ND·100 SATELLITE
Operator Guide

ND-30.041.1 EN
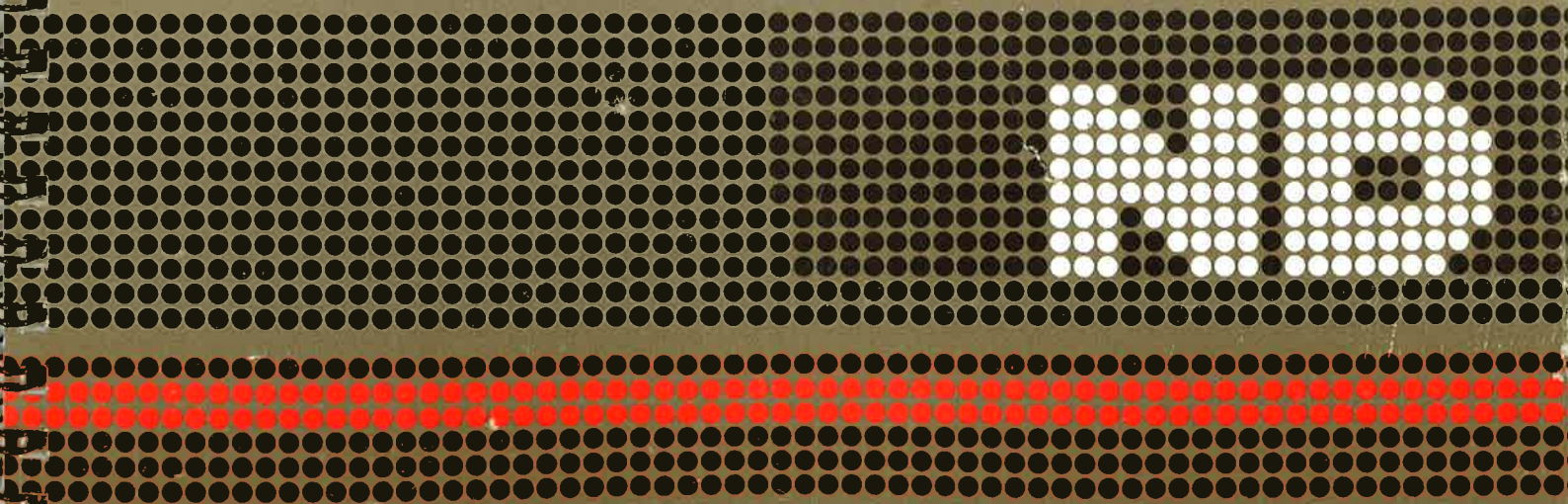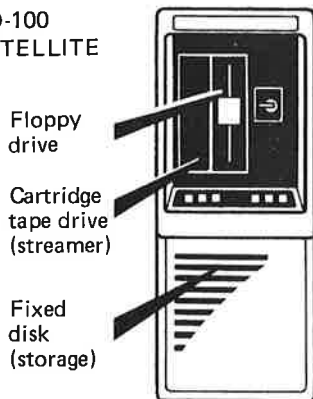
PREFACE

WHAT IS THE ND-100 SATELLITE?

ND-100 SATELLITE

- Floppy drive
- Cartridge tape drive (streamer)
- Fixed disk (storage)
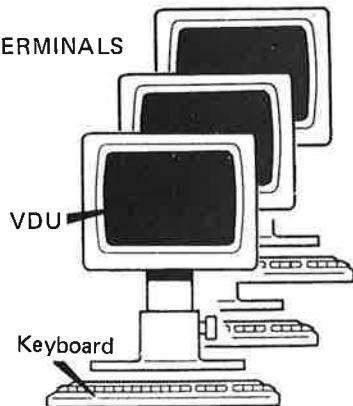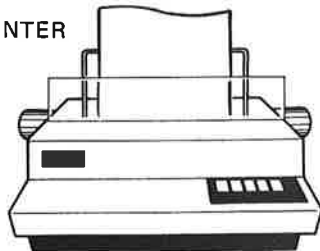
The ND-100 Satellite is a compact computer intended for use in office environment. It is small, quiet and easy to operate. It has a built-in floppy drive, as well as an internal storage device (a fixed disk). It will also normally be equipped with a cartridge tape drive (streamer).

Telefix, a system which permits analysis of errors in the computer directly from Norsk Data's Service Center, is available.

In addition to the ND-100 Satellite, your computer system consists of the following:

CONSOLE TERMINAL

TERMINALS

- VDU
- Keyboard

- a CONSOLE TERMINAL, which is the main terminal of the system, normally used by the system supervisor

- one or more USER TERMINALS, each consisting of a KEYBOARD and a VDU (Visual Display Unit)

- a PRINTER

PRINTER

> **NOTE**
>
> The technical expressions used in this manual are explained on page 45.

WHO CAN USE THIS MANUAL?

You will need this manual if you
are a REGULAR USER or a SYSTEM
SUPERVISOR.

As an REGULAR USER, you are
responsible for:

- copying your data files onto
  floppy diskettes for safe
  keeping (this is called taking
  PERSONAL backup)

- correcting simple errors

- calling the system supervisor if
  a fault occurs which you are
  unable to correct

You will find all the information
needed to carry out these duties
in the chapters marked "FOR ALL
READERS" (see table of contents)
No prior knowledge of computers is
needed to understand these
chapters.

As a SYSTEM SUPERVISOR, you have
the same duties as the regular
user, but in addition your tasks
include:

- installing the system and
  getting it operational

- creating users and allotting
  them user areas on the fixed
  disk

- regularly copying all data files
  onto a streamer tape or floppy
  diskettes for safe keeping (this
  is called taking SYSTEM backup)

- carrying out preventive
  maintenance on the streamer and
  floppy drives

- handling error situations

- installing programs

Most of these points are covered
in the chapters marked "FOR THE
SYSTEM SUPERVISOR". For additional
information, consult the following
manuals:

SINTRAN III System Supervisor   ND-30.003
SINTRAN III Introduction   ND-60.125
SINTRAN III Reference Manual   ND-60.128
ND Backup User Guide   ND-60.250
USER ENVIRONMENT Ref. Manual   ND-60.179

OPERATOR

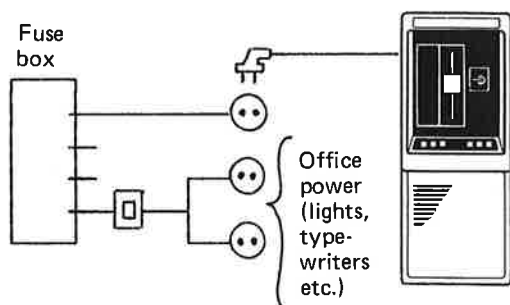SYSTEM SUPERVISOR

TABLE OF CONTENTS

1. INSTALLING YOUR ND-100 SATELLITE   (SYSTEM SUPERVISOR)

```
+-------------------------------------+
|               NOTE                  |
|                                     |
| The ventilation grills on the       |
| top of the cabinet must not be      |
| blocked. Never place papers or      |
| any other objects on top of the     |
| cabinet.                            |
+-------------------------------------+
```

POWER REQUIREMENTS

To reduce the risk of unwanted power breaks, which might lead to loss of data, the ND-100 Satellite should be given a separate power circuit which bypasses the switch for the office power.

HOW TO CONNECT TERMINALS AND PRINTERS

There are two types of connecting cables. CURRENT LOOP is the most common in this system, but some printers may require a V24 cable.

If your system includes a printer, find out you which type of cable fits the socket mounted on the printer. You will then know if it is a V24 or current loop printer.

The equipment is connected to the ND-100 Satellite by the following procedure:

• Select each socket to be either current loop or V24 by setting the selector switches on the terminal interface card.

- Connect the console terminal to the socket marked CONSOLE, using a current loop cable.

- In addition to the console terminal, a total of eight units (terminals and printers) can be connected.

USER TERMINAL

Keyboard

Power

CURRENT LOOP cable

V24 cable

V24 PRINTER

CURRENT LOOP cable

This cable will have power only when the computer is switched on. Can be used to feed power to terminals and other equipment.

To power wall socket.

CONSOLE TERMINAL

Keyboard

Power

The large contacts must be fastened with a screwdriver as shown.
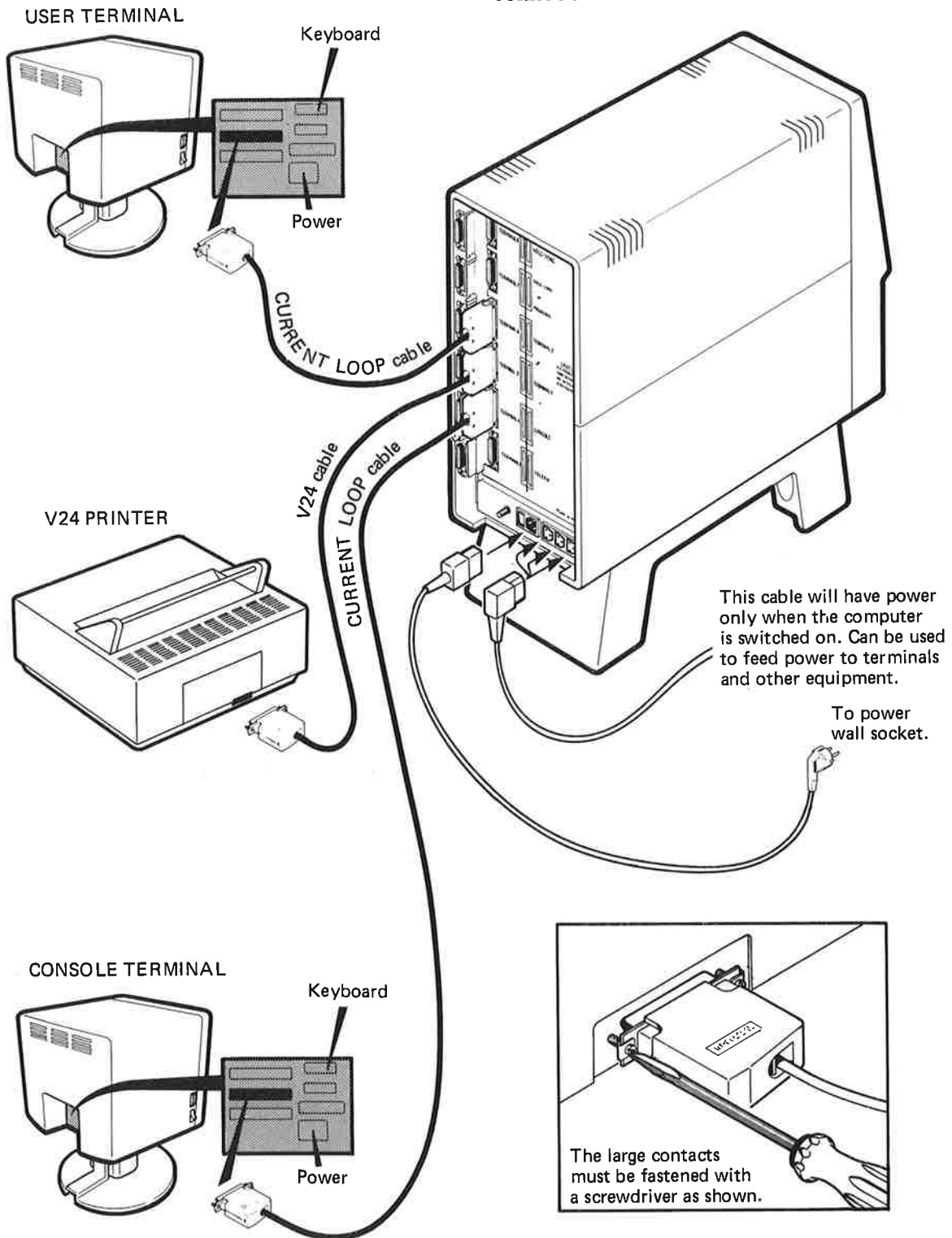
2. STARTING THE SYSTEM   (SYSTEM SUPERVISOR)

SWITCHING ON
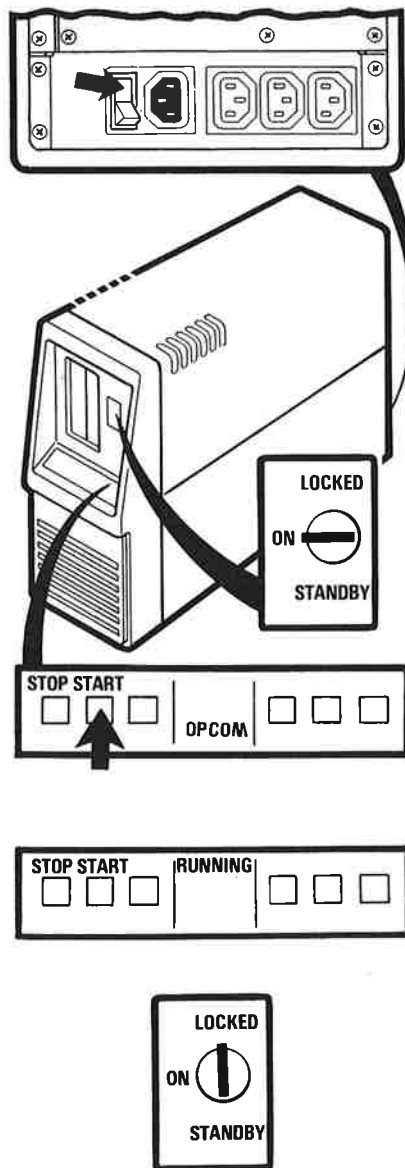
1) Locate the mains switch at the back of the computer and switch it on.

2) Go to the front of the computer and turn the key switch to position ON.

```
                CAUTION

Do not move the computer after
the key switch has been turned
ON, as this may damage the
disk.
```

3) Press the START button to start the computer.

4) Wait until the word 'running' appears on the operator panel. Then turn the key switch to the LOCKED position. This blocks the operator panel, so that nobody can use it while the computer is running.

Standby batteries

```
                CAUTION

The computer has a standby
battery which will keep the
system alive for approximately
12 minutes in case of power
failure. To prevent undesirable
discharge of this battery,
observe the following:

While the key switch is in ON
or LOCKED position, never
switch off the main switch at
the back or in any other way
disconnect the computer's
power. This would discharge
the standby battery within 12
minutes.

Always set the key switch to
position STANDBY before
switching the mains switch
off, or otherwise cutting off
the power to the computer.
```

LOGGING IN

```
                 NOTE

In this manual, everything
that YOU are expected to type
in from your terminal is
shown underlined. In user
names and passwords, hyphens
(-) must be used instead of
spaces between the words.
```

To get in touch with the
computer's operating system, you
must LOG IN.

To log in, you need a USER NAME.
The user name is the name by which
the computer knows you. Your user
name as a system supervisor is
SYSTEM.

1) You may have to wait about one minute after switching on the computer before the consoler terminal is ready.

ESC

2) Press the ESC key in the upper left corner of the keyboard.

3) The word ENTER appears on the screen. Type SYSTEM and then press ↵ (carriage return).

ENTER SYSTEM↵

4) The word PASSWORD appears. If you do not have a password yet, simply press ↵. If you know that a password has been programmed in, type it, and then press ↵.

PASSWORD: *PASSWORD*↵ *(invisible)*

OK

@

5) OK is displayed on your screen. On the next line, the sign '@' appears. The '@' is called the SINTRAN sign. It means that you are in contact with SINTRAN, which is the computer's operating system. You can think of SINTRAN as a 'traffic control' system in the computer (remember that several people may be using the computer at the same time, so some sort of traffic control is needed).

HOW TO USE SINTRAN

You communicate with the computer by using SINTRAN commands. There are three important things to remember about these commands:

• They can only be typed in when the SINTRAN SIGN '@' or the words 'SINTRAN command' are displayed. This indicates that the computer is ready to receive a command.

• As in a user name, hyphens must be used instead of spaces between words.

• The command is not carried out
until the ↵ key is pressed.

@WHO-IS-ON↵

Here is a useful SINTRAN command
which you can try straight away.
Type WHO-IS-ON followed by ↵.
This tells you who is using the
computer, and their terminal
numbers. At present, you are the
only user.

CREATING USERS

Creating a user

As a system supervisor, one of
your tasks is to CREATE USERS.
This simply means to 'introduce' a
person to the ND-100 Satellite, so
that the computer will 'recognize'
this person when he or she tries
to log in.

When creating a user, you must
also reserve some space for
him/her on the computer's storage
device (the fixed disk). Depending
on its size, the fixed disk in the
ND-100 Satellite contains 16, 22,
45 or 74Mb which must be shared
between the different users.

@CREATE-USER↵

USER NAME: ANNE↵

@GIVE-USER-SPACE↵

USER NAME: ANNE↵

NUMBER OF PAGES: 250↵

In this example, we assume that
you create a user with the user
name ANNE, who needs 250 pages.
Type in the instructions as shown
to the left:

DELETING A USER

@DELETE-USER↵

USER NAME: ANNE↵

You can delete a user with the
SINTRAN command DELETE-USER.

```
NOTE

A user cannot be deleted as
long as he or she still has
files on the disk. All files
must first be erased.
```

INCREASING OR REDUCING THE NUMBER OF PAGES

You can increase the number of pages allotted to a user by means of the SINTRAN command GIVE-USER-SPACE.

If there are no more pages available, you can take unused pages from another user with the SINTRAN command TAKE-USER-SPACE.

STARTING THE USER ENVIRONMENT PROGRAM

USER ENVIRONMENT is a program which makes it very easy for inexperienced users to start using the ND-100 Satellite. When logging in, you will get a menu which looks like this:

```
┌─────────────────── M A I N   M E N U ───────────────────┐
│ Date:1985-2-16                          Time:12:18:35    │
│ User:YOUR NAME            Current user area:YOUR-USER-NAME │
└─────────────────────────────────────────────────────────┘

1 Office Automation

2 Program Development

3 Remote Systems

4 User Area Maintenance

5 System Maintenance

            Task name:...............................
```

You choose one item on the menu by
typing the number of the item or
moving the "inverse video cursor"
to the desired item, with the up-
arrow and down-arrow keys (↓ and
↑) and pressing the carriage
return key (↵). A submenu appears
on the screen, from which further
choices can be made.

HELP

```
+----------------------------------+
|               NOTE               |
|                                  |
| Further on-screen information    |
| about the menu and how to use    |
| it can be obtained by pressing   |
| the HELP key. Press EXIT to      |
| get the menu back.               |
+----------------------------------+
```

In some installations, the USER
ENVIRONMENT program must be
started manually when the computer
is switched on. If you want
automatic loading of USER
ENVIRONMENT, contact your ND
representative, who will arrange
it. USER ENVIRONMENT will then be
automatically switched on when the
ND-100 Satellite is started.

Information on how to start USER
ENVIRONMENT manually can be found
on the Program Description sheet.

'MOVING' THE USERS INTO THE USER ENVIRONMENT PROGRAM

Although USER ENVIRONMENT is now
operating, it is still 'empty',
i.e. it does not have any users
except yourself. What you must do
now is to 'move' the users you
created earlier (page 6) into the
USER ENVIRONMENT program, so that
they can use it.

@LOG ↵

ESC

1) Log out by giving the SINTRAN
   command LOG. Then press the ESC
   key. You get the screen picture
   shown below.

2) Type your name, which is
SYSTEM, followed by ↵
(carriage return) Then type
your password, which is SYSTEM,
followed by ↵. The password is
NOT DISPLAYED on the screen.

```
                                                        ND-10518B

        ┌──────────────────────────────────────────────────────┐
        │                                                        │
        │   U  S  E  R     E  N  V  I  R  O  N  M  E  N  T        │
        │                                                        │
        └──────────────────────────────────────────────────────┘


        Enter your name    :   SYSTEM↵..........................


        Enter password     :   SYSTEM↵ (invisible).........
```

3) You get the MAIN MENU shown on
page 7. Choose 'User Area
Maintenance' by typing 4. You
get the following submenu:

```
┌─────────────────────── M A I N   M E N U ───────────────────┐
│ Date:1985-2-16                            Time:12:18:35       │
│ User:YOUR NAME                  Current user area:YOUR-USER-NAME│
└──────────────────────────────────────────────────────────────┘
                    ┌──────────────────────────────────┐
                    │ User Area Maintance              │
  1 Office Automati │                                  │
                    │                                  │
  2 Program Develop │ 1 Personal Backup                │
                    │                                  │
  3 Remote Systems  │ 2 Change User Area               │
                    │                                  │
  4 User Area Maint │ 3 User and Terminal Profiles     │
                    │                                  │
  5 System Maintena │                                  │
                    └──────────────────────────────────┘
```

4

```
┌───┐
│ 3 │
└───┘
```

4) Choose 'User and Terminal
   Profiles' by typing 3. You get
   the following screen picture:

```
                U  S  E  R      P  R  O  F  I  L  E          ND-10518B
   User:SYSTEM
   ──────────────────────────────────────────────────────────────────
       User name       :                              Letter:
       Password        :
       Standard task   :
       Language        :
       User level      :
   ──────────────────────────────────────────────────────────────────
       User groups     :
       Authorization   :                          SINTRAN:
       Main user area  :
       Alternative areas :
       Menu system     :
```

```
┌────┐
│ F2 │
└────┘
```

5) Press the F2 key in the right-
   hand section of the keyboard.
   The words 'User name' now
   change to 'Create user'.

```
                U  S  E  R      P  R  O  F  I  L  E          ND-10518B
   User:SYSTEM
   ──────────────────────────────────────────────────────────────────
       Create user       :
```

```
                U  S  E  R      P
   User:SYSTEM
   ────────────────────────────────────
       Create user     : ANNE SMITH ↵
       Password        : PASSWORD ↵
       Standard task   :
       Language        :
       User level      :
   ────────────────────────────────────
       User groups     :
       Authorization   :
       Main user area  : ANNE ↵
```

6) Type the user's real name
   (first and last name) followed
   by ↵. Then type the password
   you have chosen for this user,
   followed by ↵. (The password
   is not displayed. Write the
   password down, and give it to
   the user later on.) Then type
   the user's USER NAME (which you
   assigned when you created the
   user), followed by ↵. The user
   ANNE, whose real name is ANNE
   SMITH, has now been defined in
   the USER ENVIRONMENT program,
   and can start to use it.

7) Press the EXIT key to get back
   to the main menu, and repeat
   the procedure for another user,
   if there are any.

You can change the USER PROFILE to
meet the requirements of each
individual user. This is explained
in the USER ENVIRONMENT Reference
Manual, ND-60.179.2.

SWITCHING OFF

It is normally unnecessary to stop
the computer. However, if you must
stop it, e.g. in order to move it,
proceed as follows:

1) Before stopping the computer,
   you must make sure that the
   system is not being used by
   anyone. To do this, you use the
   SINTRAN command WHO-IS-ON (on
   how to use SINTRAN commands in
   USER ENVIRONMENT, see page 14).

2) Turn the key switch to position
   ON.
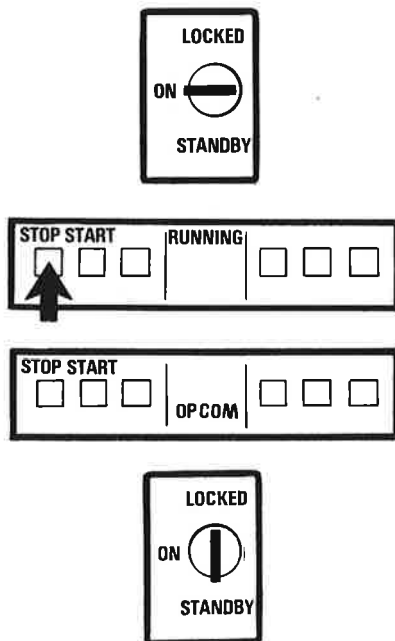
```
+------------------------------+
|           CAUTION            |
|                              |
| Before continuing, double-   |
| check that all users have    |
| logged out. If someone is    |
| using the system when you    |
| press the STOP button, data on|
| the fixed disk may be lost.  |
+------------------------------+
```

3) Press the STOP button on the
   operator panel.

4) Turn the key switch to position
   STANDBY.

```
+------------------------------+
|           CAUTION            |
|                              |
| Do not move the computer until|
| 30 seconds after the key     |
| switch has been turned to the|
| STANDBY position, as this may|
| damage the disk.             |
+------------------------------+
```

3. LOGGING IN AND GETTING STARTED   (ALL READERS)

LOGGING IN

Using the computer

When using the computer, the first thing you must do is to get in touch with it, i.e., you must LOG IN.

To log in, you need a user name and a PASSWORD. The password is necessary so that no one but you can log into the computer using your name. Ask your system supervisor what your user name and password are.

Having found out what your password is, you can start logging in as follows:

1) Check that the green lamps ON and LINE at the top of the keyboard are lit. If not, see page 16.

2) Press the orange key marked ESC in the upper left corner of the keyboard. The following picture appears on your screen:


```
                                                        ND-10518B

        U S E R       E N V I R O N M E N T




        Enter your name    :    ................................

        Enter password     :    ................................
```
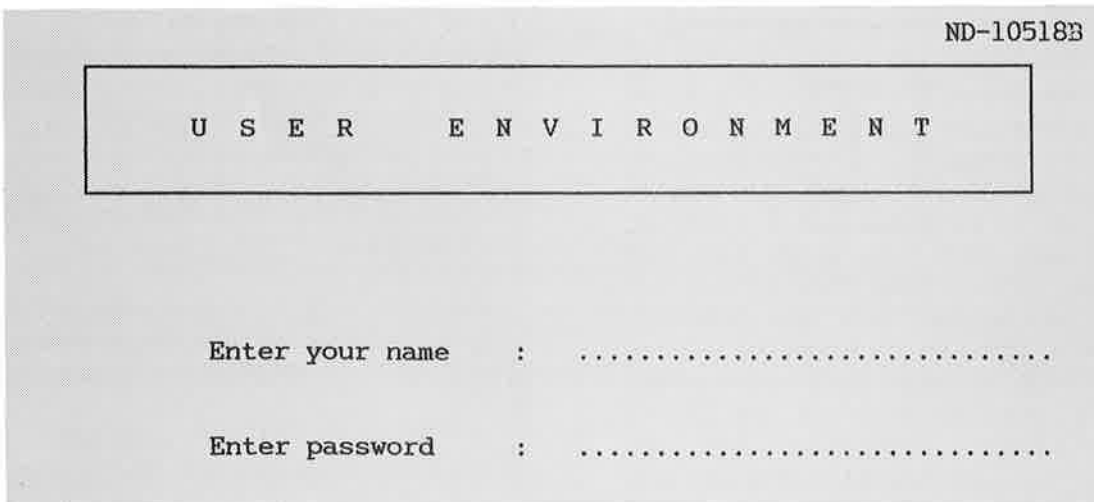
```
+------------------------------------+
|                NOTE                |
|                                    |
| In this manual, everything         |
| that YOU type is shown under-      |
| lined.                             |
+------------------------------------+
```

3) Type your user name followed by
   ↵. (The name ANNE SMITH is
   used as an example) The ↵ key
   is the large orange key to the
   right of the light grey keys.
   It is called carriage return.

Enter your name   :   ANNE SMITH↵...............

If you make a typing error, you
can erase the letters with the
orange key marked ⌀ above the
↵ key. If you do not discover
the error until you have moved
to the next line, you can move
back by using the brown key
marked ↑.

4) Type your password followed by
   ↵. The password is not
   displayed on the screen.

Enter password   :   *PASSWORD↵ (invisible)* ....

5) If you have done everything
   correctly, the MAIN MENU
   appears on the screen. If not,
   see page 17.

```
+------------------------------------+
|                NOTE                |
|                                    |
| Whenever you have a menu on        |
| the screen, you can press the      |
| HELP key to get further            |
| information on the menu and        |
| how to use it. Press the EXIT      |
| key to get the menu back.          |
+------------------------------------+
```

```
┌──────────────── M A I N   M E N U ─────────────────────┐
│ ┌──────────────────────────────────────────────────┐   │
│ │ Date:1985-2-16                      Time:12:18:35 │   │
│ │ User:YOUR NAME          Current user area:YOUR-USER-NAME │
│ └──────────────────────────────────────────────────┘   │
│                                                         │
│  1 Office Automation                                    │
│                                                         │
│  2 Program Development                                  │
│                                                         │
│  3 Remote Systems                                       │
│                                                         │
│  4 User Area Maintenance                                │
│                                                         │
│  5 System Maintenance                                   │
│                                                         │
│           Task name:...............................     │
│                                                         │
└─────────────────────────────────────────────────────────┘
```

6) If you are a SYSTEM SUPERVISOR,
   you can choose any item on this
   menu by typing a number between
   1 and 5. You can also give
   orders directly to the computer
   by typing the SINTRAN sign @.
   You will then move to the line
   'Task name:....', and you can
   type your SINTRAN command here.
   If you are a a REGULAR USER,
   you will normally type 1. You
   then get the following SUBMENU:

[1]

```
┌──────────────── M A I N   M E N U ─────────────────────┐
│ ┌──────────────────────────────────────────────────┐   │
│ │ Date:1985-2-16                      Time:12:18:35 │   │
│ │ User:YOUR NAME          Current user area:YOUR-USER-NAME │
│ └──────────────────────────────────────────────────┘   │
│                ┌─────────────────────────────────────┐  │
│                │ Office Automation                   │  │
│  1 Office Automati                                    │  │
│                │                                     │  │
│  2 Program Develop │ 1 Word Processing and TELEX     │  │
│                │ 2 Document Storage                  │  │
│  3 Remote Systems  │ 3 Spreadsheet                   │  │
│                │ 4 Queries                           │  │
│  4 User Area Maint │ 5 Report Generator (Make reports) │ │
│                │ 6 Report Processor (Run reports)    │  │
│  5 System Maintena │ 7 Information Retrieval          │  │
│                │ 8 Mail system                       │  │
│                │ 9 Business Graphics                 │  │
│                └─────────────────────────────────────┘  │
└─────────────────────────────────────────────────────────┘
```

7) You may choose any item on this menu by typing a number between 1 and 9. For further instructions on how to use the different systems, see the relevant manuals. If you choose 1, you get another submenu:


```
─────── M A I N   M E N U ───────
 Date:1985-2-16                          Time:12:18:35
 User:YOUR NAME            Current user area:YOUR-USER-NAME

                    Office Automation
 1 Office Automati
                             Word Processing and Telex
 2 Program Develop  1 Word Proc
                    2 Document
 3 Remote Systems   3 Spreadshe  1 Create Document
                    4 Queries    2 Edit Document
 4 User Area Maint  5 Report Ge  3 Format Document
                    6 Report Pr  4 Inspect Document
 5 System Maintena  7 Informati  5 TELEX
                    8 Mail syst
                    9 Business
```

8) To get back to a previous menu, press the EXIT key in the upper right corner of the keyboard.

LOGGING OUT

When you have finished your work, you must break contact with the computer.

To do this, first return to the main menu by pressing the EXIT key the required number of times (depending on which menu level you are on). Then press the EXIT key once more.
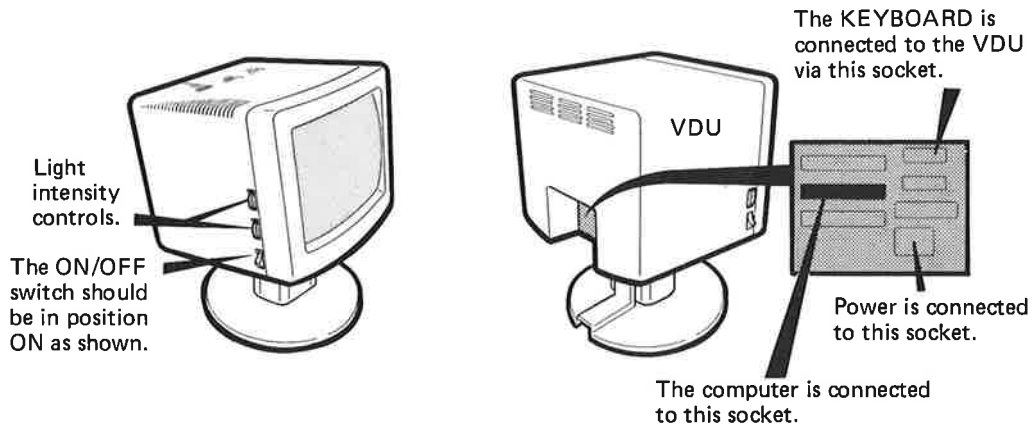
The computer will now ask:

Do you want to finish your work at the terminal (Yes/No)?

Type Y (for yes) followed by ↵.

The computer responds by giving the time of your logging out, followed by the word EXIT.

Make it a HABIT to log out when leaving the terminal.

IF SOMETHING GOES WRONG

Light intensity controls.

The ON/OFF switch should be in position ON as shown.

The KEYBOARD is connected to the VDU via this socket.

VDU

Power is connected to this socket.

The computer is connected to this socket.

FAULT	WHAT TO CHECK OR WHAT TO DO
ON lamp on terminal not lit.	On/off switch on? VDU connected to mains voltage?
LINE lamp on terminal not lit.	Keyboard connected to VDU? VDU connected to data socket? Press the brown LOCAL key in the top row of the keyboard a couple of times.

FAULT	WHAT TO CHECK OR WHAT TO DO
Other lamps on terminal lit.	EXP LAMP LIT: Press the orange INS/EXP key on the left-side of your keyboard. APP LAMP LIT: Hold the SHIFT key down while pressing the orange INS/EXP key. The SHIFT key is the unmarked light grey key in the lower left (and right) corner of the main keyboard. BUSY, MSG., CAR, WAIT, or ERROR LAMP LIT: Call your system supervisor.
You get nothing on your screen	Are the 'light intensity' controls on the left side of the VDU turned up? If this was not the problem, call your system supervisor.
The computer writes: "User name must be given" (or) "Password must be given"	You have forgotten to type your user name or password when logging in. Go back by pressing the brown ↑ key and type the correct name or password. If you do not know your user name or password, contact your system supervisor.
The computer writes: "User name/password not recognized"	The computer has rejected your user name or password. Go back by pressing the brown ↑ key and try again, taking great care to avoid spelling mistakes. Remember: hyphens (-) between the words.

```
+-----------------------------------+
|               NOTE                |
|                                   |
| Do not repeat an unsuccessful     |
| log-in procedure more than ten    |
| times (see below).                |
+-----------------------------------+
```

FAULT	WHAT TO CHECK OR WHAT TO DO

The computer writes:
"Too many attempts
to enter"

The system supervisor
will give you a hand

If you repeat an unsuccessful log-in procedure more than a predefined number of times (normally ten), the computer will suspect that you are an unauthorized user trying to log in without knowing the user name (or password). The computer displays the words TOO MANY ATTEMPTS TO ENTER and further log-in attempts from your keyboard are blocked. In this case you will need your system supervisor to 'bail you out'.

To the system supervisor:

You can reseve the user from this situation with the SINTRAN command STOP-TERMINAL (how to use SINTRAN commands in USER ENVIRONMENT is explained on page 14). You must also know the terminal number, which can be found by using the WHO-IS-ON command.

You forgot your password:

Call your system supervisor.

To the system supervisor:

You can change the password by choosing USER AREA MAINTENANCE on the main menu, and then USER AND TERMINAL PROFILES on the submenu. You then type the new password, followed by ↵.

You get an unfamiliar text
(perhaps an error message)
on your screen.

Call your system supervisor.

To the system supervisor:

An explanation of some error messages is found at the end of this manual. Otherwise, refer to the manual SINTRAN III System Supervisor, ND-30.003.

4. TAKING PERSONAL BACKUP   (ALL READERS)

HOW TO TAKE CARE OF YOUR DISKETTES

Good diskette habits will minimize
the risk of losing data. For your
own benefit, always follow these
rules:
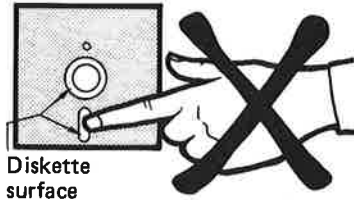
Diskette
surface

- Do not touch the diskette
  surface!

- Keep the diskettes away from
  magnetic fields. Do not place
  them on top of your terminal or
  other equipment.

- Do not bend or fold the
  diskettes.
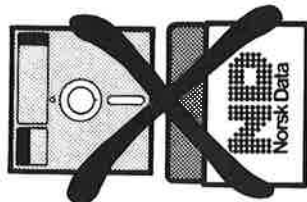
- Keep the diskettes in their
  envelope when they are not in
  use.

- Be careful when inserting the
  diskette in the floppy drive.
  NEVER leave it halfway inserted
  in the open door.

- Do not drop the diskette on the
  carpet, and if you do, pick it
  up again immediately, as the
  static electricity may damage
  the data.

WRITE PROTECTION

You can protect your diskettes
against unwanted erasure by
placing a small metal foil
(enclosed in the diskette pack)
over the indentation at the side
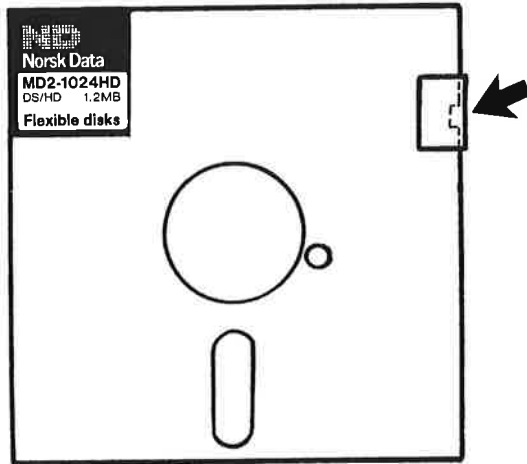of the diskette, as shown. It will
now be impossible to record
anything on this diskette.

```
+-----------------------------------------------+
|                     NOTE                      |
|                                               |
|  When using a diskette, always                |
|  check that it has not been                   |
|  protected against recording.                 |
+-----------------------------------------------+
```

INSERTING A DISKETTE IN THE FLOPPY DRIVE

You insert the diskette as shown:

1.
Make sure that
the door is
unlocked (red
means locked).

↑ UNLOCKED
↓ LOCKED

2.
Press the left
side of the
door. The
door opens.

3.
Insert the
diskette as
shown.
Push it in
as far as it
will go.

4.
Close
the door.

5.
Lock the
door if
you want.
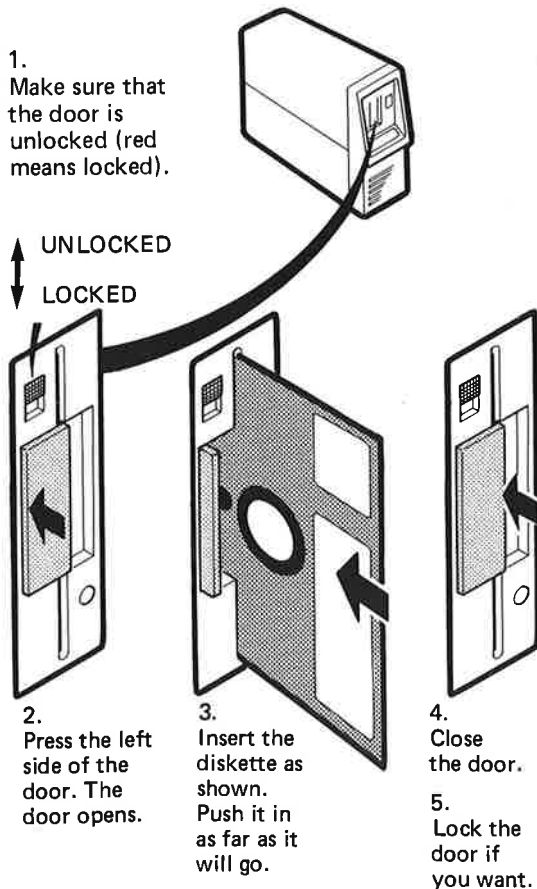
HOW TO FORMAT YOUR DISKETTES

If your diskettes are supplied by Norsk Data, you can skip this section.

If your diskettes are from another supplier, you must <u>format</u> them before use. To format a diskette means to prepare it for data storage. In the formatting process, the diskette is divided into numbered sectors.

```
                CAUTION

If the diskette contains data,
this data will be lost in the
formatting process.
```

Formatting is done as follows:

1) Insert the diskette.

2) Log in on a terminal.

3) When you get the MAIN MENU, type @. You will then move to the line 'Task name:....'.

4) Type the instructions as shown:

5) The formatting is completed when the @ sign reappears (a couple of minutes).

6) Press the EXIT key to get your menu back.

```
@DEVICE-FUNCTION↵

FILE NAME: FLOPPY↵

FUNCTION: SET-FORMAT↵

FORMAT: 17↵
```

```
@DEVICE-FUNCTION↵

FILE NAME: FLOPPY↵

FUNCTION: FORMAT-FLOPPY↵
```

You also use this procedure if you want to 'erase' the old contents of a diskette and store new data on it.

PERSONAL BACKUP – COPYING TO A DISKETTE

When you use the computer, the
work you do (your data files) is
stored in the computer's storage
device (disk). To take a personal
backup means to make a copy of
your files on a diskette. This is
done for safety reasons, in case
the original gets lost.

```
+-----------------------------------+
|                NOTE               |
|                                   |
| If you run into trouble, you      |
| can usually 'get out' by          |
| pressing the ESC key and start    |
| from the beginning again.         |
+-----------------------------------+
```

1) Log in on a terminal.

2) On the main menu, choose 4
   (User Area Maintenance). You
   get the following submenu:

4

```
┌─────────────────── M A I N   M E N U ───────────────────────┐
│ Date:1985-2-16                               Time:12:18:35   │
│ User:YOUR NAME              Current user area:YOUR-USER-NAME │
└─────────────────────────────────────────────────────────────┘

              ┌──────────────────────────────────────┐
              │ User Area Maintance                  │
1 Office Automati │                                  │
              │                                      │
2 Program Develop │ 1 Personal Backup                │
              │                                      │
3 Remote Systems  │ 2 Change User Area               │
              │                                      │
4 User Area Maint │ 3 User and Terminal Profiles     │
              │                                      │
5 System Maintena │                                  │
              └──────────────────────────────────────┘
```

$\boxed{1}$

3) On the submenu, choose 1 (Personal Backup), and "Ba-sy:" appears on the VDU.

4) Before taking backup, you must CREATE VOLUME, i.e. reserve space on the floppy diskette, and give this space a name. You can, for example, choose the name you logged in under. The maximum number of letters is six. The name ANNE is chosen as an example here. The values between the quatation marks ,'and', are the defaults which are used if only carriage return (↵) is given. Type the instructions as shown:

```
Ba-sy: CREATE-VOLUME↵

   Volume name: ANNE↵

   Device name 'FLOPPY-DISK-1': ↵

   Device unit '0': ↵
```

NOTE

If you later take another backup on THE SAME diskette, you can use the volume already created.

---

5) When you have created volume,
   you must specify the
   DESTINATION of your copying.
   The destination is the space
   (volume) you just created on
   your diskette. You must also
   specify the SOURCE of the
   copying, i.e. the file or files
   you wish to copy. Type the
   instructions as shown:

```
Ba-sy: COPY-USER-FILES↵

   Destination type: VOLUME↵

      Destination volume name: ANNE↵

      Destination device name 'FLOPPY-DISK-1': ↵

      Destination unit number '0': ↵

      Destination file generation: ↵

DEFAULT DESTINATION GENERATION: 1

Source type: DIRECTORY↵

   Source directory name '': ↵

   Source user name 'ANNE': ↵

   Source file name: LETTER↵

Manual selection: NO↵
```

If you do not specify a file, but
simply press ↵, ALL your files
will be copied. In the example
here, all files whose names begin
with LETTER (i.e. LETTER-1,
LETTER-2 etc.) will be copied. To
copy just one file, you must type
THE WHOLE file name. (WAIT while
the backup is taking place.)

6) When 'Ba-sy:' reappears, the backup copying is completed. You can now check that your file or files have been transferred to the diskette, by making a list of the files on the diskette. Type the instructions as shown:

```
Ba-sy: LIST-VOLUME↵

   Device name 'FLOPPY-DISK-1': ↵

   Device unit '0': ↵

   File name '': ↵

   Output file 'TERMINAL': ↵

VOLUME NAME: ANNE

OWNED BY: ANNE

FILE 1: (ANNE)LETTER-1:TEXT;1

.........
```
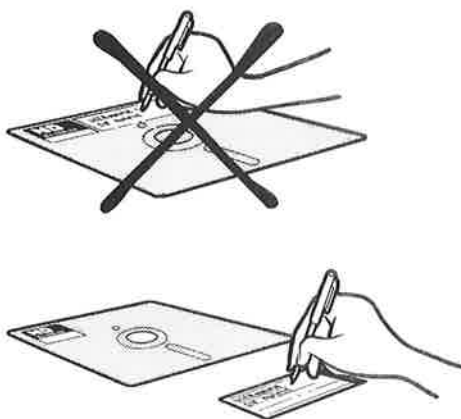
ESC

7) Press the ESC key.

```
Ba-sy: EXIT↵
```

8) Type EXIT to get your menu back.

LABELLING THE DISKETTE

It is very important to mark the diskettes, to know what has been stored on them. Labels for this purpose are included in the diskette cartons.

```
+-------------------------------+
|            CAUTION            |
|                               |
| Write on the label BEFORE     |
| placing it on the diskette,   |
| otherwise the diskette might  |
| be damaged.                   |
+-------------------------------+
```

RECOVER - COPYING FROM A DISKETTE BACK TO A STORAGE DEVICE

1) Follow steps 1-3 on page 22-23.

2) In this example, all files whose names begin with LETTER will be copied back to disk. If you do not specify a source file name, but simply press ↵, ALL files on the floppy diskette will be copied back. Type the instructions as shown:

```
Ba-sy: COPY-USER-FILES↵

   Destination type: DIRECTORY↵

      Destination directory name '': ↵

      Destination user name 'ANNE': ↵

Source type: VOLUME↵

   Source volume name: ANNE↵

   Source device name 'FLOPPY-DISK-1': ↵

   Source device unit '0': ↵

   Source file generation '': ↵

   Source file name: LETTER↵

Manual selection: YES↵

FILE 1: (ANNE)LETTER-1:TEXT   (YES/NO)
        Indexed   1 page modified  85.01.01

. . . . . . . .
```

(WAIT while the copying takes place.)

ESC

3) Press the ESC key.

```
Ba-sy: EXIT↵
```

4) Type EXIT to get your menu back.

CLEANING THE FLOPPY DRIVE

The floppy drive should be cleaned
at least once a month. Use the
PERFECT DATA Head Cleaning Kit,
and follow the instructions given
on the envelope of the cleaning
diskette.

```
+-----------------------------+
|            NOTE             |
|                             |
| The floppy drive is dual    |
| sided; the perforated tab on|
| the cleaning diskette must  |
| therefore be removed.       |
+-----------------------------+
```

How to start the floppy drive
while cleaning the head:

1) Log in on a terminal.

2) When you get the MAIN MENU,
   type @. You will then move to
   the line 'Task name:....'.

@CREATE-DIRECTORY↵

DIRECTORY NAME: ↵

DEVICE NAME: FLOPPY-DRIVE↵

3) Type the instructions as shown:

4) You may get an ERROR message on
   the screen, but this is of no
   importance.

EXIT

5) The cleaning is completed when
   the @ sign reappears. Press the
   EXIT key to get your menu back.

## 5. TAKING SYSTEM BACKUP   (SYSTEM SUPERVISOR)

GENERAL INFORMATION ABOUT THE STREAMER BACKUP PROGRAM

The streamer backup program copies all data on the disk to the streamer tape, starting from page zero on the disk. The number of pages copied is:

74 MB disk	37,888 decimal pages
45 MB disk	22,040 decimal pages
23 MB disk	11,776 decimal pages
16 MB disk	8,194 decimal pages

The first block of the tape gives information about the backup date, which disk unit the backup was taken from, and the number of pages. You will also get CPU information.
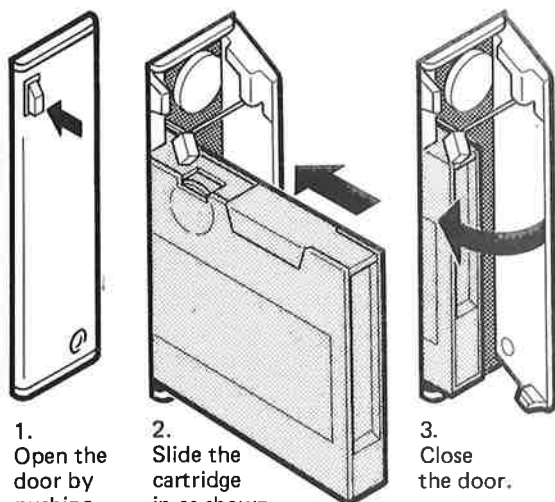
PROTECTING THE TAPE CARTRIDGE FROM ACCIDENTAL ERASURE
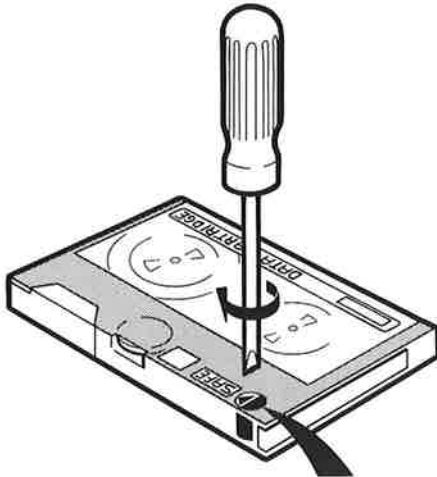
Writing prohibited

You can protect existing data cn a cartridge from accidental over-write by turning the write protect to the SAFE position. This switch prohibits writing on any track.

BACKUP COPYING TO STREAMER TAPE

1.
Open the
door by
pushing
the knob.

2.
Slide the
cartridge
in as shown
until it
stops.

3.
Close
the door.

1) Insert the tape cartridge as shown. Remember that one backup takes one cartridge.

2) Insert the diskette marked DIR-BACKUP or UTILITY.

3) Log in on the console terminal, under the user name SYSTEM.

4) Before stopping the system, which you must do before taking backup, make sure that the computer is not being used by anyone. To do this, give the SINTRAN command WHO-IS-ON (on how to use SINTRAN commands in USER ENVIRONMENT, see page 14).

5) This is an example showing the type of information this command will give you. In this case, you must ask the two users KATE and BOB to log out before you stop the system.

```
@WHO-IS-ON↵

===>        1        SYSTEM
            5        KATE
            8        BOB
```

6) When all users have logged out, proceed as follows:

```
┌─────────────────────────────────┐
│              NOTE                │
│                                  │
│ After STOP-SYSTEM, everything    │
│ you type must be in UPPERCASE.   │
└─────────────────────────────────┘
```

```
@STOP-SYSTEM↵ ;

£MACL↵

££1560£      (Do NOT press ↵ )
```

(WAIT for a few seconds)

```
=======================================================
=            Directory backup for              =
=        Winchester-disk and Streamer          =
=        Started : Date/Month-Year   hh:mm:ss  =
=======================================================


    Program number : xxxxxxx-x
    Program name    : Dir-Backup-X
    Issued          : MONTH date, year

The command HELP gives you a list of the commands.
```

> ┌─────────────────────────────────┐
> │   NOTE   │
> │   │
> │ The copying will take 22-25   │
> │ minutes for a 45 MB disk.   │
> └─────────────────────────────────┘

```
>BACKUP↵

BACKUP

TO
STREAMER system (1-2 (Dec.)): ↵↵

Unit............(0-3 (Dec.)): ↵↵

FROM
DISK-NAME...................: ↵↵

Unit...........(0-3 (Oct.)): ↵↵

==  hh:mm:ss  Initialize disk and streamer  ==

==  hh:mm:ss  Copy from disk TO STREAMER    ==

========> Current page: XXXX

==  hh:mm:ss          Copy finished         ==

==  hh:mm:ss    Compare disk and streamer   ==
========> Current page: XXXX

==  hh:mm:ss         Compare finished        ==

>RESTART-SINTRAN↵

Give Main device

DISK-NAME...................: ↵↵

Unit...........(0-3 (Oct.)): ↵↵
```
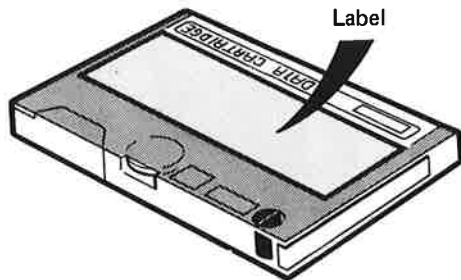

Backup takes time

(WAIT for a few seconds, while
SINTRAN is restarted. Then LOG IN
again.)

LABELLING THE TAPE CARTRIDGE

It is very important to label the cartridge to know what has been stored on it. Always write the date and the name of the disk unit from which the backup was taken.

Label

```
┌─────────────────────────────┐
│            NOTE             │
│                             │
│ DO NOT fasten the label to  │
│ the metal plate on the back │
│ of the cartridge. The       │
│ thickness of the label will │
│ be sufficient to bring the  │
│ cartridge out of its        │
│ correct position, so that   │
│ the tape will be positioned │
│ incorrectly with respect to │
│ the read/write heads.       │
└─────────────────────────────┘
```

RECOVER — COPYING FROM STREAMER TAPE TO A STORAGE DEVICE

Follow steps 1-5 on page 29. Then proceed as follows:

```
┌─────────────────────────────┐
│           CAUTION           │
│                             │
│ When you use the RECOVER    │
│ command, ALL of the present │
│ disk contents will be       │
│ erased, and there is no     │
│ protection mechanism        │
│ against this.               │
└─────────────────────────────┘
```

```
>RECOVER↵

RECOVER
TO
DISK-NAME....................: ↵↵

Unit...........(0-3 (Dec.)): ↵↵

FROM
STREAMER system (1-2 (Oct.)): ↵↵

Unit...........(0-3 (Dec.)): ↵↵

==  hh:mm:ss  Initialize disk and streamer  ==

==BAC08=> This backup is recorded Date/Month-Year hh:mm
========> From DISK-45MB-1

==  hh:mm:ss  Copy TO DISK from streamer   ==
========> Current page: XXXX

==  hh:mm:ss           Copy finished       ==

==  hh:mm:ss     Compare disk and streamer  ==

========> Current page: XXXX

==  hh:mm:ss        Compare finished        ==

>RESTART-SINTRAN↵

Give Main device

DISK-NAME....................: ↵↵

Unit...........(0-3 (Oct.)): ↵↵
```

(WAIT for a few seconds, while
SINTRAN is restarted. Then LOG IN
again.)

CLEANING THE READ/WRITE HEADS

WHEN TO CLEAN:

Do you need a 'cleaning'?

WHAT TO USE:

If backup is taken daily, you must clean the read/write heads once a week. If backup is taken weekly, you must clean the heads once a month.

If there are any rewrites, rereads, overruns or underruns during copying, a message will appear on the screen afterwards, giving you the number of such occurrences. If the number of rewrites increases dramatically from copy to copy, the read/write head may need cleaning.

To clean the heads, you can use Tandberg Data's 7566 Kit TDC Cleaning Cartridge. Follow the instructions that is implemented in the kit.

SYSTEM BACKUP ON FLOPPY DISKETTES

If your computer is not equipped
with a streamer, you must take
system backup on floppy diskettes.

1) Log in as SYSTEM.

2) On the main menu, choose 4
   (User Area Maintenance). You
   get the following submenu:

4

```
─────────── M A I N   M E N U ──────────────
┌──────────────────────────────────────────────────┐
│ Date:1985-2-16                    Time:12:18:35    │
│ User:YOUR NAME        Current user area:YOUR-USER-NAME │
└──────────────────────────────────────────────────┘

                 ┌─────────────────────────────────┐
                 │ User Area Maintance             │
 1 Office Automati├─────────────────────────────────┤
                 │                                 │
 2 Program Develop│ 1 Personal Backup               │
                 │                                 │
 3 Remote Systems │ 2 Change User Area              │
                 │                                 │
 4 User Area Maint│ 3 User and Terminal Profiles    │
                 │                                 │
 5 System Maintena└─────────────────────────────────┘
```

1

3) On the submenu, choose 1
   (Personal Backup). You get "Ba-
   sy:" on the VDU.

4) Before taking backup, you must
   CREATE VOLUME, i.e. reserve space
   on the floppy diskette, and give
   this space a name. You can, for
   example, use the date when the
   backup is taken. The maximum
   number of letters is six. Type
   the instructions as shown:

```
Ba-sy: CREATE-VOLUME↵

   Volume name: OCT.11↵

   Device name 'FLOPPY-DISK-1': ↵

   DEVICE UNIT '0': ↵
```

You will probably want to limit
your backup to those files which
have been modified since the last
backup (taking backup of ALL files
will require a lot of floppy
diskettes).

5) You must therefore create a LOG
   FILE to keep track of the files
   that have been modified. You do
   this by typing "BACKUP-LOG:LOG"
   as shown (instead of BACKUP-LOG
   you can use another name of your
   choice). The double quotes (" -
   ") should only be used the FIRST
   time you take backup i.e. when
   the file is created. Later, they
   must be left out (but otherwise
   the procedure is the same). Type
   the instructions as shown:

```
Ba-sy: SERVICE-PROGRAM-CUF↵

   Cuf-serv: MASTER-LOG-MODE↵

    Master log file '': "BACKUP-LOG:LOG"↵

    Append access? 'YES': ↵

   Cuf-serv: EXIT↵
```

6) You now define the DESTINATION of
   your backup (the volume you just
   created), and the SOURCE (i.e.
   the disk PACK-ONE) in the
   computer. You must decide which
   files to copy, and which to
   leave. To help you decide, you
   can ask the computer for a list
   of the criteria for file
   selection. Different criteria can
   be combined by using AND, OR, NOT
   and parantheses.

   Let us assume you decide to copy
   all files that have been modified
   since the last backup, except
   some large data files (e.g. the
   SINTRAN file). The selection
   shown on page 36 is a good
   example, and you can copy it
   directly if you like. Remember to
   type EXECUTE when you have
   finished your selection.

```
Ba-sy: MULTIUSER-COPY↵

   Destination type: VOLUME↵

       Destination volume name: OCT.11↵

       Destination device name 'FLOPPY-DISK-1': ↵

       Destination unit number '0': ↵

       Destination file generation: ↵

DEFAULT DESTINATION GENERATION: 1

Source type: DIRECTORY↵

   Source directory name: PACK-ONE↵

   Source user name '': ↵

Manual check 'LIST': ↵

Manual selection: S↵

   Selection: HELP↵

   Command name: ↵

Selection: MODIFIED-SINCE-LAST-BACKUP↵

Selection: AND NOT F-N (SYS)SINTRAN:DATA↵

Selection: AND NOT F-N (SYS)MACM-AREA:DATA↵

Selection: AND NOT F-N (SYS)SEGFILO:DAT↵

Selection: AND NOT F-N :OUT↵

Selection: AND NOT F-N :BRF↵

Selection: AND NOT F-N (SCRATCH)↵

Selection: AND NOT F-A SPOOLING↵

Selection: AND NOT F-A PERIPHERAL↵

Selection: AND NOT F-A TERMINAL↵

Selection: EXECUTE↵

VOLUME IS NOW PRODUCED IN MODE: BACKUP SYSTEM

USER NAME: SYSTEM
```
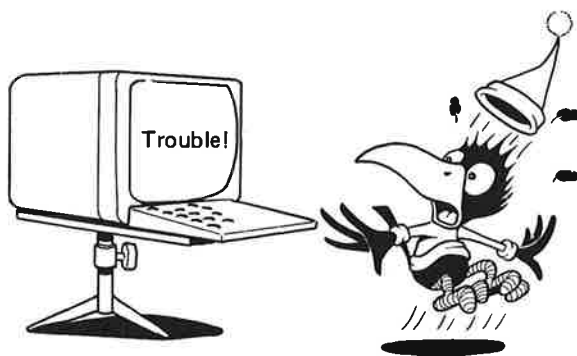
7) The backup is now taking place.
When the diskette is full, the
computer will ask for a new one.
Simply remove the old diskette,
insert the new one and continue
the backup. You do not have to
create volume on the new diskette
in advance.

IF YOU RUN INTO TROUBLE

• Have you remembered to create
volume (page 34)?

• Do you have a 'clean' diskette?
If not, you can erase it as
explained on page 21.

• Have you checked that your
diskette is not write protected
(page 20)?

• If you get stuck, you can always
'get out' by pressing the ESC
key the required number of
times.

Every 5th to 10th time you take
backup, you should take a COMPLETE
backup, to avoid producing long
chains of selected backups. You do
this by leaving out the selection
MODIFIED-SINCE-LAST-BACKUP from
the example above. The first time
you take a regular backup again,
after taking a complete backup,
you must erase the log file by
answering NO to the question
'Append access'. See page 35.

6. ERROR SITUATIONS   (SYSTEM SUPERVISOR)

HOW TO USE TELEFIX

Telefix is a system which permits analysis of error situations in your computer directly from Norsk Data's Service Center.
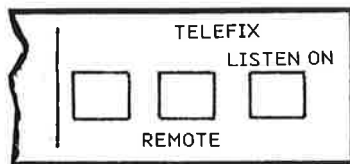
To activate Telefix, set the key switch to ON and press the two rightmost keys on the operator panel (to the left of the key switch), so that the panel looks like the illustration (REMOTE and LISTEN ON).

```
        TELEFIX
              LISTEN ON
  ┌─┐   ┌─┐   ┌─┐
  └─┘   └─┘   └─┘
   REMOTE
```
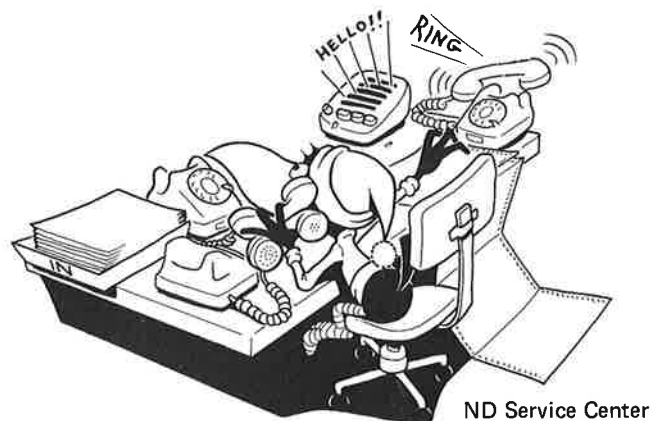

NOTE

To be able to use the TELEFIX, you must:

Set the thumbwheel switch for "Speed Setting for Console Terminal" to position 15.

Set the switch "SW" (ST1) on the Panel Control PCB (ND-1834) to the REMOTE position.

Now you can communicate with the ND Service Center from your console terminal.

ND Service Center

ERROR MESSAGES GIVEN DURING STREAMER BACKUP

The format of the message is shown on the left, in which x and y are numbers. The number x has the following significance:

```
       ┌─────────────────────────────┐
    ┬──┘                             └──
==BACxy=> (text giving the message)
========> (additional explanatory
           text)
```

0: Message to inform (no error).

3: Error message (information on the status that caused the error).

4: System error (fatal error – the system was unable to perform the operation).

5: Operator break.

==BAC00=> Current disk page :
     xxxxxx – yyyyyy

Tells you where the program was operating on the disk when the error occurred. xx and yy are octal numbers.

==BAC00=> Pages compared to disk :
     xxxxxx

Page counter, telling you how many pages have been compared to the disk.

==BAC01=> Current streamer page :
     xxxxxx – yyyyyy

Tells you where the program was operating on the streamer when the error occurred.

==BAC01=> Pages copied to disk :
     xxxxxx

Page counter, telling you how many pages have been copied to the disk.

==BAC02=> Pages copied to streamer :
     xxxxxx

Page counter, telling you how many pages have been copied to the streamer.

==BAC06=> There have been x blocks rewritten on tape

==BAC06=> There have been x blocks reread on tape

Number of rewrites or rereads during backup or recover. x is a decimal number. A rapidly increasing number of rewrites indicates that the read/write heads should be cleaned or that the tape is in bad condition.

==BAC07=> There have been x underruns   Number of underruns or
          on streamer drive   overruns during backup,
                                               recover or compare. **x** is
==BAC07=> There have been x overruns   a decimal number.
          on streamer drive

==BAC32=> COMPARE ERROR   The copy you have taken
========> Page : xxxxxx xxxxxx   is not identical with the
                                               original. Try again.

==SIN40=> SINTRAN ERROR   SINTRAN error message.
========> SINTRAN error message   See SINTRAN manual.

==BAC40=> FATAL ERROR, operation   The operation in progress
          ABORTED. Time hh:mm:ss   cannot be completed.

========>Bad cartridge   Clean the read/write
                                               heads or change the
                                               cartridge.

========>No cartridge installed   Insert a cartridge.

========>End-of-medium, Cartridge   Insert another cartridge.
         full

========>Write protected cartridge   The cartridge is
                                               protected against
                                               recording (see page 28).
                                               Insert another.

Finding a way out of the trouble

OTHER ERROR MESSAGES

AMBIGUOUS USER NAME

You abbreviated too much. Try again.

AMBIGUOUS DOCUMENT NAME

You abbreviated too much. Try again.

DOCUMENT/DEVICE IN USE BY SOMEONE

Try again later.

NO MORE AVAILABLE SPACE FOR THIS USER

You have used all your storage space in the computer. See your system supervisor immediately. Do not log out, or you will lose part of your work.

NO SUCH FILE NAME

Wrong name given, perhaps a typing error. Check the name and try again.

NO SUCH USER NAME

Wrong name given, perhaps a typing error. Check the name and try again.

PRINTING ABORTED AFTER SHEET NUMBER 'n'

The message is given if \ is pressed before all the requested text has been printed.

SEARCH ABORTED AT LINE NUMBER 'n'

This occurs if a search is interrupted by the \ key before the whole search area has been searched.

"XX" IS NO PRINTER

When you used the PRINT key, you gave a device name which does not exist.

YOU DO NOT HAVE READ ACCESS TO THIS DOCUMENT

You are not allowed access to this file.

YOU DO NOT HAVE STORE ACCESS TO THIS DOCUMENT

You tried to store text in a file protected against unauthorized use.

YOU DO NOT HAVE STORE APPEND ACCESS

Same as above.

7. APPENDIX   (THE USER ENVIRONMENT MENUS)

The Main Menu

```
┌─────────────────── M A I N    M E N U ───────────────────────┐
│ ┌──────────────────────────────────────────────────────────┐ │
│ │ Date:1985-2-16                        Time:12:18:35        │ │
│ │ User:YOUR NAME          Current user area:YOUR-USER-NAME   │ │
│ └──────────────────────────────────────────────────────────┘ │
│                                                               │
│   1 Office Automation                                         │
│                                                               │
│   2 Program Development                                       │
│                                                               │
│   3 Remote Systems                                            │
│                                                               │
│   4 User Area Maintenance                                     │
│                                                               │
│   5 System Maintenance                                        │
│                                                               │
│             Task name:...............................         │
└───────────────────────────────────────────────────────────────┘
```

Submenu 1

This menu selection leads you to the tools needed for office
functions.

```
┌─────────────────── M A I N    M E N U ───────────────────────┐
│ ┌──────────────────────────────────────────────────────────┐ │
│ │ Date:1985-2-16                        Time:12:18:35        │ │
│ │ User:YOUR NAME          Current user area:YOUR-USER-NAME   │ │
│ └──────────────────────────────────────────────────────────┘ │
│              ┌─────────────────────────────────────────────┐  │
│              │ Office Automation                           │  │
│  1 Office Automati                                          │  │
│              │                                             │  │
│  2 Program Develop │ 1 Word Processing and TELEX    NOTIS-WP │
│              │ 2 Document Storage             NOTIS-DS      │  │
│  3 Remote Systems  │ 3 Spreadsheet             NOTIS-CALC   │  │
│              │ 4 Queries                      ACCESS        │  │
│  4 User Area Maint │ 5 Report Generator (Make reports) NOTIS-RG │
│              │ 6 Report Processor (Run reports)  NOTIS-RP   │  │
│  5 System Maintena │ 7 Information Retrieval      NOTIS-IR   │  │
│              │ 8 Mail system                  NOTIS-ID      │  │
│              │ 9 Business Graphics            NOTIS-BG      │  │
│              └─────────────────────────────────────────────┘  │
└───────────────────────────────────────────────────────────────┘
```

SUBMENU 2

This menu selection leads you to the tools needed for administrative
data processing.

```
┌─────────────────── M A I N   M E N U ──────────────────────┐
│  Date:1985-2-16                          Time:12:18:35      │
│  User:YOUR NAME           Current user area:YOUR-USER-NAME  │
└────────────────────────────────────────────────────────────┘
             ┌─Program Development──────────┐
 1 Office Automati│                         │
             │                              │
 2 Program Develop│ 1 Program Editor        │   PED
             │ 2 Application Development     │   UNIQUE
 3 Remote Systems │ 3 Queries               │   ACCESS
             │ 4 Report Generator           │   NOTIS-RG
 4 User Area Maint│ 5 Application Generator │   ABM
             │ 6 SIBAS Maintenance          │   SIB-Server
 5 System Maintena│ 7 Document Storage      │   NOTIS-DS
             └──────────────────────────────┘
```

SUBMENU 3

This menu selection leads you to the tools needed for getting in
connection with other computer systems.

```
┌─────────────────── M A I N   M E N U ──────────────────────┐
│  Date:1985-2-16                          Time:12:18:35      │
│  User:YOUR NAME           Current user area:YOUR-USER-NAME  │
└────────────────────────────────────────────────────────────┘
             ┌─Remote Systems───────────────┐
 1 Office Automati│                         │
             │                              │
 2 Program Develop│ 1 Connect to ND Systems │
             │                              │
 3 Remote Systems │ 2 Connect to other Systems
             │                              │
 4 User Area Maint│ 3 Transfer files        │
             │                              │
 5 System Maintena│ 4 Remote Spooling       │
             └──────────────────────────────┘
```

Submenu 4

This menu selection leads you to the tools needed for the various
maintenance tasks in the user area in the computer.

```
───────────── M A I N   M E N U ─────────────
  Date:1985-2-16                          Time:12:18:35
  User:YOUR NAME            Current user area:YOUR-USER-NAME

                   ┌─ User Area Maintance ──────────┐
  1 Office Automati │                                │
                   │                                │
  2 Program Develop │ 1 Personal Backup              │
                   │                                │
  3 Remote Systems  │ 2 Change User Area             │
                   │                                │
  4 User Area Maint │ 3 User and Terminal Profiles   Profile Manager
                   │                                │
  5 System Maintena │                                │
                   └────────────────────────────────┘
```

Submenu 5

This menu selection leads you to the tools needed for system
maintenance functions.

```
───────────── M A I N   M E N U ─────────────
  Date:1985-2-16                          Time:12:18:35
  User:YOUR NAME            Current user area:YOUR-USER-NAME

                   ┌─ System Maintenance ──────────┐
  1 Office Automati │                               │
                   │                               │
  2 Program Develop │ 1 User Environment Functions  │
                   │                               │
  3 Remote Systems  │ 2 System Backup               │
                   │                               │
  4 User Area Maint │ 3 File Maintenance            File Manager
                   │                               │
  5 System Maintena │ 4 Document Storage            NOTIS-DS
                   └───────────────────────────────┘
```

8. TERMINOLOGY

Backup	A copy of one or more data files on a floppy diskette or streamer tape, which is stored in case the original gets lost.
Bit	The smallest available unit of information. A bit can have only one of two values: 0 or 1.
Buffer	Temporary storage used to balance different operating speeds of devices.
Byte	A group of bits. In ND computers a byte is always eight bits.
Command	An order you give to the computer.
Console terminal	Terminal 1, connected directly to the CPU in the computer. Communication and fault-finding are usually carried out on the console terminal.
CPU	Central Processing Unit. It stores programs and data, and controls the computer's interpretation and execution of instructions.
CRT	Cathode Ray Tube (same as VDU).
Default	The parameter chosen by the computer if you yourself do not specify one, i.e. if you press the carriage return key instead of typing a parameter. See PARAMETER.
Directory	A set of files.
Disk	See Fixed disk.
Diskette	See Floppy diskette.

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File	Files are what you use for storing data. They are like labeled drawers in a cabinet. You put your data in one of them, give it a FILE NAME, and later you can get it out again when you want to see it or make some changes to it. Files can exist on floppy diskettes, and on the fixed disk. A group of files is called a DIRECTORY, and is given a DIRECTORY NAME.
Fixed disk	A hard magnetic plate used for data storage. The disk forms a part of the computer's memory.
Floppy drive	The part of the computer where you insert the floppy diskette to record data from (or transfer data to) the computer's disk.
Floppy diskette	A round magnetic plate used for storing data.
Formatting	Preparing a floppy diskette for storing data. The data which was previously on the floppy diskette is destroyed.
Interface	A shared boundary between two units. It is often used as an adaption device which makes it possible to link two different units together.
Load into	Transferring something (e.g. a program) into the computer's memory.
Log in	The procedure you follow in order to start a dialog with the computer.
MB (Mbyte)	Megabyte = 1048576 bytes (1 million bytes).
Operating system	A program controlling the execution of other programs or commands in the computer. It enables several users to communicate with the computer at the same time. In ND computers, the operating system is called SINTRAN III.

Operator	A person who operates the computer and other units in the computer system.
Overrun	During copying from the streamer tape, the interface is not able to accept data at the rate at which it is transmitted from the streamer. This results in a full buffer, and the streamer may be stopped and then started again.
Page	Files are divided into pages, usually consisting of 1024 words each.
Parameter	Additional information that you put into a command given to the computer. EXAMPLE: If you tell the computer to copy from disk to streamer, you must specify which disk to copy from. The disk name will then be the parameter. See DEFAULT.
Password	A set of characters used for identification when communicating with the computer. It prevents other users from logging in under your user name.
Personal backup	Copying your own data files onto a floppy diskette (as opposed to SYSTEM backup, which means copying ALL files).
Release	To 'get out' of a computer program or system, to make it available for somebody else.
Reread	This happens if the system was unable to recover a block of data from the streamer tape. The tape motion is stopped, and the tape is rewound before the block of data is read once more.
Rewrite	Occurs if the streamer was unable to write a block of data successfully. The write attempt is then repeated.
SINTRAN	See Operating system.

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Streamer	A tape recorder built into the computer and used for storing data.
Streamer tape	The tape cartridge used in the streamer.
System supervisor	The person who is responsible for the daily operation of the system.
Telefix	Permits analysis of error situations in the customer computers directly from Norsk Data's Service Center.
Terminal	What you use to communicate with the computer.
Terminal 1	See Console terminal.
Underrun	Whilst writing to the streamer tape, the interface is unable to transmit data at a rate that is fast enough for the streamer. The streamer may be stopped and started again when there is more data available.
User	Yourself, and anybody else who uses a computer terminal.
User area	A registered area on the fixed disk where the computer stores your files. This area is reserved for you.
User name	A registered name by which the computer identifies you.
SYSTEM backup	Copying all data files onto a streamer tape or floppy diskettes. (as opposed to PERSONAL backup, which means copying YOUR OWN files only).
VDU	Visual Display Unit. Part of the terminal.

9. INDEX

SEND US YOUR COMMENTS!

Are you frustrated because of unclear information in our manuals? Do you have trouble finding things? Why don't you join the Reader's Club and send us a note? You will receive a membership card — and an answer to your comments.

Please let us know if you:
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— cannot understand information
— cannot find information
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This form is primarily for documentation errors. Software and system errors should be reported on Customer System Reports.

Manual Name: _____ Manual number: _____

Which version of the product are you using? _____

What problems do you have? (use extra pages if needed) _____

_____

_____

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_____

_____

Do you have suggestions for improving this manual? _____

_____

_____

_____

_____

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Your name: _____ Date: _____

Company: _____ Position: _____

Address: _____

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What are you using this manual for? _____

_____

Norsk Data's answer will be found on the reverse side. ➡

Answer from Norsk Data: _____

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Answered by: _____   Date: _____

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Systems that put people first

ND