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NORD SOFTWARE LIBRARY DISKETTE

CONTAINING : TEST PROGRAMS NO 1 FOR  
NORD-10, NORD-12 AND ND-100.

DIRECTORY NAME : ND-10324E  
USER NAME : FLOPPY-USER

FILE 0 : (ND-10324E:FLOPPY-USER)BIG-RAND-1876C:BPUN:1  
FILE 1 : (ND-10324E:FLOPPY-USER)CONFI-INV-1672N:BPUN:1  
FILE 2 : (ND-10324E:FLOPPY-USER)DIMS-1453F:BPUN:1  
FILE 3 : (ND-10324E:FLOPPY-USER)DISC-TEMA-D:BPUN:1  
FILE 4 : (ND-10324E:FLOPPY-USER)EXTEN-ONE-1519B:BPUN:1  
FILE 5 : (ND-10324E:FLOPPY-USER)FLOPP-FORM-1990B:BPUN:1  
FILE 6 : (ND-10324E:FLOPPY-USER)FLOPPY-RAN-1988B:BPUN:1  
FILE 7 : (ND-10324E:FLOPPY-USER)HDLC-MEGALINK-A:BPUN:1  
FILE 8 : (ND-10324E:FLOPPY-USER)LP-TEST-1878C:BPUN:1  
FILE 9 : (ND-10324E:FLOPPY-USER)MEMORY-B:BPUN:1  
FILE 10 : (ND-10324E:FLOPPY-USER)MOVER-1863C:BPUN:1  
FILE 11 : (ND-10324E:FLOPPY-USER)MULTI-1820P:BPUN:1  
FILE 12 : (ND-10324E:FLOPPY-USER)SUPER-RAND-2222C:BPUN:1  
FILE 13 : (ND-10324E:FLOPPY-USER)TANB-MAG-1559G:BPUN:1  
FILE 14 : (ND-10324E:FLOPPY-USER)TERMINAL-ASYNC-B:BPUN:1

26 NOVEMBER 1982

PRODUCT	NAME	ND-NUMBER	CATEGORY
	TEST-PROGRAMS No. 1 for ND-10, ND-12 and ND-100.	10324E	T
		ND-NUMBER FOR SOURCE	
		10327E	
ISSUED	DATE: 1 DEC 1982	BY (INITIALS)	DG
COMPUTERS	X 10 ! X 12 ! 50 ! X 100 !	500 !	
INSTR.SET	48 BIT FL. ! 32 BIT FL. !	COMMERCIAL !	
OP.SYSTEM	SIN III VS ! SIN III RT !	X ALONE !	
DOCUMEN- TATION	NUMBER: ND-30.005.1 TITLE: Testprogram description. Vol. 1.		
PURPOSE	Testprograms for CPU, memory, discs and peripherals.		
PROGRAMS (FILES)	PROG.NUMB NAME	TYPE	CONTAINING
	HAR-1876C BIG-RAND	BPUN	Random test for big disc
	HUT-1672N CONFI-INV	BPUN	Checks configuration
	HUT-1453F DIMS	BPUN	Utility program 10MB disc
	203134D DISC-TEMA	BPUN	Utility program discs
	HAR-1519B EXTEN-ONE	BPUN	Instruction check
	HUT-1990B FLOPP-FORM	BPUN	Discette formatting
	HAR-1988B FLOPPY-RAN	BPUN	Random test floppy disc.
	203447A HDLC-MEGALINK	BPUN	HDLC and MEGALINK testprog
	HAR-1878C LP-TEST	BPUN	Line printer testprogram
	203396B MEMORY	BPUN	Memory test program
	HAR-1863C MOVER	BPUN	Memory testprogram
	HAR-1820P MULTI	BPUN	Memory test program
	HAR-2222C SUPER-RAND	BPUN	Random test for discs
	HAR-1559G TANB-MAG	BPUN	Tandberg tape testprogram
	203198B TERMINAL-ASYNC	BPUN	Terminal testprogram

## LOADING PROCEDURE:

Place floppy in Floppy Disc Controller 1, Unit 0.  
Press Master Clear, Type 1560& and LOAD <program>.

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## BIG-RAND

Date: 78.05.30 (DG) Boundaries: 0<4000  
Start address: 0 Restart address: 20

The test can only be run on Disc System 1. Unit numbers are given as a sequence of numbers (0-7) separated by space, terminated by CR.

Status appears as two words. The first word is the hardware status reg. The upper four bits in the second word have the following meaning:

Bit 12: Seek error.  
Bit 13: Core Address Reg. not as expected.  
Bit 14: Block Address out of range.  
Bit 15: Illegal device operation code.

Bit 12-15 all ones: Controller not active after activate.

## CONFI-INV

Date: 82.09.01 (PVDV) Boundaries: 0<40577  
Start address: 0 Restart address: 20

Includes the TEST-MONITOR-2441F and MON-LIBR-2442F

## DIMS

Date: 81.02.01 (DG) Boundaries: 0<20033  
Start address: 0 Restart address: 20

Includes the TEST-MONITOR-2441C.

## DISC-TEMA

Date: 82.12.01 (DG) Boundaries: 0<55113  
Start address: 0 Restart address: 20

Includes the TEST-MONITOR-2441F and MON-LIBR-2442F.

## EXTEN-ONE

Date: 77.09.15 (PVDV) Boundaries: 0<4065  
Start address: 20 Restart address: 20

Runs ONE-CHECK on levels 1-15.

Location 0432 contains SAT 1 (171001)

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Is wanted on the Punch, change to 171003.  
Is wanted on the Line-Printer, " 171005.  
Is wanted on the Terminal 2, " 171007.

FLOPP-FORM Date: 82.01.15 (SUP) Boundaries: 0<5042  
Start address: 20 Restart address: 20

FLOPPY-RAN Date: 82.01.15 (SUP) Boundaries: 0<10600  
Start address: 0 Restart address: 20

HDLC-MEGALINK Date: 82.09.01 (SUP) Boundaries: 0<31756  
Start address: 0 Restart address: 20

Includes the TEST-MONITOR-2441F and MON-LIBR-2442F.

LP-TEST Date: 82.01.15 (SUP) Boundaries: 0<21322  
Start address: 0 Restart address: 20

Includes the TEST-MONITOR-2441E.

MEMORY Date: 82.09.01 (PVDV) Boundaries: 0<41233  
Start address: 0 Restart address: 20

Includes the TEST-MONITOR-1441F and MON-LIBR-2442F.

MOVER Date: 77.04.29 (PVDV) Boundaries: 0<2737  
Start address: 400 Restart address: None

Self-documenting.

MULTI Date: 82.09.01 (PVDV) Boundaries: 0<25643  
Start address: 0 Restart address: 20

Includes the TEST-MONITOR-2441E and MON-LIBR-2442E

MULTI may be used to test memory on ND-10 and ND-100.  
MULTI reads from DMA-devices in test mode.

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PRODUCT	NAME	ND-NUMBER	
	TEST-PROGRAMS No. 1	10324E	
	for ND-10, ND-12 and ND-100.		

It should not be necessary to turn off the disc/drum, but it may be the best.

SUPER-RAND      Date: 79.11.30      (DG)      Boundaries: 0<13276  
Start address:      20      Restart address: 20

Qualitative read/write/seek test for disc and controller.

TANB-MAG      Date: 82.09.01      (DG)      Boundaries: 0<7567  
Start address:      20      Restart address. 20

TERMINAL-ASYNC      Date: 82.09.01      (SUP)      Boundaries: 0<32767  
Start address:      0      Restart address: 20

Includes the TEST-MONITOR-2441F.

PRODUCT	NAME	ND-NUMBER
	DISC-TEMA	10324E
ISSUED	DATE 82.12.01	BY (INITIALS) DG
REASON	* ERROR CORRECTION	DIFFERENT ENVIRONMENT
	* CHANGE/ADDITION	NEW PROGRAM
FILES	PROG.NUMB. NAME	
CHANGED	203134D DISC-TEMA	
OR NEW		
FILES		

The D-version of DISC-TEMA includes the F-versions of the TEST-PROGRAM-MONITOR and the MONITOR-LIBRARY.

The following errors have been reported in DISC-TEMA-C:

i) **PROGRAM-STATUS:**

The command PROGRAM-STATUS does not write the number of retries in the column where this should be written.

ii) **Formatting with track reallocation of tracks on Phoenix discs.:**  
It is not possible to format with track reallocation of tracks on Phoenix discs.

iii) **Translate on Phoenix:**  
When running stand alone, translate does not allow cylinder number above 1464 on Phoenix.

iv) **Formatting with track-allocation, no bad track found:**  
If a disc pack which has never been formatted without track-allocation, is formatted with track allocation, and no bad track are detected, problems occur when using the pack afterwards. I.E. the program tries to use the non-formatted tracks.

v) **Formatting of artificially divided subunits:**  
When artificially divided subunits (2-75MB or 3-75MB) are formatted. The last tracks on the last cylinder is not formatted.

vi) **Use of disc connected to different disc controllers:**  
If a command which uses both the "FROM" and the "TO" discs are used, and the last specified disc unit does not exist on the "FROM" controller, the program tries to do a RTZ on the not existing disc unit, during the "cleaning up" sequence in the beginning of the command.

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PRODUCT	NAME		ND-NUMBER		
	DISC-TEMA		10324E		

- vii) **Function on 38MB disc:**  
On 38MB disc, the function test uses cylinder 0 for all the tests. Consequently the content on cylinder 0 is destroyed.
- viii) **Disabling of ECC:**  
Replying YES to the question:  
ECC CORRECTION ALLOWED (YES/NO):  
Does not have any effect.
- ix) **Error in Sintran disc driver:**  
An error in the Sintran disc driver had the effect that transfers to or from a reallocated track, were started on the first sector on the track regardless of which sector was specified.

In the D version of DISC-TEMA, all the mentioned errors are corrected.

The D version of DISC-TEMA, has two new features:

- i) **PROGRAM-STATUS:**  
The command PROGRAM-STATUS now also prints the accumulated no of:  
ECC-corrections, read retries, write retries and marginal recovery.
- ii) **Varying disc type:**  
It is also possible to tell the program that different disc types will be used. This is done by specifying VARYING as disc type. Each command will then ask for the disc type to use. It is now possible to specify the disc type to be varying.

The D version of DISC-TEMA, has one new command:

- i) **PRIORITY-SELECT:**  
Priority selects the specified disc drive. It remains priority selected until another command which uses the disc drive, is finished. This command is only interesting for configurations with dual port to the disc drive. This command is not executable under sintran.