

NORD SOFTWARE LIBRARY DISKETTE

CONTAINING : SINTRAN UTILITY PROGRAMS

DIRECTORY NAME : ND-10022S
USER NAME : FLOPPY-USER

FILE 1 : (ND-10022S:FLOPPY-USER)FLOPPY-MON-2010F:BPUN:1
FILE 2 : (ND-10022S:FLOPPY-USER)FILSYS-INV-2135H:BPUN:1
FILE 3 : (ND-10022S:FLOPPY-USER)MENTOF-2326A:BPUN:1
FILE 4 : (ND-10022S:FLOPPY-USER)DUMPFL-2327A:BPUN:1
FILE 5 : (ND-10022S:FLOPPY-USER)DMAC-1915D:BPUN:1
FILE 6 : (ND-10022S:FLOPPY-USER)MCOFY-TANB-1649J:BPUN:1
FILE 8 : (ND-10022S:FLOPPY-USER)DITAP-1880D:BPUN:1
FILE 9 : (ND-10022S:FLOPPY-USER)COF-VERIFY-2035D:BPUN:1
FILE 10 : (ND-10022S:FLOPPY-USER)MCOFY-HP-1650G:BPUN:1

16 MARCH 1982

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! REVISION LOG					
! PRODUCT	! NAME			! ND-NUMBER	
	Subsystem Package			! 10005/10044	
	SINTRAN III/VS Utility Programs			! 10022	
! ISSUED	! DATE 82.04.06	! BY (INITIALS)	! KN		
! REASON	! . ERROR CORRECTION	! . DIFFERENT ENVIRONMENT			
	! X CHANGE/ADDITION	!			
! FILES	! PROG.NUMB.	! NAME			
! CHANGED	!	!			
! OR NEW	!	!			
! FILES	!	!			

CHANGES

The subsystems on the diskettes 10005,10044 and 10022 are organized slightly different, and one new diskette - 10400 Subsystem Package II - is introduced, to have room for future extensions of the programs on the diskettes. The new diskettes will contain:

10005/10044	10022	10400
Subsystem Package	SINTRAN III/VS Utility Programs	Subsystem Package II
FILE-EXTRACT	FLOPPY-MONITOR	FMAC (32 and 48 bit)
BRF-EDITOR	FILE-SYSTEM-INVESIGATOR	MAC (32 and 48 bit)
LOOK-FILE	MEMTOF	QED
NRL	DUMPFL	NPL
PERFORM	DMAC	
GPM	MCOPY (HP and TANDBERG)	
	DITAP	
	COPY-VERIFY	

The diskette 10124 GPM will be phased out.

The diskette 10400 will not be issued to customers that already have the products on that diskette until a change occur in one of those products.

! NORSK DATA A/S		! NORD SOFTWARE LIBRARY		! PAGE 1 OF 2	
		! PROGRAM DESCRIPTION			
! PRODUCT	! NAME	! ND-NUMBER	! CATEGORY		
	SINTRAN UTILITY PROGRAMS	10022Q,R, S	P		
		! ND-NUMBER FOR SOURCE (LDR-2036F)			
! ISSUED	! DATE:	! 25 AUG 1981		! BY (INITIALS)	! PVDV
! 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:	TITLE:			
! PURPOSE	! Floppy disc bootstrap and monitor, used ! to load programs from discettes.				
! PROGRAMS ! (FILES)	! PROG.NUMB.	! NAME	! TYPE	! CONTAINING	
	LDR-2010F	FLOPPY-MON	BPUN	FLOPPY-MON-2010F	

LOADING PROCEDURE:

Put the monitor on the discette by doing the SINTRAN command:

```
$DEV-FUNCTION,<FLOPPY PERIPHERAL NAME>,DUMP-BOOTSTRAP,FLOPPY-MON
```

USER INSTRUCTIONS:

Place floppy in Floppy Disc Controller 1, Unit 0.

Press Master Clear and type 1560&. The floppy monitor should now start up by printing an asterisk and is ready to accept one of the following commands:

LIST-FILE <dev> : Makes a list of the :BPUN files contained on the discette. If <dev>=1 (or CR) output will go to the terminal; if <dev>=5 it will go to the line printer.

LOAD-FILE <file> : Load the file as specified by <file> into memory and start execution of this program.

PLACE-FILE <file>: As LOAD-FILE but does not start execution.

HELP : Lists the monitor-version and the possible commands.

! NORSK DATA A/S	NORD SOFTWARE LIBRARY	PAGE 2 OF 2
! PRODUCT	! NAME	! ND-NUMBER
!	! SINTRAN UTILITY PROGRAMS	! 10022Q ,R,S
!	!	!

If a terminal different from device 300 is to be used as console device, one may set the T-register on level 15 (dec.) to any legal terminal device number (310,320 etc.) prior to typing 1560&. The text 'IF HERE TYPE ANY CHARACTER' will then be printed on both device 300 and on the 'alternative' console device. The first device that sends a character to the computer will be taken as console device.

If the discette contains only one :BPUN file and the X-register on level 15 (dec.) is different from 0, this file will be automatically loaded without entering the floppy monitor.

The following program stops are defined (last instruction was WAIT)

WAIT 77 : not possible to read bootstrap from floppy (hardware err)

WAIT 0 : always when PLACE-FILE command is used (legal wait)

Any other error situation will give an error message. If the error occurs after the loading of a program has started, an error message will be given and the floppy monitor will be reloaded.

! NORSK DATA A/S		! NORD SOFTWARE LIBRARY		! PAGE 1 OF 1	
		! REVISION LOG			
! PRODUCT	! NAME	! ND-NUMBER			
	! SINTRAN UTILITY PROGRAMS	! 10022Q ,R,S			
! ISSUED	! DATE 25 AUG 1981	! BY (INITIALS) PVDV			
! REASON	! X ERROR CORRECTION	! DIFFERENT ENVIRONMENT			
	! X CHANGE/ADDITION	!			
! FILES	! PROG.NUMB. NAME				
! CHANGED	! LDR-2010F FLOPPY-MON				
! OR NEW	!				
! FILES	!				

CHANGES

- * If the discette contains only one :BPUN file and the X-register on level 15 (dec.) is different from 0, this file will be automatically loaded without entering the floppy monitor.
- * Carriage Return may now be entered as default for console device in the LIST-FILE command.
- * The monitor now accepts lower case characters on input
- * certain error conditions will now give error messages in stead of going into WAIT.
- * The PLACE-FILE command will type the message 'PLACED' when the place is finished.
- * The floppy monitor will automatically be reloaded if an error occured during loading of a program.
- * The necessary code has been added to be able to support the floppy-disc DMA controller

ERRORS CORRECTED:

- * Corrected abbreviation uplook routine
- * Sometimes if the file name specified would be ambiguous, one of the programs would still be loaded. This is corrected.

! NORSK DATA A/S		! NORD SOFTWARE LIBRARY		! PAGE 1 OF 1	
! PROGRAM DESCRIPTION					
! PRODUCT	! NAME			! ND-NUMBER	! CATEGORY
	SINTRAN UTILITY PROGRAMS			10022Q,R, S	P
				ND-NUMBER FOR SOURCE	
				SUT-2369D	
! ISSUED	! DATE AUG 20, 1981		! BY (INITIALS) TP		
! COMPUTERS	X 10	! . 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:				
	! TITLE:				
! PURPOSE	! To check directories				
! PROGRAMS ! (FILES)	! PROG.NUMB.	! NAME	! TYPE CONTAINING		
	SUT-2135H	FILSYS-INV	BPUN File system investigator		

LOADING/OPERATING PROCEDURE, USE

Place the diskette in the floppy disk drive, unit 0.
 Press MASTER CLEAR. Type 1560&.
 When the terminal responds with an asterisk, type LOAD FIL.

After power fail, the program should be restarted.

SET-PRINTER-DEVICE should not be used with device number 0.

Due to an error in the test program monitor, it is absolutely necessary to press MASTER CLEAR before the diskette is loaded. The error will be corrected in the next version.

PRODUCT	NAME	ND-NUMBER
	SINTRAN UTILITY PROGRAMS	10022Q,R,S
ISSUED	DATE AUG 20, 1981	BY (INITIALS) TP
REASON	X ERROR CORRECTION	X DIFFERENT ENVIRONMENT
	X CHANGE/ADDITION
FILES CHANGED OR NEW FILES	PROG.NUMB. NAME	
	SUT-2135H FILSYS-INV:BPUN	

CHANGES

This version can operate on the 150 Mbyte (DISC-2-75) disc.

Some of the directories have changed size. Therefore, a new disk driver has been included.

Some minor errors are corrected.



NORD SOFTWARE LIBRARY
OBJECT DESCRIPTION

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PROGRAM	NAME MEMTOF	PROGRAM NUMBER SUT-2326 A	
REFERENCE	DATE 09.04.79	NAME TNY	PROGRAM CATEGORY
REVISED	DATE	NAME	REVISION LOG FOR PROGRAM
EXPIRED	DATE	NAME	NEW PROGRAM NUMBER
COMPUTERS	<input type="checkbox"/> 1 <input type="checkbox"/> 2B <input type="checkbox"/> 5 <input checked="" type="checkbox"/> 10 <input type="checkbox"/> 12 <input type="checkbox"/> 20 <input type="checkbox"/> 50 <input type="checkbox"/> _____		
OPERATING SYSTEMS	<input type="checkbox"/> TSS <input checked="" type="checkbox"/> BIN III M <input type="checkbox"/> SIN III C <input type="checkbox"/> ALONE <input type="checkbox"/> _____		
TYPE	<input checked="" type="checkbox"/> BINARY <input type="checkbox"/> OCTAL <input type="checkbox"/> BRP <input type="checkbox"/> RB <input type="checkbox"/> _____		
DOCUMENTATION	<input type="checkbox"/> SYSTEM DESCRIPTION <input checked="" type="checkbox"/> USER DESCRIPTION <input type="checkbox"/> MANUAL		
	TITLE _____		
ADDRESS SPACE	SIZE 1K	BOUNDARIES 66000<70000	
	START ADDRESS	RESTART ADDRESS	
PURPOSE	Dump content memory bank 0 plus registerblocks to floppy.		

LOADING/OPERATING PROCEDURE, USE

1. Copy the file MEMTOF:BPUN to main directory, user system
@COPY-F "MEMTOF-2326:BPUN" (P-10022F:F-U) MEMTOF:BPUN
2. Dump MEMTOF as a stand-alone program on diskette by using
@DUMPFL (SUT-2327)
(NB! No directory on the diskette).
3. When you want to do a memory dump :
Insert diskette with MEMTOF - stand-alone in floppydevice-one,
unit 0 and type 1560 & on the consol.



NORD SOFTWARE LIBRARY
OBJECT DESCRIPTION

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PROGRAM	NAME DUMPFL	PROGRAM NUMBER SUT-2327 A	
REFERENCE	DATE 09.04.79	NAME TNY	PROGRAM CATEGORY
REVISED	DATE	NAME	REVISION LOG FOR PROGRAM
EXPIRED	DATE	NAME	NEW PROGRAM NUMBER
COMPUTERS	<input type="checkbox"/> 1 <input type="checkbox"/> 2B <input type="checkbox"/> 5 <input checked="" type="checkbox"/> 10 <input type="checkbox"/> 12 <input type="checkbox"/> 20 <input type="checkbox"/> 50 <input type="checkbox"/> ____		
OPERATING SYSTEMS	<input type="checkbox"/> TSS <input checked="" type="checkbox"/> SIN III M <input type="checkbox"/> SIN III C <input type="checkbox"/> ALONE <input type="checkbox"/> ____		
TYPE	<input checked="" type="checkbox"/> BINARY <input type="checkbox"/> OCTAL <input type="checkbox"/> BRP <input type="checkbox"/> RB <input type="checkbox"/> ____		
DOCUMENTATION	<input type="checkbox"/> SYSTEM DESCRIPTION <input checked="" type="checkbox"/> USER DESCRIPTION <input type="checkbox"/> MANUAL	TITLE _____	
ADDRESS SPACE	SIZE	BOUNDARIES	
	START ADDRESS 13665	RESTART ADDRESS 13665	
PURPOSE	Dump MEMTOF on floppy as a stand-alone program to be loaded by the hardware loader.		

LOADING/OPERATING PROCEDURE, USE

1. Copy the file DUMPFL:PROG to main directory, user system.

```
@COPY-F "DUMPFL-2327:BPUN" (P-10022F:F-u) DUMPFL:BPUN
```

Dump as "PROG" version :

```
@PLACE-BINARY DUMPFL
```

```
@DUMP "DUMPFL-2327A" 13665 13665
```

or as reentrant subsystem :

```
@DUMP-REENTRANT DUMPFL, 13665, 13665, DUMPFL
```

2. To produce a diskette with the MEMTOF stand-alone :

Insert a formatted diskette in floppy-disk-one unit 0,
and start the program DUMPFL

```
@DUMPFL
```

There will be some output, but the program requires no input.

NB! There is no directory on the diskette containing MEMTOF-stand-alone.

PROGRAM	NAME	PROGRAM NUMBER
	DMAC	MAC-1915 D
		PART OF ND-NUMBER 1002: N,P,Q,R,S
COMPUTERS	X 10 ! . 12 ! . 50 ! X 100 ! . 500 ! !	
INSTR.SET	. 48 BIT FL. ! . 32 BIT FL. ! . COMMERCIAL !	
OP.SYSTEM	X SIN III VS ! . SIN III RT ! . ALONE ! !	
PROG.TYPE	X BINARY ! . BRF ! . SYMBOLIC ! !	
DOCUMENTATION	NUMBER: ND-60.096.01 ND-60.050.09	
	TITLE: MAC USER'S GUIDE AND SINTRAN III USER'S GUIDE	
ADDRESS SPACE (BIN.PROG)	BOUNDRIES: 104700<123777 !	
	START ADDRESS: 123777 !	RESTART ADDRESS: 123775 !
PURPOSE	DEBUGGING RT-PROGRAMS (OPERATE ON SEGMENTS)	

LOADING/OPERATING PROCEDURE, USE

SEE SINTRAN III SYSTEM SUPERVISOR (ND-60.103.04)

DOES NOT INCLUDE THE TWO PASS ASSEMBLY OPTION!

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	REVISION LOG	
! PRODUCT	! NAME	! ND-NUMBER
	SINTRAN UTILITY PROGRAMS	10022N,P,Q,R,S
! ISSUED	! DATE 81.02.10	! BY (INITIALS) TNY
! REASON	! . ERROR CORRECTION	! . DIFFERENT ENVIRONMENT
	! X CHANGE/ADDITION	!
! FILES	! PROG.NUMB. NAME	
! CHANGED	! MAC-1915D DMAC	
! OR NEW		
! FILES		

CHANGES

Included option for single step breakpoint (partly missing in the C-version) and floating point numbers.

PRODUCT	NAME	ND-NUMBER	CATEGORY
	SINTRAN UTILITY PROGRAMS (MCOPIY-TANB)	10022R,S	P
		ND-NUMBER FOR SOURCE	
		HUT-1648J	
ISSUED	DATE 81.11.13	BY (INITIALS)	TNY
COMPUTERS	X 10 ! . 12 ! . 50 ! X 100!	. 500!!
INSTR.SET	. 48 BIT FL.!	. 32 BIT FL.!	. COMMERCIAL!
OP.SYSTEM	. SIN III VS!	. SIN III RT!	X ALONE !
DOCUMENTATION	NO MANUAL EXISTS AT THE PRESENT TIME		
PURPOSE	TO COPY DIRECTORIES ON DISK TO AND FROM TANDBERG, PERTEC AND STC MAG-TAPE DRIVES		
PROGRAMS (FILES)	PROG.NUMB. NAME	TYPE CONTAINING	
	HUT-1649J MCOPIY-TANB	BPUN	

Boundaries: 0 < 30550
 Start address: 0
 Restart address: 20

LOADING/OPERATING PROCEDURE, USE

MASTER CLEAR
 1560&
 *LOAD MCOPIY-TANB

When starting the program, users of Nord-10 and 10/S computers may get an error message:

INTERNAL INTERRUPT. IIC: 0

This message may be disregarded (it is due to an error in the Test-program monitor).

A more complete description of MCOPIY and how to use it is given on the next pages. In the examples, user input is underlined.

1. DESCRIPTION OF MCOPIY

MCOPIY means Mag-tape - Disk Copy.

PRODUCT	NAME	ND-NUMBER
	SINTRAN UTILITY PROGRAMS (MCOPIY-TANB)	10022R,S

1.1. Purpose of the program

MCOPIY is a program for backup of disks to tape. It can be used to copy one or more directories from disk to tape, or from tape to disk. It can also compare one or more directories on disk and tape. MCOPIY runs under the Test-program Monitor. (But it is not a test program!)

1.2. Necessary equipment

The current version of MCOPIY (MCOPIY-TANB-1649J) may be used with the following equipment:

Computers:	ND-10, ND-10/S, ND-100
Disk drives:	10 MB (Hawk), 30/60/90 MB (Phoenix), 33/66/38/75/160/288 MB
Tape drives:	Tandberg, Pertec, STC

1.3. Loading the program

*LOAD MCOPIY

MAG-TAPE - DISK COPY, HUT-1649J. ISSUED: 2. SEPTEMBER 1981
THE COMMAND HELP GIVES YOU A LIST OF THE COMMANDS
>

1.4. Listing of all the commands in the program

This list is also printed on your terminal when you give the command

>LIST-SPECIAL-COMMANDS

COPY-TO-MAG-TAPE
COPY-FROM-MAG-TAPE
COMPARE-DISK-TAPE
SINTRAN-BLOCK-SIZE
SET-MAG-TAPE-DEVICE-NUMBER
1600-BPI
SYSTEM-COPY
AUTOMATIC-COMPARE
SET-DISK-TYPE

PRODUCT	NAME	ND-NUMBER
	SINTRAN UTILITY PROGRAMS (MCPY-TANB)	10022R,S

1.5. General information

The main commands of the program are:

COPY-TO-MAG-TAPE	used to copy from disk to tape
COPY-FROM-MAG-TAPE	used to copy from tape to disk
COMPARE-DISK-TAPE	used to compare disk and tape

The commands:

SINTRAN-BLOCK-SIZE
1600-BPI
SYSTEM-COPY
AUTOMATIC-COMPARE

are used to turn on/off (set/reset) special features (modes) of the program, i.e. each time one of these commands is given, the relevant feature is either turned on or off, depending on what state it was in previously.

The commands:

SET-MAG-TAPE-DEVICE-NUMBER
SET-DISK-TYPE

are used to change the values of mag-tape device number or disk type.

Several of the MCPY commands expects numbers as parameters. When the numbers are asked for, the program also indicates the range of legal values, and the radix (decimal or octal), e.g.:

DISK UNIT (DECIMAL, 0-3) : 1

MAG-TAPE DEVICE NUMBER (OCTAL, 520-530) : 530

1.6. How to copy/compare one or more directories

One or more directories may be copied from disk to tape by giving the command:

>COPY-TO-MAG-TAPE

One or more directories may be copied from tape to disk by giving the command:

>COPY-FROM-MAG-TAPE

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!	PRODUCT	NAME	ND-NUMBER	!
!		SINTRAN UTILITY PROGRAMS	10022R,S	!
!		(MCPY-TANB)		!

One or more directories may be compared by giving the command:

>COMPARE-DISK-TAPE

After each of these commands the user is asked a number of questions, some of them dependent on disk type, whether system copy is turned on etc.

- 1) If disk type has not been given previously, the user is asked about disk type. The disk type is given by standard Sintran disk names, e.g.

DISK NAME : DISC-75MB-1

- 2) For some of the disk types (38/75/288/30/60/90 MB) the user is then asked about old or new directory size:

DIRECTORIES CREATED BY SINTRAN VERSION E OR LATER ARE A FEW PAGES SMALLER THAN THOSE CREATED BY VERSIONS A, B, C, D. DO YOU WANT THE NEW SIZE (VERSION E OR LATER) OR THE OLD SIZE (VERSION D OR EARLIER)? PLEASE ANSWER OLD OR NEW : NEW

- 3) The user is then asked about disk unit number:

DISK UNIT (DECIMAL, 0-3) : 0

- 4) If the disk type is one with multiple directories on the same unit (i.e. 10 MB, 30/60/90 MB, 2-75 MB, 3-75 MB) the user is then asked for:

- a) If system copy is turned on: Number of directories to copy, e.g.:

NUMBER OF DIRECTORIES (DECIMAL, 1-2) : 2

- b) If system copy is not turned on: Which directory to copy, i.e. removable or fixed for 10 MB and 30/60/90 MB, which subunit for disks with more than one subunit (60/90 MB, 2-75 MB, 3-75 MB), e.g.:

REMOVABLE OR FIXED : FIXED

SUBUNIT (DECIMAL, 0-2) : 1

PRODUCT	NAME	ND-NUMBER
	SINTRAN UTILITY PROGRAMS (MCPY-TANB)	10022R,S

5) The user is then asked about mag-tape unit, e.g.:

MAG-TAPE UNIT (DECIMAL, 0-3) : 0

If the disk type is one with multiple directories on the same unit, and system copy is turned off, the program then asks for file number on tape, e.g.:

MAG-TAPE FILE NUMBER (DECIMAL, 0-99) : 2

The intention of this is that the user should be able to copy multiple directories to tape, and then be able to select one specific directory to be copied back to disk.

6) Finally, before starting any copy/compare operation, the user is asked:

OK ? YES

and if the answer is YES, the copy/compare operation is started.

1.7. How to change disk type and mag-tape device number

When one of the copy/compare commands is given, the program checks if disk type has already been given (i.e. in connection with an earlier copy/compare operation). If the disk type has been given, the program will continue to use this disk type until it is explicitly changed by using the command SET-DISK-TYPE, e.g.:

```
>SET-DISK-TYPE  
DISK NAME : DISC-2-75MB-1
```

When the program is started, it assumes that the mag-tape drive is connected to mag-tape controller 1, device number 520 octal. This may be changed by giving the command SET-MAG-TAPE-DEVICE-NUMBER, e.g.:

```
>SET-MAG-TAPE-DEVICE-NUMBER  
MAG-TAPE DEVICE NUMBER (OCTAL, 520-530) : 530
```

Mag-tape drives connected to mag-tape controller 2 have device number 530 octal.

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! PRODUCT	! NAME	! ND-NUMBER			
	! SINTRAN UTILITY PROGRAMS	! 10022R,S			
	! (MCPY-TANB)				

1.8. How to change various modes of the program

The program has some commands which act like an on/off switch, i.e. each time such a command is given, the relevant feature (mode) of the program is either turned off or on, depending on what state it was in previously. When such a command is given, the command will answer whether the relevant feature is turned off or on, e.g.:

```
>SYSTEM-COPY
SYSTEM COPY TURNED ON
```

```
>SYSTEM-COPY
SYSTEM COPY TURNED OFF
```

1.8.1. Automatic compare

When the program is started, automatic compare is turned on, meaning that after each copy operation the program will automatically do a compare. When copying directories occupying multiple reels of tape (e.g. a 75 MB directory on 1600 BPI), the program will compare each reel of tape after it has been copied, thus avoiding the trouble of having to mount each reel of tape twice. The automatic compare may be turned off by giving the command AUTOMATIC-COMPARE, e.g.:

```
>AUTOMATIC-COMPARE
AUTOMATIC COMPARE TURNED OFF
```

1.8.2. System copy

With disk types having multiple directories on the same unit, it is possible to copy/compare multiple directories. This feature is turned on by giving the command SYSTEM-COPY, e.g.:

```
>SYSTEM-COPY
SYSTEM COPY TURNED ON
```

System copy is initially turned off.

1.8.3. 1600 BPI

The STC mag-tape drive may record data on tape in either 1600 BPI or 6250 BPI mode. It is initially set in 6250 BPI mode, but this may be changed by giving the command 1600-BPI, e.g.:

! PRODUCT	! NAME	! ND-NUMBER
!	! SINTRAN UTILITY PROGRAMS	! 10022R,S
!	! (MCPY-TANB)	!

>1600-BPI

1600 BPI TURNED ON

Recording the data in 1600 BPI mode makes it possible to read the tape on the Pertec mag-tape drive.

1.8.4. Sintran block size

The record size on tape is usually greater than 1K (1024) 16 bit words (i.e. greater than one page), in order to utilize the tape efficiently. Using the command SINTRAN-BLOCK-SIZE makes it possible to produce tape records which are exactly one page each. The intention of this command is that the user should be able to copy from tape to disk while Sintran is running, using the Sintran command @COPY-DEVICE. Sintran block size is initially turned off.

Note that it is not possible to copy back directories occupying more than one reel of tape with the @COPY-DEVICE command. Note also that using a record size of one page leads to inefficient utilization of the tape, and makes the copy/compare operation slower. Therefore, Sintran block size should only be used if absolutely necessary. Example of use:

>SINTRAN-BLOCK-SIZE

SINTRAN BLOCK SIZE TURNED ON

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! REVISION LOG					
! PRODUCT	! NAME	! SINTRAN UTILITY PROGRAMS	! ND-NUMBER	! 10022R,S	!
	! (MCOPIY-TANB)				!
! ISSUED	! DATE 81.11.13	! BY (INITIALS) TNY			!
! REASON	! X ERROR CORRECTION	! . DIFFERENT ENVIRONMENT			!
	! X CHANGE/ADDITION	!			!
! FILES	! PROG.NUMB. NAME				!
! CHANGED	! HUT-1649J MCOPIY-TANB				!
! OR NEW	!				!
! FILES	!				!

Errors corrected:

- The program did not work correctly with certain disk and mag-tape configurations. This is corrected.
- Various minor errors corrected.

Changes made, new features:

- The program may now be used with the subdivided 150 and 288 Mb disks, i.e. DISC-2-75MB-1, DISC-3-75MB-2, etc.
- The program now runs under the TEST-MONITOR version 2441D
- Disks are now named by standard Sintran names, e.g.
DISC-75MB-1
DISC-90MB-2
With the 60/90 Mb Phoenix disks, and the subdivided 150 and 288 Mb disks, the user must now indicate subunit number (the usual way, used in Sintran), instead of surface number (which was used in previous versions of this program).
- When the program is started, it will ask for disk type. If another disk type is wanted, the command
SET-DISK-TYPE
may be used. The command SET-DISK-DEVICE-NUMBER no longer exists.
- For some of the disk types, the program will ask for old or new directory size. This is due to the fact that directory sizes in Sintran version E or later are a few pages smaller than earlier versions.

! PRODUCT	! NAME	! ND-NUMBER
!	! SINTRAN UTILITY PROGRAMS	! 10022R,S
!	! (MCPY-TANB)	!

- Commands requiring numeric parameters will now specify what kind of number (decimal or octal) is expected, and the legal range for this number. User input is checked against these specifications.
- Instead of the program asking whether the user wanted system copy or not, there is now a command called
SYSTEM-COPY
which will turn system copy on or off.
- The first file on tape is now file number 0, instead of number 1. Similarly, the tape numbers now start from 0 instead of from 1.
- Earlier versions of the program always did compare after copy. This is now possible to turn off, by using the command
AUTOMATIC-COMPARE
Note that it is still recommended to do compare after copy!
- When copying directories occupying multiple reels of tape, each tape reel will be rewound and compared before the next tape reel is mounted (unless compare is turned off).
- The command earlier called
SET-1600-BPI
is now called
1600-BPI
- The command earlier called
SET-SINTRAN-BLOCK-SIZE
is now called
SINTRAN-BLOCK-SIZE

The reason for the change is that these commands may now turn on or off (set or reset) the relevant mode. In fact, the four commands mentioned below all work like this: The relevant feature or mode is alternately turned on or off (set or reset) each time the command is given:

AUTOMATIC-COMPARE
SYSTEM-COPY
1600-BPI
SINTRAN-BLOCK-SIZE



PROGRAM	NAME DITAP	PROGRAM NUMBER SUT-1880D	
REFERENCE	DATE 79.03.27	NAME JFB	PROGRAM CATEGORY
REVISED	DATE	NAME	REVISION LOG FOR PROGRAM SUT-1880D
EXPIRED	DATE	NAME	NEW PROGRAM NUMBER
COMPUTERS	<input type="checkbox"/> 1 <input type="checkbox"/> 2B <input type="checkbox"/> 5 <input checked="" type="checkbox"/> 10 <input type="checkbox"/> 12 <input type="checkbox"/> 20 <input type="checkbox"/> 50 <input checked="" type="checkbox"/> 10-32		
OPERATING SYSTEMS	<input type="checkbox"/> TSS <input checked="" type="checkbox"/> SIN III M <input type="checkbox"/> SIN III C <input type="checkbox"/> ALONE <input type="checkbox"/> _____		
TYPE	<input checked="" type="checkbox"/> BINARY <input type="checkbox"/> OCTAL <input type="checkbox"/> 8RF <input type="checkbox"/> RB <input type="checkbox"/> _____		
DOCUMENTATION	<input type="checkbox"/> SYSTEM DESCRIPTION <input type="checkbox"/> USER DESCRIPTION <input type="checkbox"/> MANUAL TITLE _____		
ADDRESS SPACE	SIZE 1300 ₈	BOUNDARIES 0 < 1300	
	START ADDRESS 70	RESTART ADDRESS 70	
PURPOSE	Produce binary files with bootstrap from a "Recover-file" Specially fit for use in making all your subsystems REENTRANT		

' LOADING/OPERATING PROCEDURE, USE

If you have SINTRAN with REENTRANT-SUBSYSTEMS do:

@ COPY "DITAP:BPUN" T-R

@ DUMP-REENTRANT \lfloor DITAP \lfloor 70 \lfloor 70 \lfloor DITAP

If you have SINTRAN version 760615 or older do:

@ PLACE T-R

@ DUMP "DITAP-1880B" 70 70

Then for both SINTRAN with reentrant subsystems and the older versions:

@ DITAP

Destination file: <filename > default type in BPUN. You can use the signs (,) , " , in addition to the file name.

SOURCE FILE: < filename > default type is PROG. You can use the signs (,) , in addition to the file name.

The "PROG-file" will be converted to a "BPUN-file" with BOOTSTRAP and checksum and placed on the destination file. Then this destination file can be used as a reentrant subsystem or only be saved on ")BPUN" format.



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REVISION LOG

PROGRAM	NAME(S) DITAP	PROGRAM NUMBER(S) SUT-1880D SUT-1879D
REFERENCE	DATE 79.03.27 NAME JFB	
REASONS	<input checked="" type="checkbox"/> ERROR CORRECTION <input type="checkbox"/> DIFFERENT ENVIRONMENT <input type="checkbox"/> CHANGE/ADDITION	CORRECTED SSRS
COMPUTERS	<input type="checkbox"/> 1 <input type="checkbox"/> 2B <input type="checkbox"/> 5 <input checked="" type="checkbox"/> 10 <input type="checkbox"/> 12 <input type="checkbox"/> 20 <input type="checkbox"/> 60 <input type="checkbox"/> _ _ _	
OPERATING SYSTEMS	<input type="checkbox"/> TSS <input checked="" type="checkbox"/> SIN III M <input type="checkbox"/> SIN III C <input type="checkbox"/> ALONE <input type="checkbox"/> _ _ _ _	
LANGUAGE (SOURCE)	<input type="checkbox"/> MAC <input checked="" type="checkbox"/> NPL <input type="checkbox"/> FORTRAN <input type="checkbox"/> BASIC <input type="checkbox"/> _ _ _ _	
TYPE (OBJECT)	<input checked="" type="checkbox"/> BINARY <input type="checkbox"/> OCTAL <input type="checkbox"/> BR <input type="checkbox"/> RB <input type="checkbox"/> _ _ _ _	

CHANGES

The program can now be used in mode- and batch-jobs



PROGRAM DESCRIPTION

PROGRAM	NAME COP-VERIFY	PROGRAM NUMBER	HUF-2035D				
		PART OF ND NUMBER	10022P,Q,R,S,†				
COMPUTERS	<input checked="" type="checkbox"/> 10	<input checked="" type="checkbox"/> 12	<input type="checkbox"/> 50	<input checked="" type="checkbox"/> 100	<input type="checkbox"/> 500	<input type="checkbox"/> _____	<input type="checkbox"/> _____
INSTRUCTION SET	<input checked="" type="checkbox"/> 48 BIT FL.	<input checked="" type="checkbox"/> 32 BIT FL.	<input type="checkbox"/> COMMERCIAL	<input type="checkbox"/> _____			
OPERATING SYSTEMS	<input type="checkbox"/> SIN III VS	<input type="checkbox"/> SIN III RT	<input checked="" type="checkbox"/> ALONE	<input type="checkbox"/> _____			
PROGRAM TYPE	<input checked="" type="checkbox"/> BINARY	<input type="checkbox"/> BRJ	<input type="checkbox"/> SYMBOLIC	<input type="checkbox"/> _____			
DOCUMENTATION	NUMBER _____						
	TITLE _____						
ADDRESS SPACE (For Binary Programs)	BOUNDARIES		0 < 017515				
	START ADDRESS		0		RESTART ADDRESS 020		
PURPOSE	To copy pages between mass storage devices.						

LOADING/OPERATING PROCEDURE, USE

MASTER CLEAR, 1560 &



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REVISION LOG

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PROGRAM	NAME COP-VERIFY	PROGRAM NUMBER	HUT-2035D
		PART OF NO NUMBER	10022P,Q,R,S,T
ISSUED	DATE 79.07.23	BY (INITIALS)	TEP
REASON	<input type="checkbox"/> ERROR CORRECTION <input type="checkbox"/> DIFFERENT ENVIRONMENT <input checked="" type="checkbox"/> CHANGE/ADDITION		

CHANGES

Will also run Phoenix disks.



PROGRAM DESCRIPTION

PROGRAM	NAME MCPY-HP	PROGRAM NUMBER HUT-1650G
		PART OF ND NUMBER - 10022P,Q,R,S,T
COMPUTERS	<input checked="" type="checkbox"/> 10 <input type="checkbox"/> 12 <input type="checkbox"/> 50 <input checked="" type="checkbox"/> 100 <input type="checkbox"/> 500 <input type="checkbox"/> ___ <input type="checkbox"/> ___ <input type="checkbox"/> ___	
INSTRUCTION SET	<input type="checkbox"/> 48 BIT FL. <input type="checkbox"/> 32 BIT FL. <input type="checkbox"/> COMMERCIAL <input type="checkbox"/> ___	
OPERATING SYSTEMS	<input type="checkbox"/> SIN III VS <input type="checkbox"/> SIN III RT <input checked="" type="checkbox"/> ALONE <input type="checkbox"/> ___	
PROGRAM TYPE	<input checked="" type="checkbox"/> BINARY <input type="checkbox"/> BRP <input type="checkbox"/> SYMBOLIC <input type="checkbox"/> ___	
DOCUMENTATION	NUMBER ND-62.009.03	
	TITLE TEST PROGRAM DESCRIPITON	
ADDRESS SPACE (For Binary Programs)	BOUNDARIES 20 < 6023	
	START ADDRESS 20	RESTART ADDRESS 20
PURPOSE	To copy disk or drum to and from H-P magnetic tape	

LOADING/OPERATING PROCEDURE, USE

Floppy disk: Load with 1560&
* LOAD MCPY-HP

Use: See manual



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REVISION LOG

PAGE 1 OF 1

PROGRAM	NAME	PROGRAM NUMBER	HUT-1650G
	MCOPY-HP	PART OF NO NUMBER	10022P,Q,R,S,T
ISSUED	DATE 79.12.17	BY (INITIALS) DG	
REASON	<input checked="" type="checkbox"/> ERROR CORRECTION	<input type="checkbox"/> DIFFERENT ENVIRONMENT	<input checked="" type="checkbox"/> CHANGE/ADDITION

CHANGES

The F version did not copy the last cylinders of the 37 and 75 MB disks.

The G version copies the entire disks. The possibility to do only compare between the mag-tape and disk is added.

The printout at tape shift now prints the tape no. The tape-unit specified is now tested if it is ON-LINE, if not a message is printed and the question is asked again.