NORD SOFTWARE LIBRARY DISKETTE

CONTAINING   : PLANC FOR ND-100

DIRECTORY NAME : ND-10309B
USER NAME   : FLOPPY-USER

FILE 0 : (ND-10309B:FLOPPY-USER)PLANC-100-B:BPUN;1
FILE 1 : (ND-10309B:FLOPPY-USER)PLANC-1BANK-B:BRF;1
FILE 2 : (ND-10309B:FLOPPY-USER)PLANC-2BANK-B:BRF;1

29 JUNE   1982

PRODUCT	NAME		ND-NUMBER	CATEGORY
	PLANC for ND-100		10309B	P
			ND-NUMBER FOR SOURCE	
			10370B	
ISSUED	DATE 82.06.15		BY (INITIALS) GAH	

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: Planc Reference Manual	NUMBER: 60.117.03

PURPOSE	PLANC-100 Compiler

PROGRAMS (FILES)	PROG.NUMB.	NAME	TYPE	CONTAINING
	203452B	PLANC-100	BPUN	PLANC-100 Compiler
	203453B	PLANC-1BANK	BRF	1 BANK RUNTIME SYSTEM
	203454B	PLANC-2BANK	BRF	2 BANK RUNTIME SYSTEM

LOADING/OPERATING PROCEDURE, USE

The PLANC compiler consists of the following files:

```
        PLANC-100-B:BPUN      SA=0 , RA=1  ; The compiler
        PLANC-1BANK-B:BRF                  ; Runtime system 1 bank
        PLANC-2BANK-B:BRF                  ; Runtime system 2 bank
```

Enter the directory on the floppy and copy all the files to user SYSTEM.

Dump the compiler as a reentrant subsystem, using the SINTRAN command:

```
        @DUMP-REENTRANT PLANC-100,0,1,<input-file>
```

The PLANC-100 compiler must have a terminal background segment of 128k Words. The background segment size can be changed by the SINTRAN command:

```
        @CHANGE-BACKGROUND-SEGMENT-SIZE <terminal number> , 128
```

Note:
        The PLANC-100 can not be restarted with @CONTINUE

*** PROGRAM DESCRIPTION ***

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THE FOLLOWING LIST CONTAINS A SUMMARY OF SYNTACTICAL RESTRICTIONS
IN THE PLANC-100-B VERSION.

1) A statement containing a MACRO call, an INLINE routine call or
   a $INCLUDE command, must be terminated by carriage return.

2) The IND standard routine can not have as parameter a routine
   pointer which qualifies a routine with an in-value.

3) The argument to the standard routine ADDR can not be enclosed
   in parantheses if it is a routine pointer.

4) The standard routine ADDR can not have as argument a routine
   with an outvalue.

5) The standard routines MININDEX, MAXINDEX and IN can not be
   applied on the parameters within a routine with the STANDARD
   modifier. The compiler does not give any error messages.

6) The ON OVERFLOW statement does not handle integer unsigned
   values.

7) It is impossible to export a family of routines, where the
   routine-name is equal to the name of a PLANC predefined
   standard routine or a PLANC operator.

8) The following type declaration is illegal, and the compiler
   does not give any error message:

          TYPE A=RECORD ......ENDRECORD
          TYPE B=A   % illegal type declaration.

9) The access modifiers of a formal parameter type are not
   relevant when declaring routines with equal names. Example:

          A. ROUTINE VOID,VOID(INTEGER   ): RUT?
          B. ROUTINE VOID,VOID(INTEGER WRITE): RUT?
   The compiler can not distinguish between declaration A. and
   B. .

10) The $COMPILE command and the <source file> must be separated
    with at least one space.

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	PLANC for ND-100		10309B

ISSUED	DATE 82.06.03	BY (INITIALS) GAH

REASON	x ERROR CORRECTION	. DIFFERENT ENVIRONMENT
	x CHANGE/ADDITION	.

FILES	PROG.NUMB.	NAME	TYPE
CHANGED	203452B	PLANC-100	BPUN
OR NEW	203453B	PLANC-1BANK	BRF
FILES	203454B	PLANC-2BANK	BRF

1.   Improvements

    - Exponential REAL8**INTEGER is implemented.

2.   New Compiler Commands

    - $OPTION   ARRAY-INDEX-CHECK   <ON/OFF>
        If the option is ON, legal array accesses will be checked
        upon compile-/run-time. The option might be turned ON/OFF
        anywhere in the source program.

    - $EJECT
        A form-feed will be written to the list-device.

3.   Errors corrected

1) Errors concerning FOR <xx> IN <element of a set array> are corrected.

2) Inconsistence between a variable predeclaration and a variable declaration is detected, and a warning message is given.

3) Actual macro parameters can be enclosed in double quote characters according to the definition in the PLANC REFERENCE MANUAL.

4) Errors corrected concerning NEW <type> IN <integer array>.

5) Errors corrected concerning initiation of variables using the operators AND, OR, XOR and NOT.

6) Errors corrected concerning INLINE routines.

7) If the standard routine MAXINDEX or MININDEX is used in a PLANC routine with the STANDARD modifier, an error message is given.

8) Errors corrected concerning BYTE stored into a multiple number of BYTES.

9) Errors corrected concerning Recordarray(index).INTEGER4- INTEGER4=:<xx>.

10) Equivalence with the invalue of a routine is made possible.

11) Errors corrected concerning stack damage if a routine has a composite outvalue and the number of parameters > 2.

12) Errors corrected concerning the standard routine <unsigned 16 bits value> MOD <xx>.

13) If the standard routine ADDR is applied on a LOCAL/INLINE routine, an error message is given.

14) Some minor errors are corrected.