```
CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                    1
CLEAR STORAGE 2     L068116,105106,110117B101/I9Z#071029C029056B026/B001/0991,001/001117I0?                  2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039             ,0010011040                  3

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 SEQ PG LIN  LABEL  OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD

 101  1 01   000    JOB   1401 PORTFOLIO SELECTION
 102  1 02          CTL   440
 103  1 03          ORG   100                                                      0100
 104  1 04   RESTRT RWD   1                                                 5  0100  U %U1 R              4
 105  1 05          BSS   DONE,A                                           5  0105  B 135 A              4
 106  1 06   READ   R                                                     1  0110  1                    4
 107  1 07          C     3,MSSG-7                                        7  0111  C 003 153            4
 108  1 08          BU    READ                                            5  0118  B 110 /              4
 109  1 09   LOAD   RTW   1,1                                             8  0123  L %U1 001 R          4
 110  1 10          B     1                                               4  0131  B 001                4
 111  1 11   DONE   CS    332                                             4  0135  / 332                5
 112  1 12          CS                                                    1  0139  /                    5
 113  1 13          MLC   MSSG,215                                        7  0140  M 160 215            5
 114  1 14          CC    1                                               2  0147  F 1                  5
 115  1 15          W                                                     1  0149  2                    5
 116  1 16          H                                                     1  0150  .                    5
 117  1 17   MSSG   DCW   @END OF RUN@                                   10  0160                       5
 118  1 18   RSTRT  RWD   1                                                 5  0161  U %U1 R              6
 119  1 19          BSS   DONE,A                                           5  0166  B 135 A              6
 120  1 20          B     LOAD                                            4  0171  B 123                6
 121  1 21   GOLOD  RTW   1,1                                             8  0175  L %U1 001 R          6
 122  1 22          SW    87,92                                           7  0183  , 087 092            6
 123  1 23          SW    97                                              4  0190  , 097                6
 124  1 24          B     7                                               4  0194  B 007                6
 125  1 25          H                                                     1  0198  .                    7
 126  1 26          ORG   333                                                    0333
 127  1 27          DCW   #3                                              3  0335                       8
 128  1 28   MULT1  SBR   MULT1-1                                         4  0336  H 335                8
 129  1 29          MA    TWOMA,MULT1-1                                   7  0340  # /31 335            8
 130  1 30          MLC   MULT1-1,MU00&3                                  7  0347  M 335 357            8
 131  1 31   MU00   MLC   000,MU04&3                                      7  0354  M 000 434            8
 132  1 32          MLC   MU04&3,MU02&3                                  7  0361  M 434 416            8
 133  1 33          MA    THRMA,MULT1-1                                   7  0368  # /34 335            9
 134  1 34          MLC   MULT1-1,MU01&3                                  7  0375  M 335 385            9
 135  1 35   MU01   MLC   000,MU05&3                                      7  0382  M 000 441            9
 136  1 36          SW    MU05&1                                          4  0389  , 439                9
 137  1 37          MLC   MU05&3,MU03&3                                  7  0393  M 441 423            9
 138  1 38          CW    MU05&1                                          4  0400  ) 439                9
 139  1 39          S     PROD                                            4  0404  S 623               10
 140  1 40          BSS   MU04,B                                         5  0408  B 431 B             10
 141  1 41   MU02   A     000,PROD-14                                     7  0413  A 000 609           10
 142  1 42   MU03   ZA    000,MCD                                         7  0420  ? 000 595           10
 143  1 43          B     MU06                                            4  0427  B 445               10
 144  1 44   MU04   A     000,PROD                                        7  0431  A 000 623           10
 145  1 45   MU05   MLCWA 000,MCD                                        7  0438  L 000 595           11
 146  1 46   MU06   MA    ONEMA,MULT1-1                                   7  0445  # /28 335           11
 147  1 47          MLC   MULT1-1,MU13&3                                  7  0452  M 335 582           11
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SEQ PG LIN  LABEL   OP    OPERANDS                SFX CT  LOCN  INSTRUCTION TYPE  CARD
148  1 48           BSS   MU07,B                    5  0459  B 475 B             11
149  1 49           M     MCD,PROD                  7  0464  @ 595 623           11
150  1 50           B     MU13                      4  0471  B 579               11
151  1 51   MU07    MLC   THREE,PSS                 7  0475  M /57 596           12
152  1 52           MLZS  PROD,PSS                  7  0482  Y 623 596           12
153  1 53           BM    MU08,MCD                  8  0489  V 501 595 K         12
154  1 54           B     MU09                      4  0497  B 516               12
155  1 55   MU08    S     NINE,PSS                  7  0501  S /23 596           12
156  1 56           A     THREE,PSS                 7  0508  A /57 596           13
157  1 57           MLZS                            1  0515  Y                   13
158  1 58   MU09    MLCWA TWLV,STSHFT               7  0516  L /25 626           13
159  1 59   MU10    S     ONE,STSHFT                7  0523  S /55 626           13
160  1 60           MLNS  PROD,STMPR                7  0530  D 623 624           13
161  1 61           ZA                              1  0537  ?                   13
162  1 62   MU11    BCE   MU12,STMPR,?              8  0538  B 564 624 ?         13
163  1 63           A     MCD,PROD-12               7  0546  A 595 611           14
164  1 64           S     ONE,STMPR                 7  0553  S /55 624           14
165  1 65           B     MU11                      4  0560  B 538               14
166  1 66   MU12    BWZ   MU10,STSHFT,B            8  0564  V 523 626 B         14
167  1 67           MLZS  PSS,PROD                  7  0572  Y 596 623           14
168  1 68   MU13    B     000                       4  0579  B 000               14
169  1 69   MCD     DCW   #13                      13  0595                      15
170  1 70   PSS     DCW   #1                        1  0596                      15
171  1 71   PROD    DCW   #27                      27  0623                      16
172  1 72   STMPR   DCW   @?@                       1  0624                      16
173  1 73   STSHFT  DCW   #2                        2  0626                      16
174  1 74           DCW   #3                        3  0629                      16
175  1 75   DIVIDE  SBR   DIVIDE-1                 4  0630  H 629               16
176  1 76           MA    TWOMA,DIVIDE-1            7  0634  # /31 629           17
177  1 77           MLC   DIVIDE-1,DI00&3           7  0641  M 629 651           17
178  1 78   DI00    MLC   000,DI03&3                7  0648  M 000 767           17
179  1 79           MA    THRMA,DIVIDE-1            7  0655  # /34 629           17
180  1 80           MLC   DIVIDE-1,DI01&3           7  0662  M 629 672           17
181  1 81   DI01    MLC   000,DI04&3                7  0669  M 000 841           18
182  1 82           MA    TWOMA,DIVIDE-1            7  0676  # /31 629           18
183  1 83           MLC   DIVIDE-1,DI02&3           7  0683  M 629 693           18
184  1 84   DI02    MLC   000,INDEX                 7  0690  M 000 /16           18
185  1 85           S     TEMP                      4  0697  S |61               18
186  1 86           MLC   THREE,TEMP-21             7  0701  M /57 |40           18
187  1 87           S     INDEX,TEMP-20             7  0708  S /16 |41           19
188  1 88           MLZS  ONE,TEMP-20               7  0715  Y /55 |41           19
189  1 89           MA    LOC,TEMP-20               7  0722  # /19 |41           19
190  1 90           MLC   TEMP-20,DI13&6            7  0729  M |41 |29           19
191  1 91           MA    ONEMA,TEMP-20             7  0736  # /28 |41           19
192  1 92           MLC   TEMP-20,DI09&6            7  0743  M |41 958           20
193  1 93           MLC   TEMP-20,DI10&6            7  0750  M |41 965           20
194  1 94           MLC   TEMP-20,DI12&6            7  0757  M |41 984           20
195  1 95   DI03    MLCWA 000,DVR                   7  0764  L 000 |75           20
196  1 951          MLZS  DVR,QSS                   7  0771  Y |75 /13           20
197  1 952          MLZS  ONE,DVR                   7  0778  Y /55 |75           21
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SEQ PG LIN  LABEL  OP    OPERANDS                SFX CT  LOCN  INSTRUCTION TYPE  CARD
198  1 953         C     ZEROS,DVR                 7  0785  C /54 |75           21
199  1 954         BU    *&5                       5  0792  B 801 /             21
200  1 955         H     801                       4  0797  . 801               21
201  1 956         MLZS  QSS,DVR                   7  0801  Y /13 |75           21
202  1 96          BSS   DI04,B                    5  0808  B 838 B             21
203  1 97          CW    DVD-22                    4  0813  ) |89               21
204  1 98          MLC   ONEMA,DI05&3              7  0817  M /28 881           22
205  1 99          MLC   INDEX,DI05&3             7  0824  M /16 881           22
206  2 00          MA    LOC1,DI05&3               7  0831  # /22 881           22
207  2 01  DI04    ZA    000,DVD                   7  0838  ? 000 /11           22
208  2 02          MA    ONEMA,DIVIDE-1            7  0845  # /28 629           22
209  2 03          MLC   DIVIDE-1,DI14&3           7  0852  M 629 |38           23
210  2 04          BSS   DI06,B                    5  0859  B 896 B             23
211  2 05          D     DVR,DVD-21                7  0864  % |75 |90           23
212  2 06          MLC   DVD,QSS                   7  0871  M /11 /13           23
213  2 07  DI05    MLC   000,DVD                   7  0878  M 000 /11           23
214  2 08          MLCWA QSS,DVD-22                7  0885  L /13 |89           24
215  2 09          B     DI14                      4  0892  B |35               24
216  2 10  DI06    MLC   THREE,QSS                 7  0896  M /57 /13           24
217  2 11          MLZS  DVD,RMDRSN                7  0903  Y /11 /14           24
218  2 12          MLZS  DVD,QSS                   7  0910  Y /11 /13           24
219  2 13          BM    DI07,DVR                  8  0917  V 929 |75 K         25
220  2 14          B     DI08                      4  0925  B 945               25
221  2 15  DI07    S     NINE,QSS                  7  0929  S /23 /13           25
222  2 16          A     THREE,QSS                 7  0936  A /57 /13           25
223  2 17          MLZS                            1  0943  Y                   25
224  2 18          MLZS                            1  0944  Y                   25
225  2 19  DI08    MLZS  ONE,DVR                   7  0945  Y /55 |75           25
226  2 20  DI09    S     DVR,000                   7  0952  S |75 000           26
227  2 21  DI10    BM    DI12,000                  8  0959  V 978 000 K         26
228  2 23          A     ONE,NEW                   7  0967  A /55 /12           26
229  2 25          B     DI09                      4  0974  B 952               26
230  2 28  DI12    A     DVR,000                   7  0978  A |75 000           26
231  2 29          MLC   NEW,TEMP                  7  0985  M /12 |61           27
232  2 30          ZA                              1  0992  ?                   27
233  2 31          MLC   TEMP&1,NEW               7  0993  M |62 /12           27
234  2 32          ZA                              1  1000  ?                   27
235  2 33          S     ONE,INDEX                 7  1001  S /55 /16           27
236  2 34          BWZ   DI09,INDEX,B              8  1008  V 952 /16 B         27
237  2 35          MLZS  QSS,DVD                   7  1016  Y /13 /11           27
238  2 36  DI13    MLZS  RMDRSN,000                7  1023  Y /14 000           28
239  2 37          BAV   *&1                       5  1030  B |35 Z             28
240  2 38  DI14    B     000                       4  1035  B 000               28
241  2 39  TEMP    DCW   #23                      23  1061                      28
242  2 40          DCW   @0@                       1  1062                      29
243  2 41  DVR     DCW   #13                      13  1075                      29
244  2 42          DCW   #13                      13  1088                      29
245  2 43  DVD     DCW   #23                      23  1111                      30
246  2 44  QUOT    EQU   *                           1111
247  2 45  NEW     DCW   @0@                       1  1112                      30
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
248	2	46	QSS	DCW	#1		1	1113			30
249	2	47	RMDRSN	DCW	@1@		1	1114			30
250	2	48	INDEX	DCW	@00@		2	1116			30
251	2	49	LOC	DSA	DVD-31		3	1119	|80		30
252	2	50	LOC1	DSA	DVD-23		3	1122	|88		30
253	2	51	NINE	DCW	@9@		1	1123			31
254	2	52	TWLV	DCW	12		2	1125			31
255	2	53	ONEMA	DCW	001		3	1128			31
256	2	54	TWOMA	DCW	002		3	1131			31
257	2	55	THRMA	DCW	003		3	1134			31
258	2	56	ZEROS	DCW	@00000000000000000000@		20	1154			31
259	2	57	ONE	DCW	1		1	1155			31
260	2	58	TWO	DCW	2		1	1156			32
261	2	59	THREE	DCW	3		1	1157			32
262	2	60	FOUR	DCW	4		1	1158			32
263	2	61	BLNK	DCW	@ @		3	1161			32
264	2	62	MULT1G	EQU	MULT1			0336			
265	2	63	QUOT G	EQU	QUOT			1111			
266	2	64	PROD G	EQU	PROD			0623			
267	2	65	ZEROSG	EQU	ZEROS			1154			
268	2	66	ONE G	EQU	ONE			1155			
269	2	67	TWO G	EQU	TWO			1156			
270	2	68	THREEG	EQU	THREE			1157			
271	2	69	FOUR G	EQU	FOUR			1158			
272	2	70	NINE G	EQU	NINE			1123			
273	2	71	ONEMAG	EQU	ONEMA			1128			
274	2	72	TWOMAG	EQU	TWOMA			1131			
275	2	73	THRMAG	EQU	THRMA			1134			
276	2	74	BLNK G	EQU	BLNK			1161			
277	2	75	RSTRTG	EQU	RSTRT			0161			
278	2	76	GOLODG	EQU	GOLOD			0175			
279	2	77		SFX	G						
280	2	78	SV	DA	10X20	G		1162	1361		34
281	2	79			1,20	G		1181		FIELD	34
282	2	80	SM	DA	20X20	G		1362	1761		39
283	2	81			1,20	G		1381		FIELD	39
284	2	82	GV	DA	10X20	G		1762	1961		44
285	2	83			1,20	G		1781		FIELD	44
286	2	84	GM	DA	8X20	G		1962	2121		47
287	2	85			1,20	G		1981		FIELD	47
288	2	86	CDBUF	DA	8X9,G	G		2122	2193		49
289	2	87			1,9	G		2130		FIELD	49
				DCW	@}@	G	1	2194		GMARK	51
290	2	88	FIVMA	DCW	@I9E@	G	3	2197			51
291	2	89	FTMA	DCW	@I8F@	G	3	2200			51
292	2	90	NINMA	DCW	@009@	G	3	2203			51
293	2	91	M13A	DCW	@I8G@	G	3	2206			51
294	2	92	EIGHT	DCW	8	G	1	2207			51
295	2	93	TNTY	DCW	20	G	2	2209			52
296	2	94	NINES	DCW	99999	G	5	2214			52

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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
297  2 95   MNINS   DCW   -99999                                  G   5  2219                     52
298  2 96   TEMP1   DCW   #20                                     G  20  2239                     52
299  2 97   SE      DCW   #20                                     G  20  2259                     53
300  2 98   SQ      DCW   #20                                     G  20  2279                     54
301  2 99   SB      DCW   #20                                     G  20  2299                     55
302  3 00   SC      DCW   #20                                     G  20  2319                     56
303  3 01   SH      DCW   #20                                     G  20  2339                     57
304  3 02   SP      DCW   #20                                     G  20  2359                     58
305  3 03   SORT    DA    101X13,G                                G      2360   3672              74
306  3 04           DA    1,3                                     G      2362              FIELD   74
307  3 05           DA    4,8                                     G      2367              FIELD   91
308  3 06           DA    9,13                                    G      2372              FIELD  108
                    DCW   @}@                                     G   1  3673              GMARK  125
309  3 07   NRCT    DCW   #2                                      G   2  3675                     125
310  3 08   NRLIS   DA    10X20                                   G      3676   3875              127
311  3 09           DA    1,20                                    G      3695              FIELD  127
312  3 10   IE      DCW   #20                                     G  20  3895                     128
313  3 11   IQ      DCW   #20                                     G  20  3915                     129
314  3 12   FXIND   DCW   #1                                      G   1  3916                     129
315  3 13   T0      DA    10X20                                   G      3917   4116              130
316  3 14           DA    1,20                                    G      3936              FIELD  130
317  3 15   PGNAM   DA    1X14                                    G      4117   4130              132
318  3 16   RCGV    DCW   #4              DIMENSIONS OF GV,GM,SV,ETC.  G   4  4134                132
319  3 17   RCGM    DCW   #4              1ST TWO CHARS-NO.ROWS   G   4  4138                     132
320  3 18   RCSV    DCW   #4              2ND TWO-NO.COLS.        G   4  4142                     132
321  3 19   RCSM    DCW   #4              0 OR BLANK MEANS BYPASS.  G   4  4146                133
322  3 20   RCCV    DCW   #4                                      G   4  4150                     133
323  3 21   RCCM    DCW   #4                                      G   4  4154                     133
324  3 22   PG      DA    1X820                                   G      4155   4974              133
325  3 23   IX1     EQU   89                                      G      0089
326  3 24   IX2     EQU   94                                      G      0094
327  3 25   IX3     EQU   99                                      G      0099
328  3 26   PGADR   DSA   PG                                      G   3  4977  15V                 134
329  3 27   CADR    DCW   #3                                      G   3  4980                     134
330  3 28   SADR    DCW   #3                                      G   3  4983                     134
331  3 29   NOCDS   DCW   #2                                      G   2  4985                     134
332  3 30   SCIND   DCW   #1                                      G   1  4986                     134
333  3 31   SECTR   DCW   000                                     G   3  4989                     134
334  3 32   SI      DA    1X20,G                                  G      4990   5009              134
                    DCW   @}@                                     G   1  5010              GMARK  135
335  3 33   SREC    DA    1X42,G                                  G      5011   5052              135
336  3 34   SIREC          1,5                                     G      5015              FIELD  135
337  3 35   SEREC          6,10                                    G      5020              FIELD  135
338  3 36   SQREC          11,20                                   G      5030              FIELD  135
339  3 37   SBREC          21,26                                   G      5036              FIELD  135
340  3 38   SCREC          27,31                                   G      5041              FIELD  135
341  3 39   SHREC          32,36                                   G      5046              FIELD  136
342  3 40   SPREC          37,41                                   G      5051              FIELD  136
343  3 41   SFREC          42,42                                   G      5052              FIELD  136
                    DCW   @}@                                     G   1  5053              GMARK  136
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SEQ PG LIN  LABEL   OP    OPERANDS                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
344  3 42   OUTRQ   DA    1X27,G                     G      5054   5080             136
345  3 43   DELTA         1,4                        G      5057               FIELD 136
346  3 44   LLIM          5,6                        G      5059               FIELD 136
347  3 45   ULIM          7,8                        G      5061               FIELD 137
348  3 46   IEOUT         9,17                       G      5070               FIELD 137
349  3 47   IQOUT         18,26                      G      5079               FIELD 137
350  3 48   OPT           27,27                      G      5080               FIELD 137
                   DCW   @}@                        G   1  5081               GMARK 137
351  3 49   CC1     DCW   #2                         G   2  5083                     137
352  3 50   CC2     DCW   #2                         G   2  5085                     137
353  3 51   CC3     DCW   #1                         G   1  5086                     138
354  3 52   CC5     DCW   #3                         G   3  5089                     138
355  3 53   CC6     DCW   #4                         G   4  5093                     138
356  3 54   CC7     DCW   #9                         G   9  5102                     138
357  3 55   CC8     DCW   #3                         G   3  5105                     138
358  3 56   CC9     DCW   #3                         G   3  5108                     138
359  3 57   CC11    DCW   #5                         G   5  5113                     138
360  3 58   CC12    DCW   #5                         G   5  5118                     139
361  3 59   GPK     DA    1X1,G                      G      5119    5119             139
                   DCW   @}@                        G   1  5120               GMARK 140
362  3 60   ADRTO   DSA   T0&19                      G   3  5123   I36               140
363  3 61   PICADR  DSA   PIC1                       G   3  5126   Q5X               140
364  3 62   PIPADR  DSA   PIP1                       G   3  5129   R2Y               140
365  3 63   PISADR  DSA   PIS1                       G   3  5132   ?3U               140
366  3 64   PIMADR  DSA   PIM1                       G   3  5135   A4|               140
367  3 65   PIDADR  DSA   PID1                       G   3  5138   C8U               140
368  3 66   PIAADR  DSA   PIA1                       G   3  5141   F3|               141
369  3 67   ANRLIS  DSA   NRLIS&19                   G   3  5144   F95               141
370  3 68           DCW   #3                         G   3  5147                     141
371  3 69   ADPIR   DSA   PIR1                       G   3  5150   T1S               141
372  3 70   ADPIL   DSA   PIL1                       G   3  5153   S4T               141
373  3 71   ADRSV   DSA   SV&19                      G   3  5156   /81               141
374  3 72   ADRSM   DSA   SM-1                       G   3  5159   T61               141
375  3 73   ADRGV   DSA   GV&19                      G   3  5162   X81               142
376  3 74   ADRGM   DSA   GM-1                       G   3  5165   Z61               142
377  3 75   MODE    DCW   #1                         G   1  5166                     142
378  3 76   MOD1    DCW   #1                         G   1  5167                     142
379  3 77   BCODE   DCW   @B@                        G   1  5168                     142
380  3 78   PRNAM   DCW   #7                         G   7  5175                     142
381  3 79   DGV     DCW   @GV@                       G   2  5177                     142
382  3 80           DCW   @GM@                       G   2  5179                     143
383  3 81           DCW   @SV@                       G   2  5181                     143
384  3 82           DCW   @SM@                       G   2  5183                     143
385  3 83           DCW   @CV@                       G   2  5185                     143
386  3 84           DCW   @CM@                       G   2  5187                     143
387  3 85   DGVV    DCW   @00@                       G   2  5189                     143
388  3 86           DCW   @04@                       G   2  5191                     143
389  3 87           DCW   @08@                       G   2  5193                     144
390  3 88           DCW   @12@                       G   2  5195                     144
391  3 89           DCW   @16@                       G   2  5197                     144
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SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
392  3 90          DCW   @20@                                         G   2  5199                    144
393  3 91   PI1    CS    80              CLEAR CARD READ AREA         G   4  5200  / 080             144
394  3 92          SW    1,87            SET WD MK IN CARD AREA       G   7  5204  , 001 087         144
395  3 93          SW    92,97           AND FOR INDEX REGS.          G   7  5211  , 092 097         144
396  3 94          R                     READ I/O DESIGNATOR          G   1  5218  1                 145
397  3 95          C     1,@Z@           BRANCH TO HALT               G   7  5219  C 001 I5V         145
398  3 96          BU    ERR             IF COLUMN 1 NOT Z            G   5  5226  B M4V /           145
399  3 97   PI1A   MLC   ZEROS,IX1                                    G   7  5231  M /54 089         145
400  3 98          MLC   40,OPT                                       G   7  5238  M 040 |8|         145
401  3 99          BCE   PI2,OPT,1                                   G   8  5245  B T2U |8| 1       145
402  4 00          BCE   PI2,OPT,2                                   G   8  5253  B T2U |8| 2       146
403  4 01          BCE   PI2,OPT,3                                   G   8  5261  B T2U |8| 3       146
404  4 02          CS    332                                         G   4  5269  / 332             146
405  4 03          CS                                                G   1  5273  /                 146
406  4 04          MLCWA MSG1,241                                    G   7  5274  L T2T 241         146
407  4 05          W                                                 G   1  5281  2                 146
408  4 06          CC    1                                           G   2  5282  F 1               146
409  4 07          H     RESTRT                                      G   4  5284  . 100             147
410  4 08   MSG1   DCW   @22003  OUTPUT OPTION IS NOT 1,2 OR 3@       G  36  5323                    148
411  4 09   PI2    BCE   PI3,10,R       BRANCH TO PI3 IF D.T.P. IS ON LINE    G   8  5324  B T9T 010 R      149
412  4 10          BCE   PIB18,10,T     BRANCH TO PIB18 IF D.T.P. IS OFF LINE G   8  5332  B X9W 010 T      149
413  4 11          CS    332                                         G   4  5340  / 332             149
414  4 12          CS                                                G   1  5344  /                 149
415  4 13          MLCWA MSG2,239                                    G   7  5345  L T9S 239         149
416  4 14          W                                                 G   1  5352  2                 149
417  4 15          CC    1                                           G   2  5353  F 1               149
418  4 16          H     RESTRT                                      G   4  5355  . 100             150
419  4 17   MSG2   DCW   @22002  D.T.P. OPTION IS NOT R OR T@         G  34  5392                    150
420  4 18   PI3    MLC   SWOFF,SW&3                                  G   7  5393  M W3S W2Z         151
421  4 19          MLC   SW1OF,SW1&3     SET SW 1 TO READ DTP ON LINE          G   7  5400  M W4S W3Z      151
422  4 20          MLC   SW2OF,SW2&3          SET SW2 OFF TO READ DTP ON LINE  G   7  5407  M X3X X3U      151
423  4 21   PIB1   RWD   2               REWIND TAPE 2                G   5  5414  U %U2 R           151
424  4 22          RWD   3                    REWIND TAPE 3           G   5  5419  U %U3 R           151
425  4 23          RWD   4                    REWIND TAPE 4           G   5  5424  U %U4 R           151
426  4 24          MLC   9,PGNAM&6       STORE NAME OF DTP            G   7  5429  M 009 12T         152
427  4 25          MLC   16,DELTA              STORE DECIMAL PART OF INTERVAL  G   7  5436  M 016 |5X      152
428  4 26          MLC   13,DELTA-2            STORE INTEGER PART OF INTERVAL  G   7  5443  M 013 |5V      152
429  4 27          MLC   ZEROS,CC6                                    G   7  5450  M /54 |9T         152
430  4 28          S     DELTA,CC6       BRANCH TO PIB1A IF           G   7  5457  S |5X |9T         152
431  4 29          BM    PIB1A,CC6       DELTA NOT ZERO OR BLANK      G   8  5464  V V2U |9T K       153
432  4 30          BCE   PIB1A,OPT,1     BRANCH TO PIB1A IF CR. PTS. ONLY      G   8  5472  B V2U |8| 1      153
433  4 31          CS    332                                         G   4  5480  / 332             153
434  4 32          CS                                                G   1  5484  /                 153
435  4 33          MLCWA ERR9,230                                    G   7  5485  L V2T 230         153
436  4 34          W                                                 G   1  5492  2                 153
437  4 35          CC    1                                           G   2  5493  F 1               153
438  4 36          H     RESTRT                                      G   4  5495  . 100             154
439  4 37   ERR9   DCW   @22004  NO OUTPUT INTERVAL@                  G  25  5523                    154
440  4 38   PIB1A  MLC   21,LLIM         STORE LOWER LIMIT FOR OUTPUT  G   7  5524  M 021 |5Z         154
441  4 39          MLC   31,ULIM         STORE UPPER LIMIT FOR OUTPUT  G   7  5531  M 031 |6/         155
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SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

442  4 40          MLCWA GPK&1,81       SET GRP MK WD MK IN 81              G   7  5538  L /2| 081          155
443  4 41   PIB2   R                    READ TITLE CARDS                    G   1  5545  1                  155
444  4 42          C     1,@T@          BRANCH TO PIB3                      G   7  5546  C 001 I5W          155
445  4 43          BU    PIB3           IF COLUMN 1 NOT T                   G   5  5553  B V7V /            155
446  4 44          WTW   2,2            WRITE TITLE CARDS ON TAPE 2         G   8  5558  L %U2 002 W        155
447  4 45          BER   ERRW2                                              G   5  5566  B O0Y L            156
448  4 46          B     PIB2                                               G   4  5571  B V4V              156
449  4 47   PIB3   WTM   2              WRITE E-O-F FOR TITLE CARDS         G   5  5575  U %U2 M            156
450  4 48          B     PIB5                                               G   4  5580  B V8V              156
451  4 49   PIB4   R                    READ CASE CARDS                     G   1  5584  1                  156
452  4 50   PIB5   C     1,@P@          BRANCH TO PIB6                      G   7  5585  C 001 I5X          156
453  4 51          BU    PIB6           IF COLUMN 1 NOT P                   G   5  5592  B W1U /            156
454  4 52          WTW   2,2            WRITE CASE CARDS ON TAPE 2          G   8  5597  L %U2 002 W        157
455  4 53          BER   ERRW2                                              G   5  5605  B O0Y L            157
456  4 54          B     PIB4                                               G   4  5610  B V8U              157
457  4 55   PIB6   WTM   2              WRITE E-O-F FOR CASE CARDS          G   5  5614  U %U2 M            157
458  4 56          MLCWA GPK&1,73       PLACE GRP MK WD MK IN 73            G   7  5619  L /2| 073          157
459  4 57   SW     B     000                                                G   4  5626  B 000              157
460  4 58   SWOFF  DCW   PIB8                                               G   3  5632  W6U                157
461  4 59   SWON   DCW   PIB19                                              G   3  5635  Y2/                158
462  4 60   SW1    B     000                                                G   4  5636  B 000              158
463  4 61   SW1OF  DCW   PIB7                                               G   3  5642  W6T                158
464  4 62   SW1ON  DCW   PIB6A                                              G   3  5645  W4W                158
465  4 63   PIB6A  RTW   1,1                                                G   8  5646  L %U1 001 R        158
466  4 64          BER   ERRR1                                              G   5  5654  B N1U L            158
467  4 65          B     PIB8                                               G   4  5659  B W6U              158
468  4 66   PIB7   R                    READ DIMENSION CARDS                G   1  5663  1                  159
469  4 67   PIB8   C     1,@D@          BRANCH TO PIB12                     G   7  5664  C 001 I5Y          159
470  4 68          BU    PIB12          IF COLUMN 1 NOT D                   G   5  5671  B X5Z /            159
471  4 69          MLC   ZEROS,IX3      SET INDEX 3 TO 000                  G   7  5676  M /54 099          159
472  4 70   PIB9   C     11,DGV&X3      BRANCH TO PIB 10 UNTIL              G   7  5683  C 011 /GX          159
473  4 71          BU    PIB10          PROPER VECTOR OR MATRIX DETERMINED  G   5  5690  B X2| /            159
474  4 72          MLC   DGVV&X3,IX2    SET INDEX 2                         G   7  5695  M /HZ 094          159
475  4 73          MLC   16,RCGV&X2     STORE COLUMN DIMENSION              G   7  5702  M 016 1LU          160
476  4 74          MLC   13,RCGV-2&X2   STORE ROW DIMENSION                 G   7  5709  M 013 1LS          160
477  4 75          B     SW1                                                G   4  5716  B W3W              160
478  4 76   PIB10  A     TWO,IX3        ADD 2 TO INDEX 3                    G   7  5720  A /56 099          160
479  4 77          B     PIB9                                               G   4  5727  B W8T              160
480  4 78   SW2    B     000                                                G   4  5731  B 000              160
481  4 79   SW2OF  DCW   PIB11                                              G   3  5737  X5Y                160
482  4 80   SW2ON  DCW   PB10A                                              G   3  5740  X4/                161
483  4 81   PB10A  RTW   1,1                                                G   8  5741  L %U1 001 R        161
484  4 82          BER   ERRR1                                              G   5  5749  B N1U L            161
485  4 83          B     PIB12                                              G   4  5754  B X5Z              161
486  4 84   PIB11  R                    READ OPERATION CARDS                G   1  5758  1                  161
487  4 85   PIB12  C     9,BLNK9             BRANCH TO PIN1                 G   7  5759  C 009 I5U          161
488  4 86          BU    PIN1                IF NOT END CARD                G   5  5766  B O3T /            161
489  4 87          MLCWA BCODE,PG&X1    SET UP RETURN                       G   7  5771  L /6Y 1VV          162
490  4 88          MLC   ADPIR,PG&3&X1  FROM DTP PROGRAM                    G   7  5778  M /5| 1VY          162
491  4 89          MLCWA GPK&1,PG&4&X1  SET GP MK WD MK AT END OF DTP PROGRAM G   7  5785  L /2| 1VZ          162
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SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

492  4 90          B     POSIT              POSITION PROGRAM TAPE TO PHASE 2 G   4  5792  B M0S              162
493  4 91   PIB18  MLC   SW1ON,SW1&3    SET SW 1 ON TO READ DTP OFF-LINE     G   7  5796  M W4V W3Z          162
494  4 92          MLC   SW2ON,SW2&3         SET SW2 ON TO READ DTP OFF LINE  G   7  5803  M X4| X3U          162
495  4 93          MLC   SWON,SW&3                                           G   7  5810  M W3V W2Z          163
496  4 94          B     PIB1                                                G   4  5817  B U1U              163
497  4 95   PIB19  MLC   PGNAM&6,PRNAM                                       G   7  5821  M 12T /7V          163
498  4 96   PIB21  RTW   1,PGNAM        READ ADTP                            G   8  5828  L %U1 11X R        163
499  4 97          BER   ERRR1                                               G   5  5836  B N1U L            163
500  4 98          C     PGNAM&6,PRNAM       BRANCH TO SW1                   G   7  5841  C 12T /7V          163
501  4 99          BU    *&5                                                 G   5  5848  B Y5X /            164
502  5 00          B     SW1                 WHEN DTP LOCATED                G   4  5853  B W3W              164
503  5 01          C     PGNAM&4,@U%U1B@                                     G   7  5857  C 12/ I6T          164
504  5 02          BU    PIB22                                               G   5  5864  B Z2U /            164
505  5 03          CS    332                                                 G   4  5869  / 332              164
506  5 04          CS                                                        G   1  5873  /                  164
507  5 05          MLCWA MSGER,236                                           G   7  5874  L Z2T 236          164
508  5 06          MLCWA PRNAM,244                                           G   7  5881  L /7V 244          165
509  5 07          W                                                         G   1  5888  2                  165
510  5 08          H     RESTRT                                              G   4  5889  . 100              165
511  5 09   MSGER  DCW   @22005  CANNOT FIND D.T.P. NAMED@                   G  31  5923                     166
512  5 10   PIB22  RTW   1,1                                                 G   8  5924  L %U1 001 R        166
513  5 11          C     9,BLNK9             SKIP TO                         G   7  5932  C 009 I5U          167
514  5 12          BU    PIB22               NEXT DTP                        G   5  5939  B Z2U /            167
515  5 13          B     PIB21                                               G   4  5944  B Y2Y              167
516  5 14   PIK1   SW    1                                                   G   4  5948  , 001              167
517  5 15          C     BLNKS,RCGV     BRANCH TO PIK2                       G   7  5952  C I4V 13U          167
518  5 16          BU    PIK2           IF DIMENSION OF GV NOT BLANK         G   5  5959  B Z6Y /            167
519  5 17          B     PIK7           NO GENERAL VECTOR                    G   4  5964  B J1Z              167
520  5 18   PIK2   MLC   RCGV-2,CC1     COMPUTE                              G   7  5968  M 13S |8T          168
521  5 19          B     DIVIDE         NUMBER                               G   4  5975  B 630              168
522  5 20          DSA   EIGHT          OF CARDS                             G   3  5981  K07                168
523  5 21          DSA   CC1            IN GV                                G   3  5984  |8T                168
524  5 22          DCW   21                                                  G   2  5986                     168
525  5 23          MLC   QUOT,NOCDS                                          G   7  5987  M /11 98V          168
526  5 24          MLZS  @0@,QUOT-22                                         G   7  5994  Y I6U |89          168
527  5 25          C     @0@,QUOT-22                                         G   7  6001  C I6U |89          169
528  5 26          BU    PIK3                                                G   5  6008  B !1X /            169
529  5 27          B     PIK4                                                G   4  6013  B !2U              169
530  5 28   PIK3   A     ONE,NOCDS      ADD 1 TO NO. OF CARDS                G   7  6017  A /55 98V          169
531  5 29   PIK4   MLC   ZEROS,IX3      SET INDEX 3 TO 000                   G   7  6024  M /54 099          169
532  5 30   PIK5   R                    READ A DATA CARD                     G   1  6031  1                  169
533  5 31          MLCWA GPK&1,73                                            G   7  6032  L /2| 073          169
534  5 32          MRCM  1,CDBUF        MOVE DATA CARD TO CDBUF              G   7  6039  P 001 J22          170
535  5 33          MLC   ZEROS,IX2      SET INDEX 2 TO 000                   G   7  6046  M /54 094          170
536  5 34   PIK6   MLC   CDBUF&8&X2,GV&13&X3      MOVE DECIMAL TO GV -I-      G   7  6053  M JL0 XG5          170
537  5 35          MLC   CDBUF&3&X2,GV&9&X3       MOVE INTEGER TO GV -I-      G   7  6060  M JK5 XG1          170
538  5 36          A     NINE,IX2       INCREASE INDEX 2 BY 9                G   7  6067  A /23 094          170
539  5 37          A     TNTY,IX3       INCREASE INDEX 3 BY 20               G   7  6074  A K09 099          171
540  5 38          C     @072@,IX2      BRANCH TO PIK6                       G   7  6081  C I6X 094          171
541  5 39          BU    PIK6           IF INDEX 2 IS NOT 072                G   5  6088  B !5T /            171
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
542  5 40          S     ONE,NOCDS      DECREASE NO. OF CARDS BY 1  G   7  6093  S /55 98V         171
543  5 41          MLZS  @0@,NOCDS                                  G   7  6100  Y I6U 98V         171
544  5 42          C     ZEROS,NOCDS    BRANCH TO PIK5              G   7  6107  C /54 98V         172
545  5 43          BU    PIK5           IF GV INCOMPLETE            G   5  6114  B !3/ /           172
546  5 44  PIK7    C     BLNKS,RCGM     BRANCH TO PIK8              G   7  6119  C I4V 13Y         172
547  5 45          BU    PIK8           IF DIMENSION OF GM NOT BLANK G   5  6126  B J3V /           172
548  5 46          B     GOLOD          NO GENERAL MATRIX           G   4  6131  B 175             172
549  5 47  PIK8    MLC   RCGM,CC1       COMPUTE                     G   7  6135  M 13Y |8T         172
550  5 48          B     DIVIDE         NUMBER                      G   4  6142  B 630            172
551  5 49          DSA   EIGHT          OF CARDS                    G   3  6148  K07              173
552  5 50          DSA   CC1            PER ROW                     G   3  6151  |8T              173
553  5 51          DCW   21             OF GM                       G   2  6153                   173
554  5 52          MLC   QUOT,NOCDS                                 G   7  6154  M /11 98V         173
555  5 53          MLZS  @0@,QUOT-22                                G   7  6161  Y I6U |89         173
556  5 54          MLC   QUOT-22,CC3                                G   7  6168  M |89 |8W         173
557  5 55          C     @0@,QUOT-22                                G   7  6175  C I6U |89         173
558  5 56          BU    PIK9                                       G   5  6182  B J9/ /           174
559  5 57          B     PIK10                                      G   4  6187  B J9Y            174
560  5 58  PIK9    A     ONE,NOCDS      ADD 1 TO NO. OF CARDS       G   7  6191  A /55 98V         174
561  5 59  PIK10   MLC   NOCDS,CC2      SAVE NO. OF CARDS PER ROW   G   7  6198  M 98V |8V         174
562  5 60          MLC   ZEROS,CC1      SET NO. OF ROWS READ TO 00  G   7  6205  M /54 |8T         174
563  5 61          MLC   ZEROS,IX3      SET INDEX 3 TO 000          G   7  6212  M /54 099          174
564  5 62  PIK11   R                    READ DATA CARD              G   1  6219  1                 174
565  5 63          MLCWA GPK&1,73                                   G   7  6220  L /2| 073         175
566  5 64          MRCM  1,CDBUF             MOVE DATA CARD TO CDBUF G   7  6227  P 001 J22        175
567  5 65          MLC   ZEROS,IX2      SET INDEX 2 TO 000          G   7  6234  M /54 094          175
568  5 66  PIK13   MLC   CDBUF&8&X2,GM&13&X3      MOVE DECIMAL TO GM -I,J-  G   7  6241  M JL0 ZG5  175
569  5 67          MLC   CDBUF&3&X2,GM&9&X3       MOVE INTEGER TO GM -I,J-  G   7  6248  M JK5 ZG1  175
570  5 68          A     NINE,IX2       INCREASE INDEX 2 BY 9       G   7  6255  A /23 094         176
571  5 69          A     TNTY,IX3       INCREASE INDEX 3 BY 20      G   7  6262  A K09 099         176
572  5 70          C     @072@,IX2      BRANCH TO PIK13             G   7  6269  C I6X 094         176
573  5 71          BU    PIK13          IF INDEX 2 IS NOT 072       G   5  6276  B K4/ /           176
574  5 72          S     ONE,NOCDS      DECREASE NO. OF CARDS BY 1  G   7  6281  S /55 98V         176
575  5 73          MLZS  @0@,NOCDS                                  G   7  6288  Y I6U 98V         177
576  5 74          C     ZEROS,NOCDS    BRANCH TO PIK11             G   7  6295  C /54 98V         177
577  5 75          BU    PIK11          IF ROW OF GM INCOMPLETE     G   5  6302  B K1Z /           177
578  5 76          A     ONE,CC1        ADD 1 TO NO. OF ROWS READ   G   7  6307  A /55 |8T         177
579  5 77          C     CC1,RCGM-2     BRANCH TO PIK14             G   7  6314  C |8T 13W         177
580  5 78          BU    PIK14          IF ALL ROWS HAVE NOT BEEN READ G   5  6321  B L3| /          177
581  5 79          B     GOLOD          ALL OF GENERAL MATRIX HAS BEEN READ  G   4  6326  B 175     178
582  5 80  PIK14   MLC   CC2,NOCDS      RESET NO. OF CDS PER ROW    G   7  6330  M |8V 98V         178
583  5 81          C     CC3,@0@        BRANCH TO PIK15             G   7  6337  C |8W I6U         178
584  5 82          BU    PIK15          IF GM ROW IS NOT INTEGER NO. OF CDS  G   5  6344  B L5T /  178
585  5 83          B     PIK11          READ NEXT ROW               G   4  6349  B K1Z             178
586  5 84  PIK15   MLC   @008@,CC5                                  G   7  6353  M I7| |8Z         178
587  5 85          S     CC3,CC5        COMPUTE                     G   7  6360  S |8W |8Z         179
588  5 86          B     MULT1          ADJUSTMENT                  G   4  6367  B 336            179
589  5 87          DSA   CC5            FOR                         G   3  6373  |8Z              179
590  5 88          DSA   TNTY           INDEX 3                     G   3  6376  K09              179
591  5 89          MLC   PROD,CC5                                   G   7  6377  M 623 |8Z         179
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SEQ PG LIN  LABEL  OP    OPERANDS                                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
592  5 90           S     CC5,IX3        ADJUST INDEX 3                            G  7  6384  S |8Z 099          179
593  5 91           MLZS  @0@,IX3                                                  G  7  6391  Y I6U 099          179
594  5 92           B     PIK11                                                    G  4  6398  B K1Z              180
595  5 93   POSIT   MLCWA GPK&1,6                                                  G  7  6402  L /2| 006          180
596  5 94           RTW   1,1                                                      G  8  6409  L %U1 001 R        180
597  5 95           C     5,@U%U1B@                                                G  7  6417  C 005 I7V         180
598  5 96           BU    POSIT                                                    G  5  6424  B M0S /           180
599  5 97           MLCWA @0@,6                                                    G  7  6429  L I6U 006         180
600  5 98           BSP   1                                                        G  5  6436  U %U1 B           181
601  5 99           B     PIK1                                                     G  4  6441  B Z4Y             181
602  6 00   ERR     CC    1                                                        G  2  6445  F 1               181
603  6 01           CS    332                                                      G  4  6447  / 332             181
604  6 02           CS                                                             G  1  6451  /                 181
605  6 03           MLCWA MSG,250                                                  G  7  6452  L N1T 250         181
606  6 04           W                                                              G  1  6459  2                 181
607  6 05           CC    1                                                        G  2  6460  F 1               182
608  6 06           H     RESTRT                                                   G  4  6462  . 100             182
609  6 07   MSG     DCW   @22001 THE FIRST CARD OF THE CASE IS NOT A Z-CARD@       G 48  6513                  184
610  6 08   ERRR1   SBR   ERR1A&3                                                  G  4  6514  H N4Y             184
611  6 09           MA    M13A,ERR1A&3                                             G  7  6518  # K06 N4Y         184
612  6 10           S     ONE,ERR1B                                                G  7  6525  S /55 N4Z         184
613  6 11           BM    ERR1C,ERR1B                                              G  8  6532  V N5| N4Z K       184
614  6 12           BSP   1                                                        G  5  6540  U %U1 B           185
615  6 13   ERR1A   B     *                                                        G  4  6545  B N4Y             185
616  6 14   ERR1B   DCW   9                                                        G  1  6549                  185
617  6 15   ERR1C   CS    332                                                      G  4  6550  / 332             185
618  6 16           CS    299                                                      G  4  6554  / 299             185
619  6 17           MLC   ERR1M,237                                                G  7  6558  M O0X 237         185
620  6 18           CC    1                                                        G  2  6565  F 1               185
621  6 19           W                                                              G  1  6567  2                 186
622  6 20           H     *-3                                                      G  4  6568  . N6Y             186
623  6 21   ERR1M   DCW   @22018 PERMANENT READ ERROR ON TAPE 1@                   G 36  6607                  187
624  6 22   ERRW2   SBR   ERW2A&3                                                  G  4  6608  H O3S             188
625  6 23           MA    M13A,ERW2A&3                                             G  7  6612  # K06 O3S         188
626  6 24           BSP   2                                                        G  5  6619  U %U2 B           188
627  6 25           SKP   2                                                        G  5  6624  U %U2 E           188
628  6 26   ERW2A   B     *                                                        G  4  6629  B O3S             188
629  6 27   PIN1    SW    1                PROCESS AN OP CARD                      G  4  6633  , 001             188
630  6 28           C     @I@,1            COL 1-I,C OR S -                        G  7  6637  C I7W 001         188
631  6 29           BU    PIN2                                                     G  5  6644  B O5T /           189
632  6 30           B     PIN6                                                     G  4  6649  B O8/             189
633  6 31   PIN2    C     @C@,1                                                    G  7  6653  C I7X 001         189
634  6 32           BU    PIN4                                                     G  5  6660  B O6Z /           189
635  6 33           B     PIN6                                                     G  4  6665  B O8/             189
636  6 34   PIN4    C     @S@,1                                                    G  7  6669  C I7Y 001         189
637  6 35           BU    PIN25                                                    G  5  6676  B Q0T /           189
638  6 36   PIN6    MLC   MODE,MOD1                                                G  7  6681  M /6W /6X         190
639  6 37           MLC   1,MODE                                                   G  7  6688  M 001 /6W         190
640  6 38           C     @I@,1                                                    G  7  6695  C I7W 001         190
641  6 39           BU    PIN10                                                    G  5  6702  B P1/ /           190
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SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
642  6 40           B     SW2                                      G  4  6707  B X3/              190
643  6 41   PIN10   MLCWA BCODE,PG&X1                             G  7  6711  L /6Y 1VV          190
644  6 42           C     @I@,MOD1                                 G  7  6718  C I7W /6X          191
645  6 43           BU    PIN15                                    G  5  6725  B P4/ /            191
646  6 44           MLC   ADPIL,PG&3&X1                            G  7  6730  M /5T 1VY          191
647  6 45           B     PIN20                                    G  4  6737  B P4Y              191
648  6 46   PIN15   MLC   ADPIR,PG&3&X1                           G  7  6741  M /5| 1VY          191
649  6 47   PIN20   A     FOUR,IX1                                 G  7  6748  A /58 089          191
650  6 48           MLC   PGADR,CC5                                G  7  6755  M 97X |8Z          192
651  6 49           A     IX1,CC5                                  G  7  6762  A 089 |8Z          192
652  6 50           C     @C@,MODE                                 G  7  6769  C I7X /6W          192
653  6 51           BU    PIN23                                    G  5  6776  B P9S /            192
654  6 52           MLC   CC5,CADR                                 G  7  6781  M |8Z 98|          192
655  6 53           B     SW2                                      G  4  6788  B X3/              192
656  6 54   PIN23   MLC   CC5,SADR                                 G  7  6792  M |8Z 98T          193
657  6 55           B     SW2                                      G  4  6799  B X3/              193
658  6 56   PIN25   MLCWA BCODE,PG&X1                             G  7  6803  L /6Y 1VV          193
659  6 57           C     @M@,1                                    G  7  6810  C I7Z 001          193
660  6 58           BU    PIN26                                    G  5  6817  B Q2W /            193
661  6 59           B     PIN32                                    G  4  6822  B R5U              193
662  6 60   PIN26   C     @&@,1                                    G  7  6826  C I8| 001          194
663  6 61           BU    PIN27                                    G  5  6833  B Q4S /            194
664  6 62           B     PIN33                                    G  4  6838  B R6V              194
665  6 63   PIN27   C     @-@,1                                    G  7  6842  C I8/ 001          194
666  6 64           BU    PIN28                                    G  5  6849  B Q5Y /            194
667  6 65           B     PIN34                                    G  4  6854  B R7W              194
668  6 66   PIN28   C     @*@,1                                    G  7  6858  C I8S 001          194
669  6 67           BU    PIN29                                    G  5  6865  B Q7U /            195
670  6 68           B     PIN35                                    G  4  6870  B R8X              195
671  6 69   PIN29   C     @/@,1                                    G  7  6874  C I8T 001          195
672  6 70           BU    PIN30                                    G  5  6881  B Q9| /            195
673  6 71           B     PIN36                                    G  4  6886  B R9Y              195
674  6 72   PIN30   C     @A@,1                                    G  7  6890  C I8U 001          195
675  6 73           BU    PIN31                                    G  5  6897  B R0W /            195
676  6 74           B     PIN37                                    G  4  6902  B ?0Z              196
677  6 75   PIN31   CS    332                                      G  4  6906  / 332              196
678  6 76           CS                                             G  1  6910  /                  196
679  6 77           MLC   ER9MSG,234                               G  7  6911  M R5T 234          196
680  6 78           W                                              G  1  6918  2                  196
681  6 79           CC    1                                        G  2  6919  F 1                196
682  6 80           H     RESTRT                                   G  4  6921  . 100              196
683  6 81   ER9MSG  DCW   @22006  ILLEGAL CARD IN D.T.P.@          G 29  6953                     197
684  6 82   PIN32   MLC   PICADR,PG&3&X1                          G  7  6954  M /2W 1VY          197
685  6 83           B     PIN40                                    G  4  6961  B ?1W              198
686  6 84   PIN33   MLC   PIPADR,PG&3&X1                          G  7  6965  M /2Z 1VY          198
687  6 85           B     PIN40                                    G  4  6972  B ?1W              198
688  6 86   PIN34   MLC   PISADR,PG&3&X1                          G  7  6976  M /3S 1VY          198
689  6 87           B     PIN40                                    G  4  6983  B ?1W              198
690  6 88   PIN35   MLC   PIMADR,PG&3&X1                          G  7  6987  M /3V 1VY          198
691  6 89           B     PIN40                                    G  4  6994  B ?1W              198
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SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

692  6 90   PIN36  MLC   PIDADR,PG&3&X1                                     G   7  6998  M /3Y 1VY          199
693  6 91          B     PIN40                                             G   4  7005  B ?1W              199
694  6 92   PIN37  MLC   PIAADR,PG&3&X1                                     G   7  7009  M /4/ 1VY          199
695  6 93   PIN40  MLC   18,CC7                                            G   7  7016  M 018 /0S          199
696  6 94          B     CONVT            ADDRESSES                        G   4  7023  B B1U              199
697  6 95          MLCWA CC5,PG&6&X1                                       G   7  7027  L |8Z 1W/          199
698  6 951         C     BLNK,CC5            BRANCH TO PIN31               G   7  7034  C /61 |8Z          200
699  6 952         BU    PIN41               IF A OPERAND                  G   5  7041  B ?5| /            200
700  6 953         B     PIN31               IS BLANK                      G   4  7046  B R0W              200
701  6 96   PIN41  MLC   28,CC7                                            G   7  7050  M 028 /0S          200
702  6 97          B     CONVT                                             G   4  7057  B B1U              200
703  6 98          MLCWA CC5,PG&9&X1                                       G   7  7061  L |8Z 1WU          200
704  6 981         C     BLNK,CC5            BRANCH TO PIN31               G   7  7068  C /61 |8Z          201
705  6 982         BU    PIN42               IF B OPERAND                  G   5  7075  B ?9S /            201
706  6 983         C     PG&3&X1,PICADR      IS BLANK FOR OTHER            G   7  7080  C 1VY /2W          201
707  6 984         BU    PIN31               THAN A MOVE OPERATION         G   5  7087  B R0W /            201
708  6 99   PIN42  MLC   38,CC7                                            G   7  7092  M 038 /0S          201
709  7 00          B     CONVT                                             G   4  7099  B B1U              201
710  7 01          MLCWA CC5,PG&12&X1                                      G   7  7103  L |8Z 1WX          202
711  7 011         C     BLNK,CC5            BRANCH TO PIN31               G   7  7110  C /61 |8Z          202
712  7 012         BU    PIN43               IF C OPERAND                  G   5  7117  B A2W /            202
713  7 013         B     PIN31               IS BLANK                      G   4  7122  B R0W              202
714  7 02   PIN43  A     @13@,IX1                                          G   7  7126  A I8W 089          202
715  7 021         MLC   IX1,CC5                                           G   7  7133  M 089 |8Z          202
716  7 022         S     @788@,CC5           BRANCH TO SW2                 G   7  7140  S I8Z |8Z          203
717  7 03          BM    SW2,CC5             IF IX1 IS LESS THAN 788       G   8  7147  V X3/ |8Z K        203
718  7 05          CS    332                                               G   4  7155  / 332              203
719  7 06          CS                                                      G   1  7159  /                  203
720  7 07          MLC   ER6MSG,245                                        G   7  7160  M B1T 245          203
721  7 08          W                                                       G   1  7167  2                  203
722  7 09          CC    1                                                 G   2  7168  F 1                203
723  7 10          H     RESTRT                                            G   4  7170  . 100              204
724  7 11   ER6MSG DCW   @22007  MORE THAN 60 STATEMENTS IN D.T.P.@        G  40  7213                     206
725  7 12   *  SUBROUTINE CONVT- CONVERTS 9 COLS. IN CC7 TO AN ADDRESS IN CC5
726  7 13   CONVT  SBR   CONVX1&3                                          G   4  7214  H G4X              206
727  7 14          MLC   IX3,CC9                                           G   7  7218  M 099 /0Y          206
728  7 15          C     BLNK,CC7-7                                        G   7  7225  C /61 |9V          206
729  7 16          BU    CONV1                                             G   5  7232  B B4Y /            206
730  7 17          MLC   BLNK,CC5                                          G   7  7237  M /61 |8Z          207
731  7 18          B     CONVEX                                            G   4  7244  B G3X              207
732  7 19   CONV1  C     CC7-7,@V@                                         G   7  7248  C |9V I9|          207
733  7 20          BU    CONV5                                             G   5  7255  B B6U /            207
734  7 21          B     CONV20                                            G   4  7260  B B8|              207
735  7 22   CONV5  C     CC7-7,@M@                                         G   7  7264  C |9V I7Z          207
736  7 23          BU    CONV80                                            G   5  7271  B E4X /            207
737  7 24          B     CONV30                                            G   4  7276  B C5Z              208
738  7 25   CONV20 MLC   CC7-5,CC1                                         G   7  7280  M |9X |8T          208
739  7 26          S     ONE,CC1                                           G   7  7287  S /55 |8T          208
740  7 27          B     MULT1                                             G   4  7294  B 336              208
741  7 28          DSA   TNTY                                              G   3  7300  K09                208
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SEQ PG LIN  LABEL   OP    OPERANDS                SFX CT  LOCN  INSTRUCTION TYPE  CARD
742  7 29           DSA   CC1                      G   3  7303  |8T                208
743  7 30           MLC   PROD,CC8                 G   7  7304  M 623 /0V          208
744  7 31           C     CC7-8,@G@                G   7  7311  C |9U I9/          209
745  7 32           BU    CONV64                   G   5  7318  B C3U /            209
746  7 33           MLC   ADRGV,CC5                G   7  7323  M /6S |8Z         209
747  7 34           B     CONV66                   G   4  7330  B C4/             209
748  7 35   CONV64  MLC   ADRSV,CC5                G   7  7334  M /5W |8Z         209
749  7 36   CONV66  MLZS  @0@,CC8                  G   7  7341  Y I6U /0V         209
750  7 37           MA    CC8,CC5                  G   7  7348  # /0V |8Z         210
751  7 38           B     CONVEX                   G   4  7355  B G3X             210
752  7 39   CONV30  C     CC7-8,@G@                G   7  7359  C |9U I9/          210
753  7 40           BU    CONV32                   G   5  7366  B C7V /            210
754  7 41           B     CONV36          -GM      G   4  7371  B C9/             210
755  7 42   CONV32  C     CC7-8,@C@                G   7  7375  C |9U I7X          210
756  7 43           BU    CONV38          -SM      G   5  7382  B D0S /            210
757  7 44           B     CONV40          -CM      G   4  7387  B D1T             211
758  7 45   CONV36  MLC   RCGM,CC6                 G   7  7391  M 13Y |9T         211
759  7 46           B     CONV45                   G   4  7398  B D2|             211
760  7 47   CONV38  MLC   RCSM,CC6                 G   7  7402  M 14W |9T         211
761  7 48           B     CONV45                   G   4  7409  B D2|             211
762  7 49   CONV40  MLC   RCCM,CC6                 G   7  7413  M 15U |9T         211
763  7 50   CONV45  MLC   CC6,CC1                 G   7  7420  M |9T |8T         212
764  7 51           B     MULT1                    G   4  7427  B 336             212
765  7 52           DSA   CC1                      G   3  7433  |8T               212
766  7 53           DSA   TNTY                     G   3  7436  K09              212
767  7 54           MLC   PROD,CC8                 G   7  7437  M 623 /0V          212
768  7 55           MLC   CC7-5,CC1                G   7  7444  M |9X |8T         212
769  7 56           S     ONE,CC1                  G   7  7451  S /55 |8T         212
770  7 57           B     MULT1                    G   4  7458  B 336             213
771  7 58           DSA   CC8                      G   3  7464  /0V              213
772  7 59           DSA   CC1                      G   3  7467  |8T               213
773  7 60           MLC   PROD,CC8                 G   7  7468  M 623 /0V          213
774  7 61           MLC   CC7-2,CC1                G   7  7475  M /0| |8T         213
775  7 62           B     MULT1                    G   4  7482  B 336             213
776  7 63           DSA   TNTY                     G   3  7488  K09              213
777  7 64           DSA   CC1                      G   3  7491  |8T               214
778  7 65           A     PROD,CC8                 G   7  7492  A 623 /0V          214
779  7 66           MLZS  @0@,CC8                  G   7  7499  Y I6U /0V         214
780  7 67           C     CC7-8,@G@                G   7  7506  C |9U I9/          214
781  7 68           BU    CONV74                   G   5  7513  B E2Z /            214
782  7 69           MLC   ADRGM,CC5                G   7  7518  M /6V |8Z         214
783  7 70           B     CONV76                   G   4  7525  B E3W             215
784  7 71   CONV74  MLC   ADRSM,CC5                G   7  7529  M /5Z |8Z         215
785  7 72   CONV76  MA    CC8,CC5                  G   7  7536  # /0V |8Z         215
786  7 73           B     CONVEX                   G   4  7543  B G3X             215
787  7 74   CONV80  C     CC7-8,@N@                G   7  7547  C |9U I9S          215
788  7 75           BU    CONV60          -T LOC   G   5  7554  B G4Y /            215
789  7 76           B     MULT1           -NR      G   4  7559  B 336             215
790  7 77           DSA   NRCT                     G   3  7565  F75              216
791  7 78           DSA   TNTY                     G   3  7568  K09              216
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SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

792  7 79          MLC   PROD,IX3                                           G   7  7569  M 623 099          216
793  7 80          MLZS  @0@,IX3                                            G   7  7576  Y I6U 099          216
794  7 81          A     ONE,NRCT                                           G   7  7583  A /55 F75          216
795  7 82          C     @11@,NRCT           BRANCH TO CONV81               G   7  7590  C I9U F75          216
796  7 83          BU    CONV81              IF NO. OF CONST. LESS THAN 11  G   5  7597  B F8| /            216
797  7 84          CS    332                                                G   4  7602  / 332              217
798  7 85          CS                                                       G   1  7606  /                  217
799  7 86          MLC   ER7MSG,248                                         G   7  7607  M F7| 248          217
800  7 87          MLC   ER7MG1,258                                         G   7  7614  M F7Z 258          217
801  7 88          W                                                        G   1  7621  2                  217
802  7 89          CC    1                                                  G   2  7622  F 1                217
803  7 90          H     RESTRT                                             G   4  7624  . 100              217
804  7 91   ER7MSG DCW   @22008  MORE THAN 10 REFERENCES TO CONSTANTS@      G  43  7670                     219
805  7 92   ER7MG1 DCW   @IN D.T.P.@                                        G   9  7679                     219
806  7 93   CONV81 SW    CC7-6                                              G   4  7680  , |9W              219
807  7 94          MLC   CC7,NRLIS&13&X3                                    G   7  7684  M /0S FH9          219
808  7 95          MLC   CC7-5,NRLIS&9&X3                                   G   7  7691  M |9X FH5          219
809  7 96          MLC   @0@,NRLIS&7&X3                                     G   7  7698  M I6U FH3          220
810  7 97          MLZS  NRLIS&13&X3,NRLIS&19&X3                            G   7  7705  Y FH9 FI5          220
811  7 98          MLZS  @0@,NRLIS&13&X3                                    G   7  7712  Y I6U FH9          220
812  7 99          CW    CC7-6                                              G   4  7719  ) |9W              220
813  8 00          MLC   ANRLIS,CC5                                         G   7  7723  M /4U |8Z          220
814  8 01          MA    IX3,CC5                                            G   7  7730  # 099 |8Z          220
815  8 02   CONVEX MLC   CC9,IX3                                            G   7  7737  M /0Y 099          221
816  8 03   CONVX1 B     *                                                  G   4  7744  B G4X              221
817  8 04   CONV60 C     CC7-8,@T@                                          G   7  7748  C |9U I5W          221
818  8 05          BU    CONV90                                             G   5  7755  B H0Z /            221
819  8 06          MLC   CC7-7,CC3                                          G   7  7760  M |9V |8W          221
820  8 07          B     MULT1                                              G   4  7767  B 336              221
821  8 08          DSA   TNTY                                               G   3  7773  K09                221
822  8 09          DSA   CC3                                                G   3  7776  |8W                222
823  8 10          MLC   PROD,CC8                                           G   7  7777  M 623 /0V          222
824  8 11          MLZS  @0@,CC8                                            G   7  7784  Y I6U /0V          222
825  8 12          MLC   ADRTO,CC5                                          G   7  7791  M /2T |8Z          222
826  8 13          MA    CC8,CC5                                            G   7  7798  # /0V |8Z          222
827  8 14          B     CONVEX                                             G   4  7805  B G3X              222
828  8 15   CONV90 MLC   CC7-7,CC2                                          G   7  7809  M |9V |8V          223
829  8 16          MLC   ZEROS,IX3                                          G   7  7816  M /54 099          223
830  8 17   CONV93 C     ADIQ&X3,CC2                                        G   7  7823  C HI| |8V          223
831  8 18          BU    CONV95                                             G   5  7830  B H3Z /            223
832  8 19          B     CONV96                                             G   4  7835  B H7X              223
833  8 20   CONV95 A     THREE,IX3                                          G   7  7839  A /57 099          223
834  8 21          C     @027@,IX3                                          G   7  7846  C I9X 099          224
835  8 22          BU    CONV93                                             G   5  7853  B H2T /            224
836  8 23          CS    332                                                G   4  7858  / 332              224
837  8 24          CS                                                       G   1  7862  /                  224
838  8 25          MLC   ER9MSG,234                                         G   7  7863  M R5T 234          224
839  8 26          W                                                        G   1  7870  2                  224
840  8 27          CC    1                                                  G   2  7871  F 1                224
841  8 28          H     RESTRT                                             G   4  7873  . 100              225
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SEQ PG LIN  LABEL  OP    OPERANDS                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
842  8 29   CONV96 MLC   ADRIQ&X3,CC5               G   7  7877  M IAX |8Z          225
843  8 30          B     CONVEX                     G   4  7884  B G3X              225
844  8 31   ADIQ   DCW   @ IQ@                      G   3  7890                     225
845  8 32          DCW   @ IE@                      G   3  7893                     225
846  8 33          DCW   @ SE@                      G   3  7896                     225
847  8 34          DCW   @ SC@                      G   3  7899                     225
848  8 35          DCW   @ SI@                      G   3  7902                     226
849  8 36          DCW   @ SB@                      G   3  7905                     226
850  8 37          DCW   @ SQ@                      G   3  7908                     226
851  8 38          DCW   @ SH@                      G   3  7911                     226
852  8 39          DCW   @ SP@                      G   3  7914                     226
853  8 40   ADRIQ  DSA   IQ                         G   3  7917  I15                226
854  8 41          DSA   IE                         G   3  7920  H95                226
855  8 42          DSA   SE                         G   3  7923  K59                227
856  8 43          DSA   SC                         G   3  7926  L19                227
857  8 44          DSA   SI&19                      G   3  7929  |0Z                227
858  8 45          DSA   SB                         G   3  7932  K99                227
859  8 46          DSA   SQ                         G   3  7935  K79                227
860  8 47          DSA   SH                         G   3  7938  L39                227
861  8 48          DSA   SP                         G   3  7941  L59                227
862  8 49   BLNKS  DCW   @    @                     G   4  7945                     228
863  8 491  BLNK9  DCW   @         @                G   9  7954                     228
                    DCW   @Z@                       G   1  7955             LIT     228
                          @T@                       G   1  7956             LIT     228
                          @P@                       G   1  7957             LIT     228
                          @D@                       G   1  7958             LIT     228
       503                @U%U1B@                   G   5  7963             LIT     228
                          @0@                       G   1  7964             LIT     229
                          @072@                     G   3  7967             LIT     229
                          @008@                     G   3  7970             LIT     229
       597                @U%U1B@                   G   5  7975             LIT     229
                          @I@                       G   1  7976             LIT     229
                          @C@                       G   1  7977             LIT     229
                          @S@                       G   1  7978             LIT     229
                          @M@                       G   1  7979             LIT     230
                          @&@                       G   1  7980             LIT     230
                          @-@                       G   1  7981             LIT     230
                          @*@                       G   1  7982             LIT     230
                          @/@                       G   1  7983             LIT     230
                          @A@                       G   1  7984             LIT     230
                          @13@                      G   2  7986             LIT     230
                          @788@                     G   3  7989             LIT     231
                          @V@                       G   1  7990             LIT     231
                          @G@                       G   1  7991             LIT     231
                          @N@                       G   1  7992             LIT     231
                          @11@                      G   2  7994             LIT     231
                          @027@                     G   3  7997             LIT     231
864  8 50          EX    PI1                        G          B S0|                232
865  8 51          ORG   5125                       G           5125
866  8 52   ERRW3  SBR   ERW3A&3                    G   4  5125  H /4Z              235
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SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD

867  8 53           MA    M13A,ERW3A&3                                     G   7  5129  # K06 /4Z          235
868  8 54           BSP   3                                                G   5  5136  U %U3 B            235
869  8 55           SKP   3                                                G   5  5141  U %U3 E            235
870  8 56   ERW3A   B     *                                                G   4  5146  B /4Z              235
871  8 57   ERRW4   SBR   ERW4A&3                                          G   4  5150  H /7U              235
872  8 58           MA    M13A,ERW4A&3                                     G   7  5154  # K06 /7U          235
873  8 59           BSP   4                                                G   5  5161  U %U4 B            236
874  8 60           SKP   4                                                G   5  5166  U %U4 E            236
875  8 61   ERW4A   B     *                                                G   4  5171  B /7U              236
876  8 62   PIL0    MLC   CADR,PIL3&3    SET ADDRESS FOR CASH ITEM PART OF DTP G   7  5175  M 98| T1/         236
877  8 63           MLC   SADR,PIL2&3    SET ADDRESS FOR NON-CASH PART OF DTP  G   7  5182  M 98T T0W         236
878  8 64           CS    80                                               G   4  5189  / 080              236
879  8 65           SW    1                                                G   4  5193  , 001              236
880  8 66           MLC   ZEROS,SORT&2   INITIALIZE BUFFER CT.             G   7  5197  M /54 L62          237
881  8 67           MLC   NINES,SORT&12  SET SMALLEST MU TO 9.9999         G   7  5204  M K14 L72          237
882  8 68           C     BLANK,RCGV     BRANCH TO PIL05                   G   7  5211  C Z6V 13U          237
883  8 69           BU    PIL05          IF THERE WAS A                    G   5  5218  B S3Z /            237
884  8 70           C     BLANK,RCGM     GENERAL VECTOR AND/OR A           G   7  5223  C Z6V 13Y          237
885  8 71           BU    PIL05          GENERAL MATRIX                    G   5  5230  B S3Z /            237
886  8 72           B     PIL1                                             G   4  5235  B S4T              238
887  8 73   PIL05   B     PG             EXECUTE INDEX PART OF DTP         G   4  5239  B 15V              238
888  8 74   PIL1    B     RDSVM          READ CASH AND NON-CASH ITEMS INTO G   4  5243  B !3U              238
889  8 75   *                              CV,CM AND SV,SM RESPECTIVELY
890  8 76           MLC   ZEROS,SE                                         G   7  5247  M /54 K59          238
891  8 77           MLC   ZEROS,SQ           CLEAR                       G   7  5254  M /54 K79          238
892  8 78           MLC   ZEROS,SB           SECURITY                    G   7  5261  M /54 K99          238
893  8 79           MLC   ZEROS,SC           PARAMETERS                  G   7  5268  M /54 L19          239
894  8 80           MLC   ZEROS,SH           FOR                         G   7  5275  M /54 L39          239
895  8 81           MLC   ZEROS,SP           DTP                         G   7  5282  M /54 L59          239
896  8 82           MLC   ZEROS,SIREC                                    G   7  5289  M /54 |1V          239
897  8 83           C     ONE,SCIND      EXECUTE NON-CASH PART OF DTP      G   7  5296  C /55 98W          239
898  8 84   PIL2    BU    *              IF SECURITY IS NON-CASH ITEM      G   5  5303  B T0X /            240
899  8 85   PIL3    B     *              OTHERWISE EXECUTE CASH PART OF DTP G   4  5308  B T1/             240
900  8 86   PIR1    MLC   SI&10,SIREC    STORE ID   XXXXX                 G   7  5312  M |0| |1V          240
901  8 87           MLC   SI&10,SI&19                                     G   7  5319  M |0| |0Z          240
902  8 88           WTW   4,SI&15        WRITE SECURITY ID ON TAPE 4       G   8  5326  L %U4 |0V W        240
903  8 89           BER   ERRW4                                            G   5  5334  B /5| L            240
904  8 90           A     ONE,SECTR      ADD 1 TO INTERNAL ID              G   7  5339  A /55 98Z          241
905  8 91           C     @751@,SECTR    BRANCH TO PIR15                   G   7  5346  C H7W 98Z          241
906  8 92           BU    PIR15          IF SECTR LESS THAN 751            G   5  5353  B U0Y /            241
907  8 93           CS    332                                              G   4  5358  / 332              241
908  8 94           CS                                                     G   1  5362  /                  241
909  8 95           MLC   ER8MSG,236                                       G   7  5363  M U0X 236          241
910  8 96           W                                                      G   1  5370  2                  241
911  8 97           CC    1                                                G   2  5371  F 1                242
912  8 98           H     RESTRT                                           G   4  5373  . 100              242
913  8 99   ER8MSG  DCW   @22011  MORE THAN 750 SECURITIES@                G  31  5407                     242
914  9 00   PIR15   A     @5@,SE-5       ROUND MU                          G   7  5408  A H7X K54          243
915  9 01           MLC   SE-6,SEREC     STORE MU  X.XXXX                  G   7  5415  M K53 |2|          243
916  9 02           MLZS  SE,SEREC                                         G   7  5422  Y K59 |2|          243
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SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

917  9 03          MLC   SQ-2,SQREC     STORE Q    XX.XXXXXXXX              G   7  5429  M K77 |3|          243
918  9 04          A     @5@,SB-5       ROUND B                             G   7  5436  A H7X K94          243
919  9 05          MLC   SB-6,SBREC          STORE B  XX.XXXX               G   7  5443  M K93 |3W          244
920  9 06          MLZS  SB,SBREC                                            G   7  5450  Y K99 |3W          244
921  9 07          S     ONE,SC         BRANCH TO PIR3                      G   7  5457  S /55 L19          244
922  9 08          BM    PIR3,SC        IF C BLANK OR ZERO                  G   8  5464  V U9/ L19 K        244
923  9 09          A     ONE,SC                                             G   7  5472  A /55 L19          244
924  9 10          C     SC-10,ONE      BRANCH TO PIR4                      G   7  5479  C L09 /55          245
925  9 11          BU    PIR4           IF C NOT 1.                         G   5  5486  B U9Y /            245
926  9 12   PIR3   MLC   ONEPT,SC-6     SET C TO 1.0000                     G   7  5491  M Z6| L13          245
927  9 13   PIR4   MLC   SC-6,SCREC     STORE C    X.XXXX                   G   7  5498  M L13 |4/          245
928  9 14          C     SH-6,BLANK     BRANCH TO PIR5                      G   7  5505  C L33 Z6V          245
929  9 15          BU    PIR5           IF H NOT BLANK                      G   5  5512  B V2Y /            245
930  9 16          MLC   ZEROS,SH-6     SET H EQU 0.0000                    G   7  5517  M /54 L33          246
931  9 17          B     PIR6                                               G   4  5524  B V4X              246
932  9 18   PIR5   C     SH-10,ONE      BRANCH TO PIR6                      G   7  5528  C L29 /55          246
933  9 19          BU    PIR6           IF H NOT 1.                         G   5  5535  B V4X /            246
934  9 20          MLC   ONEPT,SH-6     SET H TO 1.0000                     G   7  5540  M Z6| L33          246
935  9 21   PIR6   MLC   SH-6,SHREC     STORE H    X.XXXX                   G   7  5547  M L33 |4W          246
936  9 22          MLC   SP-8,SPREC     STORE P  XXX.XX                     G   7  5554  M L51 |5/          247
937  9 23          MLC   FXIND,SFREC    STORE FIXED INVESTMENT INDICATOR    G   7  5561  M I16 |5S          247
938  9 24          C     @0@,SCIND           BRANCH TO PIR7                G   7  5568  C H7Y 98W          247
939  9 25          BU    PIR7                IF CASH ITEM                  G   5  5575  B W6U /            247
940  9 26          C     ZEROS,SQREC         STOP ON NON-CASH ITEM         G   7  5580  C /54 |3|          247
941  9 27          BU    PIR7                IF VARIANCE IS ZERO           G   5  5587  B W6U /            247
942  9 28          CS    332                                                G   4  5592  / 332              248
943  9 29          CS                                                       G   1  5596  /                  248
944  9 30          MLCWA ERR12,249                                          G   7  5597  L W6T 249          248
945  9 31          MLCWA SIREC,231                                          G   7  5604  L |1V 231          248
946  9 32          CC    1                                                  G   2  5611  F 1                248
947  9 33          W                                                        G   1  5613  2                  248
948  9 34          CC    1                                                  G   2  5614  F 1                248
949  9 35          H     RESTRT                                             G   4  5616  . 100              249
950  9 36   ERR12  DCW   @22009  NON-CASH ITEM       HAS ZERO VARIANCE@     G  44  5663                     251
951  9 37   PIR7   WTW   3,SREC          WRITE SECURITY DATA ON TAPE 3      G   8  5664  L %U3 |1/ W        251
952  9 38          BER   ERRW3                                              G   5  5672  B /2V L            251
953  9 39          C     @T00@,SORT&2   BRANCH TO PIT6                      G   7  5677  C H8/ L62          251
954  9 40          BU    PIT6           IF SORT LIST NOT FULL               G   5  5684  B Y6S /            251
955  9 401         MLC   SORT&5,IX3                                         G   7  5689  M L65 099          252
956  9 41          BCE   PIT2,FXIND,1   BRANCH TO PIT2 IF SECURITY IS FIXED G   8  5696  B X3X I16 1        252
957  9 42          MLC   SEREC,CC11                                         G   7  5704  M |2| /1T          252
958  9 43          S     SORT&12,CC11                                       G   7  5711  S L72 /1T          252
959  9 44          BM    PIL1,CC11      BRANCH TO PIL1 IF MU-I- UNDER MIN   G   8  5718  V S4T /1T K        252
960  9 46          MLC   SECTR,SORT&2&X3                                    G   7  5726  M 98Z LF2          253
961  9 47          B     PIT3                                               G   4  5733  B X6X              253
962  9 48   PIT2   C     SORT&12,NINES                                      G   7  5737  C L72 K14          253
963  9 49          BU    PIT25                                              G   5  5744  B X5T /            253
964  9 50          B     ERR3              BR TO ERR3 IF MU-MIN- EQU 9.9999 G   4  5749  B Z6W              253
965  9 51   PIT25  MLC   SECTR,SORT&2&X3    STORE INTERNAL ID IN SORT LIST   G   7  5753  M 98Z LF2          253
966  9 52          MLZS  PIT3,SORT&2&X3     SET FIXED SEC. INDICATOR         G   7  5760  Y X6X LF2          254
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SEQ PG LIN  LABEL  OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD
 967  9 53   PIT3   MLC   SEREC,SORT&7&X3    STORE MU                    G   7  5767  M |2| LF7          254
 968  9 54          MLC   SCREC,SORT&12&X3   STORE C                     G   7  5774  M |4/ LG2          254
 969  9 55          MLC   NINES,SORT&12      SET MU-MIN-  TO 9.9999      G   7  5781  M K14 L72         254
 970  9 56          MLC   @013@,IX3          SET INDEX 3 TO 013          G   7  5788  M H8U 099         254
 971  9 57   PIT4   BM    PIT5,SORT&2&X3     BRANCH TO PIT5 IF SEC. IS FIXED G   8  5795  V Y3Z LF2 K      255
 972  9 58          MLC   SORT&12,CC11   BRANCH TO PIT5                    G   7  5803  M L72 /1T        255
 973  9 59          S     SORT&7&X3,CC11     IF MU-I- IS                 G   7  5810  S LF7 /1T        255
 974  9 60          BM    PIT5,CC11          GREATER THAN MU-MIN-        G   8  5817  V Y3Z /1T K       255
 975  9 61          MLC   SORT&7&X3,SORT&12  MU-MIN-  EQU  MU-I-         G   7  5825  M LF7 L72        255
 976  9 62          MLC   IX3,SORT&5         L-MU-MIN-- EQU  12XI        G   7  5832  M 099 L65        256
 977  9 63   PIT5   MA    @013@,IX3      I EQUAL I & 013                 G   7  5839  # H8U 099        256
 978  9 64          C     @T00@,IX3      BRANCH TO PIT4                  G   7  5846  C H8/ 099        256
 979  9 65          BU    PIT4               IF I NOT 1900               G   5  5853  B X9V /           256
 980  9 66          B     PIL1               GO TO READ NEXT SECURITY    G   4  5858  B S4T             256
 981  9 67   PIT6   MA    @013@,SORT&2   INCREASE SORT BUFFER LOCATION    G   7  5862  # H8U L62        256
 982  9 68          MLC   SORT&2,IX3                                      G   7  5869  M L62 099        257
 983  9 69          MLC   SECTR,SORT&2&X3    STORE INTERNAL ID IN SORT BUFFER G  7  5876  M 98Z LF2        257
 984  9 70          MLC   SEREC,SORT&7&X3    STORE MU                    G   7  5883  M |2| LF7        257
 985  9 71          MLC   SCREC,SORT&12&X3    STORE C                    G   7  5890  M |4/ LG2         257
 986  9 72          BCE   PIT7,FXIND,1       BRANCH TO PIT7 IF SECURITY FIXED G 8  5897  B Z4V I16 1      257
 987  9 73          MLC   SORT&12,CC11                                     G   7  5905  M L72 /1T        258
 988  9 74          S     SEREC,CC11     BRANCH TO PIL1                  G   7  5912  S |2| /1T        258
 989  9 75          BM    PIL1,CC11      IF MU-I-  GREATER THAN  MU-MIN- G   8  5919  V S4T /1T K      258
 990  9 76          MLC   SEREC,SORT&12  MU-MIN-  EQU  MU-I-             G   7  5927  M |2| L72        258
 991  9 77          MLC   IX3,SORT&5     L-MU-MIN-- EQU SORT BUFFER LOCATION G 7  5934  M 099 L65       258
 992  9 78          B     PIL1           GO TO READ NEXT SECURITY        G   4  5941  B S4T            259
 993  9 79   PIT7   MLZS  PIT3,SORT&2&X3   SET FIXED SEC. INDICATOR      G   7  5945  Y X6X LF2        259
 994  9 80          B     PIL1           GO TO READ NEXT SECURITY        G   4  5952  B S4T            259
 995  9 81   ONEPT  DCW   @10000@                                        G   5  5960                   259
 996  9 82   BLANK  DCW   @     @                                        G   5  5965                   259
 997  9 83   ERR3   CC    1                                             G   2  5966  F 1              259
 998  9 84          CS    332                                           G   4  5968  / 332            259
 999  9 85          CS                                                  G   1  5972  /                260
1000  9 86          MLCWA MSG3,252                                      G   7  5973  L !3T 252        260
1001  9 87          W                                                   G   1  5980  2                260
1002  9 88          CC    1                                             G   2  5981  F 1              260
1003  9 89          H     RESTRT                                        G   4  5983  . 100            260
1004  9 90   MSG3   DCW   @22010 MORE THAN 100 FIXED INVESTMENT SECURITIES@  G  47  6033               262
1005  9 91   * SUBROUTINE TO READ IN A GROUP OF SV,SM OR CV,CM CARDS
1006  9 92   RDSVM  SBR   SVMEX&3                                       G   4  6034  H Q2W            262
1007  9 93         MLZS  @0@,CC8-1                                     G   7  6038  Y H7Y /0U         262
1008  9 94         MLZS  @0@,CC5-1                                     G   7  6045  Y H7Y |8Y         262
1009  9 95         MLC   @0@,SCIND        0-SEC,1-CASH                 G   7  6052  M H7Y 98W         262
1010  9 96         MLC   @0@,FXIND                                     G   7  6059  M H7Y I16         263
1011  9 97         R                                                   G   1  6066  1                263
1012  9 98         SW    1                                             G   4  6067  , 001            263
1013  9 99         C     3,@END@                                       G   7  6071  C 003 H8X         263
1014 10 00         BU    SVM6                                          G   5  6078  B !8X /           263
1015 10 01         B     GOLOD                                         G   4  6083  B 175             263
1016 10 02   SVM6   C     74,@F@                                        G   7  6087  C 074 H8Y         263
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 SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
1017 10 03          BU    SVM4                                     G   5  6094  B J0W /           264
1018 10 04          MLC   ONE,FXIND                               G   7  6099  M /55 I16         264
1019 10 05   SVM4   C     73,@C@                                   G   7  6106  C 073 H8Z         264
1020 10 06          BU    SVM10                                    G   5  6113  B J5S /           264
1021 10 07          MLC   ONE,SCIND                               G   7  6118  M /55 98W         264
1022 10 08          C     BLANK,RCCV                               G   7  6125  C Z6V 15|         264
1023 10 09          BU    SVM8                                     G   5  6132  B J4/ /           265
1024 10 10          B     SVM50                                    G   4  6137  B M0W             265
1025 10 11   SVM8   MLC   RCCV-2,CC1                              G   7  6141  M 14Y |8T         265
1026 10 12          B     SVM15                                    G   4  6148  B J7V             265
1027 10 13   SVM10  C     BLANK,RCSV                               G   7  6152  C Z6V 14S         265
1028 10 14          BU    SVM11                                    G   5  6159  B J6Y /           265
1029 10 15          B     SVM50                                    G   4  6164  B M0W             265
1030 10 16   SVM11  MLC   RCSV-2,CC1                              G   7  6168  M 14| |8T         266
1031 10 17   SVM15  B     DIVIDE                                   G   4  6175  B 630             266
1032 10 18          DSA   EIGHT                                   G   3  6181  K07               266
1033 10 19          DSA   CC1                                      G   3  6184  |8T              266
1034 10 20          DCW   21                                       G   2  6186                    266
1035 10 21          MLC   QUOT,NOCDS                              G   7  6187  M /11 98V         266
1036 10 22          MLZS  @0@,QUOT-22                            G   7  6194  Y H7Y |89         266
1037 10 23          C     @0@,QUOT-22                            G   7  6201  C H7Y |89         267
1038 10 24          BU    SVM19                                    G   5  6208  B K1X /           267
1039 10 25          B     SVM28                                    G   4  6213  B K2U             267
1040 10 26   SVM19  A     ONE,NOCDS                                G   7  6217  A /55 98V         267
1041 10 27   SVM28  MLC   @020@,IX3                               G   7  6224  M H9S 099         267
1042 10 28          MLC   ZEROS,SV&10                            G   7  6231  M /54 /72         267
1043 10 29   SVM40  SW    1                                        G   4  6238  , 001             268
1044 10 30          MLCWA GPK&1,73                               G   7  6242  L /2| 073         268
1045 10 31          MRCM  1,CDBUF                                G   7  6249  P 001 J22         268
1046 10 32          C     75,@V@          BRANCH TO SVM98        G   7  6256  C 075 H9T         268
1047 10 33          BU    SVM98           IF COL. 75 NOT V       G   5  6263  B Q0U /           268
1048 10 34          C     ZEROS,SV&10                            G   7  6268  C /54 /72         268
1049 10 35          BU    SVM41                                    G   5  6275  B K9/ /           269
1050 10 36          MLC   5,SV&10                                G   7  6280  M 005 /72         269
1051 10 37          B     SVM42                                    G   4  6287  B L0T             269
1052 10 38   SVM41  C     SV&10,5         BRANCH TO SVM98        G   7  6291  C /72 005         269
1053 10 39          BU    SVM98           IF ID-S DONT MATCH     G   5  6298  B Q0U /           269
1054 10 40   SVM42  MLC   @009@,IX2                              G   7  6303  M H9W 094         269
1055 10 41   SVM44  MLC   CDBUF&8&X2,SV&13&X3                    G   7  6310  M JL0 /G5         270
1056 10 42          MLC   CDBUF&3&X2,SV&9&X3                     G   7  6317  M JK5 /G1         270
1057 10 43          MLC   @ @,SV&5&X3                            G   7  6324  M H9X /F7         270
1058 10 44          MLZS  SV&13&X3,SV&19&X3                      G   7  6331  Y /G5 /H1         270
1059 10 45          MLZS  @0@,SV&13&X3                           G   7  6338  Y H7Y /G5         270
1060 10 46          A     @9@,IX2                                G   7  6345  A H9Y 094         271
1061 10 47          A     TNTY,IX3                               G   7  6352  A K09 099         271
1062 10 48          C     @072@,IX2                              G   7  6359  C I0/ 094         271
1063 10 49          BU    SVM44                                    G   5  6366  B L1| /           271
1064 10 50          S     ONE,NOCDS                              G   7  6371  S /55 98V         271
1065 10 51          MLZS  @0@,NOCDS                              G   7  6378  Y H7Y 98V         272
1066 10 52          C     ZEROS,NOCDS                            G   7  6385  C /54 98V         272
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 SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
1067 10 53          BU    SVM46                                    G  5  6392  B M0/ /            272
1068 10 54          B     SVM50                                    G  4  6397  B M0W              272
1069 10 55   SVM46   R                                              G  1  6401  1                  272
1070 10 56          B     SVM40                                    G  4  6402  B K3Y              272
1071 10 57   SVM50  C     ONE,SCIND                                G  7  6406  C /55 98W          272
1072 10 58          BU    SVM55                                    G  5  6413  B M4V /            273
1073 10 59          C     BLANK,RCCM                               G  7  6418  C Z6V 15U          273
1074 10 60          BU    SVM52                                    G  5  6425  B M3U /            273
1075 10 61          B     SVMEX                                    G  4  6430  B Q2T              273
1076 10 62   SVM52  MLC   RCCM,CC1                                 G  7  6434  M 15U |8T          273
1077 10 63          B     SVM60                                    G  4  6441  B M6Y              273
1078 10 64   SVM55  C     BLANK,RCSM                               G  7  6445  C Z6V 14W          273
1079 10 65          BU    SVM57                                    G  5  6452  B M6/ /            274
1080 10 66          B     SVMEX                                    G  4  6457  B Q2T              274
1081 10 67   SVM57  MLC   RCSM,CC1                                 G  7  6461  M 14W |8T          274
1082 10 68   SVM60  B     DIVIDE                                   G  4  6468  B 630              274
1083 10 69          DSA   EIGHT                                   G  3  6474  K07                274
1084 10 70          DSA   CC1                                      G  3  6477  |8T               274
1085 10 71          DCW   21                                       G  2  6479                     274
1086 10 72          MLC   QUOT,NOCDS                              G  7  6480  M /11 98V          275
1087 10 73          R                                              G  1  6487  1                  275
1088 10 74          MLZS  @0@,QUOT-22                            G  7  6488  Y H7Y |89          275
1089 10 75          MLC   QUOT-22,CC3                            G  7  6495  M |89 |8W          275
1090 10 76          C     @0@,QUOT-22                            G  7  6502  C H7Y |89          275
1091 10 77          BU    SVM63                                    G  5  6509  B N1Y /            275
1092 10 78          B     SVM64                                    G  4  6514  B N2V              275
1093 10 79   SVM63   A     ONE,NOCDS                                G  7  6518  A /55 98V          276
1094 10 80   SVM64  MLC   NOCDS,CC2                               G  7  6525  M 98V |8V          276
1095 10 81          MLC   ZEROS,CC1                              G  7  6532  M /54 |8T          276
1096 10 82          MLC   ZEROS,IX3                              G  7  6539  M /54 099          276
1097 10 83   SVM78  MLCWA GPK&1,73                               G  7  6546  L /2| 073          276
1098 10 84          MRCM  1,CDBUF                                G  7  6553  P 001 J22          277
1099 10 85          SW    76                                     G  4  6560  , 076              277
1100 10 86          C     SV&10,80       BRANCH TO SVM98         G  7  6564  C /72 080          277
1101 10 87          BU    SVM98          IF ID-S DONT MATCH      G  5  6571  B Q0U /            277
1102 10 88          MLC   ZEROS,IX2                              G  7  6576  M /54 094          277
1103 10 89   SVM82  MLC   CDBUF&8&X2,SM&13&X3                    G  7  6583  M JL0 TG5          277
1104 10 90          MLC   CDBUF&3&X2,SM&9&X3                     G  7  6590  M JK5 TG1          278
1105 10 91          MLC   @ @,SM&5&X3                            G  7  6597  M H9X TF7          278
1106 10 92          MLZS  SM&13&X3,SM&19&X3                      G  7  6604  Y TG5 TH1          278
1107 10 93          MLZS  @0@,SM&13&X3                           G  7  6611  Y H7Y TG5          278
1108 10 94          A     @9@,IX2                                G  7  6618  A H9Y 094          278
1109 10 95          A     TNTY,IX3                               G  7  6625  A K09 099          279
1110 10 96          C     @072@,IX2                              G  7  6632  C IO/ 094          279
1111 10 97          BU    SVM82                                    G  5  6639  B N8T /            279
1112 10 98          S     ONE,NOCDS                              G  7  6644  S /55 98V          279
1113 10 99          MLZS  @0@,NOCDS                              G  7  6651  Y H7Y 98V          279
1114 11 00          C     ZEROS,NOCDS                            G  7  6658  C /54 98V          280
1115 11 01          BU    SVM84                                    G  5  6665  B O7U /            280
1116 11 02          B     SVM90                                    G  4  6670  B O7Z              280
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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

1117 11 03   SVM84  R                                                G   1  6674  1                   280
1118 11 04          B     SVM78                                      G   4  6675  B N4W               280
1119 11 05   SVM90  A     ONE,CC1                                    G   7  6679  A /55 |8T           280
1120 11 06          C     ONE,SCIND                                  G   7  6686  C /55 98W           280
1121 11 07          BU    SVM92                                      G   5  6693  B P1U /             281
1122 11 08          C     CC1,RCCM-2                                 G   7  6698  C |8T 15S           281
1123 11 09          BU    SVM95                                      G   5  6705  B P3| /             281
1124 11 10          B     SVMEX                                      G   4  6710  B Q2T               281
1125 11 11   SVM92  C     CC1,RCSM-2                                 G   7  6714  C |8T 14U           281
1126 11 12          BU    SVM95                                      G   5  6721  B P3| /             281
1127 11 13          B     SVMEX                                      G   4  6726  B Q2T               281
1128 11 14   SVM95  MLC   CC2,NOCDS                                  G   7  6730  M |8V 98V           282
1129 11 15          C     CC3,@0@                                    G   7  6737  C |8W H7Y           282
1130 11 16          BU    SVM97                                      G   5  6744  B P5U /             282
1131 11 17          R                                                G   1  6749  1                   282
1132 11 18          B     SVM78                                      G   4  6750  B N4W               282
1133 11 19   SVM97  MLC   @008@,CC5                                  G   7  6754  M I0U |8Z           282
1134 11 20          S     CC3,CC5                                    G   7  6761  S |8W |8Z           282
1135 11 21          B     MULT1                                      G   4  6768  B 336               283
1136 11 22          DSA   CC5                                        G   3  6774  |8Z                 283
1137 11 23          DSA   TNTY                                       G   3  6777  K09                 283
1138 11 24          MLC   PROD,CC5                                   G   7  6778  M 623 |8Z           283
1139 11 25          S     CC5,IX3                                    G   7  6785  S |8Z 099           283
1140 11 26          MLZS  @0@,IX3                                    G   7  6792  Y H7Y 099           283
1141 11 27          R                                                G   1  6799  1                   283
1142 11 28          B     SVM78                                      G   4  6800  B N4W               284
1143 11 29   SVM98  CS    332                                        G   4  6804  / 332               284
1144 11 30          CS                                               G   1  6808  /                   284
1145 11 31          MLCWA ER10MG,235                                 G   7  6809  L Q5W 235           284
1146 11 32          W                                                G   1  6816  2                   284
1147 11 33          CC    1                                          G   2  6817  F 1                 284
1148 11 34          H     RESTRT                                     G   4  6819  . 100               284
1149 11 35   SVMEX  B     *                                          G   4  6823  B Q2W               285
1150 11 36   ER10MG DCW   @22019  DATA CARDS OUT OF ORDER@           G  30  6856                      285
1151 11 37   PIC1   SBR   CC8            -MOVE                       G   4  6857  H /0V               285
1152 11 38          MA    TWOMA,CC8                                  G   7  6861  # /31 /0V           286
1153 11 39          MLC   CC8,PIC80&3                                G   7  6868  M /0V Q7Y           286
1154 11 40   PIC80  MLC   *,PIC30&3                                  G   7  6875  M Q8/ R0W           286
1155 11 41          MA    @006@,CC8                                  G   7  6882  # I0X /0V           286
1156 11 42          MLC   CC8,PIC85&3                                G   7  6889  M /0V Q9Z           286
1157 11 43   PIC85  MLC   *,PIC30&6                                  G   7  6896  M R0S R0Z           287
1158 11 44   PIC30  MLC   *,*                                        G   7  6903  M R0Z R0Z           287
1159 11 45          MA    ONEMA,CC8                                  G   7  6910  # /28 /0V           287
1160 11 46          MLC   CC8,PICEX&3                                G   7  6917  M /0V R2X           287
1161 11 47   PICEX  B     *                                          G   4  6924  B R2X               287
1162 11 48   PIP1   SBR   CC8              - ADD                     G   4  6928  H /0V               287
1163 11 49          MA    TWOMA,CC8                                  G   7  6932  # /31 /0V           288
1164 11 50          MLC   CC8,PIP80&3                                G   7  6939  M /0V R4Z           288
1165 11 51   PIP80  MLC   *,PIP10&3                                  G   7  6946  M R5S ?1S           288
1166 11 52          MA    THRMA,CC8                                  G   7  6953  # /34 /0V           288
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 SEQ PG LIN  LABEL  OP    OPERANDS                SFX CT  LOCN  INSTRUCTION TYPE  CARD
1167 11 53          MLC   CC8,PIP83&3              G   7  6960  M /0V R7|          288
1168 11 54   PIP83  MLC   *,PIP20&3               G   7  6967  M R7T ?1Z          289
1169 11 55          MA    THRMA,CC8                G   7  6974  # /34 /0V          289
1170 11 56          MLC   CC8,PIP85&3              G   7  6981  M /0V R9/          289
1171 11 57   PIP85  MLC   *,PIP30&6               G   7  6988  M R9U ?2Z          289
1172 11 58          MA    ONEMA,CC8                G   7  6995  # /28 /0V          289
1173 11 59          MLC   CC8,PIPEX&3             G   7  7002  M /0V ?3T          290
1174 11 60   PIP10  ZA    *,TEMP1                  G   7  7009  ? ?1V K39          290
1175 11 61   PIP20  A     *,TEMP1                  G   7  7016  A ?2S K39          290
1176 11 62   PIP30  MLC   TEMP1,*                  G   7  7023  M K39 ?2Z          290
1177 11 63   PIPEX  B     *                        G   4  7030  B ?3T              290
1178 11 64   PIS1   SBR   CC8                      G   4  7034  H /0V              290
1179 11 65          MA    TWOMA,CC8                G   7  7038  # /31 /0V          291
1180 11 66          MLC   CC8,PIS80&3              G   7  7045  M /0V ?5V          291
1181 11 67   PIS80  MLC   *,PIS10&3               G   7  7052  M ?5Y A1Y          291
1182 11 68          MA    THRMA,CC8                G   7  7059  # /34 /0V          291
1183 11 69          MLC   CC8,PIS85&3              G   7  7066  M /0V ?7W          291
1184 11 70   PIS85  MLC   *,PIS20&3               G   7  7073  M ?7Z A2V          292
1185 11 71          MA    THRMA,CC8                G   7  7080  # /34 /0V          292
1186 11 72          MLC   CC8,PIS88&3              G   7  7087  M /0V ?9X          292
1187 11 73   PIS88  MLC   *,PIS30&6               G   7  7094  M A0| A3V          292
1188 11 74          MA    ONEMA,CC8                G   7  7101  # /28 /0V          292
1189 11 75          MLC   CC8,PISEX&3             G   7  7108  M /0V A3Z          293
1190 11 76   PIS10  ZA    *,TEMP1                  G   7  7115  ? A2/ K39          293
1191 11 77   PIS20  S     *,TEMP1                  G   7  7122  S A2Y K39          293
1192 11 78   PIS30  MLC   TEMP1,*                  G   7  7129  M K39 A3V          293
1193 11 79   PISEX  B     *                        G   4  7136  B A3Z              293
1194 11 80   PIM1   SBR   CC8                      G   4  7140  H /0V              293
1195 11 81          MA    TWOMA,CC8                G   7  7144  # /31 /0V          294
1196 11 82          MLC   CC8,PIM70&3              G   7  7151  M /0V A6/          294
1197 11 83   PIM70  MLC   *,PIM50                  G   7  7158  M A6U C4X          294
1198 11 84          MLC   PIM50,PIM14&3            G   7  7165  M C4X C3|          294
1199 11 85          MA    FTMA,PIM50               G   7  7172  # K00 C4X          294
1200 11 86          MLC   PIM50,PIM10&3            G   7  7179  M C4X C2S          295
1201 11 87          MLC   PIM50,PIM60&3            G   7  7186  M C4X C5U          295
1202 11 88          MA    NINMA,PIM50              G   7  7193  # K03 C4X          295
1203 11 89          MLC   PIM50,PIM14&6            G   7  7200  M C4X C3T          295
1204 11 90          MLC   PIM50,PIM64&6            G   7  7207  M C4X C6V          295
1205 11 91          MA    THRMA,CC8                G   7  7214  # /34 /0V          296
1206 11 92          MLC   CC8,PIM78&3              G   7  7221  M /0V B3/          296
1207 11 93   PIM78  MLC   *,PIM55                  G   7  7228  M B3U C5|          296
1208 11 94          MLC   PIM55,PIM16&3            G   7  7235  M C5| C3X          296
1209 11 95          MA    FTMA,PIM55               G   7  7242  # K00 C5|          296
1210 11 96          MLC   PIM55,PIM12&3            G   7  7249  M C5| C2W          297
1211 11 97          MLC   PIM55,PIM62&3            G   7  7256  M C5| C5Y          297
1212 11 98          MA    NINMA,PIM55              G   7  7263  # K03 C5|          297
1213 11 99          MLC   PIM55,PIM16&6            G   7  7270  M C5| C4|          297
1214 12 00          MLC   PIM55,PIM66&6            G   7  7277  M C5| C7S          297
1215 12 01          MA    THRMA,CC8                G   7  7284  # /34 /0V          298
1216 12 02          MLC   CC8,PIM88&3              G   7  7291  M /0V C0/          298
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION TYPE	CARD
1217	12	03	PIM88	MLC	*,PIM58&6	G	7	7298	M C0U C7Z	298
1218	12	04		MA	ONEMA,CC8	G	7	7305	# /28 /0V	298
1219	12	05		MLC	CC8,PIMEX&3	G	7	7312	M /0V C8T	298
1220	12	06	PIM10	SW	*	G	4	7319	, C2S	298
1221	12	07	PIM12	SW	*	G	4	7323	, C2W	299
1222	12	08	PIM14	MLZS	*,*	G	7	7327	Y C3T C3T	299
1223	12	09	PIM16	MLZS	*,*	G	7	7334	Y C4| C4|	299
1224	12	10		B	MULT1	G	4	7341	B 336	299
1225	12	11	PIM50	DSA	*	G	3	7347	C4X	299
1226	12	12	PIM55	DSA	*	G	3	7350	C5|	299
1227	12	13	PIM60	CW	*	G	4	7351	) C5U	299
1228	12	14	PIM62	CW	*	G	4	7355	) C5Y	300
1229	12	15	PIM64	MLZS	@0@,*	G	7	7359	Y H7Y C6V	300
1230	12	16	PIM66	MLZS	@0@,*	G	7	7366	Y H7Y C7S	300
1231	12	17	PIM58	MLC	PROD,*	G	7	7373	M 623 C7Z	300
1232	12	18	PIMEX	B	*	G	4	7380	B C8T	300
1233	12	19	PID1	SBR	CC8	G	4	7384	H /0V	300
1234	12	20		MA	TWOMA,CC8	G	7	7388	# /31 /0V	301
1235	12	21		MLC	CC8,PID80&3	G	7	7395	M /0V D0V	301
1236	12	22	PID80	MLC	*,PID55	G	7	7402	M D0Y E6T	301
1237	12	23		MA	THRMA,CC8	G	7	7409	# /34 /0V	301
1238	12	24		MLC	CC8,PID82&3	G	7	7416	M /0V D2W	301
1239	12	25	PID82	MLC	*,PID50	G	7	7423	M D2Z E6|	302
1240	12	26		MLC	PID50,PID12&3	G	7	7430	M E6| E5|	302
1241	12	27		MA	FTMA,PID50	G	7	7437	# K00 E6|	302
1242	12	28		MLC	PID50,PID10&3	G	7	7444	M E6| E4W	302
1243	12	29		MLC	PID50,PID60&3	G	7	7451	M E6| E7W	302
1244	12	30		MA	NINMA,PID50	G	7	7458	# K03 E6|	303
1245	12	31		MLC	PID50,PID12&6	G	7	7465	M E6| E5T	303
1246	12	32		MLC	PID50,PID44&6	G	7	7472	M E6| E8T	303
1247	12	33		MA	THRMA,CC8	G	7	7479	# /34 /0V	303
1248	12	34		MLC	CC8,PID90&3	G	7	7486	M /0V D9W	303
1249	12	35	PID90	MLC	*,PID58&6	G	7	7493	M D9Z E9X	304
1250	12	36		SW	PID58&4	G	4	7500	, E9V	304
1251	12	37		MLC	PID58&6,PID40&6	G	7	7504	M E9X F0U	304
1252	12	38		MLC	PID58&6,PID46&6	G	7	7511	M E9X E9|	304
1253	12	39		MA	FIVMA,PID58&6	G	7	7518	# J97 E9X	304
1254	12	40		MLC	PID58&6,PID40&3	G	7	7525	M E9X F0/	304
1255	12	41		MLC	PID58&6,PID42&6	G	7	7532	M E9X F1/	305
1256	12	42		CW	PID58&4	G	4	7539	) E9V	305
1257	12	43	PID10	SW	*	G	4	7543	, E4W	305
1258	12	44	PID12	MLZS	*,*	G	7	7547	Y E5T E5T	305
1259	12	45		B	DIVIDE	G	4	7554	B 630	305
1260	12	46	PID50	DSA	*	G	3	7560	E6|	305
1261	12	47	PID55	DSA	*	G	3	7563	E6T	305
1262	12	48		DCW	12	G	2	7565		306
1263	12	49		MLC	ZEROS,QUOT-11	G	7	7566	M /54 /00	306
1264	12	50	PID60	CW	*	G	4	7573	) E7W	306
1265	12	51	PID44	MLZS	@0@,*	G	7	7577	Y H7Y E8T	306
1266	12	52	PID46	MLC	ZEROS,*	G	7	7584	M /54 E9|	306

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 SEQ PG LIN  LABEL  OP    OPERANDS                SFX CT  LOCN  INSTRUCTION TYPE  CARD
1267 12 53   PID58  MLC   QUOT,*                   G   7  7591  M /11 E9X          306
1268 12 54   PID40  MLZS  *,*                      G   7  7598  Y F0U F0U          307
1269 12 55   PID42  MLZS  @0@,*                    G   7  7605  Y H7Y F1/          307
1270 12 56          MA    ONEMA,CC8                 G   7  7612  # /28 /0V         307
1271 12 57          MLC   CC8,PIDEX&3               G   7  7619  M /0V F2Z         307
1272 12 58   PIDEX  B     *                         G   4  7626  B F2Z             307
1273 12 59   PIA1   SBR   CC8                       G   4  7630  H /0V            307
1274 12 60          MA    TWOMA,CC8                 G   7  7634  # /31 /0V         308
1275 12 61          MLC   CC8,PIA70&3               G   7  7641  M /0V F5/         308
1276 12 62   PIA70  MLC   *,PIA50                   G   7  7648  M F5U H3X         308
1277 12 63          MLC   PIA50,PIA14&3             G   7  7655  M H3X H2|         308
1278 12 64          MA    FTMA,PIA50                G   7  7662  # K00 H3X         308
1279 12 65          MLC   PIA50,PIA10&3             G   7  7669  M H3X H1S         309
1280 12 66          MLC   PIA50,PIA60&3             G   7  7676  M H3X H4U         309
1281 12 67          MA    NINMA,PIA50               G   7  7683  # K03 H3X         309
1282 12 68          MLC   PIA50,PIA14&6             G   7  7690  M H3X H2T         309
1283 12 69          MLC   PIA50,PIA64&6             G   7  7697  M H3X H5V         309
1284 12 70          MA    THRMA,CC8                 G   7  7704  # /34 /0V         310
1285 12 71          MLC   CC8,PIA76&3               G   7  7711  M /0V G2/         310
1286 12 72   PIA76  MLC   *,PIA55                   G   7  7718  M G2U H4|         310
1287 12 73          MLC   PIA55,PIA16&3             G   7  7725  M H4| H2X         310
1288 12 74          MA    FTMA,PIA55                G   7  7732  # K00 H4|         310
1289 12 75          MLC   PIA55,PIA12&3             G   7  7739  M H4| H1W         311
1290 12 76          MLC   PIA55,PIA62&3             G   7  7746  M H4| H4Y         311
1291 12 77          MA    NINMA,PIA55               G   7  7753  # K03 H4|         311
1292 12 78          MLC   PIA55,PIA16&6             G   7  7760  M H4| H3|         311
1293 12 79          MLC   PIA55,PIA66&6             G   7  7767  M H4| H6S         311
1294 12 80          MA    THRMA,CC8                 G   7  7774  # /34 /0V         312
1295 12 81          MLC   CC8,PIA84&3               G   7  7781  M /0V G9/         312
1296 12 82   PIA84  MLC   *,PIA58&6                 G   7  7788  M G9U H6Z         312
1297 12 83          MA    ONEMA,CC8                 G   7  7795  # /28 /0V         312
1298 12 84          MLC   CC8,PIAEX&3               G   7  7802  M /0V H7T         312
1299 12 85   PIA10  SW    *                         G   4  7809  , H1S             312
1300 12 86   PIA12  SW    *                         G   4  7813  , H1W             313
1301 12 87   PIA14  MLZS  *,*                      G   7  7817  Y H2T H2T          313
1302 12 88   PIA16  MLZS  *,*                      G   7  7824  Y H3| H3|          313
1303 12 89          B     MULT1                     G   4  7831  B 336             313
1304 12 90   PIA50  DSA   *                         G   3  7837  H3X               313
1305 12 91   PIA55  DSA   *                         G   3  7840  H4|               313
1306 12 92   PIA60  CW    *                         G   4  7841  ) H4U             313
1307 12 93   PIA62  CW    *                         G   4  7845  ) H4Y             314
1308 12 94   PIA64  MLZS  @0@,*                    G   7  7849  Y H7Y H5V          314
1309 12 95   PIA66  MLZS  @0@,*                    G   7  7856  Y H7Y H6S          314
1310 12 96   PIA58  A     PROD,*                    G   7  7863  A 623 H6Z         314
1311 12 97   PIAEX  B     *                         G   4  7870  B H7T             314
                    DCW   @751@                     G   3  7876              LIT    314
                          @5@                       G   1  7877              LIT    314
                          @0@                       G   1  7878              LIT    315
                          @T00@                     G   3  7881              LIT    315
                          @013@                     G   3  7884              LIT    315
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 SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

                          @END@                                             G   3  7887              LIT    315
                          @F@                                               G   1  7888              LIT    315
                          @C@                                               G   1  7889              LIT    315
                          @020@                                             G   3  7892              LIT    315
                          @V@                                               G   1  7893              LIT    316
                          @009@                                             G   3  7896              LIT    316
                          @ @                                               G   1  7897              LIT    316
                          @9@                                               G   1  7898              LIT    316
                          @072@                                             G   3  7901              LIT    316
                          @008@                                             G   3  7904              LIT    316
                          @006@                                             G   3  7907              LIT    316
1312 12 98          EX    PIL0                                              G            B /7V               317
1313 12 99          ORG   5175                                              G             5175
1314 13 00   BUF    DA    1X13,G                                            G      5175   5187               320
                    DCW   @}@                                               G   1  5188              GMARK  320
1315 13 01   PIX1   WTM   4              WRITE E-O-F AFTER EXTERNAL ID FILE G   5  5189  U %U4 M            320
1316 13 02          WTM   3              WRITE E-O-F AFTER SECURITY DATA    G   5  5194  U %U3 M            320
1317 13 03          RWD   4              REWIND TAPE 4                      G   5  5199  U %U4 R            320
1318 13 04          BEF   *&1                                               G   5  5204  B S0Z K            320
1319 13 05   PIX2   RTW   4,BUF          READ 1 EXTERNAL ID RECORD          G   8  5209  L %U4 /7V R        320
1320 13 06          BER   ERRR4                                             G   5  5217  B X3T L            321
1321 13 07          BEF   PIX3           BRANCH TO PIX3 ON E-O-F            G   5  5222  B S5/ K            321
1322 13 08          MLCWA GPK&1,BUF&5    PLACE GRP MK WD MK AFTER ID        G   7  5227  L /2| /8|          321
1323 13 09          WTW   3,BUF          WRITE EXTERNAL ID ON TAPE 3        G   8  5234  L %U3 /7V W        321
1324 13 10          BER   ERRW3                                             G   5  5242  B /2V L            321
1325 13 11          B     PIX2                                              G   4  5247  B S0Z              321
1326 13 12   PIX3   WTM   3              WRITE E-O-F AFTER EXTERNAL ID FILE G   5  5251  U %U3 M            321
1327 13 13          RWD   4              REWIND TAPE 4                      G   5  5256  U %U4 R            322
1328 13 14          MLCWA ZEROS,BUF&12                                      G   7  5261  L /54 /8X          322
1329 13 15          SW    BUF,BUF&3          DEFINE                         G   7  5268  , /7V /7Y          322
1330 13 16          SW    BUF&8          FIELDS                             G   4  5275  , /8T              322
1331 13 17          MLC   @000@,IX2          SET INDEX 2 TO 000             G   7  5279  M Y2W 094          322
1332 13 18          MLC   @000@,IX1                                         G   7  5286  M Y2W 089          322
1333 13 185  PIX4   MA    @013@,IX1           INCREASE INDEX 1 BY 013       G   7  5293  # Y2Z 089          323
1334 13 19          BWZ   PIX7,SORT&2&X1,2    BRANCH TO PIX7 IF SEC. NOT FIXED G   8  5300  V U8W LW2 2        323
1335 13 20          MLC   SORT&2&X1,BUF&2    STORE INTERNAL ID IN BUFFER    G   7  5308  M LW2 /7X          323
1336 13 21          MLC   SORT&7&X1,BUF&7    STORE MU                       G   7  5315  M LW7 /8S          323
1337 13 22          MLC   SORT&12&X1,BUF&12  STORE C                        G   7  5322  M LX2 /8X          323
1338 13 23          WTW   4,BUF              WRITE BUFFER ON TAPE 4         G   8  5329  L %U4 /7V W        324
1339 13 24          BER   ERRW4                                             G   5  5337  B /5| L            324
1340 13 25          A     SORT&12&X1,CC12    SIGCI EQU SIGCI&C-I-           G   7  5342  A LX2 /1Y          324
1341 13 26          MLC   CC12,CC11                                         G   7  5349  M /1Y /1T          324
1342 13 27          S     @10000@,CC11       BRANCH TO PIX6                 G   7  5356  S Y3U /1T          324
1343 13 28          BM    PIX6,CC11          IF SIGCI LESS THAN 1.0000      G   8  5363  V U6T /1T K        325
1344 13 29          MLZS  @0@,CC11                                          G   7  5371  Y Y3V /1T          325
1345 13 30          C     @00000@,CC11       BRANCH TO PIX6                 G   7  5378  C Y4| /1T          325
1346 13 31          BU    PIX6           IF SIGCI NOT EQUAL 1.0000          G   5  5385  B U6T /            325
1347 13 32   PIX5   WTM   4                  WRITE E-O-F SORT LIST          G   5  5390  U %U4 M            325
1348 13 33          MLC   SECTR,CC6-1                                       G   7  5395  M 98Z |9S          325
1349 13 34          MLCWA GPK&1,CC6                                         G   7  5402  L /2| |9T          326
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 SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

1350 13 35          WTW   4,CC6-3             WRITE NO. OF SEC. IN TAPE 4    G   8  5409  L %U4 |9| W        326
1351 13 36          BER   ERRW4                                              G   5  5417  B /5| L             326
1352 13 37          WTM   4                   WRITE E-O-F AFTER NO. OF SEC.  G   5  5422  U %U4 M             326
1353 13 38          MLC   IE-3,IEOUT                                        G   7  5427  M H92 |7|           326
1354 13 39          MLC   IQ-3,IQOUT                                        G   7  5434  M I12 |7Z           326
1355 13 40          WTW   4,OUTRQ             WRITE REPORT PARAMETERS ON TAPE G   8  5441  L %U4 |5U W        327
1356 13 41          BER   ERRW4                                              G   5  5449  B /5| L             327
1357 13 42          WTM   4                   WRITE E-O-F AFTER REPORT PARAM. G   5  5454  U %U4 M             327
1358 13 43          B     GOLOD               LOAD NEXT SECTION              G   4  5459  B 175               327
1359 13 44   PIX6   MA    @013@,IX2            INCREASE INDEX 2 BY 013       G   7  5463  # Y2Z 094           327
1360 13 45          C     IX2,SORT&2          BRANCH TO PIX7                 G   7  5470  C 094 L62          327
1361 13 46          BU    PIX7                IF SORT LIST INCOMPLETE        G   5  5477  B U8W /             328
1362 13 47          B     ERR4                BRANCH TO ERR4 IF SORT LIST BAD G   4  5482  B W6Y              328
1363 13 49   PIX7   C     IX1,SORT&2           BRANCH TO PIX4                G   7  5486  C 089 L62          328
1364 13 50          BU    PIX4                 IF SORT LIST INCOMPLETE       G   5  5493  B S9T /            328
1365 13 51   PIX8   MLC   @000@,IX1           SET INDEX 1 TO 000             G   7  5498  M Y2W 089           328
1366 13 52          MLC   MNINS,SORT&12                                      G   7  5505  M K19 L72          328
1367 13 53   PIX9   MA    @013@,IX1            INCREASE INDEX 1 BY 013       G   7  5512  # Y2Z 089           329
1368 13 54          BM    PIX10,SORT&2&X1      BRANCH TO PIX10 IF SEC. IS FIXED G  8  5519  V V6T LW2 K        329
1369 13 55          MLC   SORT&7&X1,CC11      BRANCH TO PIX10                G   7  5527  M LW7 /1T          329
1370 13 56          S     SORT&12,CC11        IF MU-MAX-  IS                 G   7  5534  S L72 /1T          329
1371 13 57          BM    PIX10,CC11           GREATER THAN MU%I)            G   8  5541  V V6T /1T K        329
1372 13 58          MLC   SORT&7&X1,SORT&12   MU-MAX-  EQU  MU-I-           G   7  5549  M LW7 L72          330
1373 13 59          MLC   IX1,IX3             MAX  EQU  I                    G   7  5556  M 089 099          330
1374 13 60   PIX10  C     IX1,SORT&2           BRANCH TO PIX9                G   7  5563  C 089 L62          330
1375 13 61          BU    PIX9                 IF SORT LIST INCOMPLETE       G   5  5570  B V1S /            330
1376 13 62          MLC   SORT&2&X3,BUF&2     STORE INTERNAL ID IN BUFFER    G   7  5575  M LF2 /7X          330
1377 13 63          MLC   SORT&7&X3,BUF&7     STORE MU-MAX-                  G   7  5582  M LF7 /8S          331
1378 13 64          MLC   SORT&12&X3,BUF&12    STORE C                       G   7  5589  M LG2 /8X          331
1379 13 65          WTW   4,BUF               WRITE SORT LIST ON TAPE4       G   8  5596  L %U4 /7V W        331
1380 13 66          BER   ERRW4                                              G   5  5604  B /5| L             331
1381 13 67          MLC   MNINS,SORT&7&X3     SET MU-I- EQU  -9.9999         G   7  5609  M K19 LF7          331
1382 13 68          A     SORT&12&X3,CC12     SIGCI  EQU  SIGCI&C-I-         G   7  5616  A LG2 /1Y          332
1383 13 69          MLC   CC12,CC11                                          G   7  5623  M /1Y /1T          332
1384 13 70          S     @10000@,CC11         BRANCH TO PIX5 IF             G   7  5630  S Y4V /1T          332
1385 13 71          BWZ   PIX5,CC11,B          SIGCI NOT LESS THAN 1.0000    G   8  5637  V T9| /1T B       332
1386 13 72          MA    @013@,IX2            INCREASE INDEX 2 BY 13        G   7  5645  # Y2Z 094           332
1387 13 73          C     IX2,SORT&2          BRANCH TO PIX8                 G   7  5652  C 094 L62          333
1388 13 74          BU    PIX8                IF SORT LIST INCOMPLETE        G   5  5659  B U9Y /            333
1389 13 75          B     ERR4                BRANCH TO ERR4 IF SORT LIST BAD G   4  5664  B W6Y              333
1390 13 76   ERR4   CC    1                                                  G   2  5668  F 1                333
1391 13 77          CS    332                                                G   4  5670  / 332              333
1392 13 78          CS                                                       G   1  5674  /                  333
1393 13 79          MLCWA MSG4,249                                           G   7  5675  L X3S 249          333
1394 13 80          W                                                        G   1  5682  2                  334
1395 13 81          CC    1                                                  G   2  5683  F 1                334
1396 13 82          H     RSTRT                                              G   4  5685  . 161              334
1397 13 83   MSG4   DCW   @22012 SUM OF MAXIMUM HOLDINGS LESS THAN 100%@    G  44  5732                     336
1398 13 84   ERRR4  SBR   ERR4A&3                                            G   4  5733  H X6X              336
1399 13 85          MA    M13A,ERR4A&3                                       G   7  5737  # K06 X6X          336
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 SEQ PG LIN  LABEL  OP    OPERANDS                                      SFX CT  LOCN  INSTRUCTION TYPE  CARD

1400 13 86          S     ONE,ERR4B                                      G   7  5744  S /55 X6Y          336
1401 13 87          BM    ERR4C,ERR4B                                    G   8  5751  V X6Z X6Y K        336
1402 13 88          BSP   4                                              G   5  5759  U %U4 B            337
1403 13 89   ERR4A  B     *                                              G   4  5764  B X6X              337
1404 13 90   ERR4B  DCW   9                                              G   1  5768                     337
1405 13 91   ERR4C  CS    332                                            G   4  5769  / 332              337
1406 13 92          CS                                                   G   1  5773  /                  337
1407 13 93          MLC   ERR4M,237                                      G   7  5774  M Y2T 237          337
1408 13 94          CC    1                                              G   2  5781  F 1                337
1409 13 95          W                                                    G   1  5783  2                  338
1410 13 96          H     *-3                                            G   4  5784  . X8U              338
1411 13 97   ERR4M  DCW   @22018 PERMANENT READ ERROR ON TAPE 4@         G  36  5823                     339
                    DCW   @000@                                          G   3  5826              LIT    339
                          @013@                                          G   3  5829              LIT    340
       1342               @10000@                                        G   5  5834              LIT    340
                          @0@                                            G   1  5835              LIT    340
       1345               @00000@                                        G   5  5840              LIT    340
       1384               @10000@                                        G   5  5845              LIT    340
1412 13 98          EX    PIX1                                           G            B /8Z              341
1413 13 99          SFX
1414 14 00   IX1    EQU   89                                                    0089
1415 14 01   IX2    EQU   94                                                    0094
1416 14 02   IX3    EQU   99                                                    0099
1417 14 03          ORG   1162                                                         1162
1418 14 04   SQRT   SBR   SQRTX&3                                            4  1162  H T19              344
1419 14 05          ZA    C,ROOT                                             7  1166  ? T82 T90          344
1420 14 06          MLZS  SQRTA,C                                            7  1173  Y /94 T82          344
1421 14 07          ZA    ACCAUT,ACCAU7-2                                    7  1180  ? T44 T58          344
1422 14 08          MLZS  C5,ACCAU7-2                                        7  1187  Y T76 T58          344
1423 14 09   SQRTA  ZS    ROOT,R1                                            7  1194  ! T90 T75          344
1424 14 10          B     DIVIDE                                             4  1201  B 630              345
1425 14 11          DSA   ROOT                                               3  1207  T90                345
1426 14 12          DSA   ACCAU7                                             3  1210  T60                345
1427 14 13          DCW   14                                                 2  1212                     345
1428 14 14          A     ROOT,QUOT                                          7  1213  A T90 /11          345
1429 14 15          MLC   QUOT,ROOT                                          7  1220  M /11 T90          345
1430 14 16          S     ROOTA                                              4  1227  S T99              345
1431 14 17          A     ROOT,ROOTA                                         7  1231  A T90 T99          346
1432 14 18          A     ROOTA                                              4  1238  A T99              346
1433 14 19          A     ROOTA                                              4  1242  A T99              346
1434 14 20          A     ROOT,ROOTA                                         7  1246  A T90 T99          346
1435 14 21          MLC   ROOTA-1,ROOT                                       7  1253  M T98 T90          346
1436 14 22          BM    SQRTC,C                                            8  1260  V T20 T82 K        346
1437 14 23          A     ROOT,R1                                            7  1268  A T90 T75          347
1438 14 24          BWZ   SQRTB,R1,B                                         8  1275  V T02 T75 B        347
1439 14 25          MCS   R1,ROOTA                                           7  1283  Z T75 T99          347
1440 14 26          BCE   *&5,ROOTA,                                         8  1290  B T02 T99          347
1441 14 27          B     SQRTA                                              4  1298  B /94              347
1442 14 28   SQRTB  A     C5,ROOT                                            7  1302  A T76 T90          348
1443 14 29          MLC   ROOT-1,R                                           7  1309  M T89 T67          348
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SEQ	PG	LIN	LABEL	OP	OPERANDS		SFX	CT	LOCN	INSTRUCTION TYPE	CARD
1444	14	30	SQRTX	B	*			4	1316	B T19	348
1445	14	31	SQRTC	MLZS	C5,C			7	1320	Y T76 T82	348
1446	14	32		B	SQRTA			4	1327	B /94	348
1447	14	33	ACCAUT	DCW	#14			14	1344		349
1448	14	34	ACCAU7	DCW	#16			16	1360		349
1449	14	35	R	DCW	#7			7	1367		349
1450	14	36	R1	DCW	#8			8	1375		350
1451	14	37	C5	DCW	5			1	1376		350
1452	14	38	C	DCW	300000			6	1382		350
1453	14	39	ROOT	DCW	#8			8	1390		350
1454	14	40	ROOTA	DCW	#9			9	1399		350
1455	14	41	SIGCP	SBR	GCPEX&3			4	1400	H W50	350
1456	14	42		B	MULT1			4	1404	B 336	351
1457	14	43		DSA	BUF6&14	1/SIGMA XXX.XXXXX		3	1410	G76	351
1458	14	44		DSA	BUF6&22	B/SIGMA XXX.XXXXX		3	1413	G84	351
1459	14	45		MLZS	PROD,PROD-5			7	1414	Y 623 618	351
1460	14	46		MLC	PROD-5,SIGBT			7	1421	M 618 E89	351
1461	14	47		B	MULT1			4	1428	B 336	351
1462	14	48		DSA	BUF6&6	MU/SIGMA XX.XXXXX		3	1434	G68	351
1463	14	49		DSA	BUF6&14	1/SIGMA XXX.XXXXX		3	1437	G76	352
1464	14	50		MLZS	PROD,PROD-5			7	1438	Y 623 618	352
1465	14	51		MLC	PROD-5,MUSIG			7	1445	M 618 F10	352
1466	14	52		B	MULT1			4	1452	B 336	352
1467	14	53		DSA	BUF6&6	MU/SIGMA XX.XXXXX		3	1458	G68	352
1468	14	54		DSA	BUF6&22	B/SIGMA XXX.XXXXX		3	1461	G84	352
1469	14	55		MLZS	PROD,PROD-5			7	1462	Y 623 618	352
1470	14	56		MLC	PROD-5,MUBET			7	1469	M 618 F20	353
1471	14	57		B	MULT1			4	1476	B 336	353
1472	14	58		DSA	BUF6&6	MU/SIGMA XX.XXXXX		3	1482	G68	353
1473	14	59		DSA	BUF6&6	MU/SIGMA XX.XXXXX		3	1485	G68	353
1474	14	60		MLC	PROD-5,MUSQ			7	1486	M 618 F30	353
1475	14	61		B	MULT1			4	1493	B 336	353
1476	14	62		DSA	BUF6&14	1/SIGMA XXX.XXXXX		3	1499	G76	353
1477	14	63		DSA	BUF6&14	1/SIGMA XXX.XXXXX		3	1502	G76	354
1478	14	64		MLC	PROD-5,SIGS			7	1503	M 618 E78	354
1479	14	65		B	MULT1			4	1510	B 336	354
1480	14	66		DSA	BUF6&22	B/SIGMA XXX.XXXXX		3	1516	G84	354
1481	14	67		DSA	BUF6&22	B/SIGMA XXX.XXXXX		3	1519	G84	354
1482	14	68		MLC	PROD-5,SIGBTA			7	1520	M 618 F00	354
1483	14	69		C	ZEROS,IND4	BRANCH TO GCP1		7	1527	C /54 K44	354
1484	14	70		BU	GCP1	IF IND4 NOT 0		5	1534	B V95 /	355
1485	14	71		BAV	*&1			5	1539	B V44 Z	355
1486	14	72		A	SIGS,SIGD	A%1,1)		7	1544	A E78 E11	355
1487	14	73		A	SIGBT,SIGDB	A%1,2)		7	1551	A E89 E24	355
1488	14	74		A	SIGBTA,SIGB	A%2,2)		7	1558	A F00 E37	355
1489	14	75		A	MUSIG,SIGMD	A%1,3)		7	1565	A F10 E47	355
1490	14	76		A	MUBET,SIGMB	A%2,3)		7	1572	A F20 E57	356
1491	14	77		A	MUSQ,SIGM2	A%3,3)		7	1579	A F30 E67	356
1492	14	78		BAV	GCPER			5	1586	B W51 Z	356
1493	14	79		B	GCPEX			4	1591	B W47	356

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1494 14 80   GCP1   BAV   *&1                                                   5  1595  B W00 Z            356
1495 14 81          S     SIGS,SIGD          A%1,1)                            7  1600  S E78 E11          356
1496 14 82          S     SIGBT,SIGDB        A%1,2)                            7  1607  S E89 E24          357
1497 14 83          S     SIGBTA,SIGB        A%2,2)                            7  1614  S F00 E37          357
1498 14 84          S     MUSIG,SIGMD        A%1,3)                            7  1621  S F10 E47          357
1499 14 85          S     MUBET,SIGMB        A%2,3)                            7  1628  S F20 E57          357
1500 14 86          S     MUSQ,SIGM2         A%3,3)                            7  1635  S F30 E67          357
1501 14 87          BAV   GCPER                                                 5  1642  B W51 Z            358
1502 14 88   GCPEX  B     *                                                     4  1647  B W50              358
1503 14 89   GCPER  CS    332                                                   4  1651  / 332              358
1504 14 90          CS                                                          1  1655  /                  358
1505 14 91          MLCWA GCPMG,254                                             7  1656  L X34 254          358
1506 14 92          MLCWA GCPM1,283                                             7  1663  L X62 283          358
1507 14 93          MLCWA ITCTR,287                                             7  1670  L M31 287          358
1508 14 94          CC    1                                                     2  1677  F 1                359
1509 14 95          W                                                           1  1679  2                  359
1510 14 96          CC    1                                                     2  1680  F 1                359
1511 14 97          H     RSTRT                                                 4  1682  . 161              359
1512 14 98   GCPMG  DCW   @22017  ARITHMETIC OVERFLOW IN UPDATING OF MIDLING@  49  1734                      361
1513 14 99   GCPM1  DCW   @GROUP VARIABLES IN ITERATION@                       28  1762                      361
1514 15 00   TITPR  SBR   TIT20&3                                               4  1763  H Z02              362
1515 15 01          CC    1                                                     2  1767  F 1                362
1516 15 02          RWD   2                                                     5  1769  U %U2 R            362
1517 15 03          A     ONE,PGNO                                              7  1774  A /55 Z11          362
1518 15 04          MLC   ZEROS,TITNO                                           7  1781  M /54 Z08          362
1519 15 05          MLC   PGNO,TIT03                                            7  1788  M Z11 Z06          362
1520 15 06          BEF   *&1                                                   5  1795  B Y00 K            362
1521 15 07   TIT5   RTW   2,BUF9                                                8  1800  L %U2 002 R        363
1522 15 08          BER   ERRR2                                                 5  1808  B Z44 L            363
1523 15 09          BEF   TIT20                                                 5  1813  B Y99 K            363
1524 15 10          MLC   BUF9,TIT01                                            7  1818  M 002 Z03          363
1525 15 11          SW    BUF9&1                                                4  1825  , 003              363
1526 15 12          CS    332                                                   4  1829  / 332              363
1527 15 13          CS                                                          1  1833  /                  363
1528 15 14          MLC   BUF9&78,279                                           7  1834  M 080 279          364
1529 15 15          MLC   TIT03,300                                             7  1841  M Z06 300          364
1530 15 16          W                                                           1  1848  2                  364
1531 15 17          A     ONE,TITNO                                             7  1849  A /55 Z08          364
1532 15 18          CS    300                                                   4  1856  / 300              364
1533 15 19          CS                                                          1  1860  /                  364
1534 15 20   TIT7   S     ONE,TIT01                                             7  1861  S /55 Z03          364
1535 15 21          MLC   BLNK,TIT03                                            7  1868  M /61 Z06          365
1536 15 22          BWZ   TIT10,TIT01,B                                         8  1875  V Y87 Z03 B        365
1537 15 23          B     TIT5                                                  4  1883  B Y00              365
1538 15 24   TIT10  W                                                           1  1887  2                  365
1539 15 25          A     ONE,TITNO                                             7  1888  A /55 Z08          365
1540 15 26          B     TIT7                                                  4  1895  B Y61              365
1541 15 27   TIT20  B     *                                                     4  1899  B Z02              365
1542 15 28   TIT01  DCW   #1                                                    1  1903                      366
1543 15 29   TIT03  DCW   #3                                                    3  1906                      366
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 SEQ PG LIN  LABEL   OP    OPERANDS                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
1544 15 30   TITNO   DCW   #2                          2  1908                      366
1545 15 31   PGNO    DCW   #3                          3  1911                      366
1546 15 32   GPWDS   DA    1X1,G,C                        1912   1912               366
             DCW   @}@                                 1  1913              GMARK   366
1547 15 33   NSEC    DCW   #3                          3  1916                      366
1548 15 34           DCW   #1                          1  1917                      367
1549 15 35   NOPT    DCW   #3                          3  1920                      367
1550 15 36   EDT1    DCW   @ 0 .  @                    6  1926                      367
1551 15 37   EDT5    DCW   @ 0 .  -@                   7  1933                      367
1552 15 38   EDT6    DCW   @ 0 .    -@                 9  1942                      367
1553 15 39   FIVE    DCW   @5@                         1  1943                      367
1554 15 40   ERRR2   SBR   ERR2A&3                     4  1944  H Z78               367
1555 15 41           MA    M13A,ERR2A&3                7  1948  # J66 Z78           368
1556 15 42           S     ONE,ERR2B                   7  1955  S /55 Z79           368
1557 15 43           BM    ERR2C,ERR2B                 8  1962  V Z80 Z79 K         368
1558 15 44           BSP   2                           5  1970  U %U2 B             368
1559 15 45   ERR2A   B     *                           4  1975  B Z78               368
1560 15 46   ERR2B   DCW   9                           1  1979                      368
1561 15 47   ERR2C   CS    332                         4  1980  / 332               368
1562 15 48           CS                                1  1984  /                   369
1563 15 49           MLC   ERRRM,235                   7  1985  M J63 235           369
1564 15 50           MLC   TWO,237                     7  1992  M /56 237           369
1565 15 51           CC    1                           2  1999  F 1                 369
1566 15 52           W                                 1  2001  2                   369
1567 15 53           H     *                           4  2002  . !05              369
1568 15 54   ERRR3   SBR   ERR3A&3                     4  2006  H !40               369
1569 15 55           MA    M13A,ERR3A&3                7  2010  # J66 !40           370
1570 15 56           S     ONE,ERR3B                   7  2017  S /55 !41           370
1571 15 57           BM    ERR3C,ERR3B                 8  2024  V !42 !41 K         370
1572 15 58           BSP   3                           5  2032  U %U3 B             370
1573 15 59   ERR3A   B     *                           4  2037  B !40               370
1574 15 60   ERR3B   DCW   9                           1  2041                      370
1575 15 61   ERR3C   CS    332                         4  2042  / 332               370
1576 15 62           CS                                1  2046  /                   371
1577 15 63           MLC   ERRRM,235                   7  2047  M J63 235           371
1578 15 64           MLC   THREE,237                   7  2054  M /57 237           371
1579 15 65           CC    1                           2  2061  F 1                 371
1580 15 66           W                                 1  2063  2                   371
1581 15 67           H     *                           4  2064  . !67              371
1582 15 68   ERRR4   SBR   ERR4A&3                     4  2068  H J02               371
1583 15 69           MA    M13A,ERR4A&3                7  2072  # J66 J02           372
1584 15 70           S     ONE,ERR4B                   7  2079  S /55 J03           372
1585 15 71           BM    ERR4C,ERR4B                 8  2086  V J04 J03 K         372
1586 15 72           BSP   4                           5  2094  U %U4 B             372
1587 15 73   ERR4A   B     *                           4  2099  B J02               372
1588 15 74   ERR4B   DCW   9                           1  2103                      372
1589 15 75   ERR4C   CS    332                         4  2104  / 332               372
1590 15 76           CS                                1  2108  /                   373
1591 15 77           MLC   ERRRM,235                   7  2109  M J63 235           373
1592 15 78           MLC   FOUR,237                    7  2116  M /58 237           373
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 SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

1593 15 79           CC    1                                           2  2123  F 1               373
1594 15 80           W                                                 1  2125  2                 373
1595 15 81           H     *                                           4  2126  . J29             373
1596 15 82   ERRRM   DCW   @22018 PERMANENT READ ERROR ON TAPE@       34  2163                    374
1597 15 83   M13A    DCW   @I8G@                                       3  2166                    374
1598 15 84   ERRW2   SBR   ERW2A&3                                     4  2167  H J91             375
1599 15 85           MA    M13A,ERW2A&3                                7  2171  # J66 J91         375
1600 15 86           BSP   2                                           5  2178  U %U2 B           375
1601 15 87           SKP   2                                           5  2183  U %U2 E           375
1602 15 88   ERW2A   B     *                                           4  2188  B J91             375
1603 15 89   ERRW3   SBR   ERW3A&3                                     4  2192  H K16             375
1604 15 90           MA    M13A,ERW3A&3                                7  2196  # J66 K16         375
1605 15 91           BSP   3                                           5  2203  U %U3 B           376
1606 15 92           SKP   3                                           5  2208  U %U3 E           376
1607 15 93   ERW3A   B     *                                           4  2213  B K16             376
1608 15 94   ERRW4   SBR   ERW4A&3                                     4  2217  H K41             376
1609 15 95           MA    M13A,ERW4A&3                                7  2221  # J66 K41         376
1610 15 96           BSP   4                                           5  2228  U %U4 B           376
1611 15 97           SKP   4                                           5  2233  U %U4 E           376
1612 15 98   ERW4A   B     *                                           4  2238  B K41             377
1613 15 99   IND1    DCW   #1                                          1  2242                    377
1614 16 00   IND2    DCW   #1                                          1  2243                    377
1615 16 01   IND4    DCW   #1                                          1  2244                    377
1616 16 02   CC1A    DCW   #1                                          1  2245                    377
1617 16 03   CC2A    DCW   #2                                          2  2247                    377
1618 16 04   CC3A    DCW   #3                                          3  2250                    377
1619 16 05   CC3B    DCW   #3                                          3  2253                    378
1620 16 06   CC4A    DCW   #4                                          4  2257                    378
1621 16 07   CC5A    DCW   #5                                          5  2262                    378
1622 16 08   CC5B    DCW   #5                                          5  2267                    378
1623 16 09   CC6A    DCW   #6                                          6  2273                    378
1624 16 10   CC7A    DCW   #7                                          7  2280                    378
1625 16 11   CC8A    DCW   #8                                          8  2288                    378
1626 16 12   CC10A   DCW   #10                                        10  2298                    379
1627 16 13   CC10B   DCW   #10                                        10  2308                    379
1628 16 14   CC11A   DCW   #11                                        11  2319                    379
1629 16 15   CC13A   DCW   #13                                        13  2332                    380
1630 16 16   CC13B   DCW   #13                                        13  2345                    380
1631 16 17   CC18A   DCW   #18                                        18  2363                    381
1632 16 18   CC18B   DCW   #18                                        18  2381                    381
1633 16 19   CC20A   DCW   #20                                        20  2401                    382
1634 16 20   CC21A   DCW   #21                                        21  2422                    383
1635 16 21   N1SEC   DCW   #3                                          3  2425                    383
1636 16 22   MCOUNT  DCW   #3                                          3  2428                    383
1637 16 23   ITCTR   DCW   @000@                                       3  2431                    383
1638 16 24   HIPRS   DCW   #3                                          3  2434                    383
1639 16 25   PRLAM   DCW   #10                                        10  2444                    384
1640 16 26   HILAM   DCW   #10                                        10  2454                    384
1641 16 27   TLAM    DCW   #10                                        10  2464                    384
1642 16 28   EPREV   DCW   #10                                        10  2474                    385
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SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
1643	16	29	EPRES	DCW	#10		10	2484			385
1644	16	30	EPR	DCW	#10		10	2494			385
1645	16	31	NXPR	DCW	#4		4	2498			385
1646	16	32	STAT	DA	1X750,G,C			2499	3248		405
				DCW	@}@		1	3249		GMARK	405
1647	16	33	OUTRQ	DA	1X27,G,C			3250	3276		406
1648	16	34	DELTA		1,4			3253		FIELD	406
1649	16	35	ULIM		5,6			3255		FIELD	406
1650	16	36	LLIM		7,8			3257		FIELD	406
1651	16	37	IE		9,17			3266		FIELD	407
1652	16	38	IQ		18,26			3275		FIELD	407
1653	16	39	OPT		27,27			3276		FIELD	407
				DCW	@}@		1	3277		GMARK	407
1654	16	40	ALPH1	DCW	#10		10	3287			407
1655	16	401	ALPH2	DCW	#10		10	3297			407
1656	16	402	BETA1	DCW	#10		10	3307			407
1657	16	403	BETA2	DCW	#10		10	3317			408
1658	16	404	A11	DCW	#13		13	3330			408
1659	16	405	A12	DCW	#13		13	3343			408
1660	16	406	A22	DCW	#13		13	3356			409
1661	16	407	A13	DCW	#10		10	3366			409
1662	16	408	A23	DCW	#10		10	3376			409
1663	16	409	A33	DCW	#10		10	3386			410
1664	16	41	VU	DCW	#14		14	3400			410
1665	16	412	K1	DCW	#10		10	3410			410
1666	16	413	K2	DCW	#10		10	3420			411
1667	16	42	K3	DCW	#10		10	3430			411
1668	16	43	K4	DCW	#10		10	3440			411
1669	16	44	SIGR1	DCW	#10		10	3450			412
1670	16	45	SIGC2	DCW	#14		14	3464			412
1671	16	46	SIGCU	DCW	#10		10	3474			412
1672	16	47	SIGMC	DCW	#12		12	3486			413
1673	16	48	SIGBC	DCW	#12		12	3498			413
1674	16	49	SIGD	DCW	#13		13	3511			413
1675	16	50	SIGDB	DCW	#13		13	3524			414
1676	16	51	SIGB	DCW	#13		13	3537			414
1677	16	52	SIGMD	DCW	#10		10	3547			414
1678	16	53	SIGMB	DCW	#10		10	3557			415
1679	16	54	SIGM2	DCW	#10		10	3567			415
1680	16	55	SIGS	DCW	#11		11	3578			415
1681	16	56	SIGBT	DCW	#11		11	3589			416
1682	16	57	SIGBTA	DCW	#11		11	3600			416
1683	16	58	MUSIG	DCW	#10		10	3610			416
1684	16	59	MUBET	DCW	#10		10	3620			417
1685	16	60	MUSQ	DCW	#10		10	3630			417
1686	16	61	C2SIG	DCW	#14		14	3644			417
1687	16	62	CUSIG	DCW	#10		10	3654			418
1688	16	63	BCSIG	DCW	#12		12	3666			418
1689	16	64	MCSIG	DCW	#12		12	3678			418
1690	16	65	DENOM	DCW	#13		13	3691			419

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 SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

1691 16 66   NUMER  DCW   #21                                                  21  3712                     419
1692 16 67   MUZ    DCW   #7                                                    7  3719                     420
1693 16 68   GAMZ   DCW   #13                                                  13  3732                     420
1694 16 69   OMEGZ  DCW   #13                                                  13  3745                     420
1695 16 70   ONEPT5 DCW   @100000@                                              6  3751                     420
1696 16 71   NINES  DCW   @9999999999@                                         10  3761                     421
1697 16 72   BUF    EQU   7218                                                      7218
1698 16 73   BUF9   EQU   2                                                         0002
1699 16 74   BUF6   DA    1X36,G,C                                                  3762   3797              422
1700 16 75                1,7                                                       3768              FIELD  422
1701 16 76                8,15                                                      3776              FIELD  422
1702 16 77                16,23                                                     3784              FIELD  422
1703 16 78                24,31                                                     3792              FIELD  423
1704 16 79                32,36                                                     3797              FIELD  423
                    DCW   @}@                                                   1  3798              GMARK  423
1705 16 80   PSA    RWD   2                 REWIND TAPE 2                       5  3799  U %U2 R            423
1706 16 81          RWD   3                 REWIND TAPE 3                       5  3804  U %U3 R            423
1707 16 82          RWD   4                 REWIND TAPE 4                       5  3809  U %U4 R            423
1708 16 83          SW    87,92             SET WORD MARKS FOR                  7  3814  , 087 092          423
1709 16 84          SW    97                INDEX REGISTERS                     4  3821  , 097              424
1710 16 85          MLCWA @0@,IND4          SET CURRENT HOLDING FLAG TO ZERO    7  3825  L ?6V K44          424
1711 16 86          MLC   ZEROS,SIGCU       SET SUM C%I) TO ZERO                7  3832  M /54 D74          424
1712 16 87   PSA1   RTW   4,BUF             READ ONE SECURITY FROM SORT-LIST    8  3839  L %U4 B1Y R        424
1713 16 88          BER   ERRR4                                                 5  3847  B !68 L            424
1714 16 89          A     BUF&12,SIGCU-1    ADD C%I) TO SUM C%I)                7  3852  A B3| D73          424
1715 16 90          MLC   BUF&2,IX1         SET INDEX 1                         7  3859  M B2| 089          425
1716 16 91          MLZS  @0@,IX1           TO INTERNAL ID                      7  3866  Y ?6V 089          425
1717 16 92          BWZ   PSA2,BUF&2,2      BRANCH TO PSA2 IF NOT FIXED SEC.    8  3873  V H92 B2| 2        425
1718 16 93          MLC   THREE,STAT-1&X1   SET STATUS OF FIXED SEC. TO 3       7  3881  M /57 MZ8          425
1719 16 94          B     PSA3                                                  4  3888  B H99              425
1720 16 95   PSA2   MLC   TWO,STAT-1&X1     SET STATUS OF VARIABLE SEC. TO 2    7  3892  M /56 MZ8          426
1721 16 96   PSA3   MLC   SIGCU,CC6A                                            7  3899  M D74 K73          426
1722 16 97          S     ONEPT5,CC6A       BRANCH TO PSA1                      7  3906  S G51 K73          426
1723 16 98          BM    PSA1,CC6A         IF NOT K-TH SEC.                    8  3913  V H39 K73 K        426
1724 16 99          S     BUF&12,SIGCU-1    ADJUST SUM C%I)                     7  3921  S B3| D73          426
1725 17 00          MLZS  @0@,SIGCU-1                                           7  3928  Y ?6V D73          427
1726 17 01          MLC   ONE,STAT-1&X1     SET STATUS OF K-TH SEC. TO 1        7  3935  M /55 MZ8          427
1727 17 02          BEF   *&1                                                   5  3942  B I47 K            427
1728 17 03   PSA4   RTW   4,BUF                                                 8  3947  L %U4 B1Y R        427
1729 17 04          BEF   PSA5              SKIP TO END OF SORT-LIST            5  3955  B I64 K            427
1730 17 05          B     PSA4                                                  4  3960  B I47              427
1731 17 06   PSA5   RTW   4,NSEC-2          READ NUMBER OF SECURITIES           8  3964  L %U4 Z14 R        428
1732 17 07          BER   ERRR4                                                 5  3972  B !68 L            428
1733 17 08          RTW   4,BUF                                                 8  3977  L %U4 B1Y R        428
1734 17 09          RTW   4,OUTRQ           READ OUTPUT REQUEST DATA            8  3985  L %U4 B50 R        428
1735 17 10          BER   ERRR4                                                 5  3993  B !68 L            428
1736 17 11          RWD   4                 REWIND TAPE 4                       5  3998  U %U4 R            428
1737 17 12          MLC   ZEROS,CC13A                                           7  4003  M /54 L32          429
1738 17 13          MLC   ONE,CC13A-12                                          7  4010  M /55 L20          429
1739 17 14          B     DIVIDE            COMPUTE                             4  4017  B 630              429
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 SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

1740 17 15          DSA   IQ                 1/SIGMA%N&1)**2                   3  4023  B75               429
1741 17 16          DSA   CC13A              WHICH IS                          3  4026  L32               429
1742 17 17          DCW   13                 PART OF A%2,2)                    2  4028                    429
1743 17 18          MLC   QUOT,SIGB                                            7  4029  M /11 E37         429
1744 17 19          MLCWA @020@,N1SEC        INITIALIZE BLOCK COUNT            7  4036  L ?6Y M25         430
1745 17 20          MLC   ZEROS,CC3A         SET INTERNAL ID TO 000            7  4043  M /54 K50         430
1746 17 21          MLC   ZEROS,CC3B         SET NO. OF SEC. IN BUF TO 000     7  4050  M /54 K53         430
1747 17 22          MLC   ZEROS,IX1          SET INDEX 1 TO 000                7  4057  M /54 089         430
1748 17 23          S     EPRES                                                4  4064  S M84             430
1749 17 24          S     EPREV                                                4  4068  S M74             430
1750 17 25          S     PRLAM                                                4  4072  S M44             431
1751 17 26          B     TITPR              PRINT TITLE CARDS                 4  4076  B X63             431
1752 17 27          B     CASPR              PRINT CASE CARDS                  4  4080  B R1Y             431
1753 17 28          B     PRHD1              PRINT HEADINGS                    4  4084  B O0W             431
1754 17 29          MLC   TITNO,CC2A         SET CC2A TO NO. OF LINES PRINTED  7  4088  M Z08 K47         431
1755 17 30   PSA6   RTW   3,BUF3            READ ONE SECURITY FROM TAPE 3     8  4095  L %U3 ?2S R       431
1756 17 31          BER   ERRR3                                                5  4103  B !06 L           431
1757 17 32          C     CC2A,@58@          BRANCH TO PSA6A                   7  4108  C K47 ?7|         432
1758 17 33          BU    PSA6A              IF PAGE INCOMPLETE                5  4115  B 15U /           432
1759 17 34          CC    J                                                    2  4120  F J               432
1760 17 35          MLCWA @* FIXED HOLDING@,224                              7  4122  L ?8V 224         432
1761 17 36          W                                                        1  4129  2                 432
1762 17 37          B     TITPR              PRINT TITLE CARDS                 4  4130  B X63             432
1763 17 38          CC    L                                                    2  4134  F L               432
1764 17 39          B     PRHD1              PRINT HEADINGS                    4  4136  B O0W             433
1765 17 40          MLC   TITNO,CC2A         SET CC2A TO NO. OF LINES PRINTED  7  4140  M Z08 K47         433
1766 17 41          A     THREE,CC2A                                           7  4147  A /57 K47         433
1767 17 42   PSA6A  A     ONE,CC3A           ADD 1 TO INTERNAL ID              7  4154  A /55 K50         433
1768 17 43          MLC   CC3A,IX2           PLACE INTERNAL ID IN INDEX 2      7  4161  M K50 094         433
1769 17 44          A     ONE,CC3B           ADD 1 TO NO. OF SEC. IN BUF       7  4168  A /55 K53         433
1770 17 45          MLC   BUF3&4,216         PLACE ID IN PRINT AREA            7  4175  M ?2W 216         434
1771 17 46          MLCWA EDT5,228                                             7  4182  L Z33 228         434
1772 17 47          MCE   BUF3&9,228         PLACE MU IN PRINT AREA            7  4189  E ?3/ 228         434
1773 17 48          BCE   PSA9,228,          BRANCH TO PSA9 IF MU NOT MINUS    8  4196  B 25W 228         434
1774 17 49          MLC   @ @,228            SET SIGN BLANK                    7  4204  M ?8W 228         434
1775 17 50          BCE   PSA7,223,          BRANCH TO PSA7 IF 223 BLANK       8  4211  B 23Y 223         435
1776 17 51          BCE   PSA8,222,          BRANCH TO PSA8 IF 222 BLANK       8  4219  B 24Z 222         435
1777 17 52          MLC   @-@,221            PLACE MINUS SIGN IN 221           7  4227  M ?8X 221         435
1778 17 53          B     PSA9                                                 4  4234  B 25W             435
1779 17 54   PSA7   MLC   @-@,223            PLACE MINUS SIGN IN 223           7  4238  M ?8X 223         435
1780 17 55          B     PSA9                                                 4  4245  B 25W             435
1781 17 56   PSA8   MLC   @-@,222            PLACE MINUS SIGN IN 222           7  4249  M ?8X 222         436
1782 17 57   PSA9   MLCWA EDT1,238                                             7  4256  L Z26 238         436
1783 17 58          C     ZEROS,BUF3&19                                        7  4263  C /54 ?4/         436
1784 17 581         BU    PSA9A                                                5  4270  B 28W /           436
1785 17 582         MLC   ZEROS,CC5A                                          7  4275  M /54 K62         436
1786 17 583         B     PSA9B                                                4  4282  B 31/             436
1787 17 584  PSA9A  MLC   BUF3&19,ACCAUT                                      7  4286  M ?4/ T44         437
1788 17 59          MLC   ZEROS,ACCAUT-10                                      7  4293  M /54 T34         437
1789 17 60          B     SQRT                                                 4  4300  B /62             437
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 SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

1790 17 61          MLC   R,CC5A             INTRINSIC STD. DEV. X.XXXX          7  4304  M T67 K62          437
1791 17 62   PSA9B  MCE   CC5A,238           PLACE INTR. STD. DEV. IN PRINT      7  4311  E K62 238          437
1792 17 63          MLCWA EDT1,248                                               7  4318  L Z26 248          437
1793 17 64          C     ZEROS,BUF3&19                                          7  4325  C /54 ?4/          438
1794 17 641         BU    PSA9C                                                  5  4332  B 34Y /            438
1795 17 642         MLC   ZEROS,CC5B                                             7  4337  M /54 K67          438
1796 17 643         B     PSA9D                                                  4  4344  B 40|              438
1797 17 644  PSA9C  B     MULT1                                                  4  4348  B 336              438
1798 17 65          DSA   BUF3&25            B  XX.XXXX                          3  4354  ?4X                438
1799 17 66          DSA   BUF3&25            B  XX.XXXX                          3  4357  ?4X                438
1800 17 67          MLC   PROD,ACCAUT        B SQUARED  XXXX.XXXXXXXX            7  4358  M 623 T44          439
1801 17 68          B     MULT1                                                  4  4365  B 336              439
1802 17 69          DSA   ACCAUT             B SQUARED  XXXX.XXXXXXXX            3  4371  T44                439
1803 17 70          DSA   IQ                 Q%N&1)       XX.XXXXXXX             3  4374  B75                439
1804 17 71          MLC   PROD-7,ACCAUT      B SQ. * Q%N&1) XXXXXX.XXXXXXXX      7  4375  M 616 T44          439
1805 17 72          A     BUF3&19,ACCAUT     TOTAL VARIANCE XXXXXX.XXXXXXXX      7  4382  A ?4/ T44          439
1806 17 73          B     SQRT                                                   4  4389  B /62              439
1807 17 74          MLC   R,CC5B                                                 7  4393  M T67 K67          440
1808 17 75   PSA9D  MCE   CC5B,248           PLACE TOTAL STD. DEV. IN PRINT      7  4400  E K67 248          440
1809 17 76          MLCWA EDT6,259                                               7  4407  L Z42 259          440
1810 17 77          MCE   BUF3&25,259        PLACE SLOPE IN PRINT AREA           7  4414  E ?4X 259          440
1811 17 78          BCE   PSA11,259,         BRANCH TO PSA11 IF B NOT MINUS      8  4421  B 46S 259          440
1812 17 79          MLC   @ @,259            SET SIGN BLANK                      7  4429  M ?8W 259          441
1813 17 80          BCE   PSA10,252,         BRANCH TO PSA10 IF 252 BLANK        8  4436  B 45V 252          441
1814 17 81          MLC   @-@,251            PLACE MINUS SIGN IN 251             7  4444  M ?8X 251          441
1815 17 82          B     PSA11                                                  4  4451  B 46S              441
1816 17 83   PSA10  MLC   @-@,252            PLACE MINUS SIGN IN 252             7  4455  M ?8X 252          441
1817 17 84   PSA11  BCE   PSA11A,253,                                            8  4462  B 47U 253          442
1818 17 85          B     PSA11B                                                 4  4470  B 48Y              442
1819 17 86   PSA11A MLC   @0000@,258                                             7  4474  M ?9/ 258          442
1820 17 87          MLC   @0@,253                                                7  4481  M ?6V 253          442
1821 17 88   PSA11B MLCWA EDT6,269                                               7  4488  L Z42 269          442
1822 17 89          B     MULT1                                                  4  4495  B 336              442
1823 17 90          DSA   BUF3&25            B       XX.XXXX                     3  4501  ?4X                443
1824 17 91          DSA   IE                 MU%N&1) XX.XXXXXXX                  3  4504  B66                443
1825 17 92          MLZS  PROD,PROD-7                                            7  4505  Y 623 616          443
1826 17 93          MLC   BUF3&9,CC6A        MU  X.XXXX                          7  4512  M ?3/ K73          443
1827 17 935         MLC   @ @,CC6A-5                                             7  4519  M ?8W K68          443
1828 17 94          S     PROD-7,CC6A        A EQUAL MU-B*MU%N&1) XX.XXXX        7  4526  S 616 K73          443
1829 17 95          MCE   CC6A,269           PLACE INTERCEPT IN PRINT AREA       7  4533  E K73 269          444
1830 17 96          BCE   PSA13,269,                                             8  4540  B 58/ 269          444
1831 17 97          MLC   @ @,269            SET SIGN BLANK                      7  4548  M ?8W 269          444
1832 17 98          BCE   PSA12,262,         BRANCH TO PSA12 IF 262 BLANK        8  4555  B 57U 262          444
1833 17 99          MLC   @-@,261            PLACE MINUS SIGN IN 261             7  4563  M ?8X 261          444
1834 18 00          B     PSA13                                                  4  4570  B 58/              445
1835 18 01   PSA12  MLC   @-@,262            PLACE MINUS SIGN IN 262             7  4574  M ?8X 262          445
1836 18 02   PSA13  MLCWA EDT1,278                                               7  4581  L Z26 278          445
1837 18 03          MCE   BUF3&30,278        PLACE MAX. AUTH. HLD. IN PRINT      7  4588  E ?5S 278          445
1838 18 04          BCE   *&5,STAT-1&X2,3    PRINT ASTERIC IF FIXED SEC.         8  4595  B 60X MR8 3        445
1839 18 05          B     *&8                                                    4  4603  B 61U              445
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 SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

1840 18 06          MLCWA @*@,279                                                7  4607  L ?9S 279          446
1841 18 07          BCE   PS13A,275,                                             8  4614  B 64S 275          446
1842 18 08          BCE   PS13B,277,                                             8  4622  B 64Z 277          446
1843 18 09          BCE   PS13C,278,                                             8  4630  B 65W 278          446
1844 18 10          B     PS13D                                                  4  4638  B 66T              446
1845 18 11   PS13A  MLC   @0@,275                                                7  4642  M ?6V 275          447
1846 18 12   PS13B  MLC   @0@,277                                                7  4649  M ?6V 277          447
1847 18 13   PS13C  MLC   @0@,278                                                7  4656  M ?6V 278          447
1848 18 14   PS13D  MLCWA EDT1,289                                               7  4663  L Z26 289          447
1849 18 15          MCE   BUF3&35,289         PLACE CURRENT HLD. IN PRINT AREA   7  4670  E ?5X 289          447
1850 18 16          BCE   PS13E,286,                                             8  4677  B 70V 286          448
1851 18 17          BCE   PS13F,288,                                             8  4685  B 71S 288          448
1852 18 18          BCE   PS13G,289,                                             8  4693  B 71Z 289          448
1853 18 19          B     PS13H                                                  4  4701  B 72W              448
1854 18 20   PS13E  MLC   @0@,286                                                7  4705  M ?6V 286          448
1855 18 21   PS13F  MLC   @0@,288                                                7  4712  M ?6V 288          449
1856 18 22   PS13G  MLC   @0@,289                                                7  4719  M ?6V 289          449
1857 18 23   PS13H  MLCWA EDT1,298                                               7  4726  L Z26 298          449
1858 18 24          MCE   BUF3&40,298         PLACE PRICE IN PRINT AREA          7  4733  E ?6S 298          449
1859 18 25          BCE   PS13I,297,                                             8  4740  B 76| 297          449
1860 18 26          BCE   PS13J,298,                                             8  4748  B 76X 298          450
1861 18 27          B     PS13K                                                  4  4756  B 77U              450
1862 18 28   PS13I  MLC   @0@,297                                                7  4760  M ?6V 297          450
1863 18 29   PS13J  MLC   @0@,298                                                7  4767  M ?6V 298          450
1864 18 30   PS13K  W                                                            1  4774  2                  450
1865 18 31          CS    298                                                    4  4775  / 298              450
1866 18 32          A     ONE,CC2A            ADD 1 TO NO. OF LINES PRINTED      7  4779  A /55 K47          450
1867 18 33   PSA14  MLCWA CC3A,BUF&2&X1       STORE INTERNAL ID IN BUF           7  4786  L K50 BS|          451
1868 18 34          C     ZEROS,CC5A                                             7  4793  C /54 K62          451
1869 18 35          BU    PSA14A                                                 5  4800  B 88W /            451
1870 18 36          MLC   ZEROS,CC8A                                             7  4805  M /54 K88          451
1871 18 37          MLCWA CC8A,BUF&25&X1      B/SIGMA EQUAL 000.00000            7  4812  L K88 BUT          451
1872 18 38          MLC   ONE,CC8A-5                                             7  4819  M /55 K83          452
1873 18 39          MLCWA CC8A,BUF&17&X1      1/SIGMA EQUAL 001.00000            7  4826  L K88 BTV          452
1874 18 40          MLC   BUF3&30,CC8A-3                                         7  4833  M ?5S K85          452
1875 18 41          MLCWA CC8A,BUF&33&X1      C*SIGMA EQUAL C  X.XXXX000         7  4840  L K88 BV/          452
1876 18 42          MLC   ZEROS,CC8A-7                                           7  4847  M /54 K81          452
1877 18 43          MLC   BUF3&9,CC8A-2                                          7  4854  M ?3/ K86          453
1878 18 44          MLCWA CC8A-1,BUF&9&X1     MU/SIGMA EQUAL MU  0X.XXXX0        7  4861  L K87 BSX          453
1879 18 45          MLZS  BUF&8&X1,BUF&9&X1                                      7  4868  Y BSW BSX          453
1880 18 46          MLZS  @0@,BUF&8&X1                                           7  4875  Y ?6V BSW          453
1881 18 47          B     PSA14B                                                 4  4882  B /5/              453
1882 18 48   PSA14A S     CC10A                                                  4  4886  S K98              453
1883 18 49          ZA    BUF3&7,CC5B                                            7  4890  ? ?2Z K67          454
1884 18 50          MLZS  @0@,CC5B                                               7  4897  Y ?6V K67          454
1885 18 51          S     CC5A,CC5B           BRANCH TO PSA33 IF                 7  4904  S K62 K67          454
1886 18 52          BWZ   PSA33,CC5B,B        MU GREATER THAN 100 * SIGMA        8  4911  V K0| K67 B        454
1887 18 53          MLC   BUF3&9,CC10A-5                                         7  4919  M ?3/ K93          454
1888 18 54          MLZS  CC10A-5,CC10A                                          7  4926  Y K93 K98          455
1889 18 55          MLZS  @0@,CC10A-5                                            7  4933  Y ?6V K93          455
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 SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

1890 18 56          B     DIVIDE                                                4  4940  B 630              455
1891 18 57          DSA   CC5A                SIGMA  X.XXXX                     3  4946  K62                455
1892 18 58          DSA   CC10A               MU     X.XXXX                     3  4949  K98                455
1893 18 59          DCW   17                                                    2  4951                      455
1894 18 60          MLC   QUOT,CC7A           MU/SIGMA  XX.XXXXX                7  4952  M /11 K80          455
1895 18 61          MLCWA CC7A,BUF&9&X1                                         7  4959  L K80 BSX          456
1896 18 62          MLC   ZEROS,CC5B                                            7  4966  M /54 K67          456
1897 18 63          MLC   ONE,CC5B-1                                            7  4973  M /55 K66          456
1898 18 64          S     CC5A,CC5B           BRANCH TO PSA34 IF                7  4980  S K62 K67          456
1899 18 65          BWZ   PSA34,CC5B,B        SIGMA LESS THAN 0.0011            8  4987  V K1Z K67 B        456
1900 18 66          MLC   ZEROS,CC10A                                           7  4995  M /54 K98          457
1901 18 67          MLC   ONE,CC10A-9                                           7  5002  M /55 K89          457
1902 18 68          B     DIVIDE                                                4  5009  B 630              457
1903 18 69          DSA   CC5A                SIGMA  X.XXXX                     3  5015  K62                457
1904 18 70          DSA   CC10A                      1.0000000000                3  5018  K98                457
1905 18 71          DCW   17                                                    2  5020                      457
1906 18 72          MLC   QUOT,CC8A           1/SIGMA  XXX.XXXXX                7  5021  M /11 K88          457
1907 18 73          MLCWA CC8A,BUF&17&X1                                        7  5028  L K88 BTV          458
1908 18 74          S     CC10A                                                 4  5035  S K98              458
1909 18 75          ZA    BUF3&22,CC5B                                          7  5039  ? ?4U K67          458
1910 18 77          S     CC5A,CC5B           BRANCH TO PSA35 IF                7  5046  S K62 K67          458
1911 18 78          BWZ   PSA35,CC5B,B        B GREATER THAN 1000 * SIGMA       8  5053  V K3Y K67 B        458
1912 18 79          MLC   BUF3&25,CC10A-5                                       7  5061  M ?4X K93          459
1913 18 80          MLZS  CC10A-5,CC10A                                         7  5068  Y K93 K98          459
1914 18 81          MLZS  @0@,CC10A-5                                           7  5075  Y ?6V K93          459
1915 18 82          B     DIVIDE                                                4  5082  B 630              459
1916 18 83          DSA   CC5A                SIGMA  X.XXXX                     3  5088  K62                459
1917 18 84          DSA   CC10A               B     XX.XXXX00000                3  5091  K98                459
1918 18 85          DCW   17                                                    2  5093                      459
1919 18 86          MLC   QUOT,CC8A           B/SIGMA  XXX.XXXXX                7  5094  M /11 K88          460
1920 18 87          C     ZEROS,CC8A          SET B/SIGMA TO                    7  5101  C /54 K88          460
1921 18 88          BU    *&8                 .0000& IF                         5  5108  B /2| /            460
1922 18 89          MLC   @?@,CC8A            IT IS ZERO                        7  5113  M ?9T K88          460
1923 18 90          MLCWA CC8A,BUF&25&X1                                        7  5120  L K88 BUT          460
1924 18 91          B     MULT1                                                 4  5127  B 336              460
1925 18 92          DSA   CC5A                SIGMA  X.XXXX                     3  5133  K62                461
1926 18 93          DSA   BUF3&30             C      X.XXXX                     3  5136  ?5S                461
1927 18 94          MLC   PROD-1,CC8A         C*SIGMA  X.XXXXXXX                7  5137  M 622 K88          461
1928 18 95          MLCWA CC8A,BUF&33&X1                                        7  5144  L K88 BV/          461
1929 18 96   PSA14B MLCWA BUF3&30,BUF&38&X1   C   X.XXXX                        7  5151  L ?5S BVW          461
1930 18 97          BCE   PSA15,STAT-1&X2,1   BRANCH TO PSA15 IF SEC. IN M      8  5158  B /7Y MR8 1        461
1931 18 98          BCE   PSA17,STAT-1&X2,    BRANCH TO PSA17 IF SEC. IN D      8  5166  B T7X MR8          462
1932 18 99          B     PSA16               BRANCH TO PSA16 IF SEC. IN U      4  5174  B S9W              462
1933 19 00   PSA15  MLCWA BUF&9&X1,BUF6&6     STORE MU/SIGMA IN BUF6            7  5178  L BSX G68          462
1934 19 01          MLCWA BUF&17&X1,BUF6&14   STORE  1/SIGMA IN BUF6            7  5185  L BTV G76          462
1935 19 02          MLCWA BUF&25&X1,BUF6&22   STORE  B/SIGMA IN BUF6            7  5192  L BUT G84          462
1936 19 03          MLCWA BUF&33&X1,BUF6&30   STORE  C*SIGMA IN BUF6            7  5199  L BV/ G92          463
1937 19 04          MLCWA BUF&38&X1,BUF6&35   STORE  C       IN BUF6            7  5206  L BVW G97          463
1938 19 05          MLC   ONEPT5,CC6A                                           7  5213  M G51 K73          463
1939 19 06          S     SIGCU,CC6A          X%K) EQUALS 1 - C SUPER U         7  5220  S D74 K73          463
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 SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

1940 19 07           B     MULT1                                         4  5227  B 336              463
1941 19 08           DSA   CC6A                                          3  5233  K73                463
1942 19 09           DSA   BUF3&9                                        3  5236  ?3/                463
1943 19 10           MLC   PROD-2,HILAM        X%K) * MU%K)              7  5237  M 621 M54          464
1944 19 11           MLC   ZEROS,MUZ           SET MU Z TO ZERO          7  5244  M /54 G19          464
1945 19 12           S     GAMZ                SET GAMMA Z TO ZERO       4  5251  S G32              464
1946 19 13           S     OMEGZ               SET OMEGA Z TO ZERO       4  5255  S G45              464
1947 19 14           C     ZEROS,CC5A          BRANCH TO PSA17           7  5259  C /54 K62          464
1948 19 15           BU    PSA17               IF NOT CASH ITEM          5  5266  B T7X /            464
1949 19 16           MLC   BUF6&6,MUZ          MU Z EQUALS MU OF CASH ITEM IN M  7  5271  M G68 G19  465
1950 19 161          MLC   CC6A,GAMZ-3         GAMMA Z EQUALS            7  5278  M K73 G29          465
1951 19 162          MLZS  @0@,GAMZ-3          1 - C SUPER U             7  5285  Y ?6V G29          465
1952 19 17           B     PSA17                                         4  5292  B T7X              465
1953 19 18   PSA16   B     MULT1                                         4  5296  B 336              465
1954 19 19           DSA   BUF&25&X1           B/SIGMA  XXX.XXXXX        3  5302  BUT                465
1955 19 20           DSA   BUF&33&X1           C*SIGMA  X.XXXXXXX        3  5305  BV/                465
1956 19 21           MLZS  PROD,PROD-5                                   7  5306  Y 623 618          466
1957 19 22           A     PROD-5,SIGBC        B SUPER U                 7  5313  A 618 D98          466
1958 19 221          C     ZEROS,BUF&25&X1     NO CONTRIBUTION TO        7  5320  C /54 BUT          466
1959 19 222          BU    PSA16A              V SUPER U IF              5  5327  B T3W /            466
1960 19 223          B     PSA16B              CASH SECURITY             4  5332  B T5T              466
1961 19 23   PSA16A  B     MULT1                                         4  5336  B 336              466
1962 19 24           DSA   BUF&33&X1           C*SIGMA  X.XXXXXXX        3  5342  BV/                466
1963 19 25           DSA   BUF&33&X1           C*SIGMA  X.XXXXXXX        3  5345  BV/                467
1964 19 26           A     PROD-3,SIGC2        V SUPER U                 7  5346  A 620 D64          467
1965 19 27   PSA16B  B     MULT1                                         4  5353  B 336              467
1966 19 28           DSA   BUF&9&X1           MU/SIGMA  XX.XXXXX        3  5359  BSX                467
1967 19 29           DSA   BUF&33&X1           C*SIGMA  X.XXXXXXX        3  5362  BV/                467
1968 19 30           MLZS  PROD,PROD-5                                   7  5363  Y 623 618          467
1969 19 31           A     PROD-5,SIGMC        E SUPER U                 7  5370  A 618 D86          467
1970 19 32   PSA17   C     ZEROS,BUF3&35       BRANCH TO PSA24 IF        7  5377  C /54 ?5X          468
1971 19 33           BU    PSA24               CURRENT HLDG NOT ZERO     5  5384  B V1U /            468
1972 19 34   PSA18   MA    @039@,IX1           ADD 39 TO INDEX 1         7  5389  # ?9W 089          468
1973 19 35           C     CC3A,NSEC           BRANCH TO PSA19           7  5396  C K50 Z16          468
1974 19 36           BU    PSA19               IF ALL SEC. NOT PROCESSED 5  5403  B U2S /            468
1975 19 37           CC    J                                             2  5408  F J                468
1976 19 38           MLCWA @* FIXED HOLDING@,224                       7  5410  L A1/ 224          469
1977 19 39           W                                                   1  5417  2                  469
1978 19 40           B     PSA21                                         4  5418  B U3U              469
1979 19 41   PSA19   C     CC3B,N1SEC          BRANCH TO PSA6            7  5422  C K53 M25          469
1980 19 42           BU    PSA6                IF BUF NOT FULL           5  5429  B 09V /            469
1981 19 43   PSA21   MLCWA GPWDS&1,BUF&X1      PLACE GRP MK WD MK AFTER BUF  7  5434  L Z13 B/Y          469
1982 19 44           WTW   4,BUF               WRITE BLOCK OF SEC. ON TAPE 4  8  5441  L %U4 B1Y W        469
1983 19 45           BER   ERRW4                                         5  5449  B K17 L            470
1984 19 46           MLCWA @0@,BUF&X1          REMOVE GRP MK WD MK FROM BUF  7  5454  L ?6V B/Y          470
1985 19 47           MLC   ZEROS,CC3B          RESET NO. OF SEC. IN BUF TO 000  7  5461  M /54 K53          470
1986 19 48           MLC   ZEROS,IX1           RESET INDEX 1 TO 000      7  5468  M /54 089          470
1987 19 49           C     CC3A,NSEC           BRANCH TO PSA6            7  5475  C K50 Z16          470
1988 19 50           BU    PSA6                IF ALL SEC. NOT PROCESSED 5  5482  B 09V /            470
1989 19 51           WTM   4                   WRITE E-O-F AFTER LAST SEC. BLCK  5  5487  U %U4 M          471
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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

1990 19 52          BEF   *&1                                         5  5492  B U9X K            471
1991 19 53   PSA23   RTW   3,BUF3                                     8  5497  L %U3 ?2S R        471
1992 19 54          BEF   PSA25              SKIP TO NEXT FILE        5  5505  B W1U K            471
1993 19 55          B     PSA23                                       4  5510  B U9X              471
1994 19 56   PSA24  B     MULT1                                       4  5514  B 336              471
1995 19 57          DSA   BUF3&9             MU  X.XXXX               3  5520  ?3/                471
1996 19 58          DSA   BUF3&35            H   X.XXXX               3  5523  ?5X                472
1997 19 59          MLZS  PROD,PROD-1                                 7  5524  Y 623 622          472
1998 19 60          A     PROD-1,EPRES       E                        7  5531  A 622 M84          472
1999 19 61          B     MULT1                                       4  5538  B 336              472
2000 19 62          DSA   CC5A               SIGMA  X.XXXX            3  5544  K62                472
2001 19 63          DSA   BUF3&35            H      X.XXXX            3  5547  ?5X                472
2002 19 64          MLC   PROD-3,CC6A                                 7  5548  M 620 K73          472
2003 19 65          B     MULT1                                       4  5555  B 336              473
2004 19 66          DSA   CC6A               H*SIGMA  X.XXXXX         3  5561  K73                473
2005 19 67          DSA   CC6A               H*SIGMA  X.XXXXX         3  5564  K73                473
2006 19 68          A     PROD-5,EPREV       V                        7  5565  A 618 M74          473
2007 19 69          B     MULT1                                       4  5572  B 336              473
2008 19 70          DSA   BUF3&25            B  XX.XXXX               3  5578  ?4X                473
2009 19 71          DSA   BUF3&35            H   X.XXXX               3  5581  ?5X                473
2010 19 72          MLZS  PROD,PROD-3                                 7  5582  Y 623 620          474
2011 19 73          A     PROD-3,PRLAM       SUM B * H                7  5589  A 620 M44          474
2012 19 74          A     BUF3&35,MUSQ-5     ACCUMULATE CURRENT HOLDING 7  5596  A ?5X F25          474
2013 19 75          MLCWA ONE,IND4           SET CURRENT HOLDING FLAG TO ONE 7  5603  L /55 K44          474
2014 19 76          B     PSA18                                       4  5610  B T8Z              474
2015 19 77   PSA25  RTW   3,BUF3                                     8  5614  L %U3 ?2S R        475
2016 19 78          BER   ERRR3                                      5  5622  B !06 L            475
2017 19 79          BEF   PSA26              EXTERNAL                 5  5627  B W5T K            475
2018 19 80          SW    BUF3&5             ID                       4  5632  , ?2X              475
2019 19 81          WTW   4,BUF3             FILE                     8  5636  L %U4 ?2S W        475
2020 19 82          BER   ERRW4                                       5  5644  B K17 L            475
2021 19 83          B     PSA25              TAPE 4                   4  5649  B W1U              475
2022 19 84   PSA26  WTM   4                  WRITE E-O-F AFTER EXTERNAL ID-S 5  5653  U %U4 M            476
2023 19 85          RWD   3                  REWIND TAPE 3            5  5658  U %U3 R            476
2024 19 86          BCE   PSA28A,IND4,0      BRANCH TO PSA28A IF NO CURR HLDG 8  5663  B Z7Y K44 0        476
2025 19 87          C     @10000@,MUSQ-5     BRANCH TO PSA36          7  5671  C A1W F25          476
2026 19 88          BU    PSA36              IF SUM OF CURR HLDG NOT 1.0000 5  5678  B K5X /            476
2027 19 89          B     MULT1                                       4  5683  B 336              476
2028 19 90          DSA   PRLAM              SUM B * H                3  5689  M44                476
2029 19 91          DSA   PRLAM              SUM B * H                3  5692  M44                477
2030 19 92          MLC   PROD-5,CC8A                                 7  5693  M 618 K88          477
2031 19 93          B     MULT1                                       4  5700  B 336              477
2032 19 94          DSA   CC8A                                        3  5706  K88                477
2033 19 95          DSA   IQ                                          3  5709  B75                477
2034 19 96          A     PROD-7,EPREV       V                        7  5710  A 616 M74          477
2035 19 97          B     TITPR              PRINT TITLE CARDS        4  5717  B X63              477
2036 19 98          MLC   CHPHD,268                                   7  5721  M N5T 268          478
2037 19 99          CC    K                                           2  5728  F K                478
2038 20 00          CC    S                                           2  5730  F S                478
2039 20 01          W                        PRINT HEADING            1  5732  2                  478
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 SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

2040 20 02           CS    268                                          4  5733  / 268              478
2041 20 03           MLC   CPHD1,257                                    7  5737  M N6Y 257          478
2042 20 04           MLCWA EDT5,270                                     7  5744  L Z33 270          478
2043 20 05           A     FIVE,EPRES-2        ROUND                    7  5751  A Z43 M82          479
2044 20 06           MLC   EPRES-3,CC5A                                 7  5758  M M81 K62          479
2045 20 07           MLZS  EPRES,CC5A                                   7  5765  Y M84 K62          479
2046 20 08           MCE   CC5A,270                                     7  5772  E K62 270          479
2047 20 09           B     SCTL                                         4  5779  B M5U              479
2048 20 10           W                         PRINT EXPECTED RETURN    1  5783  2                  479
2049 20 11           MLC   CPHD2,260                                    7  5784  M N8W 260          480
2050 20 12           MLC   ZEROS,ACCAUT                                 7  5791  M /54 T44          480
2051 20 13           MLC   EPREV,ACCAUT-3                              7  5798  M M74 T41          480
2052 20 131          MLZS  @ @,ACCAUT-3                                 7  5805  Y ?8W T41          480
2053 20 132          C     ZEROS,ACCAUT                                 7  5812  C /54 T44          480
2054 20 133          BU    PSA27                                        5  5819  B Y3V /            481
2055 20 134          MLC   ZEROS,R                                      7  5824  M /54 T67          481
2056 20 135          B     PSA27A                                       4  5831  B Y3Z              481
2057 20 14   PSA27   B     SQRT                                         4  5835  B /62              481
2058 20 15   PSA27A  MLCWA EDT1,269                                     7  5839  L Z26 269          481
2059 20 16           MLC   R,CC5B                                      7  5846  M T67 K67          481
2060 20 17           MCE   CC5B,269                                     7  5853  E K67 269          482
2061 20 18           CC    S                                            2  5860  F S                482
2062 20 19           W                         PRINT STANDARD DEVIATION 1  5862  2                  482
2063 20 20           MLC   CC5A,CC5B                                    7  5863  M K62 K67          482
2064 20 21           MLC   ONE,CC1A                                     7  5870  M /55 K45          482
2065 20 22           MLC   CPHD3,261                                    7  5877  M O0V 261          482
2066 20 23   PSA28   MLC   @-@,251                                     7  5884  M ?8X 251          482
2067 20 24           MLC   CC1A,252                                     7  5891  M K45 252          483
2068 20 25           S     R,CC5A                                       7  5898  S T67 K62          483
2069 20 26           MLCWA EDT5,270                                     7  5905  L Z33 270          483
2070 20 27           MCE   CC5A,270                                     7  5912  E K62 270          483
2071 20 28           B     SCTL                                         4  5919  B M5U              483
2072 20 29           W                                                  1  5923  2                  483
2073 20 30           MLC   @&@,251                                     7  5924  M A1X 251          484
2074 20 31           A     R,CC5B                                       7  5931  A T67 K67          484
2075 20 32           MLCWA EDT5,270                                     7  5938  L Z33 270          484
2076 20 33           MCE   CC5B,270                                     7  5945  E K67 270          484
2077 20 34           B     SCTL                                         4  5952  B M5U              484
2078 20 35           CC    S                                            2  5956  F S                484
2079 20 36           W                                                  1  5958  2                  484
2080 20 37           A     ONE,CC1A                                     7  5959  A /55 K45          485
2081 20 38           C     FOUR,CC1A                                    7  5966  C /58 K45          485
2082 20 39           BU    PSA28                                        5  5973  B Y8U /            485
2083 20 40   PSA28A  MLC   SIGMC,EPREV        E MAX EQUALS             7  5978  M D86 M74          485
2084 20 41           A     HILAM,EPREV         E SUPER U & X%K) * MU%K)  7  5985  A M54 M74          485
2085 20 43           BCE   PSA32,OPT,1         BRANCH TO PSA32 IF CR. PTS. ONLY  8  5992  B J4V B76 1  486
2086 20 44   PSA28B  S     CC5A                                         4  6000  S K62              486
2087 20 45           C     BLNK,ULIM           BRANCH TO PSA30          7  6004  C /61 B55          486
2088 20 46           BU    PSA30               IF ULIM NOT BLANK        5  6011  B !3U /            486
2089 20 47   PSA29   MLC   EPREV-3,CC5A                                 7  6016  M M71 K62          486
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 SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

2090 20 48          MLZS  EPREV,CC5A                                            7  6023  Y M74 K62          486
2091 20 49          B     PSA31                                                 4  6030  B J0Z              487
2092 20 50   PSA30  MLC   EPREV-5,CC5A-2                                        7  6034  M M69 K60          487
2093 20 51          MLZS  EPREV,CC5A                                            7  6041  Y M74 K62          487
2094 20 52          S     CC5B                                                  4  6048  S K67              487
2095 20 53          MLC   ULIM,CC5B-2                                           7  6052  M B55 K65          487
2096 20 54          MLZS  CC5B-2,CC5B                                           7  6059  Y K65 K67          487
2097 20 55          MLZS  @0@,CC5B-2                                            7  6066  Y ?6V K65          488
2098 20 56          S     CC5B,CC5A          BRANCH TO PSA29                    7  6073  S K67 K62          488
2099 20 57          BM    PSA29,CC5A         IF ULIM GREATER THAN E MAX         8  6080  V !1W K62 K        488
2100 20 58          MLC   ULIM,CC5A-2                                           7  6088  M B55 K60          488
2101 20 59          MLZS  CC5A-2,CC5A                                           7  6095  Y K60 K62          488
2102 20 60          MLZS  @0@,CC5A-2                                            7  6102  Y ?6V K60          489
2103 20 61   PSA31  B     DIVIDE                                                4  6109  B 630              489
2104 20 62          DSA   DELTA              INTERVAL                XX.XX      3  6115  B53                489
2105 20 63          DSA   CC5A               E EQUALS E MAX OR ULIM  XXX.XX     3  6118  K62                489
2106 20 64          DCW   18                                                    2  6120                     489
2107 20 65          MLC   QUOT,CC4A          E/INTERVAL  TRUNCATED  XXXX        7  6121  M /11 K57          489
2108 20 66          B     MULT1                                                 4  6128  B 336              489
2109 20 67          DSA   CC4A               E/INTERVAL  TRUNCATED  XXXX        3  6134  K57                490
2110 20 68          DSA   DELTA              INTERVAL             XX.XX         3  6137  B53                490
2111 20 69          MLC   PROD,NXPR          NEXT PRINT E                       7  6138  M 623 M98          490
2112 20 70   PSA32  MLC   ZEROS,IND4         SET IND4 TO 0                      7  6145  M /54 K44          490
2113 20 701         C     ZEROS,MUZ          DONT UPDATE MIDLIN GROUP           7  6152  C /54 G19          490
2114 20 702         BU    *&5                VARIABLES IF CASH IN M             5  6159  B J6Y /            490
2115 20 71          B     SIGCP                                                 4  6164  B U00              490
2116 20 72          MLC   NINES,EPREV                                           7  6168  M G61 M74          491
2117 20 73          MLC   NINES,PRLAM                                           7  6175  M G61 M44          491
2118 20 74          MLC   ZEROS,ITCTR                                           7  6182  M /54 M31          491
2119 20 75          MLC   @00A@,MCOUNT       SET M-GROUP COUNT TO PLUS 1        7  6189  M A2| M28          491
2120 20 76          B     GOLOD                                                 4  6196  B 175              491
2121 20 77   PSA33  CS    332                                                   4  6200  / 332              491
2122 20 78          CS                                                          1  6204  /                  491
2123 20 79          MLCWA ERR5,255                                              7  6205  L L2V 255          492
2124 20 80          W                                                           1  6212  2                  492
2125 20 81          CC    1                                                     2  6213  F 1                492
2126 20 82          H     161                                                   4  6215  . 161              492
2127 20 83   PSA34  CS    332                                                   4  6219  / 332              492
2128 20 84          CS                                                          1  6223  /                  492
2129 20 85          MLCWA ERR6,237                                              7  6224  L L5X 237          492
2130 20 86          W                                                           1  6231  2                  493
2131 20 87          CC    1                                                     2  6232  F 1                493
2132 20 88          H     161                                                   4  6234  . 161              493
2133 20 89   PSA35  CS    332                                                   4  6238  / 332              493
2134 20 90          CS                                                          1  6242  /                  493
2135 20 91          MLCWA ERR7,255                                              7  6243  L M0X 255          493
2136 20 92          W                                                           1  6250  2                  493
2137 20 93          CC    1                                                     2  6251  F 1                494
2138 20 94          H     161                                                   4  6253  . 161              494
2139 20 95   PSA36  CS    332                                                   4  6257  / 332              494
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 SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

2140 20 96          CS                                                       1  6261  /                    494
2141 20 97          MLCWA ERR8,251                                           7  6262  L M5T 251            494
2142 20 98          CC    1                                                  2  6269  F 1                  494
2143 20 99          W                                                        1  6271  2                    494
2144 21 00          B     PSA28A                                             4  6272  B Z7Y                495
2145 21 01   ERR5   DCW   @22015  MU/SIGMA EXCEEDS 99.99999 IN ABSOLUTE VALUE@  50  6325                 497
2146 21 02   ERR6   DCW   @22013  1/SIGMA EXCEEDS 999.99999@                 32  6357                 498
2147 21 03   ERR7   DCW   @22014  B/SIGMA EXCEEDS 999.99999 IN ABSOLUTE VALUE@  50  6407                 500
2148 21 04   ERR8   DCW   @12016  THE SUM OF CURRENT HOLDINGS IS NOT 100%@    46  6453                 502
2149 21 05   SCTL   SBR   SC3&3                                              4  6454  H N2Y                502
2150 21 06          MLC   @ @,263                                            7  6458  M ?8W 263            502
2151 21 07          BCE   SC3,270,                                           8  6465  B N2V 270            502
2152 21 08          MLC   @ @,270                                            7  6473  M ?8W 270            502
2153 21 09          BCE   SC1,265,                                           8  6480  B N0X 265            503
2154 21 10          BCE   SC2,264,                                           8  6488  B N1Y 264            503
2155 21 11          MLC   @-@,263                                            7  6496  M ?8X 263            503
2156 21 12          B     SC3                                                4  6503  B N2V                503
2157 21 13   SC1    MLC   @-@,265                                            7  6507  M ?8X 265            503
2158 21 14          B     SC3                                                4  6514  B N2V                503
2159 21 15   SC2    MLC   @-@,264                                            7  6518  M ?8X 264            504
2160 21 16   SC3    B     *                                                  4  6525  B N2Y                504
2161 21 17   CHPHD  DCW   @CURRENT HOLDING PORTFOLIO@                       25  6553                 504
2162 21 18   CPHD1  DCW   @EXPECTED RETURN@                                 15  6568                 505
2163 21 19   CPHD2  DCW   @STANDARD DEVIATION@                              18  6586                 505
2164 21 20   CPHD3  DCW   @EXP.RET.   STD.DEV.@                             19  6605                 506
2165 21 21   PRHD1  SBR   HD2EX&3                                            4  6606  H O7Z                506
2166 21 22          MLC   HD2,290                                            7  6610  M P4U 290            506
2167 21 23          MLC   HD1,268                                            7  6617  M P2W 268            506
2168 21 24          W                                                        1  6624  2                    506
2169 21 25          CS    299                                                4  6625  / 299                507
2170 21 26          MLC   HD4,299                                            7  6629  M Q3T 299            507
2171 21 27          MLC   HD3,260                                            7  6636  M P9U 260            507
2172 21 28          W                                                        1  6643  2                    507
2173 21 29          CS    299                                                4  6644  / 299                507
2174 21 30          MLC   HD6,298                                            7  6648  M R1X 298            507
2175 21 31          MLC   HD5,257                                            7  6655  M Q7Y 257            507
2176 21 32          W                                                        1  6662  2                    508
2177 21 33          CS    299                                                4  6663  / 299                508
2178 21 34          W                                                        1  6667  2                    508
2179 21 35          W                                                        1  6668  2                    508
2180 21 36          A     @05@,TITNO                                         7  6669  A A2S Z08            508
2181 21 37   HD2EX  B     *                                                  4  6676  B O7Z                508
2182 21 38   HD1    DCW   @PERCENT   STANDARD DEVIATION  RELATION TO INDEX@  47  6726                 510
2183 21 39   HD2    DCW   @MAXIMUM    PERCENT@                              18  6744                 510
2184 21 40   HD3    DCW   @SECURITY  EXPECTED   ------------------  ---------@  50  6794                 512
2185 21 41   HD4    DCW   @--------    PERCENT    CURRENT  CURRENT@          39  6833                 513
2186 21 42   HD5    DCW   @NAME     RETURN    INTRINSIC   TOTAL    SLOPE@     45  6878                 515
2187 21 43   HD6    DCW   @INTERCEPT   AUTHORIZED  HOLDING   PRICE@         39  6917                 516
2188 21 44   CASPR  SBR   CASEX&3                                            4  6918  H ?2|                517
2189 21 45   CAS1   RTW   2,BUF9                                             8  6922  L %U2 002 R          517
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 SEQ PG LIN  LABEL  OP    OPERANDS                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
2190 21 46          BER   ERRR2                       5  6930  B Z44 L           517
2191 21 47          BEF   CAS4                        5  6935  B ?0S K           517
2192 21 48          SW    BUF9&1                      4  6940  , 003             517
2193 21 49          MLC   BUF9&78,279                 7  6944  M 080 279         517
2194 21 50          W                                 1  6951  2                 517
2195 21 51          A     ONE,TITNO                   7  6952  A /55 Z08         518
2196 21 52          MLC   BUF9,CC1A                   7  6959  M 002 K45         518
2197 21 53   CAS2   S     ONE,CC1A                    7  6966  S /55 K45         518
2198 21 54          BWZ   CAS3,CC1A,B                 8  6973  V R8V K45 B       518
2199 21 55          B     CAS1                        4  6981  B R2S             518
2200 21 56   CAS3   CS    300                         4  6985  / 300             518
2201 21 57          CS                                1  6989  /                 518
2202 21 58          W                                 1  6990  2                 519
2203 21 59          A     ONE,TITNO                   7  6991  A /55 Z08         519
2204 21 60          B     CAS2                        4  6998  B R6W             519
2205 21 61   CAS4   CS    300                         4  7002  / 300             519
2206 21 62          CS                                1  7006  /                 519
2207 21 63          W                                 1  7007  2                 519
2208 21 64          W                                 1  7008  2                 519
2209 21 65          W                                 1  7009  2                 520
2210 21 66          A     THREE,TITNO                 7  7010  A /57 Z08         520
2211 21 67   CASEX  B     *                           4  7017  B ?2|             520
2212 21 68          H                                 1  7021  .                 520
2213 21 69   BUF3   DA    1X42,G,C                        7022   7063             521
2214 21 70                1,5                             7026             FIELD  521
2215 21 71                6,10                            7031             FIELD  521
2216 21 72                11,20                           7041             FIELD  521
2217 21 73                21,26                           7047             FIELD  522
2218 21 74                27,31                           7052             FIELD  522
2219 21 75                32,36                           7057             FIELD  522
2220 21 76                37,41                           7062             FIELD  522
                    DCW   @}@                         1  7064             GMARK  522
                    DCW   @0@                         1  7065             LIT    522
                          @020@                       3  7068             LIT    522
                          @58@                        2  7070             LIT    523
       1760               @* FIXED HOLDING@          15  7085             LIT    523
                          @ @                         1  7086             LIT    523
                          @-@                         1  7087             LIT    523
                          @0000@                      4  7091             LIT    523
                          @*@                         1  7092             LIT    523
                          @?@                         1  7093             LIT    523
                          @039@                       3  7096             LIT    524
       1976               @* FIXED HOLDING@          15  7111             LIT    524
       2025               @10000@                     5  7116             LIT    524
                          @&@                         1  7117             LIT    524
                          @00A@                       3  7120             LIT    524
                          @05@                        2  7122             LIT    524
2221 21 77          EX    PSA                             B G99             525
2222 21 78          ORG   3799                             3799
2223 21 79   BF2    DA    1X40,G,C                        3799   3838             529
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 SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
2224 21 80           1,10                                            3808              FIELD  529
2225 21 81           11,20                                           3818              FIELD  529
2226 21 82           21,30                                           3828              FIELD  529
2227 21 83           31,40                                           3838              FIELD  530
                DCW  @}@                                          1  3839              GMARK  530
2228 21 84   BUF2   DA   22X8,G,C                                     3840   4015              537
2229 21 85           1,3                                             3842              FIELD  538
2230 21 86           4,8                                             3847              FIELD  541
                DCW  @}@                                          1  4016              GMARK  545
2231 21 87   BUF4   DA   20X26,G,C                                    4017   4536              561
2232 21 88           1,13                                            4029              FIELD  561
2233 21 89           14,26                                           4042              FIELD  565
                DCW  @}@                                          1  4537              GMARK  568
2234 21 90   REST3  RWD  2                  REWIND TAPE 2           5  4538  U %U2 R           568
2235 21 91          MLCWA GPWDS&1,7998                             7  4543  L Z13 I9Y         568
2236 21 92          RTW  2,7997            SKIP PORTFOLIO GENERATOR SECTION  8  4550  L %U2 I9X R       568
2237 21 93          RTW  2,PSC1            READ IN QUADRATIC PROGRAM. SECT.  8  4558  L %U2 59V R       568
2238 21 94          BER  ERRR2                                     5  4566  B Z44 L           569
2239 21 95          B    PSC31             EXECUTE QUADRATIC PROG. SECT.  4  4571  B L2/             569
2240 21 96   SYS    RWD  2                 REWIND TAPE 2           5  4575  U %U2 R           569
2241 21 97          BEF  SYS1              TURN OFF E-O-F INDICATOR  5  4580  B 58V K           569
2242 21 98   SYS1   RTW  2,BUF9            READ ONE TITLE CARD     8  4585  L %U2 002 R       569
2243 21 99          BER  ERRR2                                     5  4593  B Z44 L           569
2244 22 00          BEF  SYS2              BRANCH TO SYS2 ON E-O-F  5  4598  B 62X K           569
2245 22 01          MLCWA GPWDS&1,BUF9&80  PLACE GRP MK WD MK AFTER TITLE  7  4603  L Z13 082         570
2246 22 02          WTW  4,BUF9            WRITE TITLE CARD ON TAPE 4  8  4610  L %U4 002 W       570
2247 22 03          BER  ERRW4                                     5  4618  B K17 L           570
2248 22 04          B    SYS1                                      4  4623  B 58V             570
2249 22 05   SYS2   WTM  4                 WRITE E-O-F AFTER TITLE CARDS  5  4627  U %U4 M           570
2250 22 06          RWD  2                 REWIND TAPE 2           5  4632  U %U2 R           570
2251 22 07          RWD  4                 REWIND TAPE 4           5  4637  U %U4 R           570
2252 22 08          MLCWA GPWDS&1,ENDPG&18 PLACE GRP MK WD MK AFTER P.G.S.  7  4642  L Z13 N5S         571
2253 22 09          WTW  2,PSE1            WRITE PORTFOLIO GENERATOR SECT.  8  4649  L %U2 66W W       571
2254 22 10          BER  ERRW2                                     5  4657  B J67 L           571
2255 22 11          B    GOLOD             BRING IN NEXT PHASE     4  4662  B 175             571
2256 22 12   PSE1   MLC  EPREV,CC10A                               7  4666  M M74 K98         571
2257 22 13          MLC  EPR,CC10B                                 7  4673  M M94 L08         571
2258 22 14          S    EPRES,CC10B       EPR - EPRES             7  4680  S M84 L08         572
2259 22 15          S    CC18A                                     4  4687  S L63             572
2260 22 16          MLC  CC10B,CC18A-8                             7  4691  M L08 L55         572
2261 22 17          MLZS CC10B,CC18A                               7  4698  Y L08 L63         572
2262 22 18          MLZS @0@,CC18A-8                               7  4705  Y N3V L55         572
2263 22 19          S    EPRES,CC10A       EPREV - EPRES           7  4712  S M84 K98         572
2264 22 191         MLZS CC10A,CC8A                                7  4719  Y K98 K88         573
2265 22 192         MLZS ONE,CC10A                                 7  4726  Y /55 K98         573
2266 22 193         C    ZEROS,CC10A                               7  4733  C /54 K98         573
2267 22 194         BU   PSE1A                                     5  4740  B 75W /           573
2268 22 195         MLC  ZEROS,CC8A                                7  4745  M /54 K88         573
2269 22 196         B    PSE1B                                     4  4752  B 78S             573
2270 22 197  PSE1A   MLZS CC8A,CC10A                               7  4756  Y K88 K98         574
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 SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

2271 22 20          B     DIVIDE                                        4  4763  B 630              574
2272 22 21          DSA   CC10A                                         3  4769  K98                574
2273 22 22          DSA   CC18A              INTERPOLATION FACTOR EQUALS 3  4772  L63                574
2274 22 23          DCW   12                                            2  4774                     574
2275 22 24          MLC   QUOT,CC8A                                     7  4775  M /11 K88          574
2276 22 25   PSE1B  MLC   PRLAM,CC10B         DELTA LAMBDA EQUQLS       7  4782  M M44 L08          574
2277 22 26          S     HILAM,CC10B          LAMBDA E%PREV) - LAMBDA E%PRES) 7  4789  S M54 L08          575
2278 22 27          B     MULT1                                         4  4796  B 336              575
2279 22 28          DSA   CC8A               INT. FACTOR          .XXXXXXXX 3  4802  K88                575
2280 22 29          DSA   CC10B              DELTA LAMBDA E  XX.XXXXXXXX  3  4805  L08                575
2281 22 30          MLC   PROD-8,TLAM        LAMBDA E EQUALS LAMBDA E%PRES) & 7  4806  M 615 M64          575
2282 22 31          A     HILAM,TLAM         INT. FACTOR * DELTA LAMBDA E  7  4813  A M54 M64          575
2283 22 311         C     EPRES,EPR          BRANCH TO PSE11               7  4820  C M84 M94          575
2284 22 312         BU    *&5                IF PRINT PORTFOLIO            5  4827  B 83W /            576
2285 22 313         B     PSE11              IS A CRITICAL POINT           4  4832  B !9U              576
2286 22 32          B     MULT1              COMPUTE V FOR PRINT PORTFOLIO 4  4836  B 336              576
2287 22 33          DSA   ALPH2              ALPHA 2    XX.XXXXXXXX        3  4842  B97                576
2288 22 34          DSA   A22                A%2,2)  XXXXXXXX.XXXXX      3  4845  C56                576
2289 22 35          MLC   PROD-6,CC13A                                    7  4846  M 617 L32          576
2290 22 36          MLZS  PROD,CC13A                                      7  4853  Y 623 L32          576
2291 22 37          B     MULT1                                         4  4860  B 336              577
2292 22 38          DSA   ALPH2              ALPHA 2                     3  4866  B97                577
2293 22 39          DSA   CC13A              ALPHA 2 * A%2,2)            3  4869  L32                577
2294 22 40          MLC   PROD-8,CC13A                                  7  4870  M 615 L32          577
2295 22 41          MLZS  PROD,CC13A         TERM 1 EQUAL ALPHA 2 SQ * A%2,2) 7  4877  Y 623 L32          577
2296 22 42          B     MULT1                                         4  4884  B 336              577
2297 22 43          DSA   ALPH2              ALPHA 2    XX.XXXXXXXX        3  4890  B97                577
2298 22 44          DSA   A12                A%1,2)  XXXXXXXX.XXXXX      3  4893  C43                578
2299 22 45          MLC   PROD-6,CC13B                                    7  4894  M 617 L45          578
2300 22 46          MLZS  PROD,CC13B                                      7  4901  Y 623 L45          578
2301 22 47          B     MULT1                                         4  4908  B 336              578
2302 22 48          DSA   ALPH1              ALPHA 1                     3  4914  B87                578
2303 22 49          DSA   CC13B              ALPHA 2 * A%1,2)            3  4917  L45                578
2304 22 50          MLC   PROD-8,CC13B                                  7  4918  M 615 L45          578
2305 22 51          MLZS  PROD,CC13B         TERM 2 EQUAL                7  4925  Y 623 L45          579
2306 22 52          A     CC13B              2 * ALPHA 1 * ALPHA 2 * A%1,2) 4  4932  A L45              579
2307 22 53          A     CC13B,CC13A        TERM 1 & TERM 2             7  4936  A L45 L32          579
2308 22 54          B     MULT1                                         4  4943  B 336              579
2309 22 55          DSA   ALPH1              ALPHA 1    XX.XXXXXXXX      3  4949  B87                579
2310 22 56          DSA   A11                A%1,1)  XXXXXXXX.XXXXX      3  4952  C30                579
2311 22 57          MLC   PROD-6,CC13B                                    7  4953  M 617 L45          579
2312 22 58          MLZS  PROD,CC13B                                      7  4960  Y 623 L45          580
2313 22 59          B     MULT1                                         4  4967  B 336              580
2314 22 60          DSA   ALPH1              ALPHA 1                     3  4973  B87                580
2315 22 61          DSA   CC13B              ALPHA 1 * A%1,1)            3  4976  L45                580
2316 22 62          MLC   PROD-8,CC13B                                  7  4977  M 615 L45          580
2317 22 63          MLZS  PROD,CC13B         TERM 3 EQUAL ALPHA 1 SQ * A%1,1) 7  4984  Y 623 L45          580
2318 22 64          A     CC13B,CC13A        TERM 1 & TERM 2 & TERM 3      7  4991  A L45 L32          580
2319 22 65          A     VU-4,CC13A         G SUB 0 EQUAL V SUPER U & TERM 1 7  4998  A C96 L32          581
2320 22 66          ZA    CC13A,ACCAUT       & TERM 2 & TERM 3             7  5005  ? L32 T44          581
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 SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

2321 23 29          B     MULT1                                               4  5012  B 336              581
2322 23 30          DSA   BETA1              BETA 1     XX.XXXXXXXX           3  5018  C07                581
2323 23 31          DSA   A11                A%1,1)  XXXXXXXX.XXXXX           3  5021  C30                581
2324 23 32          MLC   PROD-6,CC13A                                        7  5022  M 617 L32          581
2325 23 33          MLZS  PROD,CC13A                                          7  5029  Y 623 L32          581
2326 23 34          B     MULT1                                               4  5036  B 336              582
2327 23 35          DSA   BETA1              BETA 1                          3  5042  C07                582
2328 23 36          DSA   CC13A              BETA 1 * A%1,1)                 3  5045  L32                582
2329 23 37          MLC   PROD-8,CC13A                                        7  5046  M 615 L32          582
2330 23 38          MLZS  PROD,CC13A         TERM 1 EQUAL BETA 1 SQ * A%1,1) 7  5053  Y 623 L32          582
2331 23 39          B     MULT1                                               4  5060  B 336              582
2332 23 40          DSA   BETA1              BETA 1     XX.XXXXXXXX          3  5066  C07                582
2333 23 41          DSA   A12                A%1,2)  XXXXXXXX.XXXXX          3  5069  C43                583
2334 23 42          MLC   PROD-6,CC13B                                        7  5070  M 617 L45          583
2335 23 43          MLZS  PROD,CC13B                                          7  5077  Y 623 L45          583
2336 23 44          B     MULT1                                               4  5084  B 336              583
2337 23 45          DSA   BETA2              BETA 2                          3  5090  C17                583
2338 23 46          DSA   CC13B              BETA 1 * A%1,2)                 3  5093  L45                583
2339 23 47          MLC   PROD-8,CC13B                                        7  5094  M 615 L45          583
2340 23 48          MLZS  PROD,CC13B         TERM 2 EQUAL                    7  5101  Y 623 L45          584
2341 23 49          A     CC13B              2 * BETA 1 * BETA 2 * A%1,2)    4  5108  A L45              584
2342 23 50          A     CC13B,CC13A        TERM 1 & TERM 2                 7  5112  A L45 L32          584
2343 23 51          B     MULT1                                               4  5119  B 336              584
2344 23 52          DSA   BETA1              BETA 1  XX.XXXXXXXX             3  5125  C07                584
2345 23 53          DSA   A13                A%1,3)  XXXXX.XXXXX             3  5128  C66                584
2346 23 54          MLC   PROD-6,CC13B                                        7  5129  M 617 L45          584
2347 23 55          MLZS  PROD,CC13B                                          7  5136  Y 623 L45          585
2348 23 56          A     CC13B              TERM 3 EQUAL 2 * BETA 1 * A%1,3) 4  5143  A L45              585
2349 23 57          S     CC13B,CC13A        TERM 1 & TERM 2 - TERM 3        7  5147  S L45 L32          585
2350 23 58          B     MULT1                                               4  5154  B 336              585
2351 23 59          DSA   BETA2              BETA 2     XX.XXXXXXXX          3  5160  C17                585
2352 23 60          DSA   A22                A%2,2)  XXXXXXXX.XXXXX          3  5163  C56                585
2353 23 61          MLC   PROD-6,CC13B                                        7  5164  M 617 L45          585
2354 23 62          MLZS  PROD,CC13B                                          7  5171  Y 623 L45          586
2355 23 63          B     MULT1                                               4  5178  B 336              586
2356 23 64          DSA   BETA2              BETA 2                          3  5184  C17                586
2357 23 65          DSA   CC13B              BETA 2 * A%2,2)                 3  5187  L45                586
2358 23 66          MLC   PROD-8,CC13B                                        7  5188  M 615 L45          586
2359 23 67          MLZS  PROD,CC13B         TERM 4 EQUAL BETA 2 SQ * A%2,2) 7  5195  Y 623 L45          586
2360 23 68          A     CC13B,CC13A        TERM1 & TERM2 - TERM3 & TERM4   7  5202  A L45 L32          586
2361 23 69          B     MULT1                                               4  5209  B 336              587
2362 23 70          DSA   BETA2              BETA 2  XX.XXXXXXXX             3  5215  C17                587
2363 23 71          DSA   A23                A%2,3)  XXXXX.XXXXX             3  5218  C76                587
2364 23 72          MLC   PROD-6,CC13B                                        7  5219  M 617 L45          587
2365 23 73          MLZS  PROD,CC13B                                          7  5226  Y 623 L45          587
2366 23 74          A     CC13B              TERM 5 EQUAL 2 * BETA 2 * A%2,3) 4  5233  A L45              587
2367 23 75          S     CC13B,CC13A        G SUB 2 EQUAL                   7  5237  S L45 L32          587
2368 23 76          MLC   ZEROS,CC13B        TERM 1 & TERM 2                 7  5244  M /54 L45          588
2369 23 77          A     A33,CC13B-2        - TERM 3 & TERM 4               7  5251  A C86 L43          588
2370 23 78          MLZS  @0@,CC13B-2        - TERM 5 & A%3,3)               7  5258  Y N3V L43          588
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 SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

2371 23 79          A     CC13B,CC13A                                         7  5265  A L45 L32          588
2372 23 80   PSE2   B     MULT1                                               4  5272  B 336              588
2373 23 81          DSA   TLAM                LAMBDA E                      3  5278  M64                588
2374 23 82          DSA   CC13A               G SUB 2                       3  5281  L32                588
2375 23 83          MLC   PROD-8,CC13A                                      7  5282  M 615 L32          589
2376 23 84          MLZS  PROD,CC13A                                        7  5289  Y 623 L32          589
2377 23 85          B     MULT1                                             4  5296  B 336              589
2378 23 86          DSA   TLAM                LAMBDA E                      3  5302  M64                589
2379 23 87          DSA   CC13A               G SUB 2 * LAMBDA E            3  5305  L32                589
2380 23 88          MLC   PROD-8,CC13A                                      7  5306  M 615 L32          589
2381 23 89          MLZS  PROD,CC13A          V EQUAL G SUB 0 & G SUB 1 *   7  5313  Y 623 L32          589
2382 23 90          A     CC13A,ACCAUT        LAMBDA E & G SUB 2 * LAMBDA E SQ  7  5320  A L32 T44         590
2383 23 91          MLC   ACCAUT,BF2&39                                      7  5327  M T44 H38          590
2384 23 92          MLC   EPR,BF2&29          E EQUALS E PRINT              7  5334  M M94 H28          590
2385 23 93          MLC   EPRES,BF2&19        E PRES TO CHECK CRITICAL PTS. 7  5341  M M84 H18          590
2386 23 94          MLC   TLAM,BF2&9          LAMBDA E                      7  5348  M M64 H08          590
2387 23 95          WTW   3,BF2               WRITE HEADING DATA ON TAPE 3  8  5355  L %U3 G99 W        591
2388 23 96          BER   ERRW3                                             5  5363  B J92 L            591
2389 23 97          MLC   @001@,CC3A          SET INTERNAL ID TO 001        7  5368  M N3Y K50          591
2390 23 98          MLC   ZEROS,IX3           SET BUF2 LOCATION TO 000      7  5375  M /54 099          591
2391 23 99   PSE3   RTW   4,BUF               READ 1 BLOCK OF SECURITIES    8  5382  L %U4 B1Y R        591
2392 24 00          BER   ERRR4                                             5  5390  B !68 L            592
2393 24 01          RTW   2,BUF4              READ 1 BLOCK OF GAMMAS & OMEGAS  8  5395  L %U2 01X R       592
2394 24 02          BER   ERRR2                                             5  5403  B Z44 L            592
2395 24 03          MLC   ZEROS,IX2           SET BUF LOCATION TO 000       7  5408  M /54 094          592
2396 24 04          MLC   ZEROS,CC3B          SET BUF4 LOCATION TO 000      7  5415  M /54 K53          592
2397 24 05   PSE4   MLC   CC3A,IX1            SET INDEX 1 TO INTERNAL ID    7  5422  M K50 089          592
2398 24 06          C     ZEROS,HILAM         BRANCH TO PSE4A               7  5429  C /54 M54          593
2399 24 07          BU    *&5                 IF LAMBDA E IS ZERO           5  5436  B U4V /            593
2400 24 08          B     PSE4A                                             4  5441  B U9S              593
2401 24 09          C     CC3A,HIPRS          BRANCH TO PSE4A               7  5445  C K50 M34          593
2402 24 10          BU    PSE4A               IF NOT MOST RECENTLY MOVED SEC.  5  5452  B U9S /          593
2403 24 11          BCE   PSE5,STAT-1&X1,     BRANCH TO PSE5 IF M TO D MOVE 8  5457  B V1Z MZ8          593
2404 24 12          BCE   PSE5,STAT-1&X1,2    BRANCH TO PSE5 IF M TO U MOVE 8  5465  B V1Z MZ8 2        594
2405 24 13          MLC   CC3B,IX1                                          7  5473  M K53 089          594
2406 24 14          BM    PSE7,BUF4&25&X1     BRANCH TO PSE7 IF D TO M MOVE 8  5480  V W4Z 0US K        594
2407 24 15          B     PSE4B              BRANCH TO PSE4B IF U TO M MOVE 4  5488  B V0Y              594
2408 24 16   PSE4A  BCE   PSE7,STAT-1&X1,     BRANCH TO PSE7 IF SEC. IS IN D 8  5492  B W4Z MZ8          594
2409 24 17          BCE   PSE5,STAT-1&X1,1    BRANCH TO PSE5 IF SEC. IS IN M 8  5500  B V1Z MZ8 1        595
2410 24 18   PSE4B  MLC   BUF&38&X2,BUF2&7&X3     X EQUALS C IF SEC. IS IN U  7  5508  M BNW HD7          595
2411 24 19          B     PSE6                                              4  5515  B W0T              595
2412 24 20   PSE5   MLC   CC3B,IX1            SET INDEX 1 TO BUF4 LOCATION  7  5519  M K53 089          595
2413 24 21          B     MULT1                                             4  5526  B 336              595
2414 24 22          DSA   BUF4&25&X1          OMEGA     XXXXX.XXXXXXXX      3  5532  0US                595
2415 24 23          DSA   TLAM                LAMBDA E     XX.XXXXXXXX      3  5535  M64                595
2416 24 24          MLC   PROD-8,CC13A                                      7  5536  M 615 L32          596
2417 24 25          MLZS  PROD,CC13A                                        7  5543  Y 623 L32          596
2418 24 26          A     BUF4&12&X1,CC13A    GAMMA      XXXXX.XXXXXXXX     7  5550  A 0SZ L32          596
2419 24 27          B     MULT1                                             4  5557  B 336              596
2420 24 28          DSA   CC13A               GAMMA & OMEGA * LAMBDA E      3  5563  L32                596
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 SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

2421 24 29          DSA   BUF&17&X2          1/SIGMA                             3  5566  BLV                596
2422 24 30          A     FIVE,PROD-8        ROUND                               7  5567  A Z43 615          596
2423 24 31          MLC   PROD-9,BUF2&7&X3                                       7  5574  M 614 HD7          597
2424 24 32          S     BUF&38&X2,PROD-9                                       7  5581  S BNW 614          597
2425 24 33          BM    PSE6,PROD-9                                            8  5588  V W0T 614 K        597
2426 24 34          MLC   BUF&38&X2,BUF2&7&X3                                    7  5596  M BNW HD7          597
2427 24 35   PSE6   MLC   CC3A,BUF2&2&X3                                         7  5603  M K50 HD2          597
2428 24 36          A     @8@,IX3            ADD 8 TO BUF2 LOCATION              7  5610  A N3Z 099          598
2429 24 37          C     @176@,IX3          BRANCH TO PSE7                      7  5617  C N4S 099          598
2430 24 38          BU    PSE7               IF BUF2 NOT FULL                    5  5624  B W4Z /            598
2431 24 39          WTW   3,BUF2             WRITE BUF2 ON TAPE 3                8  5629  L %U3 H40 W        598
2432 24 40          BER   ERRW3                                                  5  5637  B J92 L            598
2433 24 41          MLC   ZEROS,IX3          RESET BUF2 LOCATION TO 000          7  5642  M /54 099          598
2434 24 42   PSE7   C     CC3A,NSEC          BRANCH TO PSE10                     7  5649  C K50 Z16          599
2435 24 43          BU    PSE10              IF ALL SEC. NOT PROCESSED           5  5656  B !5X /            599
2436 24 44          MLC   CC3B,IX1                                               7  5661  M K53 089          599
2437 24 45          MLCWA @0@,BUF4&26&X1                                         7  5668  L N3V 0UT          599
2438 24 46          C     ZEROS,IX3          BRANCH TO PSE8                      7  5675  C /54 099          599
2439 24 47          BU    PSE8               IF BUF2 NOT EMPTY                   5  5682  B W9/ /            599
2440 24 48          B     PSE9                                                   4  5687  B X1Y              600
2441 24 49   PSE8   MLCWA GPWDS&1,BUF2&X3    PLACE GRP MK WD MK AFTER BUF2       7  5691  L Z13 HD0          600
2442 24 50          WTW   3,BUF2             WRITE BUF2 ON TAPE 3                8  5698  L %U3 H40 W        600
2443 24 51          BER   ERRW3                                                  5  5706  B J92 L            600
2444 24 52          MLCWA @ @,BUF2&X3                                            7  5711  L N4T HD0          600
2445 24 53   PSE9   A     ONE,NOPT           ADD 1 TO NO. OF PRINT PORTFOLIOS    7  5718  A /55 Z20          600
2446 24 54          WTM   3                  WRITE E-O-F AFTER PORTFOLIO         5  5725  U %U3 M            601
2447 24 55          RWD   4                  REWIND TAPE 4                       5  5730  U %U4 R            601
2448 24 56          S     EPRES,EPR                                              7  5735  S M84 M94          601
2449 24 57          MLZS  @0@,EPR            BRANCH TO REST3 IF E PRES           7  5742  Y N3V M94          601
2450 24 58          C     ZEROS,EPR          BRANCH TO REST3                     7  5749  C /54 M94          601
2451 24 59          BU    PSE9A              IF E PRES EQUALS E PRINT            5  5756  B X9T /            601
2452 24 60          C     ZEROS,HILAM        BRANCH TO GOLOD                     7  5761  C /54 M54          602
2453 24 61          BU    *&5                IF LAMBDA E EQUALS ZERO             5  5768  B X7X /            602
2454 24 62          B     PSE9F                                                  4  5773  B !3Y              602
2455 24 63          C     ZEROS,BF2&38                                           7  5777  C /54 H37          602
2456 24 64          BU    REST3              IF VARIANCE EQUALS 00.0000000X      5  5784  B 53Y /            602
2457 24 65          B     PSE9F                                                  4  5789  B !3Y              602
2458 24 66   PSE9A  C     BLNK,LLIM          BRANCH TO PSE9B                     7  5793  C /61 B57          602
2459 24 67          BU    PSE9B              IF LOWER LIMIT NOT BLANK            5  5800  B Y0Z /            603
2460 24 68          B     PSE9C                                                  4  5805  B Y3Y              603
2461 24 69   PSE9B  MLC   NXPR,CC4A                                              7  5809  M M98 K57          603
2462 24 70          MLZS  CC4A,CC4A-2                                            7  5816  Y K57 K55          603
2463 24 71          S     LLIM,CC4A-2        BRANCH TO PSE9D IF NEXT PRINT E     7  5823  S B57 K55          603
2464 24 72          BM    PSE9D,CC4A-2       IS LESS THAN LOWER LIMIT            8  5830  V Z1T K55 K        603
2465 24 73   PSE9C  MLC   ZEROS,CC10A                                            7  5838  M /54 K98          604
2466 24 74          MLC   NXPR,CC10A-3                                           7  5845  M M98 K95          604
2467 24 75          MLZS  NXPR,CC10A                                             7  5852  Y M98 K98          604
2468 24 76          MLZS  @0@,CC10A-3                                            7  5859  Y N3V K95          604
2469 24 77          S     EPRES,CC10A        BRANCH TO PSE9E IF NEXT PRINT E     7  5866  S M84 K98          604
2470 24 78          BWZ   PSE9E,CC10A,B      GREATER THAN OR EQUAL TO E PRES     8  5873  V Z6X K98 B        605
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 SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

2471 24 781         C     ZEROS,HILAM                                    7  5881  C /54 M54          605
2472 24 782         BU    *&5                                            5  5888  B Y9X /            605
2473 24 783         B     PSE9D&8                                        4  5893  B Z2/              605
2474 24 784         C     ZEROS,BF2&38                                   7  5897  C /54 H37          605
2475 24 785         BU    PSE9D                                          5  5904  B Z1T /            605
2476 24 786         B     PSE9D&8                                        4  5909  B Z2/              606
2477 24 79   PSE9D  BCE   REST3,OPT,2        BRANCH TO REST3 IF NO CR. PTS.  8  5913  B 53Y B76 2       606
2478 24 80          RWD   2                  REWIND TAPE 2                  5  5921  U %U2 R            606
2479 24 81          MLCWA GPWDS&1,7998                                   7  5926  L Z13 I9Y          606
2480 24 82          RTW   2,7997             SKIP PORTFOLIO GENERATOR SECTION  8  5933  L %U2 I9X R      606
2481 24 83          MLCWA GPWDS&1,7998                                   7  5941  L Z13 I9Y          606
2482 24 84          RTW   2,7997             SKIP QUADRATIC PROGRAMMING SECT.  8  5948  L %U2 I9X R      607
2483 24 85          MLC   EPRES,EPR          SET E PRINT TO CRITICAL E      7  5956  M M84 M94          607
2484 24 86          B     PSE1                                           4  5963  B 66W              607
2485 24 87   PSE9E  S     EPR                                            4  5967  S M94              607
2486 24 88          MLC   NXPR,EPR-3                                     7  5971  M M98 M91          607
2487 24 89          MLZS  NXPR,EPR           SET E PRINT TO NEXT PRINT E    7  5978  Y M98 M94          607
2488 24 90          MLZS  @0@,EPR-3                                      7  5985  Y N3V M91          608
2489 24 91          S     DELTA,NXPR         SUBTRACT DELTA FROM NEXT PRINT E  7  5992  S B53 M98       608
2490 24 92          RWD   2                  REWIND TAPE 2                  5  5999  U %U2 R            608
2491 24 93          MLCWA GPWDS&1,7998                                   7  6004  L Z13 I9Y          608
2492 24 94          RTW   2,7997             SKIP PORTFOLIO GENERATOR SECTION  8  6011  L %U2 I9X R      608
2493 24 95          MLCWA GPWDS&1,7998                                   7  6019  L Z13 I9Y          609
2494 24 96          RTW   2,7997             SKIP QUADRATIC PROGRAMMING SECT.  8  6026  L %U2 I9X R      609
2495 24 97          B     PSE1                                           4  6034  B 66W              609
2496 24 971  PSE9F  RWD   2                  REWIND TAPE 2                  5  6038  U %U2 R            609
2497 24 972         RWD   3                  REWIND TAPE 3                  5  6043  U %U3 R            609
2498 24 973         RWD   4                  REWIND TAPE 4                  5  6048  U %U4 R            609
2499 24 974         B     GOLOD              CALL IN PHASE VII              4  6053  B 175              609
2500 24 98   PSE10  A     ONE,CC3A           ADD 1 TO INTERNAL ID           7  6057  A /55 K50          610
2501 24 99          MA    @039@,IX2          ADD 39 TO BUF LOCATION         7  6064  # N4W 094          610
2502 25 00          A     @26@,CC3B          ADD 26 TO BUF4 LOCATION        7  6071  A N4Y K53          610
2503 25 01          C     @520@,CC3B         BRANCH TO PSE4                 7  6078  C N5/ K53          610
2504 25 02          BU    PSE4               IF BUF4 NOT DONE               5  6085  B U2S /            610
2505 25 03          B     PSE3                                           4  6090  B T8S              610
2506 25 04   PSE11  B     MULT1                                          4  6094  B 336              611
2507 25 041         DSA   K3                 ALPHA 2                        3  6100  D30                611
2508 25 042         DSA   SIGB               A%2,2)                         3  6103  E37                611
2509 25 043         MLC   PROD-6,CC13A                                     7  6104  M 617 L32          611
2510 25 044         MLZS  PROD,CC13A                                       7  6111  Y 623 L32          611
2511 25 045         B     MULT1                                          4  6118  B 336              611
2512 25 046         DSA   K3                 ALPHA 2                        3  6124  D30                611
2513 25 047         DSA   CC13A              ALPHA 2 * A%2,2)               3  6127  L32                612
2514 25 048         MLC   PROD-8,CC13A                                     7  6128  M 615 L32          612
2515 25 049         MLZS  PROD,CC13A         TERM 1 EQUAL ALPHA 2 SQ * A%2,2)  7  6135  Y 623 L32       612
2516 25 05          B     MULT1                                          4  6142  B 336              612
2517 25 051         DSA   K3                 ALPHA 2                        3  6148  D30                612
2518 25 052         DSA   SIGDB              A%1,2)                         3  6151  E24                612
2519 25 053         MLC   PROD-6,CC13B                                     7  6152  M 617 L45          612
2520 25 054         MLZS  PROD,CC13B                                       7  6159  Y 623 L45          613
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 SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

2521 25 055         B     MULT1                                               4  6166  B 336              613
2522 25 056         DSA   K1                ALPHA 1                           3  6172  D10                613
2523 25 057         DSA   CC13B             ALPHA 2 * A%1,2)                  3  6175  L45                613
2524 25 058         MLC   PROD-8,CC13B                                        7  6176  M 615 L45          613
2525 25 059         MLZS  PROD,CC13B        TERM 2 EQUAL                      7  6183  Y 623 L45          613
2526 25 06          A     CC13B             2 * ALPHA 1 * ALPHA 2 * A%1,2)    4  6190  A L45              613
2527 25 061         A     CC13B,CC13A       TERM 1 & TERM 2                   7  6194  A L45 L32          614
2528 25 062         B     MULT1                                               4  6201  B 336              614
2529 25 063         DSA   K1                ALPHA 1                           3  6207  D10                614
2530 25 064         DSA   SIGD              A%1,1)                            3  6210  E11                614
2531 25 065         MLC   PROD-6,CC13B                                       7  6211  M 617 L45          614
2532 25 066         MLZS  PROD,CC13B                                          7  6218  Y 623 L45          614
2533 25 067         B     MULT1                                               4  6225  B 336              614
2534 25 068         DSA   K1                ALPHA 1                           3  6231  D10                615
2535 25 069         DSA   CC13B             ALPHA 1 * A%1,1)                  3  6234  L45                615
2536 25 07          MLC   PROD-8,CC13B                                        7  6235  M 615 L45          615
2537 25 071         MLZS  PROD,CC13B        TERM 3 EQUAL ALPHA 1 SQ * A%1,1)  7  6242  Y 623 L45          615
2538 25 072         A     CC13B,CC13A       TERM 1 & TERM 2 & TERM 3          7  6249  A L45 L32          615
2539 25 073         A     SIGC2-4,CC13A     G SUB 0 EQUAL V SUPER U & TERM 1  7  6256  A D60 L32          615
2540 25 074         ZA    CC13A,ACCAUT      & TERM 2 & TERM 3                 7  6263  ? L32 T44          616
2541 25 075         B     MULT1                                               4  6270  B 336              616
2542 25 076         DSA   K2                BETA 1                            3  6276  D20                616
2543 25 077         DSA   SIGD              A%1,1)                            3  6279  E11                616
2544 25 078         MLC   PROD-6,CC13A                                       7  6280  M 617 L32          616
2545 25 079         MLZS  PROD,CC13A                                          7  6287  Y 623 L32          616
2546 25 08          B     MULT1                                               4  6294  B 336              616
2547 25 081         DSA   K2                BETA 1                            3  6300  D20                617
2548 25 082         DSA   CC13A             BETA 1 * A%1,1)                   3  6303  L32                617
2549 25 083         MLC   PROD-8,CC13A                                        7  6304  M 615 L32          617
2550 25 084         MLZS  PROD,CC13A        TERM 1 EQUAL BETA 1 SQ * A%1,1)   7  6311  Y 623 L32          617
2551 25 085         B     MULT1                                               4  6318  B 336              617
2552 25 086         DSA   K2                BETA 1                            3  6324  D20                617
2553 25 087         DSA   SIGDB             A%1,2)                            3  6327  E24                617
2554 25 088         MLC   PROD-6,CC13B                                       7  6328  M 617 L45          618
2555 25 089         MLZS  PROD,CC13B                                          7  6335  Y 623 L45          618
2556 25 09          B     MULT1                                               4  6342  B 336              618
2557 25 091         DSA   K4                BETA 2                            3  6348  D40                618
2558 25 092         DSA   CC13B             BETA 1 * A%1,2)                   3  6351  L45                618
2559 25 093         MLC   PROD-8,CC13B                                        7  6352  M 615 L45          618
2560 25 094         MLZS  PROD,CC13B        TERM 2 EQUAL                      7  6359  Y 623 L45          618
2561 25 095         A     CC13B             2 * BETA 1 * BETA 2 * A%1,2)      4  6366  A L45              619
2562 25 096         A     CC13B,CC13A       TERM 1 & TERM 2                   7  6370  A L45 L32          619
2563 25 097         B     MULT1                                               4  6377  B 336              619
2564 25 098         DSA   K2                BETA 1                            3  6383  D20                619
2565 25 099         DSA   SIGMD             A%1,3)                            3  6386  E47                619
2566 25 10          MLC   PROD-6,CC13B                                       7  6387  M 617 L45          619
2567 25 101         MLZS  PROD,CC13B                                          7  6394  Y 623 L45          619
2568 25 102         A     CC13B             TERM 3 EQUAL 2 * BETA 1 * A%1,3)  4  6401  A L45              620
2569 25 103         S     CC13B,CC13A       TERM 1 & TERM 2 - TERM 3          7  6405  S L45 L32          620
2570 25 104         B     MULT1                                               4  6412  B 336              620
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 SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD
2571 25 105          DSA   K4                BETA 2                    3  6418  D40               620
2572 25 106          DSA   SIGB              A%2,2)                    3  6421  E37               620
2573 25 107          MLC   PROD-6,CC13B                                7  6422  M 617 L45         620
2574 25 108          MLZS  PROD,CC13B                                  7  6429  Y 623 L45         620
2575 25 109          B     MULT1                                       4  6436  B 336             621
2576 25 11           DSA   K4                BETA 2                    3  6442  D40               621
2577 25 111          DSA   CC13B             BETA 2 * A%2,2)           3  6445  L45               621
2578 25 112          MLC   PROD-8,CC13B                                7  6446  M 615 L45         621
2579 25 113          MLZS  PROD,CC13B        TERM 4 EQUAL BETA 2 SQ * A%2,2)   7  6453  Y 623 L45         621
2580 25 114          A     CC13B,CC13A       TERM1 & TERM2 - TERM3 & TERM4     7  6460  A L45 L32         621
2581 25 115          B     MULT1                                       4  6467  B 336             621
2582 25 116          DSA   K4                BETA 2                    3  6473  D40               622
2583 25 117          DSA   SIGMB             A%2,3)                    3  6476  E57               622
2584 25 118          MLC   PROD-6,CC13B                                7  6477  M 617 L45         622
2585 25 119          MLZS  PROD,CC13B                                  7  6484  Y 623 L45         622
2586 25 12           A     CC13B             TERM 5 EQUAL 2 * BETA 2 * A%2,3)  4  6491  A L45             622
2587 25 121          S     CC13B,CC13A       G SUB 2 EQUAL             7  6495  S L45 L32         622
2588 25 122          MLC   ZEROS,CC13B       TERM 1 & TERM 2           7  6502  M /54 L45         622
2589 25 123          A     SIGM2,CC13B-2     - TERM 3 & TERM 4         7  6509  A E67 L43         623
2590 25 124          MLZS  @0@,CC13B-2       - TERM 5 & A%3,3)         7  6516  Y N3V L43         623
2591 25 125          A     CC13B,CC13A                                 7  6523  A L45 L32         623
2592 25 126          B     PSE2                                        4  6530  B S7S             623
2593 25 127  ENDPG  H                                                  1  6534  .                 623
                     DCW   @0@                                         1  6535              LIT   623
                           @001@                                       3  6538              LIT   623
                           @8@                                         1  6539              LIT   624
                           @176@                                       3  6542              LIT   624
                           @ @                                         1  6543              LIT   624
                           @039@                                       3  6546              LIT   624
                           @26@                                        2  6548              LIT   624
                           @520@                                       3  6551              LIT   624
2594 25 128          EX    SYS                                               B 57V             625
2595 25 129          ORG   4575                                               4575
2596 25 13   WRITE   MLCWA GPWDS&1,ENDQP&14                             7  4575  L Z13 A0|         628
2597 25 131          WTW   2,PSC1             WRITE QUADRATIC PROGRAMMING SECT  8  4582  L %U2 59V W       628
2598 25 132          BER   ERRW2                                       5  4590  B J67 L           628
2599 25 133  PSC1    C     ZEROS,MUZ         BRANCH TO PSC4            7  4595  C /54 G19         628
2600 25 134          BU    PSC4              IF CASH IN M              5  4602  B 61V /           628
2601 25 135          B     MAT1              CALC. ALPHAS & BETAS IF CASH OUT  4  4607  B L3Z             628
2602 25 136          B     PSC5                                        4  4611  B 61Z             629
2603 25 14   PSC4    B     MAT2              CALC. ALPHAS & BETAS IF CASH IN   4  4615  B O7|             629
2604 25 15   PSC5    MLC   MNINS,HILAM       SET LAMBDA E TO -99.99999999      7  4619  M ?4Y M54         629
2605 25 16   PSC5A   MLC   ZEROS,IX1         SET BUF LOCATION TO 000           7  4626  M /54 089         629
2606 25 17           MLC   ZEROS,IX2         SET BUF4 LOCATION TO 000          7  4633  M /54 094         629
2607 25 18           RTW   4,BUF             READ 1 BLOCK OF SECURITIES        8  4640  L %U4 B1Y R       629
2608 25 19           BER   ERRR4                                       5  4648  B !68 L           630
2609 25 20   PSC6    MLC   BUF&2&X1,IX3       PLACE INTERNAL ID IN INDEX 3      7  4653  M BS| 099         630
2610 25 21           BCE   PSC18,STAT-1&X3,3  BRANCH TO PSC18 IF SEC. IS FIXED  8  4660  B T1/ MI8 3       630
2611 25 22           C     ZEROS,BUF&25&X1   BRANCH TO PSC10                   7  4668  C /54 BUT         630
2612 25 23           BU    PSC10             IF B/SIGMA NOT ZERO *NOT CASH)    5  4675  B 92U /           630
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 SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

2613 25 24           BCE   PSC8,STAT-1&X3,1    BRANCH TO PSC8 IF SEC. IS IN M    8  4680  B 79W MI8 1       631
2614 25 25           S     NUMER                                             4  4688  S G12             631
2615 25 26           MLC   K1,NUMER-8                                        7  4692  M D10 G04         631
2616 25 27           MLZS  K1,NUMER                                          7  4699  Y D10 G12         631
2617 25 28           MLZS  @0@,NUMER-8         NUMERATOR EQUALS ALPHA 1      7  4706  Y ?8X G04         631
2618 25 29           S     DENOM                                             4  4713  S F91             631
2619 25 30           MLC   BUF&9&X1,DENOM-3                                  7  4717  M BSX F88         632
2620 25 31           MLZS  DENOM-3,DENOM                                     7  4724  Y F88 F91         632
2621 25 32           MLZS  @0@,DENOM-3                                       7  4731  Y ?8X F88         632
2622 25 33           S     K2,DENOM            DENOMINATOR EQUALS MU - BETA 1    7  4738  S D20 F91         632
2623 25 34           MLC   DENOM,BUF4&25&X2                                  7  4745  M F91 0MS         632
2624 25 35           BCE   PSC7,STAT-1&X3,2     BRANCH TO PSC7 IF SEC. IS IN U    8  4752  B 77S MI8 2       633
2625 25 36           BM    PSC7A,DENOM         BRANCH TO PSC7A IF DENOM. NEG.    8  4760  V 78| F91 K       633
2626 25 37           B     PSC18               DONT CALC. V IF DENOM. NOT NEG.   4  4768  B T1/             633
2627 25 38   PSC7    BM    PSC18,DENOM         DONT CALC. V IF DENOM. NEGATIVE   8  4772  V T1/ F91 K       633
2628 25 39   PSC7A   C     ZEROS,DENOM-1       BRANCH TO PSC13                   7  4780  C /54 F90         633
2629 25 40           BU    PSC13               IF DENOMINATOR NOT 00.0000000X    5  4787  B /7S /           634
2630 25 41           B     PSC18               DONT CALC. V IF DENOM. IS ZERO    4  4792  B T1/             634
2631 25 42   PSC8    MLC   GAMZ,BUF4&12&X2     GAMMA EQUALS GAMMA Z              7  4796  M G32 0KZ         634
2632 25 43           MLC   OMEGZ,BUF4&25&X2    OMEGA EQUALS OMEGA Z              7  4803  M G45 0MS         634
2633 25 44           C     @00A@,MCOUNT        DONT COMPUTE V IF                 7  4810  C ?9| M28         634
2634 25 45           BU    *&5                 M-GROUP COUNT EQUALS PLUS  1      5  4817  B 82W /           634
2635 25 46           B     PSC18                                             4  4822  B T1/             634
2636 25 47           MLC   BUF4&25&X2,DENOM    DENOMINATOR EQUALS OMEGA          7  4826  M 0MS F91         635
2637 25 48           BM    PSC9,BUF4&25&X2     BRANCH TO PSC9 IF OMEGA NEG.      8  4833  V 87| 0MS K       635
2638 25 49   PSC8A   S     NUMER                                             4  4841  S G12             635
2639 25 50           ZS    BUF4&12&X2,NUMER-8                                7  4845  ! 0KZ G04         635
2640 25 51           MLZS  NUMER-8,NUMER                                     7  4852  Y G04 G12         635
2641 25 52           MLZS  @0@,NUMER-8         NUMERATOR EQUALS - GAMMA      7  4859  Y ?8X G04         636
2642 25 53           B     PSC13                                             4  4866  B /7S             636
2643 25 54   PSC9    S     NUMER                                             4  4870  S G12             636
2644 25 55           MLZS  @0@,NUMER                                         7  4874  Y ?8X G12         636
2645 25 56           MLC   BUF&33&X1,NUMER-9                                 7  4881  M BV/ G03         636
2646 25 57           S     CC21A                                             4  4888  S M22             636
2647 25 58           MLC   BUF4&12&X2,CC21A-8                                7  4892  M 0KZ M14         637
2648 25 59           MLZS  CC21A-8,CC21A                                     7  4899  Y M14 M22         637
2649 25 60           MLZS  @0@,CC21A-8                                       7  4906  Y ?8X M14         637
2650 25 61           S     CC21A,NUMER         NUMERATOR EQUALS C BAR - GAMMA    7  4913  S M22 G12         637
2651 25 62           B     PSC13                                             4  4920  B /7S             637
2652 25 63   PSC10   B     MULT1                                             4  4924  B 336             637
2653 25 64           DSA   K1                  ALPHA 1  XX.XXXXXXXX           3  4930  D10               637
2654 25 65           DSA   BUF&17&X1           AI1     XXX.XXXXX             3  4933  BTV               638
2655 25 66           MLC   PROD-5,CC13A                                      7  4934  M 618 L32         638
2656 25 67           MLZS  PROD,CC13A                                        7  4941  Y 623 L32         638
2657 25 68           ZS    CC13A,BUF4&12&X2                                  7  4948  ! L32 0KZ         638
2658 25 69           B     MULT1                                             4  4955  B 336             638
2659 25 70           DSA   K3                  ALPHA 2  XX.XXXXXXXX           3  4961  D30               638
2660 25 71           DSA   BUF&25&X1           AI2     XXX.XXXXX             3  4964  BUT               638
2661 25 72           MLC   PROD-5,CC13A                                      7  4965  M 618 L32         639
2662 25 73           MLZS  PROD,CC13A          GAMMA EQUALS - AI1 * ALPHA 1      7  4972  Y 623 L32         639
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 SEQ PG LIN  LABEL   OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

2663 25 74           S     CC13A,BUF4&12&X2    - AI2 * ALPHA 2  XXXXX.XXXXXXXX      7  4979  S L32 0KZ          639
2664 25 75           S     BUF4&25&X2                                             4  4986  S 0MS              639
2665 25 76           MLC   BUF&9&X1,BUF4&22&X2                                    7  4990  M BSX 0LZ          639
2666 25 77           MLZS  BUF&9&X1,BUF4&25&X2                                    7  4997  Y BSX 0MS          639
2667 25 78           MLZS  @0@,BUF4&22&X2                                         7  5004  Y ?8X 0LZ          640
2668 25 79           B     MULT1                                                  4  5011  B 336              640
2669 25 80           DSA   K2                  BETA 1  XX.XXXXXXXX              3  5017  D20                640
2670 25 81           DSA   BUF&17&X1           AI1    XXX.XXXXX                 3  5020  BTV                640
2671 25 82           MLZS  PROD,PROD-5                                          7  5021  Y 623 618          640
2672 25 83           S     PROD-5,BUF4&25&X2                                    7  5028  S 618 0MS          640
2673 25 84           B     MULT1                                                  4  5035  B 336              640
2674 25 85           DSA   K4                  BETA 2  XX.XXXXXXXX              3  5041  D40                641
2675 25 86           DSA   BUF&25&X1           AI2    XXX.XXXXX                 3  5044  BUT                641
2676 25 87           MLZS  PROD,PROD-5         OMEGA EQUALS AI3 - AI1 * BETA 1  7  5045  Y 623 618          641
2677 25 88           S     PROD-5,BUF4&25&X2   - AI2 * BETA 2  XXXXX.XXXXXXXX   7  5052  S 618 0MS          641
2678 25 89           MLC   BUF4&25&X2,DENOM    DENOMINATOR EQUALS OMEGA         7  5059  M 0MS F91          641
2679 25 90           BCE   PSC11,STAT-1&X3,    BRANCH TO PSC11 IF SEC. IS IN D  8  5066  B /2Z MI8          641
2680 25 91           BCE   PSC12,STAT-1&X3,2   BRANCH TO PSC12 IF SEC. IS IN U  8  5074  B /4/ MI8 2        642
2681 25 92           C     @00A@,MCOUNT        DONT COMPUTE V IF                7  5082  C ?9| M28          642
2682 25 93           BU    *&5                 M-GROUP COUNT EQUALS PLUS 1      5  5089  B |9Y /            642
2683 25 94           B     PSC10B                                               4  5094  B /1Y              642
2684 25 95           BM    PSC12A,BUF4&25&X2   BRANCH TO PSC12A IF OMEGA NEG.   8  5098  V /4Z 0MS K        642
2685 25 96   PSC10A  C     ZEROS,BUF4&24&X2    BRANCH TO PSC8A IF OMEGA         7  5106  C /54 0M/          642
2686 25 97           BU    PSC8A               NOT 00000.0000000X               5  5113  B 84/ /            643
2687 25 98   PSC10B  MLC   ZEROS,BUF4&25&X2                                     7  5118  M /54 0MS          643
2688 25 99           B     PSC18               DONT CALC. V IF OMEGA IS ZERO    4  5125  B T1/              643
2689 26 00   PSC11   BM    PSC10A,BUF4&25&X2   BRANCH TO PSC10A IF OMEGA NEG.   8  5129  V /0W 0MS K        643
2690 26 01           B     PSC18               DONT CALC. V IF OMEGA NOT NEG.   4  5137  B T1/              643
2691 26 02   PSC12   BM    PSC18,BUF4&25&X2    DONT CALC. V IF OMEGA NEG.       8  5141  V T1/ 0MS K        643
2692 26 03   PSC12A  C     ZEROS,BUF4&24&X2    BRANCH TO PSC9 IF OMEGA          7  5149  C /54 0M/          644
2693 26 04           BU    PSC9                NOT 00000.0000000X               5  5156  B 87| /            644
2694 26 05           MLC   ZEROS,BUF4&25&X2                                     7  5161  M /54 0MS          644
2695 26 06           B     PSC18               DONT CALC. V IF OMEGA IS ZERO    4  5168  B T1/              644
2696 26 07   PSC13   B     DIVIDE                                               4  5172  B 630              644
2697 26 08           DSA   DENOM                                                3  5178  F91                644
2698 26 09           DSA   NUMER                                                3  5181  G12                644
2699 26 10           DCW   09                                                   2  5183                     645
2700 26 11           MLC   QUOT,TLAM                                            7  5184  M /11 M64          645
2701 26 12           MLC   HILAM,CC10A                                          7  5191  M M54 K98          645
2702 26 13           S     TLAM,CC10A          BRANCH TO PSC15                  7  5198  S M64 K98          645
2703 26 14           BM    PSC15,CC10A         IF V%I) GREATER THAN V MAX       8  5205  V S1X K98 K        645
2704 26 15           B     PSC18                                                4  5213  B T1/              645
2705 26 16   PSC15   MLC   TLAM,HILAM          LAMBDA E EQUALS V MAX            7  5217  M M64 M54          646
2706 26 17           MLC   IX3,HIPRS                                            7  5224  M 099 M34          646
2707 26 18           MLCWA BUF&9&X1,BUF6&6     MU/SIGMA                         7  5231  L BSX G68          646
2708 26 19           MLCWA BUF&17&X1,BUF6&14    1/SIGMA                         7  5238  L BTV G76          646
2709 26 20           MLCWA BUF&25&X1,BUF6&22    B/SIGMA                         7  5245  L BUT G84          646
2710 26 21           MLCWA BUF&33&X1,BUF6&30   C BAR                            7  5252  L BV/ G92          647
2711 26 22           MLCWA BUF&38&X1,BUF6&35   C                                7  5259  L BVW G97          647
2712 26 23           BCE   PSC16,STAT-1&X3,1   BRANCH TO PSC16 IF SEC. IS IN M  8  5266  B S8V MI8 1        647
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SEQ	PG	LIN	LABEL	OP	OPERANDS		SFX	CT	LOCN	INSTRUCTION TYPE	CARD
2713	26	24		MLC	@0@,IND2	SET IND2 TO 0 IF SEC. NOT IN M		7	5274	M ?8X K43	647
2714	26	25		B	PSC18			4	5281	B T1/	647
2715	26	26	PSC16	BM	PSC17,BUF4&25&X2	BRANCH TO PSC17 IF OMEGA NEG.		8	5285	V T0U 0MS K	648
2716	26	27		MLC	@0@,IND2	SET IND2 TO 0 IF OMEGA NOT NEG.		7	5293	M ?8X K43	648
2717	26	28		B	PSC18			4	5300	B T1/	648
2718	26	29	PSC17	MLC	ONE,IND2	SET IND2 TO 1 IF OMEGA NEG.		7	5304	M /55 K43	648
2719	26	30	PSC18	C	IX3,NSEC	BRANCH TO PSC19		7	5311	C 099 Z16	648
2720	26	31		BU	PSC19	IF ALL SEC. NOT PROCESSED		5	5318	B T5Z /	648
2721	26	32		MLCWA	GPWDS&1,BUF4&26&X2	PLACE GRP MK WD MK AFTER BUF4		7	5323	L Z13 0MT	649
2722	26	33		WTW	2,BUF4	WRITE LAST GAMMA-OMEGA RECORD		8	5330	L %U2 01X W	649
2723	26	34		BER	ERRW2			5	5338	B J67 L	649
2724	26	35		MLCWA	@0@,BUF4&26&X2			7	5343	L ?8X 0MT	649
2725	26	36		RWD	4	REWIND TAPE 4		5	5350	U %U4 R	649
2726	26	37		B	PSC20			4	5355	B U0Z	649
2727	26	38	PSC19	MA	@039@,IX1	ADD 39 TO BUF LOCATION		7	5359	# ?9T 089	650
2728	26	39		A	@26@,IX2	ADD 26 TO BUF4 LOCATION		7	5366	A ?9V 094	650
2729	26	40		C	@520@,IX2	BRANCH TO PSC6		7	5373	C ?9Y 094	650
2730	26	41		BU	PSC6	IF BUF4 NOT FULL		5	5380	B 65T /	650
2731	26	42		MLCWA	GPWDS&1,BUF4&520			7	5385	L Z13 53X	650
2732	26	43		WTW	2,BUF4	WRITE 1 GAMMA-OMEGA RECORD		8	5392	L %U2 01X W	651
2733	26	44		BER	ERRW2			5	5400	B J67 L	651
2734	26	45		B	PSC5A			4	5405	B 62W	651
2735	26	46	PSC20	A	ONE,ITCTR	ADD 1 TO ITERATION COUNT		7	5409	A /55 M31	651
2736	26	461		MLC	K1,ALPH1			7	5416	M D10 B87	651
2737	26	462		MLC	K2,BETA1			7	5423	M D20 C07	651
2738	26	463		MLC	K3,ALPH2			7	5430	M D30 B97	652
2739	26	464		MLC	K4,BETA2			7	5437	M D40 C17	652
2740	26	465		MLC	SIGD,A11			7	5444	M E11 C30	652
2741	26	466		MLC	SIGDB,A12			7	5451	M E24 C43	652
2742	26	467		MLC	SIGB,A22			7	5458	M E37 C56	652
2743	26	468		MLC	SIGMD,A13			7	5465	M E47 C66	653
2744	26	469		MLC	SIGMB,A23			7	5472	M E57 C76	653
2745	26	47		MLC	SIGM2,A33			7	5479	M E67 C86	653
2746	26	471		MLC	SIGC2,VU			7	5486	M D64 D00	653
2747	26	472		MLC	@0@,IND1	SET IND1 TO 0		7	5493	M ?8X K42	653
2748	26	48		BWZ	PSC21,HILAM,B	BRANCH TO PSC21 IF LAMBDA E POS.		8	5500	V V1Z M54 B	654
2749	26	49		MLC	ZEROS,HILAM	SET LAMBDA E TO ZERO IF NEGATIVE		7	5508	M /54 M54	654
2750	26	50		B	PSC27			4	5515	B Y8X	654
2751	26	51	PSC21	MLC	HIPRS,IX2	SET INDEX 2 TO ID OF MOVING SEC.		7	5519	M M34 094	654
2752	26	52		BCE	PSC21A,STAT-1&X2,1	BRANCH TO PSC21A IF SEC. IS IN M		8	5526	B V5T MR8 1	654
2753	26	53		A	ONE,MCOUNT	ADD 1 TO M-GROUP COUNT		7	5534	A /55 M28	655
2754	26	54		BCE	PSC22,STAT-1&X2,2	BRANCH TO PSC22 IF SEC. WAS IN U		8	5541	B W3W MR8 2	655
2755	26	55		B	PSC23	BRANCH TO PSC23 IF SEC. WAS IN D		4	5549	B W4T	655
2756	26	56	PSC21A	S	ONE,MCOUNT	SUBTRACT 1 FROM M-GROUP COUNT		7	5553	S /55 M28	655
2757	26	57		C	ONE,IND2	BRANCH TO PSC23 IF SEC. WAS IN M		7	5560	C /55 K43	655
2758	26	58		BU	PSC23	AND IND2 EQUAL 0		5	5567	B W4T /	655
2759	26	59		MLC	TWO,IND1	SET IND1 TO 2 IF M TO U MOVE		7	5572	M /56 K42	656
2760	26	60		MLC	TWO,STAT-1&X2	PUT SECURITY IN U		7	5579	M /56 MR8	656
2761	26	61		C	ZEROS,BUF6&22	BRANCH TO PSC21B		7	5586	C /54 G84	656
2762	26	62		BU	PSC21B	IF NOT CASH ITEM		5	5593	B W2/ /	656

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SEQ	PG	LIN	LABEL	OP	OPERANDS		SFX	CT	LOCN	INSTRUCTION TYPE	CARD
2763	26	63		MLC	ZEROS,MUZ	MU Z EQUAL ZERO		7	5598	M /54 G19	656
2764	26	64		S	GAMZ	GAMMA Z EQUALS ZERO		4	5605	S G32	656
2765	26	65		S	OMEGZ	OMEGA Z EQUALS ZERO		4	5609	S G45	657
2766	26	66		B	CSIG	UPDATE SUPER U VARIABLES		4	5613	B Q3X	657
2767	26	67		B	PSC25A	USE MAT1 BECAUSE CASH MOVED TO U		4	5617	B X5T	657
2768	26	68	PSC21B	B	CSIG	UPDATE SUPER U VARIABLES		4	5621	B Q3X	657
2769	26	69		MLC	ONE,IND4	SET IND4 TO 1 IF M TO U MOVE		7	5625	M /55 K44	657
2770	26	70		B	PSC25			4	5632	B X3X	657
2771	26	71	PSC22	MLC	ONE,IND1	SET IND1 TO 1 IF U TO M MOVE		7	5636	M /55 K42	657
2772	26	72	PSC23	B	CSIG	UPDATE SUPER U VARIABLES		4	5643	B Q3X	658
2773	26	73		BCE	PSC24,STAT-1&X2,1	BRANCH TO PSC24 IF SEC. WAS IN M		8	5647	B W9S MR8 1	658
2774	26	74		MLC	@0@,IND4	SET IND4 TO 0 IF MVNG TO M		7	5655	M ?8X K44	658
2775	26	75		MLC	ONE,STAT-1&X2	PUT SECURITY IN M		7	5662	M /55 MR8	658
2776	26	76		C	ZEROS,BUF6&22	BRANCH TO PSC25		7	5669	C /54 G84	658
2777	26	77		BU	PSC25	IF NOT CASH ITEM		5	5676	B X3X /	658
2778	26	78		MLC	BUF6&6,MUZ	MU Z EQUALS MU OF CASH ITEM IN M		7	5681	M G68 G19	659
2779	26	79		B	PSC26	USE MAT2 BECAUSE CASH MOVED TO M		4	5688	B X6/	659
2780	26	80	PSC24	MLC	ONE,IND4	SET IND4 TO 1 IF M TO D MOVE		7	5692	M /55 K44	659
2781	26	81		MLC	@ @,STAT-1&X2	PUT SEC. IN D		7	5699	M ?9Z MR8	659
2782	26	82		C	ZEROS,BUF6&22	BRANCH TO PSC25		7	5706	C /54 G84	659
2783	26	83		BU	PSC25	IF NOT CASH ITEM		5	5713	B X3X /	659
2784	26	84		MLC	ZEROS,MUZ	MU Z EQUAL ZERO		7	5718	M /54 G19	660
2785	26	85		S	GAMZ	GAMMA Z EQUALS ZERO		4	5725	S G32	660
2786	26	86		S	OMEGZ	OMEGA Z EQUALS ZERO		4	5729	S G45	660
2787	26	87		B	PSC25A	USE MAT1 BECAUSE CASH MOVED TO D		4	5733	B X5T	660
2788	26	88	PSC25	B	SIGCP	UPDATE A-S		4	5737	B U00	660
2789	26	89		C	ZEROS,MUZ	BRANCH TO PSC		7	5741	C /54 G19	660
2790	26	90		BU	PSC26	IF CASH ITEM IN M		5	5748	B X6/ /	660
2791	26	91	PSC25A	B	MAT1	CALC. ALPHAS & BETAS IF CASH OUT		4	5753	B L3Z	661
2792	26	92		B	PSC27			4	5757	B Y8X	661
2793	26	93	PSC26	B	MAT2	CALC. ALPHAS & BETAS IF CASH IN		4	5761	B O7|	661
2794	26	94		MLC	ZEROS,GAMZ			7	5765	M /54 G32	661
2795	26	95		A	ONE,GAMZ-8			7	5772	A /55 G24	661
2796	26	96		S	SIGCU,GAMZ-3			7	5779	S D74 G29	661
2797	26	97		MLZS	@0@,GAMZ-3			1	5786	Y	661
2798	26	98		B	MULT1			4	5787	B 336	662
2799	26	99		DSA	K3	ALPHA 2		3	5793	D30	662
2800	27	00		DSA	SIGDB	A%1,2)		3	5796	E24	662
2801	27	01		MLZS	PROD,PROD-5	GAMMA Z EQUALS 1 - C SUPER U		7	5797	Y 623 618	662
2802	27	02		A	PROD-5,GAMZ	& A%1,2) * ALPHA 2		7	5804	A 618 G32	662
2803	27	03		MLC	ZEROS,OMEGZ			7	5811	M /54 G45	662
2804	27	04		S	SIGMD,OMEGZ-3	A%1,3)		7	5818	S E47 G42	662
2805	27	05		MLZS	OMEGZ-3,OMEGZ			7	5825	Y G42 G45	663
2806	27	06		MLZS	@0@,OMEGZ-3			7	5832	Y ?8X G42	663
2807	27	07		B	MULT1			4	5839	B 336	663
2808	27	08		DSA	K2	BETA 1		3	5845	D20	663
2809	27	09		DSA	SIGD	A%1,1)		3	5848	E11	663
2810	27	10		MLZS	PROD,PROD-5			7	5849	Y 623 618	663
2811	27	11		A	PROD-5,OMEGZ			7	5856	A 618 G45	663
2812	27	12		B	MULT1			4	5863	B 336	664

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SEQ	PG	LIN	LABEL	OP	OPERANDS		SFX	CT	LOCN	INSTRUCTION TYPE	CARD
2813	27	13		DSA	K4	BETA 2		3	5869	D40	664
2814	27	14		DSA	SIGDB	A%1,2)		3	5872	E24	664
2815	27	15		MLZS	PROD,PROD-5	OMEGZ EQUALS A%1,1) * BETA 1		7	5873	Y 623 618	664
2816	27	16		A	PROD-5,OMEGZ	& A%1,2) * BETA 2 - A%1,3)		7	5880	A 618 G45	664
2817	27	17	PSC27	MLC	ZEROS,EPRES			7	5887	M /54 M84	664
2818	27	18		MLC	SIGM2,EPRES-2	A%3,3)		7	5894	M E67 M82	664
2819	27	19		MLZS	@0@,EPRES-2			7	5901	Y ?8X M82	665
2820	27	20		B	MULT1			4	5908	B 336	665
2821	27	21		DSA	K2	BETA 1		3	5914	D20	665
2822	27	22		DSA	SIGMD	A%1,3)		3	5917	E47	665
2823	27	23		MLZS	PROD,PROD-6			7	5918	Y 623 617	665
2824	27	24		S	PROD-6,EPRES			7	5925	S 617 M84	665
2825	27	25		B	MULT1			4	5932	B 336	665
2826	27	26		DSA	K4	BETA 2		3	5938	D40	666
2827	27	27		DSA	SIGMB	A%2,3)		3	5941	E57	666
2828	27	28		MLZS	PROD,PROD-6			7	5942	Y 623 617	666
2829	27	29		S	PROD-6,EPRES			7	5949	S 617 M84	666
2830	27	30		B	MULT1			4	5956	B 336	666
2831	27	31		DSA	MUZ	MU Z		3	5962	G19	666
2832	27	32		DSA	OMEGZ	OMEGA Z		3	5965	G45	666
2833	27	33		MLZS	PROD,PROD-6	SLOPE EQUALS A%3,3)-BETA1*A%1,3)		7	5966	Y 623 617	667
2834	27	34		A	PROD-6,EPRES	-BETA2*A%2,3)&MU Z * OMEGA Z		7	5973	A 617 M84	667
2835	27	35		B	MULT1			4	5980	B 336	667
2836	27	36		DSA	HILAM	LAMBDA E		3	5986	M54	667
2837	27	37		DSA	EPRES	SLOPE		3	5989	M84	667
2838	27	38		MLZS	PROD,PROD-8			7	5990	Y 623 615	667
2839	27	39		MLC	PROD-8,EPRES			7	5997	M 615 M84	667
2840	27	40		A	SIGMC,EPRES	E SUPER U		7	6004	A D86 M84	668
2841	27	45		B	MULT1			4	6011	B 336	668
2842	27	46		DSA	K1	ALPHA 1		3	6017	D10	668
2843	27	47		DSA	SIGMD	A%1,3)		3	6020	E47	668
2844	27	48		MLZS	PROD,PROD-6			7	6021	Y 623 617	668
2845	27	49		S	PROD-6,EPRES			7	6028	S 617 M84	668
2846	27	50		B	MULT1			4	6035	B 336	668
2847	27	51		DSA	K3	ALPHA 2		3	6041	D30	669
2848	27	52		DSA	SIGMB	A%2,3)		3	6044	E57	669
2849	27	53		MLZS	PROD,PROD-6			7	6045	Y 623 617	669
2850	27	54		S	PROD-6,EPRES			7	6052	S 617 M84	669
2851	27	55		B	MULT1			4	6059	B 336	669
2852	27	56		DSA	MUZ	MU Z		3	6065	G19	669
2853	27	57		DSA	GAMZ	GAMMA Z		3	6068	G32	669
2854	27	58		MLZS	PROD,PROD-6			7	6069	Y 623 617	670
2855	27	59		A	PROD-6,EPRES			7	6076	A 617 M84	670
2856	27	60	PSC27A	MLC	EPRES,EPR	SET PRINT E TO E PRES		7	6083	M M84 M94	670
2857	27	61		BCE	PRTIN,OPT,1	BRANCH TO PRTIN IF CR. PTS. ONLY		8	6090	B ?4Z B76 1	670
2858	27	62		C	ONEMA,ITCTR	BRANCH TO PSC28A		7	6098	C /28 M31	670
2859	27	63		BU	PSC28A	IF NOT 1ST ITERATION		5	6105	B J3| /	671
2860	27	64		B	PRTIN	GO TO GENERATE PRINT PORT FOLIO		4	6110	B ?4Z	671
2861	27	65	PSC28	C	ZEROS,HILAM	BRANCH TO PSC28A		7	6114	C /54 M54	671
2862	27	66		BU	PSC28A	IF LAMBDA E NOT ZERO		5	6121	B J3| /	671

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2863 27 67          B     PRTIN                                                 4  6126  B ?4Z              671
2864 27 68   PSC28A C     BLNK,LLIM          BRANCH TO PSC28B                   7  6130  C /61 B57          671
2865 27 69          BU    PSC28B             IF LOWER LIMIT NOT BLANK           5  6137  B J4W /            671
2866 27 70          B     PSC28C                                                4  6142  B J7V              672
2867 27 71   PSC28B MLC   NXPR,CC4A                                             7  6146  M M98 K57          672
2868 27 72          MLZS  CC4A,CC4A-2                                           7  6153  Y K57 K55          672
2869 27 73          S     LLIM,CC4A-2        BRANCH TO PSC29 IF NEXT PRINT E    7  6160  S B57 K55          672
2870 27 74          BM    PSC29,CC4A-2       IS LESS THAN LOWER LIMIT           8  6167  V K5Y K55 K        672
2871 27 75   PSC28C MLC   EPRES,CC10A                                           7  6175  M M84 K98          673
2872 27 76          S     CC10B                                                 4  6182  S L08              673
2873 27 77          MLC   NXPR,CC10B-3                                          7  6186  M M98 L05          673
2874 27 78          MLZS  CC10B-3,CC10B                                         7  6193  Y L05 L08          673
2875 27 79          MLZS  @0@,CC10B-3                                           7  6200  Y ?8X L05          673
2876 27 80          S     CC10A,CC10B        BRANCH TO PSC29 IF E PRES IS       7  6207  S K98 L08          673
2877 27 81          BM    PSC29,CC10B        GREATER THAN NEXT PRINT LEVEL      8  6214  V K5Y L08 K        674
2878 27 82          S     EPR                                                   4  6222  S M94              674
2879 27 83          MLC   NXPR,EPR-3         E PRINT EQUALS NEXT PRINT LEVEL    7  6226  M M98 M91          674
2880 27 84          MLZS  NXPR,EPR                                              7  6233  Y M98 M94          674
2881 27 85          MLZS  @0@,EPR-3                                             7  6240  Y ?8X M91          674
2882 27 86          S     DELTA,NXPR         SUBTRACT DELTA FROM NEXT PRINT     7  6247  S B53 M98          675
2883 27 87          B     PRTIN                                                 4  6254  B ?4Z              675
2884 27 871  PSC29  C     ZEROS,HILAM        CALL PORTFOLIO GENERATOR           7  6258  C /54 M54          675
2885 27 872         BU    PSC29A             IF LAMBDA E                        5  6265  B K7U /            675
2886 27 873         B     PRTIN              EQUALS ZERO                        4  6270  B ?4Z              675
2887 27 88   PSC29A BCE   PSC30,OPT,2        BRANCH TO PSC30 IF CR. PTS. OUT    8  6274  B K8W B76 2        675
2888 27 89          B     PRTIN                                                 4  6282  B ?4Z              675
2889 27 90   PSC30  RWD   2                  REWIND TAPE 2                      5  6286  U %U2 R            676
2890 27 91          MLCWA GPWDS&1,7998                                          7  6291  L Z13 I9Y          676
2891 27 92          RTW   2,7997             SKIP PORTFOLIO GENERATOR SECTION   8  6298  L %U2 I9X R        676
2892 27 93          MLCWA GPWDS&1,7998                                          7  6306  L Z13 I9Y          676
2893 27 94          RTW   2,7997             SKIP QUADRATIC PROGRAMMING SECT.   8  6313  L %U2 I9X R        676
2894 27 95   PSC31  MLC   EPRES,EPREV                                           7  6321  M M84 M74          677
2895 27 96          MLC   HILAM,PRLAM                                           7  6328  M M54 M44          677
2896 27 97          B     PSC5                                                  4  6335  B 61Z              677
2897 27 98   MAT1   SBR   MATEX&3                                               4  6339  H O6Z              677
2898 27 99          B     MULT1                                                 4  6343  B 336              677
2899 28 00          DSA   SIGD               A%1,1)                             3  6349  E11                677
2900 28 01          DSA   SIGB               A%2,2)                             3  6352  E37                677
2901 28 02          MLC   PROD-9,CC11A                                          7  6353  M 614 L19          678
2902 28 03          MLZS  PROD,CC11A                                            7  6360  Y 623 L19          678
2903 28 04          B     MULT1                                                 4  6367  B 336              678
2904 28 05          DSA   SIGDB              A%1,2)                             3  6373  E24                678
2905 28 06          DSA   SIGDB              A%1,2)                             3  6376  E24                678
2906 28 07          S     PROD-9,CC11A                                          7  6377  S 614 L19          678
2907 28 08          MLC   SIGCU,SIGR1                                           7  6384  M D74 D50          678
2908 28 09          S     ONEPT5,SIGR1                                          7  6391  S G51 D50          679
2909 28 10          B     MULT1                                                 4  6398  B 336              679
2910 28 11          DSA   SIGR1              C SUPER U - 1.00000                3  6404  D50                679
2911 28 12          DSA   SIGB               A%2,2)                             3  6407  E37                679
2912 28 13          MLZS  PROD,PROD-1                                           7  6408  Y 623 622          679
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 SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
2913 28 14          MLC   PROD-1,CC20A                              7  6415  M 622 M01          679
2914 28 15          B     MULT1                                     4  6422  B 336              679
2915 28 16          DSA   SIGBC              B SUPER U              3  6428  D98                680
2916 28 17          DSA   SIGDB              A%1,2)                 3  6431  E24                680
2917 28 18          MLZS  PROD,PROD-3                               7  6432  Y 623 620          680
2918 28 19          S     PROD-3,CC20A                              7  6439  S 620 M01          680
2919 28 20          B     DIVIDE                                    4  6446  B 630              680
2920 28 21          DSA   CC11A                                     3  6452  L19                680
2921 28 22          DSA   CC20A                                     3  6455  M01                680
2922 28 23          DCW   11                                        2  6457                     681
2923 28 24          MLC   QUOT,K1             ALPHA 1  XX.XXXXXXXX  7  6458  M /11 D10          681
2924 28 25          B     MULT1                                     4  6465  B 336              681
2925 28 26          DSA   SIGBC              B SUPER U              3  6471  D98                681
2926 28 27          DSA   SIGD               A%1,1)                 3  6474  E11                681
2927 28 28          MLZS  PROD,PROD-3                               7  6475  Y 623 620          681
2928 28 29          MLC   PROD-3,CC20A                              7  6482  M 620 M01          681
2929 28 30          B     MULT1                                     4  6489  B 336              682
2930 28 31          DSA   SIGR1              C SUPER U - 1.00000    3  6495  D50                682
2931 28 32          DSA   SIGDB              A%1,2)                 3  6498  E24                682
2932 28 33          MLZS  PROD,PROD-1                               7  6499  Y 623 622          682
2933 28 34          S     PROD-1,CC20A                              7  6506  S 622 M01          682
2934 28 35          B     DIVIDE                                    4  6513  B 630              682
2935 28 36          DSA   CC11A                                     3  6519  L19                682
2936 28 37          DSA   CC20A                                     3  6522  M01                683
2937 28 38          DCW   11                                        2  6524                     683
2938 28 39          MLC   QUOT,K3             ALPHA 2  XX.XXXXXXXX  7  6525  M /11 D30          683
2939 28 40          B     MULT1                                     4  6532  B 336              683
2940 28 41          DSA   SIGMD              A%1,3)                 3  6538  E47                683
2941 28 42          DSA   SIGB               A%2,2)                 3  6541  E37                683
2942 28 43          MLZS  PROD,PROD-1                               7  6542  Y 623 622          683
2943 28 44          MLC   PROD-1,CC20A                              7  6549  M 622 M01          684
2944 28 45          B     MULT1                                     4  6556  B 336              684
2945 28 46          DSA   SIGMB              A%2,3)                 3  6562  E57                684
2946 28 47          DSA   SIGDB              A%1,2)                 3  6565  E24                684
2947 28 48          MLZS  PROD,PROD-1                               7  6566  Y 623 622          684
2948 28 49          S     PROD-1,CC20A                              7  6573  S 622 M01          684
2949 28 50          B     DIVIDE                                    4  6580  B 630              684
2950 28 51          DSA   CC11A                                     3  6586  L19                685
2951 28 52          DSA   CC20A                                     3  6589  M01                685
2952 28 53          DCW   11                                        2  6591                     685
2953 28 54          MLC   QUOT,K2             BETA 1   XX.XXXXXXXX  7  6592  M /11 D20          685
2954 28 55          B     MULT1                                     4  6599  B 336              685
2955 28 56          DSA   SIGD               A%1,1)                 3  6605  E11                685
2956 28 57          DSA   SIGMB              A%2,3)                 3  6608  E57                685
2957 28 58          MLZS  PROD,PROD-1                               7  6609  Y 623 622          686
2958 28 59          MLC   PROD-1,CC20A                              7  6616  M 622 M01          686
2959 28 60          B     MULT1                                     4  6623  B 336              686
2960 28 61          DSA   SIGDB              A%1,2)                 3  6629  E24                686
2961 28 62          DSA   SIGMD              A%1,3)                 3  6632  E47                686
2962 28 63          MLZS  PROD,PROD-1                               7  6633  Y 623 622          686
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 SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD
2963 28 64          S     PROD-1,CC20A                                   7  6640  S 622 M01          686
2964 28 65          B     DIVIDE                                         4  6647  B 630              687
2965 28 66          DSA   CC11A                                          3  6653  L19                687
2966 28 67          DSA   CC20A                                          3  6656  M01                687
2967 28 68          DCW   11                                             2  6658                     687
2968 28 69          MLC   QUOT,K4             BETA 2   XX.XXXXXXXX      7  6659  M /11 D40          687
2969 28 70   MATEX  B     *                                              4  6666  B O6Z              687
2970 28 71   MAT2   SBR   MAT2X&3                                        4  6670  H Q3W              687
2971 28 72          S     K1                   ALPHA 1                   4  6674  S D10              688
2972 28 73          S     K2                                             4  6678  S D20              688
2973 28 74          MLC   MUZ,K2-3             BETA 1                    7  6682  M G19 D17          688
2974 28 75          MLZS  K2-3,K2                                        7  6689  Y D17 D20          688
2975 28 76          MLZS  @0@,K2-3                                       7  6696  Y ?8X D17          688
2976 28 77          S     CC18A                                          4  6703  S L63              688
2977 28 78          MLC   SIGBC,CC18A-6                                  7  6707  M D98 L57          689
2978 28 79          MLZS  CC18A-6,CC18A                                  7  6714  Y L57 L63          689
2979 28 80          MLZS  @0@,CC18A-6                                    7  6721  Y ?8X L57          689
2980 28 81          B     DIVIDE                                         4  6728  B 630              689
2981 28 82          DSA   SIGB                                          3  6734  E37                689
2982 28 83          DSA   CC18A                                          3  6737  L63                689
2983 28 84          DCW   09                                             2  6739                     689
2984 28 85          MLC   QUOT,K3             ALPHA 2                   7  6740  M /11 D30          690
2985 28 86          S     CC18A                                          4  6747  S L63              690
2986 28 87          MLC   SIGMB,CC18A-8                                  7  6751  M E57 L55          690
2987 28 88          MLZS  CC18A-8,CC18A                                  7  6758  Y L55 L63          690
2988 28 89          MLZS  @0@,CC18A-8                                    7  6765  Y ?8X L55          690
2989 28 90          B     MULT1                                          4  6772  B 336              690
2990 28 91          DSA   MUZ                  MU Z                      3  6778  G19                690
2991 28 92          DSA   SIGDB                A%1,2)                    3  6781  E24                691
2992 28 93          S     CC18B                                          4  6782  S L81              691
2993 28 94          MLC   PROD,CC18B-3                                   7  6786  M 623 L78          691
2994 28 95          MLZS  CC18B-3,CC18B                                  7  6793  Y L78 L81          691
2995 28 96          MLZS  @0@,CC18B-3                                    7  6800  Y ?8X L78          691
2996 28 97          S     CC18B,CC18A                                    7  6807  S L81 L63          691
2997 28 98          B     DIVIDE                                         4  6814  B 630              691
2998 28 99          DSA   SIGB                                          3  6820  E37                692
2999 29 00          DSA   CC18A                                          3  6823  L63                692
3000 29 01          DCW   09                                             2  6825                     692
3001 29 02          MLC   QUOT,K4             BETA 2                    7  6826  M /11 D40          692
3002 29 03   MAT2X  B     *                                              4  6833  B Q3W              692
3003 29 04   CSIG   SBR   CSGEX&3                                        4  6837  H ?3Y              692
3004 29 05          C     @0@,IND1             BRANCH TO CSG1            7  6841  C ?8X K42          692
3005 29 06          BU    CSG1                 IF IND1 NOT 0             5  6848  B Q5X /            693
3006 29 07          B     CSGEX                EXIT IF NO CHANGE IN U    4  6853  B ?3V              693
3007 29 08   CSG1   MLC   ZEROS,CUSIG                                    7  6857  M /54 F54          693
3008 29 09          MLC   BUF6&35,CUSIG-1      C                         7  6864  M G97 F53          693
3009 29 10          MLZS  @0@,CUSIG-1                                    7  6871  Y ?8X F53          693
3010 29 11          C     ZEROS,BUF6&22        DONT INCLUDE C BAR SQUARED 7  6878  C /54 G84          693
3011 29 12          BU    CSG00                IN V SUPER U IF THE SECURITY 5  6885  B Q9Y /            694
3012 29 13          S     C2SIG                MOVING TO U IS   A CASH ITEM 4  6890  S F44              694
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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

3013 29 14          B     CSG01                                       4  6894  B R1V              694
3014 29 15   CSG00  B     MULT1                                       4  6898  B 336              694
3015 29 16          DSA   BUF6&30            C BAR                    3  6904  G92                694
3016 29 17          DSA   BUF6&30            C BAR                    3  6907  G92                694
3017 29 18          MLC   PROD-3,C2SIG                                7  6908  M 620 F44          694
3018 29 19   CSG01  B     MULT1                                       4  6915  B 336              695
3019 29 20          DSA   BUF6&22            B/SIGMA                  3  6921  G84                695
3020 29 21          DSA   BUF6&30            C BAR                    3  6924  G92                695
3021 29 22          MLC   PROD-5,BCSIG                                7  6925  M 618 F66          695
3022 29 23          MLZS  PROD,BCSIG                                  7  6932  Y 623 F66          695
3023 29 24          B     MULT1                                       4  6939  B 336              695
3024 29 25          DSA   BUF6&6             MU/SIGMA                 3  6945  G68                695
3025 29 26          DSA   BUF6&30            C BAR                    3  6948  G92                696
3026 29 27          MLC   PROD-5,MCSIG                                7  6949  M 618 F78          696
3027 29 28          MLZS  PROD,MCSIG                                  7  6956  Y 623 F78          696
3028 29 29          C     TWO,IND1           BRANCH TO CSG2           7  6963  C /56 K42          696
3029 29 30          BU    CSG2               IF MOVE WAS FROM U TO M  5  6970  B ?0X /            696
3030 29 31          A     C2SIG,SIGC2                                 7  6975  A F44 D64          696
3031 29 32          A     CUSIG,SIGCU                                 7  6982  A F54 D74          697
3032 29 33          A     BCSIG,SIGBC                                 7  6989  A F66 D98          697
3033 29 34          A     MCSIG,SIGMC                                 7  6996  A F78 D86          697
3034 29 35          B     CSGEX                                       4  7003  B ?3V              697
3035 29 36   CSG2   S     C2SIG,SIGC2                                 7  7007  S F44 D64          697
3036 29 37          S     CUSIG,SIGCU                                 7  7014  S F54 D74          697
3037 29 38          S     BCSIG,SIGBC                                 7  7021  S F66 D98          698
3038 29 39          S     MCSIG,SIGMC                                 7  7028  S F78 D86          698
3039 29 40   CSGEX  B     *                                           4  7035  B ?3Y              698
3040 29 41   MNINS  DCW   @999999999R@                               10  7048                     698
3041 29 42   PRTIN  RWD   2                  REWIND TAPE 2            5  7049  U %U2 R            698
3042 29 43          RTW   2,PSE1                                      8  7054  L %U2 66W R        699
3043 29 44          BER   ERRR2                                       5  7062  B Z44 L            699
3044 29 45          MLCWA GPWDS&1,7998                                7  7067  L Z13 I9Y          699
3045 29 46          RTW   2,7997             SKIP QUADRATIC PROGRAMMING SECT.  8  7074  L %U2 I9X R        699
3046 29 47          B     PSE1                                        4  7082  B 66W              699
3047 29 48   ENDQP  H                                                 1  7086  .                  699
                    DCW   @0@                                        1  7087            LIT    699
                          @00A@                                      3  7090            LIT    700
                          @039@                                      3  7093            LIT    700
                          @26@                                       2  7095            LIT    700
                          @520@                                      3  7098            LIT    700
                          @ @                                        1  7099            LIT    700
3048 29 49          EX    WRITE                                                B 57V              701
3049 29 50          ORG   2170                                                  2170
3050 29 54   PSP    RWD   1                  REWIND TAPE 1            5  2170  U %U1 R            704
3051 29 55          BEF   *&1                TURN OFF E-O-F INDICATOR  5  2175  B J80 K            704
3052 29 56   PSP1   MLCWA GPWDS&1,7998                                7  2180  L Z13 I9Y          704
3053 29 57          RTW   4,7997                                      8  2187  L %U4 I9X R        704
3054 29 58          BEF   PSP2               SKIP SECURITY BLOCKS     5  2195  B K04 K            704
3055 29 59          B     PSP1                                        4  2200  B J80              704
3056 29 60   PSP2   MLCWA GPWDS&1,7998                                7  2204  L Z13 I9Y          705
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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

3057 29 61          RTW   4,7997                                       8  2211  L %U4 I9X R        705
3058 29 62          BEF   PSP3               SKIP EXTERNAL ID FILE       5  2219  B K28 K            705
3059 29 63          B     PSP2                                           4  2224  B K04              705
3060 29 64   PSP3   RTW   4,2                READ 1 TITLE CARD FROM TAPE 4  8  2228  L %U4 002 R        705
3061 29 65          BER   ERRR4                                          5  2236  B !68 L            705
3062 29 66          BEF   PSP4               BRANCH TO PSP4 ON E-O-F     5  2241  B K70 K            706
3063 29 67          MLCWA GPWDS&1,81         PLACE GRP MK  WD MK IN 81   7  2246  L Z13 081          706
3064 29 68          WTW   2,2                WRITE 1 TITLE CARD ON TAPE 2  8  2253  L %U2 002 W        706
3065 29 69          BER   ERRW2                                          5  2261  B J67 L            706
3066 29 70          B     PSP3                                           4  2266  B K28              706
3067 29 71   PSP4   WTM   2                  WRITE E-O-F AFTER TITLE CARDS 5  2270  U %U2 M            706
3068 29 72          RWD   2                  REWIND TAPE 2               5  2275  U %U2 R            706
3069 29 73          RWD   4                  REWIND TAPE 4               5  2280  U %U4 R            707
3070 29 74          B     TITPR              PRINT TITLE CARDS           4  2285  B X63              707
3071 29 75          MLC   ONEMA,LOCOL        SET LOCOL TO 001            7  2289  M /28 41X          707
3072 29 76          MLC   @010@,PCC3A        SET HICOL TO                7  2296  M I3Z 44V          707
3073 29 77          S     NOPT,PCC3A         MINIMUM OF                  7  2303  S Z20 44V          707
3074 29 78          BM    PSP5,PCC3A         10 AND                      8  2310  V L29 44V K        707
3075 29 79          MLC   NOPT,HICOL         NOPT                        7  2318  M Z20 42|          708
3076 29 80          B     PSP6                                           4  2325  B L36              708
3077 29 81   PSP5   MLC   @010@,HICOL                                    7  2329  M I3Z 42|          708
3078 29 82   PSP6   MLC   ONEMA,LOROW         SET LOROW TO 001            7  2336  M /28 42Z          708
3079 29 83          MLC   @060@,PCC3A        SET HIROW TO                7  2343  M I4S 44V          708
3080 29 84          S     NSEC,PCC3A         MINIMUM OF                  7  2350  S Z16 44V          708
3081 29 85          BM    PSP6A,PCC3A        60 AND                      8  2357  V L76 44V K        709
3082 29 86          MLC   NSEC,HIROW         NSEC                        7  2365  M Z16 43S          709
3083 29 87          B     PSP7                                           4  2372  B L83              709
3084 29 88   PSP6A  MLC   @060@,HIROW                                    7  2376  M I4S 43S          709
3085 29 89   PSP7   MLCWA GPWDS&1,7998                                   7  2383  L Z13 I9Y          709
3086 29 90          RTW   4,7997                                       8  2390  L %U4 I9X R        710
3087 29 91          BEF   PSP8               SKIP SECURITY BLOCKS        5  2398  B M07 K            710
3088 29 92          B     PSP7                                           4  2403  B L83              710
3089 29 93   PSP8   MLC   ONE,FSTPG          SET 1ST PAGE FLAG TO 1      7  2407  M /55 43T          710
3090 29 94          MLC   TITNO,NOLNP        SET UP NO. OF LINES PRINTED 7  2414  M Z08 41U          710
3091 29 95   PSP8A  MLC   LOCOL,COLCT        SET COLUMN TO LOCOL         7  2421  M 41X 42T          710
3092 29 96          MLC   ZEROS,IX1                                      7  2428  M /54 089          711
3093 29 97   PSP8B  MLC   ZEROS,XMAT&4&X1    ZERO                        7  2435  M /54 9U|          711
3094 29 98          MA    @005@,IX1          OUT                         7  2442  # I4V 089          711
3095 29 99          C     @?00@,IX1          X-MATRIX                    7  2449  C I4Y 089          711
3096 30 00          BU    PSP8B                                          5  2456  B M35 /            711
3097 30 01          C     ONEMA,LOCOL        BRANCH TO PSP9              7  2461  C /28 41X          712
3098 30 02          BU    PSP9               IF LOCOL NOT 001            5  2468  B M77 /            712
3099 30 03          B     PSP12                                          4  2473  B N30              712
3100 30 04   PSP9   MLC   LOCOL,PCC3A                                    7  2477  M 41X 44V          712
3101 30 05          S     TWO,PCC3A          SET FILE SKIP CT TO LOCOL - 2 7  2484  S /56 44V          712
3102 30 06   PSP10  MLCWA GPWDS&1,7998                                   7  2491  L Z13 I9Y          712
3103 30 07          RTW   3,7997                                       8  2498  L %U3 I9X R        713
3104 30 08          BEF   PSP11              SKIP 1 PORTFOLIO ON TAPE 3  5  2506  B N15 K            713
3105 30 09          B     PSP10                                          4  2511  B M91              713
3106 30 10   PSP11  S     ONE,PCC3A          SUBTRACT 1 FROM FILE SKIP CT 7  2515  S /55 44V          713
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 SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

3107 30 11          BWZ   PSP10,PCC3A,B       BRANCH TO PSP10 IF CT NOT NEG.      8  2522  V M91 44V B        713
3108 30 12   PSP12  RTW   3,PBF2              READ HEADING DATA OF PORTFOLIO      8  2530  L %U3 51X R        714
3109 30 13          BER   ERRR3                                                   5  2538  B !06 L            714
3110 30 14          BCE   PSP13,FSTPG,2       BRANCH TO PSP13 IF NOT 1ST PAGE     8  2543  B O22 43T 2        714
3111 30 15          MLC   COLCT,PCC3A                                             7  2551  M 42T 44V          714
3112 30 16          S     LOCOL,PCC3A                                             7  2558  S 41X 44V          714
3113 30 17          B     MULT1               COMPUTE                             4  2565  B 336              714
3114 30 18          DSA   PCC3A               E-V MATRIX                          3  2571  44V                715
3115 30 19          DSA   TWTY                LOCATION                            3  2574  43V                715
3116 30 20          MLC   PROD,IX1                                                7  2575  M 623 089          715
3117 30 21          MLZS  @0@,IX1                                                 7  2582  Y I4Z 089          715
3118 30 22          MLC   PBF2&29,EVMAT&9&X1   STORE E                            7  2589  M 54W 7UU          715
3119 30 23          MLC   PBF2&39,EVMAT&19&X1  STORE V                            7  2596  M 55W 7VU          715
3120 30 24          C     PBF2&19,PBF2&29     BRANCH TO PSP13                     7  2603  C 53W 54W          716
3121 30 25          BU    PSP13               IF NOT CRITICAL PT. PORTFOLIO       5  2610  B O22 /            716
3122 30 26          MLZS  @-@,EVMAT&19&X1     SET V NEG IF CRITICAL PT. PORT.     7  2615  Y I5| 7VU          716
3123 30 27   PSP13  RTW   3,PBUF2             READ 1 BLOCK OF SECURITIES          8  2622  L %U3 55Y R        716
3124 30 28          BER   ERRR3                                                   5  2630  B !06 L            716
3125 30 29          BEF   PSP17               BRANCH TO PSP17 ON E-O-F            5  2635  B Q30 K            716
3126 30 30          MLC   ZEROS,IX1           SET BUF 2 LOCATION TO 000           7  2640  M /54 089          717
3127 30 31   PSP14  MLC   PBUF2&2&X1,PCC3A                                        7  2647  M 5W| 44V          717
3128 30 32          S     LOROW,PCC3A         BRANCH TO PSP16                     7  2654  S 42Z 44V          717
3129 30 33          BM    PSP16,PCC3A         IF LOROW GREATER THAN ID            8  2661  V Q11 44V K        717
3130 30 34          MLC   HIROW,PCC3B                                             7  2669  M 43S 44Y          717
3131 30 35          S     PBUF2&2&X1,PCC3B    BRANCH TO PSP13                     7  2676  S 5W| 44Y          718
3132 30 36          BM    PSP13,PCC3B         IF ID GREATER THAN HIROW            8  2683  V O22 44Y K        718
3133 30 37          B     MULT1                                                   4  2691  B 336              718
3134 30 38          DSA   PCC3A                                                   3  2697  44V                718
3135 30 39          DSA   FFTY                COMPUTE                             3  2700  43X                718
3136 30 40          MLC   PROD,PCC3A          ROW                                 7  2701  M 623 44V          718
3137 30 41          MLZS  @0@,PCC3A                                               7  2708  Y I4Z 44V          718
3138 30 42          S     @1000@,PROD         LOCATION                            7  2715  S I5U 623          719
3139 30 43          BM    PSP15,PROD                                              8  2722  V P59 623 K        719
3140 30 44          MLZS  A,PCC3A-2                                               7  2730  Y 44| 44T          719
3141 30 45          S     @1000@,PROD                                             7  2737  S I5U 623          719
3142 30 46          BM    PSP15,PROD                                              8  2744  V P59 623 K        719
3143 30 47          MLZS  B,PCC3A-2                                               7  2752  Y 44/ 44T          720
3144 30 48   PSP15  MLC   COLCT,PCC3B                                             7  2759  M 42T 44Y          720
3145 30 49          S     LOCOL,PCC3B         COMPUTE                             7  2766  S 41X 44Y          720
3146 30 50          B     MULT1               COLUMN                              4  2773  B 336              720
3147 30 51          DSA   PCC3B               LOCATION                            3  2779  44Y                720
3148 30 52          DSA   FIVE                                                    3  2782  Z43                720
3149 30 53          MLZS  @0@,PROD                                                7  2783  Y I4Z 623          720
3150 30 54          A     PROD,PCC3A                                              7  2790  A 623 44V          721
3151 30 55          MLC   PCC3A,IX2                                               7  2797  M 44V 094          721
3152 30 56          MLC   PBUF2&7&X1,XMAT&4&X2  STORE X IN X-MATRIX               7  2804  M 5WV 9M|          721
3153 30 57   PSP16  A     @8@,IX1             ADD 8 TO BUF 2 LOCATION             7  2811  A I5V 089          721
3154 30 58          BCE   PSP13,PBUF2&X1,}    BRANCH TO PSP13 IF BUF2 DONE        8  2818  B O22 5VY }        721
3155 30 59          B     PSP14                                                   4  2826  B O47              722
3156 30 60   PSP17  A     ONE,COLCT           ADD 1 TO COLCT                      7  2830  A /55 42T          722
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SEQ PG LIN  LABEL  OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD
3157 30 61          MLC   HICOL,PCC3A                               7  2837  M 42| 44V          722
3158 30 62          S     COLCT,PCC3A                               7  2844  S 42T 44V          722
3159 30 63          BWZ   PSP12,PCC3A,B       BRANCH TO PSP12 IF NOT LAST COL.  8  2851  V N30 44V B        722
3160 30 631         RWD   3                   REWIND TAPE 3             5  2859  U %U3 R            722
3161 30 64          BCE   PSP45,FSTPG,2       BRANCH TO PSP45 IF NOT 1ST PAGE   8  2864  B G78 43T 2        723
3162 30 65          MLC   PSHD1,215           SET HEADING FOR E-S       7  2872  M 47Z 215          723
3163 30 66          MLC   @227@,PSP18&6       INITIALIZE                7  2879  M I5Y R69          723
3164 30 67          MLC   @227@,PSP19&6       ADDRESSES                 7  2886  M I5Y R97          723
3165 30 68          MLC   @227@,PSP20&6       FOR                       7  2893  M I5Y ?04          723
3166 30 69          MLC   @227@,PSP21&6       FORMATTING                7  2900  M I5Y ?12          724
3167 30 70          MLC   @227@,PSP28&6                                  7  2907  M I5Y ?76          724
3168 30 71          MLC   @222@,PSP22&6       E-S                       7  2914  M I6/ ?19          724
3169 30 72          MLC   @222@,PSP25&6       &                         7  2921  M I6/ ?46          724
3170 30 73          MLC   @221@,PSP23&6       V-S                       7  2928  M I6U ?27          724
3171 30 74          MLC   @221@,PSP26&6                                  7  2935  M I6U ?57          725
3172 30 75          MLC   @220@,PSP24&6                                  7  2942  M I6X ?35          725
3173 30 76          MLC   ZEROS,IX1           SET EVMAT LOCATION TO 000 7  2949  M /54 089          725
3174 30 77          MLC   LOCOL,COLCT                                   7  2956  M 41X 42T          725
3175 30 78  PSP18   MLCWA EDT5,227            PLACE EDIT WORD IN PRINT AREA     7  2963  L Z33 227          725
3176 30 79          A     FIVE,EVMAT&7&X1     ROUND E                   7  2970  A Z43 7US          726
3177 30 80          MLC   EVMAT&6&X1,PCC5A                              7  2977  M 7U/ 45T          726
3178 30 81          MLZS  EVMAT&9&X1,PCC5A                              7  2984  Y 7UU 45T          726
3179 30 82  PSP19   MCE   PCC5A,227           EDIT E TO PRINT           7  2991  E 45T 227          726
3180 30 83  PSP20   BCE   PSP27,227,          BRANCH TO PSP27 IF E NOT NEG.     8  2998  B ?58 227          726
3181 30 84  PSP21   MLC   @ @,227             CLEAR SIGN FROM PRINT AREA        7  3006  M I6Y 227          727
3182 30 85  PSP22   BCE   PSP25,222,          BRANCH TO PSP25 IF TENS POS. BL.  8  3013  B ?40 222          727
3183 30 86  PSP23   BCE   PSP26,221,          BRANCH TO PSP26 IF HDRS POS. BL.  8  3021  B ?51 221          727
3184 30 87  PSP24   MLC   @-@,220             PLACE MINUS SIGN IN THSDS POS.    7  3029  M I5| 220          727
3185 30 88          B     PSP27                                         4  3036  B ?58              727
3186 30 89  PSP25   MLC   @-@,222             PLACE MINUS SIGN IN TENS POS.     7  3040  M I5| 222          728
3187 30 90          B     PSP27                                         4  3047  B ?58              728
3188 30 91  PSP26   MLC   @-@,221             PLACE MINUS SIGN IN HDRS POS.     7  3051  M I5| 221          728
3189 30 92  PSP27   BM    PSP28,EVMAT&19&X1   BRANCH TO PSP28 IF CRITICAL PT.  8  3058  V ?70 7VU K        728
3190 30 93          B     PSP29                                         4  3066  B ?77              728
3191 30 94  PSP28   MLC   @*@,227             PLACE ASTERIC IN PRINT AREA       7  3070  M I6Z 227          728
3192 30 95  PSP29   A     @20@,IX1            ADD 20 TO EVMAT LOCATION  7  3077  A I7/ 089          729
3193 30 96          A     ONE,COLCT                                     7  3084  A /55 42T          729
3194 30 97          MA    @008@,PSP18&6                                 7  3091  # I7U R69          729
3195 30 98          MA    @008@,PSP19&6                                 7  3098  # I7U R97          729
3196 30 99          MA    @008@,PSP20&6                                 7  3105  # I7U ?04          729
3197 31 00          MA    @008@,PSP21&6       MODIFY                    7  3112  # I7U ?12          730
3198 31 01          MA    @008@,PSP22&6       FORMATTING                7  3119  # I7U ?19          730
3199 31 02          MA    @008@,PSP23&6       ADDRESSES                 7  3126  # I7U ?27          730
3200 31 03          MA    @008@,PSP24&6                                 7  3133  # I7U ?35          730
3201 31 04          MA    @008@,PSP25&6                                 7  3140  # I7U ?46          730
3202 31 05          MA    @008@,PSP26&6                                 7  3147  # I7U ?57          731
3203 31 06          MA    @008@,PSP28&6                                 7  3154  # I7U ?76          731
3204 31 07          MLC   HICOL,PCC3A                                   7  3161  M 42| 44V          731
3205 31 08          S     COLCT,PCC3A         BRANCH TO PSP18           7  3168  S 42T 44V          731
3206 31 09          BWZ   PSP18,PCC3A,B       IF COLCT NOT GREATER THAN HICOL   8  3175  V R63 44V B        731
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 SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

3207 31 10           CC    J                                           2  3183  F J               731
3208 31 11           W                          PRINT E-S             1  3185  2                 731
3209 31 12           CS    299                                         4  3186  / 299             732
3210 31 13           MLC   PSHD2,218            SET HEADING FOR V-S   7  3190  M 49X 218         732
3211 31 14           MLC   @226@,PSP30&6        INITIALIZE            7  3197  M I7X B31         732
3212 31 15           MLC   @226@,PSP31&6        FORMATTING ADDRESSES  7  3204  M I7X C00         732
3213 31 16           MLC   ZEROS,IX1            SET E-V MATRIX LOCATION TO 000  7  3211  M /54 089  732
3214 31 17           MLC   LOCOL,COLCT          SET COLCT TO LOCOL    7  3218  M 41X 42T         732
3215 31 18   PSP30   MLCWA EDT1,226             PLACE EDIT WORD IN PRINT AREA  7  3225  L Z26 226  733
3216 31 19           MLZS  @0@,EVMAT&19&X1      CLEAR ZONE FROM V     7  3232  Y I4Z 7VU         733
3217 31 20           MLC   ZEROS,ACCAUT                                7  3239  M /54 T44         733
3218 31 21           MLC   EVMAT&19&X1,ACCAUT-1                       7  3246  M 7VU T43         733
3219 31 22           MLZS  @0@,ACCAUT-1                               7  3253  Y I4Z T43         733
3220 31 23           C     ZEROS,ACCAUT                               7  3260  C /54 T44         734
3221 31 231          BU    PSP30A                                     5  3267  B B83 /           734
3222 31 232          MLC   ZEROS,R                                    7  3272  M /54 T67         734
3223 31 233          B     PSP30B                                     4  3279  B B87             734
3224 31 234  PSP30A  B     SQRT                 CALCULATE SIGMA       4  3283  B /62             734
3225 31 24   PSP30B  MLC   R,PCC5A                                    7  3287  M T67 45T         734
3226 31 25   PSP31   MCE   PCC5A,226           EDIT SIGMA TO PRINT   7  3294  E 45T 226         735
3227 31 26           S     EVMAT&19&X1                                4  3301  S 7VU             735
3228 31 27           MLC   R,EVMAT&19&X1        PLACE SIGMA IN E-V MATRIX  7  3305  M T67 7VU      735
3229 31 28           A     @20@,IX1             ADD 20 TO E-V MATRIX LOCATION  7  3312  A I7/ 089  735
3230 31 29           MA    @008@,PSP30&6        MODIFY                7  3319  # I7U B31         735
3231 31 30           MA    @008@,PSP31&6        FORMATING ADDRESSES   7  3326  # I7U C00         735
3232 31 31           A     ONE,COLCT            ADD 1 TO COLCT        7  3333  A /55 42T         736
3233 31 32           MLC   HICOL,PCC3A                                7  3340  M 42| 44V         736
3234 31 33           S     COLCT,PCC3A          BRANCH TO PSP30       7  3347  S 42T 44V         736
3235 31 34           BWZ   PSP30,PCC3A,B       IF COLCT NOT GREATER THAN HICOL  8  3354  V B25 44V B  736
3236 31 35           CC    S                                          2  3362  F S               736
3237 31 36           W                          PRINT SIGMA-S         1  3364  2                 736
3238 31 37           MLC   ONE,PCC1A            SET N TO 1            7  3365  M /55 44S         736
3239 31 38           MLC   ZEROS,IX2            SET INDEX 2 TO 000    7  3372  M /54 094         737
3240 31 39   PSP32   MLC   PSHD3,219           SET HEADING FOR E &OR- N SIGMA  7  3379  M 51W 219  737
3241 31 40           MLC   PSP90&X2,208        PLACE & OR - IN HEADING  7  3386  M 3OV 208         737
3242 31 41           MLC   PSP95&X2,209        PLACE N IN HEADING    7  3393  M 3P/ 209         737
3243 31 42           MLC   @227@,PSP33&6                              7  3400  M I5Y E00         737
3244 31 43           MLC   @227@,PSP35&6                              7  3407  M I5Y E47         738
3245 31 44           MLC   @227@,PSP36&6        INITIALIZE            7  3414  M I5Y E54         738
3246 31 45           MLC   @227@,PSP37&6        FORMATTING            7  3421  M I5Y E62         738
3247 31 46           MLC   @222@,PSP38&6        ADDRESSES             7  3428  M I6/ E69         738
3248 31 47           MLC   @222@,PSP41&6                              7  3435  M I6/ E96         738
3249 31 48           MLC   @221@,PSP39&6                              7  3442  M I6U E77         739
3250 31 49           MLC   @221@,PSP42&6                              7  3449  M I6U F07         739
3251 31 50           MLC   @220@,PSP40&6                              7  3456  M I6X E85         739
3252 31 51           MLC   ZEROS,IX1            SET E-V MATRIX LOCATION TO 000  7  3463  M /54 089  739
3253 31 52           MLC   LOCOL,COLCT          SET COLCT TO LOCOL    7  3470  M 41X 42T         739
3254 31 53   PSP32A  B     MULT1                                      4  3477  B 336             739
3255 31 54           DSA   PCC1A                COMPUTE N * SIGMA     3  3483  44S               740
3256 31 55           DSA   EVMAT&19&X1                                3  3486  7VU               740
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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

3257 31 56          MLC   PROD,PCC5B                                   7  3487  M 623 45Y          740
3258 31 57   PSP33  MLCWA EDT5,227           PLACE EDIT WORD IN PRINT AREA   7  3494  L Z33 227          740
3259 31 58          MLC   EVMAT&6&X1,PCC5A    E                            7  3501  M 7U/ 45T          740
3260 31 59          MLZS  EVMAT&9&X1,PCC5A                                  7  3508  Y 7UU 45T          740
3261 31 60          BCE   PSP34,208,-                                       8  3515  B E34 208 -        741
3262 31 61          A     PCC5B,PCC5A         & N * SIGMA                  7  3523  A 45Y 45T          741
3263 31 62          B     PSP35                                             4  3530  B E41              741
3264 31 63   PSP34  S     PCC5B,PCC5A         - N * SIGMA                  7  3534  S 45Y 45T          741
3265 31 64   PSP35  MCE   PCC5A,227           EDIT E & OR - N * SIGMA TO PRINT  7  3541  E 45T 227          741
3266 31 65   PSP36  BCE   PSP43,227,          BRANCH TO PSP43 IF NOT NEG.  8  3548  B F08 227          742
3267 31 66   PSP37  MLC   @ @,227             SET SIGN BLANK               7  3556  M I6Y 227          742
3268 31 67   PSP38  BCE   PSP41,222,          BRANCH TO PSP41 IF TENS POS. BL.  8  3563  B E90 222          742
3269 31 68   PSP39  BCE   PSP42,221,          BRANCH TO PSP42 IF HDRS POS. BL.  8  3571  B F01 221          742
3270 31 69   PSP40  MLC   @-@,220             PUT MINUS SIGN IN THSDS POS. 7  3579  M I5| 220          742
3271 31 70          B     PSP43                                             4  3586  B F08              743
3272 31 71   PSP41  MLC   @-@,222             PUT MINUS SIGN IN TENS POS.  7  3590  M I5| 222          743
3273 31 72          B     PSP43                                             4  3597  B F08              743
3274 31 73   PSP42  MLC   @-@,221             PUT MINUS SIGN IN HDRS POS.  7  3601  M I5| 221          743
3275 31 74   PSP43  A     @20@,IX1            ADD 20 TO E-V MATRIX LOCATION  7  3608  A I7/ 089          743
3276 31 75          A     ONE,COLCT           ADD 1 TO COLCT               7  3615  A /55 42T          743
3277 31 76          MA    @008@,PSP33&6                                     7  3622  # I7U E00          744
3278 31 77          MA    @008@,PSP35&6                                     7  3629  # I7U E47          744
3279 31 78          MA    @008@,PSP36&6       MODIFY                       7  3636  # I7U E54          744
3280 31 79          MA    @008@,PSP37&6       FORMATTING                   7  3643  # I7U E62          744
3281 31 80          MA    @008@,PSP38&6       ADDRESSES                    7  3650  # I7U E69          744
3282 31 81          MA    @008@,PSP39&6                                     7  3657  # I7U E77          745
3283 31 82          MA    @008@,PSP40&6                                     7  3664  # I7U E85          745
3284 31 83          MA    @008@,PSP41&6                                     7  3671  # I7U E96          745
3285 31 84          MA    @008@,PSP42&6                                     7  3678  # I7U F07          745
3286 31 85          MLC   HICOL,PCC3A                                      7  3685  M 42| 44V          745
3287 31 86          S     COLCT,PCC3A         BRANCH TO PSP32A             7  3692  S 42T 44V          746
3288 31 87          BWZ   PSP32A,PCC3A,B      IF COLCT NOT GREATER THAN HICOL  8  3699  V D77 44V B        746
3289 31 88          BCE   PSP44,208,-         BRANCH TO PSP44 IF IX2 EVEN  8  3707  B G24 208 -        746
3290 31 89          A     ONE,PCC1A           N EQUALS N & 1               7  3715  A /55 44S          746
3291 31 90          CC    S                   EXTRA SPACE AFTER PRINT      2  3722  F S                746
3292 31 91   PSP44  W                         PRINT E & OR - SIGMA         1  3724  2                  746
3293 31 92          CS    299                                               4  3725  / 299              746
3294 31 93          A     ONEMA,IX2           ADD 001 TO INDEX 2           7  3729  A /28 094          747
3295 31 94          C     @006@,IX2           BRANCH TO PSP32              7  3736  C I8| 094          747
3296 31 95          BU    PSP32               IF IX 2 NOT 006              5  3743  B C79 /            747
3297 31 96          CC    S                                                 2  3748  F S                747
3298 31 97          MLC   PSP99,227                                         7  3750  M 41S 227          747
3299 31 98          W                                                       1  3757  2                  747
3300 31 99          MLC   TWO,FSTPG           SET 1ST PAGE FLAG TO 2       7  3758  M /56 43T          747
3301 32 00          A     @17@,NOLNP                                        7  3765  A I8S 41U          748
3302 32 01          CS    299                                               4  3772  / 299              748
3303 32 02          CC    K                   SPACE 2 LINES                2  3776  F K                748
3304 32 03   PSP45  MLC   LOROW,ROWCT         SET ROWCT TO LOROW           7  3778  M 42Z 42W          748
3305 32 04          MLC   ZEROS,PCC3A         SET X-MATRIX LOCATION TO 000  7  3785  M /54 44V          748
3306 32 05   PSP46  RTW   4,210               READ EXTERNAL ID FOR ROWCT   8  3792  L %U4 210 R        748
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 SEQ PG LIN  LABEL   OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

3307 32 06           BER   ERRR4                                       5  3800  B !68 L            749
3308 32 07           MLC   @ @,215                                     7  3805  M I6Y 215          749
3309 32 08           MLC   ZEROS,PCC6A         SET SUM OF X-S TO 00.0000  7  3812  M /54 46U          749
3310 32 09           MLC   @226@,PSP47&6       INITIALIZE                 7  3819  M I7X H95          749
3311 32 10           MLC   @226@,PSP48&6       FORMATTING ADDRESSES       7  3826  M I7X I02          749
3312 32 11           MLC   @226@,PSP48C&6                                  7  3833  M I7X I25          750
3313 32 12           MLC   @226@,PSP48F&6                                  7  3840  M I7X I51          750
3314 32 13           MLC   @225@,PSP48B&6                                  7  3847  M I8V I17          750
3315 32 14           MLC   @225@,PSP48E&6                                  7  3854  M I8V I44          750
3316 32 15           MLC   @223@,PSP48A&6                                  7  3861  M I8Y I09          750
3317 32 16           MLC   @223@,PSP48D&6                                  7  3868  M I8Y I37          751
3318 32 17           MLC   LOCOL,COLCT          SET COLCT TO LOCOL         7  3875  M 41X 42T          751
3319 32 18           MLC   PCC3A,IX1           PLACE X-MATRIX LOC. IN INDEX 1  7  3882  M 44V 089          751
3320 32 19   PSP47   MLCWA EDT1,226            PLACE EDIT WORD IN PRINT AREA   7  3889  L Z26 226          751
3321 32 20   PSP48   MCE   XMAT&4&X1,226       EDIT X TO PRINT AREA       7  3896  E 9U| 226          751
3322 32 21   PSP48A  BCE   PSP48D,223,                                     8  3903  B I31 223          752
3323 32 22   PSP48B  BCE   PSP48E,225,                                     8  3911  B I38 225          752
3324 32 23   PSP48C  BCE   PSP48F,226,                                     8  3919  B I45 226          752
3325 32 24           B     PSP48G                                          4  3927  B I52              752
3326 32 25   PSP48D  MLC   @0@,223                                        7  3931  M I4Z 223          752
3327 32 26   PSP48E  MLC   @0@,225                                        7  3938  M I4Z 225          753
3328 32 27   PSP48F  MLC   @0@,226                                        7  3945  M I4Z 226          753
3329 32 28   PSP48G  A     XMAT&4&X1,PCC6A     ADD X TO SUM OF X-S        7  3952  A 9U| 46U          753
3330 32 29           MA    @0008@,PSP47&6      MODIFY                     7  3959  # I7U H95          753
3331 32 30           MA    @0008@,PSP48&6      FORMATTING ADDRESSES       7  3966  # I7U I02          753
3332 32 31           MA    @0008@,PSP48A&6                                7  3973  # I7U I09          754
3333 32 32           MA    @0008@,PSP48B&6                                7  3980  # I7U I17          754
3334 32 33           MA    @0008@,PSP48C&6                                7  3987  # I7U I25          754
3335 32 34           MA    @0008@,PSP48D&6                                7  3994  # I7U I37          754
3336 32 35           MA    @0008@,PSP48E&6                                7  4001  # I7U I44          754
3337 32 36           MA    @0008@,PSP48F&6                                7  4008  # I7U I51          755
3338 32 37           MA    @0005@,IX1          ADD 5 TO X-MATRIX LOCATION 7  4015  # I4V 089          755
3339 32 38           A     ONE,COLCT           ADD 1 TO COLCT             7  4022  A /55 42T          755
3340 32 39           MLC   HICOL,PCC3B                                    7  4029  M 42| 44Y          755
3341 32 40           S     COLCT,PCC3B         BRANCH TO PSP47            7  4036  S 42T 44Y          755
3342 32 41           BWZ   PSP47,PCC3B,B      IF COLCT NOT GREATER THAN HICOL  8  4043  V H89 44Y B       756
3343 32 42           C     ZEROS,PCC6A         BRANCH TO PSP49            7  4051  C /54 46U          756
3344 32 43           BU    PSP49               IF SUM X-S NOT 00.0000     5  4058  B 06X /            756
3345 32 44           B     PSP50                                          4  4063  B 11W              756
3346 32 45   PSP49   C     NOLNP,@60@          BRANCH TO PSP49A           7  4067  C 41U I9|          756
3347 32 46           BU    PSP49A              IF PAGE INCOMPLETE         5  4074  B 10Y /            756
3348 32 47           B     TITPR               PRINT TITLE CARDS          4  4079  B X63              757
3349 32 48           MLC   TITNO,NOLNP         INITIALIZE NO. OF LINES PRINTED  7  4083  M Z08 41U          757
3350 32 49           CC    J                                              2  4090  F J                757
3351 32 50           A     ONE,NOLNP                                      7  4092  A /55 41U          757
3352 32 51           BSP   4                                              5  4099  U %U4 B            757
3353 32 52           B     PSP46                                          4  4104  B G92              757
3354 32 53   PSP49A  W                         PRINT X-S                  1  4108  2                  757
3355 32 54           A     ONE,NOLNP           ADD 1 TO NO. OF LINES PRINTED  7  4109  A /55 41U          758
3356 32 55   PSP50   CS    299                                            4  4116  / 299              758
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 SEQ PG LIN  LABEL  OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD

3357 32 56          MA    FFTY,PCC3A          ADD 50 TO X-MATRIX LOCATION      7  4120  # 43X 44V          758
3358 32 57          A     ONE,ROWCT           ADD 1 TO ROWCT                   7  4127  A /55 42W          758
3359 32 58          MLC   HIROW,PCC3B                                         7  4134  M 43S 44Y          758
3360 32 59          S     ROWCT,PCC3B         BRANCH TO PSP46                  7  4141  S 42W 44Y          758
3361 32 60          BWZ   PSP46,PCC3B,B       IF ROWCT NOT GREATER THAN HIROW  8  4148  V G92 44Y B        759
3362 32 62          C     HIROW,NSEC          BRANCH TO PSPS1 IF               7  4156  C 43S Z16          759
3363 32 63          BU    PSP51               HIROW NOT EQUAL TO NO. OF SEC.   5  4163  B 17S /            759
3364 32 64          B     PSP53                                                4  4168  B 23X             759
3365 32 65   PSP51  MLC   HIROW,LOROW                                         7  4172  M 43S 42Z          759
3366 32 66          A     ONE,LOROW           SET LOROW TO HIROW & 1           7  4179  A /55 42Z          759
3367 32 67          MLC   HIROW,PCC3A                                        7  4186  M 43S 44V          760
3368 32 68          A     @060@,PCC3A                                        7  4193  A I4S 44V          760
3369 32 69          S     NSEC,PCC3A          BRANCH TO PSP52 IF NO. OF SEC.   7  4200  S Z16 44V          760
3370 32 70          BM    PSP52,PCC3A         GREATER THAN HIROW & 60          8  4207  V 22W 44V K        760
3371 32 71          MLC   NSEC,HIROW          SET HIROW TO NO. OF SEC.         7  4215  M Z16 43S          760
3372 32 72          B     PSP8A                                                4  4222  B M21             761
3373 32 73   PSP52  A     @060@,HIROW         SET HIROW TO HIROW & 60          7  4226  A I4S 43S          761
3374 32 74          B     PSP8A                                                4  4233  B M21             761
3375 32 75   PSP53  C     HICOL,NOPT          BRANCH TO PSP54                  7  4237  C 42| Z20          761
3376 32 76          BU    PSP54               IF NOT DONE                      5  4244  B 27| /            761
3377 32 77          BIN   PSP57,A             BRANCH TO PSP57 IF LAST CASE     5  4249  B 34U A            761
3378 32 78          RTW   1,1                 READ BOOTSTRAP                   8  4254  L %U1 001 R        762
3379 32 79          SW    1                                                    4  4262  , 001             762
3380 32 80          B     1                                                    4  4266  B 001             762
3381 32 81   PSP54  RWD   4                   REWIND TAPE 4                    5  4270  U %U4 R           762
3382 32 82          MLC   HICOL,LOCOL                                        7  4275  M 42| 41X          762
3383 32 83          A     ONE,LOCOL           SET LOCOL TO HICOL & 1           7  4282  A /55 41X          762
3384 32 84          MLC   HICOL,PCC3A                                        7  4289  M 42| 44V          763
3385 32 85          A     TEN,PCC3A                                          7  4296  A 43Z 44V          763
3386 32 86          S     NOPT,PCC3A          BRANCH TO PSP56 IF NO. OF PORT.  7  4303  S Z20 44V          763
3387 32 87          BM    PSP56,PCC3A         GREATER THAN HICOL & 10          8  4310  V 33T 44V K        763
3388 32 88          MLC   NOPT,HICOL          GET HICOL TO NO. OF PORT.        7  4318  M Z20 42|          763
3389 32 89   PSP55  B     TITPR               PRINT TITLE CARDS                4  4325  B X63             764
3390 32 90          B     PSP6                                                 4  4329  B L36             764
3391 32 91   PSP56  A     TEN,HICOL                                          7  4333  A 43Z 42|          764
3392 32 92          B     PSP55                                              4  4340  B 32V             764
3393 32 93   PSP57  CS    332                                                4  4344  / 332             764
3394 32 94          CS                                                       1  4348  /                 764
3395 32 95          MLCWA PSP98,215                                          7  4349  L 38W 215          764
3396 32 96          CC    1                                                  2  4356  F 1               765
3397 32 97          W                                                        1  4358  2                 765
3398 32 98          CC    1                                                  2  4359  F 1               765
3399 32 99          H     *-3                                                4  4361  . 36/             765
3400 33 00   PSP90  DCW   @-@                                                1  4365                    765
3401 33 01          DCW   @&@                                                1  4366                    765
3402 33 02          DCW   @-@                                                1  4367                    765
3403 33 03          DCW   @&@                                                1  4368                    766
3404 33 04          DCW   @-@                                                1  4369                    766
3405 33 05          DCW   @&@                                                1  4370                    766
3406 33 06   PSP95  DCW   @1@                                                1  4371                    766
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 SEQ PG LIN  LABEL   OP    OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD

3407 33 07           DCW   @1@                                       1  4372                     766
3408 33 08           DCW   @2@                                       1  4373                     766
3409 33 09           DCW   @2@                                       1  4374                     766
3410 33 10           DCW   @3@                                       1  4375                     767
3411 33 11           DCW   @3@                                       1  4376                     767
3412 33 12   PSP98   DCW   @END OF RUN@                             10  4386                     767
3413 33 13   PSP99   DCW   @* CRITICAL POINT PORTFOLIO@            26  4412                     767
3414 33 14   NOLNP   DCW   #2                                        2  4414                     768
3415 33 15   LOCOL   DCW   #3                                        3  4417                     768
3416 33 16   HICOL   DCW   #3                                        3  4420                     768
3417 33 17   COLCT   DCW   #3                                        3  4423                     768
3418 33 18   ROWCT   DCW   #3                                        3  4426                     768
3419 33 19   LOROW   DCW   #3                                        3  4429                     768
3420 33 20   HIROW   DCW   #3                                        3  4432                     768
3421 33 21   FSTPG   DCW   #1                                        1  4433                     769
3422 33 22   TWTY    DCW   20                                        2  4435                     769
3423 33 23   FFTY    DCW   50                                        2  4437                     769
3424 33 24   TEN     DCW   10                                        2  4439                     769
3425 33 25   A       DCW   @/@                                       1  4440                     769
3426 33 26   B       DCW   @J@                                       1  4441                     769
3427 33 27   PCC1A   DCW   #1                                        1  4442                     769
3428 33 28   PCC3A   DCW   #3                                        3  4445                     770
3429 33 29   PCC3B   DCW   #3                                        3  4448                     770
3430 33 30   PCC5A   DCW   #5                                        5  4453                     770
3431 33 31   PCC5B   DCW   #5                                        5  4458                     770
3432 33 32   PCC6A   DCW   #6                                        6  4464                     770
3433 33 33   PSHD1   DCW   @EXPECTED RETURN@                       15  4479                     770
3434 33 34   PSHD2   DCW   @STANDARD DEVIATION@                    18  4497                     771
3435 33 35   PSHD3   DCW   @EXP.RET.   STD.DEV.@                   19  4516                     771
3436 33 36   PBF2    DA    1X40,G,C                                    4517   4556              773
3437 33 37                 1,10                                        4526              FIELD  773
3438 33 38                 11,20                                       4536              FIELD  773
3439 33 39                 21,30                                       4546              FIELD  773
3440 33 40                 31,40                                       4556              FIELD  774
                           DCW   @}@                                 1  4557              GMARK  774
3441 33 41   PBUF2   DA    22X8,G,C                                    4558   4733              781
3442 33 42                 1,3                                         4560              FIELD  782
3443 33 43                 4,8                                         4565              FIELD  785
                           DCW   @}@                                 1  4734              GMARK  789
3444 33 44   EVMAT   DA    10X20,G,C                                   4735   4934              795
3445 33 45                 1,10                                        4744              FIELD  796
3446 33 46                 11,20                                       4754              FIELD  797
                           DCW   @}@                                 1  4935              GMARK  799
3447 33 47   XMAT    DA    600X5,G,C                                   4936   7935              977
3448 33 48                 1,5                                         4940              FIELD  977
                           DCW   @}@                                 1  7936              GMARK 1077
                           DCW   @010@                               3  7939              LIT   1077
                                 @060@                               3  7942              LIT   1077
                                 @005@                               3  7945              LIT   1077
                                 @?00@                               3  7948              LIT   1077
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 SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD

                         @0@                                            1  7949              LIT   1078
                         @-@                                            1  7950              LIT   1078
                         @1000@                                         4  7954              LIT   1078
                         @8@                                            1  7955              LIT   1078
                         @227@                                          3  7958              LIT   1078
                         @222@                                          3  7961              LIT   1078
                         @221@                                          3  7964              LIT   1078
                         @220@                                          3  7967              LIT   1079
                         @ @                                            1  7968              LIT   1079
                         @*@                                            1  7969              LIT   1079
                         @20@                                           2  7971              LIT   1079
                         @008@                                          3  7974              LIT   1079
                         @226@                                          3  7977              LIT   1079
                         @006@                                          3  7980              LIT   1079
                         @17@                                           2  7982              LIT   1080
                         @225@                                          3  7985              LIT   1080
                         @223@                                          3  7988              LIT   1080
                         @60@                                           2  7990              LIT   1080
3449 33 49          EX   PSP                                                   B J70              1081
3450 33 50          END  PSA                                                   / G99 080          1084
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