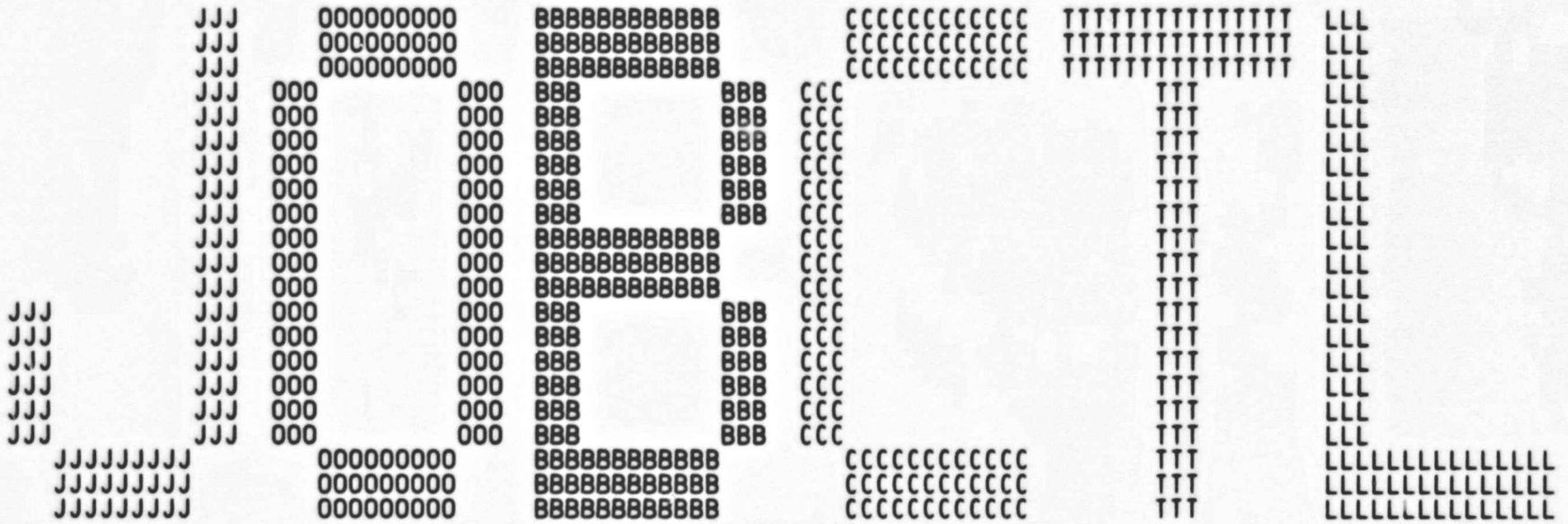
JJJ OOOOOOOOO BBBBBBBBBBBB CCCCCCCCCCC TTTTTTTTTTTTTTT LLL
JJJ OOOOOOOOO BBBBBBBBBBBB CCCCCCCCCCC TTTTTTTTTTTTTTT LLL
JJJ OOOOOOOOO BBBBBBBBBBBB CCCCCCCCCCC TTTTTTTTTTTTTTT LLL
JJJ OOO OOO BBB BBB CCC TTT LLL
JJJ OOO OOO BBB BBB CCC TTT LLL
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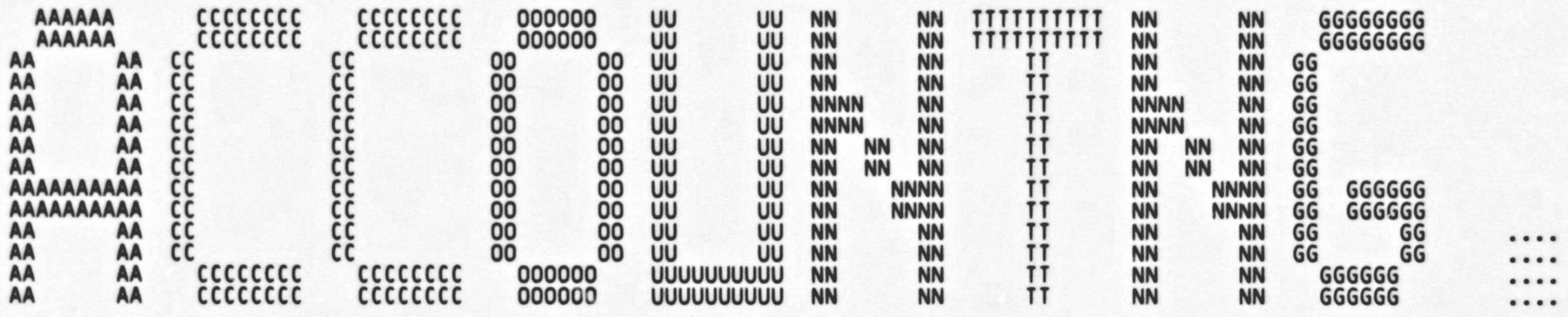
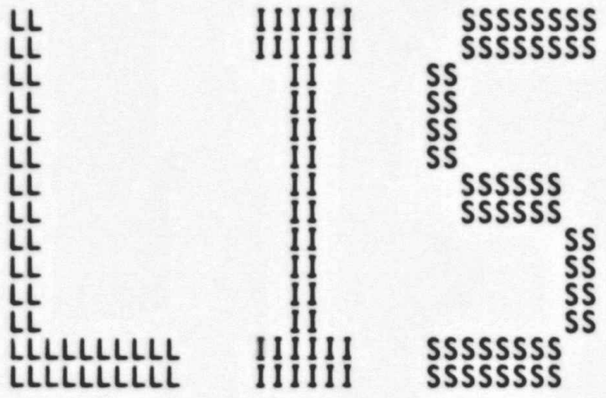
JJJ JJJ OOO OOO BBB BBB CCC TTT LLL
JJJ JJJ OOO OOO BBB BBB CCC TTT LLL
JJJJJJJJJ OOOOOOOOO BBBBBBBBBBBB CCCCCCCCCCC TTT LLLLLLLLLLLLLLL
JJJJJJJJJ OOOOOOOOO BBBBBBBBBBBB CCCCCCCCCCC TTT LLLLLLLLLLLLLLL
JJJJJJJJJ OOOOOOOOO BBBBBBBBBBBB CCCCCCCCCCC TTT LLLLLLLLLLLLLLL

FILEID**ACCOUNTNG





```
;     1        0001  0 MODULE ACCOUNTNG(%TITLE 'Accounting manager'
;     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 !*                                                                    *
;     9        0009  1 !*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY                          *
;    10        0010  1 !*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.           *
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;    14        0014  1 !*  ONLY IN  ACCORDANCE WITH  THE  TERMS  OF  SUCH  LICENSE  AND WITH THE  *
;    15        0015  1 !*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR  ANY  OTHER  *
;    16        0016  1 !*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY  *
;    17        0017  1 !*  OTHER PERSON.  NO TITLE TO AND OWNERSHIP OF  THE  SOFTWARE IS  HEREBY  *
;    18        0018  1 !*  TRANSFERRED.                                                       *
;    19        0019  1 !*                                                                    *
;    20        0020  1 !*  THE INFORMATION IN THIS SOFTWARE IS  SUBJECT TO CHANGE WITHOUT NOTICE  *
;    21        0021  1 !*  AND  SHOULD  NOT  BE  CONSTRUED AS  A COMMITMENT BY DIGITAL EQUIPMENT  *
;    22        0022  1 !*  CORPORATION.                                                       *
;    23        0023  1 !*                                                                    *
;    24        0024  1 !*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE  OR  RELIABILITY OF ITS  *
;    25        0025  1 !*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.            *
;    26        0026  1 !*                                                                    *
;    27        0027  1 !*                                                                    *
;    28        0028  1 !**********************************************************************
;    29        0029  1 !
;    30        0030  1
;    31        0031  1 !++
;    32        0032  1 ! FACILITY:
;    33        0033  1 !       Job controller.
;    34        0034  1 !
;    35        0035  1 ! ABSTRACT:
;    36        0036  1 !       This module contains the accounting management routines.
;    37        0037  1 !
;    38        0038  1 ! ENVIRONMENT:
;    39        0039  1 !       VAX/VMS user and kernel mode.
;    40        0040  1 !--
;    41        0041  1 !
;    42        0042  1 ! AUTHOR: M. Jack, CREATION DATE: 16-Feb-1982
;    43        0043  1 !
;    44        0044  1 ! MODIFIED BY:
;    45        0045  1 !
;    46        0046  1 !       V03-005 MHB0140         Mark Bramhall,  20-Apr-1984
;    47        0047  1 !               Change account name handling, especially the determination
;    48        0048  1 !               logic for generating SYSINIT and LOGFAIL records.
;    49        0049  1 !
;    50        0050  1 !       V03-004 MLJ0114         Martin L. Jack, 23-Jun-1983  4:48
;    51        0051  1 !               Changes for job controller baselevel.
;    52        0052  1 !
;    53        0053  1 !       V03-003 MLJ0113         Martin L. Jack, 26-May-1983  21:05
;    54        0054  1 !               Changes for job controller baselevel.
;    55        0055  1 !
;    56        0056  1 !       V03-002 MLJ0112         Martin L. Jack, 29-Apr-1983  2:48
;    57        0057  1 !               Changes for job controller baselevel.
```

```
;   58          0058  1 !
;   59          0059  1 !       V03-001 MLJ0109         Martin L. Jack, 14-Apr-1983  12:45
;   60          0060  1 !               Changes for job controller baselevel.
;   61          0061  1 !
;   62          0062  1 !**
```

```
;    64          0063  1 REQUIRE 'SRC$:JOBCTLDEF';
;    65          1104  1
;    66          1105  1
;    67          1106  1 LITERAL
;    68          1107  1         ACCT_ACM_REG=   6,
;    69          1108  1         ACCT_ACR_REG=   7,
;    70          1109  1         ACCT_APK_REG=   8,
;    71          1110  1         ACCT_SJH_REG=   9,
;    72          1111  1         ACCT_SMQ_REG=   11;
;    73          1112  1
;    74          1113  1
;    75          1114  1 LINKAGE
;    76          1115  1         L_WRITE_ACCOUNTING_FILE=        CALL: GLOBAL(
;    77          1116  1                                             ACR = ACCT_ACR_REG),
;    78          1117  1
;    79          1118  1         L_IDENT_PACKET=                 CALL: GLOBAL(
;    80          1119  1                                             ACM = ACCT_ACM_REG,
;    81          1120  1                                             ACR = ACCT_ACR_REG,
;    82          1121  1                                             SJH = ACCT_SJH_REG,
;    83          1122  1                                             SMQ = ACCT_SMQ_REG),
;    84          1123  1
;    85          1124  1         L_RESOURCE_PACKET=              CALL: GLOBAL(
;    86          1125  1                                             ACM = ACCT_ACM_REG,
;    87          1126  1                                             ACR = ACCT_ACR_REG);
;    88          1127  1
;    89          1128  1
;    90          1129  1 FORWARD ROUTINE
;    91          1130  1         WRITE_ACCOUNTING_FILE:          L_WRITE_ACCOUNTING_FILE NOVALUE,
;    92          1131  1         OPEN_ACCOUNTING_FILE:           NOVALUE,
;    93          1132  1         CLOSE_ACCOUNTING_FILE:          NOVALUE,
;    94          1133  1         IDENT_PACKET:                   L_IDENT_PACKET NOVALUE,
;    95          1134  1         RESOURCE_PACKET:                L_RESOURCE_PACKET NOVALUE,
;    96          1135  1         WRITE_USER_ACCOUNTING_RECORD:   NOVALUE,
;    97          1136  1         WRITE_FILE_LINK_RECORD:         NOVALUE,
;    98          1137  1         WRITE_ACCOUNTING_RECORD:        NOVALUE,
;    99          1138  1         WRITE_PRINT_RECORD:             NOVALUE,
;   100          1139  1         WRITE_PROCESS_RECORD:           NOVALUE,
;   101          1140  1         PROCESS_ACCOUNTING:             NOVALUE;
;   102          1141  1
;   103          1142  1
;   104          1143  1 EXTERNAL ROUTINE
;   105          1144  1         FIND_PROCESS_DATA:              L_OUTPUT_3,
;   106          1145  1         LOCK_QUEUE_FILE:                NOVALUE,
;   107          1146  1         READ_RECORD,
;   108          1147  1         SIGNAL_FILE_ERROR:              NOVALUE,
;   109          1148  1         UNLOCK_QUEUE_FILE:              NOVALUE;
;   110          1149  1
;   111          1150  1
;   112          1151  1 EXTERNAL
;   113          1152  1         EXE$GL_ACMFLAGS:                BBLOCK ADDRESSING_MODE(GENERAL);
;   114          1153  1
;   115          1154  1
;   116          1155  1 BUILTIN
;   117          1156  1         LOCC,
;   118          1157  1         MOVC3,
;   119          1158  1         SKPC,
;   120          1159  1         TESTBITCC,
```

```
;  121          1160  1          TESTBITSC;
```

```
;  123     1161  1 ROUTINE WRITE_ACCOUNTING_FILE: L_WRITE_ACCOUNTING_FILE NOVALUE=
;  124     1162  1
;  125     1163  1 !++
;  126     1164  1 !
;  127     1165  1 ! FUNCTIONAL DESCRIPTION:
;  128     1166  1 !       This routine writes the accounting file.
;  129     1167  1 !
;  130     1168  1 ! INPUT PARAMETERS:
;  131     1169  1 !       NONE
;  132     1170  1 !
;  133     1171  1 ! IMPLICIT INPUTS:
;  134     1172  1 !       ACR             - Pointer to accounting record.
;  135     1173  1 !
;  136     1174  1 ! OUTPUT PARAMETERS:
;  137     1175  1 !       NONE
;  138     1176  1 !
;  139     1177  1 ! IMPLICIT OUTPUTS:
;  140     1178  1 !       NONE
;  141     1179  1 !
;  142     1180  1 ! ROUTINE VALUE:
;  143     1181  1 !       NONE
;  144     1182  1 !
;  145     1183  1 ! SIDE EFFECTS:
;  146     1184  1 !       Accounting record written.
;  147     1185  1 !
;  148     1186  1 !--
;  149     1187  1
;  150     1188  2 BEGIN
;  151     1189  2 EXTERNAL REGISTER
;  152     1190  2         ACR = ACCT_ACR_REG:     REF BBLOCK;     ! Pointer to accounting record
;  153     1191  2
;  154     1192  2
;  155     1193  2 ! The following loop is executed up to MAXFILERR times or until the accounting
;  156     1194  2 ! record is successfully written, provided that an accounting file is open and
;  157     1195  2 ! the record type is selected by the accounting control flags.
;  158     1196  2 !
;  159     1197  2 DECR I FROM JBC$K_MAXFILERR TO 1 DO
;  160     1198  3     BEGIN
;  161     1199  3     LOCAL
;  162     1200  3         FAB:            REF BBLOCK;     ! Pointer to FAB
;  163     1201  3
;  164     1202  3
;  165     1203  3     ! Pick up a pointer to the current accounting FAB.  If the file is closed,
;  166     1204  3     ! return.
;  167     1205  3     !
;  168     1206  3     FAB = .ACCOUNTING_FABS[0];
;  169     1207  3     IF .FAB[FAB$W_IFI] NEQ 0
;  170     1208  3     THEN
;  171     1209  4         BEGIN
;  172     1210  4
;  173     1211  4         ! Evaluate the accounting control flags to determine whether the
;  174     1212  4         ! record type is currently selected.
;  175     1213  4         !
;  176     1214  4         IF
;  177     1215  5             BEGIN
;  178     1216  5             CASE .ACR[ACR$V_TYPE] FROM ACR$K_PRCDEL TO ACR$K_FILE_BL OF
;  179     1217  5                 SET
```

```
;   180     1218  5
;   181     1219  5
;   182     1220  5                 [OUTRANGE]:
;   183     1221  5                     FALSE;
;   184     1222  5
;   185     1223  5
;   186     1224  5                 [ACR$K_PRCDEL, ACR$K_PRCPUR]:
;   187     1225  5                     IF .EXE$GL_ACMFLAGS[ACM$V_PROCESS]
;   188     1226  5                     THEN
;   189     1227  5                         CASE .ACR[ACR$V_SUBTYPE] FROM ACR$K_INTERACTIVE TO ACR$K_NETWORK OF
;   190     1228  5                             SET
;   191     1229  5                             [OUTRANGE]:                 FALSE;
;   192     1230  5                             [ACR$K_INTERACTIVE]:        .EXE$GL_ACMFLAGS[ACM$V_INTERACTIVE];
;   193     1231  5                             [ACR$K_SUBPROCESS]:         .EXE$GL_ACMFLAGS[ACM$V_SUBPROCESS];
;   194     1232  5                             [ACR$K_DETACHED]:           .EXE$GL_ACMFLAGS[ACM$V_DETACHED];
;   195     1233  5                             [ACR$K_BATCH]:              .EXE$GL_ACMFLAGS[ACM$V_BATCH];
;   196     1234  5                             [ACR$K_NETWORK]:            .EXE$GL_ACMFLAGS[ACM$V_NETWORK];
;   197     1235  5                             TES
;   198     1236  5                     ELSE
;   199     1237  5                         FALSE;
;   200     1238  5
;   201     1239  5
;   202     1240  5                 [ACR$K_IMGDEL, ACR$K_IMGPUR]:
;   203     1241  5                     CASE .ACR[ACR$V_SUBTYPE] FROM ACR$K_INTERACTIVE TO ACR$K_NETWORK OF
;   204     1242  5                         SET
;   205     1243  5                         [OUTRANGE]:                 FALSE;
;   206     1244  5                         [ACR$K_INTERACTIVE]:        .EXE$GL_ACMFLAGS[ACM$V_INTERACTIVE];
;   207     1245  5                         [ACR$K_SUBPROCESS]:         .EXE$GL_ACMFLAGS[ACM$V_SUBPROCESS];
;   208     1246  5                         [ACR$K_DETACHED]:           .EXE$GL_ACMFLAGS[ACM$V_DETACHED];
;   209     1247  5                         [ACR$K_BATCH]:              .EXE$GL_ACMFLAGS[ACM$V_BATCH];
;   210     1248  5                         [ACR$K_NETWORK]:            .EXE$GL_ACMFLAGS[ACM$V_NETWORK];
;   211     1249  5                         TES;
;   212     1250  5
;   213     1251  5
;   214     1252  5                         [ACR$K_SYSINIT, ACR$K_SETTIME, ACR$K_ENABLE, ACR$K_DISABLE,
;   215     1253  5                          ACR$K_ALTACM, ACR$K_FILE_FL, ACR$K_FILE_BL]:
;   216     1254  5                             TRUE;
;   217     1255  5
;   218     1256  5
;   219     1257  5                         [ACR$K_LOGFAIL]:
;   220     1258  5                             .EXE$GL_ACMFLAGS[ACM$V_LOGFAIL];
;   221     1259  5
;   222     1260  5
;   223     1261  5                         [ACR$K_PRINT]:
;   224     1262  5                             .EXE$GL_ACMFLAGS[ACM$V_PRINT];
;   225     1263  5
;   226     1264  5
;   227     1265  5                         [ACR$K_USER]:
;   228     1266  5                             .EXE$GL_ACMFLAGS[ACM$V_USER_DATA];
;   229     1267  5
;   230     1268  5
;   231     1269  5                         TES
;   232     1270  5                     END
;   233     1271  4                 THEN
;   234     1272  5                     BEGIN
;   235     1273  5                     LABEL
;   236     1274  5                         WRITE_RECORD;
```

```
;   237     1275  5              LOCAL
;   238     1276  5                  RAB:            REF BBLOCK;     ! Pointer to RAB
;   239     1277  5
;   240     1278  5
;   241     1279  5 WRITE_RECORD:
;   242     1280  6              BEGIN
;   243     1281  6
;   244     1282  6              ! Pick up a pointer to the RAB.
;   245     1283  6              !
;   246     1284  6              RAB = .ACCOUNTING_RABS[0];
;   247     1285  6
;   248     1286  6
;   249     1287  6              ! If there is a previous asynchronous operation in progress, wait
;   250     1288  6              ! for its completion.
;   251     1289  6              !
;   252     1290  6              IF TESTBITSC(RAB[RAB$V_ASY])
;   253     1291  6              THEN
;   254     1292  7                  BEGIN
;   255     1293  7                  IF NOT $WAIT(RAB=.RAB) THEN LEAVE WRITE_RECORD;
;   256     1294  6                  END;
;   257     1295  6
;   258     1296  6
;   259     1297  6              ! Initialize the record descriptor and write this record.
;   260     1298  6              !
;   261     1299  6              RAB[RAB$W_RSZ] = .ACR[ACR$W_LENGTH];
;   262     1300  6              RAB[RAB$L_RBF] = .ACR;
;   263     1301  6              IF NOT $PUT(RAB=.RAB) THEN LEAVE WRITE_RECORD;
;   264     1302  6
;   265     1303  6
;   266     1304  6              ! Unless this is an image accounting record, start an asynchronous
;   267     1305  6              ! $FLUSH to write this record to disk.
;   268     1306  6              !
;   269     1307  7              IF NOT ONEOF_(.ACR[ACR$V_TYPE], BMSK_(ACR$K_IMGDEL, ACR$K_IMGPUR))
;   270     1308  6              THEN
;   271     1309  7                  BEGIN
;   272     1310  7                  RAB[RAB$V_ASY] = TRUE;
;   273     1311  7                  IF NOT $FLUSH(RAB=.RAB) THEN LEAVE WRITE_RECORD;
;   274     1312  6                  END;
;   275     1313  6
;   276     1314  6
;   277     1315  6              ! Completed successfully -- return.
;   278     1316  6              !
;   279     1317  6              RETURN;
;   280     1318  5              END;        ! block WRITE_RECORD
;   281     1319  5
;   282     1320  5
;   283     1321  5              ! An error occurred writing the record.  Report it.
;   284     1322  5              !
;   285     1323  5              SIGNAL_FILE_ERROR(JBC$_WRITEERR + STS$K_ERROR, .FAB, .RAB);
;   286     1324  5
;   287     1325  5
;   288     1326  5              ! Unless the error is "device full", close this accounting file,
;   289     1327  5              ! try to open a new one, and then try to write the record again.
;   290     1328  5              !
;   291     1329  5              IF .RAB[RAB$L_STS] EQL RMS$_FUL
;   292     1330  5              THEN
;   293     1331  5                  EXITLOOP
```

```
;  294     1332  5                 ELSE
;  295     1333  5                     OPEN_ACCOUNTING_FILE(TRUE);
;  296     1334  5                 END
;  297     1335  4             ELSE
;  298     1336  4                 RETURN;
;  299     1337  4             END
;  300     1338  3         ELSE
;  301     1339  3             RETURN;
;  302     1340  2         END;
;  303     1341  2
;  304     1342  2
;  305     1343  2 ! Writing has failed.  Implicitly disable accounting.
;  306     1344  2 !
;  307     1345  2 SIGNAL(JBC$_ACCDISERR OR STS$K_INFO);
;  308     1346  2 CLOSE_ACCOUNTING_FILE();
;  309     1347  1 END;


                                                        .TITLE  ACCOUNTNG Accounting manager
                                                        .IDENT  \V04-000\

                                                        .PSECT  COMMON,NOEXE,  OVR,2

                                                00000 DIAG_STORAGE_BASE:
                                                                .BLKB   0
                                                00000 DIAG_TRACE:
                                                                .BLKB   96
                                                00060 DIAG_COUNT:
                                                                .BLKB   96
                                                000C0 DIAG_FLAGS:
                                                                .BLKB   4
                                                000C4 WORK_AREA:
                                                                .BLKB   44
                                                000F0 SNDJBC_COUNT:
                                                                .BLKB   132
                                                00174 GETQUI_COUNT:
                                                                .BLKB   40
                                                0019C SNDACC_COUNT:
                                                                .BLKB   28
                                                001B8 SNDSMB_COUNT:
                                                                .BLKB   72
                                                00200 DIAG_STORAGE_END:
                                                                .BLKB   0
                                                00200 FLAGS:    .BLKB   4
                                                00204 IMAGE_DUMP_STSFLG:
                                                                .BLKB   4
                                                00208 THIS_SYSID:
                                                                .BLKB   6
                                                0020E           .BLKB   2
                                                00210 CUR_TIME:
                                                                .BLKB   8
                                                00218 HOURLY_TIME:
                                                                .BLKB   8
                                                00220 HOURLY_PARAMS:
                                                                .BLKB   20
                                                00234 SYMBIONT_COUNT:
                                                                .BLKB   4
```

```
00238 QUEUE_REFERENCE_COUNT:
                .BLKB   4
0023C MBX_MESSAGE_COUNT:
                .BLKB   4
00240 MBX:      .BLKB   4
00244 MBX_END:  .BLKB   4
00248 MEMORY_FREE_QUEUES:
                .BLKB   40
00270 NONAST_WORK_QUEUE:
                .BLKB   8
00278 BCB_FREE_LIST:
                .BLKB   4
0027C BCB_ACTIVE_LIST:
                .BLKB   4
00280 GQL_FREE_LIST:
                .BLKB   4
00284 GQL_ACTIVE_LIST:
                .BLKB   4
00288 OPEN_GETQUI_LIST:
                .BLKB   4
0028C PROCESS_DATA_LIST:
                .BLKB   4
00290 SYMBIONT_CONTROL:
                .BLKB   4
00294 SPARE_AREA:
                .BLKB   12
002A0 REMOTE_REQUEST_LKSB:
                .BLKB   8
002A8 QUEUE_FILE_LKSB:
                .BLKB   8
002B0 QUEUE_LOCK_LKSB:
                .BLKB   8
002B8 RSP:      .BLKB   8
002C0 JBC_PRIORITY:
                .BLKB   4
002C4 JBC_PRIVILEGES:
                .BLKB   8
002CC JBC_QUOTAS:
                .BLKB   66
0030E           .BLKB   2
00310 JBC_UIC:  .BLKB   4
00314 QUEUE_FAB:
                .BLKB   80
00364 QUEUE_RAB:
                .BLKB   68
003A8 QUEUE_NAM:
                .BLKB   96
00408 QUEUE_XAB:
                .BLKB   88
00460 QUEUE_RSA:
                .BLKB   255
0055F           .BLKB   1
00560 QUEUE_ALQ:
                .BLKB   4
00564 QUEUE_MBF:
                .BLKB   1
00565           .BLKB   3
```

```
00568 ACCOUNTING_FABS:
                .BLKB   8
00570 ACCOUNTING_RABS:
                .BLKB   8
00578 ACCOUNT_FAB_A:
                .BLKB   80
005C8 ACCOUNT_RAB_A:
                .BLKB   68
0060C ACCOUNT_NAM_A:
                .BLKB   96
0066C ACCOUNT_RSA_A:
                .BLKB   255
0076B           .BLKB   1
0076C ACCOUNT_FAB_B:
                .BLKB   80
007BC ACCOUNT_RAB_B:
                .BLKB   68
00800 ACCOUNT_NAM_B:
                .BLKB   96
00860 ACCOUNT_RSA_B:
                .BLKB   255
0095F           .BLKB   1
00960 DIAG_FAB:
                .BLKB   80
009B0 DIAG_RAB:
                .BLKB   68
009F4 MBX_CHAN:
                .BLKB   4
009F8 MBX_IOSB:
                .BLKB   8
00A00 MBX_BUFFER:
                .BLKB   1024
00E00 VALUE_STORAGE_BASE:
                .BLKB   0
00E00 ITEM_PRESENT:
                .BLKB   32
00E20 VALUE_GETQUI_BASE:
                .BLKB   0
00E20 VALUE_ACCOUNTING_MESSAGE:
                .BLKB   6
00E26 VALUE_ACCOUNTING_TYPES:
                .BLKB   4
00E2A VALUE_AFTER_TIME:
                .BLKB   8
00E32 VALUE_ALIGNMENT_PAGES:
                .BLKB   1
00E33 VALUE_BASE_PRIORITY:
                .BLKB   1
00E34 VALUE_BATCH_INPUT:
                .BLKB   6
00E3A VALUE_BATCH_OUTPUT:
                .BLKB   10
00E44 VALUE_BUFFER_COUNT:
                .BLKB   1
00E45 VALUE_CHARACTERISTIC_NAME:
                .BLKB   6
00E4B VALUE_CHARACTERISTIC_NUMBER:
```

```
                        .BLKB   1
00E4C VALUE_CHARACTERISTICS:
                        .BLKB   16
00E5C VALUE_CHECKPOINT_DATA:
                        .BLKB   6
00E62 VALUE_CLI:
                        .BLKB   6
00E68 VALUE_CPU_DEFAULT:
                        .BLKB   4
00E6C VALUE_CPU_LIMIT:
                        .BLKB   4
00E70 VALUE_DESTINATION_QUEUE:
                        .BLKB   8
00E78 VALUE_DEVICE_NAME:
                        .BLKB   6
00E7E VALUE_ENTRY_NUMBER:
                        .BLKB   4
00E82 VALUE_ENTRY_NUMBER_OUTPUT:
                        .BLKB   10
00E8C VALUE_EXTEND_QUANTITY:
                        .BLKB   2
00E8E VALUE_FILE_COPIES:
                        .BLKB   1
00E8F VALUE_FILE_IDENTIFICATION:
                        .BLKB   36
00EB3 VALUE_FILE_SETUP_MODULES:
                        .BLKB   6
00EB9 VALUE_FILE_SPECIFICATION:
                        .BLKB   6
00EBF VALUE_FIRST_PAGE:
                        .BLKB   4
00EC3 VALUE_FORM_DESCRIPTION:
                        .BLKB   6
00EC9 VALUE_FORM_LENGTH:
                        .BLKB   1
00ECA VALUE_FORM_MARGIN_BOTTOM:
                        .BLKB   1
00ECB VALUE_FORM_MARGIN_LEFT:
                        .BLKB   2
00ECD VALUE_FORM_MARGIN_RIGHT:
                        .BLKB   2
00ECF VALUE_FORM_MARGIN_TOP:
                        .BLKB   1
00ED0 VALUE_FORM_NAME:
                        .BLKB   6
00ED6 VALUE_FORM_NUMBER:
                        .BLKB   4
00EDA VALUE_FORM:
                        .BLKB   8
00EE2 VALUE_FORM_SETUP_MODULES:
                        .BLKB   6
00EE8 VALUE_FORM_STOCK:
                        .BLKB   6
00EEE VALUE_FORM_WIDTH:
                        .BLKB   2
00EF0 VALUE_GENERIC_TARGET:
                        .BLKB   996
```

```
012D4 VALUE_JOB_COPIES:
                .BLKB   1
012D5 VALUE_JOB_LIMIT:
                .BLKB   1
012D6 VALUE_JOB_NAME:
                .BLKB   6
012DC VALUE_JOB_RESET_MODULES:
                .BLKB   6
012E2 VALUE_JOB_SIZE_MAXIMUM:
                .BLKB   4
012E6 VALUE_JOB_SIZE_MINIMUM:
                .BLKB   4
012EA VALUE_JOB_STATUS_OUTPUT:
                .BLKB   10
012F4 VALUE_LAST_PAGE:
                .BLKB   4
012F8 VALUE_LIBRARY_SPECIFICATION:
                .BLKB   6
012FE VALUE_LOG_QUEUE:
                .BLKB   8
01306 VALUE_LOG_SPECIFICATION:
                .BLKB   6
0130C VALUE_NOTE:
                .BLKB   6
01312 VALUE_OPERATOR_REQUEST:
                .BLKB   6
01318 VALUE_OWNER_UIC:
                .BLKB   4
0131C VALUE_PAGE_SETUP_MODULES:
                .BLKB   6
01322 VALUE_PARAMETER_1:
                .BLKB   6
01328 VALUE_PARAMETER_2:
                .BLKB   6
0132E VALUE_PARAMETER_3:
                .BLKB   6
01334 VALUE_PARAMETER_4:
                .BLKB   6
0133A VALUE_PARAMETER_5:
                .BLKB   6
01340 VALUE_PARAMETER_6:
                .BLKB   6
01346 VALUE_PARAMETER_7:
                .BLKB   6
0134C VALUE_PARAMETER_8:
                .BLKB   6
01352 VALUE_PRIORITY:
                .BLKB   1
01353 VALUE_PROCESSOR:
                .BLKB   6
01359 VALUE_PROTECTION:
                .BLKB   4
0135D VALUE_QUEUE:
                .BLKB   6
01363 VALUE_QUEUE_FILE_SPECIFICATION:
                .BLKB   6
01369 VALUE_RELATIVE_PAGE:
```

```
                        .BLKB   4
0136D VALUE_RESERVED_INPUT_1:
                        .BLKB   1
0136E VALUE_RESERVED_INPUT_2:
                        .BLKB   2
01370 VALUE_RESERVED_INPUT_3:
                        .BLKB   4
01374 VALUE_RESERVED_INPUT_4:
                        .BLKB   6
0137A VALUE_RESERVED_OUTPUT_1:
                        .BLKB   10
01384 VALUE_RESERVED_OUTPUT_2:
                        .BLKB   10
0138E VALUE_SEARCH_STRING:
                        .BLKB   6
01394 VALUE_SCSNODE_NAME:
                        .BLKB   6
0139A VALUE_WSDEFAULT:
                        .BLKB   2
0139C VALUE_WSEXTENT:
                        .BLKB   2
0139E VALUE_WSQUOTA:
                        .BLKB   2
013A0 VALUE_STORAGE_END:
                        .BLKB   0

        JBC$_CLOSEOUT=      266328
        JBC$_NOCMKRNL=      272388
        JBC$_NOOPER=        272532
        JBC$_NOSYSNAM=      272404
        JBC$_OPENIN=        266392
        JBC$_OPENOUT=       266400
        JBC$_READERR=       266416
        JBC$_WRITEERR=      266448
                        .EXTRN  FIND_PROCESS_DATA
                        .EXTRN  LOCK_QUEUE_FILE
                        .EXTRN  READ_RECORD, SIGNAL_FILE_ERROR
                        .EXTRN  UNLOCK_QUEUE_FILE
                        .EXTRN  EXE$GL_ACMFLAGS
                        .EXTRN  SYS$WAIT, SYS$PUT
                        .EXTRN  SYS$FLUSH

                        .PSECT  CODE,NOWRT,2

                003C 00000 WRITE_ACCOUNTING_FILE:
                        .WORD   Save R2,R3,R4,R5                        ; 1161
        55 00000000G   00  9E 00002             MOVAB   EXE$GL_ACMFLAGS, R5     ;
        54             02  D0 00009             MOVL    #2, I                   ; 1197
        53 00000000'   EF  D0 0000C 1$:         MOVL    ACCOUNTING_FABS, FAB    ; 1206
                  02   A3  B5 00013             TSTW    2(FAB)                  ; 1207
                       01  12 00016             BNEQ    2$                      ;
                           04 00018             RET                             ;
 50             67     07      01  EF 00019 2$:     EXTZV   #1, #7, (ACR), R0       ; 1216
                0D     01      50  CF 0001E         CASEL   R0, #1, #13             ;
0036            0036   001D    001D    00022 3$:   .WORD   4$-3$,-                 ;
0069            0064   0074    0074    0002A               4$-3$,-                 ;
0074            0074   0074    006E    00032               7$-3$,-                 ;
```

```
                    0074          0074    0003A                7$-3$,-
                                                               17$-3$,-
                                                               17$-3$,-
                                                               14$-3$,-
                                                               15$-3$,-
                                                               16$-3$,-
                                                               17$-3$,-
                                                               17$-3$,-
                                                               17$-3$,-
                                                               17$-3$,-
                                                               17$-3$
                                       04 0003E         RET
                    01             65  E8 0003F 4$:     BLBS   EXE$GL_ACMFLAGS, 5$                       : 1225
                                       04 00042         RET
   51     01   A7   04             00  EF 00043 5$:     EXTZV  #0, #4, 1(ACR), R1                        : 1227
               04   01             51  CF 00049         CASEL  R1, #1, #4
 002F        002A   0025         0020     0004D 6$:     .WORD  9$-6$,-
                                 0034     00055                10$-6$,-
                                                               11$-6$,-
                                                               12$-6$,-
                                                               13$-6$
                                       04 00057         RET
   51     01   A7   04             00  EF 00058 7$:     EXTZV  #0, #4, 1(ACR), R1                        : 1241
               04   01             51  CF 0005E         CASEL  R1, #1, #4
 001A        0015   0010         000B     00062 8$:     .WORD  9$-8$,-
                                 001F     0006A                10$-8$,-
                                                               11$-8$,-
                                                               12$-8$,-
                                                               13$-8$
                                       04 0006C         RET
               25   65             02  E0 0006D 9$:     BBS    #2, EXE$GL_ACMFLAGS, 17$                  : 1244
                                       04 00071         RET
               20   65             04  E0 00072 10$:    BBS    #4, EXE$GL_ACMFLAGS, 17$                  : 1245
                                       04 00076         RET
               1B   65             05  E0 00077 11$:    BBS    #5, EXE$GL_ACMFLAGS, 17$                  : 1246
                                       04 0007B         RET
               16   65             06  E0 0007C 12$:    BBS    #6, EXE$GL_ACMFLAGS, 17$                  : 1247
                                       04 00080         RET
                                   65  95 00081 13$:    TSTB   EXE$GL_ACMFLAGS                           : 1248
                                   11  19 00083         BLSS   17$
                                       04 00085         RET
               0C   65             03  E0 00086 14$:    BBS    #3, EXE$GL_ACMFLAGS, 17$                  : 1258
                                       04 0008A         RET
                    07      01     A5  E8 0008B 15$:    BLBS   EXE$GL_ACMFLAGS+1, 17$                    : 1262
                                       04 0008F         RET
               01      01   A5     01  E0 00090 16$:    BBS    #1, EXE$GL_ACMFLAGS+1, 17$                : 1266
                                       04 00095         RET
                    52 00000000'   EF  D0 00096 17$:    MOVL   ACCOUNTING_RABS, RAB                      : 1284
               0C      04   A2     00  E5 0009D         BBCC   #0, 4(RAB), 18$                           : 1290
                                   52  DD 000A2         PUSHL  RAB                                       : 1293
          00000000G   00           01  FB 000A4         CALLS  #1, SYS$WAIT
                      34           50  E9 000AB         BLBC   R0, 19$
                22    A2    02     A7  B0 000AE 18$:    MOVW   2(ACR), 34(RAB)                           : 1299
                28    A2           57  D0 000B3         MOVL   ACR, 40(RAB)                              : 1300
                                   52  DD 000B7         PUSHL  RAB                                       : 1301
          00000000G   00           01  FB 000B9         CALLS  #1, SYS$PUT
                      1F           50  E9 000C0         BLBC   R0, 19$
```

```
                50              67              07              01  EF 000C3          EXTZV   #1, #7, (ACR), R0                       ; 1307
                                50 18000000     8F              50  78 000C8          ASHL    R0, #402653184, R0                      ;
                                                                4C  19 000D0          BLSS    22$                                     ;
                                        04      A2              01  88 000D2          BISB2   #1, 4(RAB)                              ; 1310
                                                                52  DD 000D6          PUSHL   RAB                                     ; 1311
                                00000000G       00              01  FB 000D8          CALLS   #1, SYS$FLUSH                           ;
                                                3C              50  E8 000DF          BLBS    R0, 22$                                 ;
                                                                52  DD 000E2 19$:      PUSHL   RAB                                     ; 1323
                                                                53  DD 000E4          PUSHL   FAB                                     ;
                                                000410D2        8F  DD 000E6          PUSHL   #266450                                 ;
                                00000000G       EF              03  FB 000EC          CALLS   #3, SIGNAL_FILE_ERROR                   ;
                                00018544        8F      08      A2  D1 000F3          CMPL    8(RAB), #99652                          ; 1329
                                                                0F  13 000FB          BEQL    21$                                     ;
                                                                01  DD 000FD          PUSHL   #1                                      ; 1333
                                    0000V       CF              01  FB 000FF          CALLS   #1, OPEN_ACCOUNTING_FILE                ;
                                                02              54  F5 00104          SOBGTR  I, 20$                                  ; 1197
                                                                03  11 00107          BRB     21$                                     ;
                                                              FF00  31 00109 20$:      BRW     1$                                      ;
                                                00048403        8F  DD 0010C 21$:      PUSHL   #295939                                 ; 1345
                                00000000G       00              01  FB 00112          CALLS   #1, LIB$SIGNAL                          ;
                                    0000V       CF              00  FB 00119          CALLS   #0, CLOSE_ACCOUNTING_FILE               ; 1346
                                                                    04  0011E 22$:      RET                                             ; 1347

; Routine Size:  287 bytes,    Routine Base:  CODE + 0000
```

```
;   311          1348  1 GLOBAL ROUTINE OPEN_ACCOUNTING_FILE(NEW): NOVALUE=
;   312          1349  1
;   313          1350  1 !++
;   314          1351  1 !
;   315          1352  1 ! FUNCTIONAL DESCRIPTION:
;   316          1353  1 !       This routine opens an accounting file.  If one is already open, it is
;   317          1354  1 !       closed and a new copy created.
;   318          1355  1 !
;   319          1356  1 ! INPUT PARAMETERS:
;   320          1357  1 !       NEW             - True if a new file must be created.
;   321          1358  1 !
;   322          1359  1 ! IMPLICIT INPUTS:
;   323          1360  1 !       NONE
;   324          1361  1 !
;   325          1362  1 ! OUTPUT PARAMETERS:
;   326          1363  1 !       NONE
;   327          1364  1 !
;   328          1365  1 ! IMPLICIT OUTPUTS:
;   329          1366  1 !       NONE
;   330          1367  1 !
;   331          1368  1 ! ROUTINE VALUE:
;   332          1369  1 !       NONE
;   333          1370  1 !
;   334          1371  1 ! SIDE EFFECTS:
;   335          1372  1 !       Accounting file opened.
;   336          1373  1 !
;   337          1374  1 !--
;   338          1375  1
;   339          1376  2 BEGIN
;   340          1377  2 LOCAL
;   341          1378  2         OLD_IFI,                        ! Previous IFI value for current file
;   342          1379  2         OLD_FAB:        REF BBLOCK,     ! Current FAB
;   343          1380  2         OLD_RAB:        REF BBLOCK,     ! Current RAB
;   344          1381  2         NEW_FAB:        REF BBLOCK,     ! Next FAB
;   345          1382  2         NEW_RAB:        REF BBLOCK;     ! Next RAB
;   346          1383  2
;   347          1384  2
;   348          1385  2 ! If this is the first call, initialize.
;   349          1386  2 !
;   350          1387  2 IF .ACCOUNTING_FABS[0] EQL 0
;   351          1388  2 THEN
;   352          1389  3     BEGIN
;   353          1390  3     ACCOUNTING_FABS[0] = ACCOUNT_FAB_A;
;   354          1391  3     ACCOUNTING_FABS[1] = ACCOUNT_FAB_B;
;   355          1392  3     ACCOUNTING_RABS[0] = ACCOUNT_RAB_A;
;   356          1393  3     ACCOUNTING_RABS[1] = ACCOUNT_RAB_B;
;   357        P 1394  3     $FAB_INIT(FAB=ACCOUNT_FAB_A,
;   358        P 1395  3         FAC=PUT,
;   359        P 1396  3         FNA=UPLIT BYTE('ACCOUNTNG'),
;   360        P 1397  3         FNS=%CHARCOUNT('ACCOUNTNG'),
;   361        P 1398  3         DNA=UPLIT BYTE('SYS$MANAGER:.DAT'),
;   362        P 1399  3         DNS=%CHARCOUNT('SYS$MANAGER:.DAT'),
;   363        P 1400  3         FOP=CIF,
;   364        P 1401  3         DEQ=25,
;   365        P 1402  3         ORG=SEQ,
;   366        P 1403  3         RFM=VAR,
;   367        P 1404  3         NAM=ACCOUNT_NAM_A,
```

```
;  368          1405  3          SHR=<GET,UPI>);
;  369        P 1406  3      $RAB_INIT(RAB=ACCOUNT_RAB_A,
;  370        P 1407  3          FAB=ACCOUNT_FAB_A,
;  371        P 1408  3          MBC=1,
;  372        P 1409  3          MBF=2,
;  373        P 1410  3          RAC=SEQ,
;  374          1411  3          ROP=<EOF,WBH>);
;  375        P 1412  3      $NAM_INIT(NAM=ACCOUNT_NAM_A,
;  376        P 1413  3          RSA=ACCOUNT_RSA_A,
;  377          1414  3          RSS=NAM$C_MAXRSS);
;  378          1415  3      CH$MOVE(FAB$C_BLN, ACCOUNT_FAB_A, ACCOUNT_FAB_B);
;  379          1416  3      CH$MOVE(RAB$C_BLN, ACCOUNT_RAB_A, ACCOUNT_RAB_B);
;  380          1417  3      CH$MOVE(NAM$C_BLN, ACCOUNT_NAM_A, ACCOUNT_NAM_B);
;  381          1418  3      ACCOUNT_FAB_B[FAB$L_NAM] = ACCOUNT_NAM_B;
;  382          1419  3      ACCOUNT_RAB_B[RAB$L_FAB] = ACCOUNT_FAB_B;
;  383          1420  3      ACCOUNT_NAM_B[NAM$L_RSA] = ACCOUNT_RSA_B;
;  384          1421  2      END;
;  385          1422  2
;  386          1423  2
;  387          1424  2 ! Pick up pointers to the current and new FAB and RAB.
;  388          1425  2 !
;  389          1426  2 OLD_FAB = .ACCOUNTING_FABS[0];
;  390          1427  2 NEW_FAB = .ACCOUNTING_FABS[1];
;  391          1428  2 OLD_RAB = .ACCOUNTING_RABS[0];
;  392          1429  2 NEW_RAB = .ACCOUNTING_RABS[1];
;  393          1430  2
;  394          1431  2
;  395          1432  2 ! If an accounting file is currently open, unconditionally create a new file.
;  396          1433  2 ! Otherwise, use the CIF option to connect to the end of the existing file.
;  397          1434  2 ! Set up ALQ for no initial allocation.
;  398          1435  2 !
;  399          1436  2 NEW_FAB[FAB$V_CIF] = TRUE;
;  400          1437  2 OLD_IFI = .OLD_FAB[FAB$W_IFI];
;  401          1438  2 IF .OLD_IFI NEQ 0 OR .NEW THEN NEW_FAB[FAB$V_CIF] = FALSE;
;  402          1439  2
;  403          1440  2
;  404          1441  2 ! Create or open the file.  Accept an error that occurs during a create-if,
;  405          1442  2 ! and loop to create a new version.
;  406          1443  2 !
;  407          1444  2 WHILE TRUE DO
;  408          1445  3     BEGIN
;  409          1446  3     NEW_FAB[FAB$L_ALQ] = 0;
;  410          1447  4     IF NOT $CREATE(FAB=.NEW_FAB)
;  411          1448  3     THEN
;  412          1449  4         BEGIN
;  413          1450  4         IF TESTBITCC(NEW_FAB[FAB$V_CIF])
;  414          1451  4         THEN
;  415          1452  5             BEGIN
;  416          1453  5             SIGNAL_FILE_ERROR(JBC$_OPENOUT + STS$K_ERROR, .NEW_FAB, .NEW_FAB);
;  417          1454  5             EXITLOOP;
;  418          1455  4             END;
;  419          1456  4         END
;  420          1457  3     ELSE
;  421          1458  4         BEGIN
;  422          1459  5         IF NOT $CONNECT(RAB=.NEW_RAB)
;  423          1460  4         THEN
;  424          1461  5             BEGIN
```

```
;  425          1462  5              SIGNAL_FILE_ERROR(JBC$_OPENOUT + STS$K_ERROR, .NEW_FAB, .NEW_RAB);
;  426          1463  5              $CLOSE(FAB=.NEW_FAB);
;  427          1464  5              NEW_FAB[FAB$W_IFI] = 0;
;  428          1465  4              END;
;  429          1466  4          EXITLOOP;
;  430          1467  3          END;
;  431          1468  2      END;
;  432          1469  2
;  433          1470  2
;  434          1471  2 ! If an accounting file was previously open and a new file has been created,
;  435          1472  2 ! write the file forward link record.  Omit this if forced creation of a new
;  436          1473  2 ! file is requested, since the previous file sustained an error.
;  437          1474  2 !
;  438          1475  3 IF (NOT .NEW_FAB[FAB$V_CIF] OR .NEW_FAB[FAB$L_STS] EQL RMS$_CREATED)
;  439          1476  2 AND .OLD_IFI NEQ 0
;  440          1477  2 THEN
;  441          1478  3     BEGIN
;  442          1479  3     IF NOT .NEW THEN WRITE_FILE_LINK_RECORD(ACR$K_FILE_FL, .NEW_FAB);
;  443          1480  3     CLOSE_ACCOUNTING_FILE();
;  444          1481  2     END;
;  445          1482  2
;  446          1483  2
;  447          1484  2 ! Exchange FAB and RAB pointers.
;  448          1485  2 !
;  449          1486  2 ACCOUNTING_FABS[0] = .NEW_FAB;
;  450          1487  2 ACCOUNTING_FABS[1] = .OLD_FAB;
;  451          1488  2 ACCOUNTING_RABS[0] = .NEW_RAB;
;  452          1489  2 ACCOUNTING_RABS[1] = .OLD_RAB;
;  453          1490  2
;  454          1491  2
;  455          1492  2 ! If an accounting file was previously open, write the file back link record.
;  456          1493  2 !
;  457          1494  2 IF .OLD_IFI NEQ 0 THEN WRITE_FILE_LINK_RECORD(ACR$K_FILE_BL, .OLD_FAB);
;  458          1495  1 END;


                        47  4E  54  4E  55  4F  43  43  41  0011F P.AAA:  .ASCII  \ACCOUNTNG\                                  ;
41  44  2E  3A  52  45  47  41  4E  41  4D  24  53  59  53  00128 P.AAB:  .ASCII  \SYS$MANAGER:.DAT\                            ;
                                                        54  00137                                                              ;

                                                                    $RMS_PTR=       ACCOUNT_FAB_A
                                                                    $RMS_PTR=       ACCOUNT_RAB_A
                                                                    $RMS_PTR=       ACCOUNT_NAM_A
                                                                            .EXTRN  SYS$CREATE, SYS$CONNECT
                                                                            .EXTRN  SYS$CLOSE

                                                    01FC 00000              .ENTRY  OPEN_ACCOUNTING_FILE, Save R2,R3,R4,R5,R6,- ; 1348
                                                                                    R7,R8                                       ;
                                          58 00000000G  EF  9E 00002        MOVAB   SIGNAL_FILE_ERROR, R8                       ;
                                          57 00000000'  EF  9E 00009        MOVAB   ACCOUNT_FAB_A, R7                           ;
                                                F0      A7  D5 00010        TSTL    ACCOUNTING_FABS                             ; 1387
                                                        03  13 00013        BEQL    1$                                          ;
                                                      00C0  31 00015        BRW     2$                                          ;
                                    F0  A7                67  9E 00018 1$:   MOVAB   ACCOUNT_FAB_A, ACCOUNTING_FABS             ; 1390
                                    F4  A7          01F4  C7  9E 0001C        MOVAB   ACCOUNT_FAB_B, ACCOUNTING_FABS+4           ; 1391
                                    F8  A7            50  A7  9E 00022        MOVAB   ACCOUNT_RAB_A, ACCOUNTING_RABS             ; 1392
```

```
                                FC    A7      0244    C7  9E 00027          MOVAB   ACCOUNT_RAB_B, ACCOUNTING_RABS+4          ; 1393
0050    8F              00              6E              00  2C 0002D          MOVC5   #0, (SP), #0, #80, $RMS_PTR              ; 1405
                                                        67     00034
                                67      5003            8F  B0 00035          MOVW    #20483, $RMS_PTR                         ;
                                04    A7 02000000       8F  D0 0003A          MOVL    #33554432, $RMS_PTR+4                    ;
                                14    A7 42010019       8F  D0 00042          MOVL    #1107361817, $RMS_PTR+20                 ;
                                                  1D    A7  94 0004A          CLRB    $RMS_PTR+29                              ;
                                1F    A7                02  90 0004D          MOVB    #2, $RMS_PTR+31                          ;
                                28    A7      0094      C7  9E 00051          MOVAB   ACCOUNT_NAM_A, $RMS_PTR+40               ;
                                2C    A7        8D      AF  9E 00057          MOVAB   P.AAA, $RMS_PTR+44                       ;
                                30    A7        91      AF  9E 0005C          MOVAB   P.AAB, $RMS_PTR+48                       ;
                                34    A7      1009      8F  B0 00061          MOVW    #4105, $RMS_PTR+52                       ;
0044    8F              00              6E              00  2C 00067          MOVC5   #0, (SP), #0, #68, $RMS_PTR              ; 1411
                                                  50    A7     0006E
                                50    A7      4401      8F  B0 00070          MOVW    #17409, $RMS_PTR                         ;
                                54    A7      0500      8F  3C 00076          MOVZWL  #1280, $RMS_PTR+4                        ;
                                                  6E    A7  94 0007C          CLRB    $RMS_PTR+30                              ;
                              0086    C7      0102      8F  B0 0007F          MOVW    #258, $RMS_PTR+54                        ;
                              008C    C7                67  9E 00086          MOVAB   ACCOUNT_FAB_A, $RMS_PTR+60               ;
0060    8F              00              6E              00  2C 0008B          MOVC5   #0, (SP), #0, #96, $RMS_PTR              ; 1414
                                                0094    C7     00092
                              0094    C7      6002            8F  B0 00095          MOVW    #24578, $RMS_PTR                         ;
                              0096    C7                      01  8E 0009C          MNEGB   #1, $RMS_PTR+2                           ;
                              0098    C7      00F4      C7  9E 000A1          MOVAB   ACCOUNT_RSA_A, $RMS_PTR+4                ;
                  01F4        C7              0050      8F  28 000A8          MOVC3   #80, ACCOUNT_FAB_A, ACCOUNT_FAB_B        ; 1415
                  0244        C7        50    A7      0044  8F 28 000B0          MOVC3   #68, ACCOUNT_RAB_A, ACCOUNT_RAB_B        ; 1416
                  0288        C7      0094    C7      0060  8F 28 000B9          MOVC3   #96, ACCOUNT_NAM_A, ACCOUNT_NAM_B        ; 1417
                              021C    C7      0288      C7  9E 000C3          MOVAB   ACCOUNT_NAM_B, ACCOUNT_FAB_B+40          ; 1418
                              0280    C7      01F4      C7  9E 000CA          MOVAB   ACCOUNT_FAB_B, ACCOUNT_RAB_B+60          ; 1419
                              028C    C7      02E8      C7  9E 000D1          MOVAB   ACCOUNT_RSA_B, ACCOUNT_NAM_B+4           ; 1420
                                                  53    F0  A7 DO 000D8 2$:   MOVL    ACCOUNTING_FABS, OLD_FAB                 ; 1426
                                                  52    F4  A7 DO 000DC       MOVL    ACCOUNTING_FABS+4, NEW_FAB               ; 1427
                                                  56    F8  A7 DO 000E0       MOVL    ACCOUNTING_RABS, OLD_RAB                 ; 1428
                                                  55    FC  A7 DO 000E4       MOVL    ACCOUNTING_RABS+4, NEW_RAB               ; 1429
                                      07    A2              02  88 000E8       BISB2   #2, 7(NEW_FAB)                           ; 1436
                                                  50    02  A3 3C 000EC       MOVZWL  2(OLD_FAB), OLD_IFI                      ; 1437
                                                                54 D4 000F0       CLRL    R4                                       ; 1438
                                                                50 D5 000F2       TSTL    OLD_IFI                                  ;
                                                                04 13 000F4       BEQL    3$                                       ;
                                                                54 D6 000F6       INCL    R4                                       ;
                                                                04 11 000F8       BRB     4$                                       ;
                                                  04    04  AC  E9 000FA 3$:    BLBC    NEW, 5$                                  ;
                                      07    A2              02  8A 000FE 4$:    BICB2   #2, 7(NEW_FAB)                           ;
                                                  10    A2  D4 00102 5$:       CLRL    16(NEW_FAB)                              ; 1446
                                                                52 DD 00105       PUSHL   NEW_FAB                                  ; 1447
                          00000000G             00              01 FB 00107       CALLS   #1, SYS$CREATE                           ;
                                                14              50 E8 0010E       BLBS    R0, 6$                                   ;
                      EC          04    A2                    19 E4 00111       BBSC    #25, 4(NEW_FAB), 5$                      ; 1450
                                                                52 DD 00116       PUSHL   NEW_FAB                                  ; 1453
                                                                52 DD 00118       PUSHL   NEW_FAB                                  ;
                                                000410A2        8F DD 0011A       PUSHL   #266402                                  ;
                                                68              03 FB 00120       CALLS   #3, SIGNAL_FILE_ERROR                    ;
                                                                23 11 00123       BRB     7$                                       ; 1452
                                                                55 DD 00125 6$:   PUSHL   NEW_RAB                                  ; 1459
                          00000000G             00              01 FB 00127       CALLS   #1, SYS$CONNECT                          ;
                                                17              50 E8 0012E       BLBS    R0, 7$                                   ;
                                                                24 BB 00131       PUSHR   #^M<R2,R5>                               ; 1462
```

```
                                000410A2  8F  DD 00133          PUSHL   #266402                                    ;
                                      68  03  FB 00139          CALLS   #3, SIGNAL_FILE_ERROR                      ;
                                          52  DD 0013C          PUSHL   NEW_FAB                                    ; 1463
                          00000000G   00  01  FB 0013E          CALLS   #1, SYS$CLOSE                              ;
                                      02  A2  B4 00145          CLRW    2(NEW_FAB)                                 ; 1464
                          0A      07  A2  01  E1 00148 7$:      BBC     #1, 7(NEW_FAB), 8$                         ; 1475
                          00010619    8F      08  A2  D1 0014D  CMPL    8(NEW_FAB), #67097                         ;
                                          15  12 00155          BNEQ    10$                                        ;
                                      12  54  E9 00157 8$:      BLBC    R4, 10$                                    ; 1476
                                      09      04  AC  E8 0015A  BLBS    NEW, 9$                                    ; 1479
                                          52  DD 0015E          PUSHL   NEW_FAB                                    ;
                                          0D  DD 00160          PUSHL   #13                                        ;
                                0000V     CF  02  FB 00162      CALLS   #2, WRITE_FILE_LINK_RECORD                 ;
                                0000V     CF  00  FB 00167 9$:  CALLS   #0, CLOSE_ACCOUNTING_FILE                  ; 1480
                                  F0      A7  52  7D 0016C 10$: MOVQ    NEW_FAB, ACCOUNTING_FABS                   ; 1486
                                  F8      A7  55  7D 00170      MOVQ    NEW_RAB, ACCOUNTING_RABS                   ; 1488
                                      09      54  E9 00174      BLBC    R4, 11$                                    ; 1494
                                          53  DD 00177          PUSHL   OLD_FAB                                    ;
                                          0E  DD 00179          PUSHL   #14                                        ;
                                0000V     CF  02  FB 0017B      CALLS   #2, WRITE_FILE_LINK_RECORD                 ;
                                              04  00180 11$:     RET                                                ; 1495

; Routine Size:  385 bytes,    Routine Base:  CODE + 0138
```

```
;  460          1496  1 GLOBAL ROUTINE CLOSE_ACCOUNTING_FILE: NOVALUE=
;  461          1497  1
;  462          1498  1 !++
;  463          1499  1 !
;  464          1500  1 ! FUNCTIONAL DESCRIPTION:
;  465          1501  1 !       This routine closes an accounting file, if one is open.
;  466          1502  1 !
;  467          1503  1 ! INPUT PARAMETERS:
;  468          1504  1 !       NONE
;  469          1505  1 !
;  470          1506  1 ! IMPLICIT INPUTS:
;  471          1507  1 !       NONE
;  472          1508  1 !
;  473          1509  1 ! OUTPUT PARAMETERS:
;  474          1510  1 !       NONE
;  475          1511  1 !
;  476          1512  1 ! IMPLICIT OUTPUTS:
;  477          1513  1 !       NONE
;  478          1514  1 !
;  479          1515  1 ! ROUTINE VALUE:
;  480          1516  1 !       NONE
;  481          1517  1 !
;  482          1518  1 ! SIDE EFFECTS:
;  483          1519  1 !       Accounting file closed.
;  484          1520  1 !
;  485          1521  1 !--
;  486          1522  1
;  487          1523  2 BEGIN
;  488          1524  2 LOCAL
;  489          1525  2         FAB:            REF BBLOCK,     ! Pointer to FAB
;  490          1526  2         RAB:            REF BBLOCK;     ! Pointer to RAB
;  491          1527  2
;  492          1528  2
;  493          1529  2 FAB = .ACCOUNTING_FABS[0];
;  494          1530  2 RAB = .ACCOUNTING_RABS[0];
;  495          1531  2
;  496          1532  2
;  497          1533  2 IF .FAB[FAB$W_IFI] NEQ 0
;  498          1534  2 THEN
;  499          1535  3     BEGIN
;  500          1536  3     IF TESTBITSC(RAB[RAB$V_ASY])
;  501          1537  3     THEN
;  502          1538  4         IF NOT $WAIT(RAB=.RAB)
;  503          1539  3         THEN
;  504          1540  3             SIGNAL_FILE_ERROR(JBC$_WRITEERR + STS$K_ERROR, .FAB, .RAB);
;  505          1541  3
;  506          1542  3
;  507          1543  4     IF NOT $CLOSE(FAB=.FAB)
;  508          1544  3     THEN
;  509          1545  3         SIGNAL_FILE_ERROR(JBC$_CLOSEOUT + STS$K_ERROR, .FAB, .FAB);
;  510          1546  3
;  511          1547  3
;  512          1548  3     FAB[FAB$W_IFI] = 0;
;  513          1549  2     END;
;  514          1550  1 END;
```

```
                                          001C 00000          .ENTRY  CLOSE_ACCOUNTING_FILE, Save R2,R3,R4        ; 1496
                                54 00000000G  EF   9E 00002   MOVAB   SIGNAL_FILE_ERROR, R4                       ;
                                53 00000000'  EF   D0 00009   MOVL    ACCOUNTING_FABS, FAB                      ; 1529
                                52 00000000'  EF   D0 00010   MOVL    ACCOUNTING_RABS, RAB                      ; 1530
                                      02      A3   B5 00017   TSTW    2(FAB)                                    ; 1533
                                              3A   13 0001A   BEQL    3$                                        ;
                          19        04        A2   00 E5 0001C   BBCC    #0, 4(RAB), 1$                            ; 1536
                                              52   DD 00021   PUSHL   RAB                                       ; 1538
                             00000000G        00   01 FB 00023   CALLS   #1, SYS$WAIT                            ;
                                              0D   50 E8 0002A   BLBS    R0, 1$                                    ;
                                              52   DD 0002D   PUSHL   RAB                                       ; 1540
                                              53   DD 0002F   PUSHL   FAB                                       ;
                                 000410D2     8F   DD 00031   PUSHL   #266450                                    ;
                                      64           03   FB 00037   CALLS   #3, SIGNAL_FILE_ERROR                 ;
                                              53   DD 0003A 1$:  PUSHL   FAB                                       ; 1543
                             00000000G        00   01 FB 0003C   CALLS   #1, SYS$CLOSE                           ;
                                              0D   50 E8 00043   BLBS    R0, 2$                                    ;
                                              53   DD 00046   PUSHL   FAB                                       ; 1545
                                              53   DD 00048   PUSHL   FAB                                       ;
                                 0004105A     8F   DD 0004A   PUSHL   #266330                                    ;
                                      64           03   FB 00050   CALLS   #3, SIGNAL_FILE_ERROR                 ;
                                      02      A3   B4 00053 2$:  CLRW    2(FAB)                                    ; 1548
                                              04   00056 3$:  RET                                               ; 1550

; Routine Size:  87 bytes,    Routine Base:  CODE + 02B9
```

```
;  516        M 1551  1 MACRO ACM_RECORD(TYPE,SUBTYPE,TIME,ACR)=
;  517        M 1552  1
;  518        M 1553  1 !++
;  519        M 1554  1 !
;  520        M 1555  1 ! FUNCTIONAL DESCRIPTION:
;  521        M 1556  1 !       This macro builds the record header.
;  522        M 1557  1 !
;  523        M 1558  1 ! INPUT PARAMETERS:
;  524        M 1559  1 !       TYPE            - Record type.
;  525        M 1560  1 !       SUBTYPE         - Record subtype.
;  526        M 1561  1 !       TIME            - Pointer to quadword event time.
;  527        M 1562  1 !       ACR             - Pointer to accounting record buffer.
;  528        M 1563  1 !
;  529        M 1564  1 ! IMPLICIT INPUTS:
;  530        M 1565  1 !       NONE
;  531        M 1566  1 !
;  532        M 1567  1 ! OUTPUT PARAMETERS:
;  533        M 1568  1 !       NONE
;  534        M 1569  1 !
;  535        M 1570  1 ! IMPLICIT OUTPUTS:
;  536        M 1571  1 !       Record header built in record buffer.
;  537        M 1572  1 !
;  538        M 1573  1 ! SIDE EFFECTS:
;  539        M 1574  1 !       NONE
;  540        M 1575  1 !
;  541        M 1576  1 !--
;  542        M 1577  1
;  543        M 1578  1 BEGIN
;  544        M 1579  1 BBLOCK[ACR, ACR$W_LENGTH] = ACR$K_HDRLEN;
;  545        M 1580  1 %IF %CTCE(TYPE) AND %CTCE(SUBTYPE)
;  546        M 1581  1 %THEN
;  547        M 1582  1     BBLOCK[ACR, ACR$W_TYPE] =
;  548        M 1583  1         (TYPE) ^ $BITPOSITION(ACR$V_TYPE) OR
;  549        M 1584  1         (SUBTYPE) ^ $BITPOSITION(ACR$V_SUBTYPE) OR
;  550        M 1585  1         ACR$K_CURVER ^ $BITPOSITION(ACR$V_VERSION)
;  551        M 1586  1 %ELSE
;  552        M 1587  1     %IF %CTCE(SUBTYPE)
;  553        M 1588  1     %THEN
;  554        M 1589  1         BBLOCK[ACR, ACR$W_TYPE] =
;  555        M 1590  1             (SUBTYPE) ^ $BITPOSITION(ACR$V_SUBTYPE) OR
;  556        M 1591  1             ACR$K_CURVER ^ $BITPOSITION(ACR$V_VERSION);
;  557        M 1592  1         BBLOCK[ACR, ACR$V_TYPE] = (TYPE)
;  558        M 1593  1     %ELSE
;  559        M 1594  1         BBLOCK[ACR, ACR$W_TYPE] =
;  560        M 1595  1             ACR$K_CURVER ^ $BITPOSITION(ACR$V_VERSION);
;  561        M 1596  1         BBLOCK[ACR, ACR$V_TYPE] = (TYPE);
;  562        M 1597  1         BBLOCK[ACR, ACR$V_SUBTYPE] = (SUBTYPE)
;  563        M 1598  1     %FI
;  564        M 1599  1 %FI;
;  565        M 1600  1 (BBLOCK[ACR, ACR$Q_SYSTIME]+0) = .VECTOR[TIME, 0];
;  566        M 1601  1 (BBLOCK[ACR, ACR$Q_SYSTIME]+4) = .VECTOR[TIME, 1];
;  567          1602  1 END %;
```

```
;  569     M 1603  1 MACRO ACM_PACKET(TYPE,SUBTYPE,ACR,APK)=
;  570     M 1604  1
;  571     M 1605  1 !++
;  572     M 1606  1 !
;  573     M 1607  1 ! FUNCTIONAL DESCRIPTION:
;  574     M 1608  1 !       This macro builds the packet header.
;  575     M 1609  1 !
;  576     M 1610  1 ! INPUT PARAMETERS:
;  577     M 1611  1 !       TYPE            - Packet type.
;  578     M 1612  1 !       SUBTYPE         - Packet subtype.
;  579     M 1613  1 !       ACR             - Pointer to accounting record buffer.
;  580     M 1614  1 !
;  581     M 1615  1 ! IMPLICIT INPUTS:
;  582     M 1616  1 !       NONE
;  583     M 1617  1 !
;  584     M 1618  1 ! OUTPUT PARAMETERS:
;  585     M 1619  1 !       APK             - Pointer to packet.
;  586     M 1620  1 !
;  587     M 1621  1 ! IMPLICIT OUTPUTS:
;  588     M 1622  1 !       Packet header built in record buffer.
;  589     M 1623  1 !
;  590     M 1624  1 ! SIDE EFFECTS:
;  591     M 1625  1 !       NONE
;  592     M 1626  1 !
;  593     M 1627  1 !--
;  594     M 1628  1
;  595     M 1629  1 BEGIN
;  596     M 1630  1 APK = (ACR) + .BBLOCK[ACR, ACR$W_LENGTH];
;  597     M 1631  1 APK[ACR$W_LENGTH] = 0;
;  598     M 1632  1 %IF %CTCE(TYPE) AND %CTCE(SUBTYPE)
;  599     M 1633  1 %THEN
;  600     M 1634  1     APK[ACR$W_TYPE] =
;  601     M 1635  1         ACR$M_PACKET OR
;  602     M 1636  1         (TYPE) ^ $BITPOSITION(ACR$V_TYPE) OR
;  603     M 1637  1         (SUBTYPE) ^ $BITPOSITION(ACR$V_SUBTYPE) OR
;  604     M 1638  1         ACR$K_CURVER ^ $BITPOSITION(ACR$V_VERSION)
;  605     M 1639  1 %ELSE
;  606     M 1640  1     APK[ACR$W_TYPE] =
;  607     M 1641  1         ACR$M_PACKET OR
;  608     M 1642  1         ACR$K_CURVER ^ $BITPOSITION(ACR$V_VERSION);
;  609     M 1643  1     APK[ACR$V_TYPE] = (TYPE);
;  610     M 1644  1     APK[ACR$V_SUBTYPE] = (SUBTYPE)
;  611     M 1645  1 %FI;
;  612       1646  1 END %;
```

```
;  614     1647  1 ROUTINE IDENT_PACKET: L_IDENT_PACKET NOVALUE=
;  615     1648  1
;  616     1649  1 !++
;  617     1650  1 !
;  618     1651  1 ! FUNCTIONAL DESCRIPTION:
;  619     1652  1 !       This routine builds the identification packet.
;  620     1653  1 !
;  621     1654  1 ! INPUT PARAMETERS:
;  622     1655  1 !       NONE
;  623     1656  1 !
;  624     1657  1 ! IMPLICIT INPUTS:
;  625     1658  1 !       ACM             - Pointer to mailbox message.
;  626     1659  1 !       ACR             - Pointer to accounting record buffer.
;  627     1660  1 !       SJH             - Pointer to SJH or 0.
;  628     1661  1 !       SMQ             - Pointer to SMQ or 0.
;  629     1662  1 !
;  630     1663  1 ! OUTPUT PARAMETERS:
;  631     1664  1 !       NONE
;  632     1665  1 !
;  633     1666  1 ! IMPLICIT OUTPUTS:
;  634     1667  1 !       Identification packet built in record buffer.
;  635     1668  1 !
;  636     1669  1 ! ROUTINE VALUE:
;  637     1670  1 !       NONE
;  638     1671  1 !
;  639     1672  1 ! SIDE EFFECTS:
;  640     1673  1 !       NONE
;  641     1674  1 !
;  642     1675  1 !--
;  643     1676  1
;  644     1677  2 BEGIN
;  645     1678  2 EXTERNAL REGISTER
;  646     1679  2         ACM = ACCT_ACM_REG:     REF BBLOCK,     ! Pointer to mailbox message
;  647     1680  2         ACR = ACCT_ACR_REG:     REF BBLOCK,     ! Pointer to record buffer
;  648     1681  2         SJH = ACCT_SJH_REG:     REF BBLOCK,     ! Pointer to SJH
;  649     1682  2         SMQ = ACCT_SMQ_REG:     REF BBLOCK;     ! Pointer to SMQ
;  650     1683  2 LOCAL
;  651     1684  2         APK:            REF BBLOCK;     ! Pointer to packet
;  652     1685  2 REGISTER
;  653     1686  2         P = 3;                          ! Pointer to free byte
;  654     1687  2
;  655     1688  2
;  656     1689  2 ACM_PACKET(ACR$K_ID, 0, .ACR, APK);
;  657     1690  2 APK[ACR$L_PID] = .ACM[ACM$L_PID];
;  658     1691  2 APK[ACR$L_OWNER] = .ACM[ACM$L_OWNER];
;  659     1692  2 APK[ACR$L_UIC] = .ACM[ACM$L_UIC];
;  660     1693  2 (APK[ACR$Q_PRIV]+0) = .(ACM[ACM$Q_PRVMSK]+0);
;  661     1694  2 (APK[ACR$Q_PRIV]+4) = .(ACM[ACM$Q_PRVMSK]+4);
;  662     1695  2 APK[ACR$B_PRI] = .ACM[ACM$B_PROCPRI];
;  663     1696  2 (APK[ACR$B_PRI]+1)<0,8> = 0;
;  664     1697  2
;  665     1698  2
;  666     1699  2 APK[ACR$W_ACCOUNT] = 0;
;  667     1700  2 APK[ACR$W_NODENAME] = 0;
;  668     1701  2 APK[ACR$W_TERMINAL] = 0;
;  669     1702  2 APK[ACR$W_JOBNAME] = 0;
;  670     1703  2 APK[ACR$L_JOBID] = 0;
```

```
;  671          1704  2 APK[ACR$W_QUEUE] = 0;
;  672          1705  2 APK[ACR$W_NODEADDR] = 0;
;  673          1706  2 APK[ACR$W_REMOTEID] = 0;
;  674          1707  2 P = APK[ACR$K_IDVAR,0,0,0];
;  675          1708  2
;  676          1709  2
;  677          1710  3 BEGIN ! block to use output registers
;  678          1711  3 REGISTER
;  679          1712  3     R0 = 0;
;  680          1713  3
;  681          1714  3 APK[ACR$W_USERNAME] = .P - .APK;
;  682          1715  3 LOCC(%REF(%C' '), %REF(ACM$S_USERNAME), ACM[ACM$T_USERNAME]; R0);
;  683          1716  3 R0 = ACM$S_USERNAME - .R0;
;  684          1717  3 (.P)<0,8> = .R0;
;  685          1718  3 P = .P + 1;
;  686          1719  3 MOVC3(R0, ACM[ACM$T_USERNAME], .P; ,,, P);
;  687          1720  2 END; ! block to use output registers
;  688          1721  2
;  689          1722  2
;  690          1723  3 BEGIN ! block to use output registers
;  691          1724  3 REGISTER
;  692          1725  3     R0 = 0,
;  693          1726  3     R1 = 1 : REF VECTOR[,BYTE];
;  694          1727  3
;  695          1728  3 !
;  696          1729  3 ! Strip leading binary nulls and trailing blanks from the account name.
;  697          1730  3 ! Don't move over the account name at all if it is totally binary nulls.
;  698          1731  3 !
;  699          1732  3 IF SKPC(%REF(0), %REF(ACM$S_ACCOUNT), ACM[ACM$T_ACCOUNT]; R0, R1)
;  700          1733  3 THEN
;  701          1734  4     BEGIN
;  702          1735  4     DO
;  703          1736  5         BEGIN
;  704          1737  5         IF .R1[.R0 - 1] NEQ %C' '
;  705          1738  5         THEN
;  706          1739  5             EXITLOOP;
;  707          1740  5         R0 = .R0 - 1;
;  708          1741  5         END
;  709          1742  4     WHILE .R0 GTR 0;
;  710          1743  4     APK[ACR$W_ACCOUNT] = .P - .APK;
;  711          1744  4     (.P)<0,8> = .R0;
;  712          1745  4     P = .P + 1;
;  713          1746  4     MOVC3(R0, .R1, .P; ,,, P);
;  714          1747  3     END;
;  715          1748  2 END; ! block to use output registers
;  716          1749  2
;  717          1750  2
;  718        P 1751  2 IF ONEOF (.ACR[ACR$V_TYPE], BMSK_(
;  719          1752  3     ACR$K_PRCDEL, ACR$K_LOGFAIL, ACR$K_IMGDEL, ACR$K_PRCPUR, ACR$K_IMGPUR))
;  720          1753  2 THEN
;  721          1754  3     BEGIN
;  722          1755  3     IF .ACM[ACM$W_NODEADDR] NEQ 0
;  723          1756  3     THEN
;  724          1757  4         BEGIN
;  725          1758  4         LOCAL
;  726          1759  4             Q:          REF VECTOR[,BYTE],      ! Pointer to ASCIC data
;  727          1760  4             L;                                  ! Length of data
```

```
;  728          1761  4
;  729          1762  4          Q = .ACM + .ACM[ACM$W_NODEADDR];
;  730          1763  4          L = .Q[0];
;  731          1764  4          IF .L NEQ 0
;  732          1765  4          THEN
;  733          1766  5              BEGIN
;  734          1767  5              APK[ACR$W_NODEADDR] = .P - .APK;
;  735          1768  5              MOVC3(%REF(.L + 1), .Q, .P); ,,, P);
;  736          1769  4              END;
;  737          1770  3          END;
;  738          1771  3
;  739          1772  3
;  740          1773  3      IF .ACM[ACM$W_NODENAME] NEQ 0
;  741          1774  3      THEN
;  742          1775  4          BEGIN
;  743          1776  4          LOCAL
;  744          1777  4              Q:          REF VECTOR[,BYTE],      ! Pointer to ASCIC data
;  745          1778  4              L;                                  ! Length of data
;  746          1779  4
;  747          1780  4          Q = .ACM + .ACM[ACM$W_NODENAME];
;  748          1781  4          L = .Q[0];
;  749          1782  4          IF .L NEQ 0
;  750          1783  4          THEN
;  751          1784  5              BEGIN
;  752          1785  5              APK[ACR$W_NODENAME] = .P - .APK;
;  753          1786  5              MOVC3(%REF(.L + 1), .Q, .P); ,,, P);
;  754          1787  4              END;
;  755          1788  3          END;
;  756          1789  3
;  757          1790  3
;  758          1791  3      IF .ACM[ACM$W_REMOTEID] NEQ 0
;  759          1792  3      THEN
;  760          1793  4          BEGIN
;  761          1794  4          LOCAL
;  762          1795  4              Q:          REF VECTOR[,BYTE],      ! Pointer to ASCIC data
;  763          1796  4              L;                                  ! Length of data
;  764          1797  4
;  765          1798  4          Q = .ACM + .ACM[ACM$W_REMOTEID];
;  766          1799  4          L = .Q[0];
;  767          1800  4          IF .L NEQ 0
;  768          1801  4          THEN
;  769          1802  5              BEGIN
;  770          1803  5              APK[ACR$W_REMOTEID] = .P - .APK;
;  771          1804  5              MOVC3(%REF(.L + 1), .Q, .P); ,,, P);
;  772          1805  4              END;
;  773          1806  3          END;
;  774          1807  2      END;
;  775          1808  2
;  776          1809  2
;  777          1810  2  IF CH$RCHAR(ACM[ACM$T_TERMINAL]) NEQ 0
;  778          1811  2  THEN
;  779          1812  3      BEGIN
;  780          1813  3      APK[ACR$W_TERMINAL] = .P - .APK;
;  781          1814  3      MOVC3(%REF(CH$RCHAR(ACM[ACM$T_TERMINAL]) + 1), ACM[ACM$T_TERMINAL], .P; ,,, P);
;  782          1815  2      END;
;  783          1816  2
;  784          1817  2
```

```
;  785          1818  2 IF .SJH NEQ 0
;  786          1819  2 THEN
;  787          1820  3     BEGIN
;  788          1821  3     APK[ACR$L_JOBID] = .SJH[SYM$L_ENTRY_NUMBER];
;  789          1822  3     APK[ACR$W_JOBNAME] = .P - .APK;
;  790          1823  3     MOVC3(%REF(CH$RCHAR(SJH[SJH$T_NAME]) + 1), SJH[SJH$T_NAME], .P; ,,, P);
;  791          1824  3     APK[ACR$W_QUEUE] = .P - .APK;
;  792          1825  3     MOVC3(%REF(CH$RCHAR(SMQ[SMQ$T_NAME]) + 1), SMQ[SMQ$T_NAME], .P; ,,, P);
;  793          1826  2     END;
;  794          1827  2
;  795          1828  2
;  796          1829  2 APK[ACR$W_LENGTH] = .P - .APK;
;  797          1830  2 ACR[ACR$W_LENGTH] = .P - .ACR;
;  798          1831  1 END;


                                        013C 00000 IDENT_PACKET:
                                                   .WORD   Save R2,R3,R4,R5,R8                    ; 1647
                        58        02    A7  3C 00002         MOVZWL  2(ACR), APK                    ; 1689
                        58              57  C0 00006         ADDL2   ACR, APK                       ;
                        68      2003    8F  3C 00009         MOVZWL  #8195, (APK)                   ;
                04      A8        28    A6  D0 0000E         MOVL    40(ACM), 4(APK)                ; 1690
                08      A8        30    A6  D0 00013         MOVL    48(ACM), 8(APK)                ; 1691
                0C      A8        0C    A6  D0 00018         MOVL    12(ACM), 12(APK)               ; 1692
                10      A8        04    A6  7D 0001D         MOVQ    4(ACM), 16(APK)                ; 1693
                18      A8        24    A6  9B 00022         MOVZBW  36(ACM), 24(APK)               ; 1695
                                  1C    A8  D4 00027         CLRL    28(APK)                        ; 1699
                                  20    A8  7C 0002A         CLRQ    32(APK)                        ; 1701
                                  28    A8  D4 0002D         CLRL    40(APK)                        ; 1704
                                  2C    A8  B4 00030         CLRW    44(APK)                        ; 1706
                        53        2E    A8  9E 00033         MOVAB   46(R8), P                      ; 1707
              1A        A8              53  A3 00037         SUBW3   APK, P, 26(APK)                ; 1714
              10        A6              0C  3A 0003C         LOCC    #32, #12, 16(ACM)              ; 1715
                        50              0C  C3 00041         SUBL3   R0, #12, R0                    ; 1716
                                        83  90 00045         MOVB    R0, (P)+                       ; 1717
                        63        10    A6  28 00048         MOVC3   R0, 16(ACM), (P)               ; 1719
              1C        A6              08  3B 0004D         SKPC    #0, #8, 28(ACM)                ; 1732
                                        16  13 00052         BEQL    3$                             ;
                        20      FF  A041  91 00054 1$:       CMPB    -1(R0)[R1], #32                ; 1737
                                        03  12 00059         BNEQ    2$                             ;
                        F6              50  F5 0005B         SOBGTR  R0, 1$                         ; 1740
              1C        A8              53  A3 0005E 2$:     SUBW3   APK, P, 28(APK)                ; 1743
                                        83  90 00063         MOVB    R0, (P)+                       ; 1744
                        63              61  28 00066         MOVC3   R0, (R1), (P)                  ; 1746
50                      67              07  EF 0006A 3$:     EXTZV   #1, #7, (ACR), R0              ; 1752
                        50  79000000   8F  78 0006F         ASHL    R0, #2030043136, R0            ;
                                        54  18 00077         BGEQ    6$                             ;
                                  74    A6  B5 00079         TSTW    116(ACM)                       ; 1755
                                        17  13 0007C         BEQL    4$                             ;
                        51        74    A6  3C 0007E         MOVZWL  116(ACM), Q                    ; 1762
                        51              56  C0 00082         ADDL2   ACM, Q                         ;
                        50              61  9A 00085         MOVZBL  (Q), L                         ; 1763
                                        0B  13 00088         BEQL    4$                             ; 1764
              2A        A8              53  A3 0008A         SUBW3   APK, P, 42(APK)                ; 1767
```

```
                                         50  D6 0008F        INCL    R0                            ; 1768
         63            61                50  28 00091        MOVC3   R0, (Q), (P)                  ;
                                   76    A6  B5 00095 4$:    TSTW    118(ACM)                      ; 1773
                                         17  13 00098        BEQL    5$                            ;
                       51          76    A6  3C 0009A        MOVZWL  118(ACM), Q                   ; 1780
                       51                56  C0 0009E        ADDL2   ACM, Q                        ;
                       50                61  9A 000A1        MOVZBL  (Q), L                        ; 1781
                                         0B  13 000A4        BEQL    5$                            ; 1782
    1E   A8            53                58  A3 000A6        SUBW3   APK, P, 30(APK)               ; 1785
                                         50  D6 000AB        INCL    R0                            ; 1786
         63            61                50  28 000AD        MOVC3   R0, (Q), (P)                  ;
                                   78    A6  B5 000B1 5$:    TSTW    120(ACM)                      ; 1791
                                         17  13 000B4        BEQL    6$                            ;
                       51          78    A6  3C 000B6        MOVZWL  120(ACM), Q                   ; 1798
                       51                56  C0 000BA        ADDL2   ACM, Q                        ;
                       50                61  9A 000BD        MOVZBL  (Q), L                        ; 1799
                                         0B  13 000C0        BEQL    6$                            ; 1800
    2C   A8            53                58  A3 000C2        SUBW3   APK, P, 44(APK)               ; 1803
                                         50  D6 000C7        INCL    R0                            ; 1804
         63            61                50  28 000C9        MOVC3   R0, (Q), (P)                  ;
                                   34    A6  95 000CD 6$:    TSTB    52(ACM)                       ; 1810
                                         10  13 000D0        BEQL    7$                            ;
    20   A8            53                58  A3 000D2        SUBW3   APK, P, 32(APK)               ; 1813
                       50          34    A6  9A 000D7        MOVZBL  52(ACM), R0                   ; 1814
                                         50  D6 000DB        INCL    R0                            ;
         63      34    A6                50  28 000DD        MOVC3   R0, 52(ACM), (P)              ;
                                         59  D5 000E2 7$:    TSTL    SJH                           ; 1818
                                         29  13 000E4        BEQL    8$                            ;
                 24    A8          08    A9  D0 000E6        MOVL    8(SJH), 36(APK)               ; 1821
    22   A8            53                58  A3 000EB        SUBW3   APK, P, 34(APK)               ; 1822
                       50        0108    C9  9A 000F0        MOVZBL  264(SJH), R0                  ; 1823
                                         50  D6 000F5        INCL    R0                            ;
         63    0108    C9                50  28 000F7        MOVC3   R0, 264(SJH), (P)             ;
    28   A8            53                58  A3 000FD        SUBW3   APK, P, 40(APK)               ; 1824
                       50        00B0    CB  9A 00102        MOVZBL  176(SMQ), R0                  ; 1825
                                         50  D6 00107        INCL    R0                            ;
         63    00B0    CB                50  28 00109        MOVC3   R0, 176(SMQ), (P)             ;
    02   A8            53                58  A3 0010F 8$:    SUBW3   APK, P, 2(APK)                ; 1829
    02   A7            53                57  A3 00114        SUBW3   ACR, P, 2(ACR)                ; 1830
                                             04 00119        RET                                   ; 1831

; Routine Size:  282 bytes,    Routine Base:  CODE + 0310
```

```
;  800          1832  1 ROUTINE RESOURCE_PACKET: L_RESOURCE_PACKET NOVALUE=
;  801          1833  1
;  802          1834  1 !++
;  803          1835  1 !
;  804          1836  1 ! FUNCTIONAL DESCRIPTION:
;  805          1837  1 !       This routine builds the resource usage packet.
;  806          1838  1 !
;  807          1839  1 ! INPUT PARAMETERS:
;  808          1840  1 !       NONE
;  809          1841  1 !
;  810          1842  1 ! IMPLICIT INPUTS:
;  811          1843  1 !       ACM             - Pointer to mailbox message.
;  812          1844  1 !       ACR             - Pointer to accounting record buffer.
;  813          1845  1 !
;  814          1846  1 ! OUTPUT PARAMETERS:
;  815          1847  1 !       NONE
;  816          1848  1 !
;  817          1849  1 ! IMPLICIT OUTPUTS:
;  818          1850  1 !       Resource packet built in record buffer.
;  819          1851  1 !
;  820          1852  1 ! ROUTINE VALUE:
;  821          1853  1 !       NONE
;  822          1854  1 !
;  823          1855  1 ! SIDE EFFECTS:
;  824          1856  1 !       NONE
;  825          1857  1 !
;  826          1858  1 !--
;  827          1859  1
;  828          1860  2 BEGIN
;  829          1861  2 EXTERNAL REGISTER
;  830          1862  2         ACM = ACCT_ACM_REG:     REF BBLOCK,     ! Pointer to mailbox message
;  831          1863  2         ACR = ACCT_ACR_REG:     REF BBLOCK;     ! Pointer to record buffer
;  832          1864  2 LOCAL
;  833          1865  2         APK:            REF BBLOCK;     ! Pointer to packet
;  834          1866  2 REGISTER
;  835          1867  2         P = 3;                          ! Pointer to free byte
;  836          1868  2
;  837          1869  2
;  838          1870  2 ACM_PACKET(ACR$K_RESOURCE, 0, .ACR, APK);
;  839          1871  2 MOVC3(
;  840          1872  2     %REF($BYTEOFFSET(ACM$L_VOLUMES) + 4 - $BYTEOFFSET(ACM$Q_LOGIN)),
;  841          1873  2     ACM[ACM$Q_LOGIN],
;  842          1874  2     APK[ACR$Q_LOGIN]; ,,, P);
;  843          1875  2 APK[ACR$W_LENGTH] = .P - .APK;
;  844          1876  2 ACR[ACR$W_LENGTH] = .P - .ACR;
;  845          1877  1 END;


                                        013C 00000 RESOURCE_PACKET:
                                                    .WORD   Save R2,R3,R4,R5,R8                     ; 1832
                        58      02  A7  3C 00002            MOVZWL  2(ACR), APK                     ; 1870
                        58          57  C0 00006            ADDL2   ACR, APK                        ;
                        68    2005  8F  3C 00009            MOVZWL  #8197, (APK)                    ;
                04  A8      44  A6      30 28 0000E         MOVC3   #48, 68(ACM), 4(APK)            ; 1874
```

```
                02   A8          53          58  A3 00014        SUBW3   APK, P, 2(APK)                  ; 1875
                02   A7          53          57  A3 00019        SUBW3   ACR, P, 2(ACR)                  ; 1876
                                                 04 0001E        RET                                     ; 1877

; Routine Size:  31 bytes,    Routine Base:  CODE + 042A
```

```
;  847     1878  1 GLOBAL ROUTINE WRITE_USER_ACCOUNTING_RECORD(PACM,PSJH,PSMQ,LENGTH,ADDRESS): NOVALUE=
;  848     1879  1
;  849     1880  1 !++
;  850     1881  1 !
;  851     1882  1 ! FUNCTIONAL DESCRIPTION:
;  852     1883  1 !       This routine builds the user data record.
;  853     1884  1 !
;  854     1885  1 ! INPUT PARAMETERS:
;  855     1886  1 !       PACM            - Pointer to mailbox message.
;  856     1887  1 !       PSJH            - Pointer to SJH or 0.
;  857     1888  1 !       PSMQ            - Pointer to SMQ or 0.
;  858     1889  1 !       LENGTH          - Descriptor for user data.
;  859     1890  1 !       ADDRESS         -
;  860     1891  1 !
;  861     1892  1 ! IMPLICIT INPUTS:
;  862     1893  1 !       NONE
;  863     1894  1 !
;  864     1895  1 ! OUTPUT PARAMETERS:
;  865     1896  1 !       NONE
;  866     1897  1 !
;  867     1898  1 ! IMPLICIT OUTPUTS:
;  868     1899  1 !       NONE
;  869     1900  1 !
;  870     1901  1 ! ROUTINE VALUE:
;  871     1902  1 !       NONE
;  872     1903  1 !
;  873     1904  1 ! SIDE EFFECTS:
;  874     1905  1 !       NONE
;  875     1906  1 !
;  876     1907  1 !--
;  877     1908  1
;  878     1909  2 BEGIN
;  879     1910  2 LOCAL
;  880     1911  2         ACR_BUFFER:     BBLOCK[JBC$K_MAXACCREC],        ! Record buffer
;  881     1912  2         APK:            REF BBLOCK;                     ! Pointer to packet
;  882     1913  2 REGISTER
;  883     1914  2         P = 3;                                          ! Pointer to free byte
;  884     1915  2 GLOBAL REGISTER
;  885     1916  2         ACM = ACCT_ACM_REG:     REF BBLOCK,             ! Pointer to mailbox message
;  886     1917  2         ACR = ACCT_ACR_REG:     REF BBLOCK,             ! Pointer to record buffer
;  887     1918  2         SJH = ACCT_SJH_REG:     REF BBLOCK,             ! Pointer to SJH or 0
;  888     1919  2         SMQ = ACCT_SMQ_REG:     REF BBLOCK;             ! Pointer to SMQ or 0
;  889     1920  2
;  890     1921  2
;  891     1922  2 ACM = .PACM;
;  892     1923  2 ACR = ACR_BUFFER;
;  893     1924  2 SJH = .PSJH;
;  894     1925  2 SMQ = .PSMQ;
;  895     1926  2 ACM_RECORD(ACR$K_USER, 0, CUR_TIME, .ACR);
;  896     1927  2 IDENT_PACKET();
;  897     1928  2 ACM_PACKET(ACR$K_USER_DATA, 0, .ACR, APK);
;  898     1929  2 CH$WCHAR(.LENGTH, APK[ACR$T_USER_DATA]);
;  899     1930  2 MOVC3(LENGTH, .ADDRESS, APK[ACR$T_USER_DATA]+1; ,,, P);
;  900     1931  2 APK[ACR$W_LENGTH] = .P - .APK;
;  901     1932  2 ACR[ACR$W_LENGTH] = .P - .ACR;
;  902     1933  2 WRITE_ACCOUNTING_FILE();
;  903     1934  1 END;
```

```
                                                 0AFC 00000        .ENTRY  WRITE_USER_ACCOUNTING_RECORD, Save R2,R3,-  ; 1878
                                                                           R4,R5,R6,R7,R9,R11                          ;
                          5E      FC00    CE   9E 00002        MOVAB   -1024(SP), SP                               ;
                          56        04    AC   D0 00007        MOVL    PACM, ACM                                   ; 1922
                          57              6E   9E 0000B        MOVAB   ACR_BUFFER, ACR                             ; 1923
                          59        08    AC   D0 0000E        MOVL    PSJH, SJH                                   ; 1924
                          5B        0C    AC   D0 00012        MOVL    PSMQ, SMQ                                   ; 1925
                          67 000C2012     8F   D0 00016        MOVL    #794642, (ACR)                              ; 1926
                    04    A7 00000000'    EF   7D 0001D        MOVQ    CUR_TIME, 4(ACR)                            ;
                FE9D      CF              00   FB 00025        CALLS   #0, IDENT_PACKET                            ; 1927
                          56        02    A7   3C 0002A        MOVZWL  2(ACR), APK                                 ; 1928
                          56              57   C0 0002E        ADDL2   ACR, APK                                    ;
                          66      200B    8F   3C 00031        MOVZWL  #8203, (APK)                                ;
                    04    A6        10    AC   90 00036        MOVB    LENGTH, 4(APK)                              ; 1929
          05    A6        14    BC        10    AC   28 0003B  MOVC3   LENGTH, @ADDRESS, 5(APK)                    ; 1930
          02    A6              53              56   A3 00042  SUBW3   APK, P, 2(APK)                             ; 1931
          02    A7              53              57   A3 00047  SUBW3   ACR, P, 2(ACR)                             ; 1932
                FB66      CF              00   FB 0004C        CALLS   #0, WRITE_ACCOUNTING_FILE                   ; 1933
                                                 04 00051        RET                                             ; 1934

; Routine Size:  82 bytes,    Routine Base:  CODE + 0449
```

```
;  905          1935  1 ROUTINE WRITE_FILE_LINK_RECORD(TYPE,FAB): NOVALUE=
;  906          1936  1
;  907          1937  1 !++
;  908          1938  1 !
;  909          1939  1 ! FUNCTIONAL DESCRIPTION:
;  910          1940  1 !       This routine builds the accounting file forward and back link records.
;  911          1941  1 !
;  912          1942  1 ! INPUT PARAMETERS:
;  913          1943  1 !       TYPE            - Record type (ACR$K_FILE_FL, ACR$K_FILE_BL).
;  914          1944  1 !       FAB             - Pointer to FAB from which to obtain filespec.
;  915          1945  1 !
;  916          1946  1 ! IMPLICIT INPUTS:
;  917          1947  1 !       NONE
;  918          1948  1 !
;  919          1949  1 ! OUTPUT PARAMETERS:
;  920          1950  1 !       NONE
;  921          1951  1 !
;  922          1952  1 ! IMPLICIT OUTPUTS:
;  923          1953  1 !       NONE
;  924          1954  1 !
;  925          1955  1 ! ROUTINE VALUE:
;  926          1956  1 !       NONE
;  927          1957  1 !
;  928          1958  1 ! SIDE EFFECTS:
;  929          1959  1 !       Accounting record written.
;  930          1960  1 !
;  931          1961  1 !--
;  932          1962  1
;  933          1963  2 BEGIN
;  934          1964  2 MAP
;  935          1965  2         FAB:            REF BBLOCK;     ! Pointer to FAB
;  936          1966  2 LOCAL
;  937          1967  2         ACR_BUFFER:     BBLOCK[JBC$K_MAXACCREC],        ! Record buffer
;  938          1968  2         APK:            REF BBLOCK,     ! Pointer to packet
;  939          1969  2         NAM:            REF BBLOCK,     ! Pointer to NAM block
;  940          1970  2         L;                              ! Length of filename
;  941          1971  2 REGISTER
;  942          1972  2         P = 3;                          ! Pointer to free byte
;  943          1973  2 GLOBAL REGISTER
;  944          1974  2         ACR = ACCT_ACR_REG:     REF BBLOCK;     ! Pointer to record buffer
;  945          1975  2
;  946          1976  2
;  947          1977  2 ACR = ACR_BUFFER;
;  948          1978  2 ACM_RECORD(.TYPE, 0, CUR_TIME, .ACR);
;  949          1979  2 ACM_PACKET(ACR$K_FILENAME, 0, .ACR, APK);
;  950          1980  2 P = APK[ACR$T_FILENAME];
;  951          1981  2 NAM = .FAB[FAB$L_NAM];
;  952          1982  2 L = .NAM[NAM$B_RSL];
;  953          1983  2 (.P)<0,8> = .L;
;  954          1984  2 P = .P + 1;
;  955          1985  2 MOVC3(L, .NAM[NAM$L_RSA], .P; ..., P);
;  956          1986  2 APK[ACR$W_LENGTH] = .P - .APK;
;  957          1987  2 ACR[ACR$W_LENGTH] = .P - .ACR;
;  958          1988  2 WRITE_ACCOUNTING_FILE();
;  959          1989  1 END;
```

```
                                     00FC 00000 WRITE_FILE_LINK_RECORD:
                                                .WORD   Save R2,R3,R4,R5,R6,R7               ; 1935
                  5E       FC00   CE  9E 00002  MOVAB   -1024(SP), SP
                  57              6E  9E 00007  MOVAB   ACR_BUFFER, ACR                      ; 1977
                  67  000C2000    8F  D0 0000A  MOVL    #794624, (ACR)                       ; 1978
  67       07     01        04    AC  F0 00011  INSV    TYPE, #1, #7, (ACR)
              04  A7  00000000'   EF  7D 00017  MOVQ    CUR_TIME, 4(ACR)
                  56        02    A7  3C 0001F  MOVZWL  2(ACR), APK                          ; 1979
                  56              57  C0 00023  ADDL2   ACR, APK
                  66      2009    8F  3C 00026  MOVZWL  #8201, (APK)
                  53        04    A6  9E 0002B  MOVAB   4(R6), P                             ; 1980
                  50        08    AC  D0 0002F  MOVL    FAB, R0                              ; 1981
                  50        28    A0  D0 00033  MOVL    40(R0), NAM
                  51        03    A0  9A 00037  MOVZBL  3(NAM), L                            ; 1982
                  83              51  90 0003B  MOVB    L, (P)+                              ; 1983
           63     04  B0          51  28 0003E  MOVC3   L, @4(NAM), (P)                      ; 1985
       02  A6         53          56  A3 00043  SUBW3   APK, P, 2(APK)                       ; 1986
       02  A7         53          57  A3 00048  SUBW3   ACR, P, 2(ACR)                       ; 1987
             FB13     CF          00  FB 0004D  CALLS   #0, WRITE_ACCOUNTING_FILE            ; 1988
                                      04 00052  RET                                          ; 1989

; Routine Size:  83 bytes,    Routine Base:  CODE + 049B
```

```
;  961     1990  1 GLOBAL ROUTINE WRITE_ACCOUNTING_RECORD(SJH,SMQ,ACM,STS): NOVALUE=
;  962     1991  1
;  963     1992  1 !++
;  964     1993  1 !
;  965     1994  1 ! FUNCTIONAL DESCRIPTION:
;  966     1995  1 !       This routine builds and writes an accounting record for a process, a
;  967     1996  1 !       completed batch or symbiont job, or an incomplete job.
;  968     1997  1 !
;  969     1998  1 ! INPUT PARAMETERS:
;  970     1999  1 !       NONE
;  971     2000  1 !
;  972     2001  1 ! IMPLICIT INPUTS:
;  973     2002  1 !       SJH             - Pointer to SJH or 0.
;  974     2003  1 !       SMQ             - Pointer to SMQ or 0.
;  975     2004  1 !       ACM             - Pointer to ACM or 0.
;  976     2005  1 !       STS             - (Optional) Forced completion status.
;  977     2006  1 !
;  978     2007  1 ! OUTPUT PARAMETERS:
;  979     2008  1 !       NONE
;  980     2009  1 !
;  981     2010  1 ! IMPLICIT OUTPUTS:
;  982     2011  1 !       NONE
;  983     2012  1 !
;  984     2013  1 ! ROUTINE VALUE:
;  985     2014  1 !       NONE
;  986     2015  1 !
;  987     2016  1 ! SIDE EFFECTS:
;  988     2017  1 !       Accounting record written.
;  989     2018  1 !
;  990     2019  1 !--
;  991     2020  1
;  992     2021  2 BEGIN
;  993     2022  2 MAP
;  994     2023  2         SJH:            REF BBLOCK,     ! Pointer to SJH
;  995     2024  2         SMQ:            REF BBLOCK;     ! Pointer to SMQ
;  996     2025  2 LOCAL
;  997     2026  2         LACM:           BBLOCK[$BYTEOFFSET(ACM$W_IMAGENAME)+2]; ! Fake message
;  998     2027  2 BUILTIN
;  999     2028  2         ACTUALCOUNT;
; 1000     2029  2
; 1001     2030  2
; 1002     2031  2 IF .SMQ EQL 0
; 1003     2032  2 THEN
; 1004     2033  2     WRITE_PROCESS_RECORD(0, 0, .ACM)
; 1005     2034  2 ELSE
; 1006     2035  2     IF .SMQ[SMQ$V_BATCH]
; 1007     2036  2     THEN
; 1008     2037  2         IF .ACM NEQ 0
; 1009     2038  2         THEN
; 1010     2039  2             WRITE_PROCESS_RECORD(.SJH, .SMQ, .ACM)
; 1011     2040  2         ELSE
; 1012     2041  3             BEGIN
; 1013     2042  3             CH$FILL(0, %ALLOCATION(LACM), LACM);
; 1014     2043  3             LACM[ACM$W_TYPE] = MSG$_DELPROC;
; 1015     2044  3             LACM[ACM$L_UIC] = .SJH[SJH$L_UIC];
; 1016     2045  3             CH$MOVE(SJH$S_USERNAME, SJH[SJH$T_USERNAME], LACM[ACM$T_USERNAME]);
; 1017     2046  3             CH$MOVE(SJH$S_ACCOUNT, SJH[SJH$T_ACCOUNT], LACM[ACM$T_ACCOUNT]);
```

```
;  1018     2047  3              BITVECTOR[LACM[ACM$L_STS], $BITPOSITION(PCB$V_BATCH)] = TRUE;
;  1019     2048  3              COPY_TIME(CUR_TIME, [ACM[ACM$Q_LOGIN]);
;  1020     2049  3              IF ACTUALCOUNT() GTRU 3
;  1021     2050  3              THEN
;  1022     2051  4                  BEGIN
;  1023     2052  4                  LACM[ACM$L_FINALSTS] = .STS;
;  1024     2053  4                  SJH[SJH$L_CONDITION_1] = .STS;
;  1025     2054  4                  SJH[SJH$L_CONDITION_2] = 0;
;  1026     2055  4                  SJH[SJH$L_CONDITION_3] = 0;
;  1027     2056  3                  END;
;  1028     2057  3              WRITE_PROCESS_RECORD(.SJH, .SMQ, LACM);
;  1029     2058  3              END
;  1030     2059  2      ELSE
;  1031     2060  3          BEGIN
;  1032     2061  3          IF ACTUALCOUNT() GTRU 3
;  1033     2062  3          THEN
;  1034     2063  4              BEGIN
;  1035     2064  4              SJH[SJH$L_CONDITION_1] = .STS;
;  1036     2065  4              SJH[SJH$L_CONDITION_2] = 0;
;  1037     2066  4              SJH[SJH$L_CONDITION_3] = 0;
;  1038     2067  3              END;
;  1039     2068  3          IF .(SMQ[SMQ$Q_ACM_BEGTIM]) EQL 0
;  1040     2069  3          THEN
;  1041     2070  3              COPY_TIME(CUR_TIME, SMQ[SMQ$Q_ACM_BEGTIM]);
;  1042     2071  3          WRITE_PRINT_RECORD(.SJH, .SMQ);
;  1043     2072  2          END;
;  1044     2073  1 END;


                                    01FC 00000          .ENTRY  WRITE_ACCOUNTING_RECORD, Save R2,R3,R4,R5,- ; 1990
                                                                R6,R7,R8
                            58 00000000'  EF  9E 00002          MOVAB   CUR_TIME, R8                        ;
                            5E        84  AE  9E 00009          MOVAB   -124(SP), SP                        ;
                            57        08  AC  D0 0000D          MOVL    SMQ, R7                             ; 2031
                                      07  12  00011              BNEQ    1$                                  ;
                                      0C  AC  DD 00013          PUSHL   ACM                                 ; 2033
                                      7E  7C  00016              CLRQ    -(SP)                               ;
                                      52  11  00018              BRB     5$                                  ;
                            56        04  AC  D0 0001A  1$:      MOVL    SJH, R6                             ; 2039
                            50        0C  A7  E9 0001E          BLBC    12(R7), 6$                          ; 2035
                                      0C  AC  D5 00022          TSTL    ACM                                 ; 2037
                                      05  13  00025              BEQL    2$                                  ;
                                      0C  AC  DD 00027          PUSHL   ACM                                 ; 2039
                                      3D  11  0002A              BRB     4$                                  ;
007C  8F        00            6E          00  2C  0002C  2$:      MOVC5   #0, (SP), #0, #124, LACM            ; 2042
                                          6E  00033              ;                                           ;
                            6E          03  B0  00034          MOVW    #3, LACM                            ; 2043
                         0C AE      0144  C6  D0  00037          MOVL    324(R6), LACM+12                    ; 2044
                   10    AE    0148  C6          0C  28  0003D  MOVC3   #12, 328(R6), LACM+16               ; 2045
                   1C    AE      14  A6          08  28  00044  MOVC3   #8, 20(R6), LACM+28                 ; 2046
                         2D    AE      40  8F    88  0004A      BISB2   #64, LACM+45                        ; 2047
                         44    AE          68  7D  0004F          MOVQ    CUR_TIME, LACM+68                   ; 2048
                            03              6C  91  00053          CMPB    (AP), #3                            ; 2049
                                            0F  1B  00056          BLEQU   3$                                  ;
```

```
                    4C   AE        10   AC  D0 00058          MOVL    STS, LACM+76                    ; 2052
                  00DC   C6        10   AC  D0 0005D          MOVL    STS, 220(R6)                    ; 2053
                              00E0  C6   7C 00063             CLRQ    224(R6)                         ; 2054
                                    5E   DD 00067 3$:         PUSHL   SP                              ; 2057
                         7E         56   7D 00069 4$:         MOVQ    R6, -(SP)                       ;
                  0000V  CF         03   FB 0006C 5$:         CALLS   #3, WRITE_PROCESS_RECORD        ;
                                    04   00071               RET                                     ; 2037
                         03         6C   91 00072 6$:         CMPB    (AP), #3                        ; 2061
                                    0E   1B 00075             BLEQU   7$                              ;
                         50   04    AC   D0 00077             MOVL    SJH, R0                         ; 2064
                  00DC   C0   10    AC   D0 0007B             MOVL    STS, 220(R0)                    ;
                              00E0  C0   7C 00081             CLRQ    224(R0)                         ; 2065
                                    14   A7  D5 00085 7$:     TSTL    20(R7)                          ; 2068
                                    04   12 00088             BNEQ    8$                              ;
                        14   A7              68  7D 0008A     MOVQ    CUR_TIME, 20(R7)                ; 2070
                         7E              56  7D 0008E 8$:     MOVQ    R6, -(SP)                       ; 2071
                  0000V  CF              02  FB 00091         CALLS   #2, WRITE_PRINT_RECORD          ;
                                             04 00096         RET                                     ; 2073

; Routine Size:  151 bytes,    Routine Base:  CODE + 04EE
```

```
;  1046     2074  1 ROUTINE WRITE_PRINT_RECORD(PSJH,PSMQ): NOVALUE=
;  1047     2075  1
;  1048     2076  1 !++
;  1049     2077  1 !
;  1050     2078  1 ! FUNCTIONAL DESCRIPTION:
;  1051     2079  1 !       This routine builds the print accounting record.
;  1052     2080  1 !
;  1053     2081  1 ! INPUT PARAMETERS:
;  1054     2082  1 !       NONE
;  1055     2083  1 !
;  1056     2084  1 ! IMPLICIT INPUTS:
;  1057     2085  1 !       PSJH            - Pointer to SJH.
;  1058     2086  1 !       PSMQ            - Pointer to SMQ.
;  1059     2087  1 !
;  1060     2088  1 ! OUTPUT PARAMETERS:
;  1061     2089  1 !       NONE
;  1062     2090  1 !
;  1063     2091  1 ! IMPLICIT OUTPUTS:
;  1064     2092  1 !       NONE
;  1065     2093  1 !
;  1066     2094  1 ! ROUTINE VALUE:
;  1067     2095  1 !       NONE
;  1068     2096  1 !
;  1069     2097  1 ! SIDE EFFECTS:
;  1070     2098  1 !       Print accounting record written.
;  1071     2099  1 !
;  1072     2100  1 !--
;  1073     2101  1
;  1074     2102  2 BEGIN
;  1075     2103  2 LOCAL
;  1076     2104  2         ACM_BUFFER:     BBLOCK[$BYTEOFFSET(ACM$W_USERREQ)],     ! Fake message
;  1077     2105  2         ACR_BUFFER:     BBLOCK[JBC$K_MAXACCREC],        ! Record buffer
;  1078     2106  2         APK:            REF BBLOCK;                     ! Pointer to packet
;  1079     2107  2 GLOBAL REGISTER
;  1080     2108  2         ACM = ACCT_ACM_REG:     REF BBLOCK,     ! Pointer to accounting message
;  1081     2109  2         ACR = ACCT_ACR_REG:     REF BBLOCK,     ! Pointer to record buffer
;  1082     2110  2         SJH = ACCT_SJH_REG:     REF BBLOCK,     ! Pointer to SJH
;  1083     2111  2         SMQ = ACCT_SMQ_REG:     REF BBLOCK;     ! Pointer to SMQ
;  1084     2112  2
;  1085     2113  2
;  1086     2114  2 ACM = ACM_BUFFER;
;  1087     2115  2 SJH = .PSJH;
;  1088     2116  2 SMQ = .PSMQ;
;  1089     2117  2 CH$FILL(0, %ALLOCATION(ACM_BUFFER), .ACM);
;  1090     2118  2 ACM[ACM$L_PID] = .SJH[SJH$L_PID];
;  1091     2119  2 ACM[ACM$L_UIC] = .SJH[SJH$L_UIC];
;  1092     2120  2 ACM[ACM$B_PROCPRI] = .SJH[SJH$B_PRIORITY];
;  1093     2121  2 CH$MOVE(ACM$S_USERNAME, SJH[SJH$T_USERNAME], ACM[ACM$T_USERNAME]);
;  1094     2122  2 CH$MOVE(ACM$S_ACCOUNT, SJH[SJH$T_ACCOUNT], ACM[ACM$T_ACCOUNT]);
;  1095     2123  2
;  1096     2124  2
;  1097     2125  2 ACR = ACR_BUFFER;
;  1098     2126  2 ACM_RECORD(ACR$K_PRINT, 0, CUR_TIME, .ACR);
;  1099     2127  2 IDENT_PACKET();
;  1100     2128  2 ACM_PACKET(ACR$K_PRINT, 0, .ACR, APK);
;  1101     2129  2 APK[ACR$L_PRINTSTS] = .SJH[SJH$L_CONDITION_1];
;  1102     2130  2 COPY_TIME(SJH[SJH$Q_TIME], APK[ACR$Q_QUETIME]);
```

```
;  1103          2131  2 COPY_TIME(SMQ[SMQ$Q_ACM_BEGTIM], APK[ACR$Q_BEGTIME]);
;  1104          2132  2 APK[ACR$L_SYMCPUTIM] = .SMQ[SMQ$L_ACM_SYMCPUTIM];
;  1105          2133  2 APK[ACR$L_PAGECNT] = .SMQ[SMQ$L_ACM_PAGECNT];
;  1106          2134  2 APK[ACR$L_QIOCNT] = .SMQ[SMQ$L_ACM_QIOCNT];
;  1107          2135  2 APK[ACR$L_GETCNT] = .SMQ[SMQ$L_ACM_GETCNT];
;  1108          2136  2 APK[ACR$W_LENGTH] = $BYTEOFFSET(ACR$L_GETCNT) + 4;
;  1109          2137  2 ACR[ACR$W_LENGTH] = .APK + $BYTEOFFSET(ACR$L_GETCNT) + 4 - .ACR;
;  1110          2138  2 WRITE_ACCOUNTING_FILE();
;  1111          2139  2
;  1112          2140  2
;  1113          2141  2 CLEAR_TIME(SMQ[SMQ$Q_ACM_BEGTIM]);
;  1114          2142  2 SMQ[SMQ$L_ACM_SYMCPUTIM] = 0;
;  1115          2143  2 SMQ[SMQ$L_ACM_PAGECNT] = 0;
;  1116          2144  2 SMQ[SMQ$L_ACM_QIOCNT] = 0;
;  1117          2145  2 SMQ[SMQ$L_ACM_GETCNT] = 0;
;  1118          2146  1 END;


                                        0AFC 00000 WRITE_PRINT_RECORD:
                                                   .WORD   Save R2,R3,R4,R5,R6,R7,R9,R11                    ; 2074
                                5E      FBBC    CE  9E 00002       MOVAB   -1092(SP), SP                    ;
                                56        BC    AD  9E 00007       MOVAB   ACM_BUFFER, ACM                  ; 2114
                                59        04    AC  D0 0000B       MOVL    PSJA, SJH                        ; 2115
                                5B        08    AC  D0 0000F       MOVL    PSMQ, SMQ                        ; 2116
    0044    8F          00          6E          00  2C 00013       MOVC5   #0, (SP), #0, #68, (ACM)         ; 2117
                                                  66   0001A
                              28    A6    0130    C9  D0 0001B       MOVL    304(SJH), 40(ACM)                ; 2118
                              0C    A6    0144    C9  D0 00021       MOVL    324(SJH), 12(ACM)                ; 2119
                              24    A6    017D    C9  90 00027       MOVB    381(SJH), 36(ACM)                ; 2120
                        10    A6  0148    C9        0C  28 0002D       MOVC3   #12, 328(SJH), 16(ACM)           ; 2121
                        1C    A6    14    A9        08  28 00034       MOVC3   #8, 20(SJH), 28(ACM)             ; 2122
                                57          6E      9E  0003A       MOVAB   ACR_BUFFER, ACR                  ; 2125
                                67 000C2010 8F      D0  0003D       MOVL    #794640, (ACR)                   ; 2126
                              04    A7 00000000' EF     7D  00044       MOVQ    CUR_TIME, 4(ACR)
                            FD3A    CF          00      FB  0004C       CALLS   #0, IDENT_PACKET                 ; 2127
                                50        02    A7  3C  00051       MOVZWL  2(ACR), APK                      ; 2128
                                50          57      C0  00055       ADDL2   ACR, APK
                                60      2011    8F  3C  00058       MOVZWL  #8209, (APK)
                              04    A0    00DC    C9  D0 0005D       MOVL    220(SJH), 4(APK)                 ; 2129
                              08    A0    013C    C9  7D 00063       MOVQ    316(SJH), 8(APK)                 ; 2130
                              10    A0      14    AB  7D 00069       MOVQ    20(SMQ), 16(APK)                 ; 2131
                              18    A0      28    AB  D0 0006E       MOVL    40(SMQ), 24(APK)                 ; 2132
                              1C    A0      20    AB  7D 00073       MOVQ    32(SMQ), 28(APK)                 ; 2133
                              24    A0      1C    AB  D0 00078       MOVL    28(SMQ), 36(APK)                 ; 2135
                              02    A0            28  B0 0007D       MOVW    #40, 2(APK)                      ; 2136
                                50          57      C2  00081       SUBL2   ACR, R0                          ; 2137
                        02    A7            50      28  A1 00084       ADDW3   #40, R0, 2(ACR)
                            F9ED    CF          00      FB  00089       CALLS   #0, WRITE_ACCOUNTING_FILE        ; 2138
                                          14    AB  7C  0008E       CLRQ    20(SMQ)                          ; 2141
                                          1C    AB  7C  00091       CLRQ    28(SMQ)                          ; 2145
                                          24    AB  7C  00094       CLRQ    36(SMQ)                          ; 2144
                                                    04  00097       RET                                      ; 2146

; Routine Size:  152 bytes,    Routine Base:  CODE + 0585
```

```
;  1120          2147  1 ROUTINE WRITE_PROCESS_RECORD(PSJH,PSMQ,PACM): NOVALUE=
;  1121          2148  1
;  1122          2149  1 !++
;  1123          2150  1 !
;  1124          2151  1 ! FUNCTIONAL DESCRIPTION:
;  1125          2152  1 !       This routine builds process deletion, process purge, image deletion,
;  1126          2153  1 !       image purge, login failure, and system initialization records.
;  1127          2154  1 !
;  1128          2155  1 ! INPUT PARAMETERS:
;  1129          2156  1 !       NONE
;  1130          2157  1 !
;  1131          2158  1 ! IMPLICIT INPUTS:
;  1132          2159  1 !       PSJH            - Pointer to SJH or 0.
;  1133          2160  1 !       PSMQ            - Pointer to SMQ or 0.
;  1134          2161  1 !       PACM            - Pointer to mailbox message.
;  1135          2162  1 !
;  1136          2163  1 ! OUTPUT PARAMETERS:
;  1137          2164  1 !       NONE
;  1138          2165  1 !
;  1139          2166  1 ! IMPLICIT OUTPUTS:
;  1140          2167  1 !       NONE
;  1141          2168  1 !
;  1142          2169  1 ! ROUTINE VALUE:
;  1143          2170  1 !       NONE
;  1144          2171  1 !
;  1145          2172  1 ! SIDE EFFECTS:
;  1146          2173  1 !       NONE
;  1147          2174  1 !
;  1148          2175  1 !--
;  1149          2176  1
;  1150          2177  2 BEGIN
;  1151          2178  2 LOCAL
;  1152          2179  2         ACR_BUFFER:     BBLOCK[JBC$K_MAXACCREC],        ! Record buffer
;  1153          2180  2         TYPE,                                   ! Record type
;  1154          2181  2         SUBTYPE;                                ! Record subtype
;  1155          2182  2 GLOBAL REGISTER
;  1156          2183  2         ACM = ACCT_ACM_REG:     REF BBLOCK,     ! Pointer to mailbox message
;  1157          2184  2         ACR = ACCT_ACR_REG:     REF BBLOCK,     ! Pointer to record buffer
;  1158          2185  2         SJH = ACCT_SJH_REG:     REF BBLOCK,     ! Pointer to SJH or 0
;  1159          2186  2         SMQ = ACCT_SMQ_REG:     REF BBLOCK;     ! Pointer to SMQ or 0
;  1160          2187  2
;  1161          2188  2
;  1162          2189  2 ACM = .PACM;
;  1163          2190  2 ACR = ACR_BUFFER;
;  1164          2191  2 SJH = .PSJH;
;  1165          2192  2 SMQ = .PSMQ;
;  1166          2193  2 IF .SJH NEQ 0 THEN ACM[ACM$L_FINALSTS] = .SJH[SJH$L_CONDITION_1];
;  1167          2194  2 SUBTYPE = 0;
;  1168          2195  2 IF
;  1169          2196  3     BEGIN
;  1170          2197  3     CASE .ACM[ACM$W_TYPE] FROM MSG$_DELPROC TO MSG$_PURIMAG OF
;  1171          2198  3         SET
;  1172          2199  3
;  1173          2200  3         [INRANGE, OUTRANGE]:
;  1174          2201  3             RETURN;
;  1175          2202  3
;  1176          2203  3 !+
```

```
;  1177     2204  3 !
;  1178     2205  3 ! DELPROC messages generate one of the following accounting records:
;  1179     2206  3 !
;  1180     2207  3 !    SYSINIT    System Initialization; the STARTUP process terminated
;  1181     2208  3 !    LOGFAIL    Login Failure; LOGINOUT terminated with an authorization error
;  1182     2209  3 !    PRCDEL     Normal process termination
;  1183     2210  3 !
;  1184     2211  3 ! Account names starting with a binary null are special, reserved to
;  1185     2212  3 ! Digital, account names.  These special account names are used to determine
;  1186     2213  3 ! what kind to accounting record to generate here.
;  1187     2214  3 !
;  1188     2215  3 ! The system STARTUP process starts out life with an account name of all
;  1189     2216  3 ! binary nulls.  This is changed to a single binary null followed by
;  1190     2217  3 ! '<start>' when it gets set logged in by LOGINOUT.  Furthermore, the
;  1191     2218  3 ! STARTUP process has no terminal and a username of SYSTEM.  These
;  1192     2219  3 ! characteristics are checked and, if met, cause a SYSINIT record.
;  1193     2220  3 !
;  1194     2221  3 ! A login failure has an account name starting with a single binary
;  1195     2222  3 ! null followed by some descriptive keyword enclosed by <>'s.  This
;  1196     2223  3 ! special account name is set up by LOGINOUT whenever it must terminate
;  1197     2224  3 ! due to an authorization failure.  Account names of this special
;  1198     2225  3 ! form cause a LOGFAIL record.  The following special account name
;  1199     2226  3 ! descriptive keywords are currently used:
;  1200     2227  3 !
;  1201     2228  3 !    <batch>    Batch job login failure
;  1202     2229  3 !    <det>      Detached process login failure
;  1203     2230  3 !    <login>    Interactive login failure
;  1204     2231  3 !    <net>      Network login failure
;  1205     2232  3 !
;  1206     2233  3 ! Otherwise, a PRCDEL record is generated.
;  1207     2234  3 !-
;  1208     2235  3
;  1209     2236  4         [MSG$_DELPROC]:
;  1210     2237  4             BEGIN
;  1211     2238  4             MACRO
;  1212     2239  4                 SYSINIT_ACCOUNT = %STRING(%CHAR(0), '<start>')%;
;  1213     2240  4             LOCAL
;  1214     2241  4                 NON_NULLS;
;  1215     2242  4             SKPC(%REF(0), %REF(ACM$S_ACCOUNT), ACM[ACM$T_ACCOUNT]; NON_NULLS);
;  1216     2243  5             IF (.NON_NULLS EQL 0
;  1217     2244  5                     OR
;  1218     2245  5                 CH$EQL(
;  1219     2246  5                 ACM$S_ACCOUNT, ACM[ACM$T_ACCOUNT],
;  1220     2247  5                 %CHARCOUNT(SYSINIT_ACCOUNT), UPLIT BYTE(SYSINIT_ACCOUNT),
;  1221     2248  4                 %C' '))
;  1222     2249  4             AND CH$RCHAR(ACM[ACM$T_TERMINAL]) EQL 0
;  1223     2250  4             AND CH$EQL(
;  1224     2251  4                 ACM$S_USERNAME, ACM[ACM$T_USERNAME],
;  1225     2252  4                 %CHARCOUNT('SYSTEM'), UPLIT BYTE('SYSTEM'),
;  1226     2253  4                 %C' ')
;  1227     2254  4             THEN
;  1228     2255  5                 BEGIN
;  1229     2256  5                 ACM_RECORD(ACR$K_SYSINIT, 0, CUR_TIME, .ACR);
;  1230     2257  5                 IDENT_PACKET();
;  1231     2258  5                 RESOURCE_PACKET();
;  1232     2259  5                 WRITE_ACCOUNTING_FILE();
;  1233     2260  4                 RETURN;
;  1234     2261  4                 END;
```

```
;  1234     2261  5              IF (.NON_NULLS EQL 0
;  1235     2262  5                  AND
;  1236     2263  5                  CH$RCHAR(ACM[ACM$T_TERMINAL]) NEQ 0)
;  1237     2264  4              OR .NON_NULLS EQL ACM$S_ACCOUNT - 1
;  1238     2265  4              THEN
;  1239     2266  5                  BEGIN
;  1240     2267  5                  TYPE = ACR$K_LOGFAIL;
;  1241     2268  5                  FALSE
;  1242     2269  5                  END
;  1243     2270  4              ELSE
;  1244     2271  5                  BEGIN
;  1245     2272  5                  TYPE = ACR$K_PRCDEL;
;  1246     2273  5                  TRUE
;  1247     2274  5                  END
;  1248     2275  3              END;
;  1249     2276  3
;  1250     2277  3          [MSG$_PURPROC]:
;  1251     2278  4              BEGIN
;  1252     2279  4              TYPE = ACR$K_PRCPUR;
;  1253     2280  4              TRUE
;  1254     2281  3              END;
;  1255     2282  3
;  1256     2283  3          [MSG$_DELIMAG]:
;  1257     2284  4              BEGIN
;  1258     2285  4              TYPE = ACR$K_IMGDEL;
;  1259     2286  4              TRUE
;  1260     2287  3              END;
;  1261     2288  3
;  1262     2289  3          [MSG$_PURIMAG]:
;  1263     2290  4              BEGIN
;  1264     2291  4              TYPE = ACR$K_IMGPUR;
;  1265     2292  4              TRUE
;  1266     2293  3              END;
;  1267     2294  3
;  1268     2295  3          TES
;  1269     2296  3      END
;  1270     2297  2  THEN
;  1271     2298  3      BEGIN
;  1272     2299  3      IF CH$RCHAR(ACM[ACM$T_TERMINAL]) NEQ 0
;  1273     2300  3      THEN
;  1274     2301  3          SUBTYPE = ACR$K_INTERACTIVE
;  1275     2302  3
;  1276     2303  3      ELSE IF .BITVECTOR[ACM[ACM$L_STS], $BITPOSITION(PCB$V_BATCH)]
;  1277     2304  3      THEN
;  1278     2305  3          SUBTYPE = ACR$K_BATCH
;  1279     2306  3
;  1280     2307  3      ELSE IF .BITVECTOR[ACM[ACM$L_STS], $BITPOSITION(PCB$V_NETWRK)]
;  1281     2308  3      THEN
;  1282     2309  3          SUBTYPE = ACR$K_NETWORK
;  1283     2310  3
;  1284     2311  3      ELSE IF .ACM[ACM$L_OWNER] NEQ 0
;  1285     2312  3      THEN
;  1286     2313  3          SUBTYPE = ACR$K_SUBPROCESS
;  1287     2314  3
;  1288     2315  3      ELSE
;  1289     2316  3          SUBTYPE = ACR$K_DETACHED;
;  1290     2317  2      END;
```

```
;  1291          2318  2
;  1292          2319  2
;  1293          2320  2 ACM_RECORD(.TYPE, .SUBTYPE, CUR_TIME, .ACR);
;  1294          2321  2 IDENT_PACKET();
;  1295          2322  2 RESOURCE_PACKET();
;  1296          2323  2
;  1297          2324  2
;  1298          2325  3 IF ONEOF_(.TYPE, BMSK_(ACR$K_IMGPUR, ACR$K_IMGDEL))
;  1299          2326  2 THEN
;  1300          2327  3     BEGIN
;  1301          2328  3     LOCAL
;  1302          2329  3         APK:            REF BBLOCK,             ! Pointer to packet
;  1303          2330  3         Q:              REF VECTOR[,BYTE];      ! Pointer to image name string
;  1304          2331  3     REGISTER
;  1305          2332  3         P = 3;                                  ! Pointer to free byte
;  1306          2333  3
;  1307          2334  3
;  1308          2335  3     ACM_PACKET(ACR$K_IMAGENAME, 0, .ACR, APK);
;  1309          2336  3     Q = .ACM + .ACM[ACM$W_IMAGENAME];
;  1310          2337  3     MOVC3(%REF(.Q[0] + 1), .Q, APK[ACR$T_IMAGENAME]; ,,, P);
;  1311          2338  3     APK[ACR$W_LENGTH] = .P - .APK;
;  1312          2339  3     ACR[ACR$W_LENGTH] = .P - .ACR;
;  1313          2340  2     END;
;  1314          2341  2
;  1315          2342  2
;  1316          2343  2 WRITE_ACCOUNTING_FILE();
;  1317          2344  1 END;


                                3E  74  72  61  74  73  3C  00  0061D P.AAC:  .ASCII  <0>\<start>\                    ;
                                    4D  45  54  53  59  53  00625 P.AAD:  .ASCII  \SYSTEM\                           ;


                                                    OFFC 00000 WRITE_PROCESS_RECORD:
                                                                       .WORD   Save R2,R3,R4,R5,R6,R7,R8,R9,R10,R11    ; 2147
                                                    5A      FCDF    CF  9E 00002           MOVAB   IDENT_PACKET, R10
                                                    5E      FC00    CE  9E 00007           MOVAB   -1024(SP), SP
                                                    56        0C    AC  D0 0000C           MOVL    PACM, ACM               ; 2189
                                                    57              6E  9E 00010           MOVAB   ACR_BUFFER, ACR         ; 2190
                                                    59        04    AC  D0 00013           MOVL    PSJH, SJH               ; 2191
                                                    5B        08    AC  D0 00017           MOVL    PSMQ, SMQ               ; 2192
                                                                    59  D5 0001B           TSTL    SJH                     ; 2193
                                                                    06  13 0001D           BEQL    1$
                                                4C  A6      00DC    C9  D0 0001F           MOVL    220(SJH), 76(ACM)
                                                                    54  D4 00025 1$:       CLRL    SUBTYPE                 ; 2194
                                                      0A            66  AF 00027           CASEW   (ACM), #3, #10          ; 2197
                                0101          0101          0017      0002B 2$:          .WORD   3$-2$,-
                                0101          0101          0101      00033                     20$-2$,-
                                              007B          0076      0071  0003B               20$-2$,-
                                                                                                20$-2$,-
                                                                                                20$-2$,-
                                                                                                20$-2$,-
                                                                                                20$-2$,-
                                                                                                20$-2$,-
                                                                                                10$-2$,-
```

```
                                                          11$-2$,-                                  ;
                                                          12$-2$                                    ;
                                      04 00041           RET                                        ; 2201
         1C   A6        08        00  3B 00042 3$:       SKPC    #0, #8, 28(ACM)                    ; 2241
                        58        50  D0 00047           MOVL    R0, R8                             ;
                                  55  D4 0004A           CLRL    R5                                 ; 2242
                                  58  D5 0004C           TSTL    NON_NULLS                          ;
                                  04  12 0004E           BNEQ    4$                                 ;
                                  55  D6 00050           INCL    R5                                 ;
                                  08  11 00052           BRB     5$                                 ;
         98   AF    1C  A6        08  29 00054 4$:       CMPC3   #8, 28(ACM), P.AAC                 ; 2245
                                  29  12 0005A           BNEQ    6$                                 ;
                             34   A6  95 0005C 5$:       TSTB    52(ACM)                            ; 2248
                                  24  12 0005F           BNEQ    6$                                 ;
    06        20    10  A6        0C  2D 00061           CMPC5   #12, 16(ACM), #32, #6, P.AAD       ; 2250
                             91   AF     00067                                                      ;
                                  1A  12 00069           BNEQ    6$                                 ;
                        67 000C200A   8F  D0 0006B       MOVL    #794634, (ACR)                     ; 2255
                     04 A7 00000000'  EF  7D 00072       MOVQ    CUR_TIME, 4(ACR)                   ;
                        6A        00  FB 0007A           CALLS   #0, IDENT_PACKET                   ; 2256
                  011A  CA        00  FB 0007D           CALLS   #0, RESOURCE_PACKET                ; 2257
                           00A2   31 00082               BRW     19$                                ; 2258
                        05        55  E9 00085 6$:       BLBC    R5, 7$                             ; 2261
                             34   A6  95 00088           TSTB    52(ACM)                            ; 2263
                                  05  12 0008B           BNEQ    8$                                 ;
                        07        58  D1 0008D 7$:       CMPL    NON_NULLS, #7                      ; 2264
                                  05  12 00090           BNEQ    9$                                 ;
                        52        07  D0 00092 8$:       MOVL    #7, TYPE                           ; 2267
                                  3D  11 00095           BRB     18$                                ;
                        52        01  D0 00097 9$:       MOVL    #1, TYPE                           ; 2272
                                  0D  11 0009A           BRB     13$                                ;
                        52        02  D0 0009C 10$:      MOVL    #2, TYPE                           ; 2279
                                  08  11 0009F           BRB     13$                                ;
                        52        03  D0 000A1 11$:      MOVL    #3, TYPE                           ; 2285
                                  03  11 000A4           BRB     13$                                ;
                        52        04  D0 000A6 12$:      MOVL    #4, TYPE                           ; 2291
                             34   A6  95 000A9 13$:      TSTB    52(ACM)                            ; 2299
                                  05  13 000AC           BEQL    14$                                ;
                        54        01  D0 000AE           MOVL    #1, SUBTYPE                        ; 2301
                                  21  11 000B1           BRB     18$                                ;
              05    2D  A6        06  E1 000B3 14$:      BBC     #6, 45(ACM), 15$                   ; 2303
                        54        04  D0 000B8           MOVL    #4, SUBTYPE                        ; 2305
                                  17  11 000BB           BRB     18$                                ;
              05    2E  A6        05  E1 000BD 15$:      BBC     #5, 46(ACM), 16$                   ; 2307
                        54        05  D0 000C2           MOVL    #5, SUBTYPE                        ; 2309
                                  0D  11 000C5           BRB     18$                                ;
                             30   A6  D5 000C7 16$:      TSTL    48(ACM)                            ; 2311
                                  05  13 000CA           BEQL    17$                                ;
                        54        02  D0 000CC           MOVL    #2, SUBTYPE                        ; 2313
                                  03  11 000CF           BRB     18$                                ;
                        54        03  D0 000D1 17$:      MOVL    #3, SUBTYPE                        ; 2316
                        67 000C2000   8F  D0 000D4 18$:  MOVL    #794624, (ACR)                     ; 2320
         67         07            01  52  F0 000DB       INSV    TYPE, #1, #7, (ACR)                ;
    01   A7         04            00  54  F0 000E0       INSV    SUBTYPE, #0, #4, 1(ACR)            ;
                     04 A7 00000000'  EF  7D 000E6       MOVQ    CUR_TIME, 4(ACR)                   ;
                        6A        00  FB 000EE           CALLS   #0, IDENT_PACKET                   ; 2321
                  011A  CA        00  FB 000F1           CALLS   #0, RESOURCE_PACKET                ; 2322
```

```
                50 18000000   8F              52  78 000F6          ASHL    TYPE, #402653184, R0                    ; 2325
                                              27  18 000FE          BGEQ    19$                                     ;
                                    59    02  A7  3C 00100          MOVZWL  2(ACR), APK                             ; 2335
                                    59        57  C0 00104          ADDL2   ACR, APK                                ;
                                    69  2007  8F  3C 00107          MOVZWL  #8199, (APK)                            ;
                                    51    7A  A6  3C 0010C          MOVZWL  122(ACM), Q                             ; 2336
                                    51        56  C0 00110          ADDL2   ACM, Q                                  ;
                                    50        61  9A 00113          MOVZBL  (Q), R0                                 ; 2337
                                              50  D6 00116          INCL    R0                                      ;
              04    A9              61        50  28 00118          MOVC3   R0, (Q), 4(APK)                         ;
              02    A9              53        59  A3 0011D          SUBW3   APK, P, 2(APK)                          ; 2338
              02    A7              53        57  A3 00122          SUBW3   ACR, P, 2(ACR)                          ; 2339
                        FCF0  CA              00  FB 00127 19$:     CALLS   #0, WRITE_ACCOUNTING_FILE               ; 2343
                                              04  0012C 20$:     RET                                             ; 2344

; Routine Size:  301 bytes,    Routine Base:  CODE + 062B
```

```
;  1319     2345  1 GLOBAL ROUTINE PROCESS_ACCOUNTING: NOVALUE=
;  1320     2346  1
;  1321     2347  1 !++
;  1322     2348  1 !
;  1323     2349  1 ! FUNCTIONAL DESCRIPTION:
;  1324     2350  1 !       This routine processes the message types:
;  1325     2351  1 !               MSG$_PURPROC            process purge
;  1326     2352  1 !               MSG$_DELIMAG            image deletion
;  1327     2353  1 !               MSG$_PURIMAG            image purge
;  1328     2354  1 !       by writing an accounting record.
;  1329     2355  1 !
;  1330     2356  1 ! INPUT PARAMETERS:
;  1331     2357  1 !       NONE
;  1332     2358  1 !
;  1333     2359  1 ! IMPLICIT INPUTS:
;  1334     2360  1 !       MBX             - Pointer to buffered mailbox message.
;  1335     2361  1 !
;  1336     2362  1 ! OUTPUT PARAMETERS:
;  1337     2363  1 !       NONE
;  1338     2364  1 !
;  1339     2365  1 ! IMPLICIT OUTPUTS:
;  1340     2366  1 !       NONE
;  1341     2367  1 !
;  1342     2368  1 ! ROUTINE VALUE:
;  1343     2369  1 !       NONE
;  1344     2370  1 !
;  1345     2371  1 ! SIDE EFFECTS:
;  1346     2372  1 !       Accounting record written.
;  1347     2373  1 !
;  1348     2374  1 !--
;  1349     2375  1
;  1350     2376  2 BEGIN
;  1351     2377  2 LOCAL
;  1352     2378  2         SJH_N,                          ! Record number of SJH
;  1353     2379  2         SMQ_N;                          ! Record number of SMQ
;  1354     2380  2
;  1355     2381  2
;  1356     2382  2 IF
;  1357     2383  3     BEGIN
;  1358     2384  3     IF .BITVECTOR[MBX[ACM$L_STS], $BITPOSITION(PCB$V_BATCH)]
;  1359     2385  3     THEN
;  1360     2386  3         FIND_PROCESS_DATA(
;  1361     2387  3             PDE_K_BATCH, .MBX[ACM$L_PID], FALSE;
;  1362     2388  3             , SMQ_N, SJH_N)
;  1363     2389  3     ELSE
;  1364     2390  3         FALSE
;  1365     2391  3     END
;  1366     2392  2 THEN
;  1367     2393  3     BEGIN
;  1368     2394  3     LOCK_QUEUE_FILE();
;  1369     2395  3     WRITE_PROCESS_RECORD(
;  1370     2396  3         READ_RECORD(.SJH_N),
;  1371     2397  3         READ_RECORD(.SMQ_N),
;  1372     2398  3         .MBX);
;  1373     2399  3     UNLOCK_QUEUE_FILE();
;  1374     2400  3     END
;  1375     2401  2 ELSE
```

```
; 1376        2402  2     WRITE_PROCESS_RECORD(0, 0, .MBX);
; 1377        2403  1 END;


                                                0E0C 00000          .ENTRY  PROCESS_ACCOUNTING, Save R2,R3,R9,R10,R11    ; 2345
                                      53 00000000G  EF   9E 00002   MOVAB   READ_RECORD, R3                              ;
                                      52 00000000'  EF   9E 00009   MOVAB   MBX, R2                                      ;
                                      50            62   D0 00010   MOVL    MBX, R0                                     ; 2384
                                35          2D      A0   06   E1 00013   BBC     #6, 45(R0), 1$                          ;
                                                     7E   D4   00018   CLRL    -(SP)                                   ; 2386
                                                28   A0   DD   0001A   PUSHL   40(R0)                                   ; 2387
                                                     01   DD   0001D   PUSHL   #1                                       ; 2386
                                   00000000G    EF        03   FB   0001F   CALLS   #3, FIND_PROCESS_DATA               ;
                                                24        50   E9   00026   BLBC    R0, 1$                              ;
                                   00000000G    EF        00   FB   00029   CALLS   #0, LOCK_QUEUE_FILE                 ; 2394
                                                          62   DD   00030   PUSHL   MBX                                 ; 2398
                                                          5A   DD   00032   PUSHL   SMQ_N                               ; 2397
                                                63        01   FB   00034   CALLS   #1, READ_RECORD                     ;
                                                          50   DD   00037   PUSHL   R0                                  ;
                                                          5B   DD   00039   PUSHL   SJH_N                               ; 2396
                                                63        01   FB   0003B   CALLS   #1, READ_RECORD                     ;
                                                          50   DD   0003E   PUSHL   R0                                  ;
                                      FE8E      CF        03   FB   00040   CALLS   #3, WRITE_PROCESS_RECORD            ;
                                   00000000G    EF        00   FB   00045   CALLS   #0, UNLOCK_QUEUE_FILE               ; 2399
                                                          04   00048   RET                                             ; 2382
                                                          62   DD   0004D 1$:  PUSHL   MBX                             ; 2402
                                                          7E   7C   0004F   CLRQ    -(SP)                               ;
                                      FE7D      CF        03   FB   00051   CALLS   #3, WRITE_PROCESS_RECORD            ;
                                                          04   00056   RET                                             ; 2403

; Routine Size:  87 bytes,    Routine Base:  CODE + 0758
```

```
; 1379        2404  1 END
; 1380        2405  0 ELUDOM


                                                        .EXTRN  LIB$SIGNAL

;                               PSECT SUMMARY
;
;       Name                    Bytes                           Attributes
;
;  COMMON                         5024  NOVEC,  WRT,  RD ,NOEXE,NOSHR,  LCL,  REL,  OVR,NOPIC,ALIGN(2)
;  CODE                           1967  NOVEC,NOWRT,  RD ,  EXE,NOSHR,  LCL,  REL,  CON,NOPIC,ALIGN(2)


;                             Library Statistics
;
;                                       -------- Symbols --------      Pages       Processing
;       File                            Total    Loaded   Percent      Mapped      Time
;
;  _$255$DUA28:[SYSLIB]LIB.L32;1         18619       220         1        1000        00:01.5



;                                       COMMAND QUALIFIERS

;       BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LIS$:ACCOUNTNG/OBJ=OBJ$:ACCOUNTNG MSRC$:ACCOUNTNG/UPDATE=(ENH$:ACCOUNTNG)

; Size:          1928 code + 5063 data bytes
; Run Time:          00:39.4
; Elapsed Time:      02:39.7
; Lines/CPU Min:      3661
; Lexemes/CPU-Min: 46131
; Memory Used:   392 pages
; Compilation Complete
```

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XFDEF
FOR

LASNDLDRQ
LIS

LABUFFER
LIS

JOBCTL

JOBCTL
MAP

JOBCTLDEF
REQ

DRSUP
LIS

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SDL

IOSUP

ACCOUNTNG
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