HARDWARE TRAINING CLASS

MARK 2T DISCUTILITY

VERSION 2.2

SAMPLE DIALOGS

DELTA DATA SYSTEMS, INC.
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NASHVILLE, TN 37217
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SAMPLE DIALOGS WITH THE

MARK 2T DISCUTILIY STANDALONE

THE MARK 2T REQUIRES THE USE OF ITS OWN DISCUTILITY TO USE THE DISC, FLOPPY, AND STREAMER TAPE PERIPHERIALS TO FORMAT, RESTORE, COPY, AND VERIFY.

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CONTENTS

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NOTE : DISCUTILITY FOR THE MARK 3 IS UNDERGOING CONSTANT CHANGE. CHECK WITH POINT 4 FOR LATEST VERSION AND OPERATING INSTUCTIONS.

POINT 4 MARK 2T

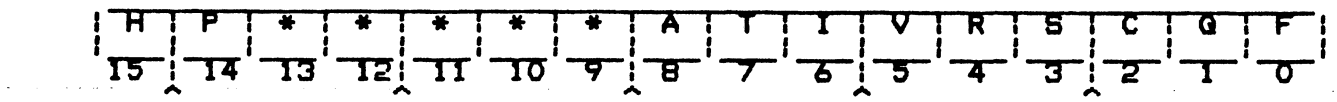
DISCUTILITY OPTION

FLAG WORD

NOTE : DISABLE PRESCAN BY SETTING BIT 14 OF THE OPTION FLAG WORD TO ONE. (LOC. 200 = 40000)

```
**************************************************************************
    200       0 OPTNF: 0        ;PROGRAM OPTION FLAG. MUST STAY @ 200 !!
    201       0         0       ;201 IS RESERVED
**************************************************************************
```

OPTION FLAG WORD DEFINITION



WHERE:

H - BIT 15 = BAD TRACK ENTRY OPTION.
P - BIT 14 = PRESCAN DISC PRIOR TO FORMAT.
A - BIT 8 = STREAMER TAPE VERIFY.
T - BIT 7 = STREAMER TAPE RETENSION.
I - BIT 6 = IPL IRIS SYSTEM DISC.
V - BIT 5 = VERIFY DISC COPY.
R - BIT 4 = RESTORE DISC
S - BIT 3 = SAVE DISC
C - BIT 2 = COPY DISC TO DISC.
Q - BIT 1 = FORMAT DISC IN 2 PASSES.
F - BIT 0 = FORMAT DISC IN 5 PASSES.

* - RESERVED

OPTIONS ARE DISABLED BY SETTING THE APPROPRIATE BITS TO 1.

EXAMPLES:

SETTING LOC 200 = 100022 DISABLES H, R & Q.
= 000023 DISABLES R, Q & F.

OPTIONS THAT ARE DISABLED WILL NOT APPEAR IN THE PROGRAM HELP MENU.

DISCUTILITY

PROGRAM DIRECTORY

H

MARK 2T DISC UTILITIES

VERSION 2.2 JUNE 11, 1984

- - - - N O T I C E - - - -

ALL NUMBERS ARE IN OCTAL.

TYPE 'H' FOR HELP ANYTIME.

PROGRAM NAME: H

PROGRAM	PURPOSE
<F>ORMAT	- FORMAT AND ANALYZE SURFACES IN 5 PASSES
<Q>UICK FORMAT	- FORMAT AND ANALYZE SURFACES IN 2 PASSES
<C>OPY	- COPY SOURCE DISC TO DESTINATION
<S>AVE DISC	- DISC BACKUP, SAVE DATA ON TAPE OR DISC
<R>ESTORE DISC	- RESTORE DISC FROM BACKUP TAPE OR DISC
<V>ERIFY COPY	- VERIFY COPIED DATA AGAINST SOURCE
<I>PL	- IPL SYSTEM DISC
<T>APE	- RETENSION TAPE
<STR>EAMER VERIFY	- VERIFY DISC AGAINST TAPE

DISCUTILITY

FORMAT PROGRAM

PROGRAM NAME: F

TYPE OF DRIVE: H

ST506 WINCHESTER DRIVES

CODE	MNEMONIC	TYPE	CAPACITY	CYL'S	HEADS	SECT'S	MODEL
1	ATI20	WIN	20MB	1206	3	20	3020
2	ATI46	WIN	46MB	1206	7	20	3046
3	CMI19	WIN	19MB	462	6	20	5619
4	CMI12	WIN	12MB	462	4	20	5412

5 1/4'' FLOPPY DISKETTE DRIVES

CODE	MNEMONIC	TYPE	CAPACITY	CYL'S	HEADS	SECT'S	MODEL
12	F52D	FLOPPY	1MB	115	2	20	

TYPE OF DRIVE: 2

DRIVE NUMBER: H

0 THRU 3 FOR DISC

NO DEFAULTS ALLOWED !!

DRIVE NUMBER: 0

```
SURFACE(S): H

'ALL' FOR ALL SURFACES

SURFACE(S): ALL


WHEN DRIVE IS READY, HIT RETURN TO START


READING ALTERNATE SECTOR INFORMATION

FORMATTING

CURRENT CYLINDER =40
CURRENT CYLINDER =100
CURRENT CYLINDER =140
CURRENT CYLINDER =200
CURRENT CYLINDER =240
CURRENT CYLINDER =300
CURRENT CYLINDER =340
CURRENT CYLINDER =400
CURRENT CYLINDER =440
CURRENT CYLINDER =500
CURRENT CYLINDER =540
CURRENT CYLINDER =600
CURRENT CYLINDER =640
CURRENT CYLINDER =700
CURRENT CYLINDER =740
CURRENT CYLINDER =1000
CURRENT CYLINDER =1040
CURRENT CYLINDER =1100
CURRENT CYLINDER =1140
CURRENT CYLINDER =1200
CURRENT CYLINDER =1205

FORMAT DONE
```

SURFACE ANALYSIS

WRITING

CURRENT CYLINDER =40
CURRENT CYLINDER =100

CURRENT CYLINDER =140
CURRENT CYLINDER =200
CURRENT CYLINDER =240
CURRENT CYLINDER =300
CURRENT CYLINDER =340
CURRENT CYLINDER =400
CURRENT CYLINDER =440
CURRENT CYLINDER =500
CURRENT CYLINDER =540
CURRENT CYLINDER =600
CURRENT CYLINDER =640
CURRENT CYLINDER =700
CURRENT CYLINDER =740
CURRENT CYLINDER =1000
CURRENT CYLINDER =1040
CURRENT CYLINDER =1100
CURRENT CYLINDER =1140
CURRENT CYLINDER =1200
CURRENT CYLINDER =1205

READING

CURRENT CYLINDER =40
CURRENT CYLINDER =100
CURRENT CYLINDER =140
CURRENT CYLINDER =200
CURRENT CYLINDER =240
CURRENT CYLINDER =300
CURRENT CYLINDER =340
CURRENT CYLINDER =400
CURRENT CYLINDER =440
CURRENT CYLINDER =500
CURRENT CYLINDER =540
CURRENT CYLINDER =600
CURRENT CYLINDER =640
CURRENT CYLINDER =700
CURRENT CYLINDER =740
CURRENT CYLINDER =1000
CURRENT CYLINDER =1040
CURRENT CYLINDER =1100
CURRENT CYLINDER =1140
CURRENT CYLINDER =1200
CURRENT CYLINDER =1205

DONE PASS 1

```
WRITING

CURRENT CYLINDER =40
CURRENT CYLINDER =100
CURRENT CYLINDER =140
CURRENT CYLINDER =200
CURRENT CYLINDER =240
CURRENT CYLINDER =300
CURRENT CYLINDER =340
CURRENT CYLINDER =400
CURRENT CYLINDER =440
CURRENT CYLINDER =500
CURRENT CYLINDER =540
CURRENT CYLINDER =600
CURRENT CYLINDER =640
CURRENT CYLINDER =700
CURRENT CYLINDER =740
CURRENT CYLINDER =1000


CURRENT CYLINDER =1040
CURRENT CYLINDER =1100
CURRENT CYLINDER =1140
CURRENT CYLINDER =1200
CURRENT CYLINDER =1205

READING

CURRENT CYLINDER =40
CURRENT CYLINDER =100
CURRENT CYLINDER =140
CURRENT CYLINDER =200
CURRENT CYLINDER =240
CURRENT CYLINDER =300
CURRENT CYLINDER =340
CURRENT CYLINDER =400
CURRENT CYLINDER =440
CURRENT CYLINDER =500
CURRENT CYLINDER =540
CURRENT CYLINDER =600
CURRENT CYLINDER =640
CURRENT CYLINDER =700
CURRENT CYLINDER =740
CURRENT CYLINDER =1000
CURRENT CYLINDER =1040
CURRENT CYLINDER =1100
CURRENT CYLINDER =1140
CURRENT CYLINDER =1200
CURRENT CYLINDER =1205

DONE PASS 2
```

WRITING

CURRENT CYLINDER =40
CURRENT CYLINDER =100
CURRENT CYLINDER =140
CURRENT CYLINDER =200
CURRENT CYLINDER =240
CURRENT CYLINDER =300
CURRENT CYLINDER =340
CURRENT CYLINDER =400
CURRENT CYLINDER =440
CURRENT CYLINDER =500
CURRENT CYLINDER =540
CURRENT CYLINDER =600
CURRENT CYLINDER =640
CURRENT CYLINDER =700
CURRENT CYLINDER =740
CURRENT CYLINDER =1000
CURRENT CYLINDER =1040
CURRENT CYLINDER =1100
CURRENT CYLINDER =1140
CURRENT CYLINDER =1200
CURRENT CYLINDER =1205

READING

CURRENT CYLINDER =40
CURRENT CYLINDER =100
CURRENT CYLINDER =140
CURRENT CYLINDER =200
CURRENT CYLINDER =240
CURRENT CYLINDER =300

CURRENT CYLINDER =340
CURRENT CYLINDER =400
CURRENT CYLINDER =440
CURRENT CYLINDER =500
CURRENT CYLINDER =540
CURRENT CYLINDER =600
CURRENT CYLINDER =640
CURRENT CYLINDER =700
CURRENT CYLINDER =740
CURRENT CYLINDER =1000
CURRENT CYLINDER =1040
CURRENT CYLINDER =1100
CURRENT CYLINDER =1140
CURRENT CYLINDER =1200
CURRENT CYLINDER =1205

DONE PASS 3

WRITING

CURRENT CYLINDER =40
CURRENT CYLINDER =100
CURRENT CYLINDER =140
CURRENT CYLINDER =200
CURRENT CYLINDER =240
CURRENT CYLINDER =300
CURRENT CYLINDER =340
CURRENT CYLINDER =400
CURRENT CYLINDER =440
CURRENT CYLINDER =500
CURRENT CYLINDER =540
CURRENT CYLINDER =600
CURRENT CYLINDER =640
CURRENT CYLINDER =700
CURRENT CYLINDER =740
CURRENT CYLINDER =1000
CURRENT CYLINDER =1040
CURRENT CYLINDER =1100
CURRENT CYLINDER =1140
CURRENT CYLINDER =1200
CURRENT CYLINDER =1205

READING

CURRENT CYLINDER =40
CURRENT CYLINDER =100
CURRENT CYLINDER =140
CURRENT CYLINDER =200
CURRENT CYLINDER =240
CURRENT CYLINDER =300
CURRENT CYLINDER =340
CURRENT CYLINDER =400
CURRENT CYLINDER =440
CURRENT CYLINDER =500
CURRENT CYLINDER =540
CURRENT CYLINDER =600
CURRENT CYLINDER =640
CURRENT CYLINDER =700
CURRENT CYLINDER =740
CURRENT CYLINDER =1000
CURRENT CYLINDER =1040
CURRENT CYLINDER =1100
CURRENT CYLINDER =1140
CURRENT CYLINDER =1200

CURRENT CYLINDER =1205

DONE PASS 4

WRITING

CURRENT CYLINDER =40
CURRENT CYLINDER =100
CURRENT CYLINDER =140
CURRENT CYLINDER =200
CURRENT CYLINDER =240
CURRENT CYLINDER =300
CURRENT CYLINDER =340
CURRENT CYLINDER =400
CURRENT CYLINDER =440
CURRENT CYLINDER =500
CURRENT CYLINDER =540
CURRENT CYLINDER =600
CURRENT CYLINDER =640
CURRENT CYLINDER =700
CURRENT CYLINDER =740
CURRENT CYLINDER =1000
CURRENT CYLINDER =1040
CURRENT CYLINDER =1100
CURRENT CYLINDER =1140
CURRENT CYLINDER =1200
CURRENT CYLINDER =1205

READING

CURRENT CYLINDER =40
CURRENT CYLINDER =100
CURRENT CYLINDER =140
CURRENT CYLINDER =200
CURRENT CYLINDER =240
CURRENT CYLINDER =300
CURRENT CYLINDER =340
CURRENT CYLINDER =400
CURRENT CYLINDER =440
CURRENT CYLINDER =500
CURRENT CYLINDER =540
CURRENT CYLINDER =600
CURRENT CYLINDER =640
CURRENT CYLINDER =700
CURRENT CYLINDER =740
CURRENT CYLINDER =1000
CURRENT CYLINDER =1040
CURRENT CYLINDER =1100
CURRENT CYLINDER =1140
CURRENT CYLINDER =1200
CURRENT CYLINDER =1205

DONE PASS 5

ANALYSIS DONE

THIS OPTION ALLOWS MARGINAL OR KNOWN BAD TRACKS TO BE RE-ASSIGNED.

ERROR LOG PRINTOUT & INSERTION IN DECIMAL ? (Y OR CR, CR INDICATES OCTAL) Y

TOTAL DISC ERRORS: HARD = 0 SOFT = 0

RULES FOR ENTERING BAD SPOTS.

ENTER SURFACE TRACK AND SECTOR FOR EVERY BAD AREA.

***** NOTE: SECTOR NUMBERS ENTERED ARE PHYSICAL RATHER THAN LOGICAL.

DO YOU WISH TO INPUT SECTOR INFO AS A BYTE OFFSET ? (N= INPUT AS SECTOR #):

TYPE 'Y' TO ENTER BAD TRACKS OR RETURN.Y

SURFACE 1

TRACK 700

WHAT?

TRACK 600

SECTOR 10

OK TO LOG ? Y

SURFACE

TOTAL DISC ERRORS: HARD = 1 SOFT = 0

			PHYSICAL	LOGICAL	
COUNT	SURFACE	TRACK	SECTOR	SECTOR	DRIVE
HARD 1	1	600	10	9	0

PROGRAM NAME:

DISCUTILITY

COPY PROGRAM

PROGRAM NAME: C

SOURCE DRIVE -

TYPE: 2

NUMBER: 0

SURFACE(S): H

'ALL' FOR ALL SURFACES

'OPT,ALL' FOR SELECTIVE CYLINDER(S) ALL SURFACES

SURFACE(S): H

'ALL' FOR ALL SURFACES

'OPT,ALL' FOR SELECTIVE CYLINDER(S) ALL SURFACES

SURFACE(S): ALL

TO THE SAME DRIVE? H

WHAT? Y

SURFACE(S): ALL

WHEN DRIVE IS READY, HIT RETURN TO START

PROGRAM NAME:

DISCUTILITY

SAVE PROGRAM

```
PROGRAM NAME: S
SAVE TO TAPE OR DISC (T/D) ? H
WHAT?
SAVE TO TAPE OR DISC (T/D) ? T
SOURCE DRIVE -
TYPE: 2
NUMBER: 0
SURFACE(S): H
'ALL' FOR ALL SURFACES
'OPT,ALL' FOR SELECTIVE CYLINDER(S) ALL SURFACES
SURFACE(S): ALL

KEY IN CREATION DATE MM-DD-YY 09-10-84
DESCRIPTOR:SAMPLE DIALOG
WHEN BOTH DISC AND TAPE UNITS ARE READY, HIT RETURN TO START
TAPE IS WRITE PROTECTED OR NO TAPE. HIT `C` WHEN READY TO CONTINUE
PROGRAM NAME:
```

DISCUTILITY

RESTORE PROGRAM

```
PROGRAM NAME: R
RESTORE FROM TAPE OR DISC (T/D) ? T

DESTINATION DRIVE -
TYPE: 2
NUMBER: 0
SURFACE(S): H
'ALL' FOR ALL SURFACES
'OPT,ALL' FOR SELECTIVE CYLINDER(S) ALL SURFACES

SURFACE(S): ALL
IF VALIDATION OF DESCRIPTION AND DATE IS NOT DESIRED ENTER A '!'

KEY IN CREATION DATE MM-DD-YY 09-10-84
DESCRIPTOR:SAMPLE DIALOG

WHEN BOTH DISC AND TAPE UNITS ARE READY, HIT RETURN TO START

STREAMING FROM TAPE
TRANSFER COMPLETE

TOTAL DISC ERRORS: HARD = 0    SOFT = 0
NO TAPE ERROR
VERIFY TAPE AGAINST DISC ?H

PROGRAM NAME:
```

```
TO CONTINUE THIS OPERATION USING YOUR INPUT, ENTER A '!' (EXCLAMATION POINT)
STREAMING FROM TAPE
TRANSFER COMPLETE

TOTAL DISC ERRORS: HARD = 0    SOFT = 0
NO TAPE ERROR
VERIFY TAPE AGAINST DISC ?Y
TAPE BEING PROCESSED CONTAINS FOLLOWING LBL:
VOLUME SEQUENCE #: 1
CREATION DATE 09-04-84

DESCRIPTOR:POINT4

CHECKSUMMING TAPE

CHECKSUMS= 64205 44014 116037
  RECORD COUNT= 24100

CHECKSUMMING DISC

CHECKSUMS= 64205 44014 116037
  RECORD COUNT= 24100

GOOD VERIFY - RECORD CHECKSUMS FOR FUTURE REFERENCE

PROGRAM NAME:
```

DISCUTILITY

VERIFY PROGRAM

J2

MARK 2T DISC UTILITIES

VERSION 2.2 JUNE 11, 1984

- - - - N O T I C E - - - -

ALL NUMBERS ARE IN OCTAL.

TYPE 'H' FOR HELP ANYTIME.

PROGRAM NAME: V

SOURCE DRIVE -

TYPE: 2

NUMBER: 0

SURFACE(S): ALL

TO THE SAME DRIVE? H

WHAT? Y

SURFACE(S): H

'ALL' FOR ALL SURFACES

'OPT,ALL' FOR SELECTIVE CYLINDER(S) ALL SURFACES

SURFACE(S): ALL

WHAT? ALL

WHEN DRIVE IS READY, HIT RETURN TO START

```
VERIFYING DESTINATION DISC DATA

DATA COMPARE ERROR
 CYL 0  HEAD 6  SECT 0
DATA COMPARE ERROR
 CYL 1  HEAD 6  SECT 0
DATA COMPARE ERROR
 CYL 2  HEAD 6  SECT 0
DATA COMPARE ERROR
 CYL 3  HEAD 6  SECT 0

DATA COMPARE ERROR
 CYL 4  HEAD 6  SECT 0
STOP AT  READ DATA
 CYL 4  HEAD 6  SECT 0

TOTAL DISC ERRORS: HARD = 0    SOFT = 0
```

DISCUTILITY

TENSION TAPE PROGRAM

PROGRAM NAME: T

WHEN TAPE UNIT IS READY, HIT RETURN TO START

RETENSIONING TAPE

PROGRAM NAME:

DISCUTILITY

IPL FROM DISC PROGRAM

PROGRAM NAME: I

TYPE OF DRIVE: 2

WHEN DRIVE IS READY, HIT RETURN TO START

PRESS RETURN

IRIS 8.2C

?? NO PICO-N ??

17031: 40401 0 0 0 0 (AFTER RESET PRESSED)