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# Network Station User's Guide

DEC Rainbow 100



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# Network Station User's Guide

DEC Rainbow 100

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# Getting Started

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This guide tells you how to use your DEC Rainbow 100 computer with a Corvus mass storage system or local network. In particular, this guide explains how to gain access to the Corvus mass storage system and how to activate volumes. It also shows you how to send and receive messages, how to print files and how to back up volumes on diskettes.

## How This Guide is Organized

**Chapter 1** tells how to sign on, gain access to your Corvus mass storage system and use your name and password.

**Chapter 2** describes how to activate volumes. It shows how to enter the mount manager program and use it to list volumes, mount a volume on a unit and set temporary write access to protect a volume. The chapter also explains how to examine volumes on several Corvus mass storage systems.

**Chapter 3** tells how to print files. It shows how to spool a file to the pipes area of your Corvus mass storage system and set the spool parameters.

**Chapter 4** shows how users can exchange information and send files to other network users. It tells how to check for transmitted files and how to receive files.

Chapter 5 describes the backup-to-floppy program. The chapter shows how to save an entire volume on diskettes and restore an entire volume from diskettes.

## Usage

Throughout this guide, the word **type** means to enter two or more characters or keyboard symbols on the computer keyboard. You should type all words, symbols, spaces and punctuation to the right of the word **type** exactly as shown. Do not add or leave out punctuation marks at the end of the statement you are typing.

Examples:

Type ERA B:\*.DOC

Type DIR C:

Don't type the spaces between the word **type** and the first character to its right. When a keytop symbol appears, press the key it refers to. Do not type out each letter of keytop symbol words.

When the command **type** appears in a sentence or paragraph, type the information indicated.

Example:

Type your user name and password.

Throughout this guide, **press** means to enter a single character or keytop symbol on the computer keyboard.

Examples:

Press **Y**

Press **RETURN**

Throughout this guide, **x.xx** stands for version numbers in screen displays.

Example:

Corvus Mount Manager Utility [x.xx]  
Copyright 1983 by Corvus Systems, Inc.

Throughout this guide, **n** stands for the unit letter on which the volume containing a particular program resides. The unit letter value varies, depending on which unit you assigned the volume to. For example, the form for the mount manager program is **n:MNTMGR**. If you have the mount manager program on a floppy diskette in drive B, type **B:MNTMGR**. If you have the mount manager program in a volume mounted on unit D, type **D:MNTMGR**.

This guide uses **boot** and **reboot** to mean you should load or reload the operating system into your computer.

This guide uses **session** to mean the time from booting until rebooting.

Throughout this guide, you can press **ESC** in response to any question on the screen and you will return to the menu one level above.



---

# Chapter 1: Sign On

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To use your Corvus mass storage system with the Rainbow 100, you must sign on to your system. This chapter will show you how to sign on.

**1. Get a Corvus boot diskette for your Rainbow 100 computer.**

Your system manager has these diskettes.

**2. Turn on your computer.**

The screen displays the Rainbow 100 main system menu.

**3. Put the boot diskette into drive A of your computer.**

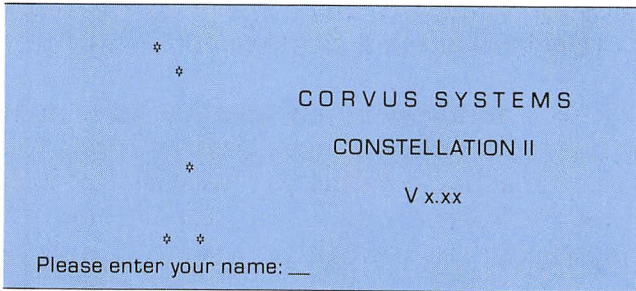
## 4. Press A to start from drive A.

After a moment the screen displays:



--- Corvus Link Installed ---

Then the Constellation II sign-on display appears:



## 5. Sign on to the system with your user name and password.

If you don't have a name and password, see your system manager.

If you have volumes that are accessible by a different user name, you may switch to that name during this session. To change names, insert the boot diskette in drive A and type A:LOGON **RETURN** at the operating system prompt.



---

## Chapter 2: Activating Volumes

---

CP/M-86 allows up to 16 units to be active at once. Each active volume occupies a part of the computer memory. The size of that part depends on the attributes of the volume, so you may not always have enough memory to have all 16 volumes active. Your system manager determines how many Corvus volumes you have active and their attributes.

The system manager may give you access to more volumes than the ones you have active. If you want to use an inactive volume, you must mount it. Mount means to place a volume on a unit so you can use the volume.

You may mount an inactive volume on an occupied unit. If you do this, the mount program will automatically unmount the volume that is already on the unit and will mount the volume you need in its place.

When the computer boots, Corvus volumes are mounted on unit letters designated by your system manager. If a unit already has a volume mounted on it, another volume with that letter will not be mounted. For example, if you have two Corvus volumes with the same unit letter, only the first one will be mounted on that unit.

If a Corvus volume has the same unit letter as a floppy drive, the drive will be unmounted and the volume mounted. Floppy drives unmounted by volumes will be remounted if units are still available once all volumes have been mounted. Such remounting prevents programs that read data on a

floppy drive by tracks (not files) from working properly. Do not run programs LDCOPY, COPY or FORMAT on any Corvus volumes or on floppies remounted on units other than A, B, C or D.

## Entering the Mount Manager Program

The mount manager program mounts and unmounts volumes.

To enter the mount manager program, after signing on, type `n:MNTMGR` RETURN, where `n` is the unit letter of the volume containing the mount manager program.

The screen display is similar to:

```
CORVUS MOUNT MANAGER UTILITY [x.xx]
Copyright 1983 by Corvus Systems, Inc.

Server: SERVER                Drive: *
User: Tim
-----
C -- Change Mount Status

L -- List Units and Volumes

S -- Select Drive

H -- Help

E -- Exit
-----
Enter MOUNT MANAGER option: __
```

## Listing Volumes

### 1. List all of the volumes you have mounted.

Press **L**

The screen display is similar to:

```
CORVUS MOUNT MANAGER UTILITY [x.xx]

List Volumes

MOUNTED VOLUME DIRECTORY

Unit  Volume          Alloc  Resv   Dir   Write
      Volume          Size   Sctrs Entries Access  Server Drive
-----
A   FLOPPYA
B   FLOPPYB
C   CPMSYS86         492    2     2    256   YES   SERVER  CPM
D   VOL10            1004   4     2    256   YES   SERVER  CPM
E   VOL11             492    2     2    256   YES   SERVER  CPM
F   VOL13             492    2     2    256   YES   SERVER  CPM

Press <SPACE> to continue
```

If you don't need to list all of the volumes you have access to, press **ESC** .

The screen displays the mount manager main menu.

If you want to list all of the volumes you have access to, press **SPACE** .

The screen display is similar to:

ACCESSIBLE VOLUME DIRECTORY								
Unit	Volume	Length	Alloc Size	Resv Sctrs	Dir Entries	Write Access	Server	Drive
	TEXT1	872	2	2	256		SERVER	CPM
	ALL	492	2	2	256		SERVER	CPM
C	CPMSYS86	492	2	2	256	YES	SERVER	CPM
D	VOL10	1004	4	2	256	YES	SERVER	CPM
E	VOL11	492	2	2	256	YES	SERVER	CPM
F	VOL13	872	2	2	256	YES	SERVER	CPM

Press <SPACE> to continue

If you want to use a volume on this list that isn't already mounted on a unit, write down the volume name and check which unit letters are currently assigned. You will need this information for steps 2 and 3 in the next section.

## 2. [Return to the mount manager main menu.](#)

Press



## Mounting Volumes

If a volume is currently mounted on one unit and you want to mount it on another, you must first unmount it from its present unit then remount it on the desired unit.

Floppy drives can also be unmounted, mounted or have their status changed by typing FLOPPYX for the volume name, where X is A for the first floppy drive, B for the second and so on. Depending on your computer, unmounting floppy drive A may not be allowed. If it is not allowed on your computer, attempting to unmount it will result in the following error message:

```
*** Volume Unmounting Not Allowed ***
```

The screen is displaying the mount manager main menu.

### 1. Change your volume's mount status.

Press **C**

The screen displays:

```
CORVUS MOUNT MANAGER UTILITY [x.xx]
```

```
Change mount status
```

```
Enter volume name: __
```

## 2. Enter your volume name.

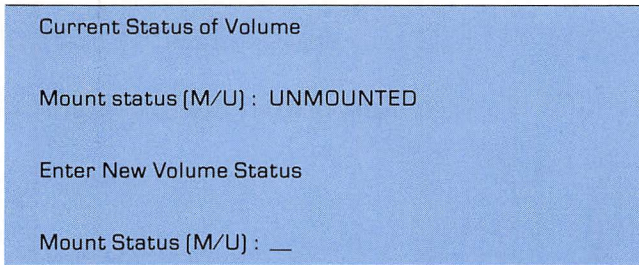
Type the name of the volume you wish to mount and press `RETURN` .

If you have another volume with the same name on a different drive,

Type `/dname/vname` `RETURN`

where “dname” is the name of the drive on which the volume is located and “vname” is the name of the volume.

The screen display is similar to:



```
Current Status of Volume

Mount status (M/U) : UNMOUNTED

Enter New Volume Status

Mount Status (M/U) : __
```

### 3. Mount the volume.

Press **M**

The screen display is similar to:

Mount Unit (A-P) : \_\_

Press the letter of the unit where you wish to mount the volume. If you choose a unit that already has a volume mounted on it, the volume currently mounted will be unmounted. Do not unmount the volume which contains the programs you are currently using.

The screen displays:

Write Access (Y/N) : \_\_

### 4. Determine the temporary write access to the volume.

You can protect files temporarily by making access read-only during this session. If you want to protect files temporarily, press **N**.

Press **Y** to write to the volume as well as read from it.

The screen displays:

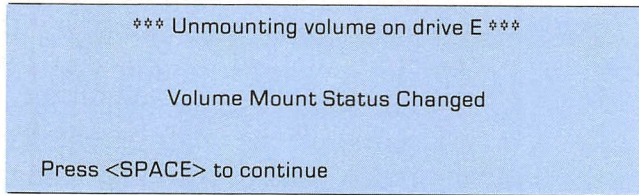
Ok to change mount status (Y/N) ? \_\_

## 5. Confirm the changes you have made.

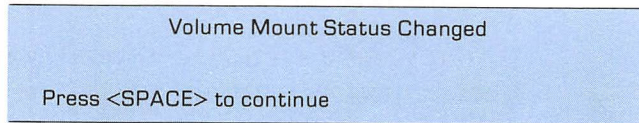
If you have made all desired changes,

Press **Y**

If you are mounting a volume in place of another volume, the screen display is similar to:



If you are mounting your volume on a free unit, the screen display is similar to:



## 6. Return to the mount manager main menu.

Press

The screen displays the mount manager main menu.

## 7. Exit the mount manager program.

Press **E**



## Protecting Volumes

Sometimes you may not want to write to a volume so you can protect information. For example, if you are transferring files from one volume to another, you might want to set the access on the source volume to read-only. There are two ways to protect your volumes using the mount manager program. You can unmount a volume completely, but then you won't be able to read from it. If you want to read from but not write to a volume, you can change the write access to read-only. If you wish to protect a volume with either of these methods, use the change mount status option from the mount manager main menu.

### Note to Users with Several Mass Storage Systems

If your volumes reside on several Corvus mass storage systems, the select drive option of the mount manager lets you choose to examine only the volumes on a specific system. If you are interested in a particular system, you can use this option to limit the size of the volume listings in the list units and volumes option. This makes listing faster and easier to read. If you wish to consider all systems, type \* for drive name. Volume searches will then include all systems.



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## Chapter 3: Printing

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Usually each computer on a network won't have an attached printer. To use a printer attached to another computer or utility server, you must spool your file to a special area on the Corvus mass storage system called the pipes area. Spooling sends a file to a common area. The other computer or utility server then can despool, or retrieve, the file from the common area and send it to the attached printer.

### Spooling a File

The first step in printing is to specify how your information will appear in print. Format your text the way you want with your computer's editor or word processor. Next, save this text in a file. Now you are ready to spool.

# 1. Enter the spool program.

Type n:SPOOL

where n is the unit letter for the volume containing the spool program.

The screen displays:

```
Copyright 1982, 1983 Corvus Systems, Inc.  
All Rights Reserved  
  
Corvus Spool Utility [x.xx]  
Main Menu  
-----  
S — Spool a File  
  
C — Change Spool Parameters  
  
D — Display Pipes  
  
H — Help  
  
E — Exit  
-----  
Please select an option: _
```

## 2. Select your printer.

The system manager can tell you which printer your computer will automatically suggest for printing files.

If you want your file sent to a printer other than the suggested printer, you must change the spool parameter for the pipe name. If you wish to do this, go to the next section, "Changing Spool Parameters."

If you want your file to print on the suggested printer, press **S**. The screen displays:

```
Corvus Spool Utility [x.xx]
Spool a file
-----
File name: _
```

## 3. Enter your file name.

Type the name of the file that you want printed and press **RETURN** .

## 4. Add a message to your file.

The program asks you for a message. Type any message up to 80 characters and press `RETURN`. For example, you might want your name and the date printed. The message will be printed on the title page of your printed file.

The program now starts spooling your file to the pipes area. While the file is being spooled, a series of dots will appear across the screen. When spooling is complete, the screen display is similar to:

```
Spooling file to pipe PRINTER [1]

.....

15 blocks written to pipe PRINTER [1]

Enter file name to be spooled: __
```

## 5. Spool another file to the printer or exit the program.

If you wish to spool another file for printing, type the new file name and press `RETURN`.

If you wish to exit, press `RETURN`. The screen displays the spool utility main menu. Press `E`.

Your printer now should start printing the file. If it doesn't, see your system manager.

## Changing Spool Parameters

Several parameters affect how a file is spooled. You can change these parameters to suit your needs. If you need to change these parameters, you must change the suggested values before you spool the file. Follow the steps below to change the parameter values.

### 1. Enter the spool program.

Type `n:SPOOL`

where `n` is the unit letter for the volume containing the spool program.

The screen displays:

```
Copyright 1982, 1983 Corvus Systems, Inc.
All Rights Reserved

Corvus Spool Utility [x.xx]
Main Menu
-----
S  — Spool a File

C  — Change Spool Parameters

D  — Display Pipes

H  — Help

E  — Exit
-----
Please select an option:  _
```



## 2. Change the spool parameters.

Press C

The screen displays:

```
Corvus Spool Utility [x.xx]
Change Spool Parameters
-----
P — Pipe Name      : PRINTER
L — Lines per Page : 55
C — Chaining Symbol : [*]
N — New page Symbol: [*P
T — Tab Length     : 8
F — File Type      : TEXT
E — Exit to Main Menu :
-----
Please select an option: _
```

## 3. Select the parameter to change.

Type the letter which corresponds to the parameter you want to change. For example, if you wish to change the chaining symbol, press C.



## 4. Choose the new value.

After you choose a parameter, the program shows you a possible value for the parameter. Choose the value you want. Type the value and press `RETURN`. The parameters and their values are described below.

Pipe Name — This is any alphanumeric name up to eight characters that begins with a letter. You can direct your file to any active printer on your network by choosing the appropriate pipe name. Your system manager can give you a list of network printers and their pipe names.

Lines per Page — This is the total number of lines that a printer will print on a page before beginning a new page. If you want to print continuously without skipping over page boundaries, set lines per page to 0. This only applies to text files.

**Chaining Symbol** – When you type this symbol and a file name immediately after it in your text file, the spool program inserts the text from the specified file where the symbol appeared. Neither the chaining symbol nor the file name will appear in the spooled text. If the spool program finds no file name after the chaining symbol, it prints an error message and continues spooling. The chaining symbol can be any string of up to 133 characters.

**New Page Symbol** – When you type this symbol in your text file, the printer will skip to the top of the next page. The symbol can be any string of up to 133 characters.

## Tab Length

—This sets the tab column positions and causes the spool program to insert spaces until it reaches the next tab column. Starting at the left margin, tabs are set according to the tab length specified. For example, a tab length of 8 would insert tabs every eight spaces. Valid tab lengths are 1 to 133.

## File Type

—This lets you specify whether the file being spooled is text or data. If you choose text, the spool program will format the file with the parameters of lines per page, chaining symbol, new page symbol and tab lengths. If you choose data, the spool program will spool the file without formatting it.

**5.** Return to the  
spool program main menu.

After you have changed all the parameters  
you wish to change,

Press **E**

The screen displays the spool utility main menu.

**6.** Spool  
your file.

---

## Chapter 4: Exchanging Information Between Users

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Corvus local area networks let users exchange information electronically. Exchanges take place through a special area of the mass storage system called the pipes area. You can think of the pipes area as a message center. Users can send their files to the pipes area so other users can share access to the files, regardless of operating system.

Sending a file to the pipes area is called spooling. When you spool a file, you must name it so that other users will know who the file is for. Your system manager should set up a directory of users and pipe names so that you will know how to address your files. This chapter explains how to send files to other users by spooling, check for files and receive files which others have sent you by despooling.

## Sending Files

### 1. Enter the spool program.

Type `n:SPOOL`

where `n` is the unit letter for the volume containing the spool program.

The screen displays:

```
Copyright 1982, 1983 Corvus Systems, Inc.
      All Rights Reserved

Corvus Spool Utility [x.xx]
Main Menu
-----
S  — Spool a file

C  — Change Spool Parameters

D  — Display Pipes

H  — Help

E  — Exit
-----
Please select an option: __
```

## 2. Change pipe name parameter.

Press **C**

The screen displays the change parameters menu:

```
Corvus Spool Utility
Change Spool Parameters
-----
P — Pipe Name       : PRINTER
L — Lines per Page  : 55
C — Chaining Symbol : (*I
N — New Page Symbol : [*P
T — Tab Length      : 8
F — File Type       : TEXT
E — Exit to Main Menu
-----
Please select an option: _
```

## 3. Select the pipe name option.

Press **P**

The screen displays:

```
Pipe name (up to 8 characters): _
```

## 4. Name the pipe.

Consult your user directory to determine what spool name to use when sending your file to another user.

You can use any name you wish with the spool program, as long as the same name is used to despool the file. For example, if your computer supports two operating systems, you can exchange files from one operating system to the other by creating your own pipe name.

Type the pipe name and press **RETURN** .

## 5. Return to the spool program main menu.

Press **E**

The screen displays the spool program main menu.

## 6. Send the file to another user.

Press **S**

The screen displays:

```
Corvus Spool Utility [x.xx]
Spool a file
-----
File name: ____
```



## 7. Enter the file name.

Type the name of the file you want to send and press **RETURN** .

The screen displays:

```
Message: __
```

The screen display is similar to:

```
Spooling PIP.DOC to pipe STEVE [1] .....  
.....  
84 block(s) spooled to pipe [1] named STEVE  
-----  
Corvus Spool Utility [x.xx]  
Spool a file  
-----  
File name: __
```

## 8. Spool another file or return to the spool program.

You may now spool another file to the same user.

If you have another file to send to that user, type the new file name and press **RETURN** .

If you have no more files to spool to that user, press **RETURN** .

The screen displays the spool program main menu.

## 9. Exit the spool program.

Press **E**

## Checking for Files

This section tells you how to find out if any files have been sent to you.

### 1. Enter the spool program.

Type `n:SPOOL`

where `n` is the unit letter for the volume containing the spool program.

The screen displays the spool program main menu:

```
Copyright 1982, 1983 Corvus Systems, Inc.
      All Rights Reserved

Corvus Spool Utility [x.xx]
Main Menu
-----
S  — Spool a file

C  — Change Spool Parameters

D  — Display Pipes

H  — Help

E  — Exit
-----
Please select an option: __
```

## 2. Display your files in the pipes area.

Press **D**

The screen displays:

```
Corvus Spool Utility [x.xx]
Display pipe
-----
Pipe name: _
```

## 3. Enter your pipe name.

Type your pipe name as it appears in the user directory and press **RETURN**. The screen will list all files in the pipes area that have your name on them. For example:

```
2. STEVE   Closed   ---   Contains data   2 blocks
```

This shows that one file is waiting for STEVE in the pipes area. This file is in pipe 2.

## 4. Return to the spool program main menu.

Press **RETURN**

The screen displays the spool program main menu.

## 5. Exit the spool program.

Press **E**

## Receiving Files

### 1. Enter the despool program.

If you have a file waiting for you in the pipes area,

Type n:DESPOOL

where n is the unit letter for the volume containing the despool program.

The screen displays the despool program main menu:

```
Copyright 1982, 1983 Corvus Systems, Inc.
      All Rights Reserved

Corvus Despool Utility [x.xx]
Main menu
-----
D — Despool a file

C — Change despool parameters

H — Help

E — Exit
-----
Please select an option: __
```

## 2. Change the despool parameters.

Press **C**

The screen displays the change parameters menu:

```
Corvus Despool Utility [x.xx]
Change Parameters
-----
P -- Pipe name                : PRINTER
O -- Output device            : PRINTER
L -- Do you want <lf> after <cr> : YES
S -- Single page printing     : NO
E -- Exit to main menu
-----
Please select an option: __
```

## 3. Select the pipe name option.

Press **P**

The screen displays:

```
Pipe name: __
```

## 4. Enter your pipe name.

Type your pipe name as it appears in the user directory and press **RETURN**. The screen displays the change parameters menu.

Press **O**

The screen displays:

```
Printer, File, Console : __
```



## 5. Decide where to despool your file.

You have three choices of where to despool the file that has been sent to you.

If you have a printer attached to your computer, press **P** to select the printer option. When you despool the file, your printer will print it.

If you want to see the message on your screen but don't want to save it in a file, press **C** to select the console option.

If you want to put the file in one of your own volumes, press **F** for file. This is usually your best choice, because a file disappears from the pipes area after it is despoiled. If you despool a file to your printer or your screen, you cannot put the information into a file later. When you press **F**, the screen displays the change parameters menu without the **L** and **S** options.

If the file in the pipes area is a data file, despooling it to the console or the printer will result in an error message. You will be given the option of emptying the pipe or putting the file in one of your volumes.

## 6. Return to the despool program main menu.

Press **E**

The screen displays the despool program main menu.

## 7. Despool the file to your volume.

Press **D**

The screen display is similar to:

```
Currently despooling pipe named : STEVE
Pipe number                    : 2
Spooled filename               : TEST.TXT
Filename to despool to        : _
```

Type a location and a file name and press **RETURN**. The despool program will create a file at this location and will put the despoiled data into it.

For example,

Type **B:TEST1.TXT RETURN**

The screen display is similar to:

```
.....
5 block(s) read from pipe 2 named STEVE
```

If more than one file had your name on it, the program will ask you for the next file name. Otherwise, the screen display is similar to:

```
Currently searching for pipe named : STEVE
Press any key to escape ...
```

## 8. Return to the despool program main menu.

Press RETURN

The screen displays the despool program main menu.

## 9. Exit the despool program.

Press E



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## Chapter 5: Backup to Floppy

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This chapter tells you how to use the Corvus backup-to-floppy program to save an entire volume to diskettes. This chapter also explains how to restore a Corvus volume from diskettes.

### Getting Ready

During the backup process, you will need enough formatted diskettes to hold all of the information on the entire volume being backed up. The number of diskettes you will need varies according to the size of the volume to be backed up. Use the table below to estimate how many diskettes you will need to back up your volume.

Floppy Drive Format	Volume Size			
	512 blocks	1024 blocks	2048 blocks (1MB)	4096 blocks
400KB	1 diskette	2 diskettes	3 diskettes	6 diskettes

For example, suppose you have an 1800-block volume that you want to back up with your 400KB floppy drive. The table shows you will need two or three diskettes. Estimate on the high side and format three diskettes.

If you do not know the size of your volumes, follow steps 1 and 2 of the section "Set Backup Options" and press L to get a listing of your volumes and their respective sizes. After you have the information, reboot your computer and repeat the program from step 1.

## Backup to Floppy

Backing up a volume to floppy diskettes is a two-part process. First you set your backup options, then you begin to back up the volume.

### Set Backup Options

#### 1. Enter the backup-to-floppy program.

After you have formatted enough diskettes, boot to the Corvus Constellation II log-on message and sign on with your user name and password. When the screen displays the operating system prompt,

Type **SMGR**

The screen displays the Constellation II log-on message again.

Type **DRBACKUP**

The screen displays:

```
CORVUS BACKUP-TO-FLOPPY UTILITY [x.xx]
Copyright 1983 by Corvus Systems, Inc.
```

-----  
Please enter:

User name: \_\_

Password: \_\_

## 2. Sign on to the program with your name and password.

Type the name and password you normally use to sign on. Follow both your name and password with a  . If you do not have a password, press  in response to the password prompt.

The screen displays the backup-to-floppy main menu:

```
CORVUS BACKUP-TO-FLOPPY UTILITY [x.xx]
Copyright 1983 by Corvus Systems, Inc.
-----
B — Backup a Volume

R — Restore a Volume

I — Identify a Diskette

L — List Volumes

S — Set Options

E — Exit to CP/M-86
-----
Please select an option: _
```

### 3. Set your verification and password protection options.

Press **S**

The screen displays:

```
CORVUS BACKUP-TO-FLOPPY UTILITY [x.xx]
      Set Options
-----
Verification (Y/N) : N
Password Protection (Y/N) : Y
```

If you choose the verification option, the backup-to-floppy program will check during the backup procedure that it is correctly copying information from the Corvus volume to diskette.

The password protection option lets you prevent other people from reading data from your backup diskettes. If a diskette is protected, you will have to enter your user name and password before you can restore from the diskette.

Set the verification and password protection options the way you want them. Press **RETURN** each time you enter a **Y** or an **N**.

The screen displays:

```
Ok to set options (Y/N) ? Y
```

## 4. Confirm your option selections.

If you like the way you have set the options,

Press **RETURN**

The screen displays:

```
Options set.
-----
Press <space> to continue.
```

## 5. Return to the backup-to-floppy main menu.

Press **SPACE**

The screen displays the backup-to-floppy main menu.

### Back Up the Volume

## 1. Select the volume you wish to back up.

Press **L**

The screen display is similar to:

```
CORVUS BACKUP-TO-FLOPPY UTILITY [x.xx]
List Volumes
-----
volume      length      unit      write access
VOL13      1024        E         YES
JOHN       2048        F         YES
JACK       2048        G         YES
-----
Press <space> to continue: _
```



When you know the name of the volume you wish to back up,

Press **SPACE**

The screen displays the backup-to-floppy main menu.

## 2. Select the backup option.

Press **B**

The screen displays:

```
CORVUS BACKUP-TO-FLOPPY UTILITY [x.xx]
Backup a Volume
-----
Please enter:

Volume Name: __
Date:      __
```

## 3. Enter the volume name and the date.

Type the name of the volume you wish to back up and press **RETURN**. Type the date and press **RETURN**. For example,

Type **VOL13** **RETURN**

Type **4-04-83** **RETURN**

The screen displays:

```
Insert formatted [volume]-1 diskette in drive A.
Press <space> after inserting diskette. __
```

## 4. Label your first diskette and begin the backup process.

Make a label for your first backup diskette. The label should show the name of the volume followed by “-1.” For example, write “VOL13-1.” This will allow you to sequence backup diskettes properly if you need more than one diskette. Place this label on the diskette. Insert the diskette in diskette drive A.

Press `SPACE`

The screen display is similar to:

```
Checking capacity of the floppy drive . . . 400KB
Creating floppy # 1
This backup requires  n diskettes.
```

The program now begins to copy data from the Corvus volume to the first backup diskette. As each block of data is copied, a dot appears on the screen. When the first diskette is full, the screen displays:

```
Insert formatted [volume]-2 diskette in drive A.
Press <space> after inserting diskette.  _
```

## 5. Check the number of formatted diskettes.

At the start of step 4 of the screen indicated how many diskettes you would need for your backup. If you have not formatted enough diskettes, press `ESC`, format more diskettes, and start the program over from the beginning.

If you have enough diskettes, continue to the next step.

## 6. Complete the backup process.

Make a diskette label that includes the Corvus volume name, followed by “-2.” Place the label on a formatted diskette, then place the diskette in diskette drive A.

Press SPACE

The backup process continues. The computer will request more diskettes as required. Label each diskette in a similar manner to the first two diskettes.

When all information has been stored on diskettes, the screen displays:

```
Volume backup complete.  
-----  
Press <space> to continue. _
```

## 7. Exit the backup-to-floppy program.

Remove the last diskette used during backup.

Press SPACE

The screen displays the backup-to-floppy main menu.

Press **E**

The screen displays:

```
Please reboot your computer. _
```



## 8. Reboot your computer.

### Restore from Floppy

Restoration is a three-part process. First you set your restoration options. Then, if you aren't sure you have the right diskettes, you may identify the image on them. Once you have the options set and the right diskettes, begin the restoration.

#### Set Restoration Options

### 1. Enter the backup-to-floppy program.

From the Corvus Constellation II log-on message, sign on with your user name and password. When the screen displays the operating system prompt,

Type **SMGR**

The screen displays the Constellation II log-on message again.

Type **DRBACKUP**

The screen displays:

```
CORVUS BACKUP-TO-FLOPPY UTILITY [x.xx]
Copyright 1983 by Corvus Systems, Inc.
```

-----  
Please enter:

User name: \_\_  
Password: \_\_

## 2. Sign on to the program with your name and password.

Type the name and password you normally use to sign on. Follow both your name and password with a  . If you do not have a password, press  in response to the password prompt.

The screen displays the backup-to-floppy main menu:

```
CORVUS BACKUP-TO-FLOPPY UTILITY [x.xx]
Copyright 1983 by Corvus Systems, Inc.
-----
B — Backup a Volume

R — Restore a Volume

I — Identify a Diskette

L — List Volumes

S — Set Options

E — Exit to CP/M-86
-----
Please select an option: __
```

### 3. Set your verification option.

Press **S**

The screen displays:

```
CORVUS BACKUP-TO-FLOPPY UTILITY [x.xx]
Set Options
-----
Verification (Y/N) : N
Password Protection (Y/N) : Y
```

If you choose the verification option, the restore program will check to see that it is correctly copying data from your diskettes to the Corvus volume.

Set the verification option the way you want it. Type either a **Y** or **N** and **RETURN**. The password protection option doesn't apply to restoration. So press **RETURN**.

The screen displays:

```
Ok to set options (Y/N) ? Y
```

### 4. Confirm your option selections.

If you like the way you have set the options,

Press **RETURN**

The screen displays:

```
Options set.
-----
Press <space> to continue.
```

## 5. Return to the backup-to-floppy main menu.

Press **SPACE**

The screen displays the backup-to-floppy main menu.

Identify the Volume

## 1. Confirm you are restoring the proper information.

To make sure that you are restoring the proper information to the Corvus volume, select the identify option. Note that you also can use this option to sequence diskettes properly in case backup diskettes were accidentally mixed up.

Press **I**

The screen displays:

```
CORVUS BACKUP-TO-FLOPPY UTILITY [x.xx]
CORVUS BACKUP-TO-FLOPPY UTILITY [x.xx]
Identify a Diskette
```

```
-----
Insert diskette in drive A.
Press <space> after inserting diskette _
```

## 2. Insert the first diskette in drive A.

Place the first diskette created during the backup process ([volume]-1) in diskette drive A.

Press

The screen display is similar to:

```
CORVUS BACKUP-TO-FLOPPY UTILITY [x.xx]
      Identify a Diskette
-----
      Volume Backed Up:  VOL13
      Date of Backup:    4-04-83
      User Name:         TIM (protected)
      Size of Volume (blocks): 1024
Total Number of Diskettes: 5
      Number of this Diskette: 1
-----
Press <space> to continue.  _
```

If the diskette contains the desired backup, note the size of the backed up volume and

Press

The screen displays the backup-to-floppy main menu.



### 3. Determine the name of the volume you wish to restore to.

Press L

The screen display is similar to:

```
CORVUS BACKUP-TO-FLOPPY UTILITY [x.xx]
List Volumes
-----
volume      length      unit      write access
VOL13       1024        E         YES
JOHN        2048        F         YES
JACK        2048        G         YES
-----
Press <space> to continue.  _
```

When you have confirmed that you have write access to this volume and that the length of this volume is equal to the length of the volume to be restored from diskette,

Press

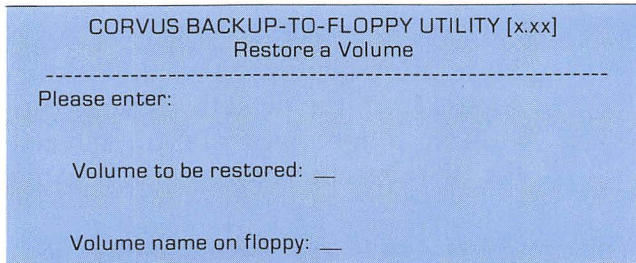
The screen displays the backup-to-floppy main menu.

## Restore the Volume

### 1. Restore the information to the volume.

Press **R**

The screen displays:



```
CORVUS BACKUP-TO-FLOPPY UTILITY [x.xx]
Restore a Volume
-----
Please enter:

Volume to be restored: ___

Volume name on floppy: ___
```

You don't have to restore information to the same volume that you backed up, but the restored and backed up volumes must be the same size.

Type the name of the volume on the Corvus mass storage system to be restored and the name of the volume on the floppy being restored. Follow each name by **RETURN**.

If during backup you protected your backup diskettes, your current user name and password must be identical to the name and password you used during the backup.

If you pass all security checks, the screen displays:

```
Insert [volume]-1 diskette in drive A.  
Press <space> after inserting diskette. _
```

Place the first diskette from the backup into drive A, if you haven't already done so.

Press

Restoration begins. As each block of data is copied from the diskette drive to the Corvus volume, a dot appears on the screen. After the first diskette is copied, the screen displays:

```
Insert [volume]-2 diskette in drive A.  
Press <space> after inserting diskette. _
```

## 2. Place the requested diskette in diskette drive A.

Press

Restoration continues. The computer will request in order each diskette made during the backup.

When all information has been restored, the screen displays:

```
Volume restoration complete.  
-----  
Press <space> to continue. _
```



### 3. Exit the backup-to-floppy program.

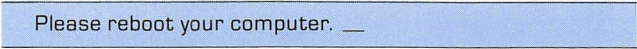
Remove the last diskette used during restoration.

Press SPACE

The screen displays the backup-to-floppy main menu.

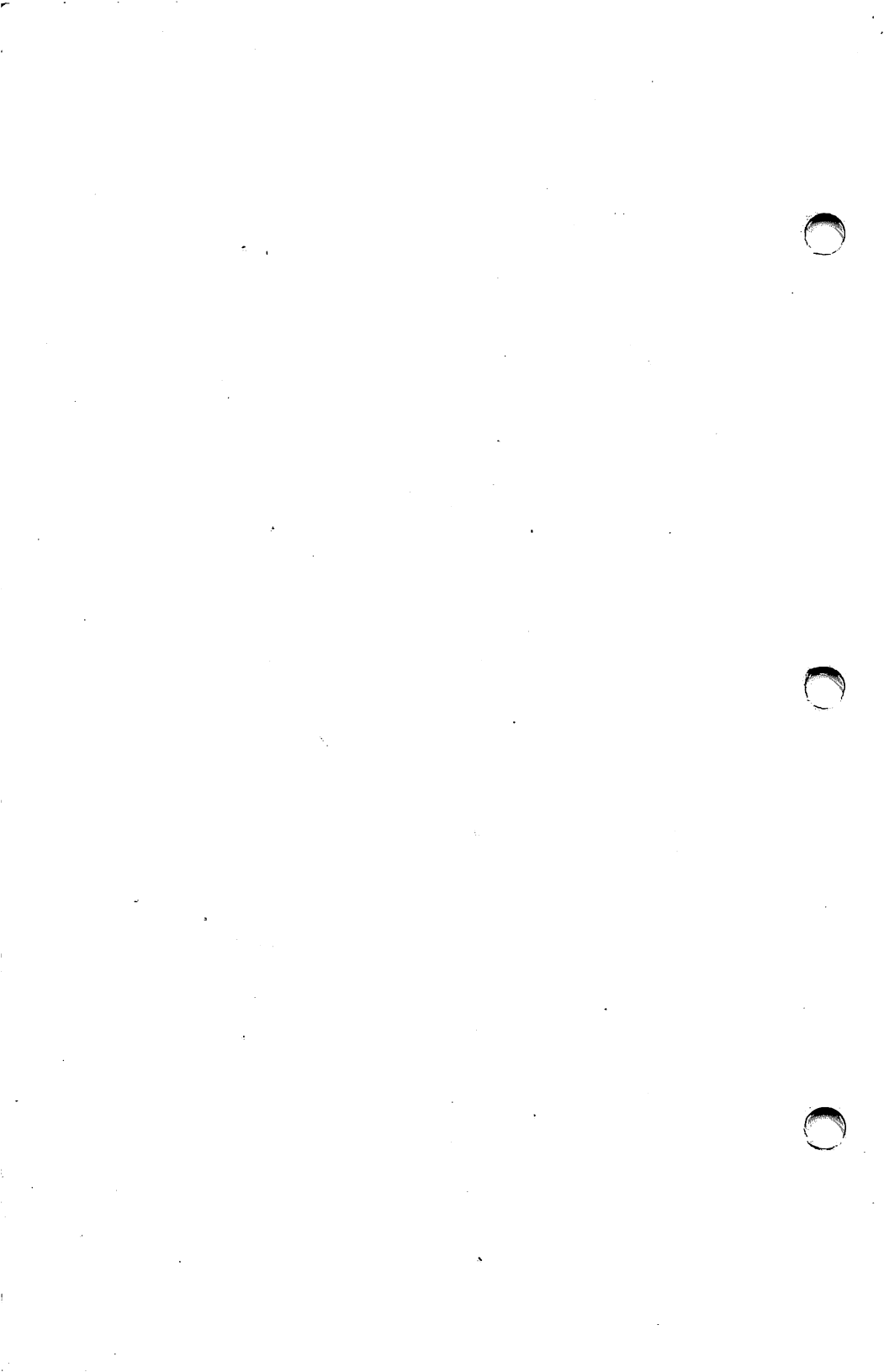
Press **E**

The screen displays:



Please reboot your computer. \_

### 4. Reboot your computer.





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