```
SEQ PG LIN  LABEL  OP    OPERANDS                                                SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR

101               JOB   FORTRAN COMPILER -- RESORT 1 PHASE -- PHASE 47
102               CTL   6611
103         *
104         * EXTERNALLY REFERENCED SYMBOLS ARE MARKED WITH ASTERISK IN COLUMN 1.
105         *
106         * AN AREA IS MADE AVAILABLE FOR A TABLE TO ASSIST IN RESORTING
107         * THE STATEMENTS INTO THEIR ORIGINAL ORDER.
108         *
109         X1     EQU   89                                                      0089
110         X2     EQU   94                                                      0094
111         X3     EQU   99                                                      0099
112         *
113         * STUFF IN THE RESIDENT AREA
114         *
115         DOCNT  EQU   151  COUNT OF DO STATEMENTS                            0151
116         NSTMTS EQU   183  NUMBER OF STATEMENTS, INCLUDING GENERATED STOP    0183
117         *
118               EXT00   SNAPSH, LOADNX, CDOVLY                                          MACRO
119         SNAPSH EQU   333                                                    0333        GEN
120         PHASLD EQU   381                                                    0381        GEN
121         SNAPEX EQU   564                                                    0564        GEN
122         LOADNX EQU   700   CARD OVERLAY UNLESS NOP                         0700        GEN
123         CDOVLY EQU   700   1 IF LOADING FROM CARDS, N IF FROM TAPE         0700        GEN
124         TPREAD EQU   704   LOAD OVERLAY FROM TAPE                          0704        GEN
125         TPERR  EQU   728                                                    0728        GEN
126         *
127               EXT03   START, TOP OF PHASE 3                                     MACRO
128         BEGIN3 EQU   838                                                    0838        GEN
129         TOP3   EQU   2600                                                   2600        GEN
130               EXT49   STUFF IN RESORT THREE PHASE -- 49                          MACRO
131         TABEL  EQU   2499                                                   2499        GEN
132         *
133         SORTAB EQU   TABEL  SORT TABLE                                      2499
134         *
135         PHAS47 LDPH  RESORT ONE,LOADAD,BEGN47,,,47                                  MACRO
            * PHAZ   LDPH [PHASID],LOADAD,ENTAD[,SKIPFG,SKIP],[NUMBER][,HALT]        GEN
            *        XFR  PHASZ     PROHIBITED IN A MACRO                           GEN
            *                                                                       GEN
            * LOAD A BLOCK                                                         GEN
            *                                                                       GEN
136         )6J004 EQU   110  PHASE ID                                          0110        GEN
137         )6K004 EQU   700  LOAD NEXT PHASE                                   0700        GEN
138         )6L004 EQU   704  TAPE READ INSTRUCTION                             0704        GEN
139         )6M004 EQU   728  TAPE ERROR HANDLER                                0728        GEN
            *                                                                       GEN
140               ORG   201                                                           0201
141         PHAS47 BSS   )8J004,G                                           5   0201  B 257 G     GEN      1   257
142               NOP     TO PATCH IN TRAPS FOR DEBUGGING                   1   0206  N           GEN      1
143         )0J004 EQU   *&1                                                    0207              GEN
144               LCA   )9J004,)6J004                                       7   0207  L 282 110   GEN      1   282     110
```

```
SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR

145            BCE   )1J004,)6K004,1    Q: LOADING FROM CARDS?             8  0214  B 250 700 1 GEN      1   250     700
146            BCE   )1J004,)6L004&4,0  Q: LOADING FROM AUTOCODER TAPE?     8  0222  B 250 708 0 GEN      1   250     708
147            RTW   1,LOADAD           READ THE BLOCK                     8  0230  L %U1 838 R GEN      1   %U1     838
148            BER   )6M004             Q: TAPE ERROR?                     5  0238  B 728 L     GEN      2   728
149            CS    BEGN47,)9R004      ENTER THE BLOCK                    7  0243  / /75 286   GEN      2  1175     286
150       )1J004 CS    )6K004,)9R004      LOAD CARDS OR AUTOCODER TAPE       7  0250  / 700 286   GEN      2   700     286
151       )8J004 SW    )9R004                                                4  0257  , 286       GEN      2   286
152            MU    %T0,)8K004,W                                          8  0261  M %T0 273 W GEN      2   %T0     273
153            H     )0J004                                                4  0269  . 207       GEN      2   207
154       )8K004 EQU   *&1                                                   0273              GEN
155       )9J004 DCW   @RESORT ONE@          PHASE ID                     10  0282              GEN      3
156            DCW   #1                                                    1  0283              GEN      3
157            DC    @47@          PHASE NUMBER                           2  0285              GEN      3
158       )9R004 DCW   @}@                                                  1  0286              GEN      3
159            XFR   PHAS47                                                     B 201             4   201
160       *
161            ORG   BEGIN3                                                     0838
162       LOADAD EQU   *&1          LOAD ADDRESS                             0838
163    838 W1    DCW   0                                                     1  0838                       5
164 *  841 TOPA  DCW   000  TABBOT PLUS 3 X NUMBER OF STATEMENTS             3  0841                       5
165 *  844 SX3A  DCW   000  USED ONLY IN PHASE 48 AND 49                     3  0844                       5
166 *  847 TABBOT DCW  000  BOTTOM OF RESORT TABLE                           3  0847                       5
167 *  850 NEXT  DCW   000  USED ONLY IN PHASE 49                           3  0850                       5
168 *  853 SX2   DCW   000  USED ONLY IN PHASE 48 AND 49                    3  0853                       5
169 *  856 SX3B  DCW   000                                                  3  0856                       5
170 *  859 W3    DCW   000  USED ONLY IN PHASE 48 AND 49                    3  0859                       6
171 *  862 TOPC  DCW   000  TABBOT PLUS 3 X NUMBER OF STATEMENTS PLUS 1     3  0862                       6
172 *  865 SEQNO DCW   000  USED ONLY IN PHASE 48 AND 49                    3  0865                       6
173 *  870 TOPC5 DCW   00000  TOPC AS FIVE DIGITS                           5  0870                       6
174 *  875 TIMES6 DCW  00000  DOCNT TIMES 6                                 5  0875                       6
175 *  880 W5    DCW   00000  USED ONLY IN PHASE 49                        5  0880                       6
176 *  883 TOPB  DCW   000  TABBOT PLUS 3 X NUMBER OF STATEMENTS PLUS 1     3  0883                       6
177 *  884 FLAG  DCW   0    USED ONLY IN PHASE 48 AND 49                    1  0884                       7
178    886 ZONTST DCW  99   FOR TESTING ZONES                              2  0886                       7
179 *  891 ADR5B DCW   #5                                                   5  0891                       7
180 *  896 ADR5  DCW   #5                                                   5  0896                       7
181    898 ZONES DCW   @99@                                                 2  0898                       7
182    900       DCW   @Z9@                                                 2  0900                       7
183    902       DCW   @R9@                                                 2  0902                       7
184    904       DCW   @I9@                                                 2  0904                       8
185    906       DCW   @9Z@                                                 2  0906                       8
186    908       DCW   @ZZ@                                                 2  0908                       8
187    910       DCW   @RZ@                                                 2  0910                       8
188    912       DCW   @IZ@                                                 2  0912                       8
189    914       DCW   @9R@                                                 2  0914                       8
190    916       DCW   @ZR@                                                 2  0916                       8
191    918       DCW   @RR@                                                 2  0918                       9
192    920       DCW   @IR@                                                 2  0920                       9
193    922       DCW   @9I@                                                 2  0922                       9
194    924       DCW   @ZI@                                                 2  0924                       9
```

```
SEQ PG LIN  LABEL   OP    OPERANDS                                                SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR

195    926          DCW   @RI@                                                      2  0926                      9
196    928          DCW   @II@                                                      2  0928                      9
197          *
198          * CONVERT FIVE-DIGIT ADDRESS IN ADR5 TO MACHINE FORM
199          *
200 *  929  CONV53  SBR   CONV5X&3                                                  4  0929  H 968             9   968
201    933          ZA    ADR5-3,X1                                                 7  0933  ? 893 089         10   893     089
202    940          MZ    NOZONE,X1                                                 7  0940  Y /26 089         10  1126     089
203    947          A     X1                                                        4  0947  A 089             10   089
204    951          MZ    ZONES-1&X1,ADR5-2                                         7  0951  Y 8Z7 894         10   897+1   894
205    958          MZ    ZONES&X1,ADR5                                             7  0958  Y 8Z8 896         10   898+1   896
206    965  CONV5X  B     0-0                                                       4  0965  B 000             10   000
207          *
208          * CONVERT THREE-CHARACTER ADDRESS IN ADR5 TO FIVE DIGITS IN ADR5B
209          *
210 *  969  CONV35  SBR   CONV3X&3                                                  4  0969  H |24             11  1024
211    973          MCW   K5B,ADR5B                                                 7  0973  M /31 891         11  1131     891
212    980          MN    ADR5,ADR5B                                                7  0980  D 896 891         11   896     891
213    987          MN                                                              1  0987  D                 11
214    988          MN                                                              1  0988  D                 11
215    989          MZ    ADR5,ZONTST                                               7  0989  Y 896 886         11   896     886
216    996          MZ    ADR5-2,ZONTST-1                                           7  0996  Y 894 885         11   894     885
217  1 003          MCW   AZONES,*&11                                               7  1003  M /34 |20         12  1134    1020
218  1 010          S     ADR5                                                      4  1010  S 896             12   896
219  1 014  TSTZON  C     ZONTST,0-0                                                7  1014  C 886 000         12   886     000
220  1 021  CONV3X  BE    0-0                                                       5  1021  B 000 S           12   000
221  1 026          A     K1,ADR5B-3                                                7  1026  A /35 888         12  1135     888
222  1 033          SW    TSTZON&4                                                  4  1033  , |18             12  1018
223  1 037          A     K002,TSTZON&6                                             7  1037  A /38 |20         13  1138    1020
224  1 044          CW    TSTZON&4                                                  4  1044  ) |18             13  1018
225  1 048          B     TSTZON                                                    4  1048  B |14             13  1014
226          *
227          * FIND NEXT HIGHER GMWM.  LEAVE ITS ADDRESS & 1 IN X3.
228          *
229 *1 052  FINDGM  SBR   FINDGX&3                                                 4  1052  H |91             13  1091
230  1 056          MN    0&X3                                                      4  1056  D 0?0             13   000+3
231  1 060          SAR   X3                                                        4  1060  Q 099             13   099
232  1 064  MORE    MCM   1&X3                                                     4  1064  P 0?1             13   001+3
233  1 068          MN                                                              1  1068  D                 14
234  1 069          SBR   X3                                                        4  1069  H 099             14   099
235  1 073          BCE   MORE,0&X3,|                                             8  1073  B |64 0?0 |        14  1064     000+3
236  1 081          SBR   X3,1&X3                                                  7  1081  H 099 0?1         14   099     001+3
237  1 088  FINDGX  B     0-0                                                       4  1088  B 000             14   000
238          *
239          * PROGRAM IS TOO BIG
240          *
241 *1 092  TOOBIG  CS    332                                                       4  1092  / 332             14   332
242  1 096          CS                                                              1  1096  /                 14
243  1 097          CC    1                                                         2  1097  F 1               15
244  1 099          MCW   ERROR2,270                                                7  1099  M /74 270         15  1174     270
```

```
SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR

245  1 106          W                                                 1  1106  2                   15
246  1 107          CC    1                                           2  1107  F 1                 15
247  1 109          BCE   HALT,CDOVLY,1                             8  1109  B /22 700 1         15  1122     700
248  1 117          RWD   1                                           5  1117  U %U1 R             15   %U1
249  1 122  HALT    H     HALT                                        4  1122  . /22               15  1122
250          *
251  1 126  NOZONE  DCW   #1                                          1  1126                      16
252  1 131  K5B     DCW   #5                                          5  1131                      16
253  1 134  AZONES  DSA   ZONES                                       3  1134  898                 16   898
254  1 135  K1      DCW   1                                           1  1135                      16
255  1 138  K002    DCW   002                                         3  1138                      16
256  1 174  ERROR2  DCW   @MESSAGE 2 - OBJECT PROGRAM TOO LARGE@     36  1174                      17
257          *
258 *1 175  BEGN47  SBR   SX3B,0&X3                                   7  1175  H 856 0?0           18   856     000+3
259  1 182          SBR   X1,SORTAB                                   7  1182  H 089 M99           18   089    2499
260  1 189          SBR   TABBOT  BOTTOM OF CODE IN LOW CORE          4  1189  H 847               18   847
261  1 193          MCW   NSTMTS,*&14                                 7  1193  M 183 S13           18   183    1213
262  1 200          MZ    X1ZONE,*&6                                  7  1200  Y U79 S12           18  1479    1212
263  1 207  NSX3    SBR   X1,0    COMPUTE                             7  1207  H 089 000           18   089     000
264  1 214          A     K1A,W1    TABBOT PLUS                       7  1214  A U80 838           19  1480     838
265  1 221          C     W1,K3       NUMBER OF STATEMENTS            7  1221  C 838 U81           19   838    1481
266  1 228          BH    NSX3          TIMES 3                       5  1228  B S07 U             19  1207
267  1 233          SBR   TOPA,0&X1                                   7  1233  H 841 0|0           19   841     000+1
268  1 240          SBR   TOPB,1&X1                                   7  1240  H 883 0|1           19   883     001+1
269  1 247          MCW   KB,W1                                       7  1247  M U82 838           20  1482     838
270  1 254          BCE   *&5,DOCNT,                                  8  1254  B S66 151           20  1266     151
271  1 262          B     HAVE                                        4  1262  B S92               20  1292
272  1 266          SBR   TOPC,1&X1                                   7  1266  H 862 0|1           20   862     001+1
273  1 273          SBR   ADR5                                        4  1273  H 896               20   896
274  1 277          B     CONV35                                      4  1277  B 969               20   969
275  1 281          MCW   ADR5B,TOPC5                                7  1281  M 891 870           21   891     870
276  1 288          B     NOT                                         4  1288  B T61               21  1361
277  1 292  HAVE    MCW   DOCNT,TIMES6                               7  1292  M 151 875           21   151     875
278  1 299          A     TIMES6                                      4  1299  A 875               21   875
279  1 303          A     TIMES6                                      4  1303  A 875               21   875
280  1 307          A     DOCNT                                       4  1307  A 151               21   151
281  1 311          A     DOCNT,TIMES6                                7  1311  A 151 875           21   151     875
282  1 318          SBR   ADR5,1&X1                                   7  1318  H 896 0|1           22   896     001+1
283  1 325          B     CONV35                                      4  1325  B 969               22   969
284  1 329          MCW   ADR5B,TOPC5                                7  1329  M 891 870           22   891     870
285  1 336          A     TIMES6,TOPC5                                7  1336  A 875 870           22   875     870
286  1 343          MCW   TOPC5,ADR5                                 7  1343  M 870 896           22   870     896
287  1 350          B     CONV53                                      4  1350  B 929               22   929
288  1 354          MCW   ADR5,TOPC                                  7  1354  M 896 862           23   896     862
289  1 361  NOT     MCW   SX3B,ADR5                                  7  1361  M 856 896           23   856     896
290  1 368          B     CONV35                                      4  1368  B 969               23   969
291  1 372          MCW   ADR5B,W5                                    7  1372  M 891 880           23   891     880
292  1 379          C     TOPC5,W5                                    7  1379  C 870 880           23   870     880
293  1 386          BH    *&5                                         5  1386  B T95 U             23  1395
294  1 391          B     TOOBIG                                      4  1391  B |92               24  1092
```

```
SEQ PG LIN  LABEL  OP    OPERANDS                                                SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR

295  1 395         CC    1                                                         2  1395  F 1               24
296  1 397         CS    332                                                       4  1397  / 332             24   332
297  1 401         CS                                                              1  1401  /                 24
298  1 402         MCW   STRTNG,243                                                7  1402  M V12 243         24  1512     243
299  1 409         W                                                               1  1409  2                 24
300  1 410         CC    K                                                         2  1410  F K               24
301  1 412         CS    332                                                       4  1412  / 332             25   332
302  1 416         CS                                                              1  1416  /                 25
303  1 417         MCW   SEQ,208                                                  7  1417  M V15 208         25  1515     208
304  1 424         MCW   STRTA,242                                                 7  1424  M V31 242         25  1531     242
305  1 431         MCW   DISPLA,256                                               7  1431  M V38 256         25  1538     256
306  1 438         W                                                               1  1438  2                 25
307  1 439         CC    J                                                         2  1439  F J               25
308  1 441         CS    332                                                       4  1441  / 332             26   332
309  1 445         CS                                                              1  1445  /                 26
310  1 446 *          LCA  K000,208  MOVED TO PHASE 49 BECAUSE LDPH CLOBBERS IT
311  1 453         MCW   SX3B,X1                                                   7  1446  M 856 089         26   856     089
312  1 460         SBR   X1,2&X1                                                  7  1453  H 089 0|2         26   089     002+1
313  1 467         SBR   X3                                                       4  1460  H 099             26   099
314  1 471         B     FINDGM                                                    4  1464  B |52             26  1052
315  1 475         MCW   X3,X2                                                    7  1468  M 099 094         26   099     094
316  1 519         B     LOADNX                                                    4  1475  B 700             27   700
317       *
318       * DATA
319       *
320  1 523 X1ZONE DCW   @Z@                                                       1  1479                    27
321  1 524 K1A    DCW   1                                                         1  1480                    27
322  1 525 K3     DCW   3                                                         1  1481                    27
323  1 526 KB     DCW   #1                                                        1  1482                    27
324  1 556 STRTNG DCW   @STARTING ADDRESS OF STATEMENTS@                         30  1512                    27
325  1 559 SEQ    DCW   @SEQ@                                                     3  1515                    28
326  1 575 STRTA  DCW   @STARTING ADDRESS@                                       16  1531                    28
327  1 582 DISPLA DCW   @DISPLAY@                                                 7  1538                    28
328  1 585 * K000    DCW  000  MOVED TO PHASE 49
329  1 594 GMWM   DCW   @}@                                                       1  1539          GMARK     28
330               EX    BEGN47                                                          B /75               29  1175
331       CLRME  CLRA  BEGN47,GMWM,C                                                                MACRO
          *      CLRA  CLRBOT,CLRTOP[,SS,HERE,GWMAD]                                                GEN
          *                                                                         GEN
          * CLEAR CORE AFTER A PHASE USING THE CLRTOP ADDRESS                      GEN
          *                                                                         GEN
332               ORG   201                                                              0201
          *                                                                         GEN
          * CLEAR DOWN TO CLRBOT & X00 THE EASY WAY                                GEN
          *                                                                         GEN
333       CLRME  EQU   *&1                                                    0201  GEN
334              BSS   SNAPSH,C                                                5  0201  B 333 C     GEN     30   333
335       )0J005 CS    GMWM         CLEAR FROM CLRTOP                         4  0206  / V39       GEN     30  1539
336              SBR   )0J005&3                                                 4  0210  H 209       GEN     30   209
337              SBR   )0L005&6                                                 4  0214  H 255       GEN     30   255
```

```
SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR

338                 C     )0J005&3,)0M005   DOWN TO CLRBOT & X00?           7  0218  C 209 266   GEN     30   209     266
339                 BU    )0J005                                           5  0225  B 206 /     GEN     30   206
            *                                                                                    GEN
            * NOW CLEAR DOWN TO CLRBOT THE HARD WAY                                             GEN
            *                                                                                    GEN
340         )0K005  C     )0L005&6,)0N005                                  7  0230  C 255 269   GEN     30   255     269
341                 BU    )0L005                                           5  0237  B 249 /     GEN     31   249
342                 CS    LOADNX,)0Q005  LOAD THE NEXT BLOCK AT 1          7  0242  / 700 276   GEN     31   700     276
343         )0L005  LCA   )0P005,0-0     CLEAR WITH BLANK AND WORD MARK   7  0249  L 270 000   GEN     31   270     000
344                 SBR   )0L005&6                                         4  0256  H 255       GEN     31   255
345                 B     )0K005                                           4  0260  B 230       GEN     31   230
346         )0M005  DSA   )0R005         CLRBOT & X00 - 1                 3  0266  /99         GEN     31  1199
347         )0N005  DSA   BEGN47         CLRBOT                           3  0269  /75         GEN     31  1175
348         )0P005  DCW   #1                                             1  0270              GEN     32
349                 DC    @CLRA @     IDENTIFY IN A DECK, TAPE, OR DUMP  5  0275              GEN     32
350         )0Q005  DCW   @}@                                            1  0276              GEN     32
351                 ORG   BEGN47&X00                                                1200
352         )0R005  EQU   *           CLRBOT & X00 - 1                      1199              GEN
353                 XFR   CLRME                                                     B 201               33   201
```

SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS
)0J004	0207: 0	)0J005	0206: 0	)0K005	0230: 0	)0L005	0249: 0	)0M005	0266: 0	)0N005	0269: 0
)0P005	0270: 0	)0Q005	0276: 0	)0R005	1199: 0	)1J004	0250: 0	)6J004	0110: 0	)6K004	0700: 0
)6L004	0704: 0	)6M004	0728: 0	)8J004	0257: 0	)8K004	0273: 0	)9J004	0282: 0	)9R004	0286: 0
ADR5	0896: 0	ADR5B	0891: 0	AZONES	1134: 0	BEGIN3	0838: 0	BEGN47	1175: 0	CDOVLY	0700: 0
CLRME	0201: 0	CONV35	0969: 0	CONV3X	1021: 0	CONV53	0929: 0	CONV5X	0965: 0	DISPLA	1538: 0
DOCNT	0151: 0	ERROR2	1174: 0	FINDGM	1052: 0	FINDGX	1088: 0	FLAG	0884: 0	GMWM	1539: 0
HALT	1122: 0	HAVE	1292: 0	K002	1138: 0	K1	1135: 0	K1A	1480: 0	K3	1481: 0
K5B	1131: 0	KB	1482: 0	LOADAD	0838: 0	LOADNX	0700: 0	MORE	1064: 0	NEXT	0850: 0
NOT	1361: 0	NOZONE	1126: 0	NSTMTS	0183: 0	NSX3	1207: 0	PHAS47	0201: 0	PHASLD	0381: 0
SEQ	1515: 0	SEQNO	0865: 0	SNAPEX	0564: 0	SNAPSH	0333: 0	SORTAB	2499: 0	STRTA	1531: 0
STRTNG	1512: 0	SX2	0853: 0	SX3A	0844: 0	SX3B	0856: 0	TABBOT	0847: 0	TABEL	2499: 0
TIMES6	0875: 0	TOOBIG	1092: 0	TOP3	2600: 0	TOPA	0841: 0	TOPB	0883: 0	TOPC	0862: 0
TOPC5	0870: 0	TPERR	0728: 0	TPREAD	0704: 0	TSTZON	1014: 0	W1	0838: 0	W3	0859: 0
W5	0880: 0	X1	0089: 0	X1ZONE	1479: 0	X2	0094: 0	X3	0099: 0	ZONES	0898: 0
ZONTST	0886: 0										

UNREFERENCED SYMBOLS

FLAG NEXT PHASLD SEQNO SNAPEX SX2 SX3A TOP3 TPERR TPREAD W3