



# UNIVAC

**TYPE 1219B  
DIGITAL DATA  
COMPUTER**

**DIAGNOSTIC  
MANUAL  
VOLUME II**

**DIAGNOSTIC MANUAL**

**for**

**TYPE 1219B  
DIGITAL DATA COMPUTER**

**VOLUME II  
SECTION 4**

**PX 4637-2-1**

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LIST OF EFFECTIVE PAGES

| PAGE<br>NUMBER                                     | CHANGE<br>IN EFFECT              |
|--|----------------------------------|
| Volume II<br><br>Title<br>ii to iv<br>4-1 to 4-370 | Original<br>Original<br>Original |

TABLE OF CONTENTS

SECTION 4 - PROGRAM LISTING

| Paragraph |                               | Page  |
|-----------|-------------------------------|-------|
| 4.0       | <b>Introduction</b> . . . . . | 4-1   |
|           | <b>EZLOAD</b> . . . . .       | 4-3   |
|           | <b>EASIER</b> . . . . .       | 4-9   |
|           | <b>CONTBASI</b> . . . . .     | 4-13  |
|           | <b>MEDIA</b> . . . . .        | 4-95  |
|           | <b>IOTA</b> . . . . .         | 4-215 |





## SECTION 4 - PROGRAM LISTING

4.0

### INTRODUCTION

4.0

This section contains the side-by-side listing of the source and object programs for the 1219 B diagnostic programs. An example of a listing entry with an explanatory description is shown below.

|                    |             |  |                   |              |                         |
|--------------------|-------------|--|-------------------|--------------|-------------------------|
| <u>002135</u>      | <u>PLUM</u> | <u>STRAU * TRAP</u>  | <u>CK + - NET</u> | <u>02724</u> | <u>46 3016</u>          |
| SEQUENCE<br>NUMBER | LABEL       | MNEMONIC<br>CODE<br>INSTRUCTION  | NOTES             | ADDRESS      | ABSOLUTE<br>INSTRUCTION |
|                    |             | <div style="border-top: 1px solid black; width: 100%; margin-top: 5px;"></div> STATEMENT |                   |              |                         |

The listings are arranged as follows:

- 1) EZLOAD, pages 4-3 through 4-8.
- 2) EASIER, pages 4-9 through 4-12.
- 3) CONTBASI, pages 4-13 through 4-94.
- 4) MEDIA, pages 4-95 through 4-214.
- 5) IOTA, pages 4-215 through 4-370.



=====  
 OUTPUT 12  
 =====

 MEM. STRG. USED 00145  
 00240 THRU 00404

| LOK   | INSTR   | L1ID    | LO   |
|-------|---------|---------|--|
|       |         | 0       | EZLOAD   |
| 00240 | 50 5600 | 1       | EZLOAD   |
|       |         | 2       | PROG*ABICHT*5JULY1967                                |
|       |         | 3       | STOP*00  |
|       |         | 4       | REMARK*IF THIS STOP OCCURS, IT INDICATES THAT A BIT- |
| 00241 | 50 5677 | 5       | REMARK*OR BITS OF BITS 0 THRU 5 HAVE PICKED UP.      |
|       |         | 6       | STOP*77  |
|       |         | 7       | REMARK*IF ALL STOP LIGHTS ARE LIT, ALL IS OK.        |
|       |         |         | REMARK*BITS CORRESPONDING TO STOP LIGHTS NOT-        |
|       |         |         | REMARK*LIT WERE DROPPED.                             |
| 43    | 00242   | 44 0406 | 10   |
|       | 00243   | 10 0252 | 11   |
|       | 00244   | 60 0246 | 12   |
|       | 00245   | 50 5640 | 13   |
|       |         |         | 14   |
|       |         |         | 15   |
|       | 00246   | 10 0253 | 16   |
|       | 00247   | 50 6200 | 17   |
|       |         |         | 18   |
|       |         |         | 19   |
|       |         |         | 20   |
|       | 00250   | 60 0254 | 21   |
|       | 00251   | 50 5640 | 22   |
|       |         |         | 23   |
|       |         |         | 24   |
|       |         |         | 25   |
|       |         |         | 26   |
|       | 00252   | 00 0000 | 27   |
|       |         |         | 28   |
|       |         |         | 29   |
|       |         |         | 30   |
|       | 00253   | 77 7777 | 31   |
|       | 00254   | 76 0256 | 32   |
|       | 00255   | 50 5640 | 33   |
|       |         |         | 34   |
|       | 00256   | 00 0000 | 35   |

STRAL\*0406 STORE PARAMETERS  
 ENTAU\*ZEROS ALL ZEROS TO AU  
 JPAUZ\*LOK+2  
 STOP\*40  
 REMARK\*BITS SET IN AU WERE PICKED UP.  
 REMARK\*IF AU IS CLEARED, JPAUZ INSTRUCTION (60) IS BAD.  
 ENTAU\*WONES ALL ONES TO AU  
 CPAU\*  
 JPAUZ\*LOK+4  
 STOP\*40  
 REMARK\*IF AU EQUALS 777777, THEN CPAU INSTRUCTION-  
 REMARK\*(50 62) IS BAD.  
 REMARK\*IF JUST SOME BITS ARE SET IN AU, THEN EITHER-  
 REMARK\*THOSE BITS WERE DROPPED IN MEMORY OR THE-  
 REMARK\*COMPLEMENT DOES NOT WORK FOR THOSE BITS.  
 ZEROS 0\*0 ALL ZEROS CONSTANT  
 WONES 77\*7777 ALL ONES CONSTANT  
 RJP\*STRAD VERIFY FUNCTION 76  
 STOP\*40  
 REMARK\*RJP INSTRUCTION (76) DOES NOT JUMP.  
 STRAD 0\*0 RJP ENTRANCE ADDRESS

|       |    |      |     |       |  |                                 |
|-------|----|------|-----|-------|--|---------------------------------|
| 00257 | 55 | 0261 | 35  |       | IJP*REFAD  | VERIFY FUNCTION 55              |
| 00260 | 50 | 5640 | 36  |       | STOP*40  |                                 |
|       |    |      | 37  |       | REMARK*IJP INSTRUCTION (55)DOES NOT JUMP.              |                                 |
| 00261 | 00 | 0262 | 40  | REFAD | 0*REFAD+1  | IJP REFERAL TO NEXT INSTRUCTION |
| 00262 | 44 | 0252 | 41  |       | STRAL*ZEROS  | SET ZEROS TO SOMETHING          |
| 00263 | 46 | 0252 | 42  |       | STRAU*ZEROS  | CLEAR ZEROS                     |
| 00264 | 10 | 0252 | 43  |       | ENTAU*ZEROS  | DISPLAY ZEROS                   |
| 00265 | 60 | 0267 | 44  |       | JPAUZ*LOK+2  | VERIFY FUNCTION 46              |
| 00266 | 50 | 5640 | 45  |       | STOP*40  |                                 |
|       |    |      | 46  |       | REMARK*STRAU INSTRUCTION (46)DOES NOT STORE.           |                                 |
| 00267 | 70 | 0255 | 47  |       | ENTALK*WONES+2   | SET AL TO P+1 ADDRESS OF RJP    |
| 00270 | 02 | 0256 | 50  |       | CMAL*STRAD   | COMPARE AGAINST P+1 OF RJP      |
| 00271 | 63 | 0301 | 51  |       | JPNOT*REFER  | JP IF NO COMPARE                |
| 00272 | 12 | 0252 | 52  |       | ENTAL*ZEROS  | CLEAR AL                        |
| 00273 | 61 | 0275 | 53  |       | JPALZ*LOK+2  | VERIFY FUNCTIONS 12 AND 61      |
| 00274 | 50 | 5640 | 54  |       | STOP*40  |                                 |
|       |    |      | 55  |       | REMARK*IF AL NOT EQUAL TO ZERO, THE ENTAL INSTRUCTION- |                                 |
|       |    |      | 56  |       | REMARK*(12)DOES NOT CHANGE AL.                         |                                 |
|       |    |      | 57  |       | REMARK*IF AL EQUALS ZERO, THE JPALZ INSTRUCTION-       |                                 |
|       |    |      | 60  |       | REMARK*(61)DOES NOT SENSE THAT AL EQUALS ZERO.         |                                 |
| 00275 | 40 | 0256 | 61  |       | CL*STRAD   | CLEAR ENTRANCE ADDRESS          |
| 00276 | 12 | 0256 | 62  |       | ENTAL*STRAD  | VERIFY FUNCTION 40              |
| 00277 | 61 | 0303 | 63  |       | JPALZ*CKSUM  | JUMP IF GOOD AND BEGIN CHECKSUM |
| 00300 | 50 | 5640 | 64  |       | STOP*40  |                                 |
|       |    |      | 65  |       | REMARK*CL INSTRUCTION (40)DOES NOT CLEAR THE ADDRESS.  |                                 |
| 00301 | 10 | 0256 | 66  | REFER | ENTAU*STRAD  | PROBABLE P+1 TO AU              |
| 00302 | 50 | 5640 | 67  |       | STOP*40  |                                 |
|       |    |      | 70  |       | REMARK*AU EQUALS PROBABLE STRAD P+1.                   |                                 |
|       |    |      | 71  |       | REMARK*AL EQUALS WHAT AU SHOULD BE.                    |                                 |
|       |    |      | 72  |       | REMARK*EITHER THE RJP INSTRUCTION (76)DOES NOT PUT-    |                                 |
|       |    |      | 73  |       | REMARK*P+1 AT THE ENTRANCE ADDRESS OR-                 |                                 |
|       |    |      | 74  |       | REMARK*THE CMAL INSTRUCTION (02)DOES NOT COMPARE OR-   |                                 |
|       |    |      | 75  |       | REMARK*THE JPNOT INSTRUCTION (63) JUMPS EVEN THOUGH-   |                                 |
|       |    |      | 76  |       | REMARK*THE COMPARE IS EQUAL.                           |                                 |
| 00303 | 36 | 0144 | 77  | CKSUM | ENTBK*0144   | SET B TO AREA LOADER LENGTH     |
| 00304 | 15 | 0240 | 100 |       | ADDALB*EZLOAD  | COMPUTE CHECKSUM                |

4-5

|       |    |      |     |       |  |                              |
|-------|----|------|-----|-------|--|------------------------------|
| 00305 | 73 | 0304 | 101 |       | BJP*LOK-1  | CONTINUE IF NOT FINISHED     |
| 00306 | 02 | 0405 | 102 |       | CMAL*LAST  | COMPARE CHECKSUMS            |
| 00307 | 63 | 0337 | 103 |       | JPNOT*CKSER  | JUMP IF BAD                  |
| 00310 | 12 | 0213 | 104 |       | ENTAL*0213   | BOOTSTRAP ADDRESS 213 TO AL  |
| 00311 | 02 | 0342 | 105 |       | CMAL*CLEAR   | EQUAL TO 700000?             |
| 00312 | 61 | 0317 | 106 |       | JPEQ*T31   | IF 50, JUMP TO 1231//12/1532 |
| 00313 | 12 | 0213 | 107 | T32   | ENTAL*0213   | BOOTSTRAP ADDRESS 213 TO AL  |
| 00314 | 44 | 0376 | 110 |       | STRAL*RADF+1   | SET LOADER READ INSTRUCTION  |
| 00315 | 12 | 0216 | 111 |       | ENTAL*0216   | BOOTSTRAP ADDRESS 216 TO AL  |
| 00316 | 34 | 0322 | 112 |       | JP*LOK+4   |                              |
| 00317 | 12 | 0214 | 113 | T31   | ENTAL*0214   | BOOTSTRAP ADDRESS 214 TO AL  |
| 00320 | 44 | 0376 | 114 |       | STRAL*RADF+1   | SET LOADER READ INSTRUCTION  |
| 00321 | 12 | 0217 | 115 |       | ENTAL*0217   | BOOTSTRAP ADDRESS 217 TO AL  |
| 00322 | 44 | 0401 | 116 |       | STRAL*RADF+4   | SET SKIP ACTIVE INSTRUCTION  |
| 00323 | 76 | 0341 | 117 |       | RJP*SETAD  | GO READ ADDRESSES            |
| 00324 | 76 | 0363 | 120 | PROAD | RJP*ASSM3  | GO ASSEMBLE ONE INSTRUCTION  |
| 00325 | 45 | 0000 | 121 |       | STRALB*0   | STORE PROGRAM                |
| 00326 | 14 | 0405 | 122 |       | ADDAL*LAST   | ADD TO CHECKSUM              |
| 00327 | 44 | 0405 | 123 |       | STRAL*LAST   | SAVE CHECKSUM                |
| 00330 | 56 | 0362 | 124 |       | BSK*TO   | ALL LOADED YET               |
| 00331 | 34 | 0324 | 125 |       | JP*PROAD   | NO, CONTINUE LOAD            |
| 00332 | 76 | 0363 | 126 |       | RJP*ASSM3  | READ CHECKSUM FROM TAPE      |
| 00333 | 02 | 0405 | 127 |       | CMAL*LAST  | COMPARE CHECKSUM             |
| 00334 | 63 | 0337 | 130 |       | JPNOT*CKSER  | JUMP IF BAD                  |
| 00335 | 50 | 3400 | 131 |       | SIL*0  | SET INTERRUPT LOCKOUT        |
| 00336 | 55 | 0361 | 132 |       | IJP*FROM   | JUMP TO FIRST TEST ADDRESS   |
| 00337 | 10 | 0405 | 133 | CKSER | ENTAU*LAST   | CHECKSUM TO AU               |
| 00340 | 50 | 5640 | 134 |       | STOP*40  |                              |
|       |    |      | 135 |       | REMARK*THE COMPUTED CHECKSUM AND THE CHECKSUM-           |                              |
|       |    |      | 136 |       | REMARK*FRAME FROM TAPE DO NOT COMPARE.                   |                              |
|       |    |      | 137 |       | REMARK*IF ONLY THE LOADER HAS LOADED, THEN-              |                              |
|       |    |      | 140 |       | REMARK*AU CONTAINS THE CHECKSUM FRAME FROM TAPE AND-     |                              |
|       |    |      | 141 |       | REMARK*AL CONTAINS THE CHECKSUM COMPUTED OF THE LOADER.  |                              |
|       |    |      | 142 |       | REMARK*IF BOTH THE LOADER AND PROGRAM HAVE LOADED, THEN- |                              |
|       |    |      | 143 |       | REMARK*AL CONTAINS THE CHECKSUM FRAME FROM TAPE AND-     |                              |
|       |    |      | 144 |       | REMARK*AU CONTAINS THE CHECKSUM COMPUTED OF THE PROGRAM. |                              |

|       |    |      |     |       |             |                           |
|-------|----|------|-----|-------|-------------|---------------------------|
| 00341 | 00 | 0000 | 145 | SETAD | 0*0         | ENTRANCE                  |
| 00342 | 70 | 0000 | 146 | CLEAR | ENTALK*0    | CLEAR AL                  |
| 00343 | 10 | 0252 | 147 |       | ENTAU*ZEROS | CLEAR AU                  |
| 00344 | 76 | 0375 | 150 |       | RJP*RADF    | GO READ THE LEADER        |
| 00345 | 61 | 0344 | 151 |       | JPALZ*LOK-1 | CONTINUE IF FRAME IS ZERO |
| 00346 | 76 | 0363 | 152 |       | RJP*ASSM3   | GO READ BEGINNING ADDRESS |
| 00347 | 50 | 4717 | 153 |       | LSHA*17     | BEGIN TO AU               |
| 00350 | 50 | 4611 | 154 |       | LSHAL*11    | RESTORE AL                |
| 00351 | 76 | 0375 | 155 |       | RJP*RADF    | READ A FRAME              |
| 00352 | 50 | 4606 | 156 |       | LSHAL*6     | SHIFT ADDRESS             |
| 00353 | 76 | 0375 | 157 |       | RJP*RADF    | READ A FRAME              |
| 00354 | 46 | 0361 | 160 |       | STRAU*FROM  | BEGIN TO JUMP ADDRESS     |
| 00355 | 32 | 0361 | 161 |       | ENTB*FROM   | BEGIN TO B                |
| 00356 | 44 | 0362 | 162 |       | STRAL*TO    | SAVE FINAL                |
| 00357 | 40 | 0405 | 163 |       | CL*LAST     | CLEAR CHECKSUM ADDRESS    |
| 00360 | 55 | 0341 | 164 |       | IJP*SETAD   | EXIT                      |
| 00361 | 00 | 0000 | 165 | FROM  | 0*0         | BEGIN ADDRESS             |
| 00362 | 00 | 0000 | 166 | TO    | 0*0         | FINAL ADDRESS             |
| 00363 | 00 | 0000 | 167 | ASSM3 | 0*0         | ENTRANCE                  |
| 00364 | 70 | 0002 | 170 |       | ENTALK*2    | SET INDEX                 |
| 00365 | 44 | 0374 | 171 |       | STRAL*DEX   | STORE INDEX               |
| 00366 | 70 | 0000 | 172 |       | ENTALK*0    | CLEAR AL                  |
| 00367 | 50 | 4606 | 173 |       | LSHAL*6     | SHIFT WORD                |
| 00370 | 76 | 0375 | 174 |       | RJP*RADF    | READ A FRAME              |
| 00371 | 57 | 0374 | 175 |       | ISK*DEX     | IS WORD COMPLETE          |
| 00372 | 34 | 0367 | 176 |       | JP*LOK-3    | NO, CONTINUE              |
| 00373 | 55 | 0363 | 177 |       | IJP*ASSM3   | YES, EXIT                 |
| 00374 | 00 | 0000 | 200 | DEX   | 0*0         | INDEX COUNT               |
| 00375 | 00 | 0000 | 201 | RADF  | 0*0         | ENTRANCE                  |
| 00376 | 50 | 1100 | 202 |       | IN*0        | INPUT ONE FRAME           |
| 00377 | 00 | 0002 | 203 |       | 0*DATA      | AT ADDRESS DATA           |
| 00400 | 00 | 0002 | 204 |       | 0*DATA      | AT ADDRESS DATA           |
| 00401 | 50 | 2100 | 205 |       | SKPIIN*0    | SKIP ON INPUT INACTIVE    |
| 00402 | 34 | 0401 | 206 |       | JP*LOK-1    | TEST ACTIVE               |
| 00403 | 51 | 0002 | 207 |       | SLSET*DATA  | SET DATA TO AL            |
| 00404 | 55 | 0375 | 210 |       | IJP*RADF    | EXIT                      |
|       |    |      | 211 |       | ENDATA*     |                           |

## LABELS AND ADDRESSES

|       |       |        |       |       |       |       |       |       |       |
|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|
| ASSM3 | 00363 | CKSER  | 00337 | CKSUM | 00303 | CLEAR | 00342 | DATA  | 00002 |
| DEX   | 00374 | EZLOAD | 00240 | FROM  | 00361 | LAST  | 00405 | PROAD | 00324 |
| RAUF  | 00375 | REFAD  | 00261 | REFER | 00301 | SETAD | 00341 | STRAD | 00256 |
| TO    | 00362 | T31    | 00317 | T32   | 00313 | WONES | 00253 | ZEROS | 00252 |





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OUTPUT 12

=====

MEM. STRG. USED 00145  
 00240 THRU 00404

4-9

| LOK   | INSTR   | L1ID | LO     |                        |
|-------|---------|------|--------|------------------------|
|       |         | 0    | EASIER | PROG*ABICHT*24JULY1967 |
| 00240 | 34 0301 | 1    | EASIER | JP*CKSUM-2             |
| 00241 | 00 0000 | 2    |        | RESERV*37              |
| 00300 | 00 0000 | 3    | ZEROS  | 0*0                    |
| 00301 | 10 0300 | 4    |        | ENTAU*ZEROS            |
| 00302 | 70 0000 | 5    |        | ENTALK*0               |
| 00303 | 36 0144 | 6    | CKSUM  | ENTBK*0144             |
| 00304 | 15 0240 | 7    |        | ADDALB*EASIER          |
| 00305 | 73 0304 | 10   |        | BJP*LOK-1              |
| 00306 | 02 0405 | 11   |        | CMAL*LAST              |
| 00307 | 63 0337 | 12   |        | JPNOT*CKSER            |
| 00310 | 12 0213 | 13   |        | ENTAL*0213             |
| 00311 | 02 0342 | 14   |        | CMAL*CLEAR             |
| 00312 | 61 0317 | 15   |        | JPEQ*T31               |
| 00313 | 12 0213 | 16   | T32    | ENTAL*0213             |
| 00314 | 44 0376 | 17   |        | STRAL*RADF+1           |
| 00315 | 12 0216 | 20   |        | ENTAL*0216             |
| 00316 | 34 0322 | 21   |        | JP*LOK+4               |
| 00317 | 12 0214 | 22   | T31    | ENTAL*0214             |
| 00320 | 44 0376 | 23   |        | STRAL*RADF+1           |
| 00321 | 12 0217 | 24   |        | ENTAL*0217             |
| 00322 | 44 0401 | 25   |        | STRAL*RADF+4           |
| 00323 | 76 0341 | 26   |        | RJP*SETAD              |
| 00324 | 76 0363 | 27   | PROAD  | RJP*ASSM3              |
| 00325 | 45 0000 | 30   |        | STRALB*0               |
| 00326 | 14 0405 | 31   |        | ADDAL*LAST             |
| 00327 | 44 0405 | 32   |        | STRAL*LAST             |
| 00330 | 56 0362 | 33   |        | BSK*TO                 |
| 00331 | 34 0324 | 34   |        | JP*PROAD               |

RESERVE ADDRESSES 241-277  
 ALL ZEROS CONSTANT  
 CLEAR AU  
 CLEAR AL  
 SET B TO AREA LOADER LENGTH  
 COMPUTE CHECKSUM

CONTINUE IF NOT FINISHED  
 COMPARE CHECKSUMS  
 JUMP IF BAD  
 BOOTSTRAP ADDRESS 213 TO AL  
 EQUAL TO 700000?  
 IF SO, JUMP TO 1232//12/1532  
 BOOTSTRAP ADDRESS 213 TO AL  
 SET LOADER READ INSTRUCTION

BOOTSTRAP ADDRESS 216 TO AL

BOOTSTRAP ADDRESS 214 TO AL  
 SET LOADER READ INSTRUCTION  
 BOOTSTRAP ADDRESS 217 TO AL  
 SET SKIP ACTIVE INSTRUCTION  
 GO READ ADDRESSES  
 GO ASSEMBLE ONE INSTRUCTION

STORE PROGRAM  
 ADD TO CHECKSUM  
 SAVE CHECKSUM  
 ALL LOADED YET  
 NO, CONTINUE LOAD

4-10

|       |    |      |     |       |  |                            |
|-------|----|------|-----|-------|--|----------------------------|
| 00332 | 76 | 0363 | 35  |       | RJP*ASSM3  | READ CHECKSUM FROM TAPE    |
| 00333 | 02 | 0405 | 36  |       | CMAL*LAST  | COMPARE CHECKSUM           |
| 00334 | 63 | 0337 | 37  |       | JPNOT*CKSER  | JUMP IF BAD                |
| 00335 | 50 | 3400 | 40  |       | SIL*0  | SET INTERRUPT LOCKOUT      |
| 00336 | 55 | 0361 | 41  |       | IJP*FROM   | JUMP TO FIRST TEST ADDRESS |
| 00337 | 10 | 0405 | 42  | CKSER | ENTAU*LAST   | CHECKSUM TO AU             |
| 00340 | 50 | 5640 | 43  |       | STOP*40  | ERROR STOP 1.4.1           |
|       |    |      | 44  |       | REMARK*THE COMPUTED CHECKSUM AND THE CHECKSUM-           |                            |
|       |    |      | 45  |       | REMARK*FRAME FROM TAPE DO NOT COMPARE.                   |                            |
|       |    |      | 46  |       | REMARK*IF ONLY THE LOADER HAS LOADED, THEN-              |                            |
|       |    |      | 47  |       | REMARK*AU CONTAINS THE CHECKSUM FRAME FROM TAPE AND-     |                            |
|       |    |      | 50  |       | REMARK*AL CONTAINS THE CHECKSUM COMPUTED OF THE LOADER.  |                            |
|       |    |      | 51  |       | REMARK*IF BOTH THE LOADER AND PROGRAM HAVE LOADED, THEN- |                            |
|       |    |      | 52  |       | REMARK*AL CONTAINS THE CHECKSUM FRAME FROM TAPE AND-     |                            |
|       |    |      | 53  |       | REMARK*AU CONTAINS THE CHECKSUM COMPUTED OF THE PROGRAM. |                            |
| 00341 | 00 | 0000 | 54  | SETAD | 0*0  | ENTRANCE                   |
| 00342 | 70 | 0000 | 55  | CLEAR | ENTALK*0   | CLEAR AL                   |
| 00343 | 10 | 0300 | 56  |       | ENTAU*ZEROS  | CLEAR AU                   |
| 00344 | 76 | 0375 | 57  |       | RJP*RADF   | GO READ THE LEADER         |
| 00345 | 61 | 0344 | 60  |       | JPALZ*LOK-1  | CONTINUE IF FRAME IS ZERO  |
| 00346 | 76 | 0363 | 61  |       | RJP*ASSM3  | GO READ BEGINNING ADDRESS  |
| 00347 | 50 | 4717 | 62  |       | LSHA*17  | BEGIN TO AU                |
| 00350 | 50 | 4611 | 63  |       | LSHAL*11   | RESTORE AL                 |
| 00351 | 76 | 0375 | 64  |       | RJP*RADF   | READ A FRAME               |
| 00352 | 50 | 4606 | 65  |       | LSHAL*6  | SHIFT ADDRESS              |
| 00353 | 76 | 0375 | 66  |       | RJP*RADF   | READ A FRAME               |
| 00354 | 46 | 0361 | 67  |       | STRAU*FROM   | BEGIN TO JUMP ADDRESS      |
| 00355 | 32 | 0361 | 70  |       | ENTB*FROM  | BEGIN TO B                 |
| 00356 | 44 | 0362 | 71  |       | STRAL*TO   | SAVE FINAL                 |
| 00357 | 40 | 0405 | 72  |       | CL*LAST  | CLEAR CHECKSUM ADDRESS     |
| 00360 | 55 | 0341 | 73  |       | IJP*SETAD  | EXIT                       |
| 00361 | 00 | 0000 | 74  | FROM  | 0*0  | BEGIN ADDRESS              |
| 00362 | 00 | 0000 | 75  | TO    | 0*0  | FINAL ADDRESS              |
| 00363 | 00 | 0000 | 76  | ASSM3 | 0*0  | ENTRANCE                   |
| 00364 | 70 | 0002 | 77  |       | ENTALK*2   | SET INDEX                  |
| 00365 | 44 | 0374 | 100 |       | STRAL*DEX  | STORE INDEX                |

|       |         |     |            |                        |
|-------|---------|-----|------------|------------------------|
| 00366 | 70 0000 | 101 | ENTALK*0   | CLEAR AL               |
| 00367 | 50 4606 | 102 | LSHAL*6    | SHIFT WORD             |
| 00370 | 76 0375 | 103 | RJP*RADF   | READ A FRAME           |
| 00371 | 57 0374 | 104 | ISK*DEX    | IS WORD COMPLETE       |
| 00372 | 34 0367 | 105 | JP*LOK-3   | NO, CONTINUE           |
| 00373 | 55 0363 | 106 | IJP*ASSM3  | YES, EXIT              |
| 00374 | 00 0000 | 107 | 0*0        | INDEX COUNT            |
| 00375 | 00 0000 | 110 | 0*0        | ENTRANCE               |
| 00376 | 50 1100 | 111 | IN*0       | INPUT ONE FRAME        |
| 00377 | 00 0002 | 112 | 0*DATA     | AT ADDRESS DATA        |
| 00400 | 00 0002 | 113 | 0*DATA     | AT ADDRESS DATA        |
| 00401 | 50 2100 | 114 | SKPIIN*0   | SKIP ON INPUT INACTIVE |
| 00402 | 34 0401 | 115 | JP*LOK-1   | TEST ACTIVE            |
| 00403 | 51 0002 | 116 | SLSET*DATA | SET DATA INTO AL       |
| 00404 | 55 0375 | 117 | IJP*RADF   | EXIT                   |
|       |         | 120 | ENDATA*    |                        |

DEX  
RADF

4-11

LABELS AND ADDRESSES

|       |       |        |       |       |       |       |       |       |       |
|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|
| ASSM3 | 00363 | CKSER  | 00337 | CKSUM | 00303 | CLEAR | 00342 | DATA  | 00002 |
| DEX   | 00374 | EASIER | 00240 | FROM  | 00361 | LAST  | 00405 | PROAD | 00324 |
| RADF  | 00375 | SETAD  | 00341 | T0    | 00362 | T31   | 00317 | T32   | 00313 |
| ZEROS | 00300 |        |       |       |       |       |       |       |       |

| SEQNO  | LABEL    | STATEMENT                              | ADDRESS | INSTRUCT | PAGE | 0001 |
|--------|----------|--|---------|----------|------|------|
| 000000 | CONTBASI | CONTR*FRENCH*20MARCH1968               |         |          |      |      |
| 000001 | CONTBASI | ALLOC*FRENCH*20MARCH1968               |         |          |      |      |
| 000002 | ADR      | 000000                                 |         |          |      |      |
| 000003 | CONTBASI | 0706                                   |         |          |      |      |
| 000004 | CONTBASI | PROG*FRENCH*20MARCH1968                |         |          |      |      |
| 000005 |          | P SEG                                  | 00000   | 5047     | 00   |      |
| 000006 | CONTBASI | SIL*00 SIL                             | 00706   | 5034     | 00   |      |
| 000007 |          | STOP*20 PROG STOP 4 MEANS GOOD MT LOAD | 00707   | 5056     | 20   |      |
| 000010 |          | SKP*02 SET SKIP KEY 1                  | 00710   | 5050     | 02   |      |
| 000011 |          | JP*LOK+2 TO BYPASS                     | 00711   | 34       | 0713 |      |
| 000012 |          | JP*FALCON+3 FAULT TEST                 | 00712   | 34       | 1003 |      |
| 000013 |          | CL*STAHL CL CONTENTS                   | 00713   | 40       | 4632 |      |
| 000014 |          | ENTAL*END1 AL EQ 505640                | 00714   | 12       | 4350 |      |
| 000015 |          | STRAL*0001                             | 00715   | 44       | 0001 |      |
| 000016 |          | STRAL*0002                             | 00716   | 44       | 0002 |      |
| 000017 |          | STRAL*0004                             | 00717   | 44       | 0004 |      |
| 000020 |          | STRAL*0010                             | 00720   | 44       | 0010 |      |
| 000021 |          | STRAL*011                              | 00721   | 44       | 0011 |      |
| 000022 |          | STRAL*012                              | 00722   | 44       | 0012 |      |
| 000023 |          | STRAL*013                              | 00723   | 44       | 0013 |      |
| 000024 |          | STRAL*014                              | 00724   | 44       | 0014 |      |
| 000025 |          | STRAL*015                              | 00725   | 44       | 0015 |      |
| 000026 |          | STRAL*016                              | 00726   | 44       | 0016 |      |
| 000027 |          | STRAL*0017                             | 00727   | 44       | 0017 |      |
| 000030 |          | ENTAL*COMBACK AL EQ 34CHEZ-3           | 00730   | 12       | 4666 |      |
| 000031 |          | STRAL*0000 STORE JP IN FLT ENT         | 00731   | 44       | 0000 |      |
| 000032 |          | ENTAL*WEEDOUT2 AL EQ 34CHEZ+1          | 00732   | 12       | 4667 |      |
| 000033 |          | STRAL*CHEZ                             | 00733   | 44       | 0750 |      |
| 000034 |          | ENTAL*WEEDOUT3 AL EQ 34CHEZ2           | 00734   | 12       | 4670 |      |

4-13

| SEQNO  | LABEL | STATEMENT       | ADDRESS | INSTRUCT |
|--------|-------|-----------------|---------|----------|
| 000035 |       | STRAL*CHEZ1     | 00735   | 44 0765  |
| 000036 |       | 000000          | 00736   | 000000   |
| 000037 |       | ENTAL*ZEROUNE   | 00737   | 12 5032  |
| 000040 |       | STRAL*STAHL     | 00740   | 44 4632  |
| 000041 |       | ENTAL*WEEDOUT   | 00741   | 12 4675  |
| 000042 |       | STRAL*CHEZ      | 00742   | 44 0750  |
| 000043 |       | ENTAL*WEEDOUT4  | 00743   | 12 4671  |
| 000044 |       | STRAL*CHEZ1     | 00744   | 44 0765  |
| 000045 |       | ENTAL*COMBACK1  | 00745   | 12 4672  |
| 000046 |       | STRAL*0000      | 00746   | 44 0000  |
| 000047 |       | 010000          | 00747   | 010000   |
| 000050 | CHEZ  | 000000          | 00750   | 000000   |
| 000051 |       | ENTAL*ZERODEUX  | 00751   | 12 4466  |
| 000052 |       | STRAL*STAHL     | 00752   | 44 4632  |
| 000053 |       | ENTAL*WEEDOUT5  | 00753   | 12 4673  |
| 000054 |       | STRAL*CHEZ1     | 00754   | 44 0765  |
| 000055 |       | JP*CHEZ1-3      | 00755   | 34 0762  |
| 000056 |       | ENTAL*ZEROTROIS | 00756   | 12 5146  |
| 000057 |       | STRAL*STAHL     | 00757   | 44 4632  |
| 000060 |       | ENTAL*WEEDOUT1  | 00760   | 12 4674  |
| 000061 |       | STRAL*CHEZ1     | 00761   | 44 0765  |
| 000062 |       | ENTAL*COMBACK2  | 00762   | 12 4676  |
| 000063 |       | STRAL*0000      | 00763   | 44 0000  |
| 000064 |       | 777777          | 00764   | 777777   |
| 000065 | CHEZ1 | 000000          | 00765   | 000000   |
| 000066 |       | ENTAL*ZEROCING  | 00766   | 12 4433  |
| 000067 |       | STRAL*STAHL     | 00767   | 44 4632  |
| 000070 |       | JP*SOFINDS      | 00770   | 34 0776  |
| 000071 |       | ENTAL*ZEROSIX   | 00771   | 12 5050  |
| 000072 |       | STRAL*STAHL     | 00772   | 44 4632  |
| 000073 |       | JP*SOFINDS      | 00773   | 34 0776  |

| SEQNO  | LABEL   | STATEMENT   | ADDRESS | INSTRUCT |
|--------|---------|---|---------|----------|
| 000074 |         | RJP*FLTISOL TEST SPEC,MONINT,INT FF   | 00774   | 76 1007  |
| 000075 |         | ENTAL*STAHL DISPLAY FLT FLGS  | 00775   | 12 4632  |
| 000076 | SOFINDS | STOP*40 ERROR STOP  | 00776   | 5056 40  |
| 000077 | CHEZ2   | ENTAL*STAHL   | 00777   | 12 4632  |
| 000100 | FALCON  | JP*FALCON   | 01000   | 34 1000  |
| 000101 | *       | CHK FAULT-AL SHOULD BE 000000-<br>AND FAULT LITE ON-IF NOT-ERROR<br>TO CONTINUE TES-DEPRESS MC<br>SWITCH TO REMOVE FAULT LITE-NEXT<br>PUT DISC ADV P SWITCH IN UP POS-<br>INCREMENT P BY 1 BY SETTING BIT 0 |         |          |
| 000102 | *       |   |         |          |
| 000103 | *       |   |         |          |
| 000104 | *       |   |         |          |
| 000105 | *       |   |         |          |
| 000106 | *       |   |         |          |
| 000107 |         | SIL*00  | 01001   | 5034 00  |
| 000110 | *       | THEN SET BIT 1 OF P AND   |         |          |
| 000111 | *       | REMOVE DISC ADV P   |         |          |
| 000112 | *       | TEST WILL CONTINUE AS SELECTED  |         |          |
| 000113 |         | STOP*40 ERROR STOP-DUE TO DISC ADV P  | 01002   | 5056 40  |
| 000114 |         | SKP*10 SET SKIP KEY 3 TO OMIT SKIPSTOP  | 01003   | 5050 10  |
| 000115 |         | JP*SKIPSTOP EXECUTE SKIP STOP TEST  | 01004   | 34 1104  |
| 000116 |         | SXL*00  | 01005   | 5036 00  |
| 000117 |         | JP*PRELIM OMIT SKIPSTOP   | 01006   | 34 1200  |
| 000120 | *       | THE FOLLOWING IS A MANUAL CHECK   |         |          |
| 000121 | *       | OF ALL KEY SKIPS AND STOPS-STOP   |         |          |
| 000122 | *       | 40 INDICATES ERROR WITH K VALUE   |         |          |
| 000123 | FLTISOL | 0*0 ENTRY   | 01007   | 00 0000  |
| 000124 |         | REMARK*RTC DISABLE SW MUST BE OFF TO  |         |          |
| 000125 |         | REMARK*PROPERLY USE THIS ISOLATION ROUTINE  |         |          |
| 000126 |         | SXL DISABLE EIRS  | 01010   | 5036 00  |
| 000127 |         | CL*SPINTE CLR ERROR FLAG LOC  | 01011   | 40 1100  |
| 000130 |         | ENTAL*RTCOK RETURN AT   | 01012   | 12 1077  |
| 000131 |         | STRAL*012 RTC MON INT ENT ADDR  | 01013   | 44 0012  |
| 000132 |         | ENTAL*END1P2 RTC MON IS   | 01014   | 12 1076  |

4-15



| SEQNO  | LABEL  | STATEMENT                          | ADDRESS | INSTRUCT |
|--------|--------|------------------------------------|---------|----------|
| 000133 |        | STRAL*014 +2 OF WD                 | 01015   | 44 0014  |
| 000134 |        | ADDALK*7775 AT RTC                 | 01016   | 71 7775  |
| 000135 |        | STRAL*015 INC ADDR                 | 01017   | 44 0015  |
| 000136 |        | RTC ENABLE RTC MON                 | 01020   | 5014 00  |
| 000137 |        | RIL ENABLE INTERNAL INTS           | 01021   | 5030 00  |
| 000140 |        | ENTALK*3000 DELAY AT LEAST 1024 US | 01022   | 70 3000  |
| 000141 |        | ADDALK*7776 RECEIVE                | 01023   | 71 7776  |
| 000142 |        | JPALNZ*LOK-1 OF RTC MON INT        | 01024   | 63 1023  |
| 000143 |        | ENTALK*01 FLAG RTC MON             | 01025   | 70 0001  |
| 000144 |        | STRAL*SPINTE NOT RECEIVED          | 01026   | 44 1100  |
| 000145 | RTCOVF | ENTAL*RTCOVK JP AT                 | 01027   | 12 1101  |
| 000146 |        | STRAL*013 RTC OVERFLOW INT ADDR    | 01030   | 44 0013  |
| 000147 |        | ENTALK*7777 FILL                   | 01031   | 70 7777  |
| 000150 |        | STRAL*015 RTC INC REG              | 01032   | 44 0015  |
| 000151 |        | RIL EN INTS                        | 01033   | 5030 00  |
| 000152 |        | ENTALK*3000 DELAY 1024US           | 01034   | 70 3000  |
| 000153 |        | ADDALK*7776 TO RECEIVE RTC         | 01035   | 71 7776  |
| 000154 |        | JPALNZ*LOK-1 OVERFLOW INT          | 01036   | 63 1035  |
| 000155 |        | ENTAL*SPINTE RECORD ERROR          | 01037   | 12 1100  |
| 000156 |        | ADDALK*02 NO RTC                   | 01040   | 71 0002  |
| 000157 |        | STRAL*SPINTE OVERFLOW INT          | 01041   | 44 1100  |
| 000160 | RILFLT | ENTAL*RILERQ RETURN AT             | 01042   | 12 1102  |
| 000161 |        | STRAL*0000 FLT INT ENT             | 01043   | 44 0000  |
| 000162 |        | RIL EN INTS                        | 01044   | 5030 00  |
| 000163 |        | 00*0000 FORCE INST FLT             | 01045   | 00 0000  |
| 000164 |        | ENTAL*SPINTE RECORD INFO-          | 01046   | 12 1100  |
| 000165 |        | ADDALK*04 RIL DOES NOT             | 01047   | 71 0004  |
| 000166 |        | STRAL*SPINTE LOCKOUT FLT           | 01050   | 44 1100  |
| 000167 | MONINT | ENTBK*0466 STORE                   | 01051   | 36 0466  |
| 000170 |        | ENTAL*END1 STOPS                   | 01052   | 12 4350  |
| 000171 |        | STRALB*011 AT                      | 01053   | 45 0011  |

| SEQNO  | LABEL    | STATEMENT  | ADDRESS | INSTRUCT |
|--------|----------|--|---------|----------|
| 000172 |          | BJP*LOK-1 11-477                                 | 01054   | 73 1053  |
| 000173 |          | ENTAL*MONOK RETURN AT                            | 01055   | 12 1103  |
| 000174 |          | STRAL*0140 CHAN 0 OUT MON INT ENT                | 01056   | 44 0140  |
| 000175 |          | OUT*00 OUT 0                                     | 01057   | 5012 00  |
| 000176 |          | 0*LOK+1 W/MON                                    | 01060   | 001061   |
| 000177 |          | 2*LOK FWD  | 01061   | 201061   |
| 000200 |          | OUTSTP*00 TERM CHAN 0 OUT                        | 01062   | 5016 00  |
| 000201 |          | OUTOV*00 PRODUCE OUT MON                         | 01063   | 5026 00  |
| 000202 |          | RIL ENABLE OUT MON INT                           | 01064   | 5030 00  |
| 000203 |          | ENTALK*3000 WAIT TO                              | 01065   | 70 3000  |
| 000204 |          | ADDALK*7775 TO INSURE RECEIPT                    | 01066   | 71 7775  |
| 000205 |          | JPALNZ*LOK-1 OUT MON INT                         | 01067   | 63 1066  |
| 000206 |          | ENTAL*SPINTE RECORD ERR-                         | 01070   | 12 1100  |
| 000207 |          | ADDALK*010 NO OUT MON                            | 01071   | 71 0010  |
| 000210 |          | STRAL*SPINTE RECEIVED                            | 01072   | 44 1100  |
| 000211 | DISPOUT  | ENTAU*SPINTE DISPLAY SP INT FLGS                 | 01073   | 10 1100  |
| 000212 |          | IJP*FLTISOL EXIT TO STOP                         | 01074   | 55 1007  |
| 000213 |          | RESERV*01  | 01075   | 000000   |
| 000214 | END1P2   | 505642 STOP*40+2                                 | 01076   | 505642   |
| 000215 | RTCOK    | JP*RTC0VF AT 12                                  | 01077   | 34 1027  |
| 000216 | SPINTE   | 0*0 ERROR FLG STR                                | 01100   | 00 0000  |
| 000217 | RTC0VK   | JP*RILFLT AT 13                                  | 01101   | 34 1042  |
| 000220 | RILERQ   | JP*MONINT AT 0000                                | 01102   | 34 1051  |
| 000221 | MONOK    | JP*DISPOUT AT 140                                | 01103   | 34 1073  |
| 000222 | SKIPSTOP | SIL*0 SET INTERRUPT LOCKOUTS.                    | 01104   | 5034 00  |
| 000223 |          | SXL*00 ADDED INSURANCE OF LOCKOUT                | 01105   | 5036 00  |
| 000224 |          | STOP*40 SET ALL SKIP AND STOP KEYS AND           | 01106   | 5056 40  |
| 000225 | *        | RESTART THE COMPUTER.                            |         |          |
| 000226 |          | 505600 IF STOP OCCURS,THE STOP LIGHT             | 01107   | 505600   |
| 000227 | *        |  |         |          |
| 000230 | *        | LITE CORRESPONDS TO A K REGISTER BIT THAT ALWAYS |         |          |

| SEQNO  | LABEL  | STATEMENT                       | ADDRESS | INSTRUCT |
|--------|--------|---------------------------------|---------|----------|
| 000231 | *      |                                 |         |          |
| 000232 |        | APPEARS TO BE SET FOR STOPS.    |         |          |
| 000233 | *      | DO ANY OF THE K REGISTER BITS   | 01110   | 5050 00  |
| 000234 | *      | ALWAYS APPEAR TO BE SET FOR     |         |          |
| 000235 |        | SKIP INSTRUCTIONS?              |         |          |
|        |        | NO, CONTINUE TESTING.           | 01111   | 34 1124  |
| 000236 | *      |                                 |         |          |
| 000237 | *      | YES. IS THE FALSE SKIP          |         |          |
| 000240 |        | CONDITION ONLY UP FOR 5050XX    |         |          |
| 000241 |        | INSTRUCTIONS?                   | 01112   | 5055 00  |
| 000242 | *      | YES. GO TO ISOLATE TO THE       | 01113   | 34 1117  |
| 000243 |        | FAILING K BIT.                  |         |          |
| 000244 |        |                                 | 01114   | 5054 00  |
| 000245 | *      | YES. GO TO ISOLATE TO THE       | 01115   | 34 1117  |
|        |        | FAILING K BIT POSITION.         |         |          |
| 000246 |        |                                 | 01116   | 5056 40  |
| 000247 | *      | NO. THE SKIP CONDITION IS       |         |          |
| 000250 | *      | ALWAYS UP FOR ALL SKIP          |         |          |
| 000251 | SKPST1 | INSTRUCTIONS.                   |         |          |
| 000252 | *      | RESTART THE COMPUTER - IT WILL  | 01117   | 5056 40  |
| 000253 | *      | HANG UP IN A LOOP. RELEASE      |         |          |
| 000254 | *      | THE SKIP KEYS ONE BY ONE        |         |          |
| 000255 | *      | UNTIL A 5 STOP OCCURS. THE      |         |          |
|        |        | LAST KEY TO BE RELEASED         |         |          |
| 000256 | *      |                                 |         |          |
| 000257 | *      | BEFORE THE STOP OCCURS,         |         |          |
| 000260 | *      | CORRESPONDS TO THE K REGISTER   |         |          |
| 000261 | *      | BIT THAT ALWAYS APPEARS TO BE   |         |          |
| 000262 | *      | SET FOR SKIP INSTRUCTIONS.      |         |          |
| 000263 | *      | IF THE PROGRAM IS STILL LOOPING |         |          |
| 000264 | *      | AFTER ALL THE SKIP KEY HAVE     |         |          |
| 000265 | *      | BEEN RELEASED, THIS INDICATES   |         |          |
|        |        | THAT K REGISTER BIT 05 ALWAYS   |         |          |
| 000266 | *      |                                 |         |          |
| 000267 |        | APPEARS SET FOR SKIPS.          | 01120   | 5050 00  |

4-18

| SEQNO  | LABEL  | STATEMENT                       | ADDRESS | INSTRUCT |
|--------|--------|---------------------------------|---------|----------|
| 000270 |        | JP*LOK+2                        | 01121   | 34 1123  |
| 000271 |        | JP*LOK-2                        | 01122   | 34 1120  |
| 000272 |        | STOP*40                         | 01123   | 5056 40  |
| 000273 | SKPST2 | ENTAL*POSZERO                   | 01124   | 12 4510  |
| 000274 |        | SKP*01                          | 01125   | 5050 01  |
|        |        | INITIATE FAILURE TO SKIP FLAG.  |         |          |
|        |        | IF SKP*01 FAILS                 |         |          |
| 000275 |        | SLSET*SS0                       | 01126   | 51 5472  |
| 000276 |        | SKP*02                          | 01127   | 5050 02  |
| 000277 |        | SLSET*SS1                       | 01130   | 51 5473  |
| 000300 |        | SKP*04                          | 01131   | 5050 04  |
| 000301 |        | SLSET*SS2                       | 01132   | 51 5474  |
| 000302 |        | SKP*10                          | 01133   | 5050 10  |
| 000303 |        | SLSET*SS3                       | 01134   | 51 5475  |
| 000304 |        | SKP*20                          | 01135   | 5050 20  |
|        |        | SET BIT 00 IN THE FLAG.         |         |          |
|        |        | IF SKP*02 FAILS                 |         |          |
|        |        | SET BIT 01 IN THE FLAG.         |         |          |
|        |        | IF SKP*04 FAILS                 |         |          |
|        |        | SET BIT 02 IN THE FLAG.         |         |          |
|        |        | IF SKP*10 FAILS                 |         |          |
|        |        | SET BIT 03 IN THE FLAG.         |         |          |
|        |        | IF SKP*20 FAILS                 |         |          |
| 000305 |        | SLSET*SS4                       | 01136   | 51 5476  |
| 000306 |        | SKP*40                          | 01137   | 5050 40  |
| 000307 |        | SLSET*SS5                       | 01140   | 51 5477  |
| 000310 |        | JPALZ*SKPST3                    | 01141   | 61 1150  |
| 000311 | *      |                                 |         |          |
| 000312 |        | SKPEVN*0                        | 01142   | 5055 00  |
| 000313 |        | JP*LOK+2                        | 01143   | 34 1145  |
| 000314 |        | JP*LOK+3                        | 01144   | 34 1147  |
|        |        | SET BIT 04 IN THE FLAG.         |         |          |
|        |        | IF SKP*40 FAILS                 |         |          |
|        |        | SET BIT 05 IN THE FLAG.         |         |          |
|        |        | IF NO SKIP FAILURE WAS DETECTED |         |          |
|        |        | GO TEST THE STOP.               |         |          |
|        |        | DOES THE FAILURE AFFECT OTHER   |         |          |
|        |        | SKIP INSTRUCTIONS?              |         |          |
| 000315 |        | SKPODD*0                        | 01145   | 5054 00  |
| 000316 |        | SLSET*SS6                       | 01146   | 51 5500  |
| 000317 |        | STOP*40                         | 01147   | 5056 40  |
| 000320 | *      |                                 |         |          |
| 000321 | *      |                                 |         |          |
| 000322 | *      |                                 |         |          |
| 000323 | *      |                                 |         |          |
| 000324 | *      |                                 |         |          |
|        |        | AL EQUAL TO 000177 IMPLIES THAT |         |          |
|        |        | THE FAILURE AFFECTS ALL SKIP    |         |          |
|        |        | INSTRUCTIONS.                   |         |          |
|        |        | AL EQUAL TO 000077 IMPLIES THAT |         |          |
|        |        | THE FAILURE AFFECTS ALL K       |         |          |
| 000325 | *      |                                 |         |          |
| 000326 | *      |                                 |         |          |
|        |        | VALUES FOR THE 5050XX SKIP      |         |          |
|        |        | INSTRUCTION.                    |         |          |

| SEQNO  | LABEL  | STATEMENT                        | ADDRESS | INSTRUCT |
|--------|--------|----------------------------------|---------|----------|
| 000327 | *      | IF A SINGLE BIT IS SET IN AL     |         |          |
| 000330 | *      | THEN EITHER THE CORRESPONDING    |         |          |
| 000331 | *      | SKIP KEY OR K REGISTER BIT       |         |          |
| 000332 | *      | PATH FOR SKIPS HAS FAILED.       |         |          |
| 000333 | SKPST3 | STOP*77                          | 01150   | 5056 77  |
| 000334 | *      | THEN EITHER THE CORRESPONDING    |         |          |
| 000335 | *      | STOP KEY OR K REGISTER BIT       |         |          |
| 000336 | *      | PATH FOR STOPS HAS FAILED.       |         |          |
| 000337 | *      | IF ALL THE STOP LIGHTS ARE LITE, |         |          |
| 000340 | *      | THEN CLEAR ALL THE SKIP AND      |         |          |
| 000341 | *      | ALL THE STOP KEYS.               |         |          |
| 000342 |        | STOP*37                          | 01151   | 5056 37  |
| 000343 | *      | THE STOP KEY CORRESPONDING TO    |         |          |
|        |        | THE STOP LIGHT LITE ALWAYS       |         |          |
| 000344 | *      | APPEARS SET.                     |         |          |
| 000345 |        | SKP*37                           | 01152   | 5050 37  |
| 000346 |        | JP*SKPST4                        | 01153   | 34 1155  |
| 000347 | *      | IF ALL SKIP KEYS ARE CLEARED,    |         |          |
|        |        | BYPASS THE WTFI HANG UP.         |         |          |
| 000350 |        | WTFI                             | 01154   | 5024 00  |
| 000351 | *      | IF ALL OF THE STOPS FAIL, THE    |         |          |
|        |        | PROGRAM WILL HANG UP HERE.       |         |          |
| 000352 | SKPST4 | ENTAL*POSZERO                    | 01155   | 12 4510  |
| 000353 |        | SKP*01                           | 01156   | 5050 01  |
|        |        | DOES SKIP KEY 0 ALWAYS APPEAR    |         |          |
| 000354 | *      | TO BE SET?                       |         |          |
| 000355 |        | JP*L0K+2                         | 01157   | 34 1161  |
| 000356 |        | SLSET*SS0                        | 01160   | 51 5472  |
| 000357 |        | SKP*02                           | 01161   | 5050 02  |
| 000360 | *      | TO BE SET?                       |         |          |
| 000361 |        | JP*L0K+2                         | 01162   | 34 1164  |
| 000362 |        | SLSET*SS1                        | 01163   | 51 5473  |
| 000363 |        | SKP*04                           | 01164   | 5050 04  |
|        |        | DOES SKIP KEY 2 ALWAYS APPEAR    |         |          |
| 000364 | *      | TO BE SET?                       |         |          |
| 000365 |        | JP*L0K+2                         | 01165   | 34 1167  |

| SEQNO  | LABEL  | STATEMENT           | ADDRESS | INSTRUCT |
|--------|--------|---------------------|---------|----------|
| 000366 |        | SLSET*SS2           | 01166   | 51 5474  |
| 000367 |        | SKP*10              | 01167   | 5050 10  |
| 000370 | *      |                     |         |          |
| 000371 |        | JP*LOK+2            | 01170   | 34 1172  |
| 000372 |        | SLSET*SS3           | 01171   | 51 5475  |
| 000373 |        | SKP*20              | 01172   | 5050 20  |
| 000374 | *      |                     |         |          |
| 000375 |        | JP*LOK+2            | 01173   | 34 1175  |
| 000376 |        | SLSET*SS4           | 01174   | 51 5476  |
| 000377 |        | JPALZ*LOK+2         | 01175   | 61 1177  |
| 000400 | *      |                     |         |          |
| 000401 | *      |                     |         |          |
| 000402 |        | STOP*40             | 01176   | 5056 40  |
| 000403 | *      |                     |         |          |
| 000404 | *      |                     |         |          |
| 000405 | *      |                     |         |          |
| 000406 |        | STOP*40             | 01177   | 5056 40  |
| 000407 |        | REMARK*SET STOP AND |         |          |
| 000410 | PRELIM | ENTAL*AFALT         | 01200   | 12 4361  |
| 000411 |        | STRAL*0000          | 01201   | 44 0000  |
| 000412 |        | ENTAL*REPLEM        | 01202   | 12 4646  |
| 000413 |        | STRAL*SMEAL         | 01203   | 44 1240  |
| 000414 |        | ENTAL*ISAU          | 01204   | 12 4647  |
| 000415 |        | STRAL*SAUCE         | 01205   | 44 1247  |
| 000416 |        | ENTAL*STARTADD      | 01206   | 12 4661  |
| 000417 |        | STRAL*IFALT         | 01207   | 44 4404  |
| 000420 |        | ENTAL*NEGZERO       | 01210   | 12 4512  |
| 000421 |        | JPALZ*ALLOW         | 01211   | 61 1232  |
| 000422 |        | ENTAL*POSZERO       | 01212   | 12 4510  |
| 000423 |        | JPALZ*LOK+5         | 01213   | 61 1220  |
| 000424 |        | CMAL*POSZERO        | 01214   | 02 4510  |

| SEQNO  | LABEL  | STATEMENT       | ADDRESS | INSTRUCT                           |
|--------|--------|-----------------|---------|------------------------------------|
| 000425 |        | JPALZ*LOK+2     | 01215   | 61 1217                            |
| 000426 |        | STOP*40         | 01216   | 5056 40                            |
| 000427 |        | STOP*40         | 01217   | 5056 40                            |
| 000430 |        | CMAL*ZEROSEPT   | 01220   | 02 4440                            |
| 000431 |        | JPEQ*LOK+4      | 01221   | 61 1225                            |
| 000432 |        | CMAL*POSZERO    | 01222   | 02 4510                            |
| 000433 |        | JPEQ*JUMRET     | 01223   | 61 1236                            |
| 000434 |        | STOP*40         | 01224   | 5056 40                            |
| 000435 |        | ENTAL*QUTREDEUX | 01225   | 12 4414                            |
| 000436 |        | CMAL*QUTREDEUX  | 01226   | 02 4414                            |
| 000437 |        | JPEQ*LOK+2      | 01227   | 61 1231                            |
| 000440 |        | STOP*40         | 01230   | 5056 40                            |
| 000441 |        | STOP*40         | 01231   | 5056 40                            |
| 000442 | ALLOW  | ENTAL*SEPTZERO  | 01232   | 12 5067                            |
| 000443 |        | JPALZ*LOK+2     | 01233   | 61 1235                            |
| 000444 |        | STOP*40         | 01234   | 5056 40                            |
| 000445 |        | STOP*40         | 01235   | 5056 40                            |
| 000446 | JUMRET | RJP*SMEAL       | 01236   | 76 1240                            |
| 000447 |        | STOP*40         | 01237   | 5056 40                            |
| 000450 | SMEAL  | JP*LOK+5        | 01240   | 34 1245                            |
| 000451 |        | ENTAL*SMEAL     | 01241   | 12 1240                            |
| 000452 |        | CMAL*PEAPLUS    | 01242   | 02 4654                            |
| 000453 |        | JPEQ*LOK+3      | 01243   | 61 1246                            |
| 000454 |        | STOP*40         | 01244   | 5056 40                            |
| 000455 |        | STOP*40         | 01245   | 5056 40                            |
| 000456 |        | IJP*SAUCE       | 01246   | 55 1247                            |
| 000457 | SAUCE  | 00*KUP          | 01247   | 00 1251                            |
| 000460 |        | STOP*40         | 01250   | 5056 40                            |
| 000461 | KUP    | ENTAL*ELM       | 01251   | 12 4664                            |
| 000462 |        | STRAL*7775      |         | OF STACK TO CHK FOR P BITS DROPPED |

| SEQNO  | LABEL | STATEMENT     | ADDRESS | INSTRUCT |
|--------|-------|---------------|---------|----------|
|        |       |               | 01252   | 44 7775  |
| 000463 |       | ENTAL*ELM1    | 01253   | 12 4665  |
| 000464 |       | STRAL*7776    | 01254   | 44 7776  |
| 000465 |       | ENTAL*LOK+2   | 01255   | 12 1257  |
| 000466 |       | STRAL*IFFAULT | 01256   | 44 4404  |
| 000467 |       | JP*7775       | 01257   | 34 7775  |
| 000470 | ELM2  | SKP*04        | 01260   | 5050 04  |
| 000471 |       | JP*EXRET      | 01261   | 34 1263  |
| 000472 |       | JP*PRELIM     | 01262   | 34 1200  |
| 000473 | EXRET | RJP*DEEDEE    | 01263   | 76 1311  |
| 000474 |       | RJP*KONG      | 01264   | 76 1357  |
| 000475 |       | RJP*SLUP      | 01265   | 76 1522  |
| 000476 |       | RJP*ICEBERG   | 01266   | 76 1657  |
| 000477 |       | RJP*CAMEO     | 01267   | 76 2100  |
| 000500 |       | RJP*SUPEREG   | 01270   | 76 2266  |
| 000501 |       | RJP*KAYADDER  | 01271   | 76 2427  |
| 000502 |       | RJP*SHIFLESS  | 01272   | 76 2523  |
| 000503 |       | RJP*ADDSUBAD  | 01273   | 76 3024  |
| 000504 |       | RJP*MUDDIVE   | 01274   | 76 3230  |
| 000505 |       | RJP*PARITY    | 01275   | 76 3367  |
| 000506 |       | ENTAU*POSZERO | 01276   | 10 4510  |
| 000507 |       | ENTALK*0000   | 01277   | 70 0000  |
| 000510 |       | STRAL*WASTE   | 01300   | 44 4637  |
| 000511 |       | STOP*01       | 01301   | 5056 01  |
| 000512 |       | SKP*20        | 01302   | 5050 20  |
| 000513 |       | SKP*40        | 01303   | 5050 40  |
| 000514 |       | RJP*ZPACS     | 01304   | 76 5501  |
| 000515 |       | SKP*01        | 01305   | 5050 01  |
| 000516 |       | JP*PRELIM     | 01306   | 34 1200  |
| 000517 |       | JP*500        | 01307   | 34 0500  |
| 000520 |       | RESERV*01     | 01310   | 000000   |



| SEQNO  | LABEL  | STATEMENT       | ADDRESS                          | INSTRUCT      |
|--------|--------|-----------------|----------------------------------|---------------|
| 000521 | DEEDEE | 0*0             | ENTRANCE                         | 01311 00 0000 |
| 000522 |        | ENTAL*SEPTZERO  |                                  | 01312 12 5067 |
| 000523 |        | STRAL*STROLL    |                                  | 01313 44 4631 |
| 000524 |        | ENTAU*TROISCING | CHK FUNC 10                      | 01314 10 4412 |
| 000525 |        | STRAU*STROLL    | CHK FUNC 46                      | 01315 46 4631 |
| 000526 |        | ENTAL*STROLL    |                                  | 01316 12 4631 |
| 000527 |        | CMAL*TROISCING  | IS AU STORED AND CORRECT         | 01317 02 4412 |
| 000530 |        | JPEQ*FUMBLE+2   | YES-CONT                         | 01320 61 1345 |
| 000531 |        | CMAL*SEPTZERO   | NO-EAS ANY AU VALUE STORED       | 01321 02 5067 |
| 000532 |        | JPEQ*FUMBLE     | YES-46 ERROR                     | 01322 61 1343 |
| 000533 |        | JPALZ*FUMBLE+1  | NO-IS AU CONST CL-X-AU ENBL MISS | 01323 61 1344 |
| 000534 | TOBY   | STRAL*SROBY     | STORE ERROR                      | 01324 44 4633 |
| 000535 |        | STRAL*SROBY+1   |                                  | 01325 44 4634 |
| 000536 |        | SUBA*SROBY      |                                  | 01326 22 4633 |
| 000537 |        | STRAU*STROLL    |                                  | 01327 46 4631 |
| 000540 |        | ENTAL*STROLL    |                                  | 01330 12 4631 |
| 000541 |        | JPALZ*LOK+2     | CHK FOR CONST 1 IN AU BITS       | 01331 61 1333 |
| 000542 |        | STOP*40         | ERROR STOP                       | 01332 5056 40 |
| 000543 |        | SUBA*TWOSEV     | SUB WITH 777777-777777           | 01333 22 4545 |
| 000544 |        | STRAU*STROLL    |                                  | 01334 46 4631 |
| 000545 |        | ENTAL*STROLL    |                                  | 01335 12 4631 |
| 000546 |        | CMAL*NEGZERO    | CHK FOR CONST 0 IN AU BITS       | 01336 02 4512 |
| 000547 |        | JPEQ*LOK+2      | IF JP INPUT ERROR                | 01337 61 1341 |
| 000550 |        | STOP*40         | ERROR STOP                       | 01340 5056 40 |
| 000551 |        | ENTAL*SROBY     |                                  | 01341 12 4633 |
| 000552 |        | STOP*40         | ERROR STOP                       | 01342 5056 40 |
| 000553 | FUMBLE | STOP*40         | ERROR STOP                       | 01343 5056 40 |
| 000554 |        | STOP*40         | ERROR STOP                       | 01344 5056 40 |
| 000555 |        | ENTAU*QUTREDEUX |                                  | 01345 10 4414 |
| 000556 |        | STRAU*STROLL    |                                  | 01346 46 4631 |
| 000557 |        | ENTAL*STROLL    |                                  | 01347 12 4631 |

| SEQNO  | LABEL | STATEMENT                           | ADDRESS | INSTRUCT |
|--------|-------|-------------------------------------|---------|----------|
| 000560 |       | CMAL*QUTREDEUX IS AU CORRECT        | 01350   | 02 4414  |
| 000561 |       | JPEQ*LOK+2 YES-CONT                 | 01351   | 61 1353  |
| 000562 |       | JP*TOBY                             | 01352   | 34 1324  |
| 000563 |       | SKP*04 SET SKIP KEY 2 TO CYCLE TEST | 01353   | 5050 04  |
| 000564 |       | IJP*DEEDEE EXIT                     | 01354   | 55 1311  |
| 000565 |       | JP*DEEDEE+1 TO RECYCLE DEEDEE       | 01355   | 34 1312  |
| 000566 |       | RESERV*01                           | 01356   | 000000   |
| 000567 | KONG  | 0*0 ENTRANCE                        | 01357   | 00 0000  |
| 000570 |       | ENTALK*00                           | 01360   | 70 0000  |
| 000571 |       | STRAL*COLLECT                       | 01361   | 44 4613  |
| 000572 |       | ENTALK*7777 CKK FUNC 70             | 01362   | 70 7777  |
| 000573 |       | CMAL*NEGZERO AL EQ 777777           | 01363   | 02 4512  |
| 000574 |       | JPEQ*LOK+2 YES-CONTINUE             | 01364   | 61 1366  |
| 000575 |       | STOP*40 NO-ERROR STOP               | 01365   | 5056 40  |
| 000576 |       | ENTALK*3777                         | 01366   | 70 3777  |
| 000577 |       | CMAL*MAZE IS AL 003777              | 01367   | 02 4451  |
| 000600 |       | JPEQ*LOK+2                          | 01370   | 61 1372  |
| 000601 |       | STOP*40 ERROR STOP                  | 01371   | 5056 40  |
| 000602 |       | ENTAL*THIFIVE AL EQ 350000          | 01372   | 12 4437  |
| 000603 |       | ADDALK*3535 CHK FUNC 71             | 01373   | 71 3535  |
| 000604 |       | CMAL*TR0ISCING AL EQ 353535         | 01374   | 02 4412  |
| 000605 |       | JPEQ*LOK+2 YES-CONTINUE             | 01375   | 61 1377  |
| 000606 |       | STOP*40 NO-ERROR STOP               | 01376   | 5056 40  |
| 000607 |       | ENTAL*DUALSEV AL EQ 000077          | 01377   | 12 5110  |
| 000610 |       | ADDALK*7700 CHK EXT                 | 01400   | 71 7700  |
| 000611 |       | JPALZ*LOK+2 AL EQ 0-YES-CONTINUE    | 01401   | 61 1403  |
| 000612 |       | STOP*40 NO-ERROR STOP               | 01402   | 5056 40  |
| 000613 |       | ENTAU*POSZERO                       | 01403   | 10 4510  |
| 000614 |       | JPAUZ*LOK+4 CHK FUNC 60-IF JP-OK    | 01404   | 60 1410  |
| 000615 |       | ENTAL*COLLECT                       | 01405   | 12 4613  |
| 000616 |       | ADDALK*0001                         | 01406   | 71 0001  |

| SEQNO  | LABEL | STATEMENT      | ADDRESS              | INSTRUCT      |
|--------|-------|----------------|----------------------|---------------|
| 000617 |       | STRAL*COLLECT  | RECORD ERROR         | 01407 44 4613 |
| 000620 |       | ENTAU*ZEROSEPT |                      | 01410 10 4440 |
| 000621 |       | JPAUZ*LOK+2    | IF JP-ERROR          | 01411 60 1413 |
| 000622 |       | JP*LOK+4       | OK-CONTINUE          | 01412 34 1416 |
| 000623 |       | ENTAL*COLLECT  |                      | 01413 12 4613 |
| 000624 |       | ADDALK*0002    |                      | 01414 71 0002 |
| 000625 |       | STRAL*COLLECT  | RECORD ERROR         | 01415 44 4613 |
| 000626 |       | JPAUNZ*LOK+4   | CHK FUNC 62-IF JP-OK | 01416 62 1422 |
| 000627 |       | ENTAL*COLLECT  |                      | 01417 12 4613 |
| 000630 |       | ADDALK*0004    |                      | 01420 71 0004 |
| 000631 |       | STRAL*COLLECT  | RECORD ERROR         | 01421 44 4613 |
| 000632 |       | ENTAU*POSZERO  |                      | 01422 10 4510 |
| 000633 |       | JPAUNZ*LOK+2   | IF JP-ERROR          | 01423 62 1425 |
| 000634 |       | JP*LOK+4       | OK-CONTINUE          | 01424 34 1430 |
| 000635 |       | ENTAL*COLLECT  |                      | 01425 12 4613 |
| 000636 |       | ADDALK*0010    |                      | 01426 71 0010 |
| 000637 |       | STRAL*COLLECT  | RECORD ERROR         | 01427 44 4613 |
| 000640 |       | ENTAU*ZEROSIX  |                      | 01430 10 5050 |
| 000641 |       | JPAUP*LOK+4    | CHK FUNC 64-IF JP-OK | 01431 64 1435 |
| 000642 |       | ENTAL*COLLECT  |                      | 01432 12 4613 |
| 000643 |       | ADDALK*0020    |                      | 01433 71 0020 |
| 000644 |       | STRAL*COLLECT  | RECORD ERROR         | 01434 44 4613 |
| 000645 |       | ENTAU*TSEVTZER |                      | 01435 10 4443 |
| 000646 |       | JPAUP*LOK+2    | IF JP-ERROR          | 01436 64 1440 |
| 000647 |       | JP*LOK+4       | OK-CONTINUE          | 01437 34 1443 |
| 000650 |       | ENTAL*COLLECT  |                      | 01440 12 4613 |
| 000651 |       | ADDALK*0040    |                      | 01441 71 0040 |
| 000652 |       | STRAL*COLLECT  | RECORD ERROR         | 01442 44 4613 |
| 000653 |       | JPAUNG*LOK+4   | CHK FUNC 66-IF JP-OK | 01443 66 1447 |
| 000654 |       | ENTAL*COLLECT  |                      | 01444 12 4613 |
| 000655 |       | ADDALK*0100    |                      | 01445 71 0100 |

| SEGN0  | LABEL | STATEMENT       | ADDRESS              | INSTRUCT      |
|--------|-------|-----------------|----------------------|---------------|
| 000656 |       | STRAL*COLLECT   | RECORD ERROR         | 01446 44 4613 |
| 000657 |       | ENTAU*ZEROSEPT  |                      | 01447 10 4440 |
| 000660 |       | JPAUNG*LOK+2    | IF JP-ERROR          | 01450 66 1452 |
| 000661 |       | JP*LOK+4        | OK-CONTINUE          | 01451 34 1455 |
| 000662 |       | ENTAL*COLLECT   |                      | 01452 12 4613 |
| 000663 |       | ADDALK*0200     |                      | 01453 71 0200 |
| 000664 |       | STRAL*COLLECT   | RECORD ERROR         | 01454 44 4613 |
| 000665 |       | ENTAL*SIXSEPT   |                      | 01455 12 4460 |
| 000666 |       | JPALNZ*LOK+4    | CHK FUNC 63-IF JP-OK | 01456 63 1462 |
| 000667 |       | ENTAL*COLLECT   |                      | 01457 12 4613 |
| 000670 |       | ADDALK*0400     |                      | 01460 71 0400 |
| 000671 |       | STRAL*COLLECT   | RECORD ERROR         | 01461 44 4613 |
| 000672 |       | ENTAL*POSZERO   |                      | 01462 12 4510 |
| 000673 |       | JPALNZ*LOK+2    | IF JP-ERROR          | 01463 63 1465 |
| 000674 |       | JP*LOK+4        | OK-CONTINUE          | 01464 34 1470 |
| 000675 |       | ENTAL*COLLECT   |                      | 01465 12 4613 |
| 000676 |       | ADDALK*1000     |                      | 01466 71 1000 |
| 000677 |       | STRAL*COLLECT   | RECORD ERROR         | 01467 44 4613 |
| 000700 |       | ENTAL*TROISZERO |                      | 01470 12 4464 |
| 000701 |       | JPALP*LOK+4     | CHK FUNC 65-IF JP-OK | 01471 65 1475 |
| 000702 |       | ENTAL*COLLECT   |                      | 01472 12 4613 |
| 000703 |       | ADDALK*2000     |                      | 01473 71 2000 |
| 000704 |       | STRAL*COLLECT   | RECORD ERROR         | 01474 44 4613 |
| 000705 |       | ENTAL*SIXSEPT   |                      | 01475 12 4460 |
| 000706 |       | JPALP*LOK+2     | IF JP-ERROR          | 01476 65 1500 |
| 000707 |       | JP*LOK+4        | OK-CONTINUE          | 01477 34 1503 |
| 000710 |       | ENTAL*COLLECT   |                      | 01500 12 4613 |
| 000711 |       | ADDALK*4000     |                      | 01501 71 4000 |
| 000712 |       | STRAL*COLLECT   |                      | 01502 44 4613 |
| 000713 |       | JPALNG*LOK+2    | CHK FUNC 67-IF JP-OK | 01503 67 1505 |
| 000714 |       | JP*LOK+6        |                      | 01504 34 1512 |

| SEQNO  | LABEL | STATEMENT               | ADDRESS | INSTRUCT |
|--------|-------|-------------------------|---------|----------|
| 000715 |       | ENTAL*ZEROSIX           | 01505   | 12 5050  |
| 000716 |       | JPALNG*LOK+6            | 01506   | 67 1514  |
| 000717 |       | ENTAL*COLLECT           | 01507   | 12 4613  |
| 000720 |       | JPALZ*LOK+6             | 01510   | 61 1516  |
| 000721 |       | STOP*40                 | 01511   | 5056 40  |
|        |       | IF JP-ALL JPS OK        |         |          |
|        |       | ERROR STOP              |         |          |
| 000722 |       | ENTAU*ZEROUNE           | 01512   | 10 5032  |
| 000723 |       | JP*LOK-2                | 01513   | 34 1511  |
| 000724 |       | ENTAU*ZERODEUX          | 01514   | 10 4466  |
| 000725 |       | JP*LOK-4                | 01515   | 34 1511  |
| 000726 |       | SKP*04                  | 01516   | 5050 04  |
| 000727 |       | IJP*KONG                | 01517   | 55 1357  |
| 000730 |       | JP*KONG+1               | 01520   | 34 1360  |
| 000731 |       | RESERV*01               | 01521   | 000000   |
| 000732 | SLUP  | 0*0                     | 01522   | 00 0000  |
| 000733 |       | ENTAL*TROISCINQ         | 01523   | 12 4412  |
| 000734 |       | SLSET*QUTREDEUX         | 01524   | 51 4414  |
| 000735 |       | CMAL*NEGZERO            | 01525   | 02 4512  |
| 000736 |       | JPEQ*LOK+2              | 01526   | 61 1530  |
| 000737 |       | STOP*40                 | 01527   | 5056 40  |
| 000740 |       | ENTAL*QUTREDEUX         | 01530   | 12 4414  |
| 000741 |       | SLSET*TROISCINQ         | 01531   | 51 4412  |
|        |       | ENTRANCE                |         |          |
|        |       | CHK FUNC 51             |         |          |
|        |       | IS AL 777777            |         |          |
|        |       | YES-CONTINUE            |         |          |
|        |       | NO-ERROR STOP           |         |          |
| 000742 |       | CMAL*NEGZERO            | 01532   | 02 4512  |
| 000743 |       | JPEQ*LOK+2              | 01533   | 61 1535  |
| 000744 |       | STOP*40                 | 01534   | 5056 40  |
| 000745 |       | ENTAL*SEPTZERO          | 01535   | 12 5067  |
| 000746 |       | SLCL*ZEROSEPT           | 01536   | 52 4440  |
| 000747 |       | JPALZ*LOK+2             | 01537   | 61 1541  |
| 000750 |       | STOP*40                 | 01540   | 5056 40  |
| 000751 |       | ENTAL*ZEROSEPT          | 01541   | 12 4440  |
|        |       | CHK FUNC 52             |         |          |
|        |       | IS AL ZERO-YES-CONTINUE |         |          |
|        |       | NO-ERROR STOP           |         |          |
| 000752 |       | SLCL*SEPTZERO           | 01542   | 52 5067  |
| 000753 |       | JPALZ*LOK+2             | 01543   | 61 1545  |
|        |       | IS AL ZERO-YES-CONTINUE |         |          |

| SEQNO  | LABEL | STATEMENT       | ADDRESS | INSTRUCT |
|--------|-------|-----------------|---------|----------|
| 000754 |       | STOP*40         | 01544   | 5056 40  |
| 000755 |       | ENTAL*QUTREDEUX | 01545   | 12 4414  |
| 000756 |       | SLCP*TROISCINQ  | 01546   | 53 4412  |
| 000757 |       | CMAL*NEGZERO    | 01547   | 02 4512  |
| 000760 |       | JPEQ*LOK+2      | 01550   | 61 1552  |
| 000761 |       | STOP*40         | 01551   | 5056 40  |
| 000762 |       | ENTAL*TROISCINQ | 01552   | 12 4412  |
| 000763 |       | SLCP*QUTREDEUX  | 01553   | 53 4414  |
| 000764 |       | CMAL*NEGZERO    | 01554   | 02 4512  |
| 000765 |       | JPEQ*LOK+2      | 01555   | 61 1557  |
| 000766 |       | STOP*40         | 01556   | 5056 40  |
| 000767 |       | ENTAU*SEPTZERO  | 01557   | 10 5067  |
| 000770 |       | ENTAL*TROISCINQ | 01560   | 12 4412  |
| 000771 |       | SLSU*QUTREDEUX  | 01561   | 04 4414  |
| 000772 |       | CMAL*QUTRECINQ  | 01562   | 02 4453  |
| 000773 |       | JPEQ*LOK+2      | 01563   | 61 1565  |
| 000774 |       | STOP*40         | 01564   | 5056 40  |
| 000775 |       | ENTAU*ZEROSEPT  | 01565   | 10 4440  |
| 000776 |       | ENTAL*TROISCINQ | 01566   | 12 4412  |
| 000777 |       | SLSU*QUTREDEUX  | 01567   | 04 4414  |
| 001000 |       | CMAL*TROISDEUX  | 01570   | 02 4452  |
| 001001 |       | JPEQ*LOK+2      | 01571   | 61 1573  |
| 001002 |       | STOP*40         | 01572   | 5056 40  |
| 001003 |       | ENTAL*TROISCINQ | 01573   | 12 4412  |
| 001004 |       | CPAL            | 01574   | 5061 00  |
| 001005 |       | CMAL*QUTREDEUX  | 01575   | 02 4414  |
| 001006 |       | JPEQ*LOK+2      | 01576   | 61 1600  |
| 001007 |       | STOP*40         | 01577   | 5056 40  |
| 001010 |       | CPAL            | 01600   | 5061 00  |
| 001011 |       | CMAL*TROISCINQ  | 01601   | 02 4412  |
| 001012 |       | JPEQ*LOK+2      | 01602   | 61 1604  |

| SEQNO       | LABEL | STATEMENT       | ADDRESS | INSTRUCT |
|-------------|-------|-----------------|---------|----------|
| 001013      |       | STOP*40         | 01603   | 5056 40  |
| 001014      |       | ENTAL*POSZERO   | 01604   | 12 4510  |
| 001015      |       | CPAL            | 01605   | 5061 00  |
| 001016      |       | JPALZ*LOK+2     | 01606   | 61 1610  |
| 001017      |       | STOP*40         | 01607   | 5056 40  |
| 001020      |       | ENTAU*TROISCING | 01610   | 10 4412  |
| 001021      |       | CPAU            | 01611   | 5062 00  |
| 001022      |       | STRAU*WASTE     | 01612   | 46 4637  |
| 001023      |       | ENTAL*WASTE     | 01613   | 12 4637  |
| 001024      |       | CMAL*QUTREDEUX  | 01614   | 02 4414  |
| 001025      |       | JPEQ*LOK+2      | 01615   | 61 1617  |
| 001026      |       | STOP*40         | 01616   | 5056 40  |
| 001027      |       | CPAU            | 01617   | 5062 00  |
| 4-30 001030 |       | STRAU*WASTE     | 01620   | 46 4637  |
| 001031      |       | ENTAL*WASTE     | 01621   | 12 4637  |
| 001032      |       | CMAL*TROISCING  | 01622   | 02 4412  |
| 001033      |       | JPEQ*LOK+2      | 01623   | 61 1625  |
| 001034      |       | STOP*40         | 01624   | 5056 40  |
| 001035      |       | ENTAU*POSZERO   | 01625   | 10 4510  |
| 001036      |       | CPAU            | 01626   | 5062 00  |
| 001037      |       | JPAUZ*LOK+2     | 01627   | 60 1631  |
| 001040      |       | STOP*40         | 01630   | 5056 40  |
| 001041      |       | ENTAU*TROISCING | 01631   | 10 4412  |
| 001042      |       | ENTAL*TROISCING | 01632   | 12 4412  |
| 001043      |       | CPA             | 01633   | 5063 00  |
| 001044      |       | CMAL*QUTREDEUX  | 01634   | 02 4414  |
| 001045      |       | JPEQ*LOK+2      | 01635   | 61 1637  |
| 001046      |       | STOP*40         | 01636   | 5056 40  |
| 001047      |       | STRAU*WASTE     | 01637   | 46 4637  |
| 001050      |       | ENTAL*WASTE     | 01640   | 12 4637  |
| 001051      |       | CMAL*QUTREDEUX  | 01641   | 02 4414  |

| SEQNO       | LABEL   | STATEMENT            | ADDRESS | INSTRUCT |
|-------------|---------|----------------------|---------|----------|
| 001052      |         | JPEQ*LOK+2           | 01642   | 61 1644  |
| 001053      |         | STOP*40              | 01643   | 5056 40  |
| 001054      |         | ENTAU*POSZERO        | 01644   | 10 4510  |
| 001055      |         | ENTALK*00            | 01645   | 70 0000  |
| 001056      |         | CPA*00               | 01646   | 5063 00  |
| 001057      |         | JPAUZ*LOK+2          | 01647   | 60 1651  |
| 001060      |         | STOP*40              | 01650   | 5056 40  |
| 001061      |         | JPALZ*LOK+2          | 01651   | 61 1653  |
| 001062      |         | STOP*40              | 01652   | 5056 40  |
| 001063      |         | SKP*04               | 01653   | 5050 04  |
| 001064      |         | IJP*SLUP             | 01654   | 55 1522  |
| 001065      |         | JP*SLUP+1            | 01655   | 34 1523  |
| 001066      |         | RESERV*01            | 01656   | 000000   |
| 4-31 001067 | ICEBERG | 0*0                  | 01657   | 00 0000  |
| 001070      |         | ENTALK*7777          | 01660   | 70 7777  |
| 001071      |         | STRAL*WASUP          | 01661   | 44 4650  |
| 001072      |         | ENTAL*POSZERO        | 01662   | 12 4510  |
| 001073      |         | STRAL*WASTE          | 01663   | 44 4637  |
| 001074      |         | STRAL*COLLECT        | 01664   | 44 4613  |
| 001075      |         | ENTAL*BEEREG         | 01665   | 12 4446  |
| 001076      |         | STRAL*BEWARE         | 01666   | 44 1673  |
| 001077      |         | ENTALK*7710          | 01667   | 70 7710  |
| 001100      |         | STRAL*DUNLUP         | 01670   | 44 4651  |
| 001101      |         | ENTALK*10            | 01671   | 70 0010  |
| 001102      |         | STRAL*BELONG         | 01672   | 44 4612  |
| 001103      | BEWARE  | 000000               | 01673   | 000000   |
| 001104      |         | STRICR*WASTE         | 01674   | 72 4637  |
| 001105      |         | STRICR*WASUP         | 01675   | 72 4650  |
| 001106      |         | ENTAL*WASUP          | 01676   | 12 4650  |
| 001107      |         | CMAL*DUNLUP          | 01677   | 02 4651  |
| 001110      |         | JPEQ*LOK+2           | 01700   | 61 1702  |
|             |         | ARE UPPER 12 BITS OK |         |          |
|             |         | YES-CONTINUE         |         |          |



| SEQNO  | LABEL | STATEMENT      | ADDRESS | INSTRUCT |
|--------|-------|----------------|---------|----------|
| 001111 |       | STOP*40        |         |          |
|        |       | NO-ERROR STOP  | 01701   | 5056 40  |
| 001112 |       | ENTAL*WASTE    | 01702   | 12 4637  |
| 001113 |       | CMAL*BELONG    | 01703   | 02 4612  |
| 001114 |       | JPEQ*LOK+6     | 01704   | 61 1712  |
| 001115 |       | JPALNZ*LOK+2   | 01705   | 63 1707  |
| 001116 |       | STOP*40        |         |          |
|        |       | YES-ERROR STOP | 01706   | 5056 40  |
| 001117 |       | ENTAL*COLLECT  | 01707   | 12 4613  |
| 001120 |       | ADDALK*01      | 01710   | 71 0001  |
| 001121 |       | STRAL*COLLECT  | 01711   | 44 4613  |
| 001122 |       | ENTAL*COLLECT  | 01712   | 12 4613  |
| 001123 |       | LSHAL*01       | 01713   | 5046 01  |
| 001124 |       | STRAL*COLLECT  | 01714   | 44 4613  |
| 001125 |       | ENTAL*DUNLUP   | 01715   | 12 4651  |
| 001126 |       | ADDALK*7776    | 01716   | 71 7776  |
| 001127 |       | STRAL*DUNLUP   | 01717   | 44 4651  |
| 001130 |       | ENTAL*BELONG   | 01720   | 12 4612  |
| 001131 |       | ADDALK*7776    | 01721   | 71 7776  |
| 001132 |       | STRAL*BELONG   | 01722   | 44 4612  |
| 001133 |       | ENTAL*BEWARE   | 01723   | 12 1673  |
| 001134 |       | ADDALK*7776    | 01724   | 71 7776  |
| 001135 |       | STRAL*BEWARE   | 01725   | 44 1673  |
| 001136 |       | SLCL*DUALSEV   | 01726   | 52 5110  |
| 001137 |       | JPALNZ*BEWARE  | 01727   | 63 1673  |
| 001140 |       | ENTAL*COLLECT  | 01730   | 12 4613  |
| 001141 |       | JPALZ*LOK+2    | 01731   | 61 1733  |
| 001142 |       | STOP*40        | 01732   | 5056 40  |
| 001143 |       | STRAL*0001     | 01733   | 44 0001  |
| 001144 |       | STRAL*0002     | 01734   | 44 0002  |
| 001145 |       | STRAL*0003     | 01735   | 44 0003  |
| 001146 |       | STRAL*0004     | 01736   | 44 0004  |
| 001147 |       | STRAL*0005     | 01737   | 44 0005  |

| SEQNO       | LABEL  | STATEMENT                                | ADDRESS | INSTRUCT |
|-------------|--------|--|---------|----------|
| 001150      |        | STRAL*0006                               | 01740   | 44 0006  |
| 001151      |        | STRAL*0007                               | 01741   | 44 0007  |
| 001152      |        | STRAL*0010                               | 01742   | 44 0010  |
| 001153      |        | ENTJCR*01                                | 01743   | 5072 01  |
| 001154      |        | ENTBK*7777           CHK FUNC 36         | 01744   | 36 7777  |
| 001155      | BEEMIN | ENTAL*0001                               | 01745   | 12 0001  |
| 001156      |        | CMAL*NEGZERO           IS AL 777777      | 01746   | 02 4512  |
| 001157      |        | JPEQ*LOK+4   YES-CONTINUE                | 01747   | 61 1753  |
| 001160      |        | JPALZ*LOK+2   DID ANY B GET STORED       | 01750   | 61 1752  |
| 001161      |        | STOP*40   ERROR STOP                     | 01751   | 5056 40  |
| 001162      |        | STOP*40   ERROR STOP                     | 01752   | 5056 40  |
| 001163      |        | ENTAL*POSZERO                            | 01753   | 12 4510  |
| 001164      |        | STRAL*0001                               | 01754   | 44 0001  |
| 4-33 001165 |        | ENTAL*BEEMIN           AL EQ 120001      | 01755   | 12 1745  |
| 001166      |        | STRAL*BEECHK                             | 01756   | 44 1757  |
| 001167      | BEECHK | 000000           CHK ALL B LOKS          | 01757   | 000000   |
| 001170      |        | JPALZ*LOK+2   IS AL 0-YES -CONTINUE      | 01760   | 61 1762  |
| 001171      |        | STOP*40   NO-ERROR STOP                  | 01761   | 5056 40  |
| 001172      |        | ENTAL*BEECHK                             | 01762   | 12 1757  |
| 001173      |        | ADDALK*01           INCREMENT 1          | 01763   | 71 0001  |
| 001174      |        | STRAL*BEECHK                             | 01764   | 44 1757  |
| 001175      |        | CMAL*BEEMAX           ARE ALL B LOKS CHK | 01765   | 02 4653  |
| 001176      |        | JPEQ*LOK+2   YES-CONTINUE                | 01766   | 61 1770  |
| 001177      |        | JP*BEECHK   NO-CONT CHK B LOKS           | 01767   | 34 1757  |
| 001200      |        | ENTB*ZEROSIX   CHK FUNC 32               | 01770   | 32 5050  |
| 001201      |        | ENTAL*0001                               | 01771   | 12 0001  |
| 001202      |        | CMAL*ZEROSIX   IS AL 000006              | 01772   | 02 5050  |
| 001203      |        | JPEQ*LOK+2   YES-CONTINUE                | 01773   | 61 1775  |
| 001204      |        | STOP*40   NO-ERROR STOP                  | 01774   | 5056 40  |
| 001205      |        | ENTBK*01                                 | 01775   | 36 0001  |
| 001206      |        | BJP*LOK+3   CHK FUNC 73 B NOT 0          | 01776   | 73 2001  |

| SEQNO       | LABEL | STATEMENT                                 | ADDRESS | INSTRUCT |
|-------------|-------|---|---------|----------|
| 001207      |       | RJP*PICKAPLUM TEST B+-1 NETWORK ,B#0 EVAL | 01777   | 76 2717  |
| 001210      |       | STOP*40 ERROR STOP                        | 02000   | 5056 40  |
| 001211      |       | BJP*LOK+2 B EQ 0                          | 02001   | 73 2003  |
| 001212      |       | JP*LOK+3 OK-CONTINUE                      | 02002   | 34 2005  |
| 001213      |       | RJP*PICKAPLUM TEST B+-1 NETWORK ,B#0 EVAL | 02003   | 76 2717  |
| 001214      |       | STOP*40 NO-ERROR STOP                     | 02004   | 5056 40  |
| 001215      |       | BSK*ZERONE CHK FUNC 56-B EQ 0-AL NEQ Y    | 02005   | 56 5032  |
| 001216      |       | JP*LOK+3 OK-CONTINUE                      | 02006   | 34 2011  |
| 001217      |       | RJP*PICKAPLUM TEST B+-1 NETWORK ,B#0 EVAL | 02007   | 76 2717  |
| 001220      |       | STOP*40 ERROR STOP                        | 02010   | 5056 40  |
| 001221      |       | BSK*ZERONE B EQ Y-YES-CONTINUE            | 02011   | 56 5032  |
| 001222      |       | JP*LOK+2                                  | 02012   | 34 2014  |
| 001223      |       | JP*LOK+3                                  | 02013   | 34 2016  |
| 4-34 001224 |       | RJP*PICKAPLUM TEST B+-1 NETWORK ,B#0 EVAL | 02014   | 76 2717  |
| 001225      |       | STOP*40 NO-ERROR STOP                     | 02015   | 5056 40  |
| 001226      |       | ENTBK*01 B EQ 1                           | 02016   | 36 0001  |
| 001227      |       | ISK*01 Y NEQ 0                            | 02017   | 57 0001  |
| 001230      |       | JP*LOK+3 OK-CONTINUE                      | 02020   | 34 2023  |
| 001231      |       | RJP*PICKAPLUM TEST B+-1 NETWORK ,B#0 EVAL | 02021   | 76 2717  |
| 001232      |       | STOP*40 ERROR STOP                        | 02022   | 5056 40  |
| 001233      |       | ISK*01 Y EQ 0-YES-CONTINUE                | 02023   | 57 0001  |
| 001234      |       | JP*LOK+2                                  | 02024   | 34 2026  |
| 001235      |       | JP*LOK+3                                  | 02025   | 34 2030  |
| 001236      |       | RJP*PICKAPLUM TEST B+-1 NETWORK ,B#0 EVAL | 02026   | 76 2717  |
| 001237      |       | STOP*40 NO-ERROR STOP                     | 02027   | 5056 40  |
| 001240      |       | ENTBK*01                                  | 02030   | 36 0001  |
| 001241      |       | ENTAU*POSZERO                             | 02031   | 10 4510  |
| 001242      |       | ENTAU*UNESEPT CHK FUNC 11                 | 02032   | 11 4410  |
| 001243      |       | STRAU*WASTE                               | 02033   | 46 4637  |
| 001244      |       | ENTAL*WASTE                               | 02034   | 12 4637  |
| 001245      |       | CMAL*UNESEPT+1 IS AL 377777               | 02035   | 02 4411  |

| SEQNO  | LABEL | STATEMENT      | ADDRESS | INSTRUCT |
|--------|-------|----------------|---------|----------|
| 001246 |       | JPEQ*LOK+7     | 02036   | 61 2045  |
| 001247 |       | CMAL*UNESEPT   | 02037   | 02 4410  |
| 001250 |       | JPEQ*LOK+4     | 02040   | 61 2044  |
| 001251 |       | JPALZ*LOK+2    | 02041   | 61 2043  |
| 001252 |       | STOP*40        | 02042   | 5056 40  |
| 001253 |       | STOP*40        | 02043   | 5056 40  |
| 001254 |       | STOP*40        | 02044   | 5056 40  |
| 001255 |       | ENTALK*00      | 02045   | 70 0000  |
| 001256 |       | ENTALB*UNESEPT | 02046   | 13 4410  |
| 001257 |       | CMAL*UNESEPT+1 | 02047   | 02 4411  |
| 001260 |       | JPEQ*LOK+4     | 02050   | 61 2054  |
| 001261 |       | JPALZ*LOK+2    | 02051   | 61 2053  |
| 001262 |       | STOP*40        | 02052   | 5056 40  |
| 001263 |       | STOP*40        | 02053   | 5056 40  |
| 001264 |       | ENTBB*UNESEPT  | 02054   | 33 4410  |
| 001265 |       | ENTAL*01       | 02055   | 12 0001  |
| 001266 |       | CMAL*UNESEPT+1 | 02056   | 02 4411  |
| 001267 |       | JPEQ*LOK+4     | 02057   | 61 2063  |
| 001270 |       | JPALZ*LOK+2    | 02060   | 61 2062  |
| 001271 |       | STOP*40        | 02061   | 5056 40  |
| 001272 |       | STOP*40        | 02062   | 5056 40  |
| 001273 |       | ENTBK*01       | 02063   | 36 0001  |
| 001274 |       | ENTBKB*01      | 02064   | 37 0001  |
| 001275 |       | ENTAL*01       | 02065   | 12 0001  |
| 001276 |       | CMAL*ZERODEUX  | 02066   | 02 4466  |
| 001277 |       | JPEQ*LOK+5     | 02067   | 61 2074  |
| 001300 |       | CMAL*ZEROUNE   | 02070   | 02 5032  |
| 001301 |       | JPEQ*LOK+2     | 02071   | 61 2073  |
| 001302 |       | STOP*40        | 02072   | 5056 40  |
| 001303 |       | STOP*40        | 02073   | 5056 40  |
| 001304 |       | SKP*04         | 02074   | 5050 04  |



| SEQNO  | LABEL | STATEMENT       | ADDRESS | INSTRUCT |
|--------|-------|-----------------|---------|----------|
| 001344 |       | STOP*40         | 02134   | 5056 40  |
| 001345 |       | STOP*40         | 02135   | 5056 40  |
| 001346 |       | ENTAL*ZEROSIX   | 02136   | 12 5050  |
| 001347 |       | STRALB*01       | 02137   | 45 0001  |
| 001350 |       | ENTAL*02        | 02140   | 12 0002  |
| 001351 |       | CMAL*ZEROSIX    | 02141   | 02 5050  |
| 001352 |       | JPEQ*LOK+5      | 02142   | 61 2147  |
| 001353 |       | CMAL*ZEROUNE    | 02143   | 02 5032  |
| 001354 |       | JPEQ*LOK+2      | 02144   | 61 2146  |
| 001355 |       | STOP*40         | 02145   | 5056 40  |
| 001356 |       | STOP*40         | 02146   | 5056 40  |
| 001357 |       | ENTAU*ZERODEUX  | 02147   | 10 4466  |
| 001360 |       | STRAUB*01       | 02150   | 47 0001  |
| 001361 |       | ENTAL*02        | 02151   | 12 0002  |
| 001362 |       | CMAL*ZERODEUX   | 02152   | 02 4466  |
| 001363 |       | JPEQ*LOK+5      | 02153   | 61 2160  |
| 001364 |       | CMAL*ZEROSIX    | 02154   | 02 5050  |
| 001365 |       | JPEQ*LOK+2      | 02155   | 61 2157  |
| 001366 |       | STOP*40         | 02156   | 5056 40  |
| 001367 |       | STOP*40         | 02157   | 5056 40  |
| 001370 |       | CL*WASTE        | 02160   | 40 4637  |
| 001371 |       | ENTAL*ZEROSEVEN | 02161   | 12 5054  |
| 001372 |       | STRADR*WASTE    | 02162   | 74 4637  |
| 001373 |       | ENTAL*WASTE     | 02163   | 12 4637  |
| 001374 |       | CMAL*TZERFSEV   | 02164   | 02 5324  |
| 001375 |       | JPEQ*LOK+7      | 02165   | 61 2174  |
| 001376 |       | CMAL*ZEROSEVEN  | 02166   | 02 5054  |
| 001377 |       | JPEQ*LOK+4      | 02167   | 61 2173  |
| 001400 |       | JPALZ*LOK+2     | 02170   | 61 2172  |
| 001401 |       | STOP*40         | 02171   | 5056 40  |
| 001402 |       | STOP*40         | 02172   | 5056 40  |

| SEQNO  | LABEL | STATEMENT       | ADDRESS | INSTRUCT |
|--------|-------|-----------------|---------|----------|
| 001403 |       | STOP*40         | 02173   | 5056 40  |
| 001404 |       | ENTALK*7777     | 02174   | 70 7777  |
| 001405 |       | STRAL*WASUP     | 02175   | 44 4650  |
| 001406 |       | ENTAL*BOM20     | 02176   | 12 5407  |
| 001407 |       | STRADR*WASUP    | 02177   | 74 4650  |
| 001410 |       | ENTAL*WASUP     | 02200   | 12 4650  |
| 001411 |       | CMAL*BOM20      | 02201   | 02 5407  |
| 001412 |       | JPEQ*LOK+2      | 02202   | 61 2204  |
| 001413 |       | STOP*40         | 02203   | 5056 40  |
| 001414 |       | ENTBK*17        | 02204   | 36 0017  |
| 001415 |       | ENTAL*UNEHUNTHO | 02205   | 12 4504  |
| 001416 |       | CMALB*CHAN      | 02206   | 03 4465  |
| 001417 |       | JPEQ*LOK+6      | 02207   | 61 2215  |
| 001420 |       | ENTBK*00        | 02210   | 36 0000  |
| 001421 |       | CMALB*UNEHUNTHO | 02211   | 03 4504  |
| 001422 |       | JPEQ*LOK+2      | 02212   | 61 2214  |
| 001423 |       | STOP*40         | 02213   | 5056 40  |
| 001424 |       | STOP*40         | 02214   | 5056 40  |
| 001425 |       | ENTAU*ZEROSEVEN | 02215   | 10 5054  |
| 001426 |       | ENTAL*SIXSEPT   | 02216   | 12 4460  |
| 001427 |       | CMSK*UNESEPT    | 02217   | 06 4410  |
| 001430 |       | JPEQ*LOK+2      | 02220   | 61 2222  |
| 001431 |       | STOP*40         | 02221   | 5056 40  |
| 001432 |       | ENTBK*01        | 02222   | 36 0001  |
| 001433 |       | CMSKB*TRUISSEPT | 02223   | 07 4406  |
| 001434 |       | JPEQ*LOK+2      | 02224   | 61 2226  |
| 001435 |       | STOP*40         | 02225   | 5056 40  |
| 001436 |       | ENTBK*01        | 02226   | 36 0001  |
| 001437 |       | JPB*SWAI        | 02227   | 35 2230  |
| 001440 | SWAI  | STOP*40         | 02230   | 5056 40  |
| 001441 |       | ENTAL*STOPIT    | 02231   | 12 4652  |

| SEQNO  | LABEL   | STATEMENT      | ADDRESS                      | INSTRUCT      |
|--------|---------|----------------|------------------------------|---------------|
| 001442 |         | STRAL*BIEN     | PRESTORE STOPS               | 02232 44 2236 |
| 001443 |         | STRAL*PORTE    |                              | 02233 44 2246 |
| 001444 |         | IRJP*ALLON     | CHK FUNC 30                  | 02234 30 4642 |
| 001445 |         | STOP*40        | ERROR STOP                   | 02235 5056 40 |
| 001446 | BIEN    | STOP*40        | ERROR STOP                   | 02236 5056 40 |
| 001447 |         | ENTAL*BIEN     |                              | 02237 12 2236 |
| 001450 |         | CMAL*TRES      | IS AL SWAI+2                 | 02240 02 4643 |
| 001451 |         | JPEQ*LOK+2     | YES-CONTINUE                 | 02241 61 2243 |
| 001452 |         | STOP*40        | NO-ERROR STOP                | 02242 5056 40 |
| 001453 |         | ENTBK*01       |                              | 02243 36 0001 |
| 001454 |         | IRJPB*TRES     | CHK FUNC 31                  | 02244 31 4643 |
| 001455 |         | STOP*40        | ERROR STOP                   | 02245 5056 40 |
| 001456 | PORTE   | STOP*40        | ERROR STOP                   | 02246 5056 40 |
| 001457 |         | ENTAL*PORTE    |                              | 02247 12 2246 |
| 001460 |         | CMAL*ROUGE     | IS AL PORTE-1                | 02250 02 4645 |
| 001461 |         | JPEQ*LOK+2     | YES-CONTINUE                 | 02251 61 2253 |
| 001462 |         | STOP*40        | NO-ERROR STOP                | 02252 5056 40 |
| 001463 |         | ENTAU*SEPTZERO | AU EQ 707070                 | 02253 10 5067 |
| 001464 |         | ENTAL*ZEROSEPT | AL EQ 070707                 | 02254 12 4440 |
| 001465 |         | ENTBK*01       |                              | 02255 36 0001 |
| 001466 |         | SLSUB*ZEROSEPT | CHK FUNC 05                  | 02256 05 4440 |
| 001467 |         | CMAL*NEGZERO   | IS AL 777777                 | 02257 02 4512 |
| 001470 |         | JPEQ*LOK+2     | YES-CONTINUE                 | 02260 61 2262 |
| 001471 |         | STOP*40        | NO-ERROR STOP                | 02261 5056 40 |
| 001472 |         | SKP*04         | SET SKIP KEY 2 TO CYCLE TEST | 02262 5050 04 |
| 001473 |         | IJP*CAMEO      | EXIT                         | 02263 55 2100 |
| 001474 |         | JP*CAMEO+1     | TO RECYCLE CAMEO             | 02264 34 2101 |
| 001475 |         | RESERV*01      |                              | 02265 000000  |
| 001476 | SUPEREG | 0*0            | ENTRANCE                     | 02266 00 0000 |
| 001477 |         | ENTAL*D0SUP    | NOTIFY AFAULT                | 02267 12 4655 |
| 001500 |         | STRAL*IFault   | WHICH ROUTINE                | 02270 44 4404 |



| SEQNO  | LABEL | STATEMENT    | ADDRESS | INSTRUCT |
|--------|-------|--------------|---------|----------|
| 001501 |       | ENTALK*0077  | 02271   | 70 0077  |
| 001502 |       | STRAL*WASTE  | 02272   | 44 4637  |
| 001503 |       | ENTSR*10     | 02273   | 5073 10  |
| 001504 |       | STRSR*WASTE  | 02274   | 75 4637  |
| 001505 |       | ENTAL*WASTE  | 02275   | 12 4637  |
| 001506 |       | CMAL*CHAN+3  | 02276   | 02 4470  |
| 001507 |       | JPEQ*SR30    | 02277   | 61 2313  |
| 001510 |       | CMAL*SEVSEV  | 02300   | 02 5111  |
| 001511 |       | JPEQ*SR30-1  | 02301   | 61 2312  |
| 001512 |       | JPALNZ*LOK+7 | 02302   | 63 2311  |
| 001513 |       | ENTSR*17     | 02303   | 5073 17  |
| 001514 |       | STRSR*WASTE  | 02304   | 75 4637  |
| 001515 |       | ENTAL*WASTE  | 02305   | 12 4637  |
| 001516 |       | JPALNZ*LOK+2 | 02306   | 63 2310  |
| 001517 |       | STOP*40      | 02307   | 5056 40  |
| 001520 |       | STOP*40      | 02310   | 5056 40  |
| 001521 |       | STOP*40      | 02311   | 5056 40  |
| 001522 |       | STOP*40      | 02312   | 5056 40  |
| 001523 | SR30  | ENTALK*7700  | 02313   | 70 7700  |
| 001524 |       | STRAL*WASTE  | 02314   | 44 4637  |
| 001525 |       | ENTSR*07     | 02315   | 5073 07  |
| 001526 |       | STRSR*WASTE  | 02316   | 75 4637  |
| 001527 |       | ENTAL*WASTE  | 02317   | 12 4637  |
| 001530 |       | CMAL*SEVENT  | 02320   | 02 4447  |
| 001531 |       | JPEQ*LOK+2   | 02321   | 61 2323  |
| 001532 |       | STOP*40      | 02322   | 5056 40  |
| 001533 |       | ENTALK*00    | 02323   | 70 0000  |
| 001534 |       | STRAL*WASTE  | 02324   | 44 4637  |
| 001535 |       | ENTSR*30     | 02325   | 5073 30  |
| 001536 |       | STRSR*WASTE  | 02326   | 75 4637  |
| 001537 |       | ENTAL*WASTE  | 02327   | 12 4637  |

4-40

IS AL 77707

| SEQNO  | LABEL  | STATEMENT   | ADDRESS | INSTRUCT |
|--------|--------|---|---------|----------|
| 001540 |        | CMAL*THIRTY IS AL 30                                | 02330   | 02 4435  |
| 001541 |        | JPEQ*LOK+2 YES-CONTINUE                             | 02331   | 61 2333  |
| 001542 |        | STOP*40 NO-ERROR STOP                               | 02332   | 5056 40  |
| 001543 |        | ENTICR*01   | 02333   | 5072 01  |
| 001544 |        | ENTBK*03  | 02334   | 36 0003  |
| 001545 |        | CL*WASTE CL CONTENTS                                | 02335   | 40 4637  |
| 001546 |        | ENTICR*03   | 02336   | 5072 03  |
| 001547 |        | ENTBK*17  | 02337   | 36 0017  |
| 001550 |        | ENTICR*03 DETERMINE HIGHEST RANGE OF MAIN           | 02340   | 5072 03  |
| 001551 |        | REMARK*MEMORY, 100K, 40K, 20K OR 10K, EXIT IF LESS. |         |          |
| 001552 | MEMZI  | ENTALB*CHAN   | 02341   | 13 4465  |
| 001553 |        | ENTICR*02   | 02342   | 5072 02  |
| 001554 |        | STRAL*0002  | 02343   | 44 0002  |
| 001555 |        | ENTAL*SEPTZERO AL EQ 707070                         | 02344   | 12 5067  |
| 001556 |        | STRALB*7776   | 02345   | 45 7776  |
| 001557 |        | ENTALB*7776   | 02346   | 13 7776  |
| 001560 |        | CMAL*SEPTZERO                                       | 02347   | 02 5067  |
| 001561 |        | JPEQ*LOK+6  | 02350   | 61 2356  |
| 001562 |        | ENTICR*03   | 02351   | 5072 03  |
| 001563 |        | BJP*LOK+1   | 02352   | 73 2353  |
| 001564 |        | ENTICR*01   | 02353   | 5072 01  |
| 001565 |        | BJP*MEMZI-1   | 02354   | 73 2340  |
| 001566 |        | JP*MADEIT   | 02355   | 34 2423  |
| 001567 |        | ENTICR*01   | 02356   | 5072 01  |
| 001570 |        | ENTALB*ACKUP  | 02357   | 13 4547  |
| 001571 |        | STRAL*STACKUP                                       | 02360   | 44 4630  |
| 001572 | REFILL | ENTICR*03   | 02361   | 5072 03  |
| 001573 |        | ENTALB*CHAN   | 02362   | 13 4465  |
| 001574 |        | STRAL*0002 STORE DIFF BANK SELECTIONS               | 02363   | 44 0002  |
| 001575 |        | CL*7774   | 02364   | 40 7774  |
| 001576 |        | ENTICR*02   | 02365   | 5072 02  |

| SEQNO       | LABEL   | STATEMENT              | ADDRESS                      | INSTRUCT      |
|-------------|---------|------------------------|------------------------------|---------------|
| 001577      |         | ENTAL*STACKED          | AL EQ 557775                 | 02366 12 4450 |
| 001600      |         | STRALB*7774            | STORE OUTSIDE BANK 0         | 02367 45 7774 |
| 001601      |         | ENTAL*UNSTACK          | AL EQ 00BANDIT               | 02370 12 4656 |
| 001602      |         | STRALB*7775            |                              | 02371 45 7775 |
| 001603      |         | ENTAL*7774             |                              | 02372 12 7774 |
| 001604      |         | JPALZ*LOK+5            | IS BIT DROPPED IN P          | 02373 61 2400 |
| 001605      | REJECTS | ENTAL*WASTE            | YES-ERROR                    | 02374 12 4637 |
| 001606      |         | SLSET*0002             | RECORD ERROR                 | 02375 51 0002 |
| 001607      |         | STRAL*WASTE            | STORE ERROR RESULT           | 02376 44 4637 |
| 001610      |         | JP*BANDIT              |                              | 02377 34 2403 |
| 001611      |         | ENTAL*REFRAD           | AL EQ 34REJECTS              | 02400 12 4657 |
| 001612      |         | STRAL*0000             |                              | 02401 44 0000 |
| 001613      |         | IJP*STACKUP            |                              | 02402 55 4630 |
| 4-42 001614 | BANDIT  | ENTICR*03              |                              | 02403 5072 03 |
| 001615      |         | BJP*LOK+1              |                              | 02404 73 2405 |
| 001616      |         | ENTICR*01              |                              | 02405 5072 01 |
| 001617      |         | BJP*REFILL-2           |                              | 02406 73 2357 |
| 001620      |         | ENTAL*WASTE            | CHK IF BANKS WERE ENTERED    | 02407 12 4637 |
| 001621      |         | JPALZ*LOK+2            | AL EQ 0 YES CONTINUE         | 02410 61 2412 |
| 001622      |         | STOP*40                | NO-ERROR STOP                | 02411 5056 40 |
| 001623      |         | ENTB*CHAN+14           | B EQ 010000                  | 02412 32 4501 |
| 001624      |         | ENTAL*TEAN             | AL EQ 070007                 | 02413 12 4444 |
| 001625      |         | STRALB*7774            | STORE IN BANK 1              | 02414 45 7774 |
| 001626      |         | ENTSR*11               | ACTIVATE BANK 1              | 02415 5073 11 |
| 001627      |         | ENTAL*7774             | CHECK SR TO P ENABLES        | 02416 12 7774 |
| 001630      |         | ENTSR*00 DEACTIVATE SR |                              | 02417 5073 00 |
| 001631      |         | CMAL*TEAN              | WAS CORRECT BANK REFERENCED  | 02420 02 4444 |
| 001632      |         | JPEQ*MADEIT            | YES GO TO END OF TEST        | 02421 61 2423 |
| 001633      | DEFEAT  | STOP*40                | ERROR STOP                   | 02422 5056 40 |
| 001634      | MADEIT  | SKP*04                 | SET SKIP KEY 2 TO CYCLE TEST | 02423 5050 04 |
| 001635      |         | IJP*SUPEREG            | EXIT                         | 02424 55 2266 |

| SEQNO  | LABEL    | STATEMENT      | ADDRESS | INSTRUCT |
|--------|----------|----------------|---------|----------|
| 001636 |          | JP*SUPEREG+1   | 02425   | 34 2267  |
| 001637 |          | RESERV*01      | 02426   | 000000   |
| 001640 | KAYADDER | 0*0            | 02427   | 00 0000  |
| 001641 |          | ENTICR*01      | 02430   | 5072 01  |
| 001642 |          | ENTBK*0474     | 02431   | 36 0474  |
| 001643 |          | CLB*0002       | 02432   | 41 0002  |
| 001644 |          | BJP*LOK-1      | 02433   | 73 2432  |
| 001645 |          | ENTALK*0013    | 02434   | 70 0013  |
| 001646 |          | STRAL*0017     | 02435   | 44 0017  |
| 001647 |          | ENTALK*01      | 02436   | 70 0001  |
| 001650 |          | ENTAU*POSZERO  | 02437   | 10 4510  |
| 001651 |          | SF*77          | 02440   | 5044 77  |
| 001652 |          | STRAU*TOPCOUNT | 02441   | 46 4635  |
| 001653 |          | JPALZ*LOK+10   | 02442   | 61 2452  |
| 001654 |          | CMAL*ZEROUNE   | 02443   | 02 5032  |
| 001655 |          | JPEQ*LOK+3     | 02444   | 61 2447  |
| 001656 |          | ENTAU*0017     | 02445   | 10 0017  |
| 001657 |          | STOP*40        | 02446   | 5056 40  |
| 001660 |          | ENTAU*0017     | 02447   | 10 0017  |
| 001661 |          | JPAUZ*SHIFLESS | 02450   | 60 2523  |
| 001662 |          | STOP*40        | 02451   | 5056 40  |
| 001663 |          | ENTAL*TOPCOUNT | 02452   | 12 4635  |
| 001664 |          | CMAL*TWOHUNTHO | 02453   | 02 4505  |
| 001665 |          | JPEQ*LOK+3     | 02454   | 61 2457  |
| 001666 |          | JPALZ*LOK-6    | 02455   | 61 2447  |
| 001667 |          | JP*LOK-11      | 02456   | 34 2445  |
| 001670 |          | ENTAL*0017     | 02457   | 12 0017  |
| 001671 |          | CMAL*TREFIVE   | 02460   | 02 4436  |
| 001672 |          | JPEQ*COUNTDOWN | 02461   | 61 2477  |
| 001673 |          | CMAL*THIRTEEN  | 02462   | 02 4434  |
| 001674 |          | JPEQ*LOK+2     | 02463   | 61 2465  |

| SEQNO  | LABEL     | STATEMENT       | ADDRESS                      | INSTRUCT      |
|--------|-----------|-----------------|------------------------------|---------------|
| 001675 |           | STOP*40         | NO-ERROR STOP                | 02464 5056 40 |
| 001676 |           | ENTAL*0001      |                              | 02465 12 0001 |
| 001677 |           | JPALZ*LOK+2     | IS AL ZERO-YES-CONT          | 02466 61 2470 |
| 001700 |           | STOP*40         | NO-ERROR STOP                | 02467 5056 40 |
| 001701 |           | CL*0017         |                              | 02470 40 0017 |
| 001702 |           | ENTBK*0474      |                              | 02471 36 0474 |
| 001703 |           | ENTALB*0002     |                              | 02472 13 0002 |
| 001704 |           | JPALZ*LOK+2     | IS AL ZERO-YES-CONT          | 02473 61 2475 |
| 001705 |           | STOP*40         | NO-ERROR STOP                | 02474 5056 40 |
| 001706 |           | BJP*LOK-3       | ARE ALL LOKS CHK-NO-CONT     | 02475 73 2472 |
| 001707 |           | STOP*40         | YES-ERROR STOP               | 02476 5056 40 |
| 001710 | COUNTDOWN | ENTB*FACTOR     | B EQ 504477                  | 02477 32 4462 |
| 001711 |           | ENTALK*0076     | TEST ALL K COUNTS            | 02500 70 0076 |
| 001712 |           | STRAL*0002      |                              | 02501 44 0002 |
| 001713 | TAKEOFF   | STRB*LOK+3      | STORE INST                   | 02502 42 2505 |
| 001714 |           | ENTAU*UNEHUNTHO | AU EQ 100000                 | 02503 10 4504 |
| 001715 |           | ENTALK*00       |                              | 02504 70 0000 |
| 001716 |           | 000000          |                              | 02505 000000  |
| 001717 |           | ENTAL*0017      |                              | 02506 12 0017 |
| 001720 |           | CMAL*0002       | IS COUNT OK                  | 02507 02 0002 |
| 001721 |           | JPEQ*LOK+2      | YES-CONT                     | 02510 61 2512 |
| 001722 |           | STOP*40         | NO-ERROR STOP                | 02511 5056 40 |
| 001723 |           | ENTICR*02       |                              | 02512 5072 02 |
| 001724 |           | BJP*LOK+2       | IS B ZERO-NO-CONT            | 02513 73 2515 |
| 001725 |           | JP*LOK+3        | YES-GO TO END OF TEST        | 02514 34 2517 |
| 001726 |           | ENTICR*01       |                              | 02515 5072 01 |
| 001727 |           | BJP*TAKEOFF     | IS B ZERO-NO-CONT            | 02516 73 2502 |
| 001730 |           | SKP*04          | SET SKIP KEY 2 TO CYCLE TEST | 02517 5050 04 |
| 001731 |           | IJP*KAYADDER    | YES-EXIT                     | 02520 55 2427 |
| 001732 |           | JP*KAYADDER+1   | TO RECYCLE KAYADDER          | 02521 34 2430 |
| 001733 |           | RESERV*01       |                              | 02522 000000  |

| SEQNO  | LABEL    | STATEMENT       | ADDRESS                           | INSTRUCT      |
|--------|----------|-----------------|-----------------------------------|---------------|
| 001734 | SHIFLESS | 0*0             | ENTRANCE                          | 02523 00 0000 |
| 001735 |          | ENTAL*QUTREZERO | AL EQ 400000                      | 02524 12 4506 |
| 001736 |          | LSHAL*00        | NO SHIFT                          | 02525 5046 00 |
| 001737 |          | JPALP*SHIFFY    | DID IT SHIFT OR CHANGE-YES-CONT   | 02526 65 2701 |
| 001740 | SHIFTER  | ENTALK*7777     |                                   | 02527 70 7777 |
| 001741 |          | ENTAU*NEGZERO   | AU EQ 777777                      | 02530 10 4512 |
| 001742 |          | LSHAL*01        | CHK CL W-ALL1 FOR CONST ENABLES   | 02531 5046 01 |
| 001743 |          | JPALZ*SHIFNO    | AL EQ 0? YES-CONT                 | 02532 61 2711 |
| 001744 |          | CPAL            | NO-CHK W BIT TO AL FOR CONST 0-IN |               |
| 001745 |          | JPALZ*LOK+2     | AL EQ 0? YES-CONT                 | 02533 5061 00 |
| 001746 |          | STOP*40         | NO-ERROR STOP                     | 02534 61 2536 |
| 001747 |          | ENTAU*POSZERO   | AU EQ 000000                      | 02535 5056 40 |
|        |          |                 |                                   | 02536 10 4510 |
| 001750 |          | LSHAL*01        | CHK W BIT TO AL FOR CONST 1-IN    | 02537 5046 01 |
| 001751 |          | JPALZ*LOK+5     | AL EQ 0? YES-CONT                 | 02540 61 2545 |
| 001752 |          | CPAL            | CHK FOR CONST INHIBIT OF CL W     | 02541 5061 00 |
| 001753 |          | JPALZ*LOK+2     | AL EQ 0? YES-CL W-NO-CONST 1 ERRS |               |
|        |          |                 |                                   | 02542 61 2544 |
| 001754 |          | STOP*40         | NO-ERROR STOP                     | 02543 5056 40 |
| 001755 |          | STOP*40         | YES-ERROR STOP                    | 02544 5056 40 |
| 001756 |          | ENTAU*NEGZERO   | AU EQ 777777                      | 02545 10 4512 |
| 001757 |          | LSHAL*01        | CHK IF AU BIT 35 GOES TO W BIT 1  | 02546 5046 01 |
| 001760 |          | JPALZ*LOK+2     | AL EQ 0? YES-CONT                 | 02547 61 2551 |
| 001761 |          | STOP*40         | NO-ERROR STOP                     | 02550 5056 40 |
| 001762 |          | CPAU            | CHK IF AL BIT 17 GOES TO X BIT 1  | 02551 5062 00 |
| 001763 |          | JPAUZ*LOK+2     | AU EQ 0? YES-CONT                 | 02552 60 2554 |
| 001764 |          | STOP*40         | NO-ERROR STOP                     | 02553 5056 40 |
| 001765 |          | ENTAL*SEPTZERO  | AL EQ 707070                      | 02554 12 5067 |
| 001766 |          | LSHAL*11        | CHK PROPER SHIFTING               | 02555 5046 11 |
| 001767 |          | CMAL*ZEROSEPT   | IS AL 070707                      | 02556 02 4440 |
| 001770 |          | JPEQ*LOK+2      | YES-CONT                          | 02557 61 2561 |

| SEQNO  | LABEL | STATEMENT       | ADDRESS                           | INSTRUCT      |
|--------|-------|-----------------|-----------------------------------|---------------|
| 001771 |       | STOP*40         | NO-ERROR STOP                     | 02560 5056 40 |
| 001772 |       | ENTAU*NEGZERO   | AU EQ 777777                      | 02561 10 4512 |
| 001773 |       | ENTALK*7777     |                                   | 02562 70 7777 |
| 001774 |       | RSHAL*01        | CHK W BIT TO AL FOR CONST 0-IN    | 02563 5042 01 |
| 001775 |       | CPAL            |                                   | 02564 5061 00 |
| 001776 |       | JPALZ*LOK+2     | AL EQ 0? YES-CONT                 | 02565 61 2567 |
| 001777 |       | STOP*40         | NO-ERROR STOP                     | 02566 5056 40 |
| 002000 |       | ENTALK*00       |                                   | 02567 70 0000 |
| 002001 |       | ENTAU*POSZERO   | AU EQ 000000                      | 02570 10 4510 |
| 002002 |       | RSHAL*01        | CHK W BIT TO AL FOR CONST 1-IN    | 02571 5042 01 |
| 002003 |       | JPALZ*LOK+2     | AL EQ 0? YES-CONT                 | 02572 61 2574 |
| 002004 |       | STOP*40         | NO-ERROR STOP                     | 02573 5056 40 |
| 002005 |       | ENTAU*NEGZERO   | AL EQ 777777                      | 02574 10 4512 |
| 002006 |       | RSHAL*01        | CHK IF AU BIT 18 GOES TO W BIT 17 | 02575 5042 01 |
| 002007 |       | JPALZ*LOK+2     | AL EQ 0? YES-CONT                 | 02576 61 2600 |
| 002010 |       | STOP*40         | NO-ERROR STOP                     | 02577 5056 40 |
| 002011 |       | ENTAL*QUTREZERO | AL EQ 400000                      | 02600 12 4506 |
| 002012 |       | RSHAL*10        | CHK PROPER SHIFTING               | 02601 5042 10 |
| 002013 |       | CMAL*TSEVTZER   | IS AL 777000                      | 02602 02 4443 |
| 002014 |       | JPEQ*LOK+2      | YES-CONT                          | 02603 61 2605 |
| 002015 |       | STOP*40         | NO-ERROR STOP                     | 02604 5056 40 |
| 002016 |       | ENTAU*NEGZERO   | AU EQ 777777                      | 02605 10 4512 |
| 002017 |       | LSHAU*01        | CHK X BIT TO AU FOR IN ERRORS     | 02606 5045 01 |
| 002020 |       | CPAU            |                                   | 02607 5062 00 |
| 002021 |       | JPAUZ*LOK+2     | AU EQ 0? YES-CONT                 | 02610 60 2612 |
| 002022 |       | STOP*40         | NO-ERROR STOP                     | 02611 5056 40 |
| 002023 |       | LSHAU*01        | CHK X BIT TO AU FOR IN ERRORS     | 02612 5045 01 |
| 002024 |       | JPAUZ*LOK+2     | AU EQ 0 YES CONT                  | 02613 60 2615 |
| 002025 |       | STOP*40         | NO-ERROR STOP                     | 02614 5056 40 |
| 002026 |       | ENTAU*SEPTZERO  | AU EQ 707070                      | 02615 10 5067 |

| SEQNO  | LABEL | STATEMENT       | ADDRESS | INSTRUCT |
|--------|-------|-----------------|---------|----------|
| 002027 |       | LSHAU*11        | 02616   | 5045 11  |
| 002030 |       | STRAU*BINYARD   | 02617   | 46 4611  |
| 002031 |       | ENTAL*BINYARD   | 02620   | 12 4611  |
| 002032 |       | CMAL*ZEROSEPT   | 02621   | 02 4440  |
| 002033 |       | JPEQ*LOK+2      | 02622   | 61 2624  |
| 002034 |       | STOP*40         | 02623   | 5056 40  |
| 002035 |       | ENTAU*NEGZERO   | 02624   | 10 4512  |
| 002036 |       | RSHAU*01        | 02625   | 5041 01  |
| 002037 |       | CPAU            | 02626   | 5062 00  |
| 002040 |       | JPAUZ*LOK+2     | 02627   | 60 2631  |
| 002041 |       | STOP*40         | 02630   | 5056 40  |
| 002042 |       | RSHAU*01        | 02631   | 5041 01  |
| 002043 |       | JPAUZ*LOK+2     | 02632   | 60 2634  |
| 002044 |       | STOP*40         | 02633   | 5056 40  |
| 002045 |       | ENTAU*QUTREZERO | 02634   | 10 4506  |
| 002046 |       | RSHAU*10        | 02635   | 5041 10  |
| 002047 |       | STRAU*BINYARD   | 02636   | 46 4611  |
| 002050 |       | ENTAL*BINYARD   | 02637   | 12 4611  |
| 002051 |       | CMAL*TSEVTZER   | 02640   | 02 4443  |
| 002052 |       | JPEQ*LOK+2      | 02641   | 61 2643  |
| 002053 |       | STOP*40         | 02642   | 5056 40  |
| 002054 |       | ENTAU*TSEVTZER  | 02643   | 10 4443  |
| 002055 |       | LSHA*01         | 02644   | 5047 01  |
| 002056 |       | CMAL*TRANSFER   | 02645   | 02 4461  |
| 002057 |       | JPEQ*LOK+2      | 02646   | 61 2650  |
| 002060 |       | STOP*40         | 02647   | 5056 40  |
| 002061 |       | STRAU*BINYARD   | 02650   | 46 4611  |
| 002062 |       | ENTAL*BINYARD   | 02651   | 12 4611  |
| 002063 |       | CMAL*TRANSFER   | 02652   | 02 4461  |
| 002064 |       | JPEQ*LOK+2      | 02653   | 61 2655  |
| 002065 |       | STOP*40         | 02654   | 5056 40  |



| SEQNO  | LABEL    | STATEMENT       | ADDRESS                      | INSTRUCT      |
|--------|----------|-----------------|------------------------------|---------------|
| 002066 |          | ENTAU*ZEROSEPT  | AU EQ 070707                 | 02655 10 4440 |
| 002067 |          | ENTAL*ZEROSEPT  | AL EQ 070707                 | 02656 12 4440 |
| 002070 |          | LSHA*03         | CHK PROPER SHIFTING          | 02657 5047 03 |
| 002071 |          | CMAL*SEPTZERO   | IS AL 707070                 | 02660 02 5067 |
| 002072 |          | JPEQ*LOK+2      | YES-CONT                     | 02661 61 2663 |
| 002073 |          | STOP*40         | NO-ERROR STOP                | 02662 5056 40 |
| 002074 |          | STRAU*BINYARD   |                              | 02663 46 4611 |
| 002075 |          | ENTAL*BINYARD   |                              | 02664 12 4611 |
| 002076 |          | CMAL*SEPTZERO   | IS AL 707070                 | 02665 02 5067 |
| 002077 |          | JPEQ*LOK+2      | YES-CONT                     | 02666 61 2670 |
| 002100 |          | STOP*40         | NO-ERROR STOP                | 02667 5056 40 |
| 002101 |          | RSHA*03         | CHK AU BIT 18 TO W BIT 17    | 02670 5043 03 |
| 002102 |          | CMAL*ZEROSEPT   | IS AL 070707                 | 02671 02 4440 |
| 002103 |          | JPEQ*LOK+2      | YES-CONT                     | 02672 61 2674 |
| 002104 |          | STOP*40         | NO-ERROR STOP                | 02673 5056 40 |
| 002105 |          | STRAU*BINYARD   |                              | 02674 46 4611 |
| 002106 |          | ENTAL*BINYARD   |                              | 02675 12 4611 |
| 002107 |          | CMAL*TRANSIT    | IS AL 770707                 | 02676 02 4442 |
| 002110 |          | JPEQ*ALLRIGHT-1 | YES-GO TEST B+-1,B#0         | 02677 61 2712 |
| 002111 |          | STOP*40         | NO-ERROR STOP                | 02700 5056 40 |
| 002112 | SHIFFY   | JPALZ*LOK+7     | AL EQ 0? YES-SHIFT IMPROPER  | 02701 61 2710 |
| 002113 |          | ENTBK*21        |                              | 02702 36 0021 |
| 002114 |          | CMALB*CHAN      | IS MORE THAN 1 BIT SET       | 02703 03 4465 |
| 002115 |          | JPEQ*LOK+3      | YES-SHIFT IMPROPER           | 02704 61 2707 |
| 002116 |          | BJP*LOK-2       |                              | 02705 73 2703 |
| 002117 |          | JP*SHIFTER      | NO-CHK W BIT TO AL           | 02706 34 2527 |
| 002120 |          | STOP*40         | ERROR STOP                   | 02707 5056 40 |
| 002121 |          | STOP*40         | ERROR STOP                   | 02710 5056 40 |
| 002122 | SHIFNO   | STOP*40         | ERROR STOP                   | 02711 5056 40 |
| 002123 |          | RJP*PICKAPLUM   | TEST B+-1 NETWORK,B#0 EVAL   | 02712 76 2717 |
| 002124 | ALLRIGHT | SKP*04          | SET SKIP KEY 2 TO CYCLE TEST | 02713 5050 04 |

| SEQNO  | LABEL     | STATEMENT                               | ADDRESS | INSTRUCT |
|--------|-----------|---|---------|----------|
| 002125 |           | IJP*SHIFLESS EXIT                       | 02714   | 55 2523  |
| 002126 |           | JP*SHIFLESS+1 TO RECYCLE SHIFLESS       | 02715   | 34 2524  |
| 002127 |           | RESERV*01                               | 02716   | 000000   |
| 002130 | PICKAPLUM | 0*0 ENTRY                               | 02717   | 00 0000  |
| 002131 |           | ENTAL*PICKAPLUM DISPLAY ENTRY           | 02720   | 12 2717  |
| 002132 |           | STRAL*IFault ON C                       | 02721   | 44 4404  |
| 002133 |           | ENTAU*SF2 177777                        | 02722   | 10 3014  |
| 002134 |           | ENTAL*PENNYP 200000                     | 02723   | 12 3015  |
| 002135 | PLUM      | STRAU*TRAP CHECK PLUS AND MINUS NETWORK | 02724   | 46 3016  |
| 002136 |           | ENTB*TRAP                               | 02725   | 32 3016  |
| 002137 |           | BSK*NZRO PATTERN                        | 02726   | 56 4445  |
| 002140 |           | JP*LOK+3                                | 02727   | 34 2732  |
| 002141 |           | RJP*DISPOC                              | 02730   | 76 4374  |
| 002142 |           | STOP*40 ERROR STOP                      | 02731   | 5056 40  |
| 002143 |           | STRB*CREEK                              | 02732   | 42 3017  |
| 002144 |           | CMAL*CREEK IS INCREMENT CORRECT?        | 02733   | 02 3017  |
| 002145 |           | JPEQ*LOK+4                              | 02734   | 61 2740  |
| 002146 |           | ENTAU*CREEK                             | 02735   | 10 3017  |
| 002147 |           | RJP*DISPOC                              | 02736   | 76 4374  |
| 002150 |           | STOP*40 ERROR STOP                      | 02737   | 5056 40  |
| 002151 |           | BJP*LOK+3 CHECK B EQUAL ZERO INPUT PINS | 02740   | 73 2743  |
| 002152 |           | RJP*DISPOC                              | 02741   | 76 4374  |
| 002153 |           | STOP*40 ERROR STOP                      | 02742   | 5056 40  |
| 002154 |           | RSHAU*01                                | 02743   | 5041 01  |
| 002155 |           | RSHAL*01                                | 02744   | 5042 01  |
| 002156 |           | JPALNZ*PLUM ARE PATTERNS COMPLETE?      | 02745   | 63 2724  |
| 002157 |           | ENTAU*WOLF 377777                       | 02746   | 10 3020  |
| 002160 |           | ENTAL*WOLF 377777                       | 02747   | 12 3020  |
| 002161 | PLUM1     | CPAU                                    | 02750   | 5062 00  |
| 002162 |           | STRAU*TRAP                              | 02751   | 46 3016  |
| 002163 |           | ENTB*TRAP                               | 02752   | 32 3016  |

| SEQNO          | LABEL | STATEMENT                          | ADDRESS | INSTRUCT |
|----------------|-------|------------------------------------|---------|----------|
| 002164         |       | BJP*LOK+3 DECREMENT PATTERN        | 02753   | 73 2756  |
| 002165         |       | RJP*DISPOC                         | 02754   | 76 4374  |
| 002166         |       | STOP*40 ERROR STOP                 | 02755   | 5056 40  |
| 002167         |       | STRB*CREEK                         | 02756   | 42 3017  |
| 002170         |       | CMAL*CREEK IS DECREMENT CORRECT    | 02757   | 02 3017  |
| 002171         |       | JPEQ*LOK+4                         | 02760   | 61 2764  |
| 002172         |       | ENTAU*CREEK                        | 02761   | 10 3017  |
| 002173         |       | RJP*DISPOC                         | 02762   | 76 4374  |
| 002174         |       | STOP*40 ERROR STOP                 | 02763   | 5056 40  |
| 002175         |       | CPAU                               | 02764   | 5062 00  |
| 002176         |       | RSHA*01                            | 02765   | 5043 01  |
| 002177         |       | JPAUZ*LOK+2 ARE PATTERNS COMPLETE? | 02766   | 60 2770  |
| 002200         |       | JP*PLUM1                           | 02767   | 34 2750  |
| 4-50<br>002201 |       | BSK*HALF INCREMENT 777776          | 02770   | 56 3023  |
| 002202         |       | STRB*CREEK 777776                  | 02771   | 42 3017  |
| 002203         |       | ENTAL*NEG1P                        | 02772   | 12 3021  |
| 002204         |       | CMAL*CREEK                         | 02773   | 02 3017  |
| 002205         |       | JPEQ*LOK+3                         | 02774   | 61 2777  |
| 002206         |       | RJP*DISPOC                         | 02775   | 76 4374  |
| 002207         |       | STOP*40 ERROR STOP                 | 02776   | 5056 40  |
| 002210         |       | ENTAL*BEANP AL TO 400000           | 02777   | 12 3022  |
| 002211         |       | ENTB*WOLF B TO 377777              | 03000   | 32 3020  |
| 002212         |       | BSK*NZRO INCREMENT B               | 03001   | 56 4445  |
| 002213         |       | STRB*TRAP                          | 03002   | 42 3016  |
| 002214         |       | CMAL*TRAP IS PATTERN CORRECT?      | 03003   | 02 3016  |
| 002215         |       | JPEQ*LOK+3                         | 03004   | 61 3007  |
| 002216         |       | RJP*DISPOC                         | 03005   | 76 4374  |
| 002217         |       | STOP*40 ERROR STOP                 | 03006   | 5056 40  |
| 002220         |       | JP*LOK+3                           | 03007   | 34 3012  |
| 002221         |       | RJP*DISPOC                         | 03010   | 76 4374  |
| 002222         |       | STOP*40 ERROR STOP                 | 03011   | 5056 40  |

| SEQNO  | LABEL    | STATEMENT                                   | ADDRESS | INSTRUCT |
|--------|----------|---|---------|----------|
| 002223 |          | IJP*PICKAPLUM EXIT                          | 03012   | 55 2717  |
| 002224 |          | RESERV*01                                   | 03013   | 000000   |
| 002225 | SF2      | 177777                                      | 03014   | 177777   |
| 002226 | PENNYP   | 200000                                      | 03015   | 200000   |
| 002227 | TRAP     | 000000                                      | 03016   | 000000   |
| 002230 | CREEK    | 000000                                      | 03017   | 000000   |
| 002231 | WOLF     | 377777                                      | 03020   | 377777   |
| 002232 | NEG1P    | 777776                                      | 03021   | 777776   |
| 002233 | BEANP    | 400000                                      | 03022   | 400000   |
| 002234 | HALF     | 525252                                      | 03023   | 525252   |
| 002235 | ADDSUBAD | 0*0 ENTRANCE                                | 03024   | 00 0000  |
| 002236 |          | ENTALK*00                                   | 03025   | 70 0000  |
| 002237 |          | ADDAL*NEGZERO CHK OUTPUTS OF HS-BORROW      | 03026   | 14 4512  |
| 002240 |          | REMARK AND DIFF GEN-BORROW ENABLES-         |         |          |
| 002241 |          | REMARK INPUTS TO BORROW AND DIFF GEN        |         |          |
| 002242 |          | STRAL*SCARF STORE RESULT 1                  | 03027   | 44 4533  |
| 002243 |          | LSHA*22                                     | 03030   | 5047 22  |
| 002244 |          | ENTALK*7777                                 | 03031   | 70 7777  |
| 002245 |          | ADDAL*POSZERO CHK ENABLE INPUTS             | 03032   | 14 4510  |
| 002246 |          | STRAL*SCARF+1 STORE RESULT 2                | 03033   | 44 4534  |
| 002247 |          | JPALZ*LOK+4 IS AL ZERO-YES-CONT             | 03034   | 61 3040  |
| 002250 |          | JPAUZ*LOK+6 NO-IS AU ZERO-YES-CONT          | 03035   | 60 3043  |
| 002251 |          | ENTAU*SCARF NO-RESULT 1 AND 2 BAD           | 03036   | 10 4533  |
| 002252 |          | STOP*40 ERROR STOP                          | 03037   | 5056 40  |
| 002253 |          | JPAUZ*TOSSUP IS AU ZERO-YES-BOTH RESULTS OK | 03040   | 60 3045  |
| 002254 |          | ENTAL*SCARF NO-RESULT 1 BAD                 | 03041   | 12 4533  |
| 002255 |          | STOP*40 ERROR STOP                          | 03042   | 5056 40  |
| 002256 |          | ENTAL*SCARF+1 RESULT 2 BAD                  | 03043   | 12 4534  |
| 002257 |          | STOP*40 ERROR STOP                          | 03044   | 5056 40  |
| 002260 | TOSSUP   | ENTAU*NEGZERO                               | 03045   | 10 4512  |
| 002261 |          | ENTALK*7777                                 | 03046   | 70 7777  |

| SEQNO  | LABEL | STATEMENT                                 | ADDRESS | INSTRUCT |
|--------|-------|---|---------|----------|
| 002262 |       | ADDAL*NEGZERO CHECK OUTPUTS OF HS-BORROW  | 03047   | 14 4512  |
| 002263 |       | REMARK AND DIFF GEN                       |         |          |
| 002264 |       | SF*44                                     | 03050   | 5044 44  |
| 002265 |       | ENTAL*0017 AL EQ SHIFT COUNT              | 03051   | 12 0017  |
| 002266 |       | JPALZ*LOK+2 IS AL ZERO-YES-RESULT OK      | 03052   | 61 3054  |
| 002267 |       | STOP*40 NO-ERROR STOP                     | 03053   | 5056 40  |
| 002270 |       | ENTALK*00                                 | 03054   | 70 0000  |
| 002271 |       | ADDAL*POSZERO CHK EACH BIT FOR BORROW GEN | 03055   | 14 4510  |
| 002272 |       | JPALZ*LOK+2 IS AL ZERO-YES-RESULT OK      | 03056   | 61 3060  |
| 002273 |       | STOP*40 NO-ERROR STOP                     | 03057   | 5056 40  |
| 002274 |       | ENTAU*TSEVTZER SET AU TO 777000           | 03060   | 10 4443  |
| 002275 |       | ENTAL*SEPTZERO SET AL TO 707070           | 03061   | 12 5067  |
| 002276 |       | ADDAL*SEPTZERO CHK BORROW SECTIONS        | 03062   | 14 5067  |
| 002277 |       | LSHAL*02 SHIFT THE RESULT                 | 03063   | 5046 02  |
| 002300 |       | LSHA*03 SO AL EQ NEG ZERO                 | 03064   | 5047 03  |
| 002301 |       | LSHAL*03 AND AU EQ POS ZERO               | 03065   | 5046 03  |
| 002302 |       | LSHA*03                                   | 03066   | 5047 03  |
| 002303 |       | LSHAL*03                                  | 03067   | 5046 03  |
| 002304 |       | LSHA*03                                   | 03070   | 5047 03  |
| 002305 |       | JPAUZ*LOK+2 IS AU ZERO-YES-CONT           | 03071   | 60 3073  |
| 002306 |       | STOP*40 NO-ERROR STOP                     | 03072   | 5056 40  |
| 002307 |       | ENTAU*NEGZERO                             | 03073   | 10 4512  |
| 002310 |       | SF*44 CK AL RESULT                        | 03074   | 5044 44  |
| 002311 |       | ENTAL*0017 AL EQ SHIFT COUNT              | 03075   | 12 0017  |
| 002312 |       | JPALZ*LOK+2 IS AL ZERO-YES-RESULT OK      | 03076   | 61 3100  |
| 002313 |       | STOP*40 NO-ERROR STOP                     | 03077   | 5056 40  |
| 002314 |       | ENTAU*TSEVTZER SET AU TO 777000           | 03100   | 10 4443  |
| 002315 |       | ENTAL*ZEROSEPT SET AL TO 070707           | 03101   | 12 4440  |
| 002316 |       | ADDAL*ZEROSEPT CHK BORROW SECTIONS        | 03102   | 14 4440  |
| 002317 |       | LSHAL*05 SHIFT THE RESULT                 | 03103   | 5046 05  |
| 002320 |       | LSHA*03 SO AL EQ NEG ZERO                 | 03104   | 5047 03  |

| SEQNO  | LABEL | STATEMENT                            | ADDRESS | INSTRUCT |
|--------|-------|--------------------------------------|---------|----------|
| 002321 |       | LSHAL*03 AND AU EQ POS ZERO          | 03105   | 5046 03  |
| 002322 |       | LSHA*03                              | 03106   | 5047 03  |
| 002323 |       | LSHAL*03                             | 03107   | 5046 03  |
| 002324 |       | LSHA*03                              | 03110   | 5047 03  |
| 002325 |       | JPAUZ*LOK+2 IS AU ZERO-YES-CONT      | 03111   | 60 3113  |
| 002326 |       | ENTAL*NEGZERO SET AL NEG ZERO        | 03112   | 12 4512  |
| 002327 |       | JP*LOK+1                             | 03113   | 34 3114  |
| 002330 |       | ENTAU*NEGZERO AU EQ 777777           | 03114   | 10 4512  |
| 002331 |       | SF*44 CK AL RESULT                   | 03115   | 5044 44  |
| 002332 |       | ENTAL*0017 AL EQ SHIFT COUNT         | 03116   | 12 0017  |
| 002333 |       | JPALZ*LOK+2 IS AL ZERO-YES-RESULT OK | 03117   | 61 3121  |
| 002334 |       | STOP*40 NO-ERROR STOP                | 03120   | 5056 40  |
| 002335 |       | ENTAU*TROISCINQ SET AU TO 353535     | 03121   | 10 4412  |
| 002336 |       | ENTAL*TROISCINQ SET AL TO 353535     | 03122   | 12 4412  |
| 002337 |       | ADDA*QUTREDEUX ADD TO 424242 424242  | 03123   | 20 4414  |
| 002340 |       | JPALZ*LOK+2 IS AL ZERO-YES-CONT      | 03124   | 61 3126  |
| 002341 |       | STOP*40 NO-ERROR STOP                | 03125   | 5056 40  |
| 002342 |       | JPAUZ*LOK+2 IS AU ZERO-YES-CONT      | 03126   | 60 3130  |
| 002343 |       | STOP*40 NO-ERROR STOP                | 03127   | 5056 40  |
| 002344 |       | SKPNOV* CL OVERFLOW DESIGNATOR       | 03130   | 5053 00  |
| 002345 |       | JP*LOK+1                             | 03131   | 34 3132  |
| 002346 |       | SKPOV DOES IT SKIP                   | 03132   | 5052 00  |
| 002347 |       | SKPNOV DOES IT SKIP                  | 03133   | 5053 00  |
| 002350 |       | STOP*40 YES-ERROR STOP               | 03134   | 5056 40  |
| 002351 |       | SKPNB0*LOK+2                         | 03135   | 5051 37  |
| 002352 |       | STOP*40 ERROR STOP                   | 03136   | 5056 40  |
| 002353 |       | ENTAU*POSZERO                        | 03137   | 10 4510  |
| 002354 |       | ENTAL*SIXSEPT SET AL TO 677777       | 03140   | 12 4460  |
| 002355 |       | ENTBK*00                             | 03141   | 36 0000  |
| 002356 |       | ADDAB*UNESEPT ADD TO 177777 377777   | 03142   | 21 4410  |
| 002357 |       | CMAL*ZEROSEVEN IS AL SUM CORRECT     | 03143   | 02 5054  |

| SEQNO  | LABEL | STATEMENT                            | ADDRESS | INSTRUCT |
|--------|-------|--------------------------------------|---------|----------|
| 002360 |       | JPEQ*LOK+2 YES-CONT                  | 03144   | 61 3146  |
| 002361 |       | STOP*40 NO-ERROR STOP                | 03145   | 5056 40  |
| 002362 |       | LSHA*22                              | 03146   | 5047 22  |
| 002363 |       | CMAL*QUTREZERO IS AU SUM CORRECT     | 03147   | 02 4506  |
| 002364 |       | JPEQ*LOK+2 YES-CONT                  | 03150   | 61 3152  |
| 002365 |       | STOP*40 NO-ERROR STOP                | 03151   | 5056 40  |
| 002366 |       | SKPOV DOES IT SKIP                   | 03152   | 5052 00  |
| 002367 |       | STOP*40 NO-ERROR STOP                | 03153   | 5056 40  |
| 002370 |       | SKPNOV DOES IT SKIP                  | 03154   | 5053 00  |
| 002371 |       | STOP*40 NO-ERROR STOP                | 03155   | 5056 40  |
| 002372 |       | SKPNB0*00 CHK IF IT SKIPS            | 03156   | 5051 00  |
| 002373 |       | JP*LOK+2 NO OK                       | 03157   | 34 3161  |
| 002374 |       | STOP*40 NO ERROR STOP                | 03160   | 5056 40  |
| 002375 |       | ENTAL*TROISCING SET AL TO 353535     | 03161   | 12 4412  |
| 002376 |       | SUBALB*TROISCING                     | 03162   | 17 4412  |
| 002377 |       | CMAL*POSZERO IS SUB CORRECT          | 03163   | 02 4510  |
| 002400 |       | JPEQ*LOK+2 YES-CONT                  | 03164   | 61 3166  |
| 002401 |       | STOP*40 NO-ERROR STOP                | 03165   | 5056 40  |
| 002402 |       | ENTAL*QUTREDEUX SET AL TO 424242     | 03166   | 12 4414  |
| 002403 |       | SUBAL*QUTREDEUX                      | 03167   | 16 4414  |
| 002404 |       | CMAL*POSZERO IS SUB CORRECT          | 03170   | 02 4510  |
| 002405 |       | JPEQ*LOK+2 YES-CONT                  | 03171   | 61 3173  |
| 002406 |       | STOP*40 NO-ERROR STOP                | 03172   | 5056 40  |
| 002407 |       | ENTAL*TROISCING SET AL TO 353535     | 03173   | 12 4412  |
| 002410 |       | ADDALB*QUTREDEUX                     | 03174   | 15 4414  |
| 002411 |       | CMAL*POSZERO IS SUM CORRECT          | 03175   | 02 4510  |
| 002412 |       | JPEQ*LOK+2 YES-CONT                  | 03176   | 61 3200  |
| 002413 |       | STOP*40 NO-ERROR STOP                | 03177   | 5056 40  |
| 002414 |       | ENTAL*ZEROSEVEN SET AL TO 077777     | 03200   | 12 5054  |
| 002415 |       | ENTAU*QUTREZERO SET AU TO 400000     | 03201   | 10 4506  |
| 002416 |       | SUBAB*UNESEPT SUB WITH 177777 377777 | 03202   | 23 4410  |

| SEQNO  | LABEL   | STATEMENT                           | ADDRESS | INSTRUCT |
|--------|---------|-------------------------------------|---------|----------|
| 002417 |         | CMAL*SEVENZERO                      | 03203   | 02 4432  |
| 002420 |         | JPEQ*LOK+2 YES-CONT                 | 03204   | 61 3206  |
| 002421 |         | STOP*40 NO-ERROR STOP               | 03205   | 5056 40  |
| 002422 |         | LSHA*22                             | 03206   | 5047 22  |
| 002423 |         | CMAL*POSZERO IS AU SUB CORRECT      | 03207   | 02 4510  |
| 002424 |         | JPEQ*LOK+2 YES-CONT                 | 03210   | 61 3212  |
| 002425 |         | STOP*40 NO-ERROR STOP               | 03211   | 5056 40  |
| 002426 |         | SUBA*UNESEPT SUB WITH 177777 377777 | 03212   | 22 4410  |
| 002427 |         | CMAL*SIXZERONE IS AL 600001         | 03213   | 02 4430  |
| 002430 |         | JPEQ*LOK+2 YES-CONT                 | 03214   | 61 3216  |
| 002431 |         | STOP*40 NO-ERROR STOP               | 03215   | 5056 40  |
| 002432 |         | LSHA*22                             | 03216   | 5047 22  |
| 002433 |         | CMAL*TROISZERO IS AL 300000         | 03217   | 02 4464  |
| 002434 |         | JPEQ*LOK+2 YES-CONT                 | 03220   | 61 3222  |
| 002435 |         | STOP*40 NO-ERROR STOP               | 03221   | 5056 40  |
| 002436 |         | SKPOV*00 CL OVERFLOW DESIGNATOR     | 03222   | 5052 00  |
| 002437 |         | JP*LOK+1                            | 03223   | 34 3224  |
| 002440 |         | SKP*04 SET SKIP KEY 2 TO CYCLE TEST | 03224   | 5050 04  |
| 002441 |         | IJP*ADDSUBAD EXIT                   | 03225   | 55 3024  |
| 002442 |         | JP*ADDSUBAD+1 TO RECYCLE ADDSUBAD   | 03226   | 34 3025  |
| 002443 |         | RESERV*01                           | 03227   | 000000   |
| 002444 | MUDDIVE | 0*0 ENTRANCE                        | 03230   | 00 0000  |
| 002445 |         | ENTALK*00                           | 03231   | 70 0000  |
| 002446 |         | STRAL*BENERROR                      | 03232   | 44 4607  |
| 002447 |         | ENTALK*01                           | 03233   | 70 0001  |
| 002450 |         | STRAL*BENCOUNT                      | 03234   | 44 4610  |
| 002451 |         | ENTAL*MULTSEL AL EQ 25 COMBINE      | 03235   | 12 4662  |
| 002452 |         | STRAL*TRYIT STORE MUL INST          | 03236   | 44 3263  |
| 002453 |         | ENTICR*03                           | 03237   | 5072 03  |
| 002454 |         | ENTBK*23                            | 03240   | 36 0023  |
| 002455 |         | ENTICR*04                           | 03241   | 5072 04  |



| SEQNO  | LABEL   | STATEMENT                            | ADDRESS | INSTRUCT |
|--------|---------|--------------------------------------|---------|----------|
| 002456 |         | ENTBK*01                             | 03242   | 36 0001  |
| 002457 |         | ENTICR*05                            | 03243   | 5072 05  |
| 002460 |         | ENTBK*07                             | 03244   | 36 0007  |
| 002461 |         | ENTAL*GOUP                           | 03245   | 12 4456  |
| 002462 |         | STRAL*GROUP                          | 03246   | 44 4535  |
| 002463 |         | ENTAL*GOUP2                          | 03247   | 12 4457  |
| 002464 |         | STRAL*COMBINE                        | 03250   | 44 4537  |
| 002465 |         | ENTAL*GOUP3                          | 03251   | 12 4454  |
| 002466 |         | STRAL*COMBINE+1                      | 03252   | 44 4540  |
| 002467 | SECONDS | ENTICR*01                            | 03253   | 5072 01  |
| 002470 |         | ENTBK*01                             | 03254   | 36 0001  |
| 002471 | REDUE   | ENTICR*02                            | 03255   | 5072 02  |
| 002472 |         | ENTBK*01                             | 03256   | 36 0001  |
| 002473 | WATCHIT | ENTICR*01                            | 03257   | 5072 01  |
| 002474 |         | ENTAUB*GROUP VAR PATS TO CHECK INST  | 03260   | 11 4535  |
| 002475 |         | ENTALB*GROUP VAR PATS TO CHECK INST  | 03261   | 13 4535  |
| 002476 |         | ENTICR*02 MUL AND DIV INSTS CHECKED  | 03262   | 5072 02  |
| 002477 | TRYIT   | 000000                               | 03263   | 000000   |
| 002500 |         | ENTICR*03                            | 03264   | 5072 03  |
| 002501 |         | CMALB*TESTALL IS AL RESULT OK        | 03265   | 03 4507  |
| 002502 |         | JPEQ*LOK+2 YES-CONT                  | 03266   | 61 3270  |
| 002503 |         | JP*LOK+5 NO-RECORD ERROR             | 03267   | 34 3274  |
| 002504 |         | BJP*LOK+2 IS B ZERO NO-CONT          | 03270   | 73 3272  |
| 002505 |         | JP*COMMAND YES-CHECK REMAINING INSTS | 03271   | 34 3316  |
| 002506 |         | LSHA*22 CHECK AU RESULT              | 03272   | 5047 22  |
| 002507 |         | CMALB*TESTALL IS AU RESULT OK        | 03273   | 03 4507  |
| 002510 |         | JPEQ*LOK+5 YES CONT                  | 03274   | 61 3301  |
| 002511 |         | ENTAL*BENERROR NO-RECORD ERROR       | 03275   | 12 4607  |
| 002512 |         | SLSET*BENCOUNT SET BIT POS ERROR     | 03276   | 51 4610  |
| 002513 |         | LSHAL*01                             | 03277   | 5046 01  |
| 002514 |         | STRAL*BENERROR STORE ERROR COUNT     | 03300   | 44 4607  |

| SEQNO       | LABEL   | STATEMENT                            | ADDRESS | INSTRUCT |
|-------------|---------|--------------------------------------|---------|----------|
| 002515      |         | BJP*LOK+2            DECREMENT B     | 03301   | 73 3303  |
| 002516      |         | JP*DEMAND                            | 03302   | 34 3331  |
| 002517      |         | ENTICR*05                            | 03303   | 5072 05  |
| 002520      |         | BJP*LOK+2                            | 03304   | 73 3306  |
| 002521      |         | JP*COMMAND                           | 03305   | 34 3316  |
| 002522      |         | ENTICR*02                            | 03306   | 5072 02  |
| 002523      |         | BJP*WATCHIT    IS B ZERO-NO-CONT     | 03307   | 73 3257  |
| 002524      |         | ENTBK*01    YES-CHANGE B             | 03310   | 36 0001  |
| 002525      |         | ENTICR*01                            | 03311   | 5072 01  |
| 002526      |         | BJP*WATCHIT    IS B ZERO-NO-CONT     | 03312   | 73 3257  |
| 002527      |         | ENTAL*DIVSEL    YES-CHECK DIV INST   | 03313   | 12 4663  |
| 002530      |         | STRAL*TRYIT    STORE 27 COMBINE INST | 03314   | 44 3263  |
| 002531      |         | JP*SECONDS                           | 03315   | 34 3253  |
| 4-57 002532 | COMMAND | ENTICR*04                            | 03316   | 5072 04  |
| 002533      |         | BJP*LOK+2                            | 03317   | 73 3321  |
| 002534      |         | JP*DEMAND                            | 03320   | 34 3331  |
| 002535      |         | ENTALK*7777                          | 03321   | 70 7777  |
| 002536      |         | STRAL*GROUP                          | 03322   | 44 4535  |
| 002537      |         | STRAL*COMBINE+1                      | 03323   | 44 4540  |
| 002540      |         | ENTALK*00                            | 03324   | 70 0000  |
| 002541      |         | STRAL*COMBINE                        | 03325   | 44 4537  |
| 002542      |         | ENTICR*05                            | 03326   | 5072 05  |
| 002543      |         | ENTBK*01                             | 03327   | 36 0001  |
| 002544      |         | JP*REDUE                             | 03330   | 34 3255  |
| 002545      | DEMAND  | ENTAL*BENERROR    AL EQ ERROR COUNT  | 03331   | 12 4607  |
| 002546      |         | JPALZ*LOK+2    IS AL ZERO-YES-CONT   | 03332   | 61 3334  |
| 002547      |         | STOP*40    NO-ERROR STOP             | 03333   | 5056 40  |
| 002550      |         | ENTBK*01                             | 03334   | 36 0001  |
| 002551      |         | ENTAUB*ROUND                         | 03335   | 11 4541  |
| 002552      |         | ENTALK*70                            | 03336   | 70 0070  |
| 002553      |         | RND    CHECK RND INST                | 03337   | 5060 00  |

| SEQNO  | LABEL  | STATEMENT                           | ADDRESS | INSTRUCT |
|--------|--------|-------------------------------------|---------|----------|
| 002554 |        | CMALB*KNOCKOUT IS RESULT OK         | 03340   | 03 4543  |
| 002555 |        | JPEQ*LOK+2 YES-CONT                 | 03341   | 61 3343  |
| 002556 |        | STOP*40 NO-ERROR STOP               | 03342   | 5056 40  |
| 002557 |        | BJP*LOK-6 ARE ALL PATS CHK-NO-CONT  | 03343   | 73 3335  |
| 002560 |        | ENTALK*03 YES-CHECK NEW INSTS       | 03344   | 70 0003  |
| 002561 |        | MULAL*ZERODEUX MUL BY 000002        | 03345   | 24 4466  |
| 002562 |        | CMAL*ZEROSIX IS RESULT OK           | 03346   | 02 5050  |
| 002563 |        | JPEQ*LOK+2 YES-CONT                 | 03347   | 61 3351  |
| 002564 |        | STOP*40 NO-ERROR STOP               | 03350   | 5056 40  |
| 002565 |        | ENTAU*ZERODEUX AU EQ 000002         | 03351   | 10 4466  |
| 002566 |        | ENTAL*ZEROSIX AL EQ 000006          | 03352   | 12 5050  |
| 002567 |        | DIVA*ZERODEUX DIV BY 000002         | 03353   | 26 4466  |
| 002570 |        | CMAL*NEGZERO IS AL RESULT OK        | 03354   | 02 4512  |
| 002571 |        | JPEQ*LOK+2 YES-CONT                 | 03355   | 61 3357  |
| 002572 |        | STOP*40 NO-ERROR STOP               | 03356   | 5056 40  |
| 002573 |        | LSHA*22                             | 03357   | 5047 22  |
| 002574 |        | CMAL*CHAN+3 IS AU RESULT OK         | 03360   | 02 4470  |
| 002575 |        | JPEQ*LOK+2 YES-GO TO END OF TEST    | 03361   | 61 3363  |
| 002576 |        | STOP*40 NO-ERROR STOP               | 03362   | 5056 40  |
| 002577 |        | SKP*04 SET SKIP KEY 2 TO CYCLE TEST | 03363   | 5050 04  |
| 002600 |        | IJP*MUDDIVE EXIT                    | 03364   | 55 3230  |
| 002601 |        | JP*MUDDIVE+1 TO RECYCLE MUDDIVE     | 03365   | 34 3231  |
| 002602 |        | RESERV*01                           | 03366   | 000000   |
| 002603 | PARITY | 0*0                                 | 03367   | 00 0000  |
| 002604 |        | CL*EIN                              | 03370   | 40 4617  |
| 002605 |        | CL*ZWEI                             | 03371   | 40 4641  |
| 002606 |        | ENTICR*1                            | 03372   | 5072 01  |
| 002607 |        | ENTBK*15                            | 03373   | 36 0015  |
| 002610 |        | ENTAU*NZRO                          | 03374   | 10 4445  |
| 002611 | ERSTE  | ENTALB*EVEN EVEN PATTERNS           | 03375   | 13 4553  |
| 002612 |        | SKPEVN NO ERROR                     | 03376   | 5055 00  |

| SEQNO  | LABEL  | STATEMENT                           | ADDRESS | INSTRUCT |
|--------|--------|-------------------------------------|---------|----------|
| 002613 |        | JP*LOK+3 ERROR DETECTED             | 03377   | 34 3402  |
| 002614 |        | ENTAL*EIN                           | 03400   | 12 4617  |
| 002615 |        | JP*LOK+3                            | 03401   | 34 3404  |
| 002616 |        | ENTAL*EIN                           | 03402   | 12 4617  |
| 002617 |        | ADDALK*1 SET BIT FOR ERROR          | 03403   | 71 0001  |
| 002620 |        | LSHAL*1                             | 03404   | 5046 01  |
| 002621 |        | STRAL*EIN                           | 03405   | 44 4617  |
| 002622 |        | BJP*ERSTE                           | 03406   | 73 3375  |
| 002623 |        | ENTBK*14                            | 03407   | 36 0014  |
| 002624 | ZWEITE | ENTALB*CODD ODD PATTERNS            | 03410   | 13 4571  |
| 002625 |        | SKPODD NO ERROR                     | 03411   | 5054 00  |
| 002626 |        | JP*LOK+3 ERROR DETECTED             | 03412   | 34 3415  |
| 002627 |        | ENTAL*ZWEI                          | 03413   | 12 4641  |
| 002630 |        | JP*LOK+3 NO ERROR                   | 03414   | 34 3417  |
| 002631 |        | ENTAL*ZWEI                          | 03415   | 12 4641  |
| 002632 |        | ADDALK*1 SET BIT FOR ERROR          | 03416   | 71 0001  |
| 002633 |        | LSHAL*1                             | 03417   | 5046 01  |
| 002634 |        | STRAL*ZWEI                          | 03420   | 44 4641  |
| 002635 |        | BJP*ZWEITE                          | 03421   | 73 3410  |
| 002636 |        | ENTAL*EIN                           | 03422   | 12 4617  |
| 002637 |        | ENTAU*ZWEI                          | 03423   | 10 4641  |
| 002640 |        | JPALNZ*LOK+3 EVEN ERRORS            | 03424   | 63 3427  |
| 002641 |        | JPAUNZ*LOK+2 ODD ERRORS             | 03425   | 62 3427  |
| 002642 |        | JP*LOK+2                            | 03426   | 34 3430  |
| 002643 |        | STOP ERROR STOP                     | 03427   | 5056 40  |
| 002644 |        | SKP*04 SET SKIP KEY 2 TO CYCLE TEST | 03430   | 5050 04  |
| 002645 |        | IJP*PARITY EXIT                     | 03431   | 55 3367  |
| 002646 |        | JP*PARITY+1 TO RECYCLE PARITY       | 03432   | 34 3370  |
| 002647 |        | RESERV*01                           | 03433   | 000000   |
| 002650 |        | REMARK* *** FTA ***                 |         |          |
| 002651 |        | REMARK*MASTER CLEAR THE COMPUTER    |         |          |

| SEQNO  | LABEL | STATEMENT                             | ADDRESS | INSTRUCT |
|--------|-------|---------------------------------------|---------|----------|
| 002652 |       | REMARK*SET ICR TO 01                  |         |          |
| 002653 |       | REMARK*SET AU TO 777777               |         |          |
| 002654 |       | REMARK*REMOVE ALL PROGRAM SKIPS/STOPS |         |          |
| 002655 |       | REMARK*SET PROGRAM SKIP 4             |         |          |
| 002656 | FTA   | ENTAL*PAR50 SET AL ZERO               | 03434   | 12 4511  |
| 002657 |       | SIL* LOCKOUT ALL INTS                 | 03435   | 5034 00  |
| 002660 |       | STRAL*BONITA CL CONTENTS OF BONITA    | 03436   | 44 4606  |
| 002661 |       | STRAL*DEBBIE THRU NANCY               | 03437   | 44 4616  |
| 002662 |       | STRAL*0002                            | 03440   | 44 0002  |
| 002663 |       | STRAL*NANCY                           | 03441   | 44 4626  |
| 002664 |       | ENTAL*HOT36 SET AL TO 34END1          | 03442   | 12 4760  |
| 002665 |       | STRAL*LUCILE+4                        | 03443   | 44 4252  |
| 002666 |       | ENTAL*HOT37 SET AL TO 34END2          | 03444   | 12 4761  |
| 002667 |       | STRAL*LUCILE+3                        | 03445   | 44 4251  |
| 002670 |       | ENTAL*HOT40 SET AL TO 34END3          | 03446   | 12 4762  |
| 002671 |       | STRAL*ZULA                            | 03447   | 44 4640  |
| 002672 |       | ENTAL*HOT71 SET AL TO 34END4          | 03450   | 12 5004  |
| 002673 |       | STRAL*DENICE+3                        | 03451   | 44 4227  |
| 002674 |       | STRAL*LOKI+3                          | 03452   | 44 4263  |
| 002675 |       | ENTAL*HOT72 SET AL TO 504702          | 03453   | 12 5005  |
| 002676 |       | STRAL*ROSIE                           | 03454   | 44 5155  |
| 002677 |       | ENTAL*PAT1 SET AL TO 1                | 03455   | 12 4420  |
| 002700 |       | STRAL*RITA                            | 03456   | 44 5315  |
| 002701 |       | ENTAL*NEUF SET AL TO 7                | 03457   | 12 4431  |
| 002702 |       | STRAL*KAY                             | 03460   | 44 5016  |
| 002703 |       | ENTAL*HOT73 SET AL TO 34DENICE        | 03461   | 12 5006  |
| 002704 |       | STRAL*LILY2+6                         | 03462   | 44 4206  |
| 002705 |       | ENTAL*HOT75 SET AL TO 12KAY           | 03463   | 12 5010  |
| 002706 |       | STRAL*CAROL                           | 03464   | 44 4614  |
| 002707 |       | ENTAL*HOT76 SET AL TO 12ROSIE         | 03465   | 12 5011  |
| 002710 |       | STRAL*CONNIE                          | 03466   | 44 4615  |

| SEQNO  | LABEL | STATEMENT                       | ADDRESS | INSTRUCT |
|--------|-------|---------------------------------|---------|----------|
| 002711 |       | ENTAL*HOT74 SET AL TO 12RITA    | 03467   | 12 5007  |
| 002712 |       | STRAL*KATHY                     | 03470   | 44 4625  |
| 002713 |       | ENTAL*HOT77 SET AL TO 34LILY2+3 | 03471   | 12 5012  |
| 002714 |       | STRAL*LILY2+2                   | 03472   | 44 4202  |
| 002715 |       | ENTAL*PAT2 SET AL TO 2          | 03473   | 12 5043  |
| 002716 |       | STRAL*JIM                       | 03474   | 44 4622  |
| 002717 |       | ENTAL*HOT25 SET AL TO 34LOKI    | 03475   | 12 4750  |
| 002720 |       | STRAL*TINA+5                    | 03476   | 44 4245  |
| 002721 |       | ENTAL*FUN65 SET AL TO 65LOK+2   | 03477   | 12 4731  |
| 002722 |       | STRAL*SUM1 STORE FUNC CODE      | 03500   | 44 5454  |
| 002723 |       | ENTAL*HOT1 SET AL TO 34ANN      | 03501   | 12 4732  |
| 002724 |       | STRAL*0000 STORE JP REF         | 03502   | 44 0000  |
| 002725 |       | ENTAL*POS1 SET AL POS           | 03503   | 12 5144  |
| 002726 |       | JPALP*LOK+4 CHECK FUNC 65       | 03504   | 65 3510  |
| 002727 |       | JP*ANN FUNC 65 ERROR            | 03505   | 34 3556  |
| 002730 |       | JP*ANN FUNC 65 ERROR            | 03506   | 34 3556  |
| 002731 |       | JP*ANN FUNC 65 ERROR            | 03507   | 34 3556  |
| 002732 |       | ENTAL*PAR50 SET AL ZERO         | 03510   | 12 4511  |
| 002733 |       | STRAL*SUM1 FUNC 65 OK           | 03511   | 44 5454  |
| 002734 |       | ENTAL*FUN06 SET AL TO 06KAY     | 03512   | 12 4715  |
| 002735 |       | STRAL*SUM2 STORE FUNC CODE      | 03513   | 44 5455  |
| 002736 |       | ENTAL*HOT2 SET AL TO 34ELANE    | 03514   | 12 4733  |
| 002737 |       | STRAL*0000 STORE JP REF         | 03515   | 44 0000  |
| 002740 |       | ENTAL*PAIR2 SET AL NEG          | 03516   | 12 5107  |
| 002741 |       | STRAL*NANCY                     | 03517   | 44 4626  |
| 002742 |       | CMSK*NANCY CHECK FUNC 06        | 03520   | 06 4626  |
| 002743 |       | JPMLEQ*LOK+3 IF JP#FUNC 06 OK   | 03521   | 65 3524  |
| 002744 |       | JP*ELANE FUNC 06 ERROR          | 03522   | 34 3536  |
| 002745 |       | JP*ELANE FUNC 06 ERROR          | 03523   | 34 3536  |
| 002746 |       | ENTAL*PAR50 SET AL ZERO         | 03524   | 12 4511  |
| 002747 |       | STRAL*SUM2 FUNCS 06-65 OK       | 03525   | 44 5455  |

| SEQNO  | LABEL | STATEMENT                      | ADDRESS | INSTRUCT |
|--------|-------|--------------------------------|---------|----------|
| 002750 |       | ENTAL*FUN06 SET AL TO 06KAY    | 03526   | 12 4715  |
| 002751 |       | STRAL*LUCILE+3                 | 03527   | 44 4251  |
| 002752 |       | ENTAL*FUN65 SET AL TO 65LOK+2  | 03530   | 12 4731  |
| 002753 |       | STRAL*LUCILE+4                 | 03531   | 44 4252  |
| 002754 |       | ENTAL*HOT60 SET AL TO 34REBECA | 03532   | 12 4774  |
| 002755 |       | STRAL*LUCILE+5                 | 03533   | 44 4253  |
| 002756 |       | ENTAL*HOT61 SET AL TO 06ELZA   | 03534   | 12 4775  |
| 002757 |       | STRAL*LUCILE+7                 | 03535   | 44 4255  |
| 002760 | ELANE | ENTAL*FUN07 SET AL TO 07KAY    | 03536   | 12 4716  |
| 002761 |       | STRAL*SUM16 STORE FUNC CODE    | 03537   | 44 5471  |
| 002762 |       | ENTAL*HOT1 SET AL TO 34ANN     | 03540   | 12 4732  |
| 002763 |       | STRAL*0000 STORE JP REF        | 03541   | 44 0000  |
| 002764 |       | ENTAL*NIP SET AL NEG           | 03542   | 12 5434  |
| 002765 |       | STRAL*NANCY                    | 03543   | 44 4626  |
| 002766 |       | CMSKB*NANCY CHECK FUNC 07      | 03544   | 07 4626  |
| 002767 |       | JPMLEQ*LOK+3 IF JP#FUNC 07 OK  | 03545   | 65 3550  |
| 002770 |       | JP*ANN FUNC 07 ERROR           | 03546   | 34 3556  |
| 002771 |       | JP*ANN FUNC 07 ERROR           | 03547   | 34 3556  |
| 002772 |       | ENTAL*PAR50 SET AL ZERO        | 03550   | 12 4511  |
| 002773 |       | STRAL*SUM16 FUNC 07 OK         | 03551   | 44 5471  |
| 002774 |       | ENTAL*FUN07 SET AL TO 07KAY    | 03552   | 12 4716  |
| 002775 |       | STRAL*LUCILE+3                 | 03553   | 44 4251  |
| 002776 |       | ENTAL*HOT62 SET AL TO 07ELZA   | 03554   | 12 4776  |
| 002777 |       | STRAL*LUCILE+7                 | 03555   | 44 4255  |
| 003000 | ANN   | ENTAL*FUN63 SET AL TO 63REBECA | 03556   | 12 4730  |
| 003001 |       | STRAL*SUM3 STORE FUNC CODE     | 03557   | 44 5456  |
| 003002 |       | ENTAL*HOT3 SET AL TO 34HELEN   | 03560   | 12 4734  |
| 003003 |       | STRAL*0000 STORE JP REF        | 03561   | 44 0000  |
| 003004 |       | ENTAL*NEG1 SET AL NEG          | 03562   | 12 4455  |
| 003005 |       | JPALNZ*LOK+4 CHECK FUNC 63     | 03563   | 63 3567  |
| 003006 |       | JP*HELEN FUNC 63 ERROR         | 03564   | 34 3634  |

| SEQNO       | LABEL | STATEMENT                        | ADDRESS | INSTRUCT |
|-------------|-------|----------------------------------|---------|----------|
| 003007      |       | JP*HELEN FUNC 63 ERROR           | 03565   | 34 3634  |
| 003010      |       | JP*HELEN FUNC 63 ERROR           | 03566   | 34 3634  |
| 003011      |       | ENTAL*PAR50 SET AL ZERO          | 03567   | 12 4511  |
| 003012      |       | JPALNZ*HELEN IF JP-FUNC 63 ERROR | 03570   | 63 3634  |
| 003013      |       | STRAL*SUM3 FUNC 63 OK            | 03571   | 44 5456  |
| 003014      |       | ENTAL*FUN03 SET AL TO 03KAY      | 03572   | 12 4714  |
| 003015      |       | STRAL*SUM4 STORE FUNC CODE       | 03573   | 44 5457  |
| 003016      |       | ENTAL*HOT65 SET AL TO 34LINDA    | 03574   | 12 5001  |
| 003017      |       | STRAL*0000 STORE JP REF          | 03575   | 44 0000  |
| 003020      |       | ENTAL*PAR50 SET AL ZERO          | 03576   | 12 4511  |
| 003021      |       | STRAL*0001 SET B TO ZERO         | 03577   | 44 0001  |
| 003022      |       | CMALB*POS3 AL NEQ M              | 03600   | 03 5141  |
| 003023      |       | JPNOT*LOK+3                      | 03601   | 63 3604  |
| 4-63 003024 |       | JP*LINDA FUNC 03 ERROR           | 03602   | 34 3614  |
| 003025      |       | JP*LINDA FUNC 03 ERROR           | 03603   | 34 3614  |
| 003026      |       | ENTAL*PAR50 SET AL ZERO          | 03604   | 12 4511  |
| 003027      |       | STRAL*SUM4 FUNC 03 OK            | 03605   | 44 5457  |
| 003030      |       | ENTAL*FUN03 SET AL TO 03KAY      | 03606   | 12 4714  |
| 003031      |       | STRAL*LUCILE+3                   | 03607   | 44 4251  |
| 003032      |       | ENTAL*FUN61 SET AL TO 61 JACKIE  | 03610   | 12 4727  |
| 003033      |       | STRAL*LUCILE+4                   | 03611   | 44 4252  |
| 003034      |       | ENTAL*HOT60 SET AL TO 34REBECA   | 03612   | 12 4774  |
| 003035      |       | STRAL*LUCILE+5                   | 03613   | 44 4253  |
| 003036      | LINDA | ENTAL*FUN02 SET AL TO 02KAY      | 03614   | 12 4713  |
| 003037      |       | STRAL*SUM6 STORE FUNC CODE       | 03615   | 44 5461  |
| 003040      |       | ENTAL*HOT3 SET AL TO 34HELEN     | 03616   | 12 4734  |
| 003041      |       | STRAL*0000 STORE JP REF          | 03617   | 44 0000  |
| 003042      |       | ENTAL*PAR50 SET AL TO ZERO       | 03620   | 12 4511  |
| 003043      |       | CMAL*POS3 CHECK FUNC 02          | 03621   | 02 5141  |
| 003044      |       | JPNOT*LOK+3 FUNC 02 OK           | 03622   | 63 3625  |
| 003045      |       | JP*HELEN FUNC 02 ERROR           | 03623   | 34 3634  |



| SEQNO       | LABEL | STATEMENT                      | ADDRESS | INSTRUCT |
|-------------|-------|--------------------------------|---------|----------|
| 003046      |       | JP*HELEN FUNC 02 ERROR         | 03624   | 34 3634  |
| 003047      |       | STRAL*SUM6 FUNC 02 OK          | 03625   | 44 5461  |
| 003050      |       | ENTAL*FUN02 SET AL TO 02KAY    | 03626   | 12 4713  |
| 003051      |       | STRAL*LUCILE+3                 | 03627   | 44 4251  |
| 003052      |       | ENTAL*FUN63 SET AL TO 63REBECA | 03630   | 12 4730  |
| 003053      |       | STRAL*LUCILE+4                 | 03631   | 44 4252  |
| 003054      |       | ENTAL*HOT63 SET AL TO 34JACKIE | 03632   | 12 4777  |
| 003055      |       | STRAL*LUCILE+5                 | 03633   | 44 4253  |
| 003056      | HELEN | ENTAL*FUN61 SET AL TO 61JACKIE | 03634   | 12 4727  |
| 003057      |       | STRAL*SUM5 STORE FUNC CODE     | 03635   | 44 5460  |
| 003060      |       | ENTAL*HOT5 SET AL TO 34SUE     | 03636   | 12 4736  |
| 003061      |       | STRAL*0000 STORE JP REF        | 03637   | 44 0000  |
| 003062      |       | ENTAL*PAR50 SET AL ZERO        | 03640   | 12 4511  |
| 4-64 003063 |       | JPALZ*LOK+4 CHECK FUNC 61      | 03641   | 61 3645  |
| 003064      |       | JP*SUE FUNC 61 ERROR           | 03642   | 34 3712  |
| 003065      |       | JP*SUE FUNC 61 ERROR           | 03643   | 34 3712  |
| 003066      |       | JP*SUE FUNC 61 ERROR           | 03644   | 34 3712  |
| 003067      |       | STRAL*SUM5 FUNC 61 OK          | 03645   | 44 5460  |
| 003070      |       | ENTAL*FUN02 SET AL TO 02KAY    | 03646   | 12 4713  |
| 003071      |       | STRAL*SUM6 STORE FUNC CODE     | 03647   | 44 5461  |
| 003072      |       | ENTAL*HOT4 SET AL TO 34JENNIE  | 03650   | 12 4735  |
| 003073      |       | STRAL*0000 STORE JP REF        | 03651   | 44 0000  |
| 003074      |       | ENTAL*POS3 SET AL POS          | 03652   | 12 5141  |
| 003075      |       | CMAL*POS3 CONT CHECKING 02     | 03653   | 02 5141  |
| 003076      |       | JPEQ*LOK+3                     | 03654   | 61 3657  |
| 003077      |       | JP*JENNIE FUNC 02 ERROR        | 03655   | 34 3667  |
| 003100      |       | JP*JENNIE FUNC 02 ERROR        | 03656   | 34 3667  |
| 003101      |       | ENTAL*PAR50 SET AL ZERO        | 03657   | 12 4511  |
| 003102      |       | STRAL*SUM6 FUNCS 02-61 OK      | 03660   | 44 5461  |
| 003103      |       | ENTAL*FUN02 SET AL TO 02KAY    | 03661   | 12 4713  |
| 003104      |       | STRAL*LUCILE+3                 | 03662   | 44 4251  |

| SEQNO  | LABEL  | STATEMENT                      | ADDRESS | INSTRUCT |
|--------|--------|--------------------------------|---------|----------|
| 003105 |        | ENTAL*FUN61 SET AL TO 61JACKIE | 03663   | 12 4727  |
| 003106 |        | STRAL*LUCILE+4                 | 03664   | 44 4252  |
| 003107 |        | ENTAL*HOT60 SET AL TO 34REBECA | 03665   | 12 4774  |
| 003110 |        | STRAL*LUCILE+5                 | 03666   | 44 4253  |
| 003111 | JENNIE | ENTAL*FUN03 SET AL TO 03KAY    | 03667   | 12 4714  |
| 003112 |        | STRAL*SUM4 STORE FUNC CODE     | 03670   | 44 5457  |
| 003113 |        | ENTAL*HOT5 SET AL TO 34SUE     | 03671   | 12 4736  |
| 003114 |        | STRAL*0000 STORE JP REF        | 03672   | 44 0000  |
| 003115 |        | ENTAL*PAR50 SET AL ZERO        | 03673   | 12 4511  |
| 003116 |        | STRAL*0001 SET B ZERO          | 03674   | 44 0001  |
| 003117 |        | ENTAL*POS3 SET AL POS          | 03675   | 12 5141  |
| 003120 |        | CMALB*POS3 CHECK FUNC 03       | 03676   | 03 5141  |
| 003121 |        | JPEQ*LOK+3 IF JP-FUNC 03 OK    | 03677   | 61 3702  |
| 003122 |        | JP*SUE FUNC 03 ERROR           | 03700   | 34 3712  |
| 003123 |        | JP*SUE FUNC 03 ERROR           | 03701   | 34 3712  |
| 003124 |        | ENTAL*PAR50 SET AL ZERO        | 03702   | 12 4511  |
| 003125 |        | STRAL*SUM4 FUNC 03 OK          | 03703   | 44 5457  |
| 003126 |        | ENTAL*FUN03 SET AL TO 03KAY    | 03704   | 12 4714  |
| 003127 |        | STRAL*LUCILE+3                 | 03705   | 44 4251  |
| 003130 |        | ENTAL*FUN61 SET AL TO 61JACKIE | 03706   | 12 4727  |
| 003131 |        | STRAL*LUCILE+4                 | 03707   | 44 4252  |
| 003132 |        | ENTAL*HOT60 SET AL TO 34REBECA | 03710   | 12 4774  |
| 003133 |        | STRAL*LUCILE+5                 | 03711   | 44 4253  |
| 003134 | SUE    | ENTAL*HOT7 SET AL TO 34JOYCE   | 03712   | 12 4737  |
| 003135 |        | STRAL*0000 STORE JP FAULT REF  | 03713   | 44 0000  |
| 003136 |        | STRAL*REBECA STORE JP REF      | 03714   | 44 4627  |
| 003137 |        | ENTAL*HOT10 SET AL TO 34ALICE  | 03715   | 12 4740  |
| 003140 |        | STRAL*JACKIE STORE JP REF      | 03716   | 44 4624  |
| 003141 |        | ENTAL*ROSIE SET AL TO 504702   | 03717   | 12 5155  |
| 003142 |        | STRAL*SUM7 STORE FUNC CODE     | 03720   | 44 5462  |
| 003143 |        | ENTAL*RITA SET AL TO 1         | 03721   | 12 5315  |

| SEQNO       | LABEL | STATEMENT                     | ADDRESS | INSTRUCT |
|-------------|-------|-------------------------------|---------|----------|
| 003144      |       | LSHA*02 CHECK FUNC 5047       | 03722   | 5047 02  |
| 003145      |       | JP*LOK+3 CONTINUE CHECKING    | 03723   | 34 3726  |
| 003146      |       | JP*JOYCE FUNC 5047 ERROR      | 03724   | 34 3740  |
| 003147      |       | JP*JOYCE FUNC 5047 ERROR      | 03725   | 34 3740  |
| 003150      |       | STRAL*ELZA STORE FINAL RESULT | 03726   | 44 4620  |
| 003151      |       | JP*LUCILE CHECK RESULTS       | 03727   | 34 4246  |
| 003152      | ALICE | ENTAL*HOT15 SET AL TO 504722  | 03730   | 12 4744  |
| 003153      |       | STRAL*LOKI+3 STORE SHIFT      | 03731   | 44 4263  |
| 003154      |       | ENTAL*HOT101 SET AL TO 44GAIL | 03732   | 12 5014  |
| 003155      |       | STRAL*LOKI+4 STORE JP REF     | 03733   | 44 4264  |
| 003156      |       | ENTAL*HOT15 SET AL TO 504722  | 03734   | 12 4744  |
| 003157      |       | STRAL*DENICE+3 STORE SHIFT    | 03735   | 44 4227  |
| 003160      |       | ENTAL*PAR50 SET AL ZERO       | 03736   | 12 4511  |
| 4-66 003161 |       | STRAL*SUM7 FUNC 5047 OK       | 03737   | 44 5462  |
| 003162      | JOYCE | ENTAL*PAR2 SET AL TO 4        | 03740   | 12 5046  |
| 003163      |       | STRAL*KAY STORE ANS           | 03741   | 44 5016  |
| 003164      |       | ENTAL*FUN10 AL EQ FUNC 10     | 03742   | 12 4717  |
| 003165      |       | STRAL*SUM10 STORE FUNC CODE   | 03743   | 44 5463  |
| 003166      |       | ENTAL*HOT11 SET AL TO 34BARB  | 03744   | 12 4741  |
| 003167      |       | STRAL*0000 STORE JP FAULT REF | 03745   | 44 0000  |
| 003170      |       | STRAL*REBECA STORE JP REF     | 03746   | 44 4627  |
| 003171      |       | ENTAL*HOT17 SET AL TO 34CINDY | 03747   | 12 4745  |
| 003172      |       | STRAL*JACKIE STORE JP REF     | 03750   | 44 4624  |
| 003173      |       | STRAL*ELZA                    | 03751   | 44 4620  |
| 003174      |       | ENTAU*PAR2 SET AU TO 4        | 03752   | 10 5046  |
| 003175      |       | STRAU*ELZA CHECK FUNCS 10#44  | 03753   | 46 4620  |
| 003176      |       | JP*LUCILE CHECK RESULTS       | 03754   | 34 4246  |
| 003177      |       | JP*BARB FUNC ERRORS           | 03755   | 34 3767  |
| 003200      |       | JP*BARB FUNC ERRORS           | 03756   | 34 3767  |
| 003201      | CINDY | ENTAL*FUN10 SET AL TO 10PAR1  | 03757   | 12 4717  |
| 003202      |       | STRAL*LOKI+4 STORE ENTAU      | 03760   | 44 4264  |

| SEQNO       | LABEL  | STATEMENT                      | ADDRESS | INSTRUCT |
|-------------|--------|--------------------------------|---------|----------|
| 003203      |        | ENTAL*FUN46 SET AL TO 46GAIL   | 03761   | 12 4725  |
| 003204      |        | STRAL*LOKI+3 STORE STRAU       | 03762   | 44 4263  |
| 003205      |        | ENTAL*HOT67 SET AL TO 10RITA   | 03763   | 12 5002  |
| 003206      |        | STRAL*DENICE+3 STORE ENTAU     | 03764   | 44 4227  |
| 003207      |        | ENTAL*PAR50 SET AL ZERO        | 03765   | 12 4511  |
| 003210      |        | STRAL*SUM10 FUNCS 10-46 OK     | 03766   | 44 5463  |
| 003211      | BARB   | ENTAL*FUN11 AL EQ FUNC 11      | 03767   | 12 4720  |
| 003212      |        | STRAL*SUM11 STORE FUNC CODE    | 03770   | 44 5464  |
| 003213      |        | ENTAL*HOT13 SET AL TO 34LORANE | 03771   | 12 4742  |
| 003214      |        | STRAL*0000 STORE JP FAULT REF  | 03772   | 44 0000  |
| 003215      |        | STRAL*REBECA STORE JP REF      | 03773   | 44 4627  |
| 003216      |        | ENTAL*HOT14 SET AL TO 34SHERRY | 03774   | 12 4743  |
| 003217      |        | STRAL*JACKIE STORE JP REF      | 03775   | 44 4624  |
| 4-67 003220 |        | STRAL*ELZA                     | 03776   | 44 4620  |
| 003221      |        | ENTAL*POS3 SET AL TO 242424    | 03777   | 12 5141  |
| 003222      |        | STRAL*KAY                      | 04000   | 44 5016  |
| 003223      |        | ENTAUB*POS3 SET AU TO 242424   | 04001   | 11 5141  |
| 003224      |        | STRAUB*ELZA CHECK FUNCS 11-47  | 04002   | 47 4620  |
| 003225      |        | JP*LUCILE CHECK RESULTS        | 04003   | 34 4246  |
| 003226      |        | JP*LORANE FUNCS 11-47 ERRORS   | 04004   | 34 4016  |
| 003227      |        | JP*LORANE FUNCS 11-47 ERRORS   | 04005   | 34 4016  |
| 003230      | SHERRY | ENTAL*FUN11 SET AL TO 11PAR1   | 04006   | 12 4720  |
| 003231      |        | STRAL*LOKI+4 STORE ENTAUB      | 04007   | 44 4264  |
| 003232      |        | ENTAL*HOT102 SET AL TO 47GAIL  | 04010   | 12 5015  |
| 003233      |        | STRAL*LOKI+3 STORE STRAUB      | 04011   | 44 4263  |
| 003234      |        | ENTAL*HOT70 SET AL TO 11RITA   | 04012   | 12 5003  |
| 003235      |        | STRAL*DENICE+3 STORE ENTAUB    | 04013   | 44 4227  |
| 003236      |        | ENTAL*PAR50 SET AL ZERO        | 04014   | 12 4511  |
| 003237      |        | STRAL*SUM11 FUNCS 11-47 OK     | 04015   | 44 5464  |
| 003240      | LORANE | ENTAL*FUN15 AL EQ FUNC 15      | 04016   | 12 4721  |
| 003241      |        | STRAL*ROSIE STORE FUNC REF     | 04017   | 44 5155  |

| SEQNO  | LABEL | STATEMENT                      | ADDRESS | INSTRUCT |
|--------|-------|--------------------------------|---------|----------|
| 003242 |       | STRAL*SUM12 STORE FUNC CODE    | 04020   | 44 5465  |
| 003243 |       | ENTAL*HOT23 SET AL TO 34TERRY  | 04021   | 12 4746  |
| 003244 |       | STRAL*REBECA STORE JP REF      | 04022   | 44 4627  |
| 003245 |       | STRAL*0000 STORE JP FAULT REF  | 04023   | 44 0000  |
| 003246 |       | ENTAL*HOT24 SET AL TO 34LEANN  | 04024   | 12 4747  |
| 003247 |       | STRAL*JACKIE STORE JP REF      | 04025   | 44 4624  |
| 003250 |       | ENTAL*PAT3 SET AL TO 3         | 04026   | 12 4422  |
| 003251 |       | STRAL*RITA STORE AL FUNC CHECK | 04027   | 44 5315  |
| 003252 |       | ENTAL*PAR2 SET AL TO 4         | 04030   | 12 5046  |
| 003253 |       | STRAL*KAY STORE FUNC ANS       | 04031   | 44 5016  |
| 003254 |       | JP*DENICE CHECK FUNC           | 04032   | 34 4224  |
| 003255 | LEANN | ENTAL*TRY1                     | 04033   | 12 4677  |
| 003256 |       | STRAL*LILY4                    | 04034   | 44 4212  |
| 003257 |       | ENTAL*TRY2                     | 04035   | 12 4700  |
| 003260 |       | STRAL*LILY5                    | 04036   | 44 4221  |
| 003261 |       | ENTAL*TRY11 FUNC 15 OK         | 04037   | 12 4707  |
| 003262 |       | STRAL*ZULA STORE REF           | 04040   | 44 4640  |
| 003263 |       | ENTAL*PAT1 SET AL TO 1         | 04041   | 12 4420  |
| 003264 |       | STRAL*LOUISE STORE ADD 1 REF   | 04042   | 44 4426  |
| 003265 |       | ENTAL*PAR50 SET AL ZERO        | 04043   | 12 4511  |
| 003266 |       | STRAL*SUM12 FUNC 15 OK         | 04044   | 44 5465  |
| 003267 | TERRY | ENTAL*FUN17 AL EQ FUNC 17      | 04045   | 12 4722  |
| 003270 |       | STRAL*ROSIE STORE FUNC REF     | 04046   | 44 5155  |
| 003271 |       | STRAL*SUM13 STORE FUNC CODE    | 04047   | 44 5466  |
| 003272 |       | ENTAL*HOT27 SET AL TO 34SHELIA | 04050   | 12 4751  |
| 003273 |       | STRAL*REBECA STORE JP REF      | 04051   | 44 4627  |
| 003274 |       | STRAL*0000 STORE JP FAULT REF  | 04052   | 44 0000  |
| 003275 |       | ENTAL*HOT30 SET AL TO 34BETH   | 04053   | 12 4752  |
| 003276 |       | STRAL*JACKIE STORE JP REF      | 04054   | 44 4624  |
| 003277 |       | ENTAL*PAR2 SET AL TO 4         | 04055   | 12 5046  |
| 003300 |       | STRAL*KAY                      | 04056   | 44 5016  |

| SEQNO  | LABEL  | STATEMENT                        | ADDRESS | INSTRUCT |
|--------|--------|----------------------------------|---------|----------|
| 003301 |        | ENTAL*PAT3 SET AL TO 3           | 04057   | 12 4422  |
| 003302 |        | STRAL*RITA STORE AL FUNC CHECK   | 04060   | 44 5315  |
| 003303 |        | JP*DENICE CHECK FUNC             | 04061   | 34 4224  |
| 003304 | BETH   | ENTAL*TRY3                       | 04062   | 12 4701  |
| 003305 |        | STRAL*LILY4                      | 04063   | 44 4212  |
| 003306 |        | ENTAL*TRY4                       | 04064   | 12 4702  |
| 003307 |        | STRAL*LILY5                      | 04065   | 44 4221  |
| 003310 |        | ENTAL*TRY12 FUNC 17 OK           | 04066   | 12 4710  |
| 003311 |        | STRAL*ZULA STORE REF             | 04067   | 44 4640  |
| 003312 |        | ENTAL*DIT46 SET AL TO NEG 1      | 04070   | 12 4416  |
| 003313 |        | STRAL*LOUISE STORE SUB NEG 1 REF | 04071   | 44 4426  |
| 003314 |        | ENTAL*PAR50 SET AL ZERO          | 04072   | 12 4511  |
| 003315 |        | STRAL*SUM13 FUNC 17 OK           | 04073   | 44 5466  |
| 003316 | SHELIA | ENTAL*FUN21 AL EQ FUNC 21        | 04074   | 12 4723  |
| 003317 |        | STRAL*ROSIE STORE FUNC REF       | 04075   | 44 5155  |
| 003320 |        | STRAL*SUM14 STORE FUNC CODE      | 04076   | 44 5467  |
| 003321 |        | ENTAL*HOT31 SET AL TO 34BECKY    | 04077   | 12 4753  |
| 003322 |        | STRAL*REBECA STORE JP REF        | 04100   | 44 4627  |
| 003323 |        | STRAL*0000 STORE JP FAULT REF    | 04101   | 44 0000  |
| 003324 |        | ENTAL*HOT32 SET AL TO 34SANDY    | 04102   | 12 4754  |
| 003325 |        | STRAL*JACKIE STORE JP REF        | 04103   | 44 4624  |
| 003326 |        | ENTAL*POS1 SET AL TO 5           | 04104   | 12 5144  |
| 003327 |        | STRAL*KAY                        | 04105   | 44 5016  |
| 003330 |        | ENTAL*PAT3 SET AL TO 3           | 04106   | 12 4422  |
| 003331 |        | STRAL*RITA STORE AL FUNC CHECK   | 04107   | 44 5315  |
| 003332 |        | JP*DENICE CHECK FUNC             | 04110   | 34 4224  |
| 003333 | SANDY  | ENTAL*TRY5                       | 04111   | 12 4703  |
| 003334 |        | STRAL*LILY4                      | 04112   | 44 4212  |
| 003335 |        | ENTAL*TRY6                       | 04113   | 12 4704  |
| 003336 |        | STRAL*LILY5                      | 04114   | 44 4221  |
| 003337 |        | ENTAL*TRY13 FUNC 21 OK           | 04115   | 12 4711  |

| SEQNO  | LABEL | STATEMENT                        | ADDRESS | INSTRUCT |
|--------|-------|----------------------------------|---------|----------|
| 003340 |       | STRAL*ZULA STORE REF             | 04116   | 44 4640  |
| 003341 |       | ENTAL*PAR50 SET AL ZERO          | 04117   | 12 4511  |
| 003342 |       | STRAL*LOUISE STORE ADD 1 REF     | 04120   | 44 4426  |
| 003343 |       | STRAL*SUM14 FUNC 21 OK           | 04121   | 44 5467  |
| 003344 | BECKY | ENTAL*FUN23 AL EQ FUNC 23        | 04122   | 12 4724  |
| 003345 |       | STRAL*ROSIE STORE FUNC REF       | 04123   | 44 5155  |
| 003346 |       | STRAL*SUM15 STORE FUNC CODE      | 04124   | 44 5470  |
| 003347 |       | ENTAL*HOT33 SET AL TO 34BETTY    | 04125   | 12 4755  |
| 003350 |       | STRAL*REBECA STORE JP REF        | 04126   | 44 4627  |
| 003351 |       | STRAL*0000 STORE JP FAULT REF    | 04127   | 44 0000  |
| 003352 |       | ENTAL*HOT34 SET AL TO 34LIZ      | 04130   | 12 4756  |
| 003353 |       | STRAL*JACKIE STORE JP REF        | 04131   | 44 4624  |
| 003354 |       | ENTAL*PAT3 SET AL TO 3           | 04132   | 12 4422  |
| 003355 |       | STRAL*RITA STORE AL FUNC CHECK   | 04133   | 44 5315  |
| 003356 |       | ENTAL*POS1 SET AL TO 5           | 04134   | 12 5144  |
| 003357 |       | STRAL*KAY                        | 04135   | 44 5016  |
| 003360 |       | JP*DENICE CHECK FUNC             | 04136   | 34 4224  |
| 003361 | LIZ   | ENTAL*TRY7                       | 04137   | 12 4705  |
| 003362 |       | STRAL*LILY4                      | 04140   | 44 4212  |
| 003363 |       | ENTAL*TRY10                      | 04141   | 12 4706  |
| 003364 |       | STRAL*LILY5                      | 04142   | 44 4221  |
| 003365 |       | ENTAL*TRY14 FUNC 23 OK           | 04143   | 12 4712  |
| 003366 |       | STRAL*ZULA STORE REF             | 04144   | 44 4640  |
| 003367 |       | ENTAL*PAR1 SET AL NEG ZERO       | 04145   | 12 5066  |
| 003370 |       | STRAL*LOUISE STORE SUB NEG 1 REF | 04146   | 44 4426  |
| 003371 |       | ENTAL*PAR50 SET AL ZERO          | 04147   | 12 4511  |
| 003372 |       | STRAL*SUM15 FUNC 23 OK           | 04150   | 44 5470  |
| 003373 |       | ENTAL*HOT56 SET AL TO 34DOTTIE   | 04151   | 12 4772  |
| 003374 |       | STRAL*JACKIE STORE JP REF        | 04152   | 44 4624  |
| 003375 |       | ENTAL*HOT57 SET AL TO 34PAT      | 04153   | 12 4773  |
| 003376 |       | STRAL*REBECA STORE JP REF        | 04154   | 44 4627  |

| SEQNO  | LABEL  | STATEMENT                        | ADDRESS | INSTRUCT |
|--------|--------|----------------------------------|---------|----------|
| 003377 | BETTY  | ENTAL*ZULA AL EQ ARITH FUNC      | 04155   | 12 4640  |
| 003400 |        | STRAL*LILY1 STORE CORRECT FUNC   | 04156   | 44 4164  |
| 003401 |        | STRAL*LILY2 TO INCREMENT         | 04157   | 44 4200  |
| 003402 |        | STRAL*LILY3                      | 04160   | 44 4172  |
| 003403 | DOTTIE | ENTAL*PAR50 SET AL ZERO          | 04161   | 12 4511  |
| 003404 |        | STRAL*0001 SET B TO ZERO         | 04162   | 44 0001  |
| 003405 |        | ENTAL*CAROL                      | 04163   | 12 4614  |
| 003406 | LILY1  | 000000 INCREMENT BY 1            | 04164   | 000000   |
| 003407 |        | STRAL*CAROL                      | 04165   | 44 4614  |
| 003410 |        | STRAL*LOK+1                      | 04166   | 44 4167  |
| 003411 |        | 000000                           | 04167   | 000000   |
| 003412 |        | STRAL*KAY STORE NEXT ANS         | 04170   | 44 5016  |
| 003413 |        | ENTAL*CONNIE                     | 04171   | 12 4615  |
| 003414 | LILY3  | 000000 INCREMENT BY 1            | 04172   | 000000   |
| 003415 |        | STRAL*CONNIE                     | 04173   | 44 4615  |
| 003416 |        | STRAL*LOK+1                      | 04174   | 44 4175  |
| 003417 |        | 000000                           | 04175   | 000000   |
| 003420 |        | STRAL*ROSIE STORE NEXT FUNC CODE | 04176   | 44 5155  |
| 003421 |        | ENTAL*KATHY                      | 04177   | 12 4625  |
| 003422 | LILY2  | 000000 INCREMENT BY 1            | 04200   | 000000   |
| 003423 |        | STRAL*KATHY                      | 04201   | 44 4625  |
| 003424 |        | 000000                           | 04202   | 000000   |
| 003425 |        | STRAL*LOK+1                      | 04203   | 44 4204  |
| 003426 |        | 000000                           | 04204   | 000000   |
| 003427 |        | STRAL*RITA STORE NEXT AL ENTRY   | 04205   | 44 5315  |
| 003430 |        | JP*DENICE                        | 04206   | 34 4224  |
| 003431 | PAT    | ENTAL*PAR50 SET AL ZERO          | 04207   | 12 4511  |
| 003432 |        | STRAL*0001 SET B TO ZERO         | 04210   | 44 0001  |
| 003433 |        | ENTAL*DEBBIE AL EQ FUNC ERRORS   | 04211   | 12 4616  |
| 003434 | LILY4  | 000000 ADD TO FUNC ERROR         | 04212   | 000000   |
| 003435 |        | STRAL*DEBBIE STORE FINAL ERROR   | 04213   | 44 4616  |



| SEQNO  | LABEL  | STATEMENT                                 | ADDRESS | INSTRUCT |
|--------|--------|---|---------|----------|
| 003436 |        | STRAL*BONITA                              | 04214   | 44 4606  |
| 003437 |        | JP*DOTTIE                                 | 04215   | 34 4161  |
| 003440 | JANE   | ENTAL*PAR50 SET AL ZERO                   | 04216   | 12 4511  |
| 003441 |        | STRAL*0001 SET B TO ZERO                  | 04217   | 44 0001  |
| 003442 |        | ENTAL*BONITA AL EQ SUB FINAL ERROR        | 04220   | 12 4606  |
| 003443 | LILY5  | 000000 CHECK ALL SUMS FOR ERRORS          | 04221   | 000000   |
| 003444 |        | STRAL*BONITA STORE ERROR DISPLAY          | 04222   | 44 4606  |
| 003445 |        | JP*LILY2-1                                | 04223   | 34 4177  |
| 003446 | DENICE | ENTAL*PAR50 SET AL ZERO                   | 04224   | 12 4511  |
| 003447 |        | STRAL*0001 SET B TO ZERO                  | 04225   | 44 0001  |
| 003450 |        | ENTAL*RITA AL EQ PAT USED TO CHECK FUNC   | 04226   | 12 5315  |
| 003451 |        | 000000                                    | 04227   | 000000   |
| 003452 | SALLY  | ENTAL*HOT35 SET AL TO 34PAT               | 04230   | 12 4757  |
| 003453 |        | STRAL*U000 STORE JP FAULT REF             | 04231   | 44 0000  |
| 003454 |        | ENTAL*ROSIE AL EQ FUNC TO BE CHECKED      | 04232   | 12 5155  |
| 003455 |        | STRAL*TINA                                | 04233   | 44 4240  |
| 003456 |        | STRAL*JOY STORE FUNC CODE                 | 04234   | 44 4623  |
| 003457 |        | ENTAL*PAR50 SET AL ZERO                   | 04235   | 12 4511  |
| 003460 |        | STRAL*0001 SET B TO ZERO                  | 04236   | 44 0001  |
| 003461 |        | ENTAL*RITA AL EQ PAT USED TO CHECK FUNC   | 04237   | 12 5315  |
| 003462 | TINA   | 000000 CHECK FUNC                         | 04240   | 000000   |
| 003463 |        | JP*TINA+4                                 | 04241   | 34 4244  |
| 003464 |        | JP*LOKI CHECK FOR SKIP FUNC               | 04242   | 34 4260  |
| 003465 |        | JP*PAT FUNC ERROR                         | 04243   | 34 4207  |
| 003466 |        | STRAL*ELZA STORE RESULTS OF FUNC CHECKED  | 04244   | 44 4620  |
| 003467 |        | JP*LOKI CHECK FUNC RESULTS                | 04245   | 34 4260  |
| 003470 | LUCILE | ENTAL*PAR50 SET AL ZERO                   | 04246   | 12 4511  |
| 003471 |        | STRAL*0001 SET B ZERO                     | 04247   | 44 0001  |
| 003472 |        | ENTAL*ELZA AL EQ RESULT FROM FUNC CHECKED | 04250   | 12 4620  |
| 003473 |        | 000000 THESE 3 LOKS ARE USED TO           | 04251   | 000000   |
| 003474 |        | 000000 COMPARE AND CHECK IF RESULTS IS    | 04252   | 000000   |

| SEQNO  | LABEL  | STATEMENT                           | ADDRESS | INSTRUCT |
|--------|--------|-------------------------------------|---------|----------|
| 003475 |        | 000000 CORRECT BY COMB OF INSTRS OK | 04253   | 000000   |
| 003476 |        | ENTAL*KAY AL EQ CORRECT ANS         | 04254   | 12 5016  |
| 003477 |        | 000000 CONT CHECKING                | 04255   | 000000   |
| 003500 |        | JPMLEQ*JACKIE IF JP#FUNC OK         | 04256   | 65 4624  |
| 003501 |        | JP*REBECA FUNC ERROR                | 04257   | 34 4627  |
| 003502 | LOKI   | ENTAL*PAR50 SET AL ZERO             | 04260   | 12 4511  |
| 003503 |        | STRAL*0001 SET B TO ZERO            | 04261   | 44 0001  |
| 003504 |        | ENTAL*PAR1 SET AL TO NEG1           | 04262   | 12 5066  |
| 003505 |        | 000000                              | 04263   | 000000   |
| 003506 |        | 000000                              | 04264   | 000000   |
| 003507 |        | JP*LUCILE CHECK FUNC RESULTS        | 04265   | 34 4246  |
| 003510 | CHER   | 00*CHER+1                           | 04266   | 00 4267  |
| 003511 |        | STRAL*00                            | 04267   | 44 0000  |
| 003512 |        | ENTAL*CHER+1                        | 04270   | 12 4267  |
| 003513 |        | STRAL*ELZA                          | 04271   | 44 4620  |
| 003514 |        | JP*LOKI                             | 04272   | 34 4260  |
| 003515 | LOIS   | 00*DOTTIE                           | 04273   | 00 4161  |
| 003516 | HAYLEY | ENTAL*PAR50                         | 04274   | 12 4511  |
| 003517 |        | JP*DOTTIE                           | 04275   | 34 4161  |
| 003520 | FAYE   | ENTAL*GAIL                          | 04276   | 12 4621  |
| 003521 |        | STRAL*ELZA                          | 04277   | 44 4620  |
| 003522 |        | JP*LOKI                             | 04300   | 34 4260  |
| 003523 | PATTIE | ENTAL*HOT46                         | 04301   | 12 4763  |
| 003524 |        | STRAL*TINA+1                        | 04302   | 44 4241  |
| 003525 |        | JP*DOTTIE                           | 04303   | 34 4161  |
| 003526 | SUSAN  | ENTAL*0001                          | 04304   | 12 0001  |
| 003527 |        | STRAL*ELZA                          | 04305   | 44 4620  |
| 003530 |        | ENTAL*HOT47                         | 04306   | 12 4764  |
| 003531 |        | STRAL*TINA+1                        | 04307   | 44 4241  |
| 003532 |        | JP*LOKI                             | 04310   | 34 4260  |
| 003533 | ROBIN  | 34*DOTTIE                           | 04311   | 34 4161  |

| SEQNO  | LABEL  | STATEMENT                      | ADDRESS | INSTRUCT |
|--------|--------|--------------------------------|---------|----------|
| 003534 |        | 34*PAT                         | 04312   | 34 4207  |
| 003535 | WENNIE | 34*PAT                         | 04313   | 34 4207  |
| 003536 |        | 34*DOTTIE                      | 04314   | 34 4161  |
| 003537 | LILY   | ENTAL*HOT50                    | 04315   | 12 4765  |
| 003540 |        | STRAL*TINA+5                   | 04316   | 44 4245  |
| 003541 |        | JP*DOTTIE                      | 04317   | 34 4161  |
| 003542 | GAYLE  | STRAL*KAY                      | 04320   | 44 5016  |
| 003543 |        | ENTSR*0                        | 04321   | 5073 00  |
| 003544 |        | ENTAL*KAY                      | 04322   | 12 5016  |
| 003545 |        | STRAL*ELZA                     | 04323   | 44 4620  |
| 003546 |        | ENTAL*HOT51                    | 04324   | 12 4766  |
| 003547 |        | STRAL*TINA+5                   | 04325   | 44 4245  |
| 003550 |        | JP*LOKI                        | 04326   | 34 4260  |
| 003551 | DINA   | STRAL*ELZA                     | 04327   | 44 4620  |
| 003552 |        | ENTAL*HOT53 SET AL TO 34STOPIE | 04330   | 12 4770  |
| 003553 |        | STRAL*JACKIE                   | 04331   | 44 4624  |
| 003554 |        | ENTAL*HOT52 SET AL TO 34JANE   | 04332   | 12 4767  |
| 003555 |        | STRAL*REBECA                   | 04333   | 44 4627  |
| 003556 |        | ENTAL*HOT64 SET AL TO 34LUCILE | 04334   | 12 5000  |
| 003557 |        | STRAL*LILY2+6                  | 04335   | 44 4206  |
| 003560 |        | ENTAL*HOT100 SET AL TO 44ELZA  | 04336   | 12 5013  |
| 003561 |        | STRAL*LILY2+2                  | 04337   | 44 4202  |
| 003562 |        | JP*LILY2-1                     | 04340   | 34 4177  |
| 003563 | GRACY  | ENTAL*HOT55 SET AL TO 34BETTY  | 04341   | 12 4771  |
| 003564 |        | STRAL*ROSIE STORE JP REF       | 04342   | 44 5155  |
| 003565 |        | ENTAL*HOT56 SET AL TO 34DOTTIE | 04343   | 12 4772  |
| 003566 |        | STRAL*JACKIE STORE JP REF      | 04344   | 44 4624  |
| 003567 |        | ENTAL*HOT57 SET AL TO 34PAT    | 04345   | 12 4773  |
| 003570 |        | STRAL*REBECA STORE JP REF      | 04346   | 44 4627  |
| 003571 |        | JP*SALLY                       | 04347   | 34 4230  |
| 003572 | END1   | STOP*40 ERROR STOP 3.13.1      | 04350   | 5056 40  |

| SEQNO  | LABEL     | STATEMENT                             | ADDRESS | INSTRUCT |
|--------|-----------|---------------------------------------|---------|----------|
| 003573 | END2      | STOP*40 ERROR STOP 3.13.2             | 04351   | 5056 40  |
| 003574 | END3      | STOP*40 ERROR STOP 3.13.3             | 04352   | 5056 40  |
| 003575 | END4      | STOP*40 ERROR STOP 3.13.4             | 04353   | 5056 40  |
| 003576 | STOPIE    | ENTAL*DEBBIE                          | 04354   | 12 4616  |
| 003577 |           | ENTAU*BONITA                          | 04355   | 10 4606  |
| 003600 |           | STOP*40 ERROR STOP 3.13.5-END OF TEST | 04356   | 5056 40  |
| 003601 |           | JP*LOK-1 RESET P AND CONDITIONS       | 04357   | 34 4356  |
| 003602 |           | RESERV*01                             | 04360   | 000000   |
| 003603 | AFAULT    | RJP*AFault+1 FAULT ROUTINE JP         | 04361   | 76 4362  |
| 003604 |           | 0*0 ENTRY AND (P)                     | 04362   | 00 0000  |
| 003605 |           | ENTAL*IFault INSURE PROPER            | 04363   | 12 4404  |
| 003606 |           | STRAL*IFault+1 C DISPLAY              | 04364   | 44 4405  |
| 003607 |           | ENTAL*AFault+1 FLT ADDR IN AL         | 04365   | 12 4362  |
| 003610 |           | ADDALK*7776 SUBTRACT 1                | 04366   | 71 7776  |
| 003611 |           | STRADR*LOK+1 RESTART TO DISPLAY       | 04367   | 74 4370  |
| 003612 |           | ENTAU*ADR CONTENTS OF FAULTING ADDR   | 04370   | 10 0000  |
| 003613 |           | RJP*DISPOC DISPLAY IFault ON C        | 04371   | 76 4374  |
| 003614 |           | CL*IFault CLEAR SUSP INST STORAGE     | 04372   | 40 4404  |
| 003615 |           | STOP*40 ERROR STOP                    | 04373   | 5056 40  |
| 003616 | DISPOC    | 0*0 ENTRY                             | 04374   | 00 0000  |
| 003617 |           | OUT*00 OUT ON CHAN 0                  | 04375   | 5012 00  |
| 003620 |           | 0*IFault+1 TO DISPLAY                 | 04376   | 004405   |
| 003621 |           | 0*IFault IFault                       | 04377   | 004404   |
| 003622 |           | OUTSTP*00 AVOID FALSE DISPLAY         | 04400   | 5016 00  |
| 003623 |           | OUTOV*00 ODA TO DISPLAY ON C          | 04401   | 5026 00  |
| 003624 |           | SRSM*00 SET RESUME                    | 04402   | 5020 00  |
| 003625 |           | IJP*DISPOC EXIT                       | 04403   | 55 4374  |
| 003626 | IFault    | 0*0 SUSPECT FLT INST STORAGE          | 04404   | 00 0000  |
| 003627 |           | 0*0                                   | 04405   | 00 0000  |
| 003630 |           | DBLSET                                |         |          |
| 003631 | TROISSEPT | 377777                                | 04406   | 377777   |

| SEQNO  | LABEL     | STATEMENT | ADDRESS | INSTRUCT |
|--------|-----------|-----------|---------|----------|
| 003632 |           | 177777    | 04407   | 177777   |
| 003633 | UNESEPT   | 177777    | 04410   | 177777   |
| 003634 |           | 377777    | 04411   | 377777   |
| 003635 | TROISCINQ | 353535    | 04412   | 353535   |
| 003636 |           | 353535    | 04413   | 353535   |
| 003637 | QUTREDEUX | 424242    | 04414   | 424242   |
| 003640 |           | 424242    | 04415   | 424242   |
| 003641 | DIT46     | 777776    | 04416   | 777776   |
| 003642 |           | 000000    | 04417   | 000000   |
| 003643 | PAT1      | 000001    | 04420   | 000001   |
| 003644 |           | 000003    | 04421   | 000003   |
| 003645 | PAT3      | 000003    | 04422   | 000003   |
| 003646 |           | 000001    | 04423   | 000001   |
| 003647 | DUOONE    | 000001    | 04424   | 000001   |
| 003650 |           | 000001    | 04425   | 000001   |
| 003651 | LOUISE    | 000000    | 04426   | 000000   |
| 003652 |           | 000000    | 04427   | 000000   |
| 003653 | SIXZERUNE | 600001    | 04430   | 600001   |
| 003654 | NEUF      | 000007    | 04431   | 000007   |
| 003655 | SEVENZERO | 700000    | 04432   | 700000   |
| 003656 | ZEROCINQ  | 000005    | 04433   | 000005   |
| 003657 | THIRTEEN  | 000013    | 04434   | 000013   |
| 003660 | THIRTY    | 000030    | 04435   | 000030   |
| 003661 | TREFIVE   | 000035    | 04436   | 000035   |
| 003662 | THIFIVE   | 350000    | 04437   | 350000   |
| 003663 | ZEROSEPT  | 070707    | 04440   | 070707   |
| 003664 | DEAN      | 707070    | 04441   | 707070   |
| 003665 | TRANSIT   | 770707    | 04442   | 770707   |
| 003666 | TSEVTZER  | 777000    | 04443   | 777000   |
| 003667 | TEAN      | 070007    | 04444   | 070007   |
| 003670 | NZRO      | 777777    | 04445   | 777777   |

| SEQNO  | LABEL     | STATEMENT | ADDRESS | INSTRUCT |
|--------|-----------|-----------|---------|----------|
| 003671 | BEEREG    | 507210    | 04446   | 507210   |
| 003672 | SEVENT    | 777707    | 04447   | 777707   |
| 003673 | STACKED   | 557775    | 04450   | 557775   |
| 003674 | MAZE      | 003777    | 04451   | 003777   |
| 003675 | TROISDEUX | 323232    | 04452   | 323232   |
| 003676 | QUTRECINQ | 454545    | 04453   | 454545   |
| 003677 | GOUP3     | 611116    | 04454   | 611116   |
| 003700 | NEG1      | 477777    | 04455   | 477777   |
| 003701 | GOUP      | 544445    | 04456   | 544445   |
| 003702 | GOUP2     | 232232    | 04457   | 232232   |
| 003703 | SIXSEPT   | 677777    | 04460   | 677777   |
| 003704 | TRANSFER  | 776001    | 04461   | 776001   |
| 003705 | FACTOR    | 504477    | 04462   | 504477   |
| 003706 | SEVENN    | 000007    | 04463   | 000007   |
| 003707 | TROISZERO | 300000    | 04464   | 300000   |
| 003710 | CHAN      | 000001    | 04465   | 000001   |
| 003711 | ZERODEUX  | 000002    | 04466   | 000002   |
| 003712 |           | 000004    | 04467   | 000004   |
| 003713 |           | 000010    | 04470   | 000010   |
| 003714 |           | 000020    | 04471   | 000020   |
| 003715 |           | 000040    | 04472   | 000040   |
| 003716 |           | 000100    | 04473   | 000100   |
| 003717 |           | 000200    | 04474   | 000200   |
| 003720 |           | 000400    | 04475   | 000400   |
| 003721 |           | 001000    | 04476   | 001000   |
| 003722 |           | 002000    | 04477   | 002000   |
| 003723 |           | 004000    | 04500   | 004000   |
| 003724 |           | 010000    | 04501   | 010000   |
| 003725 |           | 020000    | 04502   | 020000   |
| 003726 |           | 040000    | 04503   | 040000   |
| 003727 | UNEHUNTHO | 100000    | 04504   | 100000   |

| SEQNO  | LABEL     | STATEMENT | ADDRESS | INSTRUCT |
|--------|-----------|-----------|---------|----------|
| 003730 | TWOHUNTH0 | 200000    | 04505   | 200000   |
| 003731 | QUTREZERO | 400000    | 04506   | 400000   |
| 003732 | TESTALL   | 000000    | 04507   | 000000   |
| 003733 | POSZERO   | 000000    | 04510   | 000000   |
| 003734 | PAR50     | 000000    | 04511   | 000000   |
| 003735 | NEGZERO   | 777777    | 04512   | 777777   |
| 003736 |           | 671471    | 04513   | 671471   |
| 003737 |           | 002715    | 04514   | 002715   |
| 003740 |           | 641464    | 04515   | 641464   |
| 003741 |           | 611677    | 04516   | 611677   |
| 003742 |           | 223617    | 04517   | 223617   |
| 003743 |           | 457271    | 04520   | 457271   |
| 003744 |           | 160477    | 04521   | 160477   |
| 003745 |           | 166105    | 04522   | 166105   |
| 003746 |           | 721121    | 04523   | 721121   |
| 003747 |           | 534333    | 04524   | 534333   |
| 003750 |           | 044047    | 04525   | 044047   |
| 003751 |           | 537272    | 04526   | 537272   |
| 003752 |           | 033432    | 04527   | 033432   |
| 003753 |           | 611212    | 04530   | 611212   |
| 003754 |           | 752616    | 04531   | 752616   |
| 003755 |           | 527366    | 04532   | 527366   |
| 003756 | SCARF     | 000000    | 04533   | 000000   |
| 003757 |           | 000000    | 04534   | 000000   |
| 003760 | GROUP     | 544445    | 04535   | 544445   |
| 003761 |           | 133331    | 04536   | 133331   |
| 003762 | COMBINE   | 232232    | 04537   | 232232   |
| 003763 |           | 611116    | 04540   | 611116   |
| 003764 | ROUND     | 000002    | 04541   | 000002   |
| 003765 |           | 700002    | 04542   | 700002   |
| 003766 | KNOCKOUT  | 000002    | 04543   | 000002   |

| SEQNO       | LABEL  | STATEMENT | ADDRESS | INSTRUCT |
|-------------|--------|-----------|---------|----------|
| 003767      |        | 700001    | 04544   | 700001   |
| 003770      | TWOSEV | 777777    | 04545   | 777777   |
| 003771      |        | 777777    | 04546   | 777777   |
| 003772      | ACKUP  | 017774    | 04547   | 017774   |
| 003773      |        | 027774    | 04550   | 027774   |
| 003774      |        | 047774    | 04551   | 047774   |
| 003775      |        | 107774    | 04552   | 107774   |
| 003776      | EVEN   | 146314    | 04553   | 146314   |
| 003777      |        | 722442    | 04554   | 722442   |
| 004000      |        | 035237    | 04555   | 035237   |
| 004001      |        | 251764    | 04556   | 251764   |
| 004002      |        | 546403    | 04557   | 546403   |
| 004003      |        | 220151    | 04560   | 220151   |
| 4-79 004004 |        | 737276    | 04561   | 737276   |
| 004005      |        | 153724    | 04562   | 153724   |
| 004006      |        | 600011    | 04563   | 600011   |
| 004007      |        | 175563    | 04564   | 175563   |
| 004010      |        | 446314    | 04565   | 446314   |
| 004011      |        | 722463    | 04566   | 722463   |
| 004012      |        | 211744    | 04567   | 211744   |
| 004013      |        | 177236    | 04570   | 177236   |
| 004014      | CODD   | 254304    | 04571   | 254304   |
| 004015      |        | 167463    | 04572   | 167463   |
| 004016      |        | 522150    | 04573   | 522150   |
| 004017      |        | 201705    | 04574   | 201705   |
| 004020      |        | 675077    | 04575   | 675077   |
| 004021      |        | 146200    | 04576   | 146200   |
| 004022      |        | 712536    | 04577   | 712536   |
| 004023      |        | 425763    | 04600   | 425763   |
| 004024      |        | 171050    | 04601   | 171050   |
| 004025      |        | 606315    | 04602   | 606315   |



| SEQNO  | LABEL    | STATEMENT | ADDRESS | INSTRUCT |
|--------|----------|-----------|---------|----------|
| 004026 |          | 270626    | 04603   | 270626   |
| 004027 |          | 117443    | 04604   | 117443   |
| 004030 |          | 742170    | 04605   | 742170   |
| 004031 | BONITA   | 000000    | 04606   | 000000   |
| 004032 | BENERROR | 000000    | 04607   | 000000   |
| 004033 | BENCOUNT | 000000    | 04610   | 000000   |
| 004034 | BINYARD  | 000000    | 04611   | 000000   |
| 004035 | BELONG   | 000000    | 04612   | 000000   |
| 004036 | COLLECT  | 000000    | 04613   | 000000   |
| 004037 | CAROL    | 000000    | 04614   | 000000   |
| 004040 | CONNIE   | 000000    | 04615   | 000000   |
| 004041 | DEBBIE   | 000000    | 04616   | 000000   |
| 004042 | EIN      | 000000    | 04617   | 000000   |
| 004043 | ELZA     | 000000    | 04620   | 000000   |
| 004044 | GAIL     | 000000    | 04621   | 000000   |
| 004045 | JIM      | 000000    | 04622   | 000000   |
| 004046 | JOY      | 000000    | 04623   | 000000   |
| 004047 | JACKIE   | 000000    | 04624   | 000000   |
| 004050 | KATHY    | 000000    | 04625   | 000000   |
| 004051 | NANCY    | 000000    | 04626   | 000000   |
| 004052 | REBECA   | 000000    | 04627   | 000000   |
| 004053 | STACKUP  | 000000    | 04630   | 000000   |
| 004054 | STROLL   | 000000    | 04631   | 000000   |
| 004055 | STAHL    | 000000    | 04632   | 000000   |
| 004056 | SROBY    | 000000    | 04633   | 000000   |
| 004057 | TOAX     | 000000    | 04634   | 000000   |
| 004060 | TOPCOUNT | 000000    | 04635   | 000000   |
| 004061 | VERA     | 000000    | 04636   | 000000   |
| 004062 | WASTE    | 000000    | 04637   | 000000   |
| 004063 | ZULA     | 000000    | 04640   | 000000   |
| 004064 | ZWEI     | 000000    | 04641   | 000000   |

| SEQNO  | LABEL    | STATEMENT   | ADDRESS | INSTRUCT |
|--------|----------|-------------|---------|----------|
| 004065 | ALLON    | 00*BIEN     | 04642   | 00 2236  |
| 004066 | TRES     | 00*SWAI+5   | 04643   | 00 2235  |
| 004067 |          | 00*PORTE    | 04644   | 00 2246  |
| 004070 | ROUGE    | 00*PORTE-1  | 04645   | 00 2245  |
| 004071 | REPLEM   | 34*LOK+5    | 04646   | 34 4653  |
| 004072 | ISAU     | 00*KUP      | 04647   | 00 1251  |
| 004073 | WASUP    | 000000      | 04650   | 000000   |
| 004074 | DUNLUP   | 000000      | 04651   | 000000   |
| 004075 | STOPIT   | 505640      | 04652   | 505640   |
| 004076 | BEEMAX   | 120011      | 04653   | 120011   |
| 004077 | PEAPLUS  | 00*SMEAL-1  | 04654   | 00 1237  |
| 004100 | DOSUP    | RJP*SUPEREG | 04655   | 76 2266  |
| 004101 | UNSTACK  | 00*BANDIT   | 04656   | 00 2403  |
| 004102 | REFRAD   | 34*REJECTS  | 04657   | 34 2374  |
| 004103 |          | SKP*00      | 04660   | 5050 00  |
| 004104 | STARTADD | 00*CONTBASI | 04661   | 00 0706  |
| 004105 | MULTSEL  | 25*COMBINE  | 04662   | 25 4537  |
| 004106 | DIVSEL   | 27*COMBINE  | 04663   | 27 4537  |
| 004107 | ELM      | 12*POSZERO  | 04664   | 12 4510  |
| 004110 | ELM1     | 34*ELM2     | 04665   | 34 1260  |
| 004111 | COMBACK  | 34*CHEZ-3   | 04666   | 34 0745  |
| 004112 | WEEDOUT2 | 34*CHEZ+1   | 04667   | 34 0751  |
| 004113 | WEEDOUT3 | 34*CHEZ2    | 04670   | 34 0777  |
| 004114 | WEEDOUT4 | 34*CHEZ1+1  | 04671   | 34 0766  |
| 004115 | COMBACK1 | 34*CHEZ1-3  | 04672   | 34 0762  |
| 004116 | WEEDOUT5 | 34*CHEZ1+4  | 04673   | 34 0771  |
| 004117 | WEEDOUT1 | 34*CHEZ1+7  | 04674   | 34 0774  |
| 004120 | WEEDOUT  | 34*CHEZ+6   | 04675   | 34 0756  |
| 004121 | COMBACK2 | 34*CHEZ2    | 04676   | 34 0777  |
| 004122 | TRY1     | 15*JOY      | 04677   | 15 4623  |
| 004123 | TRY2     | 15*RITA     | 04700   | 15 5315  |

| SEQNO  | LABEL | STATEMENT | ADDRESS | INSTRUCT |
|--------|-------|-----------|---------|----------|
| 004124 | TRY3  | 17*JOY    | 04701   | 17 4623  |
| 004125 | TRY4  | 17*RITA   | 04702   | 17 5315  |
| 004126 | TRY5  | 21*JOY    | 04703   | 21 4623  |
| 004127 | TRY6  | 21*RITA   | 04704   | 21 5315  |
| 004130 | TRY7  | 23*JOY    | 04705   | 23 4623  |
| 004131 | TRY10 | 23*RITA   | 04706   | 23 5315  |
| 004132 | TRY11 | 15*LOUISE | 04707   | 15 4426  |
| 004133 | TRY12 | 17*LOUISE | 04710   | 17 4426  |
| 004134 | TRY13 | 21*LOUISE | 04711   | 21 4426  |
| 004135 | TRY14 | 23*LOUISE | 04712   | 23 4426  |
| 004136 | FUN02 | 02*KAY    | 04713   | 02 5016  |
| 004137 | FUN03 | 03*KAY    | 04714   | 03 5016  |
| 004140 | FUN06 | 06*KAY    | 04715   | 06 5016  |
| 004141 | FUN07 | 07*KAY    | 04716   | 07 5016  |
| 004142 | FUN10 | 10*PAR1   | 04717   | 10 5066  |
| 004143 | FUN11 | 11*PAR1   | 04720   | 11 5066  |
| 004144 | FUN15 | 15*PAT1   | 04721   | 15 4420  |
| 004145 | FUN17 | 17*DIT46  | 04722   | 17 4416  |
| 004146 | FUN21 | 21*PAT1   | 04723   | 21 4420  |
| 004147 | FUN23 | 23*DIT46  | 04724   | 23 4416  |
| 004150 | FUN46 | 46*ELZA   | 04725   | 46 4620  |
| 004151 | FUN47 | 47*ELZA   | 04726   | 47 4620  |
| 004152 | FUN61 | 61*JACKIE | 04727   | 61 4624  |
| 004153 | FUN63 | 63*REBECA | 04730   | 63 4627  |
| 004154 | FUN65 | 65*LOK+2  | 04731   | 65 4733  |
| 004155 | H0T1  | 34*ANN    | 04732   | 34 3556  |
| 004156 | H0T2  | 34*ELANE  | 04733   | 34 3536  |
| 004157 | H0T3  | 34*HELEN  | 04734   | 34 3634  |
| 004160 | H0T4  | 34*JENNIE | 04735   | 34 3667  |
| 004161 | H0T5  | 34*SUE    | 04736   | 34 3712  |
| 004162 | H0T7  | 34*JOYCE  | 04737   | 34 3740  |

| SEQNO       | LABEL | STATEMENT | ADDRESS | INSTRUCT |
|-------------|-------|-----------|---------|----------|
| 004163      | HOT10 | 34*ALICE  | 04740   | 34 3730  |
| 004164      | HOT11 | 34*BARB   | 04741   | 34 3767  |
| 004165      | HOT13 | 34*LORANE | 04742   | 34 4016  |
| 004166      | HOT14 | 34*SHERRY | 04743   | 34 4006  |
| 004167      | HOT15 | 504722    | 04744   | 504722   |
| 004170      | HOT17 | 34*CINDY  | 04745   | 34 3757  |
| 004171      | HOT23 | 34*TERRY  | 04746   | 34 4045  |
| 004172      | HOT24 | 34*LEANN  | 04747   | 34 4033  |
| 004173      | HOT25 | 34*LOKI   | 04750   | 34 4260  |
| 004174      | HOT27 | 34*SHELIA | 04751   | 34 4074  |
| 004175      | HOT30 | 34*BETH   | 04752   | 34 4062  |
| 004176      | HOT31 | 34*BECKY  | 04753   | 34 4122  |
| 004177      | HOT32 | 34*SANDY  | 04754   | 34 4111  |
| 4-83 004200 | HOT33 | 34*BETTY  | 04755   | 34 4155  |
| 004201      | HOT34 | 34*LIZ    | 04756   | 34 4137  |
| 004202      | HOT35 | 34*PAT    | 04757   | 34 4207  |
| 004203      | HOT36 | 34*END1   | 04760   | 34 4350  |
| 004204      | HOT37 | 34*END2   | 04761   | 34 4351  |
| 004205      | HOT40 | 34*END3   | 04762   | 34 4352  |
| 004206      | HOT46 | 34*SUSAN  | 04763   | 34 4304  |
| 004207      | HOT47 | JP*TINA+4 | 04764   | 34 4244  |
| 004210      | HOT50 | 34*GAYLE  | 04765   | 34 4320  |
| 004211      | HOT51 | 34*VERA   | 04766   | 34 4636  |
| 004212      | HOT52 | 34*JANE   | 04767   | 34 4216  |
| 004213      | HOT53 | 34*STOPIE | 04770   | 34 4354  |
| 004214      | HOT55 | 34*BETTY  | 04771   | 34 4155  |
| 004215      | HOT56 | 34*DOTTIE | 04772   | 34 4161  |
| 004216      | HOT57 | 34*PAT    | 04773   | 34 4207  |
| 004217      | HOT60 | 34*REBECA | 04774   | 34 4627  |
| 004220      | HOT61 | 06*ELZA   | 04775   | 06 4620  |
| 004221      | HOT62 | 07*ELZA   | 04776   | 07 4620  |

| SEQNO  | LABEL   | STATEMENT  | ADDRESS | INSTRUCT |
|--------|---------|------------|---------|----------|
| 004222 | HOT63   | 34*JACKIE  | 04777   | 34 4624  |
| 004223 | HOT64   | 34*LUCILE  | 05000   | 34 4246  |
| 004224 | HOT65   | 34*LINDA   | 05001   | 34 3614  |
| 004225 | HOT67   | 10*RITA    | 05002   | 10 5315  |
| 004226 | HOT70   | 11*RITA    | 05003   | 11 5315  |
| 004227 | HOT71   | 34*END4    | 05004   | 34 4353  |
| 004230 | HOT72   | 504702     | 05005   | 504702   |
| 004231 | HOT73   | 34*DENICE  | 05006   | 34 4224  |
| 004232 | HOT74   | 12*RITA    | 05007   | 12 5315  |
| 004233 | HOT75   | 12*KAY     | 05010   | 12 5016  |
| 004234 | HOT76   | 12*ROSIE   | 05011   | 12 5155  |
| 004235 | HOT77   | 34*LILY2+3 | 05012   | 34 4203  |
| 004236 | HOT100  | 44*ELZA    | 05013   | 44 4620  |
| 004237 | HOT101  | 44*GAIL    | 05014   | 44 4621  |
| 004240 | HOT102  | 47*GAIL    | 05015   | 47 4621  |
| 004241 | KAY     | 000007     | 05016   | 000007   |
| 004242 | DIT31   | 272727     | 05017   | 272727   |
| 004243 | DIT1    | 757575     | 05020   | 757575   |
| 004244 |         | 000177     | 05021   | 000177   |
| 004245 | DIT6    | 017777     | 05022   | 017777   |
| 004246 |         | 000277     | 05023   | 000277   |
| 004247 | DIT14   | 770177     | 05024   | 770177   |
| 004250 | DIT12   | 000077     | 05025   | 000077   |
| 004251 | DIT27   | 202000     | 05026   | 202000   |
| 004252 |         | 000060     | 05027   | 000060   |
| 004253 |         | 777700     | 05030   | 777700   |
| 004254 | DIT16   | 010001     | 05031   | 010001   |
| 004255 | ZEROUNE | 000001     | 05032   | 000001   |
| 004256 | DIT32   | 173717     | 05033   | 173717   |
| 004257 |         | 123456     | 05034   | 123456   |
| 004260 |         | 654321     | 05035   | 654321   |

| SEQNO       | LABEL     | STATEMENT | ADDRESS | INSTRUCT |
|-------------|-----------|-----------|---------|----------|
| 004261      |           | 123456    | 05036   | 123456   |
| 004262      |           | 123456    | 05037   | 123456   |
| 004263      |           | 123456    | 05040   | 123456   |
| 004264      |           | 123456    | 05041   | 123456   |
| 004265      |           | 123456    | 05042   | 123456   |
| 004266      | PAT2      | 000002    | 05043   | 000002   |
| 004267      |           | 000002    | 05044   | 000002   |
| 004270      |           | 000002    | 05045   | 000002   |
| 004271      | PAR2      | 000004    | 05046   | 000004   |
| 004272      |           | 000001    | 05047   | 000001   |
| 004273      | ZEROSIX   | 000006    | 05050   | 000006   |
| 004274      |           | 000004    | 05051   | 000004   |
| 004275      |           | 000004    | 05052   | 000004   |
| 4-85 004276 | PAIR1     | 077777    | 05053   | 077777   |
| 004277      | ZEROSEVEN | 077777    | 05054   | 077777   |
| 004300      | DIT20     | 010100    | 05055   | 010100   |
| 004301      |           | 000004    | 05056   | 000004   |
| 004302      |           | 077777    | 05057   | 077777   |
| 004303      |           | 326132    | 05060   | 326132   |
| 004304      |           | 326132    | 05061   | 326132   |
| 004305      | PAT10     | 000013    | 05062   | 000013   |
| 004306      |           | 676767    | 05063   | 676767   |
| 004307      |           | 001311    | 05064   | 001311   |
| 004310      |           | 430013    | 05065   | 430013   |
| 004311      | PAR1      | 777777    | 05066   | 777777   |
| 004312      | SEPTZERO  | 707070    | 05067   | 707070   |
| 004313      |           | 050005    | 05070   | 050005   |
| 004314      |           | 757577    | 05071   | 757577   |
| 004315      |           | 333333    | 05072   | 333333   |
| 004316      |           | 444444    | 05073   | 444444   |
| 004317      | PAR26     | 616161    | 05074   | 616161   |

| SEQNO  | LABEL   | STATEMENT | ADDRESS | INSTRUCT |
|--------|---------|-----------|---------|----------|
| 004320 |         | 616161    | 05075   | 616161   |
| 004321 |         | 000100    | 05076   | 000100   |
| 004322 |         | 000001    | 05077   | 000001   |
| 004323 | DIT52   | 020000    | 05100   | 020000   |
| 004324 | B0M25   | 007700    | 05101   | 007700   |
| 004325 |         | 007700    | 05102   | 007700   |
| 004326 |         | 200000    | 05103   | 200000   |
| 004327 |         | 200000    | 05104   | 200000   |
| 004330 |         | 006000    | 05105   | 006000   |
| 004331 | SIXZERO | 600000    | 05106   | 600000   |
| 004332 | PAIR2   | 400000    | 05107   | 400000   |
| 004333 | DUALSEV | 000077    | 05110   | 000077   |
| 004334 | SEVSEV  | 000077    | 05111   | 000077   |
| 004335 | B0M17   | 000077    | 05112   | 000077   |
| 004336 |         | 000303    | 05113   | 000303   |
| 004337 |         | 000303    | 05114   | 000303   |
| 004340 |         | 000203    | 05115   | 000203   |
| 004341 |         | 000203    | 05116   | 000203   |
| 004342 |         | 123456    | 05117   | 123456   |
| 004343 |         | 654321    | 05120   | 654321   |
| 004344 |         | 123456    | 05121   | 123456   |
| 004345 |         | 654321    | 05122   | 654321   |
| 004346 |         | 654321    | 05123   | 654321   |
| 004347 |         | 000000    | 05124   | 000000   |
| 004350 |         | 654321    | 05125   | 654321   |
| 004351 |         | 767676    | 05126   | 767676   |
| 004352 |         | 123456    | 05127   | 123456   |
| 004353 |         | 373737    | 05130   | 373737   |
| 004354 |         | 654321    | 05131   | 654321   |
| 004355 |         | 123456    | 05132   | 123456   |
| 004356 |         | 123456    | 05133   | 123456   |

| SEQNO  | LABEL     | STATEMENT  | ADDRESS | INSTRUCT |
|--------|-----------|------------|---------|----------|
| 004357 |           | 123456     | 05134   | 123456   |
| 004360 |           | 123456     | 05135   | 123456   |
| 004361 |           | 123456     | 05136   | 123456   |
| 004362 |           | 654321     | 05137   | 654321   |
| 004363 |           | 00*TINA+1  | 05140   | 00 4241  |
| 004364 | POS3      | 242424     | 05141   | 242424   |
| 004365 | DIT7      | 010000     | 05142   | 010000   |
| 004366 |           | 00*TINA+1  | 05143   | 00 4241  |
| 004367 | POS1      | 000005     | 05144   | 000005   |
| 004370 | PENNY     | 000006     | 05145   | 000006   |
| 004371 | ZEROTROIS | 000003     | 05146   | 000003   |
| 004372 |           | 000003     | 05147   | 000003   |
| 004373 |           | 000003     | 05150   | 000003   |
| 004374 |           | 000003     | 05151   | 000003   |
| 004375 | SCOR4     | 770002     | 05152   | 770002   |
| 004376 |           | 000203     | 05153   | 000203   |
| 004377 |           | 12*SUM1+15 | 05154   | 12 5471  |
| 004400 | ROSIE     | 504702     | 05155   | 504702   |
| 004401 |           | 13*DIT31   | 05156   | 13 5017  |
| 004402 |           | 34*PATTIE  | 05157   | 34 4301  |
| 004403 |           | 32*DIT3    | 05160   | 32 5320  |
| 004404 |           | 34*PATTIE  | 05161   | 34 4301  |
| 004405 |           | 33*DIT5    | 05162   | 33 5322  |
| 004406 |           | 34*PATTIE  | 05163   | 34 4301  |
| 004407 |           | 360077     | 05164   | 360077   |
| 004410 |           | 34*PATTIE  | 05165   | 34 4301  |
| 004411 |           | 370060     | 05166   | 370060   |
| 004412 |           | 707700     | 05167   | 707700   |
| 004413 |           | 507202     | 05170   | 507202   |
| 004414 |           | 440001     | 05171   | 440001   |
| 004415 |           | 35*ROBIN   | 05172   | 35 4311  |



| SEQNO  | LABEL | STATEMENT | ADDRESS | INSTRUCT |
|--------|-------|-----------|---------|----------|
| 004416 |       | 507201    | 05173   | 507201   |
| 004417 |       | 35*ROBIN  | 05174   | 35 4311  |
| 004420 |       | 40*KAY    | 05175   | 40 5016  |
| 004421 |       | 41*KAY    | 05176   | 41 5016  |
| 004422 |       | 42*KAY    | 05177   | 42 5016  |
| 004423 |       | 43*KAY    | 05200   | 43 5016  |
| 004424 |       | 45*KAY    | 05201   | 45 5016  |
| 004425 |       | 72*KAY    | 05202   | 72 5016  |
| 004426 |       | 74*KAY    | 05203   | 74 5016  |
| 004427 |       | 75*KAY    | 05204   | 75 5016  |
| 004430 |       | 14*PAT1   | 05205   | 14 4420  |
| 004431 |       | 16*PAT3   | 05206   | 16 4422  |
| 004432 |       | 24*PAT2   | 05207   | 24 5043  |
| 004433 |       | 25*PAT2   | 05210   | 25 5043  |
| 004434 |       | 26*DIT44  | 05211   | 26 5426  |
| 004435 |       | 34*FAYE   | 05212   | 34 4276  |
| 004436 |       | 505200    | 05213   | 505200   |
| 004437 |       | 505200    | 05214   | 505200   |
| 004440 |       | 27*DIT44  | 05215   | 27 5426  |
| 004441 |       | 34*FAYE   | 05216   | 34 4276  |
| 004442 |       | 505300    | 05217   | 505300   |
| 004443 |       | 505300    | 05220   | 505300   |
| 004444 |       | 710013    | 05221   | 710013   |
| 004445 |       | 506000    | 05222   | 506000   |
| 004446 |       | 04*DIT24  | 05223   | 04 5440  |
| 004447 |       | 05*DIT25  | 05224   | 05 5441  |
| 004450 |       | 51*PAR1   | 05225   | 51 5066  |
| 004451 |       | 52*DEAN   | 05226   | 52 4441  |
| 004452 |       | 53*TEAN   | 05227   | 53 4444  |
| 004453 |       | 506100    | 05230   | 506100   |
| 004454 |       | 506200    | 05231   | 506200   |

| SEQNO  | LABEL | STATEMENT  | PAGE<br>ADDRESS | 0077<br>INSTRUCT |
|--------|-------|------------|-----------------|------------------|
| 004455 |       | 34*FAYE    | 05232           | 34 4276          |
| 004456 |       | 506300     | 05233           | 506300           |
| 004457 |       | 34*FAYE    | 05234           | 34 4276          |
| 004460 |       | 504106     | 05235           | 504106           |
| 004461 |       | 34*FAYE    | 05236           | 34 4276          |
| 004462 |       | 504202     | 05237           | 504202           |
| 004463 |       | 504303     | 05240           | 504303           |
| 004464 |       | 34*FAYE    | 05241           | 34 4276          |
| 004465 |       | 504422     | 05242           | 504422           |
| 004466 |       | 34*FAYE    | 05243           | 34 4276          |
| 004467 |       | 504506     | 05244           | 504506           |
| 004470 |       | 34*FAYE    | 05245           | 34 4276          |
| 004471 |       | 504606     | 05246           | 504606           |
| 004472 |       | 504706     | 05247           | 504706           |
| 004473 |       | 34*FAYE    | 05250           | 34 4276          |
| 004474 |       | 505400     | 05251           | 505400           |
| 004475 |       | 505400     | 05252           | 505400           |
| 004476 |       | 505500     | 05253           | 505500           |
| 004477 |       | 505500     | 05254           | 505500           |
| 004500 |       | 505020     | 05255           | 505020           |
| 004501 |       | 505003     | 05256           | 505003           |
| 004502 |       | 505700     | 05257           | 505700           |
| 004503 |       | 60*ROBIN   | 05260           | 60 4311          |
| 004504 |       | 60*ROBIN+1 | 05261           | 60 4312          |
| 004505 |       | 62*ROBIN   | 05262           | 62 4311          |
| 004506 |       | 62*ROBIN+1 | 05263           | 62 4312          |
| 004507 |       | 64*ROBIN   | 05264           | 64 4311          |
| 004510 |       | 64*ROBIN+1 | 05265           | 64 4312          |
| 004511 |       | 66*ROBIN   | 05266           | 66 4311          |
| 004512 |       | 66*ROBIN+1 | 05267           | 66 4312          |
| 004513 |       | 67*ROBIN   | 05270           | 67 4311          |

| SEQNO  | LABEL    | STATEMENT  | ADDRESS | INSTRUCT |
|--------|----------|------------|---------|----------|
| 004514 |          | 67*ROBIN+1 | 05271   | 67 4312  |
| 004515 |          | 56*PAR50   | 05272   | 56 4511  |
| 004516 |          | 56*PAT1    | 05273   | 56 4420  |
| 004517 |          | 57*PAR50   | 05274   | 57 4511  |
| 004520 |          | 57*JIM     | 05275   | 57 4622  |
| 004521 |          | 73*ROBIN+1 | 05276   | 73 4312  |
| 004522 |          | 30*CHER    | 05277   | 30 4266  |
| 004523 |          | 55*LOIS    | 05300   | 55 4273  |
| 004524 |          | 76*HAYLEY  | 05301   | 76 4274  |
| 004525 |          | 31*CHER    | 05302   | 31 4266  |
| 004526 |          | 20*PAT1    | 05303   | 20 4420  |
| 004527 |          | 34*FAYE    | 05304   | 34 4276  |
| 004530 |          | 22*DU00NE  | 05305   | 22 4424  |
| 4-90   |          | 34*FAYE    | 05306   | 34 4276  |
| 004532 |          | 505100     | 05307   | 505100   |
| 004533 |          | 505100     | 05310   | 505100   |
| 004534 |          | 34*LILY    | 05311   | 34 4315  |
| 004535 |          | 507302     | 05312   | 507302   |
| 004536 |          | 34*DINA    | 05313   | 34 4327  |
| 004537 |          | DBLSET     |         |          |
| 004540 |          | 000000     | 05314   | 000000   |
| 004541 | RITA     | 000001     | 05315   | 000001   |
| 004542 | DIT23    | 017701     | 05316   | 017701   |
| 004543 | DIT2     | 575757     | 05317   | 575757   |
| 004544 | DIT3     | 000177     | 05320   | 000177   |
| 004545 | DIT10    | 027777     | 05321   | 027777   |
| 004546 | DIT5     | 000277     | 05322   | 000277   |
| 004547 | DIT26    | 250525     | 05323   | 250525   |
| 004550 | TZERFSEV | 007777     | 05324   | 007777   |
| 004551 | DIT30    | 030303     | 05325   | 030303   |
| 004552 | PAR6     | 000060     | 05326   | 000060   |

| SEQNO  | LABEL | STATEMENT | ADDRESS | INSTRUCT |
|--------|-------|-----------|---------|----------|
| 004553 |       | 007700    | 05327   | 007700   |
| 004554 | DIT17 | 010001    | 05330   | 010001   |
| 004555 |       | 000001    | 05331   | 000001   |
| 004556 | DIT33 | 132213    | 05332   | 132213   |
| 004557 |       | 123456    | 05333   | 123456   |
| 004560 |       | 123456    | 05334   | 123456   |
| 004561 |       | 000000    | 05335   | 000000   |
| 004562 |       | 000000    | 05336   | 000000   |
| 004563 |       | 000000    | 05337   | 000000   |
| 004564 |       | 000000    | 05340   | 000000   |
| 004565 | DIT34 | 747474    | 05341   | 747474   |
| 004566 |       | 000001    | 05342   | 000001   |
| 004567 |       | 000077    | 05343   | 000077   |
| 004570 |       | 000000    | 05344   | 000000   |
| 004571 |       | 000003    | 05345   | 000003   |
| 004572 |       | 000004    | 05346   | 000004   |
| 004573 |       | 000003    | 05347   | 000003   |
| 004574 |       | 000002    | 05350   | 000002   |
| 004575 | S00T  | 377777    | 05351   | 377777   |
| 004576 | DIT36 | 142425    | 05352   | 142425   |
| 004577 |       | 000000    | 05353   | 000000   |
| 004600 | DIT21 | 010100    | 05354   | 010100   |
| 004601 |       | 377777    | 05355   | 377777   |
| 004602 | DIT40 | 323232    | 05356   | 323232   |
| 004603 | DIT41 | 326132    | 05357   | 326132   |
| 004604 | DIT42 | 613131    | 05360   | 613131   |
| 004605 |       | 000000    | 05361   | 000000   |
| 004606 | PAR11 | 676767    | 05362   | 676767   |
| 004607 | DIT11 | 007777    | 05363   | 007777   |
| 004610 | DIT13 | 770077    | 05364   | 770077   |
| 004611 | DIT50 | 027702    | 05365   | 027702   |

| SEQNO       | LABEL | STATEMENT | ADDRESS | INSTRUCT |
|-------------|-------|-----------|---------|----------|
| 004612      | PAR13 | 737373    | 05366   | 737373   |
| 004613      | DIT53 | 020002    | 05367   | 020002   |
| 004614      | DIT51 | 020200    | 05370   | 020200   |
| 004615      | PAR5  | 333333    | 05371   | 333333   |
| 004616      | ADDE  | 555555    | 05372   | 555555   |
| 004617      | PAR25 | 161616    | 05373   | 161616   |
| 004620      | TONFI | 250000    | 05374   | 250000   |
| 004621      | DIT4  | 000100    | 05375   | 000100   |
| 004622      | PAT12 | 000021    | 05376   | 000021   |
| 004623      | PAR23 | 100000    | 05377   | 100000   |
| 004624      |       | 077000    | 05400   | 077000   |
| 004625      | PAR52 | 377777    | 05401   | 377777   |
| 004626      | BOM30 | 000100    | 05402   | 000100   |
| 4-92 004627 | LOOT  | 772000    | 05403   | 772000   |
| 004630      | N00T  | 006000    | 05404   | 006000   |
| 004631      | BEAN  | 123456    | 05405   | 123456   |
| 004632      |       | 004000    | 05406   | 004000   |
| 004633      | BOM20 | 770000    | 05407   | 770000   |
| 004634      |       | 123456    | 05410   | 123456   |
| 004635      |       | 000703    | 05411   | 000703   |
| 004636      |       | 000303    | 05412   | 000303   |
| 004637      |       | 000503    | 05413   | 000503   |
| 004640      |       | 000203    | 05414   | 000203   |
| 004641      |       | 654321    | 05415   | 654321   |
| 004642      |       | 123456    | 05416   | 123456   |
| 004643      |       | 654321    | 05417   | 654321   |
| 004644      | PAR15 | 000000    | 05420   | 000000   |
| 004645      |       | 654321    | 05421   | 654321   |
| 004646      |       | 123456    | 05422   | 123456   |
| 004647      |       | 000000    | 05423   | 000000   |
| 004650      |       | 123456    | 05424   | 123456   |

| SEQNO  | LABEL | STATEMENT | ADDRESS | INSTRUCT |
|--------|-------|-----------|---------|----------|
| 004651 | PAR37 | 767676    | 05425   | 767676   |
| 004652 | DIT44 | 677777    | 05426   | 677777   |
| 004653 | PAR34 | 373737    | 05427   | 373737   |
| 004654 | PAR70 | 777773    | 05430   | 777773   |
| 004655 |       | 123456    | 05431   | 123456   |
| 004656 |       | 654321    | 05432   | 654321   |
| 004657 |       | 123456    | 05433   | 123456   |
| 004660 | NIP   | 400000    | 05434   | 400000   |
| 004661 |       | 123456    | 05435   | 123456   |
| 004662 |       | 654321    | 05436   | 654321   |
| 004663 | DIT60 | 600000    | 05437   | 600000   |
| 004664 | DIT24 | 511311    | 05440   | 511311   |
| 004665 | DIT25 | 431113    | 05441   | 431113   |
| 004666 | SIP   | 300001    | 05442   | 300001   |
| 004667 |       | 000003    | 05443   | 000003   |
| 004670 | GIP   | 533333    | 05444   | 533333   |
| 004671 |       | 000004    | 05445   | 000004   |
| 004672 | SCOR1 | 420052    | 05446   | 420052   |
| 004673 | SCOR3 | 400002    | 05447   | 400002   |
| 004674 |       | 222222    | 05450   | 222222   |
| 004675 | SCOR6 | 000303    | 05451   | 000303   |
| 004676 | SCOR7 | 000203    | 05452   | 000203   |
| 004677 |       | 00*SUM1   | 05453   | 00 5454  |
| 004700 | SUM1  | 000000    | 05454   | 000000   |
| 004701 | SUM2  | 000000    | 05455   | 000000   |
| 004702 | SUM3  | 000000    | 05456   | 000000   |
| 004703 | SUM4  | 000000    | 05457   | 000000   |
| 004704 | SUM5  | 000000    | 05460   | 000000   |
| 004705 | SUM6  | 000000    | 05461   | 000000   |
| 004706 | SUM7  | 000000    | 05462   | 000000   |
| 004707 | SUM10 | 000000    | 05463   | 000000   |

4-93

| SEQNO  | LABEL  | STATEMENT      | ADDRESS        | INSTRUCT                    |
|--------|--------|----------------|----------------|-----------------------------|
| 004710 | SUM11  | 000000         | 05464          | 000000                      |
| 004711 | SUM12  | 000000         | 05465          | 000000                      |
| 004712 | SUM13  | 000000         | 05466          | 000000                      |
| 004713 | SUM14  | 000000         | 05467          | 000000                      |
| 004714 | SUM15  | 000000         | 05470          | 000000                      |
| 004715 | SUM16  | 000000         | 05471          | 000000                      |
| 004716 | SS0    | 000001         | 05472          | 000001                      |
| 004717 | SS1    | 000002         | 05473          | 000002                      |
| 004720 | SS2    | 000004         | 05474          | 000004                      |
| 004721 | SS3    | 000010         | 05475          | 000010                      |
| 004722 | SS4    | 000020         | 05476          | 000020                      |
| 004723 | SS5    | 000040         | 05477          | 000040                      |
| 004724 | SS6    | 000100         | 05500          | 000100                      |
| 4-94   | 004725 | ZPACS          | 0*0            | ENTRY                       |
|        | 004726 | ENTICR*02      | SELECT         | MTU LOAD ROUTINE            |
|        | 004727 | ENTSR*00       | CLEAR          | SR REG                      |
|        | 004730 | ENTALK*2000    | SELECT         | LOGICAL TAPE                |
|        | 004731 | LSHAL*05       | TRANSPORT      | 1(SAME AS BOOTSTRAP)        |
|        | 004732 | RXL            |                |                             |
|        | 004733 | RIL*00         |                |                             |
|        | 004734 | STOP*40        | STOP TO        | SELECT BLOCK                |
|        | 004735 | REMARK*SET     | SR TO          | THE NUMBER OF BLOCKS TO BE  |
|        | 004736 | REMARK*SKIPPED | BEFORE         | READING. 1 IF MEM. 2 IF I/O |
|        | 004737 | JP*6001        | JP*START-BEGIN | MTU READ                    |
|        | 004740 | RESERV*7776    | INSURE         | THAT LOGIC/ARITH INPUT      |
|        | 004741 | RESERV*01      | CWS            | DETECT ALL LOAD FAILURES    |
|        | 004742 | ENDSEG         |                |                             |

END OF PROGRAM

| SEQNO  | LABEL | STATEMENT                | ADDRESS | INSTRUCT |
|--------|-------|--------------------------|---------|----------|
| 000000 | MEDIA | CONTR*JOHNSON            |         |          |
| 000001 |       | ALLOC                    |         |          |
| 000002 | MEDIA | 001000                   |         |          |
| 000003 |       | OUTPUT*5*12              |         |          |
| 000004 |       | PROG*JOHNSON             |         |          |
| 000005 |       | P SEG                    | 00000   | 5047 00  |
| 000006 | MEDIA | SIL*0                    | 01000   | 5034 00  |
| 000007 |       | ENTSR*00                 | 01001   | 5073 00  |
| 000010 |       | ENTAU*N000000            | 01002   | 10 4366  |
| 000011 |       | ENTAL*N000000            | 01003   | 12 4366  |
| 000012 |       | SKP*01                   | 01004   | 5050 01  |
|        |       | SET SKIP KEY 0 TO BYPASS |         |          |
| 000013 |       | JP*LOK+2                 | 01005   | 34 1007  |
| 000014 |       | JP*EXEC2                 | 01006   | 34 1020  |
| 000015 | *     |                          |         |          |
| 000016 |       | STOP*40                  | 01007   | 5056 40  |
| 000017 | *     |                          |         |          |
| 000020 | *     |                          |         |          |
| 000021 | *     |                          |         |          |
| 000022 | *     |                          |         |          |
| 000023 | *     |                          |         |          |
| 000024 | *     |                          |         |          |
| 000025 | *     |                          |         |          |
| 000026 | *     |                          |         |          |
| 000027 | *     |                          |         |          |
| 000030 |       | RJP*PARAMETER            | 01010   | 76 1074  |
| 000031 |       | JP*EXEC2                 | 01011   | 34 1020  |
| 000032 | *     |                          |         |          |
| 000033 | EXEC1 | ENTAU*N000000            | 01012   | 10 4366  |
| 000034 |       | ENTAL*N000000            | 01013   | 12 4366  |



| SEQNO  | LABEL | STATEMENT                              | ADDRESS | INSTRUCT |
|--------|-------|--|---------|----------|
| 000035 |       | STOP*02                                | 01014   | 5056 02  |
| 000036 |       | SKP*22                                 | 01015   | 5050 22  |
| 000037 | *     | BOOTSTRAP.                             |         |          |
| 000040 |       | JP*EXEC2                               | 01016   | 34 1020  |
| 000041 |       | JP*0500                                | 01017   | 34 0500  |
| 000042 | EXEC2 | SIL*0                                  | 01020   | 5034 00  |
| 000043 | *     | LOCKED OUT.                            |         |          |
| 000044 |       | ENTAL*LOWEXEC                          | 01021   | 12 4257  |
| 000045 |       | STRAL*RECYCLE                          | 01022   | 44 4275  |
| 000046 | *     | PROGRAM LOCATED IN STACK 00.           |         |          |
| 000047 |       | LSHAL*00                               | 01023   | 5046 00  |
| 000050 |       | RJP*CONTROL                            | 01024   | 76 3233  |
| 000051 |       | RJP*BOOT                               | 01025   | 76 3572  |
| 000052 |       | ENTAU*LOWLIMIT                         | 01026   | 10 4260  |
| 000053 |       | ENTAL*UPLIMIT                          | 01027   | 12 4305  |
| 000054 |       | RJP*MAIN                               | 01030   | 76 1124  |
| 000055 |       | ENTAU*N000002                          | 01031   | 10 4370  |
| 000056 |       | ENTALK*0277                            | 01032   | 70 0277  |
| 000057 |       | RJP*MAIN                               | 01033   | 76 1124  |
| 000060 |       | ENTAU*N000300                          | 01034   | 10 4403  |
| 000061 |       | ENTAL*N000477                          | 01035   | 12 4410  |
| 000062 |       | RJP*MAIN                               | 01036   | 76 1124  |
| 000063 |       | ENTAU*N000540                          | 01037   | 10 4412  |
| 000064 |       | ENTAL*N000577                          | 01040   | 12 4413  |
| 000065 |       | RJP*MAIN                               | 01041   | 76 1124  |
| 000066 |       | ENTAU*CONTSIZE                         | 01042   | 10 4227  |
| 000067 | *     | ARE THERE 256 WORDS OF CONTROL MEMORY? |         |          |
| 000070 |       | JPAUNZ*EXEC3                           | 01043   | 62 1052  |
| 000071 | *     | YES, GO MOVE THE PROGRAM TO STACK 01.  |         |          |
| 000072 |       | ENTAU*N000400                          | 01044   | 10 4407  |
| 000073 |       | ENTAL*N000477                          | 01045   | 12 4410  |

| SEQNO  | LABEL | STATEMENT                      | ADDRESS | INSTRUCT |
|--------|-------|--------------------------------|---------|----------|
| 000074 |       | RJP*MAIN                       | 01046   | 76 1124  |
| 000075 |       | ENTAU*N000540                  | 01047   | 10 4412  |
| 000076 |       | ENTAL*N000677                  | 01050   | 12 4415  |
| 000077 |       | RJP*MAIN                       | 01051   | 76 1124  |
| 000100 | EXEC3 | ENTAU*ESR10                    | 01052   | 10 4242  |
|        |       | MOVE THE PROGRAM FROM STACK 00 |         |          |
| 000101 |       | ENTAL*ESR11                    | 01053   | 12 4243  |
| 000102 |       | RJP*MOVE                       | 01054   | 76 1111  |
| 000103 |       | IJP*UP                         | 01055   | 55 1056  |
| 000104 | *     |                                |         |          |
| 000105 | *     |                                |         |          |
| 000106 | UP    | 0*EXEC4+010000                 | 01056   | 011057   |
| 000107 | *     |                                |         |          |
| 000110 | EXEC4 | ENTAL*UPEXEC                   | 01057   | 12 4304  |
|        |       | SET UP FOR MEMORY TEST RECYCLE |         |          |
| 000111 |       | STRAL*RECYCLE                  | 01060   | 44 4275  |
| 000112 | *     |                                |         |          |
| 000113 |       | ENTAU*N000540                  | 01061   | 10 4412  |
| 000114 |       | ENTAL*LOWLIMIT                 | 01062   | 12 4260  |
| 000115 |       | RJP*MAIN                       | 01063   | 76 1124  |
| 000116 | EXEC5 | ENTAU*ESR11                    | 01064   | 10 4243  |
| 000117 |       | ENTAL*ESR10                    | 01065   | 12 4242  |
| 000120 |       | RJP*MOVE                       | 01066   | 76 1111  |
|        |       | MOVE THE PROGRAM FROM STACK 01 |         |          |
|        |       | TO STACK 00.                   |         |          |
| 000121 |       | IJP*DOWN                       | 01067   | 55 1070  |
| 000122 | *     |                                |         |          |
| 000123 | *     |                                |         |          |
| 000124 | DOWN  | 0*EXEC6                        | 01070   | 001072   |
| 000125 |       | SKP*04                         | 01071   | 5050 04  |
| 000126 | *     |                                |         |          |
| 000127 | *     |                                |         |          |
| 000130 | EXEC6 | RJP*XSTACK                     | 01072   | 76 4121  |
|        |       | CHECK FOR FAILURES THAT CAUSE  |         |          |
| 000131 | *     |                                |         |          |
| 000132 | *     | NONEXISTENT ADDRESSES TO       |         |          |
|        |       | REFERENCE EXISTING LOCATIONS.  |         |          |

| SEQNO  | LABEL       | STATEMENT   | ADDRESS | INSTRUCT |
|--------|-------------|---|---------|----------|
| 000133 |             | JP*EXEC1  | 01073   | 34 1012  |
| 000134 | *           |   |         |          |
| 000135 | *           | THE PROGRAM DETECTION SECTION<br>HAS RUN ONCE WITHOUT A FAILURE<br>BEING DETECTED (MEMORY VERIFIED) |         |          |
| 000136 | *           | GO TO THE RECYCLE STOP.   |         |          |
| 000137 | PARAMETER 0 |   | 01074   | 000000   |
| 000140 |             | CMAL*N000002  | 01075   | 02 4370  |
| 000141 | *           | LESS THAN 8K?   |         |          |
| 000142 |             | JPMGR*MEDIA   | 01076   | 67 1000  |
| 000143 | *           | STOP.   |         |          |
| 000144 |             | CMAL*N000021  | 01077   | 02 4376  |
| 000145 | *           | GREATER THAN 65K?   |         |          |
| 000146 |             | JPMLEQ*MEDIA  | 01100   | 65 1000  |
| 000147 | *           | STOP.   |         |          |
| 000150 |             | STRAU*CONTSIZE  | 01101   | 46 4227  |
| 000151 | *           | PARAMETER.  |         |          |
| 000152 |             | ADDALK*7776   | 01102   | 71 7776  |
| 000153 |             | STRAL*HNS   | 01103   | 44 4250  |
| 000154 | *           | NUMBERED STACK.   |         |          |
| 000155 |             | LSHAL*14  | 01104   | 5046 14  |
| 000156 |             | STRAL*HNSX  | 01105   | 44 4251  |
| 000157 | *           | IN DISPLAYS.  |         |          |
| 000160 |             | SLSET*N007777   | 01106   | 51 4423  |
| 000161 |             | STRAL*UPLIMIT   | 01107   | 44 4305  |
| 000162 | *           | THE HIGHEST EXISTING ADDRESS IN<br>MAIN MEMORY.   |         |          |
| 000163 |             | IJP*PARAMETER   | 01110   | 55 1074  |
| 000164 | *           |   |         |          |
| 000165 | *           | THE MOVE SUBROUTINE IS USED TO MOVE THE PROGRAM FROM ONE<br>STACK TO ANOTHER.                       |         |          |
| 000166 | *           |   |         |          |
| 000167 | *           |   |         |          |
| 000170 | MOVE 0      |   | 01111   | 000000   |

| SEQNO  | LABEL | STATEMENT  | ADDRESS | INSTRUCT |
|--------|-------|--|---------|----------|
| 000171 |       | STRAU*MOVE1                                      | 01112   | 46 1115  |
| 000172 |       | STRAL*MOVE2                                      | 01113   | 44 1117  |
| 000173 |       | ENTB*PROGSIZE                                    | 01114   | 32 4264  |
| 000174 | *     |  |         |          |
| 000175 | MOVE1 | ENTSR*00   | 01115   | 5073 00  |
| 000176 | *     |  |         |          |
| 000177 |       | ENTaub*MEDIA                                     | 01116   | 11 1000  |
| 000200 | MOVE2 | ENTSR*00   | 01117   | 5073 00  |
| 000201 | *     |  |         |          |
| 000202 |       | STRAUB*MEDIA                                     | 01120   | 47 1000  |
| 000203 | *     |  |         |          |
| 000204 |       | BJP*MOVE1  | 01121   | 73 1115  |
| 000205 |       | ENTSR*00   | 01122   | 5073 00  |
| 000206 |       | IJP*MOVE   | 01123   | 55 1111  |
| 000207 | *     |  |         |          |
| 000210 | *     | MAIN IS A SUBROUTINE THAT CONTROL THE TESTING    |         |          |
| 000211 | *     | OF A BLOCK OF ADDRESSES IN MAIN MEMORY SPECIFIED |         |          |
| 000212 | *     | BY LIMITS CONTAINED IN THE AU AND AL REGISTERS   |         |          |
| 000213 | *     | WHEN MAIN IS ENTER.                              |         |          |
| 000214 | *     |  |         |          |
| 000215 | MAIN  | 0  | 01124   | 000000   |
| 000216 |       | STRAU*BEGINNING                                  | 01125   | 46 4226  |
| 000217 |       | STRAL*TERMINAL                                   | 01126   | 44 4302  |
| 000220 |       | RJP*ALLONES                                      | 01127   | 76 1220  |
| 000221 |       | RJP*ALLZEROS                                     | 01130   | 76 1253  |
| 000222 |       | ENTAL*PARITYEVN                                  | 01131   | 12 4262  |
| 000223 |       | RJP*WORSTPTTN                                    | 01132   | 76 1140  |
| 000224 | *     |  |         |          |
| 000225 | *     |  |         |          |
| 000226 |       | ENTAL*PARITYODD                                  | 01133   | 12 4263  |

| SEQNO  | LABEL       | STATEMENT   | ADDRESS | INSTRUCT |
|--------|-------------|---|---------|----------|
| 000227 |             | RJP*WORSTPTTN   | 01134   | 76 1140  |
| 000230 | *           |   |         |          |
| 000231 | *           |   |         |          |
| 000232 |             | RJP*ALLONES   | 01135   | 76 1220  |
| 000233 | *           |   |         |          |
| 000234 |             | RJP*ALLZEROS  | 01136   | 76 1253  |
| 000235 | *           |   |         |          |
| 000236 |             | IJP*MAIN  | 01137   | 55 1124  |
| 000237 | *           |   |         |          |
| 000240 | *           | WORSTPTTN USES A WORST PATTERN TO TEST THE BLOCK OF       |         |          |
| 000241 | *           | ADDRESSES SPECIFIED BY THE LIMITS STORED IN BEGINNING AND |         |          |
| 000242 | *           | TERMINAL. THE WORST PATTERN IS DEFINED BY A PARITY MASK   |         |          |
| 000243 | *           | (PARITYMSK EQUALS 005415) WHICH IS USED TO CHECK EACH     |         |          |
| 000244 | *           | ADDRESS AND EITHER 000000 OR 777777 IS WRITTEN INTO IT,   |         |          |
| 000245 | *           | DEPENDING ON THE PARITY. TWO WORST PATTERNS ARE           |         |          |
| 000246 | *           | GENERATED, ONE BY USING SKIP ON EVEN PARITY (SKPEVN)      |         |          |
| 000247 | *           | INSTRUCTIONS; AND THE OTHER, THE COMPLEMENT OF THE FIRST, |         |          |
| 000250 | *           | BY USING SKIP ON ODD PARITY (SKPODD) INSTRUCTIONS.        |         |          |
| 000251 | *           |   |         |          |
| 000252 | WORSTPTTN 0 |   | 01140   | 000000   |
| 000253 |             | ENTICR*1  | 01141   | 5072 01  |
|        |             | ACTIVATE B1.  |         |          |
| 000254 |             | STRAL*PARTYSKP1   | 01142   | 44 1150  |
| 000255 |             | STRAL*PARTYSKP2   |         |          |
|        |             | PRESTORE THE SELECTED PARITY                              |         |          |
|        |             | INSTRUCTION (SKPODD OR SKPEVN).                           |         |          |
| 000256 |             | ENTAU*PARITYMSK   | 01143   | 44 1165  |
| 000257 |             | ENTB*BEGINNING  | 01144   | 10 4261  |
| 000260 | *           |   | 01145   | 32 4226  |
| 000261 | *           |   |         |          |
| 000262 | WORST1      | ENTSR*10  | 01146   | 5073 10  |
|        |             | SEE NOTE 1 IN APPENDIX A.                                 |         |          |
| 000263 |             | ENTAL*0001  | 01147   | 12 0001  |
| 000264 | *           |   |         |          |
|        |             | NEXT TEST ADDRESS TO THE AL                               |         |          |
|        |             | REGISTER.   |         |          |

4-100

| SEQNO  | LABEL     | STATEMENT      | ADDRESS | INSTRUCT |
|--------|-----------|----------------|---------|----------|
| 000265 | PARTYSKP1 | SKPEVN*0       | 01150   | 5055 00  |
| 000266 | *         |                |         |          |
| 000267 |           | JP*WORST2      | 01151   | 34 1155  |
| 000270 | *         |                |         |          |
| 000271 |           | ENTALK*0000    | 01152   | 70 0000  |
| 000272 |           | STRALB*0000    | 01153   | 45 0000  |
| 000273 |           | JP*WORST3      | 01154   | 34 1157  |
| 000274 | WORST2    | ENTALK*7777    | 01155   | 70 7777  |
| 000275 |           | STRALB*0000    | 01156   | 45 0000  |
| 000276 | WORST3    | ENTSR*00       | 01157   | 5073 00  |
| 000277 |           | BSK*TERMINAL   | 01160   | 56 4302  |
| 000300 |           | JP*WORST1      | 01161   | 34 1146  |
| 000301 |           | ENTB*BEGINNING | 01162   | 32 4226  |
| 000302 | *         |                |         |          |
| 000303 | *         |                |         |          |
| 000304 | WORST4    | ENTSR*10       | 01163   | 5073 10  |
| 000305 |           | ENTAL*0001     | 01164   | 12 0001  |
| 000306 | *         |                |         |          |
| 000307 | PARTYSKP2 | SKPEVN*0       | 01165   | 5055 00  |
| 000310 | *         |                |         |          |
| 000311 |           | JP*WORST5      | 01166   | 34 1200  |
| 000312 |           | ENTALB*0000    | 01167   | 13 0000  |
| 000313 | *         |                |         |          |
| 000314 |           | JPALZ*WORST8   | 01170   | 61 1214  |
| 000315 |           | SKP*04         | 01171   | 5050 04  |
| 000316 | *         |                |         |          |
| 000317 |           | JP*BITSPICK    | 01172   | 34 1314  |
| 000320 | *         |                |         |          |
| 000321 | *         |                |         |          |
| 000322 |           | ENTAU*0001     | 01173   | 10 0001  |
| 000323 |           | ENTSR*00       | 01174   | 5073 00  |

| SEQNO  | LABEL  | STATEMENT                        | ADDRESS | INSTRUCT |
|--------|--------|----------------------------------|---------|----------|
| 000324 |        | STOP*40                          | 01175   | 5056 40  |
| 000325 | *      | THE FAILING ADDRESS IS DISPLAYED |         |          |
| 000326 | *      | IN THE AU REGISTER AND THE       |         |          |
| 000327 | *      | FAILING PATTERN IS DISPLAYED IN  |         |          |
| 000330 | *      | THE AL REGISTER. THE CORRECT     |         |          |
| 000331 | *      | PATTERN IS 000000.               |         |          |
| 000332 |        | RJP*MAINTAID                     | 01176   | 76 1302  |
| 000333 |        | JP*WORST7                        | 01177   | 34 1213  |
| 000334 | WORST5 | ENTALB*0000                      | 01200   | 13 0000  |
| 000335 | *      | DID THE 777777 PATTERN DROP ANY  |         |          |
| 000336 |        | BITS?                            |         |          |
| 000336 |        | JPALZ*WORST6                     | 01201   | 61 1204  |
| 000337 |        | CPAL*0                           | 01202   | 5061 00  |
| 000340 |        | JPALZ*WORST8                     | 01203   | 61 1214  |
| 000341 | WORST6 | SKP*04                           | 01204   | 5050 04  |
| 000342 | *      | SET SKIP KEY 2 TO BYPASS         |         |          |
| 000343 |        | ISOLATION ROUTINES.              |         |          |
| 000344 | *      | JP*BITSDROP                      | 01205   | 34 1324  |
| 000344 | *      | YES THE 777777 PATTERN DROPPED   |         |          |
| 000345 | *      | BITS GO TO THE ISOLATION         |         |          |
| 000346 |        | SECTION.                         |         |          |
| 000346 |        | ENTAU*0001                       | 01206   | 10 0001  |
| 000347 |        | ENTSR*00                         | 01207   | 5073 00  |
| 000350 |        | CPAL*0                           | 01210   | 5061 00  |
| 000351 | *      | SEE NOTE 2 IN APPENDIX A.        |         |          |
| 000351 | *      | COMPLEMENT AL BACK TO ORIGINAL   |         |          |
| 000352 |        | FAILING PATTERN.                 |         |          |
| 000352 |        | STOP*40                          | 01211   | 5056 40  |
| 000353 | *      | THE FAILING ADDRESS IS DISPLAYED |         |          |
| 000354 | *      | IN THE AU REGISTER AND THE       |         |          |
| 000355 | *      | FAILING PATTERN IS DISPLAYED IN  |         |          |
| 000356 | *      | THE AL REGISTER. THE CORRECT     |         |          |
| 000357 | *      | PATTERN IS 777777.               |         |          |
| 000360 |        | RJP*MAINTAID                     | 01212   | 76 1302  |
| 000361 | WORST7 | ENTAU*PARITYMSK                  | 01213   | 10 4261  |
| 000362 | WORST8 | BSK*TERMINAL                     | 01214   | 56 4302  |
| 000362 |        | RESTORE THE PARITY MASK.         |         |          |
| 000362 |        | HAVE ALL THE ADDRESSES BEEN      |         |          |

| SEQNO  | LABEL    | STATEMENT  | ADDRESS | INSTRUCT |
|--------|----------|--|---------|----------|
| 000363 | *        | CHECKED?   |         |          |
| 000364 |          | JP*WORST4  | 01215   | 34 1163  |
| 000365 |          | ENTSR*00   | 01216   | 5073 00  |
| 000366 |          | IJP*WORSTPTTN  | 01217   | 55 1140  |
| 000367 | *        |  |         |          |
| 000370 | *        | SUBROUTINE ALLONES WRITES A 777777 PATTERN INTO AND READS    |         |          |
| 000371 | *        | IT FROM EACH ADDRESS IN THE ADDRESS BLOCK SPECIFIED BY THE   |         |          |
| 000372 | *        | LIMITS STORED AT BEGINNING AND TERMINAL.                     |         |          |
| 000373 | *        |  |         |          |
| 000374 | ALLONES  | 0  | 01220   | 000000   |
| 000375 |          | ENTICR*1   | 01221   | 5072 01  |
| 000376 |          | ENTB*BEGINNING   | 01222   | 32 4226  |
| 000377 | *        | SET THE ACTIVE B REGISTER TO THE INITIAL ADDRESS OF THE TEST |         |          |
| 000400 | *        | ADDRESS BLOCK.   |         |          |
| 000401 |          | ENTSR*10   | 01223   | 5073 10  |
| 000402 |          | ENTALK*7777  | 01224   | 70 7777  |
| 000403 |          | STRALB*0000  | 01225   | 45 0000  |
| 000404 |          | BSK*TERMINAL   | 01226   | 56 4302  |
| 000405 | *        | HAVE ALL THE ADDRESSES IN THE BLOCK BEEN WRITTEN INTO?       |         |          |
| 000406 |          | JP*LOK-2   | 01227   | 34 1225  |
| 000407 | *        | NO GO WRITE 777777 INTO THE NEXT ADDRESS.                    |         |          |
| 000410 |          | ENTSR*00   | 01230   | 5073 00  |
| 000411 |          | ENTB*BEGINNING   | 01231   | 32 4226  |
| 000412 | *        | INITIAL ADDRESS OF THE TEST                                  |         |          |
| 000413 | *        | ADDRESS BLOCK.   |         |          |
| 000414 |          | ENTSR*10   | 01232   | 5073 10  |
| 000415 | ALLONES1 | ENTALB*0000  | 01233   | 13 0000  |
| 000416 | *        | DID THE 777777 PATTERN DROP ANY BITS.                        |         |          |
| 000417 |          | JPALZ*ALLONES2   | 01234   | 61 1237  |
| 000420 |          | CPAL*0   | 01235   | 5061 00  |
| 000421 |          | JPALZ*ALLONES3   | 01236   | 61 1247  |
|        |          | NO, GO TEST THE NEXT ADDRESS.                                |         |          |



| SEQNO  | LABEL    | STATEMENT      | ADDRESS | INSTRUCT |
|--------|----------|----------------|---------|----------|
| 000422 | ALLONES2 | SKP*04         | 01237   | 5050 04  |
| 000423 | *        |                |         |          |
| 000424 |          | JP*BITSDROP    | 01240   | 34 1324  |
| 000425 | *        |                |         |          |
| 000426 | *        |                |         |          |
| 000427 |          | ENTAU*0001     | 01241   | 10 0001  |
| 000430 |          | ENTSR*00       | 01242   | 5073 00  |
| 000431 |          | CPAL*0         | 01243   | 5061 00  |
| 000432 | *        |                |         |          |
| 000433 |          | STOP*40        | 01244   | 5056 40  |
| 000434 | *        |                |         |          |
| 000435 | *        |                |         |          |
| 000436 | *        |                |         |          |
| 000437 | *        |                |         |          |
| 000440 | *        |                |         |          |
| 000441 |          | RJP*MAINTAID   | 01245   | 76 1302  |
| 000442 |          | ENTSR*10       | 01246   | 5073 10  |
| 000443 | ALLONES3 | BSK*TERMINAL   | 01247   | 56 4302  |
| 000444 | *        |                |         |          |
| 000445 |          | JP*ALLONES1    | 01250   | 34 1233  |
| 000446 |          | ENTSR*00       | 01251   | 5073 00  |
| 000447 |          | IJP*ALLONES    | 01252   | 55 1220  |
| 000450 | *        |                |         |          |
| 000451 | *        |                |         |          |
| 000452 | *        |                |         |          |
| 000453 | *        |                |         |          |
| 000454 | *        |                |         |          |
| 000455 | *        |                |         |          |
| 000456 | ALLZEROS | 0              | 01253   | 000000   |
| 000457 |          | ENTICR*1       | 01254   | 5072 01  |
| 000460 |          | ENTB*BEGINNING | 01255   | 32 4226  |

| SEQNO  | LABEL     | STATEMENT                        | ADDRESS | INSTRUCT |
|--------|-----------|----------------------------------|---------|----------|
| 000461 | *         | INITIAL ADDRESS OF THE TEST      |         |          |
| 000462 | *         | ADDRESS BLOCK.                   |         |          |
| 000463 |           | ENTSR*10                         | 01256   | 5073 10  |
| 000464 |           | CLB*0000                         | 01257   | 41 0000  |
| 000465 |           | BSK*TERMINAL                     | 01260   | 56 4302  |
| 000466 | *         | BLOCK BEEN WRITTEN INTO.         |         |          |
| 000467 |           | JP*LOK-2                         | 01261   | 34 1257  |
| 000470 | *         | NO GO WRITE 000000 INTO THE      |         |          |
|        |           | NEXT ADDRESS.                    |         |          |
| 000471 |           | ENTSR*00                         | 01262   | 5073 00  |
| 000472 |           | ENTB*BEGINNING                   | 01263   | 32 4226  |
| 000473 | *         | INITIAL ADDRESS OF THE TEST      |         |          |
| 000474 | *         | ADDRESS BLOCK.                   |         |          |
| 000475 |           | ENTSR*10                         | 01264   | 5073 10  |
| 000476 | ALLZEROS1 | ENTALB*0000                      | 01265   | 13 0000  |
| 000477 | *         | DID THE 000000 PATTERN PICKUP    |         |          |
|        |           | ANY BITS?                        |         |          |
| 000500 |           | JPALZ*ALLZEROS2                  | 01266   | 61 1276  |
| 000501 |           | SKP*04                           | 01267   | 5050 04  |
| 000502 | *         | YES, SET SKIP KEY 2 TO BYPASS    |         |          |
|        |           | THE ISOLATION ROUTINES.          |         |          |
| 000503 |           | JP*BITSPICK                      | 01270   | 34 1314  |
| 000504 | *         | YES, THE 000000 PATTERN PICKED   |         |          |
| 000505 | *         | UP BIT(S), GO TO THE ISOLATION   |         |          |
|        |           | SECTION.                         |         |          |
| 000506 |           | ENTAU*0001                       | 01271   | 10 0001  |
| 000507 |           | ENTSR*00                         | 01272   | 5073 00  |
| 000510 |           | STOP*40                          | 01273   | 5056 40  |
| 000511 | *         | THE FAILING ADDRESS IS DISPLAYED |         |          |
| 000512 | *         | IN THE AU REGISTER AND THE       |         |          |
| 000513 | *         | FAILING PATTERN IS DISPLAYED     |         |          |
| 000514 | *         | IN THE AL REGISTER THE CORRECT   |         |          |
| 000515 | *         | PATTERN IS 000000.               |         |          |
| 000516 |           | RJP*MAINTAID                     | 01274   | 76 1302  |
| 000517 |           | ENTSR*10                         | 01275   | 5073 10  |
|        |           | SEE NOTE 1 IN APPENDIX A.        |         |          |

4-105

| SEQNO  | LABEL     | STATEMENT  | ADDRESS | INSTRUCT |
|--------|-----------|--|---------|----------|
| 000520 | ALLZEROS2 | BSK*TERMINAL   | 01276   | 56 4302  |
| 000521 | *         | HAVE ALL THE ADDRESSES BEEN TESTED?                      |         |          |
| 000522 |           | JP*ALLZEROS1   | 01277   | 34 1265  |
| 000523 |           | ENTSR*00   | 01300   | 5073 00  |
| 000524 |           | IJP*ALLZEROS   | 01301   | 55 1253  |
| 000525 | *         |  |         |          |
| 000526 | *         | SUBROUTINE.  |         |          |
| 000527 | *         |  |         |          |
| 000530 | *         | MAINTAID ALLOWS NON-UNIT INCREMENTATION OF TEST          |         |          |
| 000531 | *         | ADDRESSES-CHANGE AU TO NON-SEQUENTIAL ADDRESS IN         |         |          |
| 000532 | *         | THE PRESENT TEST BLOCK.                                  |         |          |
| 000533 | MAINTAID  | 0  | 01302   | 000000   |
| 000534 |           | STRAU*TEMPORARY  | 01303   | 46 4301  |
| 000535 |           | ENTAL*TEMPORARY  | 01304   | 12 4301  |
| 000536 |           | CMAL*BEGINNING   | 01305   | 02 4226  |
| 000537 |           | JPMGR*MAINTAID1  | 01306   | 67 1313  |
| 000540 |           | ENTAL*TERMINAL   | 01307   | 12 4302  |
| 000541 |           | CMAL*TEMPORARY   | 01310   | 02 4301  |
| 000542 |           | JPMGR*MAINTAID1  | 01311   | 67 1313  |
| 000543 |           | ENTB*TEMPORARY   | 01312   | 32 4301  |
| 000544 | MAINTAID1 | IJP*MAINTAID   | 01313   | 55 1302  |
| 000545 | *         |  |         |          |
| 000546 | *         | BITSPICK DETERMINES WHETHER ONE BIT IS PICKED UP OR MORE |         |          |
| 000547 | *         | THAN ONE BIT IS PICKED UP AND BRANCHES ON THE RESULTS    |         |          |
| 000550 | *         | TO EITHER SBPICK (ONE BIT) OR TO MUPICK (MORE THAN ONE   |         |          |
| 000551 | *         | BIT).  |         |          |
| 000552 | *         |  |         |          |
| 000553 | BITSPICK  | ENTSR*00   | 01314   | 5073 00  |
| 000554 |           | STRAL*FAILPTN  | 01315   | 44 4246  |
| 000555 |           | STRB*FAILADR   | 01316   | 42 4244  |
| 000556 |           | ENTAU*N000000  | 01317   | 10 4366  |

| SEQNO  | LABEL    | STATEMENT   | ADDRESS | INSTRUCT |
|--------|----------|---|---------|----------|
| 000557 |          | SF*45   | 01320   | 5044 45  |
| 000560 | *        |   |         |          |
| 000561 | *        |   |         |          |
| 000562 |          | LSHA*2  | 01321   | 5047 02  |
| 000563 | *        |   |         |          |
| 000564 | *        |   |         |          |
| 000565 |          | JPAUZ*SBPICK  | 01322   | 60 1337  |
| 000566 | *        |   |         |          |
| 000567 | *        |   |         |          |
| 000570 |          | JP*MUPICK   | 01323   | 34 1433  |
| 000571 | *        |   |         |          |
| 000572 | *        |   |         |          |
| 000573 | *        |   |         |          |
| 000574 | *        | BITSDROP DETERMINES WHETHER ONE BIT IS DROPPED OR MORE    |         |          |
| 000575 | *        | THAN ONE BIT IS DROPPED AND BRANCHES ON THE RESULT TO     |         |          |
| 000576 | *        | EITHER S9DROP (ONE BIT) OR TO MUDROP (MORE THAN ONE BIT). |         |          |
| 000577 | *        |   |         |          |
| 000600 | BITSDROP | ENTSR*00  | 01324   | 5073 00  |
| 000601 |          | CPAL*0  | 01325   | 5061 00  |
| 000602 | *        |   |         |          |
| 000603 |          | STRAL*FAILPTTN  | 01326   | 44 4246  |
| 000604 |          |   |         |          |
| 000605 |          | STR3*FAILADR  | 01327   | 42 4244  |
| 000606 | *        | CPAL*0  | 01330   | 5061 00  |
| 000607 | *        |   |         |          |
| 000610 |          | JPALZ*MUDROP  | 01331   | 61 2146  |
| 000611 | *        |   |         |          |
| 000612 | *        |   |         |          |
| 000613 |          | ENTAU*N000000   | 01332   | 10 4366  |
| 000614 |          |   |         |          |
| 000615 | *        | SF*45   | 01333   | 5044 45  |

| SEQNO  | LABEL  | STATEMENT  | ADDRESS | INSTRUCT |
|--------|--------|--|---------|----------|
| 000616 | *      | OF THE AU REGISTER.  |         |          |
| 000617 |        | LSHA*2   | 01334   | 5047 02  |
| 000620 | *      | AU REGISTER WILL EQUAL 000000.                             |         |          |
| 000621 |        | JPAUZ*SBDR0P   | 01335   | 60 1744  |
| 000622 | *      | TO THE SINGLE BIT DROPPED                                  |         |          |
| 000623 | *      | ISOLATION ROUTINE.   |         |          |
| 000624 |        | JP*MUDROP  | 01336   | 34 2146  |
| 000625 | *      | IF MORE THAN ONE BIT WAS DROPPED                           |         |          |
| 000626 | *      | GO TO THE MORE THAN ONE BIT                                |         |          |
| 000627 | *      | DROPPED ISOLATION ROUTINE.                                 |         |          |
| 000630 | *      |  |         |          |
| 000631 | *      | THE SBPICK ROUTINE IS REFERENCED WHEN A SINGLE BIT PICKED  |         |          |
| 000632 | *      | UP FAILURE IS DETECTED BY THE MAIN PROGRAM. SBPICK         |         |          |
| 000633 | *      | DETERMINES WHICH STACKS THE FAILURE OCCURS IN. FIRST,      |         |          |
| 000634 | *      | SBPICK USES THE SELECT SUBROUTINE TO TEST STACKS 00        |         |          |
| 000635 | *      | THROUGH 07 AND RECORDS THE RESULTS IN THE FORM OF A FLAG   |         |          |
| 000636 | *      | ES1. THE PROGRAM THEN BRANCHES TO SBPICKA FOR A MEMORY     |         |          |
| 000637 | *      | SIZE OF 8K TO 16K, OR TO SBPICKB FOR A MEMORY SIZE OF      |         |          |
| 000640 | *      | 20K TO 32K, OR TO SBPICKC FOR A MEMORY SIZE OF 36K TO 65K. |         |          |
| 000641 | *      |  |         |          |
| 000642 | *      |  |         |          |
| 000643 | SBPICK | ENTAL*N000000  | 01337   | 12 4366  |
| 000644 |        | ENTAU*N007000  | 01340   | 10 4421  |
| 000645 |        | RJP*SELECT   | 01341   | 76 2455  |
| 000646 |        | ENTAL*HNS  | 01342   | 12 4250  |
| 000647 | *      | HIGHEST NUMBERED STACK INDICATES                           |         |          |
| 000650 |        | THE MEMORY SIZE.   |         |          |
| 000651 |        | CMAL*N000004   | 01343   | 02 4371  |
| 000652 |        | JPMGR*SBPICKA  | 01344   | 67 1350  |
| 000653 |        | CMAL*N000010   | 01345   | 02 4373  |
| 000654 |        | IF MEMORY SIZE IS 20K, 24K, 28K,                           |         |          |
| 000655 |        | OR 32K, GO TO SBPICKB.                                     | 01346   | 67 1355  |
| 000656 |        | JP*SBPICKC   | 01347   | 34 1365  |
| 000657 |        | IF MEMORY SIZE IS 36K TO 65K                               |         |          |

| SEQNO  | LABEL   | STATEMENT   | ADDRESS | INSTRUCT |
|--------|---------|---|---------|----------|
| 000655 | *       | GO TO SBPICKC.  |         |          |
| 000656 | *       |   |         |          |
| 000657 | *       | SBPICKA EVALUATES THE SINGLE BIT PICKED UP ERROR FLAG FOR |         |          |
| 000660 | *       | 8K, 12K, OR 16K. ON THE BASIS OF THIS EVALUATION THE      |         |          |
| 000661 | *       | PROGRAM BRANCHES TO AN ERROR STOP.                        |         |          |
| 000662 | *       |   |         |          |
| 000663 | SBPICKA | ENTAU*N000377   | 01350   | 10 4406  |
| 000664 | *       | MASKS OUT THE MEMORY SIZE PORTION                         |         |          |
| 000665 |         | OF THE ERROR FLAG.  |         |          |
| 000665 |         | ENTAL*ES1   | 01351   | 12 4240  |
| 000666 |         | ERROR FLAG  |         |          |
| 000666 |         | CMSK*N000000  | 01352   | 06 4366  |
| 000667 |         | IF NO STACKS 00 THROUGH 07 FAIL                           |         |          |
| 000667 |         | JPEQ*NOPICK   | 01353   | 61 1601  |
| 000670 | *       | GO TEST THE BANK 0 ADDRESS                                |         |          |
| 000671 |         | TRANSLATION.  |         |          |
| 000671 |         | JP*ABIT3  | 01354   | 34 2066  |
| 000671 |         | IF AT LEAST ONE BUT NOT ALL BANK                          |         |          |
| 000672 | *       | 0 STACKS PICK UP A BIT GO TO                              |         |          |
| 000673 | *       | ERROR STOP ABIT3.   |         |          |
| 000674 | *       |   |         |          |
| 000675 | *       | SBPICKB EVALUATES THE SINGLE BIT PICKED UP ERROR FLAG FOR |         |          |
| 000676 | *       | 20K, 24K, 28K, OR 32K. ON THE BASIS OF THIS EVALUATION    |         |          |
| 000677 | *       | THE PROGRAM BRANCHES TO AN ERROR STOP.                    |         |          |
| 000700 | *       |   |         |          |
| 000701 | SBPICKB | ENTAU*N000377   | 01355   | 10 4406  |
| 000701 |         | MASKS OUT THE MEMORY SIZE PORTION                         |         |          |
| 000702 | *       | OF THE ERROR FLAG.  |         |          |
| 000703 |         | ENTAL*ES1   | 01356   | 12 4240  |
| 000703 |         | ERROR FLAG  |         |          |
| 000704 |         | CMSK*N000000  | 01357   | 06 4366  |
| 000704 |         | IF NO STACKS 00 THROUGH 07 FAIL                           |         |          |
| 000705 |         | JPEQ*NOPICK   | 01360   | 61 1601  |
| 000705 |         | GO TEST THE BANK 0 AND THE                                |         |          |
| 000706 | *       | BANK 1 ADDRESS TRANSLATIONS.                              |         |          |
| 000707 |         | ENTAU*N000360   | 01361   | 10 4405  |
| 000707 |         | IF AT LEAST ONE STACK IN BANK 0                           |         |          |
| 000710 |         | CMSK*N000000  | 01362   | 06 4366  |
| 000710 |         | PICKS UP A BIT GO TO ERROR                                |         |          |
| 000711 |         | JPNOT*ABIT3   | 01363   | 63 2066  |
| 000711 |         | STOP ABIT3.   |         |          |
| 000712 |         | JP*ABIT4  | 01364   | 34 2072  |
| 000713 | *       | IF AT LEAST ONE STACK IN BANK 1                           |         |          |
| 000713 | *       | PICKS UP A BIT GO TO ERROR                                |         |          |

| SEQNO  | LABEL   | STATEMENT  | ADDRESS | INSTRUCT |
|--------|---------|--|---------|----------|
| 000714 | *       | STOP ABIT4.  |         |          |
| 000715 | *       |  |         |          |
| 000716 | *       | SBPICKC EVALUATES THE SINGLE BIT PICKED UP ERROR FLAG FOR          |         |          |
| 000717 | *       | STACKS 00 THROUGH 07 FOR 36K TO 65K OF MEMORY. ON THE              |         |          |
| 000720 | *       | BASIS OF THIS EVALUATION THE PROGRAM BRANCHES TO AN ERROR          |         |          |
| 000721 | *       | STOP.  |         |          |
| 000722 | *       |  |         |          |
| 000723 | SBPICKC | ENTAU*N000377  | 01365   | 10 4406  |
| 000724 | *       | MASKS OUT THE MEMORY SIZE PORTION<br>OF THE ERROR FLAG.            |         |          |
| 000725 |         | ENTAL*ES1  | 01366   | 12 4240  |
| 000726 |         | CMSK*N000000   | 01367   | 06 4366  |
| 000727 |         | JPEQ*SBPICKD   | 01370   | 61 1377  |
| 000730 |         | CMSK*N000377   | 01371   | 06 4406  |
|        |         | IF ALL STACKS 00 THROUGH 07 PICK                                   |         |          |
| 000731 |         | JPEQ*ABIT2   | 01372   | 61 2062  |
| 000732 | *       | UP A BIT GO TO ERROR STOP<br>ABIT2.                                |         |          |
| 000733 |         | ENTAU*N000360  | 01373   | 10 4405  |
| 000734 |         | CMSK*N000000   | 01374   | 06 4366  |
| 000735 |         | JPNOT*ABIT3  | 01375   | 63 2066  |
| 000736 |         | JP*ABIT4   | 01376   | 34 2072  |
| 000737 | *       | IF AT LEAST ONE STACK IN BANK 1<br>PICKS UP A BIT GO TO ERROR STOP |         |          |
| 000740 | *       | ABIT4.   |         |          |
| 000741 | *       |  |         |          |
| 000742 | *       | SBPICKD USES THE SELECT SUBROUTINE TO TEST STACKS 10               |         |          |
| 000743 | *       | THROUGH 17 AND RECORDS THE RESULTS IN THE FORM OF A FLAG           |         |          |
| 000744 | *       | ES1. THE PROGRAM THEN BRANCHES TO SBPICKE FOR A MEMORY             |         |          |
| 000745 | *       | SIZE OF 36K TO 49K, OR TO SBPICKF FOR A MEMORY SIZE OF             |         |          |
| 000746 | *       | 53K TO 65K.  |         |          |
| 000747 | *       |  |         |          |
| 000750 | SBPICKD | ENTAL*N000000  | 01377   | 12 4366  |
|        |         | TEST FOR A SINGLE BIT PICKED UP                                    |         |          |
| 000751 |         | ENTAU*N100000  | 01400   | 10 4426  |
| 000752 |         | RJP*SELECT   | 01401   | 76 2455  |
|        |         | IN STACKS 10 THROUGH 17.   |         |          |

| SEQNO  | LABEL   | STATEMENT   | ADDRESS                           | INSTRUCT      |
|--------|---------|---|-----------------------------------|---------------|
| 000753 |         | ENTAL*HNS   | HIGHEST NUMBERED STACK INDICATES  | 01402 12 4250 |
| 000754 | *       |   | THE MEMORY SIZE.                  |               |
| 000755 |         | CMAL*N000014  | IF MEMORY SIZE IS 36K, 40K, 45K,  | 01403 02 4374 |
| 000756 |         | JPMGR*SBPICKE   | OR 49K, GO TO SBPICKE.            | 01404 67 1406 |
| 000757 |         | JP*SBPICKF  | IF MEMORY SIZE IS 53K, 57K, 61K,  | 01405 34 1417 |
| 000760 | *       |   | OR 65K, GO TO SBPICKF.            |               |
| 000761 | *       |   |                                   |               |
| 000762 | *       | SBPICKE EVALUATES THE SINGLE BIT PICKED UP ERROR FLAG FOR |                                   |               |
| 000763 | *       | STACKS 10 THROUGH 17 FOR 36K TO 49K OF MEMORY. ON THE     |                                   |               |
| 000764 | *       | BASIS OF THIS EVALUATION THE PROGRAM BRANCHES TO AN       |                                   |               |
| 000765 | *       | ERROR STOP.   |                                   |               |
| 000766 | *       |   |                                   |               |
| 000767 | SBPICKE | ENTAU*N000377   | MASKS OUT THE MEMORY SIZE PORTION | 01406 10 4406 |
| 000770 | *       |   | OF THE ERROR FLAG.                |               |
| 000771 |         | ENTAL*ES1   | ERROR FLAG.                       | 01407 12 4240 |
| 000772 |         | CMSK*N000000  | IF NO STACKS 10 THROUGH 17 FAIL   | 01410 06 4366 |
| 000773 |         | JPEQ*NOPICK   | GO TEST THE BANK 0, BANK 1,       | 01411 61 1601 |
| 000774 | *       |   | AND BANK 2 ADDRESS                |               |
| 000775 | *       |   | TRANSLATIONS.                     |               |
| 000776 |         | ENTBK*3   |                                   | 01412 36 0003 |
| 000777 |         | CMALB*IBNK2T36K   | IF ALL EXISTING STACKS 10 THROUGH |               |
|        |         |   |                                   | 01413 03 4323 |
| 001000 |         | JPEQ*ABIT56   | 13 PICK UP A SINGLE BIT GO TO     | 01414 61 2126 |
| 001001 |         | BJP*L0K-2   | ERROR STOP ABIT56.                | 01415 73 1413 |
| 001002 |         | JP*ABIT6  | IF AT LEAST ONE STACK IN BANK 2   | 01416 34 2102 |
| 001003 | *       |   | FAILED GO TO ERROR STOP ABIT6.    |               |
| 001004 | *       |   |                                   |               |
| 001005 | *       | SBPICKF EVALUATES THE SINGLE BIT PICKED UP ERROR FLAG FOR |                                   |               |
| 001006 | *       | STACKS 10 THROUGH 17 FOR 53K TO 65K OF MEMORY. ON THE     |                                   |               |
| 001007 | *       | ERROR STOP.   |                                   |               |
| 001010 | *       | BASIS OF THIS EVALUATION THE PROGRAM BRANCHES TO AN       |                                   |               |



| SEQNO  | LABEL   | STATEMENT  | ADDRESS | INSTRUCT |
|--------|---------|--|---------|----------|
| 001011 | *       |  |         |          |
| 001012 | SBPICKF | ENTAU*N000377  | 01417   | 10 4406  |
| 001013 | *       |  |         |          |
| 001014 |         | ENTAL*ES1  | 01420   | 12 4240  |
| 001015 |         | CMSK*N000000   | 01421   | 06 4366  |
| 001016 |         | JPEQ*NOPICK  | 01422   | 61 1601  |
| 001017 | *       |  |         |          |
| 001020 | *       |  |         |          |
| 001021 |         | ENTBK*3  | 01423   | 36 0003  |
| 001022 |         | CMALB*1BK23T53K  |         |          |
|        |         | IF ALL EXISTING STACKS 10 THROUGH                          | 01424   | 03 4333  |
| 001023 |         | JPEQ*ABIT5   | 01425   | 61 2076  |
| 001024 |         | BJP*LOK-2  | 01426   | 73 1424  |
|        |         | 17 PICK UP A BIT GO TO ERROR                               |         |          |
|        |         | STOP ABIT5.  |         |          |
| 001025 |         | ENTAU*N000360  | 01427   | 10 4405  |
| 001026 |         | CMSK*N000000   | 01430   | 06 4366  |
| 001027 |         | JPNOT*ABIT6  | 01431   | 63 2102  |
| 001030 | *       |  |         |          |
| 001031 |         | JP*ABIT7   | 01432   | 34 2106  |
| 001032 | *       |  |         |          |
| 001033 | *       |  |         |          |
| 001034 | *       |  |         |          |
| 001035 | *       | THE MUPICK ROUTINE IS REFERENCED WHEN MORE THAN ONE BIT IS |         |          |
| 001036 | *       | PICKED UP. MUPICK DETERMINES WHICH STACKS THE FAILURE      |         |          |
| 001037 | *       | OCCURS IN. FIRST, MUPICK USES THE SELECT SUBROUTINE TO     |         |          |
| 001040 | *       | TEST STACKS 00 THROUGH 07 AND RECORDS THE RESULTS IN THE   |         |          |
| 001041 | *       | FORM OF AN ERROR FLAG ES1. THE PROGRAM THEN BRANCHES TO    |         |          |
| 001042 | *       | MUPICKA FOR A MEMORY SIZE OF 8K TO 16K, OR TO MUPICKB FOR  |         |          |
| 001043 | *       | A MEMORY SIZE OF 20K TO 32K, OR TO MUPICKC FOR A MEMORY    |         |          |
| 001044 | *       | SIZE OF 32K TO 65K.  |         |          |
| 001045 | *       |  |         |          |
| 001046 | MUPICK  | ENTAL*N000000  | 01433   | 12 4366  |
|        |         | TEST FOR MORE THAN ONE BIT                                 |         |          |

| SEQNO  | LABEL   | STATEMENT     | ADDRESS   | INSTRUCT      |
|--------|---------|---------------|---|---------------|
| 001047 |         | ENTAU*N007000 | PICKED UP IN STACKS 00                                    | 01434 10 4421 |
| 001050 | *       |               | THROUGH 07.   |               |
| 001051 |         | RJP*SELECT    |   | 01435 76 2455 |
| 001052 |         | ENTAL*HNS     | HIGHEST NUMBERED STACK INDICATES                          | 01436 12 4250 |
| 001053 | *       |               | THE MEMORY SIZE.  |               |
| 001054 |         | CMAL*N000004  | IF MEMORY SIZE IS 8K, 12K, OR 16K                         |               |
|        |         |               |   | 01437 02 4371 |
| 001055 |         | JPMGR*MUPICKA | GO TO MUPICKA.  | 01440 67 1444 |
| 001056 |         | CMAL*N000010  | IF MEMORY SIZE IS 20K, 24K, 28K,                          | 01441 02 4373 |
| 001057 |         | JPMGR*MUPICKB | OR 32K, GO TO MUPICKB.                                    | 01442 67 1451 |
| 001060 |         | JP*MUPICKC    | IF MEMORY SIZE IS 36K TO 65K,                             | 01443 34 1472 |
| 001061 | *       |               | GO TO MUPICKC.  |               |
| 001062 | *       |               |   |               |
| 001063 | *       |               | MUPICKA EVALUATES THE MORE THAN ONE BIT PICKED UP ERROR   |               |
| 001064 | *       |               | FLAG FOR 8K, 12K, OR 16K. ON THE BASIS OF THIS EVALUATION |               |
| 001065 | *       |               | THE PROGRAM BRANCHES TO AN ERROR STOP.                    |               |
| 001066 | *       |               |   |               |
| 001067 | MUPICKA | ENTAU*N000377 | MASKS OUT THE MEMORY SIZE PORTION                         | 01444 10 4406 |
| 001070 | *       |               | OF THE ERROR FLAG.  |               |
| 001071 |         | ENTAL*ES1     | ERROR FLAG.   | 01445 12 4240 |
| 001072 |         | CMSK*N000000  | IF NO STACKS 00 THROUGH 07 FAIL                           | 01446 06 4366 |
| 001073 |         | JPEQ*NOPICK   | GO TEST THE BANK 0 ADDRESS                                | 01447 61 1601 |
| 001074 | *       |               | TRANSLATION.  |               |
| 001075 |         | JP*MUBIT3     | IF AT LEAST ONE BUT NOT ALL                               | 01450 34 1563 |
| 001076 | *       |               | BANK 0 STACKS PICK UP MORE                                |               |
| 001077 | *       |               | THAN ONE BIT GO TO ERROR STOP                             |               |
| 001100 | *       |               | MUBIT3.   |               |
| 001101 | *       |               |   |               |
| 001102 | *       |               | MUPICKB EVALUTES THE MORE THAN ONE BIT PICKED UP ERROR    |               |
| 001103 | *       |               | FLAG FOR 20K, 24K, 28K, OR 32K. ON THE BASIS OF THIS      |               |
| 001104 | *       |               | EVALUATION THE PROGRAM BRANCHES TO AN ERROR STOP.         |               |

| SEQNO  | LABEL   | STATEMENT   | ADDRESS | INSTRUCT |
|--------|---------|---|---------|----------|
| 001105 | *       |   |         |          |
| 001106 | MUPICKB | ENTAU*N000377   | 01451   | 10 4406  |
| 001107 | *       |   |         |          |
| 001110 |         | ENTAL*ES1   | 01452   | 12 4240  |
| 001111 |         | CMSK*N000000  | 01453   | 06 4366  |
| 001112 |         | JPEQ*NOPICK   | 01454   | 61 1601  |
| 001113 | *       |   |         |          |
| 001114 |         | CMSK*N000360  | 01455   | 06 4405  |
| 001115 |         | JPEQ*MUBIT2   | 01456   | 61 1561  |
| 001116 | *       |   |         |          |
| 001117 |         | ENTBK*3   | 01457   | 36 0003  |
| 001120 |         | CMALB*IBNK1T20K   | 01460   | 03 4317  |
| 001121 |         | JPEQ*MUBIT1   | 01461   | 61 1557  |
| 001122 |         | BJP*LOK-2   | 01462   | 73 1460  |
| 001123 |         | ENTAU*N000360   | 01463   | 10 4405  |
| 001124 |         | CMSK*N000000  | 01464   | 06 4366  |
| 001125 |         | JPEQ*MUBIT2   | 01465   | 61 1561  |
| 001126 | *       |   |         |          |
| 001127 |         | ENTAU*N000017   | 01466   | 10 4375  |
| 001130 |         | CMSK*N000000  | 01467   | 06 4366  |
| 001131 |         | JPEQ*MUBIT2   | 01470   | 61 1561  |
| 001132 | *       |   |         |          |
| 001133 | *       |   |         |          |
| 001134 |         | JP*MUBIT1   | 01471   | 34 1557  |
| 001135 | *       |   |         |          |
| 001136 | *       |   |         |          |
| 001137 | *       |   |         |          |
| 001140 | *       |   |         |          |
| 001141 | *       |   |         |          |
| 001142 | *       | MUPICKC EVALUATES THE MORE THAN ONE BIT PICKED UP ERROR |         |          |
| 001143 | *       | FLAG FOR STACKS 00 THROUGH 07 FOR 36K TO 65K OF MEMORY. |         |          |

| SEQNO  | LABEL   | STATEMENT   | ADDRESS | INSTRUCT |
|--------|---------|---|---------|----------|
| 001144 | *       | ON THE BASIS OF THIS EVALUATION THE PROGRAM BRANCHES TO |         |          |
| 001145 | *       | TEST STACKS 10 THROUGH 17 OR TO AN ERROR STOP.          |         |          |
| 001146 | *       |   |         |          |
| 001147 | MUPICKC | ENTAU*N000377   | 01472   | 10 4406  |
| 001150 | *       | MASKS OUT THE MEMORY SIZE PORTION<br>OF THE ERROR FLAG. |         |          |
| 001151 |         | ENTAL*ES1   | 01473   | 12 4240  |
| 001152 |         | CMSK*N000000  | 01474   | 06 4366  |
| 001153 |         | JPEQ*MUPICKD  | 01475   | 61 1512  |
| 001154 | *       | GO TO TEST STACKS 10 THROUGH                            |         |          |
| 001155 | *       | 17 FOR MORE THAN ONE BIT PICKED<br>UP FAILURES.         |         |          |
| 001156 |         | CMSK*N000377  | 01476   | 06 4406  |
| 001157 |         | JPEQ*MUBIT7   | 01477   | 61 1573  |
| 001160 |         | CMSK*N000360  | 01500   | 06 4405  |
| 001161 |         | JPEQ*MUBIT2   | 01501   | 61 1561  |
| 001162 |         | CMSK*N000017  | 01502   | 06 4375  |
| 001163 | *       | JPEQ*MUBIT1   |         |          |
| 001164 |         | ENTAU*N000360   | 01503   | 10 4405  |
| 001165 |         | CMSK*N000000  | 01504   | 06 4366  |
| 001166 |         | JPEQ*MUBIT2   | 01505   | 61 1561  |
| 001167 | *       | GO TO ERROR STOP MUBIT2.                                |         |          |
| 001170 |         | ENTAU*N000017   | 01506   | 10 4375  |
| 001171 |         | CMSK*N000000  | 01507   | 06 4366  |
| 001172 |         | JPEQ*MUBIT2   | 01510   | 61 1561  |
| 001173 | *       | GO TO ERROR STOP MUBIT2.                                |         |          |
| 001174 |         | JP*MUBIT1   | 01511   | 34 1557  |
| 001175 | *       | IF AT LEAST ONE STACK IN EACH                           |         |          |
| 001176 | *       | BANK (0 AND 1) FAIL BUT NOT                             |         |          |
| 001177 | *       | ALL EXISTING STACKS IN BANK 0                           |         |          |
| 001200 | *       | AND BANK 1, GO TO ERROR STOP<br>MUBIT1.                 |         |          |
| 001201 | *       |   |         |          |
| 001202 | *       | MUPICKD USES THE SELECT SUBROUTINE TO TEST STACKS 10    |         |          |

| SEQNO  | LABEL   | STATEMENT  | ADDRESS | INSTRUCT |
|--------|---------|--|---------|----------|
| 001203 | *       | THROUGH 17 AND RECORDS THE RESULTS IN THE FORM OF A FLAG |         |          |
| 001204 | *       | ES1. THE PROGRAM THEN BRANCHES TO MUPICKE FOR A MEMORY   |         |          |
| 001205 | *       | SIZE OF 36K TO 49K, OR TO MUPICKF FOR A MEMORY SIZE OF   |         |          |
| 001206 | *       | 53K TO 65K.  |         |          |
| 001207 | *       |  |         |          |
| 001210 | MUPICKD | ENTAL*N000000  | 01512   | 12 4366  |
| 001211 |         | ENTAU*N100000  | 01513   | 10 4426  |
| 001212 |         | RJP*SELECT   | 01514   | 76 2455  |
| 001213 |         | ENTAL*HNS  | 01515   | 12 4250  |
| 001214 | *       | HIGHEST NUMBERED STACK INDICATES                         |         |          |
|        |         | THE MEMORY SIZE.   |         |          |
| 001215 |         | CMAL*N000014   | 01516   | 02 4374  |
| 001216 |         | JPMGR*MUPICKE  | 01517   | 67 1521  |
| 001217 |         | JP*MUPICKF   | 01520   | 34 1532  |
|        |         | IF MEMORY SIZE IS 36K, 40K, 45K,                         |         |          |
|        |         | OR 49K, GO TO MUPICKE.                                   |         |          |
|        |         | IF MEMORY SIZE IS 53K, 57K, 61K,                         |         |          |
|        |         | OR 65K, GO TO MUPICKF.                                   |         |          |
| 001220 | *       |  |         |          |
| 001221 | *       |  |         |          |
| 001222 | *       | MUPICKE EVALUATES THE MORE THAN ONE BIT PICKED UP ERROR  |         |          |
| 001223 | *       | FLAG FOR STACKS 10 THROUGH 17 FOR 36K TO 49K OF MEMORY.  |         |          |
| 001224 | *       | ON THE BASIS OF THIS EVALUATION THE PROGRAM BRANCHES TO  |         |          |
| 001225 | *       | AN ERROR STOP.   |         |          |
| 001226 | *       |  |         |          |
| 001227 | MUPICKE | ENTAU*N000377  | 01521   | 10 4406  |
|        |         | MASKS OUT THE MEMORY SIZE PORTION                        |         |          |
|        |         | OF THE ERROR FLAG.                                       |         |          |
| 001230 | *       |  |         |          |
| 001231 |         | ENTAL*ES1  | 01522   | 12 4240  |
| 001232 |         | CMSK*N000000   | 01523   | 06 4366  |
| 001233 |         | JPEQ*NO PICK   | 01524   | 61 1601  |
| 001234 | *       | GO TEST THE BANK 0, BANK 1,                              |         |          |
| 001235 | *       | AND BANK 2 ADDRESS                                       |         |          |
|        |         | TRANSLATIONS.  |         |          |
| 001236 |         | ENTBK*3  | 01525   | 36 0003  |
| 001237 |         | CMALB*IBNK2T36K  | 01526   | 03 4323  |
|        |         | IF ALL EXISTING STACKS 10                                |         |          |
| 001240 |         | JPEQ*MUBIT9  | 01527   | 61 1577  |
| 001241 | *       | THROUGH 13 PICK UP MORE THAN                             |         |          |
|        |         | ONE BIT GO TO ERROR STOP                                 |         |          |

| SEQNO  | LABEL   | STATEMENT   | ADDRESS | INSTRUCT |
|--------|---------|---|---------|----------|
| 001242 | *       | MUBIT9.   |         |          |
| 001243 |         | BJP*LOK-2   | 01530   | 73 1526  |
| 001244 |         | JP*MUBIT6   | 01531   | 34 1571  |
| 001245 | *       | IF AT LEAST ONE BUT NOT ALL                             |         |          |
| 001246 | *       | EXISTING BANK 2 STACKS PICK                             |         |          |
|        |         | UP MORE THAN ONE BIT GO TO                              |         |          |
| 001247 | *       | ERROR STOP MUBIT6.                                      |         |          |
| 001250 | *       |   |         |          |
| 001251 | *       | MUPICKF EVALUATES THE MORE THAN ONE BIT PICKED UP ERROR |         |          |
| 001252 | *       | FLAG FOR STACKS 10 THROUGH 17 FOR 53K TO 65K OF MEMORY. |         |          |
| 001253 | *       | ON THE BASIS OF THIS EVALUATION THE PROGRAM BRANCHES TO |         |          |
| 001254 | *       | AN ERROR STOP.  |         |          |
| 001255 | *       |   |         |          |
| 001256 | MUPICKF | ENTAU*N000377   | 01532   | 10 4406  |
| 001257 | *       | OF THE ERROR FLAG.                                      |         |          |
| 001260 |         | ENTAL*ES1   | 01533   | 12 4240  |
| 001261 |         | CMSK*N000000  | 01534   | 06 4366  |
| 001262 |         | JPEQ*N0PICK   | 01535   | 61 1601  |
| 001263 | *       | GO TEST THE BANK 0, BANK 1,                             |         |          |
| 001264 | *       | BANK 2, AND BANK 3 ADDRESS                              |         |          |
|        |         | TRANSLATIONS.   |         |          |
| 001265 |         | ENTBK*3   | 01536   | 36 0003  |
| 001266 |         | CMALB*IBK23T53K   | 01537   | 03 4333  |
|        |         | IF ALL EXISTING STACKS 10                               |         |          |
| 001267 |         | THROUGH 17 PICK UP MORE THAN                            | 01540   | 61 1575  |
| 001270 | *       | ONE BIT GO TO ERROR STOP                                |         |          |
| 001271 | *       | MUBIT8.   |         |          |
| 001272 |         | BJP*LOK-2   | 01541   | 73 1537  |
| 001273 |         | CMSK*N000360  | 01542   | 06 4405  |
| 001274 |         | JPEQ*MUBIT5   | 01543   | 61 1567  |
| 001275 | *       | UP MORE THAN ONE BIT GO TO                              |         |          |
| 001276 | *       | ERROR STOP MUBIT5.                                      |         |          |
|        |         | ENTBK*3   | 01544   | 36 0003  |
| 001277 |         | CMALB*IBNK3T53K   | 01545   | 03 4327  |
| 001300 |         | JPEQ*MUBIT4   | 01546   | 61 1565  |
|        |         | IF ALL EXISTING STACKS 14                               |         |          |
|        |         | THROUGH 17 PICK UP MORE THAN                            |         |          |

| SEQNO  | LABEL  | STATEMENT  | ADDRESS | INSTRUCT |
|--------|--------|--|---------|----------|
| 001301 | *      | ONE BIT GO TO ERROR STOP                                     |         |          |
| 001302 | *      | MUBIT4.  |         |          |
| 001303 |        | BJP*LOK-2  | 01547   | 73 1545  |
| 001304 |        | ENTAU*N000360  | 01550   | 10 4405  |
| 001305 |        | CMSK*N000000   | 01551   | 06 4366  |
|        |        |  |         |          |
| 001306 |        | JPEQ*MUBIT5  | 01552   | 61 1567  |
| 001307 | *      | STACKS 14 THROUGH 17 FAIL,<br>GO TO ERROR STOP MUBIT5.       |         |          |
| 001310 |        | ENTAU*N000017  | 01553   | 10 4375  |
| 001311 |        | CMSK*N000000   | 01554   | 06 4366  |
| 001312 |        | JPEQ*MUBIT5  | 01555   | 61 1567  |
| 001313 | *      | STACKS 10 THROUGH 13 FAIL,<br>GO TO ERROR STOP MUBIT5.       |         |          |
| 001314 |        | JP*MUBIT4  | 01556   | 34 1565  |
| 001315 | *      | IF AT LEAST ONE STACK IN EACH<br>BANK (2 AND 3) FAIL BUT NOT |         |          |
|        |        |  |         |          |
| 001316 | *      | ALL EXISTING STACKS IN BANK 2                                |         |          |
| 001317 | *      | AND BANK 3 FAILED GO TO ERROR                                |         |          |
| 001320 | *      | STOP MUBIT4.   |         |          |
| 001321 | *      |  |         |          |
| 001322 | *      | THE FOLLOWING ERROR STOPS SERVE THE MUPICK SUBROUTINE.       |         |          |
| 001323 | *      |  |         |          |
| 001324 | MUBIT1 | STOP*40  | 01557   | 5056 40  |
| 001325 | *      | REPLACE 5J33C, CARD TYPE 0900.                               |         |          |
|        |        |  |         |          |
| 001326 |        | IJP*RECYCLE  | 01560   | 55 4275  |
| 001327 | MUBIT2 | STOP*40  | 01561   | 5056 40  |
| 001330 | *      | REPLACE 5J35C, CARD TYPE 0900.                               |         |          |
| 001331 |        | RECYCLE THE MEMORY TEST.                                     |         |          |
| 001332 | MUBIT3 | STOP*40  | 01562   | 55 4275  |
| 001333 | *      | REPLACE 5J33C, CARD TYPE 0900                                | 01563   | 5056 40  |
| 001334 | *      | AND 5J35C, CARD TYPE 0900.                                   |         |          |
| 001335 |        | RECYCLE THE MEMORY TEST.                                     | 01564   | 55 4275  |
|        |        |  |         |          |
| 001336 | MUBIT4 | STOP*40  | 01565   | 5056 40  |
| 001337 | *      | REPLACE 6J33C, CARD TYPE 0900.                               |         |          |

| SEQNO  | LABEL  | STATEMENT   | ADDRESS | INSTRUCT |
|--------|--------|-------------|---------|----------|
| 001340 |        | IJP*RECYCLE | 01566   | 55 4275  |
| 001341 | MUBIT5 | STOP*40     | 01567   | 5056 40  |
| 001342 | *      |             |         |          |
| 001343 |        | IJP*RECYCLE | 01570   | 55 4275  |
| 001344 | MUBIT6 | STOP*40     | 01571   | 5056 40  |
| 001345 | *      |             |         |          |
| 001346 | *      |             |         |          |
| 001347 |        | IJP*RECYCLE | 01572   | 55 4275  |
| 001350 | MUBIT7 | STOP*40     | 01573   | 5056 40  |
| 001351 | *      |             |         |          |
| 001352 | *      |             |         |          |
| 001353 | *      |             |         |          |
| 001354 | *      |             |         |          |
| 001355 | *      |             |         |          |
| 001356 | *      |             |         |          |
| 001357 | *      |             |         |          |
| 001360 | *      |             |         |          |
| 001361 | *      |             |         |          |
| 001362 |        | IJP*RECYCLE | 01574   | 55 4275  |
| 001363 | MUBIT8 | STOP*40     | 01575   | 5056 40  |
| 001364 | *      |             |         |          |
| 001365 | *      |             |         |          |
| 001366 | *      |             |         |          |
| 001367 | *      |             |         |          |
| 001370 | *      |             |         |          |
| 001371 | *      |             |         |          |
| 001372 | *      |             |         |          |
| 001373 | *      |             |         |          |
| 001374 | *      |             |         |          |
| 001375 |        | IJP*RECYCLE | 01576   | 55 4275  |
| 001376 | MUBIT9 | STOP*40     | 01577   | 5056 40  |



| SEQNO  | LABEL   | STATEMENT                        | ADDRESS                       | INSTRUCT      |
|--------|---------|----------------------------------|-------------------------------|---------------|
| 001377 | *       | SCOPE TO DETERMINE WHICH OF THE  |                               |               |
| 001400 | *       | FOLLOWING HAS FAILED,            |                               |               |
| 001401 | *       | (1) 6J25C (50MT21,9-135),        |                               |               |
| 001402 | *       | CARD TYPE 0260.                  |                               |               |
| 001403 | *       | (2) 6J27C (50MT26,50MT27,        |                               |               |
| 001404 | *       | 50MT22,51MT22,9-135),            |                               |               |
| 001405 | *       | CARD TYPE 0280.                  |                               |               |
| 001406 | *       | (3) IF NEITHER OF THE ABOVE FAIL |                               |               |
| 001407 | *       | REPLACE 6J33C, CARD TYPE         |                               |               |
| 001410 | *       | 0900 AND 6J35C CARD TYPE         |                               |               |
| 001411 | *       | 0900.                            |                               |               |
| 001412 |         | IJP*RECYCLE                      | RECYCLE THE MEMORY TEST.      | 01600 55 4275 |
| 001413 | NO PICK | RJP*SPADR                        | USE THE SPECIAL TEST.         | 01601 76 1635 |
| 001414 |         | ENTAL*EC2                        |                               | 01602 12 4235 |
| 001415 |         | ENTAU*N170000                    | WAS THE FAILURE AN INHIBIT    | 01603 10 4431 |
| 001416 |         | CMAL*EC1                         | STACK SELECTION FAILURE       | 01604 02 4234 |
| 001417 | *       |                                  | AFFECTING ONLY ONE STACK?     |               |
| 001420 |         | JPNOT*NO PICK4                   | NO, USE THE REGULAR ADDRESS   | 01605 63 1630 |
| 001421 | *       |                                  | TRANSLATION NEXT.             |               |
| 001422 |         | CMSK*HNSX                        | YES. IS THE FAILING STACK     | 01606 06 4251 |
| 001423 | *       |                                  | THE HIGHEST EXISTING STACK?   |               |
| 001424 |         | JPNOT*NO PICK3                   | NO, GO TO DISPLAY THE EC1 AND | 01607 63 1624 |
| 001425 | *       |                                  | EC2 ERROR FLAGS.              |               |
| 001426 |         | ENTAL*HNS                        | YES. IS THE FAILING STACK THE | 01610 12 4250 |
| 001427 | *       |                                  | ONLY EXISTING STACK IN THE    |               |
| 001430 | *       |                                  | BANK?                         |               |
| 001431 |         | CMAL*N000004                     |                               | 01611 02 4371 |
| 001432 |         | JPNOT*NO PICK1                   |                               | 01612 63 1615 |
| 001433 |         | RJP*ADRXLAT                      | YES, USE THE REGULAR ADDRESS  | 01613 76 2536 |
| 001434 | *       |                                  | TRANSLATION TEST.             |               |

4-120

| SEQNO  | LABEL  | STATEMENT     | ADDRESS | INSTRUCT |
|--------|--------|---------------|---------|----------|
| 001435 |        | JP*NOPIK3     | 01614   | 34 1624  |
| 001436 | *      |               |         |          |
| 001437 | NOPIK1 | CMAL*N000010  | 01615   | 02 4373  |
| 001440 |        | JPN0T*NOPIK2  | 01616   | 63 1621  |
| 001441 |        | RJP*ADRXLAT   | 01617   | 76 2536  |
| 001442 | *      |               |         |          |
| 001443 |        | JP*NOPIK3     | 01620   | 34 1624  |
| 001444 | *      |               |         |          |
| 001445 | NOPIK2 | CMAL*N000014  | 01621   | 02 4374  |
| 001446 |        | JPN0T*NOPIK3  | 01622   | 63 1624  |
| 001447 |        | RJP*ADRXLAT   | 01623   | 76 2536  |
| 001450 | *      |               |         |          |
| 001451 | *      |               |         |          |
| 001452 | NOPIK3 | ENTAU*EC1     | 01624   | 10 4234  |
| 001453 |        | ENTAL*EC2     | 01625   | 12 4235  |
| 001454 |        | STOP*40       | 01626   | 5056 40  |
| 001455 | *      |               |         |          |
| 001456 | *      |               |         |          |
| 001457 | *      |               |         |          |
| 001460 |        | IJP*RECYCLE   | 01627   | 55 4275  |
| 001461 | NOPIK4 | RJP*ADRXLAT   | 01630   | 76 2536  |
| 001462 | *      |               |         |          |
| 001463 |        | ENTAU*FAILADR | 01631   | 10 4244  |
| 001464 |        | ENTAL*FAILPTN | 01632   | 12 4246  |
| 001465 |        | STOP*40       | 01633   | 5056 40  |
| 001466 | *      |               |         |          |
| 001467 | *      |               |         |          |
| 001470 | *      |               |         |          |
| 001471 | *      |               |         |          |
| 001472 | *      |               |         |          |
| 001473 | *      |               |         |          |

| SEQNO  | LABEL  | STATEMENT       | ADDRESS | INSTRUCT |
|--------|--------|-----------------|---------|----------|
| 001474 | *      |                 |         |          |
| 001475 | *      |                 |         |          |
| 001476 |        | IJP*RECYCLE     | 01634   | 55 4275  |
| 001477 | SPADR  | 0               | 01635   | 000000   |
| 001500 |        | ENTSR*00        | 01636   | 5073 00  |
| 001501 |        | ENTAL*N777777   | 01637   | 12 4435  |
| 001502 |        | STRAL*EC2       | 01640   | 44 4235  |
| 001503 |        | CL*EC1          | 01641   | 40 4234  |
| 001504 |        | ENTICR*1        | 01642   | 5072 01  |
| 001505 |        | ENTAU*PARITYMSK | 01643   | 10 4261  |
| 001506 |        | ENTB*BEGINNING  | 01644   | 32 4226  |
| 001507 | *      |                 |         |          |
| 001510 | SPADR1 | ENTSR*10        | 01645   | 5073 10  |
| 001511 |        | ENTAL*0001      | 01646   | 12 0001  |
| 001512 |        | SKPEVN*0        | 01647   | 5055 00  |
| 001513 |        | JP*SPADR2       | 01650   | 34 1653  |
| 001514 | *      |                 |         |          |
| 001515 |        | CLB*0000        | 01651   | 41 0000  |
| 001516 | *      |                 |         |          |
| 001517 |        | JP*SPADR3       | 01652   | 34 1655  |
| 001520 | SPADR2 | ENTALK*7777     | 01653   | 70 7777  |
| 001521 |        | STRALB*0000     | 01654   | 45 0000  |
| 001522 | SPADR3 | ENTSR*00        | 01655   | 5073 00  |
| 001523 |        | BSK*TERMINAL    | 01656   | 56 4302  |
| 001524 | *      |                 |         |          |
| 001525 |        | JP*SPADR1       | 01657   | 34 1645  |
| 001526 |        | ENTB*BEGINNING  | 01660   | 32 4226  |
| 001527 | *      |                 |         |          |
| 001530 | SPADR4 | ENTSR*10        | 01661   | 5073 10  |
| 001531 |        | ENTAL*0001      | 01662   | 12 0001  |
| 001532 | *      |                 |         |          |

THE FAILING PATTERN. THE  
CORRECT PATTERN IS 000000.  
RECYCLE THE MEMORY TEST.

DEACTIVATE SR.

INITIATE THE ES1 AND ES2 ERROR  
DISPLAYS.

ACTIVATE B1.

PARITY MASK TO AU.

FIRST ADDRESS OF FAILING BLOCK  
TO B1.

SEE NOTE 1 IN APPENDIX A.

NEXT TEST ADDRESS TO AL.

IS THE PARITY EVEN?

NO, GO TO WRITE A 777777 PATTERN  
INTO THE ADDRESS.

YES, WRITE A 000000 PATTERN INTO  
THE ADDRESS.

WRITE A 777777 PATTERN INTO THE

CURRENT ADDRESS.

SEE NOTE 2 IN APPENDIX A.

HAVE ALL THE ADDRESSES IN THE  
BLOCK BEEN WRITTEN INTO?

NO, WRITE INTO THE NEXT ADDRESS.

FIRST ADDRESS OF FAILING BLOCK  
TO B1.

SEE NOTE 1 IN APPENDIX A.

NEXT TEST ADDRESS TO THE AL  
REGISTER.

| SEQNO  | LABEL  | STATEMENT       | ADDRESS | INSTRUCT |
|--------|--------|-----------------|---------|----------|
| 001533 |        | SKPEVN*0        | 01663   | 5055 00  |
| 001534 |        | JP*SPADR5       | 01664   | 34 1670  |
| 001535 |        | ENTALB*0000     | 01665   | 13 0000  |
| 001536 | *      |                 |         |          |
| 001537 |        | JPALZ*SPADR7    | 01666   | 61 1704  |
| 001540 |        | JP*SPADR6       | 01667   | 34 1674  |
| 001541 | SPADR5 | ENTALB*0000     | 01670   | 13 0000  |
| 001542 |        | ENTSR*00        | 01671   | 5073 00  |
| 001543 |        | CMAL*N777777    | 01672   | 02 4435  |
| 001544 |        | JPEQ*SPADR7     | 01673   | 61 1704  |
| 001545 | SPADR6 | ENTSR*00        | 01674   | 5073 00  |
| 001546 | *      |                 |         |          |
| 001547 | *      |                 |         |          |
| 001550 |        | STRB*TEMPORARY  | 01675   | 42 4301  |
| 001551 |        | ENTAL*TEMPORARY | 01676   | 12 4301  |
| 001552 |        | SLSET*EC1       | 01677   | 51 4234  |
| 001553 |        | STRAL*EC1       | 01700   | 44 4234  |
| 001554 | *      |                 |         |          |
| 001555 |        | ENTAL*TEMPORARY | 01701   | 12 4301  |
| 001556 |        | SLCL*EC2        | 01702   | 52 4235  |
| 001557 |        | STRAL*EC2       | 01703   | 44 4235  |
| 001560 | *      |                 |         |          |
| 001561 | SPADR7 | BSK*TERMINAL    | 01704   | 56 4302  |
| 001562 | *      |                 |         |          |
| 001563 |        | JP*SPADR4       | 01705   | 34 1661  |
| 001564 |        | ENTSR*00        | 01706   | 5073 00  |
| 001565 |        | ENTAL*EC1       | 01707   | 12 4234  |
| 001566 |        | JPALZ*SPADR9    | 01710   | 61 1734  |
| 001567 | *      |                 |         |          |
| 001570 |        | ENTAU*N770000   | 01711   | 10 4434  |
| 001571 |        | CMSK*EC2        | 01712   | 06 4235  |

| SEQNO  | LABEL   | STATEMENT   | ADDRESS | INSTRUCT |
|--------|---------|---|---------|----------|
| 001572 |         | JPNOT*SPADR7A   | 01713   | 63 1721  |
| 001573 |         | RSHAL*14  | 01714   | 5042 14  |
| 001574 | *       |   |         |          |
| 001575 |         | CMAL*N000004  | 01715   | 02 4371  |
| 001576 |         | JPNOT*SPADR9  | 01716   | 63 1734  |
| 001577 | *       |   |         |          |
| 001600 |         | CMAL*HNS  | 01717   | 02 4250  |
| 001601 |         | JPNOT*SPADR9  | 01720   | 63 1734  |
| 001602 | *       |   |         |          |
| 001603 | SPADR7A | ENTAL*EC1   | 01721   | 12 4234  |
| 001604 |         | ENTAU*N007777   | 01722   | 10 4423  |
| 001605 |         | CMSK*N777777  | 01723   | 06 4435  |
| 001606 |         | JPNOT*SPADR8  | 01724   | 63 1730  |
| 001607 | *       |   |         |          |
| 001610 |         | ENTAL*EC2   | 01725   | 12 4235  |
| 001611 |         | CMSK*N000000  | 01726   | 06 4366  |
| 001612 |         | JPEQ*SPADR9   | 01727   | 61 1734  |
| 001613 | *       |   |         |          |
| 001614 | SPADR8  | ENTAU*EC1   | 01730   | 10 4234  |
| 001615 |         | ENTAL*EC2   | 01731   | 12 4235  |
| 001616 |         | STOP*40   | 01732   | 5056 40  |
| 001617 | *       |   |         |          |
| 001620 | *       |   |         |          |
| 001621 | *       |   |         |          |
| 001622 | *       |   |         |          |
| 001623 |         | IJP*RECYCLE   | 01733   | 55 4275  |
| 001624 | SPADR9  | IJP*SPADR   | 01734   | 55 1635  |
| 001625 |         | RESERV*07   | 01735   | 000000   |
| 001626 | *       |   |         |          |
| 001627 | *       | THE SBDROP SUBROUTINE IS REFERENCED WHEN A SINGLE BIT   |         |          |
| 001630 | *       | DROPPED FAILURE IS DETECTED BY THE MAIN PROGRAM. SBDROP |         |          |

| SEQNO  | LABEL   | STATEMENT  | ADDRESS | INSTRUCT |
|--------|---------|--|---------|----------|
| 001631 | *       | DETERMINES WHICH STACKS THE FAILURE OCCURS IN. FIRST,      |         |          |
| 001632 | *       | SBDROP USES THE SELECT SUBROUTINE TO TEST STACKS 00        |         |          |
| 001633 | *       | THROUGH 07 AND RECORDS THE RESULTS IN THE FORM OF A FLAG   |         |          |
| 001634 | *       | ES1. THE PROGRAM THEN BRANCHES TO SBDROPA FOR A MEMORY     |         |          |
| 001635 | *       | SIZE OF 8K TO 16K, OR TO SBDROPB FOR A MEMORY SIZE OF      |         |          |
| 001636 | *       | 20K TO 32K, OR TO SBDROPC FOR A MEMORY SIZE OF 36K TO 65K. |         |          |
| 001637 | *       |  |         |          |
| 001640 | SBDROP  | ENTAL*N777777 TESTS FOR A SINGLE BIT DROPPED               | 01744   | 12 4435  |
| 001641 |         | ENTAU*N007000 IN STACKS 00 THROUGH 07.                     | 01745   | 10 4421  |
| 001642 |         | RJP*SELECT   | 01746   | 76 2455  |
| 001643 |         | ENTAL*HNS HIGHEST NUMBERED STACK INDICATES                 | 01747   | 12 4250  |
| 001644 | *       | THE MEMORY SIZE.   |         |          |
| 001645 |         | CMAL*N000004 IF MEMORY SIZE IS 8K, 12K, OR                 | 01750   | 02 4371  |
| 001646 |         | JPMGR*SBDROPA 16K, GO TO SBDROPA.                          | 01751   | 67 1755  |
| 001647 |         | CMAL*N000010 IF MEMORY SIZE IS 20K, 24K, 28K,              | 01752   | 02 4373  |
| 001650 |         | JPMGR*SBDROPB OR 32K, GO TO SBDROPB.                       | 01753   | 67 1763  |
| 001651 |         | JP*SBDROPC IF MEMORY SIZE IS 36K TO 65K,                   | 01754   | 34 2003  |
| 001652 | *       | GO TO SBDROPC.   |         |          |
| 001653 | *       |  |         |          |
| 001654 | *       | SBDROPA EVALUATES THE SINGLE BIT DROPPED ERROR FLAG FOR    |         |          |
| 001655 | *       | 8K, 12K, OR 16K. ON THE BASIS OF THIS EVALUATION THE       |         |          |
| 001656 | *       | PROGRAM BRANCHES TO AN ERROR STOP.                         |         |          |
| 001657 | *       |  |         |          |
| 001660 | SBDROPA | ENTAL*ES1 ERROR FLAG                                       | 01755   | 12 4240  |
| 001661 |         | ENTBK*2  | 01756   | 36 0002  |
| 001662 |         | CMALB*SNOFLT8K IF NO EXISTING STACKS 00 THROUGH            | 01757   | 03 4337  |
| 001663 |         | JPEQ*NODROP 03 FAIL GO TEST THE BANK 0                     | 01760   | 61 2452  |
| 001664 |         | BJP*LOK-2 ADDRESS TRANSLATION.                             | 01761   | 73 1757  |
| 001665 |         | JP*ABIT3 IF AT LEAST ONE BUT NOT ALL                       | 01762   | 34 2066  |
| 001666 | *       | STACKS IN BANK 0 DROP A BIT                                |         |          |
| 001667 | *       | GO TO ERROR STOP ABIT3.                                    |         |          |

| SEQNO  | LABEL   | STATEMENT   | ADDRESS | INSTRUCT |
|--------|---------|---|---------|----------|
| 001670 | *       |   |         |          |
| 001671 | *       | SBDROPB EVALUATES THE SINGLE BIT DROPPED ERROR FLAG FOR |         |          |
| 001672 | *       | 20K, 24K, 28K, OR 32K. ON THE BASIS OF THIS EVALUATION  |         |          |
| 001673 | *       | THE PROGRAM BRANCHES TO AN ERROR STOP.                  |         |          |
| 001674 | *       |   |         |          |
| 001675 | SBDROPB | ENTAU*N000377   | 01763   | 10 4406  |
| 001676 | *       |   |         |          |
| 001677 |         | ENTAL*ES1   | 01764   | 12 4240  |
| 001700 |         | CMSK*N000017  | 01765   | 06 4375  |
| 001701 |         | JPEQ*ABIT24   | 01766   | 61 2116  |
| 001702 |         | ENTBK*3   | 01767   | 36 0003  |
| 001703 |         | CMALB*SBNK0T20K   | 01770   | 03 4356  |
| 001704 |         | JPEQ*ABIT23   | 01771   | 61 2112  |
| 001705 |         | BJP*LOK-2   | 01772   | 73 1770  |
| 001706 |         | ENTBK*3   | 01773   | 36 0003  |
| 001707 |         | CMALB*SNOFLT20K   | 01774   | 03 4342  |
| 001710 |         | JPEQ*NODROP   | 01775   | 61 2452  |
| 001711 |         | BJP*LOK-2   | 01776   | 73 1774  |
| 001712 |         | ENTAU*N000360   | 01777   | 10 4405  |
| 001713 |         | CMSK*N000000  | 02000   | 06 4366  |
| 001714 |         | JPNOT*ABIT3   | 02001   | 63 2066  |
| 001715 | *       |   |         |          |
| 001716 |         | JP*ABIT4  | 02002   | 34 2072  |
| 001717 | *       |   |         |          |
| 001720 | *       |   |         |          |
| 001721 | *       |   |         |          |
| 001722 | *       | SBDROPC EVALUATES THE SINGLE BIT DROPPED ERROR FLAG FOR |         |          |
| 001723 | *       | STACKS 00 THROUGH 07 FOR 36K TO 65K OF MEMORY. ON THE   |         |          |
| 001724 | *       | BASIS OF THIS EVALUATION THE PROGRAM BRANCHES TO AN     |         |          |
| 001725 | *       | ERROR STOP.   |         |          |
| 001726 | *       |   |         |          |

| SEQNO  | LABEL   | STATEMENT  | ADDRESS | INSTRUCT |
|--------|---------|--|---------|----------|
| 001727 | SBDROPC | ENTAU*N000377  | 02003   | 10 4406  |
| 001730 | *       |  |         |          |
| 001731 |         | ENTAL*ES1  | 02004   | 12 4240  |
| 001732 |         | CMSK*N000000   | 02005   | 06 4366  |
| 001733 |         | JPEQ*SBDROPD   | 02006   | 61 2020  |
| 001734 |         | CMSK*N000360   | 02007   | 06 4405  |
| 001735 |         | JPEQ*ABIT23  | 02010   | 61 2112  |
| 001736 |         | CMSK*N000017   | 02011   | 06 4375  |
| 001737 |         | JPEQ*ABIT24  | 02012   | 61 2116  |
| 001740 |         | CMSK*N000377   | 02013   | 06 4406  |
| 001741 |         | JPEQ*ABIT28  | 02014   | 61 2122  |
| 001742 |         | ENTAU*N000360  | 02015   | 10 4405  |
| 001743 |         | CMSK*N000000   | 02016   | 06 4366  |
| 001744 |         | JP*ABIT4   | 02017   | 34 2072  |
| 001745 | *       |  |         |          |
| 001746 | *       |  |         |          |
| 001747 | *       |  |         |          |
| 001750 | *       | SBDROPD USES THE SELECT SUBROUTINE TO TEST STACKS 10     |         |          |
| 001751 | *       | THROUGH 17 AND RECORDS THE RESULTS IN THE FORM OF A FLAG |         |          |
| 001752 | *       | ES1. THE PROGRAM THEN BRANCHES TO SBDROPE FOR A MEMORY   |         |          |
| 001753 | *       | SIZE OF 36K TO 49K, OR TO SBDROPF FOR A MEMORY SIZE OF   |         |          |
| 001754 | *       | 53K TO 65K.  |         |          |
| 001755 | *       |  |         |          |
| 001756 | SBDROPD | ENTAL*N777777  | 02020   | 12 4435  |
| 001757 |         | ENTAU*N100000  | 02021   | 10 4426  |
| 001760 |         | RJP*SELECT   | 02022   | 76 2455  |
| 001761 |         | ENTAL*HNS  | 02023   | 12 4250  |
| 001762 | *       |  |         |          |
| 001763 |         | CMAL*N000014   | 02024   | 02 4374  |
| 001764 |         | JPMGR*SBDROPE  | 02025   | 67 2027  |
| 001765 |         | JP*SBDROPF   | 02026   | 34 2040  |



| SEQNO  | LABEL   | STATEMENT   | ADDRESS | INSTRUCT |
|--------|---------|---|---------|----------|
| 001766 | *       | OR 65K, GO TO SBDROPF.                                  |         |          |
| 001767 | *       |   |         |          |
| 001770 | *       | SBDROPE EVALUATES THE SINGLE BIT DROPPED ERROR FLAG FOR |         |          |
| 001771 | *       | STACKS 10 THROUGH 17 FOR 36K TO 49K OF MEMORY. ON THE   |         |          |
| 001772 | *       | BASIS OF THIS EVALUATION THE PROGRAM BRANCHES TO AN     |         |          |
| 001773 | *       | ERROR STOP.   |         |          |
| 001774 | *       |   |         |          |
| 001775 | SBDROPE | ENTAU*N000377   | 02027   | 10 4406  |
| 001776 | *       | MASKS OUT THE MEMORY SIZE PORTION                       |         |          |
|        |         | OF THE ERROR FLAG.                                      |         |          |
| 001777 |         | ENTAL*ES1   | 02030   | 12 4240  |
| 002000 |         | CMSK*N000377  | 02031   | 06 4406  |
| 002001 |         | JPEQ*ABIT568  | 02032   | 61 2142  |
| 002002 |         | ENTBK*3   | 02033   | 36 0003  |
| 002003 |         | CMALB*SN0FLT36K   | 02034   | 03 4346  |
| 002004 |         | JPEQ*N0DROP   | 02035   | 61 2452  |
| 002005 |         | BJP*L0K-2   | 02036   | 73 2034  |
| 002006 | *       | IF NO EXISTING STACKS 10 THROUGH                        |         |          |
|        |         | 13 FAIL GO TEST THE BANK 0,                             |         |          |
|        |         | BANK 1, AND BANK 2 ADDRESS                              |         |          |
|        |         | TRANSLATIONS.   |         |          |
| 002007 |         | JP*ABIT6  | 02037   | 34 2102  |
| 002010 | *       | IF AT LEAST ONE BUT NOT ALL                             |         |          |
|        |         | STACKS IN BANK 2 DROP A BIT                             |         |          |
|        |         | GO TO ERROR STOP ABIT6.                                 |         |          |
| 002011 | *       |   |         |          |
| 002012 | *       |   |         |          |
| 002013 | *       | SBDROPF EVALUATES THE SINGLE BIT DROPPED ERROR FLAG FOR |         |          |
| 002014 | *       | STACKS 10 THROUGH 17 FOR 53K TO 65K OF MEMORY. ON THE   |         |          |
| 002015 | *       | BASIS OF THIS EVALUATION THE PROGRAM BRANCHES TO AN     |         |          |
| 002016 | *       | ERROR STOP.   |         |          |
| 002017 | *       |   |         |          |
| 002020 | SBDROPF | ENTAU*N000377   | 02040   | 10 4406  |
| 002021 | *       | MASKS OUT THE MEMORY SIZE PORTION                       |         |          |
|        |         | OF THE ERROR FLAG.                                      |         |          |
| 002022 |         | ENTAL*ES1   | 02041   | 12 4240  |
| 002023 |         | CMSK*N000017  | 02042   | 06 4375  |
| 002024 |         | JPEQ*ABIT57   | 02043   | 61 2132  |

| SEQNO  | LABEL | STATEMENT   | ADDRESS | INSTRUCT |
|--------|-------|---|---------|----------|
| 002025 |       | CMSK*N000377  | 02044   | 06 4406  |
| 002026 |       | JPEQ*ABIT58   | 02045   | 61 2136  |
| 002027 |       | ENTBK*3   | 02046   | 36 0003  |
| 002030 |       | CMALB*SN0FLT53K   | 02047   | 03 4352  |
| 002031 |       | JPEQ*N0DROP   | 02050   | 61 2452  |
| 002032 |       | BJP*LOK-2   | 02051   | 73 2047  |
| 002033 | *     |   |         |          |
| 002034 |       | ENTBK*3   | 02052   | 36 0003  |
| 002035 |       | CMALB*SBNK2T53K   | 02053   | 03 4362  |
| 002036 |       | JPEQ*ABIT56   | 02054   | 61 2126  |
| 002037 |       | BJP*LOK-2   | 02055   | 73 2053  |
| 002040 |       | ENTAU*N000360   | 02056   | 10 4405  |
| 002041 |       | CMSK*N000000  | 02057   | 06 4366  |
| 002042 |       | JPNUT*ABIT6   | 02060   | 63 2102  |
| 002043 |       | JP*ABIT7  | 02061   | 34 2106  |
| 002044 | *     |   |         |          |
| 002045 | *     |   |         |          |
| 002046 | *     |   |         |          |
| 002047 | *     | THE FOLLOWING ERROR STOPS SERVE BOTH SBPICK AND SBDR0P. |         |          |
| 002050 | *     |   |         |          |
| 002051 | ABIT2 | ENTAU*ES1   | 02062   | 10 4240  |
| 002052 |       | ENTAL*FAILPTN   | 02063   | 12 4246  |
| 002053 |       | STOP*40   | 02064   | 5056 40  |
| 002054 | *     |   |         |          |
| 002055 | *     | REPLACE 60ZXX AND 70ZXX (BOTH ON                        |         |          |
| 002056 | *     | THE SAME CARD) ON CHASSIS 6.                            |         |          |
| 002057 | *     | WHERE XX REPRESENTS THE FAILING                         |         |          |
| 002060 | *     | BIT POSITION. REFER TO FIGURE                           |         |          |
| 002061 |       | 9-175 IN THE LOGIC PRINTS.                              |         |          |
| 002061 |       | IJP*RECYCLE   | 02065   | 55 4275  |
| 002062 | ABIT3 | ENTAU*ES1   | 02066   | 10 4240  |
| 002063 |       | ENTAL*FAILPTN   | 02067   | 12 4246  |

| SEQNO  | LABEL | STATEMENT      | ADDRESS | INSTRUCT |
|--------|-------|----------------|---------|----------|
| 002064 |       | STOP*40        | 02070   | 5056 40  |
| 002065 | *     |                |         |          |
| 002066 | *     |                |         |          |
| 002067 | *     |                |         |          |
| 002070 | *     |                |         |          |
| 002071 | *     |                |         |          |
| 002072 |       | IJP*RECYCLE    | 02071   | 55 4275  |
| 002073 | ABIT4 | ENTAU*ES1      | 02072   | 10 4240  |
| 002074 |       | ENTAL*FAILPTTN | 02073   | 12 4246  |
| 002075 |       | STOP*40        | 02074   | 5056 40  |
| 002076 | *     |                |         |          |
| 002077 | *     |                |         |          |
| 002100 | *     |                |         |          |
| 002101 | *     |                |         |          |
| 002102 | *     |                |         |          |
| 002103 |       | IJP*RECYCLE    | 02075   | 55 4275  |
| 002104 | ABIT5 | ENTAU*ES1      | 02076   | 10 4240  |
| 002105 |       | ENTAL*FAILPTTN | 02077   | 12 4246  |
| 002106 |       | STOP*40        | 02100   | 5056 40  |
| 002107 | *     |                |         |          |
| 002110 | *     |                |         |          |
| 002111 | *     |                |         |          |
| 002112 | *     |                |         |          |
| 002113 | *     |                |         |          |
| 002114 |       | IJP*RECYCLE    | 02101   | 55 4275  |
| 002115 | ABIT6 | ENTAU*ES1      | 02102   | 10 4240  |
| 002116 |       | ENTAL*FAILPTTN | 02103   | 12 4246  |
| 002117 |       | STOP*40        | 02104   | 5056 40  |
| 002120 | *     |                |         |          |
| 002121 | *     |                |         |          |
| 002122 | *     |                |         |          |

4-130

| SEONO  | LABEL  | STATEMENT                          | ADDRESS | INSTRUCT |
|--------|--------|------------------------------------|---------|----------|
| 002123 | *      | 9-157 THROUGH 9-165 IN THE         |         |          |
| 002124 | *      | LOGIC PRINTS.                      |         |          |
| 002125 |        | IJP*RECYCLE                        | 02105   | 55 4275  |
| 002126 | ABIT7  | ENTAU*ES1                          | 02106   | 10 4240  |
| 002127 |        | ENTAL*FAILPTTN                     | 02107   | 12 4246  |
| 002130 |        | STOP*40                            | 02110   | 5056 40  |
| 002131 | *      | REPLACE 30ZXX ON CHASSIS 5, WHERE  |         |          |
| 002132 | *      | XX REPRESENTS THE FAILING BIT      |         |          |
| 002133 | *      | POSITION. REFER TO FIGURES         |         |          |
| 002134 | *      | 9-166 THROUGH 9-174 IN THE         |         |          |
| 002135 | *      | LOGIC PRINTS.                      |         |          |
| 002136 |        | IJP*RECYCLE                        | 02111   | 55 4275  |
| 002137 | ABIT23 | ENTAU*ES1                          | 02112   | 10 4240  |
| 002140 |        | ENTAL*FAILPTTN                     | 02113   | 12 4246  |
| 002141 |        | STOP*40                            | 02114   | 5056 40  |
| 002142 | *      | REPLACE 60ZXX AND 70ZXX(SAME CARD) |         |          |
| 002143 | *      | AND 20ZXX, ALL ON CHASSIS 6;       |         |          |
| 002144 | *      | WHERE XX REPRESENTS THE FAILING    |         |          |
| 002145 | *      | BIT POSITION. REFER TO FIGURE      |         |          |
| 002146 | *      | 9-175(60ZXX,70ZXX) AND TO          |         |          |
| 002147 | *      | FIGURES 9-157 THROUGH 9-165        |         |          |
| 002150 | *      | (20ZXX) IN THE LOGIC PRINTS.       |         |          |
| 002151 |        | IJP*RECYCLE                        | 02115   | 55 4275  |
| 002152 | ABIT24 | ENTAU*ES1                          | 02116   | 10 4240  |
| 002153 |        | ENTAL*FAILPTTN                     | 02117   | 12 4246  |
| 002154 |        | STOP*40                            | 02120   | 5056 40  |
| 002155 | *      | REPLACE 60ZXX AND 70ZXX(SAME CARD) |         |          |
| 002156 | *      | AND 30ZXX, ALL ON CHASSIS 6;       |         |          |
| 002157 | *      | WHERE XX REPRESENTS THE FAILING    |         |          |

| SEQNO  | LABEL  | STATEMENT      | ADDRESS | INSTRUCT |
|--------|--------|----------------|---------|----------|
| 002160 | *      |                |         |          |
| 002161 | *      |                |         |          |
| 002162 | *      |                |         |          |
| 002163 | *      |                |         |          |
| 002164 |        | IJP*RECYCLE    | 02121   | 55 4275  |
| 002165 | ABIT28 | ENTAU*ES1      | 02122   | 10 4240  |
| 002166 |        | ENTAL*FAILPTTN | 02123   | 12 4246  |
| 002167 |        | STOP*40        | 02124   | 5056 40  |
| 002170 | *      |                |         |          |
| 002171 | *      |                |         |          |
| 002172 | *      |                |         |          |
| 002173 | *      |                |         |          |
| 002174 | *      |                |         |          |
| 002175 | *      |                |         |          |
| 002176 | *      |                |         |          |
| 002177 | *      |                |         |          |
| 002200 | *      |                |         |          |
| 002201 | *      |                |         |          |
| 002202 | *      |                |         |          |
| 002203 | *      |                |         |          |
| 002204 |        | IJP*RECYCLE    | 02125   | 55 4275  |
| 002205 | ABIT56 | ENTAU*ES1      | 02126   | 10 4240  |
| 002206 |        | ENTAL*FAILPTTN | 02127   | 12 4246  |
| 002207 |        | STOP*40        | 02130   | 5056 40  |
| 002210 | *      |                |         |          |
| 002211 | *      |                |         |          |
| 002212 | *      |                |         |          |
| 002213 | *      |                |         |          |
| 002214 | *      |                |         |          |
| 002215 | *      |                |         |          |

BIT POSITION. REFER TO FIGURE  
9-175(60ZXX,70ZXX) AND TO  
FIGURES 9-166 THROUGH 9-174  
(30ZXX) IN THE LOGIC PRINTS.  
RECYCLE THE MEMORY TEST.

ERROR CODE TO AU.  
FAILING PATTERN TO AL.

THIS STOP IS THE RESULT OF THE  
A FAILURE OF ONE OF THE  
FOLLOWING CIRCUITS:  
(1) 60ZXX OR 70ZXX(BOTH ON THE  
SAME CARD) ON CHASSIS 5; SEE

FIGURE 9-175 IN THE LOGIC  
PRINTS.  
(2) 65ZXX ON CHASSIS 8; SEE  
FIGURES 9-111 THROUGH 9-113  
IN THE LOGIC PRINTS.

NOTE THAT XX REPRESENTS THE  
FAILING BIT POSITION.  
RECYCLE THE MEMORY TEST.

ERROR CODE TO AU.  
FAILING PATTERN TO AL.

REPLACE 61ZXX AND 71ZXX(SAME CARD)

AND 20ZXX, ALL ON CHASSIS 5;  
WHERE XX REPRESENTS THE FAILING  
BIT POSITION. REFER TO FIGURE

9-175(61ZXX,71ZXX) AND TO  
FIGURES 9-157 THROUGH 9-165

| SEQNO  | LABEL   | STATEMENT                          | ADDRESS | INSTRUCT |
|--------|---------|------------------------------------|---------|----------|
| 002216 | *       |                                    |         |          |
| 002217 |         | (20ZXX) IN THE LOGIC PRINTS.       |         |          |
| 002220 | ABIT57  | IJP*RECYCLE                        | 02131   | 55 4275  |
| 002221 |         | RECYCLE THE MEMORY TEST.           | 02132   | 10 4240  |
| 002222 |         | ENTAU*ES1                          | 02133   | 12 4246  |
|        |         | ERROR CODE TO AU.                  | 02134   | 5056 40  |
|        |         | ENTAL*FAILPTTN                     |         |          |
|        |         | FAILING PATTERN TO AL.             |         |          |
|        |         | STOP*40                            |         |          |
| 002223 | *       | REPLACE 61ZXX AND 71ZXX(SAME CARD) |         |          |
| 002224 | *       | AND 30ZXX, ALL ON CHASSIS 5;       |         |          |
| 002225 | *       | WHERE XX REPRESENTS THE FAILING    |         |          |
| 002226 | *       | BIT POSITION. REFER TO FIGURE      |         |          |
| 002227 | *       | 9-175(61ZXX,71ZXX) AND TO          |         |          |
| 002230 | *       | (30ZXX) IN THE LOGIC PRINTS.       |         |          |
| 002231 |         | IJP*RECYCLE                        | 02135   | 55 4275  |
|        |         | RECYCLE THE MEMORY TEST.           |         |          |
| 002232 | ABIT58  | ENTAU*ES1                          | 02136   | 10 4240  |
| 002233 |         | ERROR CODE TO AU.                  | 02137   | 12 4246  |
| 002234 |         | ENTAL*FAILPTTN                     | 02140   | 5056 40  |
| 002235 | *       | FAILING PATTERN TO AL.             |         |          |
| 002236 | *       | STOP*40                            |         |          |
| 002237 | *       | THIS STOP IS THE RESULT OF THE     |         |          |
| 002240 | *       | FAILURE OF ONE OF THE              |         |          |
| 002241 | *       | FOLLOWING CIRCUITS:                |         |          |
|        |         | (1) 61ZXX OR 71ZXX(BOTH ON THE     |         |          |
|        |         | SAME CARD) ON CHASSIS 5; SEE       |         |          |
| 002242 | *       | FIGURE 9-175 IN THE LOGIC          |         |          |
| 002243 | *       | PRINTS.                            |         |          |
| 002244 | *       | (2) 65ZXX ON CHASSIS 8; SEE        |         |          |
| 002245 | *       | FIGURES 9-111 THROUGH 9-113        |         |          |
| 002246 | *       | IN THE LOGIC PRINTS.               |         |          |
| 002247 | *       | NOTE THAT XX REPRESENTS THE        |         |          |
| 002250 | *       | FAILING BIT POSITION.              |         |          |
| 002251 |         | IJP*RECYCLE                        | 02141   | 55 4275  |
|        |         | RECYCLE THE MEMORY TEST.           |         |          |
| 002252 | ABIT568 | ENTAU*ES1                          | 02142   | 10 4240  |
| 002253 |         | ERROR CODE TO AU.                  | 02143   | 12 4246  |
|        |         | ENTAL*FAILPTTN                     |         |          |
|        |         | FAILING PATTERN TO AL.             |         |          |

| SEQNO  | LABEL  | STATEMENT   | ADDRESS | INSTRUCT |
|--------|--------|---|---------|----------|
| 002254 |        | STOP*40   | 02144   | 5056 40  |
| 002255 | *      | THIS STOP IS THE RESULT OF THE FAILURE OF ONE OF THE FOLLOWING CIRCUITS,<br>(1) 61ZXX OR 71ZXX (BOTH ON THE SAME CARD) ON CHASSIS 5; SEE FIGURE 9-175 IN THE LOGIC PRINTS.<br>(2) 20ZXX ON CHASSIS 6; SEE FIGURES 9-157 THROUGH 9-165 OF THE LOGIC PRINTS.<br>(3) 65ZXX ON CHASSIS 8; SEE FIGURES 9-111 THROUGH 9-113 OF THE LOGIC PRINTS.<br>NOTE THAT XX REPRESENTS THE FAILING BIT POSITION. |         |          |
| 002256 | *      |   |         |          |
| 002257 | *      |   |         |          |
| 002260 | *      |   |         |          |
| 002261 | *      |   |         |          |
| 002262 | *      |   |         |          |
| 002263 | *      |   |         |          |
| 002264 | *      |   |         |          |
| 002265 | *      |   |         |          |
| 002266 | *      |   |         |          |
| 002267 | *      |   |         |          |
| 002270 | *      |   |         |          |
| 002271 | *      |   |         |          |
| 002272 | *      |   |         |          |
| 002273 | *      |   |         |          |
| 002274 |        | IJP*RECYCLE   | 02145   | 55 4275  |
| 002275 | *      |   |         |          |
| 002276 | *      |   |         |          |
| 002277 | *      |   |         |          |
| 002300 | *      | THE MUDROP ROUTINE IS REFERENCED WHEN MORE THAN ONE BIT IS DROPPED. MUDROP DETERMS WHICH STACKS THE FAILURE OCCURS  |         |          |
| 002301 | *      | IN. FIRST, MUDROP USES THE SELECT ROUTINE TO TEST STACKS  |         |          |
| 002302 | *      | 00 THROUGH 07 AND RECORDS THE RESULTS IN THE FORM OF A  |         |          |
| 002303 | *      | FLAG ES1. THE PROGRAM THEN BRANCHES TO MUDROPA FOR  |         |          |
| 002304 | *      | A MEMORY SIZE OF 8K TO 16K, OR TO MUDROPB FOR A MEMORY  |         |          |
| 002305 | *      | SIZE OF 20K TO 32K, OR TO MUDROPC FOR A MEMORY SIZE OF  |         |          |
| 002306 | *      | 32K TO 65K.   |         |          |
| 002307 | *      |   |         |          |
| 002310 | MUDROP | ENTAL*N777777   | 02146   | 12 4435  |
| 002311 |        | ENTAU*N007000   | 02147   | 10 4421  |
| 002312 | *      | DROPPED IN STACKS 00 THROUGH 07.  |         |          |

| SEQNO  | LABEL   | STATEMENT  | ADDRESS | INSTRUCT |
|--------|---------|--|---------|----------|
| 002313 |         | RJP*SELECT   | 02150   | 76 2455  |
| 002314 |         | ENTAL*HNS  | 02151   | 12 4250  |
| 002315 | *       |  |         |          |
| 002316 |         | CMAL*N000004   | 02152   | 02 4371  |
| 002317 |         | JPMGR*MUDROPA  | 02153   | 67 2157  |
| 002320 |         | CMAL*N000010   | 02154   | 02 4373  |
| 002321 |         | JPMGR*MUDROPB  | 02155   | 67 2212  |
| 002322 |         | JP*MUDROPC   | 02156   | 34 2266  |
| 002323 | *       |  |         |          |
| 002324 | *       |  |         |          |
| 002325 | *       | MUDROPA EVALUATES THE MORE THAN ONE BIT DROPPED ERROR FLAG |         |          |
| 002326 | *       | FOR AN 8K, 12K, OR 16K MEMORY.                             |         |          |
| 002327 | *       |  |         |          |
| 002330 | MUDROPA | ENTAU*N000377  | 02157   | 10 4406  |
| 002331 | *       |  |         |          |
| 002332 |         | ENTAL*ES1  | 02160   | 12 4240  |
| 002333 |         | CMSK*N000377   | 02161   | 06 4406  |
| 002334 |         | JPEQ*MUDROPA1  | 02162   | 61 2203  |
| 002335 |         | ENTBK*2  | 02163   | 36 0002  |
| 002336 |         | CMALB*SNOFLT8K   | 02164   | 03 4337  |
| 002337 |         | JPEQ*NODROP  | 02165   | 61 2452  |
| 002340 |         | BJP*LOK-2  | 02166   | 73 2164  |
| 002341 |         | ENTAL*N777777  | 02167   | 12 4435  |
| 002342 |         | ENTAU*N007101  | 02170   | 10 4422  |
| 002343 |         | RJP*SELECT   | 02171   | 76 2455  |
| 002344 |         | ENTAL*ES1  | 02172   | 12 4240  |
| 002345 |         | ENTBK*2  | 02173   | 36 0002  |
| 002346 |         | CMALB*SNOFLT8K   | 02174   | 03 4337  |
| 002347 |         | JPEQ*TRANSFORM   | 02175   | 61 3005  |
| 002350 | *       |  |         |          |
| 002351 |         | BJP*LOK-2  | 02176   | 73 2174  |



| SEQNO  | LABEL    | STATEMENT  | ADDRESS | INSTRUCT |
|--------|----------|--|---------|----------|
| 002352 | *        | YES, AT LEAST ONE BUT NOT ALL                              |         |          |
| 002353 | *        | STACKS 00 THROUGH 03 FAILED.                               |         |          |
| 002354 |          | ENTAU*ES1  | 02177   | 10 4240  |
| 002355 |          | ENTAL*N000000  | 02200   | 12 4366  |
| 002356 | *        | AL REGISTER.   |         |          |
| 002357 |          | STOP*40  | 02201   | 5056 40  |
| 002360 | *        | THIS ERROR STOP IS FOR BANK 0 X                            |         |          |
| 002361 | *        | X OR Y STACK SELECTION FAILURES                            |         |          |
| 002362 | *        | FOR AN 8K TO 16K MEMORY.                                   |         |          |
| 002363 |          | IJP*RECYCLE  | 02202   | 55 4275  |
| 002364 | *        | RECYCLE THE MEMORY TEST.                                   |         |          |
| 002365 | *        | MUDROPA1 USES THE ADDRESS SUBROUTINE TO TEST THE BANK 0    |         |          |
| 002366 | *        | ADDRESS TRANSLATION. IF AN ADDRESS TRANSLATION FAILURE     |         |          |
| 002367 | *        | EXISTS AN ERROR STOP WILL OCCUR IN ADDRESS. IF NO ADDRESS  |         |          |
| 002370 | *        | TRANSLATION FAILURES EXISTS AN ERROR STOP WILL OCCUR HERE  |         |          |
| 002371 | *        | IN MUDROPA1.   |         |          |
| 002372 | *        |  |         |          |
| 002373 | MUDROPA1 | RJP*SPADR  | 02203   | 76 1635  |
| 002374 | *        | SPECIAL ADDRESS TRANSLATION                                |         |          |
| 002375 |          | TEST.  |         |          |
| 002376 | *        | ENTAL*N010000  | 02204   | 12 4424  |
| 002377 |          | TEST THE BANK 0 ADDRESS                                    |         |          |
| 002400 |          | TRANSLATION USING TEST                                     |         |          |
| 002401 |          | RJP*ADDRESS  | 02205   | 76 2557  |
| 002402 | *        | ADDRESSES IN STACK 01.                                     |         |          |
| 002403 |          | ENTAU*ES1  | 02206   | 10 4240  |
| 002404 | *        | ENTAL*N000000  | 02207   | 12 4366  |
| 002405 | *        | THE AU REGISTER AND CLEAR THE                              |         |          |
| 002406 |          | AL REGISTER.   |         |          |
| 002407 | *        | STOP*40  | 02210   | 5056 40  |
| 002410 | *        | ERROR STOP DUE TO A BANK 0 X OR                            |         |          |
| 002411 | *        | Y STACK SELECTION FAILURE.                                 |         |          |
| 002412 |          | IJP*RECYCLE  | 02211   | 55 4275  |
| 002413 | *        | RECYCLE THE MEMORY TEST.                                   |         |          |
| 002414 | *        | MUDROPB EVALUATES THE MORE THAN ONE BIT DROPPED ERROR FLAG |         |          |

| SEQNO  | LABEL   | STATEMENT   | ADDRESS | INSTRUCT |
|--------|---------|---|---------|----------|
| 002411 | *       | FOR A 20K, 24K, 28K OR 32K MEMORY.                        |         |          |
| 002412 | *       |   |         |          |
| 002413 | MUDROPB | ENTAU*N000377   | 02212   | 10 4406  |
| 002414 | *       | MASKS OUT THE MEMORY SIZE PORTION<br>OF THE ERROR FLAG.   |         |          |
| 002415 |         | ENTAL*ES1   | 02213   | 12 4240  |
| 002416 |         | CMSK*N000377  | 02214   | 06 4406  |
| 002417 |         | JPEQ*MUDROPB3   | 02215   | 61 2257  |
| 002420 |         | CMSK*N000017  | 02216   | 06 4375  |
| 002421 |         | JPEQ*MUDROPB2   | 02217   | 61 2253  |
| 002422 |         | ENTBK*3   | 02220   | 36 0003  |
| 002423 |         | CMALB*SBNK0T20K   | 02221   | 03 4356  |
| 002424 |         | JPEQ*MUDROPB3   | 02222   | 61 2257  |
| 002425 |         | BJP*LOK-2   | 02223   | 73 2221  |
| 002426 |         | ENTBK*3   | 02224   | 36 0003  |
| 002427 |         | CMALB*SN0FLT20K   | 02225   | 03 4342  |
| 002430 |         | JPEQ*N0DROP   | 02226   | 61 2452  |
| 002431 |         | BJP*LOK-2   | 02227   | 73 2225  |
| 002432 | *       | AND 1.  |         |          |
| 002433 |         | ENTAL*N777777   | 02230   | 12 4435  |
| 002434 |         | ENTAU*N007101   | 02231   | 10 4422  |
| 002435 |         | RJP*SELECT  | 02232   | 76 2455  |
| 002436 |         | ENTAL*ES1   | 02233   | 12 4240  |
| 002437 |         | ENTBK*3   | 02234   | 36 0003  |
| 002440 |         | CMALB*SN0FLT20K   | 02235   | 03 4342  |
| 002441 |         | JPEQ*TRANSFORM  | 02236   | 61 3005  |
| 002442 | *       | NO, GO TEST STACK TRANSFORMERS<br>AND THEN MATRIX DIODES. |         |          |
| 002443 |         | BJP*LOK-2   | 02237   | 73 2235  |
| 002444 |         | ENTAU*N000360   | 02240   | 10 4405  |
| 002445 |         | CMSK*N000000  | 02241   | 06 4366  |
| 002446 |         | JPN0T*MUDROPB1  | 02242   | 63 2247  |
| 002447 | *       | GO TO MUDROPB1.<br>YES, AT LEAST ONE BUT NOT ALL          |         |          |

| SEQNO  | LABEL    | STATEMENT   | ADDRESS | INSTRUCT |
|--------|----------|---|---------|----------|
| 002450 | *        |   |         |          |
| 002451 |          | ENTAU*ES1   | 02243   | 10 4240  |
| 002452 |          | ENTAL*N000000   | 02244   | 12 4366  |
| 002453 | *        |   |         |          |
| 002454 |          | STOP*40   | 02245   | 5056 40  |
| 002455 | *        |   |         |          |
| 002456 | *        |   |         |          |
| 002457 | *        |   |         |          |
| 002460 |          | IJP*RECYCLE   | 02246   | 55 4275  |
| 002461 | MUDROPB1 | ENTAU*ES1   | 02247   | 10 4240  |
| 002462 |          | ENTAL*N000000   | 02250   | 12 4366  |
| 002463 | *        |   |         |          |
| 002464 |          | STOP*40   | 02251   | 5056 40  |
| 002465 | *        |   |         |          |
| 002466 | *        |   |         |          |
| 002467 | *        |   |         |          |
| 002470 |          | IJP*RECYCLE   | 02252   | 55 4275  |
| 002471 | *        |   |         |          |
| 002472 | *        | MUDROPB2 USES THE ADDRESS SUBROUTINE TO TEST THE BANK 1   |         |          |
| 002473 | *        | ADDRESS TRANSLATION. IF AN ADDRESS TRANSLATION            |         |          |
| 002474 | *        | FAILURE EXISTS AN ERROR STOP WILL OCCUR IN THE ADDRESS    |         |          |
| 002475 | *        | SUBROUTINE. IF NOT, AN ERROR STOP WILL OCCUR IN MUDROPB4. |         |          |
| 002476 | *        |   |         |          |
| 002477 | MUDROPB2 | RJP*SPADR   | 02253   | 76 1635  |
| 002500 | *        |   |         |          |
| 002501 |          | ENTAL*N040000   | 02254   | 12 4425  |
| 002502 | *        |   |         |          |
| 002503 |          | RJP*ADDRESS   | 02255   | 76 2557  |
| 002504 |          | JP*MUDROPB4   | 02256   | 34 2262  |
| 002505 | *        |   |         |          |
| 002506 | *        | MUDROPB3 USES THE ADDRESS SUBROUTINE TO TEST THE BANK 0   |         |          |

4-138

| SEQNO  | LABEL    | STATEMENT  | ADDRESS | INSTRUCT |
|--------|----------|--|---------|----------|
| 002507 | *        | ADDRESS TRANSLATION. IF AN ADDRESS TRANSLATION FAILURE     |         |          |
| 002510 | *        | EXISTS AN ERROR STOP WILL OCCUR IN THE ADDRESS SUBROUTINE. |         |          |
| 002511 | *        | IF NOT, AN ERROR STOP WILL OCCUR AT MUDROPB4.              |         |          |
| 002512 | *        |  |         |          |
| 002513 | MUDROPB3 | RJP*SPADR SPECIAL ADDRESS TRANSLATION                      | 02257   | 76 1635  |
| 002514 | *        | TEST.  |         |          |
| 002515 |          | ENTAL*N010000 TEST THE BANK 0 ADDRESS                      | 02260   | 12 4424  |
| 002516 | *        | TRANSLATION USING TEST                                     |         |          |
| 002517 |          | RJP*ADDRESS ADDRESSES IN STACK 01.                         | 02261   | 76 2557  |
| 002520 | MUDROPB4 | ENTAU*ES1 DISPLAY THE ES1 ERROR FLAG IN                    | 02262   | 10 4240  |
| 002521 |          | ENTAL*N000000 THE AU REGISTER AND CLEAR THE                | 02263   | 12 4366  |
| 002522 | *        | AL REGISTER.   |         |          |
| 002523 |          | STOP*40  | 02264   | 5056 40  |
| 002524 | *        | THIS ERROR STOP IS FOR FAILURES                            |         |          |
| 002525 | *        | AFFECTING ALL OF BANK 0 OR ALL                             |         |          |
| 002526 | *        | OF BANK 1 FOR A 20K TO 32K                                 |         |          |
| 002527 | *        | MEMORY.  |         |          |
| 002530 |          | IJP*RECYCLE RECYCLE THE MEMORY TEST.                       | 02265   | 55 4275  |
| 002531 | *        |  |         |          |
| 002532 | *        | MUDROPC EVALUATES THE MORE THAN ONE BIT DROPPED ERROR FLAG |         |          |
| 002533 | *        | FOR A 36K TO 65K MEMORY FOR STACKS 00 THROUGH 07.          |         |          |
| 002534 | *        |  |         |          |
| 002535 | MUDROPC  | ENTAU*N000377 MASKS OUT THE MEMORY SIZE PORTION            | 02266   | 10 4406  |
| 002536 | *        | OF THE ERROR FLAG.   |         |          |
| 002537 |          | ENTAL*ES1 ERROR FLAG                                       | 02267   | 12 4240  |
| 002540 |          | CMSK*N000000 IF NO STACKS 00 THROUGH 07 FAIL               | 02270   | 06 4366  |
| 002541 |          | JPEQ*MUDROPD GO TO TEST STACKS 10 THROUGH                  | 02271   | 61 2335  |
| 002542 | *        | 17.  |         |          |
| 002543 |          | CMSK*N000360 IF ALL STACKS 00 THROUGH 03 FAIL              | 02272   | 06 4405  |
| 002544 |          | JPEQ*MUDROPC3 GO TO TEST THE ADDRESS                       | 02273   | 61 2326  |
| 002545 | *        | TRANSLATION FOR BANK 0.                                    |         |          |

| SEQNO  | LABEL    | STATEMENT      | ADDRESS                           | INSTRUCT      |
|--------|----------|----------------|-----------------------------------|---------------|
| 002546 |          | CMSK*N000017   | IF ALL STACKS 04 THROUGH 07 FAIL  | 02274 06 4375 |
| 002547 |          | JPEQ*MUDROPC2  | GO TO TEST THE ADDRESS            | 02275 61 2322 |
| 002550 | *        |                | TRANSLATION FOR BANK 1.           |               |
| 002551 |          | CMSK*N000377   | IF ALL STACKS 00 THROUGH 07 FAIL  | 02276 06 4406 |
| 002552 |          | JPEQ*MUDROPC3  | GO TO TEST THE ADDRESS            | 02277 61 2326 |
| 002553 | *        |                | TRANSLATION FOR BANK 0.           |               |
| 002554 |          | ENTAL*N777777  | VERIFY STACK SELECTION FAILURE    | 02300 12 4435 |
| 002555 |          | ENTAU*N007101  | USING DIFFERENT X AND Y MATRIX    | 02301 10 4422 |
| 002556 |          | RJP*SELECT     | DIODES AND STACK TRANSFORMERS     | 02302 76 2455 |
| 002557 |          | ENTAU*N000377  | MASKS OUT THE MEMORY SIZE         | 02303 10 4406 |
| 002560 | *        |                | PORTION OF THE ERROR FLAG.        |               |
| 002561 |          | ENTAL*ES1      | ERROR FLAG.                       | 02304 12 4240 |
| 002562 |          | CMSK*N000000   | DOES THE FAILURE REPEAT?          | 02305 06 4366 |
| 002563 |          | JPEQ*TRANSFORM | NO, GO TEST THE STACK SELECTION   | 02306 61 3005 |
| 002564 | *        |                | TRANSFORMERS AND THEN THE         |               |
| 002565 | *        |                | MATRIX DIODES.                    |               |
| 002566 |          | ENTAU*N000360  | IF AT LEAST ONE BUT NOT ALL BANK  | 02307 10 4405 |
| 002567 |          | CMSK*N000000   | 0 STACKS FAIL GO TO MUDROPC1.     | 02310 06 4366 |
| 002570 |          | JPNOT*MUDROPC1 |                                   | 02311 63 2316 |
| 002571 |          | ENTAU*ES1      | DISPLAY THE ERROR FLAG ES1 IN THE | 02312 10 4240 |
| 002572 |          | ENTAL*N000000  | AU REGISTER AND CLEAR THE AL      | 02313 12 4366 |
| 002573 | *        |                | REGISTER.                         |               |
| 002574 |          | STOP*40        |                                   | 02314 5056 40 |
| 002575 | *        |                | THIS ERROR STOP IS FOR BANK 1     |               |
| 002576 | *        |                | X OR Y STACK SELECTION FAILURES   |               |
| 002577 | *        |                | FOR A 36K TO 65K MEMORY.          |               |
| 002600 |          | IJP*RECYCLE    | RECYCLE THE MEMORY TEST.          | 02315 55 4275 |
| 002601 | MUDROPC1 | ENTAU*ES1      | DISPLAY THE ES1 ERROR FLAG IN     | 02316 10 4240 |
| 002602 |          | ENTAL*N000000  | THE AU REGISTER AND CLEAR         | 02317 12 4366 |
| 002603 | *        |                | THE AL REGISTER.                  |               |

| SEQNO  | LABEL    | STATEMENT     | ADDRESS | INSTRUCT |
|--------|----------|---------------|---------|----------|
| 002604 |          | STOP*40       | 02320   | 5056 40  |
| 002605 | *        |               |         |          |
| 002606 | *        |               |         |          |
| 002607 | *        |               |         |          |
| 002610 |          | IJP*RECYCLE   | 02321   | 55 4275  |
| 002611 | *        |               |         |          |
| 002612 | *        |               |         |          |
| 002613 | *        |               |         |          |
| 002614 | *        |               |         |          |
| 002615 | *        |               |         |          |
| 002616 | *        |               |         |          |
| 002617 | MUDROPC2 | RJP*SPADR     | 02322   | 76 1635  |
| 002620 | *        |               |         |          |
| 002621 |          | ENTAL*N040000 | 02323   | 12 4425  |
| 002622 | *        |               |         |          |
| 002623 |          | RJP*ADDRESS   | 02324   | 76 2557  |
| 002624 |          | JP*MUDROPC4   | 02325   | 34 2331  |
| 002625 | *        |               |         |          |
| 002626 | *        |               |         |          |
| 002627 | *        |               |         |          |
| 002630 | *        |               |         |          |
| 002631 | *        |               |         |          |
| 002632 | *        |               |         |          |
| 002633 | *        |               |         |          |
| 002634 | MUDROPC3 | RJP*SPADR     | 02326   | 76 1635  |
| 002635 | *        |               |         |          |
| 002636 |          | ENTAL*N010000 | 02327   | 12 4424  |
| 002637 | *        |               |         |          |
| 002640 |          | RJP*ADDRESS   | 02330   | 76 2557  |
| 002641 | MUDROPC4 | ENTAU*ES1     | 02331   | 10 4240  |
| 002642 |          | ENTAL*N000000 | 02332   | 12 4366  |

| SEQNO  | LABEL   | STATEMENT   | ADDRESS | INSTRUCT |
|--------|---------|---|---------|----------|
| 002643 | *       | THE AL REGISTER.  |         |          |
| 002644 |         | STOP*40   | 02333   | 5056 40  |
| 002645 | *       |   |         |          |
| 002646 | *       | THIS ERROR STOP IS FOR FAILURES                                   |         |          |
| 002647 | *       | AFFECTING ALL OF BANK 0, OR ALL<br>OF BANK 1, OR ALL OF BOTH BANK |         |          |
| 002650 | *       |   |         |          |
| 002651 | *       | 0 AND BANK 1 FOR A 36K TO 65K<br>MEMORY.                          |         |          |
| 002652 |         | IJP*RECYCLE   | 02334   | 55 4275  |
| 002653 | *       |   |         |          |
| 002654 | *       | MUDROPD USES THE SELECT SUBROUTINE TO TEST STACKS 10              |         |          |
| 002655 | *       | THROUGH 17 FOR MORE THAN ONE BIT DROPPED FAILURES AND             |         |          |
| 002656 | *       | RECORDS THE RESULTS IN THE FORM OF AN ERROR FLAG ES1.             |         |          |
| 002657 | *       | THE PROGRAM THEN BRANCHES TO MUDROPE FOR A MEMORY SIZE OF         |         |          |
| 002660 | *       | 36K TO 49K, OR TO MUDROPF FOR A MEMORY SIZE OF 53K TO 65K.        |         |          |
| 002661 | *       |   |         |          |
| 002662 | MUDROPD | ENTAL*N777777   | 02335   | 12 4435  |
| 002663 |         | ENTAU*N100000   | 02336   | 10 4426  |
| 002664 |         | RJP*SELECT  | 02337   | 76 2455  |
| 002665 |         | ENTAL*HNS   | 02340   | 12 4250  |
| 002666 | *       |   |         |          |
| 002667 |         | CMAL*N000014  | 02341   | 02 4374  |
| 002670 |         | JPMGR*MUDROPE   | 02342   | 67 2344  |
| 002671 |         | JP*MUDROPF  | 02343   | 34 2377  |
| 002672 | *       | OR 49K, GO TO MUDROPE.  |         |          |
| 002673 | *       | IF MEMORY SIZE IS 53K, 57K, 61K,<br>OR 65K, GO TO MUDROPF.        |         |          |
| 002674 | *       | MUDROPE EVALUATES THE MORE THAN ONE BIT DROPPED ERROR FLAG        |         |          |
| 002675 | *       | FOR STACKS 10 THROUGH 17 FOR 36K TO 49K OF MEMORY.                |         |          |
| 002676 | *       |   |         |          |
| 002677 | MUDROPE | ENTAU*N000377   | 02344   | 10 4406  |
| 002700 | *       |   |         |          |
| 002701 |         | ENTAL*ES1   | 02345   | 12 4240  |

| SEQNO  | LABEL    | STATEMENT       | ADDRESS  | INSTRUCT      |
|--------|----------|-----------------|--|---------------|
| 002702 |          | CMSK*N000377    | IF ALL STACKS 10 THROUGH 17 FAIL                           | 02346 06 4406 |
| 002703 |          | JPEQ*MUDROPE1   | GO TO MUDROPE1.  | 02347 61 2370 |
| 002704 |          | ENTBK*3         |  | 02350 36 0003 |
| 002705 |          | CMALB*SNOFLT36K | IF NO EXISTING STACKS 10 THROUGH                           | 02351 03 4346 |
| 002706 |          | JPEQ*NODROP     | 13 FAIL GO TEST THE BANK 0,                                | 02352 61 2452 |
| 002707 |          | BJP*L0K-2       | BANK 1, AND BANK 2 ADDRESS                                 | 02353 73 2351 |
| 002710 | *        |                 | TRANSLATIONS.  |               |
| 002711 |          | ENTAL*777777    | VERIFY STACK SELECTION FAILURE                             | 02354 12 7777 |
| 002712 |          | ENTAU*N100101   | USING DIFFERENT X AND Y MATRIX                             | 02355 10 4427 |
| 002713 |          | RJP*SELECT      | DIODES AND STACK TRANSFORMERS.                             | 02356 76 2455 |
| 002714 |          | ENTAL*ES1       | ERROR FLAG.  | 02357 12 4240 |
| 002715 |          | ENTBK*3         |  | 02360 36 0003 |
| 002716 |          | CMALB*SNOFLT36K | DOES THE FAILURE REPEAT?                                   | 02361 03 4346 |
| 002717 |          | JPEQ*TRANSFORM  | NO, GO TEST STACK TRANSFORMERS                             | 02362 61 3005 |
| 002720 |          | BJP*L0K-2       | AND THEN MATRIX DIODES.                                    | 02363 73 2361 |
| 002721 |          | ENTAU*ES1       | DISPLAY THE ES1 ERROR FLAG IN THE                          |               |
|        |          |                 |  | 02364 10 4240 |
| 002722 |          | ENTAL*N000000   | AU REGISTER AND CLEAR THE AL                               | 02365 12 4366 |
| 002723 | *        |                 | REGISTER.  |               |
| 002724 |          | STOP*40         |  | 02366 5056 40 |
| 002725 | *        |                 | ERROR STOP DUE TO AT LEAST ONE                             |               |
|        |          |                 |  |               |
| 002726 | *        |                 | BUT NOT ALL BANK 2 STACKS                                  |               |
| 002727 | *        |                 | FAILING FOR 36K TO 49K.                                    |               |
| 002730 |          | IJP*RECYCLE     | RECYCLE THE MEMORY TEST.                                   | 02367 55 4275 |
| 002731 | *        |                 |  |               |
| 002732 | *        |                 | MUDROPE1 USES THE ADDRESS SUBROUTINE TO TEST THE BANK 2    |               |
| 002733 | *        |                 | ADDRESS TRANSLATION. IF AN ADDRESS TRANSLATION FAILURE     |               |
| 002734 | *        |                 | EXISTS AN ERROR STOP WILL OCCUR IN THE ADDRESS SUBROUTINE. |               |
| 002735 | *        |                 | IF NOT AN ERROR STOP WILL OCCUR HERE IN MUDROPE1.          |               |
| 002736 | *        |                 |  |               |
| 002737 | MUDROPE1 | RJP*SPADR       | SPECIAL ADDRESS TRANSLATION                                | 02370 76 1535 |



| SEQNO  | LABEL   | STATEMENT  | ADDRESS | INSTRUCT |
|--------|---------|--|---------|----------|
| 002740 | *       | TEST.  |         |          |
| 002741 |         | ENTAL*N100000  | 02371   | 12 4426  |
| 002742 | *       | TRANSLATION USING TEST                                     |         |          |
| 002743 |         | RJP*ADDRESS  | 02372   | 76 2557  |
| 002744 |         | ENTAU*ES1  | 02373   | 10 4240  |
|        |         | YES, DISPLAY THE ERROR FLAG ES1                            |         |          |
| 002745 |         | ENTAL*N000000  | 02374   | 12 4366  |
| 002746 | *       | IN THE AU REGISTER AND CLEAR                               |         |          |
|        |         | THE AL REGISTER.   |         |          |
| 002747 |         | STOP*40  | 02375   | 5056 40  |
| 002750 | *       | THIS ERROR STOP IS FOR BANK 2                              |         |          |
| 002751 | *       | X OR Y STACK SELECTION FAILURES                            |         |          |
| 002752 | *       | FOR A 36K TO 49K.  |         |          |
| 002753 |         | IJP*RECYCLE  | 02376   | 55 4275  |
| 002754 | *       | RECYCLE THE MEMORY TEST.                                   |         |          |
| 002755 | *       | MUDROPF EVALUATES THE MORE THAN ONE BIT DROPPED ERROR FLAG |         |          |
| 002756 | *       | FOR STACKS 10 THROUGH 17 FOR 53K TO 65K OF MEMORY.         |         |          |
| 002757 | *       |  |         |          |
| 002760 | MUDROPF | ENTAU*N000377  | 02377   | 10 4406  |
| 002761 | *       | MASKS OUT THE MEMORY SIZE PORTION                          |         |          |
|        |         | OF THE ERROR FLAG.   |         |          |
| 002762 |         | ENTAL*ES1  | 02400   | 12 4240  |
| 002763 |         | CMSK*N000377   | 02401   | 06 4406  |
| 002764 |         | JPEQ*MUDROPF3  | 02402   | 61 2443  |
|        |         | IF ALL STACKS 10 THROUGH 17 FAIL                           |         |          |
|        |         | GO TO TEST THE ADDRESS                                     |         |          |
| 002765 | *       | TRANSLATION FOR BANK 2.                                    |         |          |
| 002766 |         | CMSK*N000017   | 02403   | 06 4375  |
| 002767 |         | JPEQ*MUDROPF2  | 02404   | 61 2437  |
|        |         | IF ALL STACKS 14 THROUGH 17 FAIL                           |         |          |
|        |         | GO TO TEST THE ADDRESS                                     |         |          |
| 002770 | *       | TRANSLATION FOR BANK 3.                                    |         |          |
| 002771 |         | CMALB*SBNK2T53K  | 02405   | 03 4362  |
| 002772 |         | JPEQ*MUDROPF3  | 02406   | 61 2443  |
|        |         | IF ALL STACKS 10 THROUGH 13 FAIL                           |         |          |
|        |         | GO TO TEST THE ADDRESS                                     |         |          |
| 002773 | *       | TRANSLATION FOR BANK 2.                                    |         |          |
| 002774 |         | BJP*L0K-2  | 02407   | 73 2405  |
| 002775 |         | ENTBK*3  | 02410   | 36 0003  |
| 002776 |         | CMALB*SN0FLT53K  | 02411   | 03 4352  |
|        |         | IF NO EXISTING STACKS 10 THROUGH                           |         |          |

| SEQNO  | LABEL    | STATEMENT       | ADDRESS                          | INSTRUCT      |
|--------|----------|-----------------|----------------------------------|---------------|
| 002777 |          | JPEQ*NODROP     | 17 FAIL GO TEST THE BANK 0,      | 02412 61 2452 |
| 003000 | *        |                 | BANK 1, BANK 2, AND BANK 3,      |               |
| 003001 |          | BJP*LOK-2       | ADDRESS TRANSLATIONS.            | 02413 73 2411 |
| 003002 |          | ENTAL*N777777   | VERIFY STACK SELECTION FAILURE   | 02414 12 4435 |
| 003003 |          | ENTAU*N100101   | USING DIFFERENT X AND Y MATRIX   | 02415 10 4427 |
| 003004 |          | RJP*SELECT      | DIODES AND STACK TRANSFORMERS.   | 02416 76 2455 |
| 003005 |          | ENTAL*ES1       | ERROR FLAG                       | 02417 12 4240 |
| 003006 |          | ENTBK*3         |                                  | 02420 36 0003 |
| 003007 |          | CMALB*SNOFLT53K | DOES THE FAILURE REPEAT?         | 02421 03 4352 |
| 003010 |          | JPEQ*TRANSFORM  | NO, GO TEST STACK TRANSFORMERS   | 02422 61 3005 |
| 003011 | *        |                 | AND THEN MATRIX DIODES.          |               |
| 003012 |          | BJP*LOK-2       |                                  | 02423 73 2421 |
| 003013 |          | ENTAU*N000360   |                                  | 02424 10 4405 |
| 003014 |          | CMSK*N000000    | IF AT LEAST ONE BUT NOT ALL BANK | 02425 06 4366 |
| 003015 |          | JPNOT*MUDROPF1  | 2 STACKS FAIL GO TO MUDROPF1.    | 02426 63 2433 |
| 003016 | *        |                 | IF AT LEAST ONE BUT NOT ALL BANK |               |
| 003017 | *        |                 | 3 STACKS FAIL DISPLAY THE ES1    |               |
| 003020 |          | ENTAU*ES1       | ERROR FLAG IN THE AU REGISTER    | 02427 10 4240 |
| 003021 |          | ENTAL*N000000   | AND CLEAR THE AL REGISTER.       | 02430 12 4366 |
| 003022 |          | STOP*40         |                                  | 02431 5056 40 |
| 003023 | *        |                 | THIS ERROR STOP IS FOR BANK 3    |               |
| 003024 | *        |                 | X OR Y STACK SELECTION FAILURES  |               |
| 003025 | *        |                 | FOR A 53K TO 65K MEMORY.         |               |
| 003026 |          | IJP*RECYCLE     | RECYCLE THE MEMORY TEST.         | 02432 55 4275 |
| 003027 | MUDROPF1 | ENTAU*ES1       | DISPLAY THE ES1 ERROR FLAG IN    | 02433 10 4240 |
| 003030 |          | ENTAL*N000000   | THE AU REGISTER AND CLEAR THE    | 02434 12 4366 |
| 003031 | *        |                 | AL REGISTER.                     |               |
| 003032 |          | STOP*40         |                                  | 02435 5056 40 |
| 003033 | *        |                 | THIS ERROR STOP IS FOR BANK 2    |               |
| 003034 | *        |                 | X OR Y STACK SELECTION FAILURES  |               |
| 003035 | *        |                 | FOR A 53K TO 65K MEMORY.         |               |

| SEQNO  | LABEL    | STATEMENT  | ADDRESS                         | INSTRUCT      |
|--------|----------|--|---------------------------------|---------------|
| 003036 |          | IJP*RECYCLE  | RECYCLE THE MEMORY TEST.        | 02436 55 4275 |
| 003037 | *        |  |                                 |               |
| 003040 | *        | MUDROPF2 USES THE ADDRESS SUBROUTINE TO TEST THE BANK 3    |                                 |               |
| 003041 | *        | ADDRESS TRANSLATION. IF AN ADDRESS TRANSLATION FAILURE     |                                 |               |
| 003042 | *        | EXISTS AN ERROR STOP WILL OCCUR IN THE ADDRESS SUBROUTINE. |                                 |               |
| 003043 | *        | IF NOT, AN ERROR STOP WILL OCCUR IN MUDROPF4.              |                                 |               |
| 003044 | *        |  |                                 |               |
| 003045 | MUDROPF2 | RJP*SPADR  | SPECIAL ADDRESS TRANSLATION     | 02437 76 1635 |
| 003046 | *        |  | TEST.                           |               |
| 003047 |          | ENTAL*N140000  | TEST BANK 3 ADDRESS TRANSLATION | 02440 12 4430 |
| 003050 | *        |  | USING TEST ADDRESSES IN         |               |
| 003051 |          | RJP*ADDRESS  | IN STACK 14.                    | 02441 76 2557 |
| 003052 |          | JP*MUDROPF4  | GO TO ERROR STOP IN MUDROPF4.   | 02442 34 2446 |
| 003053 | *        |  |                                 |               |
| 003054 | *        | MUDROPF3 USES THE ADDRESS SUBROUTINE TO TEST THE BANK 2    |                                 |               |
| 003055 | *        | ADDRESS TRANSLATION. IF AN ADDRESS TRANSLATION FAILURE     |                                 |               |
| 003056 | *        | EXISTS AN ERROR STOP WILL OCCUR IN THE ADDRESS SUBROUTINE. |                                 |               |
| 003057 | *        | IF NOT, AN ERROR STOP WILL OCCUR IN MUDROPF4.              |                                 |               |
| 003060 | *        |  |                                 |               |
| 003061 | MUDROPF3 | RJP*SPADR  | SPECIAL ADDRESS TRANSLATION     | 02443 76 1635 |
| 003062 | *        |  | TEST.                           |               |
| 003063 |          | ENTAL*N100000  | TEST BANK 2 ADDRESS TRANSLATION | 02444 12 4426 |
| 003064 | *        |  | USING TESTS ADDRESSES IN        |               |
| 003065 |          | RJP*ADDRESS  | STACK 10.                       | 02445 76 2557 |
| 003066 | *        |  | GO TO ERROR STOP IN MUDROPF4.   |               |
| 003067 | MUDROPF4 | ENTAU*ES1  | DISPLAY THE ES1 ERROR FLAG IN   | 02446 10 4240 |
| 003070 |          | ENTAL*N000000  | THE AU REGISTER AND CLEAR THE   | 02447 12 4366 |
| 003071 | *        |  | AL REGISTER.                    |               |
| 003072 |          | STOP*40  |                                 | 02450 5056 40 |
| 003073 | *        |  |                                 |               |
| 003074 | *        |  | THIS ERROR STOP IS FOR FAILURES |               |
|        |          |  | AFFECTING ALL OF BANK 2, OR ALL |               |

| SEQNO  | LABEL   | STATEMENT  | ADDRESS | INSTRUCT |
|--------|---------|--|---------|----------|
| 003075 | *       |  |         |          |
| 003076 | *       |  |         |          |
| 003077 | *       |  |         |          |
| 003100 |         | IJP*RECYCLE  |         |          |
| 003101 | NODROP  | RJP*SPADR  | 02451   | 55 4275  |
|        |         |  | 02452   | 76 1635  |
| 003102 |         | RJP*ADRXLAT  | 02453   | 76 2536  |
| 003103 |         | JP*TRANSFORM   | 02454   | 34 3005  |
| 003104 | *       |  |         |          |
| 003105 | *       |  |         |          |
| 003106 | *       | THE SELECT SUBROUTINE IS USED TO DETERMINE WHICH STACKS    |         |          |
| 003107 | *       | FAIL. EIGHT STACKS, 00 THROUGH 07 OR 10 THROUGH 17, ARE    |         |          |
| 003110 | *       | TESTED EACH TIME SELECT IS REFERENCED. IF BITS ARE BEING   |         |          |
| 003111 | *       | PICKED UP THE TEST PATTERN USED IS 000000, AND IF BITS ARE |         |          |
| 003112 | *       | BEING DROPPED THE TEST PATTERN USED IS 777777.             |         |          |
| 003113 | *       |  |         |          |
| 003114 | SELECT  | 0  | 02455   | 000000   |
| 003115 |         | ENTICR*1   | 02456   | 5072 01  |
| 003116 |         | STRAU*BASEADR  | 02457   | 46 4225  |
| 003117 |         | STRAL*TESTPATTN  | 02460   | 44 4303  |
| 003120 |         | ENTALK*7   | 02461   | 70 0007  |
| 003121 |         | STRAL*LOOP1  | 02462   | 44 4253  |
| 003122 |         | STRAL*LOOP2  | 02463   | 44 4254  |
| 003123 |         | ENTB*BASEADR   | 02464   | 32 4225  |
| 003124 | *       |  |         |          |
| 003125 |         | ENTAU*N000000  | 02465   | 10 4366  |
| 003126 | SELECT1 | LSHAU*1  | 02466   | 5045 01  |
| 003127 | *       |  |         |          |
| 003130 | SELECT2 | ENTAL*TESTPATTN  | 02467   | 12 4303  |
| 003131 |         | ENTSR*10   | 02470   | 5073 10  |
| 003132 |         | STRALB*0   | 02471   | 45 0000  |

| SEQNO  | LABEL   | STATEMENT       | ADDRESS | INSTRUCT |
|--------|---------|-----------------|---------|----------|
| 003133 |         | CMALB*0         | 02472   | 03 0000  |
| 003134 |         | JPEQ*SELECT3    | 02473   | 61 2477  |
| 003135 |         | LSHA*22         | 02474   | 5047 22  |
| 003136 |         | ADDALK*1        | 02475   | 71 0001  |
| 003137 |         | LSHA*22         | 02476   | 5047 22  |
| 003140 | SELECT3 | ENTSR*00        | 02477   | 5073 00  |
| 003141 |         | ENTAL*N010000   | 02500   | 12 4424  |
| 003142 | *       |                 |         |          |
| 003143 |         | ENTSR*10        | 02501   | 5073 10  |
| 003144 |         | ADDAL*1         | 02502   | 14 0001  |
| 003145 |         | STRAL*1         | 02503   | 44 0001  |
| 003146 |         | ENTSR*00        | 02504   | 5073 00  |
| 003147 |         | ISK*LOOP1       | 02505   | 57 4253  |
| 003150 |         | JP*SELECT1      | 02506   | 34 2466  |
| 003151 |         | LSHA*22         | 02507   | 5047 22  |
| 003152 |         | SLSET*HNSX      | 02510   | 51 4251  |
| 003153 | *       |                 |         |          |
| 003154 |         | STRAL*ES1       | 02511   | 44 4240  |
| 003155 |         | ENTB*BASEADR    | 02512   | 32 4225  |
| 003156 | *       |                 |         |          |
| 003157 |         | ENTAU*N000000   | 02513   | 10 4366  |
| 003160 | SELECT4 | LSHAU*1         | 02514   | 5045 01  |
| 003161 | *       |                 |         |          |
| 003162 | SELECT5 | ENTAL*TESTPATTN | 02515   | 12 4303  |
| 003163 |         | ENTSR*10        | 02516   | 5073 10  |
| 003164 |         | CMALB*0         | 02517   | 03 0000  |
| 003165 |         | JPEQ*SELECT6    | 02520   | 61 2524  |
| 003166 |         | LSHA*22         | 02521   | 5047 22  |
| 003167 |         | ADDALK*1        | 02522   | 71 0001  |
| 003170 |         | LSHA*22         | 02523   | 5047 22  |
| 003171 | SELECT6 | ENTSR*00        | 02524   | 5073 00  |

| SEQNO  | LABEL   | STATEMENT     | ADDRESS | INSTRUCT |
|--------|---------|---------------|---------|----------|
| 003172 |         | ENTAL*N010000 | 02525   | 12 4424  |
| 003173 | *       |               |         |          |
| 003174 |         | ENTSR*10      | 02526   | 5073 10  |
| 003175 |         | ADDAL*1       | 02527   | 14 0001  |
| 003176 |         | STRAL*1       | 02530   | 44 0001  |
| 003177 |         | ENTSR*00      | 02531   | 5073 00  |
| 003200 |         | ISK*LOOP2     | 02532   | 57 4254  |
| 003201 |         | JP*SELECT4    | 02533   | 34 2514  |
| 003202 |         | STRAU*ES2     | 02534   | 46 4241  |
| 003203 |         | IJP*SELECT    | 02535   | 55 2455  |
| 003204 | *       |               |         |          |
| 003205 | ADRXLAT | 0             | 02536   | 000000   |
| 003206 |         | ENTAL*HNS     | 02537   | 12 4250  |
| 003207 |         | ADDALK*7773   | 02540   | 71 7773  |
| 003210 |         | JPALNG*RADR0  | 02541   | 67 2554  |
| 003211 | *       |               |         |          |
| 003212 |         | ADDALK*7773   | 02542   | 71 7773  |
| 003213 |         | JPALNG*RADR1  | 02543   | 67 2552  |
| 003214 | *       |               |         |          |
| 003215 |         | ADDALK*7773   | 02544   | 71 7773  |
| 003216 |         | JPALNG*RADR2  | 02545   | 67 2550  |
| 003217 | *       |               |         |          |
| 003220 | *       |               |         |          |
| 003221 | *       |               |         |          |
| 003222 | *       |               |         |          |
| 003223 | RADR3   | ENTAL*N140000 | 02546   | 12 4430  |
| 003224 |         | RJP*ADDRESS   | 02547   | 76 2557  |
| 003225 | RADR2   | ENTAL*N100000 | 02550   | 12 4426  |

| SEONO  | LABEL   | STATEMENT   | ADDRESS | INSTRUCT |
|--------|---------|---|---------|----------|
| 003226 |         | RJP*ADDRESS TRANSLATION.                                  | 02551   | 76 2557  |
| 003227 | RADR1   | ENTAL*N040000 TEST THE BANK 1 ADDRESS                     | 02552   | 12 4425  |
| 003230 |         | RJP*ADDRESS TRANSLATION.                                  | 02553   | 76 2557  |
| 003231 | RADRO   | ENTAL*N010000 TEST THE BANK 0 ADDRESS                     | 02554   | 12 4424  |
| 003232 |         | RJP*ADDRESS TRANSLATION.                                  | 02555   | 76 2557  |
| 003233 |         | IJP*ADRXLAT   | 02556   | 55 2536  |
| 003234 | *       |   |         |          |
| 003235 | *       | THE ADDRESS SUBROUTINE TESTS THE ADDRESS TRANSLATION FOR  |         |          |
| 003236 | *       | THE BANK SPECIFIED BY THE BASE TEST ADDRESS. BEFORE THE   |         |          |
| 003237 | *       | ADDRESS ROUTINE IS REFERENCED, THE BASE TEST ADDRESS MUST |         |          |
| 003240 | *       | BE ENTERED INTO THE AL REGISTER. THE BASE TEST ADDRESSES  |         |          |
| 003241 | *       | USED TO TEST THE ADDRESS TRANSLATIONS ARE AS FOLLOWS      |         |          |
| 003242 | *       | 010000 FOR BANK 0, 040000 FOR BANK 1, 100000 FOR BANK 2,  |         |          |
| 003243 | *       | AND 140000 FOR BANK 3. THE ADDRESS SUBROUTINE USES THE    |         |          |
| 003244 | *       | DIGIT SUBROUTINE TO TEST EACH DIGIT TRANSLATION; IF A     |         |          |
| 003245 | *       | FAILURE IS ISOLATED AN ERROR STOP WILL OCCUR HERE IN THE  |         |          |
| 003246 | *       | ADDRESS TRANSLATION SUBROUTINE.                           |         |          |
| 003247 | *       |   |         |          |
| 003250 | ADDRESS | 0   | 02557   | 000000   |
| 003251 |         | STRAL*BASEADR SAVE THE BASE TEST ADDRESS                  | 02560   | 44 4225  |
| 003252 | *       |   |         |          |
| 003253 | *       | XDIODE USES THE DIGIT SUBROUTINE                          |         |          |
| 003254 | *       | TO TEST THE X AXIS DIODE                                  |         |          |
| 003255 | *       | SELECTION, BITS 09 THROUGH 11                             |         |          |
| 003256 | *       | OF THE ADDRESS.   |         |          |
| 003257 | *       |   |         |          |
| 003260 |         | RJP*SAVEADR SAVE THE CONTENTS OF THE TEST                 | 02561   | 76 4166  |
| 003261 | *       | ADDRESSES THAT MAY CONTAIN                                |         |          |
| 003262 | *       | PROGRAM INSTRUCTIONS.                                     |         |          |
| 003263 | XDIODE  | ENTALK*1000 TEST ADDRESS INCREMENT                        | 02562   | 70 1000  |
| 003264 |         | RJP*DIGIT TEST THE X AXIS DIODE SELECTION                 | 02563   | 76 2674  |

| SEQNO  | LABEL | STATEMENT     | ADDRESS                            | INSTRUCT      |
|--------|-------|---------------|------------------------------------|---------------|
| 003265 |       | RJP*RESTORE   | RESTORE THE ORIGINAL CONTENTS      | 02564 76 4205 |
| 003266 | *     |               | OF THE TEST ADDRESS.               |               |
| 003267 |       | ENTAU*EA2     | ENTER AU AND AL WITH X DIODE       | 02565 10 4232 |
| 003270 |       | ENTAL*EA      | SELECTION TEST RESULTS.            | 02566 12 4230 |
| 003271 |       | JPAUZ*XGROUP  | IF NO TEST ADDRESSES FAIL(EA2      | 02567 60 2606 |
| 003272 | *     |               | EQUALS 000000) GO TEST THE X       |               |
| 003273 | *     |               | AXIS GROUP SELECTION.              |               |
| 003274 |       | CMAL*N000377  | IF ALL TEST ADDRESSES FAIL(EA1     | 02570 02 4406 |
| 003275 |       | JPEQ*XGROUP   | EQUALS 000377) GO TEST THE X       | 02571 61 2606 |
| 003276 | *     |               | AXIS GROUP SELECTION.              |               |
| 003277 |       | ENTBK*7       |                                    | 02572 36 0007 |
| 003300 |       | ENTAL*EA2     |                                    | 02573 12 4232 |
| 003301 |       | CMALB*BIT00   | IF ONLY ONE TEST ADDRESS FAILED    | 02574 03 4307 |
| 003302 |       | JPEQ*XD1      | VERIFY THAT THE FAILURE IS NOT     | 02575 61 2600 |
| 003303 |       | BJP*L0K-2     | THE RESULT OF A BAD MATRIX         | 02576 73 2574 |
| 003304 | *     |               | DIODE.                             |               |
| 003305 |       | JP*XD2        | IF MORE THAN ONE BUT NOT ALL       | 02577 34 2602 |
| 003306 | *     |               | TEST ADDRESSES FAIL GO TO THE      |               |
| 003307 | *     |               | X AXIS DIODE SELECTION ERROR       |               |
| 003310 | *     |               | STOP.                              |               |
| 003311 | XD1   | ENTALK*0100   | VERIFY THE FAILURE.                | 02600 70 0100 |
| 003312 |       | RJP*VERIFYDIO |                                    | 02601 76 2746 |
| 003313 | *     |               | IF THE FAILURE DOES NOT REPEAT FOR |               |
| 003314 | *     |               | A DIFFERENT X MATRIX DIODE PAIR    |               |
| 003315 | *     |               | CONTROL IS TRANSFERED TO THE       |               |
| 003316 | *     |               | MATRIX DIODE TEST DIODEMTRX. IF    |               |
| 003317 | *     |               | IF THE FAILURE REPEATS THE X AXIS  |               |
| 003320 | *     |               | DIODE SELECTION ERROR STOP         |               |
| 003321 | *     |               | OCCURS.                            |               |



| SEQNO  | LABEL  | STATEMENT  | ADDRESS | INSTRUCT |
|--------|--------|--|---------|----------|
| 003322 | XD2    | ENTAU*EA1  | 02602   | 10 4231  |
| 003323 |        | ENTAL*EA2  | 02603   | 12 4232  |
| 003324 | *      |  |         |          |
| 003325 |        | STOP*40  | 02604   | 5056 40  |
| 003326 | *      | THIS ERROR STOP IS FOR X AXIS  |         |          |
| 003327 | *      |  |         |          |
| 003330 | *      | DIODE SELECTION FAILURES. SEE<br>THE DIGIT SUBROUTINE DESCRIPTION            |         |          |
| 003331 | *      |  |         |          |
| 003332 | *      | FOR AN EXPLANATION OF THE EA1<br>AND EA2 ERROR FLAGS.                        |         |          |
| 003333 |        | IJP*RECYCLE  | 02605   | 55 4275  |
| 003334 | *      |  |         |          |
| 003335 | *      | XGROUP USES THE DIGIT SUBROUTINE   |         |          |
| 003336 | *      |  |         |          |
| 003337 | *      | TO TEST THE X AXIS GROUP<br>SELECTION, BITS 06 THROUGH 08<br>OF THE ADDRESS. |         |          |
| 003340 | *      |  |         |          |
| 003341 | *      |  |         |          |
| 003342 | XGROUP | ENTALK*0100  | 02606   | 70 0100  |
| 003343 |        | RJP*DIGIT  | 02607   | 76 2674  |
| 003344 |        | JPAUZ*YDIODE   | 02610   | 60 2630  |
| 003345 | *      | IF NO TEST ADDRESSES FAIL(EA2<br>EQUALS 000000) GO TEST THE Y                |         |          |
| 003346 | *      |  |         |          |
| 003347 |        | AXIS DIODE SELECTION.  |         |          |
| 003350 |        | IF ALL TEST ADDRESSES FAIL(EA1<br>EQUALS 000377) GO TEST THE                 | 02611   | 02 4406  |
| 003351 | *      | Y AXIS DIODE SELECTION.  | 02612   | 61 2630  |
| 003352 |        |  |         |          |
| 003353 |        | ENTBK*7  | 02613   | 36 0007  |
| 003354 |        | ENTAL*EA2  | 02614   | 12 4232  |
| 003355 |        | CMALB*BIT00  | 02615   | 03 4307  |
| 003355 |        | JPEQ*XG1   | 02616   | 61 2621  |
| 003356 |        |  |         |          |
| 003357 | *      | BJP*L0K-2  | 02617   | 73 2615  |
|        |        | THE RESULT OF A BAD MATRIX<br>DIODE OR STACK TRANSFORMER.                    |         |          |

| SEQNO  | LABEL | STATEMENT                          | ADDRESS | INSTRUCT |
|--------|-------|------------------------------------|---------|----------|
| 003360 |       | JP*XG2                             | 02620   | 34 2624  |
| 003361 | *     | TEST ADDRESSES FAIL GO TO THE      |         |          |
| 003362 | *     | X AXIS GROUP SELECTION ERROR       |         |          |
| 003363 | *     | STOP.                              |         |          |
| 003364 | XG1   | ENTALK*1000                        | 02621   | 70 1000  |
| 003365 |       | RJP*VERIFYDIO                      | 02622   | 76 2746  |
| 003366 | *     | IF THE FAILURE DOES NOT REPEAT FOR |         |          |
| 003367 | *     | A DIFFERENT X MATRIX DIODE PAIR    |         |          |
| 003370 | *     | USING THE SAME X AXIS GROUP        |         |          |
| 003371 | *     | SELECTION TRANSFORMER              |         |          |
| 003372 | *     | PROGRAM CONTROL IS TRANSFERED      |         |          |
| 003373 | *     | FROM VERIFYDIO TO THE MATRIX       |         |          |
| 003374 | *     | DIODE TEST DIOMTRX.                |         |          |
| 003375 |       | RJP*VERFTRFM                       | 02623   | 76 2765  |
| 003376 | *     | IF THE FAILURE DOES NOT REPEAT     |         |          |
| 003377 | *     | FOR THE CORRESPONDING X AXIS       |         |          |
| 003400 | *     | GROUP SELECTION TRANSFORMER        |         |          |
| 003401 | *     | FOR A DIFFERENT STACK PROGRAM      |         |          |
| 003402 | *     | CONTROL WILL TRANSFER FROM         |         |          |
| 003403 | *     | VERFTRFM TO THE STACK              |         |          |
| 003404 | *     | TRANSFORMER TEST TRANSFORM. IF     |         |          |
| 003405 | *     | FAILURE REPEATS, THE X GROUP       |         |          |
| 003406 | *     | SELECTION ERROR STOP WILL OCCUR.   |         |          |
| 003407 | XG2   | ENTAU*EA1                          | 02624   | 10 4231  |
| 003410 |       | ENTAL*EA2                          | 02625   | 12 4232  |
| 003411 | *     | EA2 IN THE AL REGISTER.            |         |          |
| 003412 |       | STOP*40                            | 02626   | 5056 40  |
| 003413 | *     | THIS ERROR STOP IS FOR X AXIS      |         |          |
| 003414 | *     | GROUP SELECTION FAILURES. SEE      |         |          |

| SEQNO  | LABEL  | STATEMENT                                   | ADDRESS | INSTRUCT |
|--------|--------|---|---------|----------|
| 003415 | *      | THE DIGIT SUBROUTINE DESCRIPTION            |         |          |
| 003416 | *      | FOR AN EXPLANATION OF THE EA1               |         |          |
| 003417 | *      | AND EA2 ERROR FLAGS.                        |         |          |
| 003420 |        | IJP*RECYCLE RECYCLE THE MEMORY TEST.        | 02627   | 55 4275  |
| 003421 | *      |   |         |          |
| 003422 | *      | YDIODE USES THE DIGIT SUBROUTINE            |         |          |
| 003423 | *      | TO TEST THE Y AXIS DIODE                    |         |          |
| 003424 | *      | SELECTION, BITS 03 THROUGH 05               |         |          |
| 003425 | *      | OF THE ADDRESS.                             |         |          |
| 003426 | *      |   |         |          |
| 003427 | YDIODE | ENTALK*0010 TEST ADDRESS INCREMENT          | 02630   | 70 0010  |
| 003430 |        | RJP*DIGIT TEST THE Y AXIS DIODE SELECTION   | 02631   | 76 2674  |
| 003431 |        | JPAUZ*YGROUP IF NO TEST ADDRESSES FAIL(EA2  | 02632   | 60 2651  |
| 003432 | *      | EQUALS 000000) GO TEST THE Y                |         |          |
| 003433 | *      | AXIS GROUP SELECTION.                       |         |          |
| 003434 |        | CMAL*N000377 IF ALL TEST ADDRESSES FAIL(EA1 | 02633   | 02 4406  |
| 003435 |        | JPEQ*YGROUP EQUALS 000377) GO TEST THE Y    | 02634   | 61 2651  |
| 003436 | *      | AXIS GROUP SELECTION.                       |         |          |
| 003437 |        | ENTBK*7                                     | 02635   | 36 0007  |
| 003440 |        | ENTAL*EA2                                   | 02636   | 12 4232  |
| 003441 |        | CMALB*BIT00 IF ONLY ONE TEST ADDRESS FAILED | 02637   | 03 4307  |
| 003442 |        | JPEQ*YD1 VERIFY THAT THE FAILURE IS NOT     | 02640   | 61 2643  |
| 003443 |        | BJP*LOK-2 THE RESULT OF A BAD MATRIX        | 02641   | 73 2637  |
| 003444 | *      | DIODE.                                      |         |          |
| 003445 |        | JP*YD2 IF MORE THAN ONE BUT NOT ALL         | 02642   | 34 2645  |
| 003446 | *      | TEST ADDRESSES FAIL GO TO THE               |         |          |
| 003447 | *      | Y AXIS DIODE SELECTION ERROR                |         |          |
| 003450 | *      | STOP.                                       |         |          |
| 003451 | YD1    | ENTALK*0001 VERIFY THE FAILURE.             | 02643   | 70 0001  |
| 003452 |        | RJP*VERIFYDIO                               | 02644   | 76 2746  |

| SEONO  | LABEL  | STATEMENT   | ADDRESS | INSTRUCT |
|--------|--------|---|---------|----------|
| 003453 | *      | IF THE FAILURE DOES NOT REPEAT FOR                            |         |          |
| 003454 | *      | A DIFFERENT MATRIX DIODE PAIR                                 |         |          |
| 003455 | *      | PROGRAM CONTROL IS TRANSFERED TO                              |         |          |
| 003456 | *      | THE MATRIX DIODE TEST DIODEMTRX.                              |         |          |
| 003457 | *      | IF THE FAILURE REPEATS THE Y                                  |         |          |
| 003460 | *      | AXIS DIODE SELECTION ERROR STOP                               |         |          |
| 003461 | *      | OCCURS.   |         |          |
| 003462 | YD2    | ENTAU*EA1   | 02645   | 10 4231  |
| 003463 |        | ENTAL*EA2   | 02646   | 12 4232  |
| 003464 | *      | EA2 IN THE AL REGISTER.                                       |         |          |
| 003465 |        | STOP*40   | 02647   | 5056 40  |
| 003466 | *      | THIS ERROR STOP IS FOR Y AXIS                                 |         |          |
| 003467 | *      | DIODE SELECTION FAILURES. SEE                                 |         |          |
| 003470 | *      | THE DIGIT SUBROUTINE DESCRIPTION                              |         |          |
| 003471 | *      | FOR AN EXPLANATION OF THE EA1                                 |         |          |
| 003472 | *      | AND EA2 ERROR FLAGS.  |         |          |
| 003473 |        | IJP*RECYCLE   | 02650   | 55 4275  |
| 003474 | *      | YGROUP USES THE DIGIT SUBROUTINE                              |         |          |
| 003475 | *      | TO TEST THE Y AXIS GROUP                                      |         |          |
| 003476 | *      | SELECTION, BITS 00 THROUGH 02                                 |         |          |
| 003477 | *      | OF THE ADDRESS.   |         |          |
| 003500 | YGROUP | ENTALK*0001   | 02651   | 70 0001  |
| 003501 |        | RJP*DIGIT   | 02652   | 76 2674  |
| 003502 |        | JPAUZ*ADDRESS1  | 02653   | 60 2673  |
| 003503 | *      | IF NO TEST ADDRESSES FAIL(EA2<br>EQUALS 000000) GO TO ADDRESS |         |          |
| 003504 | *      | SUBROUTINE EXIT.  |         |          |
| 003505 |        | CMAL*N000377  | 02654   | 02 4406  |

| SEQNO  | LABEL | STATEMENT     | ADDRESS                            | INSTRUCT      |
|--------|-------|---------------|------------------------------------|---------------|
| 003506 |       | JPEQ*ADDRESS1 | EQUALS 000377) GO TO ADDRESS       | 02655 61 2673 |
| 003507 |       | ENTBK*7       |                                    | 02656 36 0007 |
| 003510 |       | ENTAL*EA2     |                                    | 02657 12 4232 |
| 003511 |       | CMALB*BIT00   | IF ONLY ONE TEST ADDRESS FAILED    | 02660 03 4307 |
| 003512 |       | JPEQ*YG1      | VERIFY THAT THE FAILURE IS NOT     | 02661 61 2664 |
| 003513 |       | BJP*LOK-2     | THE RESULT OF A BAD MATRIX         | 02662 73 2660 |
| 003514 | *     |               | DIODE.                             |               |
| 003515 |       | JP*YG2        | IF MORE THAN ONE BUT NOT ALL TEST  | 02663 34 2667 |
| 003516 | *     |               | ADDRESSES FAIL GO TO THE Y AXIS    |               |
| 003517 | *     |               | GROUP SELECTION ERROR STOP.        |               |
| 003520 | YG1   | ENTALK*0010   | VERIFY THE FAILURE                 | 02664 70 0010 |
| 003521 |       | RJP*VERIFYDIO |                                    | 02665 76 2746 |
| 003522 | *     |               | IF THE FAILURE DOES NOT REPEAT FOR |               |
| 003523 | *     |               | A DIFFERENT Y MATRIX DIODE PAIR    |               |
| 003524 | *     |               | USING THE SAME Y AXIS GROUP        |               |
| 003525 | *     |               | SELECTION TRANSFORMER              |               |
| 003526 | *     |               | PROGRAM CONTROL IS TRANSFERED      |               |
| 003527 | *     |               | FROM VERIFYDIO TO THE MATRIX       |               |
| 003530 | *     |               | DIODE TEST DIOMTRX.                |               |
| 003531 |       | RJP*VERFTRFM  |                                    | 02666 76 2765 |
| 003532 | *     |               | IF THE FAILURE DOES NOT REPEAT     |               |
| 003533 | *     |               | FOR THE CORRESPONDING Y AXIS       |               |
| 003534 | *     |               | GROUP SELECTION TRANSFORMER        |               |
| 003535 | *     |               | FOR A DIFFERENT STACK, PROGRAM     |               |
| 003536 | *     |               | CONTROL WILL TRANSFER FROM         |               |
| 003537 | *     |               | VERFTRFM TO THE STACK              |               |
| 003540 | *     |               | TRANSFORMER TEST TRANSFORM.        |               |
| 003541 | *     |               | IF THE FAILURE REPEATS THE Y AXIS  |               |
| 003542 | *     |               | GROUP SELECTION ERROR STOP         |               |

| SEQNO  | LABEL    | STATEMENT     | ADDRESS | INSTRUCT |
|--------|----------|---------------|---------|----------|
| 003543 | *        |               |         |          |
| 003544 | YG2      | ENTAU*EA1     | 02667   | 10 4231  |
| 003545 |          | ENTAL*EA2     | 02670   | 12 4232  |
| 003546 | *        |               |         |          |
| 003547 |          | STOP*40       | 02671   | 5056 40  |
| 003550 | *        |               |         |          |
| 003551 | *        |               |         |          |
| 003552 | *        |               |         |          |
| 003553 | *        |               |         |          |
| 003554 | *        |               |         |          |
| 003555 |          | IJP*RECYCLE   | 02672   | 55 4275  |
| 003556 | ADDRESS1 | IJP*ADDRESS   | 02673   | 55 2557  |
| 003557 | DIGIT    | 0             | 02674   | 000000   |
| 003560 |          | STRADR*DIGIT3 | 02675   | 74 2716  |
| 003561 |          | STRADR*DIGIT6 | 02676   | 74 2737  |
| 003562 |          | ENTALK*7      | 02677   | 70 0007  |
| 003563 |          | STRAL*LOOP1   | 02700   | 44 4253  |
| 003564 |          | STRAL*LOOP2   | 02701   | 44 4254  |
| 003565 |          | ENTB*BASEADR  | 02702   | 32 4225  |
| 003566 | *        |               |         |          |
| 003567 |          | ENTALK*0000   | 02703   | 70 0000  |
| 003570 | DIGIT1   | LSHAL*1       | 02704   | 5046 01  |
| 003571 | *        |               |         |          |
| 003572 | *        |               |         |          |
| 003573 |          | ENTAU*N777777 | 02705   | 10 4435  |
| 003574 |          | ENTSR*10      | 02706   | 5073 10  |
| 003575 |          | STRAUB*0      | 02707   | 47 0000  |
| 003576 |          | ENTAUB*0      | 02710   | 11 0000  |
| 003577 |          | ENTSR*00      | 02711   | 5073 00  |
| 003600 |          | JPAUZ*DIGIT2  | 02712   | 60 2715  |

OCCURS.

DISPLAY THE ERROR FLAG EA1 IN THE  
AU REGISTER AND THE ERROR FLAG  
EA2 IN THE AL REGISTER.

THIS ERROR STOP IS FOR Y AXIS  
GROUP SELECTION FAILURES. SEE  
THE DIGIT SUBROUTINE DESCRIPTION

FOR AN EXPLANATION OF THE EA1  
AND EA2 ERROR FLAGS.

RECYCLE THE MEMORY TEST.

EXIT THE ADDRESS SUBROUTINE.

MODIFY TEST ADDRESS  
INCREMENTATION INSTRUCTIONS.

SET UP LOOPS FOR EIGHT TEST  
ADDRESSES.

ENTER B WITH THE FIRST TEST  
ADDRESS.

INITIATE EA1 ERROR FLAG.

SHIFT ERROR CODE TO RECEIVE  
THE RESULTS OF THE NEXT TEST  
ADDRESS.

TEST PATTERN  
SEE NOTE 1 IN APPENDIX A.

HAVE ALL THE BITS DROPPED?

SEE NOTE 2 IN APPENDIX A.  
NO, GO SET ERROR BIT.

| SEQNO  | LABEL  | STATEMENT     | ADDRESS | INSTRUCT |
|--------|--------|---------------|---------|----------|
| 003601 |        | CPAU*0        | 02713   | 5062 00  |
| 003602 |        | JPAUZ*DIGIT3  | 02714   | 60 2716  |
| 003603 | DIGIT2 | ADDALK*1      | 02715   | 71 0001  |
| 003604 | *      |               |         |          |
| 003605 | DIGIT3 | ENTBKB*0      | 02716   | 37 0000  |
| 003606 |        | ISK*LOOP1     | 02717   | 57 4253  |
| 003607 |        | JP*DIGIT1     | 02720   | 34 2704  |
| 003610 |        | STRAL*EA      | 02721   | 44 4230  |
| 003611 | *      |               |         |          |
| 003612 |        | ADDAL*BASEADR | 02722   | 14 4225  |
| 003613 |        | STRAL*EA1     | 02723   | 44 4231  |
| 003614 |        | ENTB*BASEADR  | 02724   | 32 4225  |
| 003615 | *      |               |         |          |
| 003616 |        | ENTALK*0      | 02725   | 70 0000  |
| 003617 | DIGIT4 | LSHAL*1       | 02726   | 5046 01  |
| 003620 | *      |               |         |          |
| 003621 | *      |               |         |          |
| 003622 |        | ENTSR*10      | 02727   | 5073 10  |
| 003623 |        | ENTAUB*0      | 02730   | 11 0000  |
| 003624 |        | ENTSR*00      | 02731   | 5073 00  |
| 003625 |        | JPAUZ*DIGIT5  | 02732   | 60 2735  |
| 003626 |        | CPAU*0        | 02733   | 5062 00  |
| 003627 |        | JPAUZ*DIGIT6  | 02734   | 60 2737  |
| 003630 | DIGIT5 | ADDALK*1      | 02735   | 71 0001  |
| 003631 | *      |               |         |          |
| 003632 |        | STRB*FAILTEST | 02736   | 42 4247  |
| 003633 | *      |               |         |          |
| 003634 | DIGIT6 | ENTBKB*0      | 02737   | 37 0000  |
| 003635 |        | ISK*LOOP2     | 02740   | 57 4254  |
| 003636 |        | JP*DIGIT4     | 02741   | 34 2726  |
| 003637 |        | STRAL*EA2     | 02742   | 44 4232  |

| SEQNO  | LABEL      | STATEMENT         | ADDRESS | INSTRUCT |
|--------|------------|-------------------|---------|----------|
| 003640 |            | ENTAU*EA2         | 02743   | 10 4232  |
| 003641 | *          |                   |         |          |
| 003642 |            | ENTAL*EA          | 02744   | 12 4230  |
| 003643 | *          |                   |         |          |
| 003644 | *          |                   |         |          |
| 003645 |            | IJP*DIGIT         | 02745   | 55 2674  |
| 003646 | VERIFYDIO  | 0                 | 02746   | 000000   |
| 003647 |            | ADDAL*FAILTEST    | 02747   | 14 4247  |
| 003650 | *          |                   |         |          |
| 003651 | *          |                   |         |          |
| 003652 | *          |                   |         |          |
| 003653 |            | ENTSR*10          | 02750   | 5073 10  |
| 003654 |            | STRAL*0001        | 02751   | 44 0001  |
| 003655 | *          |                   |         |          |
| 003656 |            | ENTALK*7777       | 02752   | 70 7777  |
| 003657 |            | ENTAUB*0          | 02753   | 11 0000  |
| 003660 | *          |                   |         |          |
| 003661 |            | STRALB*0          | 02754   | 45 0000  |
| 003662 |            | ENTALB*0          | 02755   | 13 0000  |
| 003663 |            | STRAUB*0          | 02756   | 47 0000  |
| 003664 | *          |                   |         |          |
| 003665 |            | ENTSR*00          | 02757   | 5073 00  |
| 003666 | *          |                   |         |          |
| 003667 | *          |                   |         |          |
| 003670 |            | JPALZ*VERIFYDIO1  | 02760   | 61 2764  |
| 003671 |            | CPAL*0            | 02761   | 5061 00  |
| 003672 |            | JPALNZ*VERIFYDIO1 | 02762   | 63 2764  |
| 003673 |            | JP*DIODEMTRX      | 02763   | 34 3105  |
| 003674 | *          |                   |         |          |
| 003675 | VERIFYDIO1 | IJP*VERIFYDIO     | 02764   | 55 2746  |
| 003676 | *          |                   |         |          |



| SEQNO  | LABEL     | STATEMENT        | ADDRESS | INSTRUCT |
|--------|-----------|------------------|---------|----------|
| 003677 | VERFTRFM  | 0                | 02765   | 000000   |
| 003700 |           | ENTAL*FAILTEST   | 02766   | 12 4247  |
| 003701 |           | ADDAL*N010000    | 02767   | 14 4424  |
| 003702 | *         |                  |         |          |
| 003703 |           | ENTSR*10         | 02770   | 5073 10  |
| 003704 |           | STRAL*0001       | 02771   | 44 0001  |
| 003705 | *         |                  |         |          |
| 003706 |           | ENTALK*7777      | 02772   | 70 7777  |
| 003707 |           | ENTAUB*0         | 02773   | 11 0000  |
| 003710 | *         |                  |         |          |
| 003711 |           | STRALB*0         | 02774   | 45 0000  |
| 003712 |           | ENTALB*0         | 02775   | 13 0000  |
| 003713 |           | STRAUB*0         | 02776   | 47 0000  |
| 003714 | *         |                  |         |          |
| 003715 |           | ENTSR*00         | 02777   | 5073 00  |
| 003716 |           | JPALZ*VERFTRFM1  | 03000   | 61 3004  |
| 003717 |           | CPAL*0           | 03001   | 5061 00  |
| 003720 |           | JPALNZ*VERFTRFM1 | 03002   | 63 3004  |
| 003721 |           | JP*TRANSFORM     | 03003   | 34 3005  |
| 003722 | VERFTRFM1 | IJP*VERFTRFM     | 03004   | 55 2765  |
| 003723 | TRANSFORM | ENTAL*HNS        | 03005   | 12 4250  |
| 003724 |           | STRAL*LOOP1      | 03006   | 44 4253  |
| 003725 | *         |                  |         |          |
| 003726 | TRANSFM1  | ENTAL*LOOP1      | 03007   | 12 4253  |
| 003727 | *         |                  |         |          |
| 003730 |           | LSHAL*14         | 03010   | 5046 14  |
| 003731 | *         |                  |         |          |
| 003732 |           | ADDAL*N006000    | 03011   | 14 4420  |
| 003733 |           | STRAL*BASEADR    | 03012   | 44 4225  |
| 003734 | XTRANSFM  | ENTAL*N000100    | 03013   | 12 4401  |
| 003735 | *         |                  |         |          |

| SEQNO  | LABEL    | STATEMENT       | ADDRESS | INSTRUCT |
|--------|----------|-----------------|---------|----------|
| 003736 |          | ENTAU*N001000   | 03014   | 10 4417  |
| 003737 | *        |                 |         |          |
| 003740 | *        |                 |         |          |
| 003741 | *        |                 |         |          |
| 003742 | *        |                 |         |          |
| 003743 |          | RJP*TRAN        | 03015   | 76 3035  |
| 003744 | *        |                 |         |          |
| 003745 |          | JPAUNG*YTRANSFM | 03016   | 66 3023  |
| 003746 |          | RSHAL*6         | 03017   | 5042 06  |
| 003747 | *        |                 |         |          |
| 003750 | *        |                 |         |          |
| 003751 | *        |                 |         |          |
| 003752 |          | SLCL*N000007    | 03020   | 52 4372  |
| 003753 | *        |                 |         |          |
| 003754 | *        |                 |         |          |
| 003755 | *        |                 |         |          |
| 003756 |          | STOP*40         | 03021   | 5056 40  |
| 003757 | *        |                 |         |          |
| 003760 | *        |                 |         |          |
| 003761 | *        |                 |         |          |
| 003762 | *        |                 |         |          |
| 003763 | *        |                 |         |          |
| 003764 | *        |                 |         |          |
| 003765 |          | IJP*RECYCLE     | 03022   | 55 4275  |
| 003766 | YTRANSFM | ENTAL*N000001   | 03023   | 12 4367  |
| 003767 | *        |                 |         |          |
| 003770 |          | ENTAU*N000010   | 03024   | 10 4373  |
| 003771 | *        |                 |         |          |
| 003772 | *        |                 |         |          |
| 003773 | *        |                 |         |          |
| 003774 | *        |                 |         |          |

| SEQNO  | LABEL    | STATEMENT       | ADDRESS | INSTRUCT |
|--------|----------|-----------------|---------|----------|
| 003775 |          | RJP*TRAN        | 03025   | 76 3035  |
| 003776 | *        |                 |         |          |
| 003777 |          | JPAUNG*TRANSFM2 | 03026   | 66 3032  |
| 004000 | *        |                 |         |          |
| 004001 | *        |                 |         |          |
| 004002 |          | SLCL*N000007    | 03027   | 52 4372  |
| 004003 | *        |                 |         |          |
| 004004 |          | STOP*40         | 03030   | 5056 40  |
| 004005 | *        |                 |         |          |
| 004006 | *        |                 |         |          |
| 004007 | *        |                 |         |          |
| 004010 | *        |                 |         |          |
| 004011 | *        |                 |         |          |
| 004012 |          | IJP*RECYCLE     | 03031   | 55 4275  |
| 004013 | TRANSFM2 | ISK*LOOP1       | 03032   | 57 4253  |
| 004014 |          | JP*TRANSFM1     | 03033   | 34 3007  |
| 004015 | *        |                 |         |          |
| 004016 |          | JP*DIODEMTRX    | 03034   | 34 3105  |
| 004017 | *        |                 |         |          |
| 004020 | *        |                 |         |          |
| 004021 | TRAN     | 0               | 03035   | 000000   |
| 004022 | *        |                 |         |          |
| 004023 |          | STRAU*VERIFY    | 03036   | 46 4306  |
| 004024 |          | STRADR*TRAN2    | 03037   | 74 3060  |
| 004025 | *        |                 |         |          |
| 004026 |          | ENTB*BASEADR    | 03040   | 32 4225  |
| 004027 | *        |                 |         |          |
| 004030 |          | ENTALK*7        | 03041   | 70 0007  |
| 004031 |          | STRAL*LOOP2     | 03042   | 44 4254  |
| 004032 |          | CL*FAILTEST     | 03043   | 40 4247  |
| 004033 | *        |                 |         |          |

| SEQNO  | LABEL | STATEMENT        | ADDRESS | INSTRUCT |
|--------|-------|------------------|---------|----------|
| 004034 | TRAN1 | ENTAL*N777777    | 03044   | 12 4435  |
| 004035 |       | ENTSR*10         | 03045   | 5073 10  |
| 004036 |       | ENTAUB*0         | 03046   | 11 0000  |
| 004037 | *     |                  |         |          |
| 004040 |       | STRALB*0         | 03047   | 45 0000  |
| 004041 |       | ENTALB*0         | 03050   | 13 0000  |
| 004042 |       | STRAUB*0         | 03051   | 47 0000  |
| 004043 | *     |                  |         |          |
| 004044 |       | ENTSR*00         | 03052   | 5073 00  |
| 004045 |       | CMAL*N777777     | 03053   | 02 4435  |
| 004046 |       | JPEQ*TRAN2       | 03054   | 61 3060  |
| 004047 |       | ENTAU*FAILTEST   | 03055   | 10 4247  |
| 004050 | *     |                  |         |          |
| 004051 |       | JPAUNZ*TRANAUNEG | 03056   | 62 3103  |
| 004052 | *     |                  |         |          |
| 004053 |       | STRB*FAILTEST    | 03057   | 42 4247  |
| 004054 | *     |                  |         |          |
| 004055 | TRAN2 | ENTBKB*0         | 03060   | 37 0000  |
| 004056 | *     |                  |         |          |
| 004057 |       | ISK*LOOP2        | 03061   | 57 4254  |
| 004060 | *     |                  |         |          |
| 004061 |       | JP*TRAN1         | 03062   | 34 3044  |
| 004062 |       | ENTAL*FAILTEST   | 03063   | 12 4247  |
| 004063 |       | JPALZ*TRANAUNEG  | 03064   | 61 3103  |
| 004064 | *     |                  |         |          |
| 004065 |       | ADDAL*VERIFY     | 03065   | 14 4306  |
| 004066 | *     |                  |         |          |
| 004067 |       | ENTSR*10         | 03066   | 5073 10  |
| 004070 |       | STRAL*1          | 03067   | 44 0001  |
| 004071 | *     |                  |         |          |
| 004072 |       | ENTALK*7777      | 03070   | 70 7777  |

| SEQNO  | LABEL     | STATEMENT  | ADDRESS | INSTRUCT |
|--------|-----------|--|---------|----------|
| 004073 |           | ENTaub*0   | 03071   | 11 0000  |
| 004074 | *         |  |         |          |
| 004075 |           | STRALB*0   | 03072   | 45 0000  |
| 004076 |           | ENTALB*0   | 03073   | 13 0000  |
| 004077 |           | STRAUB*0   | 03074   | 47 0000  |
| 004100 | *         |  |         |          |
| 004101 |           | ENTSR*00   | 03075   | 5073 00  |
| 004102 |           | CMAL*N777777   | 03076   | 02 4435  |
| 004103 | *         |  |         |          |
| 004104 |           | JPEQ*DIODEMTRX   | 03077   | 61 3105  |
| 004105 |           | ENTAU*LOOP1  | 03100   | 10 4253  |
| 004106 |           | ENTAL*FAILTEST   | 03101   | 12 4247  |
| 004107 | *         |  |         |          |
| 004110 |           | JP*EXITTRAN  | 03102   | 34 3104  |
| 004111 | TRANAUNEG | ENTAU*N777777  | 03103   | 10 4435  |
| 004112 | *         |  |         |          |
| 004113 | EXITTRAN  | IJP*TRAN   | 03104   | 55 3035  |
| 004114 | *         |  |         |          |
| 004115 | *         | DIODEMTRX TESTS ALL MATRIX DIODES EXCEPT X AXIS MATRIX |         |          |
| 004116 | *         | DIODES 00 THROUGH 07 ON STACK 00.                      |         |          |
| 004117 | *         |  |         |          |
| 004120 | DIODEMTRX | ENTAL*HNS  | 03105   | 12 4250  |
| 004121 |           | STRAL*LOOP1  | 03106   | 44 4253  |
| 004122 | *         |  |         |          |
| 004123 | DIOMTRX1  | ENTAL*LOOP1  | 03107   | 12 4253  |
| 004124 |           | LSHAL*14   | 03110   | 5046 14  |
| 004125 |           | STRAL*BASEADR  | 03111   | 44 4225  |
| 004126 |           | ENTB*BASEADR   | 03112   | 32 4225  |
| 004127 | *         |  |         |          |
| 004130 |           | JPALZ*DIOMTRX2   | 03113   | 61 3117  |
| 004131 |           | ENTALK*77  | 03114   | 70 0077  |

| SEQNO  | LABEL    | STATEMENT       | ADDRESS | INSTRUCT |
|--------|----------|-----------------|---------|----------|
| 004132 |          | STRAL*LOOP2     | 03115   | 44 4254  |
| 004133 |          | JP*DIOMTRX3     | 03116   | 34 3122  |
| 004134 | DIOMTRX2 | ENTALK*70       | 03117   | 70 0070  |
| 004135 |          | STRAL*LOOP2     | 03120   | 44 4254  |
| 004136 |          | ENTBKB*0700     | 03121   | 37 0700  |
| 004137 | DIOMTRX3 | ENTALK*0100     | 03122   | 70 0100  |
| 004140 | *        |                 |         |          |
| 004141 |          | STRADR*DIODE3   | 03123   | 74 3202  |
| 004142 | *        |                 |         |          |
| 004143 |          | ENTALK*0001     |         |          |
| 004144 |          |                 | 03124   | 70 0001  |
| 004145 | *        | STRADR*DIODE4   | 03125   | 74 3210  |
| 004146 | *        |                 |         |          |
| 004147 | *        |                 |         |          |
| 004150 | *        |                 |         |          |
| 004151 |          | RJP*DIODE       | 03126   | 76 3163  |
| 004152 | *        |                 |         |          |
| 004153 |          | JPALZ*DIOMTRX4  | 03127   | 61 3136  |
| 004154 | *        |                 |         |          |
| 004155 | *        |                 |         |          |
| 004156 |          | JPAUNZ*DIOMTRX4 | 03130   | 62 3136  |
| 004157 | *        |                 |         |          |
| 004160 | *        |                 |         |          |
| 004161 | *        |                 |         |          |
| 004162 |          | ENTAU*LOOP1     | 03131   | 10 4253  |
| 004163 |          | RSHAL*6         | 03132   | 5042 06  |
| 004164 |          | SLCL*N000077    | 03133   | 52 4400  |
| 004165 | *        |                 |         |          |
| 004166 |          | STOP*40         | 03134   | 5056 40  |
| 004167 | *        |                 |         |          |

DIODES ON THE STACK STARTING WITH 00.  
 YES, TEST ONLY 57 OF THE X AXIS MATRIX DIODES ON STACK (00) STARTING WITH 07.

TEST ADDRESS INCREMENT FOR X AXIS MATRIX DIODES.  
 MODIFY TEST ADDRESS INCREMENTATION INSTRUCTION.  
 IF AN X AXIS MATRIX DIODE FAILURE

OCCURS THIS NUMBER IS USED TO FORM A SECOND ADDRESS SERVED

BY THE FAILING DIODE. IF THIS SECOND ADDRESS ALSO FAILS THE DIODE FAILURE IS VERIFIED.

TEST THE X AXIS DIODE MATRIX FOR STACK (LOOP1).

NO TEST ADDRESSES FAILED, THE X AXIS DIODE MATRIX IS OK.  
 GO TEST THE Y MATRIX DIODES.

MORE THAN ONE TEST ADDRESS FAILED, THE FAILURE IS NOT DUE TO AN X MATRIX DIODE FAILURE.  
 GO TEST THE Y MATRIX DIODES.

FAILING STACK NUMBER TO AU SHIFT X DIGITS TO LOWEST TWO DIGIT POSITIONS. CLEAR ALL BUT THE LOWEST TWO DIGITS.

THIS ERROR STOP IS THE RESULT

| SEQNO  | LABEL    | STATEMENT                        | ADDRESS | INSTRUCT |
|--------|----------|----------------------------------|---------|----------|
| 004170 | *        | OF AN X AXIS MATRIX DIODE        |         |          |
| 004171 | *        | FAILURE. THE FAILING STACK IS    |         |          |
| 004172 | *        | DISPLAYED IN THE AU REGISTER.    |         |          |
| 004173 | *        | A NUMBER 0000IJ WHICH INDICATES  |         |          |
| 004174 | *        | THAT ALL ADDRESSES OF THE FORM   |         |          |
| 004175 | *        | STIJXX FAIL, WHERE ST IS THE     |         |          |
| 004176 | *        | FAILING STACK AND XX CAN TAKE    |         |          |
| 004177 | *        | ANY VALUE 00 THROUGH 77, IS      |         |          |
| 004200 | *        | DISPLAYED IN THE AL REGISTER.    |         |          |
| 004201 |          | IJP*RECYCLE                      | 03135   | 55 4275  |
| 004202 | DIOMTRX4 | ENTAL*LOOP1                      | 03136   | 12 4253  |
| 004203 |          | LSHAL*14                         | 03137   | 5046 14  |
| 004204 |          | ADDAL*N007000                    | 03140   | 14 4421  |
| 004205 |          | STRAL*BASEADR                    | 03141   | 44 4225  |
| 004206 |          | ENTB*BASEADR                     | 03142   | 32 4225  |
| 004207 | *        | ENTER B1 WITH THE Y DIODE MATRIX |         |          |
| 004210 |          | BASE TEST ADDRESS.               | 03143   | 70 0077  |
| 004211 |          | TEST ALL 64 Y AXIS MATRIX DIODES | 03144   | 44 4254  |
| 004212 | *        | ON THE STACK.                    |         |          |
| 004213 | *        | TEST ADDRESS INCREMENT FOR       | 03145   | 70 0001  |
| 004214 | *        | Y AXIS MATRIX DIODES.            |         |          |
| 004215 |          | MODIFY TEST ADDRESS              | 03146   | 74 3202  |
| 004216 | *        | INCREMENTATION INSTRUCTION.      |         |          |
| 004217 |          | IF A Y AXIS MATRIX DIODE FAILURE | 03147   | 70 0100  |
| 004220 |          | OCCURS THIS NUMBER IS USED TO    | 03150   | 74 3210  |
| 004221 | *        | FORM A SECOND ADDRESS SERVED     |         |          |
| 004222 | *        | BY THE FAILING DIODE. IF THIS    |         |          |
| 004223 | *        | SECOND ADDRESS ALSO FAILS THE    |         |          |
| 004224 | *        | DIODE FAILURE IS VERIFIED.       |         |          |
| 004225 |          | TEST THE Y AXIS DIODE MATRIX FOR | 03151   | 76 3163  |
| 004226 | *        | STACK (LOOP1).                   |         |          |

| SEQNO  | LABEL    | STATEMENT      | ADDRESS | INSTRUCT |
|--------|----------|----------------|---------|----------|
| 004227 |          | JPALZ*DIOMTRX5 | 03152   | 61 3160  |
| 004230 | *        |                |         |          |
| 004231 |          | JPAUNZ*RANDOM  | 03153   | 62 3227  |
| 004232 | *        |                |         |          |
| 004233 | *        |                |         |          |
| 004234 | *        |                |         |          |
| 004235 |          | ENTAU*LOOP1    | 03154   | 10 4253  |
| 004236 |          | SLCL*N000077   | 03155   | 52 4400  |
| 004237 | *        |                |         |          |
| 004240 |          | STOP*40        | 03156   | 5056 40  |
| 004241 | *        |                |         |          |
| 004242 | *        |                |         |          |
| 004243 |          | IJP*RECYCLE    | 03157   | 55 4275  |
| 004244 | DIOMTRX5 | ISK*LOOP1      | 03160   | 57 4253  |
| 004245 |          | JP*DIOMTRX1    | 03161   | 34 3107  |
| 004246 |          | JP*RANDOM      | 03162   | 34 3227  |
| 004247 | *        |                |         |          |
| 004250 | *        |                |         |          |
| 004251 | *        |                |         |          |
| 004252 | DIODE    | 0              | 03163   | 000000   |
| 004253 |          | CL*FAILDIODE   | 03164   | 40 4245  |
| 004254 | DIODE1   | ENTSR*10       | 03165   | 5073 10  |
| 004255 |          | ENTAUB*0000    | 03166   | 11 0000  |
| 004256 | *        |                |         |          |
| 004257 |          | ENTALK*7777    | 03167   | 70 7777  |
| 004260 |          | STRALB*0000    | 03170   | 45 0000  |
| 004261 |          | ENTALB*0000    | 03171   | 13 0000  |
| 004262 |          | STRAUB*0000    | 03172   | 47 0000  |
| 004263 | *        |                |         |          |
| 004264 |          | ENTSR*00       | 03173   | 5073 00  |
| 004265 |          | JPALZ*DIODE2   | 03174   | 61 3177  |



| SEQNO  | LABEL  | STATEMENT  | ADDRESS | INSTRUCT |
|--------|--------|--|---------|----------|
| 004266 | *      | DIODE2.  |         |          |
| 004267 |        | CPAL*0   | 03175   | 5061 00  |
| 004270 |        | JPALZ*DIODE3   | 03176   | 61 3202  |
| 004271 | *      | IF THE DIODE DID NOT FAIL GO TO<br>TEST THE NEXT DIODE.        |         |          |
| 004272 | DIODE2 | ENTAU*FAILDIODE  | 03177   | 10 4245  |
| 004273 | *      | REGISTER WITH THE CONTENTS OF                                  |         |          |
| 004274 | *      | FAILING TEST ADDRESS STORAGE.                                  |         |          |
| 004275 | *      | IS THIS THE FIRST TEST ADDRESS TO                              |         |          |
| 004276 | *      | FAIL IN THIS GROUP?  |         |          |
| 004277 |        | JPAUNZ*DIODE6  | 03200   | 62 3226  |
| 004300 | *      | NO, THE FAILURE IS IS NOT THE                                  |         |          |
| 004301 | *      | RESULT OF A BAD DIODE IN THE                                   |         |          |
| 004302 | *      | DIODE GROUP BEING TESTED.<br>EXIT THE DIODE SUBROUTINE WITH    |         |          |
| 004303 | *      | AU CONTAINING A NONZERO VALUE.                                 |         |          |
| 004304 |        | STRB*FAILDIODE   | 03201   | 42 4245  |
| 004305 | *      | YES, THIS IS THE FIRST TEST                                    |         |          |
| 004306 | *      | ADDRESS TO FAIL; STORE IT IN                                   |         |          |
| 004307 | DIODE3 | ENTBKB*0   | 03202   | 37 0000  |
| 004310 | *      | FAILING TEST ADDRESS STORAGE.<br>INCREMENT B1 TO THE NEXT TEST |         |          |
| 004311 |        | ADDRESS.   |         |          |
| 004311 |        | ISK*LOOP2  | 03203   | 57 4254  |
| 004312 |        | JP*DIODE1  | 03204   | 34 3165  |
|        |        | HAVE ALL THE DIODES BEEN TESTED?<br>NO, TEST THE NEXT DIODE.   |         |          |
| 004313 |        | ENTAU*N000000  | 03205   | 10 4366  |
| 004314 |        | ENTAL*FAILDIODE  | 03206   | 12 4245  |
| 004315 |        | JPALZ*DIODE6   | 03207   | 61 3226  |
| 004316 | *      | NO, EXIT THE DIODE SUBROUTINE.                                 |         |          |
| 004317 | *      | IF ONE AND ONLY ONE DIODE TEST                                 |         |          |
| 004320 | *      | ADDRESS FAILS OUT OF THE 64                                    |         |          |
| 004321 | *      | (OR 61) DECIMAL USED, A SECOND                                 |         |          |
| 004322 | *      | ADDRESS SERVED BY THE DIODE<br>IS TESTED TO VERIFY THE         |         |          |
| 004323 | *      | FAILURE.   |         |          |
| 004324 | DIODE4 | ADDALK*0   | 03210   | 71 0000  |
|        |        | SET UP SECOND ADDRESS SERVED BY                                |         |          |

| SEQNO  | LABEL  | STATEMENT   | ADDRESS | INSTRUCT |
|--------|--------|---|---------|----------|
| 004325 | *      | THE DIODE.  |         |          |
| 004326 |        | ENTSR*10  | 03211   | 5073 10  |
| 004327 |        | STRAL*0001  | 03212   | 44 0001  |
| 004330 |        | ENTAU*0000  | 03213   | 11 0000  |
| 004331 | *      | ADDRESS.  |         |          |
| 004332 |        | ENTALK*7777   | 03214   | 70 7777  |
| 004333 |        | STRALB*0000   | 03215   | 45 0000  |
| 004334 | *      | STORE 77777 INTO VERIFICATION TEST ADDRESS.   |         |          |
| 004335 |        | ENTALB*0000   | 03216   | 13 0000  |
| 004336 | *      | READ FROM VERIFICATION TEST TEST ADDRESS.   |         |          |
| 004337 |        | STRAUB*0000   | 03217   | 47 0000  |
| 004340 | *      | RESTORE THE ORIGINAL CONTENTS OF THE TEST ADDRESS.  |         |          |
| 004341 |        | ENTSR*00  | 03220   | 5073 00  |
|        |        | SEE NOTE 1 IN APPENDIX A.   |         |          |
| 004342 |        | ENTAU*N000000   | 03221   | 10 4366  |
| 004343 |        | JPALZ*DIODE5  | 03222   | 61 3225  |
| 004344 |        | CPAL*0  | 03223   | 5061 00  |
| 004345 |        | JPALZ*RANDOM  | 03224   | 61 3227  |
| 004346 | *      | FAILURE DID NOT VERIFY, GO TO THE RANDOM ERROR STOP.  |         |          |
| 004347 | DIODE5 | ENTAL*FAILDIODE   | 03225   | 12 4245  |
| 004350 | *      | ENTER THE AL REGISTER WITH THE VERIFIED FAILING DIODE TEST ADDRESS.                                       |         |          |
| 004351 | *      |   |         |          |
| 004352 | DIODE6 | IJP*DIODE   | 03226   | 55 3163  |
| 004353 | RANDOM | ENTAU*FAILADR   | 03227   | 10 4244  |
| 004354 |        | ENTAL*FAILPTTN  | 03230   | 12 4246  |
| 004355 |        | STOP*40   | 03231   | 5056 40  |
| 004356 | *      | RANDOM ERROR STOP. THIS ERROR STOP OCCURS WHEN THE PROGRAM DETECTS A BIT(S) DROPPED FAILURE BUT IS UNABLE |         |          |
| 004357 | *      |   |         |          |
| 004360 | *      |   |         |          |
| 004361 | *      |   |         |          |
| 004362 | *      | TO ISOLATE THE FAILURE. THE   |         |          |
| 004363 | *      | AU REGISTER CONTAINS THE  |         |          |

| SEQNO  | LABEL   | STATEMENT  | ADDRESS | INSTRUCT |
|--------|---------|--|---------|----------|
| 004364 | *       | FAILING ADDRESS AND THE AL                                 |         |          |
| 004365 | *       | REGISTER CONTAINS THE FAILING                              |         |          |
| 004366 | *       | PATTERN. THE CORRECT PATTERN                               |         |          |
| 004367 | *       | IS 777777. NOTE THAT IF ONLY                               |         |          |
| 004370 | *       | ONE BIT IS DROPPED, THE                                    |         |          |
| 004371 | *       | POSSIBILITY OF A BAD CORE                                  |         |          |
| 004372 | *       | EXISTS.  |         |          |
| 004373 |         | IJP*RECYCLE RECYCLE THE MEMORY TEST.                       | 03232   | 55 4275  |
| 004374 | *       |  |         |          |
| 004375 | *       | THE CONTROL ROUTINE USES THE DTCONT SUBROUTINE TO TEST ALL |         |          |
| 004376 | *       | OF CONTROL MEMORY USING BOTH 000000 AND 777777 PATTERNS.   |         |          |
| 004377 | *       | IF ONLY ONE ADDRESS FAILS THE FAILING ADDRESS AND THE      |         |          |
| 004400 | *       | FAILING PATTERN WILL BE DISPLAYED AT AN ERROR STOP IN      |         |          |
| 004401 | *       | DTCONT. IF MORE THAN ONE ADDRESS FAILS THE CONTROL         |         |          |
| 004402 | *       | MEMORY ISOLATION ROUTINE ISOCONT IS REFERENCED.            |         |          |
| 004403 | *       |  |         |          |
| 004404 | CONTROL | 0 CONTROL MEMORY SUBEXEC.                                  | 03233   | 000000   |
| 004405 |         | ENTALK*0077 SET UP THE DTCONT SUBROUTINE                   | 03234   | 70 0077  |
| 004406 |         | STRADR*STRA FOR TESTING ADDRESSES 000                      | 03235   | 74 4300  |
| 004407 |         | STRADR*ENTA THROUGH 077 OF CONTROL MEMORY.                 | 03236   | 74 4236  |
| 004410 |         | ENTAL*N777777  | 03237   | 12 4435  |
| 004411 |         | STRAL*TESTPATTN USE A 777777 PATTERN.                      | 03240   | 44 4303  |
| 004412 |         | RJP*DTCONT   | 03241   | 76 3303  |
| 004413 |         | ENTAL*N000000  | 03242   | 12 4366  |
| 004414 |         | STRAL*TESTPATTN USE A 000000 PATTERN.                      | 03243   | 44 4303  |
| 004415 |         | RJP*DTCONT   | 03244   | 76 3303  |
| 004416 |         | ENTALK*0277 SET UP THE DTCONT SUBROUTINE                   | 03245   | 70 0277  |
| 004417 |         | STRADR*STRA FOR TESTING ADDRESSES 200                      | 03246   | 74 4300  |
| 004420 |         | STRADR*ENTA THROUGH 277 OF CONTROL MEMORY.                 | 03247   | 74 4236  |
| 004421 |         | ENTAL*N777777  | 03250   | 12 4435  |
| 004422 |         | STRAL*TESTPATTN USE A 777777 TEST PATTERN.                 | 03251   | 44 4303  |

| SEQNO  | LABEL    | STATEMENT       | ADDRESS | INSTRUCT |
|--------|----------|-----------------|---------|----------|
| 004423 |          | RJP*DTCONT      | 03252   | 76 3303  |
| 004424 |          | ENTAL*N000000   | 03253   | 12 4366  |
| 004425 |          | STRAL*TESTPATTN | 03254   | 44 4303  |
| 004426 |          | RJP*DTCONT      | 03255   | 76 3303  |
| 004427 |          | ENTAL*CONTSIZE  | 03256   | 12 4227  |
| 004430 | *        |                 |         |          |
| 004431 |          | JPALZ*CONTROL1  | 03257   | 61 3302  |
| 004432 |          | ENTALK*0477     | 03260   | 70 0477  |
| 004433 |          | STRADR*STRA     | 03261   | 74 4300  |
| 004434 |          | STRADR*ENTA     | 03262   | 74 4236  |
| 004435 |          | ENTAL*N777777   | 03263   | 12 4435  |
| 004436 |          | STRAL*TESTPATTN | 03264   | 44 4303  |
| 004437 |          | RJP*DTCONT      | 03265   | 76 3303  |
| 004440 |          | ENTAL*N000000   | 03266   | 12 4366  |
| 004441 |          | STRAL*TESTPATTN | 03267   | 44 4303  |
| 004442 |          | RJP*DTCONT      | 03270   | 76 3303  |
| 004443 |          | ENTALK*0677     | 03271   | 70 0677  |
| 004444 |          | STRADR*STRA     | 03272   | 74 4300  |
| 004445 |          | STRADR*ENTA     | 03273   | 74 4236  |
| 004446 |          | ENTAL*N777777   | 03274   | 12 4435  |
| 004447 |          | STRAL*TESTPATTN | 03275   | 44 4303  |
| 004450 |          | RJP*DTCONT      | 03276   | 76 3303  |
| 004451 |          | ENTAL*N000000   | 03277   | 12 4366  |
| 004452 |          | STRAL*TESTPATTN | 03300   | 44 4303  |
| 004453 |          | RJP*DTCONT      | 03301   | 76 3303  |
| 004454 | CONTROL1 | IJP*CONTROL     | 03302   | 55 3233  |
| 004455 | DTCONT   | 0               | 03303   | 000000   |
| 004456 |          | ENTAL*STRA      | 03304   | 12 4300  |
| 004457 |          | STRAL*DTCONT1   | 03305   | 44 3316  |
| 004460 |          | ENTAL*ENTA      | 03306   | 12 4236  |
| 004461 |          | STRAL*DTCONT3   | 03307   | 44 3323  |

| SEQNO  | LABEL   | STATEMENT  | ADDRESS | INSTRUCT |
|--------|---------|--|---------|----------|
| 004462 |         | ENTALK*77  | 03310   | 70 0077  |
| 004463 |         | STRAL*LOOP1  | 03311   | 44 4253  |
| 004464 |         | STRAL*LOOP2  | 03312   | 44 4254  |
| 004465 |         | CL*FAILTEST  | 03313   | 40 4247  |
| 004466 | *       |  |         |          |
|        |         | STORAGE.   |         |          |
| 004467 |         | ENTAL*TESTPATTN  | 03314   | 12 4303  |
| 004470 |         | ENTSR*10   | 03315   | 5073 10  |
| 004471 | DTCONT1 | STRAL*0  | 03316   | 44 0000  |
| 004472 | *       |  |         |          |
|        |         | ADDRESS.   |         |          |
| 004473 |         | ISK*DTCONT1  | 03317   | 57 3316  |
| 004474 | *       |  |         |          |
|        |         | TO THE NEXT TEST ADDRESS.                              |         |          |
| 004475 |         | ISK*LOOP1  | 03320   | 57 4253  |
| 004476 | *       |  |         |          |
|        |         | HAVE ALL 100 ADDRESSES SPECIFIED<br>BEEN WRITTEN INTO? |         |          |
| 004477 |         | JP*DTCONT1   | 03321   | 34 3316  |
| 004500 | *       |  |         |          |
|        |         | NO, GO WRITE INTO THE NEXT<br>ADDRESS.                 |         |          |
| 004501 | DTCONT2 | ENTSR*10   | 03322   | 5073 10  |
| 004502 | DTCONT3 | ENTAL*0  | 03323   | 12 0000  |
| 004503 |         | ENTSR*00   | 03324   | 5073 00  |
| 004504 |         | CMAL*TESTPATTN   | 03325   | 02 4303  |
| 004505 |         | JPEQ*DTCONT4   | 03326   | 61 3334  |
| 004506 |         | ENTAU*FAILTEST   | 03327   | 10 4247  |
| 004507 | *       |  |         |          |
|        |         | BEFORE?  |         |          |
| 004510 |         | JPAUNZ*ISOCONT   | 03330   | 62 3347  |
| 004511 | *       |  |         |          |
|        |         | YES, GO TO THE ISOLATION ROUTINE<br>ISOCONT.           |         |          |
| 004512 |         | ENTAU*DTCONT3  | 03331   | 10 3323  |
| 004513 |         | STRAU*FAILTEST   | 03332   | 46 4247  |
| 004514 |         | STRAL*FAILPTN  | 03333   | 44 4246  |
| 004515 | DTCONT4 | ISK*DTCONT3  | 03334   | 57 3323  |
| 004516 |         | ISK*LOOP2  | 03335   | 57 4254  |
| 004517 | *       |  |         |          |
|        |         | CHECKED?   |         |          |
| 004520 |         | JP*DTCONT2   | 03336   | 34 3322  |
|        |         | NO, TEST THE NEXT ADDRESS.                             |         |          |

| SEQNO  | LABEL   | STATEMENT  | ADDRESS  | INSTRUCT                 |
|--------|---------|--|--|--------------------------|
| 004521 |         | ENTAL*FAILTEST   | DID ANY ADDRESSES FAIL?  | 03337 12 4247            |
| 004522 |         | JPALZ*DTCNT5   | NO, EXIT FROM DTCNT.   | 03340 61 3346            |
| 004523 |         | SLCL*N007777   |  | 03341 52 4423            |
| 004524 |         | LSHA*22  |  | 03342 5047 22            |
| 004525 |         | ENTAL*FAILPTN  |  | 03343 12 4246            |
| 004526 |         | STOP*40  |  | 03344 5056 40            |
| 004527 | *       |  | THIS ERROR STOP IS THE RESULT OF<br>ONLY ONE ADDRESS FAILING ON A<br>HALF PLANE (64 ADDRESSES). THE<br>FAILING ADDRESS IS DISPLAYED<br>IN THE AU REGISTER AND THE<br>FAILING PATTERN IS DISPLAYED<br>IN THE AL REGISTER. |                          |
| 004530 | *       |  |  |                          |
| 004531 | *       |  |  |                          |
| 004532 | *       |  |  |                          |
| 004533 | *       |  |  |                          |
| 004534 | *       |  |  |                          |
| 004535 | *       |  |  |                          |
| 004536 |         | IJP*RECYCLE  |  | RECYCLE THE MEMORY TEST. |
| 004537 | DTCNT5  | IJP*DTCNT  | EXIT FROM DTCNT SUBROUTINE.  | 03346 55 3303            |
| 004540 | *       |  |  |                          |
| 004541 | *       | THE ISOCONT SUBROUTINE IS USED TO ISOLATE CONTROL MEMORY |  |                          |
| 004542 | *       | ADDRESS TRANSLATION, OR SENSE AMPLIFIER, OR DIGIT        |  |                          |
| 004543 | *       | DRIVER FAILURES.   |  |                          |
| 004544 | *       |  |  |                          |
| 004545 | ISOCONT | ENTALK*7   | SET UP THE ICON LOOP COUNT FOR   | 03347 70 0007            |
| 004546 | *       |  | SUBROUTINE.  |                          |
| 004547 |         | ENTALK*7   | SET UP ICON LOOP COUNT FOR   | 03350 70 0007            |
| 004550 |         | STRAL*LOOPCOUNT  | TESTING CONTROL MEMORY ADDRESS   | 03351 44 4256            |
| 004551 | *       |  | TRANSLATION.   |                          |
| 004552 |         | ENTAL*N777777  | USE A 7777777 TEST PATTERN.  | 03352 12 4435            |
| 004553 |         | STRAL*TESTPATTN  |  | 03353 44 4303            |
| 004554 |         | CL*EC1   | INITIATE THE EC1 ERROR FLAG.   | 03354 40 4234            |
| 004555 |         | CL*EC2   | INITIATE THE EC2 ERROR FLAG.   | 03355 40 4235            |
| 004556 |         | ENTALK*0010  | SET THE TEST ADDRESS INCREMENT   | 03356 70 0010            |
| 004557 |         | STRAL*INCREM   | TO 000010.   | 03357 44 4252            |

| SEQNO  | LABEL    | STATEMENT      | ADDRESS | INSTRUCT |
|--------|----------|----------------|---------|----------|
| 004560 |          | ENTALK*0000    | 03360   | 70 0000  |
| 004561 |          | RJP*ICON       | 03361   | 76 3460  |
| 004562 | *        |                |         |          |
| 004563 |          | ENTALK*0200    | 03362   | 70 0200  |
| 004564 |          | RJP*ICON       | 03363   | 76 3460  |
| 004565 | *        |                |         |          |
| 004566 |          | JPAUZ*ISOCONT1 | 03364   | 60 3373  |
| 004567 | *        |                |         |          |
| 004570 | *        |                |         |          |
| 004571 |          | CMAL*N177777   | 03365   | 02 4432  |
| 004572 |          | JPEQ*ISOCONT1  | 03366   | 61 3373  |
| 004573 | *        |                |         |          |
| 004574 |          | ENTAU*EC1      | 03367   | 10 4234  |
| 004575 |          | ENTAL*EC2      | 03370   | 12 4235  |
| 004576 |          | STOP*40        | 03371   | 5056 40  |
| 004577 | *        |                |         |          |
| 004600 | *        |                |         |          |
| 004601 | *        |                |         |          |
| 004602 |          | IJP*RECYCLE    | 03372   | 55 4275  |
| 004603 | ISOCONT1 | CL*EC1         | 03373   | 40 4234  |
| 004604 |          | CL*EC2         | 03374   | 40 4235  |
| 004605 |          | ENTALK*0001    | 03375   | 70 0001  |
| 004606 |          | STRAL*INCREM   | 03376   | 44 4252  |
| 004607 |          | ENTALK*0000    | 03377   | 70 0000  |
| 004610 |          | RJP*ICON       | 03400   | 76 3460  |
| 004611 | *        |                |         |          |
| 004612 |          | ENTAL*CONTSIZE | 03401   | 12 4227  |
| 004613 | *        |                |         |          |
| 004614 |          | JPALZ*ISOCONT2 | 03402   | 61 3414  |
| 004615 |          | ENTALK*0400    | 03403   | 70 0400  |
| 004616 |          | RJP*ICON       | 03404   | 76 3460  |

| SEQNO  | LABEL                   | STATEMENT                          | ADDRESS | INSTRUCT |
|--------|-------------------------|------------------------------------|---------|----------|
| 004617 | *                       |                                    |         |          |
| 004620 | JPAUZ*ISOCONT4          | CIRCUIT TEST ADDRESSES.            |         |          |
| 004621 | *                       | IF NONE OF THE TEST ADDRESSES      | 03405   | 60 3430  |
| 004622 | *                       | FAIL, GO TEST THE CONTROL          |         |          |
| 004623 | *                       | MEMORY SENSE AMPLIFIERS AND        |         |          |
|        |                         | DIGIT DRIVERS.                     |         |          |
| 004624 | CMAL*N177777            | IF ALL OF THE TEST ADDRESSES       | 03406   | 02 4432  |
| 004625 | JPEQ*ISOCONT4           | FAIL GO TEST CONTROL MEMORY        | 03407   | 61 3430  |
| 004626 | *                       | SENSE AMPLIFIER AND DIGIT          |         |          |
| 004627 | *                       | DRIVERS.                           |         |          |
| 004630 | *                       | BOOTSTRAP.                         |         |          |
| 004631 | ENTAU*EC1               |                                    | 03410   | 10 4234  |
| 004632 | ENTAL*EC2               |                                    | 03411   | 12 4235  |
| 004633 | STOP*40                 |                                    | 03412   | 5056 40  |
| 004634 | *                       |                                    |         |          |
| 004635 | *                       | THIS ERROR STOP IS FOR THE 256     |         |          |
| 004636 | *                       | WORD CONTROL MEMORY ONLY.          |         |          |
| 004637 | *                       | THE STOP IS THE RESULT OF A        |         |          |
| 004640 | *                       | WD OR SC CIRCUIT FAILURE IN        |         |          |
|        |                         | THE CONTROL MEMORY.                |         |          |
| 004641 | IJP*RECYCLE             | RECYCLE THE MEMORY TEST.           | 03413   | 55 4275  |
| 004642 | *                       | ISOCONT2 AND ISOCONT3 ARE USED FOR |         |          |
|        |                         |                                    |         |          |
| 004643 | *                       | THE 128 WORD CONTROL MEMORY.       |         |          |
| 004644 | ISOCONT2 JPAUZ*ISOCONT3 | IF NO WG TEST ADDRESSES FAILED     | 03414   | 60 3424  |
| 004645 | *                       | GO TO ISOCONT3.                    |         |          |
| 004646 | ENTAL*EC1               | IF ALL WG TEST ADDRESSES FAILED    | 03415   | 12 4234  |
| 004647 | CMAL*N000377            | GO TO ISOCONT3.                    | 03416   | 02 4406  |
| 004650 | JPEQ*ISOCONT3           |                                    | 03417   | 61 3424  |
| 004651 | *                       |                                    |         |          |
| 004652 | ENTAU*EC1               | BOOTSTRAP.                         | 03420   | 10 4234  |
| 004653 | ENTAL*EC2               |                                    | 03421   | 12 4235  |
| 004654 | STOP*40                 |                                    | 03422   | 5056 40  |



| SEQNO  | LABEL    | STATEMENT                         | ADDRESS | INSTRUCT |
|--------|----------|-----------------------------------|---------|----------|
| 004655 | *        | THIS ERROR STOP IS FOR THE 128    |         |          |
| 004656 | *        | WORD MEMORY ONLY.                 |         |          |
| 004657 | *        | THIS ERROR STOP IS THE RESULT     |         |          |
| 004660 | *        | OF A WD OR SC CIRCUIT FAILURE     |         |          |
| 004661 | *        | IN CONTROL MEMORY.                |         |          |
| 004662 |          | IJP*RECYCLE                       | 03423   | 55 4275  |
| 004663 | ISOCONT3 | RJP*SPCONT                        | 03424   | 76 3536  |
| 004664 | *        | CHECK DIODES ON PIN 14 OF 10WD00  |         |          |
| 004665 |          | THROUGH 10WD03.                   |         |          |
| 004666 | *        | JPAUZ*ISOCONT4                    | 03425   | 60 3430  |
| 004667 | *        | IF NO DIODES FAIL GO TEST THE     |         |          |
| 004670 |          | CONTROL MEMORY SENSE AMPLIFIERS   |         |          |
| 004671 | *        | AND DIGIT DRIVERS.                | 03426   | 5056 40  |
| 004672 | *        | STOP*40                           |         |          |
| 004673 | *        | IF AU EQUALS 000017 REPLACE       |         |          |
| 004674 | *        | 8J22C(00SC08, ), CARD TYPE        |         |          |
| 004675 | *        | 3621.                             |         |          |
| 004676 | *        | OTHERWISE, REPLACE 8J25D          |         |          |
| 004677 | *        | (10WD00 - 10WD03), CARD TYPE      |         |          |
| 004700 | ISOCONT4 | IJP*RECYCLE                       | 03427   | 55 4275  |
| 004701 |          | CL*EC1                            | 03430   | 40 4234  |
| 004702 |          | CL*EC2                            | 03431   | 40 4235  |
| 004703 |          | INITIATE THE EC1 ERROR FLAG.      |         |          |
| 004704 | *        | INITIATE THE EC2 ERROR FLAG.      |         |          |
| 004705 |          | ENTALK*3                          | 03432   | 70 0003  |
| 004706 |          | STRAL*LOOPCOUNT                   | 03433   | 44 4256  |
| 004707 |          | SET UP ICON LOOP COUNT            |         |          |
| 004708 |          | FOR TESTING SENSE AMPS AND        |         |          |
| 004709 |          | DIGIT DRIVERS.                    |         |          |
| 004710 |          | ENTALK*0200                       | 03434   | 70 0200  |
| 004711 |          | SET THE TEST ADDRESS INCREMENT TO |         |          |
| 004712 |          | 000200.                           | 03435   | 44 4252  |
| 004713 |          | STRAL*INCREM                      | 03436   | 10 4435  |
| 004714 |          | ENTAU*N777777                     | 03437   | 46 4303  |
| 004715 |          | STRAU*TESTPATTN                   |         |          |
| 004716 |          | USE A 777777 PATTERN.             |         |          |
| 004717 |          | RJP*ICON                          | 03440   | 76 3460  |
| 004718 |          | TEST FOR BITS DROPPED.            |         |          |
| 004719 |          | ENTAU*N000000                     | 03441   | 10 4366  |

| SEQNO  | LABEL    | STATEMENT  | ADDRESS | INSTRUCT |
|--------|----------|--|---------|----------|
| 004713 |          | STRAU*TESTPATTN  | 03442   | 46 4303  |
| 004714 |          | RJP*ICON   | 03443   | 76 3460  |
| 004715 |          | ENTAL*CONTSIZE   | 03444   | 12 4227  |
| 004716 | *        |  |         |          |
| 004717 |          | JPALZ*ISOCONT5   | 03445   | 61 3452  |
| 004720 |          | ENTAU*EC1  | 03446   | 10 4234  |
| 004721 |          | ENTAL*FAILPTTN   | 03447   | 12 4246  |
| 004722 |          | STOP*40  | 03450   | 5056 40  |
| 004723 | *        |  |         |          |
| 004724 | *        |  |         |          |
| 004725 | *        |  |         |          |
| 004726 | *        |  |         |          |
| 004727 | *        |  |         |          |
| 004730 | *        |  |         |          |
| 004731 |          | IJP*RECYCLE  | 03451   | 55 4275  |
| 004732 | ISOCONT5 | ENTAL*EC1  | 03452   | 12 4234  |
| 004733 |          | SLCL*N000314   | 03453   | 52 4404  |
| 004734 | *        |  |         |          |
| 004735 | *        |  |         |          |
| 004736 |          | LSHA*22  | 03454   | 5047 22  |
| 004737 |          | ENTAL*FAILPTTN   | 03455   | 12 4246  |
| 004740 |          | STOP*40  | 03456   | 5056 40  |
| 004741 | *        |  |         |          |
| 004742 | *        |  |         |          |
| 004743 | *        |  |         |          |
| 004744 |          | IJP*RECYCLE  | 03457   | 55 4275  |
| 004745 | *        |  |         |          |
| 004746 | *        | THE ICON SUBROUTINE TESTS EIGHT ADDRESSES SPECIFIED BY |         |          |
| 004747 | *        | THE ISOCONT ROUTINE. THE TEST RESULTS ARE RECORDED IN  |         |          |
| 004750 | *        | TWO ERROR ERROR FLAGS.                                 |         |          |

| SEQNO  | LABEL | STATEMENT       | ADDRESS | INSTRUCT |
|--------|-------|-----------------|---------|----------|
| 004751 | *     |                 |         |          |
| 004752 | ICON  | 0               | 03460   | 000000   |
| 004753 |       | STRADR*ICON2    | 03461   | 74 3473  |
| 004754 | *     |                 |         |          |
| 004755 |       | STRADR*ICON3    | 03462   | 74 3474  |
| 004756 | *     |                 |         |          |
| 004757 |       | STRADR*ICON6    | 03463   | 74 3516  |
| 004760 | *     |                 |         |          |
| 004761 |       | ENTAL*LOOPCOUNT | 03464   | 12 4256  |
| 004762 |       | STRAL*LOOP1     | 03465   | 44 4253  |
| 004763 |       | STRAL*LOOP2     | 03466   | 44 4254  |
| 004764 |       | ENTAU*EC1       | 03467   | 10 4234  |
| 004765 | ICON1 | LSHAU*1         | 03470   | 5045 01  |
| 004766 | *     |                 |         |          |
| 004767 | *     |                 |         |          |
| 004770 |       | ENTAL*TESTPATTN | 03471   | 12 4303  |
| 004771 |       | ENTSR*10        | 03472   | 5073 10  |
| 004772 | ICON2 | STRAL*0         | 03473   | 44 0000  |
| 004773 | ICON3 | ENTAL*0         | 03474   | 12 0000  |
| 004774 |       | ENTSR*00        | 03475   | 5073 00  |
| 004775 |       | CMAL*TESTPATTN  | 03476   | 02 4303  |
| 004776 |       | JPEQ*ICON4      | 03477   | 61 3504  |
| 004777 | *     |                 |         |          |
| 005000 |       | STRAL*FAILPTTN  | 03500   | 44 4246  |
| 005001 |       | LSHA*22         | 03501   | 5047 22  |
| 005002 |       | SLSET*BIT00     | 03502   | 51 4307  |
| 005003 |       | LSHA*22         | 03503   | 5047 22  |
| 005004 | ICON4 | ENTAL*ICON2     | 03504   | 12 3473  |
| 005005 |       | ADDAL*INCREM    | 03505   | 14 4252  |
| 005006 |       | STRADR*ICON2    | 03506   | 74 3473  |
| 005007 |       | STRADR*ICON3    | 03507   | 74 3474  |

| SEQNO  | LABEL | STATEMENT                                      | ADDRESS | INSTRUCT |
|--------|-------|--|---------|----------|
| 005010 |       | ISK*LOOP1                                      | 03510   | 57 4253  |
| 005011 | *     |  |         |          |
| 005012 |       | JP*ICON1                                       | 03511   | 34 3470  |
| 005013 |       | STRAU*EC1                                      | 03512   | 46 4234  |
| 005014 |       | ENTAU*EC2                                      | 03513   | 10 4235  |
| 005015 | ICON5 | LSHAU*1  | 03514   | 5045 01  |
| 005016 | *     |  |         |          |
| 005017 | *     |  |         |          |
| 005020 |       | ENTSR*10                                       | 03515   | 5073 10  |
| 005021 | ICON6 | ENTAL*0  | 03516   | 12 0000  |
| 005022 |       | ENTSR*00                                       | 03517   | 5073 00  |
| 005023 |       | CMAL*TESTPATTN                                 | 03520   | 02 4303  |
| 005024 | *     |  |         |          |
| 005025 |       | JPEQ*ICON7                                     | 03521   | 61 3525  |
| 005026 | *     |  |         |          |
| 005027 |       | LSHA*22  | 03522   | 5047 22  |
| 005030 |       | SLSET*BIT00                                    | 03523   | 51 4307  |
| 005031 |       | LSHA*22  | 03524   | 5047 22  |
| 005032 | ICON7 | ENTAL*ICON6                                    | 03525   | 12 3516  |
| 005033 |       | ADDAL*INCREM                                   | 03526   | 14 4252  |
| 005034 |       | STRADR*ICON6                                   | 03527   | 74 3516  |
| 005035 | *     |  |         |          |
| 005036 |       | ISK*LOOP2                                      | 03530   | 57 4254  |
| 005037 | *     |  |         |          |
| 005040 |       | JP*ICON5                                       | 03531   | 34 3514  |
| 005041 |       | STRAU*EC2                                      | 03532   | 46 4235  |
| 005042 |       | ENTAU*EC1                                      | 03533   | 10 4234  |
| 005043 |       | ENTAL*EC2                                      | 03534   | 12 4235  |
| 005044 |       | IJP*ICON                                       | 03535   | 55 3460  |
| 005045 | *     |  |         |          |
| 005046 | *     | SPCONT IS USED TO CHECK CONTROL MEMORY ADDRESS |         |          |

| SEQNO  | LABEL  | STATEMENT  | ADDRESS | INSTRUCT |
|--------|--------|--|---------|----------|
| 005047 | *      | TRANSLATION CIRCUITRY NOT CHECKED BY ICON FOR 128 WORDS. |         |          |
| 005050 | *      |  |         |          |
| 005051 | SPCONT | 0  | 03536   | 000000   |
| 005052 |        | ENTSR*10   | 03537   | 5073 10  |
| 005053 |        | CL*0200  | 03540   | 40 0200  |
| 005054 |        | CL*0202  | 03541   | 40 0202  |
| 005055 |        | CL*0204  | 03542   | 40 0204  |
| 005056 |        | CL*0206  | 03543   | 40 0206  |
| 005057 |        | ENTALK*7777  | 03544   | 70 7777  |
| 005060 |        | STRAL*0600   | 03545   | 44 0600  |
| 005061 |        | STRAL*0602   | 03546   | 44 0602  |
| 005062 |        | STRAL*0604   | 03547   | 44 0604  |
| 005063 |        | STRAL*0606   | 03550   | 44 0606  |
| 005064 |        | ENTALK*0000  | 03551   | 70 0000  |
| 005065 |        | ENTAU*0200   | 03552   | 10 0200  |
| 005066 |        | JPAUZ*LOK+2  | 03553   | 60 3555  |
| 005067 |        | ADDALK*0001  | 03554   | 71 0001  |
| 005070 |        | ENTAU*0202   | 03555   | 10 0202  |
| 005071 |        | JPAUZ*LOK+2  | 03556   | 60 3560  |
| 005072 |        | ADDALK*0002  | 03557   | 71 0002  |
| 005073 |        | ENTAU*0204   | 03560   | 10 0204  |
| 005074 |        | JPAUZ*LOK+2  | 03561   | 60 3563  |
| 005075 |        | ADDALK*0004  | 03562   | 71 0004  |
| 005076 |        | ENTAU*0206   | 03563   | 10 0206  |
| 005077 |        | JPAUZ*LOK+2  | 03564   | 60 3566  |
| 005100 |        | ADDALK*0010  | 03565   | 71 0010  |
| 005101 |        | ENTSR*00   | 03566   | 5073 00  |
| 005102 |        | LSHA*22  | 03567   | 5047 22  |
| 005103 |        | ENTALK*0000  | 03570   | 70 0000  |
| 005104 |        | IJP*SPCONT   | 03571   | 55 3536  |
| 005105 | *      | EXIT THE SPCONT SUBROUTINE.                              |         |          |

| SEQNO  | LABEL | STATEMENT                                       | ADDRESS | INSTRUCT |
|--------|-------|---|---------|----------|
| 005106 | *     | THE BOOT SUBROUTINE TESTS THE BOOTSTRAP ADDRESS |         |          |
| 005107 | *     | TRANSLATION AND SENSE AMPLIFIERS.               |         |          |
| 005110 | *     |   |         |          |
| 005111 | BOOT  | 0*0   | 03572   | 00 0000  |
| 005112 |       | ENTALK*1 TEST ADDRESS INCREMENT                 | 03573   | 70 0001  |
| 005113 |       | STRADR*TRANBOOT2 SET UP THE TRANBOOT SUBROUTINE | 03574   | 74 3745  |
| 005114 |       | STRADR*TRANBOOT4 FOR TESTING FOR AN OPEN OR     | 03575   | 74 3763  |
| 005115 |       | ENTALK*7 SHORTED TRANSISTOR ON A                | 03576   | 70 0007  |
| 005116 |       | STRAL*LOOPCOUNT BOOTSTRAP GROUP SELECTION       | 03577   | 44 4256  |
| 005117 | *     | CARD.   |         |          |
| 005120 |       | ENTAL*N777777 INITIATE THE ERROR FLAG.          | 03600   | 12 4435  |
| 005121 |       | STRAL*EB  | 03601   | 44 4233  |
| 005122 |       | ENTALK*0500 BASE TEST ADDRESS 500.              | 03602   | 70 0500  |
| 005123 |       | RJP*TRANBOOT TEST ADDRESSES 500 - 507.          | 03603   | 76 3730  |
| 005124 |       | ENTALK*0510 BASE TEST ADDRESS 510.              | 03604   | 70 0510  |
| 005125 |       | RJP*TRANBOOT TEST ADDRESSES 510 - 517.          | 03605   | 76 3730  |
| 005126 |       | ENTALK*0520 BASE TEST ADDRESS 520.              | 03606   | 70 0520  |
| 005127 |       | RJP*TRANBOOT TEST ADDRESSES 520 - 527.          | 03607   | 76 3730  |
| 005130 | *     | IS ANY BOOT STRAP GROUP SELECTION               |         |          |
| 005131 | *     | TRANSISTOR OPEN OR SHORTED?                     |         |          |
| 005132 |       | JPAUZ*B00T1 NO, GO TEST THE BOOTSTRAP DIODE     | 03610   | 60 3613  |
| 005133 | *     | SELECTION CARD FOR AN OPEN OR                   |         |          |
| 005134 | *     | SHORTED TRANSISTOR.                             |         |          |
| 005135 |       | STOP*40 COME TO AN ERROR STOP WITH THE          | 03611   | 5056 40  |
| 005136 | *     | ERROR FLAG DISPLAYED IN AU AND                  |         |          |
| 005137 | *     | AL CLEARED.                                     |         |          |
| 005140 | *     | THIS ERROR STOP IS FOR AN OPEN OR               |         |          |
| 005141 | *     | SHORTED TRANSISTOR ON A                         |         |          |
| 005142 | *     | BOOTSTRAP GROUP SELECTION                       |         |          |
| 005143 | *     | TRANSLATION CARD.                               |         |          |
| 005144 | *     | FOR AN INTERPRETATION OF THE                    |         |          |

| SEQNO  | LABEL | STATEMENT        | ADDRESS | INSTRUCT |
|--------|-------|------------------|---------|----------|
| 005145 | *     |                  |         |          |
| 005146 | *     |                  |         |          |
| 005147 |       | IJP*RECYCLE      |         |          |
| 005150 | BOOT1 | ENTALK*10        | 03612   | 55 4275  |
| 005151 |       | STRADR*TRANBOOT2 | 03613   | 70 0010  |
|        |       |                  | 03614   | 74 3745  |
| 005152 |       | STRADR*TRANBOOT4 | 03615   | 74 3763  |
| 005153 |       | ENTALK*3         | 03616   | 70 0003  |
| 005154 |       | STRAL*LOOPCOUNT  | 03617   | 44 4256  |
| 005155 | *     |                  |         |          |
| 005156 |       | ENTAL*N777777    | 03620   | 12 4435  |
| 005157 |       | STRAL*EB         | 03621   | 44 4233  |
| 005160 |       | ENTALK*0500      | 03622   | 70 0500  |
| 005161 |       | RJP*TRANBOOT     | 03623   | 76 3730  |
| 005162 | *     |                  |         |          |
| 005163 |       | ENTALK*0501      | 03624   | 70 0501  |
| 005164 |       | RJP*TRANBOOT     | 03625   | 76 3730  |
| 005165 | *     |                  |         |          |
| 005166 |       | ENTALK*0502      | 03626   | 70 0502  |
| 005167 |       | RJP*TRANBOOT     | 03627   | 76 3730  |
| 005170 | *     |                  |         |          |
| 005171 |       | ENTALK*0503      | 03630   | 70 0503  |
| 005172 |       | RJP*TRANBOOT     | 03631   | 76 3730  |
| 005173 | *     |                  |         |          |
| 005174 | *     |                  |         |          |
| 005175 | *     |                  |         |          |
| 005176 |       | JPAUZ*B00T2      | 03632   | 60 3635  |
| 005177 | *     |                  |         |          |
| 005200 | *     |                  |         |          |
| 005201 |       | STOP*40          | 03633   | 5056 40  |
| 005202 | *     |                  |         |          |
| 005203 | *     |                  |         |          |

| SEQNO  | LABEL | STATEMENT  | ADDRESS | INSTRUCT |
|--------|-------|--|---------|----------|
| 005204 | *     | THIS ERROR STOP IS FOR AN OPEN<br>OR SHORTED TRANSISTOR ON A<br>BOOTSTRAP DIODE SELECTION<br>TRANSLATION CARD.<br>FOR AN INTERPRETATION OF THE |         |          |
| 005205 | *     |  |         |          |
| 005206 | *     |  |         |          |
| 005207 | *     |  |         |          |
| 005210 | *     |  |         |          |
| 005211 | *     | ERROR FLAG, SEE NOTE 4 IN<br>APPENDIX A.   |         |          |
| 005212 | *     |  |         |          |
| 005213 |       | IJP*RECYCLE  | 03634   | 55 4275  |
| 005214 | B00T2 | ENTALK*1   | 03635   | 70 0001  |
| 005215 |       | STRADR*DI0B00T2  | 03636   | 74 4020  |
| 005216 |       | STRADR*DI0B00T5  | 03637   | 74 4047  |
| 005217 |       | ENTALK*6   | 03640   | 70 0006  |
| 005220 |       | STRAL*LOOPCOUNT  | 03641   | 44 4256  |
| 005221 |       | ENTAL*N777777  | 03642   | 12 4435  |
| 005222 |       | STRAL*EB   | 03643   | 44 4233  |
| 005223 |       | ENTALK*0500  | 03644   | 70 0500  |
| 005224 |       | RJP*DI0B00T  | 03645   | 76 3774  |
| 005225 |       | ENTALK*0510  | 03646   | 70 0510  |
| 005226 |       | RJP*DI0B00T  | 03647   | 76 3774  |
| 005227 |       | ENTALK*0520  | 03650   | 70 0520  |
| 005230 |       | RJP*DI0B00T  | 03651   | 76 3774  |
| 005231 | *     | IS THERE AN OPEN INPUT DIODE ON<br>ANY BOOTSTRAP GROUP SELECTION<br>TRANSLATION CARD?  |         |          |
| 005232 | *     |  |         |          |
| 005233 | *     |  |         |          |
| 005234 |       | JPAUZ*B00T3  | 03652   | 60 3655  |
| 005235 | *     | NO, GO TEST THE BOOTSTRAP DIODE<br>SELECTION CARDS FOR AN OPEN<br>INPUT DIODE.   |         |          |
| 005236 | *     |  |         |          |
| 005237 |       | STOP*40  | 03653   | 5056 40  |
| 005240 | *     | YES, COME TO AN ERROR STOP WITH<br>THE ERROR FLAG DISPLAYED IN AU  |         |          |
| 005241 | *     | AND AL CLEARED.  |         |          |
| 005242 | *     | THIS ERROR STOP IS FOR AN OPEN   |         |          |



| SEQNO  | LABEL | STATEMENT                       | ADDRESS | INSTRUCT |
|--------|-------|---------------------------------|---------|----------|
| 005243 | *     |                                 |         |          |
| 005244 | *     | INPUT DIODE ON A BOOTSTRAP      |         |          |
| 005245 | *     | GROUP SELECTION CARD.           |         |          |
| 005246 | *     | FOR AN INTERPRETATION OF THE    |         |          |
| 005247 | *     | ERROR FLAG, SEE NOTE 3 IN       |         |          |
|        |       | APPENDIX A.                     |         |          |
| 005250 |       | IJP*RECYCLE                     | 03654   | 55 4275  |
| 005251 | BOOT3 | ENTALK*10                       | 03655   | 70 0010  |
| 005252 |       | STRADR*DI0B00T2                 | 03656   | 74 4020  |
| 005253 |       | STRADR*DI0B00T5                 | 03657   | 74 4047  |
| 005254 |       | ENTALK*2                        | 03660   | 70 0002  |
| 005255 |       | STRAL*LOOPCOUNT                 | 03661   | 44 4256  |
| 005256 |       | ENTAL*N777777                   | 03662   | 12 4435  |
| 005257 |       | STRAL*EB                        | 03663   | 44 4233  |
| 005260 |       | ENTALK*0500                     | 03664   | 70 0500  |
| 005261 |       | RJP*DI0B00T                     | 03665   | 76 3774  |
| 005262 | *     |                                 |         |          |
| 005263 |       | ENTALK*0501                     | 03666   | 70 0501  |
| 005264 |       | RJP*DI0B00T                     | 03667   | 76 3774  |
| 005265 | *     |                                 |         |          |
| 005266 |       | ENTALK*0502                     | 03670   | 70 0502  |
| 005267 |       | RJP*DI0B00T                     | 03671   | 76 3774  |
| 005270 | *     |                                 |         |          |
| 005271 |       | ENTALK*0503                     | 03672   | 70 0503  |
| 005272 |       | RJP*DI0B00T                     | 03673   | 76 3774  |
| 005273 | *     |                                 |         |          |
| 005274 | *     |                                 |         |          |
| 005275 | *     | IS THERE AN OPEN INPUT DIODE ON |         |          |
| 005276 | *     | ANY BOOTSTRAP DIODE SELECTION   |         |          |
| 005277 | *     | TRANSLATION CARD.               |         |          |
|        |       | JPAUZ*B00T4                     | 03674   | 60 3677  |
|        |       | NO, GO TEST THE BOOTSTRAP SENSE |         |          |
| 005300 | *     |                                 |         |          |
| 005301 | *     | AMPLIFIERS.                     | 03675   | 5056 40  |
|        |       | STOP*40                         |         |          |
|        |       | STOP WITH THE ERROR FLAG        |         |          |

| SEQNO  | LABEL | STATEMENT                        | ADDRESS | INSTRUCT |
|--------|-------|----------------------------------|---------|----------|
| 005302 | *     |                                  |         |          |
| 005303 | *     | DISPLAYED IN AU.                 |         |          |
| 005304 | *     | THIS ERROR STOP IS FOR AN OPEN   |         |          |
| 005305 | *     | INPUT DIODE ON A BOOTSTRAP       |         |          |
| 005306 | *     | DIODE SELECTION CARD.            |         |          |
|        |       | FOR AN INTERPRETATION OF THE     |         |          |
| 005307 | *     |                                  |         |          |
| 005310 | *     | ERROR FLAG, SEE NOTE 4 IN        |         |          |
| 005311 |       | APPENDIX A.                      |         |          |
| 005312 | BOOT4 | IJP*RECYCLE                      | 03676   | 55 4275  |
| 005313 | *     | RJP*BOOTDROP                     | 03677   | 76 4062  |
| 005314 |       | CPAL*0                           | 03700   | 5061 00  |
| 005315 |       | JPALZ*BOOT5                      | 03701   | 61 3706  |
| 005316 |       | ENTAU*TEMPORARY                  | 03702   | 10 4301  |
|        |       | NO, GO CHECK FOR BITS PICKED UP. |         |          |
|        |       | YES, ENTER AU WITH THE FAILING   |         |          |
| 005317 |       | ENTAL*N000000                    | 03703   | 12 4366  |
| 005320 |       | STOP*40                          | 03704   | 5056 40  |
| 005321 | *     |                                  |         |          |
| 005322 | *     | THIS ERROR STOP IS FOR A SINGLE  |         |          |
| 005323 | *     | BIT POSITION BEING DROPPED FOR   |         |          |
| 005324 |       | FOR ALL OF BOOTSTRAP.            |         |          |
| 005325 | BOOT5 | IJP*RECYCLE                      | 03705   | 55 4275  |
| 005326 | *     | RJP*BOOTPICK                     | 03706   | 76 4101  |
|        |       | IS A SINGLE BIT PICKED UP IN ALL |         |          |
|        |       | OF BOOTSTRAP MEMORY?             |         |          |
| 005327 |       | JPALZ*BOOT6                      | 03707   | 61 3714  |
| 005330 | *     | NO, GO TEST FOR OPEN BOOTSTRAP   |         |          |
| 005331 |       | MATRIX DIODES.                   |         |          |
| 005332 |       | ENTAU*TEMPORARY                  | 03710   | 10 4301  |
| 005333 |       | ENTAL*N000000                    | 03711   | 12 4366  |
| 005334 | *     | STOP*40                          | 03712   | 5056 40  |
| 005335 | *     |                                  |         |          |
| 005336 | *     | THIS ERROR STOP IS FOR A SINGLE  |         |          |
|        |       | BIT POSITION BEING PICKED UP     |         |          |
|        |       | IN ALL OF BOOTSTRAP MEMORY.      |         |          |
| 005337 |       | IJP*RECYCLE                      | 03713   | 55 4275  |
| 005340 | BOOT6 | ENTICR*1                         | 03714   | 5072 01  |
|        |       | RECYCLE THE MEMORY TEST.         |         |          |
|        |       | ACTIVATE B1.                     |         |          |

| SEQNO  | LABEL    | STATEMENT       | ADDRESS | INSTRUCT |
|--------|----------|-----------------|---------|----------|
| 005341 |          | ENTBK*500       | 03715   | 36 0500  |
| 005342 | *        |                 |         |          |
| 005343 | BOOT7    | ENTSR*10        | 03716   | 5073 10  |
| 005344 |          | ENTALB*0        | 03717   | 13 0000  |
| 005345 | *        |                 |         |          |
| 005346 |          | ENTAU*0001      | 03720   | 10 0001  |
| 005347 | *        |                 |         |          |
| 005350 |          | ENTSR*00        | 03721   | 5073 00  |
| 005351 | *        |                 |         |          |
| 005352 |          | JPALNZ*BOOT8    | 03722   | 63 3725  |
| 005353 |          | STOP*40         | 03723   | 5056 40  |
| 005354 | *        |                 |         |          |
| 005355 | *        |                 |         |          |
| 005356 | *        |                 |         |          |
| 005357 | *        |                 |         |          |
| 005360 |          | IJP*RECYCLE     | 03724   | 55 4275  |
| 005361 | BOOT8    | BSK*N000534     | 03725   | 56 4411  |
| 005362 | *        |                 |         |          |
| 005363 |          | JP*BOOT7        | 03726   | 34 3716  |
| 005364 |          | IJP*BOOT        | 03727   | 55 3572  |
| 005365 | *        |                 |         |          |
| 005366 | *        |                 |         |          |
| 005367 | *        |                 |         |          |
| 005370 | *        |                 |         |          |
| 005371 | *        |                 |         |          |
| 005372 | *        |                 |         |          |
| 005373 | TRANBOOT | 0*0             | 03730   | 00 0000  |
| 005374 |          | STRAL*BASEADR   | 03731   | 44 4225  |
| 005375 | *        |                 |         |          |
| 005376 |          | ENTAL*N777777   | 03732   | 12 4435  |
| 005377 |          | STRAL*TEMPORARY | 03733   | 44 4301  |

| SEQNO  | LABEL     | STATEMENT       | ADDRESS | INSTRUCT |
|--------|-----------|-----------------|---------|----------|
| 005400 |           | ENTAL*LOOPCOUNT | 03734   | 12 4256  |
| 005401 |           | STRAL*LOOP1     | 03735   | 44 4253  |
| 005402 |           | STRAL*LOOP2     | 03736   | 44 4254  |
| 005403 |           | ENTB*BASEADR    | 03737   | 32 4225  |
| 005404 | TRANBOOT1 | ENTSR*10        | 03740   | 5073 10  |
| 005405 |           | ENTALB*0        | 03741   | 13 0000  |
| 005406 | *         |                 |         |          |
| 005407 |           | ENTSR*00        | 03742   | 5073 00  |
| 005410 |           | SLCL*TEMPORARY  | 03743   | 52 4301  |
| 005411 |           | STRAL*TEMPORARY | 03744   | 44 4301  |
| 005412 | *         |                 |         |          |
| 005413 | *         |                 |         |          |
| 005414 | *         |                 |         |          |
| 005415 | TRANBOOT2 | ENTBKB*0        | 03745   | 37 0000  |
| 005416 | *         |                 |         |          |
| 005417 |           | ISK*LOOP1       | 03746   | 57 4253  |
| 005420 | *         |                 |         |          |
| 005421 |           | JP*TRANBOOT1    | 03747   | 34 3740  |
| 005422 | *         |                 |         |          |
| 005423 | *         |                 |         |          |
| 005424 | *         |                 |         |          |
| 005425 | *         |                 |         |          |
| 005426 | *         |                 |         |          |
| 005427 | *         |                 |         |          |
| 005430 | *         |                 |         |          |
| 005431 | *         |                 |         |          |
| 005432 | *         |                 |         |          |
| 005433 | *         |                 |         |          |
| 005434 | *         |                 |         |          |
| 005435 | *         |                 |         |          |
| 005436 | *         |                 |         |          |

| SEQNO  | LABEL     | STATEMENT       | ADDRESS | INSTRUCT |
|--------|-----------|-----------------|---------|----------|
| 005437 | *         |                 |         |          |
| 005440 |           | ENTB*BASEADR    | 03750   | 32 4225  |
| 005441 |           | ENTAU*N000000   | 03751   | 10 4366  |
| 005442 | *         |                 |         |          |
| 005443 | TRANBOOT3 | LSHAU*1         | 03752   | 5045 01  |
| 005444 | *         |                 |         |          |
| 005445 | *         |                 |         |          |
| 005446 |           | ENTSR*10        | 03753   | 5073 10  |
| 005447 |           | ENTALB*0        | 03754   | 13 0000  |
| 005450 | *         |                 |         |          |
| 005451 |           | ENTSR*00        | 03755   | 5073 00  |
| 005452 |           | CMAL*TEMPORARY  | 03756   | 02 4301  |
| 005453 |           | JPNOT*TRANBOOT4 | 03757   | 63 3763  |
| 005454 | *         |                 |         |          |
| 005455 |           | LSHA*22         | 03760   | 5047 22  |
| 005456 |           | SLSET*BIT00     | 03761   | 51 4307  |
| 005457 |           | LSHA*22         | 03762   | 5047 22  |
| 005460 | TRANBOOT4 | ENTBKB*0        | 03763   | 37 0000  |
| 005461 | *         |                 |         |          |
| 005462 |           | ISK*LOOP2       | 03764   | 57 4254  |
| 005463 | *         |                 |         |          |
| 005464 |           | JP*TRANBOOT3    | 03765   | 34 3752  |
| 005465 |           | LSHA*22         | 03766   | 5047 22  |
| 005466 |           | SLCL*EB         | 03767   | 52 4233  |
| 005467 |           | STRAL*EB        | 03770   | 44 4233  |
| 005470 | *         |                 |         |          |
| 005471 |           | ENTAU*EB        | 03771   | 10 4233  |
| 005472 |           | ENTAL*N000000   | 03772   | 12 4366  |
| 005473 |           | IJP*TRANBOOT    | 03773   | 55 3730  |
| 005474 | *         |                 |         |          |

| SEQNO  | LABEL    | STATEMENT   | ADDRESS | INSTRUCT |
|--------|----------|---|---------|----------|
| 005475 | *        |   |         |          |
| 005476 | *        | THE DIOBOOT SUBROUTINE IS USE TO TEST FOR OPEN DIODES |         |          |
| 005477 | *        | ON BOOTSTRAP ADDRESS TRANSLATION CARDS.               |         |          |
| 005500 | *        |   |         |          |
| 005501 | DIOBOOT  | 0*0   | 03774   | 00 0000  |
| 005502 |          | STRAL*BASEADR   | 03775   | 44 4225  |
| 005503 | *        | STORE THE BASE TEST ADDRESS FOR                       |         |          |
| 005504 |          | THIS REFERENCE OF DIOBOOT.                            |         |          |
| 005505 |          | SET UP THE LOOP 1 COUNT.                              |         |          |
| 005506 |          | ENTAL*LOOPCOUNT                                       | 03776   | 12 4256  |
| 005507 |          | STRAL*LOOP1   | 03777   | 44 4253  |
| 005510 |          | ENTICR*1  | 04000   | 5072 01  |
| 005511 |          | ENTB*BASEADR  | 04001   | 32 4225  |
| 005512 |          | CL*EA1  | 04002   | 40 4231  |
| 005513 |          | CL*EA2  | 04003   | 40 4232  |
| 005514 | DIOBOOT1 | ENTAU*N000000   | 04004   | 10 4366  |
| 005515 |          | INITIATE LOOP 2 TEMPORARY FLAG.                       |         |          |
| 005516 |          | ENTAL*LOOP1   | 04005   | 12 4253  |
| 005517 |          | STRAL*LOOP2   | 04006   | 44 4254  |
| 005518 | *        | INITIATE THE LOOP 2 COUNT AT THE                      |         |          |
| 005519 |          | CURRENT LOOP1 VALUE.                                  |         |          |
| 005520 |          | SEENOTE 1 IN APPENDIX A.                              |         |          |
| 005521 |          | SET B2 TO THE TEST ADDRESS                            |         |          |
| 005522 | *        | CURRENTLY HELD IN B1.                                 |         |          |
| 005523 |          | READ UP THE CONTENTS OF THE                           |         |          |
| 005524 |          | LOOP 1 TEST ADDRESS.                                  |         |          |
| 005525 |          | SEENOTE 2 IN APPENDIX A.                              |         |          |
| 005526 |          | SAVE THE CONTENTS OF THE LOOP 1                       |         |          |
| 005527 | *        | TEST ADDRESS.   |         |          |
| 005528 |          | PREPARE THE LOOP1 ERROR FLAG FOR                      |         |          |
| 005529 |          | THE TEST RESULTS OF THE                               |         |          |
| 005530 |          | CURRENT LOOP1 TEST ADDRESS.                           |         |          |
| 005531 |          | ENTSR*10  | 04007   | 5073 10  |
| 005532 |          | STRB*0002   | 04010   | 42 0002  |
| 005533 | *        | ENTALB*0  | 04011   | 13 0000  |
| 005534 | *        |   |         |          |
| 005535 |          | ENTSR*00  | 04012   | 5073 00  |
| 005536 |          | STRAL*SCRATCH1  | 04013   | 44 4276  |
| 005537 | *        |   |         |          |
| 005538 |          | ENTAL*EA1   | 04014   | 12 4231  |
| 005539 |          | LSHAL*1   | 04015   | 5046 01  |
| 005540 |          | STRAL*EA1   | 04016   | 44 4231  |
| 005541 |          | ENTICR*2  | 04017   | 5072 02  |
| 005542 | DIOBOOT2 | ENTBKB*0  | 04020   | 37 0000  |
| 005543 | *        | INCREMENT B2 TO THE NEXT TEST                         |         |          |
| 005544 |          | ADDRESS.  |         |          |

| SEQNO  | LABEL    | STATEMENT      | ADDRESS | INSTRUCT |
|--------|----------|----------------|---------|----------|
| 005534 |          | ENTSR*10       | 04021   | 5073 10  |
| 005535 |          | ENTALB*0       | 04022   | 13 0000  |
| 005536 | *        |                |         |          |
| 005537 |          | ENTSR*00       | 04023   | 5073 00  |
| 005540 |          | STRAL*SCRATCH2 | 04024   | 44 4277  |
| 005541 | *        |                |         |          |
| 005542 |          | SLCL*SCRATCH1  | 04025   | 52 4276  |
| 005543 | *        |                |         |          |
| 005544 | *        |                |         |          |
| 005545 | *        |                |         |          |
| 005546 | *        |                |         |          |
| 005547 |          | LSHAU*1        | 04026   | 5045 01  |
| 005550 | *        |                |         |          |
| 005551 | *        |                |         |          |
| 005552 |          | CMAL*SCRATCH2  | 04027   | 02 4277  |
| 005553 | *        |                |         |          |
| 005554 | *        |                |         |          |
| 005555 | *        |                |         |          |
| 005556 |          | JPNOT*DI0B00T3 | 04030   | 63 4034  |
| 005557 | *        |                |         |          |
| 005560 |          | LSHA*22        | 04031   | 5047 22  |
| 005561 |          | SLSET*BIT00    | 04032   | 51 4307  |
| 005562 |          | LSHA*22        | 04033   | 5047 22  |
| 005563 | DI0B00T3 | CMAL*SCRATCH1  | 04034   | 02 4276  |
| 005564 | *        |                |         |          |
| 005565 | *        |                |         |          |
| 005566 | *        |                |         |          |
| 005567 |          | JPNOT*DI0B00T4 | 04035   | 63 4041  |
| 005570 | *        |                |         |          |
| 005571 |          | ENTAL*EA1      | 04036   | 12 4231  |
| 005572 |          | SLSET*BIT00    | 04037   | 51 4307  |

| SEQNO  | LABEL    | STATEMENT   | ADDRESS | INSTRUCT |
|--------|----------|---|---------|----------|
| 005573 |          | STRAL*EA1   | 04040   | 44 4231  |
| 005574 | DI0B00T4 | ISK*LOOP2   | 04041   | 57 4254  |
| 005575 | *        |   |         |          |
| 005576 | *        |   |         |          |
| 005577 | *        |   |         |          |
| 005600 |          | JP*DI0B00T2   | 04042   | 34 4020  |
| 005601 | *        |   |         |          |
| 005602 |          | LSHA*22   | 04043   | 5047 22  |
| 005603 |          | SLSET*EA2   | 04044   | 51 4232  |
| 005604 |          | STRAL*EA2   | 04045   | 44 4232  |
| 005605 |          | ENTICR*1  | 04046   | 5072 01  |
| 005606 | DI0B00T5 | ENTBKB*0  | 04047   | 37 0000  |
| 005607 | *        |   |         |          |
| 005610 |          | ISK*LOOP1   | 04050   | 57 4253  |
| 005611 | *        |   |         |          |
| 005612 |          | JP*DI0B00T1   | 04051   | 34 4004  |
| 005613 |          | ENTAL*EA1   | 04052   | 12 4231  |
| 005614 |          | LSHAL*1   | 04053   | 5046 01  |
| 005615 |          | SLSET*EA2   | 04054   | 51 4232  |
| 005616 |          | SLCL*EB   | 04055   | 52 4233  |
| 005617 |          | STRAL*EB  | 04056   | 44 4233  |
| 005620 | *        |   |         |          |
| 005621 | *        |   |         |          |
| 005622 |          | ENTAU*EB  | 04057   | 10 4233  |
| 005623 |          | ENTAL*N000000                                       | 04060   | 12 4366  |
| 005624 |          | IJP*DI0B00T   | 04061   | 55 3774  |
| 005625 | *        |   |         |          |
| 005626 | *        | THE BOOTDROP SUBROUTINE TESTS FOR SINGLE BITS BEING |         |          |
| 005627 | *        | DROPPED.  |         |          |
| 005630 | *        |   |         |          |



| SEQNO  | LABEL     | STATEMENT  | ADDRESS | INSTRUCT |
|--------|-----------|--|---------|----------|
| 005631 | BOOTDROP  | 0*0  | 04062   | 00 0000  |
| 005632 |           | ENTALK*34  | 04063   | 70 0034  |
| 005633 |           | STRAL*LOOP1  | 04064   | 44 4253  |
| 005634 |           | CL*TEMPORARY   | 04065   | 40 4301  |
| 005635 |           | ENTALK*0534  | 04066   | 70 0534  |
| 005636 |           | STRADR*BOOTDROP2                                     | 04067   | 74 4071  |
| 005637 | BOOTDROP1 | ENTSR*10   | 04070   | 5073 10  |
| 005640 | BOOTDROP2 | ENTAL*0  | 04071   | 12 0000  |
| 005641 | *         |  |         |          |
| 005642 |           | ENTSR*00   | 04072   | 5073 00  |
| 005643 |           | SLSET*TEMPORARY                                      | 04073   | 51 4301  |
| 005644 |           | STRAL*TEMPORARY                                      | 04074   | 44 4301  |
| 005645 | *         |  |         |          |
| 005646 | *         |  |         |          |
| 005647 |           | ISK*BOOTDROP2  | 04075   | 57 4071  |
| 005650 | *         |  |         |          |
| 005651 |           | ISK*LOOP1  | 04076   | 57 4253  |
| 005652 | *         |  |         |          |
| 005653 |           | JP*BOOTDROP1   | 04077   | 34 4070  |
| 005654 |           | IJP*BOOTDROP   | 04100   | 55 4062  |
| 005655 | *         |  |         |          |
| 005656 | *         |  |         |          |
| 005657 | *         | THE BOOTPICK SUBROUTINE TESTS FOR A SINGLE BIT BEING |         |          |
| 005660 | *         | PICKED UP.   |         |          |
| 005661 | *         |  |         |          |
| 005662 | BOOTPICK  | 0*0  | 04101   | 00 0000  |
| 005663 |           | ENTALK*34  | 04102   | 70 0034  |
| 005664 |           | STRAL*LOOP1  | 04103   | 44 4253  |
| 005665 |           | ENTAL*N777777  | 04104   | 12 4435  |
| 005666 |           | STRAL*TEMPORARY                                      | 04105   | 44 4301  |
| 005667 |           | ENTALK*0534  | 04106   | 70 0534  |

| SEQNO  | LABEL     | STATEMENT        | ADDRESS                          | INSTRUCT      |
|--------|-----------|------------------|----------------------------------|---------------|
| 005670 |           | STRADR*BOOTPICK2 | ADDRESS.                         | 04107 74 4111 |
| 005671 | BOOTPICK1 | ENTSR*10         | ACTIVATE SR TO BANK 0            | 04110 5073 10 |
| 005672 | BOOTPICK2 | ENTAL*0          | READ UP THE CONTENTS OF THE      | 04111 12 0000 |
| 005673 | *         |                  | FIRST ADDRESS.                   |               |
| 005674 |           | ENTSR*00         | DEACTIVATE SR.                   | 04112 5073 00 |
| 005675 |           | SLCL*TEMPORARY   | FORM THE LOGICAL PRODUCT OF      | 04113 52 4301 |
| 005676 |           | STRAL*TEMPORARY  | THE CURRENT BOOTSTRAP TEST       | 04114 44 4301 |
| 005677 | *         |                  | ADDRESS WITH THE LOGICAL         |               |
| 005700 | *         |                  | PRODUCT OF THE CONTENTS OF ALL   |               |
| 005701 | *         |                  | THE PREVIOUS BOOTSTRAP TEST      |               |
| 005702 | *         |                  | ADDRESSES.                       |               |
| 005703 |           | ISK*BOOTPICK2    | DECREMENT TO THE NEXT TEST       | 04115 57 4111 |
| 005704 | *         |                  | ADDRESS.                         |               |
| 005705 |           | ISK*LOOP1        | HAVE ALL THE TEST ADDRESSES BEEN | 04116 57 4253 |
| 005706 | *         |                  | USED?                            |               |
| 005707 |           | JP*BOOTPICK1     | NO, READ THE NEXT ADDRESS.       | 04117 34 4110 |
| 005710 |           | IJP*BOOTPICK     | YES, EXIT FROM THE BOOTPICK      | 04120 55 4101 |
| 005711 | *         |                  | SUBROUTINE.                      |               |
| 005712 | XSTACK    | 0                |                                  | 04121 000000  |
| 005713 |           | ENTAL*HNS        | IS THE MEMORY SIZE GREATER THAN  | 04122 12 4250 |
| 005714 |           | CMAL*N000010     | 32K ?                            | 04123 02 4373 |
| 005715 |           | JPMLEQ*XSTACK2   | YES. GO TEST STACKS 10 THROUGH   | 04124 65 4151 |
| 005716 | *         |                  | 17.                              |               |
| 005717 |           | ENTAU*N007777    | DOES THE 000577 PATTERN APPEAR   | 04125 10 4423 |
| 005720 |           | ENTAL*N000577    | TO BE STORED IN NONEXISTENT      | 04126 12 4413 |
| 005721 |           | RJP*SELECT       | ADDRESS IN BANK 0 (MEMORY        | 04127 76 2455 |
| 005722 |           | ENTAL*ES1        | 32K OR LESS) ?                   | 04130 12 4240 |
| 005723 |           | ENTBK*6          |                                  | 04131 36 0006 |
| 005724 |           | CMALB*SNOFLT8K   |                                  | 04132 03 4337 |
| 005725 |           | JPEQ*XSTACK1     | NO. CHECK STACKS 10 THROUGH      | 04133 61 4136 |
| 005726 | *         |                  | 17.                              |               |

| SEQNO  | LABEL   | STATEMENT       | ADDRESS | INSTRUCT |
|--------|---------|-----------------|---------|----------|
| 005727 |         | BJP*LOK-2       | 04134   | 73 4132  |
| 005730 |         | JP*XSTACK3      | 04135   | 34 4161  |
| 005731 | *       |                 |         |          |
| 005732 | XSTACK1 | ENTAU*N100000   | 04136   | 10 4426  |
| 005733 |         | ENTAL*N000577   | 04137   | 12 4413  |
| 005734 |         | RJP*SELECT      | 04140   | 76 2455  |
| 005735 |         | ENTAL*ES1       | 04141   | 12 4240  |
| 005736 |         | ENTAU*N000377   | 04142   | 10 4406  |
| 005737 | *       |                 |         |          |
| 005740 |         | CMSK*N000377    | 04143   | 06 4406  |
| 005741 |         | JPEQ*XSTACK4    | 04144   | 61 4165  |
| 005742 | *       |                 |         |          |
| 005743 |         | ENTAU*ES1       | 04145   | 10 4240  |
| 005744 |         | ENTAL*ES2       | 04146   | 12 4241  |
| 005745 |         | STOP*40         | 04147   | 5056 40  |
| 005746 |         | IJP*RECYCLE     | 04150   | 55 4275  |
| 005747 | XSTACK2 | ENTAU*N100000   | 04151   | 10 4426  |
| 005750 |         | ENTAL*N000577   | 04152   | 12 4413  |
| 005751 |         | RJP*SELECT      | 04153   | 76 2455  |
| 005752 | *       |                 |         |          |
| 005753 |         | ENTBK*7         | 04154   | 36 0007  |
| 005754 |         | ENTAL*ES1       | 04155   | 12 4240  |
| 005755 |         | CMALB*SNOFLT36K | 04156   | 03 4346  |
| 005756 |         | JPEQ*XSTACK4    | 04157   | 61 4165  |
| 005757 | *       |                 |         |          |
| 005760 |         | BJP*LOK-2       | 04160   | 73 4156  |
| 005761 | XSTACK3 | ENTAU*ES1       | 04161   | 10 4240  |
| 005762 |         | ENTAL*ES2       | 04162   | 12 4241  |
| 005763 |         | STOP*40         | 04163   | 5056 40  |
| 005764 |         | IJP*RECYCLE     | 04164   | 55 4275  |
| 005765 | XSTACK4 | IJP*XSTACK      | 04165   | 55 4121  |

| SEQNO  | LABEL    | STATEMENT    | ADDRESS | INSTRUCT   |
|--------|----------|--------------|---------|--|
| 005766 | SAVEADR  | 0            | 04166   | 000000   |
| 005767 |          | ENTICR*2     | 04167   | 5072 02  |
| 005770 |          | ENTBK*5      | 04170   | 36 0005  |
| 005771 |          | ENTICR*1     | 04171   | 5072 01  |
| 005772 |          | ENTB*BASEADR | 04172   | 32 4225  |
| 005773 | *        |              |         | BE SAVED.  |
| 005774 | SAVEADR1 | ENTICR*1     | 04173   | 5072 01  |
| 005775 |          | ENTSR*10     | 04174   | 5073 10  |
| 005776 |          | ENTAUB*0     | 04175   | 11 0000  |
| 005777 | *        |              |         | TEST ADDRESS.  |
| 006000 |          | ENTBKB*1000  | 04176   | 37 1000  |
| 006001 | *        |              |         | INCREMENT B1 TO NEXT ADDRESS TO<br>BE SAVED.                   |
| 006002 |          | ENTSR*00     | 04177   | 5073 00  |
| 006003 |          | ENTICR*2     | 04200   | 5072 02  |
| 006004 |          | STRAUB*SAVEK | 04201   | 47 4265  |
| 006005 |          | BJP*SAVEADR1 | 04202   | 73 4173  |
| 006006 | *        |              |         | IF ANY ADDRESSES REMAIN TO BE<br>SAVED, SAVE THE NEXT ADDRESS. |
| 006007 |          | ENTICR*1     | 04203   | 5072 01  |
| 006010 |          | IJP*SAVEADR  | 04204   | 55 4166  |
| 006011 | *        |              |         | EXIT FROM THE SAVEADR<br>SUBROUTINE.                           |
| 006012 | RESTORE  | 0            | 04205   | 000000   |
| 006013 |          | ENTICR*1     | 04206   | 5072 01  |
| 006014 |          | ENTB*BASEADR | 04207   | 32 4225  |
| 006015 | *        |              |         | FORM THE FIRST TEST ADDRESS TO<br>BE RESTORED.                 |
| 006016 |          | ENTICR*2     | 04210   | 5072 02  |
| 006017 |          | ENTBK*5      | 04211   | 36 0005  |
| 006020 | RESTORE1 | ENTSR*00     | 04212   | 5073 00  |
| 006021 |          | ENTAUB*SAVEK | 04213   | 11 4265  |
| 006022 |          | ENTICR*1     | 04214   | 5072 01  |
| 006023 |          | ENTSR*10     | 04215   | 5073 10  |
| 006024 |          | STRAUB*0     | 04216   | 47 0000  |
|        |          |              |         | SEE NOTE 1 IN APPENDIX A.<br>RESTORE THE ORIGINAL CONTENTS OF  |

| SEQNO  | LABEL     | STATEMENT                                       | ADDRESS | INSTRUCT |
|--------|-----------|---|---------|----------|
| 006025 | *         | THE TEST ADDRESS.                               |         |          |
| 006026 |           | ENTBKB*1000                                     | 04217   | 37 1000  |
| 006027 | *         | INCREMENT B1 TO NEXT ADDRESS TO<br>BE RESTORED. |         |          |
| 006030 |           | ENTICR*2  | 04220   | 5072 02  |
| 006031 | *         | HAVE ALL THE TEST ADDRESS BEEN<br>RESTORED?     |         |          |
| 006032 |           | BJP*RESTORE1                                    | 04221   | 73 4212  |
| 006033 |           | ENTICR*1  | 04222   | 5072 01  |
| 006034 |           | ENTSR*00  | 04223   | 5073 00  |
| 006035 |           | IJP*RESTORE                                     | 04224   | 55 4205  |
| 006036 | *         | NO, RESTORE THE NEXT ADDRESS.                   |         |          |
| 006037 | *         | DEACTIVATE SR.                                  |         |          |
| 006040 | *         | EXIT FROM THE RESTORE                           |         |          |
| 006041 | *         | SUBROUTINE.                                     |         |          |
| 006041 | *         | SPECIAL PURPOSE CONSTANTS AND WORK AREAS.       |         |          |
| 006042 | BASEADR   | 0   | 04225   | 000000   |
| 006043 | BEGINNING | 0   | 04226   | 000000   |
| 006044 | CONTSIZE  | 0   | 04227   | 000000   |
| 006045 | EA        | 0   | 04230   | 000000   |
| 006046 | EA1       | 0   | 04231   | 000000   |
| 006047 | EA2       | 0   | 04232   | 000000   |
| 006050 | EB        | 0   | 04233   | 000000   |
| 006051 | EC1       | 0   | 04234   | 000000   |
| 006052 | EC2       | 0   | 04235   | 000000   |
| 006053 | ENTA      | ENTAL*0   | 04236   | 12 0000  |
| 006054 | ES        | 0   | 04237   | 000000   |
| 006055 | ES1       | 0   | 04240   | 000000   |
| 006056 | ES2       | 0   | 04241   | 000000   |
| 006057 | ESR10     | ENTSR*10  | 04242   | 5073 10  |
| 006060 | ESR11     | ENTSR*11  | 04243   | 5073 11  |
| 006061 | FAILADR   | 0   | 04244   | 000000   |
| 006062 | FAILDIODE | 0   | 04245   | 000000   |
| 006063 | FAILPTN   | 0   | 04246   | 000000   |

| SEQNO  | LABEL     | STATEMENT      | ADDRESS | INSTRUCT |
|--------|-----------|----------------|---------|----------|
| 006064 | FAILTEST  | 0              | 04247   | 000000   |
| 006065 | HNS       | 000007         | 04250   | 000007   |
| 006066 | *         |                |         |          |
| 006067 | HNSX      | 070000         | 04251   | 070000   |
| 006070 | *         |                |         |          |
| 006071 | INCREM    | 0              | 04252   | 000000   |
| 006072 | LOOP1     | 0              | 04253   | 000000   |
| 006073 | LOOP2     | 0              | 04254   | 000000   |
| 006074 | LOOP3     | 0              | 04255   | 000000   |
| 006075 | LOOPCOUNT | 0              | 04256   | 000000   |
| 006076 | LOWEXEC   | 0*EXEC1        | 04257   | 001012   |
| 006077 | LOWLIMIT  | 005000         | 04260   | 005000   |
| 006100 | PARITYMSK | 005415         | 04261   | 005415   |
| 006101 | PARITYEVN | 505500         | 04262   | 505500   |
| 006102 | PARITYODD | 505400         | 04263   | 505400   |
| 006103 | *         |                |         |          |
| 006104 | PROGSIZE  | 003500         | 04264   | 003500   |
| 006105 | *         |                |         |          |
| 006106 | *         |                |         |          |
| 006107 | SAVEK     | RESERV*10      | 04265   | 000000   |
| 006110 | *         |                |         |          |
| 006111 | RECYCLE   | 0              | 04275   | 000000   |
| 006112 | SCRATCH1  | 0              | 04276   | 000000   |
| 006113 | SCRATCH2  | 0              | 04277   | 000000   |
| 006114 | STRA      | STRAL*0        | 04300   | 44 0000  |
| 006115 | TEMPORARY | 0              | 04301   | 000000   |
| 006116 | TERMINAL  | 0              | 04302   | 000000   |
| 006117 | TESTPATTN | 0              | 04303   | 000000   |
| 006120 | UPEXEC    | 0*EXEC5+010000 | 04304   | 011064   |
| 006121 | UPLIMIT   | 077777         | 04305   | 077777   |
| 006122 | *         |                |         |          |

| SEQNO  | LABEL     | STATEMENT  | ADDRESS | INSTRUCT |
|--------|-----------|--|---------|----------|
| 006123 | VERIFY    | 0  | 04306   | 000000   |
| 006124 | BIT00     | 000001   | 04307   | 000001   |
| 006125 | BIT01     | 000002   | 04310   | 000002   |
| 006126 | BIT02     | 000004   | 04311   | 000004   |
| 006127 | BIT03     | 000010   | 04312   | 000010   |
| 006130 | BIT04     | 000020   | 04313   | 000020   |
| 006131 | BIT05     | 000040   | 04314   | 000040   |
| 006132 | BIT06     | 000100   | 04315   | 000100   |
| 006133 | BIT07     | 000200   | 04316   | 000200   |
| 006134 | *         |  |         |          |
| 006135 | *         | CODES USED FOR EVALUATING THE ES1 ERROR FLAG FOR THE |         |          |
| 006136 | *         | CONDITION ALL EXISTING BANK 1 STACKS (00 THROUGH 03) |         |          |
| 006137 | *         | PICKING UP BITS.                                     |         |          |
| 006140 | *         |  |         |          |
| 006141 | IBNK1T20K | 040010 FOR A 20K MEMORY                              | 04317   | 040010   |
| 006142 | IBNK1T24K | 050014 FOR A 24K MEMORY                              | 04320   | 050014   |
| 006143 | IBNK1T28K | 060016 FOR A 28K MEMORY                              | 04321   | 060016   |
| 006144 | IBNK1T32K | 070017 FOR A 32K MEMORY                              | 04322   | 070017   |
| 006145 | *         |  |         |          |
| 006146 | *         | CODES USED FOR EVALUATING THE ES1 ERROR FLAG FOR THE |         |          |
| 006147 | *         | CONDITION ALL EXISTING BANK 2 STACKS (10 THROUGH 13) |         |          |
| 006150 | *         | PICKING UP BITS.                                     |         |          |
| 006151 | *         |  |         |          |
| 006152 | IBNK2T36K | 100200 FOR A 36K MEMORY                              | 04323   | 100200   |
| 006153 | IBNK2T40K | 110300 FOR A 40K MEMORY                              | 04324   | 110300   |
| 006154 | IBNK2T45K | 120340 FOR A 45K MEMORY                              | 04325   | 120340   |
| 006155 | IBNK2T49K | 130360 FOR A 49K MEMORY                              | 04326   | 130360   |
| 006156 | *         |  |         |          |
| 006157 | *         | CODES USED FOR EVALUATING THE ES1 ERROR FLAG FOR THE |         |          |
| 006160 | *         | CONDITION ALL EXISTING BANK 3 STACKS (14 THROUGH 17) |         |          |
| 006161 | *         | PICKING UP BITS.                                     |         |          |

| SEQNO  | LABEL            | STATEMENT   | ADDRESS | INSTRUCT |
|--------|------------------|---|---------|----------|
| 006162 | *                |   |         |          |
| 006163 | IBNK3T53K 140010 | FOR A 53K MEMORY  | 04327   | 140010   |
| 006164 | IBNK3T57K 150014 | FOR A 57K MEMORY  | 04330   | 150014   |
| 006165 | IBNK3T61K 160016 | FOR A 61K MEMORY  | 04331   | 160016   |
| 006166 | IBNK3T65K 170017 | FOR A 65K MEMORY  | 04332   | 170017   |
| 006167 | *                |   |         |          |
| 006170 | *                | CODES USED FOR EVALUATING THE ES1 ERROR FLAG FOR THE      |         |          |
| 006171 | *                | CONDITION ALL EXISTING BANK 2 AND BANK 3 STACKS           |         |          |
| 006172 | *                | (10 THROUGH 17) PICK UP BITS.                             |         |          |
| 006173 | *                |   |         |          |
| 006174 | IBK23T53K 140370 | FOR A 53K MEMORY  | 04333   | 140370   |
| 006175 | IBK23T57K 150374 | FOR A 57K MEMORY  | 04334   | 150374   |
| 006176 | IBK23T61K 160376 | FOR A 61K MEMORY  | 04335   | 160376   |
| 006177 | IBK23T65K 170377 | FOR A 65K MEMORY.   | 04336   | 170377   |
| 006200 | *                |   |         |          |
| 006201 | *                | CODES USED FOR EVALUATING THE ES1 ERROR FLAGS FOR THE     |         |          |
| 006202 | *                | CONDITION NO EXISTING STACKS 00 THROUGH 07 DROPPING BITS. |         |          |
| 006203 | *                |   |         |          |
| 006204 | SNOFLT8K 010077  | FOR AN 8K MEMORY  | 04337   | 010077   |
| 006205 | SNOFLT12K 020037 | FOR A 12K MEMORY  | 04340   | 020037   |
| 006206 | SNOFLT16K 030017 | FOR A 16K MEMORY  | 04341   | 030017   |
| 006207 | SNOFLT20K 040007 | FOR A 20K MEMORY  | 04342   | 040007   |
| 006210 | SNOFLT24K 050003 | FOR A 24K MEMORY  | 04343   | 050003   |
| 006211 | SNOFLT28K 060001 | FOR A 28K MEMORY  | 04344   | 060001   |
| 006212 | SNOFLT32K 070000 | FOR A 32K MEMORY  | 04345   | 070000   |
| 006213 | *                |   |         |          |
| 006214 | *                | CODES USED FOR EVALUATING THE ES1 ERROR FLAG FOR THE      |         |          |
| 006215 | *                | CONDITION NO EXISTING STACKS 10 THROUGH 17 DROPPING BITS. |         |          |
| 006216 | *                |   |         |          |
| 006217 | SNOFLT36K 100177 | FOR A 36K MEMORY  | 04346   | 100177   |
| 006220 | SNOFLT40K 110077 | FOR A 40K MEMORY  | 04347   | 110077   |



| SEQNO  | LABEL            | STATEMENT  | ADDRESS | INSTRUCT |
|--------|------------------|--|---------|----------|
| 006221 | SN0FLT45K 120037 | FOR A 45K MEMORY   | 04350   | 120037   |
| 006222 | SN0FLT59K 130017 | FOR A 49K MEMORY   | 04351   | 130017   |
| 006223 | SN0FLT53K 140007 | FOR A 53K MEMORY   | 04352   | 140007   |
| 006224 | SN0FLT57K 150003 | FOR A 57K MEMORY   | 04353   | 150003   |
| 006225 | SN0FLT61K 160001 | FOR A 61K MEMORY   | 04354   | 160001   |
| 006226 | SN0FLT65K 170000 | FOR A 65K MEMORY   | 04355   | 170000   |
| 006227 | *                |  |         |          |
| 006230 | *                | CODES USED FOR EVALUATING THE ES1 ERROR FLAG FOR THE       |         |          |
| 006231 | *                | CONDITION ALL BANK 0 STACKS (00 THROUGH 03) DROPPING BITS, |         |          |
| 006232 | *                | BUT NO EXISTING STACKS (04 THROUGH 07) IN BANK 1 DROPPING  |         |          |
| 006233 | *                | BITS.  |         |          |
| 006234 | *                |  |         |          |
| 006235 | SBNK0T20K 040367 | FOR A 20K MEMORY   | 04356   | 040367   |
| 006236 | SBNK0T24K 050363 | FOR A 24K MEMORY   | 04357   | 050363   |
| 006237 | SBNK0T28K 060361 | FOR A 28K MEMORY   | 04360   | 060361   |
| 006240 | SBNK0T32K 070360 | FOR A 32K MEMORY   | 04361   | 070360   |
| 006241 | *                |  |         |          |
| 006242 | *                | CODES USED FOR EVALUATING THE ES1 ERROR FLAG FOR THE       |         |          |
| 006243 | *                | CONDITION ALL BANK 2 STACKS (10 THROUGH 13) DROPPING BITS, |         |          |
| 006244 | *                | BUT NO EXISTING STACKS (14 THROUGH 17) IN BANK 3 DROPPING  |         |          |
| 006245 | *                | BITS.  |         |          |
| 006246 | *                |  |         |          |
| 006247 | SBNK2T53K 140367 | FOR A 53K MEMORY   | 04362   | 140367   |
| 006250 | SBNK2T57K 150363 | FOR A 57K MEMORY   | 04363   | 150363   |
| 006251 | SBNK2T61K 160361 | FOR A 61K MEMORY   | 04364   | 160361   |
| 006252 | SBNK2T65K 170360 | FOR A 65K MEMORY   | 04365   | 170360   |
| 006253 | *                |  |         |          |
| 006254 | *                | GENERAL PURPOSE CONSTANTS.                                 |         |          |
| 006255 | *                |  |         |          |
| 006256 | N000000 000000   |  | 04366   | 000000   |
| 006257 | N000001 000001   |  | 04367   | 000001   |

| SEQNO  | LABEL   | STATEMENT | ADDRESS | INSTRUCT |
|--------|---------|-----------|---------|----------|
| 006260 | N000002 | 000002    | 04370   | 000002   |
| 006261 | N000004 | 000004    | 04371   | 000004   |
| 006262 | N000007 | 000007    | 04372   | 000007   |
| 006263 | N000010 | 000010    | 04373   | 000010   |
| 006264 | N000014 | 000014    | 04374   | 000014   |
| 006265 | N000017 | 000017    | 04375   | 000017   |
| 006266 | N000021 | 000021    | 04376   | 000021   |
| 006267 | N000035 | 000035    | 04377   | 000035   |
| 006270 | N000077 | 000077    | 04400   | 000077   |
| 006271 | N000100 | 000100    | 04401   | 000100   |
| 006272 | N000177 | 000177    | 04402   | 000177   |
| 006273 | N000300 | 000300    | 04403   | 000300   |
| 006274 | N000314 | 000314    | 04404   | 000314   |
| 006275 | N000360 | 000360    | 04405   | 000360   |
| 006276 | N000377 | 000377    | 04406   | 000377   |
| 006277 | N000400 | 000400    | 04407   | 000400   |
| 006300 | N000477 | 000477    | 04410   | 000477   |
| 006301 | N000534 | 000534    | 04411   | 000534   |
| 006302 | N000540 | 000540    | 04412   | 000540   |
| 006303 | N000577 | 000577    | 04413   | 000577   |
| 006304 | N000600 | 000600    | 04414   | 000600   |
| 006305 | N000677 | 000677    | 04415   | 000677   |
| 006306 | N000700 | 000700    | 04416   | 000700   |
| 006307 | N001000 | 001000    | 04417   | 001000   |
| 006310 | N006000 | 006000    | 04420   | 006000   |
| 006311 | N007000 | 007000    | 04421   | 007000   |
| 006312 | N007101 | 007101    | 04422   | 007101   |
| 006313 | N007777 | 007777    | 04423   | 007777   |
| 006314 | N010000 | 010000    | 04424   | 010000   |
| 006315 | N040000 | 040000    | 04425   | 040000   |
| 006316 | N100000 | 100000    | 04426   | 100000   |

| SEQNO  | LABEL   | STATEMENT  | ADDRESS | INSTRUCT |
|--------|---------|--|---------|----------|
| 006317 | N100101 | 100101   | 04427   | 100101   |
| 006320 | N140000 | 140000   | 04430   | 140000   |
| 006321 | N170000 | 170000   | 04431   | 170000   |
| 006322 | N177777 | 177777   | 04432   | 177777   |
| 006323 | N400000 | 400000   | 04433   | 400000   |
| 006324 | N770000 | 770000   | 04434   | 770000   |
| 006325 | N777777 | 777777   | 04435   | 777777   |
| 006326 | *       |  |         |          |
| 006327 | *       |  |         |          |
| 006330 | *       | APPENDIX A   |         |          |
| 006331 | *       |  |         |          |
| 006332 | *       | NOTE 1   |         |          |
| 006333 | *       |  |         |          |
| 006334 | *       | SINCE THE SR REGISTER IS ACTIVATED TO BANK 0, ALL      |         |          |
| 006335 | *       | MEMORY REFERENCES ARE NOW INDEPENDENT OF THE STACK THE |         |          |
| 006336 | *       | PROGRAM IS BEING RUN IN. FOR A B MODIFIED INSTRUCTION  |         |          |
| 006337 | *       | OF THE FORM XX0000 (Y EQUAL TO ZERO), THE ADDRESS      |         |          |
| 006340 | *       | REFERENCED IS ENTIRELY SPECIFIED BY THE ACTIVE B       |         |          |
| 006341 | *       | REGISTER.  |         |          |
| 006342 | *       |  |         |          |
| 006343 | *       | NOTE 2   |         |          |
| 006344 | *       |  |         |          |
| 006345 | *       | SINCE THE SR REGISTER IS DEACTIVATED, MEMORY           |         |          |
| 006346 | *       | REFERENCES ARE NOW DEPENDENT ON THE STACK THE PROGRAM  |         |          |
| 006347 | *       | IS BEING RUN IN. PROGRAM CONSTANTS CAN NOW BE CALLED   |         |          |
| 006350 | *       | UP.  |         |          |
| 006351 | *       |  |         |          |
| 006352 | *       | NOTE 3   |         |          |
| 006353 | *       |  |         |          |
| 006354 | *       | OBSERVE THE AU REGISTER, AND REPLACE THE CARD(S)       |         |          |
| 006355 | *       | CORRESPONDING TO THE BIT(S) SET.                       |         |          |

| SEQNO  | LABEL | STATEMENT  | ADDRESS | INSTRUCT |
|--------|-------|--|---------|----------|
| 006356 | *     |  |         |          |
| 006357 | *     | BIT REPLACE CARD                                       |         |          |
| 006360 | *     |  |         |          |
| 006361 | *     | 00 8J20A (00BG07, 9-132), CARD TYPE 3770.              |         |          |
| 006362 | *     | 01 8J20A (00BG06, 9-132), CARD TYPE 3770.              |         |          |
| 006363 | *     | 02 8J21A (00BG05, 9-132), CARD TYPE 3770.              |         |          |
| 006364 | *     | 03 8J21A (00BG04, 9-132), CARD TYPE 3770.              |         |          |
| 006365 | *     | 04 8J22A (00BG03, 9-132), CARD TYPE 3770.              |         |          |
| 006366 | *     | 05 8J22A (00BG02, 9-132), CARD TYPE 3770.              |         |          |
| 006367 | *     | 06 8J23A (00BG01, 9-132), CARD TYPE 3770.              |         |          |
| 006370 | *     | 07 8J23A (00BG00, 9-132), CARD TYPE 3770.              |         |          |
| 006371 | *     |  |         |          |
| 006372 | *     | NOTE 4   |         |          |
| 006373 | *     |  |         |          |
| 006374 | *     | OBSERVE THE AU REGISTER, AND REPLACE THE CARD(S)       |         |          |
| 006375 | *     | CORRESPONDING TO THE BIT(S) SET.                       |         |          |
| 006376 | *     |  |         |          |
| 006377 | *     | BIT REPLACE CARD                                       |         |          |
| 006400 | *     |  |         |          |
| 006401 | *     | 00 8J20C (10BD03, 9-132), CARD TYPE 3770.              |         |          |
| 006402 | *     | 01 8J20C (10BD02, 9-132), CARD TYPE 3770.              |         |          |
| 006403 | *     | 02 8J21C (10BD01, 9-132), CARD TYPE 3770.              |         |          |
| 006404 | *     | 03 8J21C (10BD00, 9-132), CARD TYPE 3770.              |         |          |
| 006405 | *     |  |         |          |
| 006406 | *     | NOTE 5   |         |          |
| 006407 | *     |  |         |          |
| 006410 | *     | IF THE MAIN MEMORY SIZE IS NOT 32K, THEN THE PARAMETER |         |          |
| 006411 | *     | SUBROUTINE WILL CALCULATE NEW VALUES FROM PARAMETERS   |         |          |
| 006412 | *     | SPECIFIED BY THE OPERATOR AT THE PARAMETER STOP.       |         |          |
| 006413 | *     |  |         |          |
| 006414 | *     | ENDSEG   |         |          |

4-203

END OF PROGRAM

## SYSTEMS DATA LABELS

| ADDRESS | LABEL     | REFERENCES  |
|---------|-----------|---|
| 02062   | ABIT2     | 001372U   |
| 02112   | ABIT23    | 001771U, 002010U  |
| 02116   | ABIT24    | 001766U, 002012U  |
| 02122   | ABIT28    | 002014U   |
| 02066   | ABIT3     | 001354U, 001363U, 001375U, 001762U, 002001U   |
| 02072   | ABIT4     | 001364U, 001376U, 002002U, 002017U  |
| 02076   | ABIT5     | 001425U   |
| 02126   | ABIT56    | 001414U, 002054U  |
| 02142   | ABIT568   | 002032U   |
| 02132   | ABIT57    | 002043U   |
| 02136   | ABIT58    | 002045U   |
| 02102   | ABIT6     | 001416U, 001431U, 002037U, 002060U  |
| 02106   | ABIT7     | 001432U, 002061U  |
| 02557   | ADDRESS   | 002205U, 002255U, 002261U, 002324U, 002330U, 002372U, 002441U, 002445U<br>002547U, 002551U, 002553U, 002555U, 002673U |
| 02673   | ADDRESS1  | 002653U, 002655U  |
| 02536   | ADRXLAT   | 001613U, 001617U, 001623U, 001630U, 002453U, 002556U  |
| 01220   | ALLONES   | 001127U, 001135U, 001252U   |
| 01233   | ALLONES1  | 001250U   |
| 01237   | ALLONES2  | 001234U   |
| 01247   | ALLONES3  | 001236U   |
| 01253   | ALLZEROS  | 001130U, 001136U, 001301U   |
| 01265   | ALLZEROS1 | 001277U   |
| 01276   | ALLZEROS2 | 001266U   |
| 00010   | B0        | NOT REFERENCED  |
| 03572   | BOOT      | 001025U, 003727U  |
| 03613   | BOOT1     | 003610U   |
| 03635   | BOOT2     | 003632U   |
| 03655   | BOOT3     | 003652U   |
| 03677   | BOOT4     | 003674U   |
| 03706   | BOOT5     | 003701U   |
| 03714   | BOOT6     | 003707U   |
| 03716   | BOOT7     | 003726U   |
| 03725   | BOOT8     | 003722U   |
| 04062   | BOOTDROP  | 003677U, 004100U  |
| 04070   | BOOTDROP1 | 004077U   |
| 04071   | BOOTDROP2 | 004067S, 004075U  |

|       |           |  |
|-------|-----------|--|
| 04101 | BOOTPICK  | 003706U, 004120U   |
| 04110 | BOOTPICK1 | 004117U  |
| 04111 | BOOTPICK2 | 004107S, 004115U   |
| 00001 | B1        | NOT REFERENCED   |
| 00002 | B2        | NOT REFERENCED   |
| 00003 | B3        | NOT REFERENCED   |
| 00004 | B4        | NOT REFERENCED   |
| 00005 | B5        | NOT REFERENCED   |
| 00006 | B6        | NOT REFERENCED   |
| 00007 | B7        | NOT REFERENCED   |
| 04225 | BASEADR   | 002457S, 002464U, 002512U, 002560S, 002702U, 002722U, 002724U, 003012S<br>003040U, 003111S, 003112U, 003141S, 003142U, 003731S, 003737U, 003750U<br>003775S, 004001U, 004172U, 004207U |
| 04226 | BEGINNING | 001125S, 001145U, 001162U, 001222U, 001231U, 001255U, 001263U, 001305U<br>001644U, 001660U   |
| 04307 | BIT00     | 002574U, 002615U, 002637U, 002660U, 003502U, 003523U, 003761U, 004032U<br>004037U  |
| 04310 | BIT01     | NOT REFERENCED   |
| 04311 | BIT02     | NOT REFERENCED   |
| 04312 | BIT03     | NOT REFERENCED   |
| 04313 | BIT04     | NOT REFERENCED   |
| 04314 | BIT05     | NOT REFERENCED   |
| 04315 | BIT06     | NOT REFERENCED   |
| 04316 | BIT07     | NOT REFERENCED   |
| 01324 | BITSDROP  | 001205U, 001240U   |
| 01314 | BITSPICK  | 001172U, 001270U   |
| 03233 | CONTROL   | 001024U, 003302U   |
| 03302 | CONTROL1  | 003257U  |
| 04227 | CONTSIZE  | 001042U, 001101S, 003256U, 003401U, 003444U  |
| 01070 | DOWN      | 001067U  |
| 03774 | DI0B00T   | 003645U, 003647U, 003651U, 003665U, 003667U, 003671U, 003673U, 004061U   |
| 04004 | DI0B00T1  | 004051U  |
| 04020 | DI0B00T2  | 003636S, 003656S, 004042U  |
| 04034 | DI0B00T3  | 004030U  |
| 04041 | DI0B00T4  | 004035U  |
| 04047 | DI0B00T5  | 003637S, 003657S   |
| 03163 | DI0DE     | 003126U, 003151U, 003226U  |
| 03165 | DI0DE1    | 003204U  |
| 03177 | DI0DE2    | 003174U  |
| 03202 | DI0DE3    | 003123S, 003146S, 003176U  |
| 03210 | DI0DE4    | 003125S, 003150S   |
| 03225 | DI0DE5    | 003222U  |

|       |           |  |  |  |  |  |  |  |  |
|-------|-----------|--|--|--|--|--|--|--|--|
| 03226 | DIODE6    | 003200U, 003207U   |  |  |  |  |  |  |  |
| 03105 | DIODEMTRX | 002763U, 003034U, 003077U  |  |  |  |  |  |  |  |
| 03107 | DIOMTRX1  | 003161U  |  |  |  |  |  |  |  |
| 03117 | DIOMTRX2  | 003113U  |  |  |  |  |  |  |  |
| 03122 | DIOMTRX3  | 003116U  |  |  |  |  |  |  |  |
| 03136 | DIOMTRX4  | 003127U, 003130U   |  |  |  |  |  |  |  |
| 03160 | DIOMTRX5  | 003152U  |  |  |  |  |  |  |  |
| 02674 | DIGIT     | 002563U, 002607U, 002631U, 002652U, 002745U                            |  |  |  |  |  |  |  |
| 02704 | DIGIT1    | 002720U  |  |  |  |  |  |  |  |
| 02715 | DIGIT2    | 002712U  |  |  |  |  |  |  |  |
| 02716 | DIGIT3    | 002675S, 002714U   |  |  |  |  |  |  |  |
| 02726 | DIGIT4    | 002741U  |  |  |  |  |  |  |  |
| 02735 | DIGIT5    | 002732U  |  |  |  |  |  |  |  |
| 02737 | DIGIT6    | 002676S, 002734U   |  |  |  |  |  |  |  |
| 03303 | DTCONT    | 003241U, 003244U, 003252U, 003255U, 003265U, 003270U, 003276U, 003301U |  |  |  |  |  |  |  |
|       |           | 003346U  |  |  |  |  |  |  |  |
| 03316 | DTCONT1   | 003305S, 003317U, 003321U  |  |  |  |  |  |  |  |
| 03322 | DTCONT2   | 003336U  |  |  |  |  |  |  |  |
| 03323 | DTCONT3   | 003307S, 003331U, 003334U  |  |  |  |  |  |  |  |
| 03334 | DTCONT4   | 003326U  |  |  |  |  |  |  |  |
| 03346 | DTCONT5   | 003340U  |  |  |  |  |  |  |  |
| 04230 | EA        | 002566U, 002721S, 002744U  |  |  |  |  |  |  |  |
| 04231 | EA1       | 002602U, 002624U, 002645U, 002667U, 002723S, 004002S, 004014U, 004016S |  |  |  |  |  |  |  |
|       |           | 004036U, 004040S, 004052U  |  |  |  |  |  |  |  |
| 04232 | EA2       | 002565U, 002573U, 002603U, 002614U, 002625U, 002636U, 002646U, 002657U |  |  |  |  |  |  |  |
|       |           | 002670U, 002742S, 002743U, 004003S, 004044U, 004045S, 004054U          |  |  |  |  |  |  |  |
| 04233 | EB        | 003601S, 003621S, 003643S, 003663S, 003767U, 003770S, 003771U, 004055U |  |  |  |  |  |  |  |
|       |           | 004056S, 004057U   |  |  |  |  |  |  |  |
| 04234 | EC1       | 001604U, 001624U, 001641S, 001677U, 001700S, 001707U, 001721U, 001730U |  |  |  |  |  |  |  |
|       |           | 003354S, 003367U, 003373S, 003410U, 003415U, 003420U, 003430S, 003446U |  |  |  |  |  |  |  |
|       |           | 003452U, 003467U, 003512S, 003533U                                     |  |  |  |  |  |  |  |
| 04235 | EC2       | 001602U, 001625U, 001640S, 001702U, 001703S, 001712U, 001725U, 001731U |  |  |  |  |  |  |  |
|       |           | 003355S, 003370U, 003374S, 003411U, 003421U, 003431S, 003513U, 003532S |  |  |  |  |  |  |  |
|       |           | 003534U  |  |  |  |  |  |  |  |
| 04236 | ENTA      | 003236S, 003247S, 003262S, 003273S, 003306U                            |  |  |  |  |  |  |  |
| 04237 | ES        | NOT REFERENCED   |  |  |  |  |  |  |  |
| 04240 | ES1       | 001351U, 001356U, 001366U, 001407U, 001420U, 001445U, 001452U, 001473U |  |  |  |  |  |  |  |
|       |           | 001522U, 001533U, 001755U, 001764U, 002004U, 002030U, 002041U, 002062U |  |  |  |  |  |  |  |
|       |           | 002066U, 002072U, 002076U, 002102U, 002106U, 002112U, 002116U, 002122U |  |  |  |  |  |  |  |
|       |           | 002126U, 002132U, 002136U, 002142U, 002160U, 002172U, 002177U, 002206U |  |  |  |  |  |  |  |
|       |           | 002213U, 002233U, 002243U, 002247U, 002262U, 002267U, 002304U, 002312U |  |  |  |  |  |  |  |
|       |           | 002316U, 002331U, 002345U, 002357U, 002364U, 002373U, 002400U, 002417U |  |  |  |  |  |  |  |
|       |           | 002427U, 002433U, 002446U, 002511S, 004130U, 004141U, 004145U, 004155U |  |  |  |  |  |  |  |

|       |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-------|-----------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|       |           | 004161U  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 04241 | ES2       | 002534S, 004146U, 004162U  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 04242 | ESR10     | 001052U, 001065U   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 04243 | ESR11     | 001053U, 001064U   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 01012 | EXEC1     | 001073U, 004257U   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 01020 | EXEC2     | 001006U, 001011U, 001016U  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 01052 | EXEC3     | 001043U  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 01057 | EXEC4     | 001056U  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 01064 | EXEC5     | 004304U  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 01072 | EXEC6     | 001070U  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 03104 | EXITTRAN  | 003102U  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 04244 | FAILADR   | 001316U, 001327U, 001631U, 003227U   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 04245 | FAILDIODE | 003164S, 003177U, 003201U, 003206U, 003225U  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 04246 | FAILPTN   | 001315S, 001326S, 001632U, 002063U, 002067U, 002073U, 002077U, 002103U, 002107U, 002113U, 002117U, 002123U, 002127U, 002133U, 002137U, 002143U, 003230U, 003333S, 003343U, 003447U, 003455U, 003500S |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 04247 | FAILTEST  | 002736U, 002747U, 002766U, 003043S, 003055U, 003057U, 003063U, 003101U, 003313S, 003327U, 003332S, 003337U   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 04250 | HNS       | 001103S, 001342U, 001402U, 001436U, 001515U, 001610U, 001717U, 001747U, 002023U, 002151U, 002340U, 002537U, 003005U, 003105U, 004122U  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 04251 | HNSX      | 001105S, 001606U, 002510U  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 04333 | IBK23T53K | 001424U, 001537U   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 04334 | IBK23T57K | NOT REFERENCED   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 04335 | IBK23T61K | NOT REFERENCED   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 04336 | IBK23T65K | NOT REFERENCED   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 04317 | IBNK1T20K | 001460U  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 04320 | IBNK1T24K | NOT REFERENCED   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 04321 | IBNK1T28K | NOT REFERENCED   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 04322 | IBNK1T32K | NOT REFERENCED   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 04323 | IBNK2T36K | 001413U, 001526U   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 04324 | IBNK2T40K | NOT REFERENCED   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 04325 | IBNK2T45K | NOT REFERENCED   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 04326 | IBNK2T49K | NOT REFERENCED   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 04327 | IBNK3T53K | 001545U  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 04330 | IBNK3T57K | NOT REFERENCED   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 04331 | IBNK3T61K | NOT REFERENCED   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 04332 | IBNK3T65K | NOT REFERENCED   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 03460 | ICON      | 003361U, 003363U, 003400U, 003404U, 003440U, 003443U, 003535U  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 03470 | ICON1     | 003511U  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 03473 | ICON2     | 003461S, 003504U, 003506S  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 03474 | ICON3     | 003462S, 003507S   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 03504 | ICON4     | 003477U  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 03514 | ICON5     | 003531U  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |



|       |           |  |
|-------|-----------|--|
| 03516 | ICON6     | 003463S, 003525U, 003527S  |
| 03525 | ICON7     | 003521U  |
| 04252 | INCREM    | 003357S, 003376S, 003435S, 003505U, 003526U  |
| 03347 | ISOCONT   | 003330U  |
| 03373 | ISOCONT1  | 003364U, 003366U   |
| 03414 | ISOCONT2  | 003402U  |
| 03424 | ISOCONT3  | 003414U, 003417U   |
| 03430 | ISOCONT4  | 003405U, 003407U, 003425U  |
| 03452 | ISOCONT5  | 003445U  |
| 04253 | LOOP1     | 002462S, 002505U, 002700S, 002717U, 003006S, 003007U, 003032U, 003100U,<br>003106S, 003107U, 003131U, 003136U, 003154U, 003160U, 003311S, 003320U,<br>003465S, 003510U, 003735S, 003746U, 003777S, 004005U, 004050U, 004064S,<br>004076U, 004103S, 004116U |
| 04254 | LOOP2     | 002463S, 002532U, 002701S, 002740U, 003042S, 003061U, 003115S, 003120S,<br>003144S, 003203U, 003312S, 003335U, 003466S, 003530U, 003736S, 003764U,<br>004006S, 004041U   |
| 04255 | LOOP3     | NOT REFERENCED   |
| 04256 | LOOPCOUNT | 003351S, 003433S, 003464U, 003577S, 003617S, 003641S, 003661S, 003734U,<br>003776U   |
| 04257 | LOWEXEC   | 001021U  |
| 04260 | LOWLIMIT  | 001026U, 001062U   |
| 01111 | MOVE      | 001054U, 001066U, 001123U  |
| 01115 | MOVE1     | 001112S, 001121U   |
| 01117 | MOVE2     | 001113S  |
| 01124 | MAIN      | 001030U, 001033U, 001036U, 001041U, 001046U, 001051U, 001063U, 001137U   |
| 01302 | MAINTAID  | 001176U, 001212U, 001245U, 001274U, 001313U  |
| 01313 | MAINTAID1 | 001306U, 001311U   |
| 01000 | MEDIA     | 001076U, 001100U, 001116U, 001120S   |
| 01557 | MUBIT1    | 001461U, 001471U, 001511U  |
| 01561 | MUBIT2    | 001456U, 001465U, 001470U, 001501U, 001505U, 001510U   |
| 01563 | MUBIT3    | 001450U  |
| 01565 | MUBIT4    | 001546U, 001556U   |
| 01567 | MUBIT5    | 001543U, 001552U, 001555U  |
| 01571 | MUBIT6    | 001531U  |
| 01573 | MUBIT7    | 001477U  |
| 01575 | MUBIT8    | 001540U  |
| 01577 | MUBIT9    | 001527U  |
| 02146 | MUDROP    | 001331U, 001336U   |
| 02157 | MUDROPA   | 002153U  |
| 02203 | MUDROPA1  | 002162U  |
| 02212 | MUDROPB   | 002155U  |
| 02247 | MUDROPB1  | 002242U  |

|       |          |                |          |          |          |          |          |          |         |  |
|-------|----------|----------------|----------|----------|----------|----------|----------|----------|---------|--|
| 02253 | MUDR0PB2 | 002217U        |          |          |          |          |          |          |         |  |
| 02257 | MUDR0PB3 | 002215U,       | 002222U  |          |          |          |          |          |         |  |
| 02262 | MUDR0PB4 | 002256U        |          |          |          |          |          |          |         |  |
| 02266 | MUDR0PC  | 002156U        |          |          |          |          |          |          |         |  |
| 02316 | MUDR0PC1 | 002311U        |          |          |          |          |          |          |         |  |
| 02322 | MUDR0PC2 | 002275U        |          |          |          |          |          |          |         |  |
| 02326 | MUDR0PC3 | 002273U,       | 002277U  |          |          |          |          |          |         |  |
| 02331 | MUDR0PC4 | 002325U        |          |          |          |          |          |          |         |  |
| 02335 | MUDR0PD  | 002271U        |          |          |          |          |          |          |         |  |
| 02344 | MUDR0PE  | 002342U        |          |          |          |          |          |          |         |  |
| 02370 | MUDR0PE1 | 002347U        |          |          |          |          |          |          |         |  |
| 02377 | MUDR0PF  | 002343U        |          |          |          |          |          |          |         |  |
| 02433 | MUDR0PF1 | 002426U        |          |          |          |          |          |          |         |  |
| 02437 | MUDR0PF2 | 002404U        |          |          |          |          |          |          |         |  |
| 02443 | MUDR0PF3 | 002402U,       | 002406U  |          |          |          |          |          |         |  |
| 02446 | MUDR0PF4 | 002442U        |          |          |          |          |          |          |         |  |
| 01433 | MUPICK   | 001323U        |          |          |          |          |          |          |         |  |
| 01444 | MUPICKA  | 001440U        |          |          |          |          |          |          |         |  |
| 01451 | MUPICKB  | 001442U        |          |          |          |          |          |          |         |  |
| 01472 | MUPICKC  | 001443U        |          |          |          |          |          |          |         |  |
| 01512 | MUPICKD  | 001475U        |          |          |          |          |          |          |         |  |
| 01521 | MUPICKE  | 001517U        |          |          |          |          |          |          |         |  |
| 01532 | MUPICKF  | 001520U        |          |          |          |          |          |          |         |  |
| 04366 | N000000  | 001002U,       | 001003U, | 001012U, | 001013U, | 001317U, | 001332U, | 001337U, | 001352U |  |
|       |          | 001357U,       | 001362U, | 001367U, | 001374U, | 001377U, | 001410U, | 001421U, | 001430U |  |
|       |          | 001433U,       | 001446U, | 001453U, | 001464U, | 001467U, | 001474U, | 001504U, | 001507U |  |
|       |          | 001512U,       | 001523U, | 001534U, | 001551U, | 001554U, | 001726U, | 002000U, | 002005U |  |
|       |          | 002016U,       | 002057U, | 002200U, | 002207U, | 002241U, | 002244U, | 002250U, | 002263U |  |
|       |          | 002270U,       | 002305U, | 002310U, | 002313U, | 002317U, | 002332U, | 002365U, | 002374U |  |
|       |          | 002425U,       | 002430U, | 002434U, | 002447U, | 002465U, | 002513U, | 003205U, | 003221U |  |
|       |          | 003242U,       | 003253U, | 003266U, | 003277U, | 003441U, | 003703U, | 003711U, | 003751U |  |
|       |          | 003772U,       | 004004U, | 004060U  |          |          |          |          |         |  |
|       |          | 003023U        |          |          |          |          |          |          |         |  |
| 04367 | N000001  | 001031U,       | 001075U  |          |          |          |          |          |         |  |
| 04370 | N000002  |                |          |          |          |          |          |          |         |  |
| 04371 | N000004  | 001343U,       | 001437U, | 001611U, | 001715U, | 001750U, | 002152U  |          |         |  |
| 04372 | N000007  | 003020U,       | 003027U  |          |          |          |          |          |         |  |
| 04373 | N000010  | 001345U,       | 001441U, | 001615U, | 001752U, | 002154U, | 003024U, | 004123U  |         |  |
| 04374 | N000014  | 001403U,       | 001516U, | 001621U, | 002024U, | 002341U  |          |          |         |  |
| 04375 | N000017  | 001466U,       | 001502U, | 001506U, | 001553U, | 001765U, | 002011U, | 002042U, | 002216U |  |
|       |          | 002274U,       | 002403U  |          |          |          |          |          |         |  |
| 04376 | N000021  | 001077U        |          |          |          |          |          |          |         |  |
| 04377 | N000035  | NOT REFERENCED |          |          |          |          |          |          |         |  |
| 04400 | N000077  | 003133U,       | 003155U  |          |          |          |          |          |         |  |

|       |          |  |  |  |  |  |  |  |  |
|-------|----------|--|--|--|--|--|--|--|--|
| 04401 | N000100  | 003013U  |  |  |  |  |  |  |  |
| 04402 | N000177  | NOT REFERENCED   |  |  |  |  |  |  |  |
| 04403 | N000300  | 001034U  |  |  |  |  |  |  |  |
| 04404 | N000314  | 003453U  |  |  |  |  |  |  |  |
| 04405 | N000360  | 001361U, 001373U, 001427U, 001455U, 001463U, 001500U, 001503U, 001542U |  |  |  |  |  |  |  |
|       |          | 001550U, 001777U, 002007U, 002015U, 002056U, 002240U, 002272U, 002307U |  |  |  |  |  |  |  |
|       |          | 002424U  |  |  |  |  |  |  |  |
| 04406 | N000377  | 001350U, 001355U, 001365U, 001371U, 001406U, 001417U, 001444U, 001451U |  |  |  |  |  |  |  |
|       |          | 001472U, 001476U, 001521U, 001532U, 001763U, 002003U, 002013U, 002027U |  |  |  |  |  |  |  |
|       |          | 002031U, 002040U, 002044U, 002157U, 002161U, 002212U, 002214U, 002266U |  |  |  |  |  |  |  |
|       |          | 002276U, 002303U, 002344U, 002346U, 002377U, 002401U, 002570U, 002611U |  |  |  |  |  |  |  |
|       |          | 002633U, 002654U, 003416U, 004142U, 004143U                            |  |  |  |  |  |  |  |
| 04407 | N000400  | 001044U  |  |  |  |  |  |  |  |
| 04410 | N000477  | 001035U, 001045U   |  |  |  |  |  |  |  |
| 04411 | N000534  | 003725U  |  |  |  |  |  |  |  |
| 04412 | N000540  | 001037U, 001047U, 001061U  |  |  |  |  |  |  |  |
| 04413 | N000577  | 001040U, 004126U, 004137U, 004152U                                     |  |  |  |  |  |  |  |
| 04414 | N000600  | NOT REFERENCED   |  |  |  |  |  |  |  |
| 04415 | N000677  | 001050U  |  |  |  |  |  |  |  |
| 04416 | N000700  | NOT REFERENCED   |  |  |  |  |  |  |  |
| 04417 | N001000  | 003014U  |  |  |  |  |  |  |  |
| 04420 | N006000  | 003011U  |  |  |  |  |  |  |  |
| 04421 | N007000  | 001340U, 001434U, 001745U, 002147U, 003140U                            |  |  |  |  |  |  |  |
| 04422 | N007101  | 002170U, 002231U, 002301U  |  |  |  |  |  |  |  |
| 04423 | N007777  | 001106U, 001722U, 003341U, 004125U                                     |  |  |  |  |  |  |  |
| 04424 | N010000  | 002204U, 002260U, 002327U, 002500U, 002525U, 002554U, 002767U          |  |  |  |  |  |  |  |
| 04425 | N040000  | 002254U, 002323U, 002552U  |  |  |  |  |  |  |  |
| 02452 | N0DR0P   | 001760U, 001775U, 002035U, 002050U, 002165U, 002226U, 002352U, 002412U |  |  |  |  |  |  |  |
| 01601 | NO PICK  | 001353U, 001360U, 001411U, 001422U, 001447U, 001454U, 001524U, 001535U |  |  |  |  |  |  |  |
| 01615 | NO PICK1 | 001612U  |  |  |  |  |  |  |  |
| 01621 | NO PICK2 | 001616U  |  |  |  |  |  |  |  |
| 01624 | NO PICK3 | 001607U, 001614U, 001620U, 001622U                                     |  |  |  |  |  |  |  |
| 01630 | NO PICK4 | 001605U  |  |  |  |  |  |  |  |
| 04426 | N100000  | 001400U, 001513U, 002021U, 002336U, 002371U, 002444U, 002550U, 004136U |  |  |  |  |  |  |  |
|       |          | 004151U  |  |  |  |  |  |  |  |
| 04427 | N100101  | 002355U, 002415U   |  |  |  |  |  |  |  |
| 04430 | N140000  | 002440U, 002546U   |  |  |  |  |  |  |  |
| 04431 | N170000  | 001603U  |  |  |  |  |  |  |  |
| 04432 | N177777  | 003365U, 003406U   |  |  |  |  |  |  |  |
| 04433 | N400000  | NOT REFERENCED   |  |  |  |  |  |  |  |
| 04434 | N770000  | 001711U  |  |  |  |  |  |  |  |

|       |           |  |
|-------|-----------|--|
| 04435 | N777777   | 001637U, 001672U, 001723U, 001744U, 002020U, 002146U, 002167U, 002230U |
|       |           | 002300U, 002335U, 002414U, 002705U, 003044U, 003053U, 003076U, 003103U |
|       |           | 003237U, 003250U, 003263U, 003274U, 003352U, 003436U, 003600U, 003620U |
|       |           | 003642U, 003662U, 003732U, 004104U                                     |
| 01074 | PARAMETER | 001010U, 001110U   |
| 04263 | PARITYODD | 001133U  |
| 04262 | PARITYEVN | 001131U  |
| 04261 | PARITYMSK | 001144U, 001213U, 001643U  |
| 01150 | PARTYSKP1 | 001142S  |
| 01165 | PARTYSKP2 | 001143S  |
| 04264 | PROGSIIZE | 001114U  |
| 02554 | RADRO     | 002541U  |
| 02552 | RADR1     | 002543U  |
| 02550 | RADR2     | 002545U  |
| 02546 | RADR3     | NOT REFERENCED   |
| 03227 | RANDOM    | 003153U, 003162U, 003224U  |
| 04275 | RECYCLE   | 001022S, 001060S, 001560U, 001562U, 001564U, 001566U, 001570U, 001572U |
|       |           | 001574U, 001576U, 001600U, 001627U, 001634U, 001733U, 002065U, 002071U |
|       |           | 002075U, 002101U, 002105U, 002111U, 002115U, 002121U, 002125U, 002131U |
|       |           | 002135U, 002141U, 002145U, 002202U, 002211U, 002246U, 002252U, 002265U |
|       |           | 002315U, 002321U, 002334U, 002367U, 002376U, 002432U, 002436U, 002451U |
|       |           | 002605U, 002627U, 002650U, 002672U, 003022U, 003031U, 003135U, 003157U |
|       |           | 003232U, 003345U, 003372U, 003413U, 003423U, 003427U, 003451U, 003457U |
|       |           | 003612U, 003634U, 003654U, 003676U, 003705U, 003713U, 003724U, 004150U |
|       |           | 004164U  |
| 04205 | RESTORE   | 002564U, 004224U   |
| 04212 | RESTORE1  | 004202U, 004221U   |
| 04166 | SAVEADR   | 002561U, 004204U   |
| 04173 | SAVEADR1  | 004202U  |
| 04265 | SAVEK     | 004201S, 004213U   |
| 01744 | SBDR0P    | 001335U  |
| 01755 | SBDR0PA   | 001751U  |
| 01763 | SBDR0PB   | 001753U  |
| 02003 | SBDR0PC   | 001754U  |
| 02020 | SBDR0PD   | 002006U  |
| 02027 | SBDR0PE   | 002025U  |
| 02040 | SBDR0PF   | 002026U  |
| 04356 | SBNK0T20K | 001770U, 002221U   |
| 04357 | SBNK0T24K | NOT REFERENCED   |
| 04360 | SBNK0T28K | NOT REFERENCED   |
| 04361 | SBNK0T32K | NOT REFERENCED   |
| 04362 | SBNK2T53K | 002053U, 002405U   |
| 04363 | SBNK2T57K | NOT REFERENCED   |

|       |           |   |
|-------|-----------|---|
| 04364 | SBNK2T61K | NOT REFERENCED  |
| 04365 | SBNK2T65K | NOT REFERENCED  |
| 01337 | SBPICK    | 001322U   |
| 01350 | SBPICKA   | 001344U   |
| 01355 | SBPICKB   | 001346U   |
| 01365 | SBPICKC   | 001347U   |
| 01377 | SBPICKD   | 001370U   |
| 01406 | SBPICKE   | 001404U   |
| 01417 | SBPICKF   | 001405U   |
| 04276 | SCRATCH1  | 004013S, 004025U, 004034U   |
| 04277 | SCRATCH2  | 004024S, 004027U  |
| 02455 | SELECT    | 001341U, 001401U, 001435U, 001514U, 001746U, 002022U, 002150U, 002171U<br>002232U, 002302U, 002337U, 002356U, 002416U, 002535U, 004127U, 004140U<br>004153U |
| 02466 | SELECT1   | 002506U   |
| 02467 | SELECT2   | NOT REFERENCED  |
| 02477 | SELECT3   | 002473U   |
| 02514 | SELECT4   | 002533U   |
| 02515 | SELECT5   | NOT REFERENCED  |
| 02524 | SELECT6   | 002520U   |
| 04340 | SNOFLT12K | NOT REFERENCED  |
| 04341 | SNOFLT16K | NOT REFERENCED  |
| 04342 | SNOFLT20K | 001774U, 002225U, 002235U   |
| 04343 | SNOFLT24K | NOT REFERENCED  |
| 04344 | SNOFLT28K | NOT REFERENCED  |
| 04345 | SNOFLT32K | NOT REFERENCED  |
| 04346 | SNOFLT36K | 002034U, 002351U, 002361U, 004156U  |
| 04347 | SNOFLT40K | NOT REFERENCED  |
| 04350 | SNOFLT45K | NOT REFERENCED  |
| 04352 | SNOFLT53K | 002047U, 002411U, 002421U   |
| 04353 | SNOFLT57K | NOT REFERENCED  |
| 04351 | SNOFLT59K | NOT REFERENCED  |
| 04354 | SNOFLT61K | NOT REFERENCED  |
| 04355 | SNOFLT65K | NOT REFERENCED  |
| 04337 | SNOFLT8K  | 001757U, 002164U, 002174U, 004132U  |
| 01635 | SPADR     | 001601U, 001734U, 002203U, 002253U, 002257U, 002322U, 002326U, 002370U<br>002437U, 002443U, 002452U   |
| 01645 | SPADR1    | 001657U   |
| 01653 | SPADR2    | 001650U   |
| 01655 | SPADR3    | 001652U   |
| 01661 | SPADR4    | 001705U   |
| 01670 | SPADR5    | 001664U   |
| 01674 | SPADR6    | 001667U   |

|       |           |  |  |  |  |  |  |  |  |
|-------|-----------|--|--|--|--|--|--|--|--|
| 01704 | SPADR7    | 001666U, 001673U   |  |  |  |  |  |  |  |
| 01721 | SPADR7A   | 001713U  |  |  |  |  |  |  |  |
| 01730 | SPADR8    | 001724U  |  |  |  |  |  |  |  |
| 01734 | SPADR9    | 001710U, 001716U, 001720U, 001727U                                     |  |  |  |  |  |  |  |
| 03536 | SPCONT    | 003424U, 003571U   |  |  |  |  |  |  |  |
| 04300 | STRA      | 003235S, 003246S, 003261S, 003272S, 003304U                            |  |  |  |  |  |  |  |
| 04301 | TEMPORARY | 001303S, 001304U, 001310U, 001312U, 001675U, 001676U, 001701U, 003702U |  |  |  |  |  |  |  |
|       |           | 003710U, 003733S, 003743U, 003744S, 003756U, 004065S, 004073U, 004074S |  |  |  |  |  |  |  |
|       |           | 004105S, 004113U, 004114S  |  |  |  |  |  |  |  |
| 04302 | TERMINAL  | 001126S, 001160U, 001214U, 001226U, 001247U, 001260U, 001276U, 001307U |  |  |  |  |  |  |  |
|       |           | 001656U, 001704U   |  |  |  |  |  |  |  |
| 04303 | TESTPATTN | 002460S, 002467U, 002515U, 003240S, 003243S, 003251S, 003254S, 003264S |  |  |  |  |  |  |  |
|       |           | 003267S, 003275S, 003300S, 003314U, 003325U, 003353S, 003437S, 003442S |  |  |  |  |  |  |  |
|       |           | 003471U, 003476U, 003520U  |  |  |  |  |  |  |  |
| 03035 | TRAN      | 003015U, 003025U, 003104U  |  |  |  |  |  |  |  |
| 03044 | TRAN1     | 003062U  |  |  |  |  |  |  |  |
| 03060 | TRAN2     | 003037S, 003054U   |  |  |  |  |  |  |  |
| 03103 | TRANAUNEG | 003056U, 003064U   |  |  |  |  |  |  |  |
| 03730 | TRANBOOT  | 003603U, 003605U, 003607U, 003623U, 003625U, 003627U, 003631U, 003773U |  |  |  |  |  |  |  |
| 03740 | TRANBOOT1 | 003747U  |  |  |  |  |  |  |  |
| 03745 | TRANBOOT2 | 003574S, 003614S   |  |  |  |  |  |  |  |
| 03752 | TRANBOOT3 | 003765U  |  |  |  |  |  |  |  |
| 03763 | TRANBOOT4 | 003575S, 003615S, 003757U  |  |  |  |  |  |  |  |
| 03005 | TRANSFORM | 002175U, 002236U, 002306U, 002362U, 002422U, 002454U, 003003U          |  |  |  |  |  |  |  |
| 03007 | TRANSFM1  | 003033U  |  |  |  |  |  |  |  |
| 03032 | TRANSFM2  | 003026U  |  |  |  |  |  |  |  |
| 01056 | UP        | 001055U  |  |  |  |  |  |  |  |
| 04304 | UPEXEC    | 001057U  |  |  |  |  |  |  |  |
| 04305 | UPLIMIT   | 001027U, 001107S   |  |  |  |  |  |  |  |
| 02765 | VERFTRFM  | 002623U, 002666U, 003004U  |  |  |  |  |  |  |  |
| 03004 | VERFTRFM1 | 003000U, 003002U   |  |  |  |  |  |  |  |
| 02764 | VERFYDIO1 | 002760U, 002762U   |  |  |  |  |  |  |  |
| 04306 | VERIFY    | 003036S, 003065U   |  |  |  |  |  |  |  |
| 02746 | VERIFYDIO | 002601U, 002622U, 002644U, 002665U, 002764U                            |  |  |  |  |  |  |  |
| 01146 | WORST1    | 001161U  |  |  |  |  |  |  |  |
| 01155 | WORST2    | 001151U  |  |  |  |  |  |  |  |
| 01157 | WORST3    | 001154U  |  |  |  |  |  |  |  |
| 01163 | WORST4    | 001215U  |  |  |  |  |  |  |  |
| 01200 | WORST5    | 001166U  |  |  |  |  |  |  |  |
| 01204 | WORST6    | 001201U  |  |  |  |  |  |  |  |
| 01213 | WORST7    | 001177U  |  |  |  |  |  |  |  |
| 01214 | WORST8    | 001170U, 001203U   |  |  |  |  |  |  |  |

|       |          |                           |
|-------|----------|---------------------------|
| 01140 | WORSTPTN | 001132U, 001134U, 001217U |
| 02600 | XD1      | 002575U                   |
| 02602 | XD2      | 002577U                   |
| 02562 | XDIODE   | NOT REFERENCED            |
| 02621 | XG1      | 002616U                   |
| 02624 | XG2      | 002620U                   |
| 02606 | XGROUP   | 002567U, 002571U          |
| 04121 | XSTACK   | 001072U, 004165U          |
| 04136 | XSTACK1  | 004133U                   |
| 04151 | XSTACK2  | 004124U                   |
| 04161 | XSTACK3  | 004135U                   |
| 04165 | XSTACK4  | 004144U, 004157U          |
| 03013 | XTRANSFM | NOT REFERENCED            |
| 02643 | YD1      | 002640U                   |
| 02645 | YD2      | 002642U                   |
| 02630 | YDIODE   | 002610U, 002612U          |
| 02664 | YG1      | 002661U                   |
| 02667 | YG2      | 002663U                   |
| 02651 | YGROUP   | 002632U, 002634U          |
| 03023 | YTRANSFM | 003016U                   |
| 77777 | ZZZZZZZZ | NOT REFERENCED            |

| SEQNO  | LABEL  | STATEMENT               | ADDRESS | INSTRUCT |
|--------|--------|-------------------------|---------|----------|
| 000000 | IOTA   | CONTR*NOYES             |         |          |
| 000001 |        | ALLOC                   |         |          |
| 000002 | BEGIN  | 07700                   |         |          |
| 000003 | IOTA   | 010000                  |         |          |
| 000004 | ADR    | 0                       |         |          |
| 000005 | CHTBL  | 0*0                     |         |          |
| 000006 | XX     | 0                       |         |          |
| 000007 | KH     | 0000                    |         |          |
| 000010 | KL     | 0000                    |         |          |
| 000011 | KS     | 00000                   |         |          |
| 000012 | TAK1E  | 0000                    |         |          |
| 000013 | LOAD1A | 0000                    |         |          |
| 000014 | TAK2E  | 0000                    |         |          |
| 000015 | LOAD2A | 0000                    |         |          |
| 000016 |        | OUTPUT*4*12             |         |          |
| 000017 |        | PROG*NOYES              |         |          |
| 000020 |        | P SEG                   | 00000   | 5047 00  |
| 000021 | BEGIN  | SIL*00                  | 07700   | 5034 00  |
| 000022 |        | SXL LOK0 EXT INT        | 07701   | 5036 00  |
| 000023 |        | IJP*LOK+1               | 07702   | 55 7703  |
| 000024 |        | 0*IOTA                  | 07703   | 010000   |
| 000025 | EISIL  | 0*EISILM INT RTN JP REF | 07704   | 016124   |
| 000026 |        | JPAUZ*LOK+2             | 07705   | 60 7707  |
| 000027 | FALADR | JPAUZ*LOK+1             | 07706   | 60 7707  |
| 000030 |        | STOP*40 ERR STOP        | 07707   | 5056 40  |
| 000031 | ZROL   | 0*ZROMON                | 07710   | 012060   |
| 000032 | CMPL   | 0*CMPINT                | 07711   | 012571   |
| 000033 | FAULTA | 0*FAULT+1               | 07712   | 015375   |
| 000034 | MONINO | 0*MONINX REF ADDR       | 07713   | 014342   |

4-215



| SEQNO  | LABEL  | STATEMENT    | ADDRESS | INSTRUCT |
|--------|--------|--------------|---------|----------|
| 000035 | IRJPFL | 0*IRJPFM     | 07714   | 016441   |
| 000036 | EFSIL  | 0*EFSILM     | 07715   | 016130   |
| 000037 | AUSIL  | 0*AUSILM     | 07716   | 016134   |
| 000040 | AURIL  | 0*AURILM     | 07717   | 016334   |
| 000041 | EIRH   | 0*EIRT1      | 07720   | 015367   |
| 000042 | EFMH   | 0*EFMON      | 07721   | 016000   |
| 000043 | AUTMH  | 0*AUTMON     | 07722   | 016006   |
| 000044 | INMOH  | 0*INMON      | 07723   | 016014   |
| 000045 | CHNPRL | 0*CHNPRM     | 07724   | 012341   |
| 000046 | CHNPSL | 0*CHNPSM     | 07725   | 012347   |
| 000047 | FPRIL  | 0*FPRIM      | 07726   | 012506   |
| 000050 | FPRIL1 | 0*FPRIM1     | 07727   | 012510   |
| 000051 | WTINTL | 0*WTEINT     | 07730   | 012540   |
| 000052 |        | RESERV*17    | 07731   | 000000   |
| 000053 |        | RESERV*01    | 07750   | 000000   |
| 000054 | HIEISP | 0*HIEIS      | 07751   | 013324   |
| 000055 | SODRP  | 0*S0ODRP     | 07752   | 013045   |
| 000056 | RSMFOK | 0*RSMFK0 REF | 07753   | 017547   |
| 000057 | FLRMSF | 0*FLRSMF REF | 07754   | 017543   |
| 000060 | RTCMB  | 0*RTCMA REF  | 07755   | 017615   |
| 000061 | MWAID  | 0*MWAED      | 07756   | 014002   |
| 000062 | RSMFAB | 0*RSMFB REF  | 07757   | 017216   |
| 000063 | SPI13C | 0*SPI13D REF | 07760   | 017214   |
| 000064 | SPI12A | 0*SPI12B REF | 07761   | 017212   |
| 000065 | RTCOM  | 0*RTCOK REF  | 07762   | 017210   |
| 000066 | RTCMOT | 0*RTCNOT REF | 07763   | 017206   |
| 000067 | RTCQVK | 0*RTCQVF REF | 07764   | 017204   |
| 000070 | EIOKHA | 0*EIOKH REF  | 07765   | 013052   |
| 000071 | EIOKLA | 0*EIOKL REF  | 07766   | 013057   |
| 000072 | JPEFL  | 0*JPEFM      | 07767   | 011772   |
| 000073 | PROKAA | 0*PROKA REF  | 07770   | 015362   |

4-216

| SEQNO  | LABEL  | STATEMENT   | ADDRESS | INSTRUCT |
|--------|--------|-------------|---------|----------|
| 000074 | PRBADD | 0*PRBAD REF | 07771   | 015354   |
| 000075 | RSMFBA | 0*RSMFA REF | 07772   | 017612   |
| 000076 | RTCCC  | 0*ADR REF   | 07773   | 000000   |



4-217

|        |      |   |       |      |      |
|--------|------|---|-------|------|------|
| 000077 | IOTA | SIL LOKO INT                                    | 10000 | 5034 | 00   |
| 000100 |      | ENTSR*0 INITIALIZE STACK REF                    | 10001 | 5073 | 00   |
| 000101 |      | ENTAL*AFault SET ADDR 0-1 TO JP                 | 10002 | 12   | 5374 |
| 000102 |      | ENTSR*10 REF BANK 0                             | 10003 | 5073 | 10   |
| 000103 |      | STRAL*0 STR RJP*AFault+1 AT ADDR 0              | 10004 | 44   | 0000 |
| 000104 |      | ENTSR*0 REF CURR BANK                           | 10005 | 5073 | 00   |
| 000105 |      | ENTAU*CHA4 CL AU                                | 10006 | 10   | 6527 |
| 000106 |      | ENTALK*0 CL AL                                  | 10007 | 70   | 0000 |
| 000107 |      | REMARK  |       |      |      |
| 000110 |      | REMARK  |       |      |      |
| 000111 |      | REMARK* AU I0000HIGH AL C00000000               |       |      |      |
| 000112 |      | REMARK* I0000LOCH B0000SIZE                     |       |      |      |
| 000113 |      | REMARK  |       |      |      |
| 000114 |      | REMARK*AU17#1 IF FAST INTERFACE ON HI-JPRD CHAN |       |      |      |
| 000115 |      | REMARK* #0 SLOW                                 |       |      |      |
| 000116 |      | REMARK*AU09-12#HIGHER JUMPERED CHANNEL NO.      |       |      |      |
| 000117 |      | REMARK*AU08#1 IF FAST INTERFACE ON LO-JPRD CHAN |       |      |      |
| 000120 |      | REMARK* #0 SLOW                                 |       |      |      |
| 000121 |      | REMARK*AU00-03#LOWER JUMPERED CHANNEL NO.       |       |      |      |
| 000122 |      | REMARK  |       |      |      |

| SEQNO  | LABEL | STATEMENT  | ADDRESS | INSTRUCT |
|--------|-------|--|---------|----------|
| 000123 |       | REMARK*NOTE-JUMPER#CABLE INPUT TO OUTPUT ON CHAN |         |          |
| 000124 |       | REMARK   |         |          |
| 000125 |       | REMARK*AL17#1 IF NO CDM/ONE OF 1218 MODES        |         |          |
| 000126 |       | REMARK* #0 IF CDM/1219 MODE                      |         |          |
| 000127 |       | REMARK*AL08#1 IF STANDARD 1218 BUFFER MODE       |         |          |
| 000130 |       | REMARK* #0 IF NTDS COMPATABLE BUFF MODE          |         |          |
| 000131 |       | REMARK*AL00-03#17 FOR 16 I/O CHANNEL COMPUTER    |         |          |
| 000132 |       | REMARK* 16 FOR 12                                |         |          |
| 000133 |       | REMARK* 07 FOR 8                                 |         |          |
| 000134 |       | REMARK* 06 FOR 4                                 |         |          |
| 000135 |       | REMARK   |         |          |
| 000136 |       | REMARK   |         |          |
| 000137 |       | SKP*01 SET SKP KEY 0 IF PARAM ALRDY ENTD         | 10010   | 5050 01  |
| 000140 |       | SKP*40 UNCOND SKP                                | 10011   | 5050 40  |
| 000141 |       | JP*START JP IF SKP KEY 0 SET                     | 10012   | 34 0020  |
| 000142 | PSTOP | STOP*40 ENT PARAMETERS PER INSTRUCTIONS          | 10013   | 5056 40  |
| 000143 |       | REMARK* SHOWN IMMEDIATELY ABOVE.                 |         |          |
| 000144 |       | STRAU*AUPRAM SAVE PARAMETERS                     | 10014   | 46 6624  |
| 000145 |       | STRAL*ALPRAM                                     | 10015   | 44 6625  |
| 000146 |       | RJP*UPRAM UNPACK AND STR PARAMETERS              | 10016   | 76 6137  |
| 000147 |       | RJP*CHACHA TO CHAN CHANGER                       | 10017   | 76 6233  |
| 000150 | START | SIL LOKO INT                                     | 10020   | 5034 00  |
| 000151 |       | SXL  | 10021   | 5036 00  |
| 000152 |       | RJP*CHSET SET CHAN TBL LBL AND B                 | 10022   | 76 5574  |
| 000153 |       | REMARK* I01 CK CONSTANT IN, OUT, OR EF ACTIVE.   |         |          |
| 000154 |       | REMARK* I02 CK RTC FALSE RUN, CK FALSE IDR, ODR, |         |          |
| 000155 |       | REMARK* OR EFR AND ABILITY TO CL ACT FF.         |         |          |
| 000156 |       | REMARK*I03 CK SRSM AND SKPNR FUNCTIONS           |         |          |
| 000157 |       | REMARK* I0456 CK FALSE TERM OF A LO CHAN WHEN HI |         |          |
| 000160 |       | REMARK* ONLY IS TERM - ALSO CK TERM OF HI CHAN   |         |          |
| 000161 |       | REMARK* WHEN LOWER IS TERM.                      |         |          |

| SEQNO  | LABEL | STATEMENT  | ADDRESS | INSTRUCT |
|--------|-------|--|---------|----------|
| 000162 |       | REMARK* I0789 CK FALSE ACTIVATION OF LO CHAN WHEN        |         |          |
| 000163 |       | REMARK* HI CHAN ONLY IS ACTVTD - ALSO CK ACT             |         |          |
| 000164 |       | REMARK* OF LO WHEN HI IS ACT.                            |         |          |
| 000165 |       | REMARK*I010 CK EF,OUT,AND IN ACTIVE FUNC. ENABLES        |         |          |
| 000166 |       | REMARK* I011 CK PROPER STR OF BCW(IN,OUT,EF).            |         |          |
| 000167 |       | REMARK*I012 CK EXFOV,REQUEST PROPROCESSING, RIL FAILURE, |         |          |
| 000170 |       | REMARK* PREMATURE AND NORM BUF TERM, B#0 CKT.            |         |          |
| 000171 |       | REMARK*I013 CK OUTOV,FALSE IDR, FALSE MON ON TERM.       |         |          |
| 000172 |       | REMARK* I014 CK BKWD BUF, CDM.                           |         |          |
| 000173 |       | REMARK* I016 CK HNRNG OUT AND EF MON.                    |         |          |
| 000174 |       | REMARK* RLJPEI CK RIL AND IJPEI REL OF LOKO              |         |          |
| 000175 |       | REMARK* I015 CK SIL ABILITY TO LOKO EF, OUT MON.         |         |          |
| 000176 |       | REMARK*I017 CK CHAN PRIOR,7-6,7-5,----3-0,2-0.           |         |          |
| 000177 |       | REMARK* I018 CK HNRNG OF HI PRIOR FUNC WHEN TWO          |         |          |
| 000200 |       | REMARK* FUNC WAITING TO BE HNRD ON SAME CHAN.            |         |          |
| 000201 |       | REMARK* WAITCK CK WTFI FUNC.                             |         |          |
| 000202 |       | REMARK*CMPLK0 CK COMPARE + FORCE INT LOKO                |         |          |
| 000203 |       | REMARK*EXFEIC-TEST EXF AND EI CONTROL                    |         |          |
| 000204 |       | REMARK*INOUTC- TEST INPUT AND OUTPUT CONTROL             |         |          |
| 000205 |       | REMARK*CSDATA-TESTS DATA TRANSFERRING                    |         |          |
| 000206 |       | REMARK*MONTIN-TEST INPUT MON INT                         |         |          |
| 000207 |       | REMARK*ATIME-TEST EF/OD AND IN ACK TIMING(SLOW)          |         |          |
| 000210 |       | REMARK*CDMIN-TEST INPUT CDM                              |         |          |
| 000211 |       | REMARK*FUNPGA-TEST FUNCTION PRIORITY CRKT                |         |          |
| 000212 |       | RJP*I01  | 10023   | 76 0n72  |
| 000213 |       | RJP*I02  | 10024   | 76 0133  |
| 000214 |       | RJP*I03  | 10025   | 76 0306  |
| 000215 |       | RJP*I0456 RUN I04,5,6                                    | 10026   | 76 0346  |
| 000216 |       | RJP*I0789 RUN I07,8,9                                    | 10027   | 76 0454  |

4-219

| SEQNO  | LABEL | STATEMENT                               | ADDRESS | INSTRUCT |
|--------|-------|---|---------|----------|
| 000217 |       | RJP*I010                                | 10030   | 76 0556  |
| 000220 |       | RJP*I011                                | 10031   | 76 0612  |
| 000221 |       | RJP*I012                                | 10032   | 76 1132  |
| 000222 |       | RJP*I013                                | 10033   | 76 1362  |
| 000223 |       | RJP*I014                                | 10034   | 76 1516  |
| 000224 |       | RJP*I016                                | 10035   | 76 1663  |
| 000225 |       | RJP*RLJPEI                              | 10036   | 76 1774  |
| 000226 |       | RJP*I015                                | 10037   | 76 2120  |
| 000227 |       | RJP*I017 CK CHAN PRIORITY               | 10040   | 76 2230  |
| 000230 |       | RJP*I018 CK FUNC PRIOR                  | 10041   | 76 2415  |
| 000231 |       | RJP*WAITCK CK FUNC OF WTFI              | 10042   | 76 2521  |
| 000232 |       | RJP*CMPLKO CK SIL COMPARE               | 10043   | 76 2542  |
| 000233 |       | SKP*10 SET SKIP KEY 3 TO RUN NON-JPRD   | 10044   | 5050 10  |
| 000234 |       | REMARK*TESTS ONLY.                      |         |          |
| 000235 |       | JP*LOK+6                                | 10045   | 34 0053  |
| 000236 |       | STOP*04 STOP K2 SET NORM STOP NON-JMPRD | 10046   | 5056 04  |
| 000237 | REES  | RJP*HONINT CLEAR ALL MONITORS           | 10047   | 76 6353  |
| 000240 |       | RJP*TERMAL TERM ALL ACT                 | 10050   | 76 5447  |
| 000241 |       | RJP*SRSMAL SET RESUMES                  | 10051   | 76 6374  |
| 000242 |       | JP*START RECYCLE                        | 10052   | 34 0020  |
| 000243 |       | RJP*EXFEIC TEST EXF/EI CONTROL          | 10053   | 76 2574  |
| 000244 |       | RJP*INOUTC                              | 10054   | 76 3341  |
| 000245 |       | RJP*CSDATA TEST C REG AND INPUT/STR SEL | 10055   | 76 4003  |
| 000246 |       | RJP*MONTIN                              | 10056   | 76 4245  |
| 000247 |       | RJP*ATIME                               | 10057   | 76 4343  |
| 000250 |       | RJP*CDMIN                               | 10060   | 76 4625  |
| 000251 |       | RJP*FUNPGA                              | 10061   | 76 4735  |
| 000252 |       | STOP*04 SET STOP KEY2 TO END            | 10062   | 5056 04  |
| 000253 |       | SKP*04 SET SKIP KEY 2 TO RUN SPECIAL    | 10063   | 5050 04  |
| 000254 |       | SKP*40                                  | 10064   | 5050 40  |
| 000255 |       | JP*SPECIA TO SPECIAL I/O TEST PARAM STP | 10065   | 34 6631  |

4-220

| SEQNO  | LABEL  | STATEMENT                                     | ADDRESS | INSTRUCT |
|--------|--------|---|---------|----------|
| 000256 |        | SKP*20 SET SKIP KEY 4 TO REF BOOTSTRP         | 10066   | 5050 20  |
| 000257 |        | SKP*40  | 10067   | 5050 40  |
| 000260 |        | REMARK*AND ALLOW UPAC LOAD OF OTHER MTU BLOCK |         |          |
| 000261 |        | JP*BOOTS TO BOOTSTRAP                         | 10070   | 34 7617  |
| 000262 |        | JP*REES PREP RECYCLE                          | 10071   | 34 0047  |
| 000263 | I01    | 0*0 ENTRY                                     | 10072   | 00 0000  |
| 000264 |        | ENTALK*I01                                    | 10073   | 70 0072  |
| 000265 |        | STRAL*IFault                                  | 10074   | 44 6603  |
| 000266 |        | CL*AUERDS ERR STR LOK                         | 10075   | 40 6467  |
| 000267 |        | CL*ALERDS ERR STR LOK                         | 10076   | 40 6470  |
| 000270 |        | CL*FAULTI                                     | 10077   | 40 6602  |
| 000271 |        | RJP*JMPRD FIND NON-JMPRD CHAN                 | 10100   | 76 5710  |
| 000272 | TBLI01 | ENTALB*CHTBL ENT CHAN NO                      | 10101   | 13 0000  |
| 000273 |        | ENTAU*U12MSK 777700                           | 10102   | 10 6455  |
| 000274 |        | SLSU*SKIICK MOD CHAN                          | 10103   | 04 0111  |
| 000275 |        | STRAL*SKIICK RESTR TO RTN                     | 10104   | 44 0111  |
| 000276 |        | SLSU*SKOICK MOD CHAN                          | 10105   | 04 0113  |
| 000277 |        | STRAL*SKOICK RESTR TO RTN                     | 10106   | 44 0113  |
| 000300 |        | SLSU*SKFICK MOD CHAN                          | 10107   | 04 0115  |
| 000301 |        | STRAL*SKFICK RESTR TO RTN                     | 10110   | 44 0115  |
| 000302 | SKIICK | SKPIIN*XX IN INACT?                           | 10111   | 5021 00  |
| 000303 |        | RJP*RCORDI ACTIVE - JP AND SAVE ERR           | 10112   | 76 5546  |
| 000304 | SKOICK | SKPOIN*XX OUT INACT?                          | 10113   | 5022 00  |
| 000305 |        | RJP*RCORDO ACT - JP AND SAVE ERR              | 10114   | 76 5555  |
| 000306 | SKFICK | SKPFIN*XX EF INACT?                           | 10115   | 5023 00  |
| 000307 |        | RJP*RCORDF ACT - JP AND NOTE ERR              | 10116   | 76 5564  |
| 000310 |        | BJP*TBLI01 CK ALL CHAN                        | 10117   | 73 0101  |
| 000311 |        | ENTAU*AUERDS DISPLAY ERR                      | 10120   | 10 6467  |
| 000312 |        | ENTAL*ALERDS DISPLAY ERR                      | 10121   | 12 6470  |
| 000313 |        | JPAUNZ*LOK+5 JP IF ERR                        | 10122   | 62 0127  |
| 000314 |        | JPALNZ*LOK+4 JP IF ERR                        | 10123   | 63 0127  |

| SEQNO  | LABEL  | STATEMENT                            | ADDRESS | INSTRUCT |
|--------|--------|--------------------------------------|---------|----------|
| 000315 |        | ENTAU*FAULTI                         | 10124   | 10 6602  |
| 000316 |        | JPAUZ*LOK+4 NO ERR JP                | 10125   | 60 0131  |
| 000317 |        | ENTAU*AUERDS RESET ERR DISPLAY IN AU | 10126   | 10 6467  |
| 000320 |        | RJP*DISPOC DIS ON C                  | 10127   | 76 5413  |
| 000321 |        | STOP ERR STOP                        | 10130   | 5056 40  |
| 000322 |        | IJP*I01 EXIT                         | 10131   | 55 0072  |
| 000323 |        | RESERV*1                             | 10132   | 000000   |
| 000324 | I02    | 0*0 ENTRY                            | 10133   | 00 0000  |
| 000325 |        | ENTALK*I02                           | 10134   | 70 0133  |
| 000326 |        | STRAL*IFault                         | 10135   | 44 6603  |
| 000327 |        | STRSR*KEEP SAVE SR                   | 10136   | 75 0153  |
| 000330 |        | ENTSR*10 REF BANK 0                  | 10137   | 5073 10  |
| 000331 |        | CL*015 ZERO RTC INCR REG             | 10140   | 40 0015  |
| 000332 |        | ENTALK*0450 450 EQU DLY COUNT        | 10141   | 70 0450  |
| 000333 |        | ADDALK*7776                          | 10142   | 71 7776  |
| 000334 |        | JPALNZ*LOK-1 DELAY FOR 1/1024 SEC    | 10143   | 63 0142  |
| 000335 |        | ENTAL*015 DID RTC INCR?              | 10144   | 12 0015  |
| 000336 |        | JPALZ*KEEP NO, JP OUT                | 10145   | 61 0153  |
| 000337 |        | ENTALK*0450 CK FOR 2ND TIME INCR     | 10146   | 70 0450  |
| 000340 |        | ADDALK*7776                          | 10147   | 71 7776  |
| 000341 |        | JPALNZ*LOK-1                         | 10150   | 63 0147  |
| 000342 |        | ENTAL*015 DISPLAY RTC                | 10151   | 12 0015  |
| 000343 |        | STOP*40 ERR STOP                     | 10152   | 5056 40  |
| 000344 | KEEP   | ENTSR*0 REACT SR CURRENT BANK        | 10153   | 5073 00  |
| 000345 |        | RJP*STCWAR JP TO SET ALL CW          | 10154   | 76 5474  |
| 000346 |        | CL*AUERDS ERR STR LOK                | 10155   | 40 6467  |
| 000347 |        | CL*ALERDS DO                         | 10156   | 40 6470  |
| 000350 |        | CL*FAULTI                            | 10157   | 40 6602  |
| 000351 |        | RJP*REICR RESET ICR PER IOSIZE       | 10160   | 76 5767  |
| 000352 | TBLI02 | ENTALB*CHTBL ENT CHAN NO             | 10161   | 13 0000  |
| 000353 |        | ENTAU*U12MSK 777700                  | 10162   | 10 6455  |

| SEQNO  | LABEL | STATEMENT                              | ADDRESS | INSTRUCT |
|--------|-------|--|---------|----------|
| 000354 |       | SLSU*FFID MOD CHAN                     | 10163   | 04 0210  |
| 000355 |       | STRAL*FFID AND RESTR                   | 10164   | 44 0210  |
| 000356 |       | SLSU*FFID+4 MOD CHAN                   | 10165   | 04 0214  |
| 000357 |       | STRAL*FFID+4 AND RESTR                 | 10166   | 44 0214  |
| 000360 |       | STRAL*FFOD-2 DO                        | 10167   | 44 0220  |
| 000361 |       | SLSU*FFOD-3 MOD CHAN                   | 10170   | 04 0217  |
| 000362 |       | STRAL*FFOD-3 AND RESTR                 | 10171   | 44 0217  |
| 000363 |       | SLSU*FFOD MOD CHAN                     | 10172   | 04 0222  |
| 000364 |       | STRAL*FFOD AND RESTR                   | 10173   | 44 0222  |
| 000365 |       | SLSU*FFOD+4 MOD CHAN                   | 10174   | 04 0226  |
| 000366 |       | STRAL*FFOD+4 AND RESTR                 | 10175   | 44 0226  |
| 000367 |       | STRAL*FFEF-2 DO                        | 10176   | 44 0232  |
| 000370 |       | SLSU*FFEF-3 MOD CHAN                   | 10177   | 04 0231  |
| 000371 |       | STRAL*FFEF-3 AND RESTR                 | 10200   | 44 0231  |
| 000372 |       | SLSU*FFEF MOD CHAN                     | 10201   | 04 0234  |
| 000373 |       | STRAL*FFEF AND RESTR                   | 10202   | 44 0234  |
| 000374 |       | SLSU*FFEF+4 MOD CHAN                   | 10203   | 04 0240  |
| 000375 |       | STRAL*FFEF+4 AND RESTR                 | 10204   | 44 0240  |
| 000376 |       | STRAL*FFEFA+1 DO                       | 10205   | 44 0244  |
| 000377 |       | SLSU*FFEFA MOD CHAN                    | 10206   | 04 0243  |
| 000400 |       | STRAL*FFEFA AND RESTR                  | 10207   | 44 0243  |
| 000401 | FFID  | SIN*XX SET ACT CHAN K                  | 10210   | 5001 00  |
| 000402 |       | ENTAU*CHAN+16 040000                   | 10211   | 10 6551  |
| 000403 |       | RJP*DELAY ALLOW TIME FOR FALSE IDR+IDA | 10212   | 76 0302  |
| 000404 |       | RJP*REQACK JP TO CK CONST REQ OR ACK   | 10213   | 76 0264  |
| 000405 |       | SKPIIN*XX SKP AND NOTE ERR IF INACT    | 10214   | 5021 00  |
| 000406 |       | JP*LOK+2 CONT IF ACT                   | 10215   | 34 0217  |
| 000407 |       | RJP*RCORDI NOTE ERR                    | 10216   | 76 5546  |
| 000410 |       | INSTP*XX TERM IN                       | 10217   | 5015 00  |
| 000411 |       | SKPIIN*XX SKP IF INACT AND CONTINUE    | 10220   | 5021 00  |
| 000412 |       | RJP*RCORDI NOTE ERR                    | 10221   | 76 5546  |



| SEQNO  | LABEL | STATEMENT                           | ADDRESS | INSTRUCT |
|--------|-------|-------------------------------------|---------|----------|
| 000413 | FF0D  | SOUT*XX NOTES SIMILAR TO FFID ABOVE | 10222   | 5002 00  |
| 000414 |       | ENTAU*CHAN+16 040000                | 10223   | 10 6551  |
| 000415 |       | RJP*DELAY DELAY FOR FALSE IDR+IDA   | 10224   | 76 0302  |
| 000416 |       | RJP*REQACK CK FALSE ODR+ODA         | 10225   | 76 0264  |
| 000417 |       | SKPOIN*XX                           | 10226   | 5022 00  |
| 000420 |       | JP*LOK+2                            | 10227   | 34 0231  |
| 000421 |       | RJP*RCORD0                          | 10230   | 76 5555  |
| 000422 |       | OUTSTP*XX                           | 10231   | 5016 00  |
| 000423 |       | SKPOIN*XX                           | 10232   | 5022 00  |
| 000424 |       | RJP*RCORD0                          | 10233   | 76 5555  |
| 000425 | FFEF  | SEXF*XX                             | 10234   | 5003 00  |
| 000426 |       | ENTAU*CHAN+16 040000                | 10235   | 10 6551  |
| 000427 |       | RJP*DELAY DELAY FOR FALSE IDR+IDA   | 10236   | 76 0302  |
| 000430 |       | RJP*REQACK CK FALSE EFR+EFA         | 10237   | 76 0264  |
| 000431 |       | SKPFIN*XX                           | 10240   | 5023 00  |
| 000432 |       | JP*LOK+2                            | 10241   | 34 0243  |
| 000433 |       | RJP*RCORDF                          | 10242   | 76 5564  |
| 000434 | FFEFA | EXFSTP*XX                           | 10243   | 5017 00  |
| 000435 |       | SKPFIN*XX                           | 10244   | 5023 00  |
| 000436 |       | RJP*RCORDF                          | 10245   | 76 5564  |
| 000437 |       | BJP*TBLI02 CK ALL CHAN              | 10246   | 73 0161  |
| 000440 |       | RJP*STALAC SET ID, OD, AND EF ACT   | 10247   | 76 5523  |
| 000441 |       | ENTAU*AUERDS DO                     | 10250   | 10 6467  |
| 000442 |       | ENTAL*ALERDS DO                     | 10251   | 12 6470  |
| 000443 |       | JPAUNZ*LOK+5 JP IF ERR              | 10252   | 62 0257  |
| 000444 |       | JPALNZ*LOK+4 DO                     | 10253   | 63 0257  |
| 000445 |       | ENTAU*FAULTI                        | 10254   | 10 6602  |
| 000446 |       | JPAUZ*LOK+4 NO ERR JP               | 10255   | 60 0261  |
| 000447 |       | ENTAU*AUERDS REDISPLAY ERR          | 10256   | 10 6467  |
| 000450 |       | RJP*DISPOC DISPLAY ON C             | 10257   | 76 5413  |
| 000451 |       | STOP ERR STOP                       | 10260   | 5056 40  |

4-224

| SEQNO  | LABEL  | STATEMENT                           | ADDRESS | INSTRUCT |
|--------|--------|-------------------------------------|---------|----------|
| 000452 |        | RJP*TERMAL                          | 10261   | 76 5447  |
| 000453 |        | IJP*I02 EXIT                        | 10262   | 55 0133  |
| 000454 |        | RESERV*1                            | 10263   | 000000   |
| 000455 | REQACK | 0*0 ENTRY                           | 10264   | 00 0000  |
| 000456 |        | STRICR*BB SAVE ORG ICR              | 10265   | 72 0300  |
| 000457 |        | ENTICR*03 ACT B3                    | 10266   | 5072 03  |
| 000460 |        | ENTBK*373 B3#373                    | 10267   | 36 0373  |
| 000461 | REQA   | ENTSR*10                            | 10270   | 5073 10  |
| 000462 |        | ENTALB*04 CK CONTR AREA             | 10271   | 13 0004  |
| 000463 |        | ENTSR*0                             | 10272   | 5073 00  |
| 000464 |        | CMAL*CKWD WERE BCW                  | 10273   | 02 6445  |
| 000465 |        | JPEQ*LOK+3 DISTURBED?               | 10274   | 61 0277  |
| 000466 |        | ENTAU*REQACK DISPLAY RTN ENT FROM   | 10275   | 10 0264  |
| 000467 |        | STOP ERR - BUF WD IN CONTR MEM CHGD | 10276   | 5056 40  |
| 000470 |        | BJP*REQA CK ALL BCW                 | 10277   | 73 0270  |
| 000471 | BB     | ENTICR*02 REACT ORG ICR             | 10300   | 5072 02  |
| 000472 |        | IJP*REQACK EXIT                     | 10301   | 55 0264  |
| 000473 | DELAY  | 0*0 ENTRY                           | 10302   | 00 0000  |
| 000474 |        | LSHAU*01 SHIFT                      | 10303   | 5045 01  |
| 000475 |        | JPAUP*LOK-1 DELAY RTN               | 10304   | 64 0303  |
| 000476 |        | IJP*DELAY EXIT                      | 10305   | 55 0302  |
| 000477 | I03    | 0*0 ENTRY                           | 10306   | 00 0000  |
| 000500 |        | ENTALK*I03                          | 10307   | 70 0306  |
| 000501 |        | STRAL*IFault                        | 10310   | 44 6603  |
| 000502 |        | CL*AUERDS CL ERR STR LOK            | 10311   | 40 6467  |
| 000503 |        | CL*ALERDS                           | 10312   | 40 6470  |
| 000504 |        | RJP*REICR RESET ICR                 | 10313   | 76 5767  |
| 000505 | TBLI03 | ENTALB*CHTBL ENT CHAN NO            | 10314   | 13 0000  |
| 000506 |        | ENTAU*U12MSK 777700                 | 10315   | 10 6455  |
| 000507 |        | SLSU*FFRES                          | 10316   | 04 0325  |
| 000510 |        | STRAL*FFRES                         | 10317   | 44 0325  |

| SEQNO  | LABEL | STATEMENT                      | ADDRESS | INSTRUCT |
|--------|-------|--------------------------------|---------|----------|
| 000511 |       | SLSU*FFRES+1                   | 10320   | 04 0326  |
| 000512 |       | STRAL*FFRES+1                  | 10321   | 44 0326  |
| 000513 |       | STRAL*FFRES+7                  | 10322   | 44 0334  |
| 000514 |       | SLSU*FFRES+4                   | 10323   | 04 0331  |
| 000515 |       | STRAL*FFRES+4                  | 10324   | 44 0331  |
| 000516 | FFRES | SRSM*XX SET RSM FF CHAN K      | 10325   | 5020 00  |
| 000517 |       | SKPNR*XX SKP IF RSM FF NOT SET | 10326   | 5057 00  |
| 000520 |       | JP*LOK+7 OK CONTINUE           | 10327   | 34 0336  |
| 000521 |       | RJP*RCORDI NOTE ERR            | 10330   | 76 5546  |
| 000522 |       | EXFOV*XX                       | 10331   | 5027 00  |
| 000523 |       | ENTAU*CHAN+5                   | 10332   | 10 6540  |
| 000524 |       | RJP*DELAY ALLOW TIME FOR ACK   | 10333   | 76 0302  |
| 000525 |       | SKPNR*XX SKP IF FF NOT SET     | 10334   | 5057 00  |
| 000526 |       | RJP*RCORDO NOTE ERR            | 10335   | 76 5555  |
| 000527 |       | BJP*TB LI03 JP AND DO ALL CHAN | 10336   | 73 0314  |
| 000530 |       | ENTAU*AUERDS DISPLAY ERR       | 10337   | 10 6467  |
| 000531 |       | ENTAL*ALERDS DISPLAY ERR       | 10340   | 12 6470  |
| 000532 |       | JPAUNZ*LOK+2 ERR JP            | 10341   | 62 0343  |
| 000533 |       | JPALZ*LOK+2 JP OUT IF NO ERR   | 10342   | 61 0344  |
| 000534 |       | STOP ERR STOP                  | 10343   | 5056 40  |
| 000535 |       | IJP*I03 EXIT                   | 10344   | 55 0306  |
| 000536 |       | RESERV*1                       | 10345   | 000000   |
| 000537 | I0456 | 0*0 ENTRY                      | 10346   | 00 0000  |
| 000540 |       | ENTALK*I0456                   | 10347   | 70 0346  |
| 000541 |       | STRAL*IFault                   | 10350   | 44 6603  |
| 000542 |       | ENTALK*1500 PRESTR             | 10351   | 70 1500  |
| 000543 |       | STRADR*CKTER4+3 INSTP          | 10352   | 74 0433  |
| 000544 |       | STRADR*CKTER5+1 SKPIIN         | 10353   | 74 0443  |
| 000545 |       | ENTALK*2100 AND                | 10354   | 70 2100  |
| 000546 |       | STRADR*CKTER4+4 SIN            | 10355   | 74 0434  |
| 000547 |       | STRADR*CKTER5+2 F CODES        | 10356   | 74 0444  |

4-226

| SEQNO  | LABEL  | STATEMENT                    | ADDRESS | INSTRUCT |
|--------|--------|------------------------------|---------|----------|
| 000550 |        | ENTALK*100 IN                | 10357   | 70 0100  |
| 000551 |        | STRADR*CKTER5 RTN            | 10360   | 74 0442  |
| 000552 |        | RJP*I06 RUN I04              | 10361   | 76 0405  |
| 000553 |        | ENTALK*1600 PRESTR           | 10362   | 70 1600  |
| 000554 |        | STRADR*CKTER4+3 OUTSTP       | 10363   | 74 0433  |
| 000555 |        | STRADR*CKTER5+1 SKP0IN       | 10364   | 74 0443  |
| 000556 |        | ENTALK*2200 AND              | 10365   | 70 2200  |
| 000557 |        | STRADR*CKTER4+4 SOUT         | 10366   | 74 0434  |
| 000560 |        | STRADR*CKTER5+2 F CODES      | 10367   | 74 0444  |
| 000561 |        | ENTALK*200 IN                | 10370   | 70 0200  |
| 000562 |        | STRADR*CKTER5 RTN            | 10371   | 74 0442  |
| 000563 |        | RJP*I06 RUN I05              | 10372   | 76 0405  |
| 000564 |        | ENTALK*1700 PRESTR           | 10373   | 70 1700  |
| 000565 |        | STRADR*CKTER4+3 EXFSTP       | 10374   | 74 0433  |
| 000566 |        | STRADR*CKTER5+1 SKPFIN       | 10375   | 74 0443  |
| 000567 |        | ENTALK*2300 AND              | 10376   | 70 2300  |
| 000570 |        | STRADR*CKTER4+4 SEXF         | 10377   | 74 0434  |
| 000571 |        | STRADR*CKTER5+2 F CODES      | 10400   | 74 0444  |
| 000572 |        | ENTALK*300 IN                | 10401   | 70 0300  |
| 000573 |        | STRADR*CKTER5 RTN            | 10402   | 74 0442  |
| 000574 |        | RJP*I06 RUN I06              | 10403   | 76 0405  |
| 000575 |        | IJP*I0456 EXIT               | 10404   | 55 0346  |
| 000576 | I06    | 0*0 ENTRY                    | 10405   | 00 0000  |
| 000577 |        | ENTALK*I06                   | 10406   | 70 0405  |
| 000600 |        | STRAL*IFault                 | 10407   | 44 6603  |
| 000601 |        | CL*AUERDS CL ERR             | 10410   | 40 6467  |
| 000602 |        | RJP*STALAC ACT ALL CHAN      | 10411   | 76 5523  |
| 000603 |        | RJP*REICR RESET ICR          | 10412   | 76 5767  |
| 000604 | TBLI06 | ENTALB*CHTBL ENT CHAN NO     | 10413   | 13 0000  |
| 000605 |        | ENTAU*U12MSK 777700          | 10414   | 10 6455  |
| 000606 |        | SLSU*CKTER4+3 SET HI CHAN NO | 10415   | 04 0433  |

| SEQNO  | LABEL  | STATEMENT                                   | ADDRESS | INSTRUCT |
|--------|--------|---|---------|----------|
| 000607 |        | STRAL*CKTER4+3 IN RTN                       | 10416   | 44 0433  |
| 000610 |        | SLSU*CKTER5 DO                              | 10417   | 04 0442  |
| 000611 |        | STRAL*CKTER5                                | 10420   | 44 0442  |
| 000612 |        | SLSU*CKTER5+2 DO                            | 10421   | 04 0444  |
| 000613 |        | STRAL*CKTER5+2                              | 10422   | 44 0444  |
| 000614 |        | BJP*LOK+1 DECR B2                           | 10423   | 73 0424  |
| 000615 |        | ENTALB*CHTBL ENT CHTBL-1                    | 10424   | 13 0000  |
| 000616 |        | SLSU*CKTER5+1 LOWER CHAN                    | 10425   | 04 0443  |
| 000617 |        | STRAL*CKTER5+1 IN RTN                       | 10426   | 44 0443  |
| 000620 |        | ENTAU*U12MSK REENT MSK - RCORDI MAY CHNG IT | 10427   | 10 6455  |
| 000621 | CKTER4 | ENTALB*CHTBL ENT CHAN NO                    | 10430   | 13 0000  |
| 000622 |        | SLSU*LOK+3                                  | 10431   | 04 0434  |
| 000623 |        | STRAL*LOK+2                                 | 10432   | 44 0434  |
| 000624 |        | EXFSTP*XX TERM HI CHAN                      | 10433   | 5017 00  |
| 000625 |        | SKPFIN*XX CK A LOWER CHAN FOR TERM          | 10434   | 5023 00  |
| 000626 |        | JP*LOK+2 OK, CONTINUE                       | 10435   | 34 0437  |
| 000627 |        | RJP*RCORDI RCD ERR                          | 10436   | 76 5546  |
| 000630 |        | BJP*CKTER4-1 CK ALL LOWER CHAN              | 10437   | 73 0427  |
| 000631 |        | ENTAU*AUERDS DISPLAY ERR STR LOK            | 10440   | 10 6467  |
| 000632 |        | ENTAL*LOK+1 DISPLAY FUNCTION IF ERR         | 10441   | 12 0442  |
| 000633 | CKTER5 | SEXF*XX ACT HI CHAN                         | 10442   | 5003 00  |
| 000634 |        | EXFSTP*XX TERM A LOWER CHAN                 | 10443   | 5017 00  |
| 000635 |        | SKPFIN*XX CK HI CHAN FOR TERM               | 10444   | 5023 00  |
| 000636 |        | JP*LOK+2 OK, CONTINUE                       | 10445   | 34 0447  |
| 000637 |        | STOP*40 ERR STOP-HI CHAN TERMNTD            | 10446   | 5056 40  |
| 000640 |        | JPAUZ*LOK+2 NO ERR JP OUT                   | 10447   | 60 0451  |
| 000641 |        | STOP*40 ERR STOP-LO CHAN TERMNTD            | 10450   | 5056 40  |
| 000642 |        | RJP*TERMAL                                  | 10451   | 76 5447  |
| 000643 |        | IJP*I06 EXIT                                | 10452   | 55 0405  |
| 000644 |        | RESERV*1                                    | 10453   | 000000   |
| 000645 | I0789  | 0*0 ENTRY                                   | 10454   | 00 0000  |

| SEQNO  | LABEL | STATEMENT               | ADDRESS | INSTRUCT |
|--------|-------|-------------------------|---------|----------|
| 000646 |       | ENTALK*I0789            | 10455   | 70 0454  |
| 000647 |       | STRAL*IFault            | 10456   | 44 6603  |
| 000650 |       | ENTALK*100 PRESTR       | 10457   | 70 0100  |
| 000651 |       | STRADR*CKACT4+3 SIN     | 10460   | 74 0540  |
| 000652 |       | STRADR*CKACT5+1 SKPIIN  | 10461   | 74 0547  |
| 000653 |       | ENTALK*2100 AND         | 10462   | 70 2100  |
| 000654 |       | STRADR*CKACT4+4 INSTP   | 10463   | 74 0541  |
| 000655 |       | STRADR*CKACT5+2 F CODES | 10464   | 74 0550  |
| 000656 |       | ENTALK*1500 IN          | 10465   | 70 1500  |
| 000657 |       | STRADR*CKACT5 RTN       | 10466   | 74 0546  |
| 000660 |       | RJP*I09 RUN I07         | 10467   | 76 0513  |
| 000661 |       | ENTALK*200 PRESTR       | 10470   | 70 0200  |
| 000662 |       | STRADR*CKACT4+3 SOUT    | 10471   | 74 0540  |
| 000663 |       | STRADR*CKACT5+1 SKPOIN  | 10472   | 74 0547  |
| 000664 |       | ENTALK*2200 AND         | 10473   | 70 2200  |
| 000665 |       | STRADR*CKACT4+4 OUTSTP  | 10474   | 74 0541  |
| 000666 |       | STRADR*CKACT5+2 F CODES | 10475   | 74 0550  |
| 000667 |       | ENTALK*1600 IN          | 10476   | 70 1600  |
| 000670 |       | STRADR*CKACT5 RTN       | 10477   | 74 0546  |
| 000671 |       | RJP*I09 RUN I08         | 10500   | 76 0513  |
| 000672 |       | ENTALK*300 PRESTR       | 10501   | 70 0300  |
| 000673 |       | STRADR*CKACT4+3 SEXF    | 10502   | 74 0540  |
| 000674 |       | STRADR*CKACT5+1 SKPFIN  | 10503   | 74 0547  |
| 000675 |       | ENTALK*2300 AND         | 10504   | 70 2300  |
| 000676 |       | STRADR*CKACT4+4 EXFSTP  | 10505   | 74 0541  |
| 000677 |       | STRADR*CKACT5+2 F CODES | 10506   | 74 0550  |
| 000700 |       | ENTALK*1700 IN          | 10507   | 70 1700  |
| 000701 |       | STRADR*CKACT5 RTN       | 10510   | 74 0546  |
| 000702 |       | RJP*I09 RUN I09         | 10511   | 76 0513  |
| 000703 |       | IJP*I0789 EXIT          | 10512   | 55 0454  |
| 000704 | I09   | 0*0 ENTRY               | 10513   | 00 0000  |

| SEQNO  | LABEL  | STATEMENT                          | ADDRESS | INSTRUCT |
|--------|--------|------------------------------------|---------|----------|
| 000705 |        | ENTALK*I09                         | 10514   | 70 0513  |
| 000706 |        | STRAL*IFault                       | 10515   | 44 6603  |
| 000707 |        | CL*AUERDS CL ERR STR LOK           | 10516   | 40 6467  |
| 000710 |        | RJP*TERMAL TERM ALL CHAN           | 10517   | 76 5447  |
| 000711 |        | RJP*REICR RESET ICR                | 10520   | 76 5767  |
| 000712 | TBLI09 | ENTALB*CHTBL ENT CHAN NO           | 10521   | 13 0000  |
| 000713 |        | ENTAU*U12MSK 777700                | 10522   | 10 6455  |
| 000714 |        | SLSU*CKACT4+3 SET HI CHAN          | 10523   | 04 0540  |
| 000715 |        | STRAL*CKACT4+3 NO IN RTN           | 10524   | 44 0540  |
| 000716 |        | SLSU*CKACT5 DO                     | 10525   | 04 0546  |
| 000717 |        | STRAL*CKACT5                       | 10526   | 44 0546  |
| 000720 |        | SLSU*CKACT5+2 DO                   | 10527   | 04 0550  |
| 000721 |        | STRAL*CKACT5+2                     | 10530   | 44 0550  |
| 000722 |        | BJP*LOK+1 DECR B2                  | 10531   | 73 0532  |
| 000723 |        | ENTALB*CHTBL ENT NEXT LO CHAN NO   | 10532   | 13 0000  |
| 000724 |        | SLSU*CKACT5+1 LOWER CHAN           | 10533   | 04 0547  |
| 000725 |        | STRAL*CKACT5+1 NO IN RTN           | 10534   | 44 0547  |
| 000726 | CKACT4 | ENTALB*CHTBL ENT CHAN NO           | 10535   | 13 0000  |
| 000727 |        | SLSU*LOK+3                         | 10536   | 04 0541  |
| 000730 |        | STRAL*LOK+2                        | 10537   | 44 0541  |
| 000731 |        | SEXF*XX SET HI CHAN ACT            | 10540   | 5003 00  |
| 000732 |        | SKPFIN*XX WAS A LOWER CHAN ACTVTD? | 10541   | 5023 00  |
| 000733 |        | RJP*RCORDI RCD ERR                 | 10542   | 76 5546  |
| 000734 |        | BJP*CKACT4 CK ALL CHAN             | 10543   | 73 0535  |
| 000735 |        | ENTAU*AUERDS DISPLAY ERR STR LOK   | 10544   | 10 6467  |
| 000736 |        | ENTAL*LOK+1 DISPLAY FUNC IF ERR    | 10545   | 12 0546  |
| 000737 | CKACT5 | EXFSTP*XX TERM HI CHAN             | 10546   | 5017 00  |
| 000740 |        | SEXF*XX ACT NEXT LOWER CHAN        | 10547   | 5003 00  |
| 000741 |        | SKPFIN*XX WAS HI CHAN ACTVTD?      | 10550   | 5023 00  |
| 000742 |        | STOP*40 ERR STOP FALSE ACT         | 10551   | 5056 40  |
| 000743 |        | JPAUZ*LOK+2 NO ERR JP OUT          | 10552   | 60 0554  |

4-230

| SEQNO  | LABEL | STATEMENT                  | ADDRESS | INSTRUCT |
|--------|-------|----------------------------|---------|----------|
| 000744 |       | STOP*40 ERR STOP FALSE ACT | 10553   | 5056 40  |
| 000745 |       | IJP*I09 EXIT               | 10554   | 55 0513  |
| 000746 |       | RESERV*1                   | 10555   | 000000   |
| 000747 | I010  | 0*0 ENTRY                  | 10556   | 00 0000  |
| 000750 |       | ENTALK*I010                | 10557   | 70 0556  |
| 000751 |       | STRAL*IFault               | 10560   | 44 6603  |
| 000752 |       | CL*AUERDS CL ERR STR LOK   | 10561   | 40 6467  |
| 000753 |       | CL*ALERDS CL ERR STR LOK   | 10562   | 40 6470  |
| 000754 |       | RJP*REICR RESET ICR        | 10563   | 76 5767  |
| 000755 | TBL10 | RJP*TERMAL TERM ID, OD, EF | 10564   | 76 5447  |
| 000756 |       | ENTALB*CHTBL ENT CHAN NO   | 10565   | 13 0000  |
| 000757 |       | ENTAU*U12MSK 777700        | 10566   | 10 6455  |
| 000760 |       | SLSU*FUNC-1 PRESTR CHAN    | 10567   | 04 0575  |
| 000761 |       | STRAL*FUNC-1 NO IN RTN     | 10570   | 44 0575  |
| 000762 |       | SLSU*FUNC                  | 10571   | 04 0576  |
| 000763 |       | STRAL*FUNC                 | 10572   | 44 0576  |
| 000764 |       | SLSU*FUNC+2                | 10573   | 04 0600  |
| 000765 |       | STRAL*FUNC+2               | 10574   | 44 0600  |
| 000766 |       | SEXF*XX SET EF ACT         | 10575   | 5003 00  |
| 000767 | FUNC  | SKPOIN*XX CK FALSE OUT ACT | 10576   | 5022 00  |
| 000770 |       | RJP*RCORDI NOTE ERR        | 10577   | 76 5546  |
| 000771 |       | SKPIIN*XX CK FALSE IN ACT  | 10600   | 5021 00  |
| 000772 |       | RJP*RCORDO NOTE ERR        | 10601   | 76 5555  |
| 000773 |       | BJP*TBL10 CK ALL CHAN      | 10602   | 73 0564  |
| 000774 |       | ENTAU*AUERDS DISPLAY ERR   | 10603   | 10 6467  |
| 000775 |       | ENTAL*ALERDS DISPLAY ERR   | 10604   | 12 6470  |
| 000776 |       | JPAUNZ*LOK+2 CK FOR ERR    | 10605   | 62 0607  |
| 000777 |       | JPALZ*LOK+2 CK FOR ERR     | 10606   | 61 0610  |
| 001000 |       | STOP*40 ERR STOP           | 10607   | 5056 40  |
| 001001 |       | IJP*I010 EXIT              | 10610   | 55 0556  |
| 001002 |       | RESERV*1                   | 10611   | 000000   |



| SEQNO  | LABEL  | STATEMENT                         | ADDRESS | INSTRUCT |
|--------|--------|-----------------------------------|---------|----------|
| 001003 | I011   | 0*0 ENTRY                         | 10612   | 00 0000  |
| 001004 |        | ENTALK*I011                       | 10613   | 70 0612  |
| 001005 |        | STRAL*IFault                      | 10614   | 44 6603  |
| 001006 |        | CL*AUERDS CLEAR                   | 10615   | 40 6467  |
| 001007 |        | CL*ALERDS ERR                     | 10616   | 40 6470  |
| 001010 |        | RJP*TERMAL TERM ID,0D,EF ALL CHAN | 10617   | 76 5447  |
| 001011 |        | RJP*REICR RESET ICR               | 10620   | 76 5767  |
| 001012 | I011A  | ENTALB*CHTBL ENT CHAN NO          | 10621   | 13 0000  |
| 001013 |        | ENTAU*U12MSK 777700               | 10622   | 10 6455  |
| 001014 |        | SLSU*I011IN MOD CHAN AND          | 10623   | 04 0642  |
| 001015 |        | STRAL*I011IN RESTR TO RTN         | 10624   | 44 0642  |
| 001016 |        | SLSU*I011IN+3                     | 10625   | 04 0645  |
| 001017 |        | STRAL*I011IN+3                    | 10626   | 44 0645  |
| 001020 |        | SLSU*CONTH                        | 10627   | 04 0650  |
| 001021 |        | STRAL*CONTH                       | 10630   | 44 0650  |
| 001022 |        | STRAL*I0110U                      | 10631   | 44 0722  |
| 001023 |        | SLSU*CONTH+3                      | 10632   | 04 0653  |
| 001024 |        | STRAL*CONTH+3                     | 10633   | 44 0653  |
| 001025 |        | STRAL*I0110U+3                    | 10634   | 44 0725  |
| 001026 |        | SLSU*I011EF                       | 10635   | 04 0772  |
| 001027 |        | STRAL*I011EF                      | 10636   | 44 0772  |
| 001030 |        | SLSU*I011EF+3                     | 10637   | 04 0775  |
| 001031 |        | STRAL*I011EF+3                    | 10640   | 44 0775  |
| 001032 |        | RJP*CLCWAR CL CM BCW STR AREA     | 10641   | 76 5507  |
| 001033 | I011IN | IN*XX ENBL ID                     | 10642   | 5011 00  |
| 001034 |        | 0*CKWD+1 AND STR                  | 10643   | 016446   |
| 001035 |        | 0*CKWD BUF CW ADDR                | 10644   | 016445   |
| 001036 |        | SKPIIN*XX SKP IF IN ACT           | 10645   | 5021 00  |
| 001037 |        | JP*CONTI CONTINUE IF ACT          | 10646   | 34 0660  |
| 001040 |        | ENTAL*I011IN NOTE ERR AND DISPLAY | 10647   | 12 0642  |
| 001041 | CONTH  | OUT*XX CK ANOTHER FUNC            | 10650   | 5012 00  |

4-232

| SEQNO  | LABEL | STATEMENT                               | ADDRESS | INSTRUCT |
|--------|-------|---|---------|----------|
| 001042 |       | 0*CKWD+1                                | 10651   | 016446   |
| 001043 |       | 0*CKWD                                  | 10652   | 016445   |
| 001044 |       | SKPOIN*XX SKP IF IN ACT                 | 10653   | 5022 00  |
| 001045 |       | JP*LOK+3 JP TO ERR STOP                 | 10654   | 34 0657  |
| 001046 |       | ENTAU*I011IN DISPLAY FUNC               | 10655   | 10 0642  |
| 001047 |       | STOP ERR STOP BOTH FUNC BAD             | 10656   | 5056 40  |
| 001050 |       | STOP ERR STOP FIRST FUNC ONLY           | 10657   | 5056 40  |
| 001051 | CONTI | ENTALB*CHTBL ENT CHAN NO                | 10660   | 13 0000  |
| 001052 |       | SLCL*KHMSK CHAN 10-17?                  | 10661   | 52 6556  |
| 001053 |       | JPALNZ*NEXT+1 JP IF YES                 | 10662   | 63 0667  |
| 001054 |       | ENTALB*CHTBL ENT CHAN NO                | 10663   | 13 0000  |
| 001055 |       | LSHAL*01 2K                             | 10664   | 5046 01  |
| 001056 |       | ADDALK*060                              | 10665   | 71 0060  |
| 001057 | NEXT  | JP*COMPR-1 JP AND COMPARE               | 10666   | 34 0673  |
| 001060 |       | ENTALB*CHTBL ENT CHAN NO                | 10667   | 13 0000  |
| 001061 |       | ADDALK*7767 K-10                        | 10670   | 71 7767  |
| 001062 |       | LSHAL*01 2(K-10)                        | 10671   | 5046 01  |
| 001063 |       | ADDALK*260                              | 10672   | 71 0260  |
| 001064 |       | STRAL*CCMADR SAVE TACW                  | 10673   | 44 6606  |
| 001065 | COMPR | STRADR*LOK+2 PRESTR CM ADR              | 10674   | 74 0676  |
| 001066 |       | ENTSR*10 REF STACK 0                    | 10675   | 5073 10  |
| 001067 |       | ENTAL*ADR ENT TACW                      | 10676   | 12 0000  |
| 001070 |       | ENTSR*0 REF CURR STACK                  | 10677   | 5073 00  |
| 001071 |       | CMAL*CKWD+1 TACW STORED RIGHT PLACE?    | 10700   | 02 6446  |
| 001072 |       | JPEQ*LOK+6 YES, CONTINUE                | 10701   | 61 0707  |
| 001073 |       | CMAL*CKWD EQU IACW?                     | 10702   | 02 6445  |
| 001074 |       | JPNOT*LOK+3 NO, GO FIND                 | 10703   | 63 0706  |
| 001075 |       | ENTAU*I011IN YES DISPLAY F, K, AND IACW | 10704   | 10 0642  |
| 001076 |       | STOP*40 ERR STOP - IACW INSTEAD OF      | 10705   | 5056 40  |
| 001077 |       | RJP*SRCHM                               | 10706   | 76 1051  |
| 001100 |       | REMARK TACW FOUND                       |         |          |

| SEQNO  | LABEL  | STATEMENT                          | ADDRESS | INSTRUCT |
|--------|--------|------------------------------------|---------|----------|
| 001101 |        | ENTAL*CCMADR                       | 10707   | 12 6606  |
| 001102 |        | ADDALK*01 TACW+1 FOR IACW STR ADR  | 10710   | 71 0001  |
| 001103 |        | STRADR*LOK+2 PRESTR                | 10711   | 74 0713  |
| 001104 |        | ENTSR*10 REF STACK 0               | 10712   | 5073 10  |
| 001105 |        | ENTAL*ADR ENT IACW                 | 10713   | 12 0000  |
| 001106 |        | ENTSR*0 REF CURR STACK             | 10714   | 5073 00  |
| 001107 |        | CMAL*CKWD IACW STORED RIGHT PLACE? | 10715   | 02 6445  |
| 001110 |        | JPEQ*LOK+3                         | 10716   | 61 0721  |
| 001111 |        | ENTAU*I011IN                       | 10717   | 10 0642  |
| 001112 |        | STOP*40                            | 10720   | 5056 40  |
| 001113 |        | RJP*CLCWAR CL CM BCW STR AREA      | 10721   | 76 5507  |
| 001114 | I0110U | OUT*XX COMMENTS SIMILAR TO         | 10722   | 5012 00  |
| 001115 |        | 0*CKWD+1 I011IN ABOVE              | 10723   | 016446   |
| 001116 |        | 0*CKWD                             | 10724   | 016445   |
| 001117 |        | SKPOIN*XX                          | 10725   | 5022 00  |
| 001120 |        | JP*CONTO                           | 10726   | 34 0730  |
| 001121 |        | RJP*RCORD0                         | 10727   | 76 5555  |
| 001122 | CONTO  | ENTALB*CHTBL ENT CHAN NO           | 10730   | 13 0000  |
| 001123 |        | SLCL*KHMSK                         | 10731   | 52 6556  |
| 001124 |        | JPALNZ*NEXTA+1                     | 10732   | 63 0737  |
| 001125 |        | ENTALB*CHTBL ENT CHAN NO           | 10733   | 13 0000  |
| 001126 |        | LSHAL*01                           | 10734   | 5046 01  |
| 001127 |        | ADDALK*040                         | 10735   | 71 0040  |
| 001130 | NEXTA  | JP*COMPRA-1                        | 10736   | 34 0743  |
| 001131 |        | ENTALB*CHTBL                       | 10737   | 13 0000  |
| 001132 |        | ADDALK*7767                        | 10740   | 71 7767  |
| 001133 |        | LSHAL*01                           | 10741   | 5046 01  |
| 001134 |        | ADDALK*240                         | 10742   | 71 0240  |
| 001135 |        | STRAL*CCMADR                       | 10743   | 44 6606  |
| 001136 | COMPRA | STRADR*LOK+2                       | 10744   | 74 0746  |
| 001137 |        | ENTSR*10                           | 10745   | 5073 10  |

| SEQNO  | LABEL  | STATEMENT                     | ADDRESS | INSTRUCT |
|--------|--------|-------------------------------|---------|----------|
| 001140 |        | ENTAL*ADR                     | 10746   | 12 0000  |
| 001141 |        | ENTSR*0                       | 10747   | 5073 00  |
| 001142 |        | CMAL*CKWD+1                   | 10750   | 02 6446  |
| 001143 |        | JPEQ*LOK+6                    | 10751   | 61 0757  |
| 001144 |        | CMAL*CKWD                     | 10752   | 02 6445  |
| 001145 |        | JPNOT*LOK+3                   | 10753   | 63 0756  |
| 001146 |        | ENTAU*I0110U                  | 10754   | 10 0722  |
| 001147 |        | STOP*40                       | 10755   | 5056 40  |
| 001150 |        | RJP*SRCHM                     | 10756   | 76 1051  |
| 001151 |        | ENTAL*CCMADR                  | 10757   | 12 6606  |
| 001152 |        | ADDALK*01                     | 10760   | 71 0001  |
| 001153 |        | STRADR*LOK+2                  | 10761   | 74 0763  |
| 001154 |        | ENTSR*10                      | 10762   | 5073 10  |
| 001155 |        | ENTAL*ADR                     | 10763   | 12 0000  |
| 001156 |        | ENTSR*0                       | 10764   | 5073 00  |
| 001157 |        | CMAL*CKWD                     | 10765   | 02 6445  |
| 001160 |        | JPEQ*LOK+3                    | 10766   | 61 0771  |
| 001161 |        | ENTAU*I0110U                  | 10767   | 10 0722  |
| 001162 |        | STOP*40                       | 10770   | 5056 40  |
| 001163 |        | RJP*CLCWAR CL CM BCW STR AREA | 10771   | 76 5507  |
| 001164 | I011EF | EXF*17 COMMENTS SIMILAR TO    | 10772   | 5013 17  |
| 001165 |        | 0*CKWD+1 I011IN ABOVE         | 10773   | 016446   |
| 001166 |        | 0*CKWD                        | 10774   | 016445   |
| 001167 |        | SKPFIN*17                     | 10775   | 5023 17  |
| 001170 |        | JP*CONTF                      | 10776   | 34 1000  |
| 001171 |        | RJP*RCURDI                    | 10777   | 76 5546  |
| 001172 | CONTF  | ENTALB*CHTBL                  | 11000   | 13 0000  |
| 001173 |        | SLCL*KHMSK                    | 11001   | 52 6556  |
| 001174 |        | JPALNZ*NEXTB+1                | 11002   | 63 1007  |
| 001175 |        | ENTALB*CHTBL                  | 11003   | 13 0000  |
| 001176 |        | LSHAL*01                      | 11004   | 5046 01  |

| SEQNO  | LABEL  | STATEMENT                     | ADDRESS | INSTRUCT |
|--------|--------|-------------------------------|---------|----------|
| 001177 |        | ADDALK*020                    | 11005   | 71 0020  |
| 001200 | NEXTB  | JP*COMPRC-1                   | 11006   | 34 1013  |
| 001201 |        | ENTALB*CHTBL                  | 11007   | 13 0000  |
| 001202 |        | ADDALK*7767                   | 11010   | 71 7767  |
| 001203 |        | LSHAL*01                      | 11011   | 5046 01  |
| 001204 |        | ADDALK*0220                   | 11012   | 71 0220  |
| 001205 |        | STRAL*CCMADR                  | 11013   | 44 6606  |
| 001206 | COMPRC | STRADR*LOK+2                  | 11014   | 74 1016  |
| 001207 |        | ENTSR*10                      | 11015   | 5073 10  |
| 001210 |        | ENTAL*ADR                     | 11016   | 12 0000  |
| 001211 |        | ENTSR*0                       | 11017   | 5073 00  |
| 001212 |        | CMAL*CKWD+1                   | 11020   | 02 6446  |
| 001213 |        | JPEQ*LOK+6                    | 11021   | 61 1027  |
| 001214 |        | CMAL*CKWD                     | 11022   | 02 6445  |
| 001215 |        | JPNOT*LOK+3                   | 11023   | 63 1026  |
| 001216 |        | ENTAU*I011EF                  | 11024   | 10 0772  |
| 001217 |        | STOP*40                       | 11025   | 5056 40  |
| 001220 |        | RJP*SRCHM                     | 11026   | 76 1051  |
| 001221 |        | ENTAL*CCMADR                  | 11027   | 12 6606  |
| 001222 |        | ADDALK*01                     | 11030   | 71 0001  |
| 001223 |        | STRADR*LOK+2                  | 11031   | 74 1033  |
| 001224 |        | ENTSR*10                      | 11032   | 5073 10  |
| 001225 |        | ENTAL*ADR                     | 11033   | 12 0000  |
| 001226 |        | ENTSR*0                       | 11034   | 5073 00  |
| 001227 |        | CMAL*CKWD                     | 11035   | 02 6445  |
| 001230 |        | JPEQ*LOK+3                    | 11036   | 61 1041  |
| 001231 |        | ENTAU*I011EF                  | 11037   | 10 0772  |
| 001232 |        | STOP*40                       | 11040   | 5056 40  |
| 001233 |        | BJP*I011A LOOP TO CK ALL CHAN | 11041   | 73 0621  |
| 001234 |        | ENTAU*AUERDS CK FOR           | 11042   | 10 6467  |
| 001235 |        | ENTAL*ALERDS ERRORS           | 11043   | 12 6470  |

4-236

| SEQNO  | LABEL | STATEMENT                       | ADDRESS | INSTRUCT |
|--------|-------|---------------------------------|---------|----------|
| 001236 |       | JPAUNZ*LOK+2                    | 11044   | 62 1046  |
| 001237 |       | JPALZ*LOK+2                     | 11045   | 61 1047  |
| 001240 |       | STOP ERR STOP                   | 11046   | 5056 40  |
| 001241 |       | IJP*IO11 EXIT                   | 11047   | 55 0612  |
| 001242 |       | RESERV*1                        | 11050   | 000000   |
| 001243 | SRCHM | 0*0 ENT                         | 11051   | 00 0000  |
| 001244 |       | ENTALK*01 LOOK AT ADDR 0-1      | 11052   | 70 0001  |
| 001245 |       | STRADR*SRCH+1                   | 11053   | 74 1120  |
| 001246 |       | ENTALK*0                        | 11054   | 70 0000  |
| 001247 |       | STRADR*SRCH+3                   | 11055   | 74 1122  |
| 001250 |       | ENTICR*03 USE B3                | 11056   | 5072 03  |
| 001251 |       | RJP*SRCH                        | 11057   | 76 1117  |
| 001252 |       | ENTALK*073 LOOK AT ADDR 4-77    | 11060   | 70 0073  |
| 001253 |       | STRADR*SRCH+1                   | 11061   | 74 1120  |
| 001254 |       | ENTALK*04                       | 11062   | 70 0004  |
| 001255 |       | STRADR*SRCH+3                   | 11063   | 74 1122  |
| 001256 |       | RJP*SRCH                        | 11064   | 76 1117  |
| 001257 |       | ENTALK*077 LOOK AT ADDR 200-277 | 11065   | 70 0077  |
| 001260 |       | STRADR*SRCH+1                   | 11066   | 74 1120  |
| 001261 |       | ENTALK*200                      | 11067   | 70 0200  |
| 001262 |       | STRADR*SRCH+3                   | 11070   | 74 1122  |
| 001263 |       | RJP*SRCH                        | 11071   | 76 1117  |
| 001264 |       | ENTALK*077 LOOK AT ADDR 400-477 | 11072   | 70 0077  |
| 001265 |       | STRADR*SRCH+1                   | 11073   | 74 1120  |
| 001266 |       | ENTALK*0400                     | 11074   | 70 0400  |
| 001267 |       | STRADR*SRCH+3                   | 11075   | 74 1122  |
| 001270 |       | RJP*SRCH                        | 11076   | 76 1117  |
| 001271 |       | ENTALK*077 LOOK AT ADDR 600-677 | 11077   | 70 0077  |
| 001272 |       | STRADR*SRCH+1                   | 11100   | 74 1120  |
| 001273 |       | ENTALK*0600                     | 11101   | 70 0600  |
| 001274 |       | STRADR*SRCH+3                   | 11102   | 74 1122  |

| SEQNO  | LABEL  | STATEMENT                               | ADDRESS | INSTRUCT |
|--------|--------|---|---------|----------|
| 001275 |        | RJP*SRCH                                | 11103   | 76 1117  |
| 001276 |        | ENTAU*U12MSK DIS FLAG IF NOT FOUND      | 11104   | 10 6455  |
| 001277 |        | STOP*40 ERR STOP - NO FIND              | 11105   | 5056 40  |
| 001300 | FONDIT | LSHA*18D AU#BCW                         | 11106   | 5047 22  |
| 001301 |        | ENTAL*SRCHM MAIN P                      | 11107   | 12 1051  |
| 001302 |        | STRAL*FAULTI                            | 11110   | 44 6602  |
| 001303 |        | RJP*DISPOC C#ADR IN MAIN PROG           | 11111   | 76 5413  |
| 001304 |        | ENTAL*SRCH+3                            | 11112   | 12 1122  |
| 001305 |        | SLCL*L12MSK                             | 11113   | 52 6612  |
| 001306 |        | ENTSR*10                                | 11114   | 5073 10  |
| 001307 |        | ADDAL*03 AL#ADDR OF BCW FOUND           | 11115   | 14 0003  |
| 001310 |        | STOP*40 ERR STOP                        | 11116   | 5056 40  |
| 001311 | SRCH   | 0*0 ENTRY                               | 11117   | 00 0000  |
| 001312 |        | ENTBK*XX B+(LOK+2)#HIUST ADR SRCHD      | 11120   | 36 0000  |
| 001313 |        | ENTSR*10 REF BANK 0                     | 11121   | 5073 10  |
| 001314 |        | ENTALB*ADR LOWEST ADDR BEING SEARCHED   | 11122   | 13 0000  |
| 001315 |        | ENTSR*00 REF CURRENT BANK               | 11123   | 5073 00  |
| 001316 |        | CMAL*CKWD IACW?                         | 11124   | 02 6445  |
| 001317 |        | JPEQ*FONDIT YES JP                      | 11125   | 61 1106  |
| 001320 |        | CMAL*CKWD+1 NO, TACW?                   | 11126   | 02 6446  |
| 001321 |        | JPEQ*FONDIT YES JP                      | 11127   | 61 1106  |
| 001322 |        | BJP*LOK-7 NO, CK REST OF THIS GROUP     | 11130   | 73 1121  |
| 001323 |        | IJP*SRCH EXIT - NOT FOUND IN THIS GROUP | 11131   | 55 1117  |
| 001324 | I012   | 0*0 ENTRY                               | 11132   | 00 0000  |
| 001325 |        | ENTALK*I012                             | 11133   | 70 1132  |
| 001326 |        | STRAL*IFault                            | 11134   | 44 6603  |
| 001327 |        | RJP*JMPRD FIND NON-JMPRD CHAN           | 11135   | 76 5710  |
| 001330 |        | RJP*REICR                               | 11136   | 76 5767  |
| 001331 |        | RJP*CLCWAR CL 04-677                    | 11137   | 76 5507  |
| 001332 |        | ENTALK*100 STORE                        | 11140   | 70 0100  |
| 001333 |        | STRAL*MNAREA RJPS                       | 11141   | 44 6557  |

4-238

| SEQNO  | LABEL | STATEMENT                          | ADDRESS | INSTRUCT |
|--------|-------|------------------------------------|---------|----------|
| 001334 |       | ENTALK*300 IN                      | 11142   | 70 0300  |
| 001335 |       | STRAL*MNAREA+1 EXT                 | 11143   | 44 6560  |
| 001336 |       | ENTAL*RJPEI1 INT                   | 11144   | 12 5366  |
| 001337 |       | STRAL*MNADR ENTRANCE               | 11145   | 44 6561  |
| 001340 |       | RJP*CMRJP AREA 100-117 AND 300-317 | 11146   | 76 5425  |
| 001341 |       | ENTALK*120 PRESTORE                | 11147   | 70 0120  |
| 001342 |       | STRAL*MNAREA RJP                   | 11150   | 44 6557  |
| 001343 |       | ENTALK*320 IN EF MON               | 11151   | 70 0320  |
| 001344 |       | STRAL*MNAREA+1 INT ADDR            | 11152   | 44 6560  |
| 001345 |       | ENTAL*RJPEF                        | 11153   | 12 5777  |
| 001346 |       | STRAL*MNADR                        | 11154   | 44 6561  |
| 001347 |       | RJP*CMRJP                          | 11155   | 76 5425  |
| 001350 |       | ENTALK*140 PRESTORE                | 11156   | 70 0140  |
| 001351 |       | STRAL*MNAREA RJP                   | 11157   | 44 6557  |
| 001352 |       | ENTALK*340 IN OUT MON              | 11160   | 70 0340  |
| 001353 |       | STRAL*MNAREA+1 INT ADDR            | 11161   | 44 6560  |
| 001354 |       | ENTAL*RJPOUT                       | 11162   | 12 6005  |
| 001355 |       | STRAL*MNADR                        | 11163   | 44 6561  |
| 001356 |       | RJP*CMRJP                          | 11164   | 76 5425  |
| 001357 | I012A | ENTALB*CHTBL ENT CHAN NO           | 11165   | 13 0000  |
| 001360 |       | ENTAU*U12MSK 777700                | 11166   | 10 6455  |
| 001361 |       | SLSU*EXFFCK MOD CHAN AND           | 11167   | 04 1215  |
| 001362 |       | STRAL*EXFFCK RESTR TO RTN          | 11170   | 44 1215  |
| 001363 |       | SLSU*EXFFCK+3                      | 11171   | 04 1220  |
| 001364 |       | STRAL*EXFFCK+3                     | 11172   | 44 1220  |
| 001365 |       | STRAL*CKOUT+5                      | 11173   | 44 1265  |
| 001366 |       | SLSU*EXFFCK+7                      | 11174   | 04 1224  |
| 001367 |       | STRAL*EXFFCK+7                     | 11175   | 44 1224  |
| 001370 |       | STRAL*CKOUTT+10                    | 11176   | 44 1301  |
| 001371 |       | SLSU*CKCDM                         | 11177   | 04 1307  |
| 001372 |       | STRAL*CKCDM                        | 11200   | 44 1307  |



| SEQNO  | LABEL  | STATEMENT  | ADDRESS | INSTRUCT |
|--------|--------|--|---------|----------|
| 001373 |        | SLSU*CKCDM+3                                       | 11201   | 04 1312  |
| 001374 |        | STRAL*CKCDM+3                                      | 11202   | 44 1312  |
| 001375 |        | SLSU*CKCDM+7                                       | 11203   | 04 1316  |
| 001376 |        | STRAL*CKCDM+7                                      | 11204   | 44 1316  |
| 001377 |        | SLSU*CKADRR  | 11205   | 04 1231  |
| 001400 |        | STRAL*CKADRR SKPNR                                 | 11206   | 44 1231  |
| 001401 |        | STRAL*CKADRR+4 SKPNR                               | 11207   | 44 1235  |
| 001402 |        | STRAL*CKOUTT SKPNR                                 | 11210   | 44 1271  |
| 001403 |        | STRAL*CKOUTT+5 SKPNR                               | 11211   | 44 1276  |
| 001404 |        | SLSU*CKADRR+2                                      | 11212   | 04 1233  |
| 001405 |        | STRAL*CKADRR SRSM                                  | 11213   | 44 1231  |
| 001406 |        | STRAL*CKOUTT+2 SRSM                                | 11214   | 44 1273  |
| 001407 | EXFFCK | EXF*XX DO EF ON HI CHAN                            | 11215   | 5013 00  |
| 001410 |        | 0*CKWD+1 STORE                                     | 11216   | 016446   |
| 001411 |        | 0*CKWD BCW   | 11217   | 016445   |
| 001412 |        | EXFOV*XX FORCE                                     | 11220   | 5027 00  |
| 001413 |        | ENTAU*CHAN+16 040000                               | 11221   | 10 6551  |
| 001414 |        | LSHAU*01   | 11222   | 5045 01  |
| 001415 |        | JPAUP*LOK-1 ALLOW TIME FOR TERM                    | 11223   | 64 1222  |
| 001416 |        | SKPFIN*XX DID BUF TERM?                            | 11224   | 5023 00  |
| 001417 |        | JP*LOK+4 NO, CONTINUE                              | 11225   | 34 1231  |
| 001420 |        | RJP*BEQUZO CK B#0 CKT                              | 11226   | 76 1327  |
| 001421 |        | ENTAL*LOK-3 DISPLAY F AND CHAN                     | 11227   | 12 1224  |
| 001422 |        | STOP*40 ERR STOP                                   | 11230   | 5056 40  |
| 001423 |        | REMARK*RECOGNITION OF DUAL IS IDENTIFIED ON C REGS |         |          |
| 001424 | CKADRR | SKPNR*XX WAS RESUME RESET?                         | 11231   | 5057 00  |
| 001425 |        | JP*LOK+6 YES-CONT                                  | 11232   | 34 1240  |
| 001426 |        | SRSM*XX NO-TRY PROG SET                            | 11233   | 5020 00  |
| 001427 |        | ENTAL*LOK+1 DISPLAY CHAN                           | 11234   | 12 1235  |
| 001430 |        | SKPNR*XX DID PROG RESET WORK?                      | 11235   | 5057 00  |

4-240

| SEQNO  | LABEL  | STATEMENT                         | ADDRESS | INSTRUCT |
|--------|--------|-----------------------------------|---------|----------|
| 001431 |        | STOP*40 YES-ERROR STOP            | 11236   | 5056 40  |
| 001432 |        | STOP*40 NO-ERROR STOP             | 11237   | 5056 40  |
| 001433 | CKADR  | ENTALB*CHTBL ENT CHAN NO          | 11240   | 13 0000  |
| 001434 |        | SLCL*KHMSK CHAN 10-17?            | 11241   | 52 6556  |
| 001435 |        | JPALNZ*CKOUTD JP IF YES           | 11242   | 63 1247  |
| 001436 |        | ENTALB*CHTBL ENT LO CHAN NO       | 11243   | 13 0000  |
| 001437 |        | LSHAL*01 2K                       | 11244   | 5046 01  |
| 001440 |        | ADDALK*21 CONTR MEM ADDR 21-37    | 11245   | 71 0021  |
| 001441 |        | JP*CKOUTD+4 JP AND COMPARE        | 11246   | 34 1253  |
| 001442 | CKOUTD | ENTALB*CHTBL ENT HI CHAN NO       | 11247   | 13 0000  |
| 001443 |        | ADDALK*7767 K-10                  | 11250   | 71 7767  |
| 001444 |        | LSHAL*01 2(K-10)                  | 11251   | 5046 01  |
| 001445 |        | ADDALK*221 CONTR MEM ADDR 221-237 | 11252   | 71 0221  |
| 001446 |        | STRADR*LOK+2 SAVE CACW ADDR       | 11253   | 74 1255  |
| 001447 |        | ENTSR*10 REF STACK 0              | 11254   | 5073 10  |
| 001450 |        | ENTAL*ADR ENT CACW                | 11255   | 12 0000  |
| 001451 |        | ENTSR*0 REF CURR STACK            | 11256   | 5073 00  |
| 001452 |        | STRAL*CCMADR SAVE BCW             | 11257   | 44 6606  |
| 001453 | CKOUT  | CMAL*CKWD WAS CACW CHNGD AT ALL?  | 11260   | 02 6445  |
| 001454 |        | JPEQ*SRCHCM NO, SRCH CM           | 11261   | 61 6021  |
| 001455 |        | CMAL*CKWD+1 YES, WAS IT INCR?     | 11262   | 02 6446  |
| 001456 |        | JPEQ*LOK+2 YES, CONTINUE          | 11263   | 61 1265  |
| 001457 |        | STOP*40 NO, STOP                  | 11264   | 5056 40  |
| 001460 |        | EXFOV*XX                          | 11265   | 5027 00  |
| 001461 |        | ENTAU*CHAN+16                     | 11266   | 10 6551  |
| 001462 |        | LSHAU*01                          | 11267   | 5045 01  |
| 001463 |        | JPAUP*LOK-1                       | 11270   | 64 1267  |
| 001464 | CKOUTT | SKPNR*XX WAS RESUME RESET?        | 11271   | 5057 00  |
| 001465 |        | JP*LOK+7 YES-CONT                 | 11272   | 34 1301  |
| 001466 |        | SRSM*XX NO-TRY PROG SET           | 11273   | 5020 00  |
| 001467 |        | ENTAL*LOK+2 DISPLAY CHAN          | 11274   | 12 1276  |

| SEQNO  | LABEL  | STATEMENT                                   | ADDRESS | INSTRUCT |
|--------|--------|---|---------|----------|
| 001470 |        | ENTAU*NTDSTD DISPLAY STD1218/NTDS 1219 FLAG | 11275   | 10 6526  |
| 001471 |        | SKPNR*XX DID PROG RESET WORK?               | 11276   | 5057 00  |
| 001472 |        | STOP*40 YES-ERROR STOP                      | 11277   | 5056 40  |
| 001473 |        | STOP*40 NO-ERROR STOP                       | 11300   | 5056 40  |
| 001474 |        | SKPFIN*XX TERMINATE?                        | 11301   | 5023 00  |
| 001475 |        | JP*CKCDM NO                                 | 11302   | 34 1307  |
| 001476 |        | BJP*I012+5 YES, CK ALL CHAN                 | 11303   | 73 1137  |
| 001477 |        | RJP*BEQUZO                                  | 11304   | 76 1327  |
| 001500 |        | IJP*I012 EXIT                               | 11305   | 55 1132  |
| 001501 |        | RESERV*1                                    | 11306   | 000000   |
| 001502 | CKCDM  | OUT*XX DO OUT TO CK FOR CDM                 | 11307   | 5012 00  |
| 001503 |        | 0*CKWD+3                                    | 11310   | 016450   |
| 001504 |        | 0*CKWD+3                                    | 11311   | 016450   |
| 001505 |        | OUTOV*XX FORCE                              | 11312   | 5026 00  |
| 001506 |        | ENTAU*CHAN+16                               | 11313   | 10 6551  |
| 001507 |        | LSHAU*01 DELAY                              | 11314   | 5045 01  |
| 001510 |        | JPAUP*LOK-1                                 | 11315   | 64 1314  |
| 001511 |        | SKPOIN*XX ACTIVE?                           | 11316   | 5022 00  |
| 001512 |        | JP*LOK+3 YES                                | 11317   | 34 1322  |
| 001513 |        | STOP*40 NO, STOP                            | 11320   | 5056 40  |
| 001514 |        | ENTAL*CCMADR EF/CDM BUF CONT REG            | 11321   | 12 6606  |
| 001515 |        | CMAL*CKWD+1                                 | 11322   | 02 6446  |
| 001516 |        | JPEQ*LOK+3                                  | 11323   | 61 1326  |
| 001517 |        | ENTAL*TWLV18 DSPLY NEG ALL IF 1218 MODE     | 11324   | 12 6472  |
| 001520 |        | STOP*40 ERR STOP - NOT ACT CDM              | 11325   | 5056 40  |
| 001521 |        | STOP*40 ERR STOP - ACT DUE TO CDM           | 11326   | 5056 40  |
| 001522 | BEQUZO | 0*0 ENT                                     | 11327   | 00 0000  |
| 001523 |        | SIL   | 11330   | 5034 00  |
| 001524 |        | RJP*TERMAL TERM ALL ACT                     | 11331   | 76 5447  |
| 001525 |        | ENTAU*CHA4 CL AU                            | 11332   | 10 6527  |
| 001526 |        | ENTALK*0 CL AL                              | 11333   | 70 0000  |

4-242

| SEQNO  | LABEL | STATEMENT                           | ADDRESS | INSTRUCT |
|--------|-------|-------------------------------------|---------|----------|
| 001527 |       | EXF*0 SET UP EF BUF CHAN 0          | 11334   | 5013 00  |
| 001530 |       | 1*70000 CONTR WD TO CK UPPER 4 BITS | 11335   | 17 0000  |
| 001531 |       | 1*70000                             | 11336   | 17 0000  |
| 001532 |       | EXFOV*0 SIMULATE REQ                | 11337   | 5027 00  |
| 001533 |       | ENTAL*CHAN+16 DELAY                 | 11340   | 12 6551  |
| 001534 |       | LSHAL*01                            | 11341   | 5046 01  |
| 001535 |       | JPALP*LOK-1                         | 11342   | 65 1341  |
| 001536 |       | SKPFIN*0 TERM?                      | 11343   | 5023 00  |
| 001537 |       | ENTAU*TWELVE NO SET FLAG            | 11344   | 10 6464  |
| 001540 |       | EXF*0 YES DO OTHER EF WITH          | 11345   | 5013 00  |
| 001541 |       | 0*07777 CONTR WD TO CK LO BITS      | 11346   | 00 7777  |
| 001542 |       | 0*07777                             | 11347   | 00 7777  |
| 001543 |       | EXFOV*0                             | 11350   | 5027 00  |
| 001544 |       | ENTAL*CHAN+16 DELAY                 | 11351   | 12 6551  |
| 001545 |       | LSHAL*01                            | 11352   | 5046 01  |
| 001546 |       | JPALP*LOK-1                         | 11353   | 65 1352  |
| 001547 |       | SKPFIN*0 TERM?                      | 11354   | 5023 00  |
| 001550 |       | JP*LOK+2 NO                         | 11355   | 34 1357  |
| 001551 |       | JPAUZ*LOK+3 YES CK UPPER BITS FLAG  | 11356   | 60 1361  |
| 001552 |       | ENTAL*BEQUZO AL#ADR CAME FR         | 11357   | 12 1327  |
| 001553 |       | STOP*40 ERR STOP                    | 11360   | 5056 40  |
| 001554 |       | IJP*BEQUZO EXIT                     | 11361   | 55 1327  |
| 001555 | I013  | 0*0 ENTRY                           | 11362   | 00 0000  |
| 001556 |       | ENTALK*I013                         | 11363   | 70 1362  |
| 001557 |       | STRAL*IFault                        | 11364   | 44 6603  |
| 001560 |       | RJP*JMPRD                           | 11365   | 76 5710  |
| 001561 |       | RJP*REICR                           | 11366   | 76 5767  |
| 001562 |       | RJP*CLCWAR                          | 11367   | 76 5507  |
| 001563 |       | RJP*CLPIN CL IN STR AREA            | 11370   | 76 6402  |
| 001564 |       | ENTALK*100                          | 11371   | 70 0100  |
| 001565 |       | STRAL*MNAREA                        | 11372   | 44 6557  |

4-243

| SEQNO  | LABEL | STATEMENT      | ADDRESS | INSTRUCT |
|--------|-------|----------------|---------|----------|
| 001566 |       | ENTALK*300     | 11373   | 70 0300  |
| 001567 |       | STRAL*MNAREA+1 | 11374   | 44 6560  |
| 001570 |       | ENTAL*RJPEI1   | 11375   | 12 5366  |
| 001571 |       | STRAL*MNADR    | 11376   | 44 6561  |
| 001572 |       | RJP*CMRJP      | 11377   | 76 5425  |
| 001573 |       | ENTALK*120     | 11400   | 70 0120  |
| 001574 |       | STRAL*MNAREA   | 11401   | 44 6557  |
| 001575 |       | ENTALK*320     | 11402   | 70 0320  |
| 001576 |       | STRAL*MNAREA+1 | 11403   | 44 6560  |
| 001577 |       | ENTAL*RJPEF    | 11404   | 12 5777  |
| 001600 |       | STRAL*MNADR    | 11405   | 44 6561  |
| 001601 |       | RJP*CMRJP      | 11406   | 76 5425  |
| 001602 |       | ENTALK*140     | 11407   | 70 0140  |
| 001603 |       | STRAL*MNAREA   | 11410   | 44 6557  |
| 001604 |       | ENTALK*340     | 11411   | 70 0340  |
| 001605 |       | STRAL*MNAREA+1 | 11412   | 44 6560  |
| 001606 |       | ENTAL*RJP0UT   | 11413   | 12 6005  |
| 001607 |       | STRAL*MNADR    | 11414   | 44 6561  |
| 001610 |       | RJP*CMRJP      | 11415   | 76 5425  |
| 001611 | I013A | ENTALB*CHTBL   | 11416   | 13 0000  |
| 001612 |       | ENTAU*U12MSK   | 11417   | 10 6455  |
| 001613 |       | SLSU*INBUF     | 11420   | 04 1434  |
| 001614 |       | STRAL*INBUF    | 11421   | 44 1434  |
| 001615 |       | SLSU*AUTFCK    | 11422   | 04 1440  |
| 001616 |       | STRAL*AUTFCK   | 11423   | 44 1440  |
| 001617 |       | SLSU*AUTFCK+3  | 11424   | 04 1443  |
| 001620 |       | STRAL*AUTFCK+3 | 11425   | 44 1443  |
| 001621 |       | STRAL*CKOUV+5  | 11426   | 44 1503  |
| 001622 |       | SLSU*CKADRA-4  | 11427   | 04 1452  |
| 001623 |       | STRAL*CKADRA-4 | 11430   | 44 1452  |
| 001624 |       | STRAL*CKOUV+11 | 11431   | 44 1507  |

| SEQNO  | LABEL  | STATEMENT                         | ADDRESS | INSTRUCT |
|--------|--------|-----------------------------------|---------|----------|
| 001625 |        | SLSU*INBUF+3                      | 11432   | 04 1437  |
| 001626 |        | STRAL*INBUF+3                     | 11433   | 44 1437  |
| 001627 | INBUF  | IN*XX SET INPUT AREA              | 11434   | 5011 00  |
| 001630 |        | 0*PIN                             | 11435   | 016412   |
| 001631 |        | 0*PIN                             | 11436   | 016412   |
| 001632 |        | INSTP*XX CLR IN ACT               | 11437   | 5015 00  |
| 001633 | AUTFCK | OUT*XX                            | 11440   | 5012 00  |
| 001634 |        | 0*CKWD+1                          | 11441   | 016446   |
| 001635 |        | 0*CKWD                            | 11442   | 016445   |
| 001636 |        | OUTOV*XX                          | 11443   | 5026 00  |
| 001637 |        | ENTAU*CHAN+16                     | 11444   | 10 6551  |
| 001640 |        | RJP*DELAY                         | 11445   | 76 0302  |
| 001641 |        | ENTAL*PIN                         | 11446   | 12 6412  |
| 001642 |        | JPALZ*LOK+3 WAS IDR HONORED?      | 11447   | 61 1452  |
| 001643 |        | ENTAU*AUTFCK YES DSPLY F AND CHAN | 11450   | 10 1440  |
| 001644 |        | STOP*40 ERR STOP                  | 11451   | 5056 40  |
| 001645 |        | SKPOIN*XX                         | 11452   | 5022 00  |
| 001646 |        | JP*LOK+3                          | 11453   | 34 1456  |
| 001647 |        | ENTAL*LOK-2                       | 11454   | 12 1452  |
| 001650 |        | STOP*40                           | 11455   | 5056 40  |
| 001651 | CKADRA | ENTALB*CHTBL                      | 11456   | 13 0000  |
| 001652 |        | SLCL*KHMSK                        | 11457   | 52 6556  |
| 001653 |        | JPALNZ*CKOUU                      | 11460   | 63 1465  |
| 001654 |        | ENTALB*CHTBL                      | 11461   | 13 0000  |
| 001655 |        | LSHAL*01                          | 11462   | 5046 01  |
| 001656 |        | ADDALK*041                        | 11463   | 71 0041  |
| 001657 |        | JP*CKOUU+4                        | 11464   | 34 1471  |
| 001660 | CKOUU  | ENTALB*CHTBL                      | 11465   | 13 0000  |
| 001661 |        | ADDALK*7767                       | 11466   | 71 7767  |
| 001662 |        | LSHAL*01                          | 11467   | 5046 01  |
| 001663 |        | ADDALK*241                        | 11470   | 71 0241  |

| SEQNO  | LABEL | STATEMENT                        | ADDRESS | INSTRUCT |
|--------|-------|----------------------------------|---------|----------|
| 001664 |       | STRADR*LOK+2                     | 11471   | 74 1473  |
| 001665 |       | ENTSR*10                         | 11472   | 5073 10  |
| 001666 |       | ENTAL*ADR                        | 11473   | 12 0000  |
| 001667 |       | ENTSR*0                          | 11474   | 5073 00  |
| 001670 |       | STRAL*CCMADR                     | 11475   | 44 6606  |
| 001671 | CKOUV | CMAL*CKWD WAS CACW CHNGD AT ALL? | 11476   | 02 6445  |
| 001672 |       | JPEQ*SRCHCM NO, SRCH CM          | 11477   | 61 6021  |
| 001673 |       | CMAL*CKWD+1 YES, WAS IT INCR?    | 11500   | 02 6446  |
| 001674 |       | JPEQ*LOK+2 YES, CONTINUE         | 11501   | 61 1503  |
| 001675 |       | STOP*40 NO, STOP                 | 11502   | 5056 40  |
| 001676 |       | OUTOV*XX                         | 11503   | 5026 00  |
| 001677 |       | ENTAU*CHAN+16                    | 11504   | 10 6551  |
| 001700 |       | LSHAU*01                         | 11505   | 5045 01  |
| 001701 |       | JPAUP*LOK-1                      | 11506   | 64 1505  |
| 001702 |       | SKPOIN*XX                        | 11507   | 5022 00  |
| 001703 |       | JP*LOK+4 JP IF NOT TERM          | 11510   | 34 1514  |
| 001704 |       | BJP*I013+5 CK ALL CHAN           | 11511   | 73 1367  |
| 001705 |       | IJP*I013 EXIT                    | 11512   | 55 1362  |
| 001706 |       | RESERV*01                        | 11513   | 000000   |
| 001707 |       | ENTAU*CCMADR                     | 11514   | 10 6606  |
| 001710 |       | STOP*40                          | 11515   | 5056 40  |
| 001711 | I014  | 0*0 ENTRY                        | 11516   | 00 0000  |
| 001712 |       | ENTALK*I014                      | 11517   | 70 1516  |
| 001713 |       | STRAL*IFault                     | 11520   | 44 6603  |
| 001714 |       | RJP*TERMAL TERM ALL ACT          | 11521   | 76 5447  |
| 001715 |       | RJP*STRMEM STR 1-377 IN 1-377    | 11522   | 76 6420  |
| 001716 | FCODE | EXF*0 DO EF BKWD W/CDM           | 11523   | 5013 00  |
| 001717 |       | 40*CKWDA                         | 11524   | 40 6451  |
| 001720 |       | 40*CKWDA+1                       | 11525   | 40 6452  |
| 001721 |       | EXFOV*0                          | 11526   | 5027 00  |
| 001722 |       | ENTSR*10                         | 11527   | 5073 10  |

4-246

| SEQNO  | LABEL | STATEMENT                                 | ADDRESS | INSTRUCT |
|--------|-------|---|---------|----------|
| 001723 |       | ENTAL*021 ENT CACW                        | 11530   | 12 0021  |
| 001724 |       | ENTSR*0                                   | 11531   | 5073 00  |
| 001725 |       | STRAL*CCMADR SAVE CACW                    | 11532   | 44 6606  |
| 001726 |       | CMAL*CKWDA IACW DECRMTD?                  | 11533   | 02 6451  |
| 001727 |       | JPEQ*DOCDM YES, CK CDM                    | 11534   | 61 1544  |
| 001730 |       | CMAL*CKWDA+1 NO, WAS IT CHNGD AT ALL?     | 11535   | 02 6452  |
| 001731 |       | JPEQ*LOK+4 NO, JP TO STOP                 | 11536   | 61 1542  |
| 001732 |       | CMAL*CKWDA+2 YES, ACT LIKE FWD BUF?       | 11537   | 02 6453  |
| 001733 |       | JPEQ*LOK+3 YES, JP TO STOP                | 11540   | 61 1543  |
| 001734 |       | STOP*40 ERR STOP                          | 11541   | 5056 40  |
| 001735 |       | STOP*40 ERR STOP - IACW NOT CHGD          | 11542   | 5056 40  |
| 001736 |       | STOP*40 ERR STOP - IACW INCRMTD           | 11543   | 5056 40  |
| 001737 | DOCDM | SKPFIN*0 DID EF TERM PREMATURE?           | 11544   | 5023 00  |
| 001740 |       | JP*LOK+2 NO CONTINUE                      | 11545   | 34 1547  |
| 001741 |       | JP*DSPLY YES, JP TO STOP                  | 11546   | 34 1624  |
| 001742 |       | OUT*0 NO, CONTINUE                        | 11547   | 5012 00  |
| 001743 |       | 40*CKWD DO OUT W/CDM AND BKWD             | 11550   | 40 6445  |
| 001744 |       | 40*CKWD+1                                 | 11551   | 40 6446  |
| 001745 |       | OUTOV*0 FORCE                             | 11552   | 5026 00  |
| 001746 |       | ENTAU*CHAN+16 DLY TO ALLOW TIME FOR FALSE | 11553   | 10 6551  |
| 001747 |       | RJP*DELAY TERM AND/OR EARLY CDM           | 11554   | 76 0302  |
| 001750 |       | SKPOIN*0 FALSE TERM?                      | 11555   | 5022 00  |
| 001751 |       | JP*LOK+2 NO, CONTINUE                     | 11556   | 34 1560  |
| 001752 |       | JP*DSPLY1 YES                             | 11557   | 34 1627  |
| 001753 |       | ENTSR*10 STACK 0                          | 11560   | 5073 10  |
| 001754 |       | ENTAL*41                                  | 11561   | 12 0041  |
| 001755 |       | ENTSR*0 CURR STACK                        | 11562   | 5073 00  |
| 001756 |       | CMAL*CKWDA EARLY CDM?                     | 11563   | 02 6451  |
| 001757 |       | JPEQ*LOK+2 YES                            | 11564   | 61 1566  |
| 001760 |       | JP*LOK+2 NO, CONTINUE                     | 11565   | 34 1567  |
| 001761 |       | STOP*40 ERR - EARLY CDM                   | 11566   | 5056 40  |



| SEQNO  | LABEL | STATEMENT                                | ADDRESS | INSTRUCT |
|--------|-------|--|---------|----------|
| 001762 |       | OUTOV*0                                  | 11567   | 5026 00  |
| 001763 |       | ENTAU*CHAN+16                            | 11570   | 10 6551  |
| 001764 |       | RJP*DELAY                                | 11571   | 76 0302  |
| 001765 |       | SKPOIN*0 DID CDM LOAD NEW BCW, CONT ACT? | 11572   | 5022 00  |
| 001766 |       | JP*LOK+7 STILL ACT, CONTINUE             | 11573   | 34 1602  |
| 001767 |       | ENTAL*TWLV18 INACT, CK 1218 MODE         | 11574   | 12 6472  |
| 001770 |       | JPALNG*EXIT EXIT IF 1218 MODE (NO CDM)   | 11575   | 67 1632  |
| 001771 |       | ENTSR*10 REF STACK 0                     | 11576   | 5073 10  |
| 001772 |       | ENTAU*20 DSPLY CDM AND OUT BCW           | 11577   | 10 0020  |
| 001773 |       | ENTAL*40                                 | 11600   | 12 0040  |
| 001774 |       | STOP*40 1219 MODE - NO CDM               | 11601   | 5056 40  |
| 001775 |       | ENTAL*TWLV18 CK 1218 MODE                | 11602   | 12 6472  |
| 001776 |       | JPALP*LOK+5 CONTINUE IF 1219 MODE        | 11603   | 65 1610  |
| 001777 |       | ENTSR*10 DSPLY OUT AND CDM               | 11604   | 5073 10  |
| 002000 |       | ENTAU*20 BCW REG AND STOP                | 11605   | 10 0020  |
| 002001 |       | ENTAL*40                                 | 11606   | 12 0040  |
| 002002 |       | STOP*40 1218 MODE BUT STILL CDM ACTION   | 11607   | 5056 40  |
| 002003 |       | ENTSR*10 STACK 0                         | 11610   | 5073 10  |
| 002004 |       | ENTAL*41 CK IACW                         | 11611   | 12 0041  |
| 002005 |       | ENTSR*0 THIS STACK                       | 11612   | 5073 00  |
| 002006 |       | CMAL*CKWDA WAS CDM IACW MOVED?           | 11613   | 02 6451  |
| 002007 |       | JPEQ*LOK+2 YES, CK 7ACW                  | 11614   | 61 1616  |
| 002010 |       | RJP*PEEK NO, FIND BCW STR LOK            | 11615   | 76 1634  |
| 002011 |       | ENTSR*10                                 | 11616   | 5073 10  |
| 002012 |       | ENTAL*40 CK TACW                         | 11617   | 12 0040  |
| 002013 |       | ENTSR*0                                  | 11620   | 5073 00  |
| 002014 |       | CMAL*CKWDA WAS TACW MOVED?               | 11621   | 02 6451  |
| 002015 |       | JPEQ*EXIT YES, EXIT                      | 11622   | 61 1632  |
| 002016 |       | RJP*PEEK NO, FIND IT                     | 11623   | 76 1634  |
| 002017 | DSPLY | ENTSR*10                                 | 11624   | 5073 10  |
| 002020 |       | ENTAU*20                                 | 11625   | 10 0020  |

4-248

| SEQNO  | LABEL  | STATEMENT                                   | ADDRESS | INSTRUCT |
|--------|--------|---|---------|----------|
| 002021 |        | STOP*40 ERR STOP-PREMATRE TERM EF           | 11626   | 5056 40  |
| 002022 | DSPLY1 | ENTSR*10                                    | 11627   | 5073 10  |
| 002023 |        | ENTAU*20                                    | 11630   | 10 0020  |
| 002024 |        | STOP*40 ERR STOP-PREMATRE TERM OUT          | 11631   | 5056 40  |
| 002025 | EXIT   | IJP*I014                                    | 11632   | 55 1516  |
| 002026 |        | RESERV*1                                    | 11633   | 000000   |
| 002027 | PEEK   | 0*0   | 11634   | 00 0000  |
| 002030 |        | ENTICR*03 B3                                | 11635   | 5072 03  |
| 002031 |        | ENTBK*677                                   | 11636   | 36 0677  |
| 002032 |        | ENTSR*10 REF STACK 0                        | 11637   | 5073 10  |
| 002033 | CKER   | ENTALB*0 CK ADDR 0-677 FOR CKWDA            | 11640   | 13 0000  |
| 002034 |        | ENTSR*10 REF THIS STACK                     | 11641   | 5073 10  |
| 002035 |        | CMAL*CKWDA BCW STORED HERE?                 | 11642   | 02 6451  |
| 002036 |        | JPEQ*CKNORM YES, CK IF THIS IS THE NORM LOK | 11643   | 61 1647  |
| 002037 |        | BJP*CKER NO, CK NEXT ADDR                   | 11644   | 73 1640  |
| 002040 |        | ENTAU*PEEK MAIN P                           | 11645   | 10 1634  |
| 002041 |        | STOP*40 CDM NOT MOVED IN CM                 | 11646   | 5056 40  |
| 002042 | CKNORM | ENTAL*CKER ENT ADR BEING CKD                | 11647   | 12 1640  |
| 002043 |        | SLCL*L12MSK SAVE L0 12 BITS                 | 11650   | 52 6612  |
| 002044 |        | CMAL*CDMICW IS ADR 21 BEING CKD?            | 11651   | 02 1662  |
| 002045 |        | JPEQ*LOK+5 IF YES, CONTINUE                 | 11652   | 61 1657  |
| 002046 |        | CMAL*CDMTCW IS ADR 20 BEING CKD?            | 11653   | 02 1661  |
| 002047 |        | JPEQ*LOK+3 IF YES, CONTINUE                 | 11654   | 61 1657  |
| 002050 |        | ENTAU*PEEK DISPLAY MAIN P                   | 11655   | 10 1634  |
| 002051 |        | STOP*40                                     | 11656   | 5056 40  |
| 002052 |        | BJP*CKER CK NEXT ADR                        | 11657   | 73 1640  |
| 002053 |        | STOP*40                                     | 11660   | 5056 40  |
| 002054 | CDMTCW | 0*20 CDM IACW REG CH 0                      | 11661   | 00 0020  |
| 002055 | CDMICW | 0*21 CDM IACW REG CH 1                      | 11662   | 00 0021  |
| 002056 | I016   | 0*0 ENTRY                                   | 11663   | 00 0000  |
| 002057 |        | ENTALK*I016                                 | 11664   | 70 1663  |

| SEQNO  | LABEL | STATEMENT                                 | ADDRESS | INSTRUCT |
|--------|-------|---|---------|----------|
| 002060 |       | STRAL*IFault                              | 11665   | 44 6603  |
| 002061 |       | RJP*REICR SET B2                          | 11666   | 76 5767  |
| 002062 |       | CL*FAULTI                                 | 11667   | 40 6602  |
| 002063 |       | CL*ALERDS                                 | 11670   | 40 6470  |
| 002064 |       | RJP*STINK STR STOPS IN CM                 | 11671   | 76 6336  |
| 002065 |       | ENTICR*02                                 | 11672   | 5072 02  |
| 002066 |       | ENTALK*IRJPAT MODIFY STR INT RTN          | 11673   | 70 6333  |
| 002067 |       | STRADR*STRINB                             | 11674   | 74 2410  |
| 002070 |       | ENTALK*140                                | 11675   | 70 0140  |
| 002071 |       | STRADR*STRINA+2                           | 11676   | 74 2401  |
| 002072 |       | ENTALK*340                                | 11677   | 70 0340  |
| 002073 |       | STRADR*STRINB-2                           | 11700   | 74 2406  |
| 002074 |       | RJP*STRINT STR IRJP*AURIL IN CM           | 11701   | 76 2373  |
| 002075 | I016D | ENTALB*CHTBL CHAN NO                      | 11702   | 13 0000  |
| 002076 |       | ENTAU*U12MSK PRESTR CHAN NO               | 11703   | 10 6455  |
| 002077 |       | SLSU*I016E                                | 11704   | 04 1714  |
| 002100 |       | STRAL*I016E                               | 11705   | 44 1714  |
| 002101 |       | SLSU*I016E+3                              | 11706   | 04 1717  |
| 002102 |       | STRAL*I016E+3                             | 11707   | 44 1717  |
| 002103 |       | ENTAU*ALERDS DSPLY ERR IN CASE STINK STOP | 11710   | 10 6470  |
| 002104 |       | RIL ENBL ALL INT                          | 11711   | 5030 00  |
| 002105 |       | IJPEI*LOK+1 ENBL INT                      | 11712   | 54 1713  |
| 002106 |       | 0*I016E                                   | 11713   | 011714   |
| 002107 | I016E | OUT*XX                                    | 11714   | 5012 00  |
| 002110 |       | 60*FALADR                                 | 11715   | 60 7706  |
| 002111 |       | 60*FALADR                                 | 11716   | 60 7706  |
| 002112 |       | OUTOV*XX                                  | 11717   | 5026 00  |
| 002113 |       | ENTAL*CHAN+16 ALLOW TERM TIME             | 11720   | 12 6551  |
| 002114 |       | LSHAL*01                                  | 11721   | 5046 01  |
| 002115 |       | JPALP*LOK-1                               | 11722   | 65 1721  |
| 002116 |       | RJP*RCORDO NOTE ANY INT NOT HNRD          | 11723   | 76 5555  |

4-250

| SEQNO  | LABEL | STATEMENT                                 | ADDRESS | INSTRUCT |
|--------|-------|---|---------|----------|
| 002117 | I016A | BJP*I016+6                                | 11724   | 73 1671  |
| 002120 |       | RJP*REICR RESET B2                        | 11725   | 76 5767  |
| 002121 |       | RJP*CLCWAR                                | 11726   | 76 5507  |
| 002122 |       | RJP*STINK STR STOPS IN CM                 | 11727   | 76 6336  |
| 002123 |       | ENTALK*JPEF STR JP IN CM                  | 11730   | 70 1771  |
| 002124 |       | STRADR*STRINB                             | 11731   | 74 2410  |
| 002125 |       | ENTALK*120                                | 11732   | 70 0120  |
| 002126 |       | STRADR*STRINA+2                           | 11733   | 74 2401  |
| 002127 |       | ENTALK*320                                | 11734   | 70 0320  |
| 002130 |       | STRADR*STRINB-2                           | 11735   | 74 2406  |
| 002131 |       | RJP*STRINT STR IRJP*EFSIL IN CM           | 11736   | 76 2373  |
| 002132 | I016F | RIL ENBL ALL INT                          | 11737   | 5030 00  |
| 002133 |       | IJPEI*LOK+1 ENBL INT                      | 11740   | 54 1741  |
| 002134 |       | 0*I016F+3                                 | 11741   | 011742   |
| 002135 |       | ENTALB*CHTBL CHAN NO                      | 11742   | 13 0000  |
| 002136 |       | ENTAU*U12MSK                              | 11743   | 10 6455  |
| 002137 |       | SLSU*I016G PRESTR CHAN NO                 | 11744   | 04 1750  |
| 002140 |       | STRAL*I016G                               | 11745   | 44 1750  |
| 002141 |       | SLSU*I016G+5                              | 11746   | 04 1755  |
| 002142 |       | STRAL*I016G+5                             | 11747   | 44 1755  |
| 002143 | I016G | EXF*XX                                    | 11750   | 5013 00  |
| 002144 |       | 60*FALADR                                 | 11751   | 60 7706  |
| 002145 |       | 60*FALADR                                 | 11752   | 60 7706  |
| 002146 |       | ENTAU*ALERDS DSPLY ERR IN CASE STINK STOP | 11753   | 10 6470  |
| 002147 |       | ENTAL*FAULTI                              | 11754   | 12 6602  |
| 002150 |       | EXFOV*XX                                  | 11755   | 5027 00  |
| 002151 |       | SKP*0 ALLOW TERM TIME                     | 11756   | 5050 00  |
| 002152 |       | SKP*0                                     | 11757   | 5050 00  |
| 002153 |       | SKP*0                                     | 11760   | 5050 00  |
| 002154 |       | RJP*RCORDF                                | 11761   | 76 5564  |
| 002155 | I016B | BJP*I016A+2 DO ALL CHAN                   | 11762   | 73 1726  |

| SEQNO  | LABEL  | STATEMENT                       | ADDRESS | INSTRUCT |
|--------|--------|---------------------------------|---------|----------|
| 002156 |        | ENTAU*FAULTI DSPLY EF MON ERR   | 11763   | 10 6602  |
| 002157 |        | ENTAL*ALERDS DSPLY OUT MON ERR  | 11764   | 12 6470  |
| 002160 |        | JPALNZ*LOK+2 CK ERR(OUT)        | 11765   | 63 1767  |
| 002161 |        | JPAUZ*LOK+2 CK ERR(EF)          | 11766   | 60 1770  |
| 002162 |        | STOP*40 YES                     | 11767   | 5056 40  |
| 002163 |        | IJP*I016 NO - EXIT              | 11770   | 55 1663  |
| 002164 | JPEF   | IJP*JPEFL                       | 11771   | 55 7767  |
| 002165 | JPEFM  | JP*I016B EXIT                   | 11772   | 34 1762  |
| 002166 |        | RESERV*1                        | 11773   | 000000   |
| 002167 | RLJPEI | 0*0 ENT                         | 11774   | 00 0000  |
| 002170 |        | ENTALK*RLJPEI                   | 11775   | 70 1774  |
| 002171 |        | STRAL*IFault                    | 11776   | 44 6603  |
| 002172 |        | RJP*HONINT CL INT               | 11777   | 76 6353  |
| 002173 |        | SIL LOKO INT                    | 12000   | 5034 00  |
| 002174 |        | SXL                             | 12001   | 5036 00  |
| 002175 |        | ENTAL*ZROMON-1 PREP MON INT REG | 12002   | 12 2057  |
| 002176 |        | ENTSR*10                        | 12003   | 5073 10  |
| 002177 |        | STRAL*140                       | 12004   | 44 0140  |
| 002200 |        | STRAL*144                       | 12005   | 44 0144  |
| 002201 |        | ENTSR*0                         | 12006   | 5073 00  |
| 002202 |        | OUT*0 OUT W/MON CHAN 0          | 12007   | 5012 00  |
| 002203 |        | 2*CKWD                          | 12010   | 216445   |
| 002204 |        | 2*CKWD                          | 12011   | 216445   |
| 002205 |        | OUT*2 OUT W/MON CHAN 2          | 12012   | 5012 02  |
| 002206 |        | 2*CKWDA                         | 12013   | 216451   |
| 002207 |        | 2*CKWDA                         | 12014   | 216451   |
| 002210 |        | OUTOV*2 FORCE CHAN 2            | 12015   | 5026 02  |
| 002211 |        | RIL REL LOKO                    | 12016   | 5030 00  |
| 002212 |        | ENTAU*CHAN+16 DELAY             | 12017   | 10 6551  |
| 002213 |        | LSHAU*01                        | 12020   | 5045 01  |
| 002214 |        | JPAUP*LOK-1                     | 12021   | 64 2020  |

| SEQNO  | LABEL  | STATEMENT                              | ADDRESS | INSTRUCT |
|--------|--------|--|---------|----------|
| 002215 |        | CMAL*L6MSK WAS MON HONORED?            | 12022   | 02 6456  |
| 002216 |        | JPEQ*AOK-1 YES, JP                     | 12023   | 61 2033  |
| 002217 |        | IJPEI*LOK+1 NO, DOES IJPEI REL LOKO?   | 12024   | 54 2025  |
| 002220 |        | 0*LOK+1                                | 12025   | 012026   |
| 002221 |        | ENTAU*CHAN+16 DELAY                    | 12026   | 10 6551  |
| 002222 |        | LSHAU*01                               | 12027   | 5045 01  |
| 002223 |        | JPAUP*LOK-1                            | 12030   | 64 2027  |
| 002224 |        | ENTAU*ZROMON DISPLAY P                 | 12031   | 10 2060  |
| 002225 |        | STOP*40 ERR-RIL BAD                    | 12032   | 5056 40  |
| 002226 |        | ENTALK*0                               | 12033   | 70 0000  |
| 002227 | AOK    | OUTOV*0 FORCE OTHER CHAN               | 12034   | 5026 00  |
| 002230 |        | ENTAU*CHAN+16 DELAY                    | 12035   | 10 6551  |
| 002231 |        | LSHAU*01                               | 12036   | 5045 01  |
| 002232 |        | JPAUP*LOK-1                            | 12037   | 64 2036  |
| 002233 |        | CMAL*L6MSK DID PREVIOUS INT KEEP LOKO? | 12040   | 02 6456  |
| 002234 |        | JPNOT*LOK+3 JP IF YES                  | 12041   | 63 2044  |
| 002235 |        | ENTAU*ZROMON DISPLAY P                 | 12042   | 10 2060  |
| 002236 |        | STOP*40                                | 12043   | 5056 40  |
| 002237 |        | IJPEI*LOK+1 TRY IJPEI REL OF LOKO      | 12044   | 54 2045  |
| 002240 |        | 0*LOK+1                                | 12045   | 012046   |
| 002241 |        | ENTAU*CHAN+16 DELAY                    | 12046   | 10 6551  |
| 002242 |        | LSHAU*01                               | 12047   | 5045 01  |
| 002243 |        | JPAUP*LOK-1                            | 12050   | 64 2047  |
| 002244 |        | CMAL*L6MSK WAS MON HONORED?            | 12051   | 02 6456  |
| 002245 |        | JPEQ*LOK+2 YES, CONTINUE               | 12052   | 61 2054  |
| 002246 |        | STOP*40 NO, STOP                       | 12053   | 5056 40  |
| 002247 |        | RJP*CKFORC CK FORCE LOKO OF INT        | 12054   | 76 2063  |
| 002250 |        | IJP*RLJPEI EXIT                        | 12055   | 55 1774  |
| 002251 |        | RESERV*1                               | 12056   | 000000   |
| 002252 |        | IRJP*ZR0L                              | 12057   | 30 7710  |
| 002253 | ZROMON | 0*0 ENT                                | 12060   | 00 0000  |

| SEQNO  | LABEL  | STATEMENT                             | ADDRESS | INSTRUCT |
|--------|--------|---------------------------------------|---------|----------|
| 002254 |        | ENTAL*L6MSK ENT FLAG                  | 12061   | 12 6456  |
| 002255 |        | IJP*ZROMON EXIT                       | 12062   | 55 2060  |
| 002256 | CKFORC | 0*0 ENT                               | 12063   | 00 0000  |
| 002257 |        | ENTALK*CKFORC                         | 12064   | 70 2063  |
| 002260 |        | STRAL*IFAUULT                         | 12065   | 44 6603  |
| 002261 |        | RJP*HONINT CL INT                     | 12066   | 76 6353  |
| 002262 |        | SIL LOKO INT                          | 12067   | 5034 00  |
| 002263 |        | SXL                                   | 12070   | 5036 00  |
| 002264 |        | ENTAL*ZROMON-1 PREP INT ENT REG       | 12071   | 12 2057  |
| 002265 |        | ENTSR*10                              | 12072   | 5073 10  |
| 002266 |        | STRAL*144                             | 12073   | 44 0144  |
| 002267 |        | ENTSR*0                               | 12074   | 5073 00  |
| 002270 |        | OUT*0 OUT CHAN 0                      | 12075   | 5012 00  |
| 002271 |        | 0*CKWD+3                              | 12076   | 016450   |
| 002272 |        | 0*CKWD                                | 12077   | 016445   |
| 002273 |        | OUT*2 OUT CHAN 2 W/MON                | 12100   | 5012 02  |
| 002274 |        | 2*CKWDA                               | 12101   | 216451   |
| 002275 |        | 2*CKWDA                               | 12102   | 216451   |
| 002276 |        | OUTOV*2 FORCE CHAN 2 ONE WD W/MON     | 12103   | 5026 02  |
| 002277 |        | ENTALK*0 CL AL                        | 12104   | 70 0000  |
| 002300 |        | RIL REL LOKO                          | 12105   | 5030 00  |
| 002301 |        | OUTOV*0 FORCE NON/MON CHAN MULTI-WORD | 12106   | 5026 00  |
| 002302 |        | OUTOV*0 FORCE 2D WD                   | 12107   | 5026 00  |
| 002303 |        | OUTOV*0 FORCE 3D WD                   | 12110   | 5026 00  |
| 002304 |        | CMAL*L6MSK DID FORCES MAINTAIN LOKO?  | 12111   | 02 6456  |
| 002305 |        | JPNOT*LOK+3 JP IF YES AND CONTINUE    | 12112   | 63 2115  |
| 002306 |        | ENTAU*ZROMON NO, DISPLAY P            | 12113   | 10 2060  |
| 002307 |        | STOP*40                               | 12114   | 5056 40  |
| 002310 |        | SIL LOKO INT                          | 12115   | 5034 00  |
| 002311 |        | RJP*HONINT CL INT                     | 12116   | 76 6353  |
| 002312 |        | IJP*CKFORC EXIT                       | 12117   | 55 2063  |

4-254

| SEQNO  | LABEL | STATEMENT      | ADDRESS | PAGE | INSTRUCT | 0041 |
|--------|-------|----------------|---------|------|----------|------|
| 002313 | I015  | 0*0 ENTRY      | 12120   | 00   | 0000     |      |
| 002314 |       | ENTALK*I015    | 12121   | 70   | 2120     |      |
| 002315 |       | STRAL*IFault   | 12122   | 44   | 6603     |      |
| 002316 |       | CL*AUERDS      | 12123   | 40   | 6467     |      |
| 002317 |       | CL*ALERDS      | 12124   | 40   | 6470     |      |
| 002320 |       | CL*FAULTI      | 12125   | 40   | 6602     |      |
| 002321 |       | RJP*JMPRD      | 12126   | 76   | 5710     |      |
| 002322 |       | RJP*CLCWAR     | 12127   | 76   | 5507     |      |
| 002323 |       | RJP*STINK      | 12130   | 76   | 6336     |      |
| 002324 |       | ENTALK*100     | 12131   | 70   | 0100     |      |
| 002325 |       | STRAL*MNAREA   | 12132   | 44   | 6557     |      |
| 002326 |       | ENTALK*300     | 12133   | 70   | 0300     |      |
| 002327 |       | STRAL*MNAREA+1 | 12134   | 44   | 6560     |      |
| 002330 |       | ENTAL*IRJPEI   | 12135   | 12   | 6123     |      |
| 002331 |       | STRAL*MNADR    | 12136   | 44   | 6561     |      |
| 002332 |       | RJP*CMRJP      | 12137   | 76   | 5425     |      |
| 002333 |       | ENTALK*120     | 12140   | 70   | 0120     |      |
| 002334 |       | STRAL*MNAREA   | 12141   | 44   | 6557     |      |
| 002335 |       | ENTALK*320     | 12142   | 70   | 0320     |      |
| 002336 |       | STRAL*MNAREA+1 | 12143   | 44   | 6560     |      |
| 002337 |       | ENTAL*IRJPEF   | 12144   | 12   | 6127     |      |
| 002340 |       | STRAL*MNADR    | 12145   | 44   | 6561     |      |
| 002341 |       | RJP*CMRJP      | 12146   | 76   | 5425     |      |
| 002342 |       | ENTALK*140     | 12147   | 70   | 0140     |      |
| 002343 |       | STRAL*MNAREA   | 12150   | 44   | 6557     |      |
| 002344 |       | ENTALK*340     | 12151   | 70   | 0340     |      |
| 002345 |       | STRAL*MNAREA+1 | 12152   | 44   | 6560     |      |
| 002346 |       | ENTAL*IRJPOT   | 12153   | 12   | 6133     |      |
| 002347 |       | STRAL*MNADR    | 12154   | 44   | 6561     |      |
| 002350 |       | RJP*CMRJP      | 12155   | 76   | 5425     |      |
| 002351 |       | RJP*REICR      | 12156   | 76   | 5767     |      |

4-255



| SEQNO  | LABEL | STATEMENT                            | ADDRESS | INSTRUCT |
|--------|-------|--------------------------------------|---------|----------|
| 002352 | I015A | SIL                                  | 12157   | 5034 00  |
| 002353 |       | ENTALB*CHTBL                         | 12160   | 13 0000  |
| 002354 |       | ENTAU*U12MSK                         | 12161   | 10 6455  |
| 002355 |       | SLSU*I015B                           | 12162   | 04 2171  |
| 002356 |       | STRAL*I015B                          | 12163   | 44 2171  |
| 002357 |       | SLSU*I015C                           | 12164   | 04 2176  |
| 002360 |       | STRAL*I015C                          | 12165   | 44 2176  |
| 002361 |       | STRAL*I015E                          | 12166   | 44 2207  |
| 002362 |       | SLSU*I015D                           | 12167   | 04 2202  |
| 002363 |       | STRAL*I015D                          | 12170   | 44 2202  |
| 002364 | I015B | EXF*XX                               | 12171   | 5013 00  |
| 002365 |       | 20*CKWDB                             | 12172   | 20 6454  |
| 002366 |       | 20*CKWDB                             | 12173   | 20 6454  |
| 002367 |       | ENTAL*ALERDS DSPLY ERR IF STINK STOP | 12174   | 12 6470  |
| 002370 |       | RJP*DISPOC DSPLY ERR IF STINK STOP   | 12175   | 76 5413  |
| 002371 | I015C | EXFOV*XX                             | 12176   | 5027 00  |
| 002372 |       | ENTAU*CHAN+16                        | 12177   | 10 6551  |
| 002373 |       | LSHAU*01                             | 12200   | 5045 01  |
| 002374 |       | JPAUP*LOK-1                          | 12201   | 64 2200  |
| 002375 | I015D | OUT*XX                               | 12202   | 5012 00  |
| 002376 |       | 20*CKWDB                             | 12203   | 20 6454  |
| 002377 |       | 20*CKWDB                             | 12204   | 20 6454  |
| 002400 |       | ENTAL*ALERDS DSPLY ERR IF STINK STOP | 12205   | 12 6470  |
| 002401 |       | RJP*DISPOC DSPLY ERR IF STINK STOP   | 12206   | 76 5413  |
| 002402 | I015E | OUTOV*XX                             | 12207   | 5026 00  |
| 002403 |       | ENTAU*CHAN+16                        | 12210   | 10 6551  |
| 002404 |       | LSHAU*01                             | 12211   | 5045 01  |
| 002405 |       | JPAUP*LOK-1                          | 12212   | 64 2211  |
| 002406 |       | BJP*I015A                            | 12213   | 73 2157  |
| 002407 |       | ENTAU*AUERDS                         | 12214   | 10 6467  |
| 002410 |       | ENTAL*ALERDS                         | 12215   | 12 6470  |

| SEQNO  | LABEL | STATEMENT                        | ADDRESS | INSTRUCT |
|--------|-------|----------------------------------|---------|----------|
| 002411 |       | JPAUNZ*LOK+5                     | 12216   | 62 2223  |
| 002412 |       | JPALNZ*LOK+4                     | 12217   | 63 2223  |
| 002413 |       | ENTAU*FAULTI                     | 12220   | 10 6602  |
| 002414 |       | JPAUZ*LOK+4                      | 12221   | 60 2225  |
| 002415 |       | ENTAU*AUERDS                     | 12222   | 10 6467  |
| 002416 |       | RJP*DISPOC                       | 12223   | 76 5413  |
| 002417 |       | STOP*40                          | 12224   | 5056 40  |
| 002420 |       | RJP*HONINT CL ALL MONITORS       | 12225   | 76 6353  |
| 002421 |       | IJP*I015                         | 12226   | 55 2120  |
| 002422 |       | RESERV*1                         | 12227   | 000000   |
| 002423 | I017  | 0*0 ENTRY                        | 12230   | 00 0000  |
| 002424 |       | ENTALK*I017                      | 12231   | 70 2230  |
| 002425 |       | STRAL*IFault                     | 12232   | 44 6603  |
| 002426 |       | CL*AUERDS                        | 12233   | 40 6467  |
| 002427 |       | RJP*REICR                        | 12234   | 76 5767  |
| 002430 |       | RJP*STINK STR STP*41 IN CM       | 12235   | 76 6336  |
| 002431 |       | SIL SET LOKO                     | 12236   | 5034 00  |
| 002432 |       | SXL                              | 12237   | 5036 00  |
| 002433 |       | RJP*I017F SET INT ENT REG W/STOP | 12240   | 76 2327  |
| 002434 | I017A | ENTALB*CHTBL PRESTORE CH NO      | 12241   | 13 0000  |
| 002435 |       | ENTAU*U12MSK                     | 12242   | 10 6455  |
| 002436 |       | SLSU*I017B                       | 12243   | 04 2265  |
| 002437 |       | STRAL*I017B                      | 12244   | 44 2265  |
| 002440 |       | SLSU*I017B+3                     | 12245   | 04 2270  |
| 002441 |       | STRAL*I017B+3                    | 12246   | 44 2270  |
| 002442 |       | ENTICR*01 USE B1                 | 12247   | 5072 01  |
| 002443 |       | ENTSR*10 REF STACK 0             | 12250   | 5073 10  |
| 002444 |       | ENTB*02 (B2) TO B1               | 12251   | 32 0002  |
| 002445 |       | ENTBKB*7776 B1-1 TO B1           | 12252   | 37 7776  |
| 002446 |       | ENTSR*0 REF THIS STACK           | 12253   | 5073 00  |
| 002447 |       | RJP*I017F PRESET INT ENT REG     | 12254   | 76 2327  |

| SEQNO  | LABEL | STATEMENT                              | ADDRESS | INSTRUCT |
|--------|-------|--|---------|----------|
| 002450 |       | SIL                                    | 12255   | 5034 00  |
| 002451 |       | SXL                                    | 12256   | 5036 00  |
| 002452 | I017D | ENTALB*CHTBL ENT NEXT LOWER CHAN       | 12257   | 13 0000  |
| 002453 |       | ENTAU*U12MSK                           | 12260   | 10 6455  |
| 002454 |       | SLSU*I017E                             | 12261   | 04 2271  |
| 002455 |       | STRAL*I017E                            | 12262   | 44 2271  |
| 002456 |       | SLSU*I017E+3                           | 12263   | 04 2274  |
| 002457 |       | STRAL*I017E+3                          | 12264   | 44 2274  |
| 002460 | I017B | OUT*XX DO OUT W/MON                    | 12265   | 5012 00  |
| 002461 |       | 2*CKWD+1                               | 12266   | 216446   |
| 002462 |       | 2*CKWD+1                               | 12267   | 216446   |
| 002463 |       | OUTOV*XX FORCE OUT ALL CHAN            | 12270   | 5026 00  |
| 002464 | I017E | OUT*XX OUT W/MONITOR                   | 12271   | 5012 00  |
| 002465 |       | 2*CKWD+1                               | 12272   | 216446   |
| 002466 |       | 2*CKWD+1                               | 12273   | 216446   |
| 002467 |       | OUTOV*XX                               | 12274   | 5026 00  |
| 002470 |       | ENTAL*CHAN+16                          | 12275   | 12 6551  |
| 002471 |       | LSHAL*01                               | 12276   | 5046 01  |
| 002472 |       | JPALP*LOK-1                            | 12277   | 65 2276  |
| 002473 |       | RJP*STINK STR STP IN CM                | 12300   | 76 6336  |
| 002474 |       | ENTALK*CHANPS MODIFY STR RTN TO        | 12301   | 70 2346  |
| 002475 |       | STRADR*STRINB DETECT HNRNG LO CHAN 1ST | 12302   | 74 2410  |
| 002476 |       | ENTALK*140                             | 12303   | 70 0140  |
| 002477 |       | STRADR*STRINA+2                        | 12304   | 74 2401  |
| 002500 |       | ENTALK*340                             | 12305   | 70 0340  |
| 002501 |       | STRADR*STRINB-2                        | 12306   | 74 2406  |
| 002502 |       | RJP*STRINT LO CHAN                     | 12307   | 76 2373  |
| 002503 |       | ENTICR*02                              | 12310   | 5072 02  |
| 002504 |       | ENTALK*CHANPR MODIFY STR RTN TO        | 12311   | 70 2340  |
| 002505 |       | STRADR*STRINB DETECT HNRNG HI CHAN 1ST | 12312   | 74 2410  |
| 002506 |       | RJP*STRINT                             | 12313   | 76 2373  |

| SEQNO  | LABEL  | STATEMENT                               | ADDRESS | INSTRUCT |
|--------|--------|---|---------|----------|
| 002507 |        | ENTAU*AUERDS DSPLY ERR IF STINK STOP    | 12314   | 10 6467  |
| 002510 | I017C  | RIL REMOVE LOKO                         | 12315   | 5030 00  |
| 002511 |        | ENTAL*CHAN+16 MON INT SHOULD NOW        | 12316   | 12 6551  |
| 002512 |        | LSHAL*01 BE HONORED IN TURN             | 12317   | 5046 01  |
| 002513 |        | JPALP*LOK-1                             | 12320   | 65 2317  |
| 002514 |        | ENTAU*AUERDS DSPLY CH NOT HON IN ORDER  | 12321   | 10 6467  |
| 002515 |        | ENTSR*10                                | 12322   | 5073 10  |
| 002516 |        | ENTAL*02 DSPLY UPPER CHAN               | 12323   | 12 0002  |
| 002517 |        | LSHAL*11 IN AL09-12                     | 12324   | 5046 11  |
| 002520 |        | ADDAL*01 LOWER CHAN IN AL00-03          | 12325   | 14 0001  |
| 002521 |        | STOP*40                                 | 12326   | 5056 40  |
| 002522 | I017F  | 0*0 ENTRY                               | 12327   | 00 0000  |
| 002523 |        | ENTALK*140 STR JP IN INT ENT REG        | 12330   | 70 0140  |
| 002524 |        | STRAL*MNAREA INT RTN HAS ERR STOP IN IT | 12331   | 44 6557  |
| 002525 |        | ENTALK*340                              | 12332   | 70 0340  |
| 002526 |        | STRAL*MNAREA+1                          | 12333   | 44 6560  |
| 002527 |        | ENTAL*RJPOUT                            | 12334   | 12 6005  |
| 002530 |        | STRAL*MNADR                             | 12335   | 44 6561  |
| 002531 |        | RJP*CMRJP                               | 12336   | 76 5425  |
| 002532 |        | IJP*I017F EXIT                          | 12337   | 55 2327  |
| 002533 | CHANPR | IJP*CHNPRL                              | 12340   | 55 7724  |
| 002534 | CHNPRM | ENTICR*01                               | 12341   | 5072 01  |
| 002535 |        | RJP*HONINT CL ALL INT                   | 12342   | 76 6353  |
| 002536 |        | RJP*STINK STR STOPS IN CM               | 12343   | 76 6336  |
| 002537 |        | BJP*I017D-3 CK NEXT CHAN                | 12344   | 73 2254  |
| 002540 |        | JP*CKERR CK IF ANY ERR                  | 12345   | 34 2354  |
| 002541 | CHANPS | IJP*CHNPRL                              | 12346   | 55 7725  |
| 002542 | CHNPSM | ENTICR*01 USE B1                        | 12347   | 5072 01  |
| 002543 |        | RJP*RCORDI NO, NOTE ERROR               | 12350   | 76 5546  |
| 002544 |        | RJP*HONINT CL INTS                      | 12351   | 76 6353  |
| 002545 |        | RJP*STINK STR STOPS IN CM               | 12352   | 76 6336  |

| SEQNO  | LABEL  | STATEMENT                             | ADDRESS | INSTRUCT |
|--------|--------|---------------------------------------|---------|----------|
| 002546 |        | BJP*I017D-3 CK NEXT CHAN              | 12353   | 73 2254  |
| 002547 | CKERR  | ENTAU*AUERDS DSPLY ERR                | 12354   | 10 6467  |
| 002550 |        | JPAUZ*LOK+6 JP IF NO ERR              | 12355   | 60 2363  |
| 002551 |        | ENTSR*10                              | 12356   | 5073 10  |
| 002552 |        | ENTAL*02 DSPLY UPPER CHAN             | 12357   | 12 0002  |
| 002553 |        | LSHAL*11 IN AL09-12                   | 12360   | 5046 11  |
| 002554 |        | ADDAL*01 LOWER CHAN IN AL00-03        | 12361   | 14 0001  |
| 002555 |        | STOP*40 ERR                           | 12362   | 5056 40  |
| 002556 |        | ENTICR*02                             | 12363   | 5072 02  |
| 002557 |        | BJP*LOK+1 DECR UPPER CHAN CNT         | 12364   | 73 2365  |
| 002560 |        | ENTSR*10 CK IF UPPER                  | 12365   | 5073 10  |
| 002561 |        | ENTAL*02 CHAN EQU                     | 12366   | 12 0002  |
| 002562 |        | ENTSR*0 ZERO                          | 12367   | 5073 00  |
| 002563 |        | JPALNZ*I017A-3 NO                     | 12370   | 63 2236  |
| 002564 |        | IJP*I017 YES, EXIT                    | 12371   | 55 2230  |
| 002565 |        | RESERV*1                              | 12372   | 000000   |
| 002566 | STRINT | 0*0 ENT                               | 12373   | 00 0000  |
| 002567 |        | ENTALB*CHTBL                          | 12374   | 13 0000  |
| 002570 |        | SLCL*KHMSK CHAN 10-17?                | 12375   | 52 6556  |
| 002571 |        | JPALNZ*LOK+5 YES                      | 12376   | 63 2403  |
| 002572 | STRINA | ENTALB*CHTBL NO                       | 12377   | 13 0000  |
| 002573 |        | LSHAL*01 2K                           | 12400   | 5046 01  |
| 002574 |        | ADDALK*XX BASE AREA + 2K INT REG      | 12401   | 71 0000  |
| 002575 |        | JP*LOK+5                              | 12402   | 34 2407  |
| 002576 |        | ENTALB*CHTBL                          | 12403   | 13 0000  |
| 002577 |        | ADDALK*7767 K-10                      | 12404   | 71 7767  |
| 002600 |        | LSHAL*01 2(K-10)                      | 12405   | 5046 01  |
| 002601 |        | ADDALK*XX BASE AREA + 2(K-10) INT REG | 12406   | 71 0000  |
| 002602 |        | STRADR*LOK+3                          | 12407   | 74 2412  |
| 002603 | STRINB | ENTAL*CHANPR                          | 12410   | 12 2340  |
| 002604 |        | ENTSR*10                              | 12411   | 5073 10  |

4-260

| SEQNO  | LABEL | STATEMENT                                   | ADDRESS | INSTRUCT |
|--------|-------|---|---------|----------|
| 002605 |       | STRAL*MNAREA STR INSTR IN INT ENT REG       | 12412   | 44 6557  |
| 002606 |       | ENTSR*0                                     | 12413   | 5073 00  |
| 002607 |       | IJP*STRINT EXIT                             | 12414   | 55 2373  |
| 002610 | I018  | 0*0 ENTRY                                   | 12415   | 00 0000  |
| 002611 |       | ENTALK*I018                                 | 12416   | 70 2415  |
| 002612 |       | STRAL*IFault                                | 12417   | 44 6603  |
| 002613 |       | CL*AUERDS CL ERR STR LOK                    | 12420   | 40 6467  |
| 002614 |       | RJP*REICR RESET B PER IOSIZE                | 12421   | 76 5767  |
| 002615 |       | RJP*STINK STR STOPS IN CM                   | 12422   | 76 6336  |
| 002616 |       | SIL LOKO INT                                | 12423   | 5034 00  |
| 002617 |       | SXL   | 12424   | 5036 00  |
| 002620 |       | RJP*I017F SET INT REG FOR FALSE INT         | 12425   | 76 2327  |
| 002621 | I018C | ENTALB*CHTBL REF PROPER CHAN TBL            | 12426   | 13 0000  |
| 002622 |       | ENTAU*U12MSK 777700                         | 12427   | 10 6455  |
| 002623 |       | SLSU*I018A MODIFY INSTR PER CHAN BEING DONE | 12430   | 04 2440  |
| 002624 |       | STRAL*I018A                                 | 12431   | 44 2440  |
| 002625 |       | SLSU*I018B-1                                | 12432   | 04 2444  |
| 002626 |       | STRAL*I018B-1                               | 12433   | 44 2444  |
| 002627 |       | SLSU*I018B                                  | 12434   | 04 2445  |
| 002630 |       | STRAL*I018B                                 | 12435   | 44 2445  |
| 002631 |       | SLSU*I018B+4                                | 12436   | 04 2451  |
| 002632 |       | STRAL*I018B+4                               | 12437   | 44 2451  |
| 002633 | I018A | OUT*XX DO OUT W/MON HI CHAN 1ST             | 12440   | 5012 00  |
| 002634 |       | 2*CKWD+1                                    | 12441   | 216446   |
| 002635 |       | 2*CKWD+1                                    | 12442   | 216446   |
| 002636 |       | ENTAU*AUERDS DSPLY ERR IF STINK STOP        | 12443   | 10 6467  |
| 002637 |       | OUTOV*XX FORCE OUT                          | 12444   | 5026 00  |
| 002640 | I018B | EXF*XX DO EF W/MON HI CHAN 1ST              | 12445   | 5013 00  |
| 002641 |       | 2*CKWD+1                                    | 12446   | 216446   |
| 002642 |       | 2*CKWD+1                                    | 12447   | 216446   |
| 002643 |       | ENTAU*AUERDS DSPLY ERR IF STINK STOP        | 12450   | 10 6467  |

| SEQNO  | LABEL  | STATEMENT                                     | ADDRESS | INSTRUCT |
|--------|--------|---|---------|----------|
| 002644 |        | EXFOV*XX FORCE EF                             | 12451   | 5027 00  |
| 002645 |        | ENTAL*CHAN+16 ALLOW FALSE INT                 | 12452   | 12 6551  |
| 002646 |        | LSHAL*01                                      | 12453   | 5046 01  |
| 002647 |        | JPALP*LOK-1                                   | 12454   | 65 2453  |
| 002650 |        | RJP*STINK STR STOPS IN CM                     | 12455   | 76 6336  |
| 002651 |        | ENTALK*PRIBAD MODIFY STR INT RTN TO           | 12456   | 70 2507  |
| 002652 |        | STRADR*STRINB DETECT HONORING OUT 1ST         | 12457   | 74 2410  |
| 002653 |        | ENTALK*140                                    | 12460   | 70 0140  |
| 002654 |        | STRADR*STRINA+2                               | 12461   | 74 2401  |
| 002655 |        | ENTALK*340                                    | 12462   | 70 0340  |
| 002656 |        | STRADR*STRINB-2                               | 12463   | 74 2406  |
| 002657 |        | RJP*STRINT STR IRJP*FPRIL1 IN CM              | 12464   | 76 2373  |
| 002660 |        | ENTALK*PRIOK MODIFY STR INT RTN TO            | 12465   | 70 2505  |
| 002661 |        | STRADR*STRINB DETECT HONORING EF 1ST          | 12466   | 74 2410  |
| 002662 |        | ENTALK*120                                    | 12467   | 70 0120  |
| 002663 |        | STRADR*STRINA+2                               | 12470   | 74 2401  |
| 002664 |        | ENTALK*320                                    | 12471   | 70 0320  |
| 002665 |        | STRADR*STRINB-2                               | 12472   | 74 2406  |
| 002666 |        | RJP*STRINT STR IRJP*FPRIL IN CM               | 12473   | 76 2373  |
| 002667 |        | ENTAU*AUERDS DSPLY ERR IF STINK STOP          | 12474   | 10 6467  |
| 002670 |        | RIL   | 12475   | 5030 00  |
| 002671 |        | ENTAL*CHAN+16 DLY TO LET MON INT IN           | 12476   | 12 6551  |
| 002672 |        | LSHAL*01                                      | 12477   | 5046 01  |
| 002673 |        | JPALP*LOK-1                                   | 12500   | 65 2477  |
| 002674 |        | ENTAU*AUERDS DSPLY ERR STR IF MON INT IGNORED | 12501   | 10 6467  |
| 002675 |        | ENTSR*10                                      | 12502   | 5073 10  |
| 002676 |        | ENTAL*02 DSPLY B2                             | 12503   | 12 0002  |
| 002677 |        | STOP*40 ERR STOP - INT NOT HONORED            | 12504   | 5056 40  |
| 002700 | PRIOK  | IJP*FPRIL                                     | 12505   | 55 7726  |
| 002701 | FPRIM  | JP*FPRIM1+1                                   | 12506   | 34 2511  |
| 002702 | PRIBAD | IJP*FPRIL1                                    | 12507   | 55 7727  |

| SEQNO  | LABEL  | STATEMENT                                | ADDRESS | INSTRUCT |
|--------|--------|--|---------|----------|
| 002703 | FPRIM1 | RJP*RCORDI                               | 12510   | 76 5546  |
| 002704 |        | RJP*HONINT CL INTS                       | 12511   | 76 6353  |
| 002705 |        | BJP*I018+5 DO NEXT LOWER CHAN            | 12512   | 73 2422  |
| 002706 |        | ENTAU*AUERDS DSPLY ERRS                  | 12513   | 10 6467  |
| 002707 |        | JPAUZ*LOK+3 EXIT IF NO ERRS              | 12514   | 60 2517  |
| 002710 |        | ENTAL*I018A DSPLY F AND K                | 12515   | 12 2440  |
| 002711 |        | STOP*40 ERR STOP                         | 12516   | 5056 40  |
| 002712 |        | IJP*I018 EXIT                            | 12517   | 55 2415  |
| 002713 |        | RESERV*1                                 | 12520   | 000000   |
| 002714 | WAITCK | 0*0 ENT - CK WAIT FUNC                   | 12521   | 00 0000  |
| 002715 |        | ENTALK*WAITCK                            | 12522   | 70 2521  |
| 002716 |        | STRAL*IFFAULT                            | 12523   | 44 6603  |
| 002717 |        | RJP*HONINT HON INTS                      | 12524   | 76 6353  |
| 002720 |        | ENTAL*IEINSR                             | 12525   | 12 2537  |
| 002721 |        | ENTSR*10 REF STACK 0                     | 12526   | 5073 10  |
| 002722 |        | STRAL*140 IRJP*WTINTL TO OUT MON INT REG | 12527   | 44 0140  |
| 002723 |        | ENTSR*0 REF THIS STACK                   | 12530   | 5073 00  |
| 002724 |        | OUT*0 DO OUT W/MON CH 0                  | 12531   | 5012 00  |
| 002725 |        | 0*WAITCK                                 | 12532   | 012521   |
| 002726 |        | 2*WAITCK                                 | 12533   | 212521   |
| 002727 |        | OUTOV*0 FORCE                            | 12534   | 5026 00  |
| 002730 |        | WTFI WAIT FOR INT                        | 12535   | 5024 00  |
| 002731 |        | STOP*40 STP IF WAIT NOT FUNC             | 12536   | 5056 40  |
| 002732 | IEINSR | IJP*WTINTL                               | 12537   | 55 7730  |
| 002733 | WTEINT | IJP*WAITCK EXIT                          | 12540   | 55 2521  |
| 002734 |        | RESERV*1                                 | 12541   | 000000   |
| 002735 | CMPLKO | 0*0 ENT                                  | 12542   | 00 0000  |
| 002736 |        | ENTALK*CMPLKO SAVE FAULT ADDR            | 12543   | 70 2542  |
| 002737 |        | STRAL*IFFAULT                            | 12544   | 44 6603  |
| 002740 |        | RJP*HONINT CL INT                        | 12545   | 76 6353  |
| 002741 |        | SIL LOKO INT                             | 12546   | 5034 00  |



| SEQNO  | LABEL  | STATEMENT                                      | ADDRESS | INSTRUCT |
|--------|--------|--|---------|----------|
| 002742 |        | SXL  | 12547   | 5036 00  |
| 002743 |        | ENTAL*CMPINT-1 STR IRJP*CMPL*CMPINT            | 12550   | 12 2570  |
| 002744 |        | ENTSR*10                                       | 12551   | 5073 10  |
| 002745 |        | STRAL*140 IN OUT MON INT REG                   | 12552   | 44 0140  |
| 002746 |        | ENTSR*0  | 12553   | 5073 00  |
| 002747 |        | OUT*0 OUT W/MON CHAN 0                         | 12554   | 5012 00  |
| 002750 |        | 2*CKWD   | 12555   | 216445   |
| 002751 |        | 2*CKWD   | 12556   | 216445   |
| 002752 |        | OUTOV*0  | 12557   | 5026 00  |
| 002753 |        | RIL REL LOK0                                   | 12560   | 5030 00  |
| 002754 |        | CMAL*LOK-1 GO TO INT RTN IF SIL OF             | 12561   | 02 2560  |
| 002755 |        | JPALNZ*LOK+1 COMPARE NOT WORKG, OTHERWISE CONT | 12562   | 63 2563  |
| 002756 |        | JPALNZ*LOK+1 DLY                               | 12563   | 63 2564  |
| 002757 |        | SIL SET LOK0                                   | 12564   | 5034 00  |
| 002760 |        | RJP*HONINT CL INT                              | 12565   | 76 6353  |
| 002761 |        | IJP*CMPLK0 EXIT                                | 12566   | 55 2542  |
| 002762 |        | RESERV*1                                       | 12567   | 000000   |
| 002763 |        | IRJP*CMPL                                      | 12570   | 30 7711  |
| 002764 | CMPINT | 0*0 ENT  | 12571   | 00 0000  |
| 002765 |        | ENTAU*LOK-1 DSPLY FAULT ADDR                   | 12572   | 10 2571  |
| 002766 |        | STOP*40 ERR STOP - SIL COMPR BAD               | 12573   | 5056 40  |
| 002767 | EXFEIC | 0*0 ENTRY                                      | 12574   | 00 0000  |
| 002770 |        | ENTAL*EXFEIC FLAG THIS ROUTINE                 | 12575   | 12 2574  |
| 002771 |        | STRAL*IFAUULT IN IFAUULT/IN CASE OF FAULT      | 12576   | 44 6603  |
| 002772 |        | RJP*TERMAL                                     | 12577   | 76 5447  |
| 002773 |        | RJP*HONINT                                     | 12600   | 76 6353  |
| 002774 |        | RIL ENABLE INTS                                | 12601   | 5030 00  |
| 002775 |        | ENTICR*03 B3#0 TO INITIALIZE                   | 12602   | 5072 03  |
| 002776 |        | ENTBK*00 ERROR RECORD ROUTINE                  | 12603   | 36 0000  |
| 002777 |        | CL*ALERDS                                      | 12604   | 40 6470  |
| 003000 |        | CL*PLAC8                                       | 12605   | 40 4243  |

| SEQNO  | LABEL  | STATEMENT                              | ADDRESS | INSTRUCT |
|--------|--------|--|---------|----------|
| 003001 |        | RJP*STINK                              | 12606   | 76 6336  |
| 003002 |        | RXL ENABLE EIS                         | 12607   | 5032 00  |
| 003003 |        | ENTAU*CHAN+10 WAIT TO                  | 12610   | 10 6543  |
| 003004 |        | LSHAU*01 RECEIVE ANY                   | 12611   | 5045 01  |
| 003005 |        | JPAUP*LOK-1 FALSE EIR/EFA              | 12612   | 64 2611  |
| 003006 | AUTS1  | OUT*KH SET UP TO TEST                  | 12613   | 5012 00  |
| 003007 |        | 0*CKWD+2 THAT IDA/ODR                  | 12614   | 016447   |
| 003010 |        | 0*CKWD+1 IS LOCKED OUT BY              | 12615   | 016446   |
| 003011 |        | RJP*TERMAL LACK OF OUTPUT ACTIVE       | 12616   | 76 5447  |
| 003012 | ACKOUT | IN*KH PREP TO SEE IF                   | 12617   | 5011 00  |
| 003013 |        | 0*PIN ODA RATHER THAN                  | 12620   | 016412   |
| 003014 |        | 0*PIN EFA IS SENT KH                   | 12621   | 016412   |
| 003015 | AUTS   | OUT*KL SET UP TO DETECT                | 12622   | 5012 00  |
| 003016 |        | 0*CKWD IDA RETURNED ON                 | 12623   | 016445   |
| 003017 |        | 0*CKWD WRONG CHAN                      | 12624   | 016445   |
| 003020 |        | ENTALK*7777 RECORD ERROR IN FALSE CHAN | 12625   | 70 7777  |
| 003021 |        | ENTAL*HEIP 100+2KH                     | 12626   | 12 6576  |
| 003022 |        | STRADR*ZAAA+2 AT PROG                  | 12627   | 74 2645  |
| 003023 |        | STRADR*S00DRP+1 ISOL ROUTINE           | 12630   | 74 3046  |
| 003024 |        | ADDALK*01 101+2KH                      | 12631   | 71 0001  |
| 003025 |        | STRADR*CLADR+2                         | 12632   | 74 3330  |
| 003026 |        | STRADR*DATARQ TO EXAM EI DATA          | 12633   | 74 2667  |
| 003027 |        | STRADR*S00DRP+2 TO ISOL ROUTINE        | 12634   | 74 3047  |
| 003030 |        | ADDALK*7775 101 OR 301 +2(KH-1)        | 12635   | 71 7775  |
| 003031 |        | STRADR*ESDATQ ESI EI HANDLING          | 12636   | 74 2706  |
| 003032 |        | ENTAL*H0BCP 41+2KH                     | 12637   | 12 6574  |
| 003033 |        | ADDALK*01 TO CHECK ODR                 | 12640   | 71 0001  |
| 003034 |        | STRADR*ACTLOK LOCKOUT BY ACTIVE NOT    | 12641   | 74 2675  |
| 003035 |        | RJP*CLADR                              | 12642   | 76 3326  |
| 003036 | ZAAA   | ENTAL*EI0KH-1 RJP TO INT ROUTINE       | 12643   | 12 3051  |
| 003037 |        | ENTSR*10                               | 12644   | 5073 10  |

| SEQNO  | LABEL  | STATEMENT                                    | ADDRESS | INSTRUCT |
|--------|--------|--|---------|----------|
| 003040 |        | STRAL*ADR AT 100+2KH                         | 12645   | 44 0000  |
| 003041 |        | ENTSR*00                                     | 12646   | 5073 00  |
| 003042 |        | ENTAU*AUERDS DISPLAY FLAGS IN                | 12647   | 10 6467  |
| 003043 |        | ENTAL*ALERDS CASE OF FALSE INT ENT           | 12650   | 12 6470  |
| 003044 | EIKH   | EXF*KH EXF,FWD,1WD                           | 12651   | 5013 00  |
| 003045 |        | 0*SDRP+1 DATA IS JP                          | 12652   | 013045   |
| 003046 |        | 0*SDRP IF S00 DROPPED                        | 12653   | 013044   |
| 003047 |        | EXFOV*KH SEND EFA/EIR                        | 12654   | 5027 00  |
| 003050 |        | LSHAL*00 WAIT                                | 12655   | 5046 00  |
| 003051 |        | LSHAU*00 TO RECEIVE                          | 12656   | 5045 00  |
| 003052 |        | RSHAL*00 EI KH                               | 12657   | 5042 00  |
| 003053 |        | RSHAU*00 NOOPS                               | 12660   | 5041 00  |
| 003054 |        | LSHA*00                                      | 12661   | 5047 00  |
| 003055 |        | RSHA*00                                      | 12662   | 5043 00  |
| 003056 |        | SKP*00                                       | 12663   | 5050 00  |
| 003057 |        | RJP*RCORD0 RECORD ERROR-EIKH NOT RCVD,0      | 12664   | 76 5555  |
| 003060 |        | ENTBKB*01 ADV COUNT                          | 12665   | 37 0001  |
| 003061 |        | ENTSR*10                                     | 12666   | 5073 10  |
| 003062 | DATARQ | ENTAL*ADR EXAM 101+2KH                       | 12667   | 12 0000  |
| 003063 |        | ENTSR*00                                     | 12670   | 5073 00  |
| 003064 |        | JPALNZ*LOK+2 EIR(DATA) RCVD?                 | 12671   | 63 2673  |
| 003065 |        | RJP*RCORD0 RECORD ERROR-EIR (DATA)NOT RCVD,1 | 12672   | 76 5555  |
| 003066 |        | ENTBKB*01 ADV COUNT                          | 12673   | 37 0001  |
| 003067 |        | ENTSR*10                                     | 12674   | 5073 10  |
| 003070 | ACTLOK | ENTAL*ADR 41+2KH#CACW                        | 12675   | 12 0000  |
| 003071 |        | ENTSR*00                                     | 12676   | 5073 00  |
| 003072 |        | CMAL*CKWD+1 DID ODR/IDA GET THRU?            | 12677   | 02 6446  |
| 003073 |        | JPEQ*LOK+2 NO- CONTINUE                      | 12700   | 61 2702  |
| 003074 |        | STOP*40 ERROR STOP                           | 12701   | 5056 40  |
| 003075 | TESTAK | SKPOIN*KL WAS IDA RETURNED ON WRONG K?       | 12702   | 5022 00  |
| 003076 |        | JP*LOK+2 NO-CONTINUE                         | 12703   | 34 2705  |

| SEQNO  | LABEL  | STATEMENT                                     | ADDRESS | INSTRUCT |
|--------|--------|---|---------|----------|
| 003077 |        | STOP*40 ERROR STOP                            | 12704   | 5056 40  |
| 003100 |        | ENTSR*10                                      | 12705   | 5073 10  |
| 003101 | ESDATQ | ENTAL*ADR (101 OR 301+2(KH-1))                | 12706   | 12 0000  |
| 003102 |        | ENTSR*00                                      | 12707   | 5073 00  |
| 003103 |        | CMAL*TESTAK-1 #505640?                        | 12710   | 02 2701  |
| 003104 |        | JPEQ*LOK+3 YES - CONT                         | 12711   | 61 2714  |
| 003105 |        | STRAL*PLAC8 SAVE ERRONEOUS DATA               | 12712   | 44 4243  |
| 003106 |        | RJP*RCORDO RECORD ERROR-EI WAS DUAL/ESI/ESA,2 | 12713   | 76 5555  |
| 003107 |        | ENTBKB*01 ADV COUNT                           | 12714   | 37 0001  |
| 003110 | WACKQ  | SKPIIN*KH WAS ODA SENT ON KL LINE?            | 12715   | 5021 00  |
| 003111 |        | SKP*40 NO-CONTINUE                            | 12716   | 5050 40  |
| 003112 |        | RJP*RCORDO RECORD ERROR-ODA SENT KH,3         | 12717   | 76 5555  |
| 003113 |        | ENTBKB*01 ADV COUNT                           | 12720   | 37 0001  |
| 003114 |        | RJP*STINK                                     | 12721   | 76 6336  |
| 003115 | AUTS3  | OUT*KL SET UP TO TEST                         | 12722   | 5012 00  |
| 003116 |        | 0*CKWD+2 THAT IDA/ODR                         | 12723   | 016447   |
| 003117 |        | 0*CKWD+1 IS LOCKED OUT BY                     | 12724   | 016446   |
| 003120 |        | RJP*TERMAL LACK OF OUT ACTIVE                 | 12725   | 76 5447  |
| 003121 | ACKAUT | IN*KL PREP TO SEE IF                          | 12726   | 5011 00  |
| 003122 |        | 0*PIN ODA RATHER THAN                         | 12727   | 016412   |
| 003123 |        | 0*PIN EFA IS SENT KL                          | 12730   | 016412   |
| 003124 | AUTS2  | OUT*KH SET UP TO DETECT                       | 12731   | 5012 00  |
| 003125 |        | 0*CKWD IDA RETURNED ON                        | 12732   | 016445   |
| 003126 |        | 0*CKWD WRONG CHAN                             | 12733   | 016445   |
| 003127 |        | ENTAL*LEIP 100+2KL                            | 12734   | 12 6567  |
| 003130 |        | STRADR*ZAAB+2 AT PROG                         | 12735   | 74 2753  |
| 003131 |        | STRADR*S00DRP+1 ISOL ROUTINE                  | 12736   | 74 3046  |
| 003132 |        | ADDALK*01 101+2KL                             | 12737   | 71 0001  |
| 003133 |        | STRADR*CLADR+2                                | 12740   | 74 3330  |
| 003134 |        | STRADR*DAREQ TO EXAM EI DATA                  | 12741   | 74 2775  |
| 003135 |        | STRADR*S00DRP+2 TO ISOL ROUTINE               | 12742   | 74 3047  |

| SEQNO  | LABEL  | STATEMENT                               | ADDRESS | INSTRUCT |
|--------|--------|---|---------|----------|
| 003136 |        | ADDALK*7775 101+2(KL-1)                 | 12743   | 71 7775  |
| 003137 |        | STRADR*DATABS ESI EI HANDLING           | 12744   | 74 3014  |
| 003140 |        | ENTAL*LOBCP 41+2KL                      | 12745   | 12 6565  |
| 003141 |        | ADDALK*01 TO CHECK ODR                  | 12746   | 71 0001  |
| 003142 |        | STRADR*ACTLOC LOCKOUT BY ACTIVE NOT     | 12747   | 74 3003  |
| 003143 |        | RJP*CLADR                               | 12750   | 76 3326  |
| 003144 | ZAAB   | ENTAL*EIOKL-1 RJP TO INT RTN            | 12751   | 12 3056  |
| 003145 |        | ENTSR*10                                | 12752   | 5073 10  |
| 003146 |        | STRAL*ADR AT 100+2KL                    | 12753   | 44 0000  |
| 003147 |        | ENTSR*00                                | 12754   | 5073 00  |
| 003150 |        | ENTAU*AUERDS DISPLAY                    | 12755   | 10 6467  |
| 003151 |        | ENTAL*ALERDS FLAGS                      | 12756   | 12 6470  |
| 003152 | EIKL   | EXF*KL EXF,FWD,1WD                      | 12757   | 5013 00  |
| 003153 |        | 0*SDRP+1 DATA IS JP                     | 12760   | 013045   |
| 003154 |        | 0*SDRP IF 500 DROPPED                   | 12761   | 013044   |
| 003155 |        | EXFOV*KL SEND EFA/EIR                   | 12762   | 5027 00  |
| 003156 |        | LSHAL*00 WAIT                           | 12763   | 5046 00  |
| 003157 |        | RSHAL*00 TO RECEIVE                     | 12764   | 5042 00  |
| 003160 |        | LSHAU*00 EI KL                          | 12765   | 5045 00  |
| 003161 |        | RSHAU*00 NOOPS                          | 12766   | 5041 00  |
| 003162 |        | LSHA*00                                 | 12767   | 5047 00  |
| 003163 |        | RSHA*00                                 | 12770   | 5043 00  |
| 003164 |        | SKP*00                                  | 12771   | 5050 00  |
| 003165 |        | RJP*RCORDO RECORD ERROR-EIKL NOT RCVD,4 | 12772   | 76 5555  |
| 003166 |        | ENTBKB*01 ADV COUNT                     | 12773   | 37 0001  |
| 003167 |        | ENTSR*10                                | 12774   | 5073 10  |
| 003170 | DATREQ | ENTAL*ADR EXAM 101+2KL                  | 12775   | 12 0000  |
| 003171 |        | ENTSR*00                                | 12776   | 5073 00  |
| 003172 |        | JPALNZ*LOK+2 EIR (DATA) RCVD?           | 12777   | 63 3001  |
| 003173 |        | RJP*RCORDO RECORD ERROR-DATA NOT RCVD,5 | 13000   | 76 5555  |
| 003174 |        | ENTBKB*01 ADV COUNT                     | 13001   | 37 0001  |

| SEQNO  | LABEL  | STATEMENT                                     | ADDRESS | INSTRUCT |
|--------|--------|---|---------|----------|
| 003175 |        | ENTSR*10                                      | 13002   | 5073 10  |
| 003176 | ACTLOC | ENTAL*ADR 41+2KL#CACW                         | 13003   | 12 0000  |
| 003177 |        | ENTSR*00                                      | 13004   | 5073 00  |
| 003200 |        | CMAL*CKWD+1 DID ODR/IDA GET THRU?             | 13005   | 02 6446  |
| 003201 |        | JPEQ*LOK+3 NO - CONTINUE                      | 13006   | 61 3011  |
| 003202 |        | STOP*40 ERROR STOP                            | 13007   | 5056 40  |
| 003203 | TESTAC | SKPOIN*KH WAS IDA RETURNED ON WRNG K?         | 13010   | 5022 00  |
| 003204 |        | JP*LOK+2 NO - CONTINUE                        | 13011   | 34 3013  |
| 003205 |        | STOP*40 ERROR STOP                            | 13012   | 5056 40  |
| 003206 |        | ENTSR*10                                      | 13013   | 5073 10  |
| 003207 | DATQES | ENTAL*ADR (101+2(KL-1))#                      | 13014   | 12 0000  |
| 003210 |        | ENTSR*00                                      | 13015   | 5073 00  |
| 003211 |        | CMAL*TESTAK-1 505640?                         | 13016   | 02 2701  |
| 003212 |        | JPEQ*LOK+3 YES-CONT                           | 13017   | 61 3022  |
| 003213 |        | STRAL*PLAC8                                   | 13020   | 44 4243  |
| 003214 |        | RJP*RCORD0 RECORD ERROR-EI WAS DUAL/ESI/ESA,6 | 13021   | 76 5555  |
| 003215 |        | ENTBKB*01 ADV COUNT                           | 13022   | 37 0001  |
| 003216 | QACK   | SKPIIN*KL WAS ODA SENT ON KL LINE?            | 13023   | 5021 00  |
| 003217 |        | SKP*40 NO-CONTINUE                            | 13024   | 5050 40  |
| 003220 |        | RJP*RCORD0 RECORD ERROR-ODA SENT KL,7         | 13025   | 76 5555  |
| 003221 |        | ENTBKB*01 ADV COUNT                           | 13026   | 37 0001  |
| 003222 |        | ENTAL*ALERDS ANY EI CONTROL ERRS?             | 13027   | 12 6470  |
| 003223 |        | JPALZ*FALSEI NO - CHECK FOR FALSE EIS         | 13030   | 61 3041  |
| 003224 |        | RJP*INOBAS GATHER IN/OUT CONTROL DATA         | 13031   | 76 3064  |
| 003225 |        | RJP*LOCKOB GATHER LOCKOUT CONTROL DATA        | 13032   | 76 3173  |
| 003226 |        | ENTAU*FAULTI DISPLAY LOCKOUT DATA             | 13033   | 10 6602  |
| 003227 |        | ENTAL*PLAC8 DISPLAY BAD DATA OF               | 13034   | 12 4243  |
| 003230 |        | STRAL*FAULTI LAST CHAN W/DUAL EI DETECT       | 13035   | 44 6602  |
| 003231 |        | RJP*DISPOC ON THE C REG                       | 13036   | 76 5413  |
| 003232 |        | ENTAL*ALERDS DISPLAY EXFEIC+INOBAS DATA       | 13037   | 12 6470  |
| 003233 |        | STOP*40 ERROR STOP                            | 13040   | 5056 40  |

| SEQNO  | LABEL  | STATEMENT  | ADDRESS | INSTRUCT |
|--------|--------|--|---------|----------|
| 003234 |        | REMARK*AL CONTAINS BIT SET FOR ERROR               |         |          |
| 003235 |        | REMARK* 0,4 IF EIM NOT RECEIVED KH,KL              |         |          |
| 003236 |        | REMARK* 1,5 IF EI DATA NOT RCVD KH,KL              |         |          |
| 003237 |        | REMARK* 2,6 IF EI IN DUAL+ESI+ESA MODE KH,KL       |         |          |
| 003240 |        | REMARK* 3,7 IF ODA INSTEAD OF EFA SENT KH,KL       |         |          |
| 003241 |        | REMARK* 8,12 IF INPUT ACT NOT TERM KH,KL           |         |          |
| 003242 |        | REMARK* 9,13 IF ODA/IDR SENT ON OTHER CHAN (KH,KL) |         |          |
| 003243 |        | REMARK*10,14 IF IDA RETURNED ON OTHER CHAN         |         |          |
| 003244 |        | REMARK*11,15 IF INPUT DATA NOT RCVD KH,KL          |         |          |
| 003245 |        | REMARK*AU CONTAINS LOCKOUT TEST DATA, SEE LOCKOB   |         |          |
| 003246 |        | REMARK*C CONTAINS BAD DATA OF LAST CHAN W/DUAL ERR |         |          |
| 003247 | FALSEI | RJP*LOKOS TEST INT LOCKOUTS                        | 13041   | 76 3333  |
| 003250 |        | IJP*EXFEIC EXIT                                    | 13042   | 55 2574  |
| 003251 |        | RESERV*1   | 13043   | 000000   |
| 003252 | SDRP   | IJP*SODRP 1ST EXF CODE                             | 13044   | 55 7752  |
| 003253 | S00DRP | ENTSR*10   | 13045   | 5073 10  |
| 003254 |        | ENTAL*ADR (100+2K)                                 | 13046   | 12 0000  |
| 003255 |        | ENTAU*ADR (101+2K)                                 | 13047   | 10 0000  |
| 003256 |        | STOP*40 ERROR STOP                                 | 13050   | 5056 40  |
| 003257 |        | IRJP*EI0KHA FOR INT ENT ADDR                       | 13051   | 30 7765  |
| 003260 | EI0KH  | 0*0 ENTRY  | 13052   | 00 0000  |
| 003261 |        | RIL RIL  | 13053   | 5030 00  |
| 003262 |        | ENTBKB*01 ADVANCE COUNT-EIKH RCVD                  | 13054   | 37 0001  |
| 003263 |        | JP*DATARQ-1 RETURN TO MAIN PROG                    | 13055   | 34 2666  |
| 003264 |        | IRJP*EI0KLA FOR INT ENT ADDR                       | 13056   | 30 7766  |
| 003265 | EI0KL  | 0*0 ENTRY  | 13057   | 00 0000  |
| 003266 |        | RIL RIV  | 13060   | 5030 00  |
| 003267 |        | ENTBKB*01 ADV COUNT-EIKL RCVD                      | 13061   | 37 0001  |
| 003270 |        | JP*DATREQ-1 RETURN TO MN PROG                      | 13062   | 34 2774  |
| 003271 | TOFIV  | 252525 CONSTANT                                    | 13063   | 252525   |

4-270

| SEQNO  | LABEL  | STATEMENT                              | ADDRESS | INSTRUCT |
|--------|--------|--|---------|----------|
| 003272 | INOBAS | 0*0 ENTRY                              | 13064   | 00 0000  |
| 003273 |        | ENTALK*INOBAS NOTIFY FAULT             | 13065   | 70 3064  |
| 003274 |        | STRADR*IFault ROUTINE                  | 13066   | 74 6603  |
| 003275 |        | RJP*TERMAL                             | 13067   | 76 5447  |
| 003276 |        | RJP*HONINT                             | 13070   | 76 6353  |
| 003277 |        | ENTICR*03 ALERDS FIRST 8 BITS          | 13071   | 5072 03  |
| 003300 |        | ENTBK*10                               | 13072   | 36 0010  |
| 003301 |        | RJP*CLPIN CLR INPUT AREA               | 13073   | 76 6402  |
| 003302 | T0OUTS | OUT*KH OUT ACT TO                      | 13074   | 5012 00  |
| 003303 |        | 0*CKWD+1 TEST KH ODA AND               | 13075   | 016446   |
| 003304 |        | 0*CKWD DATA,C REG                      | 13076   | 016445   |
| 003305 |        | OUT*KL OUT ACT ON KL                   | 13077   | 5012 00  |
| 003306 |        | 0*CKWD+1 TO TEST KL ODA/IDA NOT.       | 13100   | 016446   |
| 003307 |        | 0*CKWD+1 ONE WD ON KH,KL               | 13101   | 016446   |
| 003310 | TOINS  | IN*KH NORMAL RECEIVING                 | 13102   | 5011 00  |
| 003311 |        | 0*PIN CHAN,KH                          | 13103   | 016412   |
| 003312 |        | 0*PIN ONE WD                           | 13104   | 016412   |
| 003313 |        | IN*KL IN ON KL                         | 13105   | 5011 00  |
| 003314 |        | 0*PIN+2 TO TEST FALSE                  | 13106   | 016414   |
| 003315 |        | 0*PIN+2 ODA XMIT                       | 13107   | 016414   |
| 003316 | VEROUT | OUTOV*KH SEND KH ODA                   | 13110   | 5026 00  |
| 003317 |        | ENTAU*CHAN+5 WAIT TO COMPLETE          | 13111   | 10 6540  |
| 003320 |        | RJP*DELAY BUFFER EITHER INTERFACE      | 13112   | 76 0302  |
| 003321 |        | SKPIIN*KH KH INPUT TERMINATED?         | 13113   | 5021 00  |
| 003322 |        | RJP*RCORDO RECORD ERROR-NOT TERM       | 13114   | 76 5555  |
| 003323 |        | ENTBKB*01 ADV COUNT                    | 13115   | 37 0001  |
| 003324 | SKINT  | SKPIIN*KL ODA ON KL?                   | 13116   | 5021 00  |
| 003325 |        | SKP*40                                 | 13117   | 5050 40  |
| 003326 |        | RJP*RCORDO RECORD ERROR-YES,ON KL ALSO | 13120   | 76 5555  |
| 003327 |        | ENTBKB*01 ADV COUNT                    | 13121   | 37 0001  |
| 003330 |        | SKPOIN*KL WAS IDA ON KH ONLY           | 13122   | 5022 00  |



| SEQNO  | LABEL  | STATEMENT                          | ADDRESS | INSTRUCT |
|--------|--------|------------------------------------|---------|----------|
| 003331 |        | SKP*40                             | 13123   | 5050 40  |
| 003332 |        | RJP*RCORD0 RECORD ERROR-ON KL ALSO | 13124   | 76 5555  |
| 003333 |        | ENTBKB*01 ADV COUNT                | 13125   | 37 0001  |
| 003334 |        | ENTAL*PIN WAS SOME DATA RECEIVED?  | 13126   | 12 6412  |
| 003335 |        | JPALNZ*LOK+2 YES-CONTINUE          | 13127   | 63 3131  |
| 003336 |        | RJP*RCORD0 RECORD ERROR-NO DATA    | 13130   | 76 5555  |
| 003337 |        | ENTBKB*01 ADV COUNT                | 13131   | 37 0001  |
| 003340 |        | RJP*CLPIN NOTES ARE IDENTICAL      | 13132   | 76 6402  |
| 003341 | T0OUT2 | OUT*KL TO THOSE STARTING AT        | 13133   | 5012 00  |
| 003342 |        | 0*CKWD+1 T0OUTS,KH FOR KV VSV      | 13134   | 016446   |
| 003343 |        | 0*CKWD                             | 13135   | 016445   |
| 003344 |        | OUT*KH                             | 13136   | 5012 00  |
| 003345 |        | 0*CKWD+1                           | 13137   | 016446   |
| 003346 |        | 0*CKWD+1                           | 13140   | 016446   |
| 003347 | T0INS2 | IN*KL                              | 13141   | 5011 00  |
| 003350 |        | 0*PIN                              | 13142   | 016412   |
| 003351 |        | 0*PIN                              | 13143   | 016412   |
| 003352 |        | IN*KH                              | 13144   | 5011 00  |
| 003353 |        | 0*PIN+2                            | 13145   | 016414   |
| 003354 |        | 0*PIN+2                            | 13146   | 016414   |
| 003355 | VR0UT2 | OUTOV*KL                           | 13147   | 5026 00  |
| 003356 |        | ENTAU*CHAN+5 WAIT TO COMPLETE      | 13150   | 10 6540  |
| 003357 |        | RJP*DELAY                          | 13151   | 76 0302  |
| 003360 |        | SKPIIN*KL                          | 13152   | 5021 00  |
| 003361 |        | RJP*RCORD0                         | 13153   | 76 5555  |
| 003362 |        | ENTBKB*01                          | 13154   | 37 0001  |
| 003363 | SKINT2 | SKPIIN*KH                          | 13155   | 5021 00  |
| 003364 |        | SKP*40                             | 13156   | 5050 40  |
| 003365 |        | RJP*RCORD0                         | 13157   | 76 5555  |
| 003366 |        | ENTBKB*01                          | 13160   | 37 0001  |
| 003367 |        | SKPOIN*KH                          | 13161   | 5022 00  |

4-272

| SEQNO  | LABEL  | STATEMENT                        | ADDRESS | INSTRUCT |
|--------|--------|----------------------------------|---------|----------|
| 003370 |        | SKP*40                           | 13162   | 5050 40  |
| 003371 |        | RJP*RCORD0                       | 13163   | 76 5555  |
| 003372 |        | ENTBKB*01                        | 13164   | 37 0001  |
| 003373 |        | ENTAL*PIN                        | 13165   | 12 6412  |
| 003374 |        | JPALNZ*LOK+2                     | 13166   | 63 3170  |
| 003375 |        | RJP*RCORD0                       | 13167   | 76 5555  |
| 003376 |        | ENTBKB*01                        | 13170   | 37 0001  |
| 003377 |        | IJP*INOBAS EXIT                  | 13171   | 55 3064  |
| 003400 |        | RESERV*1                         | 13172   | 000000   |
| 003401 | LOCKOB | 0*0 ENTRY                        | 13173   | 00 0000  |
| 003402 |        | ENTALK*LOCKOB NOTIFY FAULT       | 13174   | 70 3173  |
| 003403 |        | STRADR*IFAUULT ROUTINE           | 13175   | 74 6603  |
| 003404 |        | RJP*TERMAL                       | 13176   | 76 5447  |
| 003405 |        | RJP*HONINT HON ALL MON INTS      | 13177   | 76 6353  |
| 003406 |        | ENTBK*00 B3#0                    | 13200   | 36 0000  |
| 003407 |        | CL*PLACE CL 1ST TIME FLAG        | 13201   | 40 6615  |
| 003410 |        | CL*FAULTI CL ERROR STORE         | 13202   | 40 6602  |
| 003411 |        | ENTALK*HEIP HICHAN EI ENT        | 13203   | 70 6576  |
| 003412 |        | STRADR*ENTAD                     | 13204   | 74 3210  |
| 003413 |        | ENTALK*HICHAN HICHAN K           | 13205   | 70 6573  |
| 003414 |        | STRADR*CHANAD                    | 13206   | 74 3220  |
| 003415 |        | RXL RXL                          | 13207   | 5032 00  |
| 003416 | ENTAD  | ENTAL*HEIP ADDR OH HI EI ENT ADR | 13210   | 12 6576  |
| 003417 |        | STRADR*EF0V2-2                   | 13211   | 74 3262  |
| 003420 |        | STRADR*VEP                       | 13212   | 74 3232  |
| 003421 |        | ADDALK*01 ADDR OF                | 13213   | 71 0001  |
| 003422 |        | STRADR*CLADR+2 EI WD             | 13214   | 74 3330  |
| 003423 |        | STRADR*KUR TO PROG LOCS          | 13215   | 74 3247  |
| 003424 |        | STRADR*EF0V2+4                   | 13216   | 74 3270  |
| 003425 |        | STRADR*EF0V3+4                   | 13217   | 74 3302  |
| 003426 | CHANAD | ENTAL*HICHAN KH (KL)             | 13220   | 12 6573  |

| SEQNO  | LABEL | STATEMENT                                   | ADDRESS | INSTRUCT |
|--------|-------|---|---------|----------|
| 003427 |       | ENTAU*U12MSK MASK                           | 13221   | 10 6455  |
| 003430 |       | SLSU*RIGA TO                                | 13222   | 04 3235  |
| 003431 |       | STRAL*RIGA PROGRAM                          | 13223   | 44 3235  |
| 003432 |       | SLSU*RIGA+3 LOCS                            | 13224   | 04 3240  |
| 003433 |       | STRAL*RIGA+3                                | 13225   | 44 3240  |
| 003434 |       | STRAL*EF0V2 EXFOV                           | 13226   | 44 3264  |
| 003435 |       | STRAL*EF0V3 EXFOV                           | 13227   | 44 3276  |
| 003436 |       | ENTAL*HIEIS-1 IRJP                          | 13230   | 12 3323  |
| 003437 |       | ENTSR*10                                    | 13231   | 5073 10  |
| 003440 | VEP   | STRAL*ADR                                   | 13232   | 44 0000  |
| 003441 |       | ENTSR*00                                    | 13233   | 5073 00  |
| 003442 |       | RJP*CLADR (101 OR 301 + 2KH)(KL)            | 13234   | 76 3326  |
| 003443 | RIGA  | EXF*KH EF ON KH (KL)                        | 13235   | 5013 00  |
| 003444 |       | 0*CKWD+4                                    | 13236   | 016451   |
| 003445 |       | 0*CKWD                                      | 13237   | 016445   |
| 003446 |       | EXFOV*KH SEND EIR TO KH (KL)                | 13240   | 5027 00  |
| 003447 | DEELA | ENTAU*CHAN+14 WAIT TO                       | 13241   | 10 6547  |
| 003450 |       | LSHAU*01 RECEIVE                            | 13242   | 5045 01  |
| 003451 |       | JPAUP*LOK-1 INTERRUPT                       | 13243   | 64 3242  |
| 003452 |       | RJP*RCORDF RECORD ERROR-EIKH NOT RCVD (KL)  | 13244   | 76 5564  |
| 003453 |       | ENTBKB*01 ADV COUNT                         | 13245   | 37 0001  |
| 003454 |       | ENTSR*10                                    | 13246   | 5073 10  |
| 003455 | KUR   | ENTAL*ADR (101 OR 301+2KH)(KL)              | 13247   | 12 0000  |
| 003456 |       | ENTSR*00                                    | 13250   | 5073 00  |
| 003457 |       | JPALNZ*LOK+2 #0? NO-CONTINUE                | 13251   | 63 3253  |
| 003460 |       | RJP*RCORDF RECORD ERROR-EIKH NO DATA WD(KL) | 13252   | 76 5564  |
| 003461 |       | ENTBKB*01 ADV COUNT                         | 13253   | 37 0001  |
| 003462 |       | RIL CLEAR ALL EIM FFS                       | 13254   | 5030 00  |
| 003463 |       | SIL LOCKOUT EIM REQ                         | 13255   | 5034 00  |
| 003464 |       | RXL ENABLE EIRS                             | 13256   | 5032 00  |
| 003465 |       | RJP*CLADR CLEAR 101 OR 301 +2KH(KL)         | 13257   | 76 3326  |

4-274

| SEQNO  | LABEL | STATEMENT                                | ADDRESS | INSTRUCT |
|--------|-------|--|---------|----------|
| 003466 |       | ENTAL*RIL IGNORE NEXT EIM                | 13260   | 12 6613  |
| 003467 |       | ENTSR*10                                 | 13261   | 5073 10  |
| 003470 |       | STRAL*ADR INTO 100 OR 300 +2KH(KL)       | 13262   | 44 0000  |
| 003471 |       | ENTSR*00                                 | 13263   | 5073 00  |
| 003472 | EF0V2 | EXFOV*KH                                 | 13264   | 5027 00  |
| 003473 |       | ENTAU*CHAN+14                            | 13265   | 10 6547  |
| 003474 |       | RJP*DELAY                                | 13266   | 76 0302  |
| 003475 |       | ENTSR*10                                 | 13267   | 5073 10  |
| 003476 |       | ENTAL*ADR (101 OR 301 +2KH(KL))          | 13270   | 12 0000  |
| 003477 |       | ENTSR*00                                 | 13271   | 5073 00  |
| 003500 |       | JPALNZ*LOK+2                             | 13272   | 63 3274  |
| 003501 |       | RJP*RCORDF RECORD ERROR-EIR NOT ACCEPTED | 13273   | 76 5564  |
| 003502 |       | ENTBKB*01 ADV COUNT                      | 13274   | 37 0001  |
| 003503 |       | RJP*CLADR 101 OR 301 +2KH(KL)            | 13275   | 76 3326  |
| 003504 | EF0V3 | EXFOV*KH                                 | 13276   | 5027 00  |
| 003505 |       | ENTAU*CHAN+12                            | 13277   | 10 6545  |
| 003506 |       | RJP*DELAY                                | 13300   | 76 0302  |
| 003507 |       | ENTSR*10                                 | 13301   | 5073 10  |
| 003510 |       | ENTAL*ADR (101 OR 301 +2KH(KL))          | 13302   | 12 0000  |
| 003511 |       | ENTSR*00                                 | 13303   | 5073 00  |
| 003512 |       | JPALZ*LOK+2                              | 13304   | 61 3306  |
| 003513 |       | RJP*RCORDF RECORD ERROR-EIR ACCEPTED     | 13305   | 76 5564  |
| 003514 |       | ENTBKB*01                                | 13306   | 37 0001  |
| 003515 |       | ENTAL*PLACE 1ST TIME THRU?               | 13307   | 12 6615  |
| 003516 |       | JPALNZ*LOK+11 NO-TO EXIT                 | 13310   | 63 3321  |
| 003517 |       | ENTALK*LEIP LOCHAN EI ENT                | 13311   | 70 6567  |
| 003520 |       | STRAL*PLACE                              | 13312   | 44 6615  |
| 003521 |       | STRADR*ENTAD                             | 13313   | 74 3210  |
| 003522 |       | ENTALK*LOCHAN LOCHAN K                   | 13314   | 70 6564  |
| 003523 |       | STRADR*CHANAD                            | 13315   | 74 3220  |
| 003524 |       | RJP*TERMAL                               | 13316   | 76 5447  |

| SEQNO  | LABEL  | STATEMENT  | ADDRESS | INSTRUCT |
|--------|--------|--|---------|----------|
| 003525 |        | RJP*HONINT GET RID OF EIMS                             | 13317   | 76 6353  |
| 003526 |        | JP*ENTAD-1 DO KL                                       | 13320   | 34 3207  |
| 003527 |        | REMARK*AL (FAULTI) HAS BIT SET TO FLAG ERROR           |         |          |
| 003530 |        | REMARK* 0, 4 IF EI NOT RCVD KH,KL                      |         |          |
| 003531 |        | REMARK* 1,5 IF NO EI DATA KH,KL                        |         |          |
| 003532 |        | REMARK* 2,6 IF EIR (DATA) NOT ACCEPTED WHEN RIL KH,KL  |         |          |
| 003533 |        | REMARK* 3,7 EIR (DATA) ACCEPTED WHEN EIM WAITING KH, L |         |          |
| 003534 |        | IJP*LOCKOB EXIT  | 13321   | 55 3173  |
| 003535 |        | RESERV*1   | 13322   | 000000   |
| 003536 |        | IJP*HIEISP   | 13323   | 55 7751  |
| 003537 | HIEIS  | IJPEI*LOK+1 EXIT                                       | 13324   | 54 3325  |
| 003540 |        | 0*DEELA+4 REF  | 13325   | 013245   |
| 003541 | CLADR  | 0*0 ENTRY  | 13326   | 00 0000  |
| 003542 |        | ENTSR*10   | 13327   | 5073 10  |
| 003543 |        | CL*ADR CL SPECIFIED ADDR                               | 13330   | 40 0000  |
| 003544 |        | ENTSR*00   | 13331   | 5073 00  |
| 003545 |        | IJP*CLADR EXIT   | 13332   | 55 3326  |
| 003546 | LOKOS  | 0*0 ENTRY  | 13333   | 00 0000  |
| 003547 |        | RJP*LOCKOB TEST EI LOCKOUT CRKT                        | 13334   | 76 3173  |
| 003550 |        | ENTAL*FAULTI ANY ERRORS?                               | 13335   | 12 6602  |
| 003551 |        | JPALZ*LOK+2 NO - EXIT                                  | 13336   | 61 3340  |
| 003552 |        | STOP*40 ERROR STOP                                     | 13337   | 5056 40  |
| 003553 |        | IJP*LOKOS EXIT   | 13340   | 55 3333  |
| 003554 | INOUTC | 0*0 ENTRY  | 13341   | 00 0000  |
| 003555 |        | ENTALK*INOUTC NOTIFY FAULT                             | 13342   | 70 3341  |
| 003556 |        | STRADR*IFault ROUTINE                                  | 13343   | 74 6603  |
| 003557 |        | ENTAL*AFault IRJP TO                                   | 13344   | 12 5374  |
| 003560 |        | ENTSR*10   | 13345   | 5073 10  |
| 003561 |        | STRAL*00 FLT ENT                                       | 13346   | 44 0000  |

4-276

| SEQNO  | LABEL | STATEMENT                            | ADDRESS | INSTRUCT |
|--------|-------|--------------------------------------|---------|----------|
| 003562 |       | ENTSR*00                             | 13347   | 5073 00  |
| 003563 |       | CL*ALERDS CLEAR ERROR STORES/        | 13350   | 40 6470  |
| 003564 |       | CL*AUERDS FLAGS                      | 13351   | 40 6467  |
| 003565 |       | CL*FAULTI                            | 13352   | 40 6602  |
| 003566 |       | CL*PLAC2                             | 13353   | 40 6620  |
| 003567 |       | CL*PLAC3                             | 13354   | 40 6621  |
| 003570 |       | CL*PLAC4                             | 13355   | 40 6622  |
| 003571 |       | ENTALK*HICHAN HIGH CHAN TO           | 13356   | 70 6573  |
| 003572 |       | STRADR*CHANG+1 CHAN CHANGER 1ST      | 13357   | 74 3367  |
| 003573 |       | ENTALK*HEIP ADDR OF HICHAN EI        | 13360   | 70 6576  |
| 003574 |       | STRADR*INOAG ENT ADR TO PROG         | 13361   | 74 3552  |
| 003575 |       | ENTALK*HIBCP ADDR OF HICHAN IN       | 13362   | 70 6575  |
| 003576 |       | STRADR*INOA CW LOCS TO PROG          | 13363   | 74 3416  |
| 003577 | RIIC  | ENTICR*02 SELECT B2 FOR ERROR RECORD | 13364   | 5072 02  |
| 003600 |       | ENTBK*00 B2#0 INITIAL                | 13365   | 36 0000  |
| 003601 | CHANG | ENTAU*U12MSK CHANNEL                 | 13366   | 10 6455  |
| 003602 |       | ENTAL*HICHAN CHANGER                 | 13367   | 12 6573  |
| 003603 |       | SLSU*INOAA                           | 13370   | 04 3437  |
| 003604 |       | STRAL*INOAA OUT                      | 13371   | 44 3437  |
| 003605 |       | STRAL*INOAF OUT                      | 13372   | 44 3525  |
| 003606 |       | STRAL*INOAH+3 OUT                    | 13373   | 44 3563  |
| 003607 |       | STRAL*INOAK OUT                      | 13374   | 44 3604  |
| 003610 |       | SLSU*INOAB                           | 13375   | 04 3443  |
| 003611 |       | STRAL*INOAB IN                       | 13376   | 44 3443  |
| 003612 |       | STRAL*INOAF+3 IN                     | 13377   | 44 3530  |
| 003613 |       | STRAL*INOAK+3 IN                     | 13400   | 44 3607  |
| 003614 |       | SLSU*INOAB+3                         | 13401   | 04 3446  |
| 003615 |       | STRAL*INOAB+3 OUTOV                  | 13402   | 44 3446  |
| 003616 |       | STRAL*INOAL OUTOV                    | 13403   | 44 3614  |
| 003617 |       | SLSU*INOAE                           | 13404   | 04 3520  |
| 003620 |       | STRAL*INOAE SKPIIN                   | 13405   | 44 3520  |

| SEQNO  | LABEL | STATEMENT                    | ADDRESS | INSTRUCT |
|--------|-------|------------------------------|---------|----------|
| 003621 |       | STRAL*INOAM SKPIIN           | 13406   | 44 3627  |
| 003622 |       | STRAL*INOAZZ SKPIIN          | 13407   | 44 3673  |
| 003623 |       | SLSU*INOAH                   | 13410   | 04 3560  |
| 003624 |       | STRAL*INOAH EXF              | 13411   | 44 3560  |
| 003625 |       | SLSU*INOAI                   | 13412   | 04 3566  |
| 003626 |       | STRAL*INOAI EXFOV            | 13413   | 44 3566  |
| 003627 |       | SLSU*INOAJ                   | 13414   | 04 3577  |
| 003630 |       | STRAL*INOAJ SKPOIN           | 13415   | 44 3577  |
| 003631 | INOA  | ENTAL*HIBCP 60+2K            | 13416   | 12 6575  |
| 003632 |       | STRADR*INOAD TO PROG         | 13417   | 74 3473  |
| 003633 |       | ADDALK*01 61+2K              | 13420   | 71 0001  |
| 003634 |       | STRADR*INOAZ                 | 13421   | 74 3655  |
| 003635 |       | STRADR*INOAC TO PROG         | 13422   | 74 3454  |
| 003636 |       | CL*PLACE FOR SEARCH          | 13423   | 40 6615  |
| 003637 |       | STRADR*PLACE ROUTINE         | 13424   | 74 6615  |
| 003640 |       | ENTAL*CKWDZ PRESTORE/RESTORE | 13425   | 12 6617  |
| 003641 |       | STRAL*CKWD OUTPUT DATA       | 13426   | 44 6445  |
| 003642 |       | ADDALK*01                    | 13427   | 71 0001  |
| 003643 |       | STRAL*CKWD+1                 | 13430   | 44 6446  |
| 003644 |       | ADDALK*01                    | 13431   | 71 0001  |
| 003645 |       | STRAL*CKWD+2                 | 13432   | 44 6447  |
| 003646 |       | ADDALK*01                    | 13433   | 71 0001  |
| 003647 |       | STRAL*CKWD+3                 | 13434   | 44 6450  |
| 003650 |       | RJP*CLCWAR CLEAR 004-677     | 13435   | 76 5507  |
| 003651 |       | RJP*CLPIN CLR INPUT AREA     | 13436   | 76 6402  |
| 003652 | IN0AA | OUT*KH ONE ODA /IDR          | 13437   | 5012 00  |
| 003653 |       | O*CKWD+1                     | 13440   | 016446   |
| 003654 |       | O*CKWD                       | 13441   | 016445   |
| 003655 |       | RJP*TERMAL IGNORE IDA        | 13442   | 76 5447  |
| 003656 | IN0AB | IN*KH ACCEPT ONE IDR         | 13443   | 5011 00  |
| 003657 |       | O*PIN+1 TWO WD INPUT         | 13444   | 016413   |

| SEQNO  | LABEL | STATEMENT                                  | ADDRESS | INSTRUCT |
|--------|-------|--|---------|----------|
| 003660 |       | 0*PIN SHOULD NOT TERMINATE                 | 13445   | 016412   |
| 003661 |       | OUTOV*KH SEND IDR                          | 13446   | 5026 00  |
| 003662 |       | SKP*00 NOOPS                               | 13447   | 5050 00  |
| 003663 |       | LSHAL*00                                   | 13450   | 5046 00  |
| 003664 |       | RSHAL*00                                   | 13451   | 5042 00  |
| 003665 |       | LSHAL*00                                   | 13452   | 5046 00  |
| 003666 |       | ENTSR*10 INPUT CACW                        | 13453   | 5073 10  |
| 003667 | INOAC | ENTAL*ADR 60 OR 260+2KH(KL)                | 13454   | 12 0000  |
| 003670 |       | ENTSR*00                                   | 13455   | 5073 00  |
| 003671 |       | ENTAU*PIN INPUT DATA WORD RECEIVED?        | 13456   | 10 6412  |
| 003672 |       | JPAUNZ*LOK+2 YES-CONTINUE                  | 13457   | 62 3461  |
| 003673 |       | RJP*RCORD0 RECORD ERROR-NO INPUT DATA 0    | 13460   | 76 5555  |
| 003674 |       | ENTBK*01                                   | 13461   | 36 0001  |
| 003675 |       | CMAL*INOAB+1 CACW INCREMENTED +1?          | 13462   | 02 3444  |
| 003676 |       | JPEQ*LOK+2 YES-CONT                        | 13463   | 61 3465  |
| 003677 |       | RJP*RCORD0 RECORD ERROR-IN CACW INCORR 1   | 13464   | 76 5555  |
| 003700 |       | ENTBK*02                                   | 13465   | 36 0002  |
| 003701 |       | CMAL*INOAB+2 CACW CHANGED AT ALL?          | 13466   | 02 3445  |
| 003702 |       | JPNOT*LOK+2 YES-CONT                       | 13467   | 63 3471  |
| 003703 |       | RJP*RCORD0 RECORD ERROR-IN CACW#ICACW2     | 13470   | 76 5555  |
| 003704 |       | ENTBK*03                                   | 13471   | 36 0003  |
| 003705 |       | ENTSR*10 TACW INPUT                        | 13472   | 5073 10  |
| 003706 | INOAD | ENTAL*ADR 61 OR 261+2KH(KL)                | 13473   | 12 0000  |
| 003707 |       | ENTSR*00                                   | 13474   | 5073 00  |
| 003710 |       | CMAL*INOAB+1 WAS TACW MODIFIED?            | 13475   | 02 3444  |
| 003711 |       | JPEQ*LOK+2 NO-CONTINUE                     | 13476   | 61 3500  |
| 003712 |       | RJP*RCORD0 RECORD ERROR-TACW WAS CHANGED 3 | 13477   | 76 5555  |
| 003713 |       | ENTBK*04                                   | 13500   | 36 0004  |
| 003714 |       | ENTAL*CKWDZ WAS OUT CW REF BY IDR?//       | 13501   | 12 6617  |
| 003715 |       | ADDALK*01 CKWD+1#CKWD+1 ?//                | 13502   | 71 0001  |
| 003716 |       | CMAL*CKWD+1 WAS SO BIT 4 DROPPED?          | 13503   | 02 6446  |



| SEQNO  | LABEL | STATEMENT                                   | ADDRESS | INSTRUCT |
|--------|-------|---|---------|----------|
| 003717 |       | JPEQ*LOK+2 NO-CONT                          | 13504   | 61 3506  |
| 003720 |       | RJP*RCORDO RECORD ERROR-OUT CWS REFERED 4   | 13505   | 76 5555  |
| 003721 |       | ENTBK*05                                    | 13506   | 36 0005  |
| 003722 |       | ENTAU*AFault                                | 13507   | 10 5374  |
| 003723 |       | ENTSR*10 WAS ADDRESS                        | 13510   | 5073 10  |
| 003724 |       | ENTAL*00 ZERO (00000) MODIFIED?             | 13511   | 12 0000  |
| 003725 |       | STRAU*00 ((RESTORE 00000))                  | 13512   | 46 0000  |
| 003726 |       | ENTSR*00                                    | 13513   | 5073 00  |
| 003727 |       | CMAL*AFault YES-ERROR                       | 13514   | 02 5374  |
| 003730 |       | JPEQ*LOK+2 NO-CONTINUE                      | 13515   | 61 3517  |
| 003731 |       | RJP*RCORDO RECORD ERROR-ADDR 0 MODIFIED 5   | 13516   | 76 5555  |
| 003732 |       | ENTBK*06                                    | 13517   | 36 0006  |
| 003733 | INQAE | SKPIIN*KH INPUT STILL ACTIVE?               | 13520   | 5021 00  |
| 003734 |       | SKP*40 YES-CONTINUE                         | 13521   | 5050 40  |
| 003735 |       | RJP*RCURDO RECORD ERROR-IN ACT EARLY TERM 6 | 13522   | 76 5555  |
| 003736 |       | ENTBK*07                                    | 13523   | 36 0007  |
| 003737 |       | RJP*TERMAL TERM ALL ACTS                    | 13524   | 76 5447  |
| 003740 | INQAF | OUT*KH CLEAR KH (KL)                        | 13525   | 5012 00  |
| 003741 |       | 0*0 OUTPUT                                  | 13526   | 00 0000  |
| 003742 |       | 0*0 CW AREA                                 | 13527   | 00 0000  |
| 003743 |       | IN*KH CLR                                   | 13530   | 5011 00  |
| 003744 |       | 0*0 IN                                      | 13531   | 00 0000  |
| 003745 |       | 0*0 CW A                                    | 13532   | 00 0000  |
| 003746 | SURCH | ENTICR*03 DID IDR                           | 13533   | 5072 03  |
| 003747 |       | ENTBK*0137 REF                              | 13534   | 36 0137  |
| 003750 |       | ENTSR*10 ADDRS                              | 13535   | 5073 10  |
| 003751 |       | ENTALB*0540 540-677?                        | 13536   | 13 0540  |
| 003752 |       | ENTSR*00                                    | 13537   | 5073 00  |
| 003753 |       | JPALNZ*CONAD1 YES-WHICH ADDR?               | 13540   | 63 3741  |
| 003754 |       | BJP*LOK-4                                   | 13541   | 73 3535  |
| 003755 |       | ENTBK*0473 DID IDR                          | 13542   | 36 0473  |

| SEQNO  | LABEL | STATEMENT                            | ADDRESS | INSTRUCT |
|--------|-------|--------------------------------------|---------|----------|
| 003756 |       | ENTSR*10 REF                         | 13543   | 5073 10  |
| 003757 |       | ENTALB*04 ADDRS                      | 13544   | 13 0004  |
| 003760 |       | ENTSR*00 004-477?                    | 13545   | 5073 00  |
| 003761 |       | JPALNZ*CONAD2 YES-WHICH ADDR?        | 13546   | 63 3744  |
| 003762 |       | BJP*LOK-4                            | 13547   | 73 3543  |
| 003763 |       | RJP*TERMAL                           | 13550   | 76 5447  |
| 003764 |       | RJP*HONINT                           | 13551   | 76 6353  |
| 003765 | INOAG | ENTAL*HEIP IGNORE                    | 13552   | 12 6576  |
| 003766 |       | STRADR*LOK+3 EIM                     | 13553   | 74 3556  |
| 003767 |       | ENTAL*RIL TO                         | 13554   | 12 6613  |
| 003770 |       | ENTSR*10 EIM ENT                     | 13555   | 5073 10  |
| 003771 |       | STRAL*ADR (100 OR 300+2K)            | 13556   | 44 0000  |
| 003772 |       | ENTSR*00                             | 13557   | 5073 00  |
| 003773 | INOAH | EXF*KH EXF TO PROVIDE                | 13560   | 5013 00  |
| 003774 |       | 0*CKWD+1 EFA/EIR                     | 13561   | 016446   |
| 003775 |       | 0*CKWD EI RETURNS IDA/ODR            | 13562   | 016445   |
| 003776 |       | OUT*KH OUTPUT TO TEST                | 13563   | 5012 00  |
| 003777 |       | 0*CKWD+1 ABILITY TO RECEIVE          | 13564   | 016446   |
| 004000 |       | 0*CKWD+1 ODR TEST ODR CIRUITRY       | 13565   | 016446   |
| 004001 | INOAI | EXFOV*KH SEND EFA                    | 13566   | 5027 00  |
| 004002 |       | RIL RIL AND RXL                      | 13567   | 5030 00  |
| 004003 |       | RXL PROVIDE SCANS                    | 13570   | 5032 00  |
| 004004 |       | LSHAL*22 NOOPS                       | 13571   | 5046 22  |
| 004005 |       | LSHAL*22                             | 13572   | 5046 22  |
| 004006 |       | LSHAL*22                             | 13573   | 5046 22  |
| 004007 |       | LSHAL*22                             | 13574   | 5046 22  |
| 004010 |       | LSHAL*22                             | 13575   | 5046 22  |
| 004011 |       | LSHAL*22                             | 13576   | 5046 22  |
| 004012 | INOAJ | SKPOIN*KH WAS ODR DETECTED?          | 13577   | 5022 00  |
| 004013 |       | RJP*RCORDO RECORD ERROR-ODR FAILED 7 | 13600   | 76 5555  |
| 004014 |       | ENTBK*08D                            | 13601   | 36 0010  |

| SEQNO  | LABEL | STATEMENT                                  | ADDRESS | INSTRUCT |
|--------|-------|--|---------|----------|
| 004015 |       | RJP*CLPIN CLR INPUT DATA AREA              | 13602   | 76 6402  |
| 004016 |       | RJP*STINK STORE STOP CM AREA+ TO DET INM   | 13603   | 76 6336  |
| 004017 | INOAK | OUT*KH 3 OUTPUT WDS                        | 13604   | 5012 00  |
| 004020 |       | 0*CKWD+2                                   | 13605   | 016447   |
| 004021 |       | 0*CKWD                                     | 13606   | 016445   |
| 004022 |       | IN*KH 3 INPUT WDS                          | 13607   | 5011 00  |
| 004023 |       | 0*PIN+2                                    | 13610   | 016414   |
| 004024 |       | 0*PIN                                      | 13611   | 016412   |
| 004025 |       | ENTAU*AUERDS CURRENT ERROR FLAGS DISPLAYED | 13612   | 10 6467  |
| 004026 |       | ENTAL*ALERDS IF FALSE IN MON REQ DETECTED  | 13613   | 12 6470  |
| 004027 | INOAL | OUTOV*KH START TRANSFER OF DATA            | 13614   | 5026 00  |
| 004030 |       | LSHAL*00 NO OPS                            | 13615   | 5046 00  |
| 004031 |       | SKP*00 TO GIVE                             | 13616   | 5050 00  |
| 004032 |       | RSHAL*00 TIME FOR                          | 13617   | 5042 00  |
| 004033 |       | LSHAU*22 BOTH TERMINATES                   | 13620   | 5045 22  |
| 004034 |       | RSHAU*00 ALLOWING                          | 13621   | 5041 00  |
| 004035 |       | LSHA*17 P EQUAL THIS                       | 13622   | 5047 17  |
| 004036 |       | RSHA*00 PROGRAM IF IN MON                  | 13623   | 5043 00  |
| 004037 |       | LSHAL*22                                   | 13624   | 5046 22  |
| 004040 |       | LSHAL*22                                   | 13625   | 5046 22  |
| 004041 |       | LSHAL*22                                   | 13626   | 5046 22  |
| 004042 | INOAM | SKPIIN*KH IN PUT TERMINATED?               | 13627   | 5021 00  |
| 004043 |       | RJP*RCORD0 RECORD ERROR-INPUT NOT TERM 8   | 13630   | 76 5555  |
| 004044 |       | ENTBK*09D                                  | 13631   | 36 0011  |
| 004045 |       | ENTAL*PIN 1ST WD                           | 13632   | 12 6412  |
| 004046 |       | JPALNZ*LOK+2 RECEIVED?                     | 13633   | 63 3635  |
| 004047 |       | RJP*RCORD0 RECORD ERROR-1ST WD NOT RCVD,9  | 13634   | 76 5555  |
| 004050 |       | ENTBK*010D                                 | 13635   | 36 0012  |
| 004051 |       | ENTAL*PIN+1 2ND WD                         | 13636   | 12 6413  |
| 004052 |       | JPALNZ*LOK+2 RECEIVED?                     | 13637   | 63 3641  |
| 004053 |       | RJP*RCORD0 RECORD ERROR-2ND WD NOT RCVD 10 | 13640   | 76 5555  |

4-282

| SEQNO  | LABEL  | STATEMENT                                     | ADDRESS | INSTRUCT |
|--------|--------|---|---------|----------|
| 004054 |        | ENTBK*11D                                     | 13641   | 36 0013  |
| 004055 |        | ENTICR*03 DATA STORED                         | 13642   | 5072 03  |
| 004056 |        | ENTBK*02 IN 4TH-6TH WD AREA?                  | 13643   | 36 0002  |
| 004057 |        | ENTALB*PIN+3 (PIN+3-PIN+5)                    | 13644   | 13 6415  |
| 004060 |        | JPALZ*LOK+4                                   | 13645   | 61 3651  |
| 004061 |        | ENTICR*02                                     | 13646   | 5072 02  |
| 004062 |        | RJP*RCORDO RECORD ERROR-DATA OVERFLOW*11      | 13647   | 76 5555  |
| 004063 |        | ENTICR*03                                     | 13650   | 5072 03  |
| 004064 |        | BJP*LOK-5                                     | 13651   | 73 3644  |
| 004065 |        | ENTICR*02                                     | 13652   | 5072 02  |
| 004066 |        | ENTBK*12D                                     | 13653   | 36 0014  |
| 004067 |        | ENTSR*10                                      | 13654   | 5073 10  |
| 004070 | IN0AZ  | ENTAL*ADR 61+2K                               | 13655   | 12 0000  |
| 004071 |        | ENTSR*00 CACW#STOPA?                          | 13656   | 5073 00  |
| 004072 |        | CMAL*STOPA CDM DETECTED?                      | 13657   | 02 6607  |
| 004073 |        | JPNOT*LOK+2 NO-CONTINUE                       | 13660   | 63 3662  |
| 004074 |        | RJP*RCORDO RECORD ERROR- CDM DETECTED         | 13661   | 76 5555  |
| 004075 |        | ENTBK*13D                                     | 13662   | 36 0015  |
| 004076 |        | CMAL*PIN3 IN CACW # PIN+3 # TERM VALUE ,      | 13663   | 02 6623  |
| 004077 |        | JPEQ*LOK+2 YES CONT                           | 13664   | 61 3666  |
| 004100 |        | RJP*RCORDO RECORD ERROR-CACW TERM V INCORR*13 | 13665   | 76 5555  |
| 004101 |        | ENTBK*14D                                     | 13666   | 36 0016  |
| 004102 |        | ENTAL*PIN+2 3RD WD RECEIVED?                  | 13667   | 12 6414  |
| 004103 |        | JPALNZ*LOK+2 YES-CONTINUE                     | 13670   | 63 3672  |
| 004104 |        | RJP*RCORDO RECORD-STANDARD 1218 MODE OUT*14   | 13671   | 76 5555  |
| 004105 |        | ENTBK*15D                                     | 13672   | 36 0017  |
| 004106 | IN0AZZ | SKPIIN*KH WAS 3RD ODA RETURNED?               | 13673   | 5021 00  |
| 004107 |        | RJP*RCORDO RECORD-STD 1218 MODE DETECT*15     | 13674   | 76 5555  |
| 004110 |        | ENTAL*PLAC4 1ST TIME THRU?                    | 13675   | 12 6622  |
| 004111 |        | JPALNZ*FLATS NO-TEST FLAGS                    | 13676   | 63 3712  |
| 004112 |        | ENTALK*7777 SET 1ST TIME                      | 13677   | 70 7777  |

| SEQNO  | LABEL | STATEMENT                                   | ADDRESS | INSTRUCT |
|--------|-------|---|---------|----------|
| 004113 |       | STRAL*PLAC4 DONE FLAG                       | 13700   | 44 6622  |
| 004114 |       | ENTAL*ALERDS MOVE KH FLAGS                  | 13701   | 12 6470  |
| 004115 |       | STRAL*AUERDS                                | 13702   | 44 6467  |
| 004116 |       | ENTALK*LOCHAN LOCHAN TO                     | 13703   | 70 6564  |
| 004117 |       | STRADR*CHANG+1 CHACHA                       | 13704   | 74 3367  |
| 004120 |       | ENTALK*LEIP USE KL ADDRS                    | 13705   | 70 6567  |
| 004121 |       | STRADR*INOAG                                | 13706   | 74 3552  |
| 004122 |       | ENTALK*LIBCP KL                             | 13707   | 70 6566  |
| 004123 |       | STRADR*INOA                                 | 13710   | 74 3416  |
| 004124 |       | JP*RIIC RECYCLE                             | 13711   | 34 3364  |
| 004125 | FLATS | ENTAL*STDEST IF STD*NO ERROR,FLAGS#160400   | 13712   | 12 6627  |
| 004126 |       | ENTAU*NTDSTD NEG IF STD,POS IF NTDS/1219    | 13713   | 10 6626  |
| 004127 |       | JPAUP*FLAKS TEST FLAGS FOR NTDS/1219 BUFF.  | 13714   | 64 3722  |
| 004130 |       | CMAL*ALERDS STD FLAGS OK,KL?                | 13715   | 02 6470  |
| 004131 |       | JPNOT*DISC NO-DISPLAY*STOP                  | 13716   | 63 3733  |
| 004132 |       | CMAL*AUERDS STD FLAGS OK,KH?                | 13717   | 02 6467  |
| 004133 |       | JPNOT*DISC NO-DISPLAY*STOP                  | 13720   | 63 3733  |
| 004134 |       | JP*FLAKS+4 TEST S0 BIT                      | 13721   | 34 3726  |
| 004135 | FLAKS | ENTAU*AUERDS KH FLAGS                       | 13722   | 10 6467  |
| 004136 |       | ENTAL*ALERDS KL FLAGS                       | 13723   | 12 6470  |
| 004137 |       | JPAUNZ*DISC ERROR-DISPLAY AND STOP          | 13724   | 62 3733  |
| 004140 |       | JPALNZ*DISC ERROR-DISP + STOP               | 13725   | 63 3733  |
| 004141 |       | ENTAL*PLAC2 ANY SEARCH ERRORS,IDR/S0 ERROR? | 13726   | 12 6620  |
| 004142 |       | JPALNZ*DISC YES-DISP +STOP                  | 13727   | 63 3733  |
| 004143 |       | RJP*MWAIT                                   | 13730   | 76 3757  |
| 004144 |       | IJP*INOUTC EXIT                             | 13731   | 55 3341  |
| 004145 |       | RESERV*1                                    | 13732   | 000000   |
| 004146 | DISC  | ENTAL*PLAC2                                 | 13733   | 12 6620  |
| 004147 |       | STRAL*FAULTI                                | 13734   | 44 6602  |
| 004150 |       | ENTAU*AUERDS                                | 13735   | 10 6467  |
| 004151 |       | ENTAL*ALERDS                                | 13736   | 12 6470  |

| SEQNO  | LABEL  | STATEMENT  | ADDRESS | INSTRUCT |
|--------|--------|--|---------|----------|
| 004152 |        | RJP*DISPOC DISPLAY PLAC2 ON C REG                | 13737   | 76 5413  |
| 004153 |        | STOP*40 ERROR STOP                               | 13740   | 5056 40  |
| 004154 |        | REMARK*AU CONTAINS KH FLAGS                      |         |          |
| 004155 |        | REMARK*AL CONTAINS KL FLAGS                      |         |          |
| 004156 |        | REMARK*BIT ERROR                                 |         |          |
| 004157 |        | REMARK* 0 NO INPUT DATA RCVD/INPUTTED            |         |          |
| 004160 |        | REMARK* 1 INPUT CACW INCORRECT AFRT IDR*FORCE    |         |          |
| 004161 |        | REMARK* 2 CACW WAS NOT INCR BY IDR*FORCE         |         |          |
| 004162 |        | REMARK* 3 TACW WAS CHANGED BY IDR*FORCE          |         |          |
| 004163 |        | REMARK* 4 OUT CWS REFRENCED BY IDR*FORCE         |         |          |
| 004164 |        | REMARK* 5 ADDR 00000 WAS MODIFIED BY IDR*FORCE   |         |          |
| 004165 |        | REMARK* 6 IN ACT TERMINATED TOO SOON             |         |          |
| 004166 |        | REMARK* 7 ODR/IDA NOT RECVD/SENT                 |         |          |
| 004167 |        | REMARK* 8 MULTI WD INPUT STILL ACTIVE            |         |          |
| 004170 |        | REMARK* 9 1ST WD#0/NOT RCVD                      |         |          |
| 004171 |        | REMARK* 10 2ND WD#0/NOT RCVD                     |         |          |
| 004172 |        | REMARK* 11 DATA OVERFLOW                         |         |          |
| 004173 |        | REMARK* 12 CDM DETECTED                          |         |          |
| 004174 |        | REMARK* 13 INPUT TERM CACW NOT#TACW+1            |         |          |
| 004175 |        | REMARK* 14 STANDARD 1218 MODE BUFFERING DETECTED |         |          |
| 004176 |        | REMARK* 15 3RD ODA NOT RETURNED,1218 STD MODE    |         |          |
| 004177 |        | REMARK*CE LOWER CONTAINS CODE FOR SO             |         |          |
| 004200 |        | REMARK*BIT PICKED UP OR DROPPED WITH IDR*BOTH K  |         |          |
| 004201 | CONAD1 | ENTALK*0540 540 +B3#ADDR                         | 13741   | 70 0540  |
| 004202 |        | ADDAL*03   | 13742   | 14 0003  |
| 004203 |        | JP*CONAD2+2 COMPARE TO CACW OF K*INPUT           | 13743   | 34 3746  |
| 004204 | CONAD2 | ENTALK*0004 4+B3#ADDR                            | 13744   | 70 0004  |
| 004205 |        | ADDAL*03   | 13745   | 14 0003  |
| 004206 |        | ENTAU*L9MSK MSK 000777                           | 13746   | 10 6616  |
| 004207 |        | SUBAL*PLACE ADDR FOUND-IN*K CACW ADDR            | 13747   | 16 6615  |
| 004210 |        | STRAL*PLACE                                      | 13750   | 44 6615  |

| SEQNO  | LABEL  | STATEMENT                                | ADDRESS | INSTRUCT |
|--------|--------|--|---------|----------|
| 004211 |        | ENTAL*PLAC2                              | 13751   | 12 6620  |
| 004212 |        | LSHAL*9D                                 | 13752   | 5046 11  |
| 004213 |        | SLSU*PLACE                               | 13753   | 04 6615  |
| 004214 |        | STRAL*PLAC2 KH IN PLAC2 UPPER*KL LOWER   | 13754   | 44 6620  |
| 004215 |        | ENTICR*02 RESELECT B2                    | 13755   | 5072 02  |
| 004216 |        | JP*INOAG CONTINUE                        | 13756   | 34 3552  |
| 004217 | MWAIT  | 0*0 ENTRY                                | 13757   | 00 0000  |
| 004220 |        | ENTAL*HIMIP HI CHAN IN MON ENT ADDR      | 13760   | 12 6601  |
| 004221 |        | STRADR*MWA                               | 13761   | 74 3764  |
| 004222 |        | ENTAL*MWAED-1 IRJP TO                    | 13762   | 12 4001  |
| 004223 |        | ENTSR*10                                 | 13763   | 5073 10  |
| 004224 | MWA    | STRAL*ADR 160 OR 360 + 2KH               | 13764   | 44 0000  |
| 004225 |        | ENTSR*00                                 | 13765   | 5073 00  |
| 004226 | MWB    | OUT*KH MULTI WD OUTPUT                   | 13766   | 5012 00  |
| 004227 |        | 0*CKWD+4 TO GIVE ODA/IDRS                | 13767   | 016451   |
| 004230 |        | 0*CKWD                                   | 13770   | 016445   |
| 004231 | MWC    | IN*KH INPUT W/MON                        | 13771   | 5011 00  |
| 004232 |        | 0*PIN+2                                  | 13772   | 016414   |
| 004233 |        | 2*PIN                                    | 13773   | 216412   |
| 004234 |        | OUTOV*KH START TRANSFER                  | 13774   | 5026 00  |
| 004235 | MWD    | WTFI WAIT TO TERM INPUT, RECEIVE MON     | 13775   | 5024 00  |
| 004236 |        | STOP*40 ERROR STOP                       | 13776   | 5056 40  |
| 004237 |        | REMARK*STP IF WAIT SEQ FAILS, HANG UP IN |         |          |
| 004240 |        | REMARK*WAIT SEQ IF I/O NOT PROCESSED     |         |          |
| 004241 |        | IJP*MWAIT EXIT                           | 13777   | 55 3757  |
| 004242 |        | RESERV*1                                 | 14000   | 000000   |
| 004243 |        | IJP*MWAID REF                            | 14001   | 55 7756  |
| 004244 | MWAED  | IJP*MWAIT OK ,EXIT                       | 14002   | 55 3757  |
| 004245 | CSDATA | 0*0 ENTRY                                | 14003   | 00 0000  |
| 004246 |        | ENTALK*CSDATA NOTIFY FAULT               | 14004   | 70 4003  |
| 004247 |        | STRADR*IFault ROUTINE                    | 14005   | 74 6603  |

4-286

| SEQNO  | LABEL  | STATEMENT                                 | ADDRESS | INSTRUCT |
|--------|--------|---|---------|----------|
| 004250 |        | CL*PLAC4 SF COUNT                         | 14006   | 40 6622  |
| 004251 |        | CL*PLAC2 SING BIT PICK DATA               | 14007   | 40 6620  |
| 004252 |        | CL*PLAC3 MULTI BIT PICK DATA              | 14010   | 40 6621  |
| 004253 |        | CL*PLAC5 SING BIT DROP DATA               | 14011   | 40 4244  |
| 004254 |        | CL*PLAC8 MULTI BIT DROP DATA              | 14012   | 40 4243  |
| 004255 |        | CL*ALERDS                                 | 14013   | 40 6470  |
| 004256 |        | ENTICR*02 B2 FOR ERROR RECORD             | 14014   | 5072 02  |
| 004257 |        | ENTBK*00 B2#0 INITIAL                     | 14015   | 36 0000  |
| 004260 |        | ENTAU*U12MSK MSK#777700                   | 14016   | 10 6455  |
| 004261 |        | ENTAL*HICHAN HIGH CHAN                    | 14017   | 12 6573  |
| 004262 |        | SLSU*CSDA FIRST TIME                      | 14020   | 04 4031  |
| 004263 |        | STRAL*CSDA TROUGH PROGRAM                 | 14021   | 44 4031  |
| 004264 |        | SLSU*CSDB                                 | 14022   | 04 4034  |
| 004265 |        | STRAL*CSDB                                | 14023   | 44 4034  |
| 004266 |        | SLSU*CSDB+3                               | 14024   | 04 4037  |
| 004267 |        | STRAL*CSDB+3                              | 14025   | 44 4037  |
| 004270 | KLTURN | CL*PLAC7 CLEAR USE                        | 14026   | 40 4242  |
| 004271 |        | CL*PLACE LOCATIONS                        | 14027   | 40 6615  |
| 004272 |        | RJP*CLPIN CLEAR INPUT AREA                | 14030   | 76 6402  |
| 004273 | CSDA   | OUT*KH OUTPUT 4 WDS                       | 14031   | 5012 00  |
| 004274 |        | 0*BITDAT+3 1ST WD#05                      | 14032   | 014237   |
| 004275 |        | 0*BITDAT 2ND WD#7S                        | 14033   | 014234   |
| 004276 | CSDB   | IN*KH INPUT 4 WDS                         | 14034   | 5011 00  |
| 004277 |        | 0*PIN+3 3RD WD#525252                     | 14035   | 016415   |
| 004300 |        | 0*PIN 4TH WD#252525                       | 14036   | 016412   |
| 004301 |        | OUTOV*KH SEND IDR                         | 14037   | 5026 00  |
| 004302 |        | ENTAU*CHAN+10 WAIT                        | 14040   | 10 6543  |
| 004303 |        | RJP*DELAY                                 | 14041   | 76 0302  |
| 004304 |        | ENTAL*PIN IS 1ST WD#0 ?                   | 14042   | 12 6412  |
| 004305 |        | JPALZ*CSDD TO 2ND WD,ADV COUNT+4          | 14043   | 61 4103  |
| 004306 |        | RJP*RCORDO RECORD ERROR-1ST WD NOT ZERO,0 | 14044   | 76 5555  |



| SEQNO  | LABEL | STATEMENT                                     | ADDRESS | INSTRUCT |
|--------|-------|---|---------|----------|
| 004307 |       | ENTBKB*01 ADV COUNT                           | 14045   | 37 0001  |
| 004310 |       | CMAL*ALL7S 1ST WD#777777 ?                    | 14046   | 02 4241  |
| 004311 |       | JPNOT*CSDE NO-ANALYZE FAILURE                 | 14047   | 63 4053  |
| 004312 |       | RJP*RCORD0 RECORD ERROR-1ST WD#7S ,1          | 14050   | 76 5555  |
| 004313 |       | ENTBKB*03 ADV COUNT                           | 14051   | 37 0003  |
| 004314 |       | JP*CSDD+1 TEST 3RD WD                         | 14052   | 34 4104  |
| 004315 | CSDE  | STRAL*TDCS SAVE DATA WD                       | 14053   | 44 4240  |
| 004316 |       | ENTBKB*01                                     | 14054   | 37 0001  |
| 004317 | CSDF  | ENTAU*CHA4 CLEAR AU                           | 14055   | 10 6527  |
| 004320 |       | SF*45   | 14056   | 5044 45  |
| 004321 |       | LSHA*02                                       | 14057   | 5047 02  |
| 004322 |       | JPAUNZ*CSDC MULTI BITS PICKED UP 1ST WD       | 14060   | 62 4075  |
| 004323 |       | RJP*RCORD0 RECORD ERROR-SING BIT PICKUP,2     | 14061   | 76 5555  |
| 004324 |       | ENTBKB*02 ADV COUNT                           | 14062   | 37 0002  |
| 004325 |       | RJP*SFK SF K,(17), TO PLAC4                   | 14063   | 76 4226  |
| 004326 |       | ENTAL*PLAC4                                   | 14064   | 12 6622  |
| 004327 |       | ADDALK*7775 -2 # OCTAL NUMBER OF BIT PICK     | 14065   | 71 7775  |
| 004330 |       | ENTAU*L9MSK MSK 000777                        | 14066   | 10 6616  |
| 004331 |       | STRAL*PLACE PLAC 2 LOWER FOR KH               | 14067   | 44 6615  |
| 004332 |       | ENTAL*PLAC2 UPPER FOR KL                      | 14070   | 12 6620  |
| 004333 |       | LSHAL*9D                                      | 14071   | 5046 11  |
| 004334 |       | SLSU*PLACE                                    | 14072   | 04 6615  |
| 004335 |       | STRAL*PLAC2                                   | 14073   | 44 6620  |
| 004336 |       | JP*CSDD+1 TEST 3RD WD                         | 14074   | 34 4104  |
| 004337 | CSDC  | ENTBKB*01 ADV COUNT                           | 14075   | 37 0001  |
| 004340 |       | RJP*RCORD0 RECORD ERROR-MULTI BIT PICK 1ST ,3 | 14076   | 76 5555  |
| 004341 |       | ENTBKB*01 ADV COUNT                           | 14077   | 37 0001  |
| 004342 |       | ENTAL*TDCS FAILING DATA WD                    | 14100   | 12 4240  |
| 004343 |       | STRAL*PLAC3 FOR DISPLAY                       | 14101   | 44 6621  |
| 004344 |       | JP*CSDD+1 TEST 3RD WD                         | 14102   | 34 4104  |
| 004345 | CSDD  | ENTBKB*04 1ST WD OK, 3RD WD?                  | 14103   | 37 0004  |

| SEQNO  | LABEL | STATEMENT                               | ADDRESS | INSTRUCT |
|--------|-------|---|---------|----------|
| 004346 |       | ENTAL*PIN+2 DOES 3RD INPUT WD           | 14104   | 12 6414  |
| 004347 |       | CMAL*BITDAT+2 EQUAL 525252 ?            | 14105   | 02 4236  |
| 004350 |       | JPEQ*LOK+2 YES-CONT                     | 14106   | 61 4110  |
| 004351 |       | RJP*RCORD0 RECORD ERROR-3RD WD WRNG. 4  | 14107   | 76 5555  |
| 004352 |       | ENTBKB*01 ADV COUNT                     | 14110   | 37 0001  |
| 004353 | CSDB2 | ENTAL*PIN+1 2ND WD#777777?              | 14111   | 12 6413  |
| 004354 |       | CMAL*BITDAT+1 YES-                      | 14112   | 02 4235  |
| 004355 |       | JPEQ*CSDD2 TEST KL DATA ,ADV COUNT+4    | 14113   | 61 4153  |
| 004356 |       | RJP*RCORD0 RECORD ERROR-2ND WD NOT#7S,5 | 14114   | 76 5555  |
| 004357 |       | ENTBKB*01 ADV COUNT                     | 14115   | 37 0001  |
| 004360 |       | JPALNZ*CSDE2 2ND WD#0S ?                | 14116   | 63 4122  |
| 004361 |       | RJP*RCORD0 RECORD ERROR-2ND WD#0S,6     | 14117   | 76 5555  |
| 004362 |       | ENTBKB*03 ADV COUNT                     | 14120   | 37 0003  |
| 004363 |       | JP*CSDD2+1 TEST KL DATA?                | 14121   | 34 4154  |
| 004364 | CSDE2 | STRAL*TDCS SAVE DATA WD                 | 14122   | 44 4240  |
| 004365 |       | ENTBKB*01                               | 14123   | 37 0001  |
| 004366 | CSDF2 | ENTAU*CHA4 CL AU                        | 14124   | 10 6527  |
| 004367 |       | CPAL DROPPED BITS TO 1                  | 14125   | 5061 00  |
| 004370 |       | SF*45                                   | 14126   | 5044 45  |
| 004371 |       | LSHA*02                                 | 14127   | 5047 02  |
| 004372 |       | JPAUNZ*CSDC2 MULTI BIT DROPPED 2ND WD   | 14130   | 62 4145  |
| 004373 |       | RJP*RCORD0 RECORD ERROR-SING BIT DROP,7 | 14131   | 76 5555  |
| 004374 |       | ENTBKB*02 ADV COUNT                     | 14132   | 37 0002  |
| 004375 |       | RJP*SFK SF K,(17),TO PLAC4              | 14133   | 76 4226  |
| 004376 |       | ENTAL*PLAC4                             | 14134   | 12 6622  |
| 004377 |       | ADDALK*7775 -2#OCTAL NUMBER OF BIT DROP | 14135   | 71 7775  |
| 004400 |       | ENTAU*L9MSK                             | 14136   | 10 6616  |
| 004401 |       | STRAL*PLAC7 PLAC 7 LOWER FOR KH         | 14137   | 44 4242  |
| 004402 |       | ENTAL*PLAC5                             | 14140   | 12 4244  |
| 004403 |       | LSHAL*9D                                | 14141   | 5046 11  |
| 004404 |       | SLSU*PLAC7                              | 14142   | 04 4242  |

| SEQNO  | LABEL | STATEMENT                                | ADDRESS | INSTRUCT |
|--------|-------|--|---------|----------|
| 004405 |       | STRAL*PLAC5                              | 14143   | 44 4244  |
| 004406 |       | JP*CSDD2+1 TEST KL?                      | 14144   | 34 4154  |
| 004407 | CSDC2 | ENTBKB*01 ADV COUNT                      | 14145   | 37 0001  |
| 004410 |       | RJP*RCORD0 RECORD ERROR-MULTI BIT DROP,B | 14146   | 76 5555  |
| 004411 |       | ENTBKB*01 ADV COUNT                      | 14147   | 37 0001  |
| 004412 |       | ENTAL*TDCS FAIL DATA                     | 14150   | 12 4240  |
| 004413 |       | STRAL*PLAC8 FOR DISPLAY                  | 14151   | 44 4243  |
| 004414 |       | JP*CSDD2+1 TEST 1ST TIME THRU ?          | 14152   | 34 4154  |
| 004415 | CSDD2 | ENTBKB*04                                | 14153   | 37 0004  |
| 004416 |       | STRB*BSAVE B2#22?                        | 14154   | 42 6444  |
| 004417 |       | ENTALK*22 2ND TIME THRU ?                | 14155   | 70 0022  |
| 004420 |       | CMAL*BSAVE NO- KL 2ND TIME               | 14156   | 02 6444  |
| 004421 |       | JPEQ*DERRQ YES-TEST ERROR DATA           | 14157   | 61 4171  |
| 004422 |       | ENTAU*U12MSK MSK#777700                  | 14160   | 10 6455  |
| 004423 |       | ENTAL*LOCHAN KL 2ND TIME THRU            | 14161   | 12 6564  |
| 004424 |       | SLSU*CSDA                                | 14162   | 04 4031  |
| 004425 |       | STRAL*CSDA                               | 14163   | 44 4031  |
| 004426 |       | SLSU*CSDB                                | 14164   | 04 4034  |
| 004427 |       | STRAL*CSDB                               | 14165   | 44 4034  |
| 004430 |       | SLSU*CSDB+3                              | 14166   | 04 4037  |
| 004431 |       | STRAL*CSDB+3                             | 14167   | 44 4037  |
| 004432 |       | JP*KLTURN TEST KL DATA                   | 14170   | 34 4026  |
| 004433 | DERRQ | ENTAL*ALERDS ANY ERROR FLAGS ?           | 14171   | 12 6470  |
| 004434 |       | JPALZ*DERROR+1 NO- TO EXIT               | 14172   | 61 4224  |
| 004435 |       | ENTAU*PLAC2 SING BIT PICKED UP?          | 14173   | 10 6620  |
| 004436 |       | JPAUNZ*DERR0P YES-DISPLAY                | 14174   | 62 4207  |
| 004437 |       | ENTAU*PLAC5 SING BIT DROPPED?            | 14175   | 10 4244  |
| 004440 |       | JPAUNZ*DERR0D YES-DISPLAY                | 14176   | 62 4203  |
| 004441 |       | ENTAU*PLAC3 MULTI BITS PICKED?           | 14177   | 10 6621  |
| 004442 |       | JPAUNZ*DERR0P YES-DISPAY                 | 14200   | 62 4207  |
| 004443 |       | ENTAU*PLAC8 DISPLAY MULTI BITS DROPPED   | 14201   | 10 4243  |

| SEQNO  | LABEL  | STATEMENT                                 | ADDRESS | INSTRUCT |
|--------|--------|---|---------|----------|
| 004444 |        | JP*DERROR                                 | 14202   | 34 4223  |
| 004445 | DERR0D | ENTALK*7777 DISPLAY DROPPED BITS          | 14203   | 70 7777  |
| 004446 |        | STRAL*FAULTI IN KH/KL C REG               | 14204   | 44 6602  |
| 004447 |        | STRAL*IFAUlT                              | 14205   | 44 6603  |
| 004450 |        | JP*DERRC                                  | 14206   | 34 4211  |
| 004451 | DERR0P | ENTALK*0000 DISPLAY PICKUP BITS           | 14207   | 70 0000  |
| 004452 |        | JP*DERROD+1 IN KH/KL C REG                | 14210   | 34 4204  |
| 004453 | DERRC  | OUT*KH                                    | 14211   | 5012 00  |
| 004454 |        | 0*IFAUlT                                  | 14212   | 016603   |
| 004455 |        | 0*IFAUlT                                  | 14213   | 016603   |
| 004456 |        | OUT*KL                                    | 14214   | 5012 00  |
| 004457 |        | 0*FAUlTI                                  | 14215   | 016602   |
| 004460 |        | 0*FAUlTI                                  | 14216   | 016602   |
| 004461 |        | RJP*TERMAL                                | 14217   | 76 5447  |
| 004462 |        | OUTOV*KH                                  | 14220   | 5026 00  |
| 004463 |        | OUTOV*KL                                  | 14221   | 5026 00  |
| 004464 |        | ENTAL*ALERDS DISPLAY FLAGS                | 14222   | 12 6470  |
| 004465 | DERROR | STOP*40 ERROR STOP                        | 14223   | 5056 40  |
| 004466 |        | REMARK*AL REGISTER FLAGS                  |         |          |
| 004467 |        | REMARK*BIT FOR ERROR                      |         |          |
| 004470 |        | REMARK* 0 1ST WD KH NOT#000000            |         |          |
| 004471 |        | REMARK* 1 1ST WD KH#777777                |         |          |
| 004472 |        | REMARK* 2 1ST WD KH SINGLE BIT PICKED UP  |         |          |
| 004473 |        | REMARK* 3 1ST WD KH MULTIPLE BIT PICKUP   |         |          |
| 004474 |        | REMARK* 4 3RD WD KH NOT#525252            |         |          |
| 004475 |        | REMARK* 5 2ND WD KH NOT#777777            |         |          |
| 004476 |        | REMARK* 6 2ND WD KH #000000               |         |          |
| 004477 |        | REMARK* 7 2ND WD KH SINGLE BIT DROPPED    |         |          |
| 004500 |        | REMARK* 8 2ND WD KH MULTIPLE BITS DROPPED |         |          |
| 004501 |        | REMARK* 9 1ST KL NOT #05                  |         |          |
| 004502 |        | REMARK* 10 1ST KL # 75                    |         |          |

| SEQNO  | LABEL | STATEMENT                                       | ADDRESS | INSTRUCT |
|--------|-------|---|---------|----------|
| 004503 |       | REMARK* 11 1ST KL SING BIT PICK                 |         |          |
| 004504 |       | REMARK* 12 1ST KL MULTI BIT PICK                |         |          |
| 004505 |       | REMARK* 13 3RD KL NOT #525252                   |         |          |
| 004506 |       | REMARK* 14 2ND KL NOT #7S                       |         |          |
| 004507 |       | REMARK* 15 2ND KL #0S                           |         |          |
| 004510 |       | REMARK* 16 2ND KL SING BIT DROP                 |         |          |
| 004511 |       | REMARK* 17 2ND KL MULTI BIT DROP                |         |          |
| 004512 |       | REMARK*AU CONTAINS THE 1ST DATA ERROR EXAMD     |         |          |
| 004513 |       | REMARK*AFTER DETECTING OF ERROR FLAG, ONE OF    |         |          |
| 004514 |       | REMARK* PLAC2-SING BIT DROP/OCTAL NO OF BIT POS |         |          |
| 004515 |       | REMARK* (BIT 2 TO 0 #1, 2 TO 1 #2, ETC.)        |         |          |
| 004516 |       | REMARK* -IF ONE CHAN ONLY, LOWER                |         |          |
| 004517 |       | REMARK* -IF BOTH CHANS, LOWER/KL, UPPER/KH      |         |          |
| 004520 |       | REMARK* PLAC3-MULTI BIT DROP                    |         |          |
| 004521 |       | REMARK* -DATA OF LAST CHAN W/FAILURE            |         |          |
| 004522 |       | REMARK* PLAC5-SING BIT PICK/OCTAL NO OF BIT POS |         |          |
| 004523 |       | REMARK* (BIT 2 TO 0 #1, 2 TO 1 #2, ETC.)        |         |          |
| 004524 |       | REMARK* -IF ONE CHAN ONLY, LOWER                |         |          |
| 004525 |       | REMARK* -IF BOTH CHANS, LOWER/KL, UPPER/KH      |         |          |
| 004526 |       | REMARK* PLAC8-MULTI BIT PICKUP                  |         |          |
| 004527 |       | REMARK* -DATA OF LAST CHAN W/FAILURE            |         |          |
| 004530 |       | REMARK*C REGISTERS KH AND KL DISPLAY OUTPUT     |         |          |
| 004531 |       | REMARK*OF TYPE DATA GIVING ERRORS/ALL 7 OR 0 /  |         |          |
| 004532 |       | IJP*CSDATA EXIT                                 | 14224   | 55 4003  |
| 004533 |       | RESERV*1  | 14225   | 000000   |
| 004534 | SFK   | 0*0 ENTRY                                       | 14226   | 00 0000  |
| 004535 |       | ENTSR*10 BANK 0                                 | 14227   | 5073 10  |
| 004536 |       | ENTAL*17 (17)                                   | 14230   | 12 0017  |
| 004537 |       | ENTSR*00 BANK 1                                 | 14231   | 5073 00  |
| 004540 |       | STRAL*PLAC4 TO PLAC4                            | 14232   | 44 6622  |
| 004541 |       | IJP*SFK EXIT                                    | 14233   | 55 4226  |

| SEQNO  | LABEL  | STATEMENT                           | ADDRESS | INSTRUCT |
|--------|--------|-------------------------------------|---------|----------|
| 004542 | BITDAT | 000000                              | 14234   | 000000   |
| 004543 |        | 777777                              | 14235   | 777777   |
| 004544 |        | 525252                              | 14236   | 525252   |
| 004545 |        | 252525                              | 14237   | 252525   |
| 004546 | TDCS   | 0*0 TEMP STORE                      | 14240   | 00 0000  |
| 004547 | ALL7S  | 777777 CONSTANT                     | 14241   | 777777   |
| 004550 | PLAC7  | 0*0 TEMP STORE                      | 14242   | 00 0000  |
| 004551 | PLAC8  | 0*0 TEMP STORE                      | 14243   | 00 0000  |
| 004552 | PLAC5  | 0*0 TEMP STORE                      | 14244   | 00 0000  |
| 004553 | MONTIN | 0*0 ENTRY                           | 14245   | 00 0000  |
| 004554 |        | ENTALK*MONTIN NOTIFY FLT            | 14246   | 70 4245  |
| 004555 |        | STRADR*IFault ROUTINE               | 14247   | 74 6603  |
| 004556 |        | CL*ALERDS                           | 14250   | 40 6470  |
| 004557 |        | ENTICR*02 B2 FOR ERROR RECORD       | 14251   | 5072 02  |
| 004560 |        | ENTBK*00 B2#0                       | 14252   | 36 0000  |
| 004561 |        | ENTALK*HICHAN HIGH CHAN FIRST       | 14253   | 70 6573  |
| 004562 |        | STRADR*MONINA+1                     | 14254   | 74 4260  |
| 004563 |        | ENTALK*HIMIP                        | 14255   | 70 6601  |
| 004564 |        | STRADR*MONINB                       | 14256   | 74 4271  |
| 004565 | MONINA | ENTAU*U12MSK MASK#777700            | 14257   | 10 6455  |
| 004566 |        | ENTAL*HICHAN CHAN TO I/O INST       | 14260   | 12 6573  |
| 004567 |        | SLSU*MONINC                         | 14261   | 04 4275  |
| 004570 |        | STRAL*MONINC                        | 14262   | 44 4275  |
| 004571 |        | SLSU*MONINC+4                       | 14263   | 04 4301  |
| 004572 |        | STRAL*MONINC+4                      | 14264   | 44 4301  |
| 004573 |        | SLSU*MONINE                         | 14265   | 04 4310  |
| 004574 |        | STRAL*MONINE                        | 14266   | 44 4310  |
| 004575 |        | SLSU*MONINF                         | 14267   | 04 4317  |
| 004576 |        | STRAL*MONINF                        | 14270   | 44 4317  |
| 004577 | MONINB | ENTAL*HIMIP IN MON ENT ADDR TO PROG | 14271   | 12 6601  |
| 004600 |        | STRADR*MONIND                       | 14272   | 74 4306  |

| SEQNO  | LABEL  | STATEMENT                                 | ADDRESS | INSTRUCT |
|--------|--------|---|---------|----------|
| 004601 |        | RJP*CLPIN CLR INPUT AREA                  | 14273   | 76 6402  |
| 004602 |        | RJP*STINK STORE STOPS 004 677             | 14274   | 76 6336  |
| 004603 | MONINC | OUT*KH PROVIDE K IDR                      | 14275   | 5012 00  |
| 004604 |        | 0*CKWD+1                                  | 14276   | 016446   |
| 004605 |        | 0*CKWD                                    | 14277   | 016445   |
| 004606 |        | RJP*TERMAL                                | 14300   | 76 5447  |
| 004607 |        | IN*KH INPUT                               | 14301   | 5011 00  |
| 004610 |        | 0*PIN 1WD                                 | 14302   | 016412   |
| 004611 |        | 2*PIN W/MON                               | 14303   | 216412   |
| 004612 |        | ENTAL*MONINX-1 IRJP                       | 14304   | 12 4341  |
| 004613 |        | ENTSR*10 TO ENT ADR                       | 14305   | 5073 10  |
| 004614 | MONIND | STRAL*ADR 160 OR 360 +K                   | 14306   | 44 0000  |
| 004615 |        | ENTSR*00                                  | 14307   | 5073 00  |
| 004616 | MONINE | OUTOV*KH SEND TERM IDR                    | 14310   | 5026 00  |
| 004617 |        | ENTAL*ALERDS DISPLAY PRESENT FLAGS        | 14311   | 12 6470  |
| 004620 |        | ENTAU*CHAN+14                             | 14312   | 10 6547  |
| 004621 |        | RIL RIL                                   | 14313   | 5030 00  |
| 004622 |        | RJP*DELAY DELAY                           | 14314   | 76 0302  |
| 004623 |        | RJP*RCORDO RECORD ERROR-NO IN MON INT*0+2 | 14315   | 76 5555  |
| 004624 |        | ENTBKB*01 ADV COUNT                       | 14316   | 37 0001  |
| 004625 | MONINF | SKPIIN*KH INPUT TERMINATED?               | 14317   | 5021 00  |
| 004626 |        | RJP*RCORDO RECORD ERROR-IN STILL ACT*1+3  | 14320   | 76 5555  |
| 004627 |        | ENTBKB*01 ADV COUNT                       | 14321   | 37 0001  |
| 004630 |        | STRB*BSAVE 2ND TIME                       | 14322   | 42 6444  |
| 004631 |        | ENTALK*04 THROUGH?                        | 14323   | 70 0004  |
| 004632 |        | CMAL*BSAVE YES-                           | 14324   | 02 6444  |
| 004633 |        | JPEQ*ALERQ TEST ERROR FLAGS               | 14325   | 61 4334  |
| 004634 |        | ENTALK*LIMIP LOW CHAN (KL) 2ND TIME       | 14326   | 70 6572  |
| 004635 |        | STRADR*MONINB                             | 14327   | 74 4271  |
| 004636 |        | ENTALK*LOCHAN                             | 14330   | 70 6564  |
| 004637 |        | STRADR*MONINA+1                           | 14331   | 74 4260  |

| SEQNO  | LABEL  | STATEMENT                                  | ADDRESS | INSTRUCT |
|--------|--------|--|---------|----------|
| 004640 |        | RJP*HONINT KNOCK DOWN INTS                 | 14332   | 76 6353  |
| 004641 |        | JP*MONINA RETURN                           | 14333   | 34 4257  |
| 004642 | ALERQ  | ENTAL*ALERDS ANY ERRORS?                   | 14334   | 12 6470  |
| 004643 |        | JPALZ*LOK+2 NO-TO EXIT                     | 14335   | 61 4337  |
| 004644 |        | STOP*40 ERROR STOP                         | 14336   | 5056 40  |
| 004645 |        | REMARK*AL CONTAINS FLAGS,BIT               |         |          |
| 004646 |        | REMARK*0,2 NO IN MON INT KH,KL             |         |          |
| 004647 |        | REMARK*1,3 IN ACT NOT TERM KH,KL           |         |          |
| 004650 |        | REMARK*S1 REG GIVES FALSE INT ENTRANCE ADR |         |          |
| 004651 |        | IJP*MONTIN EXIT                            | 14337   | 55 4245  |
| 004652 |        | RESERV*1                                   | 14340   | 000000   |
| 004653 |        | IJP*MONINO                                 | 14341   | 55 7713  |
| 004654 | MONINX | JP*MONINF-1 CONTINUE                       | 14342   | 34 4316  |
| 004655 | ATIME  | 0*0 ENTRY                                  | 14343   | 00 0000  |
| 004656 |        | ENTALK*ATIME NOTIFY FLT                    | 14344   | 70 4343  |
| 004657 |        | STRADR*IFault ROUTINE                      | 14345   | 74 6603  |
| 004660 |        | ENTICR*02                                  | 14346   | 5072 02  |
| 004661 |        | ENTBK*00                                   | 14347   | 36 0000  |
| 004662 |        | CL*ALERDS                                  | 14350   | 40 6470  |
| 004663 |        | ENTALK*HICHAN HIGH CHAN                    | 14351   | 70 6573  |
| 004664 |        | STRADR*TIMEA+2 TO PROGS                    | 14352   | 74 4442  |
| 004665 |        | STRADR*TWOV+2                              | 14353   | 74 4403  |
| 004666 |        | ENTAU*HIFACE KH FAST OR SLOW INTERFACE?    | 14354   | 10 6562  |
| 004667 |        | JPAUP*LOK+4 SLOW-CONT                      | 14355   | 64 4361  |
| 004670 |        | ENTBKB*04 FAST-                            | 14356   | 37 0004  |
| 004671 |        | RJP*TWOV FAST-20V                          | 14357   | 76 4401  |
| 004672 |        | SKP*40                                     | 14360   | 5050 40  |
| 004673 |        | RJP*TIMEA SLOW-TEST KH                     | 14361   | 76 4440  |
| 004674 |        | ENTALK*LOCHAN LOW CHAN                     | 14362   | 70 6564  |
| 004675 |        | STRADR*TIMEA+2 TO PROGS                    | 14363   | 74 4442  |
| 004676 |        | STRADR*TWOV+2                              | 14364   | 74 4403  |



| SEQNO  | LABEL | STATEMENT                                   | ADDRESS | INSTRUCT |
|--------|-------|---|---------|----------|
| 004677 |       | ENTAU*LOFACE KL FAST OR SLOW?               | 14365   | 10 6563  |
| 004700 |       | JPAUP*LOK+4 SLOW-CONT                       | 14366   | 64 4372  |
| 004701 |       | ENTBKB*04 FAST                              | 14367   | 37 0004  |
| 004702 |       | RJP*TWOV TEST TWO FORCES                    | 14370   | 76 4401  |
| 004703 |       | SKP*40                                      | 14371   | 5050 40  |
| 004704 |       | RJP*TIMEA TEST SLOW KL                      | 14372   | 76 4440  |
| 004705 | TIMET | ENTAL*ALERDS ANY ERRORS?                    | 14373   | 12 6470  |
| 004706 |       | JPALZ*LOK+3 NO-TO EXIT                      | 14374   | 61 4377  |
| 004707 |       | ENTAU*AUPRAM DISPLAY I-FACE PARAMETERS      | 14375   | 10 6624  |
| 004710 |       | STOP*40 ERROR STOP                          | 14376   | 5056 40  |
| 004711 |       | REMARK*AL FLAGS BIF/ERROR                   |         |          |
| 004712 |       | REMARK* 0,5 IF ODA TOO SHORT KH,KL          |         |          |
| 004713 |       | REMARK* 1,6 IF ODA TOO LONG KH,KL           |         |          |
| 004714 |       | REMARK* 2,7 IF IDA TOO SHORT KH,KL          |         |          |
| 004715 |       | REMARK* 3,8 IF IDA TOO LONG KH,KL           |         |          |
| 004716 |       | REMARK* 4,9 IF TWO CONSECUTIVE FORCES GAVE/ |         |          |
| 004717 |       | REMARK* WERE SEEN AS ONE ACKNOWLEDGE KH,KL  |         |          |
| 004720 |       | IJP*ATIME EXIT                              | 14377   | 55 4343  |
| 004721 |       | RESERV*1                                    | 14400   | 000000   |
| 004722 | TWOV  | 0*0 ENTRY                                   | 14401   | 00 0000  |
| 004723 |       | ENTAU*U12MSK 777700 MASK                    | 14402   | 10 6455  |
| 004724 |       | ENTAL*HICHAN CHAN NO                        | 14403   | 12 6573  |
| 004725 |       | SLSU*TWOVC                                  | 14404   | 04 4417  |
| 004726 |       | STRAL*TWOVC OUT                             | 14405   | 44 4417  |
| 004727 |       | SLSU*TWOVA                                  | 14406   | 04 4424  |
| 004730 |       | STRAL*TWOVA IN                              | 14407   | 44 4424  |
| 004731 |       | SLSU*TWOVB+1                                | 14410   | 04 4431  |
| 004732 |       | STRAL*TWOVB+1 INSTP                         | 14411   | 44 4431  |
| 004733 |       | SLSU*TWOVB                                  | 14412   | 04 4430  |
| 004734 |       | STRAL*TWOVB OUTOV                           | 14413   | 44 4430  |
| 004735 |       | STRAL*TWOVB-1 OUTOV                         | 14414   | 44 4427  |

4-296

| SEQNO  | LABEL | STATEMENT                                      | ADDRESS | INSTRUCT |
|--------|-------|--|---------|----------|
| 004736 |       | RJP*TERMAL                                     | 14415   | 76 5447  |
| 004737 |       | RJP*HONINT                                     | 14416   | 76 6353  |
| 004740 | TWOVC | OUT*KH OUT CWS/CHAN, BOTH CHNS FAST            | 14417   | 5012 00  |
| 004741 |       | O*CKWD+2                                       | 14420   | 016447   |
| 004742 |       | O*CKWD   | 14421   | 016445   |
| 004743 |       | RJP*TERMAL CL ACTIVES                          | 14422   | 76 5447  |
| 004744 |       | RJP*CLPIN CLR INPUT AREA                       | 14423   | 76 6402  |
| 004745 | TWOVA | IN*KH INPUT                                    | 14424   | 5011 00  |
| 004746 |       | O*PIN+1 OF 2 WDS                               | 14425   | 016413   |
| 004747 |       | O*PIN  | 14426   | 016412   |
| 004750 |       | OUTOV*KH FORCE OUT                             | 14427   | 5026 00  |
| 004751 | TWOVB | OUTOV*KH FORCE OUT                             | 14430   | 5026 00  |
| 004752 |       | INSTP*KH TERM IN                               | 14431   | 5015 00  |
| 004753 |       | ENTAU*PIN                                      | 14432   | 10 6412  |
| 004754 |       | ENTAL*PIN+1 WAS 2ND OV/ACK SENT?               | 14433   | 12 6413  |
| 004755 |       | JPALNZ*LOK+2 YES-CONTINUE                      | 14434   | 63 4436  |
| 004756 |       | RJP*RCORDO RECORD ERROR-ONLY ONE ACK SEEN, 4+9 | 14435   | 76 5555  |
| 004757 |       | ENTBKB*01 ADV COUNT                            | 14436   | 37 0001  |
| 004760 |       | IJP*TWOV EXIT                                  | 14437   | 55 4401  |
| 004761 | TIMEA | O*0 ENTRY                                      | 14440   | 00 0000  |
| 004762 |       | ENTAU*U12MSK                                   | 14441   | 10 6455  |
| 004763 |       | ENTAL*HICHAN CHAN TO PROG                      | 14442   | 12 6573  |
| 004764 |       | SLSU*TIMA                                      | 14443   | 04 4503  |
| 004765 |       | STRAL*TIMA IN                                  | 14444   | 44 4503  |
| 004766 |       | STRAL*TIMD IN                                  | 14445   | 44 4522  |
| 004767 |       | STRAL*TIMN IN                                  | 14446   | 44 4576  |
| 004770 |       | SLSU*TIMB                                      | 14447   | 04 4506  |
| 004771 |       | STRAL*TIMB OUT                                 | 14450   | 44 4506  |
| 004772 |       | STRAL*TIMG+3 OUT                               | 14451   | 44 4620  |
| 004773 |       | STRAL*TIMM OUT                                 | 14452   | 44 4571  |
| 004774 |       | SLSU*TIMB+4                                    | 14453   | 04 4512  |

| SEQNO  | LABEL | STATEMENT                      | ADDRESS | INSTRUCT |
|--------|-------|--------------------------------|---------|----------|
| 004775 |       | STRAL*TIMB+4 OUTOV             | 14454   | 44 4512  |
| 004776 |       | STRAL*TIME OUTOV               | 14455   | 44 4526  |
| 004777 |       | STRAL*TIMO-1 OUTOV             | 14456   | 44 4601  |
| 005000 |       | STRAL*TIMO OUTOV               | 14457   | 44 4602  |
| 005001 |       | SLSU*TIMC                      | 14460   | 04 4515  |
| 005002 |       | STRAL*TIMC SIN                 | 14461   | 44 4515  |
| 005003 |       | STRAL*TIMF SIN                 | 14462   | 44 4533  |
| 005004 |       | SLSU*TIMC+2                    | 14463   | 04 4517  |
| 005005 |       | STRAL*TIMC+2 SKPIIN            | 14464   | 44 4517  |
| 005006 |       | STRAL*TIMF+3 SKPIIN            | 14465   | 44 4536  |
| 005007 |       | SLSU*TIMG                      | 14466   | 04 4615  |
| 005010 |       | STRAL*TIMG EXF                 | 14467   | 44 4615  |
| 005011 |       | SLSU*TIMH                      | 14470   | 04 4544  |
| 005012 |       | STRAL*TIMH EXFOV               | 14471   | 44 4544  |
| 005013 |       | STRAL*TIMK EXFOV               | 14472   | 44 4555  |
| 005014 |       | SLSU*TIMI                      | 14473   | 04 4547  |
| 005015 |       | STRAL*TIMI SOUT                | 14474   | 44 4547  |
| 005016 |       | STRAL*TIML SOUT                | 14475   | 44 4562  |
| 005017 |       | SLSU*TIMI+2                    | 14476   | 04 4551  |
| 005020 |       | STRAL*TIMI+2 SKPOIN            | 14477   | 44 4551  |
| 005021 |       | STRAL*TIML+3 SKPOIN            | 14500   | 44 4565  |
| 005022 |       | RJP*TERMAL                     | 14501   | 76 5447  |
| 005023 |       | RJP*HONINT                     | 14502   | 76 6353  |
| 005024 | TIMA  | IN*KH INPUT TO RECEIVE         | 14503   | 5011 00  |
| 005025 |       | O*PIN ODA/TEST ODA             | 14504   | 016412   |
| 005026 |       | O*PIN                          | 14505   | 016412   |
| 005027 | TIMB  | OUT*KH OUT TO PROVID ODA (EFA) | 14506   | 5012 00  |
| 005030 |       | O*CKWD+2 FOR TEST              | 14507   | 016447   |
| 005031 |       | O*CKWD                         | 14510   | 016445   |
| 005032 |       | RJP*TERMAL                     | 14511   | 76 5447  |
| 005033 |       | OUTOV*KH SEND ODA              | 14512   | 5026 00  |

| SEQNO  | LABEL | STATEMENT                                  | ADDRESS | INSTRUCT |
|--------|-------|--|---------|----------|
| 005034 |       | ENTAU*CHAN+20 4 US +                       | 14513   | 10 6553  |
| 005035 |       | ENTAL*CHA4 4 US +                          | 14514   | 12 6527  |
| 005036 | TIMC  | SIN*KH 2 US# 10 US                         | 14515   | 5001 00  |
| 005037 |       | RJP*DELAY PROCESS REQUEST                  | 14516   | 76 0302  |
| 005040 |       | SKPIIN*KH IDR/ODA DETECTED AFTER 10US ?    | 14517   | 5021 00  |
| 005041 |       | RJP*RCORD0 RECORD ERROR-ODA TOO SHORT, 0+5 | 14520   | 76 5555  |
| 005042 |       | ENTBKB*01 ADV COUNT                        | 14521   | 37 0001  |
| 005043 | TIMD  | IN*KH INPUT TO RECEIVE                     | 14522   | 5011 00  |
| 005044 |       | 0*PIN ODA/TEST ODA                         | 14523   | 016412   |
| 005045 |       | 0*PIN                                      | 14524   | 016412   |
| 005046 |       | RJP*TERMAL                                 | 14525   | 76 5447  |
| 005047 | TIME  | OUTOV*KH SEND ODA                          | 14526   | 5026 00  |
| 005050 |       | LSHAL*22                                   | 14527   | 5046 22  |
| 005051 |       | LSHAL*17                                   | 14530   | 5046 17  |
| 005052 |       | IJP*LOK+1 8 US                             | 14531   | 55 4532  |
| 005053 |       | 0*LOK+1 +                                  | 14532   | 014533   |
| 005054 | TIMF  | SIN*KH 2 US # 18 US                        | 14533   | 5001 00  |
| 005055 |       | ENTAU*CHAN+17 PROCESS IDR                  | 14534   | 10 6552  |
| 005056 |       | RJP*DELAY IF DETECTED                      | 14535   | 76 0302  |
| 005057 |       | SKPIIN*KH WAS IDR DETECTED?                | 14536   | 5021 00  |
| 005060 |       | SKP*40 YES-ERROR                           | 14537   | 5050 40  |
| 005061 |       | RJP*RCORD0 RECORD ERROR-ODA TOO LONG, 1+6  | 14540   | 76 5555  |
| 005062 |       | ENTBKB*01 ADV COUNT                        | 14541   | 37 0001  |
| 005063 |       | RJP*TIMGG SET UP IDA ACTS/CWS              | 14542   | 76 4613  |
| 005064 |       | RXL  | 14543   | 5032 00  |
| 005065 | TIMH  | EXFOV*KH SEND EFA/GET IDA                  | 14544   | 5027 00  |
| 005066 |       | ENTAU*CHAN+10 4US+                         | 14545   | 10 6543  |
| 005067 |       | ENTAL*CHA4 4 US +                          | 14546   | 12 6527  |
| 005070 | TIMI  | SOUT*KH 2 US # 10 US                       | 14547   | 5002 00  |
| 005071 |       | RJP*DELAY PROCESS ODR                      | 14550   | 76 0302  |
| 005072 |       | SKPOIN*KH ODR DETECTED AFTER 10 US?        | 14551   | 5022 00  |

| SEQNO  | LABEL | STATEMENT                                      | ADDRESS | INSTRUCT |
|--------|-------|--|---------|----------|
| 005073 |       | RJP*RCORDO RECORD ERROR-IDA TOO SHORT,2+7      | 14552   | 76 5555  |
| 005074 |       | ENTBKB*01 ADV COUNT                            | 14553   | 37 0001  |
| 005075 |       | RJP*TIMGG SET UP IDA ACTS/CWS                  | 14554   | 76 4613  |
| 005076 | TIMK  | EXFOV*KH SEND EFA/GET IDA                      | 14555   | 5027 00  |
| 005077 |       | LSHAL*22                                       | 14556   | 5046 22  |
| 005100 |       | LSHAL*22                                       | 14557   | 5046 22  |
| 005101 |       | IJP*LOK+1 8 US                                 | 14560   | 55 4561  |
| 005102 |       | 0*LOK+1 +                                      | 14561   | 014562   |
| 005103 | TIML  | SOUT*KH 2 US # 18 US                           | 14562   | 5002 00  |
| 005104 |       | ENTAU*CHAN+17 PROCESS ODR                      | 14563   | 10 6552  |
| 005105 |       | RJP*DELAY IF DETECTED                          | 14564   | 76 0302  |
| 005106 |       | SKPOIN*KH WAS ODR DETECTED?                    | 14565   | 5022 00  |
| 005107 |       | SKP*40 YES-ERROR                               | 14566   | 5050 40  |
| 005110 |       | RJP*RCORDO RECORD ERROR-IDA TOO LONG,3+8       | 14567   | 76 5555  |
| 005111 |       | ENTBKB*01 ADV COUNT                            | 14570   | 37 0001  |
| 005112 | TIMM  | OUT*KH OUT CWS/SLOW CHAN                       | 14571   | 5012 00  |
| 005113 |       | 0*CKWD+2                                       | 14572   | 016447   |
| 005114 |       | 0*CKWD   | 14573   | 016445   |
| 005115 |       | RJP*TERMAL TERM ALL ACTS                       | 14574   | 76 5447  |
| 005116 |       | RJP*CLPIN CLR INPUT AREA                       | 14575   | 76 6402  |
| 005117 | TIMN  | IN*KH INPUT OF                                 | 14576   | 5011 00  |
| 005120 |       | 0*PIN+1 TWO WDS                                | 14577   | 016413   |
| 005121 |       | 0*PIN  | 14600   | 016412   |
| 005122 |       | OUTOV*KH FORCE OUT                             | 14601   | 5026 00  |
| 005123 | TIMO  | OUTOV*KH FORCE OUT                             | 14602   | 5026 00  |
| 005124 |       | LSHAU*20 WAIT 4US TO ALLOW 2ND REQ DETECT      | 14603   | 5045 20  |
| 005125 |       | INSTP*KH TERM IN                               | 14604   | 5015 00  |
| 005126 |       | ENTAU*PIN                                      | 14605   | 10 6412  |
| 005127 |       | ENTAL*PIN+1 WAS 2ND OV/ACK SENT?               | 14606   | 12 6413  |
| 005130 |       | JPALNZ*LOK+2 YES-CONTINUE                      | 14607   | 63 4611  |
| 005131 |       | RJP*RCORDO RECORD ERROR-ONLY ONE ACK SEEN, 4+9 | 14610   | 76 5555  |

4-300

| SEQNO  | LABEL  | STATEMENT                              | ADDRESS | INSTRUCT |
|--------|--------|--|---------|----------|
| 005132 |        | ENTBKB*01 ADV COUNT                    | 14611   | 37 0001  |
| 005133 |        | IJP*TIMEA EXIT                         | 14612   | 55 4440  |
| 005134 | TIMGG  | 0*0 ENTRY                              | 14613   | 00 0000  |
| 005135 |        | RJP*HONINT STORE RIL                   | 14614   | 76 6353  |
| 005136 | TIMG   | EXF*KH EXF TO GIVE RETURN              | 14615   | 5013 00  |
| 005137 |        | 0*CKWD+3 IDA BY EIR                    | 14616   | 016450   |
| 005140 |        | 0*CKWD                                 | 14617   | 016445   |
| 005141 |        | OUT*KH OUTPUT TO RECEIVE               | 14620   | 5012 00  |
| 005142 |        | 0*CKWD IDA/TEST IDA                    | 14621   | 016445   |
| 005143 |        | 0*CKWD                                 | 14622   | 016445   |
| 005144 |        | RJP*TERMAL                             | 14623   | 76 5447  |
| 005145 |        | IJP*TIMGG EXIT                         | 14624   | 55 4613  |
| 005146 | CDMIN  | 0*0 ENTRY                              | 14625   | 00 0000  |
| 005147 |        | ENTALK*CDMIN NOTIFY FLT                | 14626   | 70 4625  |
| 005150 |        | STRADR*IFault ROUTINE                  | 14627   | 74 6603  |
| 005151 |        | REMARK*ASSUME 1219 /CDM/ WHILE TESTING |         |          |
| 005152 |        | ENTICR*02 B2 ERROR RECORD              | 14630   | 5072 02  |
| 005153 |        | ENTBK*00 B2 # 0                        | 14631   | 36 0000  |
| 005154 |        | CL*PLACE                               | 14632   | 40 6615  |
| 005155 |        | CL*ALERDS CL ERROR DATA STORE          | 14633   | 40 6470  |
| 005156 |        | ENTAL*HIBCP 60 OR 260 + 2KH            | 14634   | 12 6575  |
| 005157 |        | ADDALK*01                              | 14635   | 71 0001  |
| 005160 |        | STRADR*CDMIND TO PROG                  | 14636   | 74 4657  |
| 005161 |        | STRADR*CDMING                          | 14637   | 74 4700  |
| 005162 |        | RJP*STRMEM STORE VALUE N IN ADDR N     | 14640   | 76 6420  |
| 005163 |        | EXF*KH CDM WDS KH                      | 14641   | 5013 00  |
| 005164 |        | 0*CKWDA                                | 14642   | 016451   |
| 005165 |        | 0*CKWDA                                | 14643   | 016451   |
| 005166 | CDMINA | OUT*KH IDR SOURCE                      | 14644   | 5012 00  |
| 005167 |        | 0*CKWD+3                               | 14645   | 016450   |
| 005170 |        | 0*CKWD                                 | 14646   | 016445   |

| SEQNO  | LABEL  | STATEMENT                               | ADDRESS | INSTRUCT |
|--------|--------|---|---------|----------|
| 005171 |        | RJP*TERMAL                              | 14647   | 76 5447  |
| 005172 | CDMINB | IN*KH INPUT W/CDM                       | 14650   | 5011 00  |
| 005173 |        | 4*PIN+1 2WDS                            | 14651   | 416413   |
| 005174 |        | 0*PIN                                   | 14652   | 016412   |
| 005175 | CDMINC | OUTOV*KH SEND IDR / 1ST WD              | 14653   | 5026 00  |
| 005176 |        | ENTAU*CHAN+20                           | 14654   | 10 6553  |
| 005177 |        | RJP*DELAY                               | 14655   | 76 0302  |
| 005200 |        | ENTSR*10                                | 14656   | 5073 10  |
| 005201 | CDMIND | ENTAL*ADR 61 OR 261+2KH                 | 14657   | 12 0000  |
| 005202 |        | ENTSR*00                                | 14660   | 5073 00  |
| 005203 |        | CMAL*CDMINE+2 CACW # PIN+1?             | 14661   | 02 4667  |
| 005204 |        | JPEQ*LOK+2 YES-CONT                     | 14662   | 61 4664  |
| 005205 |        | RJP*RCORDO RECORD ERROR-EARLY CDM, 0    | 14663   | 76 5555  |
| 005206 |        | ENTBKB*01 ADV COUNT                     | 14664   | 37 0001  |
| 005207 | CDMINE | IN*KH RESET INPUT                       | 14665   | 5011 00  |
| 005210 |        | 4*PIN+1 W/CDM                           | 14666   | 416413   |
| 005211 |        | 0*PIN+1 1WD                             | 14667   | 016413   |
| 005212 | CDMINF | OUTOV*KH SEND TERMINATING IDR           | 14670   | 5026 00  |
| 005213 |        | ENTAU*CHAN+10                           | 14671   | 10 6543  |
| 005214 |        | RJP*DELAY                               | 14672   | 76 0302  |
| 005215 |        | SKPIIN*KH INPUT ACT?                    | 14673   | 5021 00  |
| 005216 |        | SKP*40 YES-CONTINUE                     | 14674   | 5050 40  |
| 005217 |        | RJP*RCORDO RECORD ERROR-ACT WAS TERM, 1 | 14675   | 76 5555  |
| 005220 |        | ENTBKB*01 ADV COUNT                     | 14676   | 37 0001  |
| 005221 |        | ENTSR*10                                | 14677   | 5073 10  |
| 005222 | CDMING | ENTAL*ADR 61 OR 261+2KH                 | 14700   | 12 0000  |
| 005223 |        | ENTSR*00 INPUT CACW                     | 14701   | 5073 00  |
| 005224 |        | CMAL*CDMINA-1 RELOADED W/CDM WDS?       | 14702   | 02 4643  |
| 005225 |        | JPEQ*CDMFLG YES-TEST CDM PARAMETER      | 14703   | 61 4712  |
| 005226 |        | RJP*RCORDO RECORD ERROR-CDM WD WRNG, 2  | 14704   | 76 5555  |
| 005227 |        | ENTBKB*01 ADV COUNT                     | 14705   | 37 0001  |

4-302

| SEQNO  | LABEL  | STATEMENT  | ADDRESS | INSTRUCT |
|--------|--------|--|---------|----------|
| 005230 |        | CMAL*CDMINJ CACW NOT CHANGED?                    | 14706   | 02 4734  |
| 005231 |        | JPNOT*LOK+3 TRUE-ERROR                           | 14707   | 63 4712  |
| 005232 |        | RJP*RCORD0 RECORD ERROR-CDM WDS NOT STRD*3       | 14710   | 76 5555  |
| 005233 |        | STRAL*PLACE OR STRD INTO WRNG LOCS.              | 14711   | 44 6615  |
| 005234 | CDMFLG | ENTAL*TWLV18 1218 OR 1219 (CDM) MODE             | 14712   | 12 6472  |
| 005235 |        | JPALNG*CDMINI 1218-CONT                          | 14713   | 67 4724  |
| 005236 |        | ENTAU*ALERDS ANY ERRORS?                         | 14714   | 10 6470  |
| 005237 |        | JPAUZ*CDMINH+4 TO EXIT                           | 14715   | 60 4722  |
| 005240 | CDMINH | STRAL*FAULTI CDM PARAMETER ON C                  | 14716   | 44 6602  |
| 005241 |        | ENTAL*PLACE FALSE CDM WD LOC                     | 14717   | 12 6615  |
| 005242 |        | RJP*DISPOC                                       | 14720   | 76 5413  |
| 005243 |        | STOP*40 ERROR STOP IF 1219 MODE                  | 14721   | 5056 40  |
| 005244 |        | REMARK*AU CONTAINS ERROR BITS                    |         |          |
| 005245 |        | REMARK* 0 IF CDM DETECTED ON 1ST IDR             |         |          |
| 005246 |        | REMARK* 1 IF ACT WAS TERMINATED BY 2ND IDR       |         |          |
| 005247 |        | REMARK* 2 IF RELOAD WD WAS NOT CORRECT           |         |          |
| 005250 |        | REMARK* 3 IF RELOAD DID NOT CHANGE INPUT BACWS   |         |          |
| 005251 |        | REMARK*AL CONTAINS WRONG RELOAD WD IF NOT#0      |         |          |
| 005252 |        | REMARK*C CONTAINS FLAG, NEG IF 1218, POS IF 1219 |         |          |
| 005253 |        | IJP*CDMIN EXIT                                   | 14722   | 55 4625  |
| 005254 |        | RESERV*1   | 14723   | 000000   |
| 005255 | CDMINI | STRAL*FAULTI CDM PARAMETER ON C                  | 14724   | 44 6602  |
| 005256 |        | ENTAU*ALERDS CDM DETECTED?                       | 14725   | 10 6470  |
| 005257 |        | ENTALK*16 NO-TO EXIT                             | 14726   | 70 0016  |
| 005260 |        | CMAL*ALERDS YES-DISPLAY AND STOP                 | 14727   | 02 6470  |
| 005261 |        | JPEQ*CDMINH+4                                    | 14730   | 61 4722  |
| 005262 |        | ENTAL*PLACE                                      | 14731   | 12 6615  |
| 005263 |        | RJP*DISPOC                                       | 14732   | 76 5413  |
| 005264 |        | STOP*40 ERROR STOP IF 1218 MODE                  | 14733   | 5056 40  |
| 005265 | CDMINJ | 0*PIN+2  | 14734   | 016414   |
| 005266 | FUNPGA | 0*0 ENTRY  | 14735   | 00 0000  |



| SEQNO  | LABEL | STATEMENT                                | ADDRESS | INSTRUCT |
|--------|-------|--|---------|----------|
| 005267 |       | ENTAL*NTDSTD ABORT FUNCTION PRIORITY     | 14736   | 12 6626  |
| 005270 |       | JPALP*LOK+2 TEST IF STD 1218 BUFFERING   | 14737   | 65 4741  |
| 005271 |       | IJP*FUNPGA EXIT                          | 14740   | 55 4735  |
| 005272 |       | ENTALK*FUNPGA NOTIFY FLT                 | 14741   | 70 4735  |
| 005273 |       | STRADR*IFault ROUTINE                    | 14742   | 74 6603  |
| 005274 |       | CL*PLAC8 CLR 1ST TIME (KH) F6AG*#7S 2NDT | 14743   | 40 4243  |
| 005275 |       | CL*AUERDS CLR ERROR                      | 14744   | 40 6467  |
| 005276 |       | CL*ALERDS FLAG STORES                    | 14745   | 40 6470  |
| 005277 |       | ENTALK*HICHAN HICHAN TO                  | 14746   | 70 6573  |
| 005300 |       | STRADR*FUNPA CHACHA                      | 14747   | 74 4774  |
| 005301 |       | ENTALK*HEIP LOC OF EIM ENT ADR KH        | 14750   | 70 6576  |
| 005302 |       | STRADR*PRBBA TO PROG                     | 14751   | 74 5161  |
| 005303 |       | STRADR*PRBBC                             | 14752   | 74 5226  |
| 005304 |       | STRADR*PRBBD                             | 14753   | 74 5254  |
| 005305 |       | STRADR*PRAALL-2                          | 14754   | 74 5322  |
| 005306 |       | ENTALK*HEFMIP LOC OF EF M ENT ADR KH     | 14755   | 70 6577  |
| 005307 |       | STRADR*PRBBA+2                           | 14756   | 74 5163  |
| 005310 |       | STRADR*PRBBF                             | 14757   | 74 5303  |
| 005311 |       | STRADR*PRBBG                             | 14760   | 74 5066  |
| 005312 |       | ENTALK*HOMIP LOC OF ODM ENT ADR KH       | 14761   | 70 6600  |
| 005313 |       | STRADR*PRBBB+2                           | 14762   | 74 5205  |
| 005314 |       | STRADR*PRBBC+2                           | 14763   | 74 5230  |
| 005315 |       | STRADR*PRBBG+2                           | 14764   | 74 5070  |
| 005316 |       | ENTALK*HIMIP LOC OF ID M ENT ADR KH      | 14765   | 70 6601  |
| 005317 |       | STRADR*PRBBB                             | 14766   | 74 5203  |
| 005320 |       | STRADR*PRBBD+2                           | 14767   | 74 5256  |
| 005321 |       | STRADR*PRBBF+2                           | 14770   | 74 5305  |
| 005322 |       | ENTICR*02 B2#0 FOR EA CHAN INITIALLY     | 14771   | 5072 02  |
| 005323 |       | ENTBK*00                                 | 14772   | 36 0000  |
| 005324 |       | ENTAU*U12MSK 777700                      | 14773   | 10 6455  |
| 005325 | FUNPA | ENTAL*HICHAN CHAN TO                     | 14774   | 12 6573  |

4-304

| SEQNO  | LABEL | STATEMENT                                   | ADDRESS | INSTRUCT |
|--------|-------|---|---------|----------|
| 005326 |       | SLSU*PRAAA    PROG I/O INST                 | 14775   | 04 5165  |
| 005327 |       | STRAL*PRAAA    EXF                          | 14776   | 44 5165  |
| 005330 |       | STRAL*PRAAE    EXF                          | 14777   | 44 5232  |
| 005331 |       | STRAL*PRAAG    EXF                          | 15000   | 44 5260  |
| 005332 |       | STRAL*PRAAK    EXF                          | 15001   | 44 5307  |
| 005333 |       | STRAL*PRAAM    EXF                          | 15002   | 44 5072  |
| 005334 |       | SLSU*PRAAB                                  | 15003   | 04 5171  |
| 005335 |       | STRAL*PRAAB    OUT                          | 15004   | 44 5171  |
| 005336 |       | STRAL*PRAAD    OUT                          | 15005   | 44 5207  |
| 005337 |       | STRAL*PRAAE+3    OUT                        | 15006   | 44 5235  |
| 005340 |       | STRAL*PRAAG+3    OUT                        | 15007   | 44 5263  |
| 005341 |       | STRAL*PRAAL-3    OUT                        | 15010   | 44 5313  |
| 005342 |       | STRAL*PRAAN-3    OUT                        | 15011   | 44 5076  |
| 005343 |       | SLSU*PRAAB+3                                | 15012   | 04 5174  |
| 005344 |       | STRAL*PRAAB+3    EXFOV                      | 15013   | 44 5174  |
| 005345 |       | STRAL*PRAAF+3    EXFOV                      | 15014   | 44 5243  |
| 005346 |       | STRAL*PRAAH+3    EXFOV                      | 15015   | 44 5271  |
| 005347 |       | STRAL*PRAAK+3    EXFOV                      | 15016   | 44 5312  |
| 005350 |       | STRAL*PRAAM+3    EXFOV                      | 15017   | 44 5075  |
| 005351 |       | SLSU*PRADD                                  | 15020   | 04 5215  |
| 005352 |       | STRAL*PRADD    OUTOV                        | 15021   | 44 5215  |
| 005353 |       | STRAL*PRAAL+3    OUTOV                      | 15022   | 44 5321  |
| 005354 |       | STRAL*PRAAN+3    OUTOV                      | 15023   | 44 5104  |
| 005355 |       | SLSU*PRAAD+3                                | 15024   | 04 5212  |
| 005356 |       | STRAL*PRAAD+3    IN                         | 15025   | 44 5212  |
| 005357 |       | STRAL*PRAAF    IN                           | 15026   | 44 5240  |
| 005360 |       | STRAL*PRAAH    IN                           | 15027   | 44 5266  |
| 005361 |       | STRAL*PRAAL    IN                           | 15030   | 44 5316  |
| 005362 |       | STRAL*PRAAN    IN                           | 15031   | 44 5101  |
| 005363 |       | ENTALK*PRAAB    PREP PR2345                 | 15032   | 70 5171  |
| 005364 |       | STRADR*PRAAB-1    FOR OUTPUT LAST CONDITION | 15033   | 74 5170  |

| SEQNO  | LABEL  | STATEMENT                                 | ADDRESS | INSTRUCT |
|--------|--------|---|---------|----------|
| 005365 |        | ENTAL*PRAAD+2                             | 15034   | 12 5211  |
| 005366 |        | ADDALK*01                                 | 15035   | 71 0001  |
| 005367 |        | STRAL*PRAAD+1                             | 15036   | 44 5210  |
| 005370 |        | STRAL*PRAAF-2                             | 15037   | 44 5236  |
| 005371 |        | ENTAL*PRAAH-1                             | 15040   | 12 5265  |
| 005372 |        | ADDALK*01                                 | 15041   | 71 0001  |
| 005373 |        | STRAL*PRAAH-2                             | 15042   | 44 5264  |
| 005374 | LASTO  | RJP*PR2345 TEST FN PRIO/OUTPUT LAST       | 15043   | 76 5154  |
| 005375 |        | ENTALK*PRAAB+3 PREP PR 2345               | 15044   | 70 5174  |
| 005376 |        | STRADR*PRAAB-1 FOR INPUT LAST CONDITION   | 15045   | 74 5170  |
| 005377 |        | ENTAL*PRAAD+2                             | 15046   | 12 5211  |
| 005400 |        | STRAL*PRAAD+1                             | 15047   | 44 5210  |
| 005401 |        | STRAL*PRAAF-2                             | 15050   | 44 5236  |
| 005402 |        | ENTAL*PRBBB SWITCH PRIORITY W/INPUT LAST  | 15051   | 12 5203  |
| 005403 |        | ENTAU*PRBBB+2 *                           | 15052   | 10 5205  |
| 005404 |        | STRAL*PRBBB+2 *                           | 15053   | 44 5205  |
| 005405 |        | STRAU*PRBBB *                             | 15054   | 46 5203  |
| 005406 |        | ENTAU*PRBBF                               | 15055   | 10 5303  |
| 005407 |        | ENTAL*PRBBF+2                             | 15056   | 12 5305  |
| 005410 |        | STRAU*PRBBF+2                             | 15057   | 46 5305  |
| 005411 |        | STRAL*PRBBF                               | 15060   | 44 5303  |
| 005412 |        | ENTAL*PRAAH-1                             | 15061   | 12 5265  |
| 005413 |        | STRAL*PRAAH-2                             | 15062   | 44 5264  |
| 005414 | LASTIN | RJP*PR2345 TEST FN PRIO/INPUT LAST        | 15063   | 76 5154  |
| 005415 |        | SIL                                       | 15064   | 5034 00  |
| 005416 |        | SXL IGNORE EIR                            | 15065   | 5036 00  |
| 005417 | PRBBG  | ENTAL*HEFMIP EF MON ENT,HI PRIO W/IN LAST | 15066   | 12 6577  |
| 005420 |        | STRADR*PRAAC                              | 15067   | 74 5347  |
| 005421 |        | ENTAL*HOMIP OD MON ENT,LO PRIO W/IN LAST  | 15070   | 12 6600  |
| 005422 |        | STRADR*PRAAC+1                            | 15071   | 74 5350  |
| 005423 | PRAAM  | EXF*KH EXF FOR EFM                        | 15072   | 5013 00  |

4-306

| SEQNO  | LABEL | STATEMENT                             | ADDRESS | INSTRUCT |
|--------|-------|---------------------------------------|---------|----------|
| 005424 |       | 2*CKWD                                | 15073   | 216445   |
| 005425 |       | 2*CKWD                                | 15074   | 216445   |
| 005426 |       | EXFOV*KH EFM                          | 15075   | 5027 00  |
| 005427 |       | OUT*KH OUT FOR ODM AND IDR            | 15076   | 5012 00  |
| 005430 |       | 2*CKWD                                | 15077   | 216445   |
| 005431 |       | 2*CKWD                                | 15100   | 216445   |
| 005432 | PRAAN | IN*KH IN FOR INPUT LAS CONDITION      | 15101   | 5011 00  |
| 005433 |       | 0*PIN                                 | 15102   | 016412   |
| 005434 |       | 0*PIN                                 | 15103   | 016412   |
| 005435 |       | OUTOV*KH ODM                          | 15104   | 5026 00  |
| 005436 |       | RJP*SETPR PREP INT ENTS               | 15105   | 76 5340  |
| 005437 |       | RIL                                   | 15106   | 5030 00  |
| 005440 |       | SKP*00 RECORD ERROR-IF OD MON 1ST, 10 | 15107   | 5050 00  |
| 005441 |       | LSHAL*00                              | 15110   | 5046 00  |
| 005442 |       | LSHA*00                               | 15111   | 5047 00  |
| 005443 |       | ENTAL*PLACB 1ST TIME THRU?            | 15112   | 12 4243  |
| 005444 |       | JPALNZ*PEST NO-TEST FLAGS             | 15113   | 63 5145  |
| 005445 |       | ENTALK*7777 YES-SET FLG#777777        | 15114   | 70 7777  |
| 005446 |       | STRAL*PLACB                           | 15115   | 44 4243  |
| 005447 |       | ENTAL*ALERDS KH FLAGS                 | 15116   | 12 6470  |
| 005450 |       | STRAL*AUERDS TO AUERDS                | 15117   | 44 6467  |
| 005451 |       | CL*ALERDS CLR ERROR FLG STORE         | 15120   | 40 6470  |
| 005452 |       | ENTALK*LOCHAN LOCHAN TO               | 15121   | 70 6564  |
| 005453 |       | STRADR*FUNPA CHACHA                   | 15122   | 74 4774  |
| 005454 |       | ENTALK*LEIP LOW CHAN MON INT ENTS TO  | 15123   | 70 6567  |
| 005455 |       | STRADR*PRBBA PROG                     | 15124   | 74 5161  |
| 005456 |       | STRADR*PRBBC                          | 15125   | 74 5226  |
| 005457 |       | STRADR*PRBBD                          | 15126   | 74 5254  |
| 005460 |       | STRADR*PRAALL-2                       | 15127   | 74 5322  |
| 005461 |       | ENTALK*LEFMIP                         | 15130   | 70 6570  |
| 005462 |       | STRADR*PRBBA+2                        | 15131   | 74 5163  |

| SEQNO  | LABEL  | STATEMENT                                     | ADDRESS | INSTRUCT |
|--------|--------|---|---------|----------|
| 005463 |        | STRADR*PRBBF                                  | 15132   | 74 5303  |
| 005464 |        | STRADR*PRBBG                                  | 15133   | 74 5066  |
| 005465 |        | ENTALK*LOMIP                                  | 15134   | 70 6571  |
| 005466 |        | STRADR*PRBBB+2                                | 15135   | 74 5205  |
| 005467 |        | STRADR*PRBBC+2                                | 15136   | 74 5230  |
| 005470 |        | STRADR*PRBBG+2                                | 15137   | 74 5070  |
| 005471 |        | ENTALK*LIMIP                                  | 15140   | 70 6572  |
| 005472 |        | STRADR*PRBBB                                  | 15141   | 74 5203  |
| 005473 |        | STRADR*PRBBD+2                                | 15142   | 74 5256  |
| 005474 |        | STRADR*PRBBF+2                                | 15143   | 74 5305  |
| 005475 |        | JP*FUNPA-3 RETURN TO DO KL                    | 15144   | 34 4771  |
| 005476 | PEST   | ENTAU*AUERDS ANY ERRORS                       | 15145   | 10 6467  |
| 005477 |        | ENTAL*ALERDS KH OR KL?                        | 15146   | 12 6470  |
| 005500 |        | JPAUNZ*LOK+2 YES-STOP                         | 15147   | 62 5151  |
| 005501 |        | JPALZ*LOK+2 NO-TO EXIT                        | 15150   | 61 5152  |
| 005502 |        | STOP*40 ERROR STOP                            | 15151   | 5056 40  |
| 005503 |        | REMARK*AU CONTAINS BITS FOR KH ERRORS         |         |          |
| 005504 |        | REMARK*AL CONTAINS BITS FOR KL ERRORS         |         |          |
| 005505 |        | REMARK* 0,5 IF EF MON 1ST OUT, IN LAST (EIM)  |         |          |
| 005506 |        | REMARK* 1 IF OUT MON 1ST, OUT LAST (IDM)      |         |          |
| 005507 |        | REMARK* 6 IF IN MON 1ST, IN LAST (ODM)        |         |          |
| 005510 |        | REMARK* 2,7 IF OUT MON 1ST OUT, IN LAST (EIM) |         |          |
| 005511 |        | REMARK* 3,8 IF IN MON 1ST OUT, IN LAST (EIM)  |         |          |
| 005512 |        | REMARK* 4 IF EF MON 1ST, OUT LAST (IDM)       |         |          |
| 005513 |        | REMARK* 9 IF IN MON 1ST, IN LAST (EFM)        |         |          |
| 005514 |        | REMARK* 10 IF OUT MON 1ST, IN LAST (EFM)      |         |          |
| 005515 |        | IJP*FUNPGA EXIT                               | 15152   | 55 4735  |
| 005516 |        | RESERV*1                                      | 15153   | 000000   |
| 005517 | PR2345 | 0*0 ENTRY                                     | 15154   | 00 0000  |
| 005520 |        | REMARK*COPY SHOWS OUTPUT LAST PROG W/KH       |         |          |
| 005521 |        | RJP*TERMAL CLR ALL ACTS                       | 15155   | 76 5447  |

| SEQNO  | LABEL | STATEMENT                                  | ADDRESS | INSTRUCT |
|--------|-------|--|---------|----------|
| 005522 |       | RJP*HONINT DROP ALL MON INTS               | 15156   | 76 6353  |
| 005523 |       | RXL ALLOW EIR                              | 15157   | 5032 00  |
| 005524 |       | SIL LOCK OUT MON INTS                      | 15160   | 5034 00  |
| 005525 | PRBBA | ENTAL*HEIP EI MON ENT,HI PRIO              | 15161   | 12 6576  |
| 005526 |       | STRADR*PRAAC                               | 15162   | 74 5347  |
| 005527 |       | ENTAL*HEFMIP EF MON ENT,LO PRIO            | 15163   | 12 6577  |
| 005530 |       | STRADR*PRAAC+1 TO PREP ENTS ROUTINE        | 15164   | 74 5350  |
| 005531 | PRAAA | EXF*KH EXF FOR EFM AND EIM                 | 15165   | 5013 00  |
| 005532 |       | 2*CKWD                                     | 15166   | 216445   |
| 005533 |       | 2*CKWD                                     | 15167   | 216445   |
| 005534 |       | JP*LOK+1 +1 IF OUTPUT LAST                 | 15170   | 34 5171  |
| 005535 | PRAAB | OUT*KH JP*LOK+4 IF INPUT LAST              | 15171   | 5012 00  |
| 005536 |       | 0*CKWD OUT FOR OUTPUT LAST COND            | 15172   | 016445   |
| 005537 |       | 0*CKWD                                     | 15173   | 016445   |
| 005540 |       | EXFOV*KH EFM AND EIM                       | 15174   | 5027 00  |
| 005541 |       | RJP*SETPR PREP INT ENTS                    | 15175   | 76 5340  |
| 005542 |       | ENTAU*CHAN+17                              | 15176   | 10 6552  |
| 005543 |       | ENTAL*ALERDS DISPLAY FLAGS                 | 15177   | 12 6470  |
| 005544 |       | RIL  | 15200   | 5030 00  |
| 005545 |       | RJP*DELAY RECORD ERROR-IF EF MON 1ST,0+5   | 15201   | 76 0302  |
| 005546 |       | SIL  | 15202   | 5034 00  |
| 005547 | PRBBB | ENTAL*HIMIP IN MON ENT,HI PRIO IF OUT LAST | 15203   | 12 6601  |
| 005550 |       | STRADR*PRAAC LO PRIORITY IF INPUT LAST     | 15204   | 74 5347  |
| 005551 |       | ENTAL*HOMIP OUT MON ENT,LO PRIO IF OD LAST | 15205   | 12 6600  |
| 005552 |       | STRADR*PRAAC+1 HI PRIO IF INPUT LAST       | 15206   | 74 5350  |
| 005553 | PRAAD | OUT*KH OUT TO GIVE ODM, IDR AND            | 15207   | 5012 00  |
| 005554 |       | 2*CKWD+1 OUTPUT LAST COND                  | 15210   | 216446   |
| 005555 |       | 2*CKWD TACW#1 IF OUT LAST, #CACW, INL      | 15211   | 216445   |
| 005556 |       | IN*KH IN TO GIVE IDM                       | 15212   | 5011 00  |
| 005557 |       | 2*PIN                                      | 15213   | 216412   |
| 005560 |       | 2*PIN                                      | 15214   | 216412   |

| SEQNO  | LABEL | STATEMENT                              | ADDRESS | INSTRUCT |
|--------|-------|--|---------|----------|
| 005561 | PRADD | OUTOV*KH                               | 15215   | 5026 00  |
| 005562 |       | RJP*SETPR PROCESS AND PREP ENTS        | 15216   | 76 5340  |
| 005563 |       | ENTAU*AUERDS DISPLAY                   | 15217   | 10 6467  |
| 005564 |       | ENTAL*ALERDS ERR FLGS                  | 15220   | 12 6470  |
| 005565 |       | RIL                                    | 15221   | 5030 00  |
| 005566 |       | SKP*00 RECORD ERROR-IF OUT MON 1ST,1   | 15222   | 5050 00  |
| 005567 |       | LSHAL*00 RECORD ERROR-IF IN MON 1ST,6  | 15223   | 5046 00  |
| 005570 |       | LSHAU*00                               | 15224   | 5045 00  |
| 005571 |       | SIL                                    | 15225   | 5034 00  |
| 005572 | PRBBC | ENTAL*HEIP EIM ENT,HI PRIO             | 15226   | 12 6576  |
| 005573 |       | STRADR*PRAAC                           | 15227   | 74 5347  |
| 005574 |       | ENTAL*HOMIP OUT MON ENT,LO PRIO        | 15230   | 12 6600  |
| 005575 |       | STRADR*PRAAC+1                         | 15231   | 74 5350  |
| 005576 | PRAAE | EXF*KH EXF FOR EIM                     | 15232   | 5013 00  |
| 005577 |       | 0*CKWD                                 | 15233   | 016445   |
| 005600 |       | 0*CKWD                                 | 15234   | 016445   |
| 005601 |       | OUT*KH OUT FOR ODM, IDR AND            | 15235   | 5012 00  |
| 005602 |       | 2*CKWD+1 OUT LAST COND                 | 15236   | 216446   |
| 005603 |       | 2*CKWD                                 | 15237   | 216445   |
| 005604 | PRAAF | IN*KH IN FOR ODR OR                    | 15240   | 5011 00  |
| 005605 |       | 0*PIN INPUT LAST COND                  | 15241   | 016412   |
| 005606 |       | 0*PIN                                  | 15242   | 016412   |
| 005607 |       | EXFOV*KH                               | 15243   | 5027 00  |
| 005610 |       | RJP*SETPR SET ENT ADDRS                | 15244   | 76 5340  |
| 005611 |       | ENTAU*AUERDS DISPLAY                   | 15245   | 10 6467  |
| 005612 |       | ENTAL*ALERDS ERR FLGS                  | 15246   | 12 6470  |
| 005613 |       | RIL                                    | 15247   | 5030 00  |
| 005614 |       | SKP*00 RECORD ERROR-IF OUT MON 1ST,2+7 | 15250   | 5050 00  |
| 005615 |       | LSHAL*00 DELAY W/NOOPS                 | 15251   | 5046 00  |
| 005616 |       | LSHA*00                                | 15252   | 5047 00  |
| 005617 |       | SIL                                    | 15253   | 5034 00  |

4-310

| SEQNO  | LABEL | STATEMENT                                 | ADDRESS | INSTRUCT |
|--------|-------|---|---------|----------|
| 005620 | PRBBD | ENTAL*HEIP EIM ENT,HI PRIO                | 15254   | 12 6576  |
| 005621 |       | STRADR*PRAAC                              | 15255   | 74 5347  |
| 005622 |       | ENTAL*HIMIP ID MON ENT,LO PRIO            | 15256   | 12 6601  |
| 005623 |       | STRADR*PRAAC+1                            | 15257   | 74 5350  |
| 005624 | PRAAG | EXF*KH EXF FOR EIM                        | 15260   | 5013 00  |
| 005625 |       | 0*CKWD                                    | 15261   | 016445   |
| 005626 |       | 0*CKWD                                    | 15262   | 016445   |
| 005627 |       | OUT*KH OUT FOR IDR OR                     | 15263   | 5012 00  |
| 005630 |       | 0*CKWD+1 OUTPUT LAST COND                 | 15264   | 016446   |
| 005631 |       | 0*CKWD                                    | 15265   | 016445   |
| 005632 | PRAAH | IN*KH INPUT FOR IDM OR                    | 15266   | 5011 00  |
| 005633 |       | 2*PIN INPUT LAST COND                     | 15267   | 216412   |
| 005634 |       | 2*PIN                                     | 15270   | 216412   |
| 005635 |       | EXFOV*KH                                  | 15271   | 5027 00  |
| 005636 |       | RJP*SETPR SET ENT ADDRS                   | 15272   | 76 5340  |
| 005637 |       | ENTAU*AUERDS DISPLAY                      | 15273   | 10 6467  |
| 005640 |       | ENTAL*ALERDS ERR FLGS                     | 15274   | 12 6470  |
| 005641 |       | RIL                                       | 15275   | 5030 00  |
| 005642 |       | SKP*00 RECORD ERROR-IF ID MON 1ST,3+8     | 15276   | 5050 00  |
| 005643 |       | LSHAU*00                                  | 15277   | 5045 00  |
| 005644 |       | LSHA*00                                   | 15300   | 5047 00  |
| 005645 |       | ENTAL*HEIP                                | 15301   | 12 6576  |
| 005646 |       | STRADR*PRAALL                             | 15302   | 74 5324  |
| 005647 | PRBBF | ENTAL*HIMIP ID MON INT,HI PRIO W/OK LAST  | 15303   | 12 6601  |
| 005650 |       | STRADR*PRAAC                              | 15304   | 74 5347  |
| 005651 |       | ENTAL*HEFMIP EF MON INT,LO PRIO W/ID LAST | 15305   | 12 6577  |
| 005652 |       | STRADR*PRAAC+1                            | 15306   | 74 5350  |
| 005653 | PRAAK | EXF*KH EXF TO GIVE EFM                    | 15307   | 5013 00  |
| 005654 |       | 2*CKWD                                    | 15310   | 216445   |
| 005655 |       | 2*CKWD                                    | 15311   | 216445   |
| 005656 |       | EXFOV*KH EFM                              | 15312   | 5027 00  |



| SEQNO  | LABEL  | STATEMENT                               | ADDRESS | INSTRUCT |
|--------|--------|---|---------|----------|
| 005657 |        | OUT*KH OUT TO GIVE IDR                  | 15313   | 5012 00  |
| 005660 |        | 0*CKWD+1 +1 00 LAST,+0 ID LAST          | 15314   | 016446   |
| 005661 |        | 0*CKWD                                  | 15315   | 016445   |
| 005662 | PRAAL  | IN*KH IN FOR IDM AND                    | 15316   | 5011 00  |
| 005663 |        | 2*PIN INPUT LAST CONDITION              | 15317   | 216412   |
| 005664 |        | 2*PIN                                   | 15320   | 216412   |
| 005665 |        | OUTOV*KH IDM                            | 15321   | 5026 00  |
| 005666 |        | ENTAL*SPECIA NOOP                       | 15322   | 12 6631  |
| 005667 |        | ENTSR*10                                | 15323   | 5073 10  |
| 005670 | PRAALL | STRAL*ADR SIL AND IGNORE EIM            | 15324   | 44 0000  |
| 005671 |        | ENTSR*00                                | 15325   | 5073 00  |
| 005672 |        | RJP*SETPR PREP INT ENTS                 | 15326   | 76 5340  |
| 005673 |        | ENTAU*AUERDS DISPLAY                    | 15327   | 10 6467  |
| 005674 |        | ENTAL*ALERDS ERR FLGS                   | 15330   | 12 6470  |
| 005675 |        | RIL                                     | 15331   | 5030 00  |
| 005676 |        | SKP*00 RECORD ERROR-IF EF MON 1ST,4     | 15332   | 5050 00  |
| 005677 |        | SKP*00 RECORD ERROR-IF ID MON 1ST,9     | 15333   | 5050 00  |
| 005700 |        | LSHAL*00 DELAY W/NOOPS                  | 15334   | 5046 00  |
| 005701 |        | LSHAU*00                                | 15335   | 5045 00  |
| 005702 |        | IJP*PR2345 EXIT                         | 15336   | 55 5154  |
| 005703 |        | RESERV*1                                | 15337   | 000000   |
| 005704 | SETPR  | 0*0 ENTRY                               | 15340   | 00 0000  |
| 005705 |        | ENTAU*CHAN+5 DELAY TO PROCCSS DATA REQS | 15341   | 10 6540  |
| 005706 |        | RJP*DELAY                               | 15342   | 76 0302  |
| 005707 |        | RJP*STINK STORE STOPS IN ENT ADDRS      | 15343   | 76 6336  |
| 005710 |        | ENTAU*PROKA-1 IRJP OF HI PRIO INT       | 15344   | 10 5361  |
| 005711 |        | ENTAL*PRBAD-1 IRJP OF LO PRIO INT       | 15345   | 12 5353  |
| 005712 |        | ENTSR*10                                | 15346   | 5073 10  |
| 005713 | PRAAC  | STRAU*ADR ENT ADR OF HIGHER PRIO MON    | 15347   | 46 0000  |
| 005714 |        | STRAL*ADR ENT ADR OF LOWER PRIO MON     | 15350   | 44 0000  |
| 005715 |        | ENTSR*00                                | 15351   | 5073 00  |

4-312

| SEQNO  | LABEL  | STATEMENT                       | ADDRESS | INSTRUCT |
|--------|--------|---------------------------------|---------|----------|
| 005716 |        | IJP*SETPR EXIT                  | 15352   | 55 5340  |
| 005717 |        | IRJP*PRBADD FOR INT ENT         | 15353   | 30 7771  |
| 005720 | PRBAD  | 0*0 ENTRY                       | 15354   | 00 0000  |
| 005721 |        | RJP*RCOROO RECORD ERROR         | 15355   | 76 5555  |
| 005722 |        | ENTBKB*01 ADV COUNT             | 15356   | 37 0001  |
| 005723 |        | RJP*HONINT IGNORE OTHER INT     | 15357   | 76 6353  |
| 005724 |        | IJP*PRBAD EXIT                  | 15360   | 55 5354  |
| 005725 |        | IRJP*PROKAA FOR INT ENT         | 15361   | 30 7770  |
| 005726 | PROKA  | 0*0 ENTRY                       | 15362   | 00 0000  |
| 005727 |        | ENTBKB*01 ADV COUNT             | 15363   | 37 0001  |
| 005730 |        | RJP*HONINT IGNORE OTHER INT     | 15364   | 76 6353  |
| 005731 |        | IJP*PROKA EXIT                  | 15365   | 55 5362  |
| 005732 | RJPEI1 | IRJP*EIRH                       | 15366   | 30 7720  |
| 005733 | EIRT1  | 0*0 ENTRY                       | 15367   | 00 0000  |
| 005734 |        | ENTAU*EIRT1 MAIN PROG P DISPLAY | 15370   | 10 5367  |
| 005735 |        | ENTSR*10 REF BANK 0             | 15371   | 5073 10  |
| 005736 |        | ENTAL*02 DISPLAY CHAN           | 15372   | 12 0002  |
| 005737 |        | STOP*40 ERR STOP                | 15373   | 5056 40  |
| 005740 | AFAULT | IRJP*FAULTA                     | 15374   | 30 7712  |
| 005741 |        | 0*0 ENTRY                       | 15375   | 00 0000  |
| 005742 |        | ENTAL*AFault+1 DISPLAY FAULT    | 15376   | 12 5375  |
| 005743 |        | ADDALK*7776 ADDR IN AL          | 15377   | 71 7776  |
| 005744 |        | STRADR*LOK+1 AND ITS CONTENTS   | 15400   | 74 5401  |
| 005745 |        | ENTAU*ADR IN AU AND             | 15401   | 10 0000  |
| 005746 | CON    | SXL                             | 15402   | 5036 00  |
| 005747 |        | SRSM*NONJPD                     | 15403   | 5020 04  |
| 005750 |        | EXF*NONJPD FAULT FLAG LOC       | 15404   | 5013 04  |
| 005751 |        | 0*IFault IN C REGISTER          | 15405   | 016603   |
| 005752 |        | 0*IFault                        | 15406   | 016603   |
| 005753 |        | EXFSTP*NONJPD                   | 15407   | 5017 04  |
| 005754 |        | EXFOV*NONJPD                    | 15410   | 5027 04  |

| SEQNO  | LABEL  | STATEMENT                   | ADDRESS | INSTRUCT |
|--------|--------|-----------------------------|---------|----------|
| 005755 |        | SRSM*NONJPD                 | 15411   | 5020 04  |
| 005756 |        | STOP*40 ERR STOP            | 15412   | 5056 40  |
| 005757 | DISPOC | 0*0 ENTRY-DISPLAY ON C REG  | 15413   | 00 0000  |
| 005760 |        | SXL                         | 15414   | 5036 00  |
| 005761 |        | SRSM*NONJPD                 | 15415   | 5020 04  |
| 005762 |        | EXF*NONJPD                  | 15416   | 5013 04  |
| 005763 |        | 0*FAULTI                    | 15417   | 016602   |
| 005764 |        | 0*FAULTI                    | 15420   | 016602   |
| 005765 |        | EXFSTP*NONJPD               | 15421   | 5017 04  |
| 005766 |        | EXFOV*NONJPD                | 15422   | 5027 04  |
| 005767 |        | SRSM*NONJPD                 | 15423   | 5020 04  |
| 005770 |        | IJP*DISPOC EXIT             | 15424   | 55 5413  |
| 005771 | CMRJP  | 0*0 ENTRY                   | 15425   | 00 0000  |
| 005772 |        | STRICR*EE SAVE ICR          | 15426   | 72 5445  |
| 005773 |        | ENTICR*03 STORE             | 15427   | 5072 03  |
| 005774 |        | ENTAL*MNAREA RJPS           | 15430   | 12 6557  |
| 005775 |        | STRADR*ASTR IN              | 15431   | 74 5437  |
| 005776 |        | ENTAL*MNAREA+1 EI           | 15432   | 12 6560  |
| 005777 |        | STRADR*BSTR ENTRANCE        | 15433   | 74 5442  |
| 006000 |        | ENTBK*17 REGISTERS          | 15434   | 36 0017  |
| 006001 |        | ENTAL*MNADR                 | 15435   | 12 6561  |
| 006002 |        | ENTSR*10 BANK 0             | 15436   | 5073 10  |
| 006003 | ASTR   | STRALB*MNAREA               | 15437   | 45 6557  |
| 006004 |        | BJP*LOK-1                   | 15440   | 73 5437  |
| 006005 |        | ENTBK*17                    | 15441   | 36 0017  |
| 006006 | BSTR   | STRALB*MNAREA               | 15442   | 45 6557  |
| 006007 |        | BJP*LOK-1                   | 15443   | 73 5442  |
| 006010 |        | ENTSR*0 CURRENT BANK        | 15444   | 5073 00  |
| 006011 | EE     | ENTICR*02 REACT ORG ICR     | 15445   | 5072 02  |
| 006012 |        | IJP*CMRJP EXIT              | 15446   | 55 5425  |
| 006013 | TERMAL | 0*0 ENTRY-CL ID, OD, EF ACT | 15447   | 00 0000  |

4-314

| SEQNO  | LABEL  | STATEMENT                    | ADDRESS | INSTRUCT |
|--------|--------|------------------------------|---------|----------|
| 006014 |        | STRICR*DD SAVE ICR           | 15450   | 72 5471  |
| 006015 |        | STRB*BSAVE SAVE (B)I         | 15451   | 42 6444  |
| 006016 |        | ENTICR*03 ACT B3             | 15452   | 5072 03  |
| 006017 |        | ENTBK*17 SET B3#17           | 15453   | 36 0017  |
| 006020 |        | ENTALK*1517 PRESTR           | 15454   | 70 1517  |
| 006021 |        | STRADR*TERM F CODES          | 15455   | 74 5462  |
| 006022 |        | ENTALK*1617 AND              | 15456   | 70 1617  |
| 006023 |        | STRADR*TERM+1 MAX NO         | 15457   | 74 5463  |
| 006024 |        | ENTALK*1717 OF CHAN          | 15460   | 70 1717  |
| 006025 |        | STRADR*TERM+2 IN RTN         | 15461   | 74 5464  |
| 006026 | TERM   | INSTP*17 CL ID               | 15462   | 5015 17  |
| 006027 |        | OUTSTP*17 OD,                | 15463   | 5016 17  |
| 006030 |        | EXFSTP*17 AND EF             | 15464   | 5017 17  |
| 006031 |        | ISK*LOK-3 ON                 | 15465   | 57 5462  |
| 006032 |        | ISK*LOK-3 ALL                | 15466   | 57 5463  |
| 006033 |        | ISK*LOK-3 CHAN               | 15467   | 57 5464  |
| 006034 |        | BJP*TERM                     | 15470   | 73 5462  |
| 006035 | DD     | ENTICR*02 REACT ICR          | 15471   | 5072 02  |
| 006036 |        | ENTB*BSAVE RESTORE (B)I      | 15472   | 32 6444  |
| 006037 |        | IJP*TERMAL EXIT              | 15473   | 55 5447  |
| 006040 | STCWAR | 0*0 ENTRY TO SET ALL CW      | 15474   | 00 0000  |
| 006041 |        | STRICR*AA SAVE ICR           | 15475   | 72 5505  |
| 006042 |        | ENTICR*03 ACT B3             | 15476   | 5072 03  |
| 006043 |        | ENTBK*373                    | 15477   | 36 0373  |
| 006044 |        | ENTAL*CKWD ENT CKWD ADDR     | 15500   | 12 6445  |
| 006045 |        | ENTSR*10                     | 15501   | 5073 10  |
| 006046 |        | STRALB*04 STR IN ADDR 20-377 | 15502   | 45 0004  |
| 006047 |        | BJP*LOK-1                    | 15503   | 73 5502  |
| 006050 |        | ENTSR*0                      | 15504   | 5073 00  |
| 006051 | AA     | ENTICR*02 REACT ORG ICR      | 15505   | 5072 02  |
| 006052 |        | IJP*STCWAR EXIT              | 15506   | 55 5474  |

| SEQNO  | LABEL  | STATEMENT                     | ADDRESS | INSTRUCT |
|--------|--------|-------------------------------|---------|----------|
| 006053 | CLCWAR | 0*0 ENTRY - CL BUF CW AREA    | 15507   | 00 0000  |
| 006054 |        | STRICR*CLCICR                 | 15510   | 72 5520  |
| 006055 |        | STRB*BSAVE                    | 15511   | 42 6444  |
| 006056 |        | ENTICR*03 ACT B3              | 15512   | 5072 03  |
| 006057 |        | ENTBK*0673                    | 15513   | 36 0673  |
| 006060 |        | ENTSR*10                      | 15514   | 5073 10  |
| 006061 |        | CLB*04                        | 15515   | 41 0004  |
| 006062 |        | BJP*LOK-1 EI AND MON INT AREA | 15516   | 73 5515  |
| 006063 |        | ENTSR*0 DEACT SR              | 15517   | 5073 00  |
| 006064 | CLCICR | ENTICR*XX                     | 15520   | 5072 00  |
| 006065 |        | ENTB*BSAVE                    | 15521   | 32 6444  |
| 006066 |        | IJP*CLCWAR EXIT               | 15522   | 55 5507  |
| 006067 | STALAC | 0*0 ENTRY-SET ID, OD, EF ACT  | 15523   | 00 0000  |
| 006070 |        | STRICR*CC SAVE ICR            | 15524   | 72 5544  |
| 006071 |        | ENTICR*03 ACT B3              | 15525   | 5072 03  |
| 006072 |        | ENTBK*17 SET B3#17            | 15526   | 36 0017  |
| 006073 |        | ENTALK*0117 PRESTR            | 15527   | 70 0117  |
| 006074 |        | STRADR*STAL F CODES           | 15530   | 74 5535  |
| 006075 |        | ENTALK*0217 AND               | 15531   | 70 0217  |
| 006076 |        | STRADR*STAL+1 MAX NO          | 15532   | 74 5536  |
| 006077 |        | ENTALK*0317 OF CHAN           | 15533   | 70 0317  |
| 006100 |        | STRADR*STAL+2 IN RTN          | 15534   | 74 5537  |
| 006101 | STAL   | SIN*17 SET ID                 | 15535   | 5001 17  |
| 006102 |        | SOUT*17 OD,                   | 15536   | 5002 17  |
| 006103 |        | SEXF*17 AND EF                | 15537   | 5003 17  |
| 006104 |        | ISK*LOK-3 ON                  | 15540   | 57 5535  |
| 006105 |        | ISK*LOK-3 ALL                 | 15541   | 57 5536  |
| 006106 |        | ISK*LOK-3 CHAN                | 15542   | 57 5537  |
| 006107 |        | BJP*STAL                      | 15543   | 73 5535  |
| 006110 | CC     | ENTICR*02 REACT ORG ICR       | 15544   | 5072 02  |
| 006111 |        | IJP*STALAC EXIT               | 15545   | 55 5523  |

| SEQNO  | LABEL  | STATEMENT                           | ADDRESS | INSTRUCT |
|--------|--------|-------------------------------------|---------|----------|
| 006112 | RCORDI | 0 ERR RCD RTN ENTRY                 | 15546   | 000000   |
| 006113 |        | STRAL*ALSAVE                        | 15547   | 44 5573  |
| 006114 |        | ENTALB*CHAN                         | 15550   | 13 6533  |
| 006115 |        | SLSET*AUERDS                        | 15551   | 51 6467  |
| 006116 |        | STRAL*AUERDS                        | 15552   | 44 6467  |
| 006117 |        | ENTAL*ALSAVE RESTORE AL             | 15553   | 12 5573  |
| 006120 |        | IJP*RCORDI EXIT                     | 15554   | 55 5546  |
| 006121 | RCORDO | 0 ERR RCD RTN ENTRY                 | 15555   | 000000   |
| 006122 |        | STRAL*ALSAVE                        | 15556   | 44 5573  |
| 006123 |        | ENTALB*CHAN                         | 15557   | 13 6533  |
| 006124 |        | SLSET*ALERDS                        | 15560   | 51 6470  |
| 006125 |        | STRAL*ALERDS                        | 15561   | 44 6470  |
| 006126 |        | ENTAL*ALSAVE RESTORE AL             | 15562   | 12 5573  |
| 006127 |        | IJP*RCORDO EXIT                     | 15563   | 55 5555  |
| 006130 | RCORDF | 0 ERR RCD RTN ENTRY                 | 15564   | 000000   |
| 006131 |        | STRAL*ALSAVE                        | 15565   | 44 5573  |
| 006132 |        | ENTALB*CHAN                         | 15566   | 13 6533  |
| 006133 |        | SLSET*FAULTI SET BIT                | 15567   | 51 6602  |
| 006134 |        | STRAL*FAULTI SAVE ERR               | 15570   | 44 6602  |
| 006135 |        | ENTAL*ALSAVE RESTORE AL             | 15571   | 12 5573  |
| 006136 |        | IJP*RCORDF EXIT                     | 15572   | 55 5564  |
| 006137 | ALSAVE | 0*0 TEMP STORE AL ERROR RECORD RTNS | 15573   | 00 0000  |
| 006140 | CHSET  | 0 ENTRY - CHAN AND B SET RTN        | 15574   | 000000   |
| 006141 |        | ENTICR*02 ACT B2                    | 15575   | 5072 02  |
| 006142 |        | ENTAL*IOSIZE ENT I/O PARMTR FR MEM  | 15576   | 12 6471  |
| 006143 |        | CMAL*SXTEEN 16 I/O CHAN?            | 15577   | 02 6463  |
| 006144 |        | JPEQ*CHSET1 YES, JP                 | 15600   | 61 5610  |
| 006145 |        | CMAL*TWELVE NOT 16, 12 I/O CHAN?    | 15601   | 02 6464  |
| 006146 |        | JPEQ*CHSET2 YES, JP                 | 15602   | 61 5616  |
| 006147 |        | CMAL*EIGHT NOT 12, 8 I/O CHAN?      | 15603   | 02 6465  |
| 006150 |        | JPEQ*CHSET3 YES JP                  | 15604   | 61 5625  |

| SEQNO  | LABEL  | STATEMENT                              | ADDRESS | INSTRUCT |
|--------|--------|--|---------|----------|
| 006151 |        | CMAL*FOUR NOT 8, 4 I/O CHAN?           | 15605   | 02 6466  |
| 006152 |        | JPEQ*CHSET4 YES JP                     | 15606   | 61 5633  |
| 006153 |        | STOP ERR STOP - WRONG PARMTR ENT       | 15607   | 5056 40  |
| 006154 | CHSET1 | STRADR*REICR+1 STR B                   | 15610   | 74 5770  |
| 006155 |        | ENTSR*10 REF BANK 0                    | 15611   | 5073 10  |
| 006156 |        | STRAL*02 SET B2#17 IF 16 CHAN, SEL     | 15612   | 44 0002  |
| 006157 |        | ENTSR*0                                | 15613   | 5073 00  |
| 006160 |        | ENTAL*CHA816 16 CHAN TBL LBL AND JP TO | 15614   | 12 6460  |
| 006161 |        | JP*PRESTR PRESTR LBL IN MAIN RTN       | 15615   | 34 5641  |
| 006162 | CHSET2 | ENTALK*13 SET B2#13                    | 15616   | 70 0013  |
| 006163 |        | STRADR*REICR+1 STR B                   | 15617   | 74 5770  |
| 006164 |        | ENTSR*10                               | 15620   | 5073 10  |
| 006165 |        | STRAL*02 IF 12 CHAN,                   | 15621   | 44 0002  |
| 006166 |        | ENTSR*0                                | 15622   | 5073 00  |
| 006167 |        | ENTAL*CHA21 SEL 12 CHAN TBL LBL        | 15623   | 12 6461  |
| 006170 |        | JP*PRESTR JP TO STR IN MAIN RTN        | 15624   | 34 5641  |
| 006171 | CHSET3 | STRADR*REICR+1 STR B                   | 15625   | 74 5770  |
| 006172 |        | ENTSR*10                               | 15626   | 5073 10  |
| 006173 |        | STRAL*02                               | 15627   | 44 0002  |
| 006174 |        | ENTSR*0                                | 15630   | 5073 00  |
| 006175 |        | ENTAL*CHA816 SEL 16 CHAN TBL LBL AND   | 15631   | 12 6460  |
| 006176 |        | JP*PRESTR JP TO STR IN MAIN RTN        | 15632   | 34 5641  |
| 006177 | CHSET4 | ENTALK*03 SET B2#3                     | 15633   | 70 0003  |
| 006200 |        | STRADR*REICR+1 STR B                   | 15634   | 74 5770  |
| 006201 |        | ENTSR*10                               | 15635   | 5073 10  |
| 006202 |        | STRAL*02 IF 4 CHAN AND                 | 15636   | 44 0002  |
| 006203 |        | ENTSR*0                                | 15637   | 5073 00  |
| 006204 |        | ENTAL*CHA40 SEL 4 CHAN TBL LBL         | 15640   | 12 6462  |
| 006205 | PRESTR | STRADR*TBLI01 STR CHAN TBL IN          | 15641   | 74 0101  |
| 006206 |        | STRADR*TBLI02 MAIN RTN                 | 15642   | 74 0161  |
| 006207 |        | STRADR*TBLI03 DO                       | 15643   | 74 0314  |

4-318

| SEQNO  | LABEL | STATEMENT          | ADDRESS | INSTRUCT |
|--------|-------|--------------------|---------|----------|
| 006210 |       | STRADR*TBL10+1 DO  | 15644   | 74 0565  |
| 006211 |       | STRADR*TBLI06 DO   | 15645   | 74 0413  |
| 006212 |       | STRADR*CKTER4-4 DO | 15646   | 74 0424  |
| 006213 |       | STRADR*CKTER4 DO   | 15647   | 74 0430  |
| 006214 |       | STRADR*TBLI09 DO   | 15650   | 74 0521  |
| 006215 |       | STRADR*CKACT4-3 DO | 15651   | 74 0532  |
| 006216 |       | STRADR*CKACT4 DO   | 15652   | 74 0535  |
| 006217 |       | STRADR*I011A DO    | 15653   | 74 0621  |
| 006220 |       | STRADR*CONTI DO    | 15654   | 74 0660  |
| 006221 |       | STRADR*NEXT+1 DO   | 15655   | 74 0667  |
| 006222 |       | STRADR*CONTI+3 DO  | 15656   | 74 0663  |
| 006223 |       | STRADR*CONTO DO    | 15657   | 74 0730  |
| 006224 |       | STRADR*CONTO+3 DO  | 15660   | 74 0733  |
| 006225 |       | STRADR*NEXTA+1 DO  | 15661   | 74 0737  |
| 006226 |       | STRADR*CONTF DO    | 15662   | 74 1000  |
| 006227 |       | STRADR*CONTF+3 DO  | 15663   | 74 1003  |
| 006230 |       | STRADR*NEXTB+1 DO  | 15664   | 74 1007  |
| 006231 |       | STRADR*I012A DO    | 15665   | 74 1165  |
| 006232 |       | STRADR*CKADR DO    | 15666   | 74 1240  |
| 006233 |       | STRADR*CKADR+3 DO  | 15667   | 74 1243  |
| 006234 |       | STRADR*CKOUTD DO   | 15670   | 74 1247  |
| 006235 |       | STRADR*I013A       | 15671   | 74 1416  |
| 006236 |       | STRADR*CKADRA      | 15672   | 74 1456  |
| 006237 |       | STRADR*CKADRA+3    | 15673   | 74 1461  |
| 006240 |       | STRADR*CKOUU       | 15674   | 74 1465  |
| 006241 |       | STRADR*I015A+1     | 15675   | 74 2160  |
| 006242 |       | STRADR*I016D       | 15676   | 74 1702  |
| 006243 |       | STRADR*I016F+3     | 15677   | 74 1742  |
| 006244 |       | STRADR*I017A       | 15700   | 74 2241  |
| 006245 |       | STRADR*STRINA+4    | 15701   | 74 2403  |
| 006246 |       | LSHAL*00           | 15702   | 5046 00  |



| SEQNO  | LABEL  | STATEMENT                                | ADDRESS | INSTRUCT |
|--------|--------|--|---------|----------|
| 006247 |        | STRADR*I017D                             | 15703   | 74 2257  |
| 006250 |        | STRADR*STRINA                            | 15704   | 74 2377  |
| 006251 |        | STRADR*STRINT+1                          | 15705   | 74 2374  |
| 006252 |        | STRADR*I018C                             | 15706   | 74 2426  |
| 006253 |        | IJP*CHSET                                | 15707   | 55 5574  |
| 006254 | JMPRD  | 0*0 ENT - FIND LO EVN NON-JMPRD CHAN     | 15710   | 00 0000  |
| 006255 |        | ENTALK*0 PRESTR CHAN 0                   | 15711   | 70 0000  |
| 006256 |        | STRADR*TESTIT+1                          | 15712   | 74 5724  |
| 006257 |        | RJP*TESTIT CK CHAN 0                     | 15713   | 76 5723  |
| 006260 |        | ENTALK*02 PRESTR CHAN 2                  | 15714   | 70 0002  |
| 006261 |        | STRADR*TESTIT+1                          | 15715   | 74 5724  |
| 006262 |        | RJP*TESTIT CK CHAN 2                     | 15716   | 76 5723  |
| 006263 |        | ENTALK*04 PRESTR CHAN 4                  | 15717   | 70 0004  |
| 006264 |        | STRADR*TESTIT+1                          | 15720   | 74 5724  |
| 006265 |        | RJP*TESTIT CK CHAN 4                     | 15721   | 76 5723  |
| 006266 |        | STOP*40 JMPRD CHAN PARAMETER NOT ENTERED | 15722   | 5056 40  |
| 006267 | TESTIT | 0*0 ENT - CK FOR NON-JMPRD CHAN          | 15723   | 00 0000  |
| 006270 |        | ENTALK*XX CHAN TO AL                     | 15724   | 70 0000  |
| 006271 |        | CMAL*LOCHAN LO JMPRD CHAN?               | 15725   | 02 6564  |
| 006272 |        | JPEQ*LOK+3 YES, CK NEXT ONE              | 15726   | 61 5731  |
| 006273 |        | CMAL*HICHAN NO, HI JMPRD CHAN?           | 15727   | 02 6573  |
| 006274 |        | JPNOT*USEIT NO, NOT HI OR LO, USE IT     | 15730   | 63 5732  |
| 006275 |        | IJP*TESTIT YES, CK NEXT ONE              | 15731   | 55 5723  |
| 006276 | USEIT  | STRAL*NONJPD                             | 15732   | 44 6604  |
| 006277 |        | ENTAU*U12MSK 777700                      | 15733   | 10 6455  |
| 006300 |        | SLSU*DISPOC+3 STR CHAN                   | 15734   | 04 5416  |
| 006301 |        | STRAL*DISPOC+3 IN PROGS                  | 15735   | 44 5416  |
| 006302 |        | STRAL*CON+2                              | 15736   | 44 5404  |
| 006303 |        | SLSU*DISPOC+6                            | 15737   | 04 5421  |
| 006304 |        | STRAL*DISPOC+6                           | 15740   | 44 5421  |
| 006305 |        | STRAL*CON+5                              | 15741   | 44 5407  |

4-320

| SEQNO  | LABEL  | STATEMENT                      | ADDRESS | INSTRUCT |
|--------|--------|--------------------------------|---------|----------|
| 006306 |        | SLSU*DISPOC+7                  | 15742   | 04 5422  |
| 006307 |        | STRAL*DISPOC+7                 | 15743   | 44 5422  |
| 006310 |        | STRAL*CON+6                    | 15744   | 44 5410  |
| 006311 |        | SLSU*DISPOC+10                 | 15745   | 04 5423  |
| 006312 |        | STRAL*DISPOC+10                | 15746   | 44 5423  |
| 006313 |        | STRAL*CON+7                    | 15747   | 44 5411  |
| 006314 |        | STRAL*DISPOC+2                 | 15750   | 44 5415  |
| 006315 |        | STRAL*CON+1                    | 15751   | 44 5403  |
| 006316 |        | IJP*JMPRD EXIT                 | 15752   | 55 5710  |
| 006317 | CLBFAR | 0*0 ENTRY                      | 15753   | 00 0000  |
| 006320 |        | ENTICR*03 ACT B3               | 15754   | 5072 03  |
| 006321 |        | ENTBK*057 B3#57                | 15755   | 36 0057  |
| 006322 |        | ENTSR*10 ACT SR BANK 0         | 15756   | 5073 10  |
| 006323 |        | CLB*220 CL EF, OUT, AND IN BCW | 15757   | 41 0220  |
| 006324 |        | BJP*LOK-1 ADDR 220-257         | 15760   | 73 5757  |
| 006325 |        | ENTBK*057                      | 15761   | 36 0057  |
| 006326 |        | CLB*20 CL REST BCW AREA        | 15762   | 41 0020  |
| 006327 |        | BJP*LOK-1                      | 15763   | 73 5762  |
| 006330 |        | ENTSR*0 DEACT SR               | 15764   | 5073 00  |
| 006331 |        | ENTICR*02 REACT B2             | 15765   | 5072 02  |
| 006332 |        | IJP*CLBFAR EXIT                | 15766   | 55 5753  |
| 006333 | REICR  | 0*0 ENTRY - RESET ICR          | 15767   | 00 0000  |
| 006334 |        | ENTALK*XX ENT ICR VALUE        | 15770   | 70 0000  |
| 006335 |        | ENTSR*10 REF BANK 0            | 15771   | 5073 10  |
| 006336 |        | STRAL*02 STR IN B2             | 15772   | 44 0002  |
| 006337 |        | STRAL*01 STR IN B1             | 15773   | 44 0001  |
| 006340 |        | ENTSR*0 REF CURRENT BANK       | 15774   | 5073 00  |
| 006341 |        | ENTICR*02 ASSURE B2 ACT        | 15775   | 5072 02  |
| 006342 |        | IJP*REICR EXIT                 | 15776   | 55 5767  |
| 006343 | RJPEF  | IRJP*EFMH                      | 15777   | 30 7721  |
| 006344 | EFMON  | 0*0 EF MON INT ENTR            | 16000   | 00 0000  |

| SEQNO  | LABEL  | STATEMENT                           | ADDRESS | INSTRUCT |
|--------|--------|-------------------------------------|---------|----------|
| 006345 |        | ENTAU*EFMON DISPLAY P OF MAIN PROG  | 16001   | 10 6000  |
| 006346 |        | ENTSR*10 REF BANK 0                 | 16002   | 5073 10  |
| 006347 |        | ENTAL*02 DISPLAY CHAN               | 16003   | 12 0002  |
| 006350 |        | STOP*40 ERR STOP                    | 16004   | 5056 40  |
| 006351 | RJP0UT | IRJP*AUTMH                          | 16005   | 30 7722  |
| 006352 | AUTMON | 0*0 OUT MON INT ENTR                | 16006   | 00 0000  |
| 006353 |        | ENTAU*AUTMON DISPLAY P OF MAIN PROG | 16007   | 10 6006  |
| 006354 |        | ENTSR*10 REF BANK 0                 | 16010   | 5073 10  |
| 006355 |        | ENTAL*02 DISPLAY CHAN               | 16011   | 12 0002  |
| 006356 |        | STOP*40 ERR STOP                    | 16012   | 5056 40  |
| 006357 | RJPIN  | IRJP*INMOH                          | 16013   | 30 7723  |
| 006360 | INMON  | 0*0 IN MON INT ENTR                 | 16014   | 00 0000  |
| 006361 |        | ENTAU*INMON DISPLAY P OF MAIN PROG  | 16015   | 10 6014  |
| 006362 |        | ENTSR*10 REF BANK 0                 | 16016   | 5073 10  |
| 006363 |        | ENTAL*02 DISPLAY CHAN               | 16017   | 12 0002  |
| 006364 |        | STOP*40 ERR STOP                    | 16020   | 5056 40  |
| 006365 | SRCHCM | ENTSR*10 REF BANK 0                 | 16021   | 5073 10  |
| 006366 |        | ENTAL*00                            | 16022   | 12 0000  |
| 006367 |        | ENTSR*0 REF THIS STACK              | 16023   | 5073 00  |
| 006370 |        | ENTAU*LOK-2                         | 16024   | 10 6022  |
| 006371 |        | STRAU*FIND+3 SAVE ADR BEING CKD     | 16025   | 46 6121  |
| 006372 |        | CMAL*AFault ADDR 00 CHGD?           | 16026   | 02 5374  |
| 006373 |        | JPN0T*FIND YES                      | 16027   | 63 6116  |
| 006374 |        | ENTSR*10 REF STACK 0                | 16030   | 5073 10  |
| 006375 |        | ENTAL*01 NO, CONTINUE               | 16031   | 12 0001  |
| 006376 |        | ENTSR*0 REF THIS STACK              | 16032   | 5073 00  |
| 006377 |        | ENTAU*LOK-2                         | 16033   | 10 6031  |
| 006400 |        | STRAU*FIND+3 SAVE ADR BEING CKD     | 16034   | 46 6121  |
| 006401 |        | CMAL*AFault ADDR 01 CHGD?           | 16035   | 02 5374  |
| 006402 |        | JPN0T*FIND YES                      | 16036   | 63 6116  |
| 006403 |        | ENTICR*03 NO, CONTINUE              | 16037   | 5072 03  |

| SEQNO  | LABEL | STATEMENT                       | ADDRESS | INSTRUCT |
|--------|-------|---------------------------------|---------|----------|
| 006404 |       | ENTBK*077                       | 16040   | 36 0077  |
| 006405 |       | ENTSR*10 REF STACK 0            | 16041   | 5073 10  |
| 006406 |       | ENTALB*0600                     | 16042   | 13 0600  |
| 006407 |       | ENTSR*0 REF THIS STACK          | 16043   | 5073 00  |
| 006410 |       | ENTAU*LOK-2                     | 16044   | 10 6042  |
| 006411 |       | STRAU*FIND+3 SAVE ADR BEING CKD | 16045   | 46 6121  |
| 006412 |       | CMAL*CHA4 ADDR 600-677 CHGD?    | 16046   | 02 6527  |
| 006413 |       | JPNOT*FIND YES                  | 16047   | 63 6116  |
| 006414 |       | BJP*LOK-5                       | 16050   | 73 6043  |
| 006415 |       | ENTBK*077                       | 16051   | 36 0077  |
| 006416 |       | ENTSR*10                        | 16052   | 5073 10  |
| 006417 |       | ENTALB*0400                     | 16053   | 13 0400  |
| 006420 |       | ENTSR*0                         | 16054   | 5073 00  |
| 006421 |       | ENTAU*LOK-2                     | 16055   | 10 6053  |
| 006422 |       | STRAU*FIND+3 SAVE ADR BEING CKD | 16056   | 46 6121  |
| 006423 |       | CMAL*CHA4                       | 16057   | 02 6527  |
| 006424 |       | JPNOT*FIND                      | 16060   | 63 6116  |
| 006425 |       | BJP*LOK-7                       | 16061   | 73 6052  |
| 006426 |       | ENTBK*077                       | 16062   | 36 0077  |
| 006427 |       | ENTSR*10                        | 16063   | 5073 10  |
| 006430 |       | ENTALB*200                      | 16064   | 13 0200  |
| 006431 |       | ENTSR*0                         | 16065   | 5073 00  |
| 006432 |       | ENTAU*LOK-2                     | 16066   | 10 6064  |
| 006433 |       | STRAU*FIND+3 SAVE ADR BEING CKD | 16067   | 46 6121  |
| 006434 |       | CMAL*CKWD+1                     | 16070   | 02 6446  |
| 006435 |       | JPEQ*LOK+5                      | 16071   | 61 6076  |
| 006436 |       | CMAL*CKWD                       | 16072   | 02 6445  |
| 006437 |       | JPEQ*LOK+3                      | 16073   | 61 6076  |
| 006440 |       | CMAL*CHA4                       | 16074   | 02 6527  |
| 006441 |       | JPNOT*FIND                      | 16075   | 63 6116  |
| 006442 |       | BJP*LOK-13                      | 16076   | 73 6063  |

| SEQNO  | LABEL  | STATEMENT                       | ADDRESS | INSTRUCT |
|--------|--------|---------------------------------|---------|----------|
| 006443 |        | ENTBK*073                       | 16077   | 36 0073  |
| 006444 |        | ENTSR*10                        | 16100   | 5073 10  |
| 006445 |        | ENTALB*04                       | 16101   | 13 0004  |
| 006446 |        | ENTSR*0                         | 16102   | 5073 00  |
| 006447 |        | ENTAU*LOK-2                     | 16103   | 10 6101  |
| 006450 |        | STRAU*FIND+3 SAVE ADR BEING CKD | 16104   | 46 6121  |
| 006451 |        | CMAL*CKWD+1                     | 16105   | 02 6446  |
| 006452 |        | JPEQ*LOK+5                      | 16106   | 61 6113  |
| 006453 |        | CMAL*CKWD                       | 16107   | 02 6445  |
| 006454 |        | JPEQ*LOK+3                      | 16110   | 61 6113  |
| 006455 |        | CMAL*CHA4                       | 16111   | 02 6527  |
| 006456 |        | JPNOT*FIND                      | 16112   | 63 6116  |
| 006457 |        | BJP*LOK-13                      | 16113   | 73 6100  |
| 006460 | NOFIND | ENTAU*IFAUULT                   | 16114   | 10 6603  |
| 006461 |        | STOP*40                         | 16115   | 5056 40  |
| 006462 | FIND   | ENTAU*IFAUULT                   | 16116   | 10 6603  |
| 006463 |        | STRAL*FAULTI                    | 16117   | 44 6602  |
| 006464 |        | RJP*DISPOC CONTENTS OF FIND ADR | 16120   | 76 5413  |
| 006465 |        | ENTALB*XX FIND ADR              | 16121   | 13 0000  |
| 006466 |        | STOP*40                         | 16122   | 5056 40  |
| 006467 | IRJPEI | IRJP*EISIL                      | 16123   | 30 7704  |
| 006470 | EISILM | 0*0                             | 16124   | 00 0000  |
| 006471 |        | RJP*RCORDI                      | 16125   | 76 5546  |
| 006472 |        | IJPEI*EISILM                    | 16126   | 54 6124  |
| 006473 | IRJPEF | IRJP*EFSIL                      | 16127   | 30 7715  |
| 006474 | EFSILM | 0*0                             | 16130   | 00 0000  |
| 006475 |        | RJP*RCORDO                      | 16131   | 76 5555  |
| 006476 |        | IJPEI*EFSILM                    | 16132   | 54 6130  |
| 006477 | IRJPOT | IRJP*AUSIL                      | 16133   | 30 7716  |
| 006500 | AUSILM | 0*0                             | 16134   | 00 0000  |
| 006501 |        | RJP*RCORDF                      | 16135   | 76 5564  |

4-324

| SEQNO  | LABEL  | STATEMENT                                     | ADDRESS | INSTRUCT |
|--------|--------|---|---------|----------|
| 006502 |        | IJPEI*AUSILM                                  | 16136   | 54 6134  |
| 006503 | UPRAM  | 0*0 ENT                                       | 16137   | 00 0000  |
| 006504 |        | CL*TWLV18 1218-1219 MODE                      | 16140   | 40 6472  |
| 006505 |        | CL*HIFACE HI JMPRD CHAN INTRFACE              | 16141   | 40 6562  |
| 006506 |        | CL*LOFACE LO JMPRD CHAN INTRFACE              | 16142   | 40 6563  |
| 006507 |        | CL*NTDSTD                                     | 16143   | 40 6626  |
| 006510 |        | JPALP*LOK+2                                   | 16144   | 65 6146  |
| 006511 |        | STRAL*TWLV18 STR NEG VAL IF 1218 MODE         | 16145   | 44 6472  |
| 006512 |        | LSHAL*9D                                      | 16146   | 5046 11  |
| 006513 |        | JPALP*LOK+2 NTDS OR STD TYPE BUFFERING        | 16147   | 65 6151  |
| 006514 |        | STRAL*NTDSTD NEG IF STD                       | 16150   | 44 6626  |
| 006515 |        | LSHAL*9D POS IF NTDS                          | 16151   | 5046 11  |
| 006516 |        | SLCL*L6MSK CL ALL BUT IO SIZE                 | 16152   | 52 6456  |
| 006517 |        | STRAL*IOSIZE SAVE HIGHEST CHAN NO INDICATING  | 16153   | 44 6471  |
| 006520 |        | REMARK NUMBER OF CHANS                        |         |          |
| 006521 |        | RSHA*18D MOVE JMPRD CHAN INFO                 | 16154   | 5043 22  |
| 006522 |        | JPALP*LOK+2 POS IF SLOW INTFACE ON HIJP CHAN  | 16155   | 65 6157  |
| 006523 |        | STRAL*HIFACE NEG IF FAST INTFACE ON HIJP CHAN | 16156   | 44 6562  |
| 006524 |        | SLCL*L15MSK CL UPPER 3 BITS                   | 16157   | 52 6457  |
| 006525 |        | LSHAL*9D                                      | 16160   | 5046 11  |
| 006526 |        | JPALP*LOK+2                                   | 16161   | 65 6163  |
| 006527 |        | STRAL*LOFACE                                  | 16162   | 44 6563  |
| 006530 |        | SLCL*L15MSK                                   | 16163   | 52 6457  |
| 006531 |        | ENTAU*CHA4 CL AU                              | 16164   | 10 6527  |
| 006532 |        | LSHA*9D                                       | 16165   | 5047 11  |
| 006533 |        | STRAU*LOCHAN LO JMPRD CHAN NO                 | 16166   | 46 6564  |
| 006534 |        | LSHAL*9D                                      | 16167   | 5046 11  |
| 006535 |        | STRAL*HICHAN HI JMPRD CHAN NO                 | 16170   | 44 6573  |
| 006536 |        | RJP*MAKADR CONSTRUCT REQ JPRD-CHAN ADDRS      | 16171   | 76 6173  |
| 006537 |        | IJP*UPRAM EXIT                                | 16172   | 55 6137  |
| 006540 | MAKADR | 0*0 ENTRY                                     | 16173   | 00 0000  |

| SEQNO  | LABEL  | STATEMENT                                 | ADDRESS | INSTRUCT |
|--------|--------|---|---------|----------|
| 006541 |        | ENTAL*LOCHAN LOW JPRD CHAN#KL             | 16174   | 12 6564  |
| 006542 |        | ENTICR*02 SELECT B2                       | 16175   | 5072 02  |
| 006543 |        | ENTBK*00 B2#0 INITIALLY                   | 16176   | 36 0000  |
| 006544 |        | RJP*ADDRES PROCC LOCHAN                   | 16177   | 76 6204  |
| 006545 |        | ENTAL*HICHAN HIGH JPRD CHAN #KH           | 16200   | 12 6573  |
| 006546 |        | ENTBK*07 B2#7 FOR HI CHAN                 | 16201   | 36 0007  |
| 006547 |        | RJP*ADDRES PROCC HICHAN                   | 16202   | 76 6204  |
| 006550 |        | IJP*MAKADR EXIT                           | 16203   | 55 6173  |
| 006551 | ADDRES | 0*0 ENTRY                                 | 16204   | 00 0000  |
| 006552 |        | SLCL*KHMSK MASK # 000010, CHAN 10-17?     | 16205   | 52 6556  |
| 006553 |        | JPALNZ*HIGRUP YES-JUMP                    | 16206   | 63 6226  |
| 006554 |        | ENTALB*LOCHAN                             | 16207   | 13 6564  |
| 006555 | LOGRUP | LSHAL*01 NO - 2K                          | 16210   | 5046 01  |
| 006556 |        | ADDALK*40 +40#40+2K                       | 16211   | 71 0040  |
| 006557 |        | STRALB*LOBCP OUTPUT BUF C                 | 16212   | 45 6565  |
| 006560 |        | ADDALK*20 +20#60+2K                       | 16213   | 71 0020  |
| 006561 |        | STRALB*LIBCP INPUT BUF C                  | 16214   | 45 6566  |
| 006562 |        | ADDALK*20 +20#100+2K                      | 16215   | 71 0020  |
| 006563 |        | STRALB*LEIP EI ENT/WD                     | 16216   | 45 6567  |
| 006564 |        | ADDALK*20 +20#120+2K                      | 16217   | 71 0020  |
| 006565 |        | STRALB*LEFMIP EF MON I ENT                | 16220   | 45 6570  |
| 006566 |        | ADDALK*20 +20#140+2K                      | 16221   | 71 0020  |
| 006567 |        | STRALB*LOMIP OUTPUT MON I ENT             | 16222   | 45 6571  |
| 006570 |        | ADDALK*20 +20#160+2K                      | 16223   | 71 0020  |
| 006571 |        | STRALB*LIMIP INPUT MON I ENT              | 16224   | 45 6572  |
| 006572 |        | IJP*ADDRES EXIT                           | 16225   | 55 6204  |
| 006573 | HIGRUP | ENTALB*LOCHAN                             | 16226   | 13 6564  |
| 006574 |        | ADDALK*7767 K-10                          | 16227   | 71 7767  |
| 006575 |        | LSHAL*01 2(K-10)                          | 16230   | 5046 01  |
| 006576 |        | ADDALK*240 240 + 2K                       | 16231   | 71 0240  |
| 006577 |        | JP*LOGRUP+2 ADD 200 FOR UPPER GROUP CHANS | 16232   | 34 6212  |

4-326

| SEQNO  | LABEL  | STATEMENT                               | ADDRESS | INSTRUCT |
|--------|--------|---|---------|----------|
| 006600 | CHACHA | 0*0                                     | 16233   | 00 0000  |
| 006601 |        | ENTAU*U12MSK SLSU MASK # 777700         | 16234   | 10 6455  |
| 006602 |        | ENTAL*LOCHAN LOW JUMPERED CHAN TO PROG  | 16235   | 12 6564  |
| 006603 |        | SLSU*EIKL                               | 16236   | 04 2757  |
| 006604 |        | STRAL*EIKL EXF KH                       | 16237   | 44 2757  |
| 006605 |        | SLSU*EIKL+3                             | 16240   | 04 2762  |
| 006606 |        | STRAL*EIKL+3 EXFOV KH                   | 16241   | 44 2762  |
| 006607 |        | SLSU*AUTS                               | 16242   | 04 2622  |
| 006610 |        | STRAL*AUTS OUT KH                       | 16243   | 44 2622  |
| 006611 |        | STRAL*AUTS3 OUT KL                      | 16244   | 44 2722  |
| 006612 |        | STRAL*T00UTS+3 OUT KL                   | 16245   | 44 3077  |
| 006613 |        | STRAL*T00UT2 OUT KL                     | 16246   | 44 3133  |
| 006614 |        | STRAL*DERRC+3 OUT KL                    | 16247   | 44 4214  |
| 006615 |        | SLSU*TESTAK                             | 16250   | 04 2702  |
| 006616 |        | STRAL*TESTAK SKPOIN KH                  | 16251   | 44 2702  |
| 006617 |        | STRAL*SKINT+4 SKPOIN KL                 | 16252   | 44 3122  |
| 006620 |        | SLSU*VROUT2                             | 16253   | 04 3147  |
| 006621 |        | STRAL*VROUT2 OUTOV KL                   | 16254   | 44 3147  |
| 006622 |        | STRAL*DERRC+10 OUTOV KL                 | 16255   | 44 4221  |
| 006623 |        | SLSU*TOINS+3                            | 16256   | 04 3105  |
| 006624 |        | STRAL*TOINS+3 IN KL                     | 16257   | 44 3105  |
| 006625 |        | STRAL*TOINS2 IN KL                      | 16260   | 44 3141  |
| 006626 |        | STRAL*ACKAUT IN KL                      | 16261   | 44 2726  |
| 006627 |        | SLSU*SKINT                              | 16262   | 04 3116  |
| 006630 |        | STRAL*SKINT SKPIIN KL                   | 16263   | 44 3116  |
| 006631 |        | STRAL*VROUT2+3 SKPIIN KL                | 16264   | 44 3152  |
| 006632 |        | STRAL*QACK SKPIIN KL                    | 16265   | 44 3023  |
| 006633 |        | ENTAL*HICHAN HIGH JUMPERED CHAN TO PROG | 16266   | 12 6573  |
| 006634 |        | SLSU*EIKH                               | 16267   | 04 2651  |
| 006635 |        | STRAL*EIKH EXF KL                       | 16270   | 44 2651  |
| 006636 |        | STRAL*CDMINA-3 EXF KH                   | 16271   | 44 4641  |



| SEQNO  | LABEL | STATEMENT                | ADDRESS | INSTRUCT |
|--------|-------|--------------------------|---------|----------|
| 006637 |       | SLSU*EIKH+3              | 16272   | 04 2654  |
| 006640 |       | STRAL*EIKH+3 EXFOV KL    | 16273   | 44 2654  |
| 006641 |       | SLSU*AUTS1               | 16274   | 04 2613  |
| 006642 |       | STRAL*AUTS1 OUT KL       | 16275   | 44 2613  |
| 006643 |       | STRAL*AUTS2 OUT KH       | 16276   | 44 2731  |
| 006644 |       | STRAL*TOOUTS OUT KH      | 16277   | 44 3074  |
| 006645 |       | STRAL*TOOUT2+3 OUT KH    | 16300   | 44 3136  |
| 006646 |       | STRAL*CDMINA OUT KH      | 16301   | 44 4644  |
| 006647 |       | STRAL*DERRC OUT KH       | 16302   | 44 4211  |
| 006650 |       | STRAL*MWB OUT KH         | 16303   | 44 3766  |
| 006651 |       | SLSU*TESTAC              | 16304   | 04 3010  |
| 006652 |       | STRAL*TESTAC SKPOIN KL   | 16305   | 44 3010  |
| 006653 |       | STRAL*SKINT2+4 SKPOIN KH | 16306   | 44 3161  |
| 006654 |       | SLSU*VEROUT              | 16307   | 04 3110  |
| 006655 |       | STRAL*CDMINC OUTOV KH    | 16310   | 44 4653  |
| 006656 |       | STRAL*CDMINF OUTOV KH    | 16311   | 44 4670  |
| 006657 |       | STRAL*VEROUT OUTOV KH    | 16312   | 44 3110  |
| 006660 |       | STRAL*DERRC+7 OUTOV KH   | 16313   | 44 4220  |
| 006661 |       | STRAL*MWC+3 OUTOV KH     | 16314   | 44 3774  |
| 006662 |       | SLSU*TOINS               | 16315   | 04 3102  |
| 006663 |       | STRAL*TOINS IN KH        | 16316   | 44 3102  |
| 006664 |       | STRAL*TOINS2+3 IN KH     | 16317   | 44 3144  |
| 006665 |       | STRAL*ACKOUT IN KH       | 16320   | 44 2617  |
| 006666 |       | STRAL*CDMINB IN KH       | 16321   | 44 4650  |
| 006667 |       | STRAL*CDMINE IN KH       | 16322   | 44 4665  |
| 006670 |       | STRAL*MWC IN KH          | 16323   | 44 3771  |
| 006671 |       | SLSU*SKINT2              | 16324   | 04 3155  |
| 006672 |       | STRAL*SKINT2 SKPIIN KH   | 16325   | 44 3155  |
| 006673 |       | STRAL*VEROUT+3 SKPIIN KH | 16326   | 44 3113  |
| 006674 |       | STRAL*WACKQ SKPIIN KH    | 16327   | 44 2715  |
| 006675 |       | STRAL*CDMINF+3 SKPIIN KH | 16330   | 44 4673  |

4-328

| SEQNO  | LABEL  | STATEMENT                           | ADDRESS | INSTRUCT |
|--------|--------|-------------------------------------|---------|----------|
| 006676 |        | IJP*CHACHA EXIT                     | 16331   | 55 6233  |
| 006677 |        | RESERV*01                           | 16332   | 000000   |
| 006700 | IRJPAT | IRJP*AURIL                          | 16333   | 30 7717  |
| 006701 | AURILM | 0*0 ENTRY                           | 16334   | 00 0000  |
| 006702 |        | JP*I016A EXIT                       | 16335   | 34 1724  |
| 006703 | STINK  | 0*0 ENTRY                           | 16336   | 00 0000  |
| 006704 |        | STRICR*SS SAVE (ICR)                | 16337   | 72 6347  |
| 006705 |        | STRB*BSAVE SAVE (B)                 | 16340   | 42 6444  |
| 006706 |        | ENTICR*03 USE B3                    | 16341   | 5072 03  |
| 006707 |        | ENTBK*0673 B3#673                   | 16342   | 36 0673  |
| 006710 |        | ENTAL*STOPAA ENT STOP*40 CODE       | 16343   | 12 6614  |
| 006711 |        | ENTSR*10 REF BANK 0                 | 16344   | 5073 10  |
| 006712 |        | STRALB*04 STR STOP*41 IN ADR 04-677 | 16345   | 45 0004  |
| 006713 |        | BJP*LOK-1 DECR B3 AND JP            | 16346   | 73 6345  |
| 006714 | SS     | ENTICR*00 RESTORE (ICR)             | 16347   | 5072 00  |
| 006715 |        | ENTSR*0 REF THIS STACK              | 16350   | 5073 00  |
| 006716 |        | ENTB*BSAVE RESTORE (B)              | 16351   | 32 6444  |
| 006717 |        | IJP*STINK EXIT                      | 16352   | 55 6336  |
| 006720 | HONINT | 0*0 ENTRY - HONOR ALL INT           | 16353   | 00 0000  |
| 006721 |        | STRICR*END1 SAVE B                  | 16354   | 72 6371  |
| 006722 |        | STRB*BSAVE SAVE(B)                  | 16355   | 42 6444  |
| 006723 |        | ENTICR*03                           | 16356   | 5072 03  |
| 006724 |        | ENTBK*373 B3#373                    | 16357   | 36 0373  |
| 006725 |        | ENTAL*RIL                           | 16360   | 12 6613  |
| 006726 |        | ENTSR*10                            | 16361   | 5073 10  |
| 006727 |        | STRALB*04 STR IN ADDR 4-377 TO      | 16362   | 45 0004  |
| 006730 |        | BJP*LOK-1 HONOR ALL INT             | 16363   | 73 6362  |
| 006731 |        | ENTSR*0                             | 16364   | 5073 00  |
| 006732 |        | RIL                                 | 16365   | 5030 00  |
| 006733 |        | ENTAL*CHAN+11 1000                  | 16366   | 12 6544  |
| 006734 |        | LSHAL*01 DLY TO LET ALL             | 16367   | 5046 01  |

| SEQNO  | LABEL  | STATEMENT                  | ADDRESS | INSTRUCT |
|--------|--------|----------------------------|---------|----------|
| 006735 |        | JPALP*LOK-1 MON BE HONORED | 16370   | 65 6367  |
| 006736 | END1   | ENTICR*0 REACT ORIG ICR    | 16371   | 5072 00  |
| 006737 |        | ENTB*BSAVE RESTORE(B)      | 16372   | 32 6444  |
| 006740 |        | IJP*HONINT EXIT            | 16373   | 55 6353  |
| 006741 | SRSMAL | 0*0 ENTRY - SET RES        | 16374   | 00 0000  |
| 006742 |        | SRSM*17 UPPER ODD          | 16375   | 5020 17  |
| 006743 |        | SRSM*16 UPPER EVEN         | 16376   | 5020 16  |
| 006744 |        | SRSM*07 LOWER ODD          | 16377   | 5020 07  |
| 006745 |        | SRSM*06 LOWER EVEN         | 16400   | 5020 06  |
| 006746 |        | IJP*SRSMAL EXIT            | 16401   | 55 6374  |
| 006747 | CLPIN  | 0*0 ENTRY                  | 16402   | 00 0000  |
| 006750 |        | CL*PIN CL INPUT AREA       | 16403   | 40 6412  |
| 006751 |        | CL*PIN+1                   | 16404   | 40 6413  |
| 006752 |        | CL*PIN+2                   | 16405   | 40 6414  |
| 006753 |        | CL*PIN+3                   | 16406   | 40 6415  |
| 006754 |        | CL*PIN+4                   | 16407   | 40 6416  |
| 006755 |        | CL*PIN+5                   | 16410   | 40 6417  |
| 006756 |        | IJP*CLPIN EXIT             | 16411   | 55 6402  |
| 006757 | PIN    | RESERV*6 INPUT STR         | 16412   | 000000   |
| 006760 | STRMEM | 0*0 ENTRY                  | 16420   | 00 0000  |
| 006761 |        | STRICR*ENDA SAVE ICR       | 16421   | 72 6435  |
| 006762 |        | STRB*BSAVE SAVE B          | 16422   | 42 6444  |
| 006763 |        | ENTICR*03 USE B3           | 16423   | 5072 03  |
| 006764 |        | ENTBK*677 B3#677           | 16424   | 36 0677  |
| 006765 |        | ENTSR*10 REF STACK 0       | 16425   | 5073 10  |
| 006766 |        | STRBB*0 STR 0-677 IN 0-677 | 16426   | 43 0000  |
| 006767 |        | BJP*LOK-1                  | 16427   | 73 6426  |
| 006770 |        | ENTSR*0 REF THIS STACK     | 16430   | 5073 00  |
| 006771 |        | ENTAL*FAULT RESTORE ADDR 0 | 16431   | 12 5374  |
| 006772 |        | ENTSR*10 REF STACK 0       | 16432   | 5073 10  |
| 006773 |        | STRAL*0                    | 16433   | 44 0000  |

4-330

| SEQNO  | LABEL  | STATEMENT                       | ADDRESS | INSTRUCT |
|--------|--------|---------------------------------|---------|----------|
| 006774 |        | ENTSR*0 REF THIS STACK          | 16434   | 5073 00  |
| 006775 | ENDA   | ENTICR*XX RESTORE ICR           | 16435   | 5072 00  |
| 006776 |        | ENTB*BSAVE RESTORE B            | 16436   | 32 6444  |
| 006777 |        | IJP*STRMEM EXIT                 | 16437   | 55 6420  |
| 007000 | IRJPF  | IRJP*IRJPFL                     | 16440   | 30 7714  |
| 007001 | IRJPFM | 0*0 ENT                         | 16441   | 00 0000  |
| 007002 |        | RJP*RCORDO NOTE ERR             | 16442   | 76 5555  |
| 007003 |        | IJPEI*IRJPFM EXIT               | 16443   | 54 6441  |
| 007004 | BSAVE  | 0*0 SAVE CONTENTS OF B          | 16444   | 00 0000  |
| 007005 | CKWD   | 0*CKWD BUF CONTR WDS            | 16445   | 016445   |
| 007006 |        | 0*CKWD+1                        | 16446   | 016446   |
| 007007 |        | 0*CKWD+2                        | 16447   | 016447   |
| 007010 |        | 0*CKWD+3                        | 16450   | 016450   |
| 007011 | CKWDA  | 40*CKWDA BUF CONTR WD           | 16451   | 40 6451  |
| 007012 |        | 40*CKWDA+1                      | 16452   | 40 6452  |
| 007013 |        | 40*CKWDA+2                      | 16453   | 40 6453  |
| 007014 | CKWDB  | 20*CKWDB                        | 16454   | 20 6454  |
| 007015 | U12MSK | 777700 UPPER 12 BIT MASK        | 16455   | 777700   |
| 007016 | L6MSK  | 000077 LOWER 6 BIT MASK         | 16456   | 000077   |
| 007017 | L15MSK | 077777 LO 15 BIT MASK           | 16457   | 077777   |
| 007020 | CHA816 | 0*CHA168 16 OR 8 CHAN TBL LBL   | 16460   | 016473   |
| 007021 | CHA21  | 0*CHA12 12 CHAN TBL LBL         | 16461   | 016513   |
| 007022 | CHA40  | 0*CHA4 4 CHAN TBL LBL           | 16462   | 016527   |
| 007023 | SXTEEN | 17 HI CHAN NO FOR 16 I/O CHAN   | 16463   | 000017   |
| 007024 | TWELVE | 16 DO 12 DO                     | 16464   | 000016   |
| 007025 | EIGHT  | 07 DO 8 DO                      | 16465   | 000007   |
| 007026 | FOUR   | 06 DO 4 DO                      | 16466   | 000006   |
| 007027 | AUERDS | 0 ERR STR                       | 16467   | 000000   |
| 007030 | ALERDS | 0 DO                            | 16470   | 000000   |
| 007031 | IOSIZE | 0 PARAMETER STR                 | 16471   | 000000   |
| 007032 | TWLV18 | 0 NEG#1218 MODE - POS#1219 MODE | 16472   | 000000   |

| SEQNO  | LABEL  | STATEMENT           | ADDRESS | INSTRUCT |
|--------|--------|---------------------|---------|----------|
| 007033 | CHA168 | 00 8 OR 16 CHAN TBL | 16473   | 000000   |
| 007034 |        | 01                  | 16474   | 000001   |
| 007035 |        | 02                  | 16475   | 000002   |
| 007036 |        | 03                  | 16476   | 000003   |
| 007037 |        | 04                  | 16477   | 000004   |
| 007040 |        | 05                  | 16500   | 000005   |
| 007041 |        | 06                  | 16501   | 000006   |
| 007042 |        | 07                  | 16502   | 000007   |
| 007043 |        | 10                  | 16503   | 000010   |
| 007044 |        | 11                  | 16504   | 000011   |
| 007045 |        | 12                  | 16505   | 000012   |
| 007046 |        | 13                  | 16506   | 000013   |
| 007047 |        | 14                  | 16507   | 000014   |
| 007050 |        | 15                  | 16510   | 000015   |
| 007051 |        | 16                  | 16511   | 000016   |
| 007052 |        | 17                  | 16512   | 000017   |
| 007053 | CHA12  | 00 12 CHAN TBL      | 16513   | 000000   |
| 007054 |        | 01                  | 16514   | 000001   |
| 007055 |        | 02                  | 16515   | 000002   |
| 007056 |        | 03                  | 16516   | 000003   |
| 007057 |        | 04                  | 16517   | 000004   |
| 007060 |        | 05                  | 16520   | 000005   |
| 007061 |        | 06                  | 16521   | 000006   |
| 007062 |        | 07                  | 16522   | 000007   |
| 007063 |        | 10                  | 16523   | 000010   |
| 007064 |        | 12                  | 16524   | 000012   |
| 007065 |        | 14                  | 16525   | 000014   |
| 007066 |        | 16                  | 16526   | 000016   |
| 007067 | CHA4   | 00 4CHAN TBL        | 16527   | 000000   |
| 007070 |        | 02                  | 16530   | 000002   |
| 007071 |        | 04                  | 16531   | 000004   |

4-332

| SEQNO  | LABEL  | STATEMENT                            | ADDRESS | INSTRUCT |
|--------|--------|--------------------------------------|---------|----------|
| 007072 |        | 06                                   | 16532   | 000006   |
| 007073 | CHAN   | 01 CHAN ERR TBL                      | 16533   | 000001   |
| 007074 |        | 02                                   | 16534   | 000002   |
| 007075 |        | 04                                   | 16535   | 000004   |
| 007076 |        | 010                                  | 16536   | 000010   |
| 007077 |        | 020                                  | 16537   | 000020   |
| 007100 |        | 040                                  | 16540   | 000040   |
| 007101 |        | 0100                                 | 16541   | 000100   |
| 007102 |        | 0200                                 | 16542   | 000200   |
| 007103 |        | 0400                                 | 16543   | 000400   |
| 007104 |        | 01000                                | 16544   | 001000   |
| 007105 |        | 02000                                | 16545   | 002000   |
| 007106 |        | 04000                                | 16546   | 004000   |
| 007107 |        | 010000                               | 16547   | 010000   |
| 007110 |        | 020000                               | 16550   | 020000   |
| 007111 |        | 040000                               | 16551   | 040000   |
| 007112 |        | 100000                               | 16552   | 100000   |
| 007113 |        | 200000*                              | 16553   | 200000   |
| 007114 |        | 400000*                              | 16554   | 400000   |
| 007115 | CMADR  | 0 STR OF CONTR MEM ADDR              | 16555   | 000000   |
| 007116 | KHMSK  | 000010 CK MSK FOR HI CHAN GP         | 16556   | 000010   |
| 007117 | MNAREA | 0 INT                                | 16557   | 000000   |
| 007120 |        | 0 REG STR                            | 16560   | 000000   |
| 007121 | MNADR  | 0*0                                  | 16561   | 00 0000  |
| 007122 | HIFACE | 0 NEG#HI JMPRD CHAN FAST INT FACE    | 16562   | 000000   |
| 007123 | LOFACE | 0 NEG#LO JMPRD CHAN FAST INT FACE    | 16563   | 000000   |
| 007124 | LOCHAN | 0 LO JMPRD CHAN NO                   | 16564   | 000000   |
| 007125 | LEFP   | REMARK LOW CHAN EF (L20-37,H220-237) |         |          |
| 007126 | LOBCP  | 0*0 OBC (L40-57,                     | 16565   | 00 0000  |
| 007127 | LIBCP  | 0*0 IBC (L60-77,                     | 16566   | 00 0000  |
| 007130 | LEIP   | 0*0 EI (L100-117,                    | 16567   | 00 0000  |

| SEQNO  | LABEL   | STATEMENT                         | ADDRESS | INSTRUCT |
|--------|---------|-----------------------------------|---------|----------|
| 007131 | LEFMIP  | 0*0 EFMI(L120-137,                | 16570   | 00 0000  |
| 007132 | LOMIP   | 0*0 OMI (L140-157,                | 16571   | 00 0000  |
| 007133 | LIMIP   | 0*0 IMI (L160-177,                | 16572   | 00 0000  |
| 007134 | HICHAN  | 0 HI JMPRD CHAN NO                | 16573   | 000000   |
| 007135 | HEFP    | REMARK IH CHAN EF                 |         |          |
| 007136 | H0BCP   | 0*0 OBC                           | 16574   | 00 0000  |
| 007137 | HIBCP   | 0*0 IBC                           | 16575   | 00 0000  |
| 007140 | HEIP    | 0*0 EI                            | 16576   | 00 0000  |
| 007141 | HEFMIP  | 0*0 EFMI                          | 16577   | 00 0000  |
| 007142 | H0MIP   | 0*0 OMI                           | 16600   | 00 0000  |
| 007143 | HIMIP   | 0*0 IMI                           | 16601   | 00 0000  |
| 007144 | FAULTI  | 0*0                               | 16602   | 00 0000  |
| 007145 | IFAUULT | 0 FAULT BUF STR                   | 16603   | 000000   |
| 007146 | NONJPD  | 0 NON-JPRD CHAN NO STR            | 16604   | 000000   |
| 007147 | CDM19B  | 0*0 RARMTR STORE-NEG IF 1218 MODE | 16605   | 00 0000  |
| 007150 | CCMADR  | 0                                 | 16606   | 000000   |
| 007151 | STOPA   | STOP*41                           | 16607   | 5056 41  |
| 007152 | STOPB   | STOP*43                           | 16610   | 5056 43  |
| 007153 | STOPC   | STOP*45                           | 16611   | 5056 45  |
| 007154 | L12MSK  | 007777                            | 16612   | 007777   |
| 007155 | RIL     | RIL                               | 16613   | 5030 00  |
| 007156 | STOPAA  | STOP*40 CONST                     | 16614   | 5056 40  |
| 007157 | PLACE   | 0*0 TEMP STORAGE                  | 16615   | 00 0000  |
| 007160 | L9MSK   | 000777                            | 16616   | 000777   |
| 007161 | CKWDZ   | 0*CKWD FOR PRESTORING             | 16617   | 016445   |
| 007162 | PLAC2   | 0*0 TEMP STORAGE                  | 16620   | 00 0000  |
| 007163 | PLAC3   | 0*0 TEMP STORE                    | 16621   | 00 0000  |
| 007164 | PLAC4   | 0*0 TEMPORARY STR                 | 16622   | 00 0000  |
| 007165 | PIN3    | 0*PIN+3 FOR COMPARE               | 16623   | 016415   |
| 007166 | AUPRAM  | 0*0                               | 16624   | 00 0000  |
| 007167 | ALPRAM  | 0*0                               | 16625   | 00 0000  |

4-334

| SEQNO  | LABEL  | STATEMENT   | ADDRESS | INSTRUCT |
|--------|--------|---|---------|----------|
| 007170 | NTDSTD | 0*0 POS IF NTDS/1219,NEG IF STD 1218              | 16626   | 00 0000  |
| 007171 | STDEST | 160400* CONST, BITS 8, 13, 14 AND 15              | 16627   | 160400   |
| 007172 |        | RESERV*1  | 16630   | 000000   |
| 007173 | SPECIA | SKP*00  | 16631   | 5050 00  |
| 007174 |        | RJP*SETSPL PREP SPECIAL TEST                      | 16632   | 76 7242  |
| 007175 |        | REMARK  |         |          |
| 007176 |        | REMARK  |         |          |
| 007177 |        | REMARK  |         |          |
| 007200 |        | REMARK*INCRTC-INTERCOMPUTER/RTC TEST ASSUMES IOTA |         |          |
| 007201 |        | REMARK* HAS BEEN COMPLETED W/PROPER PARMTERS      |         |          |
| 007202 |        | REMARK  |         |          |
| 007203 |        | REMARK*SET I/C-NORMAL SW TO I/C ON KH AND KL      |         |          |
| 007204 |        | REMARK*REMOVE THE RTC DISC SW                     |         |          |
| 007205 |        | REMARK  |         |          |
| 007206 |        | REMARK  |         |          |
| 007207 |        | REMARK  |         |          |
| 007210 |        | STOP*40   | 16633   | 5056 40  |
| 007211 | INCRTC | CL*PLAC8 CL ERROR DATA STORE                      | 16634   | 40 4243  |
| 007212 |        | ENTALK*INCRTC NOTIFY FLT                          | 16635   | 70 6634  |
| 007213 |        | STRADR*IFault ROUTINE                             | 16636   | 74 6603  |
| 007214 | INCRTR | ENTICR*02 SELECT B2 FOR ERROR FLAGS               | 16637   | 5072 02  |
| 007215 |        | ENTBK*00 B2#0 INITIALLY                           | 16640   | 36 0000  |
| 007216 |        | CL*ALERDS   | 16641   | 40 6470  |
| 007217 |        | ENTALK*HICHAN KH TO                               | 16642   | 70 6573  |
| 007220 |        | STRADR*INCOMP INTERCOMPUTER PORTION               | 16643   | 74 7321  |
| 007221 |        | STRADR*LOK+1                                      | 16644   | 74 6645  |
| 007222 |        | ENTAL*HICHAN HICHAN TO SP ISOL RTN                | 16645   | 12 6573  |
| 007223 |        | ENTAU*U12MSK MASK#777700                          | 16646   | 10 6455  |
| 007224 |        | SLSU*RSMFAA                                       | 16647   | 04 7164  |
| 007225 |        | STRAL*RSMFAA OUT KS                               | 16650   | 44 7164  |

4-335



| SEQNO  | LABEL | STATEMENT                                  | ADDRESS | INSTRUCT |
|--------|-------|--|---------|----------|
| 007226 |       | STRAL*SPRIA OUT KH                         | 16651   | 44 7572  |
| 007227 |       | ENTSR*10 BANK 0                            | 16652   | 5073 10  |
| 007230 |       | CL*15 CLR RTCM INC ADR TO AVOID OVERFLO    | 16653   | 40 0015  |
| 007231 |       | ENTSR*00 BANK 1                            | 16654   | 5073 00  |
| 007232 |       | RJP*STINK STORE STOPS IN INT ENTS          | 16655   | 76 6336  |
| 007233 |       | RIL RIL                                    | 16656   | 5030 00  |
| 007234 |       | ENTALK*3777 DELAY 1024 + US IN PROG        | 16657   | 70 3777  |
| 007235 |       | ADDALK*7776 TO RECEIVE ANY FALSE SP INTS   | 16660   | 71 7776  |
| 007236 |       | JPALNZ*LOK-1                               | 16661   | 63 6660  |
| 007237 |       | SIL SIL                                    | 16662   | 5034 00  |
| 007240 |       | ENTAU*BITDAT+1 AU#777777                   | 16663   | 10 4235  |
| 007241 |       | ENTAL*RTCOVF-1 RTC OVERFLOW IJP            | 16664   | 12 7203  |
| 007242 |       | ENTSR*10                                   | 16665   | 5073 10  |
| 007243 |       | STRAU*15 777777 TO RTC INC                 | 16666   | 46 0015  |
| 007244 |       | STRAL*13 RTCOVF ENT ADR                    | 16667   | 44 0013  |
| 007245 |       | ENTSR*00                                   | 16670   | 5073 00  |
| 007246 |       | RIL RIL                                    | 16671   | 5030 00  |
| 007247 |       | ENTALK*3777 DELAY 1024+US                  | 16672   | 70 3777  |
| 007250 |       | ADDALK*7776                                | 16673   | 71 7776  |
| 007251 |       | JPALNZ*LOK-1                               | 16674   | 63 6673  |
| 007252 |       | ENTALK*3000 INSURE ENOUGH TIME             | 16675   | 70 3000  |
| 007253 |       | ADDALK*7776                                | 16676   | 71 7776  |
| 007254 |       | JPALNZ*LOK-1                               | 16677   | 63 6676  |
| 007255 |       | RJP*RCORD0 RECORD ERROR-RTC OVF NOT RCVD*0 | 16700   | 76 5555  |
| 007256 | RTCA  | ENTBKB*01 ADV COUNT                        | 16701   | 37 0001  |
| 007257 |       | SIL  | 16702   | 5034 00  |
| 007260 |       | ENTSR*10                                   | 16703   | 5073 10  |
| 007261 |       | ENTAL*15 CONTENTS OF RTC INC ADR IN AL     | 16704   | 12 0015  |
| 007262 |       | ENTAU*14 CONTENTS OF RTC COMP ADR IN AU    | 16705   | 10 0014  |
| 007263 |       | ENTSR*00                                   | 16706   | 5073 00  |
| 007264 |       | CMAL*CHA4 WAS RTC INC TO 000000?           | 16707   | 02 6527  |

4-336

| SEQNO  | LABEL | STATEMENT                                   | ADDRESS | INSTRUCT |
|--------|-------|---|---------|----------|
| 007265 |       | JPEQ*LOK+3 YES-CONT                         | 16710   | 61 6713  |
| 007266 |       | RJP*RCORD0 RECORD ERROR-INC ADR NOTHOS, 1   | 16711   | 76 5555  |
| 007267 |       | STRAL*PLAC8 SAVE VALUE                      | 16712   | 44 4243  |
| 007270 |       | ENTBKB*01 ADV COUNT                         | 16713   | 37 0001  |
| 007271 |       | CMAL*BITDAT+1 RTC NOT INC AT ALL?           | 16714   | 02 4235  |
| 007272 |       | JPNOT*LOK+2 NO-CONT                         | 16715   | 63 6717  |
| 007273 |       | RJP*RCORD0 RECORD ERROR-INC ADR NOT INC, 2  | 16716   | 76 5555  |
| 007274 |       | ENTBKB*01 ADV COUNT                         | 16717   | 37 0001  |
| 007275 |       | STRAU*PLAC4 RTC MON (COMPARE) ADR CONTENTS  | 16720   | 46 6622  |
| 007276 |       | ENTAL*PLAC4                                 | 16721   | 12 6622  |
| 007277 |       | CMAL*STOPAA RTC MON LOC INCR?               | 16722   | 02 6614  |
| 007300 |       | JPEQ*LOK+2 NO-CONT                          | 16723   | 61 6725  |
| 007301 |       | RJP*RCORD0 RECORD ERROR-ADDR 14 WAS INC, 3  | 16724   | 76 5555  |
| 007302 |       | ENTRKB*01 ADV COUNT                         | 16725   | 37 0001  |
| 007303 |       | RJP*HONINT DROP ALL MONS                    | 16726   | 76 6353  |
| 007304 |       | RJP*STINK STR STOP*41 IN INT ENTS           | 16727   | 76 6336  |
| 007305 |       | SIL SIL                                     | 16730   | 5034 00  |
| 007306 |       | ENTAU*RTCNOT-1 NO RTC REQ ENABLE INST IJP   | 16731   | 10 7205  |
| 007307 |       | ENTAL*STOPC STOP*45 IN AL                   | 16732   | 12 6611  |
| 007310 |       | ENTSR*10                                    | 16733   | 5073 10  |
| 007311 |       | STRAL*14 RTC MON WD#505645                  | 16734   | 44 0014  |
| 007312 |       | ADDALK*7775                                 | 16735   | 71 7775  |
| 007313 |       | STRAL*15 RTC INC WD#505643                  | 16736   | 44 0015  |
| 007314 |       | STRAU*12 RTC MON INT ENT ADR                | 16737   | 46 0012  |
| 007315 |       | ENTSR*00                                    | 16740   | 5073 00  |
| 007316 |       | ENTAU*ALERDS DISPLAY FLAGS                  | 16741   | 10 6470  |
| 007317 |       | RIL RIL                                     | 16742   | 5030 00  |
| 007320 |       | RJP*SECSTH DELAY 1024 US                    | 16743   | 76 7175  |
| 007321 | RTCB  | SKP*40 INT NOT RCVD-CONT                    | 16744   | 5050 40  |
| 007322 |       | RJP*RCORD0 RECORD ERROR-MON RCVD w/o RTC, 4 | 16745   | 76 5555  |
| 007323 |       | ENTBKB*01 ADV COUNT                         | 16746   | 37 0001  |

| SEQNO  | LABEL | STATEMENT                                   | ADDRESS | INSTRUCT |
|--------|-------|---|---------|----------|
| 007324 |       | SIL SET INT LOCKOUT                         | 16747   | 5034 00  |
| 007325 |       | ENTAU*RTCK-1 RTC MON OK IJP FOR INT ENT     | 16750   | 10 7207  |
| 007326 |       | ENTAL*STOPC STOP*45                         | 16751   | 12 6611  |
| 007327 |       | ENTSR*10                                    | 16752   | 5073 10  |
| 007330 |       | STRAL*14 RTC MON WD#505645                  | 16753   | 44 0014  |
| 007331 |       | ADDALK*7775                                 | 16754   | 71 7775  |
| 007332 |       | STRAL*15 RTC INC WD#505643                  | 16755   | 44 0015  |
| 007333 |       | STRAU*12 RTC OK IJP IN INT ENT              | 16756   | 46 0012  |
| 007334 |       | ENTSR*00                                    | 16757   | 5073 00  |
| 007335 |       | ENTAU*ALERDS DISPLAY ERROR FLAGS            | 16760   | 10 6470  |
| 007336 |       | RTC ENABLE RTC REQUEST                      | 16761   | 5014 00  |
| 007337 |       | RIL RIL                                     | 16762   | 5030 00  |
| 007340 |       | ENTALK*3777 DELAY 1024 US                   | 16763   | 70 3777  |
| 007341 |       | ADDALK*7776                                 | 16764   | 71 7776  |
| 007342 |       | JPALNZ*LOK-1                                | 16765   | 63 6764  |
| 007343 |       | ENTALK*3000 INSURE ENOUGH TIME              | 16766   | 70 3000  |
| 007344 |       | ADDALK*7776                                 | 16767   | 71 7776  |
| 007345 |       | JPALNZ*LOK-1                                | 16770   | 63 6767  |
| 007346 |       | RJP*RCORD0 RECORD ERROR-RTC MON NOT RCVD, 5 | 16771   | 76 5555  |
| 007347 | RTCC  | ENTBKB*01 ADV COUNT                         | 16772   | 37 0001  |
| 007350 |       | SIL SIL                                     | 16773   | 5034 00  |
| 007351 |       | ENTSR*10                                    | 16774   | 5073 10  |
| 007352 |       | ENTAL*15 RTC INC WD IN AL                   | 16775   | 12 0015  |
| 007353 |       | ENTAU*14 RTC MON WD IN AU                   | 16776   | 10 0014  |
| 007354 |       | STRAU*15 RTC INC#RTC MON                    | 16777   | 46 0015  |
| 007355 |       | ENTSR*00                                    | 17000   | 5073 00  |
| 007356 |       | CMAL*STOPD WAS RTC INCR WD INCRD?#          | 17001   | 02 7241  |
| 007357 |       | JPEQ*LOK+2 YES-CONT                         | 17002   | 61 7004  |
| 007360 |       | RJP*RCORD0 RECORD ERROR-RTC INC ADR WRNG, 6 | 17003   | 76 5555  |
| 007361 |       | ENTBKB*01 ADV COUNT                         | 17004   | 37 0001  |
| 007362 |       | STRAL*PLAC8 SAVE RTC INC WD                 | 17005   | 44 4243  |

| SEQNO  | LABEL | STATEMENT                                      | ADDRESS | INSTRUCT |
|--------|-------|--|---------|----------|
| 007363 |       | CMAL*STOPB RTC NOT INCR AT ALL?                | 17006   | 02 6610  |
| 007364 |       | JPNOT*LOK+2 NO-CONT                            | 17007   | 63 7011  |
| 007365 |       | RJP*RCORDO RECORD ERROR-RTC INC ADR NOT INC, 7 | 17010   | 76 5555  |
| 007366 |       | ENTBKB*01 ADV COUNT                            | 17011   | 37 0001  |
| 007367 |       | STRAU*PLAC4 RTC MON (COMPARE) ADR CONTENTS     | 17012   | 46 6622  |
| 007370 |       | ENTAL*PLAC4                                    | 17013   | 12 6622  |
| 007371 |       | CMAL*STOPC RTC MON LOC INCR?                   | 17014   | 02 6611  |
| 007372 |       | JPEQ*LOK+2 NO-CONT                             | 17015   | 61 7017  |
| 007373 |       | RJP*RCORDO RECORD ERROR-ADDR 14 WAS INC, 8     | 17016   | 76 5555  |
| 007374 |       | ENTBKB*01 ADV COUNT                            | 17017   | 37 0001  |
| 007375 |       | ENTAU*RTCREM RTC REQ FF IJP                    | 17020   | 10 7202  |
| 007376 |       | ENTSR*10                                       | 17021   | 5073 10  |
| 007377 |       | STRAU*12 TO RTC MON INT ENT                    | 17022   | 46 0012  |
| 007400 |       | ENTSR*00                                       | 17023   | 5073 00  |
| 007401 |       | ENTAU*CHA4 PREP AU FOR FLAG                    | 17024   | 10 6527  |
| 007402 |       | SKP*00 NOOP                                    | 17025   | 5050 00  |
| 007403 |       | RIL RIL  | 17026   | 5030 00  |
| 007404 |       | RJP*SECSTH DELAY 1024 US                       | 17027   | 76 7175  |
| 007405 |       | SIL SIL  | 17030   | 5034 00  |
| 007406 |       | JPAUZ*LOK+2 NO INT RCVD? TRUE-CONT             | 17031   | 60 7033  |
| 007407 |       | RJP*RCORDO RECORD ERROR-RTC MON REQ FF SET, 9  | 17032   | 76 5555  |
| 007410 |       | ENTBKB*01 ADV COUNT                            | 17033   | 37 0001  |
| 007411 |       | RJP*STINK STORE STOPS                          | 17034   | 76 6336  |
| 007412 |       | ENTAL*RTCWDC 600000                            | 17035   | 12 7237  |
| 007413 |       | ENTAU*RTCWDD 600007                            | 17036   | 10 7240  |
| 007414 |       | ENTSR*10                                       | 17037   | 5073 10  |
| 007415 |       | STRAL*15 RTC#600000                            | 17040   | 44 0015  |
| 007416 |       | STRAU*14 MON#600007                            | 17041   | 46 0014  |
| 007417 |       | ENTSR*00                                       | 17042   | 5073 00  |
| 007420 |       | ENTAL*RTCCBB                                   | 17043   | 12 7217  |
| 007421 |       | ENTAU*RTCCCC                                   | 17044   | 10 7235  |

| SEGNO  | LABEL | STATEMENT                         | ADDRESS | INSTRUCT |
|--------|-------|-----------------------------------|---------|----------|
| 007422 |       | ENTSR*10                          | 17045   | 5073 10  |
| 007423 |       | STRAL*RTCCC RTC ENT ADDR          | 17046   | 44 7773  |
| 007424 |       | STRAU*12                          | 17047   | 46 0012  |
| 007425 |       | ENTSR*00                          | 17050   | 5073 00  |
| 007426 |       | RIL RIL                           | 17051   | 5030 00  |
| 007427 |       | RTC EN RTC                        | 17052   | 5014 00  |
| 007430 |       | ENTALK*00 DELAY                   | 17053   | 70 0000  |
| 007431 |       | ADDALK*01                         | 17054   | 71 0001  |
| 007432 |       | CMAL*CHAN+12                      | 17055   | 02 6545  |
| 007433 |       | JPEQ*LOK+2                        | 17056   | 61 7060  |
| 007434 |       | JP*LOK-3                          | 17057   | 34 7054  |
| 007435 |       | RJP*RCORDO RECORD ERROR-NO RTC,10 | 17060   | 76 5555  |
| 007436 | RTCCB | ENTBKB*01 ADV COUNT               | 17061   | 37 0001  |
| 007437 |       | ENTAL*RTCCDD                      | 17062   | 12 7220  |
| 007440 |       | ENTSR*10                          | 17063   | 5073 10  |
| 007441 |       | STRAL*RTCCC                       | 17064   | 44 7773  |
| 007442 |       | ENTSR*00                          | 17065   | 5073 00  |
| 007443 |       | ENTALK*00                         | 17066   | 70 0000  |
| 007444 |       | ENTAU*CHAN+20                     | 17067   | 10 6553  |
| 007445 |       | ENTSR*10                          | 17070   | 5073 10  |
| 007446 |       | STRAL*15 RTC#000000               | 17071   | 44 0015  |
| 007447 |       | STRAU*14 MON#200000               | 17072   | 46 0014  |
| 007450 |       | ENTSR*00                          | 17073   | 5073 00  |
| 007451 |       | RJP*RTCEN EN RTC /DELAY           | 17074   | 76 7224  |
| 007452 |       | SKP*40 IF RTCM-ERR                | 17075   | 5050 40  |
| 007453 | RTCCD | RJP*RCORDO RECORD ERROR-RTC ,11   | 17076   | 76 5555  |
| 007454 |       | ENTBKB*01 ADV COUNT               | 17077   | 37 0001  |
| 007455 |       | ENTAL*RTCCEE                      | 17100   | 12 7221  |
| 007456 |       | ENTSR*10                          | 17101   | 5073 10  |
| 007457 |       | STRAL*RTCCC                       | 17102   | 44 7773  |
| 007460 |       | ENTALK*00                         | 17103   | 70 0000  |

4-340

| SEQNO  | LABEL | STATEMENT                      | ADDRESS | INSTRUCT |
|--------|-------|--------------------------------|---------|----------|
| 007461 |       | LSHAU*01                       | 17104   | 5045 01  |
| 007462 |       | STRAL*15 RTC#000000            | 17105   | 44 0015  |
| 007463 |       | STRAU*14 MON#400000            | 17106   | 46 0014  |
| 007464 |       | ENTSR*00                       | 17107   | 5073 00  |
| 007465 |       | RJP*RTCEN                      | 17110   | 76 7224  |
| 007466 |       | SKP*40                         | 17111   | 5050 40  |
| 007467 | RTCCE | RJP*RCORDO RECORD ERROR-RTC*12 | 17112   | 76 5555  |
| 007470 |       | ENTBKB*01                      | 17113   | 37 0001  |
| 007471 |       | ENTAL*RTCCFF                   | 17114   | 12 7222  |
| 007472 |       | ENTSR*10                       | 17115   | 5073 10  |
| 007473 |       | STRAL*RTCCC                    | 17116   | 44 7773  |
| 007474 |       | ENTSR*00                       | 17117   | 5073 00  |
| 007475 |       | ENTALK*00                      | 17120   | 70 0000  |
| 007476 |       | ENTAU*CHAN+20                  | 17121   | 10 6553  |
| 007477 |       | ENTSR*10                       | 17122   | 5073 10  |
| 007500 |       | STRAL*14 MON#000000            | 17123   | 44 0014  |
| 007501 |       | STRAU*15 RTC#200000            | 17124   | 46 0015  |
| 007502 |       | ENTSR*00                       | 17125   | 5073 00  |
| 007503 |       | RJP*RTCEN                      | 17126   | 76 7224  |
| 007504 |       | SKP*40                         | 17127   | 5050 40  |
| 007505 | RTCCF | RJP*RCORDO RECORD ERROR-RTC*13 | 17130   | 76 5555  |
| 007506 |       | ENTBKB*01                      | 17131   | 37 0001  |
| 007507 |       | ENTAL*RTCCGG                   | 17132   | 12 7223  |
| 007510 |       | ENTSR*10                       | 17133   | 5073 10  |
| 007511 |       | STRAL*RTCCC                    | 17134   | 44 7773  |
| 007512 |       | ENTALK*00                      | 17135   | 70 0000  |
| 007513 |       | LSHAU*01                       | 17136   | 5045 01  |
| 007514 |       | STRAL*14 MON#000000            | 17137   | 44 0014  |
| 007515 |       | STRAU*15 RTC#400000            | 17140   | 46 0015  |
| 007516 |       | ENTSR*00                       | 17141   | 5073 00  |
| 007517 |       | RJP*RTCEN                      | 17142   | 76 7224  |

| SEQNO  | LABEL  | STATEMENT                                  | ADDRESS | INSTRUCT |
|--------|--------|--|---------|----------|
| 007520 |        | SKP*40                                     | 17143   | 5050 40  |
| 007521 | RTCCG  | RJP*RCORDO RECORD ERROR-RTC*14             | 17144   | 76 5555  |
| 007522 |        | ENTBKB*01                                  | 17145   | 37 0001  |
| 007523 |        | RJP*HONINT DROP ANY MON INTS               | 17146   | 76 6353  |
| 007524 |        | ENTAL*ALERDS ANY ERRORS?                   | 17147   | 12 6470  |
| 007525 |        | JPALZ*SPRIO NO-TEST SP INT PRIORITY        | 17150   | 61 7255  |
| 007526 |        | RJP*STINK PREP TO TEST RSMFLT INT          | 17151   | 76 6336  |
| 007527 |        | ENTALK*3776 PREP RTC INC REG               | 17152   | 70 3776  |
| 007530 |        | ENTAU*RSMFB-1 RSMFLT INT IJP               | 17153   | 10 7215  |
| 007531 |        | ENTSR*10                                   | 17154   | 5073 10  |
| 007532 |        | STRAL*15                                   | 17155   | 44 0015  |
| 007533 |        | STRAU*11 TO RSMFLT INT ENT                 | 17156   | 46 0011  |
| 007534 |        | ENTSR*00                                   | 17157   | 5073 00  |
| 007535 |        | RJP*TERMAL CLR ALL ACTIVES                 | 17160   | 76 5447  |
| 007536 |        | ENTAU*PLAC8 DISPLAY RTC INC DATA ERROR     | 17161   | 10 4243  |
| 007537 |        | ENTAL*ALERDS DISPLAY ERROR FLAGS           | 17162   | 12 6470  |
| 007540 |        | SXL IGNORE EIRS                            | 17163   | 5036 00  |
| 007541 | RSMFAA | OUT*KH ODA                                 | 17164   | 5012 00  |
| 007542 |        | 0*CKWD+2 INTER-COMPUTER CHAN               | 17165   | 016447   |
| 007543 |        | 0*CKWD TO CLR RESUME W/ NO IDA AVAILABLE   | 17166   | 016445   |
| 007544 |        | RIL RIL                                    | 17167   | 5030 00  |
| 007545 | RTCWIC | WTFI WAIT TO RCVE RSMFLT INT               | 17170   | 5024 00  |
| 007546 |        | STOP*40 ERROR STOP IF NO RSMFLT INT        | 17171   | 5056 40  |
| 007547 |        | ENTAU*PLAC8                                | 17172   | 10 4243  |
| 007550 |        | STOP*40 ERROR STOP                         | 17173   | 5056 40  |
| 007551 |        | RESERV*1                                   | 17174   | 000000   |
| 007552 |        | REMARK*AL CONTAINS BITS SET TO FLAG ERRORS |         |          |
| 007553 |        | REMARK* 0 RTC OVERFLOW INT NOT RECEIVED    |         |          |
| 007554 |        | REMARK* 1 RTC 777777 NOT INCR TO 000000    |         |          |
| 007555 |        | REMARK* 2 RTC 777777 NOT INCR AT ALL       |         |          |
| 007556 |        | REMARK* 3 RTC MON ADR WAS INCR             |         |          |

4-342

| SEQNO  | LABEL  | STATEMENT                                      | ADDRESS | INSTRUCT |
|--------|--------|--|---------|----------|
| 007557 |        | REMARK* 4 RTC MON RCVD W/O RTC REQ ENABLE      |         |          |
| 007560 |        | REMARK* 5 RTC MON INT NOT RECEIVED             |         |          |
| 007561 |        | REMARK* 6 RTC INC ADR NOT PROPERLY INCR        |         |          |
| 007562 |        | REMARK* 7 RTC INC ADR NOT INCR AT ALL          |         |          |
| 007563 |        | REMARK* 8 RTC MON ADR WAS INCR                 |         |          |
| 007564 |        | REMARK* 9 RTC REQ FF NOT CLRD BY RTC MON       |         |          |
| 007565 |        | REMARK* 10 NO RTC/MON 600007 /RTC 600000       |         |          |
| 007566 |        | REMARK* 11 RTC/RTC 000000/MON 200000           |         |          |
| 007567 |        | REMARK* 12 RTC / MON 400000 / RTC 000000       |         |          |
| 007570 |        | REMARK* 13 RTC / MON 000000 / RTC 200000       |         |          |
| 007571 |        | REMARK* 14 RTC / MON 000000 / RTC 400000       |         |          |
| 007572 |        | REMARK*AU CONTAINS THE INCORRECT RTC INC VALUE |         |          |
| 007573 | SECSTH | 0*0 ENTRY                                      | 17175   | 00 0000  |
| 007574 |        | ENTALK*3777 DELAY ABOUT                        | 17176   | 70 3777  |
| 007575 |        | ADDALK*7776 1024 US                            | 17177   | 71 7776  |
| 007576 |        | JPALNZ*L0K-1                                   | 17200   | 63 7177  |
| 007577 |        | IJP*SECSTH EXIT                                | 17201   | 55 7175  |
| 007600 | RTCREM | ENTAU*12 FOR INT ENT ADR                       | 17202   | 10 0012  |
| 007601 |        | IJP*RTCOVK FOR RTC OVF INT ENT ADR             | 17203   | 55 7764  |
| 007602 | RTCOVF | JP*RTCA RTC OVF OK, RETURN                     | 17204   | 34 6701  |
| 007603 |        | IJP*RTCMOT FOR RTC MON INT ENT ADR             | 17205   | 55 7763  |
| 007604 | RTCN0T | JP*RTCB+1 RTC MON WHEN NO RTC INST, RECORD     | 17206   | 34 6745  |
| 007605 |        | IJP*RTCOM FOR RTC MON INT ENT ADR              | 17207   | 55 7762  |
| 007606 | RTCOK  | JP*RTCC RTC MON OK, RETURN                     | 17210   | 34 6772  |
| 007607 |        | IJP*SPI12A FOR RTC MON ENT ADR                 | 17211   | 55 7761  |
| 007610 | SPI12B | JP*INCOMV SP PRIO CK OK                        | 17212   | 34 7304  |
| 007611 |        | IJP*SPI13C FOR RTC OVFL0 ENT ADR               | 17213   | 55 7760  |
| 007612 | SPI13D | JP*INCOMV-1 SP PRIO WRONG                      | 17214   | 34 7303  |
| 007613 |        | IJP*RSMFAB FOR RSMFLT INT ENT                  | 17215   | 55 7757  |
| 007614 | RSMFB  | JP*RTCWIC+3 RSMFLT INT RCVD                    | 17216   | 34 7173  |
| 007615 | RTCCBB | 0*RTCCB  | 17217   | 017061   |



| SEQNO  | LABEL  | STATEMENT                              | ADDRESS | INSTRUCT |
|--------|--------|--|---------|----------|
| 007616 | RTCCDD | 0*RTCCD                                | 17220   | 017076   |
| 007617 | RTCCEE | 0*RTCCE                                | 17221   | 017112   |
| 007620 | RTCCFF | 0*RTCCF                                | 17222   | 017130   |
| 007621 | RTCCGG | 0*RTCCG                                | 17223   | 017144   |
| 007622 | RTCEN  | 0*0 ENTRY                              | 17224   | 00 0000  |
| 007623 |        | RIL RIL                                | 17225   | 5030 00  |
| 007624 |        | RTC ENABLE RTC                         | 17226   | 5014 00  |
| 007625 |        | ENTALK*00 DELAY                        | 17227   | 70 0000  |
| 007626 |        | ADDALK*01                              | 17230   | 71 0001  |
| 007627 |        | CMAL*RTCWD1                            | 17231   | 02 7236  |
| 007630 |        | JPEQ*LOK+2                             | 17232   | 61 7234  |
| 007631 |        | JP*LOK-3                               | 17233   | 34 7230  |
| 007632 |        | IJP*RTCEN EXIT                         | 17234   | 55 7224  |
| 007633 | RTCCCC | IJPEI*RTCC FOR RTCM ENT ADR            | 17235   | 54 7773  |
| 007634 | RTCWD1 | 000500                                 | 17236   | 000500   |
| 007635 | RTCWDC | 600000                                 | 17237   | 600000   |
| 007636 | RTCWDD | 600007                                 | 17240   | 600007   |
| 007637 | STOPD  | STOP*46 COMPARE                        | 17241   | 5056 45  |
| 007640 | SETSPL | 0*0 ENTRY                              | 17242   | 00 0000  |
| 007641 |        | RJP*TERMAL TERM ALL ACTIVES            | 17243   | 76 5447  |
| 007642 |        | RJP*HONINT IGNORE ANY MON INTS         | 17244   | 76 6353  |
| 007643 |        | RJP*SRSMAL SET ALL RESUMES             | 17245   | 76 6374  |
| 007644 |        | ENTSR*10 BANK0                         | 17246   | 5073 10  |
| 007645 |        | CL*15 CLEAR RTC INC ADR / I/C RTC TEST | 17247   | 40 0015  |
| 007646 |        | ENTSR*00 BANK1                         | 17250   | 5073 00  |
| 007647 |        | SIL SIL                                | 17251   | 5034 00  |
| 007650 |        | ENTALK*00 CL AL                        | 17252   | 70 0000  |
| 007651 |        | ENTAU*CHA4 CL AU                       | 17253   | 10 6527  |
| 007652 |        | IJP*SETSPL EXIT                        | 17254   | 55 7242  |
| 007653 | SPRIO  | RJP*HONINT IGNORE MON INTS             | 17255   | 76 6353  |
| 007654 |        | RJP*STINK STORE STOPS                  | 17256   | 76 6336  |

4-344

| SEQNO  | LABEL  | STATEMENT                                | ADDRESS | INSTRUCT |
|--------|--------|--|---------|----------|
| 007655 |        | SIL SET INT LOKOS                        | 17257   | 5034 00  |
| 007656 |        | ENTAL*BITDAT+1 PREP RTC MON INT          | 17260   | 12 4235  |
| 007657 |        | ENTSR*10 AND RTC OVERFLOW INT            | 17261   | 5073 10  |
| 007660 |        | STRAL*14                                 | 17262   | 44 0014  |
| 007661 |        | ADDALK*7776                              | 17263   | 71 7776  |
| 007662 |        | STRAL*15                                 | 17264   | 44 0015  |
| 007663 |        | ENTSR*00                                 | 17265   | 5073 00  |
| 007664 |        | ENTAU*SPI13D-1                           | 17266   | 10 7213  |
| 007665 |        | ENTAL*SPI12B-1                           | 17267   | 12 7211  |
| 007666 |        | ENTSR*10                                 | 17270   | 5073 10  |
| 007667 |        | STRAL*12 RTC MON 1ST                     | 17271   | 44 0012  |
| 007670 |        | STRAU*13 RTC OVF 2ND                     | 17272   | 46 0013  |
| 007671 |        | ENTSR*00                                 | 17273   | 5073 00  |
| 007672 |        | RTC ENABLE RTC                           | 17274   | 5014 00  |
| 007673 |        | RJP*SECSTH ALLOW TIME FOR                | 17275   | 76 7175  |
| 007674 |        | RJP*SECSTH BOTH INTS TO BE REALIZED      | 17276   | 76 7175  |
| 007675 |        | RIL RIL                                  | 17277   | 5030 00  |
| 007676 |        | ENTALK*3000 WAIT TO RECEIVE 1ST INT      | 17300   | 70 3000  |
| 007677 |        | ADDALK*7776                              | 17301   | 71 7776  |
| 007700 |        | JPALNZ*LOK-1                             | 17302   | 63 7301  |
| 007701 |        | STOP*40 ERROR STOP-2ND WAS 1ST           | 17303   | 5056 40  |
| 007702 | INCOMV | RJP*HONINT                               | 17304   | 76 6353  |
| 007703 |        | CL*PLAC4 CLR 1ST TIME THRU FLAG          | 17305   | 40 6622  |
| 007704 |        | ENTAU*NTDSTD SET OUTPUT CWS ACCORDING TO | 17306   | 10 6626  |
| 007705 |        | ENTAL*INCOMD+2 BUFFER MODE               | 17307   | 12 7412  |
| 007706 |        | ADDALK*01 +1 IF NTDS/1219                | 17310   | 71 0001  |
| 007707 |        | JPAUP*LOK+2 +2 IF STD1218                | 17311   | 64 7313  |
| 007710 |        | ADDALK*01                                | 17312   | 71 0001  |
| 007711 |        | STRAL*INCOMD+1                           | 17313   | 44 7411  |
| 007712 |        | ENTAL*HOBCEP                             | 17314   | 12 6574  |
| 007713 |        | STRADR*INCOMA                            | 17315   | 74 7345  |

| SEQNO  | LABEL  | STATEMENT                        | ADDRESS | INSTRUCT |
|--------|--------|----------------------------------|---------|----------|
| 007714 |        | ENTICR*02 B2#0 FOR EACH CHAN     | 17316   | 5072 02  |
| 007715 |        | ENTBK*00                         | 17317   | 36 0000  |
| 007716 |        | CL*ALERDS CLR ERR FLG LOC        | 17320   | 40 6470  |
| 007717 | INCOMP | ENTAL*HICHAN                     | 17321   | 12 6573  |
| 007720 |        | ENTAU*U12MSK 777700              | 17322   | 10 6455  |
| 007721 |        | SLSU*INCOMD                      | 17323   | 04 7410  |
| 007722 |        | STRAL*INCOMD OUT                 | 17324   | 44 7410  |
| 007723 |        | STRAL*INCOMH OUT                 | 17325   | 44 7464  |
| 007724 |        | SLSU*INCOMB                      | 17326   | 04 7357  |
| 007725 |        | STRAL*INCOMB IN                  | 17327   | 44 7357  |
| 007726 |        | STRAL*INCOMC IN                  | 17330   | 44 7405  |
| 007727 |        | SLSU*INCOME                      | 17331   | 04 7420  |
| 007730 |        | STRAL*INCOME SKPNR               | 17332   | 44 7420  |
| 007731 |        | STRAL*INCOMF+1 SKPNR             | 17333   | 44 7425  |
| 007732 |        | STRAL*INCOMI SKPNR               | 17334   | 44 7503  |
| 007733 |        | STRAL*INCOMJ+3 SKPNR             | 17335   | 44 7512  |
| 007734 |        | SLSU*INCOMF                      | 17336   | 04 7424  |
| 007735 |        | STRAL*INCOMF SRSM                | 17337   | 44 7424  |
| 007736 |        | STRAL*INCOMJ SRSM                | 17340   | 44 7507  |
| 007737 |        | SLSU*INCOMG                      | 17341   | 04 7431  |
| 007740 |        | STRAL*INCOMG SKPOIN              | 17342   | 44 7431  |
| 007741 |        | RJP*TERMAL TERM ALL ACTS         | 17343   | 76 5447  |
| 007742 |        | RJP*CLPIN CLR INPUT AREA         | 17344   | 76 6402  |
| 007743 | INCOMA | ENTAL*HOBCEP STORE OUT BUF CW    | 17345   | 12 6574  |
| 007744 |        | STRADR*LOK+6 TO DETECT FALSE ODR | 17346   | 74 7354  |
| 007745 |        | ADDALK*01                        | 17347   | 71 0001  |
| 007746 |        | STRADR*LOK+5                     | 17350   | 74 7355  |
| 007747 |        | ENTAL*CKWD+3                     | 17351   | 12 6450  |
| 007750 |        | ENTAU*CKWD                       | 17352   | 10 6445  |
| 007751 |        | ENTSR*10                         | 17353   | 5073 10  |
| 007752 |        | STRAL*ADR TACW                   | 17354   | 44 0000  |

4-346

| SEQNO  | LABEL  | STATEMENT                                 | ADDRESS | INSTRUCT |
|--------|--------|---|---------|----------|
| 007753 |        | STRAU*ADR+1 CACW                          | 17355   | 46 0001  |
| 007754 |        | ENTSR*00                                  | 17356   | 5073 00  |
| 007755 | INCOMB | IN*KH SET TO RECEIVE ODA/IDR              | 17357   | 5011 00  |
| 007756 |        | 0*PIN+2                                   | 17360   | 016414   |
| 007757 |        | 0*PIN                                     | 17361   | 016412   |
| 007760 |        | ENTAU*CHAN WAIT                           | 17362   | 10 6533  |
| 007761 |        | RJP*DELAY                                 | 17363   | 76 0302  |
| 007762 |        | ENTAL*PIN DATA INPUTTED?                  | 17364   | 12 6412  |
| 007763 |        | JPALZ*LOK+2 NO-CONT,YES-ERROR             | 17365   | 61 7367  |
| 007764 |        | RJP*RCORDO RECORD ERROR- FALSE ODR SEEN,0 | 17366   | 76 5555  |
| 007765 |        | ENTBKB*01 ADV COUNT                       | 17367   | 37 0001  |
| 007766 |        | RJP*CLPIN CLR INPUT AREA                  | 17370   | 76 6402  |
| 007767 |        | RJP*STINK STORE STOPS                     | 17371   | 76 6336  |
| 007770 |        | ENTAU*FLRSMF-1 IRJP TO ENT                | 17372   | 10 7542  |
| 007771 |        | ENTALK*3777                               | 17373   | 70 3777  |
| 007772 |        | ENTSR*10                                  | 17374   | 5073 10  |
| 007773 |        | STRAU*11 RSMFLT INT ENT                   | 17375   | 46 0011  |
| 007774 |        | STRAL*15 RTC # 3777                       | 17376   | 44 0015  |
| 007775 |        | ENTSR*00                                  | 17377   | 5073 00  |
| 007776 |        | ENTAU*ALERDS DISPLAY ERROR FLAGS          | 17400   | 10 6470  |
| 007777 |        | ENTAL*AUERDS                              | 17401   | 12 6467  |
| 010000 |        | STRAL*FAULTI                              | 17402   | 44 6602  |
| 010001 |        | RJP*DISPOC                                | 17403   | 76 5413  |
| 010002 |        | RIL                                       | 17404   | 5030 00  |
| 010003 | INCOMC | IN*KH INPUT TO RCVE DATA/IDRS             | 17405   | 5011 00  |
| 010004 |        | 0*PIN+2 POSS 3WD                          | 17406   | 016414   |
| 010005 |        | 0*PIN                                     | 17407   | 016412   |
| 010006 | INCOMD | OUT*KH OUTPUT I/C TO GIVE ODR             | 17410   | 5012 00  |
| 010007 |        | 0*CKWD+1 2WDS /NTDS OR STD/               | 17411   | 016446   |
| 010010 |        | 0*CKWD                                    | 17412   | 016445   |
| 010011 |        | ENTALK*7777 COMPLETE BUFFER               | 17413   | 70 7777  |

| SEQNO  | LABEL  | STATEMENT                                      | ADDRESS | INSTRUCT |
|--------|--------|--|---------|----------|
| 010012 |        | ADDALK*7776 POSSIBLE FALSE RSMFLT INT          | 17414   | 71 7776  |
| 010013 |        | JPALNZ*LOK-1                                   | 17415   | 63 7414  |
| 010014 |        | SIL SET INT L.0.                               | 17416   | 5034 00  |
| 010015 |        | ENTBKB*01 ADV COUNT                            | 17417   | 37 0001  |
| 010016 | INCOME | SKPNR*KH WAS RESUME RESET?                     | 17420   | 5057 00  |
| 010017 |        | SKP*40 YES-CONT, NO-ERROR                      | 17421   | 5050 40  |
| 010020 |        | RJP*RCORD0 RECORD ERROR-RESUME NOT SET,2       | 17422   | 76 5555  |
| 010021 |        | ENTBKB*01 ADV COUNT                            | 17423   | 37 0001  |
| 010022 | INCOMF | SRSM*KH TRY PROG RSM SET                       | 17424   | 5020 00  |
| 010023 |        | SKPNR*KH RESUME PROG SET?                      | 17425   | 5057 00  |
| 010024 |        | SKP*40 YES-CONT,NO-ERROR                       | 17426   | 5050 40  |
| 010025 |        | RJP*RCORD0 RECORD ERROR-SRSM FAILED ALSO,3     | 17427   | 76 5555  |
| 010026 |        | ENTBKB*01 ADV COUNT                            | 17430   | 37 0001  |
| 010027 | INCOMG | SKPOIN*KH OUTPUT TERMINATED?                   | 17431   | 5022 00  |
| 010030 |        | RJP*RCORD0 RECORD ERROR-NOT ENOUGH ODR/IDR,4   | 17432   | 76 5555  |
| 010031 |        | ENTBKB*01 ADV COUNT                            | 17433   | 37 0001  |
| 010032 |        | ENTAL*PIN+2 WAS A 3RD WD ACCEPTED?             | 17434   | 12 6414  |
| 010033 |        | JPALZ*LOK+2 NO- CONT, YES-ERROR                | 17435   | 61 7437  |
| 010034 |        | RJP*RCORD0 RECORD ERROR-TOO MANY ODRS ACCEPT,5 | 17436   | 76 5555  |
| 010035 |        | ENTBKB*01 ADV COUNT                            | 17437   | 37 0001  |
| 010036 |        | ENTAL*PIN+1 2ND WD RCVD?                       | 17440   | 12 6413  |
| 010037 |        | JPALNZ*LOK+2 YES-CONT,NO-ERR                   | 17441   | 63 7443  |
| 010040 |        | RJP*RCORD0 RECORD ERROR-2ND ODR NOT,6          | 17442   | 76 5555  |
| 010041 |        | ENTBKB*01 ADV COUNT                            | 17443   | 37 0001  |
| 010042 |        | ENTAL*PIN 1ST WD RCVD?                         | 17444   | 12 6412  |
| 010043 |        | JPALNZ*LOK+2 YES-CONT, NO-ERR                  | 17445   | 63 7447  |
| 010044 |        | RJP*RCORD0 RECORD ERROR-1ST ODR NOT, 7         | 17446   | 76 5555  |
| 010045 |        | ENTBKB*01 ADV COUNT                            | 17447   | 37 0001  |
| 010046 |        | RJP*TERMAL CLR ALL ACTS                        | 17450   | 76 5447  |
| 010047 |        | RJP*STINK STORE STOPS                          | 17451   | 76 6336  |
| 010050 |        | ENTAU*RSMFK0-1 OK IRJP TO ENT                  | 17452   | 10 7546  |

4-348

| SEQNO  | LABEL  | STATEMENT                                 | ADDRESS | INSTRUCT |
|--------|--------|---|---------|----------|
| 010051 |        | ENTALK*3777                               | 17453   | 70 3777  |
| 010052 |        | ENTSR*10                                  | 17454   | 5073 10  |
| 010053 |        | STRAU*11 RSMFLT ENT ADR                   | 17455   | 46 0011  |
| 010054 |        | STRAL*15 SET RTC                          | 17456   | 44 0015  |
| 010055 |        | ENTSR*00                                  | 17457   | 5073 00  |
| 010056 |        | ENTAU*ALERDS DISPLAY FLAGS                | 17460   | 10 6470  |
| 010057 |        | ENTAL*AUERDS                              | 17461   | 12 6467  |
| 010060 |        | STRAL*FAULTI                              | 17462   | 44 6602  |
| 010061 |        | RJP*DISPOC                                | 17463   | 76 5413  |
| 010062 | INCOMH | OUT*KH SEND ODA /NO IDA AVAILABLE         | 17464   | 5012 00  |
| 010063 |        | O*CKWD+1                                  | 17465   | 016446   |
| 010064 |        | O*CKWD                                    | 17466   | 016445   |
| 010065 |        | RIL RIL                                   | 17467   | 5030 00  |
| 010066 |        | ENTALK*7777 DELAY TO RECVE RSMFLT INT     | 17470   | 70 7777  |
| 010067 |        | ADDALK*7776                               | 17471   | 71 7776  |
| 010070 |        | JPALNZ*LOK-1                              | 17472   | 63 7471  |
| 010071 |        | ENTALK*7777                               | 17473   | 70 7777  |
| 010072 |        | ADDALK*7776                               | 17474   | 71 7776  |
| 010073 |        | JPALNZ*LOK-1                              | 17475   | 63 7474  |
| 010074 |        | ADDALK*01                                 | 17476   | 71 0001  |
| 010075 |        | JPALP*LOK-1                               | 17477   | 65 7476  |
| 010076 |        | SIL SIL                                   | 17500   | 5034 00  |
| 010077 |        | RJP*RCORDO RECORD ERROR-RSMFLT NOT RCVD,8 | 17501   | 76 5555  |
| 010100 |        | ENTBKB*01 ADV COUNT                       | 17502   | 37 0001  |
| 010101 | INCOMI | SKPNR*KH RESUME STILL SET? YES-OK         | 17503   | 5057 00  |
| 010102 |        | RJP*RCORDO RECORD ERROR-SKPNR/NSKP,9      | 17504   | 76 5555  |
| 010103 |        | ENTBKB*01 ADV COUNT                       | 17505   | 37 0001  |
| 010104 |        | RJP*TERMAL                                | 17506   | 76 5447  |
| 010105 | INCOMJ | SRSM*KH PROG SET OF RSM                   | 17507   | 5020 00  |
| 010106 |        | ENTAU*CHAN+10 ALLOW TIME TO CLR ACK       | 17510   | 10 6543  |
| 010107 |        | RJP*DELAY DELAY AND GEN FFS               | 17511   | 76 0302  |

| SEQNO  | LABEL  | STATEMENT                                      | ADDRESS | INSTRUCT |
|--------|--------|--|---------|----------|
| 010110 |        | SKPNR*KH WAS IT SET?                           | 17512   | 5057 00  |
| 010111 |        | SKP*40 YES-OK,NO-ERR                           | 17513   | 5050 40  |
| 010112 |        | RJP*RCORDO RECORD ERROR-SRSM FAIL,10           | 17514   | 76 5555  |
| 010113 |        | ENTAL*PLAC4 1ST TIME THRU?                     | 17515   | 12 6622  |
| 010114 |        | JPALNZ*INCOMT NO-TEST FLAGS                    | 17516   | 63 7530  |
| 010115 |        | ENTALK*7777 YES-SET 2ND TIME FLG               | 17517   | 70 7777  |
| 010116 |        | STRAL*PLAC4                                    | 17520   | 44 6622  |
| 010117 |        | ENTALK*LOCHAN LOCHAN 2ND TIME                  | 17521   | 70 6564  |
| 010120 |        | STRADR*INCOMP                                  | 17522   | 74 7321  |
| 010121 |        | ENTAL*ALERDS SAVE KH FLAGS                     | 17523   | 12 6470  |
| 010122 |        | STRAL*AUERDS                                   | 17524   | 44 6467  |
| 010123 |        | ENTAL*LOBCP                                    | 17525   | 12 6565  |
| 010124 |        | STRADR*INCOMA                                  | 17526   | 74 7345  |
| 010125 |        | JP*INCOMP-3 RECYCLE W/KL                       | 17527   | 34 7316  |
| 010126 | INCOMT | ENTAL*ALERDS FLAGS OF KL                       | 17530   | 12 6470  |
| 010127 |        | ENTAU*AUERDS FLAGS FROM KH                     | 17531   | 10 6467  |
| 010130 |        | JPALNZ*LOK+2 ANY ERRORS?                       | 17532   | 63 7534  |
| 010131 |        | JPAUZ*LOK+2 NO - TEST PRIORITY                 | 17533   | 60 7535  |
| 010132 |        | STOP*40 ERROR STOP                             | 17534   | 5056 40  |
| 010133 |        | RJP*SPRI TEST RSMFLT/RTC PRIORITY              | 17535   | 76 7550  |
| 010134 |        | REMARK*AL#KL FLAGS,AU#KH FLAGS                 |         |          |
| 010135 |        | REMARK* 0 FLASE ODR SEEN                       |         |          |
| 010136 |        | REMARK* 1 FALSE RSMFLT INT                     |         |          |
| 010137 |        | REMARK* 2 RESUME NOT RESET ON COMPLETED BUFFER |         |          |
| 010140 |        | REMARK* 3 SRSM FAILED ALSO                     |         |          |
| 010141 |        | REMARK* 4 OUTPUT NOT TERMINATED                |         |          |
| 010142 |        | REMARK* 5 TOO MANY ODRS SENT                   |         |          |
| 010143 |        | REMARK* 6 2ND WD NOT RCVD                      |         |          |
| 010144 |        | REMARK* 7 1ST WD NOT RCVD                      |         |          |
| 010145 |        | REMARK* 8 RSMFLT INT NOT RECEIVED              |         |          |
| 010146 |        | REMARK* 9 SKPNR DID NOT SKIP W/NR              |         |          |

4-350

| SEQNO  | LABEL  | STATEMENT                          | ADDRESS | INSTRUCT |
|--------|--------|------------------------------------|---------|----------|
| 010147 |        | REMARK* 10 SRSM FAILED             |         |          |
| 010150 |        | RJP*SETSPL PREP RECYCLE OR STOP    | 17536   | 76 7242  |
| 010151 |        | STOP*04 SET STOP KEY 2 TO END TEST | 17537   | 5056 04  |
| 010152 |        | JP*INCRTC RECYCLE                  | 17540   | 34 6634  |
| 010153 |        | RESERV*01                          | 17541   | 000000   |
| 010154 |        | IJP*FLRMSF FOR RSMFLT ENT ADR      | 17542   | 55 7754  |
| 010155 | FLRSMF | RJP*RCORDO RECORD ERROR-RSMFLT,1   | 17543   | 76 5555  |
| 010156 |        | RJP*HONINT IGNORE LATER INT        | 17544   | 76 6353  |
| 010157 |        | JP*INCOME-1 EXIT                   | 17545   | 34 7417  |
| 010160 |        | IJP*RSMFOK                         | 17546   | 55 7753  |
| 010161 | RSMFKO | JP*INCOMI-1 OK ENTRY/EXIT          | 17547   | 34 7502  |
| 010162 | SPRI   | 0*0 ENTRY                          | 17550   | 00 0000  |
| 010163 |        | RJP*HONINT IGNORE ALL INTS         | 17551   | 76 6353  |
| 010164 |        | RJP*STINK STORE STOPS              | 17552   | 76 6336  |
| 010165 |        | ENTALK*3777                        | 17553   | 70 3777  |
| 010166 |        | LSHA*22 3777 TO AU                 | 17554   | 5047 22  |
| 010167 |        | ENTALK*3776                        | 17555   | 70 3776  |
| 010170 |        | ENTSR*10                           | 17556   | 5073 10  |
| 010171 |        | STRAL*15 RTC TO 3776               | 17557   | 44 0015  |
| 010172 |        | STRAU*14                           | 17560   | 46 0014  |
| 010173 |        | ENTSR*00 MON TO 3777               | 17561   | 5073 00  |
| 010174 |        | ENTAU*RSMFA-1 RSMFLT ENT IRJP      | 17562   | 10 7611  |
| 010175 |        | ENTAL*RTCMA-1 RTCM ENT IRJP        | 17563   | 12 7614  |
| 010176 |        | ENTSR*10                           | 17564   | 5073 10  |
| 010177 |        | STRAU*11 RSMFLT HI PRI             | 17565   | 46 0011  |
| 010200 |        | STRAL*12 RTCM LO PRI               | 17566   | 44 0012  |
| 010201 |        | ENTSR*00                           | 17567   | 5073 00  |
| 010202 |        | SIL SET INT L.O.                   | 17570   | 5034 00  |
| 010203 |        | RJP*TERMAL CLR ALL ACTS            | 17571   | 76 5447  |
| 010204 | SPRIA  | OUT*KH PROVIDE RSMFLT INT          | 17572   | 5012 00  |
| 010205 |        | 0*CKWD+1                           | 17573   | 016446   |

4-351



| SEQNO  | LABEL | STATEMENT                           | ADDRESS | INSTRUCT |
|--------|-------|-------------------------------------|---------|----------|
| 010206 |       | 0*CKWD                              | 17574   | 016445   |
| 010207 |       | ENTALK*7777 DELAY                   | 17575   | 70 7777  |
| 010210 |       | ADDALK*7776                         | 17576   | 71 7776  |
| 010211 |       | JPALNZ*LOK-1                        | 17577   | 63 7576  |
| 010212 |       | ADDALK*01                           | 17600   | 71 0001  |
| 010213 |       | JPALP*LOK-1                         | 17601   | 65 7600  |
| 010214 |       | ADDALK*7776                         | 17602   | 71 7776  |
| 010215 |       | JPALNZ*LOK-1                        | 17603   | 63 7602  |
| 010216 |       | RIL                                 | 17604   | 5030 00  |
| 010217 | CLLR  | ENTAU*CHAN FLG AU                   | 17605   | 10 6533  |
| 010220 |       | ENTAL*CHA4 CLR AL                   | 17606   | 12 6527  |
| 010221 |       | STOP*40 ERROR STOP                  | 17607   | 5056 40  |
| 010222 |       | RESERV*01                           | 17610   | 000000   |
| 010223 |       | IJP*RSMFBA RSMFLT ENT IJP           | 17611   | 55 7772  |
| 010224 | RSMFA | RJP*HONINT IGNORE RTCM              | 17612   | 76 6353  |
| 010225 |       | IJP*SPRI OK-EXIT                    | 17613   | 55 7550  |
| 010226 |       | IJP*RTCMB                           | 17614   | 55 7755  |
| 010227 | RTCMA | RJP*HONINT IGNORE RSMFLT INT        | 17615   | 76 6353  |
| 010230 |       | JP*CLLR+2 TO STOP                   | 17616   | 34 7607  |
| 010231 | BOOTS | IJP*BOOTS+1 REF                     | 17617   | 55 7620  |
| 010232 |       | 0*0500 BTSTRP                       | 17620   | 00 0500  |
| 010233 |       | RESERV*1                            | 17621   | 000000   |
| 010234 |       | REMARK                              |         |          |
| 010235 |       | REMARK*MANUAL I/O TEST/AID          |         |          |
| 010236 |       | REMARK                              |         |          |
| 010237 |       | REMARK*SET AL00-03 TO CHANNEL,START |         |          |
| 010240 |       | REMARK                              |         |          |
| 010241 | MNI01 | ENTAU*U12MSK                        | 17622   | 10 6455  |
| 010242 |       | SLSU*MN1A                           | 17623   | 04 7634  |
| 010243 |       | STRAL*MN1A OUT LOC                  | 17624   | 44 7634  |
| 010244 |       | SLSU*MN1A+3                         | 17625   | 04 7637  |

4-352

| SEQNO  | LABEL | STATEMENT   | ADDRESS | INSTRUCT |
|--------|-------|---|---------|----------|
| 010245 |       | STRAL*MN1A+3 IN LOC                               | 17626   | 44 7637  |
| 010246 |       | SLSU*MN1B   | 17627   | 04 7642  |
| 010247 |       | STRAL*MN1B OUTOV LOC                              | 17630   | 44 7642  |
| 010250 |       | RJP*HONINT STORE RILS ALLOW EIS                   | 17631   | 76 6353  |
| 010251 |       | CL*PIN CL 2 IN WDS                                | 17632   | 40 6412  |
| 010252 |       | CL*PIN+1  | 17633   | 40 6413  |
| 010253 | MN1A  | OUT*XX OUT FN,OUTPUT/EF                           | 17634   | 5012 00  |
| 010254 |       | 0*BITDAT+3 TACW                                   | 17635   | 014237   |
| 010255 |       | 0*BITDAT CACW                                     | 17636   | 014234   |
| 010256 |       | IN*XX IN FN                                       | 17637   | 5011 00  |
| 010257 |       | 0*PIN+3 TACW                                      | 17640   | 016415   |
| 010260 |       | 0*PIN CACW  | 17641   | 016412   |
| 010261 | MN1B  | OUTOV*XX OUTOV FN,ODA/EFA                         | 17642   | 5026 00  |
| 010262 |       | STOP*04 SET STOP KEY 2 TO STOP                    | 17643   | 5056 04  |
| 010263 |       | REMARK*CW AND FN MAY BE CHANGED BY INSPECT/CHANGE |         |          |
| 010264 |       | JP*MN1A-2 RECYCLE                                 | 17644   | 34 7632  |
| 010265 |       | REMARK  |         |          |
| 010266 |       | RESERV*01   | 17645   | 000000   |
| 010267 |       | ENDSEG  |         |          |

4-353

END OF PROGRAM

SYSTEMS DATA LABELS

| ADDRESS | LABEL  | REFERENCES   |
|---------|--------|--|
| 12034   | AOK    | 012023U  |
| 15505   | AA     | 015475S  |
| 12617   | ACKOUT | 016320S  |
| 12726   | ACKAUT | 016261S  |
| 13003   | ACTLOC | 012747S  |
| 12675   | ACTLOK | 012641S  |
| 16204   | ADDRES | 016177U, 016202U, 016225U  |
| 00000   | ADR    | 007773U, 010676U, 010713U, 010746U, 010763U, 011016U, 011033U, 011122U,<br>011255U, 011473U, 012645S, 012667U, 012675U, 012706U, 012753S, 012775U,<br>013003U, 013014U, 013046U, 013047U, 013232S, 013247U, 013262S, 013270U,<br>013302U, 013330S, 013454U, 013473U, 013556S, 013655U, 013764S, 014306S,<br>014657U, 014700U, 015324S, 015347S, 015350S, 015401U, 017354S, 017355S   |
| 15374   | AFAULT | 007712U, 010002U, 013344U, 013507U, 013514U, 015376U, 016026U, 016035U   |
| 16470   | ALERDS | 016431U<br>010076S, 010121U, 010156S, 010251U, 010312S, 010340U, 010562S, 010604U,<br>010616S, 011043U, 011670S, 011710U, 011753U, 011764U, 012124S, 012174U,<br>012205U, 012215U, 012604S, 012650U, 012756U, 013027U, 013037U, 013350S,<br>013613U, 013701U, 013715U, 013723U, 013736U, 014013S, 014171U, 014222U,<br>014250S, 014311U, 014334U, 014350S, 014373U, 014633S, 014714U, 014725U,<br>014727U, 014745S, 015116U, 015120S, 015146U, 015177U, 015220U, 015246U,<br>015274U, 015330U, 015560U, 015561S, 016641S, 016741U, 016760U, 017147U,<br>017162U, 017320S, 017400U, 017460U, 017523U, 017530U |
| 14334   | ALERQ  | 014325U  |
| 14241   | ALL7S  | 014046U  |
| 16625   | ALPRAM | 010015S  |
| 15573   | ALSAVE | 015547S, 015553U, 015556S, 015562U, 015565S, 015571U   |
| 15437   | ASTR   | 015431S  |
| 14343   | ATIME  | 010057U, 014344U, 014377U  |
| 16467   | AUERDS | 010075S, 010120U, 010126U, 010155S, 010250U, 010256U, 010311S, 010337U,<br>010410S, 010440U, 010516S, 010544U, 010561S, 010603U, 010615S, 011042U,<br>012123S, 012214U, 012222U, 012233S, 012314U, 012321U, 012354U, 012420S,<br>012443U, 012450U, 012474U, 012501U, 012513U, 012647U, 012755U, 013351S,<br>013612U, 013702S, 013717U, 013722U, 013735U, 014744S, 015117S, 015145U,<br>015217U, 015245U, 015273U, 015327U, 015551U, 015552S, 017401U, 017461U,<br>017524S, 017531U   |
| 16624   | AUPRAM | 010014S, 014375U   |

4-354

|       |        |  |
|-------|--------|--|
| 07717 | AURIL  | 016333U  |
| 16334 | AURILM | 007717U  |
| 07716 | AUSIL  | 016133U  |
| 16134 | AUSILM | 007716U, 016136U   |
| 11440 | AUTFCK | 011422U, 011423S, 011424U, 011425S, 011450U                            |
| 16006 | AUTMON | 007722U, 016007U   |
| 07722 | AUTMH  | 016005U  |
| 12622 | AUTS   | 016242U, 016243S   |
| 12613 | AUTS1  | 016274U, 016275S   |
| 12731 | AUTS2  | 016276S  |
| 12722 | AUTS3  | 016244S  |
| 00010 | B0     | NOT REFERENCED   |
| 17617 | BOOTS  | 010070U, 017617U   |
| 00001 | B1     | NOT REFERENCED   |
| 00002 | B2     | NOT REFERENCED   |
| 00003 | B3     | NOT REFERENCED   |
| 00004 | B4     | NOT REFERENCED   |
| 00005 | B5     | NOT REFERENCED   |
| 00006 | B6     | NOT REFERENCED   |
| 00007 | B7     | NOT REFERENCED   |
| 10300 | BB     | 010265S  |
| 07700 | BEGIN  | NOT REFERENCED   |
| 11327 | BEQUZO | 011226U, 011304U, 011357U, 011361U                                     |
| 14234 | BITDAT | 014032U, 014033U, 014105U, 014112U, 016663U, 016714U, 017260U, 017635U |
|       |        | 017636U  |
| 16444 | BSAVE  | 014154U, 014156U, 014322U, 014324U, 015451U, 015472U, 015511U, 015521U |
|       |        | 016340U, 016351U, 016355U, 016372U, 016422U, 016436U                   |
| 15442 | BSTR   | 015433S  |
| 10674 | COMPR  | 010666U  |
| 10744 | COMPRA | 010736U  |
| 11014 | COMPRC | 011006U  |
| 15402 | CON    | 015736S, 015741S, 015744S, 015747S, 015751S                            |
| 13741 | CONAD1 | 013540U  |
| 13744 | CONAD2 | 013546U, 013743U   |
| 10730 | CONTO  | 010726U, 015657S, 015660S  |
| 11000 | CONTF  | 010776U, 015662S, 015663S  |
| 10650 | CONTH  | 010627U, 010630S, 010632U, 010633S                                     |
| 10660 | CONTI  | 010646U, 015654S, 015656S  |
| 15544 | CC     | 015524S  |
| 16606 | CCADR  | 010673S, 010707U, 010743S, 010757U, 011013S, 011027U, 011257S, 011321U |
|       |        | 011475S, 011514U, 011532S  |
| 16605 | CDM19B | NOT REFERENCED   |
| 14712 | CDMFLG | 014703U  |

|       |        |          |          |          |          |          |          |          |         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------|--------|----------|----------|----------|----------|----------|----------|----------|---------|--|--|--|--|--|--|--|--|--|--|--|--|
| 11662 | CDMICW | 011651U  |          |          |          |          |          |          |         |  |  |  |  |  |  |  |  |  |  |  |  |
| 14625 | CDMIN  | 010060U, | 014626U, | 014722U  |          |          |          |          |         |  |  |  |  |  |  |  |  |  |  |  |  |
| 14644 | CDMINA | 014702U, | 016271S, | 016301S  |          |          |          |          |         |  |  |  |  |  |  |  |  |  |  |  |  |
| 14650 | CDMINB | 016321S  |          |          |          |          |          |          |         |  |  |  |  |  |  |  |  |  |  |  |  |
| 14653 | CDMINC | 016310S  |          |          |          |          |          |          |         |  |  |  |  |  |  |  |  |  |  |  |  |
| 14657 | CDMIND | 014636S  |          |          |          |          |          |          |         |  |  |  |  |  |  |  |  |  |  |  |  |
| 14665 | CDMINE | 014661U, | 016322S  |          |          |          |          |          |         |  |  |  |  |  |  |  |  |  |  |  |  |
| 14670 | CDMINF | 016311S, | 016330S  |          |          |          |          |          |         |  |  |  |  |  |  |  |  |  |  |  |  |
| 14700 | CDMING | 014637S  |          |          |          |          |          |          |         |  |  |  |  |  |  |  |  |  |  |  |  |
| 14716 | CDMINH | 014715U, | 014730U  |          |          |          |          |          |         |  |  |  |  |  |  |  |  |  |  |  |  |
| 14724 | CDMINI | 014713U  |          |          |          |          |          |          |         |  |  |  |  |  |  |  |  |  |  |  |  |
| 14734 | CDMINJ | 014706U  |          |          |          |          |          |          |         |  |  |  |  |  |  |  |  |  |  |  |  |
| 11661 | CDMTCW | 011653U  |          |          |          |          |          |          |         |  |  |  |  |  |  |  |  |  |  |  |  |
| 16513 | CHA12  | 016461U  |          |          |          |          |          |          |         |  |  |  |  |  |  |  |  |  |  |  |  |
| 16473 | CHA168 | 016460U  |          |          |          |          |          |          |         |  |  |  |  |  |  |  |  |  |  |  |  |
| 16461 | CHA21  | 015623U  |          |          |          |          |          |          |         |  |  |  |  |  |  |  |  |  |  |  |  |
| 16527 | CHA4   | 010006U, | 011332U, | 014055U, | 014124U, | 014514U, | 014546U, | 016046U, | 016057U |  |  |  |  |  |  |  |  |  |  |  |  |
|       |        | 016074U, | 016111U, | 016164U, | 016462U, | 016707U, | 017024U, | 017253U, | 017606U |  |  |  |  |  |  |  |  |  |  |  |  |
| 16462 | CHA40  | 015640U  |          |          |          |          |          |          |         |  |  |  |  |  |  |  |  |  |  |  |  |
| 16460 | CHA816 | 015614U, | 015631U  |          |          |          |          |          |         |  |  |  |  |  |  |  |  |  |  |  |  |
| 16233 | CHACHA | 010017U, | 016331U  |          |          |          |          |          |         |  |  |  |  |  |  |  |  |  |  |  |  |
| 16533 | CHAN   | 010211U, | 010223U, | 010235U, | 010332U, | 011221U, | 011266U, | 011313U, | 011340U |  |  |  |  |  |  |  |  |  |  |  |  |
|       |        | 011351U, | 011444U, | 011504U, | 011553U, | 011570U, | 011720U, | 012017U, | 012026U |  |  |  |  |  |  |  |  |  |  |  |  |
|       |        | 012035U, | 012046U, | 012177U, | 012210U, | 012275U, | 012316U, | 012452U, | 012476U |  |  |  |  |  |  |  |  |  |  |  |  |
|       |        | 012610U, | 013111U, | 013150U, | 013241U, | 013265U, | 013277U, | 014040U, | 014312U |  |  |  |  |  |  |  |  |  |  |  |  |
|       |        | 014513U, | 014534U, | 014545U, | 014563U, | 014654U, | 014671U, | 015176U, | 015341U |  |  |  |  |  |  |  |  |  |  |  |  |
|       |        | 015550U, | 015557U, | 015566U, | 016366U, | 017055U, | 017067U, | 017121U, | 017362U |  |  |  |  |  |  |  |  |  |  |  |  |
|       |        | 017510U, | 017605U  |          |          |          |          |          |         |  |  |  |  |  |  |  |  |  |  |  |  |
| 13220 | CHANAD | 013206S, | 013315S  |          |          |          |          |          |         |  |  |  |  |  |  |  |  |  |  |  |  |
| 13366 | CHANG  | 013357S, | 013704S  |          |          |          |          |          |         |  |  |  |  |  |  |  |  |  |  |  |  |
| 12340 | CHANPR | 012311U, | 012410U  |          |          |          |          |          |         |  |  |  |  |  |  |  |  |  |  |  |  |
| 12346 | CHANPS | 012301U  |          |          |          |          |          |          |         |  |  |  |  |  |  |  |  |  |  |  |  |
| 07724 | CHNPRL | 012340U  |          |          |          |          |          |          |         |  |  |  |  |  |  |  |  |  |  |  |  |
| 12341 | CHNPRM | 007724U  |          |          |          |          |          |          |         |  |  |  |  |  |  |  |  |  |  |  |  |
| 07725 | CHNPSL | 012346U  |          |          |          |          |          |          |         |  |  |  |  |  |  |  |  |  |  |  |  |
| 12347 | CHNPSM | 007725U  |          |          |          |          |          |          |         |  |  |  |  |  |  |  |  |  |  |  |  |
| 15574 | CHSET  | 010022U, | 015707U  |          |          |          |          |          |         |  |  |  |  |  |  |  |  |  |  |  |  |
| 15610 | CHSET1 | 015600U  |          |          |          |          |          |          |         |  |  |  |  |  |  |  |  |  |  |  |  |
| 15616 | CHSET2 | 015602U  |          |          |          |          |          |          |         |  |  |  |  |  |  |  |  |  |  |  |  |
| 15625 | CHSET3 | 015604U  |          |          |          |          |          |          |         |  |  |  |  |  |  |  |  |  |  |  |  |
| 15633 | CHSET4 | 015606U  |          |          |          |          |          |          |         |  |  |  |  |  |  |  |  |  |  |  |  |
| 00000 | CHTBL  | 010101U, | 010161U, | 010314U, | 010413U, | 010424U, | 010430U, | 010521U, | 010532U |  |  |  |  |  |  |  |  |  |  |  |  |

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|       |        | 010535U, 010565U, 010621U, 010660U, 010663U, 010667U, 010730U, 010733U |
|       |        | 010737U, 011000U, 011003U, 011007U, 011165U, 011240U, 011243U, 011247U |
|       |        | 011416U, 011456U, 011461U, 011465U, 011702U, 011742U, 012160U, 012241U |
|       |        | 012257U, 012374U, 012377U, 012403U, 012426U                            |
| 11260 | CKOUT  | 011173S  |
| 11247 | CKOUTD | 011242U, 011246U, 015670S  |
| 11271 | CKOUTT | 011176S, 011210S, 011211S, 011214S                                     |
| 11465 | CKOUU  | 011460U, 011464U, 015674S  |
| 11476 | CKOUV  | 011426S, 011431S   |
| 10535 | CKACT4 | 010460S, 010463S, 010471S, 010474S, 010502S, 010505S, 010523U, 010524S |
|       |        | 010543U, 015651S, 015652S  |
| 10546 | CKACT5 | 010461S, 010464S, 010466S, 010472S, 010475S, 010477S, 010503S, 010506S |
|       |        | 010510S, 010525U, 010526S, 010527U, 010530S, 010533U, 010534S          |
|       |        | 015666S, 015667S   |
| 11240 | CKADR  | 011427U, 011430S, 015672S, 015673S                                     |
| 11456 | CKADRA |  |
| 11231 | CKADRR | 011205U, 011206S, 011207S, 011212U, 011213S                            |
| 11307 | CKCDM  | 011177U, 011200S, 011201U, 011202S, 011203U, 011204S, 011302U          |
| 11640 | CKER   | 011644U, 011647U, 011657U  |
| 12354 | CKERR  | 012345U  |
| 12063 | CKFORC | 012054U, 012064U, 012117U  |
| 11647 | CKNORM | 011643U  |
| 10430 | CKTER4 | 010352S, 010355S, 010363S, 010366S, 010374S, 010377S, 010415U, 010416S |
|       |        | 010437U, 015646S, 015647S  |
| 10442 | CKTER5 | 010353S, 010356S, 010360S, 010364S, 010367S, 010371S, 010375S, 010400S |
|       |        | 010402S, 010417U, 010420S, 010421U, 010422S, 010425U, 010426S          |
| 16445 | CKWD   | 010273U, 010643U, 010644U, 010651U, 010652U, 010700U, 010702U, 010715U |
|       |        | 010723U, 010724U, 010750U, 010752U, 010765U, 010773U, 010774U, 011020U |
|       |        | 011022U, 011035U, 011124U, 011126U, 011216U, 011217U, 011260U, 011262U |
|       |        | 011310U, 011311U, 011322U, 011441U, 011442U, 011476U, 011500U, 011550U |
|       |        | 011551U, 012010U, 012011U, 012076U, 012077U, 012266U, 012267U, 012272U |
|       |        | 012273U, 012441U, 012442U, 012446U, 012447U, 012555U, 012556U, 012614U |
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|       |        | 013005U, 013075U, 013076U, 013100U, 013101U, 013134U, 013135U, 013137U |
|       |        | 013140U, 013236U, 013237U, 013426S, 013430S, 013432S, 013434S, 013440U |
|       |        | 013441U, 013503U, 013561U, 013562U, 013564U, 013565U, 013605U, 013606U |
|       |        | 013767U, 013770U, 014276U, 014277U, 014420U, 014421U, 014507U, 014510U |
|       |        | 014572U, 014573U, 014616U, 014617U, 014621U, 014622U, 014645U, 014646U |
|       |        | 015073U, 015074U, 015077U, 015100U, 015166U, 015167U, 015172U, 015173U |
|       |        | 015210U, 015211U, 015233U, 015234U, 015236U, 015237U, 015261U, 015262U |
|       |        | 015264U, 015265U, 015310U, 015311U, 015314U, 015315U, 015500U, 016070U |
|       |        | 016072U, 016105U, 016107U, 016445U, 016446U, 016447U, 016450U, 016617U |
|       |        | 017165U, 017166U, 017351U, 017352U, 017411U, 017412U, 017465U, 017466U |
|       |        | 017573U, 017574U   |

4-358

|       |        |  |
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| 16451 | CKWDA  | 011524U, 011525U, 011533U, 011535U, 011537U, 011563U, 011613U, 011621U<br>011642U, 012013U, 012014U, 012101U, 012102U, 014642U, 014643U, 016451U<br>016452U, 016453U   |
| 16454 | CKWDB  | 012172U, 012173U, 012203U, 012204U, 016454U  |
| 16617 | CKWDZ  | 013425U, 013501U   |
| 13326 | CLADR  | 012632S, 012642U, 012740S, 012750U, 013214S, 013234U, 013257U, 013275U<br>013332U  |
| 15753 | CLBFAR | 015766U  |
| 15520 | CLCICR | 015510S  |
| 15507 | CLCWAR | 010641U, 010721U, 010771U, 011137U, 011367U, 011726U, 012127U, 013435U<br>015522U  |
| 17605 | CLLR   | 017616U  |
| 16402 | CLPIN  | 011370U, 013073U, 013132U, 013436U, 013602U, 014030U, 014273U, 014423U<br>014575U, 016411U, 017344U, 017370U   |
| 16555 | CMA DR | NOT REFERENCED   |
| 12571 | CMPINT | 007711U, 012550U   |
| 07711 | CMPL   | 012570U  |
| 12542 | CMPLKO | 010043U, 012543U, 012566U  |
| 15425 | CMRJP  | 011146U, 011155U, 011164U, 011377U, 011406U, 011415U, 012137U, 012146U<br>012155U, 012336U, 015446U  |
| 14031 | CSDA   | 014020U, 014021S, 014162U, 014163S   |
| 14003 | CSDATA | 010055U, 014004U, 014224U  |
| 14034 | CSDB   | 014022U, 014023S, 014024U, 014025S, 014164U, 014165S, 014166U, 014167S   |
| 14111 | CSDB2  | NOT REFERENCED   |
| 14075 | CSDC   | 014060U  |
| 14145 | CSDC2  | 014130U  |
| 14103 | CSDD   | 014043U, 014052U, 014074U, 014102U   |
| 14153 | CSDD2  | 014113U, 014121U, 014144U, 014152U   |
| 14053 | CSDE   | 014047U  |
| 14122 | CSDE2  | 014116U  |
| 14055 | CSDF   | NOT REFERENCED   |
| 14124 | CSDF2  | NOT REFERENCED   |
| 11544 | DOCDM  | 011534U  |
| 12667 | DATARQ | 012633S, 013055U   |
| 13014 | DATQES | 012744S  |
| 12775 | DATREQ | 012741S, 013062U   |
| 15471 | DD     | 015450S  |
| 13241 | DEELA  | 013325U  |
| 10302 | DELAY  | 010212U, 010224U, 010236U, 010305U, 010333U, 011445U, 011554U, 011571U<br>013112U, 013151U, 013266U, 013300U, 014041U, 014314U, 014516U, 014535U<br>014550U, 014564U, 014655U, 014672U, 015201U, 015342U, 017363U, 017511U |

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| 14203 | DERR0D | 014176U, 014210U   |
| 14207 | DERR0P | 014174U, 014200U   |
| 14223 | DERR0R | 014172U, 014202U   |
| 14211 | DERRC  | 014206U, 016247S, 016255S, 016302S, 016313S                            |
| 14171 | DERRQ  | 014157U  |
| 13733 | DISC   | 013716U, 013720U, 013724U, 013725U, 013727U                            |
| 15413 | DISPOC | 010127U, 010257U, 011111U, 012175U, 012206U, 012223U, 013036U, 013737U |
|       |        | 014720U, 014732U, 015424U, 015734U, 015735S, 015737U, 015740S, 015742U |
|       |        | 015743S, 015745U, 015746S, 015750S, 016120U, 017403U, 017463U          |
| 11624 | DSPLY  | 011546U  |
| 11627 | DSPLY1 | 011557U  |
| 15445 | EE     | 015426S  |
| 13264 | EF0V2  | 013211S, 013216S, 013226S  |
| 13276 | EF0V3  | 013217S, 013227S   |
| 16000 | EFMON  | 007721U, 016001U   |
| 07721 | EFMH   | 015777U  |
| 07715 | EFSIL  | 016127U  |
| 16130 | EFSILM | 007715U, 016132U   |
| 13052 | EI0KH  | 007765U, 012643U   |
| 07765 | EI0KHA | 013051U  |
| 13057 | EI0KL  | 007766U, 012751U   |
| 07766 | EI0KLA | 013056U  |
| 16465 | EIGHT  | 015603U  |
| 12651 | EIKH   | 016267U, 016270S, 016272U, 016273S                                     |
| 12757 | EIKL   | 016236U, 016237S, 016240U, 016241S                                     |
| 07720 | EIRH   | 015366U  |
| 15367 | EIRT1  | 007720U, 015370U   |
| 07704 | EISIL  | 016123U  |
| 16124 | EISILM | 007704U, 016126U   |
| 16371 | END1   | 016354S  |
| 16435 | ENDA   | 016421S  |
| 13210 | ENTAD  | 013204S, 013313S, 013320U  |
| 12706 | ESDATQ | 012636S  |
| 12574 | EXFEIC | 010053U, 012575U, 013042U  |
| 11215 | EXFFCK | 011167U, 011170S, 011171U, 011172S, 011174U, 011175S                   |
| 11632 | EXIT   | 011575U, 011622U   |
| 11106 | FONDIT | 011125U, 011127U   |
| 16466 | FOUR   | 015605U  |
| 07706 | FALADR | 011715U, 011716U, 011751U, 011752U                                     |
| 13041 | FALSEI | 013030U  |
| 07712 | FAULTA | 015374U  |
| 16602 | FAULTI | 010077S, 010124U, 010157S, 010254U, 011110S, 011667S, 011754U, 011763U |
|       |        | 012125S, 012220U, 013033U, 013035S, 013202S, 013335U, 013352S, 013734S |



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|       |        | 014204S, 014215U, 014216U, 014716S, 014724S, 015417U, 015420U, 015567U |
|       |        | 015570S, 016117S, 017402S, 017462S                                     |
| 11523 | FCODE  | NOT REFERENCED   |
| 10222 | FF0D   | 010167S, 010170U, 010171S, 010172U, 010173S, 010174U, 010175S          |
| 10234 | FFEF   | 010176S, 010177U, 010200S, 010201U, 010202S, 010203U, 010204S          |
| 10243 | FFFA   | 010205S, 010206U, 010207S  |
| 10210 | FFID   | 010163U, 010164S, 010165U, 010166S                                     |
| 10325 | FFRES  | 010316U, 010317S, 010320U, 010321S, 010322S, 010323U, 010324S          |
| 16116 | FIND   | 016025S, 016027U, 016034S, 016036U, 016045S, 016047U, 016056S, 016060U |
|       |        | 016067S, 016075U, 016104S, 016112U                                     |
| 13722 | FLAKS  | 013714U, 013721U   |
| 13712 | FLATS  | 013676U  |
| 07754 | FLRMSF | 017542U  |
| 17543 | FLRSMF | 007754U, 017372U   |
| 07726 | FPRIL  | 012505U  |
| 07727 | FPRIL1 | 012507U  |
| 12506 | FPRIM  | 007726U  |
| 12510 | FPRIM1 | 007727U, 012506U   |
| 10576 | FUNC   | 010567U, 010570S, 010571U, 010572S, 010573U, 010574S                   |
| 14774 | FUNPA  | 014747S, 015122S, 015144U  |
| 14735 | FUNPGA | 010061U, 014740U, 014741U, 015152U                                     |
| 16574 | H0BCP  | 012637U, 017314U, 017345U  |
| 16600 | H0MIP  | 014761U, 015070U, 015205U, 015230U                                     |
| 16353 | H0NINT | 010047U, 011777U, 012066U, 012116U, 012225U, 012342U, 012351U, 012511U |
|       |        | 012524U, 012545U, 012565U, 012600U, 013070U, 013177U, 013317U, 013551U |
|       |        | 014332U, 014416U, 014502U, 014614U, 015156U, 015357U, 015364U, 016373U |
|       |        | 016726U, 017146U, 017244U, 017255U, 017304U, 017544U, 017551U, 017612U |
|       |        | 017615U, 017631U   |
| 16577 | HEFMIP | 014755U, 015066U, 015163U, 015305U                                     |
| 16576 | HEIP   | 012626U, 013203U, 013210U, 013360U, 013552U, 014750U, 015161U, 015226U |
|       |        | 015254U, 015301U   |
| 16575 | HIBCP  | 013362U, 013416U, 014634U  |
| 16573 | HICHAN | 013205U, 013220U, 013356U, 013367U, 014017U, 014253U, 014260U, 014351U |
|       |        | 014403U, 014442U, 014746U, 014774U, 015727U, 016170S, 016200U, 016266U |
|       |        | 016642U, 016645U, 017321U  |
| 13324 | HIEIS  | 007751U, 013230U   |
| 07751 | HIEISP | 013323U  |
| 16562 | HIFACE | 014354U, 016141S, 016156S  |
| 16226 | HIGRUP | 016206U  |
| 16601 | HIMIP  | 013760U, 014255U, 014271U, 014765U, 015203U, 015256U, 015303U          |
| 10072 | I01    | 010023U, 010073U, 010131U  |
| 10556 | I010   | 010030U, 010557U, 010610U  |
| 10612 | I011   | 010031U, 010613U, 011047U  |

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| 10722 | I0110U | 010631S, 010634S, 010754U, 010767U                                     |
| 10621 | I011A  | 011041U, 015653S   |
| 10772 | I011EF | 010635U, 010636S, 010637U, 010640S, 011024U, 011037U                   |
| 10642 | I011IN | 010623U, 010624S, 010625U, 010626S, 010647U, 010655U, 010704U, 010717U |
| 11132 | I012   | 010032U, 011133U, 011303U, 011305U                                     |
| 11165 | I012A  | 015665S  |
| 11362 | I013   | 010033U, 011363U, 011511U, 011512U                                     |
| 11416 | I013A  | 015671S  |
| 11516 | I014   | 010034U, 011517U, 011632U  |
| 12120 | I015   | 010037U, 012121U, 012226U  |
| 12157 | I015A  | 012213U, 015675S   |
| 12171 | I015B  | 012162U, 012163S   |
| 12176 | I015C  | 012164U, 012165S   |
| 12202 | I015D  | 012167U, 012170S   |
| 12207 | I015E  | 012166S  |
| 11663 | I016   | 010035U, 011664U, 011724U, 011770U                                     |
| 11724 | I016A  | 011762U, 016335U   |
| 11762 | I016B  | 011772U  |
| 11702 | I016D  | 015676S  |
| 11714 | I016E  | 011704U, 011705S, 011706U, 011707S, 011713U                            |
| 11737 | I016F  | 011741U, 015677S   |
| 11750 | I016G  | 011744U, 011745S, 011746U, 011747S                                     |
| 12230 | I017   | 010040U, 012231U, 012371U  |
| 12241 | I017A  | 012370U, 015700S   |
| 12265 | I017B  | 012243U, 012244S, 012245U, 012246S                                     |
| 12315 | I017C  | NOT REFERENCED   |
| 12257 | I017D  | 012344U, 012353U, 015703S  |
| 12271 | I017E  | 012261U, 012262S, 012263U, 012264S                                     |
| 12327 | I017F  | 012240U, 012254U, 012337U, 012425U                                     |
| 12415 | I018   | 010041U, 012416U, 012512U, 012517U                                     |
| 12440 | I018A  | 012430U, 012431S, 012515U  |
| 12445 | I018B  | 012432U, 012433S, 012434U, 012435S, 012436U, 012437S                   |
| 12426 | I018C  | 015706S  |
| 10133 | I02    | 010024U, 010134U, 010262U  |
| 10306 | I03    | 010025U, 010307U, 010344U  |
| 10346 | I0456  | 010026U, 010347U, 010404U  |
| 10405 | I06    | 010361U, 010372U, 010403U, 010406U, 010452U                            |
| 10454 | I0789  | 010027U, 010455U, 010512U  |
| 10513 | I09    | 010467U, 010500U, 010511U, 010514U, 010554U                            |
| 16471 | I0SIZE | 015576U, 016153S   |
| 10000 | I0TA   | 007703U  |
| 12537 | IEINSR | 012525U  |

|       |         |  |
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| 16603 | IFAULT  | 010074S, 010135S, 010310S, 010350S, 010407S, 010456S, 010515S, 010560S |
|       |         | 010614S, 011134S, 011364S, 011520S, 011665S, 011776S, 012065S, 012122S |
|       |         | 012232S, 012417S, 012523S, 012544S, 012576S, 013066S, 013175S, 013343S |
|       |         | 014005S, 014205S, 014212U, 014213U, 014247S, 014345S, 014627S, 014742S |
|       |         | 015405U, 015406U, 016114U, 016116U, 016636S                            |
| 13416 | INOA    | 013363S, 013710S   |
| 13437 | INOA A  | 013370U, 013371S   |
| 13443 | INOA B  | 013375U, 013376S, 013401U, 013402S, 013462U, 013466U, 013475U          |
| 13454 | INOA C  | 013422S  |
| 13473 | INOA D  | 013417S  |
| 13520 | INOA E  | 013404U, 013405S   |
| 13525 | INOA F  | 013372S, 013377S   |
| 13552 | INOA G  | 013361S, 013706S, 013756U  |
| 13560 | INOA H  | 013373S, 013410U, 013411S  |
| 13566 | INOA I  | 013412U, 013413S   |
| 13577 | INOA J  | 013414U, 013415S   |
| 13604 | INOA K  | 013374S, 013400S   |
| 13614 | INOA L  | 013403S  |
| 13627 | INOA M  | 013406S  |
| 13655 | INOA Z  | 013421S  |
| 13673 | INOA ZZ | 013407S  |
| 13064 | INOBAS  | 013031U, 013065U, 013171U  |
| 13341 | INOUTC  | 010054U, 013342U, 013731U  |
| 11434 | INBUF   | 011420U, 011421S, 011432U, 011433S                                     |
| 17345 | INCOMA  | 017315S, 017526S   |
| 17357 | INCOMB  | 017326U, 017327S   |
| 17405 | INCOMC  | 017330S  |
| 17410 | INCOMD  | 017307U, 017313S, 017323U, 017324S                                     |
| 17420 | INCOME  | 017331U, 017332S, 017545U  |
| 17424 | INCOMF  | 017333S, 017336U, 017337S  |
| 17431 | INCOMG  | 017341U, 017342S   |
| 17464 | INCOMH  | 017325S  |
| 17503 | INCOMI  | 017334S, 017547U   |
| 17507 | INCOMJ  | 017335S, 017340S   |
| 17321 | INCOMP  | 016643S, 017522S, 017527U  |
| 17530 | INCOMT  | 017516U  |
| 17304 | INCOMV  | 017212U, 017214U   |
| 16634 | INCR TC | 016635U, 017540U   |
| 16637 | INCR TR | NOT REFERENCED   |
| 07723 | INMOH   | 016013U  |
| 16014 | INMON   | 007723U, 016015U   |
| 16133 | IRJPOT  | 012153U  |
| 16333 | IRJPAT  | 011673U  |

|       |        |  |  |  |  |  |  |  |  |
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| 16127 | IRJPEF | 012144U  |  |  |  |  |  |  |  |
| 16123 | IRJPEI | 012135U  |  |  |  |  |  |  |  |
| 16440 | IRJPF  | NOT REFERENCED   |  |  |  |  |  |  |  |
| 07714 | IRJPFL | 016440U  |  |  |  |  |  |  |  |
| 16441 | IRJPFM | 007714U, 016443U   |  |  |  |  |  |  |  |
| 15710 | JMPRD  | 010100U, 011135U, 011365U, 012126U, 015752U                            |  |  |  |  |  |  |  |
| 11771 | JPEF   | 011730U  |  |  |  |  |  |  |  |
| 07767 | JPEFL  | 011771U  |  |  |  |  |  |  |  |
| 11772 | JPEFM  | 007767U  |  |  |  |  |  |  |  |
| 10153 | KEEP   | 010136S, 010145U   |  |  |  |  |  |  |  |
| 00000 | KH     | 012613U, 012617U, 012651U, 012654U, 012715U, 012731U, 013010U, 013074U |  |  |  |  |  |  |  |
|       |        | 013102U, 013110U, 013113U, 013136U, 013144U, 013155U, 013161U, 013235U |  |  |  |  |  |  |  |
|       |        | 013240U, 013264U, 013276U, 013437U, 013443U, 013446U, 013520U, 013525U |  |  |  |  |  |  |  |
|       |        | 013530U, 013560U, 013563U, 013566U, 013577U, 013604U, 013607U, 013614U |  |  |  |  |  |  |  |
|       |        | 013627U, 013673U, 013766U, 013771U, 013774U, 014031U, 014034U, 014037U |  |  |  |  |  |  |  |
|       |        | 014211U, 014220U, 014275U, 014301U, 014310U, 014317U, 014417U, 014424U |  |  |  |  |  |  |  |
|       |        | 014427U, 014430U, 014431U, 014503U, 014506U, 014512U, 014515U, 014517U |  |  |  |  |  |  |  |
|       |        | 014522U, 014526U, 014533U, 014536U, 014544U, 014547U, 014551U, 014555U |  |  |  |  |  |  |  |
|       |        | 014562U, 014565U, 014571U, 014576U, 014601U, 014602U, 014604U, 014615U |  |  |  |  |  |  |  |
|       |        | 014620U, 014641U, 014644U, 014650U, 014653U, 014665U, 014670U, 014673U |  |  |  |  |  |  |  |
|       |        | 015072U, 015075U, 015076U, 015101U, 015104U, 015165U, 015171U, 015174U |  |  |  |  |  |  |  |
|       |        | 015207U, 015212U, 015215U, 015232U, 015235U, 015240U, 015243U, 015260U |  |  |  |  |  |  |  |
|       |        | 015263U, 015266U, 015271U, 015307U, 015312U, 015313U, 015316U, 015321U |  |  |  |  |  |  |  |
|       |        | 017164U, 017357U, 017405U, 017410U, 017420U, 017424U, 017425U, 017431U |  |  |  |  |  |  |  |
|       |        | 017464U, 017503U, 017507U, 017512U, 017572U                            |  |  |  |  |  |  |  |
| 16556 | KHMSK  | 010661U, 010731U, 011001U, 011241U, 011457U, 012375U, 016205U          |  |  |  |  |  |  |  |
| 00000 | KL     | 012622U, 012702U, 012722U, 012726U, 012757U, 012762U, 013023U, 013077U |  |  |  |  |  |  |  |
|       |        | 013105U, 013116U, 013122U, 013133U, 013141U, 013147U, 013152U, 014214U |  |  |  |  |  |  |  |
|       |        | 014221U  |  |  |  |  |  |  |  |
|       |        | 014170U  |  |  |  |  |  |  |  |
| 14026 | KLTURN | NOT REFERENCED   |  |  |  |  |  |  |  |
| 00000 | KS     | 013215S  |  |  |  |  |  |  |  |
| 13247 | KUR    | NOT REFERENCED   |  |  |  |  |  |  |  |
| 00000 | LOAD1A | NOT REFERENCED   |  |  |  |  |  |  |  |
| 00000 | LOAD2A | NOT REFERENCED   |  |  |  |  |  |  |  |
| 16565 | LOBCP  | 012745U, 016212S, 017525U  |  |  |  |  |  |  |  |
| 16564 | LOCHAN | 013314U, 013703U, 014161U, 014330U, 014362U, 015121U, 015725U, 016166S |  |  |  |  |  |  |  |
|       |        | 016174U, 016207U, 016226U, 016235U, 017521U                            |  |  |  |  |  |  |  |
| 13173 | LOCK0B | 013032U, 013174U, 013321U, 013334U                                     |  |  |  |  |  |  |  |
| 16563 | LOFACE | 014365U, 016142S, 016162S  |  |  |  |  |  |  |  |
| 16210 | LOGRUP | 016232U  |  |  |  |  |  |  |  |
| 13333 | L0K0S  | 013041U, 013340U   |  |  |  |  |  |  |  |
| 16571 | L0MIP  | 015134U, 016222S   |  |  |  |  |  |  |  |
| 16612 | L12MSK | 011113U, 011650U   |  |  |  |  |  |  |  |

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| 16457 | L15MSK | 016157U, 016163U   |
| 16456 | L6MSK  | 012022U, 012040U, 012051U, 012061U, 012111U, 016152U                   |
| 16616 | L9MSK  | 013746U, 014066U, 014136U  |
| 15043 | LASTO  | NOT REFERENCED   |
| 15063 | LASTIN | NOT REFERENCED   |
| 16570 | LEFMIP | 015130U, 016220S   |
| 16567 | LEIP   | 012734U, 013311U, 013705U, 015123U, 016216S                            |
| 16566 | LIBCP  | 013707U, 016214S   |
| 16572 | LIMIP  | 014326U, 015140U, 016224S  |
| 07713 | MONINO | 014341U  |
| 14257 | MONINA | 014254S, 014331S, 014333U  |
| 14271 | MONINB | 014256S, 014327S   |
| 14275 | MONINC | 014261U, 014262S, 014263U, 014264S                                     |
| 14306 | MONIND | 014272S  |
| 14310 | MONINE | 014265U, 014266S   |
| 14317 | MONINF | 014267U, 014270S, 014342U  |
| 14342 | MONINX | 007713U, 014304U   |
| 14245 | MONTIN | 010056U, 014246U, 014337U  |
| 16173 | MAKADR | 016171U, 016203U   |
| 17634 | MN1A   | 017623U, 017624S, 017625U, 017626S, 017644U                            |
| 17642 | MN1B   | 017627U, 017630S   |
| 16561 | MNADR  | 011145S, 011154S, 011163S, 011376S, 011405S, 011414S, 012136S, 012145S |
| 16557 | MNAREA | 012154S, 012335S, 015435U  |
|       |        | 011141S, 011143S, 011150S, 011152S, 011157S, 011161S, 011372S, 011374S |
|       |        | 011401S, 011403S, 011410S, 011412S, 012132S, 012134S, 012141S, 012143S |
|       |        | 012150S, 012152S, 012331S, 012333S, 012412S, 015430U, 015432U, 015437S |
|       |        | 015442S  |
| 17622 | MNI01  | NOT REFERENCED   |
| 13764 | MWA    | 013761S  |
| 14002 | MWAED  | 007756U, 013762U   |
| 07756 | MWAID  | 014001U  |
| 13757 | MWAIT  | 013730U, 013777U, 014002U  |
| 13766 | MWB    | 016303S  |
| 13771 | MWC    | 016314S, 016323S   |
| 13775 | MWD    | NOT REFERENCED   |
| 16114 | NGFIND | NOT REFERENCED   |
| 16604 | NONJPD | 015403U, 015404U, 015407U, 015410U, 015411U, 015415U, 015416U, 015421U |
|       |        | 015422U, 015423U, 015732S  |
| 10666 | NEXT   | 010662U, 015655S   |
| 10736 | NEXTA  | 010732U, 015661S   |
| 11006 | NEXTB  | 011002U, 015664S   |
| 16626 | NTDSTD | 011275U, 013713U, 014736U, 016143S, 016150S, 017306U                   |
| 11634 | PEEK   | 011615U, 011623U, 011645U, 011655U                                     |

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| 15145 | PEST   | 015113U  |  |  |  |  |  |  |  |
| 16412 | PIN    | 011435U, 011436U, 011446U, 012620U, 012621U, 012727U, 012730U, 013103U |  |  |  |  |  |  |  |
|       |        | 013104U, 013106U, 013107U, 013126U, 013142U, 013143U, 013145U, 013146U |  |  |  |  |  |  |  |
|       |        | 013165U, 013444U, 013445U, 013456U, 013610U, 013611U, 013632U, 013636U |  |  |  |  |  |  |  |
|       |        | 013644U, 013667U, 013772U, 013773U, 014035U, 014036U, 014042U, 014104U |  |  |  |  |  |  |  |
|       |        | 014111U, 014302U, 014303U, 014425U, 014426U, 014432U, 014433U, 014504U |  |  |  |  |  |  |  |
|       |        | 014505U, 014523U, 014524U, 014577U, 014600U, 014605U, 014606U, 014651U |  |  |  |  |  |  |  |
|       |        | 014652U, 014666U, 014667U, 014734U, 015102U, 015103U, 015213U, 015214U |  |  |  |  |  |  |  |
|       |        | 015241U, 015242U, 015267U, 015270U, 015317U, 015320U, 016403S, 016404S |  |  |  |  |  |  |  |
|       |        | 016405S, 016406S, 016407S, 016410S, 016623U, 017360U, 017361U, 017364U |  |  |  |  |  |  |  |
|       |        | 017406U, 017407U, 017434U, 017440U, 017444U, 017632S, 017633S, 017640U |  |  |  |  |  |  |  |
|       |        | 017641U  |  |  |  |  |  |  |  |
| 16623 | PIN3   | 013663U  |  |  |  |  |  |  |  |
| 16620 | PLAC2  | 013353S, 013726U, 013733U, 013751U, 013754S, 014007S, 014070U, 014073S |  |  |  |  |  |  |  |
|       |        | 014173U  |  |  |  |  |  |  |  |
| 16621 | PLAC3  | 013354S, 014010S, 014101S, 014177U                                     |  |  |  |  |  |  |  |
| 16622 | PLAC4  | 013355S, 013675U, 013700S, 014006S, 014064U, 014134U, 014232S, 016720S |  |  |  |  |  |  |  |
|       |        | 016721U, 017012S, 017013U, 017305S, 017515U, 017520S                   |  |  |  |  |  |  |  |
| 14244 | PLAC5  | 014011S, 014140U, 014143S, 014175U                                     |  |  |  |  |  |  |  |
| 14242 | PLAC7  | 014026S, 014137S, 014142U  |  |  |  |  |  |  |  |
| 14243 | PLAC8  | 012605S, 012712S, 013020S, 013034U, 014012S, 014151S, 014201U, 014743S |  |  |  |  |  |  |  |
|       |        | 015112U, 015115S, 016634S, 016712S, 017005S, 017161U, 017172U          |  |  |  |  |  |  |  |
| 16615 | PLACE  | 013201S, 013307U, 013312S, 013423S, 013424S, 013747U, 013750S, 013753U |  |  |  |  |  |  |  |
|       |        | 014027S, 014067S, 014072U, 014632S, 014711S, 014717U, 014731U          |  |  |  |  |  |  |  |
| 15362 | PROKA  | 007770U, 015344U, 015365U  |  |  |  |  |  |  |  |
| 07770 | PROKAA | 015361U  |  |  |  |  |  |  |  |
| 15154 | PR234S | 015043U, 015063U, 015336U  |  |  |  |  |  |  |  |
| 15165 | PRAAA  | 014775U, 014776S   |  |  |  |  |  |  |  |
| 15171 | PRAAB  | 015003U, 015004S, 015012U, 015013S, 015032U, 015033S, 015044U, 015045S |  |  |  |  |  |  |  |
| 15347 | PRAAC  | 015067S, 015071S, 015162S, 015164S, 015204S, 015206S, 015227S, 015231S |  |  |  |  |  |  |  |
|       |        | 015255S, 015257S, 015304S, 015306S                                     |  |  |  |  |  |  |  |
| 15207 | PRAAD  | 015005S, 015024U, 015025S, 015034U, 015036S, 015046U, 015047S          |  |  |  |  |  |  |  |
| 15232 | PRAAE  | 014777S, 015006S   |  |  |  |  |  |  |  |
| 15240 | PRAAF  | 015014S, 015026S, 015037S, 015050S                                     |  |  |  |  |  |  |  |
| 15260 | PRAAG  | 015000S, 015007S   |  |  |  |  |  |  |  |
| 15266 | PRAAH  | 015015S, 015027S, 015040U, 015042S, 015061U, 015062S                   |  |  |  |  |  |  |  |
| 15307 | PRAAK  | 015001S, 015016S   |  |  |  |  |  |  |  |
| 15316 | PRAAL  | 015010S, 015022S, 015030S  |  |  |  |  |  |  |  |
| 15324 | PRAALL | 014754S, 015127S, 015302S  |  |  |  |  |  |  |  |
| 15072 | PRAAM  | 015002S, 015017S   |  |  |  |  |  |  |  |
| 15101 | PRAAN  | 015011S, 015023S, 015031S  |  |  |  |  |  |  |  |
| 15215 | PRADD  | 015020U, 015021S   |  |  |  |  |  |  |  |

4-366

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| 15354 | PRBAD  | 007771U, 015345U, 015360U  |
| 07771 | PRBADU | 015353U  |
| 15161 | PRBBA  | 014751S, 014756S, 015124S, 015131S   |
| 15203 | PRBBB  | 014762S, 014766S, 015051U, 015052U, 015053S, 015054S, 015135S, 015141S   |
| 15226 | PRBBC  | 014752S, 014763S, 015125S, 015136S   |
| 15254 | PRBBD  | 014753S, 014767S, 015126S, 015142S   |
| 15303 | PRBBF  | 014757S, 014770S, 015055U, 015056U, 015057S, 015060S, 015132S, 015143S   |
| 15066 | PRBBG  | 014760S, 014764S, 015133S, 015137S   |
| 15641 | PRESTR | 015615U, 015624U, 015632U  |
| 12505 | PRIOK  | 012465U  |
| 12507 | PRIBAD | 012456U  |
| 10013 | PSTOP  | NOT REFERENCED   |
| 13023 | QACK   | 016265S  |
| 15555 | RCORDO | 010114U, 010230U, 010233U, 010335U, 010601U, 010727U, 011723U, 012664U<br>012672U, 012713U, 012717U, 012772U, 013000U, 013021U, 013025U, 013114U<br>013120U, 013124U, 013130U, 013153U, 013157U, 013163U, 013167U, 013460U<br>013464U, 013470U, 013477U, 013505U, 013516U, 013522U, 013600U, 013630U<br>013634U, 013640U, 013647U, 013661U, 013665U, 013671U, 013674U, 014044U<br>014050U, 014061U, 014076U, 014107U, 014114U, 014117U, 014131U, 014146U<br>014315U, 014320U, 014435U, 014520U, 014540U, 014552U, 014567U, 014610U<br>014663U, 014675U, 014704U, 014710U, 015355U, 015563U, 016131U, 016442U<br>016700U, 016711U, 016716U, 016724U, 016745U, 016771U, 017003U, 017010U<br>017016U, 017032U, 017060U, 017076U, 017112U, 017130U, 017144U, 017366U<br>017422U, 017427U, 017432U, 017436U, 017442U, 017446U, 017501U, 017504U<br>017514U, 017543U |
| 15564 | RCORDF | 010116U, 010242U, 010245U, 011761U, 013244U, 013252U, 013273U, 013305U<br>015572U, 016135U   |
| 15546 | RCORDI | 010112U, 010216U, 010221U, 010330U, 010436U, 010542U, 010577U, 010777U<br>012350U, 012510U, 015554U, 016125U   |
| 10047 | REES   | 010071U  |
| 15767 | REICR  | 010160U, 010313U, 010412U, 010520U, 010563U, 010620U, 011136U, 011366U<br>011666U, 011725U, 012156U, 012234U, 012421U, 015610S, 015617S, 015625S<br>015634S, 015776U   |
| 10270 | REQA   | 010277U  |
| 10264 | REQACK | 010213U, 010225U, 010237U, 010275U, 010301U  |
| 13235 | RIGA   | 013222U, 013223S, 013224U, 013225S   |
| 13364 | RIIC   | 013711U  |
| 16613 | RIL    | 013260U, 013554U, 016360U  |
| 16005 | RJPOUT | 011162U, 011413U, 012334U  |
| 15777 | RJPEF  | 011153U, 011404U   |
| 15366 | RJPEI1 | 011144U, 011375U   |

|       |        |   |
|-------|--------|---|
| 16013 | RJPIN  | NOT REFERENCED  |
| 11774 | RLJPEI | 010036U, 011775U, 012055U                                     |
| 07753 | RSMFOK | 017546U   |
| 17612 | RSMFA  | 007772U, 017562U  |
| 17164 | RSMFAA | 016647U, 016650S  |
| 07757 | RSMFAB | 017215U   |
| 17216 | RSMFB  | 007757U, 017153U  |
| 07772 | RSMFBA | 017611U   |
| 17547 | RSMFKO | 007753U, 017452U  |
| 17210 | RTCOK  | 007762U, 016750U  |
| 07762 | RTCOK  | 017207U   |
| 17204 | RTCQVF | 007764U, 016664U  |
| 07764 | RTCQVK | 017203U   |
| 16701 | RTCA   | 017204U   |
| 16744 | RTCB   | 017206U   |
| 16772 | RTCC   | 017210U   |
| 17061 | RTCCB  | 017217U   |
| 17217 | RTCCBB | 017043U   |
| 07773 | RTCCC  | 017046S, 017064S, 017102S, 017116S, 017134S, 017235U          |
| 17235 | RTCCCC | 017044U   |
| 17076 | RTCCD  | 017220U   |
| 17220 | RTCCDD | 017062U   |
| 17112 | RTCCE  | 017221U   |
| 17221 | RTCCEE | 017100U   |
| 17130 | RTCCF  | 017222U   |
| 17222 | RTCCFF | 017114U   |
| 17144 | RTCCG  | 017223U   |
| 17223 | RTCCGG | 017132U   |
| 17224 | RTCEN  | 017074U, 017110U, 017126U, 017142U, 017234U                   |
| 07763 | RTCMOT | 017205U   |
| 17615 | RTCMA  | 007755U, 017563U  |
| 07755 | RTCMB  | 017614U   |
| 17206 | RTCNOT | 007763U, 016731U  |
| 17202 | RTCREM | 017020U   |
| 17236 | RTCWD1 | 017231U   |
| 17237 | RTCWDC | 017035U   |
| 17240 | RTCWDD | 017036U   |
| 17170 | RTCWIC | 017216U   |
| 13045 | SODRP  | 007752U, 012630S, 012634S, 012736S, 012742S                   |
| 07752 | SODRP  | 013044U   |
| 13044 | SDRP   | 012652U, 012653U, 012760U, 012761U                            |
| 17175 | SECSTH | 016743U, 017027U, 017201U, 017275U, 017276U                   |
| 15340 | SETPR  | 015105U, 015175U, 015216U, 015244U, 015272U, 015326U, 015352U |



|       |        |                |         |         |         |         |         |         |         |
|-------|--------|----------------|---------|---------|---------|---------|---------|---------|---------|
| 17242 | SETSPL | 016632U        | 017254U | 017536U |         |         |         |         |         |
| 14226 | SFK    | 014063U        | 014133U | 014233U |         |         |         |         |         |
| 10113 | SKOICK | 010105U        | 010106S |         |         |         |         |         |         |
| 10115 | SKFICK | 010107U        | 010110S |         |         |         |         |         |         |
| 10111 | SKIICK | 010103U        | 010104S |         |         |         |         |         |         |
| 13116 | SKINT  | 016252S        | 016262U | 016263S |         |         |         |         |         |
| 13155 | SKINT2 | 016306S        | 016324U | 016325S |         |         |         |         |         |
| 16631 | SPECIA | 010065U        | 015322U |         |         |         |         |         |         |
| 07761 | SPI12A | 017211U        |         |         |         |         |         |         |         |
| 17212 | SPI12B | 007761U        | 017267U |         |         |         |         |         |         |
| 07760 | SPI13C | 017213U        |         |         |         |         |         |         |         |
| 17214 | SPI13D | 007760U        | 017266U |         |         |         |         |         |         |
| 17550 | SPRI   | 017535U        | 017613U |         |         |         |         |         |         |
| 17255 | SPRIO  | 017150U        |         |         |         |         |         |         |         |
| 17572 | SPRIA  | 016651S        |         |         |         |         |         |         |         |
| 11117 | SRCH   | 011053S        | 011055S | 011057U | 011061S | 011063S | 011064U | 011066S | 011070S |
|       |        | 011071U        | 011073S | 011075S | 011076U | 011100S | 011102S | 011103U | 011112U |
|       |        | 011131U        |         |         |         |         |         |         |         |
| 16021 | SRCHCM | 011261U        | 011477U |         |         |         |         |         |         |
| 11051 | SRCHM  | 010706U        | 010756U | 011026U | 011107U |         |         |         |         |
| 16374 | SRSMAL | 010051U        | 016401U | 017245U |         |         |         |         |         |
| 16347 | SS     | 016337S        |         |         |         |         |         |         |         |
| 16607 | STOPA  | 013657U        |         |         |         |         |         |         |         |
| 16614 | STOPAA | 016343U        | 016722U |         |         |         |         |         |         |
| 16610 | STOPB  | 017006U        |         |         |         |         |         |         |         |
| 16611 | STOPC  | 016732U        | 016751U | 017014U |         |         |         |         |         |
| 17241 | STOPD  | 017001U        |         |         |         |         |         |         |         |
| 15535 | STAL   | 015530S        | 015532S | 015534S | 015543U |         |         |         |         |
| 15523 | STALAC | 010247U        | 010411U | 015545U |         |         |         |         |         |
| 10020 | START  | 010012U        | 010052U |         |         |         |         |         |         |
| 15474 | STCWAR | 010154U        | 015506U |         |         |         |         |         |         |
| 16627 | STDEST | 013712U        |         |         |         |         |         |         |         |
| 16336 | STINK  | 011671U        | 011727U | 012130U | 012235U | 012300U | 012343U | 012352U | 012422U |
|       |        | 012455U        | 012606U | 012721U | 013603U | 014274U | 015343U | 016352U | 016655U |
|       |        | 016727U        | 017034U | 017151U | 017256U | 017371U | 017451U | 017552U |         |
| 12377 | STRINA | 011676S        | 011733S | 012304S | 012461S | 012470S | 015701S | 015704S |         |
| 12410 | STRINB | 011674S        | 011700S | 011731S | 011735S | 012302S | 012306S | 012312S | 012457S |
|       |        | 012463S        | 012466S | 012472S |         |         |         |         |         |
| 12373 | STRINT | 011701U        | 011736U | 012307U | 012313U | 012414U | 012464U | 012473U | 015705S |
| 16420 | STRMEM | 011522U        | 014640U | 016437U |         |         |         |         |         |
| 13533 | SURCH  | NOT REFERENCED |         |         |         |         |         |         |         |
| 16463 | SXTEEN | 015577U        |         |         |         |         |         |         |         |

|       |            |  |
|-------|------------|--|
| 13133 | T00UT2     | 016246S, 016300S   |
| 13074 | T00UTS     | 016245S, 016277S   |
| 13063 | T0FIV      | NOT REFERENCED   |
| 13102 | T0INS      | 016256U, 016257S, 016315U, 016316S                                     |
| 13141 | T0INS2     | 016260S, 016317S   |
| 00000 | TAK1E      | NOT REFERENCED   |
| 00000 | TAK2E      | NOT REFERENCED   |
| 10564 | TBL10      | 010602U, 015644S   |
| 10101 | TBLI01     | 010117U, 015641S   |
| 10161 | TBLI02     | 010246U, 015642S   |
| 10314 | TBLI03     | 010336U, 015643S   |
| 10413 | TBLI06     | 015645S  |
| 10521 | TBLI09     | 015650S  |
| 14240 | TDCS       | 014053S, 014100U, 014122S, 014150U                                     |
| 15462 | TERM       | 015455S, 015457S, 015461S, 015470U                                     |
| 15447 | TERMAL     | 010050U, 010261U, 010451U, 010517U, 010564U, 010617U, 011331U, 011521U |
|       |            | 012577U, 012616U, 012725U, 013067U, 013176U, 013316U, 013442U, 013524U |
|       |            | 013550U, 014217U, 014300U, 014415U, 014422U, 014501U, 014511U, 014525U |
|       |            | 014574U, 014623U, 014647U, 015155U, 015473U, 017160U, 017243U, 017343U |
|       |            | 017450U, 017506U, 017571U  |
|       |            | 016304U, 016305S   |
|       |            | 012710U, 013016U, 016250U, 016251S                                     |
|       |            | 015712S, 015713U, 015715S, 015716U, 015720S, 015721U, 015731U          |
|       |            | 014456S, 014457S   |
|       |            | 014443U, 014444S   |
|       |            | 014447U, 014450S, 014453U, 014454S                                     |
|       |            | 014460U, 014461S, 014463U, 014464S                                     |
|       |            | 014445S  |
|       |            | 014455S  |
|       |            | 014352S, 014361U, 014363S, 014372U, 014612U                            |
|       |            | NOT REFERENCED   |
|       |            | 014462S, 014465S   |
|       |            | 014451S, 014466U, 014467S  |
|       |            | 014542U, 014554U, 014624U  |
|       |            | 014470U, 014471S   |
|       |            | 014473U, 014474S, 014476U, 014477S                                     |
|       |            | 014472S  |
|       |            | 014475S, 014500S   |
|       |            | 014452S  |
|       |            | 014446S  |
|       |            | NOT REFERENCED   |
|       |            | 014353S, 014357U, 014364S, 014370U, 014437U                            |
|       |            | 014406U, 014407S   |
| 13010 | TESTAC     |  |
| 12702 | TESTAK     |  |
| 15723 | TESTIT     |  |
| 14602 | TIMO       |  |
| 14503 | TIMA       |  |
| 14506 | TIMB       |  |
| 14515 | TIMC       |  |
| 14522 | TIMD       |  |
| 14526 | TIME       |  |
| 14440 | TIMEA      |  |
| 14373 | TIMET      |  |
| 14533 | TIMF       |  |
| 14615 | TIMG       |  |
| 14613 | TIMGG      |  |
| 14544 | TIMH       |  |
| 14547 | TIMI       |  |
| 14555 | TIMK       |  |
| 14562 | TIML       |  |
| 14571 | TIMM       |  |
| 14576 | TIMN       |  |
| 07775 | TTTTTTTTO. |  |
| 14401 | TWOV       |  |
| 14424 | TWOVA      |  |

|       |          |  |
|-------|----------|--|
| 14430 | TWOVB    | 014410U, 014411S, 014412U, 014413S, 014414S                            |
| 14417 | TWOVC    | 014404U, 014405S   |
| 16464 | TWELVE   | 011344U, 015601U   |
| 16472 | TWLV18   | 011324U, 011574U, 011602U, 014712U, 016140S, 016145S                   |
| 16455 | U12MSK   | 010102U, 010162U, 010315U, 010414U, 010427U, 010522U, 010566U, 010622U |
|       |          | 011104U, 011166U, 011417U, 011703U, 011743U, 012161U, 012242U, 012260U |
|       |          | 012427U, 013221U, 013366U, 014016U, 014160U, 014257U, 014402U, 014441U |
|       |          | 014773U, 015733U, 016234U, 016646U, 017322U, 017622U                   |
|       |          | 010016U, 016172U   |
| 16137 | UPRAM    | 015730U  |
| 15732 | USEIT    | 013212S  |
| 13232 | VEP      | 016307U, 016312S, 016326S  |
| 13110 | VEROUT   | 016253U, 016254S, 016264S  |
| 13147 | VROUT2   | 016327S  |
| 12715 | WACKQ    | 010042U, 012522U, 012532U, 012533U, 012540U                            |
| 12521 | WAITCK   | 007730U  |
| 12540 | WTEINT   | 012537U  |
| 07730 | WTINTL   | 010111U, 010113U, 010115U, 010210U, 010214U, 010217U, 010220U, 010222U |
| 00000 | XX       | 010226U, 010231U, 010232U, 010234U, 010240U, 010243U, 010244U, 010325U |
|       |          | 010326U, 010331U, 010334U, 010433U, 010434U, 010442U, 010443U, 010444U |
|       |          | 010540U, 010541U, 010546U, 010547U, 010550U, 010575U, 010576U, 010600U |
|       |          | 010642U, 010645U, 010650U, 010653U, 010722U, 010725U, 011120U, 011215U |
|       |          | 011220U, 011224U, 011231U, 011233U, 011235U, 011265U, 011271U, 011273U |
|       |          | 011276U, 011301U, 011307U, 011312U, 011316U, 011434U, 011437U, 011440U |
|       |          | 011443U, 011452U, 011503U, 011507U, 011714U, 011717U, 011750U, 011755U |
|       |          | 012171U, 012176U, 012202U, 012207U, 012265U, 012270U, 012271U, 012274U |
|       |          | 012401U, 012406U, 012440U, 012444U, 012445U, 012451U, 015520U, 015724U |
|       |          | 015770U, 016121U, 016435U, 017634U, 017637U, 017642U                   |
| 12643 | ZAAA     | 012627S  |
| 12751 | ZAAB     | 012735S  |
| 07710 | ZROL     | 012057U  |
| 12060 | ZROMON   | 007710U, 012002U, 012031U, 012042U, 012062U, 012071U, 012113U          |
| 77777 | ZZZZZZZZ | NOT REFERENCED   |

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