FP11

LDF LDD STF STD

MD-11-DCFPC-B

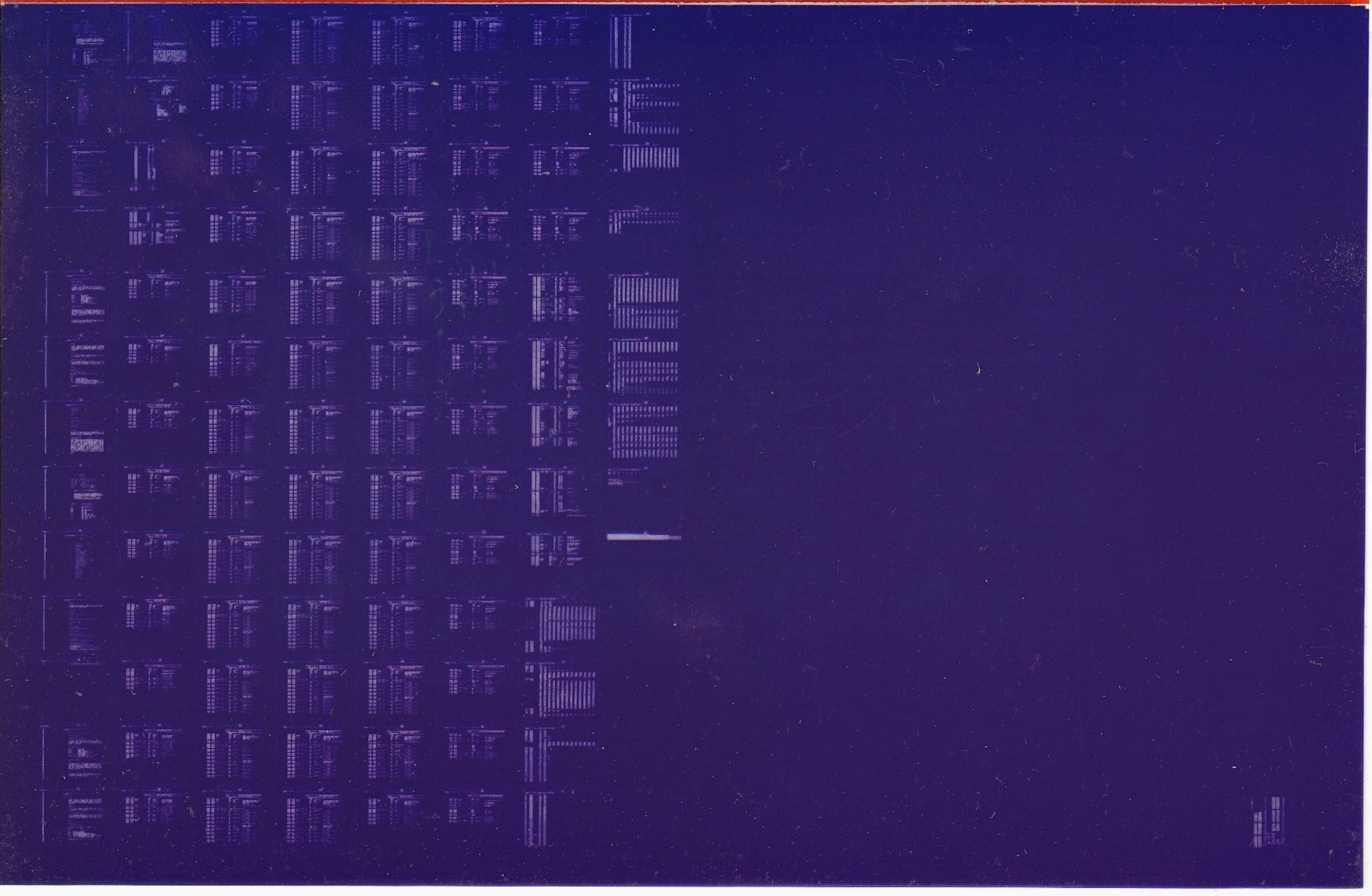
EP-DCFPC-B-DL-A

OCT 1976

FICHE 1 OF 1

digital

Made in U.S.A.



.REPT 0

IDENTIFICATION

PRODUCT CODE: MAINDEC-11-DCFPC
PRODUCT NAME: FP11 BASIC INSTRUCTION TESTS
DATE CREATED: MARCH 12, 1973
MAINTAINER: DIAGNOSTIC GROUP
AUTHORS: BOB BRAIN & KEN CHAPMAN

MAINDEC NO.	INSTRUCTIONS TESTED
DCFPA	LDFPS, STFPS, SETI, SETL SETF, SETD, CFCC
DCFPB	STST
DCFPC	LDF, LDD, STF, STD
DCFPD	ADDF, ADDD, SUBF, SUBD
DCFDE	CMDF, CMPD
DCFPF	MULF, MULD
DCFPG	DIVF, DIVD
DCFPH	CLRF, CLRD, TSTF, TSTD ABSF, ABSD, NEGF, NEGD
DCFPI	LDCFD, LDCDF, STCFD, STCDF
DCFPJ	LDCIF, LDCLF, LDCID, LDCLD STCFI, STCFL, STCDI, STCDL
DCFPK	LDEXP, STEXP
DCFPL	MODF, MODD

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FP11 BASIC INSTRUCTION TEST DCFPA - DCFPL PAGE 3
DESCRIPTION

1. ABSTRACT

THESE PROGRAMS TEST THE FP11 IN ALL MODES WITH FIXED NUMBER PATTERNS. THE PROGRAMS SHOULD BE RUN IN ORDER FOR AT LEAST 2 PASSES WITH ALL SWITCHES DOWN.

2. REQUIREMENTS

2.1 EQUIPMENT

PDP11/45 STANDARD COMPUTER WITH FP11 OPTION

2.2 STORAGE

PROGRAM STORAGE - THE ROUTINES USE MEMORY 0 - 17776

2.3 PRELIMINARY PROGRAMS

NONE

3. LOADING PROCEDURE

USE STANDARD PROCEDURE FOR ABS TAPES.

4. STARTING PROCEDURE

4.1 CONTROL SWITCH SETTINGS

SEE 5.1.1 (ALL DOWN FOR WORST CASE TESTING.

4.2 STARTING ADDRESS

THE PROGRAM SHOULD ALWAYS BE STARTED AT 200.

4.3 PROGRAM AND/OR OPERATOR ACTION

1) LOAD PROGRAM INTO MEMORY USING ABS LOADER.
2) LOAD ADDRESS 200.
3) SET SWITCHES (SEE SEC 5.1.1) ALL DOWN FOR WORST CASE
4) PRESS START.
5) THE PROGRAM WILL LOOP AND BELL WILL RING ONCE EVERY PASS
6) A MINIMUM OF TWO PASSES SHOULD ALWAYS BE RUN.

```
                        7) THE DISPLAY ON THE 11/45 WILL SHOW THE ITERATION COUNT IN
                        THE LEFT BYTE AND TEST NUMBER IN THE RIGHT.  TO USE, SET THE
```

DESCRIPTION

DATA DISPLAY SWITCH TO THE DISPLAY POSITION.

5. OPERATING PROCEDURE

5.1 OPERATIONAL SWITCH SETTINGS

AT SA 200 .. ALL SWITCHES DOWN IS WORST CASE TESTING. IF AN ERROR OCCURS, THAT TEST WILL BE LOOPED UPON UNTIL COMPLETION OF 256 CONSECUTIVE PASSES WITH NO ERRORS OF THE SUBTEST IF SW(9) SET TO A 1. THE BELL WILL RING UPON COMPLETION OF A PASS.

5.1.1 SWITCH SETTINGS ARE:

```
SW(15) = 1 ..... HALT ON ERROR
SW(14) = 1 ..... SCOPE LOOP
SW(13) = 1 ..... INHIBIT PRINTOUT
SW(12) = 1 ..... INHIBIT TRACE TRAPPING
SW(11) = 1 ..... INHIBIT ITERATIONS OF SUBTEST
SW(10) = 1 ..... BELL ON ERROR
         0 ..... BELL ON PASS COMPLETE
SW(09) = 1 ..... LOOP ON ERROR
SW(08) = 1 ..... LOOP ON TEST IN SW(7:0
         0 ..... LOAD SW(7:0) INTO JB REGISTER
```

5.2 SUBROUTINE ABSTRACTS

5.2.1 SCOPE

THIS SUBROUTINE CALL IS PLACED BETWEEN EACH SUBTEST IN THE INSTRUCTION SECTION. IT RECORDS THE STARTING ADDRESS OF EACH SUBTEST AS IT IS BEING ENTERED IN LOCATION "LAD". IF A SCOPE LOOP IS REQUESTED, THE CURRENT SUBTEST WILL BE LOOPED UPON. S.. 11) ON A 1 INHIBITS ITERATION OF SUBTESTS. THE CONTENTS OF LAD MAY BE USED TO DETERMINE THE LAST SUBTEST SUCCESSFULLY COMPLETED.

5.2.2 HLT

THIS ROUTINE PRINTS OUT AN ERROR MESSAGE (SEE 6.1. IF A HLT IS EXECUTED, THE SUBTEST WILL BE LOOPED UPON UNTIL 256 CONSECUTIVE GOOD PASSES ARE COMPLETED IF SW 9 IS ON A 1. TO INHIBIT TYPEOUTS, PUT SW(13) ON A 1.

5.2.3 TRTRAP

IF SW<12> IS ON A 0, THE T BIT WILL BE SET ON ALTERNATE PASSES. WHEN SET, IT CAUSES A TRAP AFTER EACH INSTRUCTION. THE FIRST INSTRUCTION EXECUTED UPON TRAPPING IS AN "RTT" WHICH RETURNS TO THE INTERRUPTED SEQUENCE OF INSTRUCTIONS. THIS SEQUENCE IS CONTINUED UNTIL THE END OF THE PROGRAM IS REACHED.

5.2.4 TRAPCATCHER

A ".+2" - "HALT" SEQUENCE IS REPEATED FROM 0 - 776 TO CATCH ANY UNEXPECTED TRAPS. THUS ANY UNEXPECTED TRAPS OR INTERUPTS WILL HALT AT THE VECTOR + 2.

5.2.5 FLOATING POINT TRAP (TO 244)

THE FP11 INTERRUPT DISABLE BIT IS ALWAYS SET IN ALL OF THESE TESTS (EXCEPT DCFPA) SO NO TRAPS TO 244 SHOULD OCCUR. IF AN INTERRUPT OCCURS, THE PROGRAM WILL HALT AT 756 IN THE ROUTINE CALLED FLTERR AND DISPLAY THE FPS REGISTER IN R0.

6. ERRORS

6.1 ERROR PRINTOUT

THE FORMAT IS AS FOLLOWS:

```
ADR  FPS  ANS1 ANS2 ANS3 ANS4 ANS5 ANS6 ANS7 ANS8
  FEC FEA
```

WHERE:

```
ADR     = ADDRESS OF ERROR HLT
FPS     = FLOATING POINT STATUS
FEC     = FLOATING EXCEPTION CODES (ERROR CODES)
FEA     = FLOATING EXCEPTION ADDRESS (ERROR ADDRESS)
ANS1-8 = ERROR DATA READ FROM THE FP11.  FROM 0-8  OF  THESE
         MAY  BE TYPED DEPENDING ON THE NUMBER FOLLOWING THE
         HLT: I.E., HLT+3 WOULD TYPE ANS1-ANS3.
```

TO FIND THE FAILING TEST, LOOK AT THE LISTING ABOVE THE ADDRESS TYPED.

6.2 ERROR RECOVERY

RESTART AT 200

7. RESTRICTIONS

NONE

8. MISCELLANEOUS

8.1 EXECUTION TIME

A BELL WILL RING WITHIN 15 SECONDS WITH ALL SWITCHES DOWN.

8.2 STACK POINTER

STACK IS INITALLY SET TO 500

8.3 POWER FAIL

EACH TEST CAN BE POWER FAILED WITH NO ERRORS EXCEPT ON THE FEC AND FEA. TO USE, START THE TEST AS USUAL AND POWER DOWN THEN UP AT ANY TIME. THE PROGRAM SHOULD TYPE "POWER" AND CONTINUE TO RUN WITH NO OTHER TYPEOUTS.

9. PROGRAM DESCRIPTION

THESE PROGRAMS TEST ALL THE INSTRUCTIONS ON THE FP11 IN ALL MODES. EACH PROGRAM HAS MANY SUBTESTS (THE CODE BETWEEN TWO SCOPE STATEMENTS) WHICH ARE RUN 256 TIMES BEFORE CONTINUING TO THE NEXT. SW(11) ON A 1 CAUSES EACH SUBTEST TO BE RUN ONLY ONCE. SW(9) ON A 1 ENABLES LOOP ON ERROR. THE ADDRESS ICNT (LOC 1000) AND DISPLAY REGISTER ON THE 11/45 EACH CONTAIN THE ITERATION COUNT IN THE LEFT BYTE AND THE TEST NUMBER IN THE RIGHT BYTE. ALL THE SUBTESTS SHOULD BE RUN SEQUENTIALLY BY STARTING AT 200 NOT BY STARTING AT THE BEGINNING OF THE SUBTEST. TO LOOP ON A PARTICULAR SUBTEST PUT THE TEST NUMBER (SEE LISTING) IN THE RIGHT BYTE OF THE SWITCH REGISTER AND SW(8) ON A 1. THIS TEST WILL BE LOOPED UPON UNTIL SW(8) IS PUT ON A 0 OR THE RIGHT BYTE IS CHANGED. IF THE TEST IS NON-EXISTANT, THE PROGRAM WILL BE RUN AS USUAL.

.EOP

.REPT 0

IDENTIFICATION

PRODUCT CODE: MAINDEC-11-DCFPA TO DCFPL
PRODUCT NAME: FP11 BASIC INSTRUCTION TESTS
DATE CREATED: MARCH 12, 1973
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DCFPA	LDFPS, STFPS, SETI, SETL SETF, SETD, CFCC
DCFPB	STST
DCFPC	LDF, LDD, STF, STD
DCFPD	ADDF, ADDD, SUBF, SUBD
DCFDE	CMPF, CMPD
DCFPF	MULF, MULD
DCFPG	DIVF, DIVD
DCFPH	CLRF, CLRD, TSTF, TSTD ABSF, ABSD, NEGF, NEGD
DCFPI	LDCFD, LDCDF, STCFD, STCDF
DCFPJ	LDCIF, LDCLF, LDCID, LDCLD STCFI, STCFL, STCDI, STCDL
DCFPK	LDEXP, STEXP
DCFPL	MODF, MODD

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PROGRAM STORAGE - THE ROUTINES USE MEMORY 0 - 17776

2.3 PRELIMINARY PROGRAMS

NONE

3. LOADING PROCEDURE

USE STANDARD PROCEDURE FOR ABS TAPES.

4. STARTING PROCEDURE

4.1 CONTROL SWITCH SETTINGS

SEE 5.1.1 (ALL DOWN FOR WORST CASE TESTING)

4.2 STARTING ADDRESS

THE PROGRAM SHOULD ALWAYS BE STARTED AT 200.

4.3 PROGRAM AND/OR OPERATOR ACTION

1) LOAD PROGRAM INTO MEMORY USING ABS LOADER.
2) LOAD ADDRESS 200.
3) SET SWITCHES (SEE SEC 5.1.1) ALL DOWN FOR WORST CASE
4) PRESS START.
5) THE PROGRAM WILL LOOP AND BELL WILL RING ONCE EVERY PASS
6) A MINIMUM OF TWO PASSES SHOULD ALWAYS BE RUN.

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                                7) THE DISPLAY ON THE 11/45 WILL SHOW THE ITERATION COUNT IN
                                THE LEFT BYTE AND TEST NUMBER IN THE RIGHT.  TO USE, SET THE
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FP11 BASIC INSTRUCTION TEST DCFPA - DCFPL PAGE 4
DESCRIPTION

DATA DISPLAY SWITCH TO THE DISPLAY POSITION.

5. OPERATING PROCEDURE

5.1 OPERATIONAL SWITCH SETTINGS

AT SA 200 .. ALL SWITCHES DOWN IS WORST CASE TESTING. IF AN ERROR OCCURS, THAT TEST WILL BE LOOPED UPON UNTIL COMPLETION OF 256 CONSECUTIVE PASSES WITH NO ERRORS OF THE SUBTEST IF SW<9> SET TO A 1. THE BELL WILL RING UPON COMPLETION OF A PASS.

5.1.1 SWITCH SETTINGS ARE:

SW<15> = 1 ..... HALT ON ERROR
SW<14> = 1 ..... SCOPE LOOP
SW<13> = 1 ..... INHIBIT PRINTOUT
SW<12> = 1 ..... INHIBIT TRACE TRAPPING
SW<11> = 1 ..... INHIBIT ITERATIONS OF SUBTEST
SW<10> = 1 ..... BELL ON ERROR
0 ..... BELL ON PASS COMPLETE
SW<09> = 1 ..... LOOP ON ERROR
SW<08> = 1 ..... LOOP ON TEST IN SW<7:0>
0 ..... LOAD SW<7:0> INTO UB REGISTER

5.2 SUBROUTINE ABSTRACTS

5.2.1 SCOPE

THIS SUBROUTINE CALL IS PLACED BETWEEN EACH SUBTEST IN THE INSTRUCTION SECTION. IT RECORDS THE STARTING ADDRESS OF EACH SUBTEST AS IT IS BEING ENTERED IN LOCATION "LAD". IF A SCOPE LOOP IS REQUESTED, THE CURRENT SUBTEST WILL BE LOOPED UPON. SW<11> ON A 1 INHIBITS ITERATION OF SUBTESTS. THE CONTENTS OF LAD MAY BE USED TO DETERMINE THE LAST SUBTEST SUCCESSFULLY COMPLETED.

5.2.2 HLT

THIS ROUTINE PRINTS OUT AN ERROR MESSAGE (SEE 6.1.) IF A HLT IS EXECUTED. THE SUBTEST WILL BE LOOPED UPON UNTIL 256 CONSECUTIVE GOOD PASSES ARE COMPLETED IF SW<9> IS ON A 1. TO INHIBIT TYPEOUTS, PUT SW<13> ON A 1.

DESCRIPTION

5.2.3 TRTRAP

IF SW(12) IS ON A 0, THE T BIT WILL BE SET ON ALTERNATE PASSES. WHEN SET, IT CAUSES A TRAP AFTER EACH INSTRUCTION. THE FIRST INSTRUCTION EXECUTED UPON TRAPPING IS AN "RTT" WHICH RETURNS TO THE INTERRUPTED SEQUENCE OF INSTRUCTIONS. THIS SEQUENCE IS CONTINUED UNTIL THE END OF THE PROGRAM IS REACHED.

5.2.4 TRAPCATCHER

A ".+2" - "HALT" SEQUENCE IS REPEATED FROM 0 - 776 TO CATCH ANY UNEXPECTED TRAPS. THUS ANY UNEXPECTED TRAPS OR INTERUPTS WILL HALT AT THE VECTOR + 2.

5.2.5 FLOATING POINT TRAP (TO 244)

THE FP11 INTERRUPT DISABLE BIT IS ALWAYS SET IN ALL OF THESE TESTS (EXCEPT DCFPA) SO NO TRAPS TO 244 SHOULD OCCUR. IF AN INTERRUPT OCCURS, THE PROGRAM WILL HALT AT 766 IN THE ROUTINE CALLED FLTERR AND DISPLAY THE FPS REGISTER IN R0.

6. ERRORS

6.1 ERROR PRINTOUT

THE FORMAT IS AS FOLLOWS:

```
ADR  FPS  ANS1 ANS2 ANS3 ANS4 ANS5 ANS6 ANS7 ANS8
  FEC FEA
```

WHERE:

```
ADR     = ADDRESS OF ERROR HLT
FPS     = FLOATING POINT STATUS
FEC     = FLOATING EXCEPTION CODES (ERROR CODES)
FEA     = FLOATING EXCEPTION ADDRESS (ERROR ADDRESS)
ANS1-8  = ERROR DATA READ FROM THE FP11.  FROM 0-8  OF  THESE
          MAY  BE TYPED DEPENDING ON THE NUMBER FOLLOWING THE
          HLT; I.E., HLT+3 WOULD TYPE ANS1-ANS3.
```

TO FIND THE FAILING TEST, LOOK AT THE LISTING ABOVE THE ADDRESS TYPED.

FP11 BASIC INSTRUCTION TEST DCFPA - DCFPL PAGE 6
DESCRIPTION

6.2 ERROR RECOVERY

RESTART AT 200

7. RESTRICTIONS

NONE

8. MISCELLANEOUS

8.1 EXECUTION TIME

A BELL WILL RING WITHIN 15 SECONDS WITH ALL SWITCHES DOWN.

8.2 STACK POINTER

STACK IS INITALLY SET TO 600

8.3 POWER FAIL

EACH TEST CAN BE POWER FAILED WITH NO ERRORS EXCEPT ON THE FEC AND FEA. TO USE, START THE TEST AS USUAL AND POWER DOWN THEN UP AT ANY TIME. THE PROGRAM SHOULD TYPE "POWER" AND CONTINUE TO RUN WITH NO OTHER TYPEOUTS.

9. PROGRAM DESCRIPTION

THESE PROGRAMS TEST ALL THE INSTRUCTIONS ON THE FP11 IN ALL MODES. EACH PROGRAM HAS MANY SUBTESTS (THE CODE BETWEEN TWO SCOPE STATEMENTS) WHICH ARE RUN 256 TIMES BEFORE CONTINUING TO THE NEXT. SW(11) ON A 1 CAUSES EACH SUBTEST TO BE RUN ONLY ONCE. SW(9) ON A 1 ENABLES LOOP ON ERROR. THE ADDRESS ICNT (LOC 1000) AND DISPLAY REGISTER ON THE 11/45 ERROR CONTAIN THE ITERATION COUNT IN THE LEFT BYTE AND THE TEST NUMBER IN THE RIGHT BYTE. ALL THE SUBTESTS SHOULD BE RUN SEQUENTIALLY BY STARTING AT 200 NOT BY STARTING AT THE BEGINNING OF THE SUBTEST. TO LOOP ON A PARTICULAR SUBTEST PUT THE TEST NUMBER (SEE LISTING) IN THE RIGHT BYTE OF THE SWITCH REGISTER AND SW(8) ON A 1. THIS TEST WILL BE LOOPED UPON UNTIL SW(8) IS PUT ON A 0 OR THE RIGHT BYTE IS CHANGED. IF THE TEST IS NON-EXISTANT, THE PROGRAM WILL BE RUN AS USUAL.

.EOP

```
.TITLE  MAINDEC-11-DCFPC-B      TEST OF LDF,LDD,STF,STD
;COPYRIGHT 1972, DIGITAL EQUIPMENT CORP., MAYNARD, MASS
;PROGRAM BY BOB BRAIN
.REM*
```

SWITCH	USE
8	0 - LOAD UB REGISTER WITH SW(7:0) 1 - LOOP ON TEST IN SW(7:0)
9	LOOP ON ERROR
10	0 - BELL ON PASS COMPLETE 1 - BELL ON ERROR
11	INHIBIT ITERATIONS
12	INHIBIT TRACE TRAP
13	INHIBIT ERROR TYPEOUTS
14	LOOP ON TEST
15	HALT ON ERROR

OUTPUT FORM:

ADR FPS ANS1 ANS2 ANS3 ANS4 ANS5 ANS6 ANS7 ANS8
  FEC FEA

FPS BIT	REASON
0	CARRY
1	OVERFLOW
2	ZERO
3	NEGATIVE
4	MAINTAINANCE MODE
5	TRUNCATE MODE
6	LONG INTEGER MODE
7	DOUBLE PRECISION MODE
8	INTERUPT ON CONVERSION ERROR
9	INTERUPT ON OVERFLOW
10	INTERUPT ON UNDERFLOW
11	INTERUPT ON UNDEFINED VARIABLE
14	INTERUPT DISABLE
15	ERROR FLAG*

FEC CODE	ERROR
3	ADDRESS ERROR
4	OPCODE ERROR
5	DIVIDE BY ZERO
6	CONVERSION ERROR
10	OVERFLOW
11	UNDERFLOW
14	UNDEFINED VARIABLE -C
16	CBREAK TRAP

```
                                .ENABL  ABS
000001                          N=      1
177776                          PS=     177776
177570                          SWR=    177570
177570                          DISPLAY=SWR
104400                          SCOPE=  TRAP
104000                          HLT=    EMT
000004                          TYPE=   IOT
000007                          SELF=   7
000000                          FPS=    %0
000000                          R0=     %0
000001                          R1=     %1
000002                          R2=     %2
000003                          R3=     %3
000004                          R4=     %4
000005                          R5=     %5
000006                          SY=     %6
000007                          SP=     %7
000000                          AC0=    %0
000001                          AC1=    %1
000002                          AC2=    %2
000003                          AC3=    %3
000004                          AC4=    %4
000005                          AC5=    %5
100000                          SW15=   100000
040000                          SW14=    40000
020000                          SW13=    20000
010000                          SW12=    10000
004000                          SW11=     4000
002000                          SW10=     2000
001000                          SW09=     1000
000400                          SW08=      400
170003                          KLDUB=  170003
170005                          STA0=   170005
170007                          STG0=   170007
170006                          MPS=    170006
170004                          LDSC=   170004

000000                          .=      0                       ;TRAP CATCHER FROM 0 - 776

000200                          .=      200

000200  000167  000622                  JMP     BEG

000760                          .=      760
000760  170200                  FLTERR: SETFPS  FPS
000762  170367  000034                  STST    FEC
000766  000002                          RTI
000770  000002                          RTI
```

```
                001000                          .=      1000

        001000  000000                  ICNT:   0                               ;ITERATION COUNT - LH    TEST NO. - RH
        001002  000000                  ANS1:   0                               ;FIRST ANSWER (SEE CODE)
        001004  000000                  ANS2:   0
        001006  000000                  ANS3:   0
        001010  000000                  ANS4:   0
        001012  000000                  ANS5:   0
        001014  000000                  ANS6:   0
        001016  000000                  ANS7:   0
        001020  000000                  ANS8:   0
        001022  000000                  FEC:    0                               ;FLOATING EXCEPTION CODES
        001024  000000                  FEA:    0                               ;FLOATING EXECPTION ADDRESS

        001026  012706  000600          BEG:    MOV     #600,SP                 ;** STACK AT 600 **
        001032  012737  001054  000004          MOV     #M1120,@#4              ;FIND OUT WHICH MACHINE THIS IS
        001040  005737  177772                  TST     @#177772                ;IS PIRQ THERE?
        001044  012767  000006  013704          MOV     #6,YESRT                ;FUDGE IN RTT IF 11/45
        001052  000403                          BR      BEGIN

        001054  016737  015040  000010  M1120:  MOV     FPTADR,@#10             ;LOAD THE ILLEGAL INSTRUCTION VECTOR
                                                                                ; WITH THE ADDRESS OF THE FPU.
                                                                                ; THE FPU WILL HANDLE THE BAD OPCODES
        001062  012737  000006  000004  BEGIN:  MOV     #6,@#4                  ;RESET 4
        001070  012706  000600                  MOV     #600,SP
        001074  012737  014756  000014          MOV     #YESRT,@#14             ;SET TRACE TRAP VECTOR
        001102  012777  015616  015016          MOV     #POWDWN,@DWNVEC
        001110  012777  000340  015012          MOV     #340,@DWNVEC+2
        001116  012737  016016  000020          MOV     #.IOT,@#20              ;SET UP VECTOR 20
        001124  012700  000030                  MOV     #30,R0                  ;SET R0 TO VECTOR 30
        001130  012720  015120                  MOV     #.TRP,(0)+              ;SET EMT VECTOR
        001134  012720  000340                  MOV     #340,(0)+
        001140  012720  014760                  MOV     #.EMT,(0)+              ;SET TRAP VECTOR
        001144  012710  000340                  MOV     #340,(0)
        001150  012777  000760  014744          MOV     #FLTERR,@FPVECT         ;LOAD INTERUPT VECTOR
        001156  012777  000340  014740          MOV     #340,@FPVECT+2          ;LOOK UP PROCESSOR
        001164  005067  177610                  CLR     ICNT
        001170  005067  014746                  CLR     LAC
```

```
                        ;*****************************************************************
                        ;TEST 1         LDF AND STF OF -1,-1
                        ;    USING ACO    FPS = 47410    FEC = N/A
                        ;*****************************************************************

001174  104400                      SCOPE
001176  170127  047400              LDFPS   #47410857760
001202  172467  000020              LDF     N1,0            ;LOAD -1,-1 INTO 0
001206  170200                      STFPS   FPS             ;STORE FLOATING POINT STATUS
001210  022700  047410              CMP     #47410,FPS      ;CHECK FLOATING POINT STATUS
001214  001401                      BEQ     .+4             ;BRANCH IF OK
001216  104000                      HLT                     ;FPS NOT EQUAL TO 47410

001220  174067  177556              STF     0,ANS1          ;STORE -1.-1
001224  000402                      BR      01

001226  177777              N1:     -1                      ;ANS1 = -1
001230  177777                      -1                      ;ANS2 = -1

001232  022767  177777  177542  01: CMP     #-1,ANS1        ;IS IT -1?
001240  001401                      BEQ     .+4
001242  104002                      HLT+2                   ;ANS1 NOT EQUAL TO -1

001244  022767  177777  177532      CMP     #-1,ANS2        ;IS IT -1?
001252  001401                      BEQ     .+4
001254  104002                      HLT+2                   ;ANS2 NOT EQUAL TO -1
```

```
                        ;*****************************************************************
                        ;TEST 2         LDF AND STF OF 0.0
                        ;    JSING AC1    FPS = 47404    FEC = N/A
                        ;*****************************************************************

001256  104400                  SCOPE
001260  170127  047400          LDFPS   #47404&57760
001264  172567  000020          LDF     N2,1            ;LOAD 0.0 INTO 1
001270  170200                  STFPS   FPS             ;STORE FLOATING POINT STATUS
001272  022700  047404          CMP     #47404,FPS      ;CHECK FLOATING POINT STATUS
001276  001401                  BEQ     .+4             ;BRANCH IF OK
001300  104000                  HLT                     ;FPS NOT EQUAL TO 47404

001302  174167  177774          STF     AC1,ANS1        ;STORE 0.0
001306  000402                  BR      D2

001310  000000          N2:     0                       ;ANS1 = 0
001312  000000                  0                       ;ANS2 = 0

001314  022767  000000  177460  D2:     CMP     #0,ANS1         ;IS IT 0?
001322  001401                  BEQ     .+4
001324  104002                  HLT+2                   ;ANS1 NOT EQUAL TO 0

001326  022767  000000  177450          CMP     #0,ANS2         ;IS IT 0?
001334  001401                  BEQ     .+4
001336  104002                  HLT+2                   ;ANS2 NOT EQUAL TO 0
```

```
                        ;*****************************************************************
                        ;TEST 3         LDF AND STF OF 125252,125252
                        ;    USING AC2    FPS = 47410    FEC = N/A
                        ;*****************************************************************

001340  104400                          SCOPE
001342  170127  047400                  LDFPS   #47410357760
001346  172667  000020                  LDF     N3,2            ;LOAD 125252,125252 INTO 2
001352  170200                          STFPS   FPS             ;STORE FLOATING POINT STATUS
001354  022700  047410                  CMP     #47410,FPS      ;CHECK FLOATING POINT STATUS
001360  001401                          BEQ     .+4             ;BRANCH IF OK
001362  104000                          HLT                     ;FPS NOT EQUAL TO 47410

001364  174267  177412                  STF     2,ANS1          ;STORE 125252,125252
001370  000402                          BR      D3

001372  125252                  N3:     125252                  ;ANS1 = 125252
001374  125252                          125252                  ;ANS2 = 125252

001376  022767  125252  177376  D3:     CMP     #125252,ANS1    ;IS IT 125252?
001404  001401                          BEQ     .+4
001406  104002                          HLT+2                   ;ANS1 NOT EQUAL TO 125252

001410  022767  125252  177366          CMP     #125252,ANS2    ;IS IT 125252?
001416  001401                          BEQ     .+4
001420  104002                          HLT+2                   ;ANS2 NOT EQUAL TO 125252
```

```
                        ;*****************************************************************
                        ;TEST 4         LDF AND STF OF 52525,52525
                        ;    USING AC3    FPS = 47400    FEC = N/A
                        ;*****************************************************************

001422  104400                      SCOPE
001424  170127  047400              LDFPS   #47400&57760
001430  172767  000020              LDF     N4,3            ;LOAD 52525,52525 INTO 3
001434  170200                      STFPS   FPS             ;STORE FLOATING POINT STATUS
001436  022700  047400              CMP     #47400,FPS      ;CHECK FLOATING POINT STATUS
001442  001401                      BEQ     .+4             ;BRANCH IF OK
001444  104000                      HLT                     ;FPS NOT EQUAL TO 47400

001446  174367  177330              STF     3,ANS1          ;STORE 52525,52525
001452  000402                      BR      C4

001454  052525              N4:     52525                   ;ANS1 = 52525
001456  052525                      52525                   ;ANS2 = 52525

001460  022767  052525  177314  C4: CMP     #52525,ANS1     ;IS IT 52525?
001466  001401                      BEQ     .+4
001470  104002                      HLT+2                   ;ANS1 NOT EQUAL TO 52525

001472  022767  052525  177304      CMP     #52525,ANS2     ;IS IT 52525?
001500  001401                      BEQ     .+4
001502  104002                      HLT+2                   ;ANS2 NOT EQUAL TO 52525
```

```
                        ;*****************************************************************
                        ;TEST 5         LDF AND STF OF 100000,0
                        ;    USING AC0    FPS = 14    FEC = N/A
                        ;*****************************************************************

001504  104400                  SCOPE
001506  170127  000000          LDFPS   #14857760
001512  172467  000020          LDF     N5,0            ;LOAD 100000.0 INTO 0
001516  170200                  STFPS   FPS             ;STORE FLOATING POINT STATUS
001520  022700  000014          CMP     #14,FPS         ;CHECK FLOATING POINT STATUS
001524  001401                  BEQ     .+4             ;BRANCH IF OK
001526  104000                  HLT                     ;FPS NOT EQUAL TO 14

001530  174067  177246          STF     0,ANS1          ;STORE 100000.0
001534  000402                  BR      05

001536  100000          N5:     100000                  ;ANS1 = 100000
001540  000000                  0                       ;ANS2 = 0

001542  022767  100000  177232  05:     CMP     #100000,ANS1    ;IS IT 100000?
001550  001401                  BEQ     .+4
001552  104002                  HLT+2                   ;ANS1 NOT EQUAL TO 100000

001554  022767  000000  177222          CMP     #0,ANS2         ;IS IT 0?
001562  001401                  BEQ     .+4
001564  104002                  HLT+2                   ;ANS2 NOT EQUAL TO 0
```

```
                        ;*****************************************************************
                        ;TEST 6          LDF AND STF OF 100000,0
                        ;    USING AC0    FPS = 147414    FEC = 14
                        ;*****************************************************************

001566  104400                        SCOPE
001570  170127  047400                LDFPS   #147414857760
001574  172467  000036                LDF     N6,0            ;LOAD 100000.0 INTO 0
001630  170200                        STFPS   FPS             ;STORE FLOATING POINT STATUS
001602  170367  177214                STST    FEC             ;STORE EXCEPTION CODES
001606  022700  147414                CMP     #147414,FPS     ;CHECK FLOATING POINT STATUS
001612  001401                        BEQ     .+4             ;BRANCH IF OK
001614  104000                        HLT                     ;FPS NOT EQUAL TO 147414

001616  022767  000014  177176        CMP     #14.    FEC     ;CHECK FLOATING EXCEPTION CODE
001624  001401                        BEQ     .+4             ;BRANCH IF OK
001626  104000                        HLT                     ;FEC NOT EQUAL TO 14

001630  174067  177146                STF     0,ANS1          ;STORE 100000.0
001634  000402                        BR      D6

001636  100000                N6:     100000                  ;ANS1 = 100000
001640  000000                        0                       ;ANS2 = 0

001642  022767  100000  177132  D6:   CMP     #100000,ANS1    ;IS IT 100000?
001650  001401                        BEQ     .+4
001652  104002                        HLT+2                   ;ANS1 NOT EQUAL TO 100000

001654  022767  000000  177122        CMP     #0,ANS2         ;IS IT 0?
001662  001401                        BEQ     .+4
001664  104002                        HLT+2                   ;ANS2 NOT EQUAL TO 0
```

```
                        ;*****************************************************************
                        ;TEST 7          TEST OF MODE 2 REG 7
                        ;*****************************************************************

001666  104400                  SCOPE
001670  170127  047400          LDFPS   #47400
001674  172427          ANX7:   LDF     (7)+,0          ;LOAD AC0 WITH NEXT LOCATION
001676  125252                  125252                  ;LOAD 125252 INTO AC0
001700  000401                  BR      .+4
001702  000000                  HALT                    ;FPU PICKED UP 2 WORDS
001704  174027  000000  ANY7:   STF     0,#0            ;STORE AC0 IN ANY7+2
001710  000401                  BR      .+4
001712  000000                  HALT                    ;FPU WROTE 2 WORDS

001714  022767  125252  177764        CMP     #125252,ANY7+2  ;CHECK FOR 125252
001722  001404                  BEQ     NER7
001724  016767  177756  177050        MOV     ANY7+2,ANS1     ;SET UP ANSWER AREA
001732  104001                  HLT+1

001734  174067  177042  NER7:   STF     0,ANS1          ;GET RESULT AGAIN
001740  022767  125252  177034        CMP     #125252,ANS1            ;IS IT 125252?
001746  001401                  BEQ     .+4
001750  104002                  HLT+2                   ;NOT EQUAL TO 125252

001752  005767  177026                TST     ANS2            ;SECOND WORD SHOULD BE ZERO
001756  001401                  BEQ     .+4
001760  104002                  HLT+2                   ;NOT ZERO
```

```
                        ;*****************************************************************
                        ;TEST 10                TEST OF MODE 1 REG 1 AND 2
                        ;*****************************************************************

001762  104400                  SCOPE
001764  170127  047400          LDFPS   #47400
001770  012701  002006          MOV     #NU10,%1        ;LOAD R1 WITH ADDRESS OF DATA
001774  012702  001002          MOV     #ANS1,%2        ;SET UP ANSWER AREA
002000  172411                  LDF     (1),0           ;LOAD NU10 INTO R0
002002  174012                  STF     0,(2)           ;STORE IT INTO ANS1
002004  000402                  BR      010

002006  125252  125252  NU10:   .25252,125252                    ;DATA TO BE LOADED

002012  022767  125252  176762  010:    CMP     #125252,ANS1    ;LEFT HALF = 125252?
002020  001401                  BEQ     .+4
002022  104002                  HLT+2                           ;LEFT HALF # 125252

002024  022767  125252  176752          CMP     #125252,ANS2    ;RIGHT HALF = 125252?
002032  001401                  BEQ     .+4
002034  104002                  HLT+2                           ;RIGHT HALF # 125252

002036  022701  002006          CMP     #NU10,%1        ;DID IT CHANGE R1?
002042  001403                  BEQ     NER10
002044  010167  176732          MOV     %1,ANS1
002050  104001                  HLT+1                   ;:SURE DID

002052  022702  001002  NER10:   CMP     #ANS1,%2        ;DID IT CHANGE R2?
002056  001403                  BEQ     NER1C
002060  010267  176716          MOV     %2,ANS1
002064  104001                  HLT+1                   ;SURE DID
002066                  NER1C:
```

```
                        ;*****************************************************************
                        ;TEST 11                TEST OF MODE 2 REG 1 AND 2
                        ;*****************************************************************

002066  104400                          SCOPE
002070  170177  047400                  LDFPS   #47400
002074  012701  002112                  MOV     #NU11,%1        ;LOAD FIRST ADDRESS
002100  012702  001002                  MOV     #ANS1,%2        ;SET UP STORE ADDRESS
002104  172421                          LDF     (1)+,0          ;LOAD NU11 INTO R0
002106  174022                          STF     0,(2)+          ;STORE IT INTO ANS1
002110  000402                          BR      011

002112  125252  125252          NU11:   125252,125252                   ;DATA TO BE LOADED

002116  022767  125252  176656  011:    CMP     #125252,ANS1    ;LEFT HALF = 125252?
002124  001401                          BEQ     .+4
002126  104002                          HLT+2                   ;LEFT HALF # 125252

002130  022767  125252  176646          CMP     #125252,ANS2    ;RIGHT HALF = 125252?
002136  001401                          BEQ     .+4
002140  104002                          HLT+2                   ;RIGHT HALF # 125252

002142  022701  002116                  CMP     #NU11+4,%1      ;DID IT CHANGE R1?
002146  001403                          BEQ     MER11
002150  010167  176626                  MOV     %1,ANS1
002154  104001                          HLT+1                   ;R1 IS WRONG

002156  022702  001006          MER11:  CMP     #ANS3,%2        ;DID IT CHANGE R2?
002162  001403                          BEQ     NER11
002164  010267  176612                  MOV     %2,ANS1
002170  104001                          HLT+1                   ;R2 IS WRONG
002172                          NER11:
```

```
                                          ;*****************************************************************
                                          ;TEST 12                    TEST OF MODE 3 REG 1 AND 2
                                          ;*****************************************************************

002172  104400                                    SCOPE
002174  170127  047400                            LDFPS   #47400
002200  012701  002222                            MOV     #MU12,%1                ;LOAD FIRST ADDRESS
002204  012702  002224                            MOV     #MO12,%2                ;SET UP STORE ADDRESS
002210  172431                                    LDF     @(1)+,0                 ;LOAD NU12 INTO F0
002212  174032                                    STF     0,@(2)+                 ;STORE IT INTO ANS1
002214  000404                                    BR      C12

002216  125252  125252                    NU12:   125252,125252                          ;DATA TO BE LOADED
002222  002216                            MU12:   NU12                            ;POINTER IN R1
002224  001002                            MO12:   ANS1                            ;POINTER IN R2

002226  022767  125252  176546            C12:    CMP     #125252,ANS1            ;LEFT HALF = 125252?
002234  001401                                    BEQ     .+4
002236  104002                                    HLT+2                           ;LEFT HALF # 125252

002240  022767  125252  176536                    CMP     #125252,ANS2            ;RIGHT HALF = 125252?
002246  001401                                    BEQ     .+4
002250  104002                                    HLT+2                           ;RIGHT HALF # 125252

002252  022701  002224                            CMP     #MU12+2,%1              ;DID IT CHANGE R1?
002256  001403                                    BEQ     MER12
002260  010167  176516                            MOV     %1,ANS1
002264  104001                                    HLT+1                           ;R1 IS WRONG

002266  022702  002226                    MER12:  CMP     #MO12+2,%2              ;DID IT CHANGE R2?
002272  001403                                    BEQ     NER12
002274  010267  176502                            MOV     %2,ANS1
002300  104001                                    HLT+1                           ;R2 IS WRONG
002302                                    NER12:
```

```
                        ;*****************************************************************
                        ;TEST 13                TEST OF MODE 4 REG 1 AND 2
                        ;*****************************************************************

002302  104400                    SCOPE
002304  170127  047400            LDFPS   #47400
002310  012701  002332            MOV     #NU13+4,%1      ;LOAD FIRST ADDRESS
002314  012702  001006            MOV     #ANS3,%2        ;SET UP STORE ADDRESS
002320  172441                    LDF     -(1),0          ;LOAD NU13 INTO R0
002322  174042                    STF     0,-(2)          ;STORE IT INTO ANS1
002324  000402                    BR      013

002326  125252  125252    NU13:   125252,125252                   ;DATA TO BE LOADED

002332  022767  125252  176442  013:   CMP     #125252,ANS1    ;LEFT HALF = 125252?
002340  001401                    BEQ     .+4
002342  104002                    HLT+2                   ;LEFT HALF # 125252

002344  022767  125252  176432        CMP     #125252,ANS2    ;RIGHT HALF = 125252?
002352  001401                    BEQ     .+4
002354  104002                    HLT+2                   ;RIGHT HALF # 125252

002356  022701  002326            CMP     #NU13,%1        ;DID IT CHANGE R1?
002362  001403                    BEQ     NER13
002364  010167  176412            MOV     %1,ANS1
002370  104001                    HLT+1                   ;R1 IS WRONG

002372  022702  001002    NER13:  CMP     #ANS1,%2        ;DID IT CHANGE R2?
002376  001403                    BEQ     NER13
002400  010267  176376            MOV     %2,ANS1
002404  104001                    HLT+1                   ;R2 IS WRONG
002406                    NER13:
```

```
                        ;*****************************************************************
                        ;TEST 14                TEST OF MODE 6 REG 1
                        ;*****************************************************************

002406  104400                          SCOPE
002410  170127  047400                  LDFPS   #47400
002414  012701  002442                  MOV     #NU14+4,%1      ;LOAD R1 WITH ADDRESS OF DATA
002420  012702  001006                  MOV     #ANS3,%2        ;SET UP ANSWER AREA
002424  172461  177774                  LDF     -4(1),0         ;LOAD NU14 INTO R0
002430  174062  000004                  STF     0,4(2)          ;STORE IT INTO ANS1
002434  000402                          BR      014

002436  125252  125252          NU14:   125252,125252                   ;DATA TO BE LOADED

002442  022767  125252  176332  014:    CMP     #125252,ANS1    ;LEFT HALF = 125252?
002450  001401                          BEQ     .+4
002452  104002                          HLT+2                   ;LEFT HALF # 125252

002454  022767  125252  176322          CMP     #125252,ANS2    ;RIGHT HALF = 125252?
002462  001401                          BEQ     .+4
002464  104002                          HLT+2                   ;RIGHT HALF # 125252

002466  022701  002442                  CMP     #NU14+4,%1      ;DID IT CHANGE R1?
002472  001403                          BEQ     MER14
002474  010167  176302                  MOV     %1,ANS1
002500  104001                          HLT+1                   ;SURE DID

002502  022702  001006  MER14:  CMP     #ANS3,%2        ;DID IT CHANGE R2?
002506  001403                          BEQ     MER14
002510  010267  176266                  MOV     %2,ANS1
002514  104001                          HLT+1                   ;SURE DID
002516                  MER14:
```

```
                        ;*****************************************************************
                        ;TEST 15                TEST OF MODE 7 REG 1 AND 2
                        ;*****************************************************************

002516  104400                    SCOPE
002520  170127  047400            LDFPS   #47400
002524  012701  002556            MOV     #MU15+4,%1      ;LOAD FIRST ADDRESS
002530  012702  002550            MOV     #MO15-4,%2      ;SET UP STORE ADDRESS
002534  172471  177774            LDF     @-4(1),0        ;LOAD MU15 INTO R0
002540  174072  000004            STF     0,@4(2)         ;STORE IT INTO ANS1
002544  000404                    BR      C15

002546  125252  125252    MU15:   125252,125252                   ;DATA TO BE LOADED
002552  002546            MI15:   MU15                    ;POINTER IN R1
002554  001002            MO15:   ANS1                    ;POINTER IN R2

002556  022767  125252  176216  C15:    CMP     #125252,ANS1    ;LEFT HALF = 125252?
002564  001401                    BEQ     .+4
002566  104002                    HLT+2                   ;LEFT HALF # 125252

002570  022767  125252  176206        CMP     #125252,ANS2    ;RIGHT HALF = 125252?
002576  001401                    BEQ     .+4
002600  104002                    HLT+2                   ;RIGHT HALF # 125252

002602  022701  002556            CMP     #MU15+4,%1      ;DID IT CHANGE R1?
002606  001403                    BEQ     MER15
002610  010167  176166            MOV     %1,ANS1
002614  104001                    HLT+1                   ;R1 IS WRONG

002616  022702  002550    MER15:  CMP     #MO15-4,%2      ;DID IT CHANGE R2?
002622  001403                    BEQ     NER15
002624  010267  176152            MOV     %2,ANS1
002630  104001                    HLT+1                   ;R2 IS WRONG
002632                    NER15:
```

```
                        ;*****************************************************************
                        ;TEST 16                TEST OF MODE 2 REG 1 AND 2
                        ;*****************************************************************

002632  104400                    SCOPE
002634  170127  047600            LDFPS   #47600
002640  012701  002656            MOV     #NU16,%1        ;LOAD FIRST ADDRESS
002644  012702  001002            MOV     #ANS1,%2        ;SET UP STORE ADDRESS
002650  172421                    LDD     (1)+,0          ;LOAD NU16 INTO R0
002652  174022                    STD     0,(2)+          ;STORE IT INTO ANS1
002654  000404                    BR      .16

002656  125252  125252  125252  NU16:   125252,125252,125252,125252     ;DATA TO BE LOADED
002664  125252

002666  022767  125252  176136  .16:    CMP     #125252,ANS1    ;LEFT HALF = 125252?
002674  001401                    BEQ     .+4
002676  104002                    HLT+2                   ;LEFT HALF # 125252

002700  022767  125252  176076          CMP     #125252,ANS2    ;RIGHT HALF = 125252?
002706  001401                    BEQ     .+4
002710  104002                    HLT+2                   ;RIGHT HALF # 125252

002712  022767  125252  176066          CMP     #125252,ANS3    ;LEFT HALF = 125252?
002720  001401                    BEQ     .+4
002722  104004                    HLT+4                   ;LEFT HALF # 125252

002724  022767  125252  176056          CMP     #125252,ANS4    ;RIGHT HALF = 125252?

002732  001401                    BEQ     .+4
002734  104004                    HLT+4                   ;RIGHT HALF # 125252
002736  022701  002666            CMP     #NU16+8.,%1     ;DID IT CHANGE R1?
002742  001403                    BEQ     .ER16
002744  010167  176032            MOV     %1,ANS1
002750  104001                    HLT+1                   ;R1 IS WRONG

002752  022702  001012  .ER16:    CMP     #ANS5,%2        ;DID IT CHANGE R2?
002756  001403                    BEQ     .ER16
002760  010267  176016            MOV     %2,ANS1
002764  104001                    HLT+1                   ;R2 IS WRONG
002770                  .ER16:
```

```
                        ;*****************************************************************
                        ;TEST 17                    TEST OF MODE 2 REG 7    DOUBLE MODE
                        ;*****************************************************************

003766  104400                          SCOPE
003770  170127  047600                  LDFPS   #47600
003774  172427          ANY17:          LDF     (7)+,0          ;LOAD AC0 WITH NEXT LOCATION
004000  125252                          125252                  ;LOAD 125252 INTO AC0
004002  000403                          BR      .+10
004004  000000                          HALT                    ;FPU PICKED UP 2 WORDS
004006  000000                          HALT
004010  000000                          HALT
004012  174027  000000      ANY27:      STF     0,#0            ;STORE AC0 IN ANY27+2
004016  000403                          BR      .+10
004020  000000                          HALT                    ;FPU WROTE 2 WORDS
004022  000000                          HALT
004024  000000                          HALT

004026  022767  125252  177760          CMP     #125252,ANY27+2 ;CHECK FOR 125252
004034  001404                          BEQ     NEXT:
004036  016767  177752  175740          MOV     ANY27+2,ANS1    ;SET UP ANSWER AREA
004044  104001                          HLT+1

004046  174067  175732  NEXT:          STF     0,ANS1          ;GET RESULT AGAIN
004052  022767  125252  175726          CMP     #125252,ANS1            ;IS IT 125252?
004060  001401                          BEQ     .+4
004062  104004                          HLT+4                   ;NOT EQUAL TO 125252

004064  005767  175716                  TST     ANS2            ;SECOND WORD SHOULD BE ZERO
004070  001401                          BEQ     .+4
004072  104004                          HLT+4                   ;NOT ZERO

004074  005767  175710                  TST     ANS3            ;THIRD WORD OK?
004100  001401                          BEQ     .+4
004102  104004                          HLT+4                   ;NOT 0

004104  005767  175702                  TST     ANS4            ;4TH WORD OK?
004110  001401                          BEQ     .+4
004112  104004                          HLT+4                   ;NOT 0
```

```
                                ;*****************************************************************
                                ;TEST 20                LDD AND STD 0.0.0.0
                                ;    USING AC0 AND AC4    FPS = 47604    FEC = N/A
                                ;*****************************************************************
003112  104400                          SCOPE
003114  170127  047600                  LDFPS   #47604857760
003120  172467  000020                  LDD     N20,0           ;LOAD 0.0.0.0 INTO 0
003124  170200                          STFPS   FPS             ;STORE FLOATING POINT STATUS
003126  022700  047604                  CMP     #47604,FPS      ;CHECK FLOATING POINT STATUS
003132  001401                          BEQ     .+4             ;BRANCH IF OK
003134  104000                          HLT                     ;FPS NOT EQUAL TO 47604

003136  174067  175640                  STD     0,ANS1          ;STORE 0.0.0.0
003142  000404                          BR      C20

003144  000000  000000  000000  N20:    0.0.0.0
003152  000000
003154  022767  000000  175620  C20:    CMP     #0,ANS1         ;IS IT 0?
003162  001401                          BEQ     .+4
003164  104004                          HLT+4                   ;ANS1 NOT EQUAL TO 0

003166  022767  000000  175610          CMP     #0,ANS2         ;IS IT 0?
003174  001401                          BEQ     .+4
003176  104004                          HLT+4                   ;ANS2 NOT EQUAL TO 0

003200  022767  000000  175600          CMP     #0,ANS3         ;IS IT 0?
003206  001401                          BEQ     .+4
003210  104004                          HLT+4                   ;ANS3 NOT EQUAL TO 0

003212  022767  000000  175570          CMP     #0,ANS4         ;IS IT 0?
003220  001401                          BEQ     .+4
003222  104004                          HLT+4                   ;ANS4 NOT EQUAL TO 0

003224  174004                          STD     0,4             ;STORE AC0 INTO AC4
003226  172404                          LDD     4,0             ;LOAD AC4 INTO AC0
003230  174067  175546                  STD     0,ANS1          ;STORE IT AGAIN

003234  022767  000000  175540          CMP     #0,ANS1         ;IS IT 0?
003242  001401                          BEQ     .+4
003244  104004                          HLT+4                   ;ANS1 NOT EQUAL TO 0

003246  022767  000000  175530          CMP     #0,ANS2         ;IS IT 0?
003254  001401                          BEQ     .+4
003256  104004                          HLT+4                   ;ANS2 NOT EQUAL TO 0

003260  022767  000000  175520          CMP     #0,ANS3         ;IS IT 0?
003266  001401                          BEQ     .+4
003270  104004                          HLT+4                   ;ANS3 NOT EQUAL TO 0

003272  022767  000000  175510          CMP     #0,ANS4         ;IS IT 0?
003300  001401                          BEQ     .+4
003302  104004                          HLT+4                   ;ANS4 NOT EQUAL TO 0
```

```
                        ;*****************************************************************
                        ;TEST 21                LDD AND STD -1.-1,-1.-1
                        ;    USING AC0 AND AC4    FPS = 47610    FEC = N/A
                        ;*****************************************************************
003304  104400                  SCOPE
003306  170127  047600          LDFPS   #47610857760
003312  172467  000020          LDD     N21,0           ;LOAD -1.-1.-1.-1 INTO 0
003316  170200                  STFPS   FPS             ;STORE FLOATING POINT STATUS
003320  022700  047610          CMP     #47610,FPS      ;CHECK FLOATING POINT STATUS
003324  001401                  BEQ     .+4             ;BRANCH IF OK
003326  104000                  HLT                     ;FPS NOT EQUAL TO 47610

003330  174067  175446          STD     0,ANS1          ;STORE -1.-1.-1.-1
003334  000404                  BR      021

003336  177777  177777  177777 N21:    -1.-1.-1.-1
003344  177777
003346  022767  177777  175426 021:    CMP     #-1,ANS1        ;IS IT -1?
003354  001401                  BEQ     .+4
003356  104004                  HLT+4                   ;ANS1 NOT EQUAL TO -1

003360  022767  177777  175416        CMP     #-1,ANS2        ;IS IT -1?
003366  001401                  BEQ     .+4
003370  104004                  HLT+4                   ;ANS2 NOT EQUAL TO -1

003372  022767  177777  175406        CMP     #-1,ANS3        ;IS IT -1?
003400  001401                  BEQ     .+4
003402  104004                  HLT+4                   ;ANS3 NOT EQUAL TO -1

003404  022767  177777  175376        CMP     #-1,ANS4        ;IS IT -1?
003412  001401                  BEQ     .+4
003414  104004                  HLT+4                   ;ANS4 NOT EQUAL TO -1

003416  174004                  STD     0,%4            ;STORE AC0 INTO AC4
003420  172404                  LDD     %4,0            ;LOAD AC4 INTO AC0
003422  174067  175354          STD     0,ANS1          ;STORE IT AGAIN

003426  022767  177777  175346        CMP     #-1,ANS1        ;IS IT -1?
003434  001401                  BEQ     .+4
003436  104004                  HLT+4                   ;ANS1 NOT EQUAL TO -1

003440  022767  177777  175336        CMP     #-1,ANS2        ;IS IT -1?
003446  001401                  BEQ     .+4
003450  104004                  HLT+4                   ;ANS2 NOT EQUAL TO -1

003452  022767  177777  175326        CMP     #-1,ANS3        ;IS IT -1?
003460  001401                  BEQ     .+4
003462  104004                  HLT+4                   ;ANS3 NOT EQUAL TO -1

003464  022767  177777  175316        CMP     #-1,ANS4        ;IS IT -1?
003472  001401                  BEQ     .+4
003474  104004                  HLT+4                   ;ANS4 NOT EQUAL TO -1
```

```
                                ;*****************************************************************
                                ;TEST 22                LDD AND STD 125252,125252,125252,125252
                                ;    USING AC0 AND AC4    FPS = 47610    FEC = N/A
                                ;*****************************************************************
003476  104400                          SCOPE
003500  170127  047600                  LDFPS   #47610&57760
003504  172467  000020                  LDD     N22,0           ;LOAD 125252,125252,125252,125252 INTO 0
003510  170200                          STFPS   FPS             ;STORE FLOATING POINT STATUS
003512  022700  047610                  CMP     #47610,FPS      ;CHECK FLOATING POINT STATUS
003516  001401                          BEQ     .+4             ;BRANCH IF OK
003520  104000                          HLT                     ;FPS NOT EQUAL TO 47610

003522  174067  175254                  STD     0,ANS1          ;STORE 125252,125252,125252,125252
003526  000404                          BR      022

003530  125252  125252  125252  N22:    125252,125252,125252,125252
003536  125252
003540  022767  125252  175234  022:    CMP     #125252,ANS1    ;IS IT 125252?
003546  001401                          BEQ     .+4
003550  104004                          HLT+4                   ;ANS1 NOT EQUAL TO 125252

003552  022767  125252  175224          CMP     #125252,ANS2    ;IS IT 125252?
003560  001401                          BEQ     .+4
003562  104004                          HLT+4                   ;ANS2 NOT EQUAL TO 125252

003564  022767  125252  175214          CMP     #125252,ANS3    ;IS IT 125252?
003572  001401                          BEQ     .+4
003574  104004                          HLT+4                   ;ANS3 NOT EQUAL TO 125252

003576  022767  125252  175204          CMP     #125252,ANS4    ;IS IT 125252?
003604  001401                          BEQ     .+4
003606  104004                          HLT+4                   ;ANS4 NOT EQUAL TO 125252

003610  174004                          STD     0,%4            ;STORE AC0 INTO AC4
003612  172404                          LDD     %4,0            ;LOAD AC4 INTO AC0
003614  174067  175162                  STD     0,ANS1          ;STORE IT AGAIN

003620  022767  125252  175154          CMP     #125252,ANS1    ;IS IT 125252?
003626  001401                          BEQ     .+4
003630  104004                          HLT+4                   ;ANS1 NOT EQUAL TO 125252

003632  022767  125252  175144          CMP     #125252,ANS2    ;IS IT 125252?
003640  001401                          BEQ     .+4
003642  104004                          HLT+4                   ;ANS2 NOT EQUAL TO 125252

003644  022767  125252  175134          CMP     #125252,ANS3    ;IS IT 125252?
003652  001401                          BEQ     .+4
003654  104004                          HLT+4                   ;ANS3 NOT EQUAL TO 125252

003656  022767  125252  175124          CMP     #125252,ANS4    ;IS IT 125252?
003664  001401                          BEQ     .+4
003666  104004                          HLT+4                   ;ANS4 NOT EQUAL TO 125252
```

```
                                ;*****************************************************************
                                ;TEST 23                LDD AND STD 52525,52525,52525,52525
                                ;    USING AC0 AND AC4    FPS = 47600    FEC = N/A
                                ;*****************************************************************
003670  104400                          SCOPE
003672  170127  047600                  LDFPS   #47600&57760
003676  172467  000020                  LDD     N23,0           ;LOAD 52525,52525,52525,52525 INTO 0
003702  170200                          STFPS   FPS             ;STORE FLOATING POINT STATUS
003704  022700  047600                  CMP     #47600,FPS      ;CHECK FLOATING POINT STATUS
003710  001401                          BEQ     .+4             ;BRANCH IF OK
003712  104000                          HLT                     ;FPS NOT EQUAL TO 47600

003714  174067  175062                  STD     0,ANS1          ;STORE 52525,52525,52525,52525
003720  000404                          BR      C23

003722  052525  052525  052525  N23:   52525,52525,52525,52525
003730  052525
003732  022767  052525  175042  023:   CMP     #52525,ANS1     ;IS IT 52525?
003740  001401                          BEQ     .+4
003742  104004                          HLT+4                   ;ANS1 NOT EQUAL TO 52525

003744  022767  052525  175032          CMP     #52525,ANS2     ;IS IT 52525?
003752  001401                          BEQ     .+4
003754  104004                          HLT+4                   ;ANS2 NOT EQUAL TO 52525

003756  022767  052525  175022          CMP     #52525,ANS3     ;IS IT 52525?
003764  001401                          BEQ     .+4
003766  104004                          HLT+4                   ;ANS3 NOT EQLAL TO 52525

003770  022767  052525  175012          CMP     #52525,ANS4     ;IS IT 52525?
003776  001401                          BEQ     .+4
004000  104004                          HLT+4                   ;ANS4 NOT EQUAL TO 52525

004002  174004                          STD     0,%4            ;STORE AC0 INTO AC4
004004  172404                          LDD     %4,0            ;LOAD AC4 INTO AC0
004006  174067  174770                  STD     0,ANS1          ;STORE IT AGAIN

004012  022767  052525  174762          CMP     #52525,ANS1     ;IS IT 52525?
004020  001401                          BEQ     .+4
004022  104004                          HLT+4                   ;ANS1 NOT EQUAL TO 52525

004024  022767  052525  174752          CMP     #52525,ANS2     ;IS IT 52525?
004032  001401                          BEQ     .+4
004034  104004                          HLT+4                   ;ANS2 NOT EQUAL TO 52525

004036  022767  052525  174742          CMP     #52525,ANS3     ;IS IT 52525?
004044  001401                          BEQ     .+4
004046  104004                          HLT+4                   ;ANS3 NOT EQUAL TO 52525

004050  022767  052525  174732          CMP     #52525,ANS4     ;IS IT 52525?
004056  001401                          BEQ     .+4
004060  104004                          HLT+4                   ;ANS4 NOT EQUAL TO 52525
```

```
                                                ;*******************************************************************
                                                ;TEST 24                    LDD AND STD 0,0,0,0
                                                ;     USING AC1 AND AC4     FPS = 47604     FEC = N/A
                                                ;*******************************************************************
        004062  104400                                  SCOPE
        004064  170127  047600                          LDFPS   #47604&57760
        004070  172567  000020                          LDD     N24,1           ;LOAD 0,0,0,0 INTO 1
        004074  170200                                  STFPS   FPS             ;STORE FLOATING POINT STATUS
        004076  022700  047604                          CMP     #47604,FPS      ;CHECK FLOATING POINT STATUS
        004102  001401                                  BEQ     .+4             ;BRANCH IF OK
        004104  104000                                  HLT                     ;FPS NOT EQUAL TO 47604

        004106  174167  174670                          STD     1,ANS1          ;STORE 0,0,0,0
        004112  000404                                  BR      O24

        004114  000000  000000  000000  N24:            0,0,0,0
        004122  000000
        004124  022767  000000  174650  O24:            CMP     #0,ANS1         ;IS IT 0?
        004132  001401                                  BEQ     .+4
        004134  104004                                  HLT+4                   ;ANS1 NOT EQUAL TO 0

        004136  022767  000000  174640                  CMP     #0,ANS2         ;IS IT 0?
        004144  001401                                  BEQ     .+4
        004146  104004                                  HLT+4                   ;ANS2 NOT EQUAL TO 0

        004150  022767  000000  174630                  CMP     #0,ANS3         ;IS IT 0?
        004156  001401                                  BEQ     .+4
        004160  104004                                  HLT+4                   ;ANS3 NOT EQUAL TO 0

        004162  022767  000000  174620                  CMP     #0,ANS4         ;IS IT 0?
        004170  001401                                  BEQ     .+4
        004172  104004                                  HLT+4                   ;ANS4 NOT EQUAL TO 0

        004174  174104                                  STD     1,%4            ;STORE AC1 INTO AC4
        004176  172504                                  LDD     %4,1            ;LOAD AC4 INTO AC1
        004200  174167  174576                          STD     1,ANS1          ;STORE IT AGAIN

        004204  022767  000000  174570                  CMP     #0,ANS1         ;IS IT 0?
        004212  001401                                  BEQ     .+4
        004214  104004                                  HLT+4                   ;ANS1 NOT EQUAL TO 0

        004216  022767  000000  174560                  CMP     #0,ANS2         ;IS IT 0?
        004224  001401                                  BEQ     .+4
        004226  104004                                  HLT+4                   ;ANS2 NOT EQUAL TO 0

        004230  022767  000000  174550                  CMP     #0,ANS3         ;IS IT 0?
        004236  001401                                  BEQ     .+4
        004240  104004                                  HLT+4                   ;ANS3 NOT EQUAL TO 0

        004242  022767  000000  174540                  CMP     #0,ANS4         ;IS IT 0?
        004250  001401                                  BEQ     .+4
        004252  104004                                  HLT+4                   ;ANS4 NOT EQUAL TO 0
```

```
                        ;*****************************************************************
                        ;TEST 25                LDD AND STD -1,-1,-1,-1
                        ;    USING AC1 AND AC4    FPS = 47610    FEC = N/A
                        ;*****************************************************************
004254  104400                  SCOPE
004256  170127  047600          LDFPS   #47610&57760
004262  172567  000020          LDD     N25,1           ;LOAD -1,-1,-1,-1 INTO 1
004266  170200                  STFPS   FPS             ;STORE FLOATING POINT STATUS
004270  022700  047610          CMP     #47610,FPS      ;CHECK FLOATING POINT STATUS
004274  001401                  BEQ     .+4             ;BRANCH IF OK
004276  104000                  HLT                     ;FPS NOT EQLAL TO 47610

004300  174167  174476          STD     1,ANS1          ;STORE -1,-1,-1,-1
004304  000404                  BR      025

004306  177777  177777  177777  N25:    -1,-1,-1,-1
004314  177777
004316  022767  177777  174456  025:    CMP     #-1,ANS1        ;IS IT -1?
004324  001401                  BEQ     .+4
004326  104004                  HLT+4                   ;ANS1 NOT EQUAL TO -1

004330  022767  177777  174446          CMP     #-1,ANS2        ;IS IT -1?
004336  001401                  BEQ     .+4
004340  104004                  HLT+4                   ;ANS2 NOT EQUAL TO -1

004342  022767  177777  174436          CMP     #-1,ANS3        ;IS IT -1?
004350  001401                  BEQ     .+4
004352  104004                  HLT+4                   ;ANS3 NOT EQUAL TO -1

004354  022767  177777  174426          CMP     #-1,ANS4        ;IS IT -1?
004362  001401                  BEQ     .+4
004364  104004                  HLT+4                   ;ANS4 NOT EQUAL TO -1

004366  174104                  STD     1,%4            ;STORE AC1 INTO AC4
004370  172504                  LDD     %4,1            ;LOAD AC4 INTO AC1
004372  174167  174404          STD     1,ANS1          ;STORE IT AGAIN

004376  022767  177777  174376          CMP     #-1,ANS1        ;IS IT -1?
004404  001401                  BEQ     .+4
004406  104004                  HLT+4                   ;ANS1 NOT EQUAL TO -1

004410  022767  177777  174366          CMP     #-1,ANS2        ;IS IT -1?
004416  001401                  BEQ     .+4
004420  104004                  HLT+4                   ;ANS2 NOT EQLAL TO -1

004422  022767  177777  174356          CMP     #-1,ANS3        ;IS IT -1?
004430  001401                  BEQ     .+4
004432  104004                  HLT+4                   ;ANS3 NOT EQUAL TO -1

004434  022767  177777  174346          CMP     #-1,ANS4        ;IS IT -1?
004442  001401                  BEQ     .+4
004444  104004                  HLT+4                   ;ANS4 NOT EQUAL TO -1
```

```
                                        ;*************************************************************
                                        ;TEST 26                  LDD AND STD 125252,125252,125252,125252
                                        ;    USING AC1 AND AC4     FPS = 47610    FEC = N/A
                                        ;*************************************************************
004446  104400                                  SCOPE
004450  170127  047600                          LDFPS   #47610&57760
004454  172567  000020                          LDD     N26,1           ;LOAD 125252,125252,125252,125252 INTO 1
004460  170200                                  STFPS   FPS             ;STORE FLOATING POINT STATUS
004462  022700  047610                          CMP     #47610,FPS      ;CHECK FLOATING POINT STATUS
004466  001401                                  BEQ     .+4             ;BRANCH IF OK
004470  104000                                  HLT                     ;FPS NOT EQUAL TO 47610

004472  174167  174304                          STD     1,ANS1          ;STORE 125252,125252,125252,125252
004476  000404                                  BR      026

004500  125252  125252  125252  N26:    125252,125252,125252,125252
004506  125252
004510  022767  125252  174264  026:    CMP     #125252,ANS1    ;IS IT 125252?
004516  001401                                  BEQ     .+4
004520  104004                                  HLT+4                   ;ANS1 NOT EQUAL TO 125252

004522  022767  125252  174254                  CMP     #125252,ANS2    ;IS IT 125252?
004530  001401                                  BEQ     .+4
004532  104004                                  HLT+4                   ;ANS2 NOT EQUAL TO 125252

004534  022767  125252  174244                  CMP     #125252,ANS3    ;IS IT 125252?
004542  001401                                  BEQ     .+4
004544  104004                                  HLT+4                   ;ANS3 NOT EQUAL TO 125252

004546  022767  125252  174234                  CMP     #125252,ANS4    ;IS IT 125252?
004554  001401                                  BEQ     .+4
004556  104004                                  HLT+4                   ;ANS4 NOT EQUAL TO 125252

004560  174104                                  STD     1,%4            ;STORE AC1 INTO AC4
004562  172504                                  LDD     %4,1            ;LOAD AC4 INTO AC1
004564  174167  174212                          STD     1,ANS1          ;STORE IT AGAIN

004570  022767  125252  174204                  CMP     #125252,ANS1    ;IS IT 125252?
004576  001401                                  BEQ     .+4
004600  104004                                  HLT+4                   ;ANS1 NOT EQUAL TO 125252

004602  022767  125252  174174                  CMP     #125252,ANS2    ;IS IT 125252?
004610  001401                                  BEQ     .+4
004612  104004                                  HLT+4                   ;ANS2 NOT EQUAL TO 125252

004614  022767  125252  174164                  CMP     #125252,ANS3    ;IS IT 125252?
004622  001401                                  BEQ     .+4
004624  104004                                  HLT+4                   ;ANS3 NOT EQUAL TO 125252

004626  022767  125252  174154                  CMP     #125252,ANS4    ;IS IT 125252?
004634  001401                                  BEQ     .+4
004636  104004                                  HLT+4                   ;ANS4 NOT EQUAL TO 125252
```

```
                                                ;*************************************************************
                                                ;TEST 27               LDD AND STD 52525,52525,52525,52525
                                                ;    USING AC1 AND AC4     FPS = 47600     FEC = N/A
                                                ;*************************************************************
004640  104400                                  SCOPE
004642  170127  047600                          LDFPS   #47600&57760
004646  172567  000020                          LDD     N27,1           ;LOAD 52525,52525,52525,52525 INTO 1
004652  170200                                  STFPS   FPS             ;STORE FLOATING POINT STATUS
004654  022700  047600                          CMP     #47600,FPS      ;CHECK FLOATING POINT STATUS
004660  001401                                  BEQ     .+4             ;BRANCH IF OK
004662  104000                                  HLT                     ;FPS NOT EQUAL TO 47600

004664  174167  174112                          STD     1,ANS1          ;STORE 52525,52525,52525,52525
004670  000404                                  BR      027

004672  052525  052525  052525  N27:            52525,52525,52525,52525
004700  052525
004702  022767  052525  174072  027:            CMP     #52525,ANS1     ;IS IT 52525?
004710  001401                                  BEQ     .+4
004712  104004                                  HLT+4                   ;ANS1 NOT EQUAL TO 52525

004714  022767  052525  174062                  CMP     #52525,ANS2     ;IS IT 52525?
004722  001401                                  BEQ     .+4
004724  104004                                  HLT+4                   ;ANS2 NOT EQUAL TO 52525

004726  022767  052525  174052                  CMP     #52525,ANS3     ;IS IT 52525?
004734  001401                                  BEQ     .+4
004736  104004                                  HLT+4                   ;ANS3 NOT EQUAL TO 52525

004740  022767  052525  174042                  CMP     #52525,ANS4     ;IS IT 52525?
004746  001401                                  BEQ     .+4
004750  104004                                  HLT+4                   ;ANS4 NOT EQUAL TO 52525

004752  174104                                  STD     1,%4            ;STORE AC1 INTO AC4
004754  172504                                  LDD     %4,1            ;LOAD AC4 INTO AC1
004756  174167  174020                          STD     1,ANS1          ;STORE IT AGAIN

004762  022767  052525  174012                  CMP     #52525,ANS1     ;IS IT 52525?
004770  001401                                  BEQ     .+4
004772  104004                                  HLT+4                   ;ANS1 NOT EQUAL TO 52525

004774  022767  052525  174002                  CMP     #52525,ANS2     ;IS IT 52525?
005002  001401                                  BEQ     .+4
005004  104004                                  HLT+4                   ;ANS2 NOT EQUAL TO 52525

005006  022767  052525  173772                  CMP     #52525,ANS3     ;IS IT 52525?
005014  001401                                  BEQ     .+4
005016  104004                                  HLT+4                   ;ANS3 NOT EQUAL TO 52525

005020  022767  052525  173762                  CMP     #52525,ANS4     ;IS IT 52525?
005026  001401                                  BEQ     .+4
005030  104004                                  HLT+4                   ;ANS4 NOT EQUAL TO 52525
```

C04


```
                                                  ;*************************************************************
                                                  ;TEST 30                  LDD AND STD 0,0,0,0
                                                  ;     USING AC2 AND AC4    FPS = 47604    FEC = N/A
                                                  ;*************************************************************
005032  104400                                    SCOPE
005034  170127  047600                            LDFPS   #47604$57760
005040  172567  000020                            LDD     N30,2           ;LOAD 0,0,0,0 INTO 2
005044  170200                                    STFPS   FPS             ;STORE FLOATING POINT STATUS
005046  022700  047604                            CMP     #47604,FPS      ;CHECK FLOATING POINT STATUS
005052  001401                                    BEQ     .+4             ;BRANCH IF OK
005054  104000                                    HLT                     ;FPS NOT EQUAL TO 47604

005056  174267  173720                            STD     2,ANS1          ;STORE 0,0,0,0
005062  000404                                    BR      O30

005064  000000  000000  000000   N30:             0,0,0,0
005072  000000
005074  022767  000000  173700   O30:             CMP     #0,ANS1         ;IS IT 0?
005102  001401                                    BEQ     .+4
005104  104004                                    HLT+4                   ;ANS1 NOT EQUAL TO 0

005106  022767  000000  173670                    CMP     #0,ANS2         ;IS IT 0?
005114  001401                                    BEQ     .+4
005116  104004                                    HLT+4                   ;ANS2 NOT EQUAL TO 0

005120  022767  000000  173660                    CMP     #0,ANS3         ;IS IT 0?
005126  001401                                    BEQ     .+4
005130  104004                                    HLT+4                   ;ANS3 NOT EQUAL TO 0

005132  022767  000000  173650                    CMP     #0,ANS4         ;IS IT 0?
005140  001401                                    BEQ     .+4
005142  104004                                    HLT+4                   ;ANS4 NOT EQUAL TO 0

005144  174204                                    STD     2,%4            ;STORE AC2 INTO AC4
005146  172604                                    LDD     %4,2            ;LOAD AC4 INTO AC2
005150  174267  173626                            STD     2,ANS1          ;STORE IT AGAIN

005154  022767  000000  173620                    CMP     #0,ANS1         ;IS IT 0?
005162  001401                                    BEQ     .+4
005164  104004                                    HLT+4                   ;ANS1 NOT EQUAL TO 0

005166  022767  000000  173610                    CMP     #0,ANS2         ;IS IT 0?
005174  001401                                    BEQ     .+4
005176  104004                                    HLT+4                   ;ANS2 NOT EQUAL TO 0

005200  022767  000000  173600                    CMP     #0,ANS3         ;IS IT 0?
005206  001401                                    BEQ     .+4
005210  104004                                    HLT+4                   ;ANS3 NOT EQUAL TO 0

005212  022767  000000  173570                    CMP     #0,ANS4         ;IS IT 0?
005220  001401                                    BEQ     .+4
005222  104004                                    HLT+4                   ;ANS4 NOT EQUAL TO 0
```

```
                                         ;*****************************************************************
                                         ;TEST 31                       LDD AND STD -1,-1,-1,-1
                                         ;    USING AC2 AND AC4    FPS = 47610    FEC = N A
                                         ;*****************************************************************
005224  104400                                   SCOPE
005226  170127  047600                           LDFPS   #47610&57760
005232  172667  000020                           LDD     N31,2             ;LOAD -1,-1,-1,-1 INTO 2
005236  170200                                   STFPS   FPS               ;STORE FLOATING POINT STATUS
005240  022700  047610                           CMP     #47610,FPS        ;CHECK FLOATING POINT STATUS
005244  001401                                   BEQ     .+4               ;BRANCH IF OK
005246  104000                                   HLT                       ;FPS NOT EQUAL TO 47610

005250  174267  173526                           STD     2,ANS1            ;STORE -1,-1,-1,-1
005254  000404                                   BR      031

005256  177777  177777  177777   N31:            -1,-1,-1,-1
005264  177777
005266  022767  177777  173506   031:            CMP     #-1,ANS1          ;IS IT -1?
005274  001401                                   BEQ     .+4
005276  104004                                   HLT+4                     ;ANS1 NOT EQUAL TO -1

005300  022767  177777  173476                   CMP     #-1,ANS2          ;IS IT -1?
005306  001401                                   BEQ     .+4
005310  104004                                   HLT+4                     ;ANS2 NOT EQUAL TO -1

005312  022767  177777  173466                   CMP     #-1,ANS3          ;IS IT -1?
005320  001401                                   BEQ     .+4
005322  104004                                   HLT+4                     ;ANS3 NOT EQUAL TO -1

005324  022767  177777  173456                   CMP     #-1,ANS4          ;IS IT -1?
005332  001401                                   BEQ     .+4
005334  104004                                   HLT+4                     ;ANS4 NOT EQUAL TO -1

005336  174204                                   STD     2,%4              ;STORE AC2 INTO AC4
005340  172504                                   LDD     %4,2              ;LOAD AC4 INTO AC2
005342  174267  173434                           STD     2,ANS1            ;STORE IT AGAIN

005346  022767  177777  173426                   CMP     #-1,ANS1          ;IS IT -1?
005354  001401                                   BEQ     .+4
005356  104004                                   HLT+4                     ;ANS1 NOT EQUAL TO -1

005360  022767  177777  173416                   CMP     #-1,ANS2          ;IS IT -1?
005366  001401                                   BEQ     .+4
005370  104004                                   HLT+4                     ;ANS2 NOT EQUAL TO -1

005372  022767  177777  173406                   CMP     #-1,ANS3          ;IS IT -1?
005400  001401                                   BEQ     .+4
005402  104004                                   HLT+4                     ;ANS3 NOT EQUAL TO -1

005404  022767  177777  173376                   CMP     #-1,ANS4          ;IS IT -1?
005412  001401                                   BEQ     .+4
005414  104004                                   HLT+4                     ;ANS4 NOT EQUAL TO -1
```

```
                                        ;*******************************************************************
                                        ;TEST 32               LDD AND STD 125252,125252,125252,125252
                                        ;    USING AC2 AND AC4    FPS = 47610    FEC = N/A
                                        ;*******************************************************************
005416  104400                                  SCOPE
005420  170127  047600                          LDFPS   #47610&57760
005424  172667  000020                          LDD     N32,2           ;LOAD 125252,125252,125252,125252 INTO 2
005430  170200                                  STFPS   FPS             ;STORE FLOATING POINT STATUS
005432  022700  047610                          CMP     #47610,FPS      ;CHECK FLOATING POINT STATUS
005436  001401                                  BEQ     .+4             ;BRANCH IF OK
005440  104000                                  HLT                     ;FPS NOT EQUAL TO 47610

005442  174267  173334                          STD     2,ANS1          ;STORE 125252,125252,125252,125252
005446  000404                                  BR      032

005450  125252  125252  125252  N32:    125252,125252,125252,125252
005456  125252
005460  022767  125252  173314  032:    CMP     #125252,ANS1    ;IS IT 125252?
005466  001401                                  BEQ     .+4
005470  104004                                  HLT+4                   ;ANS1 NOT EQUAL TO 125252

005472  022767  125252  173304                  CMP     #125252,ANS2    ;IS IT 125252?
005500  001401                                  BEQ     .+4
005502  104004                                  HLT+4                   ;ANS2 NOT EQUAL TO 125252

005504  022767  125252  173274                  CMP     #125252,ANS3    ;IS IT 125252?
005512  001401                                  BEQ     .+4
005514  104004                                  HLT+4                   ;ANS3 NOT EQUAL TO 125252

005516  022767  125252  173264                  CMP     #125252,ANS4    ;IS IT 125252?
005524  001401                                  BEQ     .+4
005526  104004                                  HLT+4                   ;ANS4 NOT EQUAL TO 125252

005530  174204                                  STD     2,%4            ;STORE AC2 INTO AC4
005532  172604                                  LDD     %4,2            ;LOAD AC4 INTO AC2
005534  174267  173242                          STD     2,ANS1          ;STORE IT AGAIN

005540  022767  125252  173234                  CMP     #125252,ANS1    ;IS IT 125252?
005546  001401                                  BEQ     .+4
005550  104004                                  HLT+4                   ;ANS1 NOT EQUAL TO 125252

005552  022767  125252  173224                  CMP     #125252,ANS2    ;IS IT 125252?
005560  001401                                  BEQ     .+4
005562  104004                                  HLT+4                   ;ANS2 NOT EQUAL TO 125252

005564  022767  125252  173214                  CMP     #125252,ANS3    ;IS IT 125252?
005572  001401                                  BEQ     .+4
005574  104004                                  HLT+4                   ;ANS3 NOT EQUAL TO 125252

005576  022767  125252  173204                  CMP     #125252,ANS4    ;IS IT 125252?
005604  001401                                  BEQ     .+4
005606  104004                                  HLT+4                   ;ANS4 NOT EQUAL TO 125252
```

```
                                ;*****************************************************************
                                ;TEST 33                LDD AND STD 52525,52525,52525,52525
                                ;    USING AC2 AND AC4    FPS = 47600    FEC = N/A
                                ;*****************************************************************
005610  104400                          SCOPE
005612  170127  047600                  LDFPS   #47600&57760
005616  172667  000020                  LDD     N33,2           ;LOAD 52525,52525,52525,52525 INTO 2
005622  170200                          STFPS   FPS             ;STORE FLOATING POINT STATUS
005624  022700  047600                  CMP     #47600,FPS      ;CHECK FLOATING POINT STATUS
005630  001401                          BEQ     .+4             ;BRANCH IF OK
005632  104000                          HLT                     ;FPS NOT EQUAL TO 47600

005634  174267  173142                  STD     2,ANS1          ;STORE 52525,52525,52525,52525
005640  000404                          BR      033

005642  052525  052525  052525  N33:    52525,52525,52525,52525
005650  052525
005652  022767  052525  173122  033:    CMP     #52525,ANS1     ;IS IT 52525?
005660  001401                          BEQ     .+4
005662  104004                          HLT+4                   ;ANS1 NOT EQUAL TO 52525

005664  022767  052525  173112          CMP     #52525,ANS2     ;IS IT 52525?
005672  001401                          BEQ     .+4
005674  104004                          HLT+4                   ;ANS2 NOT EQUAL TO 52525

005676  022767  052525  173102          CMP     #52525,ANS3     ;IS IT 52525?
005704  001401                          BEQ     .+4
005706  104004                          HLT+4                   ;ANS3 NOT EQUAL TO 52525

005710  022767  052525  173072          CMP     #52525,ANS4     ;IS IT 52525?
005716  001401                          BEQ     .+4
005720  104004                          HLT+4                   ;ANS4 NOT EQUAL TO 52525

005722  174204                          STD     2,%4            ;STORE AC2 INTO AC4
005724  172604                          LDD     %4,2            ;LOAD AC4 INTO AC2
005726  174267  173050                  STD     2,ANS1          ;STORE IT AGAIN

005732  022767  052525  173042          CMP     #52525,ANS1     ;IS IT 52525?
005740  001401                          BEQ     .+4
005742  104004                          HLT+4                   ;ANS1 NOT EQUAL TO 52525

005744  022767  052525  173032          CMP     #52525,ANS2     ;IS IT 52525?
005752  001401                          BEQ     .+4
005754  104004                          HLT+4                   ;ANS2 NOT EQUAL TO 52525

005756  022767  052525  173022          CMP     #52525,ANS3     ;IS IT 52525?
005764  001401                          BEQ     .+4
005766  104004                          HLT+4                   ;ANS3 NOT EQUAL TO 52525

005770  022767  052525  173012          CMP     #52525,ANS4     ;IS IT 52525?
005776  001401                          BEQ     .+4
006000  104004                          HLT+4                   ;ANS4 NOT EQUAL TO 52525
```

```
                        ;*****************************************************************
                        ;TEST 34                LDD AND STD 0.0,0.0
                        ;    USING AC3 AND AC4    FPS = 47604    FEC = N/A
                        ;*****************************************************************
006002  104400                  SCOPE
006004  170127  047600          LDFPS   #47604&57760
006010  172767  000020          LDD     N34,3           ;LOAD 0.0,0.0 INTO 3
006014  170200                  STFPS   FPS             ;STORE FLOATING POINT STATUS
006016  022700  047604          CMP     #47604,FPS      ;CHECK FLOATING POINT STATUS
006022  001401                  BEQ     .+4             ;BRANCH IF OK
006024  104000                  HLT                     ;FPS NOT EQUAL TO 47604

006026  174367  172750          STD     3,ANS1          ;STORE 0.0,0.0
006032  000404                  BR      C34

006034  000000  000000  000000  N34:    0.0,0.0
006042  000000
006044  022767  000000  172730  C34:    CMP     #0,ANS1         ;IS IT 0?
006052  001401                  BEQ     .+4
006054  104004                  HLT+4                   ;ANS1 NOT EQUAL TO 0

006056  022767  000000  172720          CMP     #0,ANS2         ;IS IT 0?
006064  001401                  BEQ     .+4
006066  104004                  HLT+4                   ;ANS2 NOT EQUAL TO 0

006070  022767  000000  172710          CMP     #0,ANS3         ;IS IT 0?
006076  001401                  BEQ     .+4
006100  104004                  HLT+4                   ;ANS3 NOT EQUAL TO 0

006102  022767  000000  172700          CMP     #0,ANS4         ;IS IT 0?
006110  001401                  BEQ     .+4
006112  104004                  HLT+4                   ;ANS4 NOT EQUAL TO 0

006114  174304                  STD     3,4             ;STORE AC3 INTO AC4
006116  172704                  LDD     4,3             ;LOAD AC4 INTO AC3
006120  174367  172656          STD     3,ANS1          ;STORE IT AGAIN

006124  022767  000000  172650          CMP     #0,ANS1         ;IS IT 0?
006132  001401                  BEQ     .+4
006134  104004                  HLT+4                   ;ANS1 NOT EQUAL TO 0

006136  022767  000000  172640          CMP     #0,ANS2         ;IS IT 0?
006144  001401                  BEQ     .+4
006146  104004                  HLT+4                   ;ANS2 NOT EQUAL TO 0

006150  022767  000000  172630          CMP     #0,ANS3         ;IS IT 0?
006156  001401                  BEQ     .+4
006160  104004                  HLT+4                   ;ANS3 NOT EQUAL TO 0

006162  022767  000000  172620          CMP     #0,ANS4         ;IS IT 0?
006170  001401                  BEQ     .+4
006172  104004                  HLT+4                   ;ANS4 NOT EQUAL TO 0
```

```
                                        ;*******************************************************************
                                        ;TEST 35                 LDD AND STD -1,-1,-1,-1
                                        ;    USING AC3 AND AC4    FPS = 47610    FEC = N/A
                                        ;*******************************************************************
006174  104400                                  SCOPE
006176  170127  047600                          LDFPS   #47610&57760
006202  172767  000020                          LDD     N35,3           ;LOAD -1,-1,-1,-1 INTO 3
006206  170200                                  STFPS   FPS             ;STORE FLOATING POINT STATUS
006210  022700  047610                          CMP     #47610,FPS      ;CHECK FLOATING POINT STATUS
006214  001401                                  BEQ     .+4             ;BRANCH IF OK
006216  104000                                  HLT                     ;FPS NOT EQUAL TO 47610

006220  174367  172556                          STD     3,ANS1          ;STORE -1,-1,-1,-1
006224  000404                                  BR      C35

006226  177777  177777  177777  N35:            -1,-1,-1,-1
006234  177777
006236  022767  177777  172536  C35:            CMP     #-1,ANS1        ;IS IT -1?
006244  001401                                  BEQ     .+4
006246  104004                                  HLT+4                   ;ANS1 NOT EQUAL TO -1

006250  022767  177777  172526                  CMP     #-1,ANS2        ;IS IT -1?
006256  001401                                  BEQ     .+4
006260  104004                                  HLT+4                   ;ANS2 NOT EQUAL TO -1

006262  022767  177777  172516                  CMP     #-1,ANS3        ;IS IT -1?
006270  001401                                  BEQ     .+4
006272  104004                                  HLT+4                   ;ANS3 NOT EQUAL TO -1

006274  022767  177777  172506                  CMP     #-1,ANS4        ;IS IT -1?
006302  001401                                  BEQ     .+4
006304  104004                                  HLT+4                   ;ANS4 NOT EQUAL TO -1

006306  174304                                  STD     3,%4            ;STORE AC3 INTO AC4
006310  172704                                  LDD     %4,3            ;LOAD AC4 INTO AC3
006312  174367  172464                          STD     3,ANS1          ;STORE IT AGAIN

006316  022767  177777  172456                  CMP     #-1,ANS1        ;IS IT -1?
006324  001401                                  BEQ     .+4
006326  104004                                  HLT+4                   ;ANS1 NOT EQUAL TO -1

006330  022767  177777  172446                  CMP     #-1,ANS2        ;IS IT -1?
006336  001401                                  BEQ     .+4
006340  104004                                  HLT+4                   ;ANS2 NOT EQUAL TO -1

006342  022767  177777  172436                  CMP     #-1,ANS3        ;IS IT -1?
006350  001401                                  BEQ     .+4
006352  104004                                  HLT+4                   ;ANS3 NOT EQUAL TO -1

006354  022767  177777  172426                  CMP     #-1,ANS4        ;IS IT -1?
006362  001401                                  BEQ     .+4
006364  104004                                  HLT+4                   ;ANS4 NOT EQUAL TO -1
```

```
                                ;*****************************************************************
                                ;TEST 36                LDD AND STD 125252,125252,125252,125252
                                ;    USING AC3 AND AC4    FPS = 47610    FEC = N/A
                                ;*****************************************************************
006366  104400                          SCOPE
006370  170127  047600                  LDFPS   #47610&57760
006374  172767  000020                  LDD     N36,3           ;LOAD 125252,125252,125252,125252 INTO 3
006400  170200                          STFPS   FPS             ;STORE FLOATING POINT STATUS
006402  022700  047610                  CMP     #47610,FPS      ;CHECK FLOATING POINT STATUS
006406  001401                          BEQ     .+4             ;BRANCH IF OK
006410  104000                          HLT                     ;FPS NOT EQUAL TO 47610

006412  174367  172364                  STD     3,ANS1          ;STORE 125252,125252,125252,125252
006416  000404                          BR      C36

006420  125252  125252  125252  N36:    125252,125252,125252,125252
006426  125252
006430  022767  125252  172344  C36:    CMP     #125252,ANS1    ;IS IT 125252?
006436  001401                          BEQ     .+4
006440  104004                          HLT+4                   ;ANS1 NOT EQUAL TO 125252

006442  022767  125252  172334          CMP     #125252,ANS2    ;IS IT 125252?
006450  001401                          BEQ     .+4
006452  104004                          HLT+4                   ;ANS2 NOT EQUAL TO 125252

006454  022767  125252  172324          CMP     #125252,ANS3    ;IS IT 125252?
006462  001401                          BEQ     .+4
006464  104004                          HLT+4                   ;ANS3 NOT EQUAL TO 125252

006466  022767  125252  172314          CMP     #125252,ANS4    ;IS IT 125252?
006474  001401                          BEQ     .+4
006476  104004                          HLT+4                   ;ANS4 NOT EQUAL TO 125252

006500  174304                          STD     3,%4            ;STORE AC3 INTO AC4
006502  172704                          LDD     %4,3            ;LOAD AC4 INTO AC3
006504  174367  172272                  STD     3,ANS1          ;STORE IT AGAIN

006510  022767  125252  172264          CMP     #125252,ANS1    ;IS IT 125252?
006516  001401                          BEQ     .+4
006520  104004                          HLT+4                   ;ANS1 NOT EQUAL TO 125252

006522  022767  125252  172254          CMP     #125252,ANS2    ;IS IT 125252?
006530  001401                          BEQ     .+4
006532  104004                          HLT+4                   ;ANS2 NOT EQUAL TO 125252

006534  022767  125252  172244          CMP     #125252,ANS3    ;IS IT 125252?
006542  001401                          BEQ     .+4
006544  104004                          HLT+4                   ;ANS3 NOT EQUAL TO 125252

006546  022767  125252  172234          CMP     #125252,ANS4    ;IS IT 125252?
006554  001401                          BEQ     .+4
006556  104004                          HLT+4                   ;ANS4 NOT EQUAL TO 125252
```

```
                                ;*****************************************************************
                                ;TEST 37                LDD AND STD 52525,52525,52525,52525
                                ;    USING AC3 AND AC4    FPS = 47600    FEC = N/A
                                ;*****************************************************************
006560  104400                          SCOPE
006562  170127  047600                  LDFPS   #47600&57760
006566  172067  000020                  LDD     N37,3           ;LOAD 52525,52525,52525,52525 INTO 3
006572  170300                          STFPS   FPS             ;STORE FLOATING POINT STATUS
006574  022700  047600                  CMP     #47600,FPS      ;CHECK FLOATING POINT STATUS
006600  001401                          BEQ     .+4             ;BRANCH IF OK
006602  104000                          HLT                     ;FPS NOT EQUAL TO 47600

006604  174367  172172                  STD     3,ANS1          ;STORE 52525,52525,52525,52525
006610  000404                          BR      037

006612  052525  052525  052525  N37:    52525,52525,52525,52525
006620  052525
006622  022767  052525  172152  037:    CMP     #52525,ANS1     ;IS IT 52525?
006630  001401                          BEQ     .+4
006632  104004                          HLT+4                   ;ANS1 NOT EQUAL TO 52525

006634  022767  052525  172142          CMP     #52525,ANS2     ;IS IT 52525?
006642  001401                          BEQ     .+4
006644  104004                          HLT+4                   ;ANS2 NOT EQUAL TO 52525

006646  022767  052525  172132          CMP     #52525,ANS3     ;IS IT 52525?
006654  001401                          BEQ     .+4
006656  104004                          HLT+4                   ;ANS3 NOT EQUAL TO 52525

006660  022767  052525  172122          CMP     #52525,ANS4     ;IS IT 52525?
006666  001401                          BEQ     .+4
006670  104004                          HLT+4                   ;ANS4 NOT EQUAL TO 52525

006672  174304                          STD     3,%4            ;STORE AC3 INTO AC4
006674  172704                          LDD     %4,3            ;LOAD AC4 INTO AC3
006676  174367  172100                  STD     3,ANS1          ;STORE IT AGAIN

006702  022767  052525  172072          CMP     #52525,ANS1     ;IS IT 52525?
006710  001401                          BEQ     .+4
006712  104004                          HLT+4                   ;ANS1 NOT EQUAL TO 52525

006714  022767  052525  172062          CMP     #52525,ANS2     ;IS IT 52525?
006722  001401                          BEQ     .+4
006724  104004                          HLT+4                   ;ANS2 NOT EQUAL TO 52525

006726  022767  052525  172052          CMP     #52525,ANS3     ;IS IT 52525?
006734  001401                          BEQ     .+4
006736  104004                          HLT+4                   ;ANS3 NOT EQUAL TO 52525

006740  022767  052525  172042          CMP     #52525,ANS4     ;IS IT 52525?
006746  001401                          BEQ     .+4
006750  104004                          HLT+4                   ;ANS4 NOT EQUAL TO 52525
```

```
                                ;*****************************************************************
                                ;TEST 40                LDD AND STD 0.0.0.0
                                ;    USING AC0 AND AC5    FPS = 47604    FEC = N/A
                                ;*****************************************************************
006752  104400                          SCOPE
006754  170127  047600                  LDFPS   #47604&57760
006760  172467  000020                  LDD     N40.0           ;LOAD 0.0.0.0 INTO 0
006764  170200                          STFPS   FPS             ;STORE FLOATING POINT STATUS
006766  022700  047604                  CMP     #47604,FPS      ;CHECK FLOATING POINT STATUS
006772  001401                          BEQ     .+4             ;BRANCH IF OK
006774  104000                          HLT                     ;FPS NOT EQUAL TO 47604

006776  174067  172000                  STD     0,ANS1          ;STORE 0.0.0.0
007002  000404                          BR      040

007004  000000  000000  000000  N40:    0.0.0.0
007012  000000
007014  022767  000000  171760  040:    CMP     #0,ANS1         ;IS IT 0?
007022  001401                          BEQ     .+4
007024  104004                          HLT+4                   ;ANS1 NOT EQUAL TO 0

007026  022767  000000  171750          CMP     #0,ANS2         ;IS IT 0?
007034  001401                          BEQ     .+4
007036  104004                          HLT+4                   ;ANS2 NOT EQUAL TO 0

007040  022767  000000  171740          CMP     #0,ANS3         ;IS IT 0?
007046  001401                          BEQ     .+4
007050  104004                          HLT+4                   ;ANS3 NOT EQUAL TO 0

007052  022767  000000  171730          CMP     #0,ANS4         ;IS IT 0?
007060  001401                          BEQ     .+4
007062  104004                          HLT+4                   ;ANS4 NOT EQUAL TO 0

007064  174005                          STD     0,%5            ;STORE AC0 INTO AC5
007066  172405                          LDD     %5,0            ;LOAD AC5 INTO AC0
007070  174067  171706                  STD     0,ANS1          ;STORE IT AGAIN

007074  022767  000000  171700          CMP     #0,ANS1         ;IS IT 0?
007102  001401                          BEQ     .+4
007104  104004                          HLT+4                   ;ANS1 NOT EQUAL TO 0

007106  022767  000000  171670          CMP     #0,ANS2         ;IS IT 0?
007114  001401                          BEQ     .+4
007116  104004                          HLT+4                   ;ANS2 NOT EQUAL TO 0

007120  022767  000000  171660          CMP     #0,ANS3         ;IS IT 0?
007126  001401                          BEQ     .+4
007130  104004                          HLT+4                   ;ANS3 NOT EQUAL TO 0

007132  022767  000000  171650          CMP     #0,ANS4         ;IS IT 0?
007140  001401                          BEQ     .+4
007142  104004                          HLT+4                   ;ANS4 NOT EQUAL TO 0
```

```
                                ;*****************************************************************
                                ;TEST 41                LDD AND STD -1,-1,-1,-1
                                ;    USING AC0 AND AC5    FPS = 47610    FEC = N/A
                                ;*****************************************************************
007144  104400                          SCOPE
007146  170127  047600                  LDFPS   #47610&57760
007152  172467  000020                  LDD     N41,0           ;LOAD -1,-1,-1,-1 INTO 0
007156  170200                          STFPS   FPS             ;STORE FLOATING POINT STATUS
007160  022700  047610                  CMP     #47610,FPS      ;CHECK FLOATING POINT STATUS
007164  001401                          BEQ     .+4             ;BRANCH IF OK
007166  104000                          HLT                     ;FPS NOT EQUAL TO 47610

007170  174067  171606                  STD     0,ANS1          ;STORE -1,-1,-1,-1
007174  000404                          BR      041

007176  177777  177777  177777  N41:    -1,-1,-1,-1
007204  177777
007206  022767  177777  171566  041:    CMP     #-1,ANS1        ;IS IT -1?
007214  001401                          BEQ     .+4
007216  104004                          HLT+4                   ;ANS1 NOT EQUAL TO -1

007220  022767  177777  171556          CMP     #-1,ANS2        ;IS IT -1?
007226  001401                          BEQ     .+4
007230  104004                          HLT+4                   ;ANS2 NOT EQUAL TO -1

007232  022767  177777  171546          CMP     #-1,ANS3        ;IS IT -1?
007240  001401                          BEQ     .+4
007242  104004                          HLT+4                   ;ANS3 NOT EQUAL TO -1

007244  022767  177777  171536          CMP     #-1,ANS4        ;IS IT -1?
007252  001401                          BEQ     .+4
007254  104004                          HLT+4                   ;ANS4 NOT EQUAL TO -1

007256  174005                          STD     0,%5            ;STORE AC0 INTO AC5
007260  172405                          LDD     %5,0            ;LOAD AC5 INTO AC0
007262  174067  171514                  STD     0,ANS1          ;STORE IT AGAIN

007266  022767  177777  171506          CMP     #-1,ANS1        ;IS IT -1?
007274  001401                          BEQ     .+4
007276  104004                          HLT+4                   ;ANS1 NOT EQUAL TO -1

007300  022767  177777  171476          CMP     #-1,ANS2        ;IS IT -1?
007306  001401                          BEQ     .+4
007310  104004                          HLT+4                   ;ANS2 NOT EQUAL TO -1

007312  022767  177777  171466          CMP     #-1,ANS3        ;IS IT -1?
007320  001401                          BEQ     .+4
007322  104004                          HLT+4                   ;ANS3 NOT EQUAL TO -1

007324  022767  177777  171456          CMP     #-1,ANS4        ;IS IT -1?
007332  001401                          BEQ     .+4
007334  104004                          HLT+4                   ;ANS4 NOT EQUAL TO -1
```

```
                                        ;*******************************************************************
                                        ;TEST 42                    LDD AND STD 125252,125252,125252,125252
                                        ;    USING AC0 AND AC5     FPS = 47610     FEC = N/A
                                        ;*******************************************************************
007336  104400                                  SCOPE
007340  170127  047600                          LDFPS   #47610&57760
007344  172467  000020                          LDD     N42,0           ;LOAD 125252,125252,125252,125252 INTO 0
007350  170200                                  STFPS   FPS             ;STORE FLOATING POINT STATUS
007352  022700  047610                          CMP     #47610,FPS      ;CHECK FLOATING POINT STATUS
007356  001401                                  BEQ     .+4             ;BRANCH IF OK
007360  104000                                  HLT                     ;FPS NOT EQUAL TO 47610

007362  174067  171414                          STD     0,ANS1          ;STORE 125252,125252,125252,125252
007366  000404                                  BR      O42

007370  125252  125252  125252  N42:    125252,125252,125252,125252
007376  125252
007400  022767  125252  171374  O42:    CMP     #125252,ANS1    ;IS IT 125252?
007406  001401                                  BEQ     .+4
007410  104004                                  HLT+4                   ;ANS1 NOT EQUAL TO 125252

007412  022767  125252  171364          CMP     #125252,ANS2    ;IS IT 125252?
007420  001401                                  BEQ     .+4
007422  104004                                  HLT+4                   ;ANS2 NOT EQUAL TO 125252

007424  022767  125252  171354          CMP     #125252,ANS3    ;IS IT 125252?
007432  001401                                  BEQ     .+4
007434  104004                                  HLT+4                   ;ANS3 NOT EQUAL TO 125252

007436  022767  125252  171344          CMP     #125252,ANS4    ;IS IT 125252?
007444  001401                                  BEQ     .+4
007446  104004                                  HLT+4                   ;ANS4 NOT EQUAL TO 125252

007450  174005                                  STD     0,%5            ;STORE AC0 INTO AC5
007452  172405                                  LDD     %5,0            ;LOAD AC5 INTO AC0
007454  174067  171322                          STD     0,ANS1          ;STORE IT AGAIN

007460  022767  125252  171314          CMP     #125252,ANS1    ;IS IT 125252?
007466  001401                                  BEQ     .+4
007470  104004                                  HLT+4                   ;ANS1 NOT EQUAL TO 125252

007472  022767  125252  171304          CMP     #125252,ANS2    ;IS IT 125252?
007500  001401                                  BEQ     .+4
007502  104004                                  HLT+4                   ;ANS2 NOT EQUAL TO 125252

007504  022767  125252  171274          CMP     #125252,ANS3    ;IS IT 125252?
007512  001401                                  BEQ     .+4
007514  104004                                  HLT+4                   ;ANS3 NOT EQUAL TO 125252

007516  022767  125252  171264          CMP     #125252,ANS4    ;IS IT 125252?
007524  001401                                  BEQ     .+4
007526  104004                                  HLT+4                   ;ANS4 NOT EQUAL TO 125252
```

```
                                        ;*****************************************************************
                                        ;TEST 43                LDD AND STD 52525,52525,52525,52525
                                        ;    USING AC0 AND AC5    FPS = 47600    FEC = N/A
                                        ;*****************************************************************
007530  104400                                  SCOPE
007532  170127  047600                          LDFPS   #47600&57760
007536  172467  000020                          LDD     N43,0           ;LOAD 52525,52525,52525,52525 INTO 0
007542  170200                                  STFPS   FPS             ;STORE FLOATING POINT STATUS
007544  022700  047600                          CMP     #47600,FPS      ;CHECK FLOATING POINT STATUS
007550  001401                                  BEQ     .+4             ;BRANCH IF OK
007552  104000                                  HLT                     ;FPS NOT EQUAL TO 47600

007554  174067  171222                          STD     0,ANS1          ;STORE 52525,52525,52525,52525
007560  000404                                  BR      043

007562  052525  052525  052525  N43:    52525,52525,52525,52525
007570  052525
007572  022767  052525  171202  043:    CMP     #52525,ANS1     ;IS IT 52525?
007600  001401                          BEQ     .+4
007602  104004                          HLT+4                   ;ANS1 NOT EQUAL TO 52525

007604  022767  052525  171172          CMP     #52525,ANS2     ;IS IT 52525?
007612  001401                          BEQ     .+4
007614  104004                          HLT+4                   ;ANS2 NOT EQUAL TO 52525

007616  022767  052525  171162          CMP     #52525,ANS3     ;IS IT 52525?
007624  001401                          BEQ     .+4
007626  104004                          HLT+4                   ;ANS3 NOT EQUAL TO 52525

007630  022767  052525  171152          CMP     #52525,ANS4     ;IS IT 52525?
007636  001401                          BEQ     .+4
007640  104004                          HLT+4                   ;ANS4 NOT EQUAL TO 52525

007642  174005                          STD     0,%5            ;STORE AC0 INTO AC5
007644  172405                          LDD     %5,0            ;LOAD AC5 INTO AC0
007646  174067  171130                  STD     0,ANS1          ;STORE IT AGAIN

007652  022767  052525  171122          CMP     #52525,ANS1     ;IS IT 52525?
007660  001401                          BEQ     .+4
007662  104004                          HLT+4                   ;ANS1 NOT EQUAL TO 52525

007664  022767  052525  171112          CMP     #52525,ANS2     ;IS IT 52525?
007672  001401                          BEQ     .+4
007674  104004                          HLT+4                   ;ANS2 NOT EQUAL TO 52525

007676  022767  052525  171102          CMP     #52525,ANS3     ;IS IT 52525?
007704  001401                          BEQ     .+4
007706  104004                          HLT+4                   ;ANS3 NOT EQUAL TO 52525

007710  022767  052525  171072          CMP     #52525,ANS4     ;IS IT 52525?
007716  001401                          BEQ     .+4
007720  104004                          HLT+4                   ;ANS4 NOT EQUAL TO 52525
```

```
                                                 ;*************************************************************
                                                 ;TEST 44                  LDD AND STD 0,0,0,0
                                                 ;    USING AC1 AND AC5    FPS = 47604    FEC = N/A
                                                 ;*************************************************************
007722  104400                                    SCOPE
007724  170127  047600                            LDFPS   #47604&57760
007730  172567  000020                            LDD     N44,1              ;LOAD 0,0,0,0 INTO 1
007734  170200                                    STFPS   FPS                ;STORE FLOATING POINT STATUS
007736  022700  047604                            CMP     #47604,FPS         ;CHECK FLOATING POINT STATUS
007742  001401                                    BEQ     .+4                ;BRANCH IF OK
007744  104000                                    HLT                        ;FPS NOT EQUAL TO 47604

007746  174167  171030                            STD     1,ANS1             ;STORE 0,0,0,0
007752  000404                                    BR      044

007754  000000  000000  000000   N44:             0,0,0,0
007762  000000
007764  022767  000000  171010   044:             CMP     #0,ANS1            ;IS IT 0?
007772  001401                                    BEQ     .+4
007774  104004                                    HLT+4                      ;ANS1 NOT EQUAL TO 0

007776  022767  000000  171000                    CMP     #0,ANS2            ;IS IT 0?
010004  001401                                    BEQ     .+4
010006  104004                                    HLT+4                      ;ANS2 NOT EQUAL TO 0

010010  022767  000000  170770                    CMP     #0,ANS3            ;IS IT 0?
010016  001401                                    BEQ     .+4
010020  104004                                    HLT+4                      ;ANS3 NOT EQUAL TO 0

010022  022767  000000  170760                    CMP     #0,ANS4            ;IS IT 0?
010030  001401                                    BEQ     .+4
010032  104004                                    HLT+4                      ;ANS4 NOT EQUAL TO 0

010034  174105                                    STD     1,%5               ;STORE AC1 INTO AC5
010036  172505                                    LDD     %5,1               ;LOAD AC5 INTO AC1
010040  174167  170736                            STD     1,ANS1             ;STORE IT AGAIN

010044  022767  000000  170730                    CMP     #0,ANS1            ;IS IT 0?
010052  001401                                    BEQ     .+4
010054  104004                                    HLT+4                      ;ANS1 NOT EQUAL TO 0

010056  022767  000000  170720                    CMP     #0,ANS2            ;IS IT 0?
010064  001401                                    BEQ     .+4
010066  104004                                    HLT+4                      ;ANS2 NOT EQUAL TO 0

010070  022767  000000  170710                    CMP     #0,ANS3            ;IS IT 0?
010076  001401                                    BEQ     .+4
010100  104004                                    HLT+4                      ;ANS3 NOT EQUAL TO 0

010102  022767  000000  170700                    CMP     #0,ANS4            ;IS IT 0?
010110  001401                                    BEQ     .+4
010112  104004                                    HLT+4                      ;ANS4 NOT EQUAL TO 0
```

```
                                        ;*******************************************************************
                                        ;TEST 45                 LDD AND STD -1,-1,-1,-1
                                        ;    USING AC1 AND AC5      FPS = 47610     FEC = N/A
                                        ;*******************************************************************
010114  104400                                  SCOPE
010116  170127  047600                          LDFPS   #47610&57760
010122  172567  000020                          LDD     N45,1                   ;LOAD -1,-1,-1,-1 INTO 1
010126  170200                                  STFPS   FPS                     ;STORE FLOATING POINT STATUS
010130  022700  047610                          CMP     #47610,FPS              ;CHECK FLOATING POINT STATUS
010134  001401                                  BEQ     .+4                     ;BRANCH IF OK
010136  104000                                  HLT                             ;FPS NOT EQUAL TO 47610

010140  174167  170636                          STD     1,ANS1                  ;STORE -1,-1,-1,-1
010144  000404                                  BR      045

010146  177777  177777  177777  N45:            -1,-1,-1,-1
010154  177777
010156  022767  177777  170616  045:            CMP     #-1,ANS1                ;IS IT -1?
010164  001401                                  BEQ     .+4
010166  104004                                  HLT+4                           ;ANS1 NOT EQUAL TO -1

010170  022767  177777  170606                  CMP     #-1,ANS2                ;IS IT -1?
010176  001401                                  BEQ     .+4
010200  104004                                  HLT+4                           ;ANS2 NOT EQUAL TO -1

010202  022767  177777  170576                  CMP     #-1,ANS3                ;IS IT -1?
010210  001401                                  BEQ     .+4
010212  104004                                  HLT+4                           ;ANS3 NOT EQUAL TO -1

010214  022767  177777  170566                  CMP     #-1,ANS4                ;IS IT -1?
010222  001401                                  BEQ     .+4
010224  104004                                  HLT+4                           ;ANS4 NOT EQUAL TO -1

010226  174105                                  STD     1,%5                    ;STORE AC1 INTO AC5
010230  172505                                  LDD     %5,1                    ;LOAD AC5 INTO AC1
010232  174167  170544                          STD     1,ANS1                  ;STORE IT AGAIN

010236  022767  177777  170536                  CMP     #-1,ANS1                ;IS IT -1?
010244  001401                                  BEQ     .+4
010246  104004                                  HLT+4                           ;ANS1 NOT EQUAL TO -1

010250  022767  177777  170526                  CMP     #-1,ANS2                ;IS IT -1?
010256  001401                                  BEQ     .+4
010260  104004                                  HLT+4                           ;ANS2 NOT EQUAL TO -1

010262  022767  177777  170516                  CMP     #-1,ANS3                ;IS IT -1?
010270  001401                                  BEQ     .+4
010272  104004                                  HLT+4                           ;ANS3 NOT EQUAL TO -1

010274  022767  177777  170506                  CMP     #-1,ANS4                ;IS IT -1?
010302  001401                                  BEQ     .+4
010304  104004                                  HLT+4                           ;ANS4 NOT EQUAL TO -1
```

D05


```
                                                ;*****************************************************************
                                                ;TEST 46                LDD AND STD 125252,125252,125252,125252
                                                ;    USING AC1 AND AC5    FPS = 47610    FEC = N/A
                                                ;*****************************************************************
010306  104400                                          SCOPE
010310  170127  047600                                  LDFPS   #47610&57760
010314  172567  000020                                  LDD     N46,1           ;LOAD 125252,125252,125252,125252 INTO 1
010320  170200                                          STFPS   FPS             ;STORE FLOATING POINT STATUS
010322  022700  047610                                  CMP     #47610,FPS      ;CHECK FLOATING POINT STATUS
010326  001401                                          BEQ     .+4             ;BRANCH IF OK
010330  104000                                          HLT                     ;FPS NOT EQUAL TO 47610

010332  174167  170444                                  STD     1,ANS1          ;STORE 125252,125252,125252,125252
010336  000404                                          BR      D46

010340  125252  125252  125252  N46:    125252,125252,125252,125252
010346  125252
010350  022767  125252  170424  D46:    CMP     #125252,ANS1    ;IS IT 125252?
010356  001401                                          BEQ     .+4
010360  104004                                          HLT+4                   ;ANS1 NOT EQUAL TO 125252

010362  022767  125252  170414                          CMP     #125252,ANS2    ;IS IT 125252?
010370  001401                                          BEQ     .+4
010372  104004                                          HLT+4                   ;ANS2 NOT EQUAL TO 125252

010374  022767  125252  170404                          CMP     #125252,ANS3    ;IS IT 125252?
010402  001401                                          BEQ     .+4
010404  104004                                          HLT+4                   ;ANS3 NOT EQUAL TO 125252

010406  022767  125252  170374                          CMP     #125252,ANS4    ;IS IT 125252?
010414  001401                                          BEQ     .+4
010416  104004                                          HLT+4                   ;ANS4 NOT EQUAL TO 125252

010420  174105                                          STD     1,%5            ;STORE AC1 INTO AC5
010422  172505                                          LDD     %5,1            ;LOAD AC5 INTO AC1
010424  174167  170352                                  STD     1,ANS1          ;STORE IT AGAIN

010430  022767  125252  170344                          CMP     #125252,ANS1    ;IS IT 125252?
010436  001401                                          BEQ     .+4
010440  104004                                          HLT+4                   ;ANS1 NOT EQUAL TO 125252

010442  022767  125252  170334                          CMP     #125252,ANS2    ;IS IT 125252?
010450  001401                                          BEQ     .+4
010452  104004                                          HLT+4                   ;ANS2 NOT EQUAL TO 125252

010454  022767  125252  170324                          CMP     #125252,ANS3    ;IS IT 125252?
010462  001401                                          BEQ     .+4
010464  104004                                          HLT+4                   ;ANS3 NOT EQUAL TO 125252

010466  022767  125252  170314                          CMP     #125252,ANS4    ;IS IT 125252?
010474  001401                                          BEQ     .+4
010476  104004                                          HLT+4                   ;ANS4 NOT EQUAL TO 125252
```

```
                                        ;*************************************************************
                                        ;TEST 47                      LDD AND STD 52525,52525,52525,52525
                                        ;     USING AC1 AND AC5     FPS = 47600     FEC = N/A
                                        ;*************************************************************
010500  104400                                  SCOPE
010502  170127  047600                          LDFPS   #47600$57760
010506  172567  000020                          LDD     N47,1           ;LOAD 52525,52525,52525,52525 INTO 1
010512  170200                                  STFPS   FPS             ;STORE FLOATING POINT STATUS
010514  022700  047600                          CMP     #47600,FPS      ;CHECK FLOATING POINT STATUS
010520  001401                                  BEQ     .+4             ;BRANCH IF OK
010522  104000                                  HLT                     ;FPS NOT EQUAL TO 47600

010524  174167  170252                          STD     1,ANS1          ;STORE 52525,52525,52525,52525
010530  000404                                  BR      C47

010532  052525  052525  052525  N47:            52525,52525,52525,52525
010540  052525
010542  022767  052525  170232  C47:            CMP     #52525,ANS1     ;IS IT 52525?
010550  001401                                  BEQ     .+4
010552  104004                                  HLT+4                   ;ANS1 NOT EQUAL TO 52525

010554  022767  052525  170222                  CMP     #52525,ANS2     ;IS IT 52525?
010562  001401                                  BEQ     .+4
010564  104004                                  HLT+4                   ;ANS2 NOT EQUAL TO 52525

010566  022767  052525  170212                  CMP     #52525,ANS3     ;IS IT 52525?
010574  001401                                  BEQ     .+4
010576  104004                                  HLT+4                   ;ANS3 NOT EQUAL TO 52525

010600  022767  052525  170202                  CMP     #52525,ANS4     ;IS IT 52525?
010606  001401                                  BEQ     .+4
010610  104004                                  HLT+4                   ;ANS4 NOT EQUAL TO 52525

010612  174105                                  STD     1,%5            ;STORE AC1 INTO AC5
010614  172505                                  LDD     %5,1            ;LOAD AC5 INTO AC1
010616  174167  170160                          STD     1,ANS1          ;STORE IT AGAIN

010622  022767  052525  170152                  CMP     #52525,ANS1     ;IS IT 52525?
010630  001401                                  BEQ     .+4
010632  104004                                  HLT+4                   ;ANS1 NOT EQUAL TO 52525

010634  022767  052525  170142                  CMP     #52525,ANS2     ;IS IT 52525?
010642  001401                                  BEQ     .+4
010644  104004                                  HLT+4                   ;ANS2 NOT EQUAL TO 52525

010646  022767  052525  170132                  CMP     #52525,ANS3     ;IS IT 52525?
010654  001401                                  BEQ     .+4
010656  104004                                  HLT+4                   ;ANS3 NOT EQUAL TO 52525

010660  022767  052525  170122                  CMP     #52525,ANS4     ;IS IT 52525?
010666  001401                                  BEQ     .+4
010670  104004                                  HLT+4                   ;ANS4 NOT EQUAL TO 52525
```

```
                                ;*****************************************************************
                                ;TEST 50                LDD AND STD 0.0.0.0
                                ;    USING AC2 AND AC5    FPS = 47604    FEC = N/A
                                ;*****************************************************************
010672  104400                          SCOPE
010674  170127  047600                  LDFPS   #47604857760
010700  172667  000020                  LDD     N50,2           ;LOAD 0.0.0.0 INTO 2
010704  170200                          STFPS   FPS             ;STORE FLOATING POINT STATUS
010706  022700  047604                  CMP     #47604,FPS      ;CHECK FLOATING POINT STATUS
010712  001401                          BEQ     .+4             ;BRANCH IF OK
010714  104000                          HLT                     ;FPS NOT EQUAL TO 47604

010716  174267  170060                  STD     2,ANS1          ;STORE 0.0.0.0
010722  000404                          BR      C50

010724  000000  000000  000000  N50:    0.0.0.0
010732  000000
010734  022767  000000  170040  C50:    CMP     #0,ANS1         ;IS IT 0?
010742  001401                          BEQ     .+4
010744  104004                          HLT+4                   ;ANS1 NOT EQUAL TO 0

010746  022767  000000  170030          CMP     #0,ANS2         ;IS IT 0?
010754  001401                          BEQ     .+4
010756  104004                          HLT+4                   ;ANS2 NOT EQUAL TO 0

010760  022767  000000  170020          CMP     #0,ANS3         ;IS IT 0?
010766  001401                          BEQ     .+4
010770  104004                          HLT+4                   ;ANS3 NOT EQUAL TO 0

010772  022767  000000  170010          CMP     #0,ANS4         ;IS IT 0?
011000  001401                          BEQ     .+4
011002  104004                          HLT+4                   ;ANS4 NOT EQUAL TO 0

011004  174205                          STD     2,%5            ;STORE AC2 INTO AC5
011006  172605                          LDD     %5,2            ;LOAD AC5 INTO AC2
011010  174267  167766                  STD     2,ANS1          ;STORE IT AGAIN

011014  022767  000000  167760          CMP     #0,ANS1         ;IS IT 0?
011022  001401                          BEQ     .+4
011024  104004                          HLT+4                   ;ANS1 NOT EQUAL TO 0

011026  022767  000000  167750          CMP     #0,ANS2         ;IS IT 0?
011034  001401                          BEQ     .+4
011036  104004                          HLT+4                   ;ANS2 NOT EQUAL TO 0

011040  022767  000000  167740          CMP     #0,ANS3         ;IS IT 0?
011046  001401                          BEQ     .+4
011050  104004                          HLT+4                   ;ANS3 NOT EQUAL TO 0

011052  022767  000000  167730          CMP     #0,ANS4         ;IS IT 0?
011060  001401                          BEQ     .+4
011062  104004                          HLT+4                   ;ANS4 NOT EQUAL TO 0
```

```
                                ;*****************************************************************
                                ;TEST 51          LDD AND STD -1.-1,-1.-1
                                ;    USING AC2 AND AC5    FPS = 47610    FEC = N/A
                                ;*****************************************************************
011064  104400                          SCOPE
011066  170127  047600                  LDFPS   #47610&57760
011072  172667  000020                  LDD     N51.2           ;LOAD -1.-1.-1.-1 INTO 2
011076  170200                          STFPS   FPS             ;STORE FLOATING POINT STATUS
011100  022700  047610                  CMP     #47610,FPS      ;CHECK FLOATING POINT STATUS
011104  001401                          BEQ     .+4             ;BRANCH IF OK
011106  104000                          HLT                     ;FPS NOT EQUAL TO 47610

011110  174267  167666                  STD     2,ANS1          ;STORE -1.-1.-1.-1
011114  000404                          BR      .+10

011116  177777  177777  177777  NS1:    -1.-1.-1.-1
011124  177777
011126  022767  177777  167646  051:    CMP     #-1,ANS1        ;IS IT -1?
011134  001401                          BEQ     .+4
011136  104004                          HLT+4                   ;ANS1 NOT EQUAL TO -1

011140  022767  177777  167636          CMP     #-1,ANS2        ;IS IT -1?
011146  001401                          BEQ     .+4
011150  104004                          HLT+4                   ;ANS2 NOT EQUAL TO -1

011152  022767  177777  167626          CMP     #-1,ANS3        ;IS IT -1?
011160  001401                          BEQ     .+4
011162  104004                          HLT+4                   ;ANS3 NOT EQUAL TO -1

011164  022767  177777  167616          CMP     #-1,ANS4        ;IS IT -1?
011172  001401                          BEQ     .+4
011174  104004                          HLT+4                   ;ANS4 NOT EQUAL TO -1

011176  174205                          STD     2,5             ;STORE AC2 INTO AC5
011200  172605                          LDD     5,5             ;LOAD AC5 INTO AC2
011202  174267  167574                  STD     2,ANS1          ;STORE IT AGAIN

011206  022767  177777  167566          CMP     #-1,ANS1        ;IS IT -1?
011214  001401                          BEQ     .+4
011216  104004                          HLT+4                   ;ANS1 NOT EQUAL TO -1

011220  022767  177777  167556          CMP     #-1,ANS2        ;IS IT -1?
011226  001401                          BEQ     .+4
011230  104004                          HLT+4                   ;ANS2 NOT EQUAL TO -1

011232  022767  177777  167546          CMP     #-1,ANS3        ;IS IT -1?
011240  001401                          BEQ     .+4
011242  104004                          HLT+4                   ;ANS3 NOT EQUAL TO -1

011244  022767  177777  167536          CMP     #-1,ANS4        ;IS IT -1?
011252  001401                          BEQ     .+4
011254  104004                          HLT+4                   ;ANS4 NOT EQUAL TO -1
```

```
                                  ;*************************************************************************
                                  ;TEST 52                  LDD AND STD 125252,125252,125252,125252
                                  ;    USING AC2 AND AC5    FPS = 47610    FEC = N/A
                                  ;*************************************************************************
011256  104400                             SCOPE
011260  170127  047600                     LDFPS   #47610&57760
011264  172667  000020                     LDD     N52,2             ;LOAD 125252,125252,125252,125252 INTO 2
011270  170200                             STFPS   FPS               ;STORE FLOATING POINT STATUS
011272  022700  047610                     CMP     #47610,FPS        ;CHECK FLOATING POINT STATUS
011276  001401                             BEQ     .+4               ;BRANCH IF OK
011300  104000                             HLT                       ;FPS NOT EQUAL TO 47610

011302  174267  167474                     STD     2,ANS1            ;STORE 125252,125252,125252,125252
011306  000404                             BR      C52

011310  125252  125252  125252  N52:       125252,125252,125252,125252
011316  125252
011320  022767  125252  167454  C52:       CMP     #125252,ANS1      ;IS IT 125252?
011326  001401                             BEQ     .+4
011330  104004                             HLT+4                     ;ANS1 NOT EQUAL TO 125252

011332  022767  125252  167444             CMP     #125252,ANS2      ;IS IT 125252?
011340  001401                             BEQ     .+4
011342  104004                             HLT+4                     ;ANS2 NOT EQUAL TO 125252

011344  022767  125252  167434             CMP     #125252,ANS3      ;IS IT 125252?
011352  001401                             BEQ     .+4
011354  104004                             HLT+4                     ;ANS3 NOT EQUAL TO 125252

011356  022767  125252  167424             CMP     #125252,ANS4      ;IS IT 125252?
011364  001401                             BEQ     .+4
011366  104004                             HLT+4                     ;ANS4 NOT EQUAL TO 125252

011370  174205                             STD     2,%5              ;STORE AC2 INTO AC5
011372  172505                             LDD     %5,2              ;LOAD AC5 INTO AC2
011374  174267  167402                     STD     2,ANS1            ;STORE IT AGAIN

011400  022767  125252  167374             CMP     #125252,ANS1      ;IS IT 125252?
011406  001401                             BEQ     .+4
011410  104004                             HLT+4                     ;ANS1 NOT EQUAL TO 125252

011412  022767  125252  167364             CMP     #125252,ANS2      ;IS IT 125252?
011420  001401                             BEQ     .+4
011422  104004                             HLT+4                     ;ANS2 NOT EQUAL TO 125252

011424  022767  125252  167354             CMP     #125252,ANS3      ;IS IT 125252?
011432  001401                             BEQ     .+4
011434  104004                             HLT+4                     ;ANS3 NOT EQUAL TO 125252

011436  022767  125252  167344             CMP     #125252,ANS4      ;IS IT 125252?
011444  001401                             BEQ     .+4
011446  104004                             HLT+4                     ;ANS4 NOT EQUAL TO 125252
```

```
                                ;*****************************************************************
                                ;TEST 53                LDD AND STD 52525,52525,52525,52525
                                ;    USING AC2 AND AC5    FPS = 47600    FEC = N/A
                                ;*****************************************************************
011450  104400                          SCOPE
011452  170127  047600                  LDFPS   #47600&577b0
011456  172667  000020                  LDD     N53,2           ;LOAD 52525,52525,52525,52525 INTO 2
011462  170200                          STFPS   FPS             ;STORE FLOATING POINT STATUS
011464  022700  047600                  CMP     #47600,FPS      ;CHECK FLOATING POINT STATUS
011470  001401                          BEQ     .+4             ;BRANCH IF OK
011472  104000                          HLT                     ;FPS NOT EQUAL TO 47600

011474  174267  167302                  STD     2,ANS1          ;STORE 52525,52525,52525,52525
011500  000404                          BR      053

011502  052525  052525  052525  N53:    52525,52525,52525,52525
011510  052525
011512  022767  052525  167262  053:    CMP     #52525,ANS1     ;IS IT 52525?
011520  001401                          BEQ     .+4
011522  104004                          HLT+4                   ;ANS1 NOT EQUAL TO 52525

011524  022767  052525  167252          CMP     #52525,ANS2     ;IS IT 52525?
011532  001401                          BEQ     .+4
011534  104004                          HLT+4                   ;ANS2 NOT EQUAL TO 52525

011536  022767  052525  167242          CMP     #52525,ANS3     ;IS IT 52525?
011544  001401                          BEQ     .+4
011546  104004                          HLT+4                   ;ANS3 NOT EQUAL TO 52525

011550  022767  052525  167232          CMP     #52525,ANS4     ;IS IT 52525?
011556  001401                          BEQ     .+4
011560  104004                          HLT+4                   ;ANS4 NOT EQUAL TO 52525

011562  174205                          STD     2,%5            ;STORE AC2 INTO AC5
011564  172605                          LDD     %5,2            ;LOAD AC5 INTO AC2
011566  174267  167210                  STD     2,ANS1          ;STORE IT AGAIN

011572  022767  052525  167202          CMP     #52525,ANS1     ;IS IT 52525?
011600  001401                          BEQ     .+4
011602  104004                          HLT+4                   ;ANS1 NOT EQUAL TO 52525

011604  022767  052525  167172          CMP     #52525,ANS2     ;IS IT 52525?
011612  001401                          BEQ     .+4
011614  104004                          HLT+4                   ;ANS2 NOT EQUAL TO 52525

011616  022767  052525  167162          CMP     #52525,ANS3     ;IS IT 52525?
011624  001401                          BEQ     .+4
011626  104004                          HLT+4                   ;ANS3 NOT EQUAL TO 52525

011630  022767  052525  167152          CMP     #52525,ANS4     ;IS IT 52525?
011636  001401                          BEQ     .+4
011640  104004                          HLT+4                   ;ANS4 NOT EQUAL TO 52525
```

```
                                ;*****************************************************************
                                ;TEST 54                LDD AND STD 0.0,0,0
                                ;    USING AC3 AND AC5    FPS = 47604    FEC = N/A
                                ;*****************************************************************
011642  104400                          SCOPE
011644  170127  047600                  LDFPS   #47604&57760
011650  172767  000020                  LDD     N54,3           ;LOAD 0.0,0,0 INTO 3
011654  170200                          STFPS   FPS             ;STORE FLOATING POINT STATUS
011656  022700  047604                  CMP     #47604,FPS      ;CHECK FLOATING POINT STATUS
011662  001401                          BEQ     .+4             ;BRANCH IF OK
011664  104000                          HLT                     ;FPS NOT EQUAL TO 47604

011666  174367  167110                  STD     3,ANS1          ;STORE 0.0.0.0
011672  000404                          BR      054

011674  000000  000000  000000  N54:    0.0.0.0
011702  000000
011704  022767  000000  167070  054:    CMP     #0,ANS1         ;IS IT 0?
011712  001401                          BEQ     .+4
011714  104004                          HLT+4                   ;ANS1 NOT EQUAL TO 0

011716  022767  000000  167060          CMP     #0,ANS2         ;IS IT 0?
011724  001401                          BEQ     .+4
011726  104004                          HLT+4                   ;ANS2 NOT EQUAL TO 0

011730  022767  000000  167050          CMP     #0,ANS3         ;IS IT 0?
011736  001401                          BEQ     .+4
011740  104004                          HLT+4                   ;ANS3 NOT EQUAL TO 0

011742  022767  000000  167040          CMP     #0,ANS4         ;IS IT 0?
011750  001401                          BEQ     .+4
011752  104004                          HLT+4                   ;ANS4 NOT EQUAL TO 0

011754  174305                          STD     3,%5            ;STORE AC3 INTO AC5
011756  172705                          LDD     %5,3            ;LOAD AC5 INTO AC3
011760  174367  167016                  STD     3,ANS1          ;STORE IT AGAIN

011764  022767  000000  167010          CMP     #0,ANS1         ;IS IT 0?
011772  001401                          BEQ     .+4
011774  104004                          HLT+4                   ;ANS1 NOT EQUAL TO 0

011776  022767  000000  167000          CMP     #0,ANS2         ;IS IT 0?
012004  001401                          BEQ     .+4
012006  104004                          HLT+4                   ;ANS2 NOT EQUAL TO 0

012010  022767  000000  166770          CMP     #0,ANS3         ;IS IT 0?
012016  001401                          BEQ     .+4
012020  104004                          HLT+4                   ;ANS3 NOT EQUAL TO 0

012022  022767  000000  166760          CMP     #0,ANS4         ;IS IT 0?
012030  001401                          BEQ     .+4
012032  104004                          HLT+4                   ;ANS4 NOT EQUAL TO 0
```

```
                                ;*****************************************************************
                                ;TEST 55                LDD AND STD -1,-1,-1,-1
                                ;    USING AC3 AND AC5    FPS = 47610    FEC = N/A
                                ;*****************************************************************
012034  104400                          SCOPE
012036  170127  047600                  LDFPS   #47610&57760
012042  172767  000020                  LDD     N55,3           ;LOAD -1,-1,-1,-1 INTO 3
012046  170200                          STFPS   FPS             ;STORE FLOATING POINT STATUS
012050  022700  047610                  CMP     #47610,FPS      ;CHECK FLOATING POINT STATUS
012054  001401                          BEQ     .+4             ;BRANCH IF OK
012056  104000                          HLT                     ;FPS NOT EQUAL TO 47610

012060  174367  166716                  STD     3,ANS1          ;STORE -1,-1,-1,-1
012064  000404                          BR      OSS

012066  177777  177777  177777  N55:    -1,-1,-1,-1
012074  177777
012076  022767  177777  166676  OSS:    CMP     #-1,ANS1        ;IS IT -1?
012104  001401                          BEQ     .+4
012106  104004                          HLT+4                   ;ANS1 NOT EQUAL TO -1

012110  022767  177777  166666          CMP     #-1,ANS2        ;IS IT -1?
012116  001401                          BEQ     .+4
012120  104004                          HLT+4                   ;ANS2 NOT EQUAL TO -1

012122  022767  177777  166656          CMP     #-1,ANS3        ;IS IT -1?
012130  001401                          BEQ     .+4
012132  104004                          HLT+4                   ;ANS3 NOT EQUAL TO -1

012134  022767  177777  166646          CMP     #-1,ANS4        ;IS IT -1?
012142  001401                          BEQ     .+4
012144  104004                          HLT+4                   ;ANS4 NOT EQUAL TO -1

012146  174305                          STD     3,%5            ;STORE AC3 INTO AC5
012150  172705                          LDD     %5,3            ;LOAD AC5 INTO AC3
012152  174367  166624                  STD     3,ANS1          ;STORE IT AGAIN

012156  022767  177777  166616          CMP     #-1,ANS1        ;IS IT -1?
012164  001401                          BEQ     .+4
012166  104004                          HLT+4                   ;ANS1 NOT EQUAL TO -1

012170  022767  177777  166606          CMP     #-1,ANS2        ;IS IT -1?
012176  001401                          BEQ     .+4
012200  104004                          HLT+4                   ;ANS2 NOT EQUAL TO -1

012202  022767  177777  166576          CMP     #-1,ANS3        ;IS IT -1?
012210  001401                          BEQ     .+4
012212  104004                          HLT+4                   ;ANS3 NOT EQUAL TO -1

012214  022767  177777  166566          CMP     #-1,ANS4        ;IS IT -1?
012222  001401                          BEQ     .+4
012224  104004                          HLT+4                   ;ANS4 NOT EQUAL TO -1
```

```
                                        ;*****************************************************************
                                        ;TEST 56                LDD AND STD 125252,125252,125252,125252
                                        ;    USING AC3 AND AC5    FPS = 47610    FEC = N/A
                                        ;*****************************************************************
012226  104400                          SCOPE
012230  170127  047600                  LDFPS   #47610&57760
012234  172767  000020                  LDD     N56,3           ;LOAD 125252,125252,125252,125252 INTO 3
012240  170200                          STFPS   FPS             ;STORE FLOATING POINT STATUS
012242  022700  047610                  CMP     #47610,FPS      ;CHECK FLOATING POINT STATUS
012246  001401                          BEQ     .+4             ;BRANCH IF OK
012250  104000                          HLT                     ;FPS NOT EQUAL TO 47610

012252  174367  166524                  STD     3,ANS1          ;STORE 125252,125252,125252,125252
012256  000404                          BR      C56

012260  125252  125252  125252  N56:    125252,125252,125252,125252
012266  125252
012270  022767  125252  166504  C56:    CMP     #125252,ANS1    ;IS IT 125252?
012276  001401                          BEQ     .+4
012300  104004                          HLT+4                   ;ANS1 NOT EQUAL TO 125252

012302  022767  125252  166474          CMP     #125252,ANS2    ;IS IT 125252?
012310  001401                          BEQ     .+4
012312  104004                          HLT+4                   ;ANS2 NOT EQUAL TO 125252

012314  022767  125252  166464          CMP     #125252,ANS3    ;IS IT 125252?
012322  001401                          BEQ     .+4
012324  104004                          HLT+4                   ;ANS3 NOT EQUAL TO 125252

012326  022767  125252  166454          CMP     #125252,ANS4    ;IS IT 125252?
012334  001401                          BEQ     .+4
012336  104004                          HLT+4                   ;ANS4 NOT EQUAL TO 125252

012340  174305                          STD     3,%5            ;STORE AC3 INTO AC5
012342  172705                          LDD     %5,3            ;LOAD AC5 INTO AC3
012344  174367  166432                  STD     3,ANS1          ;STORE IT AGAIN

012350  022767  125252  166424          CMP     #125252,ANS1    ;IS IT 125252?
012356  001401                          BEQ     .+4
012360  104004                          HLT+4                   ;ANS1 NOT EQUAL TO 125252

012362  022767  125252  166414          CMP     #125252,ANS2    ;IS IT 125252?
012370  001401                          BEQ     .+4
012372  104004                          HLT+4                   ;ANS2 NOT EQUAL TO 125252

012374  022767  125252  166404          CMP     #125252,ANS3    ;IS IT 125252?
012402  001401                          BEQ     .+4
012404  104004                          HLT+4                   ;ANS3 NOT EQUAL TO 125252

012406  022767  125252  166374          CMP     #125252,ANS4    ;IS IT 125252?
012414  001401                          BEQ     .+4
012416  104004                          HLT+4                   ;ANS4 NOT EQUAL TO 125252
```

```
                                ;**********************************************************************
                                ;TEST 57                LDD AND STD 52525,52525,52525,52525
                                ;    USING AC3 AND AC5    FPS = 47600    FEC = N/A
                                ;**********************************************************************
012420  104400                        SCOPE
012422  170127  047600                LDFPS   #47600&57760
012426  172767  000020                LDD     N57,3           ;LOAD 52525,52525,52525,52525 INTO 3
012432  170200                        STFPS   FPS             ;STORE FLOATING POINT STATUS
012434  022700  047600                CMP     #47600,FPS      ;CHECK FLOATING POINT STATUS
012440  001401                        BEQ     .+4             ;BRANCH IF OK
012442  104000                .       HLT                     ;FPS NOT EQUAL TO 47600

012444  174367  166332                STD     3,ANS1          ;STORE 52525,52525,52525,52525
012450  000404                        BR      057

012452  052525  052525  052525  N57:  52525,52525,52525,52525
012460  052525
012462  022767  052525  166312  057:  CMP     #52525,ANS1     ;IS IT 52525?
012470  001401                        BEQ     .+4
012472  104004                        HLT+4                   ;ANS1 NOT EQUAL TO 52525

012474  022767  052525  166302        CMP     #52525,ANS2     ;IS IT 52525?
012502  001401                        BEQ     .+4
012504  104004                        HLT+4                   ;ANS2 NOT EQUAL TO 52525

012506  022767  052525  166272        CMP     #52525,ANS3     ;IS IT 52525?
012514  001401                        BEQ     .+4
012516  104004                        HLT+4                   ;ANS3 NOT EQUAL TO 52525

012520  022767  052525  166262        CMP     #52525,ANS4     ;IS IT 52525?
012526  001401                        BEQ     .+4
012530  104004                        HLT+4                   ;ANS4 NOT EQUAL TO 52525

012532  174305                        STD     3,%5            ;STORE AC3 INTO AC5
012534  172705                        LDD     %5,3            ;LOAD AC5 INTO AC3
012536  174367  166240                STD     3,ANS1          ;STORE IT AGAIN

012542  022767  052525  166232        CMP     #52525,ANS1     ;IS IT 52525?
012550  001401                        BEQ     .+4
012552  104004                        HLT+4                   ;ANS1 NOT EQUAL TO 52525

012554  022767  052525  166222        CMP     #52525,ANS2     ;IS IT 52525?
012562  001401                        BEQ     .+4
012564  104004                        HLT+4                   ;ANS2 NOT EQUAL TO 52525

012566  022767  052525  166212        CMP     #52525,ANS3     ;IS IT 52525?
012574  001401                        BEQ     .+4
012576  104004                        HLT+4                   ;ANS3 NOT EQUAL TO 52525

012600  022767  052525  166202        CMP     #52525,ANS4     ;IS IT 52525?
012606  001401                        BEQ     .+4
012610  104004                        HLT+4                   ;ANS4 NOT EQUAL TO 52525
```

```
                                ;*****************************************************************
                                ;TEST 60                LDD AND STD 100000,0,0,0
                                ;    USING AC0 AND AC0    FPS = 40214    FEC = N/A
                                ;*****************************************************************
012612  104400                          SCOPE
012614  170127  040200                  LDFPS   #40214&57760
012620  172467  000020                  LDD     N60,0           ;LOAD 100000,0,0,0 INTO 0
012624  170200                          STFPS   FPS             ;STORE FLOATING POINT STATUS
012626  022700  040214                  CMP     #40214,FPS      ;CHECK FLOATING POINT STATUS
012632  001401                          BEQ     .+4             ;BRANCH IF OK
012634  104000                          HLT                     ;FPS NOT EQUAL TO 40214

012636  174067  166140                  STD     0,ANS1          ;STORE 100000,0,0,0
012642  000404                          BR      060

012644  100000  000000  000000  N60:    100000,0,0,0
012652  000000
012654  022767  100000  166120  060:    CMP     #100000,ANS1    ;IS IT 100000?
012662  001401                          BEQ     .+4
012664  104004                          HLT+4                   ;ANS1 NOT EQUAL TO 100000

012666  022767  000000  166110          CMP     #0,ANS2         ;IS IT 0?
012674  001401                          BEQ     .+4
012676  104004                          HLT+4                   ;ANS2 NOT EQUAL TO 0

012700  022767  000000  166100          CMP     #0,ANS3         ;IS IT 0?
012706  001401                          BEQ     .+4
012710  104004                          HLT+4                   ;ANS3 NOT EQUAL TO 0

012712  022767  000000  166070          CMP     #0,ANS4         ;IS IT 0?
012720  001401                          BEQ     .+4
012722  104004                          HLT+4                   ;ANS4 NOT EQUAL TO 0
```

```
                                                ;**************************************************************
                                                ;TEST 61                     LDD AND STD 100000,0,0,0
                                                ;    USING AC0 AND AC0     FPS = 147614     FEC = 14
                                                ;**************************************************************
012724  104400                                  SCOPE
012726  170127  047600                          LDFPS   #147614357760
012732  172467  000036                          LDD     N61,0           ;LOAD 100000,0,0,0 INTO 0
012736  170200                                  STFPS   FPS             ;STORE FLOATING POINT STATUS
012740  170367  166056                          STST    FEC             ;STORE EXCEPTION CODES
012744  022700  147614                          CMP     #147614,FPS     ;CHECK FLOATING POINT STATUS
012750  001401                                  BEQ     .+4             ;BRANCH IF OK
012752  104000                                  HLT                     ;FPS NOT EQUAL TO 147614

012754  022767  000014  166040                  CMP     #14,    FEC     ;CHECK FLOATING EXCEPTION CODE
012762  001401                                  BEQ     .+4             ;BRANCH IF OK
012764  104000                                  HLT                     ;FEC NOT EQUAL TO 14

012766  174067  166010                          STD     0,ANS1          ;STORE 100000,0,0,0
012772  000404                                  BR      O61

012774  100000  000000  000000  N61:            100000,0,0,0
013002  000000
013004  022767  100000  165770  O61:            CMP     #100000,ANS1    ;IS IT 100000?
013012  001401                                  BEQ     .+4
013014  104004                                  HLT+4                   ;ANS1 NOT EQUAL TO 100000

013016  022767  000000  165760                  CMP     #0,ANS2         ;IS IT 0?
013024  001401                                  BEQ     .+4
013026  104004                                  HLT+4                   ;ANS2 NOT EQUAL TO 0

013030  022767  000000  165750                  CMP     #0,ANS3         ;IS IT 0?
013036  001401                                  BEQ     .+4
013040  104004                                  HLT+4                   ;ANS3 NOT EQUAL TO 0

013042  022767  000000  165740                  CMP     #0,ANS4         ;IS IT 0?
013050  001401                                  BEQ     .+4
013052  104004                                  HLT+4                   ;ANS4 NOT EQUAL TO 0
```

```
                        ;*****************************************************************
                        ;TEST 62                LDD, LDF AND STD 0,0,0,0
                        ;*****************************************************************

013054  104400                  SCOPE
013056  170127  047600          LDFPS   #47600
013062  172467  000016          LDD     N62,0           ;LOAD 0.0,0.0 INTO 0

013066  170001                  SETF                    ;SET FLOATING MODE
013070  172467  000020          LDF     NX62,0          ;LOAD -0,-0 INTO 0

013074  170011                  SETD                    ;SET DOUBLE MODE
013076  174067  165700          STD     0,ANS1          ;STORE RESULT

013102  000406                  BR      .62

013104  000000          N62:    0                       ;INPUT DATA
013106  000000                  0
013110  000000                  0                       ;ANS3 = 0
013112  000000                  0                       ;ANS4 = 0

013114  177777          NX62:   -0-1                    ;NEW DATA
013116  177777                  -0-1

013120  022767  000000  165660  .62:    CMP     #0,ANS3         ;CHECK THIRD WORD
013126  001401                  BEQ     .+4
013130  104004                  HLT     4               ;ANS3 NOT EQUAL TO 0
013132  022767  000000  165650          CMP     #0,ANS4         ;CHECK FOURTH WORD
013140  001401                  BEQ     .+4
013142  104004                  HLT     4               ;ANS4 NOT EQUAL TO 0
```

```
                                        ;*****************************************************************
                                        ;TEST 63                LDD, LDF AND STD 177777,177777,177777,177777
                                        ;*****************************************************************

013144  104400                                  SCOPE
013146  170127  047600                          LDFPS   #47600
013152  172467  000016                          LDD     N63,0           ;LOAD 177777,177777,177777,177777 INTO 0

013156  170001                                  SETF                    ;SET FLOATING MODE
013160  172467  000020                          LDF     NX63,0          ;LOAD -177777,-177777 INTO 0

013164  170011                                  SETD                    ;SET DOUBLE MODE
013166  174067  165610                          STD     0,ANS1          ;STORE RESULT

013172  000406                                  BR      D63

013174  177777                          N63:    177777                  ;INPUT DATA
013176  177777                                  177777
013200  177777                                  177777                  ;ANS3 = 177777
013202  177777                                  177777                  ;ANS4 = 177777

013204  000000                          NX63:   -177777-1               ;NEW DATA
013206  000000                                  -177777-1

013210  022767  177777  165570          D63:    CMP     #177777,ANS3    ;CHECK THIRD WORD
013216  001401                                  BEQ     .+4
013220  104004                                  HLT+4                   ;ANS3 NOT EQUAL TO 177777

013222  022767  177777  165560                  CMP     #177777,ANS4    ;CHECK FOURTH WORD
013230  001401                                  BEQ     .+4
013232  104004                                  HLT+4                   ;ANS4 NOT EQUAL TO 177777
```

```
                        ;*****************************************************************
                        ;TEST 64                LDD, LDF AND STD 125252,125252,125252,125252
                        ;*****************************************************************

013234  104400                  SCOPE
013236  170127  047600          LDFPS   #47600
013242  172467  000016          LDD     N64,0           ;LOAD 125252,125252,125252,125252 INTO 0

013246  170001                  SETF                    ;SET FLOATING MODE
013252  172467  000020          LDF     NX64,0          ;LOAD -125252,-125252 INTO 0

013254  170011                  SETD                    ;SET DOUBLE MODE
013256  174067  165520          STD     0,ANS1          ;STORE RESULT

013262  000406                  BR      D64

013264  125252          N64:    125252                  ;INPUT DATA
013266  125252                  125252
013270  125252                  125252                  ;ANS3 = 125252
013272  125252                  125252                  ;ANS4 = 125252

013274  052525          NX64:   -125252                 ;NEW DATA
013276  052525                  -125252-1

013300  022767  125252  165500  D64:    CMP     #125252,ANS3    ;CHECK THIRD WORD
013306  001401                  BEQ     .+4
013310  104004                  HLT+4                   ;ANS3 NOT EQUAL TO 125252

013312  022767  125252  165470          CMP     #125252,ANS4    ;CHECK FOURTH WORD
013320  001401                  BEQ     .+4
013322  104004                  HLT+4                   ;ANS4 NOT EQUAL TO 125252
```

```
                        ;*****************************************************************
                        ;TEST 65                LDD, LDF AND STD 52525,52525,52525,52525
                        ;*****************************************************************

013324  104400                  SCOPE
013326  170127  047600          LDFPS   #47600
013332  172467  000016          LDD     N65,0           ;LOAD 52525,52525,52525,52525 INTO 0

013336  170001                  SETF                    ;SET FLOATING MODE
013340  172467  000020          LDF     NX65,0          ;LOAD -52525,-52525 INTO 0

013344  170011                  SETD                    ;SET DOUBLE MODE
013346  174067  165430          STD     0,ANS1          ;STORE RESULT

013352  000406                  BR      .65

013354  052525          N65:    52525                   ;INPUT DATA
013356  052525                  52525
013360  052525                  52525                   ;ANS3 = 52525
013362  052525                  52525                   ;ANS4 = 52525

013364  125252          NX65:   -52525-1                ;NEW DATA
013366  125252                  -52525-1

013370  022767  052525  165410  .65:    CMP     #52525,ANS3     ;CHECK THIRD WORD
013376  001401                  BEQ     .+4
013400  104004                  HLT+4                   ;ANS3 NOT EQUAL TO 52525

013402  022767  052525  165400          CMP     #52525,ANS4     ;CHECK FOURTH WORD
013410  001401                  BEQ     .+4
013412  104004                  HLT+4                   ;ANS4 NOT EQUAL TO 52525
```

```
                                   ;*****************************************************************
                                   ;TEST 66                    LDD, LDF AND STD 0,0,0,0
                                   ;*****************************************************************

013414  104400                              SCOPE
013416  170127  047600                      LDFPS   #47600
013422  172567  000016                      LDD     N66,1                   ;LOAD 0,0,0,0 INTO 1

013426  170001                              SETF                            ;SET FLOATING MODE
013430  172567  000020                      LDF     NX66,1                  ;LOAD -0,-0 INTO 1

013434  170011                              SETD                            ;SET DOUBLE MODE
013436  174167  165340                      STD     1,ANS1                  ;STORE RESULT

013442  000406                              BR      O66

013444  000000                     N66:     0                               ;INPUT DATA
013446  000000                              0
013450  000000                              0                               ;ANS3 = 0
013452  000000                              0                               ;ANS4 = 0

013454  177777                     NX66:    -0-1                            ;NEW DATA
013456  177777                              -0-1

013460  022767  000000  165320     O66:     CMP     #0,ANS3                 ;CHECK THIRD WORD
013466  001401                              BEQ     .+4
013470  104004                              HLT+4                           ;ANS3 NOT EQUAL TO 0

013472  022767  000000  165310              CMP     #0,ANS4                 ;CHECK FOURTH WORD
013500  001401                              BEQ     .+4
013502  104004                              HLT+4                           ;ANS4 NOT EQUAL TO 0
```

```
                        ;*****************************************************************
                        ;TEST 67                LDD, LDF AND STD 177777,177777,177777,177777
                        ;*****************************************************************

013524  104400                  SCOPE
013526  170127  047600          LDFPS   #47600
013532  172567  000016          LDD     N67,1           ;LOAD 177777,177777,177777,177777 INTO 1

013536  170001                  SETF                    ;SET FLOATING MODE
013540  172567  000020          LDF     NX67,1          ;LOAD -177777,-177777 INTO 1

013544  170011                  SETD                    ;SET DOUBLE MODE
013546  174167  165250          STD     1,ANS1          ;STORE RESULT

013552  000406                  BR      067

013554  177777          N67:    177777                  ;INPUT DATA
013556  177777                  177777
013560  177777                  177777                  ;ANS3 = 177777
013562  177777                  177777                  ;ANS4 = 177777

013564  000000          NX67:   -177777-1               ;NEW DATA
013566  000000                  -177777-1

013570  022767  177777  165230  067:   CMP     #177777,ANS3    ;CHECK THIRD WORD
013576  001401                  BEQ     .+4
013600  104004                  HLT+4                   ;ANS3 NOT EQUAL TO 177777

013602  022767  177777  165220          CMP     #177777,ANS4    ;CHECK FOURTH WORD
013610  001401                  BEQ     .+4
013612  104004                  HLT+4                   ;ANS4 NOT EQUAL TO 177777
```

```
                        ;*****************************************************************
                        ;TEST 70                LDD, LDF AND STD 125252,125252,125252,125252
                        ;*****************************************************************

013574  104400                  SCOPE
013576  170127  047600          LDFPS   #47600
013602  172567  000016          LDD     N70,1           ;LOAD 125252,125252,125252,125252 INTO 1

013606  170001                  SETF                    ;SET FLOATING MODE
013610  172567  000020          LDF     NX70,1          ;LOAD -125252,-125252 INTO 1

013614  170011                  SETD                    ;SET DOUBLE MODE
013616  174167  165160          STD     1,ANS1          ;STORE RESULT

013622  000406                  BR      C70

013624  125252          N70:    125252                  ;INPUT DATA
013626  125252                  125252
013630  125252                  125252                  ;ANS3 = 125252
013632  125252                  125252                  ;ANS4 = 125252

013634  052525          NX70:   -125252-1               ;NEW DATA
013636  052525                  -125252-1

013640  022767  125252  165140  C70:    CMP     #125252,ANS3    ;CHECK THIRD WORD
013646  001401                  BEQ     .+4
013650  104004                  HLT+4                   ;ANS3 NOT EQUAL TO 125252

013652  022767  125252  165130          CMP     #125252,ANS4    ;CHECK FOURTH WORD
013660  001401                  BEQ     .+4
013662  104004                  HLT+4                   ;ANS4 NOT EQUAL TO 125252
```

```
                                ;*****************************************************************
                                ;TEST 71                LDD, LDF AND STD 52525,52525,52525,52525
                                ;*****************************************************************

013664  104400                          SCOPE
013666  170127  047600                  LDFPS   #47600
013672  172567  000016                  LDD     N71,1           ;LOAD 52525,52525,52525,52525 INTO 1

013676  170001                          SETF                    ;SET FLOATING MODE
013700  172567  000020                  LDF     NX71,1          ;LOAD -52525,-52525 INTO 1

013704  170011                          SETD                    ;SET DOUBLE MODE
013706  174167  165070                  STD     1,ANS1          ;STORE RESULT

013712  000406                          BR      071

013714  052525                  N71:    52525                   ;INPUT DATA
013716  052525                          52525
013720  052525                          52525                   ;ANS3 = 52525
013722  052525                          52525                   ;ANS4 = 52525

013724  125252                  NX71:   -52525-1                ;NEW DATA
013726  125252                          -52525-1

013730  022767  052525  165050  071:    CMP     #52525,ANS3     ;CHECK THIRD WORD
013736  001401                          BEQ     .+4
013740  104004                          HLT+4                   ;ANS3 NOT EQUAL TO 52525

013742  022767  052525  165040          CMP     #52525,ANS4     ;CHECK FOURTH WORD
013750  001401                          BEQ     .+4
013752  104004                          HLT+4                   ;ANS4 NOT EQUAL TO 52525
```

```
                        ;*****************************************************************
                        ;TEST 72                LDD, LDF AND STD 0,0,0,0
                        ;*****************************************************************

013754  104400                  SCOPE
013756  170127  047600          LDFPS   #47600
013762  172667  000016          LDD     N72,2           ;LOAD 0,0,0,0 INTO 2

013766  170001                  SETF                    ;SET FLOATING MODE
013770  172667  000020          LDF     NX72,2          ;LOAD -0,-0 INTO 2

013774  170011                  SETD                    ;SET DOUBLE MODE
013776  174267  165000          STD     2,ANS1          ;STORE RESULT

014002  000406                  BR      C72

014004  000000          N72:    0                       ;INPUT DATA
014006  000000                  0
014010  000000                  0                       ;ANS3 = 0
014012  000000                  0                       ;ANS4 = 0

014014  177777          NX72:   -0-1                    ;NEW DATA
014016  177777                  -0-1

014020  022767  000000  164760  C72:    CMP     #0,ANS3         ;CHECK THIRD WORD
014026  001401                  BEQ     .+4
014030  104004                  HLT+4                   ;ANS3 NOT EQUAL TO 0

014032  022767  000000  164750          CMP     #0,ANS4         ;CHECK FOURTH WORD
014040  001401                  BEQ     .+4
014042  104004                  HLT+4                   ;ANS4 NOT EQUAL TO 0
```

```
                        ;*****************************************************************
                        ;TEST 73                LDD, LDF AND STD 177777,177777,177777,177777
                        ;*****************************************************************

014044  104400                  SCOPE
014046  170127  047600          LDFPS   #47600
014052  172667  000016          LDD     N73,2           ;LOAD 177777,177777,177777,177777 INTO 2

014056  170001                  SETF                    ;SET FLOATING MODE
014060  172667  000020          LDF     NX73,2          ;LOAD -177777,-177777 INTO 2

014064  170011                  SETD                    ;SET DOUBLE MODE
014066  174267  164710          STD     2,ANS1          ;STORE RESULT

014072  000406                  BR      073

014074  177777          N73:    177777                  ;INPUT DATA
014076  177777                  177777
014100  177777                  177777                  ;ANS3 = 177777
014102  177777                  177777                  ;ANS4 = 177777

014104  000000          NX73:   -177777-1               ;NEW DATA
014106  000000                  -177777-1

014110  022767  177777  164670  073:    CMP     #177777,ANS3    ;CHECK THIRD WORD
014116  001401                  BEQ     .+4
014120  104004                  HLT+4                   ;ANS3 NOT EQUAL TO 177777

014122  022767  177777  164660          CMP     #177777,ANS4    ;CHECK FOURTH WORD
014130  001401                  BEQ     .+4
014132  104004                  HLT+4                   ;ANS4 NOT EQUAL TO 177777
```

```
                        ;*****************************************************************
                        ;TEST 74                LDD, LDF AND STD 125252,125252,125252,125252
                        ;*****************************************************************

014134  104400                          SCOPE
014136  170127  047600                  LDFPS   #47600
014142  172667  000016                  LDD     N74,2           ;LOAD 125252,125252,125252,125252 INTO 2

014146  170001                          SETF                    ;SET FLOATING MODE
014150  172667  000020                  LDF     NX74,2          ;LOAD -125252,-125252 INTO 2

014154  170011                          SETD                    ;SET DOUBLE MODE
014156  174267  164620                  STD     2,ANS1          ;STORE RESULT

014162  000406                          BR      074

014164  125252                N74:     125252                  ;INPUT DATA
014166  125252                         125252
014170  125252                         125252                  ;ANS3 = 125252
014172  125252                         125252                  ;ANS4 = 125252

014174  052525                NX74:    -125252-1               ;NEW DATA
014176  052525                         -125252-1

014200  022767  125252  164600  074:    CMP     #125252,ANS3    ;CHECK THIRD WORD
014206  001401                          BEQ     .+4
014210  104004                          HLT+4                   ;ANS3 NOT EQUAL TO 125252

014212  022767  125252  164570          CMP     #125252,ANS4    ;CHECK FOURTH WORD
014220  001401                          BEQ     .+4
014222  104004                          HLT+4                   ;ANS4 NOT EQUAL TO 125252
```

```
                        ;*****************************************************************
                        ;TEST 75                LDD, LDF AND STD 52525,52525,52525,52525
                        ;*****************************************************************

014224  104400                  SCOPE
014226  170127  047600          LDFPS   #47600
014232  172667  000016          LDD     N75,2           ;LOAD 52525,52525,52525,52525 INTO 2

014236  170001                  SETF                    ;SET FLOATING MODE
014240  172667  000020          LDF     NX75,2          ;LOAD -52525,-52525 INTO 2

014244  170011                  SETD                    ;SET DOUBLE MODE
014246  174267  164530          STD     2,ANS1          ;STORE RESULT

014252  000406                  BR      075

014254  052525          N75:    52525                   ;INPUT DATA
014256  052525                  52525
014260  052525                  52525                   ;ANS3 = 52525
014262  052525                  52525                   ;ANS4 = 52525

014264  125252          NX75:   -52525-1                ;NEW DATA
014266  125252                  -52525-1

014270  022767  052525  164510  075:    CMP     #52525,ANS3     ;CHECK THIRD WORD
014276  001401                  BEQ     .+4
014300  104004                  HLT+4                   ;ANS3 NOT EQUAL TO 52525

014302  022767  052525  164500          CMP     #52525,ANS4     ;CHECK FOURTH WORD
014310  001401                  BEQ     .+4
014312  104004                  HLT+4                   ;ANS4 NOT EQUAL TO 52525
```

```
                        ;*****************************************************************
                        ;TEST 76                LDD, LDF AND STD 0,0,0,0
                        ;*****************************************************************

014314  104400                          SCOPE
014316  170127  047600                  LDFPS   #47600
014322  172767  000016                  LDD     N76,3           ;LOAD 0.0,0.0 INTO 3

014326  170002                          SETF                    ;SET FLOATING MODE
014332  172767  000020                  LDF     NX76,3          ;LOAD -0.-0 INTO 3

014334  170011                          SETD                    ;SET DOUBLE MODE
014336  174367  164440                  STD     3,ANS1          ;STORE RESULT

014342  000406                          BR      C76

014344  000000          N76:            .WORD   0               ;INPUT DATA
014346  000000                          .WORD   0
014350  000000                          .WORD   0               ;ANS3 = 0
014352  000000                          .WORD   0               ;ANS4 = 0

014354  177777          NX76:           .WORD   -0-1            ;NEW DATA
014356  177777                          .WORD   -0-1

014360  022767  000000  164420  C76:    CMP     #0,ANS3         ;CHECK THIRD WORD
014366  001401                          BEQ     .+4
014370  104004                          MUL     #4              ;ANS3 NOT EQUAL TO 0

014372  022767  000000  164410          CMP     #0,ANS4         ;CHECK FOURTH WORD
014426  001401                          BEQ     .+4
014430  104004                          MUL     #4              ;ANS4 NOT EQUAL TO 0
```

```
                        ;*****************************************************************
                        ;TEST 77                LDD, LDF AND STD 177777,177777,177777,177777
                        ;*****************************************************************

014404  104430                  SCOPE
014406  170127  047600          LDFPS   #47600
014412  172767  000016          LDD     N77,3           ;LOAD 177777,177777,177777,177777 INTO 3

014416  170001                  SETF                    ;SET FLOATING MODE
014420  172767  000020          LDF     NX77,3          ;LOAD -177777,-177777 INTO 3

014424  170011                  SETD                    ;SET DOUBLE MODE
014426  174367  164350          STD     3,ANS3          ;STORE RESUL

014432  000406                  BR      077

014434  177777          N77:    177777                  ;INPUT DATA
014436  177777                  177777
014440  177777                  177777                  ;ANS3 = 177777
014442  177777                  177777                  ;ANS4 = 177777

014444  000000          NX77:   -177777-1               ;NEW DATA
014446  000000                  -177777-1

014450  022767  177777  164330  077:   CMP     #177777,ANS3    ;CHECK THIRD WORD
014456  001401                  BEQ     .+4
014460  104004                  HLT+4                   ;ANS3 NOT EQUAL TO 177777

014462  022767  177777  164320          CMP     #177777,ANS4    ;CHECK FOURTH WORD
014470  001401                  BEQ     .+4
014472  104004                  HLT+4                   ;ANS4 NOT EQUAL TO 177777
```

```
                        ;*****************************************************************
                        ;TEST 100               LDD, LDF AND STD 125252,125252,125252,125252
                        ;*****************************************************************

014474  104400                          SCOPE
014476  170127  047600                  LDFPS   #47600
014502  172767  000016                  LDD     N100,3          ;LOAD 125252,125252,125252,125252 INTO 3

014506  170001                          SETF                    ;SET FLOATING MODE
014510  172767  000020                  LDF     NX100,3         ;LOAD -125252,-125252 INTO 3

014514  170011                          SETD                    ;SET DOUBLE MODE
014516  174367  164260                  STD     3,ANS1          ;STORE RESULT

014522  000406                          BR      D100

014524  125252                  N100:   125252                  ;INPUT DATA
014526  125252                          125252
014530  125252                          125252                  ;ANS3 = 125252
014532  125252                          125252                  ;ANS4 = 125252

014534  052525                  NX100:  -125252-1               ;NEW DATA
014536  052525                          -125252-1

014540  022767  125252  164240  D100:   CMP     #125252,ANS3    ;CHECK THIRD WORD
014546  001401                          BEQ     .+4
014550  104004                          HLT+4                   ;ANS3 NOT EQUAL TO 125252

014552  022767  125252  164230          CMP     #125252,ANS4    ;CHECK FOURTH WORD
014560  001401                          BEQ     .+4
014562  104004                          HLT+4                   ;ANS4 NOT EQUAL TO 125252
```

```
                        ;*****************************************************************
                        ;TEST 101               LDD, LDF AND STD 52525,52525,52525,52525
                        ;*****************************************************************

014564  104400                  SCOPE
014566  170127  047600          LDFPS   #47600
014572  172767  000016          LDD     N101,3          ;LOAD 52525,52525,52525,52525 INTO 3

014576  170001                  SETF                    ;SET FLOATING MODE
014600  172767  000020          LDF     NX101,3         ;LOAD -52525,-52525 INTO 3

014604  170011                  SETD                    ;SET DOUBLE MODE
014606  174367  164170          STD     3,ANS1          ;STORE RESULT

014612  000406                  BR      C1C1

014614  052525          N1C1:   52525                   ;INPUT DATA
014616  052525                  52525
014620  052525                  52525                   ;ANS3 = 52525
014622  052525                  52525                   ;ANS4 = 52525

014624  125252          NX101:  -52525-1                ;NEW DATA
014626  125252                  -52525-1

014630  022767  052525  164150  C1C1:   CMP     #52525,ANS3     ;CHECK THIRD WORD
014636  001401                  BEQ     .+4
014640  104004                  HLT+4                   ;ANS3 NOT EQUAL TO 52525

014642  022767  052525  164140          CMP     #52525,ANS-     ;CHECK FOURTH WORD
014650  001401                  BEQ     .+4
014652  104004                  HLT+4                   ;ANS4 NOT EQUAL TO 52525
```

```
014654  104430                  DONE:   SCOPE
014656  032737  002000  177570          BIT     #SW10,@#SWR     ;RING THE BELL?
014664  001005                          BNE     1$              ;NO!
014666  012767  000007  001242          MOV     #BELL,.TYPE     ;TYPE A BELL
014674  000004  016136                  TYPE    ,.TYPE
014700  005046                  1$:     CLR     -(6)            ;CLEAR TRACE TRAP
014702  032737  010000  177570          BIT     #SW12,@#SWR     ;RUN WITH TRT?
014710  001010                          BNE     2$
014712  005167  001222                  COM     TRPB
014716  100005                          BPL     2$
014720  052716  000020                  BIS     #20,(6)         ;SET TRACE TRAP
014724  012746  001062                  MOV     #BEGIN,-(6)     ;JUMP TO START OF TEST
014730  000412                          BR      YESRT
014732  012746  001062          3$:     MOV     #BEGIN,-(6      ;JUMP TO START OF TEST
014736  013700  000042                  MOV     @#42,R0         ;GET MONITOR ADDRESS
014742  001404                          BEQ     3$              ;IF NONE
014744  004710                          JSR     7.,3            ;GO TO MONITOR
014746  000240                          NOP
014750  000240                          NOP
014752  000240                          NOP
014754  000002                  3$:     RTI
014756  000002                  YESRT:  RTI                     ;RETURN TO PROGRAM FROM TRAP

014760  032737  000400  177570  .EMT:   BIT     #SW08,@#SWR     ;KILL LOOP OR LOOP ON SPEC. TEST
014766  001404                          BEQ     1$
014770  123767  177570  164002          CMPB    @#SWR,ICNT      ;ON RIGHT TEST?   #SW7-0#
014776  001437                          BEQ     OVER
015000  113703  177570          1$:     MOVB    @#SWR,R3        ;GET JB BITS
015004  170003                          LOUB
015006  032737  040000  177570          BIT     #SW14,@#SWR     ;LOOP ON TEST
015014  001026                          BNE     KIT
015016  032737  004000  177570          BIT     #SW11,@#SWR     ;KILL ITERATIONS
015024  001012                          BNE     SAVLAD
015026  105767  163747                  TSTB    ICNT+1
015032  001404                          BEQ     2$              ;BRANCH IF FIRST
015034  126767  001106  163737          CMPB    TIMES,ICNT+1    ;DONE?
015042  001013                          BNE     KIT             ;BRANCH IF NOT
015044  112767  000001  163727  2$:     MOVB    #1,ICNT+1       ;FIRST ITERATION
015052  105267  163722          SAVLAD: INCB    ICNT            ;COUNT TEST NUMBERS
015056  011667  001060                  MOV     (6),LAD         ;SAVE LOOP ADDRESS
015062  016737  163712  177570          MOV     ICNT,@#DISPLAY  ;DISPLAY TEST NO. AND ITERATION COUNT
015070  000002                          RTI                     ;RETURN

015072  105267  163703          KIT:    INCB    ICNT+1
015076  016737  163676  177570  OVER:   MOV     ICNT,@#DISPLAY  ;SET UP DISPLAY
015104  005767  001032                  TST     LAD             ;FIRST ONE?
015110  001760                          BEQ     SAVLAD
015112  016716  001024                  MOV     LAD,(6)         ;FUDGE RETURN ADDRESS
015116  000002                          RTI                     ;FIXES PS
```

```
015120  032737  002000  177570  .TRP:   BIT     #SW10,@#SWR     ;BELL ON ERROR?
015126  001405                          BEQ     1$              ;NO - SKIP
015130  012767  000007  001000          MOV     #BELL,.TYPE     ;TYPE A BELL
015136  000004  016136                  TYPE    .TYPE
015142  004767  000406          1$:     JSR     PC,ERROR        ;COUNT THE NUMBER OF ERRORS
015146  010446                          MOV     R4,-(6)
015150  032737  020000  177570          BIT     #SW13,@#SWR     ;SKIP TYPEOUT IF SET
015156  001072                          BNE     4$
015160  000004  016104                  TYPE    ,RETURN
015164  016646  000002                  MOV     2(6),-(6)       ;PUT ADDRESS OF INSTRUCTION ON STACK
015170  162716  000002                  SUB     #2,(6)
015174  011605                          MOV     (6),TTY         ;TYPE (6) IN OCTAL
015176  004767  000212                  JSR     %7,PRINTR       ;TYPE LEADING ZERO'S
015202  000004  016112                  TYPE    ,SPACE+3
015206  010005                          MOV     R0,TTY          ;TYPE R0 IN OCTAL
015210  004767  000200                  JSR     %7,PRINTR       ;TYPE LEADING ZERO'S
015214  000004  016113                  TYPE    ,SPACE+4
015220  012703  001002                  MOV     #ANS1,R3        ;ADDRESS OF DATA
015224  113604                          MOVB    @(6)+,R4        ;AMOUNT OF DATA IN TABLE
015226  001426                          BEQ     3$
015230  100016                          BPL     2$              ;TYPE STACK?
015232  016667  000006  163542          MOV     6(6),ANS1
015240  016667  000010  163536          MOV     10(6),ANS2
015246  016667  000012  163532          MOV     12(6),ANS3
015254  016667  000014  163526          MOV     14(6),ANS4
015262  042704  177600                  BIC     #177600,R4      ;CLEAR SIGN
015266  000004  016113          2$:     TYPE    ,SPACE+4
015272  012305                          MOV     (3)+,TTY        ;TYPE (3)+ IN OCTAL
015274  004767  000114                  JSR     %7,PRINTR       ;TYPE LEADING ZERO'S
015300  005304                          DEC     R4
015302  001371                          BNE     2$
015304  005700                  3$:     TST     FPS
015306  100016                          BPL     4$
015310  000004  016107                  TYPE    ,SPACE
015314  170367  163502                  STST    FEC
015320  016705  163476                  MOV     FEC,TTY         ;TYPE FEC IN OCTAL
015324  004767  000064                  JSR     %7,PRINTR       ;TYPE LEADING ZERO'S
015330  000004  016112                  TYPE    ,SPACE+3
015334  016705  163464                  MOV     FEA,TTY         ;TYPE FEA IN OCTAL
015340  004767  000050                  JSR     %7,PRINTR       ;TYPE LEADING ZERO'S
015344  012604                  4$:     MOV     (6)+,R4
015346  005737  177570                  TST     @#SWR           ;HALT ON ERROR
015352  100001                          BPL     .+4             ;SKIP IF CONTINUE
015354  000000                          HALT                    ;HALT ON ERROR!
015356  032737  001000  177570          BIT     #SW09,@#SWR     ;CHECK FOR INHIBIT LOOP ON ERROR
015364  001001                          BNE     .+4             ;SKIP IF LOOP ON ERROR
015366  000002                          RTI
015370  105067  163405                  CLRB    ICNT+1
015374  032737  000400  177570          BIT     #SW08,@#SWR     ;CHECK FOR LOAD MICROBREAK
015402  001233                          BNE     KIT             ;BRANCH IF NOT
015404  113703  177570                  MOVB    @#SWR,R3        ;PUT MICROBREAK ADDRESS IN R3
015410  170003                          LDCB    R3              ;LOAD MICROBREAK
015412  000627                          BR      KIT             ;LOOP ON TEST UNTIL NO ERRORS
```

```
015414  112767  000001  000130  PRINTR: MOVB    #1,A4$          ;SET ZERO FILL SWITCH
015422  000402                  BR      .+6
015424  005067  000122          PRINTS: CLR     A4$             ;SUPRESS LEADING ZERO'S
015430  112767  177772  000115          MOVB    #-6,A4$+1       ;SET COUNT
015436  010446                          MOV     R4,-(6)         ;SAVE R4
015440  012704  015542                  MOV     #3$,R4          ;SET POINTER TO FIRST ASCII CHAR.
015444  105014                          CLRB    (4)             ;CLEAR FIRST BYTE
015446  000405                          BR      2$              ;ROTATE FIRST BIT
015450  105014                  1$:     CLRB    (4)             ;CLEAR BYTE OF CHARACTER
015452  006105                          ROL     TTY             ;ROTATE BIT INTO C
015454  106114                          ROLB    (4)             ;PACK IT
015456  006105                          ROL     TTY             ;ROTATE BIT INTO C
015460  106114                          ROLB    (4)             ;PACK IT
015462  006105                  2$:     ROL     TTY             ;ROTATE BIT INTO C
015464  106114                          ROLB    (4)             ;PACK IT
015466  105714                          TSTB    (4)
015470  001402                          BEQ     .+6
015472  105267  000054                  INCB    A4$
015476  105767  000050                  TSTB    A4$             ;CHECK FILL SWITCH
015502  001402                          BEQ     .+6
015504  152724  000060                  BISB    #'0,(4)+        ;MAKE INTO ASCII CHAR
015510  105267  000037                  INCB    A4$+1
015514  001355                          BNE     1$              ;REPEAT
015516  022704  015542                  CMP     #3$,R4
015522  001002                          BNE     .+6
015524  112724  000060                  MOVB    #'0,(4)+
015530  105014                          CLRB    (4)
015532  000004  015542                  TYPE    ,3$             ;TYPE IT
015536  012604                          MOV     (SP)+,R4        ;RESTORE R4
015540  000207                          RTS     PC

015542  000004          3$:     .BLKW   4
015552  000000          A4$:    0

015554  005267  000364          ERROR:  INC     ERRORS          ;COUNT ERRORS
015560  132737  000001  000341          BITB    #1,@#341        ;AUTO MODE?
015566  001412                          BEQ     1$              ;NO!
015570  022767  000010  000346          CMP     #10.,ERRORS     ;TOO MANY?
015576  001006                          BNE     1$              ;NOT YET
015600  013700  000042                  MOV     @#42,R0         ;GET ADDRESS
015604  001403                          BEQ     1$              ;FORGET IT IF ZERO
015606  005037  000042                  CLR     @#42            ;ZAP 42
015612  004710                          JSR     PC,(R0)         ;CALL THE MONITOR
015614  000207                  1$:     RTS     PC              ;RETURN
```

```
015616  012777  016012  000306  POWDWN: MOV     #ILLUP,@UPVEC   ;SET FOR FAST UP
015624  012777  000340  000302          MOV     #340,@UPVEC+2   ;PRIO:7
015632  170246                          STFPS   -(6)            ;GET THE FPS
015634  170011                          SETD
015636  174046                          STD     AC0,-(6)        ;SAVE AC'S
015640  174146                          STD     AC1,-(6)
015642  174246                          STD     AC2,-(6)
015644  174346                          STD     AC3,-(6)
015646  172404                          LDD     AC4,AC0
015650  174046                          STD     AC0,-(6)
015652  172405                          LDD     AC5,AC0
015654  174046                          STD     AC0,-(6)
015656  010046                          MOV     R0,-(6)         ;SAVE REGISTERS
015660  010146                          MOV     R1,-(6)
015662  010246                          MOV     R2,-(6)
015664  010346                          MOV     R3,-(6)
015666  010446                          MOV     R4,-(6)
015670  010546                          MOV     R5,-(6)
015672  010667  000220                  MOV     SP,SAVE6        ;SAVE SP
015676  012777  015706  000226          MOV     #POWUP,@UPVEC   ;SET UP VECTOR
015704  000000                          HALT

015706  016706  000204          POWUP:  MOV     SAVE6,SP        ;GET SP
015712  005001                          CLR     R1              ;WAIT LOOP FOR THE TTY
015714  005201                  1$:     INC     R1
015716  001376                          BNE     1$
015720  012605                          MOV     (6)+,R5         ;GET THE REGISTERS
015722  012604                          MOV     (6)+,R4
015724  012603                          MOV     (6)+,R3
015726  012602                          MOV     (6)+,R2
015730  012601                          MOV     (6)+,R1
015732  012600                          MOV     (6)+,R0
015734  170011                          SETD
015736  172426                          LDD     (6)+,AC0        ;RESTORE THE AC'S
015740  174005                          STD     AC0,AC5
015742  172426                          LDD     (6)+,AC0
015744  174004                          STD     AC0,AC4
015746  172726                          LDD     (6)+,AC3
015750  172626                          LDD     (6)+,AC2
015752  172526                          LDD     (6)+,AC1
015754  172426                          LDD     (6)+,AC0
015756  170126                          LDFPS   (6)+            ;RESTORE FPS
015760  012777  015616  000140          MOV     #POWDWN,@DWNVEC ;SET UP THE POWER DOWN VECTOR
015766  012777  000340  000134          MOV     #340,@DWNVEC+2
015774  000004  016030                  TYPE    ..+2            ;.ASCIZ <15><12>"POWER"
016010  000002                          RTI

016012  000000          ;LOOP:  HALT                    ;THE POWER UP SEQUENCE HAS STARTED
016014  000776                  BR      .-2             ; BEFORE THE POWER DOWN WAS COMPLETE
```

```
016016  010546                  .IOT:   MOV     TTY,-(6)        ;SAVE TTY
016020  017605  000002                  MOV     @2(6),TTY       ;GET ADDRESS TO BE TYPED
016024  105715                  1$:     TSTB    (TTY)           ;TERMINATOR?
016026  001406                          BEQ     2$
016030  112537  177566                  MOVB    (TTY)+,@#177566 ;LOAD AND TYPE THE CHARACTER
016034  105737  177564                  TSTB    @#177564        ;IS THE PRINTER READY
016040  100375                          BPL     .-4
016042  000770                          BR      1$              ;GET THE NEXT CHARACTER
016044  017646  000002          2$:     MOV     @2(6),-(6)      ;GET ADDRESS TO BE TYPED
016050  062766  000002  000004          ADD     #2,4(6)         ;ADD 2 TO THE ADDRESS
016056  022666  000002                  CMP     (6)+,2(6)       ;IS IT .+2?
016062  001006                          BNE     3$              ;NO
016064  062705  000002                  ADD     #2,TTY          ;ADD 2 TO THE ADDRESS
016070  042705  000001                  BIC     #1,TTY          ;BACK UP TO AN EVEN BYTE
016074  010566  000002                  MOV     TTY,2(6)        ;RESTORE ADDRESS
016100  012605                  3$:     MOV     (6)+,TTY        ;RESTORE TTY
016102  000002                          RTI                     ;RETURN

016104  005015          000     RETURN: .ASCIZ  <15><12>        ;RETURN AND LINEFEED
016107      015 020012  020040  SPACE:  .ASCIZ  <15><12>"  "     ;RETURN AND 3 SPACES
016114      000
        016116                  .EVEN
016116  000000                  SAVE6:  0
016120  172160                  FPTADR: 172160                  ;FLOATING POINT ADDRESS ON THE 11/20
016122  000244  000246          FPVECT: 244,246                 ;FLOATING POINT VECTOR ADDRESS
016126  000024  000026          DWNVEC: 24,26                   ;POWER DOWN VECTOR ADDRESS
016132  000024  000026          UPVEC:  24,26                   ;POWER UP VECTOR ADDRESS
016136  000000                  .TYPE:  0
016140  000000                  TRPB:   0
016142  000000                  LAD:    0                       ;LOOP ADDRESS
016144  000000                  ERRORS: 0                       ;ERROR COUNT
016146  000377                  TIMES:  377                     ;ITERATION COUNT
        000001                  .END
```

```
AC0     =%000000  716* 3712  3716* 3717  3718* 3719  3741* 3742  3743* 3744  3748*
AC1     =%000001  717* 3713  3747*
AC2     =%000002  718* 3714  3746*
AC3     =%000003  719* 3715  3745*
AC4     =%000004  720* 3716  3744*
AC5     =%000005  721* 3718  3742*
ANS1      001002  750*  798*  804   825*  831   852*  858   879*  885   906*  912   938*  944
                  969*  972*  973   988   995  1005* 1008  1010* 1021  1028  1038* 1043* 1051
                 1063  1073* 1078* 1096  1106* 1109  1111* 1129  1139* 1144* 1162  1164  1174*
                 1179* 1190  1198  1216* 1221* 1246* 1249* 1250  1278* 1283  1301* 1303  1331*
                 1336  1354* 1356  1384* 1389  1407* 1409  1437* 1442  1460* 1462  1490* 1495
                 1513* 1515  1543* 1548  1566* 1568  1596* 1601  1619* 1621  1649* 1654  1672*
                 1674  1702* 1707  1725* 1727  1755* 1760  1778* 1780  1808* 1813  1831* 1933
                 1861* 1866  1884* 1886  1914* 1919  1937* 1939  1967* 1972  1990* 1992  2020*
                 2025  2043* 2045  2073* 2078  2096* 2098  2126* 2131  2149* 2151  2179* 2184
                 2202* 2204  2232* 2237  2255* 2257  2285* 2290  2308* 2310  2338* 2343  2361*
                 2363  2391* 2396  2414* 2416  2444* 2449  2467* 2469  2497* 2502  2520* 2522
                 2550* 2555  2573* 2575  2603* 2609  2626* 2628  2656* 2661  2679* 2681  2709*
                 2714  2732* 2734  2762* 2767  2785* 2787  2815* 2820  2838* 2840  2868* 2873
                 2891* 2893  2921* 2926  2944* 2946  2974* 2979  3013* 3018  3047* 3080* 3113*
                 3146* 3179* 3212* 3245* 3278* 3311* 3344* 3377* 3410* 3443* 3476* 3509* 3542*
                 3628  3632*
ANS2      001004   751*  808   835   862   889   916   948   977   999  1032  1067  1100  1133
                 1168  1202  1254  1287  1307  1340  1360  1393  1413  1446  1466  1499  1519
                 1552  1572  1605  1625  1658  1678  1711  1731  1764  1784  1817  1837  1870
                 1890  1923  1943  1976  1996  2029  2049  2082  2102  2135  2155  2188  2209
                 2241  2261  2294  2314  2347  2367  2400  2420  2453  2473  2506  2526  2559
                 2579  2612  2632  2665  2685  2718  2738  2771  2791  2824  2844  2877  2897
                 2930  2950  2983  3022  3633*
ANS3      001006   752*  1041  1089  1122  1142  1206  1258  1291  1311  1344  1364  1397  1417
                 1450  1470  1503  1523  1556  1576  1609  1629  1662  1682  1715  1735  1769
                 1788  1821  1841  1874  1894  1927  1947  1980  2000  2033  2053  2086  2105
                 2139  2159  2192  2212  2245  2265  2298  2318  2351  2371  2404  2424  2457
                 2477  2510  2530  2563  2583  2616  2636  2669  2689  2722  2742  2775  2795
                 2828  2848  2881  2901  2934  2954  2987  3026  3059  3092  3125  3158  3191
                 3224  3257  3290  3323  3356  3389  3422  3455  3488  3521  3554  3634*
ANS4      001010   753*  1210  1262  1295  1315  1348  1368  1401  1421  1454  1474  1507  1527
                 1560  1580  1613  1633  1666  1686  1719  1739  1772  1792  1825  1845  1878
                 1898  1931  1951  1984  2004  2037  2057  2090  2110  2143  2163  2196  2216
                 2249  2269  2302  2322  2355  2375  2408  2428  2461  2481  2514  2534  2567
                 2587  2620  2640  2673  2693  2726  2746  2779  2799  2832  2852  2885  2905
                 2938  2958  2991  3030  3063  3096  3129  3162  3195  3228  3261  3294  3322
                 3360  3393  3426  3459  3492  3525  3558  3635*
ANS5      001012   754*  1219
ANS6      001014   755*
ANS7      001016   756*
ANS8      001020   757*
ANX17     002774  1232*
ANX7      001674   959*
ANY17     003010  1238*  1244  1246
ANY7      001704   963*   967   969
A4$       015552  3664*  3666* 3667* 3681* 3692  3685* 3696*
BEG       001026   740    761*
BEGIN     001062   765    770*  3573  3575
BE__  =   000007   705*  3565  3613
DISPLA=   177570   701*  3602* 3606*
```

```
DONE    014654          3562#
DWNVEC  016126           773*   774*  3750*  3751*  3782#
ERROR   015554          3615   3698#
ERRORS  016144          3698*  3701   3787#
FEA     001024           759#  3649
FEC     001022           744*   758#   929*   934   3004*  3009   3645*  3646
FPTERR  000760           743#   781
FPS    =.000005          706#   743*   793*   794    820*   821    847*   848    874*   875    901*   902    923*
                         930   1273*  1274   1326*  1327   1379*  1380   1432*  1433   1485*  1486   1538*  1539
                        1591*  1592   1644*  1645   1697*  1698   1750*  1751   1803*  1804   1856*  1857   1909*
                        1910   1962*  1963   2015*  2016   2068*  2069   2121*  2122   2174*  2175   2227*  2228
                        2280*  2281   2333*  2334   2386*  2387   2439*  2440   2492*  2493   2545*  2546   2598*
                        2599   2651*  2652   2704*  2705   2757*  2758   2810*  2811   2863*  2864   2916*  2917
                        2969*  2970   3003*  3005   3642
FPTADR  016120           767   3780#
FPVECT  016122           781*   782*  3781#
HLT    = 104000          703#   796    806    810    823    833    837    850    860    864    877    887    891
                         904    914    918    932    936    946    950    970    975    979    987   1001   1006
                        1011   1030   1034   1039   1044   1065   1069   1074   1079   1098   1102   1107   1112
                        1131   1135   1140   1145   1166   1170   1175   1180   1200   1204   1208   1213   1217
                        1222   1247   1252   1256   1260   1264   1276   1285   1289   1293   1297   1305   1309
                        1313   1317   1329   1338   1342   1346   1350   1358   1362   1366   1370   1382   1391
                        1395   1399   1403   1411   1415   1419   1423   1435   1444   1448   1452   1456   1464
                        1468   1472   1476   1488   1497   1501   1505   1509   1517   1521   1525   1529   1541
                        1550   1554   1558   1562   1570   1574   1578   1582   1594   1603   1607   1611   1615
                        1623   1627   1631   1635   1647   1656   1660   1664   1668   1676   1680   1684   1688
                        1700   1709   1713   1717   1721   1729   1733   1737   1741   1753   1762   1766   1770
                        1774   1782   1786   1790   1794   1806   1815   1819   1823   1827   1835   1839   1843
                        1847   1859   1868   1872   1876   1880   1888   1892   1896   1900   1912   1921   1925
                        1929   1933   1941   1945   1949   1953   1965   1974   1978   1982   1986   1994   1999
                        2002   2006   2018   2027   2031   2035   2039   2047   2051   2055   2059   2071   2080
                        2084   2088   2092   2100   2104   2108   2112   2124   2133   2137   2141   2145   2153
                        2157   2161   2165   2177   2186   2190   2194   2198   2206   2210   2214   2218   2230
                        2239   2243   2247   2251   2259   2263   2267   2271   2283   2292   2296   2300   2304
                        2312   2316   2320   2324   2336   2345   2349   2353   2357   2365   2369   2373   2377
                        2389   2398   2402   2406   2410   2418   2422   2426   2430   2442   2451   2455   2459
                        2463   2471   2475   2479   2483   2495   2504   2508   2512   2516   2524   2528   2532
                        2536   2548   2557   2561   2565   2569   2577   2581   2585   2589   2601   2610   2614
                        2618   2622   2630   2634   2638   2642   2654   2663   2667   2671   2675   2683   2687
                        2691   2695   2707   2716   2720   2724   2728   2736   2740   2744   2748   2760   2769
                        2773   2777   2781   2789   2793   2797   2801   2813   2822   2826   2830   2834   2842
                        2846   2850   2854   2866   2875   2879   2883   2887   2895   2899   2903   2907   2919
                        2928   2932   2936   2940   2948   2952   2956   2960   2972   2981   2985   2999   2993
                        3007   3011   3020   3024   3028   3032   3061   3065   3094   3098   3127   3131   3160
                        3164   3193   3197   3226   3230   3259   3263   3292   3296   3325   3329   3358   3362
                        3391   3395   3424   3428   3457   3461   3490   3494   3523   3527   3556   3560

ICNT    001000           749*   783*  3587   3595   3597   3599*  3600*  3602   3605*  3606   3659*
ILLUP   016012          3708   3755#
KIT     015072          3592   3598   3605#  3660   3663
LAD     016142           784*  3601*  3607   3609   3786#
LDSC   = 170004           734#
LDUB   = 170003           730#
M      = 000006          1265#  1318   1371   1424   1477   1530   1583   1636   1689   1742   1795   1848   1901
                         1954   2007   2060   2113#  2166   2219   2272   2325   2378   2431   2484   2537   2590
                         2643   2696   2749   2802   2855   2908   2961#
MEMIO   002052          1004   1008#
```

```
MER11   002156          1037    1041#
MER12   002266          1072    1076#
MER13   002372          1105    1109#
MER14   002502          1138    1142#
MER15   002616          1173    1177#
MER16   002752          1215    1219#
MO12    002224          1054    1061#   1076
MO15    002554          1155    1162#   1177
MRS   = 170006           733#
MU12    002222          1053    1060#   1071
MU15    002552          1154    1161#   1172
M1120   001054           762     767#
N     = 000102           698#    785     812#    839#    866#    893#    920#    952#    980#   1013#   1046#   1081#   1114#
                        1147#   1182#   1224#   1225    1265#   1318#   1371#   1424#   1477#   1530#   1583#   1636#   1689#
                        1742#   1795#   1848#   1901#   1954#   2007#   2060#   2113#   2166#   2219#   2272#   2325#   2378#
                        2431#   2484#   2537#   2590#   2643#   2696#   2749#   2802#   2855#   2908#   2961#   2995#   3034#
                        3067#   3100#   3133#   3166#   3199#   3232#   3265#   3298#   3331#   3364#   3397#   3430#   3463#
                        3496#   3529#   3562#
NER10   002066          1009    1012#
NER11   002172          1042    1045#
NER12   002302          1077    1080#
NER13   002406          1110    1113#
NER14   002516          1143    1146#
NER15   002632          1178    1181#
NER16   002766          1220    1223#
NER17   003044          1245    1249#
NER7    001734           968     972#
NU10    002006           987     993#   1003
NU11    002112          1020    1026#   1036
NU12    002216          1059#   1060
NU13    002326          1088    1094#   1104
NU14    002436          1121    1127#   1137
NU15    002546          1160#   1161
NU16    002656          1189    1195#   1214
NX100   014534          3506    3518#
NX101   014624          3539    3551#
NX62    013114          3044    3056#
NX63    013204          3077    3089#
NX64    013274          3110    3122#
NX65    013364          3143    3155#
NX66    013454          3176    3188#
NX67    013544          3209    3221#
NX70    013634          3242    3254#
NX71    013724          3275    3287#
NX72    014014          3308    3320#
NX73    014104          3341    3353#
NX74    014174          3374    3386#
NX75    014264          3407    3419#
NX76    014354          3440    3452#
NX77    014444          3473    3485#
N1      001226           792     801#
N100    014524          3503    3513#
N101    014614          3536    3546#
N2      001310           819     828#
N20     003144          1272    1281#
N21     003336          1325    1334#
```

N22	003530	1378	1387#
N23	003722	1431	1440#
N24	004114	1484	1493#
N25	004306	1537	1546#
N26	004500	1590	1599#
N27	004672	1643	1652#
N3	001372	846	855#
N30	005064	1696	1705#
N31	005256	1749	1758#
N32	005450	1802	1811#
N33	005642	1855	1864#
N34	006034	1908	1917#
N35	006226	1961	1970#
N36	006420	2014	2023#
N37	006612	2067	2076#
N4	001454	873	882#
N40	007004	2120	2129#
N41	007176	2173	2182#
N42	007370	2226	2235#
N43	007562	2279	2288#
N44	007754	2332	2341#
N45	010146	2385	2394#
N46	010340	2438	2447#
N47	010532	2491	2500#
N5	001536	900	909#
N50	010724	2544	2553#
N51	011116	2597	2606#
N52	011310	2650	2659#
N53	011502	2703	2712#
N54	011674	2756	2765#
N55	012066	2809	2818#
N56	012260	2862	2871#
N57	012452	2915	2924#
N6	001636	927	941#
N60	012644	2968	2977#
N61	012774	3002	3016#
N62	013104	3041	3051#
N63	013174	3074	3084#
N64	013264	3107	3117#
N65	013354	3140	3150#
N66	013444	3173	3183#
N67	013534	3206	3216#
N70	013624	3239	3249#
N71	013714	3272	3282#
N72	014004	3305	3315#
N73	014074	3338	3348#
N74	014164	3371	3381#
N75	014254	3404	3414#
N76	014344	3437	3447#
N77	014434	3470	3480#
OVER	015076	3588	3606#
01	001232	799	804#
010	002012	991	995#
0100	014540	3511	3521#
0101	014630	3544	3554#
011	002116	1024	1029#

```
[illegible]6     014360        3445     3455#
[illegible]      014450        3478     3498#
R        = 000004        1265#    1318     1371     1424     1477#    1530     1583     1636     1689#    1742     1795     1848     1901#
                         1954     2007     2060     2113#    2166     2219     2272     2325#    2378     2431     2484     2537#    2590
                         [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
                         2643     2696     2749#    2802     2855     2908     2961#    3034#    3067     3100     3133     3166#    3199
                         3232     3265     3298#    3331     3364     3397     3430#    3463     3496     3529     3562#
R[illegible]    =%000007        715#    3615*    3693*    3706*    3707*
R[illegible]DOWN  015616        773     3708#    3750
R[illegible]     [illegible]        3727     3730#
R[illegible]     015414        3623     3626     3639     3647     3650     3664#
R[illegible]S    015424        3666#
R[illegible]     = 177776        699#
R[illegible]URN  016104        3619     3775#
R[illegible]     =%000000        707#     776*    3576*    3625     3703*    3720     3739*
R[illegible]     =%000001        708#    3721     3731*    3732*    3738*
R[illegible]     =%000002        709#    3722     3737*
R3       =%000003        710#    3589*    3628*  . 3661*    3723     3736*
R4       =%000004        711#    3616     3629*    3636*    3640*    3651*    3569     3669*    3687     3692*    3724     3735*
R5       =%000005        712#    3725     3734*
SAVE6      016116        3726*    3730     3779#
SAV[illegible]     015052        3594     3600#    3608
SCOPE    = 104400         702#     790      817      844      871      898      925      957      985     1018     1051     1086     [illegible]
                         1152     1187     1230     1270     1323     1376     1429     1482     1535     1588     1641     1694     [illegible]
                         1800     1853     1906     1959     2012     2065     2118     2171     2224     2277     2330     2393     2436
                         2489     2542     2595     2648     2701     2754     2807     2860     2913     2966     3000     3039     [illegible]
                         3105     3138     3171     3204     3237     3270     3303     3336     3369     3402     3435     3468     3501
                         3534     3562
SP       =%000006        714#     761*     771*    3726     3730*
SPACE      016107        3624     3627     3637     3644     3648     3776#
S[illegible]AC    = 170005        731#
S[illegible]2C    = 170007        732#
SWR      = 177570        700#     701     3563     3568     3595     3587     3589     3591     3593     3611     3617     3652     3655
                         3659     3661
SW08     = 000400        729#    3585     3659
SW09     = 001000        728#    3655
SW10     = 002000        727#    3563     3611
SW11     = 004000        726#    3593
SW12     = 010000        725#    3568
SW13     = 020000        724#    3617
SW14     = 040000        723#    3591
SW15     = 100000        722#
TIMES      016146        3597     3788#
TPP2       016140        3570*    3785#
[illegible]Y      =%000005        713#    3622*    3625*    3638*    3646*    3649*    3673*    3675*    3677*    3757     3758*    3759     3761
                         3769*    3770*    3771     3772*
TYPE     = 000004        704#    3566     3614     3619     3624     3627     3637     3644     3648     3691     3752
[illegible]F/EC    016132        3708*    3709*    3727*    3783#
YES[illegible]    [illegible]        764*     772     3574     3583#
.        = 016150        736#     737      738#     742#     747#     795      805      809      822      832      836      [illegible]      959
                          863      876      886      890      903      913      917      931      935      945      949      961      964
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F08

MAINDEC-11-DCFPC-B TEST OF LDF, LDD, STF, STD MACY11 27(732) 03-SEP-76 17:47 PAGE 99
DCFPCB.P11 CROSS REFERENCE TABLE -- PERMANENT SYMBOLS

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H08


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          3265  3298  3331  3364  3397  3430  3463  3496  3529  3562  3611  3664  3708  3753  3757
.PAGE      785   812   839   866   893   920   952   980  1013  1046  1081  1114  1147  1192  [illegible]
          1265  1318  1371  1424  1477  1530  1583  1636  1689  1742  1795  1848  1901  1954  [illegible]
          2060  2113  2166  2219  2272  2325  2378  2431  2484  2537  2590  2643  2696  2749  [illegible]
          2855  2908  2961  2995  3035  3068  3101  3134  3167  3200  3233  3266  3299  3332  [illegible]
          3398  3431  3464  3497  3530
```

```
MAINDEC-11-DCFPC-B      TEST OF LDF,LDD,STF,STD MACY11 27(732)  03-SEP-76  17:47  PAGE 102
DCFPCB.P11       CROSS REFERENCE TABLE -- PERMANENT SYMBOLS

.REM      556
.REPT       3      329      737     1265     2113     3034
.SBTTL    653      697      747      785     3562     3611     3664     3708     3757
.TITLE    653


 ERRORS DETECTED:  0
 DEFAULT GLOBALS GENERATED:  0

 *DCFPCB,DCFPCB.SEQ/SOL/CRF/DS:ERFZ/EN:ABS=DSKM:DCFPCB.P11
 RUN-TIME: 17.30.5 SECONDS
 RUN-TIME RATIO: 603/54=11.0
 CORE USED:  11K  (22 PAGES)
```

Spooler runtime 11 Seconds, 47 KCS, 300 disk reads, 3 disk writes, 99 pages