

USER

RUN

DIAGNOSTICS

Why should I?

Isn't that the CEO's job

What is a diagnostic

SYMPTOM:

My car won't start

DIAGNOSTIC:

Do you have gas	Yes
Do you smell gas	No
Does engine turn over	No

Diagnosis:

Dead battery

R.O.

Travel time 1.7 hours

Parts cost .87

Repair time 1.5 hours

Repair procedure

Replace broken key

SYMPTOM:

My computer won't work

DIAGNOSTIC:

Is the run light on

Is the system halt light on

What is in CIR

Does the disc wink

Does the tape move

Does the console respond on startup

DIAGNOSTIC: (Cont.)

How far into "INITIAL" does it get

Any changes

List I/O devices

Volume table changes

etc.

MICRO DIAGNOSTICS

Memory address

CIR = 0 then Enable/Load

CPU

CIR = 1 then Enable/Load

I/O

CIR = 2 then Enable/Load

MICRO DIAGNOSTICS (Cont.)

Memory pattern

CIR = 100000 then Enable/Load

Mag tape
CIR =

Console
CIR =

LISTLOG2

DESCRIPTION:

Prints in ASCII format the contents of any
MPE Log files

Reference
System Utilities manual
(30000-90044)

LISTLOG2

OPERATION:

:RUN LISTLOG2.PUB.SYS

LISTLOG2 R01.00 (C) HEWLETT-PACKARD CO., 1979
ENTER FIRST AND LAST LOG FILE TO BE ANALYZED

FIRST?159

LAST?160

ENTER EVENTS TO BE PRINTED

TYPE NO. EVENT

- 0 LOG FAILURE
- 1 SYSTEM UP
- 2 JOB INITIATION
- 3 JOB TERMINATION
- 4 PROCESS TERMINATION
- 5 FILE CLOSE
- 6 SYSTEM SHUTDOWN
- 7 POWER FAILURE
- 8 SPOOLING LOG RECORD
- 9 LINE DISCONNECTION
- 10 LINE CLOS
- 11 I/O ERRORS
- 12 VOLUME MOUNT/DISMOUNT
- 13 VOLUME SET MOUNT/DIS.
- 14 TAPE LABELS
- 15 CONSOLE LOG

ENTER EVENT NUMBERS SEPARATED BY COMMAS

A CARRIAGE RETURN ASSUMES ALL EVENTS WILL BE EVALUATED

11

DO YOU WANT TO PURGE LOG FILES?NO

DO YOU WISH TO RUN AGAIN(Y OR N)?N

END OF PROGRAM

9 :36:18:5 I/O SYS

```
-----
DRT/UNIT--LDEV--STATUS--TYPE/--DVR/--XMISSION/--DRIVER/
SUBTYPE FUNCT COUNT DATA A
6 0 7 100552 24 0 1 1024 100001
ASDYWBCFMPLRT G--TARGET/--TARGET/--PCB/--DVR/--DVR/ UENC
DST# ADDRESS STAT PAR1 PAR2-DVR C
0000100100000000 000121 002116 010421 000000 000014
-----
```

9 :38:42:3 I/O SYS

```
-----
DRT/UNIT--LDEV--STATUS--TYPE/--DVR/--XMISSION/--DRIVER/
SUBTYPE FUNCT COUNT DATA A
6 0 7 100552 24 0 1 1024 100001
ASDYWBCFMPLRT G--TARGET/--TARGET/--PCB/--DVR/--DVR/ UENC
DST# ADDRESS STAT PAR1 PAR2-DVR C
0000100100000000 000121 002116 010421 000000 000014
-----
```

9 :41:43:0 I/O SYS

```
-----
DRT/UNIT--LDEV--STATUS--TYPE/--DVR/--XMISSION/--DRIVER/
SUBTYPE FUNCT COUNT DATA A
6 0 7 100512 24 0 0 0 100107
ASDYWBCFMPLRT G--TARGET/--TARGET/--PCB/--DVR/--DVR/ UENC
DST# ADDRESS STAT PAR1 PAR2-DVR C
0000100100000000 100077 001232 006074 000000 000000
-----
```

LOGUTIL

DESCRIPTION:

Prints I/O error logs in a more readable form
than LISTLOG2

CONSIDERATIONS:

It is unsupported

LOGUTIL (cont)

OPERATION:

:RUN LOGUTIL

```
LOGUTIL <6.4> WED, FEB 6, 1980, 12:52 PM
AUDIT, SNAP, OR ERRORLIST ? E
ENTER THE 'LIST' DEVICE (RETURN => $STDLIST) LP
ENTER STARTING, STOPPING LOGFILE NUMBERS ? 159,160
IS INPUT FROM DISC OR TAPE ? DISC
LIST INDIVIDUAL ERRORS ? Y
ENTER Y/N FOR THE TYPES TO BE LISTED
TYPE 0  MOVING HEAD DISC           Y
TYPE 1  FIXED HEAD DISC
TYPE 8  CARD READER
TYPE 9  PAPER TAPE READER
TYPE 16 TERMINAL
TYPE 18 RJE-LINE
TYPE 19 HIGH SPEED SERIAL
TYPE 20 READER/PUNCH
TYPE 22 SYNC SNGL LINE CNTRL
TYPE 23 PROG CONTROLLER
TYPE 24 MAG TAPE                   Y
TYPE 32 LINE PRINTER
TYPE 33 CARD PUNCH
TYPE 34 PAPER TAPE PUNCH
TYPE 35 PLOTTER
TYPE 41 DS-3000
```

END OF PROGRAM

*****TUE, FEB 5, 1980, 9:36 AM*****MAG TAPE
LOGICAL DEVICE 7 DRT 6 UNIT 0 STATUS= X100552
FUNCTION IS WRITE
COMPLETION STATUS: <SUCESSFUL> WITH TAPE RETRY
MISC DATA =X100001, #P1=X000000 , #P2=X000014
NO TRANSFER IN PROGRESS
READY INTERRUPT
NOT READY INTERRUPT
CLEAR INTERFACE INTERRUPT
TRANSFER ERROR INTERRUPT

*****TUE, FEB 5, 1980, 9:38 AM*****MAG TAPE
LOGICAL DEVICE 7 DRT 6 UNIT 0 STATUS= X100552
FUNCTION IS WRITE
COMPLETION STATUS: <SUCESSFUL> WITH TAPE RETRY
MISC DATA =X100001, #P1=X000000 , #P2=X000014
NO TRANSFER IN PROGRESS
READY INTERRUPT
NOT READY INTERRUPT
CLEAR INTERFACE INTERRUPT
TRANSFER ERROR INTERRUPT

*****TUE, FEB 5, 1980, 9:41 AM*****MAG TAPE
LOGICAL DEVICE 7 DRT 6 UNIT 0 STATUS= X100512
FUNCTION IS READ
COMPLETION STATUS: <IRRECOVERABLE ERROR> TAPE PARITY ERROR
MISC DATA =X100107, #P1=X000000 , #P2=X000000
NO TRANSFER IN PROGRESS
READY INTERRUPT
CLEAR INTERFACE INTERRUPT
TRANSFER ERROR INTERRUPT

! SUMMARY OF I/O ERRORS !

*****MAG TAPE

LOGICAL DEVICE 7 DRT 6 UNIT 0
HAD 3 READ AND 116 WRITE ERRORS. TOTAL ERRORS =119
THERE WERE 2 I/O REQUEST ABORTED EXTERNALLY
THERE WERE 117 NO TRANSFER IN PROGRESS
THERE WERE 2 COMMAND SENT 3000 -> DEVICE
THERE WERE 2 LINE READY INTERRUPT
THERE WERE 117 READY INTERRUPT
THERE WERE 114 NOT READY INTERRUPT
THERE WERE 115 CLEAR INTERFACE INTERRUPT
THERE WERE 115 TRANSFER ERROR INTERRUPT
THERE WERE 2 READY

*****MAG TAPE

LOGICAL DEVICE 8 DRT 6 UNIT 1
HAD 8 READ AND 18 WRITE ERRORS. TOTAL ERRORS =27
THERE WERE 2 I/O REQUEST ABORTED EXTERNALLY
THERE WERE 1 SYSTEM BUFFER USED
THERE WERE 2 NO TRANSFER IN PROGRESS
THERE WERE 25 BYTE SENT 3000 -> DEVICE
THERE WERE 20 READY INTERRUPT
THERE WERE 18 NOT READY INTERRUPT
THERE WERE 22 CLEAR INTERFACE INTERRUPT
THERE WERE 1 I/O SYSTEM INTERRUPT
THERE WERE 24 TRANSFER ERROR INTERRUPT
THERE WERE 1 READY
THERE WERE 2 WATCHDOG TIMER INTERRUPT

*****TERMINAL

LOGICAL DEVICE 32 DRT 7 UNIT 12
HAD 1 READ AND 0 WRITE ERRORS. TOTAL ERRORS =1
THERE WERE 1 REQUEST COMPLETE
THERE WERE 1 I/O REQUEST ABORTED BY POWER FAIL
THERE WERE 1 RECEIVE CHARACTER MODE

MEMLOGAN / MEMTIMER

DESCRIPTION:

Allows detecting memory problems before they occur.

Reference
System Utilities Manual
(30000-90044)

MEMLOGAN

Parm =

MENTIMER

Parm =

MEMLOGAN / MEMTIMER

OPERATION:

:RUN MEMLOGAN.PUB.SYS

MEMLOGAN 800.00 (C) HEWLETT-PACKARD CO., 1978

LOGGING STARTED - DATE: 1/ 7/79 TIME: 10:27
FIRST ERROR LOGGED - DATE: 1/ 7/79 TIME: 10:27
LAST ERROR LOGGED - DATE: 2/ 6/80 TIME: 13:04
LAST LOG UPDATE - DATE: 2/ 6/80 TIME: 13:04
TIMING INTERVAL - 1:00:00

I ADDRESS		I ERROR TYPE		I ERROR I	
I CONTROLLER	I BOARD I ROW	I TYPE	BIT	CHIP	I COUNT I
I CONTROLLER A	I 0 I 0	I DATA	3	U49	I 1 I
I	I I 0	I MULTIPLE BIT ERROR			I 1 I
I	I I 1	I DATA	2	U38	I 1 I
I	I I 1	I MULTIPLE BIT ERROR			I 1 I
I	I 1 I 1	I DATA	2	U38	I 398 I

END OF PROGRAM

:RUN MEMLOGAN.PUB.SYS;PARM=1

MEMLOGAN B00.00 (C) HEWLETT-PACKARD CO., 1978

LOGGING STARTED - DATE: 1/ 7/79 TIME: 10:27
 FIRST ERROR LOGGED - DATE: 1/ 7/79 TIME: 10:27
 LAST ERROR LOGGED - DATE: 2/ 6/80 TIME: 13:04
 LAST LOG UPDATE - DATE: 2/ 6/80 TIME: 13:04
 TIMING INTERVAL - 1:00:00

I ADDRESS		I ERROR TYPE			I ERROR I	
I CONTROLLER	I BOARD	I ROW	I TYPE	BIT	CHIP	I COUNT I
I CONTROLLER A	I 0	I 0	I DATA	3	U49	I 1 I
I	I	I 0	I MULTIPLE BIT ERROR			I 1 I
I	I	I 1	I DATA	2	U38	I 1 I
I	I	I 1	I MULTIPLE BIT ERROR			I 1 I
I	I 1	I 1	I DATA	2	U38	I 398 I

END OF PROGRAM

:REDO

RUN MEMLOGAN.PUB.SYS;PARM=1

MEMLOGAN B00.00 (C) HEWLETT-PACKARD CO., 1978

* NO ENTRIES IN MEMLOG FILE *

END OF PROGRAM

:RUN MENTIMER.PUB.SYS:PARM=2

MENTIMER 800.00 (C) HEWLETT-PACKARD CO., 1976

END OF PROGRAM

:RUN MEMLOGAN.PUB.SYS

MEMLOGAN 800.00 (C) HEWLETT-PACKARD CO., 1978

LOGGING STARTED - DATE: 2/ 6/80 TIME: 13:31
FIRST ERROR LOGGED - DATE: 2/ 6/80 TIME: 13:31
LAST ERROR LOGGED - DATE: 2/ 6/80 TIME: 13:31
LAST LOG UPDATE - DATE: 2/ 6/80 TIME: 13:31
TIMING INTERVAL - 0:00:02

I	ADDRESS			I	ERROR TYPE			I	ERROR I			

I	CONTROLLER	I	BOARD	I	ROW	I	TYPE	BIT	CHIP	I	COUNT	I

I	CONTROLLER A	I	1	I	1	I	DATA	2	U38	I	1	I

END OF PROGRAM

RUN MEMLOGAN.PUB.SYS

MEMLOGAN 800.00 (C) HEWLETT-PACKARD CO., 1978

LOGGING STARTED - DATE: 2/ 6/80 TIME: 13:31
FIRST ERROR LOGGED - DATE: 2/ 6/80 TIME: 13:31
LAST ERROR LOGGED - DATE: 2/ 6/80 TIME: 13:32
LAST LOG UPDATE - DATE: 2/ 6/80 TIME: 13:32
TIMING INTERVAL - 0:00:02

I	ADDRESS			I	ERROR TYPE			I	ERROR I			

I	CONTROLLER	I	BOARD	I	ROW	I	TYPE	BIT	CHIP	I	COUNT	I

I	CONTROLLER A	I	1	I	1	I	DATA	2	U38	I	2	I

END OF PROGRAM

:RUN MENTIMER.PUB.SYS;PARM=3600

MENTIMER 800.00 (C) HEWLETT-PACKARD CO., 1976

END OF PROGRAM

RUN MEMLOGAN.PUB.SYS

MEMLOGAN 800.00 (C) HEWLETT-PACKARD CO., 1978

LOGGING STARTED - DATE: 2/ 6/80 TIME: 13:31
 FIRST ERROR LOGGED - DATE: 2/ 6/80 TIME: 13:31
 LAST ERROR LOGGED - DATE: 2/ 6/80 TIME: 13:35
 LAST LOG UPDATE - DATE: 2/ 6/80 TIME: 13:35
 TIMING INTERVAL - 1:00:00

I ADDRESS		I ERROR TYPE		I ERROR I	
I CONTROLLER	I BOARD I ROW I TYPE BIT CHIP	I COUNT	I		
I CONTROLLER A	I 1 I 1 I DATA 2 U38	I 6	I		

END OF PROGRAM

TUNER3

DESCRIPTION:

Displays useage of system tables

CONSIDERATIONS:

It is unsupported

TUNER3 (cont)

OPERATION:

:RUN TUNER3

TUNER2-VERSION 01/19/79

THE MAX IN USE IS SINCE THE LAST XXXXSTART
EXCEPT FOR SPOOL SPACE,VIRTUAL MEMORY,CST
BLOCK TABLE,JOB PROCESS COUNT TABLE AND
JOB/SESSION COUNT WHICH ARE MAX SINCE THIS
PROGRAM STARTED.

THE MAX IN USE FOR VIRTUAL MEMORY AND XCST
MAY REPRESENT ENTRIES CONSUMED BY FRAGMENTATION.
THE VALUE INSIDE () REPRESENTS THE PRIMARY AREA.

AN * BY A TABLE NAME INDICATES THIS TABLE HAS
REACHED A LEVEL OF CONCERN WHERE PERHAPS THE
SIZE OF THE TABLE SHOULD BE INCREASED.
CONTINUOUS PRINTING OR PRINT ONLY ON CONTROL Y?
WHICH DO YOU WISH?(0=CONTINUOUS,1=CONTROL Y)>

TABLE	CONFIG.	MX USED	MX OBSRVD	CUR USED	MAX %	CUR %	SIZE/WDS
DST	1024	183	80	80	17.9	7.8	4
CST	192	132	119	119	68.8	62.0	4
KCST	512	140	19	19	27.3	3.7	4
PCB	96	45	18	18	46.9	18.8	16
IOQ	255 (249)	28	1	1	11.0	.4	11
TBUF	96 (84)	17	0	0	17.7	00.0	16
SRUF	12 (10)	10	0	0	83.3	00.0	129
TRL	48	7	4	4	14.6	8.3	4
MAH	512	36	0	0	7.0	00.0	5
ICS	512	181			35.4		1
CSTRK	28	9	9	9	32.1	32.1	1
WSTB1	31	12	12	12	38.7	38.7	16
WSTB2	48	4	4	4	8.3	8.3	16
JPCNT	26	2	2	2	7.7	7.7	1
VHEM	32000	1152	1148	1148	3.6	3.6	SECTORS
SPOOL	128000		0	0	00.0	00.0	SECTORS
AVG SIZE OF DST=903		LOW=903	HIGH=903	LARGEST=4100	SMALLEST=12		
AVG SIZE OF CST=2617		LOW=2617	HIGH=2617	LARGEST=7464	SMALLEST=20		
AVG SIZE OF KCST=1615		LOW=1615	HIGH=1615	LARGEST=4096	SMALLEST=248		
CURRENT # SESSIONS=2		# JOBS=0	MAX # OF SESSIONS=2		# JOBS=0		
TIME (IN SECONDS) SINCE START=0		START: 12:21:39		CURRENT: 12:21:47			

PSCREEN

DESCRIPTION:

Transfers the contents of the screen and memory of a 264x terminal to the LP or a disc file.

CONSIDERATIONS:

Disc file is called LIST and if one exists it can be written.

The file list is in EDITOR format.

You can ACC=APPEND

It is unsupported

PSCREEN (cont)

OPERATION:

:LISTF

FILENAME

DIRPUR3	FLUSHER	FLUTIL3	GETFILE	LIST	LIST1
LIST2	LISTCRET				

:PURGE LIST

:PURGE LIST1

:PURGEGROUP EDC

GROUP EDC TO BE PURGED? (YES/NO)Y

EXPECTED RESPONSE OF "YES" OR "NO". (CIWARN 985)

GROUP EDC TO BE PURGED? (YES/NO)YES

IN USE: CAN'T BE PURGED. (CIERR 916)

:LISTF

NO FILES FOUND IN FILE-SET (CIWARN 431)

:BUILD LIST;REC=-80,16,F,ASCII

:FILE LIST;ACC=APPEND

:RUN PSCREEN.PUH.UTILS

**SCREEN CONTENTS 8: WED, FEB 6, 1980, 11:38 AM

SDUPII

DESCRIPTION:

Creates standalone tapes

CONSIDERATIONS:

when you need it you should have used it.

SDUPII

:RUN SDUPII

3000 DIAGNOSTIC UTILITY PROGRAM(SDUP)D417A.01.03
(C) COPYRIGHT HEWLETT-PACKARD COMPANY 1976

DO YOU WANT INSTRUCTIONS?
ANSWER 'YES' OR 'NO'

Y
THE DIAGNOSTIC UTILITY PROGRAM(SDUP30) IS A PROGRAM
THAT CONVERTS DIAGNOSTIC PROGRAM FILES TO A COLD LOADABLE TAPE
THIS TAPE WILL BE USED TO COLD LOAD STAND-ALONE DIAGNOSTICS.
THERE ARE 2 TYPES OF STAND-ALONE DIAGNOSTICS

TYPE 1 IS A CPU DIAGNOSTIC WHICH HAS ONLY ONE SEGMENT AND
USES A SIMPLIFIED LOADER

TYPE 2 IS A STAND-ALONE DIAGNOSTIC WHICH MAY HAVE MORE
THAN ONE SEGMENT AND WILL BE LOADED WITH A RELUCATING LOADER.
THIS TYPE DIAGNOSTIC MAY ALSO HAVE DIALOGUE TO THE SYSTEM CONSOLE.

THE PROGRAM WILL REQUEST DIAGNOSTIC TYPE
REPLY '1' FOR CPU OR '2' FOR STANDALONE
THE PROGRAM WILL REQUEST THE NAME OF THE PROGRAM FILE
REPLY WITH THE NAME OF THE PROGRAM FILE
TYPE ANY CHARACTER TO CONTINUE

K

IF YOU WANT TO USE THE PRECONFIGURATION OPTIONS
TYPE A ';' AFTER THE PROGRAM NAME
A '/' TERMINATES THE PROGRAM INPUT PHASE

INPUT DIAGNOSTIC TYPE

2

PROGRAM NAME?

SADUTILG.UTIL.SUPP

PROGRAM NAME?

//

INPUT DRT OF THE LINE PRINTER

A CARRIAGE RETURN ASSUMES NO LINE PRINTER

MOUNT TAPE ON TAPE UNIT

TAPE REQUEST HAS BEEN ISSUED
OPERATOR MUST NOW REPLY TO REQUEST

01 SADUTILG.UTIL.SUPP

LOGICAL SEG	PHYSICAL SEG	PB
000005	000003	010000
000000	000004	023661
000001	000005	031202
000002	000006	035647
000003	000007	044664
000004	000010	051041
000006	000011	051716

END OF PROGRAM

SECTOR

DESCRIPTION:

Will convert logical sector address to Cyl., Head,
Sector for any HP supported disc.

CONSIDERATIONS:

It is unsupported

F = SECTOR

===== SECTOR								SECTOR.....N.
051505	041524	047522	020040	009405	047245			SECTOR..UTIL....
051505	041524	047522	020040	052524	044514	020040	020040	SUPP....TEST....
051525	050120	020040	020040	052105	051524	020040	020040	.....
020040	020040	020040	020040	020202	004040	000001	11/005	.....
120044	120044	002005	000000	004400	000000	000000	000013	.....
000000	000000	005432	020326	002001	177400	000200	000400	.....
000014	000014	000000	000013	000405	047245	000000	000000	.....N.....
000000	000000	003000	000000	000000	000000	000000	000000	.....
000000	000000	000000	000000	000000	000000	000000	000000	.....
000000	000000	000000	000000	000000	000000	000000	000000	.....
000000	000000	000000	000000	000000	000000	000000	000000	.....
000000	000000	000000	000000	000000	000000	000000	000000	.....
000000	000000	000000	000000	000000	000000	000000	000000	.....
000000	000000	000000	000000	000000	000000	000000	000000	.....
000000	000000	000000	000000	000000	000000	000000	000000	.....
000000	000000	000000	000000	000000	000000	000000	000000	.....
000000	000000	000000	000000	006440	007006	120044	000000	.....
000000	000000	000000	000000	000000	000000	000000	000000	.....
000000	000000	000000	000000	042111	051503	020000	000000	.....DISC.....

SECTOR (cont)

OPERATION:

:RUN SECTOR

SECTOR-VERSION 04/27/78

THIS PROGRAM CONVERTS SECTOR ADDRESS TO CYL,HEAD,SECTOR

DISK	TYPE	SUBTYPE
2660	1	1,2,3
7900	0	1,2
2888	0	3
7905	0	4,5,6,7
7920	0	8
7925	0	9

TYPE? 0

SUBTYPE? 9

ENTER PAR1 5

ENTER PAR2 47245

CYL=603 HEAD=7 SECTOR=37

ENTER PAR1

DISK	TYPE	SUBTYPE
2660	1	1,2,3
7900	0	1,2
2888	0	3
7905	0	4,5,6,7
7920	0	8
7925	0	9

TYPE?

END OF PROGRAM

TAPETEST

DESCRIPTION:

THIS PROGRAM CERTIFIES MAG TAPES AND MAY BE USED TO SET UP AND CHECK OUT TAPE DRIVES. IT WRITES RECORDS OF 4095 WORDS IN LENGTH, EACH WORD HAS ALL BITS SET TO ONES. AFTER EACH WRITE A CHECK IS MADE TO DETERMINE THE NUMBER OF RETRYS THE SYSTEM HAD TO MAKE IN ORDER TO WRITE THE RECORD. ALL RETRYS AND TAPE ERRORS ARE REPORTED ALONG WITH THE RECORD NUMBER AND POSITION ON THE TAPE (IN FEET).

TAPETEST (cont)

OPERATION:

:RUN TAPETEST

***** TAPETEST <2.0> *****

MOUNT THE TAPE TO BE TESTED FOR FILE 'TESTTAPE'
YOU MAY TYPE CTRL-G-Y AT ANY TIME TO SUSPEND
THE PROGRAM AND CONTROL THE TAPE
WHAT DEVICE IS THE TESTTAPE ON ? 7
1600 BPI TAPE DRIVE

ENTER ACTION(WRITE,REWIND,EXIT,PAUSE,NOPAUSE,TAPE)? WRITE
WRITE RETRY ON RECORD #433 214 FEET
END OF TAPE
CERTIFIED 214 FEET WITH 1 ERRORS
ENTER ACTION(WRITE,REWIND,EXIT,PAUSE,NOPAUSE,TAPE)? EXIT
***** END OF TAPETEST *****

END OF PROGRAM

:RUN TAPETEST

***** TAPETEST <2.0> *****

MOUNT THE TAPE TO BE TESTED FOR FILE 'TESTTAPE'

YOU MAY TYPE CONTROL-Y AT ANY TIME TO SUSPEND *

THE PROGRAM AND CONTROL THE TAPE

WHAT DEVICE IS THE TESTTAPE ON ? 8

1600 BPI TAPE DRIVE

ENTER ACTION(WRITE,REWIND,EXIT,PAUSE,NOPAUSE,TAPE)? WRITE

WRITE RETRY ON RECORD #333 165 FEET

WRITE RETRY ON RECORD #477 236 FEET

WRITE RETRY ON RECORD #568 281 FEET

WRITE RETRY ON RECORD #612 302 FEET

WRITE RETRY ON RECORD #1843 911 FEET

WRITE RETRY ON RECORD #1917 947 FEET

WRITE RETRY ON RECORD #1960 969 FEET

WRITE RETRY ON RECORD #2429 1200 FEET

END OF TAPE

CERTIFIED 1201 FEET WITH 8 ERRORS

ENTER ACTION(WRITE,REWIND,EXIT,PAUSE,NOPAUSE,TAPE)? EXIT

***** END OF TAPETEST *****

END OF PROGRAM

#GUIDE

RUN TAPETEST (NO FILE EQUATIONS ARE NEEDED)

IF RUN FROM A SESSION:

THE PROGRAM WILL ASK FOR THE DEVICE NAME OF THE MAG TAPE DRIVE TO BE USED. REPLY WITH A LOGICAL DEVICE NUMBER, DEVICE CLASS NAME, OR 'TAPE'.

THE PROGRAM WILL OPEN THE TAPE FILE, VERIFY THAT IT IS A MAG TAPE, LIST THE TAPE DENSITY, THEN ASK FOR A COMMAND.

VALID COMMANDS ARE:

WRITE.....CERTIFY THE TAPE BY WRITING ON IT.

REWIND.....REWIND THE CURRENT TAPE.

PAUSE.....PAUSE ON ANY ERROR DETECTED.

NOPAUSE.....DON'T PAUSE ON ERRORS.

TAPE.....SELECT ANOTHER TAPE DRIVE.

EXIT.....TERMINATE THE PROGRAM.

TYPING A CONTROL-Y WHILE THE PROGRAM IS CERTIFYING WILL RETURN TO THE COMMAND INPUT POINT AND ACCEPT A NEW COMMAND.

AT THE END OF THE TAPE THE TAPE IS REWOUND, THE TOTAL LENGTH OF THE TAPE IS LISTED AND THE PROGRAM ASKS FOR A NEW COMMAND.

TAPESCAN

DESCRIPTION:

Reads a mag tape and reports any parity errors found. It will also list the number of records in each file and the length of each record.

CONSIDERATION

It is unsupported

TAPESCAN (CONT)

OPERATION

:RUN TAPESCAN

MAG TAPE ANALYZER <3.0>

ENTER THE LISTING DEVICE (* FOR \$STDLIST) LP

WHAT DEVICE IS YOUR TAPE ON? 7

DO YOU WANT ALL RECORD LENGTHS LISTED?

Y

DOUBLE END OF FILE ENCOUNTERED
CONTINUE?

Y

PARITY ERROR IN RECORD 1
DOUBLE END OF FILE ENCOUNTERED
CONTINUE?

N

END OF PROGRAM

MAG TAPE ANALYZER <3.0>

TAPE DENSITY 1600 BPI

RECNUM RECORD LENGTH IN WORD

END OF FILE 1.....0 RECORDS WITH 0 PARITYS

RECNUM RECORD LENGTH IN WORD

END OF FILE 2.....0 RECORDS WITH 0 PARITYS
DOUBLE END OF FILE ENCOUNTERED

RECNUM RECORD LENGTH IN WORD

1: 40
END OF FILE 3.....1 RECORDS WITH 0 PARITYS
SMALLEST RECORD NUMBER=1 LENGTH=40
 NUMBER=1 LENGTH=401: PARITY 1664
END OF FILE 18.....2 RECORDS WITH 1 PARITYS
SMALLEST RECORD NUMBER=2 LENGTH=1664
LONGEST RECORD NUMBER=2 LENGTH=1664

RECNUM RECORD LENGTH IN WORD

1: 1024
END OF FILE 19.....1 RECORDS WITH 0 PARITYS
SMALLEST RECORD NUMBER=1 LENGTH=1024
LONGEST RECORD NUMBER=1 LENGTH=1024

MAG TAPE ANALYZER <3.0>

TAPE DENSITY 1600 RPI

END OF FILE 1.....	0 RECORDS WITH	0 PARITYS
END OF FILE 2.....	0 RECORDS WITH	0 PARITYS
DOUBLE END OF FILE ENCOUNTERED		
END OF FILE 3.....	1 RECORDS WITH	0 PARITYS
SMALLEST RECORD	NUMBER=1	LENGTH=40
LONGEST RECORD	NUMBER=1	LENGTH=40
END OF FILE 4.....	1 RECORDS WITH	0 PARITYS
SMALLEST RECORD	NUMBER=1	LENGTH=684
LONGEST RECORD	NUMBER=1	LENGTH=684
END OF FILE 5.....	2 RECORDS WITH	0 PARITYS
SMALLEST RECORD	NUMBER=2	LENGTH=2304
LONGEST RECORD	NUMBER=1	LENGTH=4096
END OF FILE 6.....	2 RECORDS WITH	0 PARITYS
SMALLEST RECORD	NUMBER=2	LENGTH=640
LONGEST RECORD	NUMBER=1	LENGTH=4096
END OF FILE 7.....	3 RECORDS WITH	0 PARITYS
SMALLEST RECORD	NUMBER=3	LENGTH=2560
LONGEST RECORD	NUMBER=1	LENGTH=4096
END OF FILE 8.....	1 RECORDS WITH	0 PARITYS
SMALLEST RECORD	NUMBER=1	LENGTH=2688
LONGEST RECORD	NUMBER=1	LENGTH=2688
END OF FILE 9.....	1 RECORDS WITH	0 PARITYS
SMALLEST RECORD	NUMBER=1	LENGTH=1280
LONGEST RECORD	NUMBER=1	LENGTH=1280
END OF FILE 10.....		

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LONGEST RECORD
END OF FILE
SMALLEST RECORD
LONGEST RECORD      NO.
END OF FILE 15.....3
SMALLEST RECORD      NUMBER=5
LONGEST RECORD      NUMBER=1
END OF FILE 16.....2 RECORDS WITH
SMALLEST RECORD      NUMBER=2      LENGTH=2686
LONGEST RECORD      NUMBER=1      LENGTH=4096
END OF FILE 17.....1 RECORDS WITH      0 PARITYS
SMALLEST RECORD      NUMBER=1      LENGTH=896
LONGEST RECORD      NUMBER=1      LENGTH=896
END OF FILE 18.....2 RECORDS WITH      1 PARITYS
SMALLEST RECORD      NUMBER=2      LENGTH=1664
RECORD      NUMBER=2      LENGTH=1664
.....1 RECORDS WITH      0 PARITYS
      NUMBER=1      LENGTH=1024
      LENGTH=1024
      0 PARITYS

```

```

LONGEST RECORD      NUMBER=1      LENGTH=1792
END OF FILE 61.....2 RECORDS WITH      0 PARITYS
SMALLEST RECORD      NUMBER=2      LENGTH=1152
LONGEST RECORD      NUMBER=1      LENGTH=4096
END OF FILE 62.....1 RECORDS WITH      0 PARITYS
SMALLEST RECORD      NUMBER=1      LENGTH=40
LONGEST RECORD      NUMBER=1      LENGTH=40
END OF FILE 63.....0 RECORDS WITH      0 PARITYS
DOUBLE END OF FILE ENCOUNTERED

```

RECNUM RECORD LENGTH IN WORD

1: 4096 1152
END OF FILE 61.....2 RECORDS WITH 0 PARITYS
SMALLEST RECORD NUMBER=2 LENGTH=1152
LONGEST RECORD NUMBER=1 LENGTH=4096

RECNUM RECORD LENGTH IN WORD

1: 40
END OF FILE 62.....1 RECORDS WITH 0 PARITYS
SMALLEST RECORD NUMBER=1 LENGTH=40
LONGEST RECORD NUMBER=1 LENGTH=40

RECNUM RECORD LENGTH IN WORD

END OF FILE 63.....0 RECORDS WITH 0 PARITYS
DOUBLE END OF FILE ENCOUNTERED

SLEUTH

DESCRIPTION:

Can do any thing to any device

CONSIDERATIONS:

IT is offline

Can do anything to any device

SLEUTH (cont)

OPERATION:

D1 SLEUTH 3000 (HP D411A.01.04)
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> 10 DUMP T

TYPE CODE	CORRESPONDING DEVICE
1	SIO MUX CHANNEL
2	CARD READER
3	SYNC SINGLE LINE
4	HARDWIRE SERIAL
5	2607,2613,2617,2618 LINE PRINTER
6	ASYNC MUX CHANNEL
7	TERMINAL CONTROLLER
8	SYSTEM CLOCK
9	SEL MAINT CARD
10	READER/PUNCH
11	7925 DISC
12	7920 DISC
13	7900 DISC
14	ISS DISC
15	7905 DISC
16	256 TRACK F.H.DISC
17	512 TRACK F.H.DISC
18	800 CPI MAG TAPE
19	1600 CPI MAG TAPE
20	PAPER TAPE READER
21	PAPER TAPE PUNCH
22	PLOTTER
23	2610,2614 LINE PRINTER
24	SPECIAL INTERFACE
25	UNIVERSAL INTERFACE

Prompt
LUN
DRT
Device type
No. of errors
unit
 > 10 DEV 0,4,11,20,0
 > 10 MC 0
 > 20 END
 > 30 RUN
 > 30 DUMP P
 10 MC 0
 20 END
 > 30 10 RC G
 > 10 AUTO
 > 30 DUMP P
 10 RC 0
 20 END
 > 30 RUN
 > 30 20 LOOP 10,200 *← Loop to Line 10 200 times.*
 > 1 AUTO
 > 30 END
 > 40 RUN

```

> 40 DUMP P
10 RC          0
20 LOOP        10,    200,    0,    0
30 END
> 40 EP S
> 10 DUMP F
> 10 DUMP L
LUN#  DEV#  TYPE  ERR#  UNIT#  BAUD
0      4     11    20     0      0
0      0     0     0     0      0
0      0     0     0     0      0
0      0     0     0     0      0
0      0     0     0     0      0
0      0     0     0     0      0

```


> 10 DB EE,20,%,125252

> 10 DUMP B.EE

100060:	125252	125252	125252	125252	125252	125252	125252	125252
100070:	125252	125252	125252	125252	125252	125252	125252	125252
100100:	125252	125252	125252	125252				

```
> 40 EP
> 10 DB AA,100,W
> 50(%15252).50(3030)
> 10 DUMP B,AA
```

75162:	15252	15252	15252	15252	15252	15252	15252	15252
75172:	15252	15252	15252	15252	15252	15252	15252	15252
75202:	15252	15252	15252	15252	15252	15252	15252	15252
75212:	15252	15252	15252	15252	15252	15252	15252	15252
75222:	15252	15252	15252	15252	15252	15252	15252	15252
75232:	15252	15252	15252	15252	15252	15252	15252	15252
75242:	15252	15252	5726	5726	5726	5726	5726	5726
75252:	5726	5726	5726	5726	5726	5726	5726	5726
75262:	5726	5726	5726	5726	5726	5726	5726	5726
75272:	5726	5726	5726	5726	5726	5726	5726	5726
75302:	5726	5726	5726	5726	5726	5726	5726	5726
75312:	5726	5726	5726	5726	5726	5726	5726	5726
75322:	5726	5726	5726	5726				

> 10 DB BB,120.S
> THIS IS A SAMPLE

> 10 DUMP B.BB

75326:	52110	44523	20111	51440	40440	51501	46520	46105
75336:	52110	44523	20111	51440	40440	51501	46520	46105
75346:	52110	44523	20111	51440	40440	51501	46520	46105
75356:	52110	44523	20111	51440	40440	51501	46520	46105
75366:	52110	44523	20111	51440	40440	51501	46520	46105
75376:	52110	44523	20111	51440	40440	51501	46520	46105
75406:	52110	44523	20111	51440	40440	51501	46520	46105
75416:	52110	44523	20111	51440	40440	51501	46520	46105
75426:	52110	44523	20111	51440	40440	51501	46520	46105
75436:	52110	44523	20111	51440	40440	51501	46520	46105
75446:	52110	44523	20111	51440	40440	51501	46520	46105
75456:	52110	44523	20111	51440	40440	51501	46520	46105
75466:	52110	44523	20111	51440	40440	51501	46520	46105
75476:	52110	44523	20111	51440	40440	51501	46520	46105
75506:	52110	44523	20111	51440	40440	51501	46520	46105

> 10 DB CC.1000,R

> 10 DUMP B,CC

75516:	137764	174505	65747	57161	41605	6655	120775	136527
75526:	172013	60563	44611	14665	135015	166567	52113	27471
75536:	162425	41607	6661	121005	136547	172053	60663	45011
75546:	15265	136015	170567	56113	37471	2425	110315	115367
75556:	127513	153763	24503	154451	25657	157001	32537	170541
75566:	56037	37341	2145	107555	114067	124713	146363	11503
75576:	126451	151657	20273	144031	4617	114701	126337	151433
75606:	17623	142711	2357	110201	115137	127033	152623	22203
75616:	147651	14257	134001	164537	46033	17331	142125	1007
75626:	105261	107277	113333	123423	143603	4143	113551	124057
75636:	144673	6323	120111	134757	166473	51723	27111	161465
75646:	37707	3061	111405	117547	134053	164663	46303	20051
75656:	143365	3507	112461	121677	140333	175423	67603	62651
75666:	50765	25215	155675	30327	164121	44777	15241	135745
75676:	170447	55653	36771	1225	105715	110367	115513	127763
75706:	154503	25743	157151	33057	171401	57537	42541	105
75716:	124555	146067	10713	125071	146717	12277		
75726:	27173	161631	40217	270				
75736:	106011	***						

> DB DD
> DB DD.250,B
> 100(%123),100(%321),50(%177)

> 10 DUMP B,DD

77466:	51523	51523	51523	51523	51523	51523	51523	51523
77476:	51523	51523	51523	51523	51523	51523	51523	51523
77506:	51523	51523	51523	51523	51523	51523	51523	51523
77516:	51523	51523	51523	51523	51523	51523	51523	51523
77526:	51523	51523	51523	51523	51523	51523	51523	51523
77536:	51523	51523	51523	51523	51523	51523	51523	51523
77546:	51523	51523	150721	150721	150721	150721	150721	150721
77556:	150721	150721	150721	150721	150721	150721	150721	150721
77566:	150721	150721	150721	150721	150721	150721	150721	150721
77576:	150721	150721	150721	150721	150721	150721	150721	150721
77606:	150721	150721	150721	150721	150721	150721	150721	150721
77616:	150721	150721	150721	150721	150721	150721	150721	150721
77626:	150721	150721	150721	150721	77577	77577	77577	77577
77636:	77577	77577	77577	77577	77577	77577	77577	77577
77646:	77577	77577	77577	77577	77577	77577	77577	77577
77656:	77577	77577	77577	77577	77577	51523	51523	51523
77666:	51523	51523	51523	51523	51523	51523	51523	51523
77676:	51523	51523	51523	51523	51523	51523	51523	51523
77706:	51523	51523	51523	51523	51523	51523	51523	51523
77716:	51523	51523	51523	51523	51523	51523	51523	51523

```

> 10 DB AA,128,0
> 10 SEEK 0,0,0,0  ——— SEEK LUN, CYL, HEAD, SECTOR
> 20 RDI 0,AA
> 30 END
> 40 RUN
> 40 DUMP B
    DB      AA,      128

```

```

> 40 DUMP B,AA
75162: 40000      27  77746  2040      0  2040      11  20352
75172: 31460  30060  46510  33471  31065  52460      0      0
75202: 0      0      0      0      0      0      0      0
75212: 0      0      0      0      0      0      0      0
75222: 0      0      0      0      0      0      0      0
75232: 0      0      0      0      0      0      0      0
75242: 0      0      0      0      0      0      0      0
75252: 0      0      0      0      0      0      0      0
75262: 0      0      0      0      0      0      0      0
75272: 0      0      0      0      0      0      0      0
75302: 0      0      0      0      0      0      0      0
75312: 0      0      0      0      0      0      0      0
75322: 0      0      0      0      0      0      0      0
75332: 0      0      0      0      0      0      0      0
75342: 0      0      0      0      0      0      0      0
75352: 0      0      0      0      0      0      0      0

```

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> 10 DEV 0,4,11,20,0
 > 10 DB AA,128,0
 > 10 SEEK 0,0,0,1
 > 20 RDI 0,AA
 > 30 END
 > 40 RUN
 > 40 DUMP B,AA

75162:	7	13472	22016	23256	23322	41222	62026	62632
75172:	0	0	0	0	0	0	0	0
75202:	0	0	0	0	0	0	0	0
75212:	0	0	0	C	0	0	0	C
75222:	0	0	0	0	0	0	0	0
75232:	0	0	0	C	0	0	0	C
75242:	0	0	0	0	0	0	0	0
75252:	0	0	0	C	0	0	0	C
75262:	0	0	0	0	0	0	0	0
75272:	0	0	0	C	0	0	0	C
75302:	0	0	0	0	0	0	0	0
75312:	0	0	0	C	0	0	0	C
75322:	0	0	0	0	0	0	0	0
75332:	0	0	0	C	0	0	0	C
75342:	0	0	0	0	0	0	0	0
75352:	0	0	0	C	0	0	16247	1457

```

> 10 SEEK 0,0,1,1
> 1AUTO
> 40 DUMP P
  10 SEEK      0,      0,      1,      1
  20 RDI        0,      AA,     %2
  30 END
> 40 RUN
> 40 DUMP B.AA
75162: 110143      4      17      27  10743      0  20040  20040
75172: 20040  20040  40503  45505  51115  40516  2366      7
75202: 44120  41517  51120  20040  1461      7  51505  51126
75212: 44503  42440  1634      1  51517  52524  44102  40531
75222: 1562      10      10      10      10      10      10      10
75232: 10      10      10      10      10      10      10      10
75242: 10      10      10      10      10      10      10      10
75252: 10      10      10      10      10      10      10      10
75262: 10      10      10      10      10      10      10      10
75272: 10      10      10      10      10      10      10      10
75302: 10      10      10      10      10      10      10      10
75312: 10      10      10      10      10      10      10      10
75322: 10      10      10      10      10      10      10      10
75332: 10      10      10      10      10      10      10      10
75342: 10      10      10      10      10      10      10      10
75352: 10      10      10      10      10      10      10      10

```



```
> 10 EP
> 10 DEV 0,4,11,20,0
> 10 DB AA,128,0
> 10 PUT "CYL"
> 20 GET C
> 30 PUT "HEAD"
> 40 GET H
> 50 PUT "SECTOR"
> 60 GET S
> 70 SEEK 0,C,H,S
> 80 RDI 0,AA
> 90 END
>100 RUN
```

CYL

3

HEAD

4

SECTOR

12

```
>100 DUMP B,AA
```

75162:	0	0	0	0	0	0	0	0
75172:	0	0	0	0	0	0	0	0
75202:	0	0	0	0	0	0	0	0
75212:	0	0	C	0	0	0	C	0
75222:	0	0	0	0	0	0	0	0
75232:	0	0	C	0	0	0	C	0
75242:	0	0	0	0	0	0	0	0
75252:	0	0	C	0	0	0	C	0
75262:	0	0	0	C	0	0	0	0
75272:	0	0	C	0	0	0	C	0
75302:	0	0	0	0	0	0	0	0
75312:	0	0	C	0	0	0	C	0
75322:	0	0	0	0	0	0	0	0
75332:	0	0	C	0	0	0	C	0
75342:	0	0	0	0	0	0	0	0
75352:	0	0	C	0	0	0	C	0

>100 RUN

CYL

0

HEAD

1

SECTOR

1

>100 DUMP B.AA

75162:	110143	4	17	27	10743	0	20040	20040
75172:	20040	20040	40503	45505	51115	40516	2366	7
75202:	44120	41517	51120	20040	1461	7	51505	51126
75212:	44503	42440	1634	1	51517	52524	44102	40531
75222:	1562	10	10	10	10	10	10	10
75232:	10	10	10	10	10	10	10	10
75242:	10	10	10	10	10	10	10	10
75252:	10	10	10	10	10	10	10	10
75262:	10	10	10	10	10	10	10	10
75272:	10	10	10	10	10	10	10	10
75302:	10	10	10	10	10	10	10	10
75312:	10	10	10	10	10	10	10	10
75322:	10	10	10	10	10	10	10	10
75332:	10	10	10	10	10	10	10	10
75342:	10	10	10	10	10	10	10	10
75352:	10	10	10	10	10	10	10	10

```
>100 EP S
> 10 DUMP P
> 10 PUT "BEGIN"
> 20 GET C
> 30 PUT "END"
> 40 GET E
> 50 FOR I = C TO E
> 60 SEEK 0,C,0,0
> 70 RDI 0,AA
> 80 NEXT I
> 90 END
>100 RUN
BEGIN
2
END
30
>100 RUN
BEGIN
0
END .
500
```

```

>100 DUMP P
  10 PUT BEGIN
  20 GET C
  30 PUT END
  40 GET E
  50 FOR I = C TO E
  60 SEEK 0, C, 0, 0
  70 RDI C, AA, %2
  80 NEXT I
  90 END
>100 50 LET C=C+1
> 80 IF C<E THEN 50
> 85 GOTO 10
> 45 IF E=0 THEN 90
> 1 AUTO
>100 DUMP P
  10 PUT BEGIN
  20 GET C
  30 PUT END
  40 GET E
  45 IF E = 0 THEN 90
  50 LET C=C+1
  60 SEEK 0, C, 0, 0
  70 RDI 0, AA, %2
  80 IF C < E THEN 50
  85 GOTO 10
  90 END
>100 RUN
BEGIN
0
END
100
BEGIN
2
END
4
BEGIN
32
END
0
>100

```

```

10 PUT BEGIN
20 GET C
30 PUT END
40 GET E
45 IF E = 0 THEN 90
50 LET C=C+1
60 SEEK 0, C, 0, 0
70 RDI 0, AA, %2
80 IF C < E THEN 50
85 GOTO 10
90 END
>100 65 LIST C,8
> 66 LIST C,10
> 1 AUTO
>100 DUMP P
10 PUT BEGIN
20 GET C
30 PUT END
40 GET E
45 IF E = 0 THEN 90
50 LET C=C+1
60 SEEK 0, C, 0, 0
65 LIST C, 8
66 LIST C, 10
70 RDI 0, AA, %2
80 IF C < E THEN 50
85 GOTO 10
90 END
>100 RUN

```

BEGIN

1

END

4

%2

2

%3

3

%4

4

BEGIN

1

END

0

>100

```

> EP S
> 10 RS 0
> 20 LOOP 10,500
> 30 END
> 40 RUN
> 40 DUMP P
  10 RS      0
  20 LOOP    10,    500,    0,    0
  30 END
> 40 15 RS 0
> DUMP P
  10 RS      0
  15 RS      0
  20 LOOP    10,    500,    0,    0
  30 END
> REN
> DUMP P
  10 RS      0
  20 RS      0
  30 LOOP    10,    500,    0,    0
  40 END
> 5 RS 0
> DUMP P
  5 RS       0
  10 RS      0
  20 RS      0
  30 LOOP    10,    500,    0,    0
  40 END
> REN
> DUMP P
  10 RS      0
  20 RS      0
  30 RS      0
  40 LOOP    20,    500,    0,    0
  50 END

```

```
> 10 DEV 0,8,23,100,0  
> 10 RP 0,132  
> 20 END  
> 30 RUN  
> 30
```