

NORD SOFTWARE LIBRARY DISKETTE

Containing : SUBSYSTEM PACKAGE
32 BITS FLOATING FORMAT

Directory Name : ND-10005U
User : FLOPPY-USER

| Num | File name | Type | File access: | | | Pages | Bytes |
|-----|------------------|------------|--------------|--------|-----|-------|-------|
| | | | Public | Friend | Own | | |
| 5 | BRF-EDITOR-1858F | BPUN R | RWA | RWACD | | 10 | 16748 |
| 6 | F32-EXTR-2232B | BPUN R | RWACD | RWACD | | 20 | 38394 |
| 1 | GPM-2365B | BPUN RWACD | RWACD | RWACD | | 3 | 3852 |
| 7 | LOOK-FILE-2244E | BPUN RWACD | RWACD | RWACD | | 42 | 82337 |
| 0 | NRL-1935J | BPUN RWACD | RWACD | RWACD | | 12 | 21864 |
| 3 | PERFORM-2412F | BPUN R | RWACD | RWACD | | 26 | 49569 |
| 4 | PERFORM-LIBRARY | MCRO R | RWA | RWACD | | 3 | 3582 |
| 2 | GPM-LIBR-2366B | SYMB RWACD | RWACD | RWACD | | 3 | 4067 |

Total: 8 files using 119 pages

9 JAN 1984

| | | | | | |
|---------------------|---|-----------------------|----------|-------------|--|
| NORSK DATA A/S | | NORD SOFTWARE LIBRARY | | PAGE 1 OF 1 | |
| PROGRAM DESCRIPTION | | | | | |
| PRODUCT | NAME | ND-NUMBER | CATEGORY | | |
| | Subsystem Package. (BRF-EDITOR) | 10044S | STPR | | |
| | | 10005U | | | |
| | | ND-NUMBER FOR SOURCE | | | |
| | | 10153C | | | |
| ISSUED | DATE 83.12.01 | BY (INITIALS) HKD. | | | |
| 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 ! | | | | |
| DOCUMENTATION | NUMBER: 60.066.04 | | | | |
| | TITLE: NRL ND Relocating Loader | | | | |
| PURPOSE | Handle files containing BRF-information. | | | | |
| PROGRAMS (FILES) | PROG.NUMB. NAME | TYPE CONTAINING | | | |
| | SUT-1858F BRF-EDITOR | BPUN | | | |

LOADING/OPERATING PROCEDURE, USE

@PLACE-BINARY BRF-EDITOR
@DUMP BRF-EDITOR 0 0


R

@DUMP-REENTRANT BRF-EDITOR 0 0 BRF-EDITOR

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|----------------|------------------------------------|-------------------------|--------|-------------|--|
| NORSK DATA A/S | | NORD SOFTWARE LIBRARY | | PAGE 1 OF 1 | |
| REVISION LOG | | | | | |
| PRODUCT | NAME | ND-NUMBER | | | |
| | Subsystem Package. (BRF-EDITOR) | 10044S | 10005U | | |
| ISSUED | DATE 83.12.01 | BY (INITIALS) HKD. | | | |
| REASON | . ERROR CORRECTION | . DIFFERENT ENVIRONMENT | | | |
| | X CHANGE/ADDITION | | | | |
| FILES | PROG. NUMB. NAME | | | | |
| CHANGED | SUT-1858F BRF-EDITOR | | | | |
| OR NEW | | | | | |
| FILES | | | | | |

CHANGES

One error corrected in the MAKE-LIBRARY-UNITS command.
 The error occurred when the brf-unit contained the
 brf-control number 44 (octal), (DATA statement to
 CHARACTER variables).

|  | | NORD SOFTWARE LIBRARY OBJECT DESCRIPTION | | PAGE 1 OF <u>1</u> |
|---|---|--|------------------------------------|---|
| PROGRAM | NAME FILE-EXTRACT-F32 | PROGRAM NUMBER | SUT-2232B | |
| REFERENCE | DATE 78.12.19 | NAME SR | PROGRAM CATEGORY | |
| REVISED | DATE | NAME | REVISION LOG FOR PROGRAM | |
| EXPIRED | DATE | NAME | NEW PROGRAM NUMBER | ND-10005 |
| COMPUTERS | <input type="checkbox"/> 1 | <input type="checkbox"/> 2B | <input type="checkbox"/> 5 | <input 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 |
| TYPE | <input checked="" type="checkbox"/> BINARY | <input type="checkbox"/> OCTAL | <input type="checkbox"/> BRP | <input type="checkbox"/> RB |
| DOCUMENTATION | <input type="checkbox"/> SYSTEM DESCRIPTION | <input checked="" type="checkbox"/> USER DESCRIPTION | <input type="checkbox"/> MANUAL | |
| | TITLE <u>NORD FILE EXTRACT UTILITY COMMAND User's Guide ND-60.1</u> | | | |
| ADDRESS SPACE | SIZE | BOUNDARIES 16000 < 63102 | | |
| | START ADDRESS 16000 | RESTART ADDRESS 16000 | | |
| PURPOSE | Extract records from one file and write to another | | | |

LOADING/OPERATING PROCEDURE, USE


Standard subsystem

PLACE-BINARY < input file >

DUMP "FILE-EXT-2221B", < sa >, < ra >

Reentrant subsystem

DUMP-REENTRANT FILE-EXT-2221B < sa >, < ra >, < input file >

|  | | NORD SOFTWARE LIBRARY | PAGE 1 OF ___ |
|---|--|-----------------------|--------------------------|
| PROGRAM DESCRIPTION | | | |
| PROGRAM | NAME GPM | PROGRAM NUMBER | SUT-2365 B |
| | | PART OF ND NUMBER | 10124 B 10005U 10044S |
| 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 checked="" type="checkbox"/> 48 BIT FL. <input checked="" type="checkbox"/> 32 BIT FL. <input checked="" type="checkbox"/> COMMERCIAL <input type="checkbox"/> ___ | | |
| OPERATING SYSTEMS | <input checked="" type="checkbox"/> SIN III VS <input type="checkbox"/> SIN III RT <input 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 ND-60.151.01 | | |
| | TITLE SINTRAN III Utilities Manual | | |
| ADDRESS SPACE (For Binary Programs) | BOUNDARIES | 0 < 3153 | |
| | START ADDRESS | 0 | RESTART ADDRESS 0 |
| PURPOSE | Macroprocessing | | |

LOADING/OPERATING PROCEDURE, USE

Non-reentrant load :

```
@PLACE <input file>
@DUMP "GPM-2365B" 0 0
```

Reentrant load :

```
@DUMP-REENTRANT GPM,0,0,<input file>
```

Warning :

ND is fully aware that this GPM-version contains the following error :

A temporary definition made by DEF does not leave a null value.

This error will not be corrected since this would require a complete redesign of the data structure. The problem may be avoided by making all temporary definitions in redundant parameter-positions.

| NORSK DATA A/S | | NORD SOFTWARE LIBRARY | | PAGE 1 OF 1 | |
|---------------------|--|-----------------------|-----------------|--------------------------------|----------------------|
| PROGRAM DESCRIPTION | | | | | |
| PRODUCT | NAME SUBSYSTEM PACKAGE (LOOK-FILE) | | | ND-NUMBER | CATEGORY |
| | | | | 10005U | STPR |
| | | | | 10044S | |
| | | | | ND-NUMBER FOR SOURCE 10158D | |
| ISSUED | DATE 83.12.11 | | | BY (INITIALS) IFJ | |
| 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 |
| DOCUMEN- TATION | TITLE: SINTRAN III Utilities Manual | | | | NUMBER: 60.151.02 |
| PURPOSE | Dump/Patch/Compare SINTRAN files | | | | |
| PROGRAMS (FILES) | PROG.NUMB. | NAME | TYPE CONTAINING | | |
| | SUT-2244E | LOOK-FILE-2244E | BPUN | LOOK-FILE | |

LOADING/ OPERATING PROCEDURE/ USE:

Old versions of LOOK-FILE ought to be deleted. Remember, if LOOK-FILE is dumped reentrant do:

@DELETE-REENTRANT LOOK-FILE

If LOOK-FILE is to be dumped as a PROG-file, perform following:

@PLACE-BINARY <input-file> input-file may be found on
diskette ND-10005U or
ND-10044S with the name
LOOK-FILE-2244E

@DUMP "LOOK-FILE-2244E",0,0

If LOOK-FILE is to be dumped-reentrant, perform following:

@DUMP-REENTRANT LOOK-FILE-2244E,0,0,<input-file>

input-file is found on
diskette ND-10005U or
ND-10044S with the name
LOOK-FILE-2244E

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| NORSK DATA A/S | | | NORD SOFTWARE LIBRARY | | | PAGE 1 OF 2 | | |
| | | | REVISION LOG | | | | | |
| PRODUCT | | NAME SUBSYSTEM PACKAGE (LOOK-FILE) | | | | ND-NUMBERS 10005U, 10044S | | |
| ISSUED | | DATE 83.12.16 | | | BY (INITIALS) IFJ | | | |
| REASON | | X ERROR CORRECTION X CHANGE/ADDITION | | | . DIFFERENT ENVIRONMENT | | | |
| FILES CHANGED OR NEW FILES | | PROG.NUMB. NAME SUT-2244E LOOK-FILE-2244E:BPUN | | | | | | |

1 Changes in commands

Many of the commands are changed or renamed. In the following chapter all commands are listed.

All commands and parameters may be given on one line, except the patch and search value in the command PATCH and SEARCH.

All commands may be given in upper or lower case.

2 List of all Commands

PROGRAM-INFORMATION

- CALCULATE <OPERAND> <OPERATOR> <OPERAND>
- DUMP <BLOCK NUMBER (DEFAULT=0)>
 <FROM WORD NUMBER (DEFAULT=1)>
 <NUMBER OF WORDS (DEFAULT=140)>
- BYTE-DUMP <BLOCK NUMBER (DEFAULT=0)>
 <FROM WORD NUMBER (DEFAULT=1)>
 <NUMBER OF WORDS (DEFAULT=120)>
- NEXT
- PREVIOUS
- OPEN <FILE NAME>
 <BLOCKSIZE IN NUMBER OF WORDS (DEFAULT=512)>
 <ACCESS (R=READ/W=WRITE, DEFAULT=WRITE)>
- ZERO <BLOCK NUMBER (DEFAULT=0)>
- SET-BLOCK-CONTENTS <BLOCK NUMBER (DEFAULT=0)>
- CLOSE

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| NORSK DATA A/S | | | NORD SOFTWARE LIBRARY | | | PAGE 2 OF 2 | | |
| | | | REVISION LOG | | | | | |
| PRODUCT | NAME | | | | ND-NUMBERS | | | |
| | SUBSYSTEM PACKAGE (LOOK-FILE) | | | | 10005U, 10044S | | | |

COMPARE <FILE NAME>
 <FIRST BLOCK NUMBER (DEFAULT=0)>
 <NUMBER OF BLOCKS (DEFAULT=1)>

DEFINE-PRINT-FILE <FILE NAME>

ON-OFF-PRINTER <1=ON/0=OFF (DEFAULT=OFF)>

MOVE <FROM FILE NAME>
 <NUMBER OF BLOCKS TO MOVE>
 <FIRST BLOCK NUMBER IN SOURCE FILE>
 <FIRST BLOCK NUMBER IN DESTINATION FILE>

PROGRAM-STATUS

SET-PRINT-FORMAT <(B = OCTAL
 ,H = HEXADECIMAL
 ,D = DECIMAL) FORMAT (DEFAULT= B)>

PATCH <BLOCK NUMBER (DEFAULT=0)> <WORD NUMBER (DEFAULT=1)>

SEARCH <FIRST BLOCK NUMBER (DEFAULT=0)> <NUMBER OF BLOCKS (DEFAULT=1)>

EXIT

EXPLAIN-COMMAND <COMMAND>

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|---------------------|---|--|--|-------------------|--------------------------------|----------------------|------------------|
| NORSK DATA A/S | | NORD SOFTWARE LIBRARY PROGRAM DESCRIPTION | | | | PAGE 1 OF 1 | |
| PRODUCT | NAME NRL | | | | ND-NUMBER 10005U 10044S | | CATEGORY STPR |
| | | | | | ND-NUMBER FOR SOURCE 10170E | | |
| ISSUED | DATE 84.01.06 | | | BY (INITIALS) JKL | | | |
| 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 | | |
| DOCUMEN- TATION | TITLE: ND Relocating Loader | | | | | NUMBER: 60.066.04 | |
| PURPOSE | Builds programs/data out of the NORD-10/ND-100 BRF-format in memory/memory-image/overlays. | | | | | | |
| PROGRAMS (FILES) | PROG.NUMB. NAME LDR-1935J NRL | | TYPE CONTAINING BPUN ND Relocating Loader | | | | |

LOADING/OPERATING PROCEDURE/USE:

Procedure for generating a standard subsystem:

```
@PLACE-BINARY (ND:FLOPPY-USER)NRL-1935J
@DUMP "NRL-1935J",0,1
```

Procedure for generating a reentrant subsystem:

```
@DUMP-REENTRANT NRL-1935J,0,1,(ND:FLOPPY-USER)NRL-1935J
```

NOTE: The following applies until the two-bank RECOVER command is implemented in the operating system:

The file name in the loader commands PROG-FILE and DUMP can only be 15 characters when loading routines compiled with the compiler command SEPARATE-DATA ON.

| NORSK DATA A/S | | | NORD SOFTWARE LIBRARY | | | PAGE 1 OF 1 | | |
|-------------------------------------|---|--|-----------------------|--|--|-------------|--|--|
| | | | REVISION LOG | | | | | |
| PRODUCT | NAME NRL | ND-NUMBER 10005U, 10044S | | | | | | |
| ISSUED | DATE 84.01.00 | BY (INITIALS) JKL | | | | | | |
| REASON | X ERROR CORRECTION X CHANGE/ADDITION | . DIFFERENT ENVIRONMENT | | | | | | |
| FILES CHANGED OR NEW FILES | PROG.NUMB. NAME LDR-1935J NRL | TYPE CONTAINING BPUN ND Relocating Loader | | | | | | |

1 ERRORS CORRECTED

The loader command PROG-FILE destroyed the area from 177400B to 177777B on the specified program file. This error has been corrected.

When a number of library files containing a dictionary table were loaded with one LOAD command, only the last library file was closed. This error has been corrected.

The loader command ON-ERROR-EXIT will be carried out correctly when loading onto a PROG-FILE.

When creating an overlay system, the overlay table was sometimes incorrect. This error resulted in the runtime error message NO SUCH OVERLAY. This could occur if the overlay table contained more than 70 overlay entries.

Overlaid programs using buffered I/O from FORTRAN-100, i.e. using the access code SEQUENTIAL or DIRECT in the OPEN statement, got the buffer space incorrectly allocated.

2 CHANGES MADE

Two-bank programs can be loaded to memory without using the loader command PROG-FILE. They can then be executed by means of the RUN command.

The library file FTNLIBR will not be automatically loaded.

The DEPOSIT command has been improved. The following option has been included:

```
DEPOSIT <symbol name> [, <octal displacement>] [, <new contents>]
```

The DUMP command has been improved. The start and restart addresses may be symbol names.

NRL will produce information to be used by the Job Execution Control program at termination.

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| NORSK DATA A/S | | NORD SOFTWARE LIBRARY | | PAGE 1 OF 1 | |
| PROGRAM DESCRIPTION | | | | | |
| PRODUCT | NAME SINTRAN UTILITY PROGRAMS (PERFORM) | | | ND-NUMBER | CATEGORY |
| | | | | 10005U 10044S | STPR |
| | | | | ND-NUMBER FOR SOURCE 10168F | |
| ISSUED | DATE 84.01.09 | | | BY (INITIALS) BR | |
| 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 |
| DOCUMEN- TATION | TITLE: SINTRAN UTILITIES MANUAL | | | | NUMBER: 60.151.02 |
| PURPOSE | Insert parameters to a macro which makes a MODE file, and runs this MODE file. | | | | |
| PROGRAMS (FILES) | PROG.NUMB. | NAME | TYPE CONTAINING | | |
| | SUT-2412F | PERFORM | BPUN PROGRAM PERFORM | | |
| | SUT-2439D | PERFORM-LIBRARY | MCRO PERFORM MACROS | | |

LOADING/OPERATING PROCEDURE, USE:

Under user SYSTEM, do following:

- @PLACE-BINARY (ND:FLOPPY)PERFORM-2412F
- @DUMP "PERFORM-2412F",0,0

This will install PERFORM as a PROG file.

- @DELETE-REENTRANT PERFORM
- @DUMP-REENTRANT PERFORM 0 0 (ND:FLOPPY)PERFORM-2412F:BPUN

This will dump PERFORM as a reentrant subsystem.

- @DELETE-FILE PERFORM-LIBRARY:MCRO
- @COPY-FILE "PERFORM-LIBRARY:MCRO", (ND:FLOPPY)PERFORM-LIBRARY:MCRO

This will install the standard release of the default macros.

NOTE ! Be carefull not to release the old version of the PERFORM-LIBRARY if your own macroes are included to this file. Also note that the PERFORM-LIBRARY:MCRO file is completely changed. Macro names and contents are alined to our current compilers.

If old versions of our compilers are used, macroes from previous versions of the PERFORM-LIBRARY:MCRO may be used or included in the new version of PERFORM-LIBRARY:MCRO.

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| NORSK DATA A/S | | NORD SOFTWARE LIBRARY | | PAGE 1 OF 1 | |
| | | REVISION LOG | | | |
| PRODUCT | NAME SINTRAN UTILITY PROGRAMS | | | ND-NUMBER 10005U 10044S | |
| ISSUED | DATE 84.01.09 | | BY (INITIALS) BR | | |
| REASON | X ERROR CORRECTION X CHANGE/ADDITION | | . DIFFERENT ENVIRONMENT | | |
| FILES CHANGED OR NEW FILES | PROG.NUMB. NAME | | TYPE CONTAINING | | |
| | SUT-2412F | PERFORM | PROG PROGRAM PERFORM | | |
| | SUT-2439D | PERFORM-LIBRARY | MCRO PERFORM MACROS | | |

CHANGES :


- If two consecutive backslashes are encountered they are treated as one backslash and not as a parameter submission placement, because it sometimes is necessary to have a backslash as a character in a parameter.
- The default macro name will now be the first macro on the :MCRO file.
- Partly abbreviation of macro names is implemented ie. the first occurrence will be taken.
- PERFORM-LIBRARY:MCRO, file with macros, is completely changed. Macro names and contents are aligned to our current compilers.

If old versions of our compilers are used, macros from previous versions of PERFORM may be used or included in the file PERFORM-LIBRARY:MCRO.

Remember, the PERFORM-LIBRARY:MCRO file is only meant to be an example.

ERRORS CORRECTED:

- If a parameter was followed by a single character, this character disappeared from the mode file.
- Some minor errors are corrected.

|  | | NORD SOFTWARE LIBRARY | PAGE 1 OF ___ |
|---|---|-----------------------|-----------------------------|
| PROGRAM DESCRIPTION | | | |
| PROGRAM | NAME GPM-LIB | PROGRAM NUMBER | SUT-2366B |
| | | PART OF ND NUMBER | 10124B 10005T,U 10044R,S |
| 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"/> _____ | | |
| INSTRUCTION SET | <input checked="" type="checkbox"/> 48 BIT FL. <input checked="" type="checkbox"/> 32 BIT FL. <input checked="" type="checkbox"/> COMMERCIAL <input type="checkbox"/> _____ | | |
| OPERATING SYSTEMS | <input checked="" type="checkbox"/> SIN III VS <input type="checkbox"/> SIN III RT <input type="checkbox"/> ALONE <input type="checkbox"/> _____ | | |
| PROGRAM TYPE | <input type="checkbox"/> BINARY <input type="checkbox"/> BRJ <input checked="" type="checkbox"/> SYMBOLIC <input type="checkbox"/> _____ | | |
| DOCUMENTATION | NUMBER ND-60.151.01 | | |
| | TITLE SINTRAN III Utilities Manual | | |
| ADDRESS SPACE (For Binary Programs) | BOUNDARIES | < | |
| | START ADDRESS | RESTART ADDRESS | |
| PURPOSE | Library of macro-definitions for GPM | | |

LOADING/OPERATING PROCEDURE, USE

Installation :

@ COPY-FILE "GPM-LIB-2366B" <input-file>

@ SET-FILE-ACCESS GPM-LIB-2366B R R RD

Use :

Let GPM read this library before calling it :

@GPM

CR/LF TO BE IGNORED ON INPUT ? Y

OUTPUT FILE NAME : WHATEVER

INPUT FILE NAME : GPM-LIB

INPUT FILE NAME :

GPM is in "ignore CR/LF"-mode when the GPM-LIBRARY has been read.

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| NORSK DATA A/S | | NORD SOFTWARE LIBRARY | | PAGE 1 OF 1 | |
| | | REVISION LOG | | | |
| PRODUCT | NAME | ND-NUMBER | 10005T,U | | |
| | GPM | 10124B | 10044R,S | | |
| ISSUED | DATE 82.01.05 | BY (INITIALS) SN | | | |
| REASON | X ERROR CORRECTION | X DIFFERENT ENVIRONMENT | | | |
| | . CHANGE/ADDITION | BOTH 48 and 32 BITS FL.P. | | | |
| FILES | PROG.NUMB. | NAME | | | |
| CHANGED | SUT-2365B | GPM | | | |
| OR NEW | SUT-2366B | GPM-LIBR | | | |
| FILES | | | | | |

CHANGES

The new GPM-version can be executed on NORD-10/ND-100 regardless of floating-point hardware version (48 or 32 bits). The previous version failed when any sort of integer division was attempted on CPUs with 32-bits floating point hardware.

The GPM-LIB now includes a DO-LOOP macro-definition that allows other step-lengths than the default value.