

ND SOFTWARE LIBRARY DISKETTE

Containing : Linkage loader for ND-500

Directory Name : 210319H00-XX-01S

User Name : FLOPPY-USER

Num	File name	Type	File access:			Pages	Bytes	
			T	Public	Friend			Own
0	DESCRIPTION-FILE	DESC	I	R	R	RWACD	9	22528
4	LINKAGE-LOAD-H00	LINK	I	RWACD	RWACD	RWACD	2	0
5	LINKAGE-LOAD-H00	DSEG	I	RWACD	RWACD	RWACD	45	611095
6	LINKAGE-LOAD-H00	PSEG	I	RWACD	RWACD	RWACD	60	119328

=====
4 files using 116 pages. 148 pages reserved out of 148 pages
=====

ND SOFTWARE LIBRARY DISKETTE

Containing : Linkage loader for ND-500

Directory Name : 210319H00-XX-010

User Name : FLOPPY-USER

Num	File name	Type	File access:			Pages	Bytes	
			T	Public	Friend			Own
0	DESCRIPTION-FILE	DESC	I	R	R	RWACD	9	22528
4	LINKAGE-LOAD-H00	LINK	I	RWACD	RWACD	RWACD	2	0
5	LINKAGE-LOAD-H00	DSEG	I	RWACD	RWACD	RWACD	45	611095
6	LINKAGE-LOAD-H00	PSEG	I	RWACD	RWACD	RWACD	60	119328

=====
4 files using 1.16 pages. 610 pages reserved out of 610 pages
=====

Product	Name Linkage loader for ND-500	Reg. no. 210319H	Category STPR
Reason	. New product x Change/Addition	x Error Correction x Different Environment	
Documentation	Title ND-500 Loader/Monitor	Reg. no. 60.136.04	
Purpose	Load the object-modules which are output from the language processors to segments, and make connections between them. Edit NRF files.		
Prerequisites	Computer Type	Floating format	Op. system Version
	ND-500	All	SIN III >= H
	Reg. no. 210333B	Product name ND-500 Monitor	
	Minimum permanent mass storage resources		
	User	Userspace	Number of files
	Any user	116 pages on	4 files
Product consists of		Reg. no. for Source 210350H	
Directory Name: 210319H<rev>-XX-01S		User Name: FLOPPY-USER	
File no.	File Name	Type	T Pg. Bytes Containing
203126	LINKAGE-LOAD-H	Domain	I 107 730423 Linkage-loader Domain

1 NOTES

This version of the Linkage-loader runs in the ND-500. It is capable of loading both 500 and MC680xx (PIOC) programs. The G version of the Linkage-loader was only released to execute in ND-100 and to load PIOC programs. The previous Linkage-loader running in ND-500 was the F version.

* <rev> = is the current revision level for this product.

Product	Name	Reg. no.	Category
	Linkage loader for ND-500	210319H	STPR

2 ERRORS CORRECTED

Errors in the following commands are corrected from the version F:

- OUTPUT-FILE together with symbolic output, or LIST-SEGMENTS.
(STACK UNDERFLOW AT ADDRESS)
- APPEND-NRF-MODULE under certain circumstances.
(PROTECT VIOLATION AT ADDRESS)
- END-DOMAIN (or CLOSE-SEGMENT) together with RELOAD-SEGMENT
(ILLEGAL INSTRUCTION CODE)
- COMMON-SEGMENT-APPEND and trying to expand a common block did not give any error message. That is changed, however, if it is possible the common block will really be expanded! (If there is enough free space after the block!)

3 CHANGES MADE

- ND-500 Monitor version B (or later) is required. There is no new commands from the Linkage-Loader-F (Linkage-Loader-G).
- The loader table was sized to 1000000 bytes. It is now expanded to 2000000 bytes (1/2 mb). The debug info will be kept during a RELOAD-SEGMENT session. The new debug info will be appended to the old, and the symbolic debugger will find out which debug info to use.

4 CHANGED COMMANDS

The following commands are changed from the F version to be able to handle the new format of the RTFIL in SINTRAN III K version: (The commands will still work for previous versions of SINTRAN III)

- MATCH-RT-COMMON
- MATCH-SEGMENT-COMMON
- LINK-RT-PROGRAMS

The following facility is added from version F:

- It is possible to choose between upper and lower case output from the NLL. A patch should be done on the Linkage-loader domain if UPPER case is wanted. The address on the the data domain 26' is:

PROGRAM DESCRIPTION

Product	Name	Reg. no.	Category
	Linkage loader for ND-500	210319H	STPR

look-at-data 26'116214 linkage-loader-H

DS26 116214B: 0 per

DS26 116214B: 0 1

DS26 116214B: 1

DS26 116220B: 0 EX

- It is possible to run the NLL without enabling the EXCEPTION system for dumping error information. A patch should be done on the Linkage-loader domain if this facility is not wanted. The address on the the data domain 26' is:

look-at-data 26'116220 linkage-loader-H

DS26 116220B: 0 per

DS26 116220B: 0 1

DS26 116220B: 1

DS26 116224B: 0 EX

5 INSTALLATION PROCEDURE

This domain can be copied to any wanted user. In this example user DOMAINS is used.

Log in as user DOMAINS.

For new installations: If you have a double density floppy drive, insert floppy 210319H<rev> XX-01D in a FLOPPY-DISC-<drive-no.> unit <no.>. If single density floppy drive, insert the floppy 210319H<rev>-XX-01S.

ENTER-DIRECTORY 210319H<rev>-XX-01 FLOPPY-DISC-<no.>
<unit>

AND (210319H<rev>-XX-01:FLOPPY-USER)LINKAGE-LOADER

ND-linkage-loader - H.00 3. April 1986 Time: 0:00

Nll entered: 3. April 1986 Time: 13:31

Nll: COPY-DOMAIN (210319H<rev>-XX-01:FLOPPY-USER)LINKAGE-LOADER &

"LINKAGE-LOAD-H<rev>"

The "DESCRIPTION-FILE" will now be initialized

Nll: EXIT

and, for old installations (installations already using the Linkage-loader):

ENTER-DIRECTORY 210319H<rev>-XX-01 <FLOPPY-DISC-no.>
<unit>

AND (210319H<rev>-XX-01:FLOPPY-USER)LINKAGE-LOADER

ND-linkage-loader - H.00 3. April 1986 Time: 0:00

Nll entered: 3. April 1986 Time: 13:41

Nll: COPY-DOMAIN (210319H<rev>-XX-01:FLOPPY-USER)LINKAGE-LOADER &

"LINKAGE-LOAD-H<rev>"

Nll: EXIT

Product	Name	Reg. no.	Category
	Linkage loader for ND-500	210319H	STPR

The ND-500 Linkage-Loader (hereafter shorted to NLL) runs as a sub-system in the ND-500, and should therefore be defined as a standard domain. This is done in this way:

Log in as user SYSTEM.

```

@ND-500
ND-500 MONITOR Version F00.86.02.10 / 86.03.13
N500: define-standard-domain
      Linkage-loader
      (Domains)Linkage-load-h<rev>
N500: exit

```

Now the NLL should be ready for use. It is useful to get all library segments linked automatically, and all library files loaded automatically when all other loading is finished. This is done as shown below. This is only necessary the first time the NLL is entered under user SYSTEM. Lower case output is from the NLL.

For new installations:

```

@LINKAGE-LOADER
ND-Linkage-Loader - H.0003.03 April 1986 Time: 0:00
Nll entered: 3. April 1986 Time: 13:51
Nll: SET-DOMAIN "LIBRARY-DOMAIN"
Nll: SET-SEGMENT-NUMBER 36000A-07B-000 ILM
Nll: OPEN-SEGMENT "FORTRAN-LIB-I", P32 ILM
Nll: LOCAL-TRAP-DISABLE ALL-070A-022 ILM
Nll: SET-IO-BUFFERS 20 ILM
Nll: TOTAL-SEGMENT-LOAD FORTRAN-LIB-I00,EXC-LIB-C00
FORTRAN-LIB-I00-070A-022 ILM
Program:.....65303 P36 Data:.....343310 D36
Program:.....115201 P36 Data:.....54270 D36
Nll: END-DOMAIN
IO-buffer:.....50000 D36 .....147777 D36
Nll: SET-AUTO-LINK-SEGMENT FORTRAN-LIB-I FORTRAN
Nll: SET-AUTO-LOAD-FILE FORTRAN-LIB-I00 FORTRAN
Nll: SET-AUTO-LOAD-FILE EXCEPT-LIB-C00 FORTRAN
Nll: EXIT

```

PROGRAM DESCRIPTION

Product	Name	Reg. no.	Category
	Linkage loader for ND-500	210319H	STPR

For old installations:

@LINKAGE-LOADER

ND-Linkage-Loader -- H.00 3. April 1986 Time: 0:00

N11 entered: 3. April 1986 Time: 14:31

N11: RENAME-DOMAIN LIBRARY-DOMAIN OLD-LIBRARY-F

N11: SET-DOMAIN "LIBRARY-DOMAIN"

N11: SET-SEGMENT-NUMBER 36

N11: OPEN-SEGMENT "FORTRAN-LIB-I", P.

N11: LOCAL-TRAP-DISABLE ALL

N11: SET-IO-BUFFERS 20

N11: TOTAL-SEGMENT-LOAD FORTRAN-LIB-100, EXC-LIB-C00
FORTRAN-LIB-I

Program:.....65303 P36 Data:.....34331 D36

Program:.....115201 P36 Data:.....54270 D36

N11: END-DOMAIN

IO-buffer:.....50000 D36147777 D36

N11: LIST-AUTO-LINK-SEGMENT

(PACK-ONE-1:SYSTEM)FORTRAN-LIB-F -- FORTRAN

N11: DELETE-AUTO-LINK-SEGMENT

N11: SET-AUTO-LINK-SEGMENT FORTRAN-LIB-I FORTRAN

N11: LIST-AUTO-LOAD-FILE

(PACK-ONE-1:SYSTEM)FORTRAN-LIB-F -- FORTRAN

N11: DELETE-AUTO-LOAD-FILE

N11: SET-AUTO-LOAD-FILE FORTRAN-LIB-100 FORTRAN

N11: SET-AUTO-LOAD-FILE EXCEPT-LIB-C00 FORTRAN

N11: EXIT

For further information (DESCRIPTION-FILES etc.) see the manual ND-60.136.041 (ND-500 Loader/Monitor) or the manual Linkage-Lloader User Guide, ND-60.182.1 ENL.

