 001AC | TSTL        | DIR_LENGTH                   | 1517                        |      |
|           |      |           | 03   | 15 | 001AE | BLEQ        | 10\$                         |                             |      |
|           |      |           | FF52 | 31 | 001B0 | BRW         | 6\$                          |                             |      |
|           | 58   |           | 01   | D0 | 001B3 | 10\$: MOVL  | #1, FINAL_STATUS             | 1520                        |      |
| 0210      | CE   | 00040020  | 8F   | D0 | 001B6 | 11\$: MOVL  | #262176, ATR                 | 1537                        |      |
| 0214      | CE   | FDF8      | CD   | 9E | 001BF | MOVAB       | RECATTR, ATR+4               | 1538                        |      |
| 0218      | CE   | 00030004  | 8F   | D0 | 001C6 | MOVL        | #196612, ATR+8               | 1540                        |      |
| 021C      | CE   | FDF4      | CD   | 9E | 001CF | MOVAB       | UCHAR, ATR+12                | 1541                        |      |
| 0220      | CE   | 00160002  | 8F   | D0 | 001D6 | MOVL        | #1441794, ATR+16             | 1543                        |      |
| 0224      | CE   | FDF0      | CD   | 9E | 001DF | MOVAB       | FPRO, ATR+20                 | 1544                        |      |
| 0228      | CE   | 00140008  | 8F   | D0 | 001E6 | MOVL        | #1310728, ATR+24             | 1546                        |      |
| 022C      | CE   | FDE4      | CD   | 9E | 001EF | MOVAB       | BAK, ATR+28                  | 1547                        |      |
| 0230      | CE   | 00150004  | 8F   | D0 | 001F6 | MOVL        | #1376260, ATR+32             | 1549                        |      |
| 0234      | CE   | FDEC      | CD   | 9E | 001FF | MOVAB       | UIC, ATR+36                  | 1550                        |      |
| 0238      | CE   | 000A0200  | 8F   | D0 | 00206 | MOVL        | #655872, ATR+40              | 1552                        |      |
| 023C      | CE   | 0290      | CE   | 9E | 0020F | MOVAB       | HEADER, ATR+44               | 1553                        |      |
|           |      | 0240      | CE   | D4 | 00216 | CLRL        | ATR+48                       | 1554                        |      |
|           | 0E   |           | 58   | E8 | 0021A | BLBS        | FINAL_STATUS, 12\$           | 1561                        |      |
| 0254      | CE   | 025A      | CE   | D0 | 0C21D | MOVL        | FIB+10, FIB+4                | 1564                        |      |
| 0258      | CE   | 025E      | CE   | B0 | 00224 | MOVW        | FIB+14, FIB+8                | 1566                        |      |
|           |      | 025A      | CE   | D4 | 0022B | 12\$: CLRL  | FIB+10                       | 1568                        |      |
|           |      | 025E      | CE   | B4 | 0022F | CLRW        | FIB+14                       | 1570                        |      |
|           |      |           | 7E   | D4 | 00233 | 13\$: CLRL  | -(SP)                        | 1586                        |      |
|           |      | 0214      | CE   | 9F | 00235 | PUSHAB      | ATR                          |                             |      |
|           |      |           | 7E   | 7C | 00239 | CLRQ        | -(SP)                        |                             |      |
|           |      |           | 7E   | D4 | 0023B | CLRL        | -(SP)                        |                             |      |
|           |      | 025C      | CE   | 9F | 0023D | PUSHAB      | FIB_DESC                     |                             |      |
|           |      |           | 7E   | 7C | 00241 | CLRQ        | -(SP)                        |                             |      |
|           |      | 0228      | CE   | 9F | 00243 | PUSHAB      | IOSB                         |                             |      |
|           |      |           | 32   | DD | 00247 | PUSHL       | #50                          |                             |      |
|           |      | 00000000' | EF   | DD | 00249 | PUSHL       | OUTPUT_CHAN                  |                             |      |
|           |      |           | 7E   | D4 | 0024F | CLRL        | -(SP)                        |                             |      |
| 00000000G | 00   |           | 0C   | FB | 00251 | CALLS       | #12, SYSSQIOW                |                             |      |
|           | 59   |           | 50   | D0 | 00258 | MOVL        | RO, STATUS_3                 |                             |      |
|           | 08   |           | 59   | E9 | 0025B | BLBC        | STATUS_3, T4\$               | 1587                        |      |
|           | 59   | 0208      | CE   | 3C | 0025E | MOVZWL      | IOSB, STATUS_3               |                             |      |
|           | 52   |           | 59   | E8 | 00263 | BLBS        | STATUS_3, 17\$               | 1588                        |      |
| 00000910  | 58   |           | 59   | D0 | 00266 | 14\$: MOVL  | STATUS_3, FINAL_STATUS       | 1597                        |      |
|           | 8F   |           | 59   | D1 | 00269 | CML         | STATUS_3, #2320              | 1594                        |      |
|           |      |           | 03   | 13 | 00270 | BEQL        | 16\$                         |                             |      |
|           |      |           | 01B8 | 31 | 00272 | 15\$: BRW   | 28\$                         |                             |      |
|           |      |           | 5B   | D5 | 00275 | 16\$: TSTL  | PREV_ADDRESS                 |                             |      |
|           |      |           | F9   | 13 | 00277 | BEQL        | 15\$                         |                             |      |
|           | 0254 | CE        | 67   | D0 | 00279 | MOVL        | (R7), FIB+4                  | 1598                        |      |
|           | 0258 | CE        | 04   | A7 | B0    | 0027E       | MOVW                         | 4(R7), FIB+8                | 1600 |
| 50        |      |           | 5B   | C3 | 00284 | SUBL3       | PREV_ADDRESS, DIR_LENGTH, RO | 1601                        |      |
| 56        |      |           | 50   | 5A | C1    | 00288       | ADDL3                        | DIR_ADDRESS, RO, DIR_LENGTH |      |
|           |      |           | 5A   | 5B | D0    | 0028C       | MOVL                         | PREV_ADDRESS, DIR_ADDRESS   | 1602 |
|           |      |           | 5B   | D4 | 0028F | CLRL        | PREV_ADDRESS                 | 1603                        |      |
|           |      |           | 53   | 5A | D0    | 00291       | MOVL                         | DIR_ADDRESS, NAME_ADDRESS   | 1617 |

|      |           |      |           |      |    |       |        |                                          |           |  |
|------|-----------|------|-----------|------|----|-------|--------|------------------------------------------|-----------|--|
| 6A   |           | 56   |           | 2E   | 3A | 00294 | LOCC   | #46, DIR_LENGTH, (DIR_ADDRESS)           | 1618      |  |
| 52   |           | 56   |           | 50   | C3 | 00298 | SUBL3  | R0, DIR_LENGTH, NAME_LENGTH              | 1619      |  |
|      |           | 5A   | 01        | A1   | 9E | 0029C | MOVAB  | 1(R1), DIR_ADDRESS                       | 1620      |  |
|      |           | 56   |           | 70   | 9E | 002A0 | MOVAB  | -(R0), DIR_LENGTH                        | 1622      |  |
| FE18 | CD        | 52   |           | 06   | A1 | 002A3 | ADDW3  | #6, NAME_LENGTH, NAME_DESC               | 1629      |  |
| FE20 | CD        | 63   |           | 52   | 28 | 002A9 | MOVCS  | NAME_LENGTH, (NAME_ADDRESS), NAME_BUFFER | 1630      |  |
|      | 63        | FD46 |           | 06   | 28 | 002AF | MOVCS  | #6, DIR_TYP_VER, (R3)                    |           |  |
|      |           |      |           | FF7B | 31 | 002B5 | BRW    | 13\$                                     | 1594      |  |
|      |           |      | B7        | 58   | E8 | 002B8 | BLBS   | FINAL STATUS, 15\$                       | 1647      |  |
|      |           |      |           | CE   | D4 | 002BB | CLRL   | ATR+40                                   | 1655      |  |
|      |           |      | 0238      | CD   | D4 | 002BF | CLRL   | BAK+4                                    | 1656      |  |
|      |           |      | FDE8      | CD   | D4 | 002C3 | CLRL   | BAK                                      |           |  |
|      |           |      | FDE4      | CD   | D4 | 002C3 | CLRL   | BAK                                      |           |  |
| 08   | 00000000' |      |           | 06   | E0 | 002C7 | BBS    | #6, QUAL+12, 18\$                        | 1657      |  |
| 19   | 00000000' |      |           | 04   | E1 | 002CF | BBC    | #4, QUAL+10, 19\$                        |           |  |
|      |           |      |           | 02   | 91 | 002D7 | CMPB   | HEADER+7, #2                             | 1658      |  |
|      |           |      |           | 12   | 12 | 002DC | BNEQ   | 19\$                                     |           |  |
|      | FDE4      | CD   | 00000000' | EF   | D0 | 002DE | MOVL   | COM_0_BSRDATE, BAK                       | 1661      |  |
|      | FDE8      | CD   | 00000000' | EF   | D0 | 002E7 | MOVL   | COM_0_BSRDATE+4, BAK+4                   | 1662      |  |
|      | 025A      | CE   | 0254      | CE   | D0 | 002F0 | MOVL   | FIB+4, FIB+10                            | 1669      |  |
|      | 025E      | CE   | 0258      | CE   | B0 | 002F7 | MOVW   | FIB+8, FIB+14                            | 1671      |  |
|      | 0264      | CE   | 00850400  | 8F   | D0 | 002FE | MOVL   | #8717312, FIB+20                         | 1681      |  |
|      |           |      |           | 02   | 91 | 00307 | CMPB   | HEADER+7, #2                             | 1682      |  |
|      |           |      |           | 05   | 12 | 0030C | BNEQ   | 20\$                                     |           |  |
|      | 0268      | CE   |           | 01   | D0 | 0030E | MOVL   | #1, FIB+24                               |           |  |
| FE00 | 50        | 0268 |           | 01   | C1 | 00313 | ADDL3  | #1, FIB+24, R0                           | 1690      |  |
|      | CD        |      |           | 10   | 9C | 00319 | ROTL   | #16, R0, RECATTR+8                       |           |  |
|      |           |      |           | 08   | AC | 0031F | TSTL   | OWNER_UIC                                | 1696      |  |
|      |           |      |           | 06   | 13 | 00322 | BEQL   | 21\$                                     |           |  |
|      | FDEC      | CD   | 08        | AC   | D0 | 00324 | MOVL   | OWNER_UIC, UIC                           | 1698      |  |
|      | FDFO      | CD   | 8888      | 8F   | AB | 0032A | BISW2  | #34952, FPRO                             | 1704      |  |
|      | FFFF      | 8F   | 0C        | AC   | B1 | 00331 | CMPW   | PROT_VALUE, #65535                       | 1705      |  |
|      |           |      |           | 06   | 13 | 00337 | BEQL   | 22\$                                     |           |  |
|      | FDFO      | CD   | 0C        | AC   | B0 | 00339 | MOVW   | PROT_VALUE, FPRO                         | 1707      |  |
|      | FE16      | CD   | 10        | AC   | B0 | 0033F | MOVW   | MAX_VERSIONS, RECATTR+30                 | 1713      |  |
|      |           |      |           | 7E   | D4 | 00345 | CLRL   | -(SP)                                    | 1732      |  |
|      |           |      |           | 0214 | CE | 9F    | 00347  | PUSHAB                                   | ATR       |  |
|      |           |      |           | 7E   | 7C | 0034B | CLRQ   | -(SP)                                    |           |  |
|      |           |      | FE18      | CD   | 9F | 0034D | PUSHAB | NAME_DESC                                |           |  |
|      |           |      | 025C      | CE   | 9F | 00351 | PUSHAB | FIB_DESC                                 |           |  |
|      |           |      |           | 7E   | 7C | 00355 | CLRQ   | -(SP)                                    |           |  |
|      |           |      | 0228      | CE   | 9F | 00357 | PUSHAB | IOSB                                     |           |  |
|      |           |      | F3        | 8F   | 9A | 0035B | MOVZBL | #243, -(SP)                              |           |  |
|      |           |      | 00000000' | EF   | DD | 0035F | PUSHL  | OUTPUT_CHAN                              |           |  |
|      |           |      |           | 7E   | D4 | 00365 | CLRL   | -(SP)                                    |           |  |
|      | 00000000G | 00   |           | 0C   | FB | 00367 | CALLS  | #12, SYSSQIOW                            |           |  |
|      |           | 58   |           | 50   | D0 | 0036E | MOVL   | R0, FINAL STATUS                         |           |  |
|      |           | 76   |           | 58   | E9 | 00371 | BLBC   | FINAL STATUS, 25\$                       | 1733      |  |
|      |           | 58   | 0208      | CE   | 3C | 00374 | MOVZWL | IOSB, FINAL STATUS                       |           |  |
|      |           | 7A   |           | 58   | E9 | 00379 | BLBC   | FINAL STATUS, 26\$                       | 1734      |  |
|      |           | 02   | 0297      | CE   | 91 | 0037C | CMPB   | HEADER+7, #2                             | 1741      |  |
|      |           |      |           | 3F   | 12 | 00381 | BNEQ   | 24\$                                     |           |  |
| 01FE | 8F        |      | 08        | 01   | AE | 00383 | MNEGW  | #1, BLOCK_BUFFER                         | 1747      |  |
|      |           |      |           | 00   | 2C | 00387 | MOVCS  | #0, (SP), #0, #510, BLOCK_BUFFER+2       | 1748      |  |
|      |           |      |           | 0A   | AE | 0038E |        |                                          |           |  |
|      |           |      |           | 7E   | 7C | 00390 | CLRQ   | -(SP)                                    | 1755      |  |
|      |           |      |           | 7E   | 01 | 7D    | 00392  | MOVQ                                     | #1, -(SP) |  |
|      |           |      | 0200      | 8F   | 3C | 00395 | MOVZWL | #512, -(SP)                              |           |  |

|  |           |           |      |       |       |            |                                          |                     |               |      |
|--|-----------|-----------|------|-------|-------|------------|------------------------------------------|---------------------|---------------|------|
|  |           | 1C        | AE   | 9F    | 0039A | PUSHAB     | BLOCK_BUFFER                             |                     |               |      |
|  |           |           | 7E   | 7C    | 0039D | CLRQ       | -(SP)                                    |                     |               |      |
|  |           | 0228      | CE   | 9F    | 0039F | PUSHAB     | IOSB                                     |                     |               |      |
|  |           |           | 30   | DD    | 003A3 | PUSHL      | #48                                      |                     |               |      |
|  |           | 00000000' | EF   | DD    | 003A5 | PUSHL      | OUTPUT_CHAN                              |                     |               |      |
|  |           |           | 7E   | D4    | 003AB | CLRL       | -(SP)                                    |                     |               |      |
|  | 00000000G | 00        | 0C   | FB    | 003AD | CALLS      | #12, SYSSQIOW                            |                     |               |      |
|  |           | 58        | 50   | D0    | 003B4 | MOVL       | R0, FINAL_STATUS                         |                     |               |      |
|  |           | 73        | 58   | E9    | 003B7 | BLBC       | FINAL_STATUS, 28\$                       | 1756                |               |      |
|  |           | 58        | 0208 | CE    | 3C    | 003BA      | MOVZWL                                   | IOSB, FINAL_STATUS  |               |      |
|  |           | 68        | 58   | E9    | 003BF | BLBC       | FINAL_STATUS, 28\$                       | 1757                |               |      |
|  |           |           | 7E   | 7C    | 003C2 | 24\$: CLRQ | -(SP)                                    | 1767                |               |      |
|  |           |           | 7E   | 7C    | 003C4 | CLRQ       | -(SP)                                    |                     |               |      |
|  |           |           | 7E   | 7C    | 003C6 | CLRQ       | -(SP)                                    |                     |               |      |
|  |           |           | 7E   | 7C    | 003C8 | CLRQ       | -(SP)                                    |                     |               |      |
|  |           | 0228      | CE   | 9F    | 003CA | PUSHAB     | IOSB                                     |                     |               |      |
|  |           |           | 34   | DD    | 003CE | PUSHL      | #52                                      |                     |               |      |
|  |           | 00000000' | EF   | DD    | 003D0 | PUSHL      | OUTPUT_CHAN                              |                     |               |      |
|  |           |           | 7E   | D4    | 003D6 | CLRL       | -(SP)                                    |                     |               |      |
|  | 00000000G | 00        | 0C   | FB    | 003D8 | CALLS      | #12, SYSSQIOW                            |                     |               |      |
|  |           | 58        | 50   | D0    | 003DF | MOVL       | R0, FINAL_STATUS                         |                     |               |      |
|  |           | 48        | 58   | E9    | 003E2 | BLBC       | FINAL_STATUS, 28\$                       | 1768                |               |      |
|  |           | 58        | 0208 | CE    | 3C    | 003E5      | MOVZWL                                   | IOSB, FINAL_STATUS  |               |      |
|  |           | 40        | 58   | E9    | 003EA | 25\$: BLBC | FINAL_STATUS, 28\$                       | 1769                |               |      |
|  |           |           | 56   | D5    | 003ED | TSTL       | DIR_LENGTH                               | 1775                |               |      |
|  |           |           | 07   | 14    | 003EF | BGTR       | 27\$                                     |                     |               |      |
|  |           | 58        | 0619 | 8F    | 3C    | 003F1      | MOVZWL                                   | #1561, FINAL_STATUS |               |      |
|  |           |           | 35   | 11    | 003F6 | 26\$: BRB  | 28\$                                     | 1778                |               |      |
|  |           |           | 5A   | D0    | 003F8 | 27\$: MOVL | DIR_ADDRESS, NAME_ADDRESS                | 1779                |               |      |
|  | 6A        | 53        | 2E   | 3A    | 003FB | LOCC       | #46, DIR_LENGTH, (DIR_ADDRESS)           | 1794                |               |      |
|  | 52        | 56        | 50   | C3    | 003FF | SUBL3      | R0, DIR_LENGTH, NAME_LENGTH              | 1795                |               |      |
|  |           | 56        | 01   | A1    | 9E    | 00403      | MOVAB                                    | 1(R1), DIR_ADDRESS  | 1796          |      |
|  |           | 5A        | A1   | 9E    | 00407 | MOVAB      | -(R0), DIR_LENGTH                        | 1797                |               |      |
|  |           | 56        | 70   | 9E    | 00407 | MOVAB      | -(R0), DIR_LENGTH                        | 1799                |               |      |
|  | FE18      | CD        | 06   | A1    | 0040A | ADDW3      | #6, NAME_LENGTH, NAME_DESC               | 1806                |               |      |
|  | FE20      | CD        | 52   | 28    | 00410 | MOV3       | NAME_LENGTH, (NAME_ADDRESS), NAME_BUFFER | 1807                |               |      |
|  |           | 63        | 06   | 28    | 00416 | MOV3       | #6, DIR_TYP_VER, (R3)                    |                     |               |      |
|  |           | FBD       | CF   | 28    | 00416 | MOV3       | #6, DIR_TYP_VER, (R3)                    |                     |               |      |
|  |           | 025A      | CE   | 0254  | CE    | D0         | 0041C                                    | MOVL                | FIB+4, FIB+10 | 1815 |
|  |           | 025E      | CE   | 0258  | CE    | B0         | 00423                                    | MOVW                | FIB+8, FIB+14 | 1817 |
|  |           |           | FF18 | 31    | 0042A | BRW        | 23\$                                     |                     | 1719          |      |
|  |           | 67        | 0254 | CE    | D0    | 0042D      | 28\$: MOVL                               | FIB+4, (R7)         | 1831          |      |
|  |           | A7        | 0258 | CE    | B0    | 00432      | MOVW                                     | FIB+8, 4(R7)        | 1833          |      |
|  |           | 50        | 18   | AC    | D0    | 00438      | MOVL                                     | BAKDATE, R0         | 1834          |      |
|  |           | 60        | FDE4 | CD    | D0    | 0043C      | MOVL                                     | BAK, (R0)           |               |      |
|  |           | 04        | A0   | FDE8  | CD    | D0         | 00441                                    | MOVL                | BAK+4, 4(R0)  | 1835 |
|  |           | 50        | 58   | D0    | 00447 | MOVL       | FINAL_STATUS, R0                         | 1836                |               |      |
|  |           |           | 04   | 0044A | RET   |            |                                          | 1837                |               |      |

; Routine Size: 1099 bytes. Routine Base: CODE + 0006

CREATEDIR  
V04-000

Create directory  
CREATE\_DIR - create a directory file

1 2  
15-Sep-1984 23:52:12  
14-Sep-1984 11:53:50

VAX-11 Bliss-32 V4.0-742  
[BACKUP.SRC]CREATEDIR.B32;1

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(4)

: 736 1838 1 END  
: 737 1839 0 ELUDOM

PSECT SUMMARY

| Name   | Bytes | Attributes                                                   |
|--------|-------|--------------------------------------------------------------|
| COMMON | 2124  | NOVEC, WRT, RD, NOEXE, NOSHR, LCL, REL, OVR, NOPIC, ALIGN(2) |
| CODE   | 1105  | NOVEC, NOWRT, RD, EXE, NOSHR, LCL, REL, CON, NOPIC, ALIGN(2) |

Library Statistics

| File                            | Symbols |                | Pages Mapped | Processing Time |
|---------------------------------|---------|----------------|--------------|-----------------|
|                                 | Total   | Loaded Percent |              |                 |
| _\$255\$DUA28:[SYSLIB]LIB.L32;1 | 18619   | 116 0          | 1000         | 00:02.1         |

COMMAND QUALIFIERS

BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LISS:CREATEDIR/OBJ=OBJ\$:CREATEDIR MSRCS:CREATEDIR/UPDATE=(ENHS:CREATEDIR)

: Size: 1099 code + 2130 data bytes  
: Run Time: 00:34.1  
: Elapsed Time: 01:45.6  
: Lines/CPU Min: 3234  
: Lexemes/CPU-Min: 38035  
: Memory Used: 496 pages  
: Compilation Complete



0010 AH-BT13A-SE  
VAX/VMS V4.0

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The image displays a grid of 100 small terminal window screenshots, arranged in 10 rows and 10 columns. Each window shows a different system utility or command output, with various text-based data, lists, and error messages. The windows are arranged in a grid, with some larger windows visible in the background. The text in the windows is mostly monospaced and appears to be system logs or command outputs. Some of the visible titles and content include:

- BACKUPMSG LIS**: A list of backup messages.
- ANALYZE LIS**: A list of analysis results.
- BUFFERS LIS**: A list of buffer information.
- CREATEDIR LIS**: A list of directory creation results.
- BADBLOCK LIS**: A list of bad block information.
- BACKUPCMD LIS**: A list of backup command outputs.
- COMMAND LIS**: A list of command outputs.

The overall appearance is that of a system diagnostic or utility manual, showing various tools and their outputs.



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0011

FASTSCAN  
LIS

JOURNAL  
LIS

LIST  
LIS