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

101                JOB   FORTRAN COMPILER -- FORMAT LOADER -- PHASE 54A
102                CTL   6611
103         *
104         * THIS PHASE SELECTS THE PROPER I/O ROUTINE AND LOADS IT INTO
105         * ITS OBJECT CORE-STORAGE LOCATION.
106         *
107         * LIMITED FORMAT ROUTINE IS FIRST (54B), NORMAL FORMAT ROUTINE
108         * IS SECOND (54C), A-CONVERSION FORMAT ROUTINE IS THIRD (54D).
109         *
110         * STUFF IN THE RESIDENT AREA
111         *
112         FMTSW  EQU   696  X FOR NO FORMAT, L FOR LIMITED FORMAT          0696
113         *                 BLANK FOR ORDINARY, A FOR A CONVERSION
114         *
115                EXT00   SNAPSH, LOADNX, CDOVLY                                    MACRO
116         SNAPSH EQU   333                                                 0333     GEN
117         PHASLD EQU   381                                                 0381     GEN
118         SNAPEX EQU   564                                                 0564     GEN
119         LOADNX EQU   700   CARD OVERLAY UNLESS NOP                      0700     GEN
120         CDOVLY EQU   700   1 IF LOADING FROM CARDS, N IF FROM TAPE      0700     GEN
121         TPREAD EQU   704   LOAD OVERLAY FROM TAPE                       0704     GEN
122         TPERR  EQU   728                                                 0728     GEN
123         *
124                XT52B   STUFF IN PHASE 52B -- FUNCTION LOADER                      MACRO
125         BEG52C EQU   934   RELOCATION TAG FROM SW INSTRUCTION            0934     GEN
126         CLR52C EQU   1696                                                1696     GEN
127                XT54B   STUFF IN PHASE 54B -- LIMITED FORMAT                       MACRO
128         FMTBAS EQU   1697                                                1697     GEN
129         LIMADR EQU   2015  USED IN DIMENSION PHASE 2                     2015     GEN
130         LGM    EQU   2031                                                2031     GEN
131         *
132         PHAS54 LDPH  FORMATPAK,LOAD54,BEGN54,,,54A                                MACRO
            * PHAZ   LDPH [PHASID],LOADAD,ENTAD[,SKIPFG,SKIP],[NUMBER][,HALT]      GEN
            *        XFR  PHASZ     PROHIBITED IN A MACRO                          GEN
            *                                                                      GEN
            * LOAD A BLOCK                                                        GEN
            *                                                                     GEN
133         )6J004 EQU   110  PHASE ID                                      0110     GEN
134         )6K004 EQU   700  LOAD NEXT PHASE                               0700     GEN
135         )6L004 EQU   704  TAPE READ INSTRUCTION                         0704     GEN
136         )6M004 EQU   728  TAPE ERROR HANDLER                            0728     GEN
            *                                                                     GEN
137                ORG   201                                                 0201
138         PHAS54 BSS   )8J004,G                                      5  0201  B 257 G     GEN      1   257
139                NOP     TO PATCH IN TRAPS FOR DEBUGGING                 1  0206  N           GEN      1
140         )0J004 EQU   *&1                                                0207     GEN
141                LCA   )9J004,)6J004                                     7  0207  L 281 110   GEN      1   281     110
142                BCE   )1J004,)6K004,1    Q: LOADING FROM CARDS?         8  0214  B 250 700 1 GEN      1   250     700
143                BCE   )1J004,)6L004&4,0  Q: LOADING FROM AUTOCODER TAPE? 8  0222  B 250 708 0 GEN      1   250     708
144                RTW   1,LOAD54           READ THE BLOCK                 8  0230  L %U1 934 R GEN      1   %U1     934
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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR

145             BER   )6M004          Q: TAPE ERROR?                    5  0238  B 728 L     GEN      2   728
146             CS    BEGN54,)9R004    ENTER THE BLOCK                   7  0243  / 937 286   GEN      2   937     286
147         )1J004 CS   )6K004,)9R004    LOAD CARDS OR AUTOCODER TAPE    7  0250  / 700 286   GEN      2   700     286
148         )8J004 SW   )9R004                                           4  0257  , 286       GEN      2   286
149             MU    %T0,)8K004,W                                      8  0261  M %T0 273 W GEN      2   %T0     273
150             H     )0J004                                            4  0269  . 207       GEN      2   207
151         )8K004 EQU  *&1                                                0273              GEN
152         )9J004 DCW  @FORMATPAK@        PHASE ID                     9  0281              GEN      3
153             DCW   #1                                                1  0282              GEN      3
154             DC    @54A@          PHASE NUMBER                      3  0285              GEN      3
155         )9R004 DCW  @}@                                             1  0286              GEN      3
156             XFR   PHAS54                                                  B 201               4   201
157         *
158             ORG   BEG52C                                                   0934
159 *       LOAD54 EQU  *&1                                                0934
160 *       SKIPB  DCW  #1  SKIP 54B -- LIMITED FORMAT                     1  0934                    5
161 *       SKIPC  DCW  #1  SKIP 54C -- NORMAL FORMAT                      1  0935                    5
162 *       SKIPD  DCW  #1  SKIP 54D -- A FORMAT                           1  0936                    5
163         *
164         *           54B  54C  54D
165         *        X   -    -    -
166         * FMTSW  L   Y    -    -
167         *      BLANK -    Y    -
168         *        A   -    Y    Y
169         *
170    937  BEGN54 SW   GMWM,FMTBAS                                       7  0937  , |70 W97          5  1070    1697
171             BCE   LOADNX,FMTSW,X  LIMITED FORMAT, SKIP 54BCD          8  0944  B 700 696 X       5   700     696
172             BCE   AFMT,FMTSW,A    A FORMAT, SKIP 54B, LOAD 54CD       8  0952  B 984 696 A       5   984     696
173             BCE   LFMT,FMTSW,L                                        8  0960  B 976 696 L       5   976     696
174         * NOT X, NOT A, NOT L
175             CW    SKIPC           SKIP 54B, LOAD 54C, SKIP 54D        4  0968  ) 935             6   935
176             B     LOADNX                                              4  0972  B 700             6   700
177         LFMT   CW   SKIPB           LOAD PHASE 54B, SKIP 54CD         4  0976  ) 934             6   934
178             B     LOADNX                                              4  0980  B 700             6   700
179         AFMT   CW   SKIPC,SKIPD     SKIP PHASE 54B, LOAD 54CD         7  0984  ) 935 936         6   935     936
180             B     LOADNX                                              4  0991  B 700             6   700
181         *
182         * SKIP A PHASE
183         *
184 *       SKIP54 BCE  SKIPTP,TPREAD&4,0   Q: LOADING FROM AUTOCODER TAPE? 8  0995  B |45 708 0       6  1045     708
185             BCE   SKIPCD,CDOVLY,1                                     8  1003  B |32 700 1       7  1032     700
186             SW    GMWM                                                4  1011  , |70             7  1070
187             RTW   1,GMWM          SKIP A CORE-IMAGE BLOCK             8  1015  L %U1 |70 R       7   %U1    1070
188             BER   TPERR                                               5  1023  B 728 L           7   728
189             B     LOADNX                                              4  1028  B 700             7   700
190         * SKIP A BLOCK FROM CARDS.
191         SKIPCD R                                                      1  1032  1                 7
192             BCE   LOADNX,68,B     Q: XFR CARD?                        8  1033  B 700 068 B       7   700     068
193             B     SKIPCD                                              4  1041  B |32             8  1032
194         * SKIP A BLOCK FROM AUTOCODER TAPE
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SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR

195         SKIPTP  RTW   1,1            READ ONE FIELD                8  1045  L %U1 001 R          8   %U1     001
196                 BER   TPERR                                        5  1053  B 728 L              8   728
197                 BCE   LOADNX,8,B     Q: XFR RECORD?               8  1058  B 700 008 B          8   700     008
198                 B     SKIPTP                                       4  1066  B |45               8  1045
199         *
200         * DATA
201         *
202  1 253  GMWM    DCW   @}@                                          1  1070              GMARK    8
203 *       GMWM54  EQU   GMWM                                           1070
204         *
205         * WE CAN'T PUT THE OVERLAY TO CLEAR PHASE 54A HERE BECAUSE
206         * PHASE 54A SKIPS OR LOADS PHASES 54BCD. THE CLEAR CODE IS IN
207         * PHASE 55. AND WE CAN'T PUT THIS COMMENT AFTER THE XFR BECAUSE
208         * VAN'S AUTOCODER GENERATES AN EXTRA AUTOCODER BOOT RECORD.
209         *
210                 XFR   BEGN54                                             B 937               9   937
```

SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS
)0J004	0207: 0	)1J004	0250: 0	)6J004	0110: 0	)6K004	0700: 0	)6L004	0704: 0	)6M004	0728: 0
)8J004	0257: 0	)8K004	0273: 0	)9J004	0281: 0	)9R004	0286: 0	AFMT	0984: 0	BEG52C	0934: 0
BEGN54	0937: 0	CDOVLY	0700: 0	CLR52C	1696: 0	FMTBAS	1697: 0	FMTSW	0696: 0	GMWM	1070: 0
GMWM54	1070: 0	LFMT	0976: 0	LGM	2031: 0	LIMADR	2015: 0	LOAD54	0934: 0	LOADNX	0700: 0
PHAS54	0201: 0	PHASLD	0381: 0	SKIP54	0995: 0	SKIPB	0934: 0	SKIPC	0935: 0	SKIPCD	1032: 0
SKIPD	0936: 0	SKIPTP	1045: 0	SNAPEX	0564: 0	SNAPSH	0333: 0	TPERR	0728: 0	TPREAD	0704: 0

UNREFERENCED SYMBOLS

CLR52C GMWM54 LGM LIMADR PHASLD SKIP54 SNAPEX SNAPSH