

MEET YOUR FORTUNE SYSTEM

THE FORTUNE 32:16 MICROPROCESSOR
PROVIDED BY FORTUNE SYSTEMS



FORTUNE SYSTEMS

300 Harbor Boulevard
Belmont, CA 94002

This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions in this guide, may cause interference to radio communications. It has been tested and found to comply with the limits for a class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user, at his own expense, will be required to take whatever measures may be required to correct the interference.

Welcome, Fortune System User

This package contains everything you need to learn how to use your Fortune 32:16. Before you begin, use the checklist below to determine if your package is complete.

- Meet Your Fortune System
- Fortune 32:16 Reference Guide

In the back is a plastic sheet with three pockets that contain:

- Two master disks
- Training disk
- Fortune Systems software registration card

If any item is missing from your binder, contact your Fortune Systems dealer for a replacement before you proceed with your training.

Ordering Meet Your Fortune System

Order Numbers: 1000793-05 for the complete binder with disks
1000794-05 for the complete binder without disks

Consult an authorized Fortune Systems dealer for copies of manuals and technical information.

How to Use This Package

It's important that you know how to use each item in this package before you begin.

- Meet Your Fortune System. Use this guide with your training disk to learn how to connect and use your Fortune 32:16.
- Fortune 32:16 Reference Guide. After you are familiar with the operation of your Fortune system, you'll use this guide as a quick reference for details you can't be expected to remember. If you are already very familiar with computers and computer terminology, you may want to use this guide immediately.
- Master disks. These disks contain the software that operates your Fortune system.
- Training disk. This disk contains some training programs, a vocabulary list, and some information about Fortune Systems applications.
- Fortune Systems software registration card. This postpaid card registers and warrants your disks. Be sure to fill it out and mail it to Fortune Systems Corporation.

THE FORTUNE 32:16 MUST BE SHUT DOWN IN AN ORDERLY MANNER TO PREVENT LOSS OF INFORMATION. DO NOT SIMPLY TURN OFF POWER. FOLLOW THE DETAILED SHUTDOWN PROCEDURE IN THIS GUIDE. (SEE PAGE 3-21.)

YOU SHOULD MAKE BACKUP COPIES OF THE FORTUNE OPERATING SYSTEM THE FIRST TIME YOU USE THE SYSTEM. FOLLOW THIS GUIDE FOR FORMATTING A FLEXIBLE DISK (PAGE 3-28) AND MAKING COPIES OF THE OPERATING SYSTEM (PAGE 3-30).

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Meet Your Fortune System

FORTUNE SYSTEMS



Fortune Systems Corporation
300 Harbor Boulevard
Belmont, CA 94002

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Science Management Corporation - IDOL® , Data Base Management System
Multiplan is a trademark of Microsoft, Inc.

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1 2 3 4 5 6 7 8 9 0

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Order Number: 1000795-05

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Customer Comments

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How to Use This Guide

This guide tells a person who has no previous computer experience how to unpack, install, connect, and operate a Fortune 32:16. If you are new to computers, you should read the guide from the first page. If you have lots of experience with computers, you'll want to skip through this guide, looking only for features unique to the Fortune 32:16. The chart on the next page outlines the steps to set up the Fortune 32:16 for experienced users.

If you classify yourself in a category somewhere between a novice and an experienced user, you may want to be selective. Be conservative in your judgments. When in doubt, read.

Part 1 of this guide introduces you to each unit of the Fortune system and to some fundamental computer concepts, and tells you about the environment needed for the Fortune system.

Part 2 provides step-by-step procedures for unpacking the basic units, and connecting them for use.

Part 3 tells you how to turn on the system, get it operating, and shut it down. It also contains step-by-step instructions for some of the most common procedures you'll need to know. You also use the training disk in this package. The programs on the training disk will help you become comfortable with routine operations.

Part 4 tells you how to connect additional units to the basic units of the Fortune system.

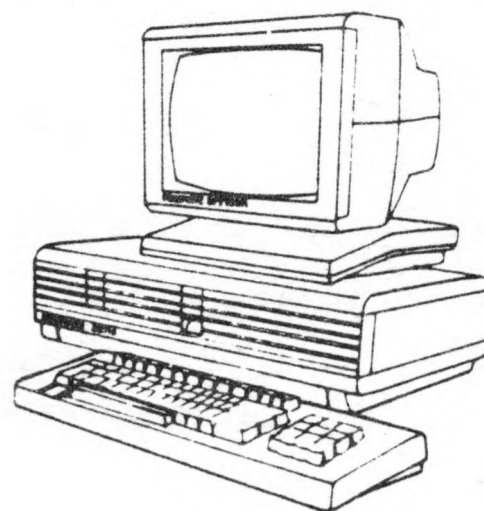
Part 5 provides additional information about some features of the Fortune system. You may want to refer to the information here to understand the relations between what you do and what the computer does.

When you're unsure about the meaning of a word you find in the guide, look it up in the glossary, which also contains terms you'll learn about in Understand Your Fortune System.

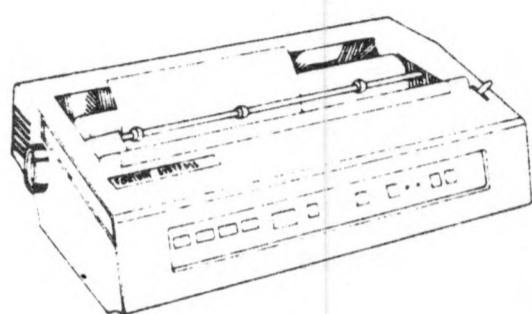
If you are an experienced computer user and just want to know how to set up and use your Fortune system, you'll find in the Fortune 32:16 Reference Guide brief step-by-step procedures for everything you'll need.

BASIC SYSTEM

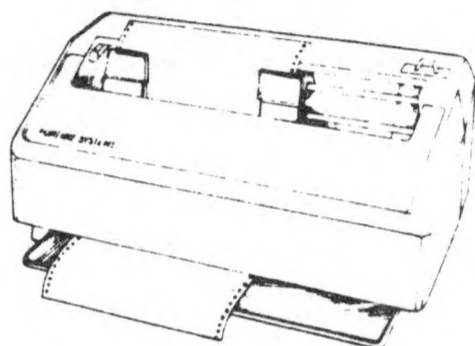
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Basic units for single-user system



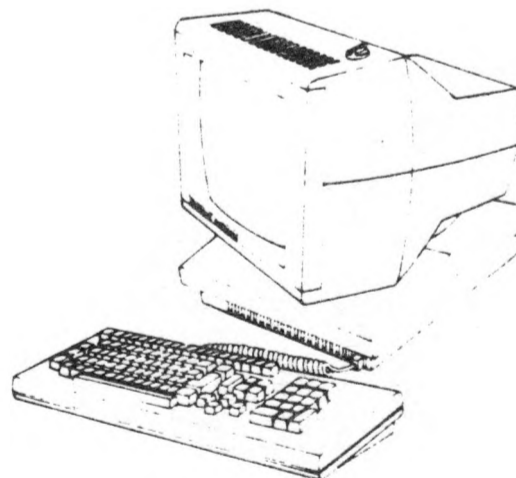
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Fortune 32:16 Reference Guide

This guide is for people who are familiar with computers and feel competent to set up and operate the Fortune 32:16 with a minimum of guidance.

Understand Your Fortune System

This guide is for people who are familiar with the procedures described in Meet Your Fortune System. It provides the Fortune Operating System information that you need to use application software.

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In this old print, Typus Arithmeticae watches over Boethius and Pythagorus, who are computing with written numerals and abacus.

From Mathematics, Rathbone Publishing Ltd.



Getting Acquainted with Your 32:16

The Fortune 32:16 is a desktop microcomputer that combines the power and computing capability of a larger computer with the ease of use and convenience of a small computer. As with any equipment, the more you know about how it works and what it's used for, the more comfortable you'll be when you use it.

This part of the guide establishes a vocabulary and provides some basic information to make the rest of the guide easier to follow.

In chapter 1, you'll find illustrations of the basic units of the Fortune system. In Part 2, you'll be connecting these units and working with them. You'll also find illustrations of units of the Fortune system that you can connect to the basic units. If your system has any of these units, you'll be connecting them to the basic units when you get to Part 4. Chapter 1 also introduces you to important computer concepts, such as hardware, software, applications, and languages.

Chapter 2 contains some basic knowledge you may need before you get started, including the requirements for the computer installation site, and information about flexible disks, supplies, manuals, service, and training.

In the following two chapters, you'll learn:

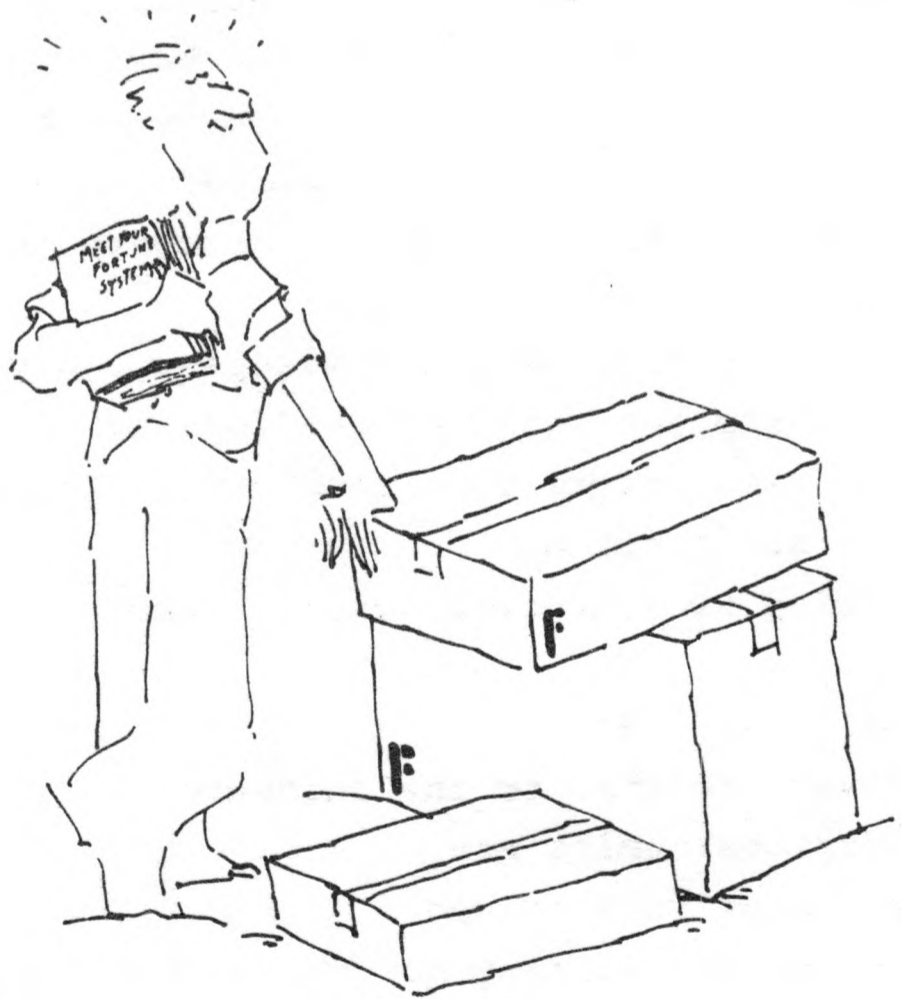
- What the basic units are
- How the hardware relates to the software
- What the additional units are
- What documentation is provided
- What is involved in learning how to use the system

1 An Overview of the Fortune 32:16

All computer systems are made up of two parts: hardware and software. One cannot work without the other. The hardware includes a central processing unit, a monitor, and a keyboard. Software consists of the instructions that tell the computer what to do.

Two major categories of software are the operating system and application programs. The operating system is the master program that controls the hardware and keeps track of where information is stored. Application programs assist users with operations such as word processing, financial planning, and accounting.

With the basic units of the Fortune system, one person can use the computer. If you attach some of the additional units to this single user system, more than one person can use the system at a time. Furthermore, on this multiuser system, the two users can be working with two different application programs at the same time.



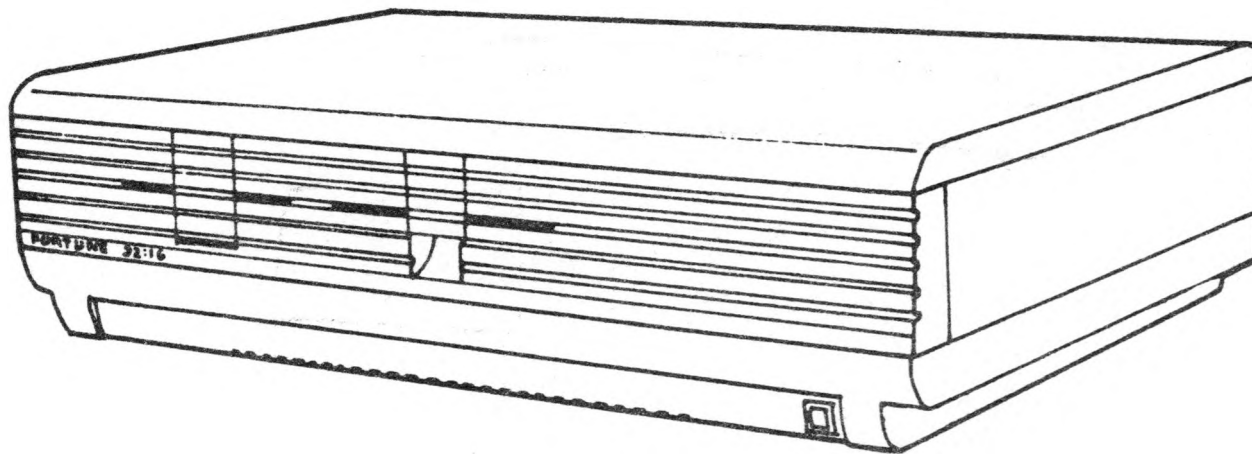
The Basic Units

Three units make up the basic hardware of the Fortune 32:16 -- the central processing unit, the monitor, and the keyboard. The following pages help you to become familiar with their general appearance before you open the packages. There are other important pieces of hardware, such as the printer, which you'll learn more about later.

CENTRAL PROCESSING UNIT

The central processing unit (CPU) does most of the work that makes a computer compute. Among its many tasks is the transfer of your input at the keyboard to the output on the screen, so that you can keep track of what is happening. Any device used with the computer is connected in some way to the CPU.

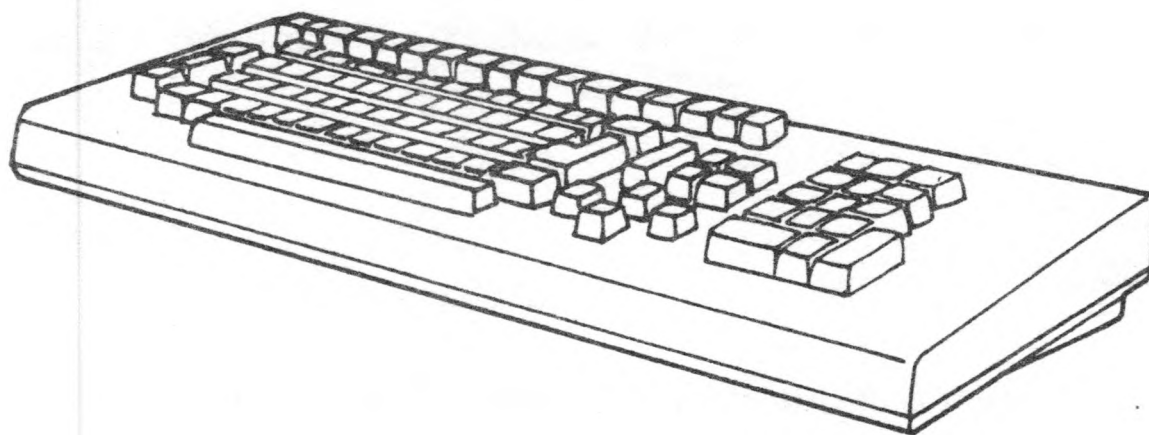
Inside the CPU are all the electronic circuits and devices that hold the results of the work you do. One of these devices is the hard disk drive, which stores information you need every day. The flexible disk drive reads information from flexible disks that look like small phonograph records. The flexible disk drive is also able to write information on these disks. You'll use these disks to store some of the information you previously kept on paper. Flexible disks are a convenient way to store information you are not currently using. Once the information is on the flexible disk, it can be read and displayed on the screen at any time.



The CPU looks like a small piece of luggage without the handle.

KEYBOARD

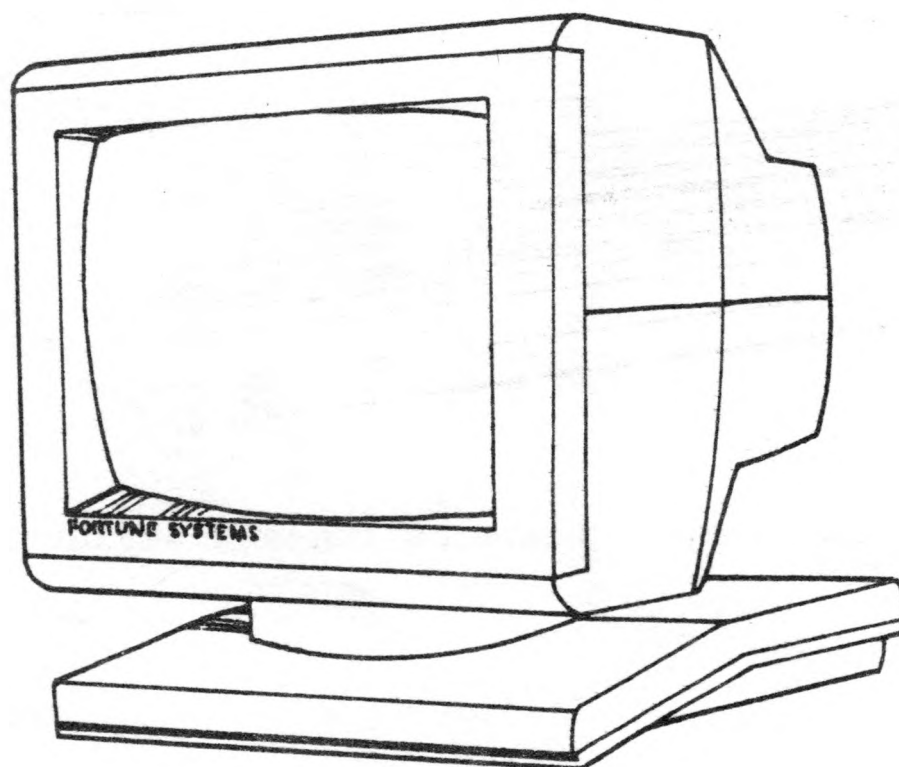
The keyboard is the input unit, which is used to put information into the computer. You communicate with the computer through the keyboard. To give you control of the computer, the keyboard has all the keys on the common office typewriter, and others to perform functions that are unique to a computer.



The keyboard looks like part of a typewriter.

MONITOR

The monitor looks very much like a television set. On the screen of the monitor you see the display that is the result of what you type at the keyboard. The display is green on a black background, which is easy on the eyes. You watch the monitor to make sure that the computer is doing what you told it to do through the keyboard. It's easy to correct any mistakes you make if you see them as they appear on the screen. The monitor is usually thought of as an output unit, because it displays what is inside the computer.



The monitor looks like a TV set.

Software

Software is invisible, but very important. You need to be familiar with the basic vocabulary of software to know what you are doing and why.

At its lowest level, the language of the computer is a collection of electrical signals that it responds to millions of times a second. At the next level up, the language of the computer is a code that one part of the computer uses to generate the electrical signals required to control another part of the computer. This code is called the machine language of the computer, and there are many different machine languages. Some people can write instructions in these languages. These people write sets of instructions so that other people can write instructions in a still higher level language.

At the next level of computer languages, instructions to the computer are written in a code consisting of groups of letters. The computer translates these letters, which are in an assembly language, into machine language. As the level of a language gets higher and higher, it eventually gets closer and closer to the languages that most people use. Any set of instructions for a computer written in any of these languages is called software. No matter what the language of the software may be, it must eventually be translated into the language of the computer at its lowest level -- a collection of electrical signals.

OPERATING SYSTEM

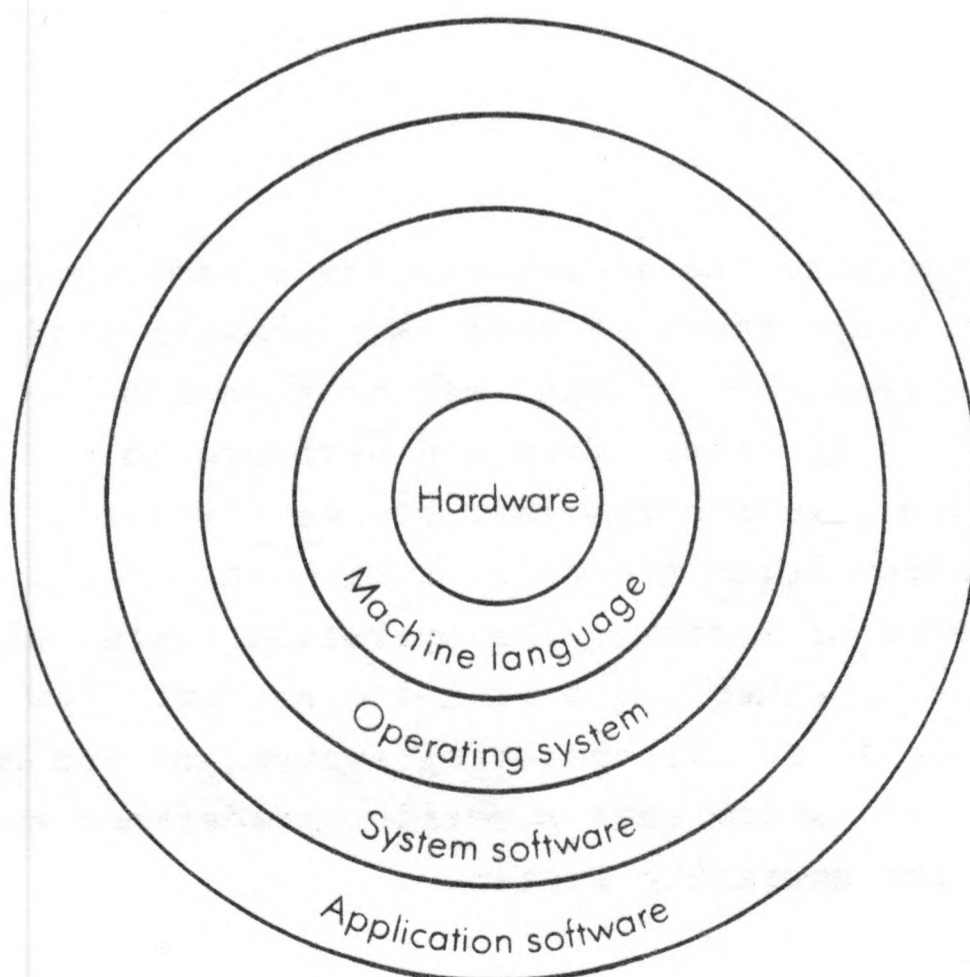
The operating system is the master program of any computer. The operating system keeps track of what is happening inside the computer; and it responds to input at the keyboard, doing such things as transferring inputs from the keyboard to the screen. In addition, when you give instructions at the keyboard, the system can search through information stored on a disk and display it on the screen, or write it on a disk. The operating system also passes your instructions to other parts of the computer. You can give your instructions directly to the operating system, or you can use application programs which send specific, predefined sets of instructions to the operating system.

APPLICATION SOFTWARE

Application software acts as a translator for people who want to work with computers but have no need to learn a computer language. People who write application software must have some knowledge of computers and some knowledge of the field in which the application is used so that they can translate from either language to the other. Users of application software often work from a menu on a screen. A menu is a display of choices available to the computer user in the vocabulary of the user, who may be an accountant, or an engineer, or a typist. Application software makes a specific type of work easy to do on a computer, but the software is dedicated to that specific job. Fortune Systems Corporation provides a full range of applications software for the Fortune 32:16.

OTHER KINDS OF SOFTWARE

There's much more to software than operating systems and application software. System software is a classification sometimes used for software that performs routine tasks. These tasks include passing information to printers or display units, arranging the format of printed pages, or changing coding systems from one form to another, such as from number representation that the computer uses to number representation that people use. As you become more involved, you'll hear many more terms, such as compilers, interpreters, and utilities.



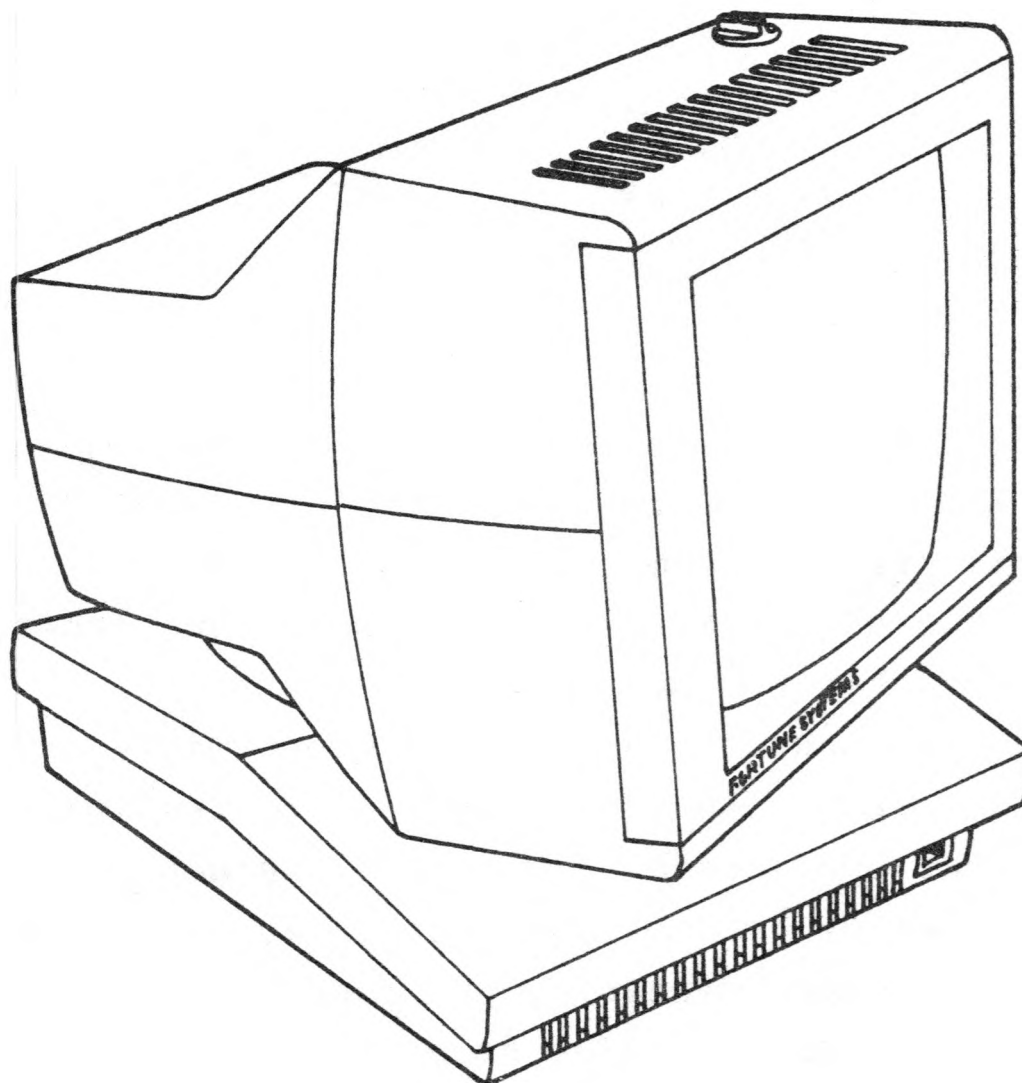
Software is available in many forms and at many levels.

Additional Units

The better computer systems are capable of expansion by connecting additional units. With your Fortune system, additional units are optional; by adding units, you can put together a system that fits your needs. For example, if one use of your Fortune 32:16 is word processing, you can add an additional unit for each operator. When you need the additional features, your Fortune system can be expanded by connecting additional units to controllers in the CPU. A controller contains electronic circuits designed to be connected with a specific type of device, usually outside the CPU. One controller in the CPU is used for the monitor, and one is used for the hard disk drive.

ASCII TERMINAL

An ASCII terminal is a display unit that looks very much like the monitor. (The name ASCII comes from American Standard Code for Information Interchange; it is pronounced to rhyme with "passkey.") Each ASCII terminal makes it possible for an additional operator to work on the Fortune system. A standard keyboard is used with the ASCII terminal.



An ASCII terminal looks similar to a monitor.

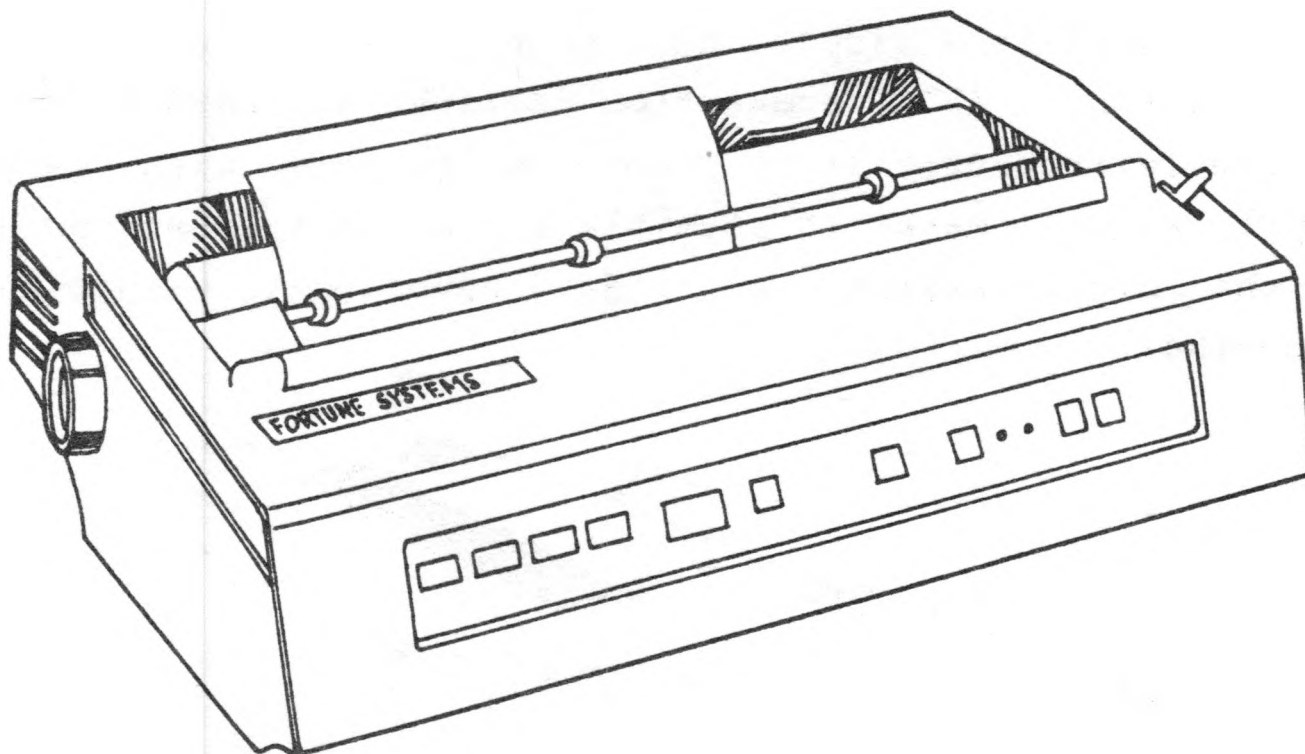
The main difference between a monitor and an ASCII terminal is that the ASCII terminal is connected to the CPU through a cable, and can operate at distances up to 50 feet from the CPU.

If your system has an ASCII terminal, you'll be unpacking and installing it after the basic units are connected and operating.

PRINTERS

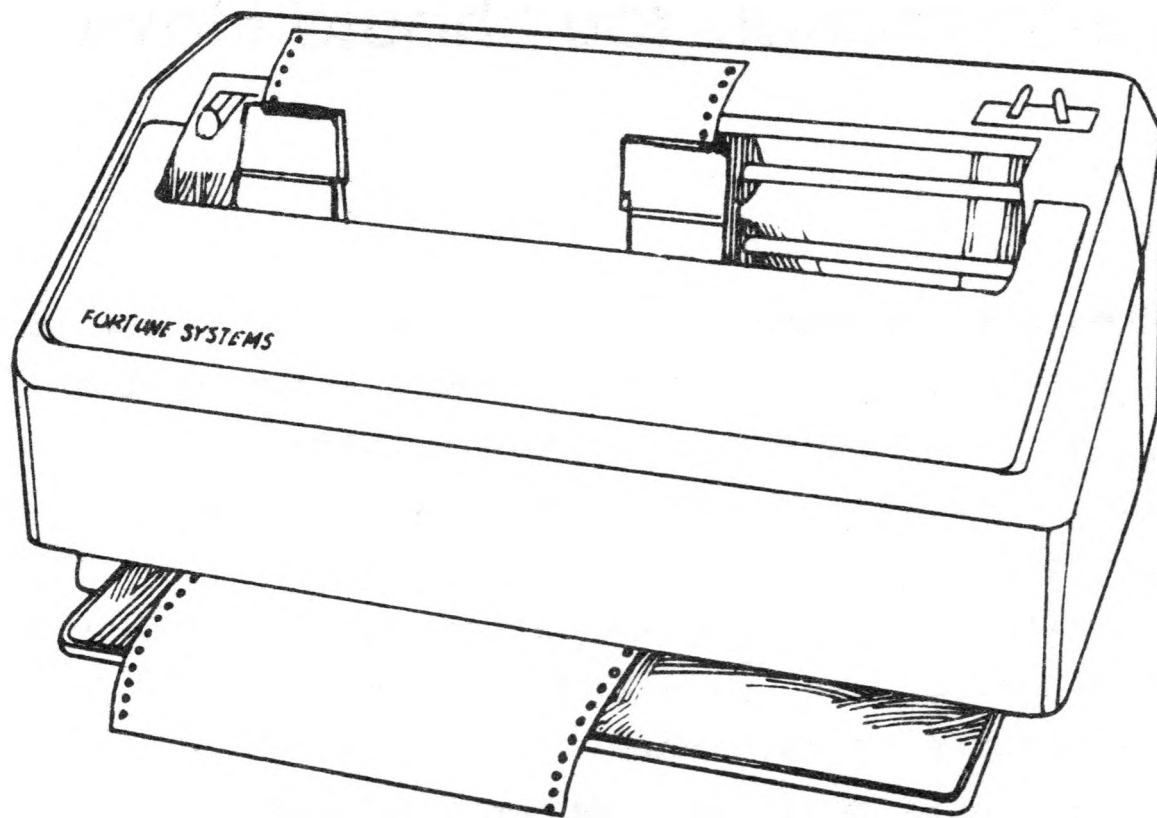
A computer operator can see the information in the computer by looking at the display on the screen, but many people want to see it in printed form. A printer is needed so that selected information in the computer can be printed for hard copy distribution. Fortune Systems Corporation can provide a letter quality printer or a dot matrix printer.

The output of a letter quality printer looks like the output of a typewriter; it is printed in the same way a typewriter prints, by striking a solid print character against a ribbon.



A letter quality printer is used for most business documents because the output is like a typewriter.

A dot matrix printer forms letters by striking a set of closely spaced dots in the shape of letters, numbers, and other characters. The dot matrix printer produces the text faster than a letter quality printer can, but the solid type produced by a letter quality printer is what most people are accustomed to reading. The Fortune dot matrix printer operates at 110 to 200 characters per second; the Fortune letter quality printer operates at 20 to 55 characters per second. Either Fortune printer can be connected to the CPU with the cable provided and requires no other equipment or software.



A matrix printer can print three times faster than a letter quality printer.

2 Some Information You Should Have

If you have previous experience with computers, you know about space requirements, flexible disks, manuals, and support. If you're new to computers, you should learn about these things now.

The computer will take up space, and so will the equipment you need with the computer.

Flexible disks, which you'll use every day, have many purposes. You need to know how to use, care and store them, and keep records of what information is on each one.

You'll need manuals for the computer, and for each application you use on the computer to learn how to use the software provided by Fortune Systems Corporation.

As with any kind of equipment, computers occasionally do things you don't expect, or don't do things you do expect. Most problems you'll be able to handle yourself. When you really need help, the computer will often tell you what to do.



Finding a Place for the Computer

Be sure you consider all the following issues when selecting a place to set up your Fortune system.

ENVIRONMENT

Your Fortune system is designed for general use and doesn't require the special air conditioning needed by the giants of the past. An environment that is good for you is good for your computer. It is as sensitive to smoke, dust, heat, and humidity as people are, so keep it in a clean, well-ventilated environment.

SPACE

When the basic units of a Fortune system are in place on the average-sized office desk, the operator will still have enough work space and storage space for the reference material needed for work. There probably won't be much room for other equipment. You may want to reserve a desk or table just for your computer.

Even if you don't have additional equipment, consider the question of extra space now. Once you become accustomed to the computer, you'll probably think of other work it can do for you and other equipment to add. Reserve enough space to allow for expansion.

It is especially important to allow the CPU as much space as possible on all sides, because the internal power supply generates heat. A fan in the CPU draws air across the power supply to keep it from overheating. Don't put the CPU flush against a wall.

Your system probably has a printer. Leave space around the printer so that either single sheet or continuous sheet paper can easily be used. Allow standing room around the printer so you can add paper. Continuous paper requires paper storage space behind the printer and a location, such as a catch basket, to feed printed paper to. It's convenient to have paper stored nearby, so that a refill is a quick task when needed.

The cable that connects an ASCII terminal to the CPU may be up to 50 feet long. Any additional terminals require the same environment and the same considerations of work space and storage space as the master workstation (the monitor and keyboard).

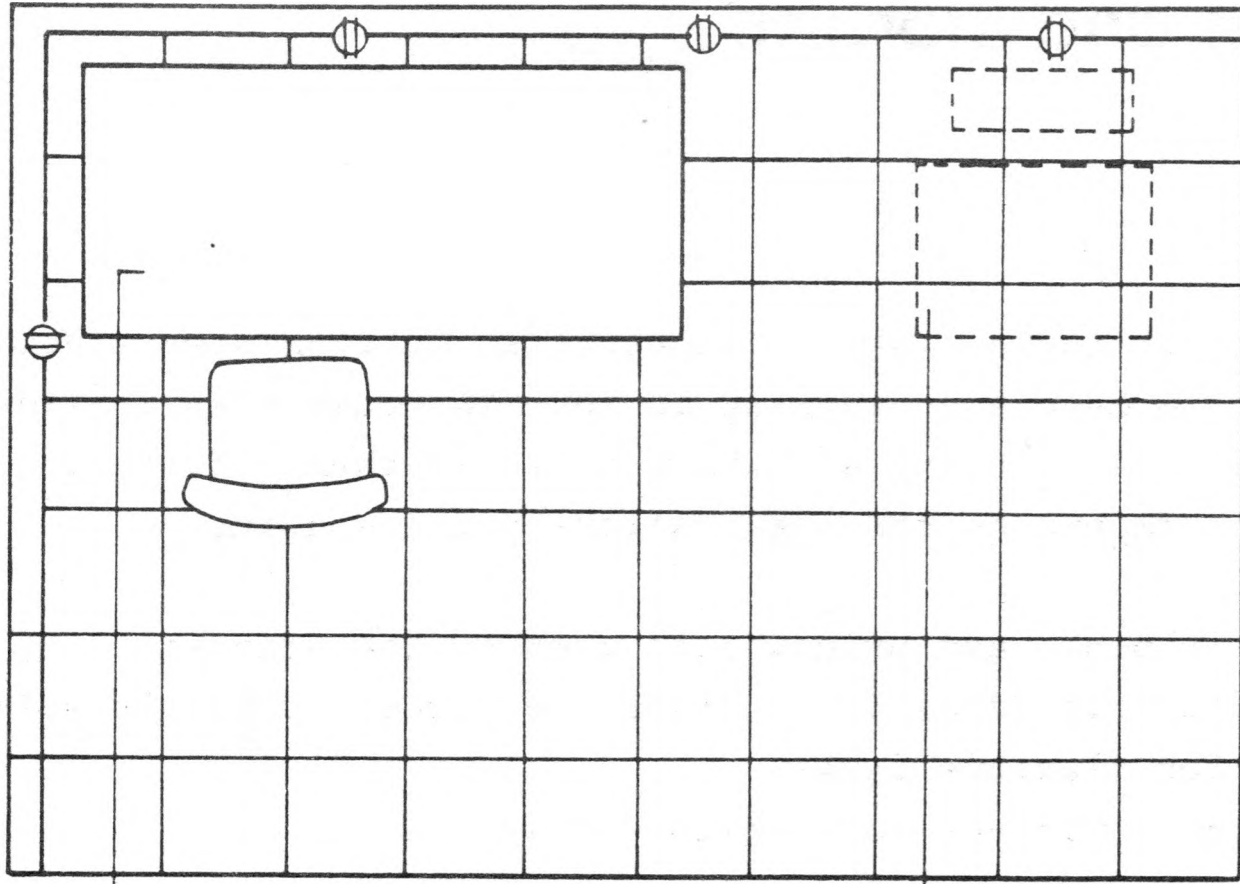
OUTLETS AND CABLES

Make sure that you locate your system in a place with plenty of electrical outlets. Otherwise, every time you add a new piece of equipment, you'll find yourself looking for a place to plug it in. Even if your system doesn't have satellite workstations (the ASCII terminal and keyboard), consider what would be involved if you decided to add them and had to route cables to the location you have selected for the basic units.

A six-foot power cable with a grounded three-pronged connector is provided with the computer.

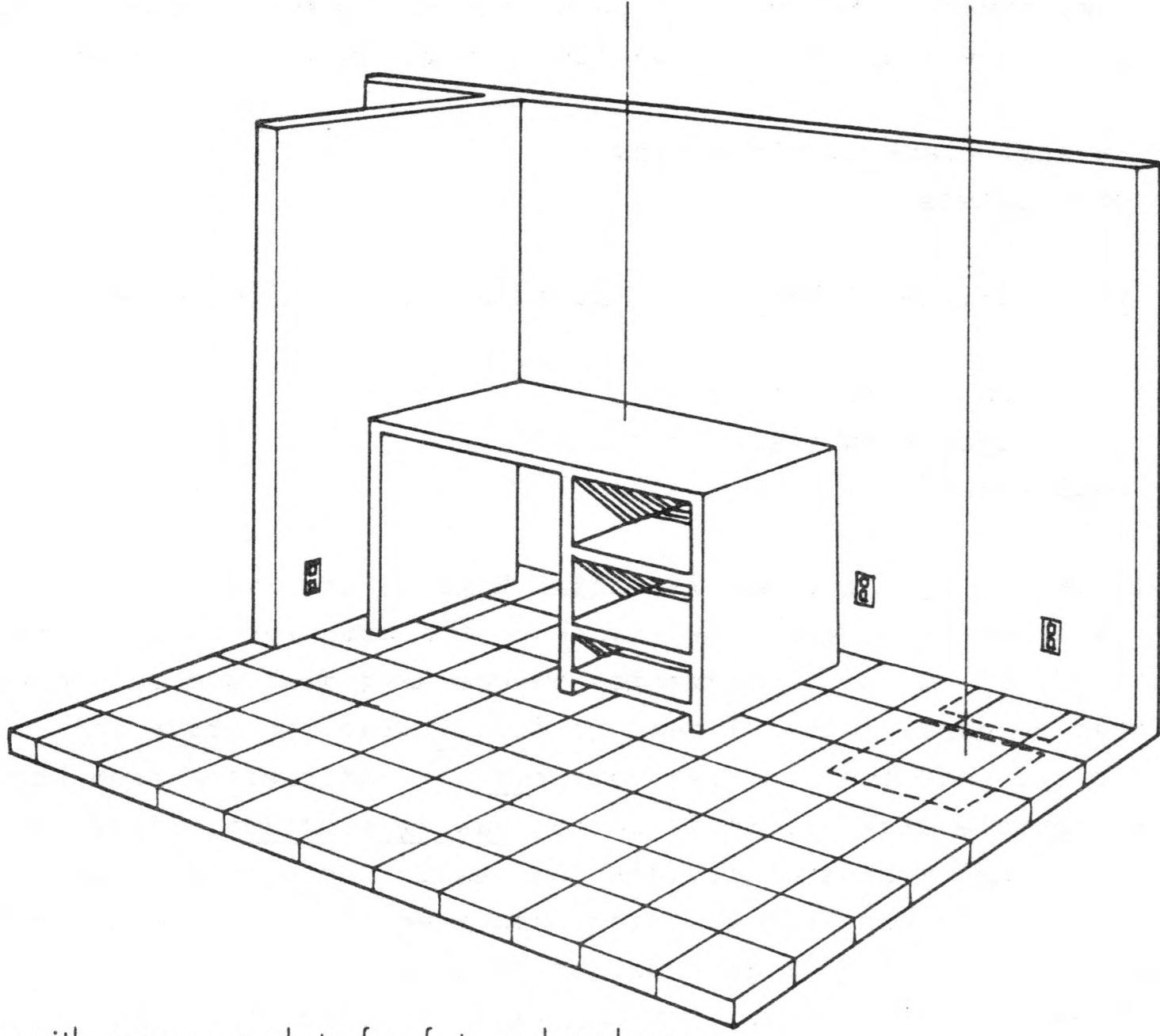
ELECTRICAL INTERFERENCE

The computer should not share an electrical outlet with equipment such as a large office copier or machine tools. Installing the computer very close to electrical machinery may cause problems for the computer.



Desk for Fortune 32:16 with easy access

Space for printer



Space with many outlets for future hookups

You'll need adequate space, ventilation, and electrical outlets for your Fortune system.

Supplies and Storage

There's more to installing a computer than putting some electronic equipment on a desk and plugging it in. You must also consider the materials you'll be using and where to store them. Your supply requirements depend on the applications you are using.

- Paper, ribbons, and printwheels used by the printers
- Blank flexible disks for storing the results of daily work
- Labels for flexible disks
- A storage container for flexible disks

Most of these supplies are readily available, but you may need to order others. Be sure to check your application guide to find out if you need additional supplies. Right now you'll need:

- Several blank flexible disks
- Disk labels

The flexible disks you use must meet the following requirements.

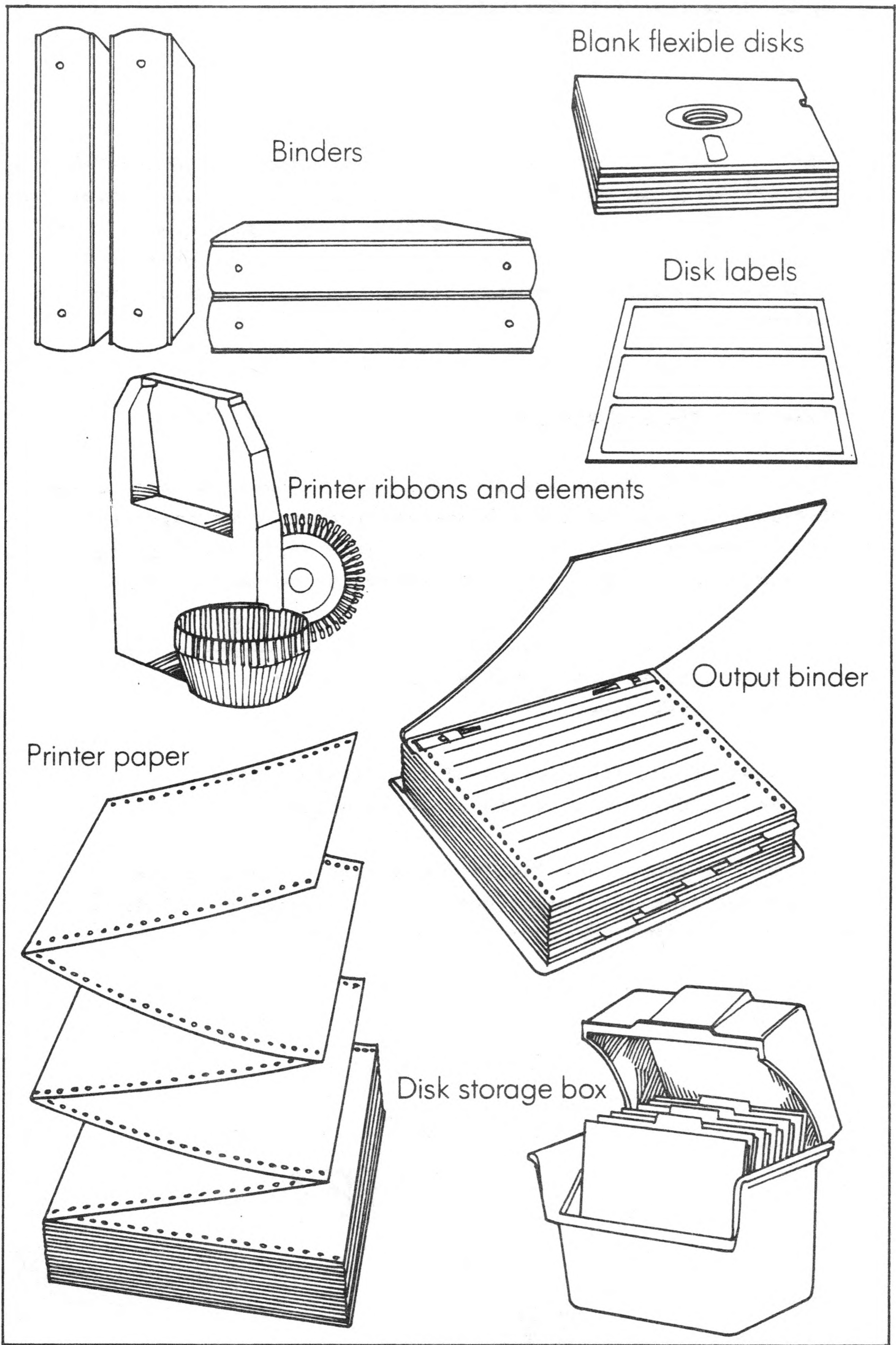
- 5 1/4 inch diameter
- Certified at 96 tracks per inch
- Dual sided

Qualified vendors include Verbatim, Maxell, and Dysan.

As a result of each day's work on the computer, you'll create two kinds of output, information on the hard disk and information printed on paper. You'll need to find a place to store each kind.

It's a good idea to copy your data or information from hard disk to a flexible disk. This is called making a backup. Each application manual you have includes information on what data should be backed up and when. In addition, you need to store the disks in a place where they won't get lost or damaged. If you have confidential information, you may want to store the disks in a locked desk or filing cabinet.

Printed results of your work usually can be stored in regular binders. If you use a wide print format (132 characters), you'll need special binders for the pages that come from your printer. Both types of binders are available at stationery stores.



Binders

Blank flexible disks

Disk labels

Printer ribbons and elements

Output binder

Printer paper

Disk storage box

These are the supplies you'll need with your Fortune system.

Caring for Flexible Disks

With all application software available from Fortune Systems Corporation, you get one or more flexible disks that contain the application software, and a flexible disk that contains a training program. You also need blank flexible disks for storing information, and for keeping backup copies of your application software.

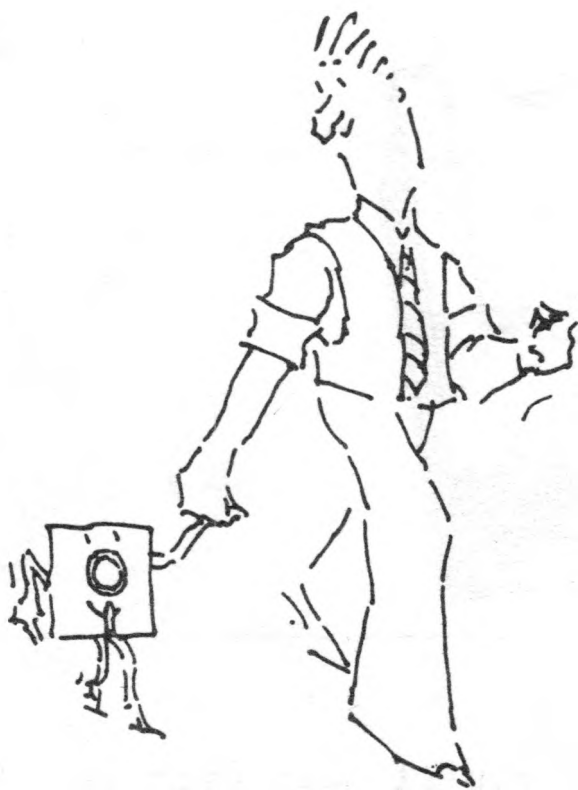
EXAMINE A FORTUNE FLEXIBLE DISK

Three flexible disks are available in the back of this package. The flexible disk is inside a black protective cover which you never should remove. A silver and blue outer dust jacket protects the disk during storage. You will remove it to use the disk.

Never remove the flexible disk from the protective cover.

Never touch the surface of the flexible disk.
Hold a disk only at the protective cover.

Do not remove the flexible disk and its protective cover from the jacket until you are ready to use it.

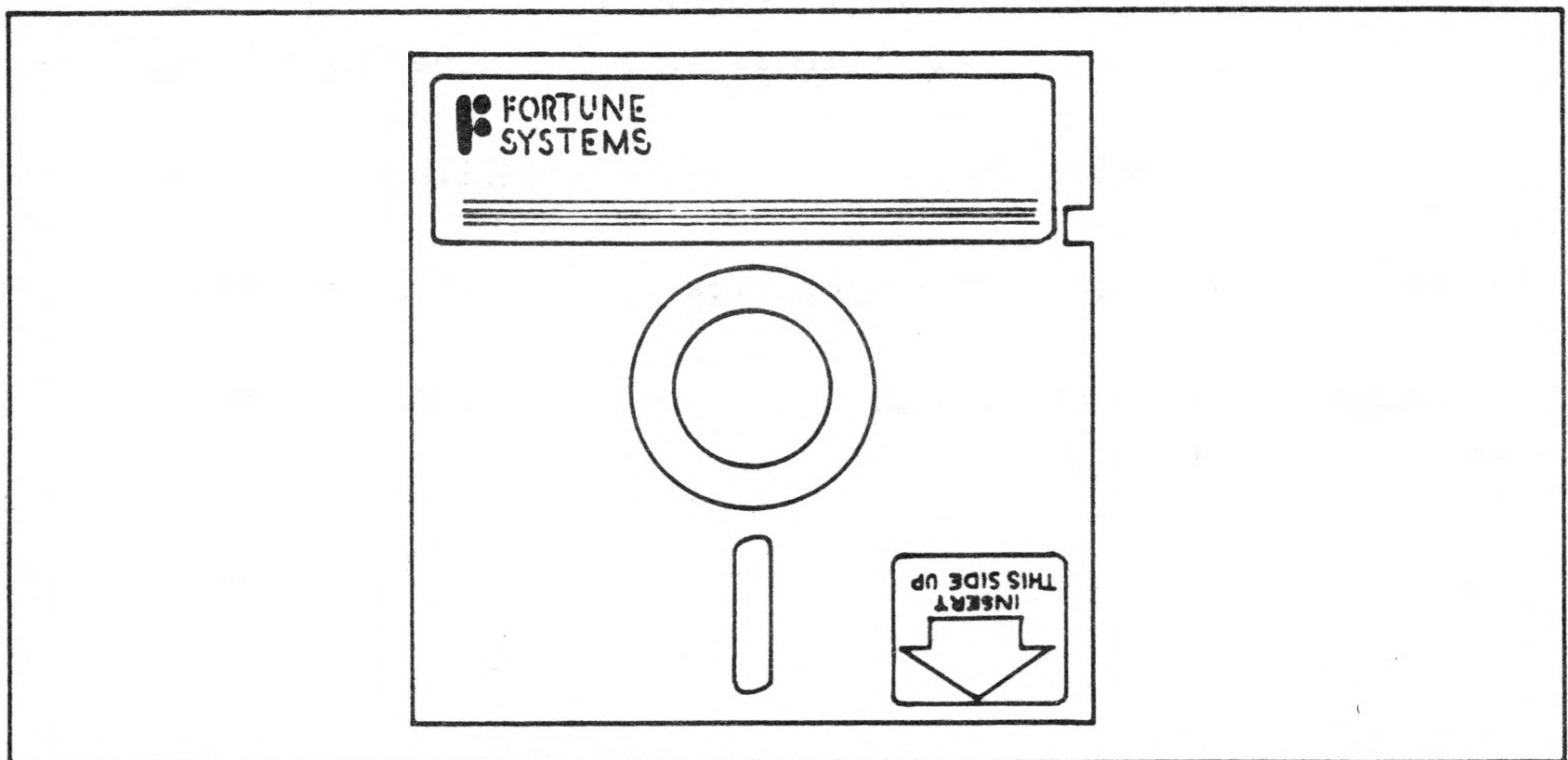


Take one of the disks from the back of this binder and remove the disk (contained in its protective cover) from the dust jacket. You can see parts of the disk through holes in the protective cover. The protective cover has a label that identifies the contents of the disk, tells whether the disk is one of a set, and includes a part number and a lot number. The part number identifies the disk's contents. The lot number indicates the time the software was written on the flexible disk. The part and lot numbers concern you only if the disk is defective and you must return it. The software register card packaged with the disks in this binder registers your disks if you return the form completed to Fortune Systems Corporation.

When a flexible disk is used, the disk and its inner protective cover are inserted into the flexible disk drive of the CPU. The openings in the protective cover allow information to be written to, or read from, the flexible disk.

BLANK FLEXIBLE DISKS

Blank flexible disks, which you can buy from your Fortune Systems dealer as you need them, also have inner protective covers and dust jackets. You'll have to label them yourself, which you'll learn about in Understand Your Fortune System and in manuals for application software.



Your flexible disks contain everything you want to preserve -- application software, training programs, and information that you create.

HELPFUL HINTS

By taking proper care of your flexible disks you can ensure accurate files and proper performance from your Fortune 32:16. When you take good care of a flexible disk, it should last approximately 200 hours. Since you'll use flexible disks primarily for storage, your disks should last a long time.

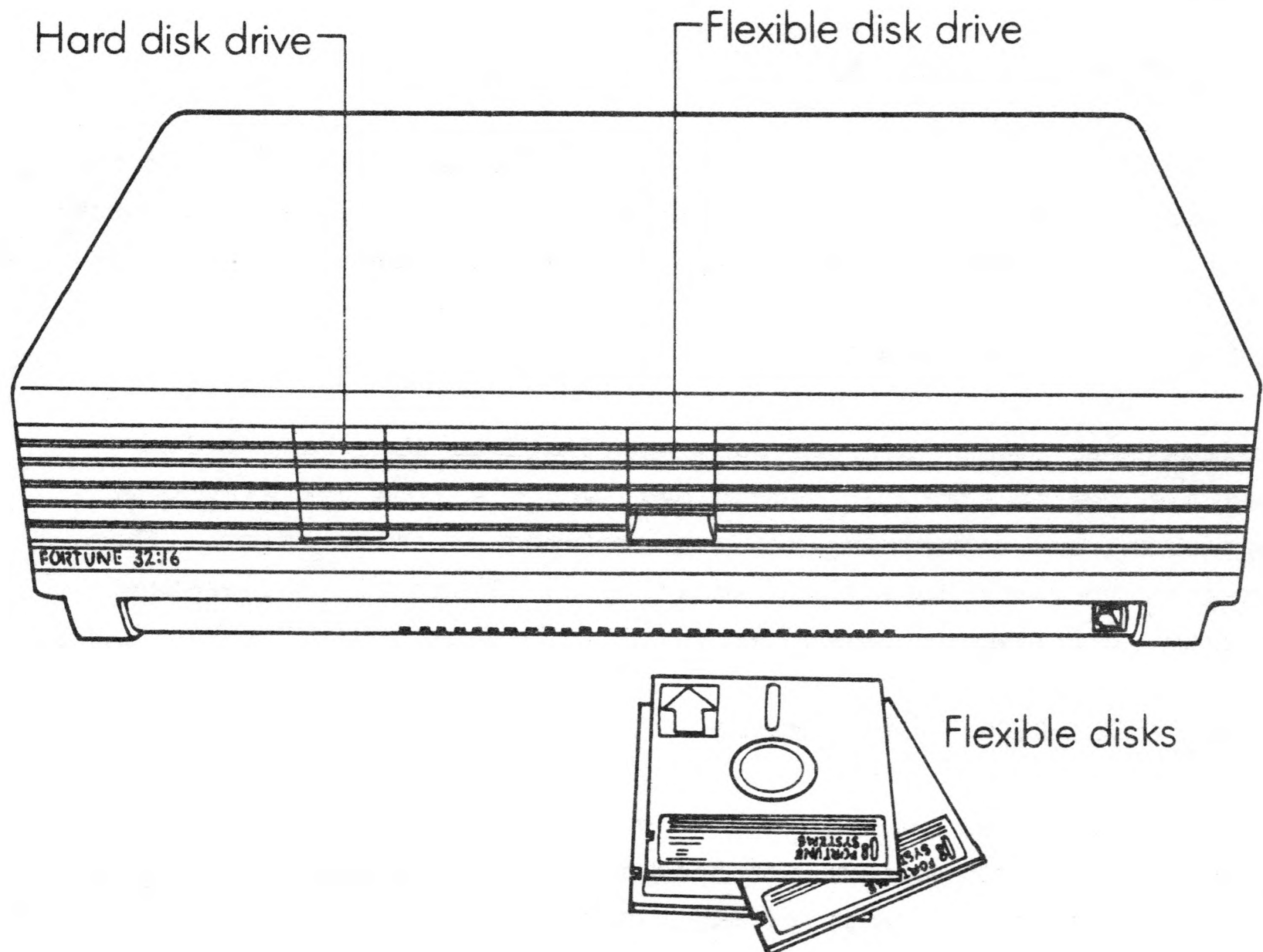
- Never touch or scratch the exposed magnetic surface of the disk. This is the portion exposed by the cutouts on the disk covering.
- Keep the disk away from magnetic fields produced by devices such as magnetic paper-clip holders, electric pencil sharpeners, TV sets, display screens, and air conditioners.
- Never write on the disk labels after they're attached to the flexible disks.
- Avoid extremes of temperature where your flexible disks are stored. Don't leave them in direct sunlight.
- Protect the disks against excessive humidity. Try to keep them within a range of 20 to 50 percent humidity.
- When you're not using a disk, return it to the protective envelope it came in and store it in a container with other disks.
- Do not bend, fold, staple, or otherwise mutilate your disk.
- Avoid spilling any liquids or cigarette ashes on the disk.

Remember, disks are fragile, and they do require a certain amount of tender loving care.

Working with Disks

Much of the information used by the Fortune system is stored on flexible disks. The CPU contains a flexible disk drive behind the door on the right-hand side of the CPU. Flexible disks store information offline; that is, the information is available to the computer only when you insert the flexible disk into the flexible disk drive. The flexible disk drive rotates the disk so that the CPU can read information from it and write information on it. The hard disk drive rotates hard disks to perform the same function as the flexible disk. The hard disk stores more information than a flexible disk and transfers information faster than a flexible disk.

As new information is generated, it can be stored on blank flexible disks. To keep track of what kind of information is stored on a particular flexible disk, each new disk should be labeled at the time the information is stored. The application program packages include suggestions for proper marking of flexible disks.



The CPU contains a hard disk drive and a flexible disk drive.

Manuals

The best computer equipment is useless if people don't know how to operate it. The Fortune system is supported at every level by manuals, which are referred to in the computer industry as documentation. Fortune Systems documentation is packaged in binders that contain everything you need to use an application. For example, the product Multiplan includes an operator's guide, reference guide, a master flexible disk and a training flexible disk, a reference card, and a keyboard template, which is an attachment to the keyboard that identifies the use of keys in that application.

Documentation for the Fortune system is divided into six categories, which are identical to the six boxes on the global menu that you'll soon see. These series and the types of manuals provided with each are listed below. Note also that each category has a color. This color is printed as a stripe on every manual that is grouped with software in that category.

BUSINESS APPLICATIONS (Red)

Business applications is a category for the accounting procedures required by most corporations. Applications such as General Ledger, Payroll, and other business functions are included.

PROFESSIONAL TOOLS (Yellow)

Professional tools includes many applications that have become feasible due to computer technology, which allows for efficient processing and formatting of large volumes of information. This category includes Multiplan, which is an electronic spreadsheet program, and graphic presentation of information.

OFFICE AUTOMATION TOOLS (Green)

These applications, which include word processing, assist with office work. Information required to run a business office smoothly and efficiently can be processed, stored, and accessed on a computer instead of in a file of papers.

COMMUNICATIONS (Orange)

This category includes applications that permit a Fortune system to exchange information with other computers or with other Fortune systems. Information in any source that can be reached by the telephone system can be made available to any person who has access to a computer.

TRAINING AND EDUCATION (Blue)

Introductory training for the applications, as well as the computer-aided training included in Meet Your Fortune System, is in this category.

SYSTEM TOOLS (Purple)

Applications for programmers, such as programming languages, the operating system, and special system functions, are in this category. The general user also has access to these tools for managing the system.

Using the Training Disk

The training disk contains information about your Fortune system as well as quizzes and games to help you learn how to use the system. It's designed so that you'll be working on the computer instead of just reading about it.

After you've unpacked, connected, and checked out your Fortune system, you'll copy the information from the disk onto your Fortune system. Then you'll be ready to go. If there is more than one person who needs to learn how to use the computer, you can take turns. There's no need to make additional copies of the disk to train additional operators.

This training disk is loaded into the computer in the same way as the training disks supplied with Fortune Systems applications. Each application training disk helps you to learn the most efficient use of the application by providing prerecorded information which you can experiment with. The operator's guide that comes with the application tells you how to best use the training disk for that application.

STOPPING AND STARTING

Now you need to know how to make the best use of time spent with the training disk. Although this depends on your own time restrictions, some guidelines will help.

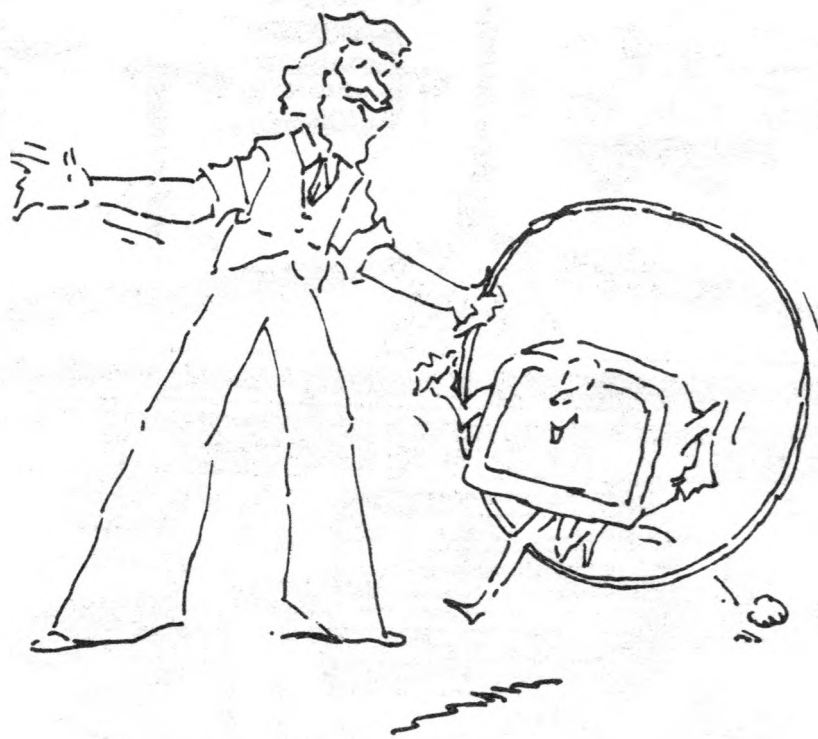
Once your Fortune system is set up you can begin the training. Go through the training at your own pace. You may want to start your training as soon as you unpack your system, or you may want to read more of this guide before you begin. Either way, choose a time when you won't be interrupted constantly so that you can get the greatest benefit from your efforts.

You can stop the training contained in this manual at certain points, such as at the end of each part. If you have the time, you should work through at least Part 2 so that your system is unpacked, connected, and ready to use. Better yet, work through Part 3 to get a clear idea of how to use the system through some hands-on exercises. Even though you may have additional units to set up, you can use the basic units to learn something about the system before you finish setting up.

AFTER YOUR TRAINING IS COMPLETE

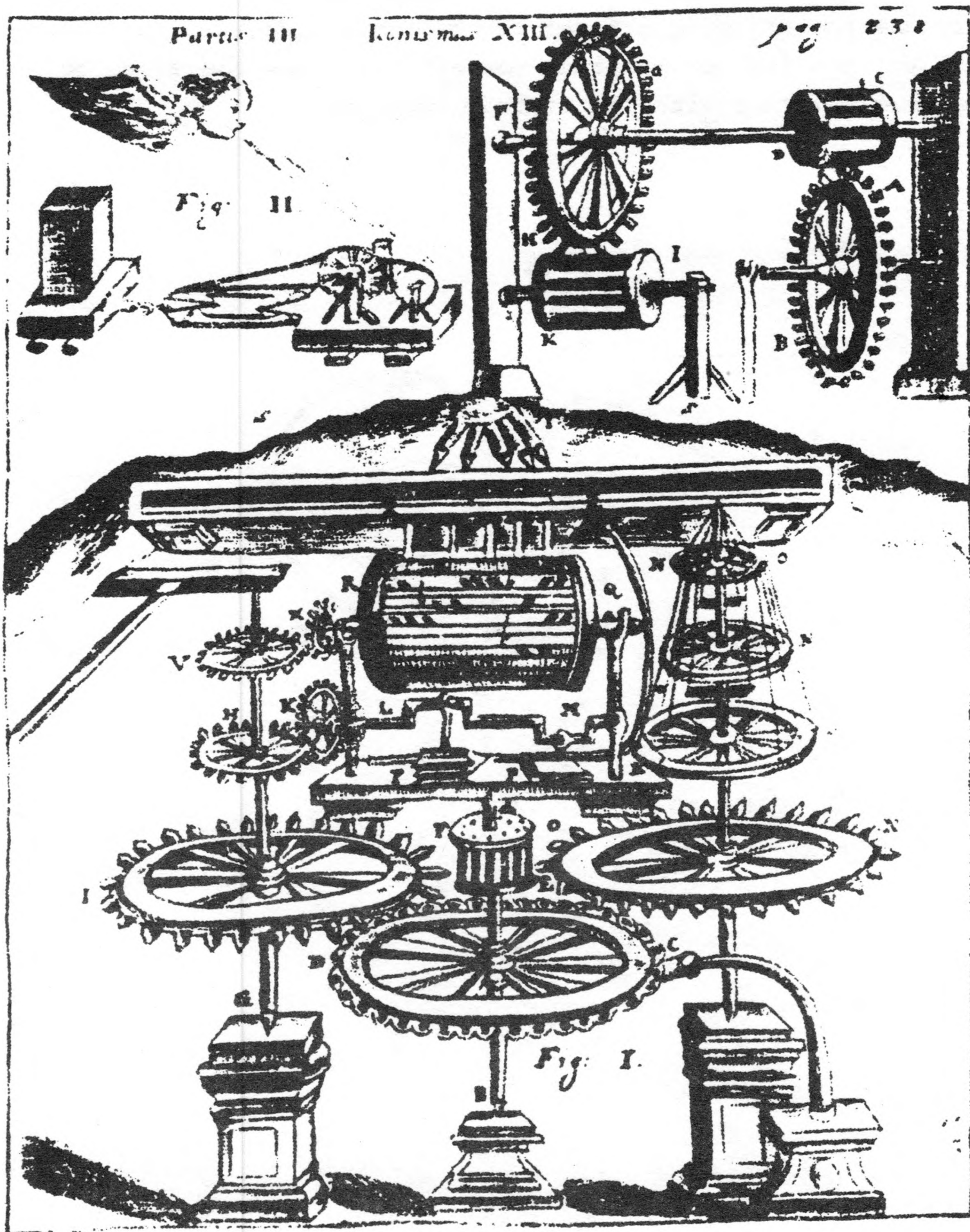
The training program takes some space on your hard disk. If you wish, you can delete it after you've used it, or you can delete just part of it. You'll be able to load it again whenever you want to. The training program contains a dictionary of business terms and a dictionary of computer terms. You may want to keep this information on the hard disk, and delete the amusements part of the training.

Because the training program can be loaded, deleted, and backed up like any application program, you can train new operators by having them practice with the training program.



Schott's engraving represents an apparatus of uncertain use, which dimly foreshadows the programming of movements by means of a perforated cylinder.

From Gaspar Schott, *Magia Universalis*, Bamberg, 1677.



Setting Up the Fortune System

This part of the guide contains detailed instructions for unpacking the basic units, and connecting them together for use. Follow the sequence of operations as described to make sure that the units are connected correctly.

In chapter 3 you'll find step-by-step instructions for unpacking the basic units and detailed information about the features of each unit. Follow the instructions in chapter 4 to set up the units. You should connect the basic units to each other before you connect any unit to a power outlet. Some cables of the Fortune system are identical and could be connected to the wrong location if you are not careful.

In the following chapters, you'll:

- Unpack everything and check to make sure everything's there
- Fill out some forms and store the cartons
- Set up the units for use

3 The Setup Sequence

It's important that you follow the setup sequence presented in the next few pages to ensure that your system is properly unpacked and situated for your use. The setup sequence described in the following pages contains these steps:

- 1 Checking to make sure you received everything. This can be easily and quickly done, and ensures you have everything you need.
- 2 Unpacking the Fortune system. The order and process of unpacking each unit is described here in detail.
- 3 Looking at the basic units. Each is described in detail in this chapter to give you more of an understanding of your system.



Making Sure You Have Everything

Now is the time to make sure that you have everything you expected and need. One way is to check the items on the invoice.

BASIC SYSTEM

If you have only the three basic units, you should be able to tell at a glance that you have everything you need.

The long, shallow box contains the CPU.

The tall box contains the master workstation, consisting of a monitor and a keyboard.

Those two boxes are the only ones you should open until you have the basic system up and running.

ADDITIONAL UNITS

If you have additional units, such as a printer or an ASCII terminal, you have boxes that you shouldn't open now. Find out which box contains which unit, and identify the boxes containing the basic units.

The box that contains the master workstation (the monitor and keyboard) and the box that contains a satellite workstation (an ASCII terminal and a keyboard) look alike from the outside. To identify the box containing the master workstation, look on the side to find the place with the following markings:

CRT

ASCII

You'll open only the one that is marked as the master in the next procedure.

CABLE CONNECTIONS

If your system has satellite workstations, cables must be installed from the CPU to each satellite workstation. Standard cables available from your dealer are 10, 20, and 50 feet long. If you need a cable longer than 50 feet, it will have to be made to order. Be sure you get your cable before you begin the installation.

Unpacking the Basic Units

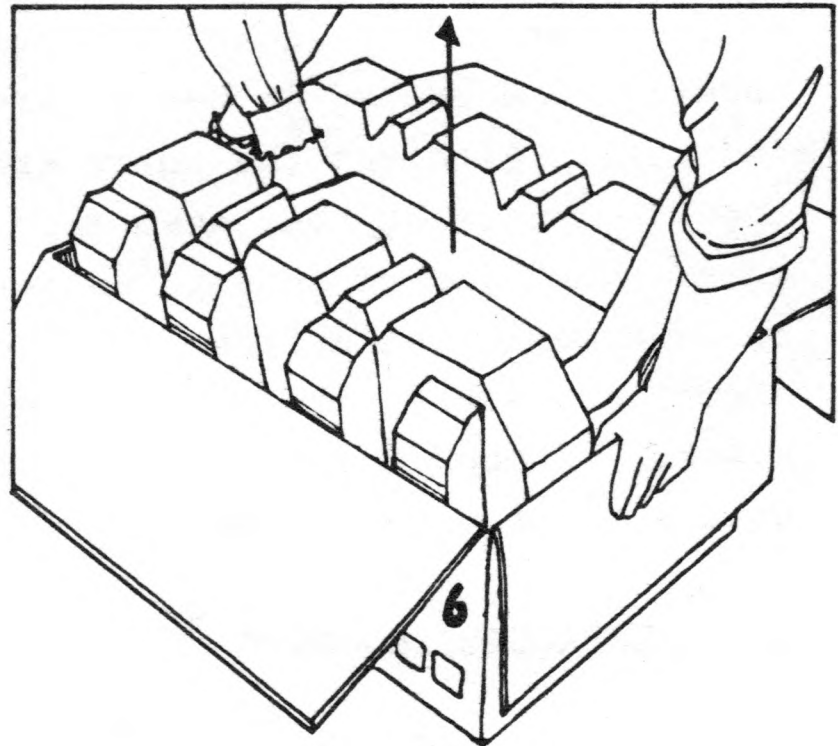
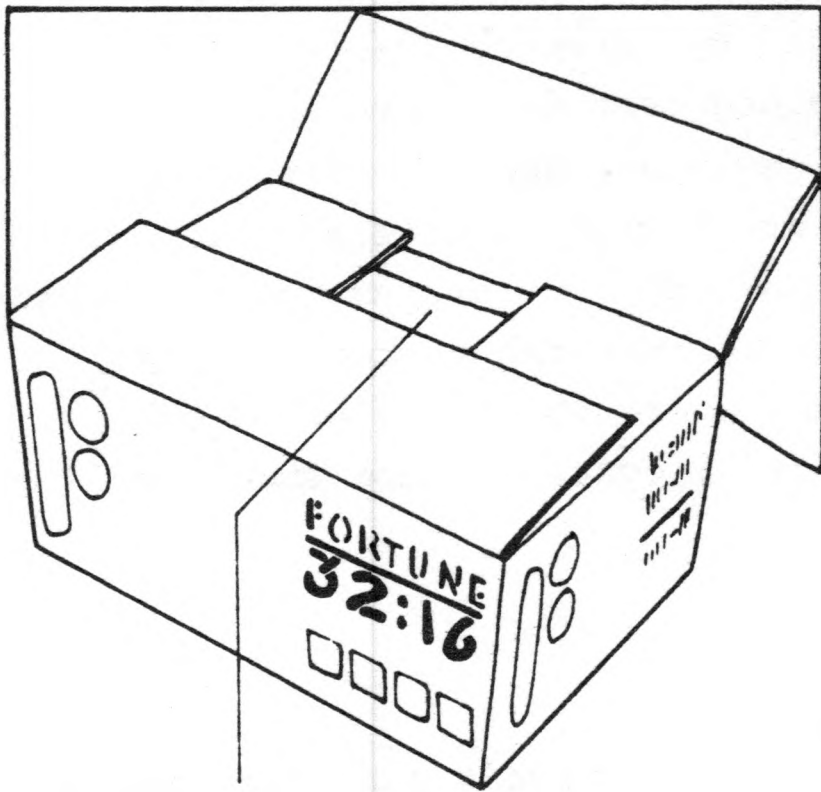
Your Fortune system comes surrounded by heavy shock-absorbing material and packed in heavy cardboard cartons to protect it during shipping. Although the units are small and easy to move around once they're unpacked, they seem much larger with packing material around them. You'll need help to unpack so that your system isn't dropped or damaged in the process. Be sure to have the cartons on the floor, preferably close to the place where you'll be using the system. Unpack the CPU first, since it contains some important papers about your system.

CENTRAL PROCESSING UNIT

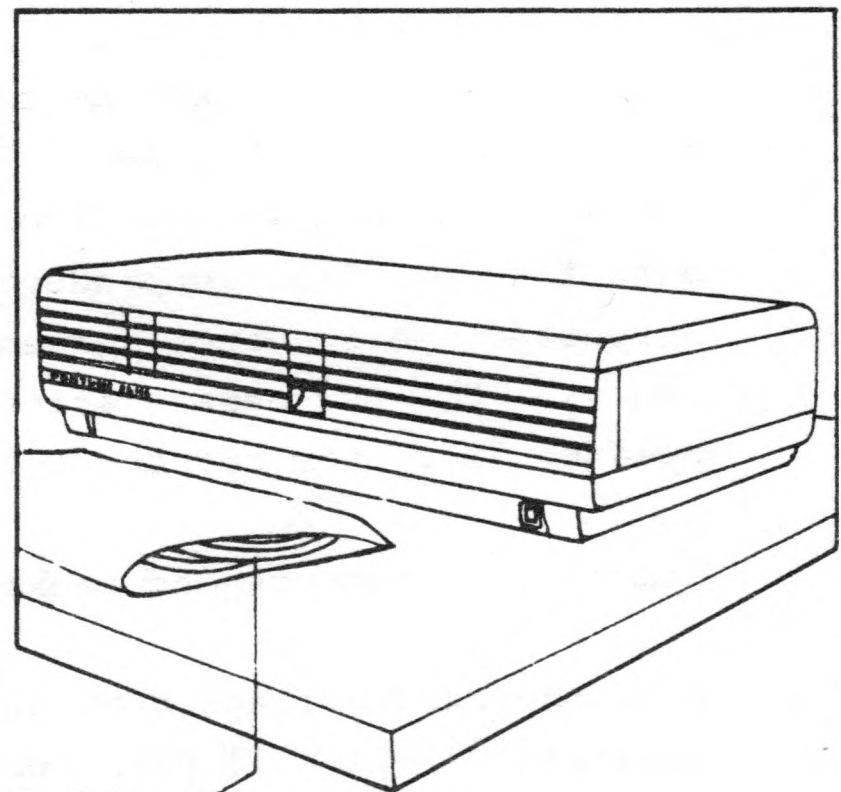
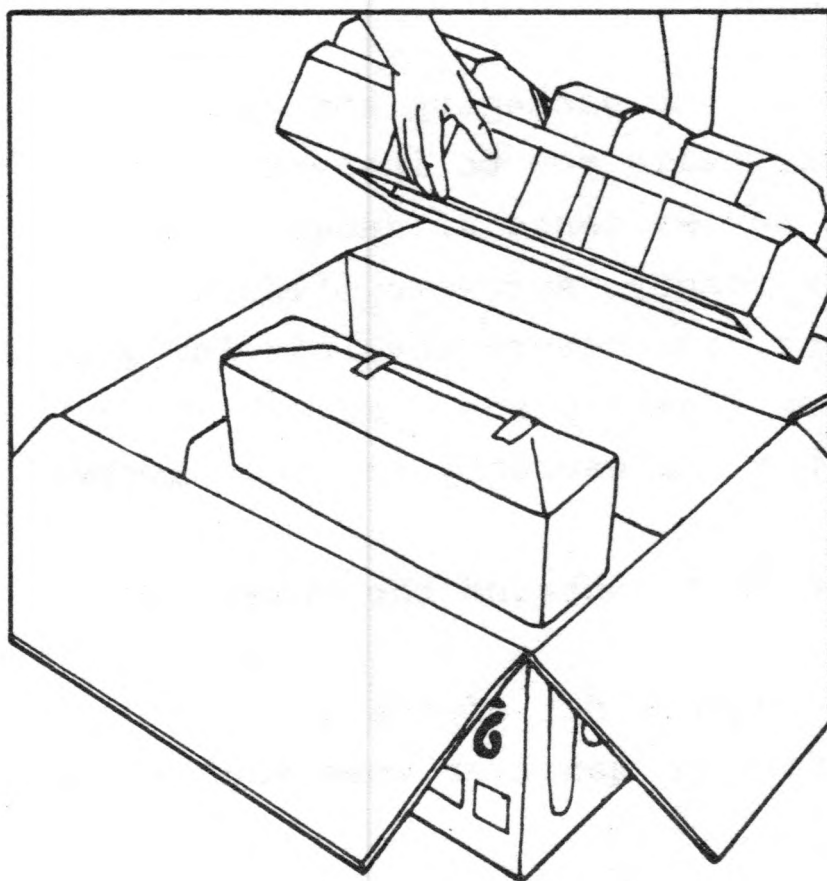
The CPU comes in a long, shallow carton. There's some information on one end about the type of unit it contains.

- 1 Remove the tape from the top of the box and open the flaps.
- 2 Take out the papers at the top of the packaging and read the one marked "Important Notice." This tells you to inspect your equipment carefully and report any evidence of damage. You'll also find the limited product warranty, software license agreement, maintenance agreement, and return envelope for your papers. Put the papers aside in a safe place, because you'll need to fill them out to register the warranty for your system.
- 3 Remove the foam-wrapped package that contains the power cord.
- 4 Fold the carton flaps down and as much out of the way as possible. This will give you room to maneuver when you've taken the unit out of the box.
- 5 With one person at each short end of the carton, have each person place one hand along the top of the box and the other hand underneath the CPU and lift the CPU out of the carton. When the unit is almost out of the box, let go of the carton and put both hands underneath the CPU.
- 6 While holding onto the unit, tilt it and put one insulated side back down in the box, with the other side up.

- 7 Lift up and remove the insulation from the side of the CPU that's standing up. Place the insulation back in the box next to the CPU. You'll need to keep it for repacking in the future.



Warranty information under flaps



Cables

The CPU is unpacked from its carton like this.

- 8 Take the unit completely out of the carton and put it on a table with the remaining insulation hanging off the table. Have one person hold the unit down on the table while the other one removes the last piece of insulation.

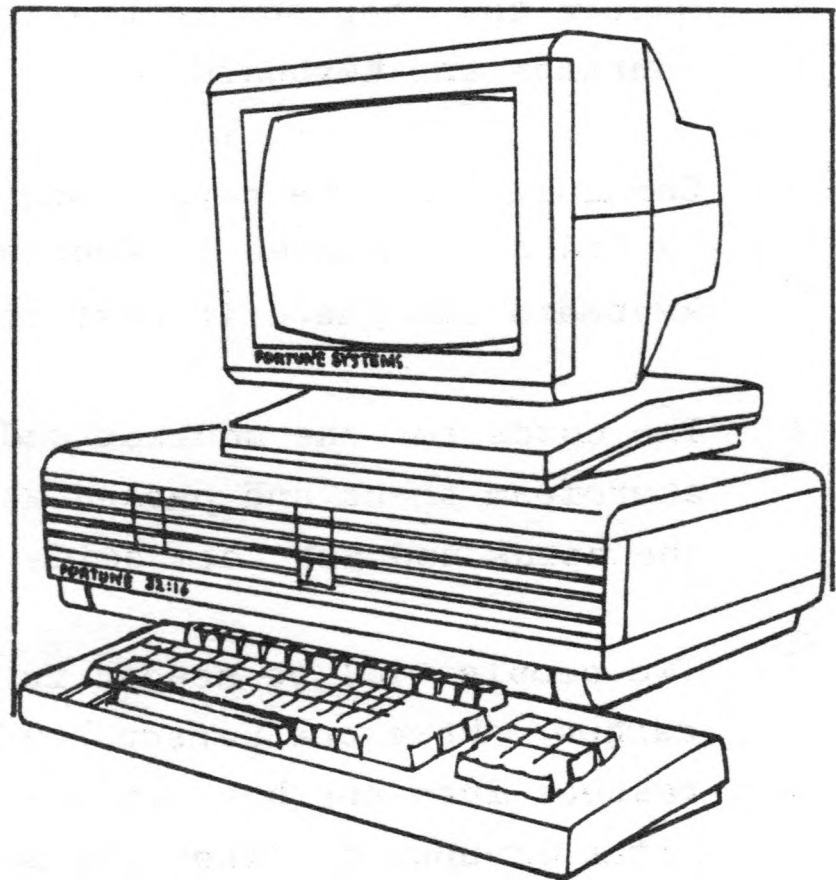
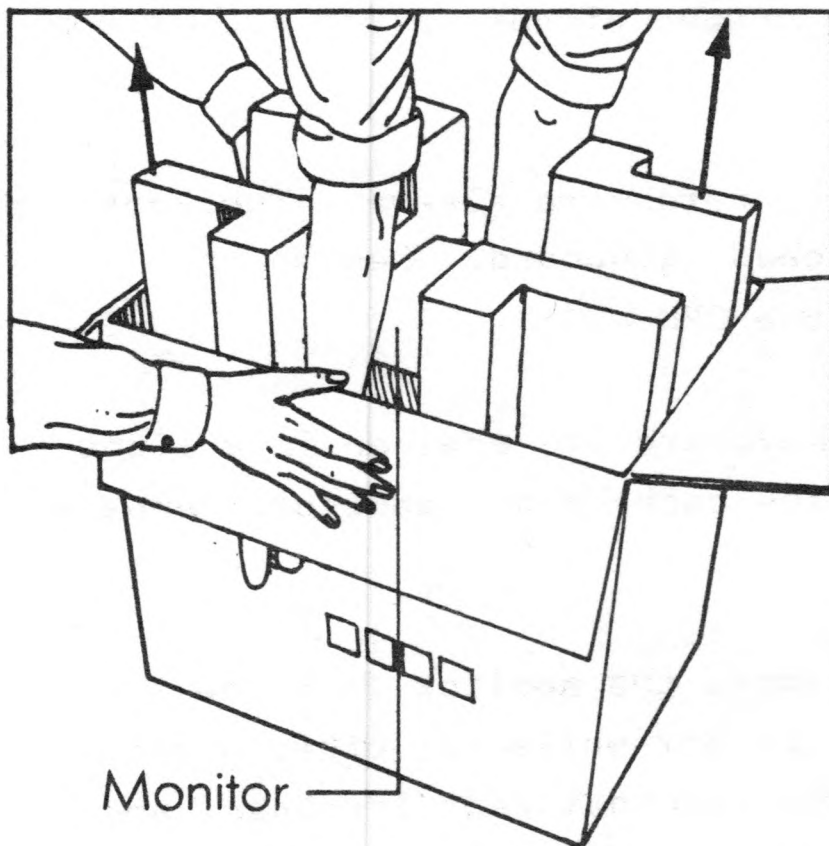
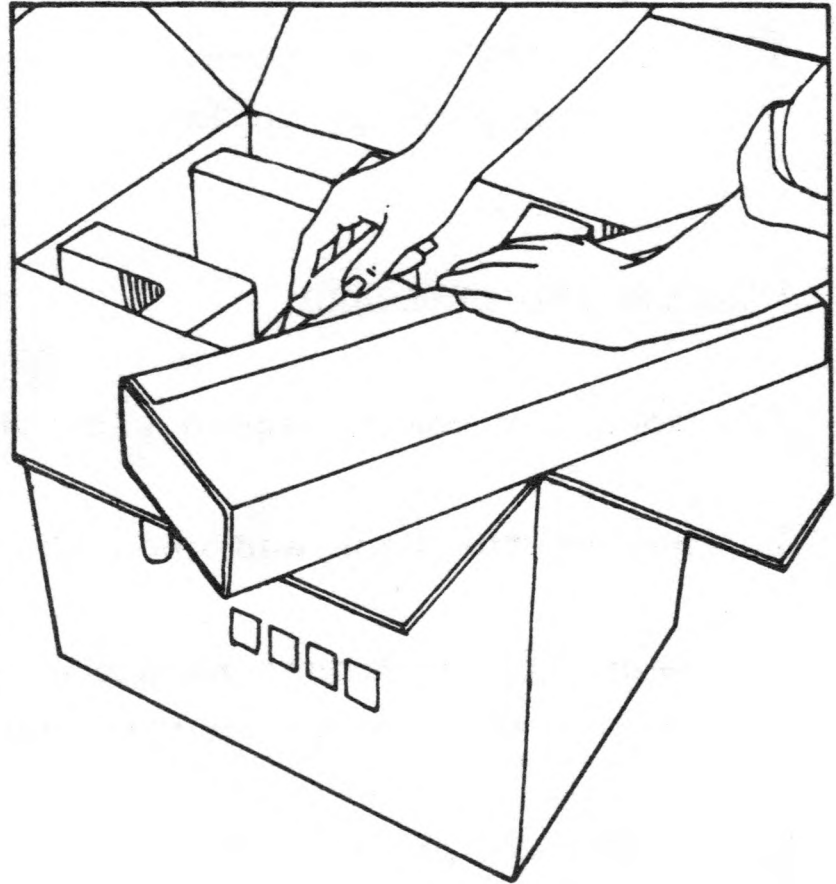
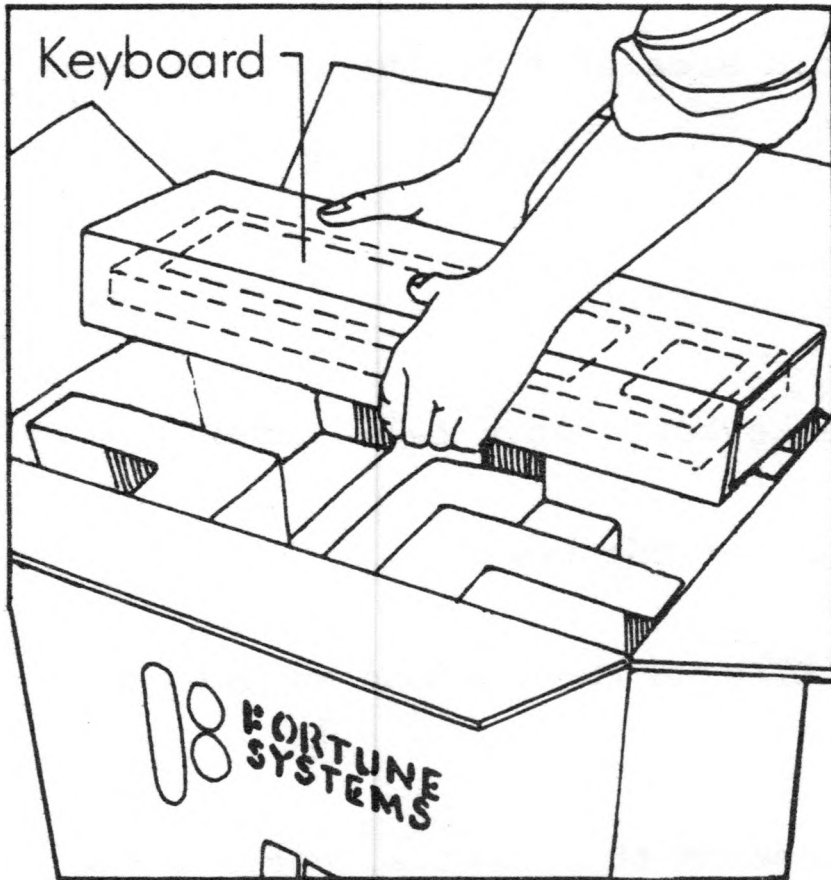
- 9 Take off the plastic wrapping.
- 10 Turn the unit around, if necessary, to have the front facing where the operator will sit. The front of the CPU has the Fortune name on a panel at the left-hand edge. Place it where you'll be using your Fortune system.
- 11 Remove the cardboard from the flexible disk drive by opening the door (on the right-hand side) and lifting it out. Put this cardboard back in the box for future use.
- 12 Place the power cord on the work area next to the unit so that you can plug it in later.

MONITOR AND KEYBOARD

The monitor, comes packed with the keyboard in a tall carton.

- 1 Remove the tape and open the top of the box.
- 2 Read the important shipping notice on the top and be sure to report any damage to your dealer.
- 3 There are two warranty cards beneath this notice, one for the monitor and one for the keyboard. Put these cards with the ones from the CPU.
- 4 Remove the long box in the top center of the carton. This box contains the keyboard.
- 5 Carefully cut the tape along the cardboard sleeve. The keyboard is inside, enclosed in foam-backed cardboard. Remove the keyboard and place it next to the CPU.
- 6 The cords for the monitor and keyboard are wrapped in a light styrofoam sheet and packed at the back of the monitor. Unpack the cords and put them aside.
- 7 Two people will be needed to remove the monitor from the carton. Have one person hold the box while the other person reaches into the box, grasps the terminal near its base, and lifts it upward. When the monitor is almost out of the box, the second person should let go of the carton and help the first person gently place the monitor on the floor.

- 8 Have one person hold the monitor while the other person removes the insulating foam from both sides. Then remove the plastic wrapping and place the monitor next to the CPU and keyboard.
- 9 Put the insulation and the wrapping for the cables back in the box.
- 10 Fill out the warranty cards with the serial numbers you'll find on the units.



The monitor and keyboard are unpacked from their carton like this.

WARRANTY CARDS AND INFORMATION

Make sure the warranty cards are filled out and that the appropriate copies are returned to Fortune Systems Corporation in the envelope provided. Keep your copies in a safe place, because you'll need them later if your system needs repairs during the warranty period.

You have a warranty card for each unit: CPU, monitor, and keyboard. Each unit also has an identification label with a serial number on it. The serial number is preceded by a code that indicates the type of unit.

| <u>Code</u> | <u>Unit</u> |
|-------------|-----------------|
| CP | CPU |
| MT | Master terminal |
| KB | Keyboard |
| AT | ASCII terminal |

SAVING THE BOXES

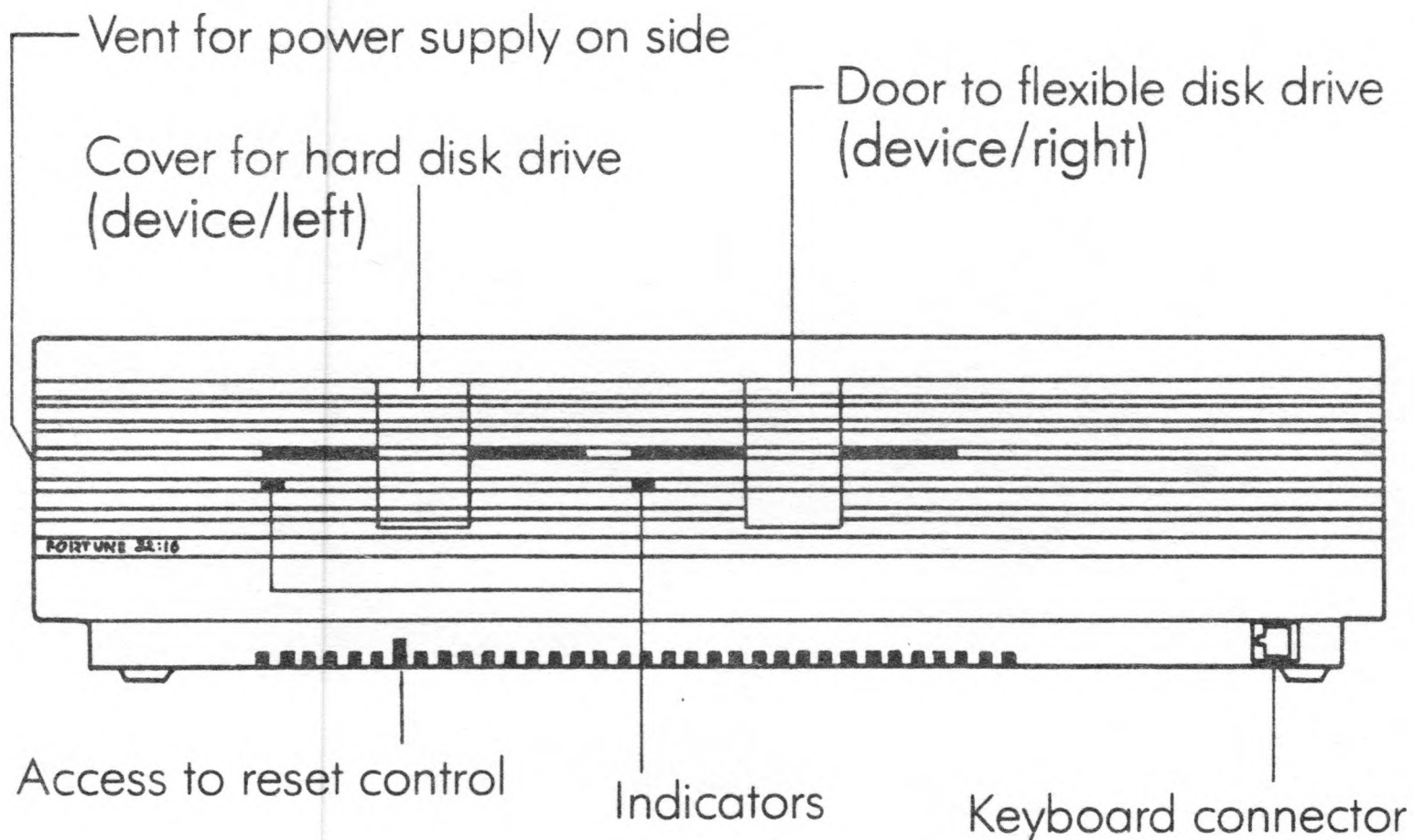
Keep the boxes and the shock-absorbing material. If you need to ship the system somewhere or need to go some distance for service, you should repack the system in the cartons.

Looking at the Basic Units

Now that everything is unpacked, take some time to look at the illustrations. You'll find where switches, knobs, indicators, and connectors are on each unit, and learn about some of the equipment inside the CPU. You'll need this information to follow the instructions that tell you how to set up and connect the basic units.

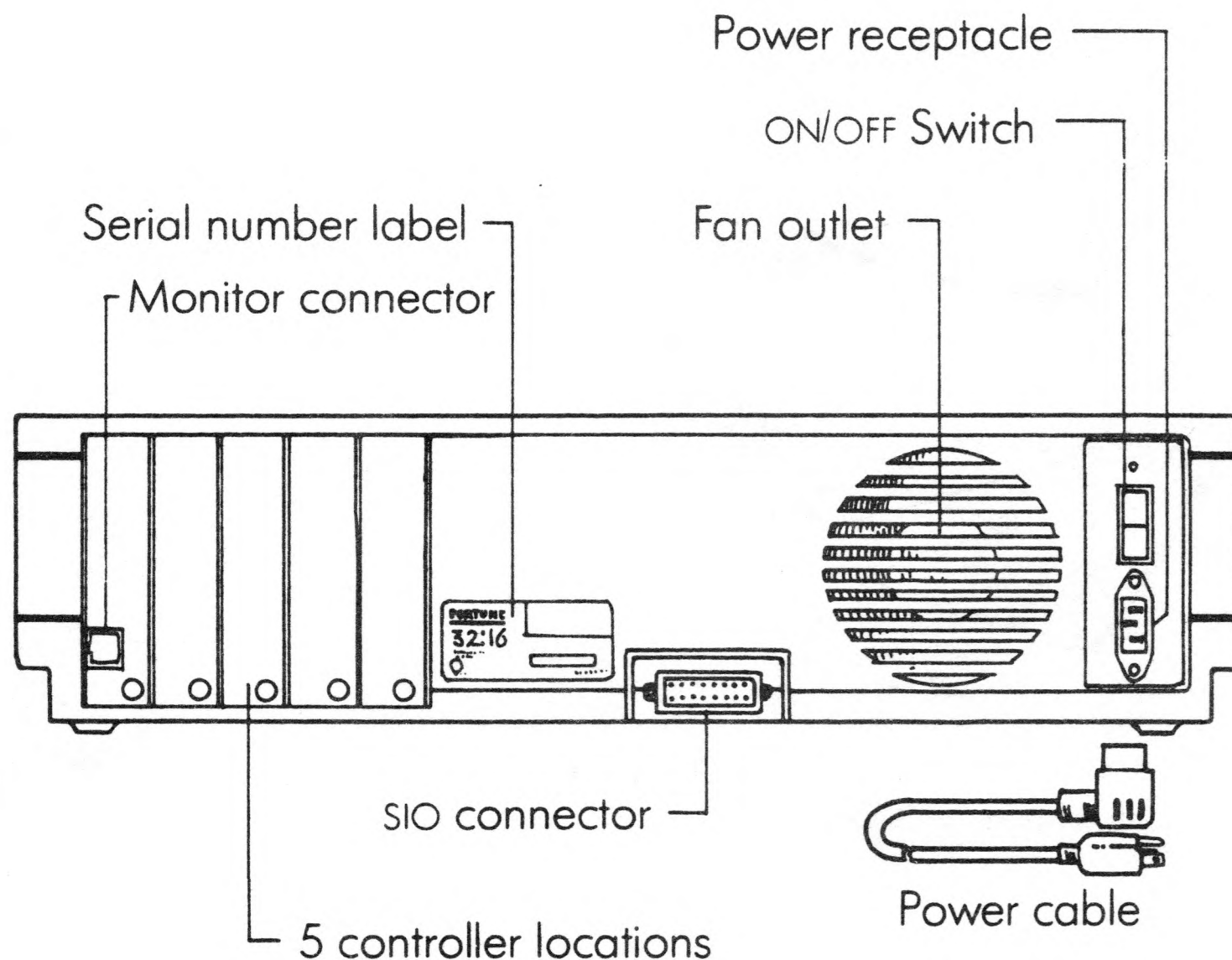
CENTRAL PROCESSING UNIT

At the front of the central processing unit (CPU) are two horizontal slots. The slot at the right has a door that can be opened by pressing the top half with your finger. Behind the door is the flexible disk drive. Whenever you insert or remove a flexible disk, you'll open this door. The slot at the left has a cover that cannot be moved. Below and to the left of each slot is an indicator light that is red whenever the disk is being used. (The indicator may either flash on and off very rapidly or stay on.) Near the bottom of the CPU, on the right-hand side, you can see the place for connecting the keyboard to the CPU, and near the bottom on the left-hand side is the slot for the reset switch.



From the front of the CPU, you can see horizontal slots for insertion of flexible disks.

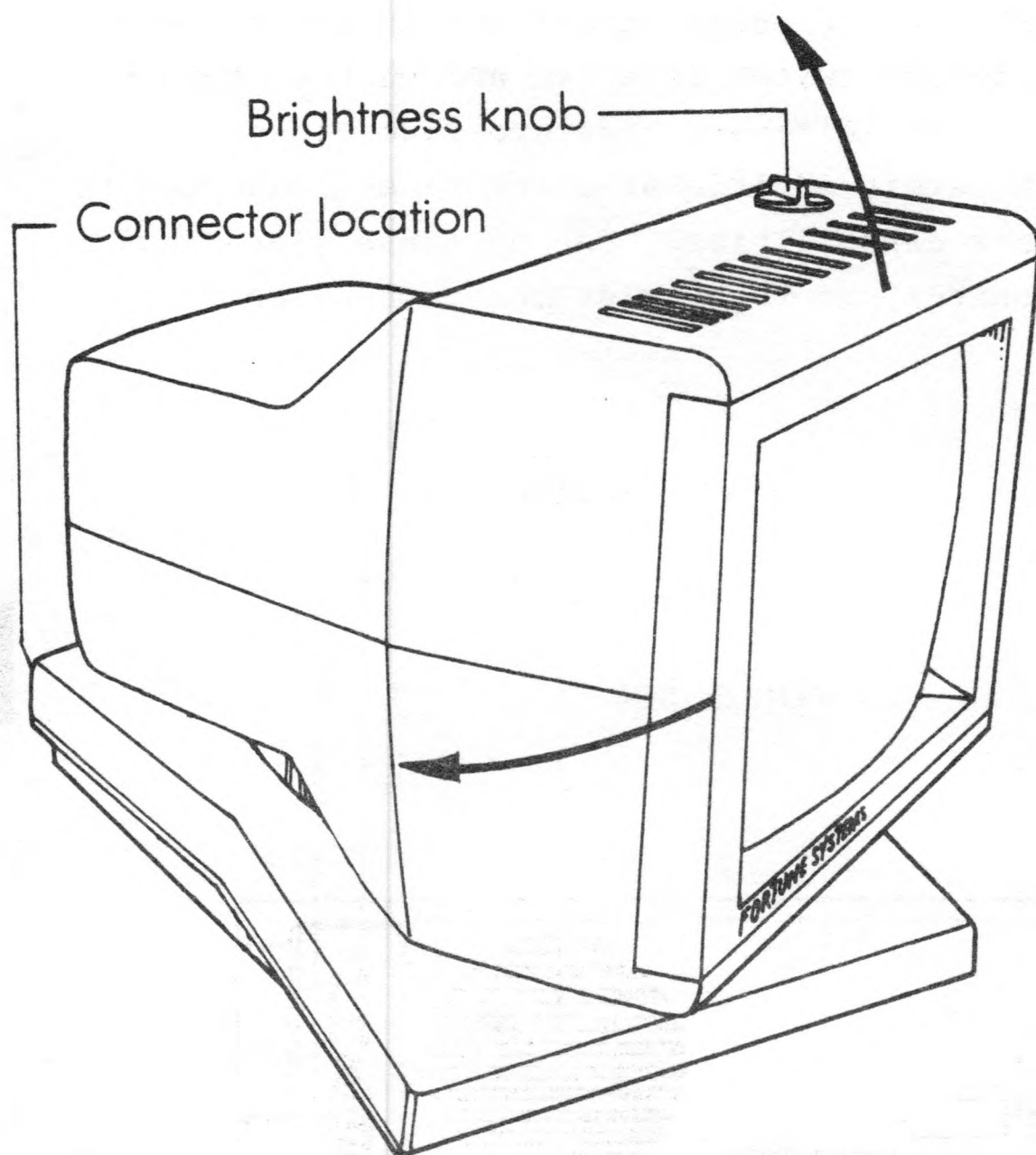
At the back of the CPU are the power on/off switch and the power receptacle. Next to the on/off switch is a fan and vent to remove heat from the CPU. At the far left-hand side are five places to insert controllers, which permit additional units to be connected to the CPU, or provide for new capabilities. One of these places holds the controller for the monitor; another holds the controller for the hard disk.



At the back of the CPU, you can see the all the places for connecting additional units.

MONITOR

The part of the monitor that contains the screen can be tilted up or down or swiveled from side to side. With these adjustments, you can set the screen to any position convenient for viewing. At the top of the monitor is a knob that allows you to change the screen brightness. After you get the system operating, you can adjust this to whatever brightness level you prefer.

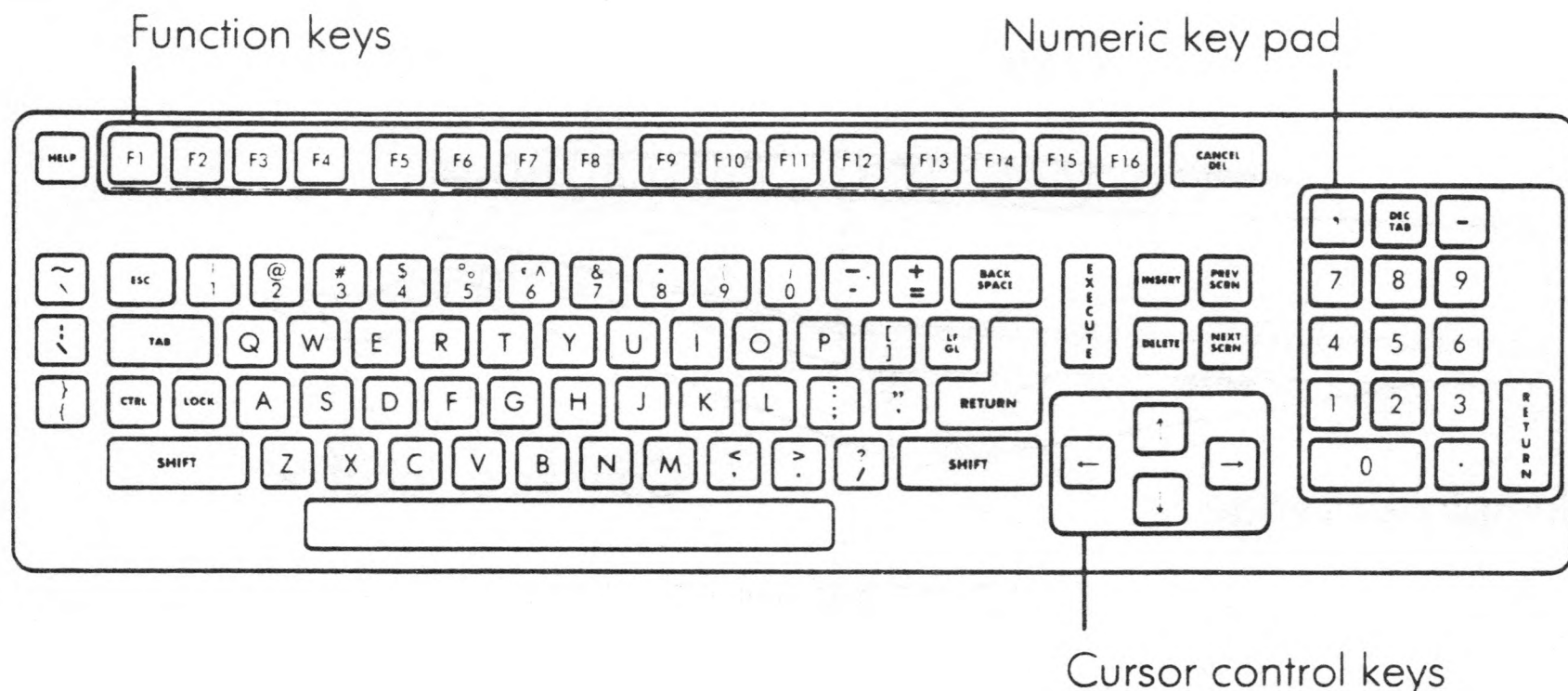


The position of the monitor and the brightness of the screen can be adjusted to suit your preference.

KEYBOARD

You'll be using the keys to get your Fortune system operating, so you should become familiar with their names and locations. The keyboard has many more keys than the conventional typewriter.

The keys that are similar to the ones you find on a conventional typewriter are in the usual places. To the right of the standard keys are the cursor control keys, which have arrows on them. On the far right-hand side of the keyboard is the numeric keypad. At the top row of the keyboard are 16 function keys, which will have different meanings in the different applications. If much of the keyboard seems unfamiliar, read the "Keyboard" section in Part 5.



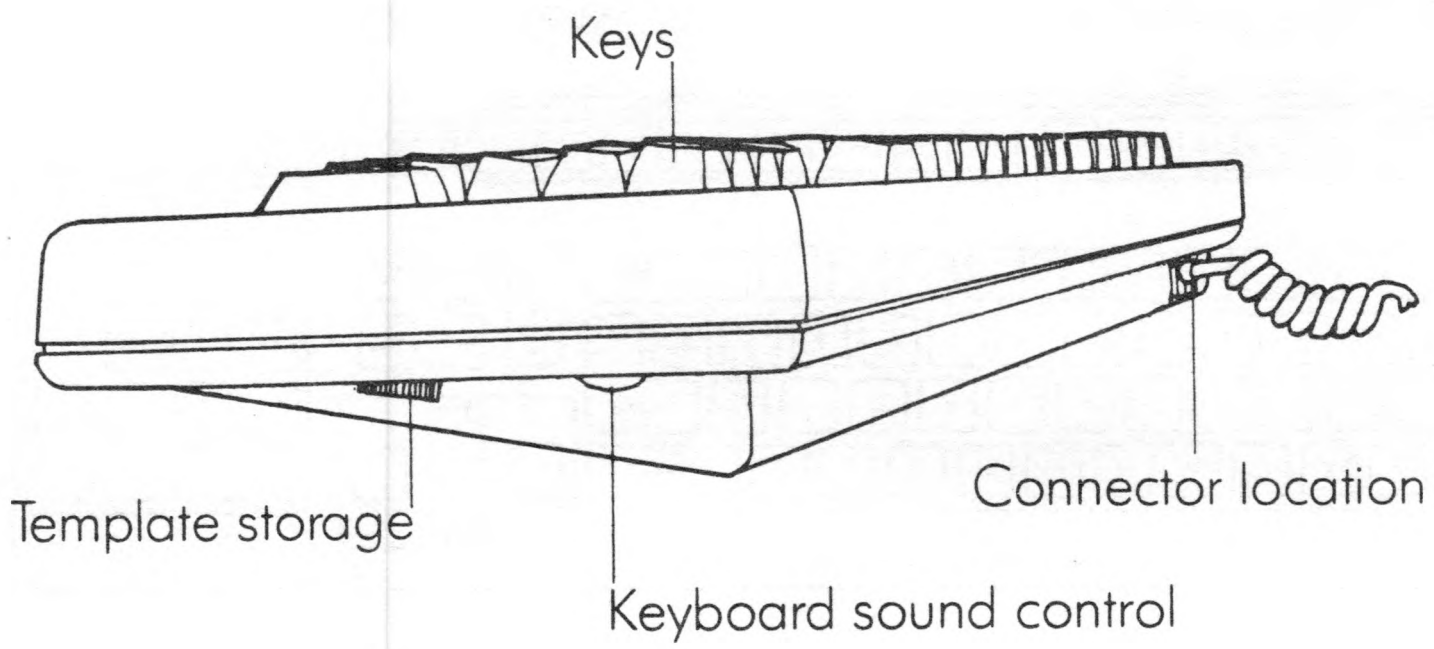
The keyboard has keys for all uses.

THE KEYBOARD HAS MORE THAN KEYS

The keyboard must be connected to other units through a cable. The connector is at the back left-hand side of the keyboard.

Just beneath the upper right-hand corner of the keyboard is a knob. This knob controls the sound you'll hear as you press the keys during operation. At one extreme position you won't hear anything; at the other extreme position, the sound is at its loudest. While you're using the system, it's very easy to find the knob without looking. You can adjust it for the level you prefer.

Also at the right-hand side of the keyboard is a place for storing templates that you get with each Fortune Systems software product. The template is a long strip that tells you what each function key means in a particular application. (No template is required or provided with the basic units). When you are working with an application, you insert the template for that application in the indentation beneath the function keys.

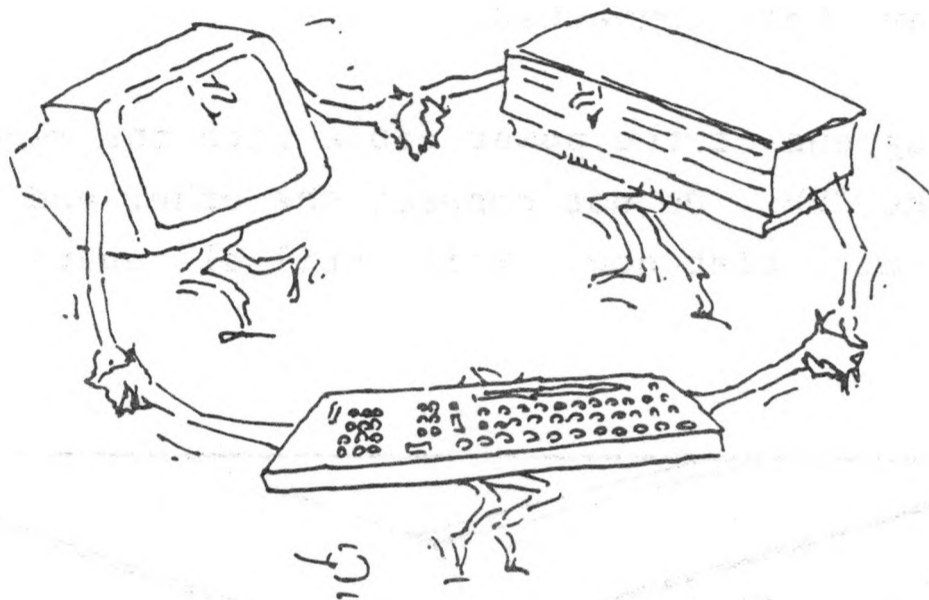


The keyboard has a place to store templates as well as a connector and a control.

4 Connecting the Basic Units

Now that your Fortune system is unpacked, you're ready to connect all the units. The Fortune 32:16 should operate with no problems if the basic units are connected according to the instructions.

The following pages provide detailed instructions that tell you to place the CPU in position and connect the power cable to the CPU, connect the keyboard to the CPU, and connect the monitor to the CPU. Instructions for connecting additional units are provided later.

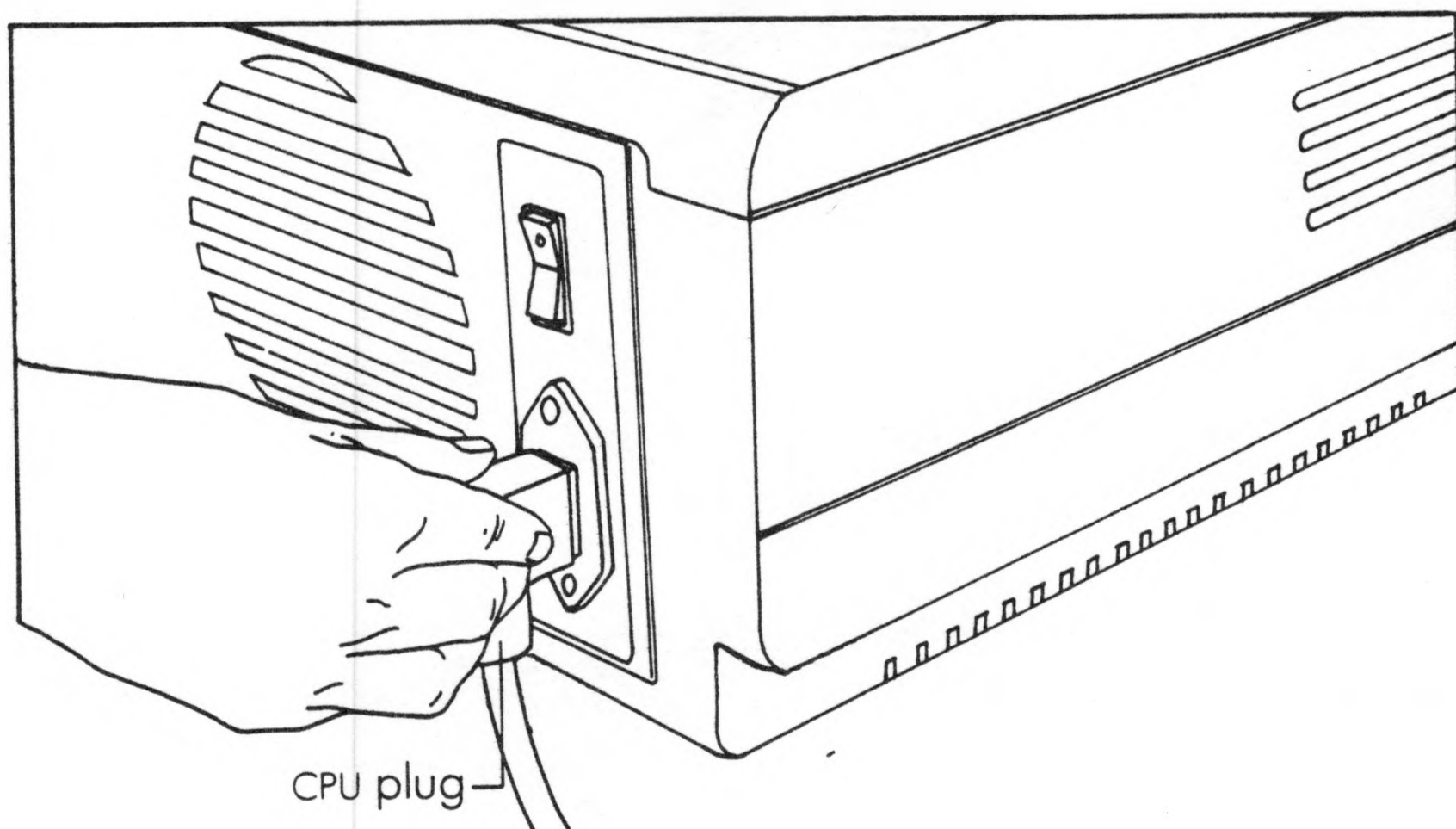


Setting Up the Basic Units

Setting up the basic units requires careful attention. The coiled cables that connect the keyboard to the CPU and the monitor to the CPU are identical, but each of the connectors on the CPU has a special purpose.

PUT THE CPU IN PLACE

- 1 Be sure that the front of the CPU faces the operator's chair. You can attend to details of placement later, after the keyboard and monitor have been connected.
- 2 Insert the plug end of the power cable into the receptacle at the back of the CPU. Do not connect the other end of the cable to an electrical outlet now. Wait until all units are connected and ready.



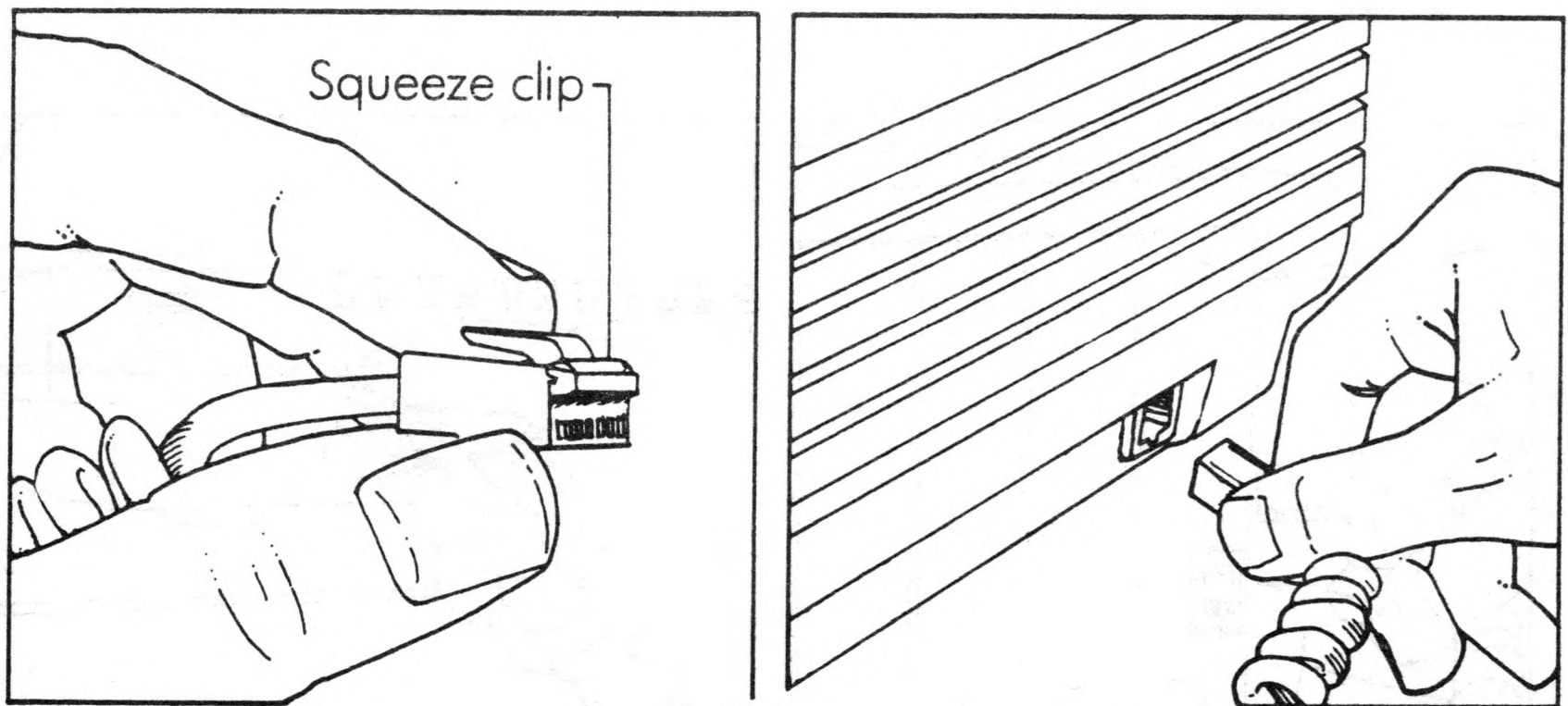
Insert the plug of the power cable into the CPU receptacle.

ATTACH THE KEYBOARD

- 1 Put the keyboard on the desk in front of the CPU.
- 2 The two coiled cables are identical, and the connectors at each end are identical. Connect one of the coiled cables to the connector at the back of the keyboard. Push the cable in to make sure it is firmly seated.

This cable also fits a connector at the back of the CPU. In step 3, be sure that you connect the keyboard to the connector at the front of the CPU.

- 3 Insert the other end of the coiled cable into the connector at the front of the CPU on the lower right-hand side. It is labeled KBD. Push the cable in to make sure it is firmly seated.



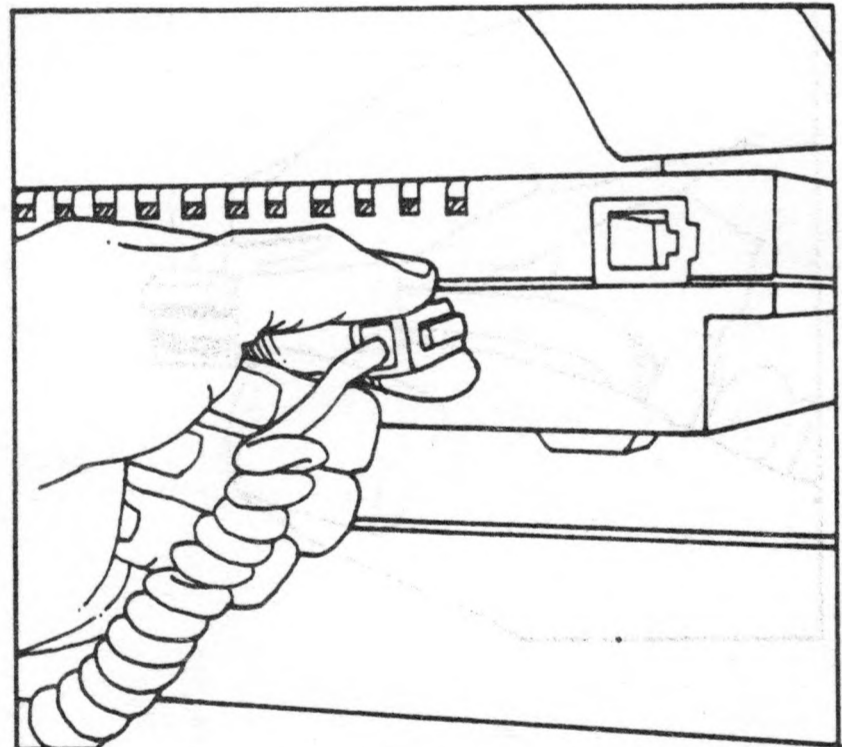
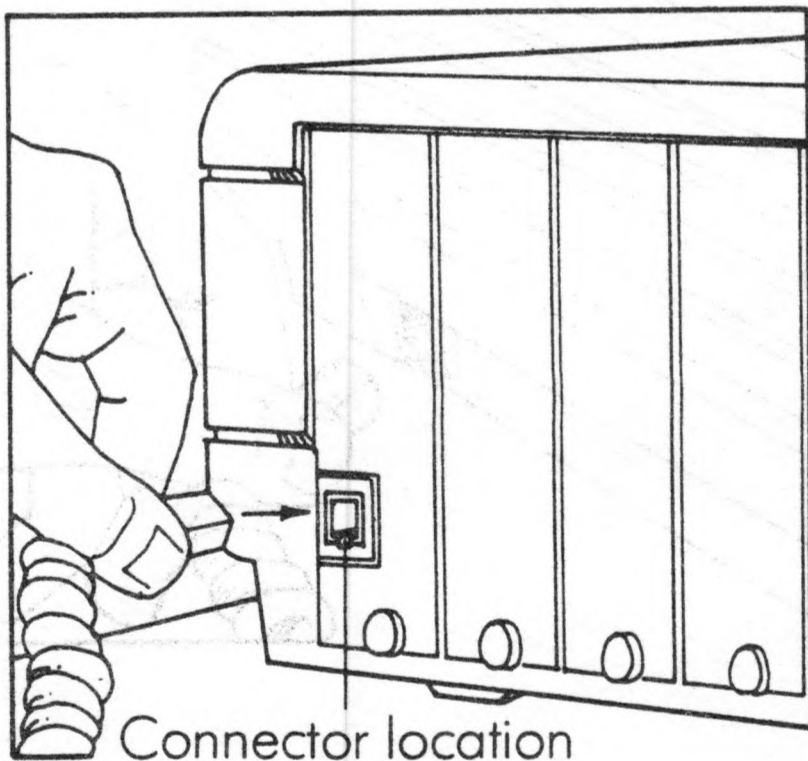
Connect the cable to the CPU.

ATTACH THE MONITOR

- 1 Put the monitor on the desk to the right of the CPU.
- 2 Connect the second coiled cable to the connector at the back of the monitor. Push the cable in to make sure it is firmly seated.
- 3 Look at the back of the CPU to find the controller for the monitor. It has a connector that fits the connector on the coiled cable; it is labeled CRT.

This cable also fits a connector at the front of the CPU. In step 4, be sure that you connect the cable from the monitor to the connector at the back of the CPU.

- 4 Insert the other end of the coiled cable from the monitor into the controller for the monitor. Push the cable in to make sure it is firmly seated.



Connect the cable to the monitor controller at the back of the CPU.

Making Some Adjustments

Now that you have the basic units connected, sit in the operator's chair and adjust things to suit yourself.

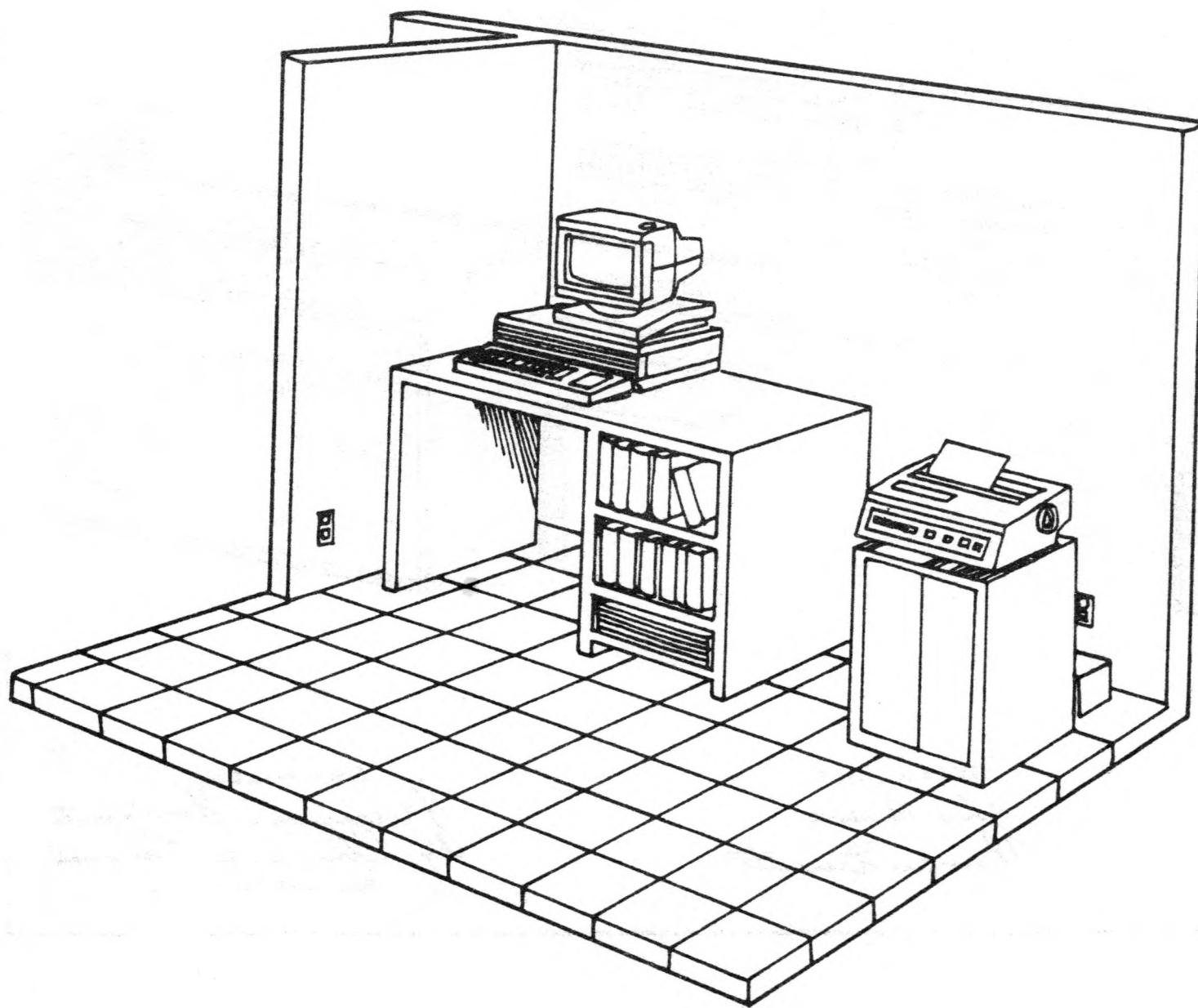
ADJUST THE POSITIONS OF THE THREE BASIC UNITS

The CPU should be within easy reach, because you'll be inserting and removing flexible disks when you use the system.

The keyboard can be put anywhere that's comfortable for you. The length of the coiled cable is the only limit on placement.

The monitor can be placed on top of the CPU, if you wish. If you decide on this location, put the monitor on the right side of the CPU, over the keyboard connector. That way, heat from the CPU can pass to the air rather than to the monitor.

The top part of the monitor can be swiveled from side to side or up and down. Use these adjustments to eliminate any reflected glare from room lighting and to adjust the screen to your eye level.



Your basic Fortune system.

Hollerith's electrical tabulating machine, which used punch cards, was developed for use in the 1890 census. It was the first statistical machine to receive widespread use.

Courtesy of the U.S. Patent Office.

(No Model.)

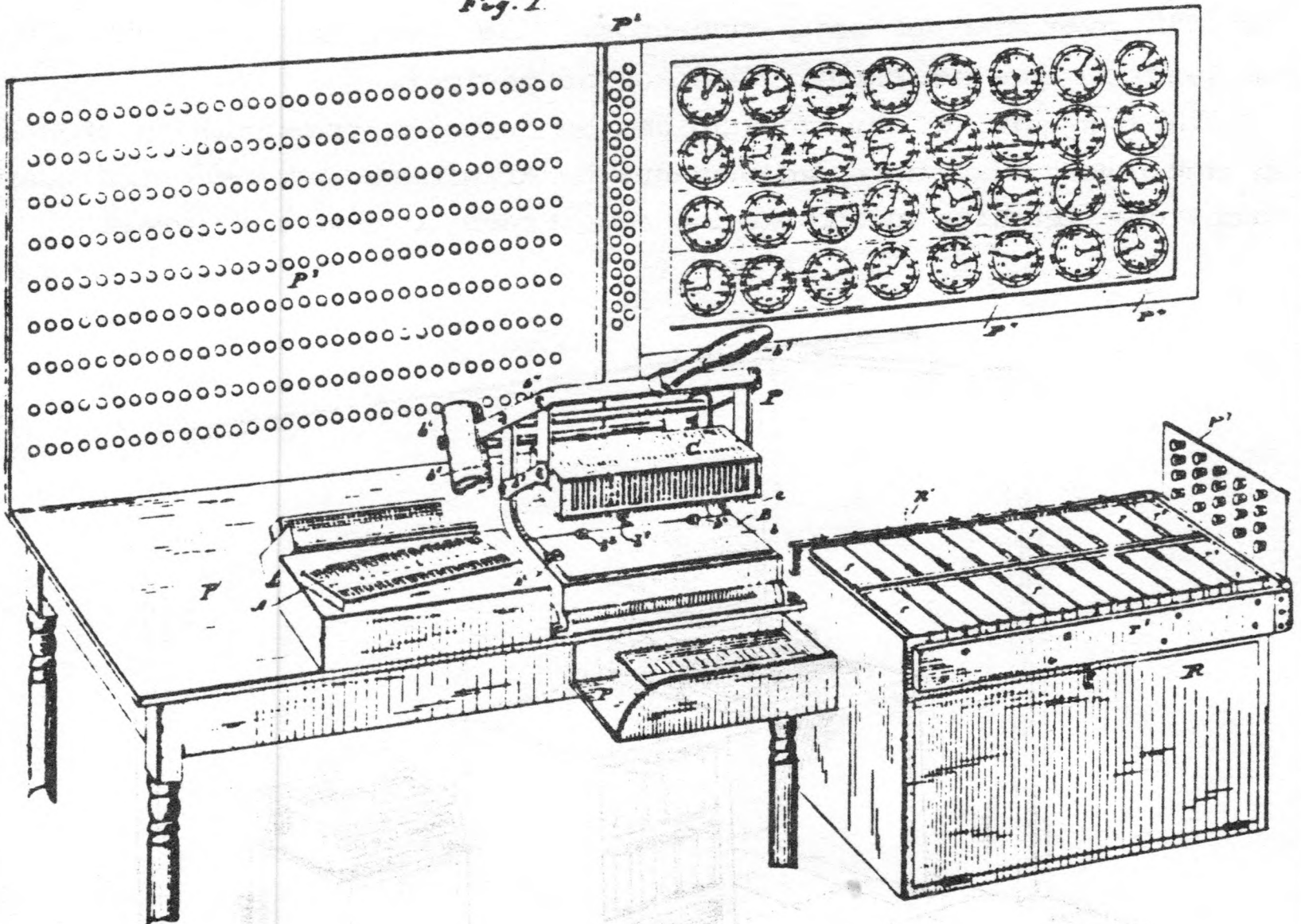
6 Sheets—Sheet 1.

H. HOLLERITH.
ART OF COMPILING STATISTICS.

No. 395,781.

Patented Jan. 8, 1889.

Fig. 1.



Witnesses
Chas. R. Burr.
Thomas Durant.

Inventor
Herman Hollerith
By Church & Church
his Attorneys

Working with the Basic Units

Every computer has its unique procedure for getting started. In this part, you'll learn the procedures for the Fortune system.

Chapter 5 introduces you to some of the special features of the Fortune system, such as the way to get help from the computer itself as you go along. You'll also learn how to interpret the procedure charts, which tell you what to look for on the screen, what to type in at the keyboard, and what response to expect from the computer. Then you follow instructions that show you how to turn the system on, perform a few simple operations, and shut the system down.

In chapter 6, you start up the system a second time. The computer has information that you have provided, and it responds in a slightly different way. Here you follow step-by-step procedures that you'll use often. During the procedures, you'll load the program from the training disk.

In chapter 7, you'll find step-by-step instructions that show you how to use the training disk program. You'll eventually follow instructions you read from the screen. As you do, you'll become comfortable with using the keyboard. When you're ready for more, follow the instructions and shut down the system again.

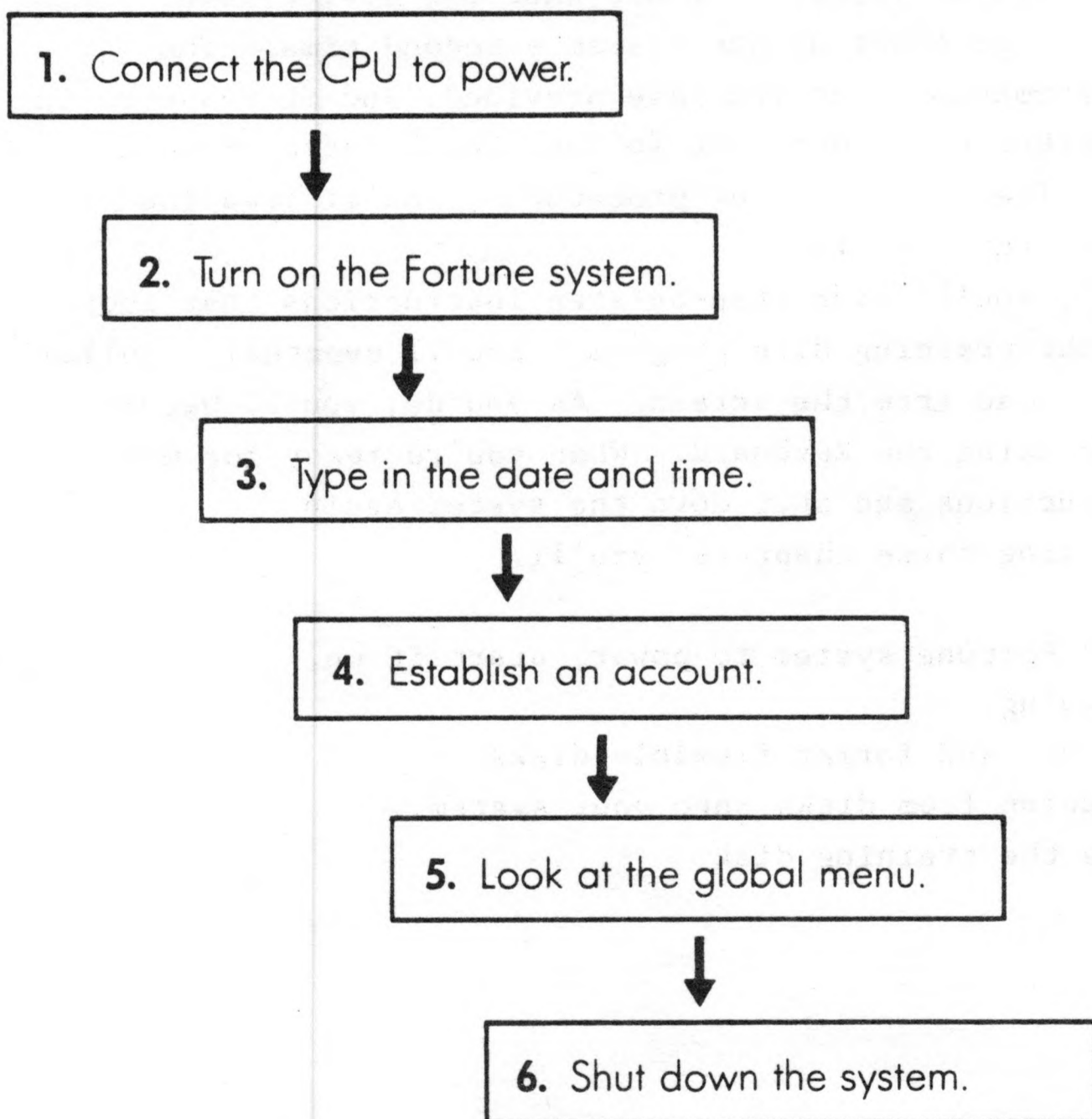
In the following three chapters, you'll:

- Connect your Fortune system to power, start it up, and get it going
- Insert, remove, and format flexible disks
- Copy information from disks onto your system
- Load and use the training disk

5 Introducing Yourself

Right now your Fortune system doesn't have any information in it about what day it is, who you are, and whether or not you can use the system. You have to give it this information. In addition, you need to know how to turn the system on, become familiar with what you'll see when you turn the system on, and how to turn the system off.

Before you can use your Fortune 32:16, you must turn the power on and set up an account for yourself. Establishing an account is similar to telling the computer who you are. You must have an account on your system before you can use it. Once you have an account, the computer will set up a place on the hard disk where you can store information.



You'll follow these steps to set up the system, log in the system, use it, and log off again.

Starting Up the System

Each time you turn on your Fortune system you'll have to type in the date and time. This time, you'll also have to connect the CPU to a power outlet. You won't have to do this often, but even this step requires special considerations.

CONNECT TO POWER

Follow these steps to connect the CPU to a power outlet.

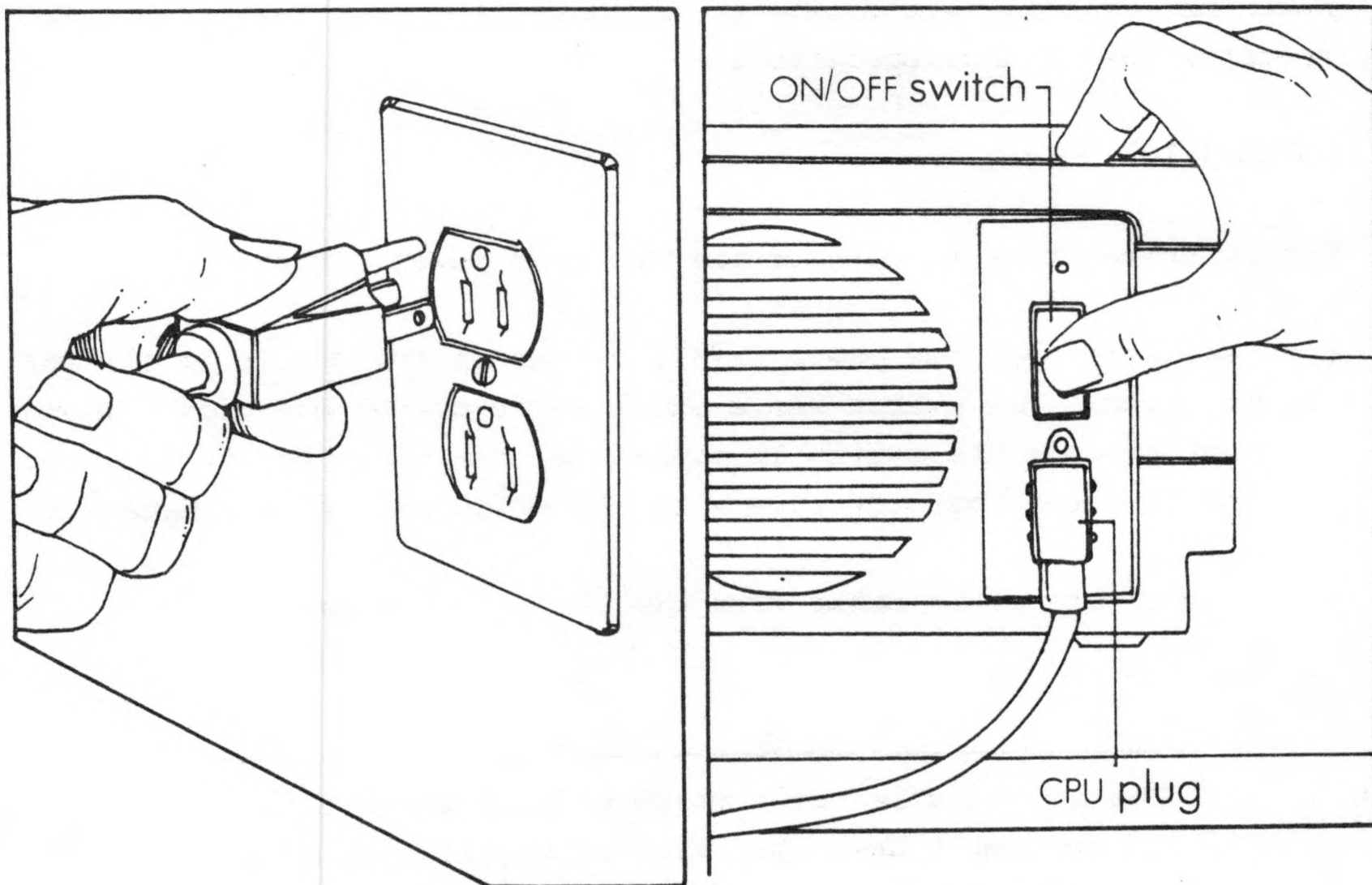
- 1 Make sure that the power on/off switch of the CPU is in the Off position. The switch has a small white dot on one side. When that side of the switch is pushed in, the power is on. Now you should check that the side with the white dot is not pushed in.
- 2 Connect the power cable from the CPU to the power outlet.

The power cable has a three-pronged connector. If you don't have that kind of outlet, you must use an adapter. For your safety and for the protection of the system, connect the ground lead of the adapter to a local ground.

- 3 To make sure that you see something on the screen when the power comes on, adjust the brightness power now. First rotate it fully counterclockwise and notice its position. Then rotate it fully clockwise and notice its position. Set the knob in the middle range.
- 4 Set the power on/off switch at the back of the CPU to On.
- 5 Hold your hand over the vent at the back of the CPU to be sure that the fan is operating. If it isn't turn off power immediately. Report the problem to your Fortune Systems dealer.

6 You can follow these indications of proper operation:

- Keyboard beeps
- Red indicator over the hard disk drive is On
- Cursor on the screen is blinking
- Red indicator over the hard disk begins to blink



The on/off switch should be off before you plug in to the power outlet.

The first message you see is "Fortune Systems 32:16 Please Wait," with the "Please Wait" blinking.

During the power-on sequence, the numbers 1 through 9 will be displayed at varying intervals. Form the habit of watching the numbers appear. They represent the nine steps the computer requires to prepare itself for use. If something fails, the highest number that you see is good information to have.

When the numbers disappear and you see the heading "Please enter the current date and time," the system is ready for you to type in some information.

If You Can't Get Started

If you carefully follow the set-up procedures in this guide, your Fortune system should be trouble-free. If you have trouble getting the system to operate, first make sure that you are following procedures exactly, and in the order described. Most problems are caused by incorrect switch settings, loose cable connections, or incorrect values set during installation.

ERROR MESSAGES

An error message that fills the screen is an indication of a serious problem. Error messages are generated by the operating system when a hardware failure occurs, or when a software problem is detected. When the operating system generates an error message, it may also reject any inputs from the operator.

For most software problems you can take corrective action yourself. For some hardware problems you need assistance from your dealer. Refer to the list of error messages in the Fortune 32:16 Reference Guide for details.

WHEN YOU NEED HELP

If you have a problem that you can't correct, call your dealer. Sometimes problems can be analyzed and corrected during a telephone conversation.

Before you call, collect as much information as possible about the exact nature of the problem. Your dealer will probably ask questions, and your problems will be corrected sooner if you have the answers to questions such as:

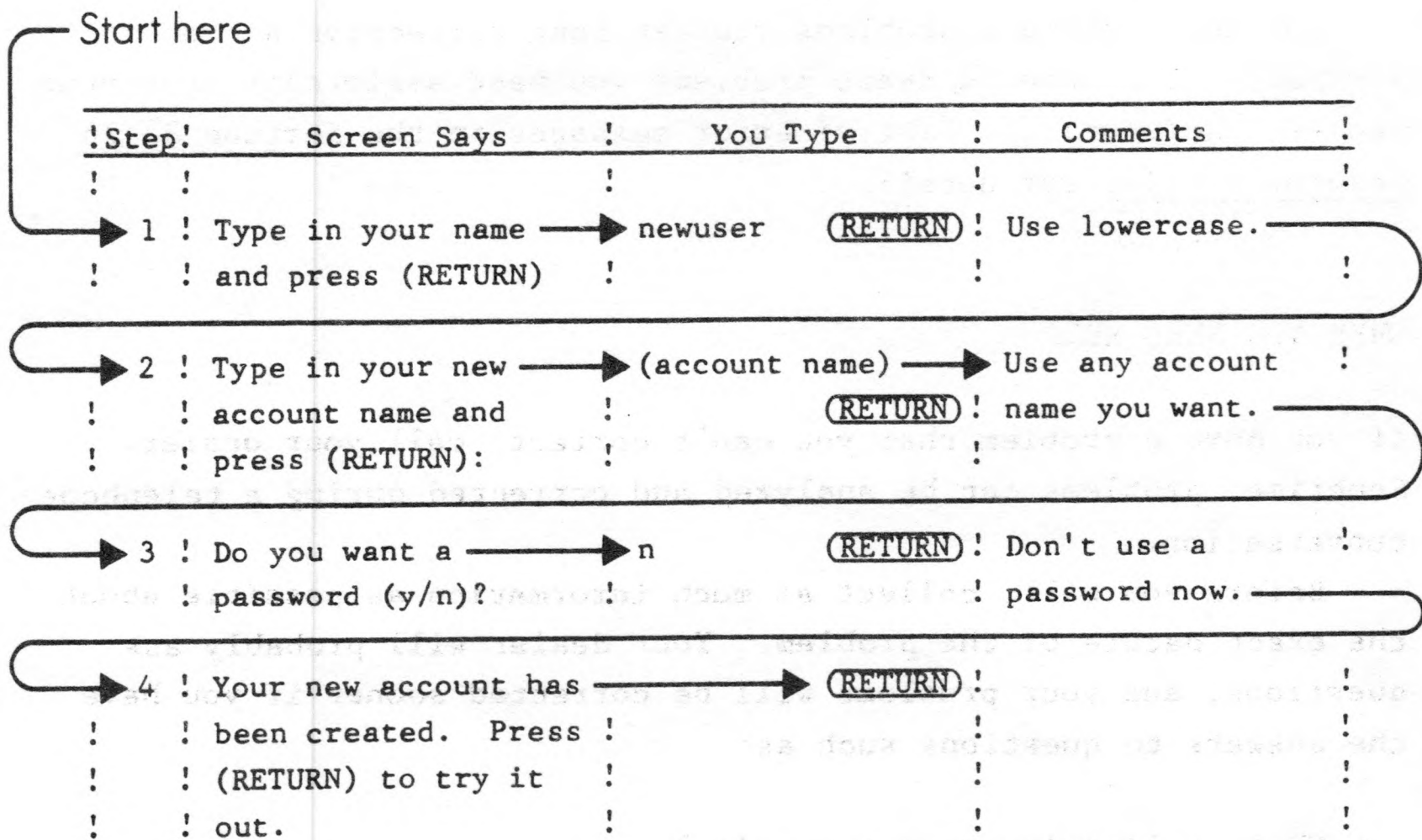
- What application were you using?
- What happened that should not have happened, or what didn't happen that should have?
- How many operators were on the system at the time? What applications were the operators using?
- Which workstation was the operator using when the problem was noted?

Using Procedure Charts

Many of the instructions you'll encounter in the rest of this guide are written in the form of procedure charts. Procedure charts outline the sequence of steps you follow to learn how to use the software available in the Fortune system. The charts are always presented in the same format and are designed to be easy to read and follow.

ORGANIZATION

The procedure chart contains three columns: Screen Says, You Type, and Comments. Check the sample chart and locate the three columns. Any time you use a procedure chart, start by reading the Screen Says column. This column shows what should be displayed on the screen at this point.



Follow procedures left to right, and down the page.

You need to follow the procedures exactly. Never use the lowercase letter L for the numeral one.

Next read the text in the You Type column. This shows which keys to press or text to type. Keys are indicated by the name of the key enclosed in a box. For example, **EXECUTE** means that you should press the Execute key. Here is a guide to the way key operations are shown in the You Type column and how to perform them.

| <u>Procedure chart says</u> | <u>What you do</u> |
|---------------------------------|---|
| (your last name) EXECUTE | Type your last name, then press the Execute key. |
| RETURN | Press the Return key. |
| newuser RETURN | Type the word <u>newuser</u> , then press Return. |

The Comments column tells you what has happened, advises you about the functions you have performed, or tells you what will happen next.

Procedure charts build on one another. Often the instructions in a procedure chart are based on the assumption that you have completed some procedures described earlier in the guide. Be sure that you stop and start at the proper places while using this guide.

Getting Help from the Computer

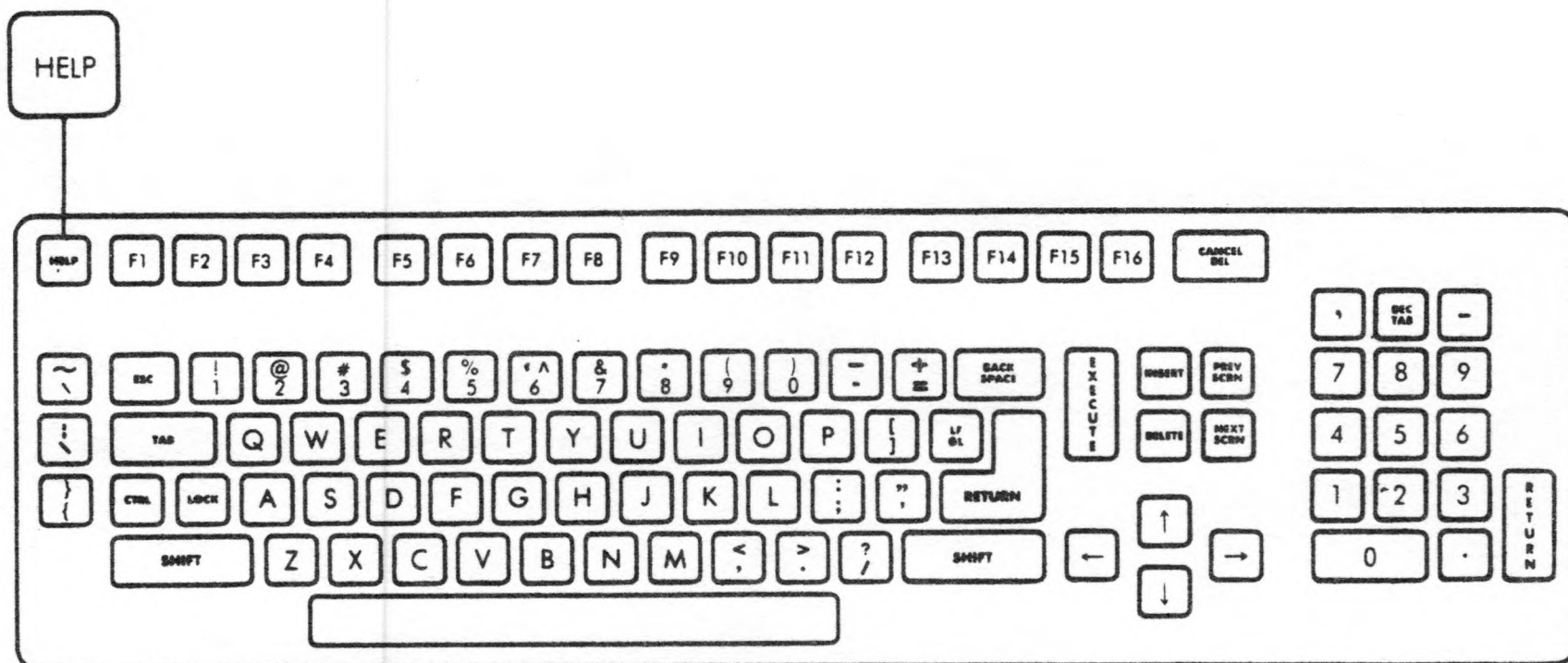
When you can't remember the details of a procedure, or if you are uncertain about what happens when you follow some procedure, you can often get help from the computer.

Help is there because people often need it. Don't be afraid to try. If you press the Help key at any point you'll get one of three responses from the computer:

- You'll get some help.
- You'll get a message that says help is not available.
- Nothing will happen.

You won't cause any problem by pressing the blue Help key. You should ask for help as early as possible. The kind of help that is available depends on where you are in the procedure. If you are facing a menu with many items, the help may tell you only about the proper way to make a selection. If you are partway into a procedure, help may tell you what can happen if you continue.

For complicated procedures, help may be available as soon as you make the selection. The screen will be filled with detailed information about the procedure.



Correcting Mistakes

Next you'll be entering information to get your system going. There's really no mystery to this. It's like typing on the keyboard of a typewriter. The difference is that you'll see what you've typed immediately on the screen in front of you, and sometimes your system will tell you immediately that:

- You've entered information incorrectly.
- You've entered information and need to go on to another step.
- There are system problems.

You'll have fewer problems with your computer if you're careful to follow procedures exactly. You can solve most of your problems by examining what you've done or by repeating the procedure.

Procedures in this guide usually describe error-free operation. Typographical errors are easy mistakes to correct if you notice them before you press the Return key. Use the Backspace key or left-cursor key to position the cursor over the error, then type over the mistake.

Don't use the space bar to move the cursor
If you do, the cursor moves but it replaces
each character in the text with a space
If you use the space bar, you'll see the
characters disappear

The computer will detect some errors and display an error message in the lower left corner of the screen. Most error messages tell you exactly what's wrong and what to do.

Most procedures tell you what to do if you make a mistake. If something appears on the screen other than what the procedure tells you about, you should read the instructions to find out what to do and to make sure that you are following the procedure correctly. You can usually recover from an incorrect selection by pressing the Cancel Del key. You'll be able to use this key with the training program.

If You Have a Problem

Once in a while you may receive an unexpected message or screen display. If you press some keys in the wrong order, or strike a key by accident, the screen display may be completely unrelated to what you find in this guide.

If you get an error message different from any described in the text, or shown in an illustration, make a note of the message before you attempt to correct the problem.

SOLUTIONS FOR EASY PROBLEMS

Some combination of these two strategies will probably get you to a familiar screen.

- Press the Return key. If the display changes in any way, continue to press the Return key until you see a familiar display, such as the global menu, and use that as the new starting point.
- Press the Cancel Del key. If the display changes in any way, continue to press the Cancel Del key until you see a familiar display, such as the global menu, which you will soon be very familiar with, and use that as the new starting point.

A SOLUTION FOR A DIFFICULT PROBLEM

If the cursor (block of light) is next to a dollar sign (\$) or a pound sign (#), you are in direct communication with the operating system.

While you are in direct communication with the operating system, you can accidentally erase information on the hard disk if you are not careful. Type carefully.

- 1 Type in /etc/shutdown. Check that your inputs on the screen look like:

This

Or this

\$ /etc/shutdown

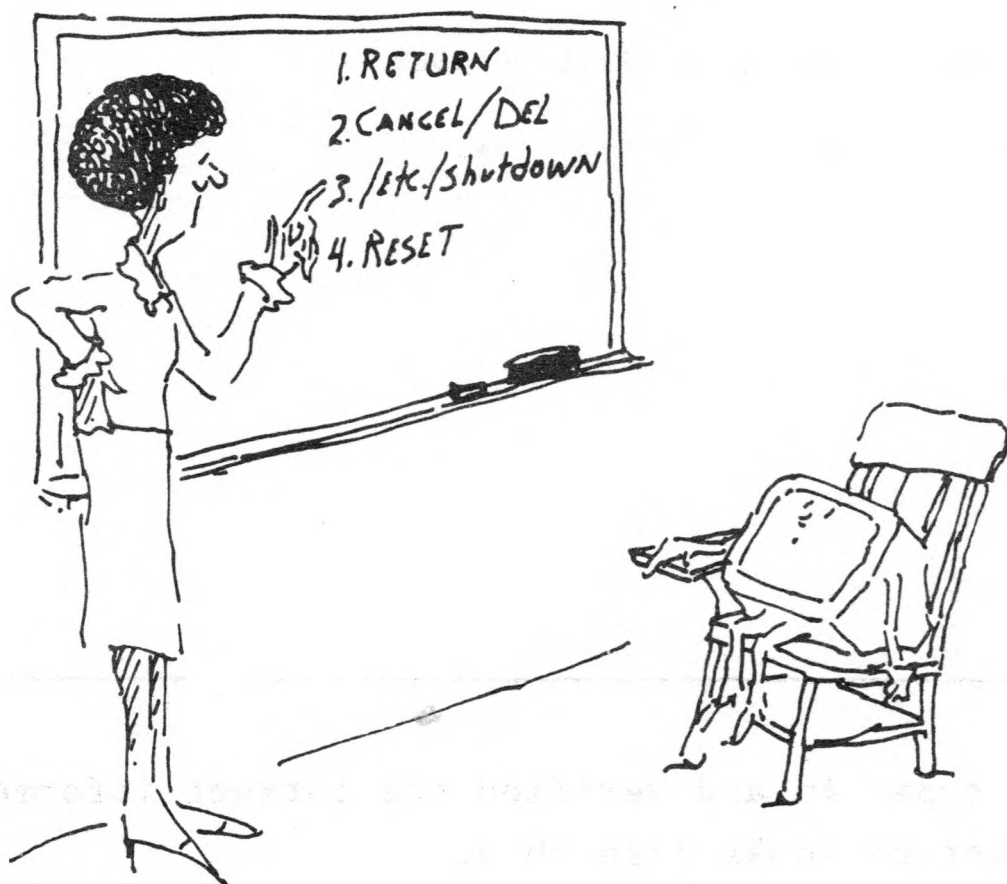
/etc/shutdown

- 2 Make sure that your input is correct, then press the Return key. The system goes through a normal shutdown procedure.
- 3 Follow the instructions on the screen to turn the system Off.
- 4 Turn the system on again and start over. You'll begin at the date and time screen.

A SOLUTION FOR EMERGENCIES ONLY

If you push the reset switch, you may damage the data on the hard disk. Do not press the reset switch, unless no other procedure is possible.

If the system does not respond to any keyboard input, push the reset switch. You can reach the reset switch through the hole in the front of the CPU, under the hard disk drive. Use a ballpoint pen or similar object to push the switch. After you push the reset switch, the computer will display the date and time screen. Begin from that point, and return to the global menu.



Telling the Computer the Date and Time

The procedure you're about to learn will soon become as routine as dialing a telephone, but this time it will require your complete attention. Before you get started, you can read the discussion to prepare for what you'll see and do. When you are ready, use the procedure chart.

When the computer prompts you for an input, the block of light (the cursor) marks the position on the screen where you'll see what you type. As you type, the cursor moves to the position where the next character will be entered.

The date and time displayed on your screen were typed in when the computer was tested. They won't be exactly what is shown in this guide. That doesn't matter, because you'll change them.

You can use the Backspace key to correct errors. If the computer tells you that you've made a mistake, press the Return key until you see a screen message that looks familiar, then start again. Confine your inputs to letters, numerals, and the Return key.

```
Fortune Systems 32:16
```

```
Please set the current date and time, then press (RETURN).
```

```
Today's date is: 08/07/82  
mm/dd/yy
```

```
Current time is: 09:18 AM  
hh:mm A  
P
```

```
Date set to Sat Aug 7 09:18:00 1982
```

```
Is this correct (yes or no)? yes
```

After you have typed in and verified the correct information, the date and time screen looks like this.

What the Cursor Does for You

The cursor is a block of light that you'll see on almost every display. When the computer is waiting for a response from you, the cursor is next to the instruction that indicates what you can do. It is usually next to a question or instruction. Sometimes it is at the first character of some information you must supply, such as a date, or the time. The computer may be waiting for you to press a single key, such as Return, or Execute, or Cancel Del.

If the computer is waiting for you to type in some letters or numerals, the cursor moves to the right as you type in each character. Usually you must press either the Return or Execute key to indicate to the computer that you have finished your input or entering information.

Sometimes, when the computer is waiting for a specific type of information such as a date, you'll hear a beep if you attempt to put in too many characters or the wrong kind of characters.

In general, the cursor is in a position on the screen that informs you about what kind of input the computer expects from you. Look for the cursor on the screen and make sure that you are providing the expected input.



How to Type the Date and Time

The six digits represent the month (01 for January, 12 for December), the date of the month (01 through 31), and the last two digits of the year. The digits in the illustration are for August 9, 1982. Notice that when a number is less than 10, you must type in the leading 0, so that numbers between zero and nine are represented by 00 through 09.

If you type in a month out of range (13 or larger) or a date out of range (32 or larger) you'll see this error message:

```
date format incorrect, please re-enter
```

If you receive this message, the cursor will be returned to the first character of the date, so you can begin again.

The four digits represent the hours and minutes in the usual 12-hour notation. Type in either an A or a P. If you type in an hour input that is out of range (greater than 12) or a minute input out of range (greater than 59), you'll see this error message:

```
time format incorrect, please re-enter
```

If this message is displayed, the cursor will be returned to the first character of the time, so you can begin again.

VARIATIONS

You'll quickly learn that you can skip over any date or time entry by pressing the Return key. If the date is correct, just press Return, and go on to the time.

For large differences between the date you type in, and the date recorded on the disk, you'll see this message:

```
Time entered is more that 5 days past system time. Please type  
'yes' if it is correct, 'no' if it is incorrect.
```

You'll probably see this message when you use the system for the first time.

THE 24-HOUR DAY

The computer uses a 24-hour notation. You may be familiar with this system. Just add 12 to any time after noon to get the 24-hour notation. For example, if you tell the computer that the time is 3:17 PM, it converts the time to 24-hour notation and displays it as 15:17.

Here is the procedure for typing in the date and time.

| !Step! | Screen Says | ! You Type | ! Comments |
|--------|-----------------------|--------------------|------------------------------|
| ! | ! | ! | ! |
| ! 1 ! | ! Please set the | ! (The date in | ! Notice how the |
| ! | ! current date and | ! mm/dd/yy format) | ! cursor moves as |
| ! | ! time, then press | ! (RETURN) | ! you type, and |
| ! | ! (RETURN). | ! | ! skips over the |
| ! | ! Today's date is ... | ! | ! slashes. |
| ! | ! | ! | ! |
| ! 2 ! | ! Current time is ... | ! (Current time) | ! The cursor moves |
| ! | ! | ! (RETURN) | ! as you type, and |
| ! | ! | ! | ! skips over the |
| ! | ! | ! | ! colon. You must |
| ! | ! | ! | ! type an A (for AM)! |
| ! | ! | ! | ! or a P (for PM). ! |
| ! | ! | ! | ! |
| ! 3 ! | ! Date set to ... | ! y (RETURN) | ! The time is dis- |
| ! | ! Is this correct | ! | ! played in the 24- |
| ! | ! (yes or no)? | ! | ! hour notation. ! |
| ! | ! | ! | ! If you type <u>n</u> and ! |
| ! | ! | ! | ! press Return, you ! |
| ! | ! | ! | ! can return to step! |
| ! | ! | ! | ! 1 and begin again.! |

3

Establishing Your Account

You cannot use the system until you establish an account. After you have established an account, whatever information you put on the system is placed under your control each time you type in your account name. As in the previous procedure, you can read the discussion to prepare yourself. Use the procedure chart when you are ready.

```
FORTUNE SYSTEMS 32:16
```

```
Press (HELP) For Assistance
```

```
Type in your name and Press (RETURN): newuser
```

```
Type in your new account name & Press (RETURN): yourname
```

```
Do you want a password?
```

```
    If so, type 'y' and Press (RETURN).
```

```
    If not, type 'n' and Press (RETURN).
```

```
Do you want a password (y/n)? n
```

```
Your new account has been created.
```

```
Press (RETURN) to try it out.
```

After you have created your account, the display looks like this.

NAME YOUR ACCOUNT

Now you'll establish yourself as a legitimate user of the Fortune system. You'll name an account that makes a place for your work on the system. You could assign a password to the account, to protect it from use by anyone else. Later you may want to assign yourself a password, but for now don't use one. You'll learn more about passwords in Part 5.

You can use almost any name for an account, but for your own ease, limit it to eight lowercase letters. Each user of a system should have a unique account name that is easy to remember. A good name for your account is your family name, typed in small letters. If your family name isn't unique in your company, use one or two initials, but don't use any spaces.

The screen will first ask for your name. If you type in your name, the computer won't recognize it because you don't have an account, so type in newuser.

If you make a mistake and don't notice it until you press the Return key you'll eventually get this message.

Invalid combination of name and password.

Wait for the cursor to appear, and begin again at step 1.

Here is the procedure to establish an account.

| !Step! | Screen Says | ! You Type | ! Comments | ! |
|--------|----------------------------|------------------|------------|---------------------|
| ! | ! | ! | ! | ! |
| ! | ! 1 ! Type in your name | ! newuser | ! (RETURN) | ! Use lowercase. |
| ! | ! and press (RETURN) | ! | ! | ! |
| ! | ! | ! | ! | ! |
| ! | ! 2 ! Type in your new | ! (account name) | ! | ! Use any account |
| ! | ! account name and | ! | ! (RETURN) | ! name you want. |
| ! | ! press (RETURN): | ! | ! | ! |
| ! | ! | ! | ! | ! |
| ! | ! 3 ! Do you want a | ! n | ! (RETURN) | ! Don't use a |
| ! | ! password (y/n)? | ! | ! | ! password now. |
| ! | ! | ! | ! | ! |
| ! | ! 4 ! Your new account has | ! | ! (RETURN) | ! |
| ! | ! been created. Press | ! | ! | ! |
| ! | ! (RETURN) to try it | ! | ! | ! |
| ! | ! out. | ! | ! | ! |
| ! | ! | ! | ! | ! |
| ! | ! 5 ! Type in your name | ! (account name) | ! | ! You must type the |
| ! | ! and press (RETURN): | ! | ! (RETURN) | ! account name |
| ! | ! | ! | ! | ! exactly as you |
| ! | ! | ! | ! | ! did in step 2. |
| ! | ! | ! | ! | ! |
| ! | ! 71% of available | ! | ! | ! This message may |
| ! | ! space is in use | ! | ! | ! be different each |
| ! | ! | ! | ! | ! time you log in. |
| ! | ! | ! | ! | ! |
| ! | ! FORTUNE SYSTEMS | ! | ! | ! |
| ! | ! GLOBAL MENU | ! | ! | ! |

TOTAL SYSTEM SPACE USED

When you start up your Fortune system and log in, always check the message that says " % of the available space is in use." This very important message tells you how much of your total disk capacity is being used. When the space in use is 90% or more, either archive or delete some files. To the Fortune system, any kind of information that has a name is a file. Any application software is a file, as is any document you create with the word processor application.

Archiving is the process of copying files on the hard disk onto flexible disks, and removing the file from the hard disk. The difference between archiving and backing up a file is that when archiving you actually remove the file from the system. Backing up only makes an extra copy of the file; no system space is saved.

If you don't archive or delete, and begin to edit a large file, your system will become totally full and you won't be able to save work on any more files. In this case, you'll see an error message on the screen. Refer to Understand Your Fortune System for information on archiving.

WHAT YOU HAVE DONE

You have established yourself as a recognized user of the Fortune system. From now on, each time you turn on the Fortune system, you type in your account name in response to the screen message "Type in your name and press (RETURN):", then press the Return key. Throughout this guide, this procedure is referred to as the login procedure. By the time you have finished reading this explanation, "FORTUNE SYSTEMS GLOBAL MENU" should be on the screen.



A Look at the Global Menu

Now that you have logged in, you can see the global menu, which is the first full-screen display you'll see each time you log in. The global menu is the menu for the entire Fortune system. It lists all application software and utilities available for the Fortune system. Utilities are programs you use to perform system functions such as adding and deleting software.

A menu is a list of activities from which you choose the one you want to use. At the bottom of every menu are instructions that tell you how to select an item from the menu. Watch for the cursor which shows that the computer is waiting for you to type something.

Examine the global menu for a moment. Notice that it is divided into six areas. Each area contains a list for a category of software available for use on the Fortune system. Some of the items on the list are at the normal level of screen brightness; others are brighter than normal (highlighted). Now is a good time to adjust the screen brightness to your taste. Turn the knob at the top of the monitor and set it to the brightness level you prefer.

Don't set the brightness knob so high that the background is noticeably green. That's not good for the screen or for your eyes.

The names that are at the normal level of brightness identify software that you can have for your system, or software that you may have purchased but have not installed. The highlighted names identify software that is available on the hard disk for your immediate use. If the phrase "Additional Choices" is highlighted in any of the six areas, additional software is available on hard disk but not named on the screen. If you select "Additional Choices" from the menu, you'll see those choices displayed on another menu.

The six major categories of the global menu are Business Applications, Communications, Professional Tools, Training and Education, Office Automation Tools, and System Tools. These are the same categories you read about in the section on manuals.

FORTUNE SYSTEMS GLOBAL MENU

BUSINESS APPLICATIONS

B1 Business Systems
B2 Business Surveys
B3 Business Graphics
B4
B5
B6

PROFESSIONAL TOOLS

P1 Multiplan
P2 Color Graphics
P3
P4
P5
P6

ELECTRONIC OFFICE TOOLS

E1 FOR:WORD
E2 Record Processing
E3 Automated Calendar
E4
E5
E6

COMMUNICATIONS

C1 Async
C2 Bisync
C3 Local Network
C4 X.25
C5 SNA/SDLC
C6

TRAINING/EDUCATION

T1 Topic Introduction
T2 Amusements
T3 Operator Training
T4 C.A.I. Training
T5 Demonstrations
T6

SYSTEM TOOLS

S1 System Utilities
S2 System Management
S3 Languages
S4 IDOL
S5 Product Maintenance
S6

Store name and phone
Enter selection and press <RETURN> :

Press <HELP> for assistance

The global menu lists all available software.

Shutting Down the System

Shut down the system now to learn how to do it properly. When you turn power on again, you'll log in with your new account name. To shut down the system you'll work your way through a sequence of screens that have information on them to help you. As in previous procedures, you can read the discussion before using the procedure chart.

You shouldn't just turn off the power and leave. If you do, you are almost certain to destroy the information you have been working with, and possibly damage the Fortune Operating System that is on the hard disk.

WORDS OF WARNING

If you have the basic system, with only one workstation, the warning messages remind you that you have started the shutdown procedure. You can easily get out of the procedure by answering no to the question "Do You Want to Continue?". If you answer no, follow screen instructions until the system management menu is displayed again.

If your full system has more than one workstation, the message "If you have ..." has another purpose. If power is turned off at the master workstation while somebody is busy at a satellite workstation, one result will be a loss of information -- perhaps a loss of several hours of work. After you have attached an ASCII terminal, you'll learn more about these warning messages.

When the message "Please turn the Fortune 32:16 off" is displayed, set the power switch at the back of the CPU to Off.

Fortune Systems 32:16 Shut Down (takes about 30 seconds)

You are in the Process of shutting down your Fortune 32:16

If you have satellite workstations and continue with this shutdown procedure, you will end everyone else's current use of the Fortune system.

Do you want to continue?

If so, type 'yes' and press (RETURN).

If not, type 'no' and press (RETURN).

If you need more information, press (HELP).

Do you want to continue?

The system gives you a chance to change your mind.

```
Software shut down starting, Please wait
Software shut down complete
Hardware shut down starting, Please Wait
Hardware shut down complete
Please turn the Fortune systems 32:16 off
```



As the shutdown sequence continues, these messages are displayed.

The screen should now be displaying the global menu. If it is not, press the Cancel key until the global menu is displayed. Here is the shutdown procedure to follow every time you are finished with the computer.

| !Step! | Screen Says | ! | You Type | ! | Comments | ! |
|--------|--------------------------|---|----------|---|----------|-----------------------------------|
| ! | ! | ! | | ! | | ! |
| ! 1 | !FORTUNE SYSTEMS GLOBAL! | ! | s2 | ! | (RETURN) | ! |
| ! | ! MENU | ! | | ! | | ! |
| ! | !SYSTEM TOOLS | ! | | ! | | ! |
| ! | ! S2 System Management | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! 2 | !SYSTEM MANAGEMENT | ! | 30 | ! | (RETURN) | ! |
| ! | !30 Shutdown computer | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | !Fortune Systems 32:16 | ! | | ! | | ! Read the message |
| ! | ! | ! | | ! | | ! on the screen. |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | !Do you want to | ! | yes | ! | (RETURN) | ! Type the full |
| ! | !continue? | ! | | ! | | ! word, <u>yes</u> or <u>no</u> . |
| ! | ! | ! | | ! | | ! |

After completing step 2 in the procedure, follow the screen instructions to complete the shutdown sequence.

6 Preparing to Use the System

When you first use the system, you need to get comfortable with handling flexible disks. Simple disk operations, such as formatting and copying, are part of the basic, everyday computer maintenance routine you should develop.

In the next pages, you'll learn how to insert and remove flexible disks from the flexible disk drive. You'll also learn how to format flexible disks, to prepare them for use with the computer. Finally, you'll copy some information from the flexible disk to the hard disk, then copy the same information from the hard disk to the flexible disk.



Starting Up the System and Logging In

Now your system is shut down. When you log in this time, respond to the prompt "Type in your name" by typing in the name you gave your account (your own name, if you followed the suggestion). Make sure you spell the account name exactly as you did when you named the account. If you do not, the computer will not recognize you.

Begin the procedure by reaching to the power on/off switch at the back of the CPU and turning the switch On. Remember to check that the fan is operating. It's a good habit to form.

Here is how you start up the system when you have an account.

3

| !Step! | Screen Says | ! | You Type | ! | Comments | ! |
|--------|----------------------------|---|----------------------|---|--------------------------|---|
| ! | ! | ! | ! | ! | ! | ! |
| ! | 1 ! Please set the | ! | (The date in | ! | If the date is | ! |
| ! | ! current date and time! | ! | mm/dd/yy format) | ! | correct, simply | ! |
| ! | ! | ! | (RETURN) | ! | press the Return | ! |
| ! | ! Today's date is ... | ! | | ! | key. | ! |
| ! | ! | ! | | ! | | ! |
| ! | 2 ! Current time is ... | ! | (Current time) | ! | | ! |
| ! | ! | ! | (RETURN) | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 3 ! Date set to . . . | ! | y | ! | (RETURN) | ! |
| ! | ! Is this correct (y/n)! | ! | | ! | If you type <u>n</u> and | ! |
| ! | ! | ! | | ! | press Return, you | ! |
| ! | ! | ! | | ! | can return to step! | ! |
| ! | ! | ! | | ! | 1 and begin again.! | ! |
| ! | ! | ! | | ! | | ! |
| ! | 4 ! Fortune Systems 32:16! | ! | (your account name)! | ! | Spell your account | ! |
| ! | ! Press (HELP) for ... | ! | | ! | (RETURN) | ! |
| ! | ! | ! | | ! | name exactly as you! | ! |
| ! | ! | ! | | ! | did before. | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! 73% of available | ! | | ! | This message may | ! |
| ! | ! space is in use | ! | | ! | be different each | ! |
| ! | ! | ! | | ! | time you log in. | ! |

Inserting and Removing Flexible Disks

You have learned how to take proper care of flexible disks. Now you can put what you've learned into practice. You'll find yourself continually inserting and removing flexible disks as you load applications from flexible disk to hard disk and write information on flexible disks so that you can store it offline.

Never remove or insert a flexible disk while the red indicator under the slot for the flexible disk drive is lighted. If you hear the keyboard beep when you open the door of the flexible disk drive, do not remove or insert a disk. You may damage and lose part of or all the information on the disk.

Remove the training disk from the back of this binder and hold it label side up, in a horizontal position, to insert it into the flexible disk drive. The large arrow should be pointing into the slot. Notice the notch on the left-hand side for the write-protect tab. When you write information on the flexible disk, information on the hard disk is put on the flexible disk. You protect disks from accidental writing by covering the notch with a write-protect tab. If a write-protect tab covers the notch, check the label on the disk again to see it is the training disk.

Fingertip force is all you need to open or close the door, or to insert a disk into the drive. Open the door of the flexible disk drive, insert the disk into the drive, and close the door. The computer is not writing on the disk, or reading from it, so the red indicator over the flexible disk drive is not on, or flashing.

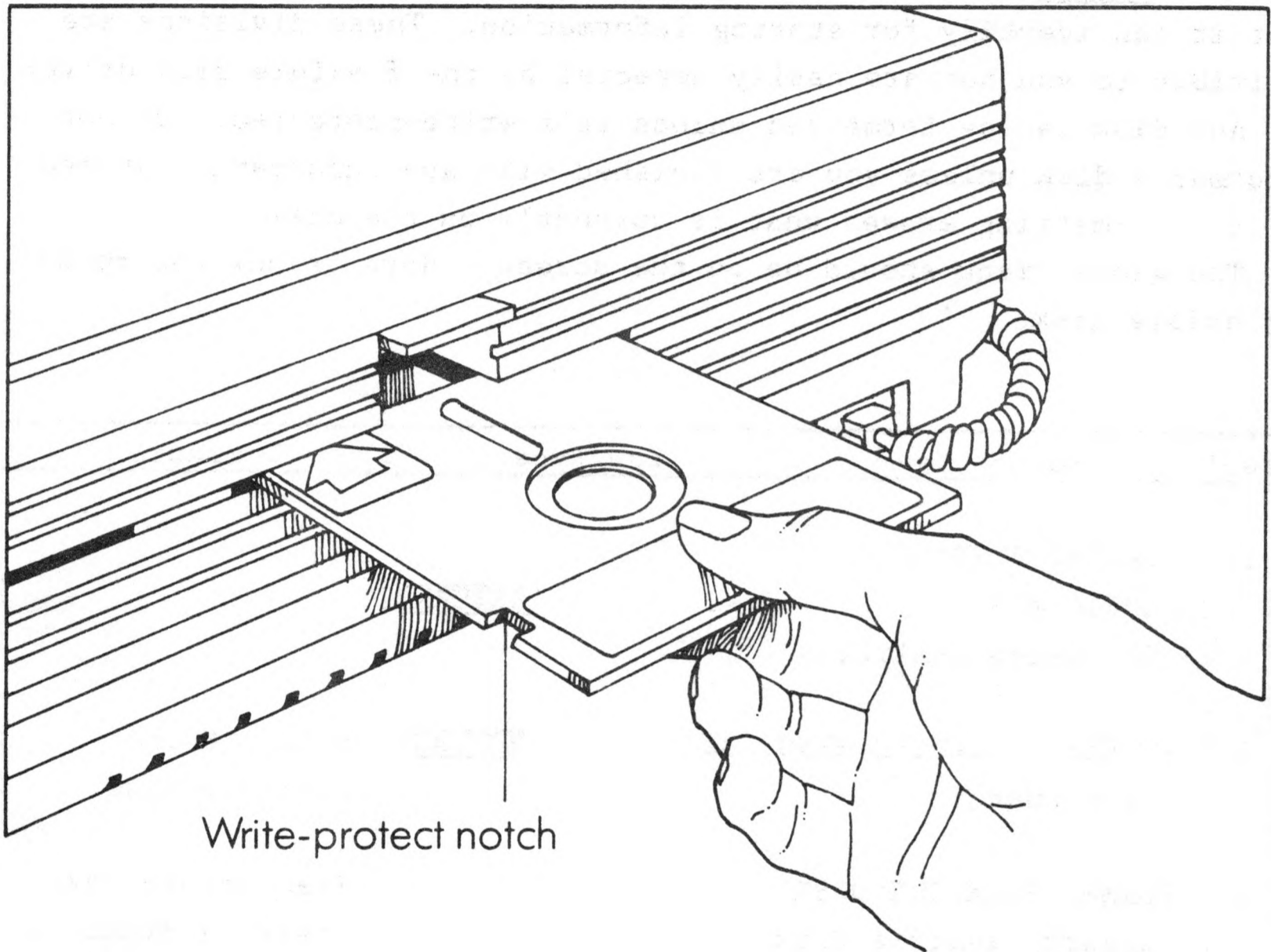
Now take the training disk out of the drive and find a blank flexible disk.

INSERT A BLANK FLEXIBLE DISK

The markings on a blank flexible disk depend on where you got the disk. It probably won't have the large arrow that you saw on the training disk. When you insert the disk, the cut in the inner protective cover should enter first. To be sure that you are

inserting the disk properly, check that the write-protect notch is on the left-hand side as you insert the disk, in the same position as the notch for the training disk.

- 1 Hold the disk so that the write-protect notch is on the left side. The disk should not be write-protected, so there should not be a tab over the notch.
- 2 Open the door, insert the disk, and close the door.



A flexible disk is inserted into the flexible disk drive with the write-protect notch on the left side.

Formatting Flexible Disks

Every time you need to copy information from the hard disk, you must use either a blank flexible disk or a disk that has enough space available for the information you want to copy. You'll learn about those considerations when you use an application.

Before you can use a blank flexible disk, it must be formatted. When you format a flexible disk, the computer divides it into parts that it can identify for storing information. These divisions are invisible to you but are easily detected by the flexible disk drive.

Any disk can be formatted unless it's write-protected. Do not reformat a disk unless you are finished with any information stored on it. Formatting erases what is currently on the disk.

The global menu should be on the screen. Here is how you format a flexible disk.

| !Step! | Screen Says | ! | You Type | ! | Comments | ! |
|--------|---------------------------|---|----------|---|----------|---------------------|
| ! | ! | ! | | ! | | ! |
| ! | 1 ! FORTUNE SYSTEMS | ! | | ! | | ! |
| ! | ! GLOBAL MENU | ! | s1 | ! | (RETURN) | ! |
| ! | ! S1 System Utilities | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 2 ! SYSTEM UTILITIES MENU | ! | 32 | ! | (RETURN) | ! Select Format |
| ! | ! 32 Format | ! | | ! | | ! Flexible Disk. |
| ! | ! | ! | | ! | | ! |
| ! | 3 ! FORMAT FLEXIBLE DISK | ! | | ! | | ! Read screen text. |
| ! | ! Insert Flexible Disk! | ! | | ! | | ! Insert a flexible |
| ! | ! To Be Formatted | ! | | ! | | ! disk. |
| ! | ! | ! | | ! | | ! |
| ! | 4 ! Do you want to | ! | yes | ! | (RETURN) | ! |
| ! | ! continue (yes no)? | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 5 ! Please Wait For | ! | | ! | | ! Do not press any |
| ! | ! Completion Message | ! | | ! | | ! key until the |
| ! | ! | ! | | ! | | ! operation is |
| ! | ! | ! | | ! | | ! complete. |
| ! | ! | ! | | ! | | ! |
| ! | 6 ! Please Remove Your | ! | | ! | (RETURN) | ! |
| ! | ! Flexible Disk. | ! | | ! | | ! |
| ! | ! -Press RETURN for | ! | | ! | | ! |
| ! | ! menu or select | ! | | ! | | ! |
| ! | ! ahead | ! | | ! | | ! |

| !Step! | Screen Says | ! | You Type | ! | Comments | ! |
|--------|----------------------------|---|----------|---|----------------------------|--------------------|
| ! | ! | ! | | ! | | ! |
| ! | 7 ! FORMAT FLEXIBLE DISK | ! | | ! | If you need to | ! |
| ! | ! | ! | | ! | format more disks, | ! |
| ! | ! | ! | | ! | repeat the format- | ! |
| ! | ! | ! | | ! | ting procedure | ! |
| ! | ! | ! | | ! | from this point. | ! |
| ! | ! | ! | | ! | Type <u>y</u> in response! | ! |
| ! | ! | ! | | ! | the question on | ! |
| ! | ! | ! | | ! | the screen. | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! Do you want to | ! | n | ! | (RETURN) | ! |
| ! | ! continue (yes | ! | | ! | | ! |
| ! | ! or no)? | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 8 ! SYSTEM UTILITIES MENU! | ! | | ! | (CANCEL) | ! The global menu |
| ! | ! | ! | | ! | | ! is displayed. |
| ! | ! | ! | | ! | | ! |
| ! | 9 ! FORTUNE SYSTEMS | ! | | ! | (CANCEL) | ! The login screen |
| ! | ! GLOBAL MENU | ! | | ! | | ! is displayed. |

3

FORMAT FLEXIBLE DISK

Insert Flexible Disk To Be Formated

Do you Want To Continue (yes no)? :

DESCRIPTION: This selection will format flexible disks which will allow your Fortune System to use them. Run this selection first on all newly purchased flexible disks.

WHAT TO ENTER: Insert your new flexible disk into the slot, close the door. Answer yes or no and Press (RETURN). This process will remove any existing information on your flexible disk.

Press (HELP) For More Information Press (CANCEL) For Utilities Menu

After you request the format utility, you'll see this screen.

Backing Up the Operating System

Your Fortune 32:16 is delivered to you with the operating system already on the hard disk. You should make a backup copy of it so that you'll be able to load it on hard disk when needed. The backup copy will be made in this procedure so that the Fortune Operating System is in perfect order when you copy it. You'll need two blank flexible disks. Label them as Cold boot disk #1, and Cold boot disk #2. You don't need a formatted flexible disk. During this procedure, the computer formats the blank flexible disk.

Use the following procedure to copy your operating system.

| !Step! | Screen Says | ! | You Type | ! | Comments | ! |
|--------|----------------------------|---|----------|---|----------|---|
| ! | ! | ! | | ! | | ! |
| ! | 1 ! Fortune Systems 32:16! | ! | manager | ! | (RETURN) | ! |
| ! | ! Press (HELP) for ... ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 2 !FORTUNE SYSTEMS GLOBAL! | ! | s5 | ! | (RETURN) | ! |
| ! | ! MENU | ! | | ! | | ! |
| ! | !SYSTEM TOOLS | ! | | ! | | ! |
| ! | !S5 Product Maintenance! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 3 !PRODUCT MAINTENANCE | ! | b | ! | (RETURN) | ! |
| ! | !Backup existing | ! | | ! | | ! |
| ! | !product | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 4 !PRODUCT SELECTION | ! | c | ! | (RETURN) | ! |
| ! | ! MENU | ! | | ! | | ! |
| ! | !Cold boot | ! | | ! | | ! |

From this point, follow the instructions when they appear on the screen. The entire procedure takes about 20 minutes.

If you get messages other than those shown in the figure, you may have made an error, or you may have a faulty flexible disk. Attempt the procedure at least one more time before asking your dealer for help.

Some important points for this procedure are:

- Do not put a write-protect tab on the disk labeled "Cold boot disk #1."
- Do put a write-protect tab on the disk labeled "Cold boot disk #2" after making the copy.

Insert flexible disk #1, type (RETURN):


```
Formatting flexible disk . . . . .
  isize = 464
  m/n = 1 10
Installing bootstrap loader . . . . .
  47+1 records in
  47+1 records out
Copying files . . . . .
```

COPY complete, remove flexible disk and label it "Cold boot disk #1"

Insert flexible disk #2, type (RETURN):


```
Formatting flexible disk . . . . .
  isize = 496
  m/n = 1 10
Copying files
```

COPY complete, remove flexible disk and label it "Cold boot disk #2"

Press RETURN for menu or select ahead

Follow these instructions when they appear.

The computer gives you instructions about when to insert and remove flexible disks.

Loading the Training Disk Program

One of the best ways to get acquainted with your Fortune system, and one that is certainly the most fun, is with the training programs included in this package. You can play games that teach you about the system and how it works. After you load the program and begin to use it, you'll interact with the screen for a while instead of with this guide.

To use the computer-aided instruction program, you first transfer the program from the training disk to the hard disk.

You should have the global menu on the screen. If not, press the Cancel Del key until the global menu appears. Here is how you load the training disk program.

| !Step! | Screen Says | ! | You Type | ! | Comments | ! |
|--------|------------------------------|---|----------|---|----------|---|
| ! | ! | ! | | ! | | ! |
| ! | ! 1 !FORTUNE SYSTEMS GLOBAL! | ! | s5 | ! | (RETURN) | ! |
| ! | ! MENU | ! | | ! | | ! |
| ! | ! SYSTEM TOOLS | ! | | ! | | ! |
| ! | ! S5 Product Maintenance! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! 2 !PRODUCT MAINTENANCE | ! | i | ! | (RETURN) | ! |
| ! | ! Install a product | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! 3 !Please install | ! | | ! | | ! |
| ! | ! flexible disk | ! | | ! | | ! |
| ! | ! volume 1. Press | ! | | ! | | ! |
| ! | ! (RETURN): | ! | | ! | (RETURN) | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! 4 !This flexible disk is | ! | | ! | | ! |
| ! | ! labeled: | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! Proceed with | ! | y | ! | (RETURN) | ! |
| ! | ! installation? (y/n) | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |

From this point, follow instructions on the screen, as you did when you copied the operating system.

Backing Up the Training Disk

Make a backup copy of the training disk as soon as possible. You should have an extra copy in case you need to reload it at some point. Treat the training disk as application software. You'll need a blank formatted disk. Parts T1 and T2 are copied to the same flexible disk. Label the disk as the screen display tells you.

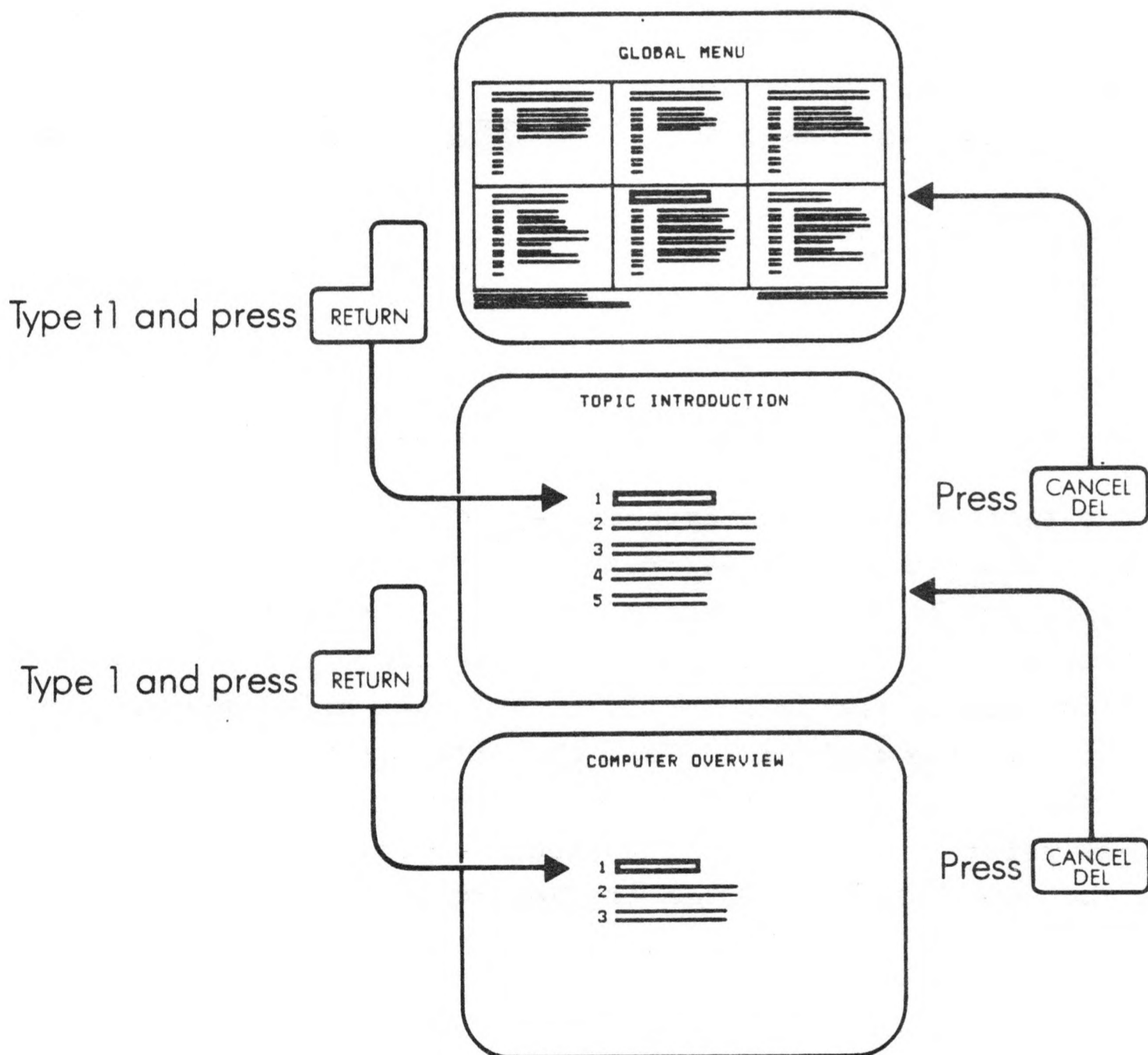
You should have the global menu on the screen. If not, press the Cancel Del key until the global menu appears. Here are the steps for copying the training disk program.

| !Step! | Screen Says | ! | You Type | ! | Comments | ! |
|--------|--------------------------|---|----------|---|----------|---|
| ! | ! | ! | | ! | | ! |
| ! | 1 ! FORTUNE SYSTEMS | ! | s5 | ! | (RETURN) | ! |
| ! | ! GLOBAL MENU | ! | | ! | | ! |
| ! | ! S5 Product | ! | | ! | | ! |
| ! | ! Maintenance | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 2 ! PRODUCT MAINTENANCE | ! | b | ! | (RETURN) | ! |
| ! | ! SELECTION : | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 3 ! PRODUCT SELECTION | ! | t1 | ! | (RETURN) | ! |
| ! | ! MENU | ! | | ! | | ! |
| ! | ! Enter Selection & | ! | | ! | | ! |
| ! | ! Press (RETURN) | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 4 ! Do you want to | ! | y | ! | (RETURN) | ! |
| ! | ! backup Topic | ! | | ! | | ! |
| ! | ! Introduction? (y/n) | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 5 ! Please label a blank | ! | | ! | | ! |
| ! | ! flexible disk . . . | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! Insert the disk . . . | ! | | ! | | ! |
| ! | ! | ! | | ! | (RETURN) | ! |
| ! | ! | ! | | ! | | ! |
| ! | 6 ! copy phase of Topic | ! | | ! | | ! |
| ! | ! Introduction | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! -Press RETURN for | ! | s5 | ! | | ! |
| ! | ! menu or select ahead! | ! | | ! | | ! |

7 Using the Training Disk Program

Some of the things you'll see when using the training programs are an overview of the Fortune system, definitions of the terms hardware and software, the business/computer dictionary, and three games to help you interact with the computer. Follow the instructions in the text to select a program for viewing. Once the program is displayed, prompts will appear on the screen whenever you should type or press any key.

The illustration below shows some of the menus used to access the computer training programs, and the general method of moving through the menus.



Type t1 and press the Return key to get to Topic Introduction. Type 1 and press the Return key to get to Computer Overview. Press the Cancel Del key twice to return to the global menu.

Learning More About Your Fortune System

On the global menu, locate the box marked Training and Education. The first entry in the box is Topic Introduction, which contains short narratives telling you a little more about your computer, including some facts not contained in this manual.

To learn more about the Fortune 32:16, follow these instructions.

| !Step! | Screen Says | ! | You Type | ! | Comments | ! |
|--------|------------------------|---|----------|---|--------------------------------|---|
| ! | ! | ! | | ! | | ! |
| ! | 1 ! FORTUNE SYSTEMS | ! | | ! | | ! |
| ! | ! GLOBAL MENU | ! | t1 | ! | (RETURN) ! A new menu is | ! |
| ! | ! | ! | | ! | ! displayed. | ! |
| ! | ! | ! | | ! | | ! |
| ! | 2 ! TOPIC INTRODUCTION | ! | | ! | ! Topic introduction! | ! |
| ! | ! 1. Computer overview | ! | 1 | ! | (RETURN) ! menu is displayed.! | ! |
| ! | ! | ! | | ! | | ! |
| ! | 3 ! COMPUTER OVERVIEW | ! | | ! | ! A text screen | ! |
| ! | ! 1. Introduction | ! | 1 | ! | (RETURN) ! with the Fortune | ! |
| ! | ! | ! | | ! | ! 32:16 introduction! | ! |
| ! | ! | ! | | ! | ! is displayed. | ! |

Use the space bar and the Execute key to respond to the questions on short quizzes. As you go through the Topic Introduction, you'll be asked questions about what you've just read. These questions not only help you be sure of what you have learned from reading the introductions, but also help you get comfortable with the keyboard. When the introduction program is complete, the screen will return to the computer overview menu.

You can return to the topic introduction menu any time by pressing the Cancel Del key, then the Return key.

TOPIC INTRODUCTION

- 1 Computer Overview
- 2 Business Applications System
- 3 Business/Computer Dictionary
- 4 Multiplan
- 5 FOR:WORD

Enter Selection & Press (RETURN):
Press (CANCEL/DEL) to return to Prior menu

3

Type a number to select a topic.

COMPUTER OVERVIEW

- 1 Introduction
- 2 Hardware
- 3 Software

Enter selection & press (RETURN):
Press (CANCEL/DEL) to return to Prior menu

Learn more about computers from the computer overview.

Introductions to Hardware and Software

Hardware and software are two computer terms you learned earlier in this guide. Selections 2 and 3 on the computer overview menu define these terms and tell you about the hardware and software available for the Fortune system.

Try the hardware introduction first.

- 1 From the selections under Computer Overview, type 2 and press the Return key. The first display of the hardware introduction should be on your screen.
- 2 Move through the text just as you did when viewing the introduction.

Topics you'll learn about include what hardware is and what types of hardware make up the Fortune system. Characteristics of the screen, keyboard, printers, disks, and memory are provided.

As in the overview, you'll be asked about the information you just learned. If you want to quit the program, press the Cancel Del key, then press the Return key. Otherwise, continue until the program ends and you are returned to the Computer Overview menu.

Now that you have viewed overview and hardware, go on to the software introduction by typing 3 and pressing the Return key. You should be comfortable as you react to the quizzes on the screen by pressing the appropriate key. The introduction tells you about the different types of software you'll probably use: applications, support software, and system software. You'll learn about the different applications you can buy for your system, such as the business applications system, FOR:WORD, and Multiplan. You'll also get an overview of the programming languages available for your system: BASIC, COBOL, FORTRAN, Pascal, and C. As in the previous introductions, you can leave Software at any time by pressing the Cancel Del key, then the Return key.

When you are finished with the software introduction, the screen will display the computer overview menu. To return to the global menu, press Cancel Del twice.

Learning More About the Fortune Applications

To acquaint yourself with the Fortune applications package, you can read the overview programs that are offered on the topic introduction menu. The applications overviews are accessed and controlled in the same way as the computer introductions you just viewed.

BUSINESS APPLICATIONS SYSTEM

The business applications system is composed of seven software packages to help perform many functions of an accounting department. The overview tells you the type of individuals and departments that the business applications system is designed for. The other menu selections explain the separate applications: General Ledger, Accounts Payable, Accounts Receivable, Order Processing, Purchase Orders, Payroll, and Fixed Assets.

MULTIPLAN

Multiplan is an automated business planning system that can be used for business and personal financial forecasting. The overview explains the many ways Multiplan can help you. Some of the functions the application can perform include general office management, accounting, finance, sales management, advertising, production, and corporate planning. You'll also learn the steps involved in creating a Multiplan worksheet.

FOR:WORD

FOR:WORD is the word processing package available for the Fortune system. In the overview you'll learn about the document cycle and the many ways FOR:WORD can assist in document production. The special features of the FOR:WORD word processor and how they relate to the document cycle are also discussed in the overview.

Here is how to view the introductions.

- 1 To view an introduction to the business applications system, type 2 and press the Return key.
- 2 Read the first screen of the application overview. Press any key to read the next screen. If you need to interrupt the overview, press the Cancel Del key to return to the topic introduction menu.

BUSINESS APPLICATIONS SYSTEM

- 1 Overview
- 2 General Ledger
- 3 Accounts Payable
- 4 Accounts Receivable
- 5 Order Processing & Inventory Control
- 6 Fixed Assets
- 7 Purchase Orders
- 8 Payroll

Enter Selection & Press (RETURN):

Press (CANCEL/DEL) to return to prior menu

From this submenu, select the overview or an application package by number.

- 3 When the overview is finished, the screen automatically displays the topic introduction menu.
- 4 You can repeat the procedure for an introduction to Multiplan or the Fortune word processing application.

Using the Business/Computer Dictionary

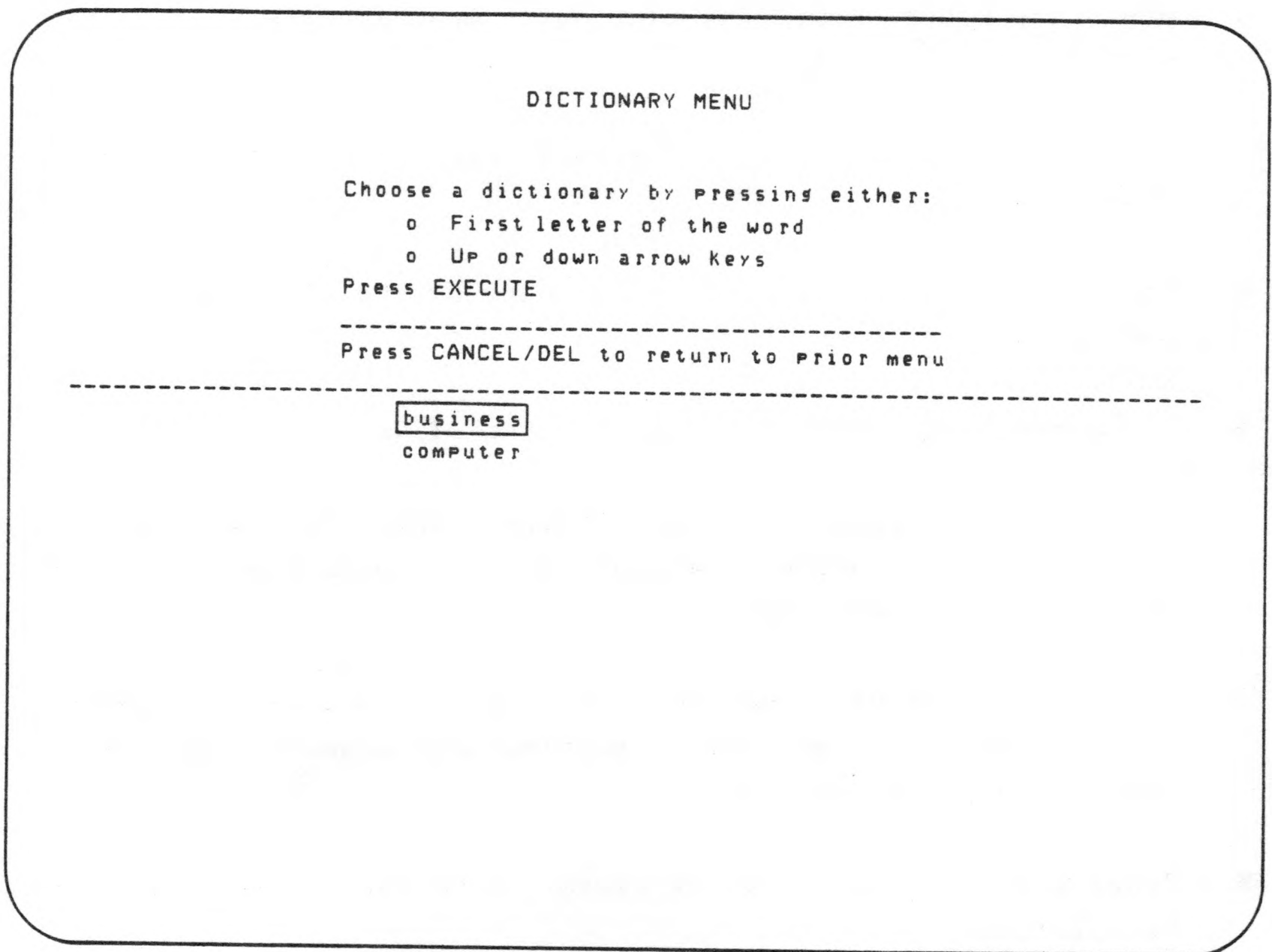
As you use your computer and its applications, you'll encounter terms you don't understand. Looking up the terms in a dictionary takes time, and besides, many of the unfamiliar computer and business terms you'll encounter aren't found in a standard English dictionary.

Rather than purchase a special dictionary of business or computer terms, you can use the one on the training disk.

Here are the steps for using the dictionary programs:

- 1 From the global menu, select T1, Topic Introduction, and press the Return key.
- 2 The topic introduction menu is now on your screen. Type 3 and press the Return key. The dictionary menu is displayed. The word "business" is in reverse video.
- 3 Press the down arrow key. The word "computer" is in reverse video.
- 4 Press the Execute key. The first page of the dictionary is displayed.
- 5 Press the Next Screen key. A new list of words appears.
- 6 Press the Next Screen key a few times. Note that each list of words is further along in alphabetical sequence than the previously displayed list.
- 7 Press the Previous Screen key. Note that a new list of words appears, but it is earlier in alphabetical sequence than the previously displayed list.
- 8 Press the up arrow key a few times. Note the way each new word is selected.
- 9 Press the down arrow key a few times. Note the way each new word is selected and the word that is now displayed in reverse video.
- 10 Press the Execute key. A definition of the selected word appears on the screen.

- 11 After reading the definition, press the Cancel Del key to return to the list you were viewing.
- 12 Type in a letter of the alphabet and see what happens.
- 13 Continue going through the dictionary and selecting words that interest you.
- 14 To leave the dictionary at any time, press Cancel Del and return to the dictionary menu.
- 15 Press Cancel Del a second time to return to the topic introduction menu.
- 16 From there, make another selection, or press Cancel Del to return to the global menu.



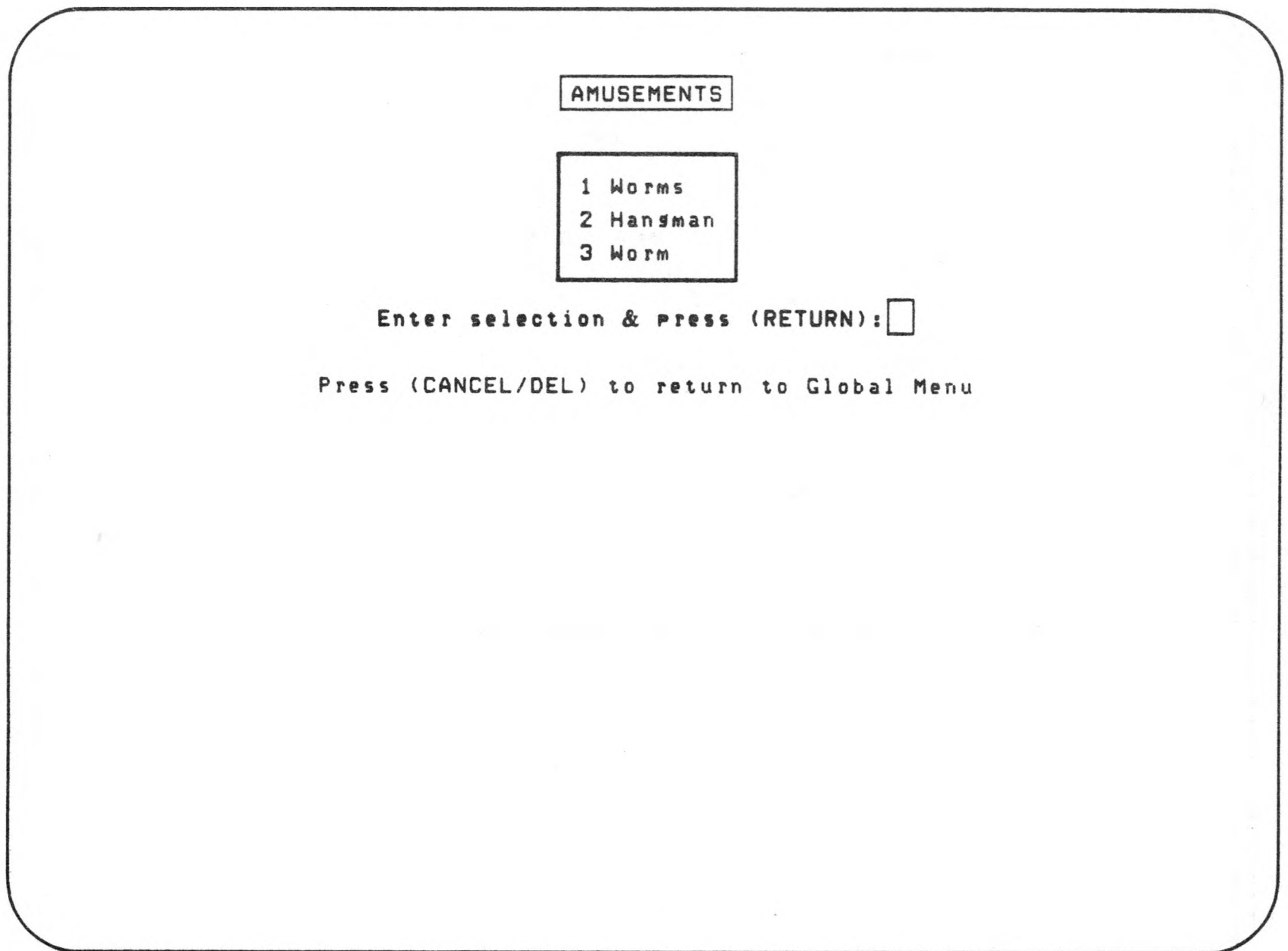
Select a computer dictionary or a business dictionary from the dictionary menu screen.

Playing with Your Fortune System

Using the computer introductions, you read some text and used the Return, Cancel Del, Prev Scrn, and Next Scrn keys and the space bar. By playing the training games, you'll increase your knowledge of other keys including the cursor keys. You'll also respond to the prompts the system gives you on the screen.

Worms, Hangman, and Worm are activities designed to improve your skill in interacting with the Fortune system. Mistakes are okay. It's all in fun. Take as much time as you want for playing. To access the computer games, follow these instructions:

- 1 From the global menu, type T2 for Amusements.
- 2 Press the Execute key. The amusements menu is now on your screen.



Use these selections on the amusements menu to become familiar with the keyboard and screen.

Playing Worms

Worms is designed to get you accustomed to answering the questions on the screen with a keystroke. Here is how to play Worms.

- 1 From the amusements menu, type 1 and press the Return key.
- 2 The Worms instructions are displayed on the screen. Read the instructions and respond to them as you are prompted. The illustration below shows the Worms instructions.
- 3 Notice the numbers enclosed inside the cursor. These numbers are called default values. A default value is a standard value the training program offers as a suggested response to a specific question. To accept the default value, press Return; to reject the default value, type a different number and press Return.

WORMS

Type each answer and Press RETURN

(Or, Press RETURN in response to each question.)

Press HELP to get information.

How many worms do you want? 9

How long should they be? 9

Do you want to see their trails? Y

How many minutes should the worms run? 1

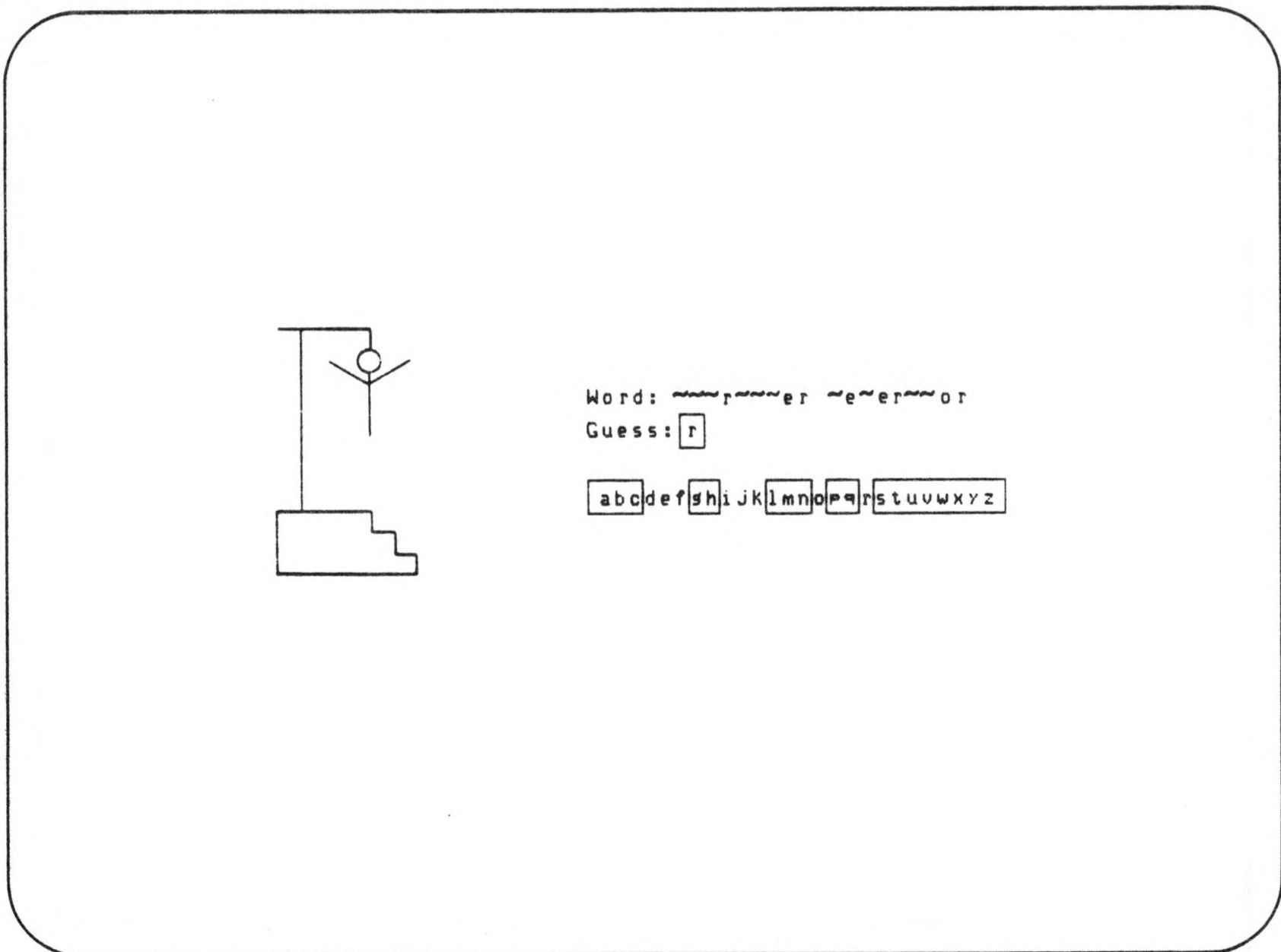
If you accept default values, the screen will look like this.

Playing Hangman

Hangman is played on the Fortune system in exactly the same fashion as the hangman game you may have played in school. The object of the game is to guess a word selected by the computer. You can make seven mistakes. Each time you make a mistake, the computer draws a part of a stick figure hanging from a gallows. If you guess the complete word before the entire figure is drawn, you beat the computer. But, if you make seven mistakes and hang the figure, you lose.

You can choose from three word lists: general, business, and computer. The general list is the most challenging of the three. The business and computer word lists are easier, especially if you have any knowledge of these fields. (If you encounter a business or computer word you don't know, look for its definition in the business/computer dictionary program.)

3



The hangman screen tells you exactly how you are doing.

Follow these instructions to get started with hangman.

- 1 Select 2, Hangman, from the amusements menu. Press Return.
- 2 You are given a choice of three word lists. Pick the one you want by typing A for general, B for business, or C for computer.
- 3 The next thing you'll see is the Hangman screen, as shown in the illustration. Tilde signs (~) show the number of letters that make up the word.
- 4 Type a letter. (Hint: start with vowels.) Each time you type a letter, it is transformed from reverse video to normal video so you can keep track of the letters you've used. If the letter is used in the word, it will appear instead of a tilde. If the letter is incorrect, a part of the stick figure is drawn on the gallows.
- 5 Continue guessing the word until you win or the figure is hanged. The computer will give you an average score when you are finished.

Playing Worm

Worm requires steady fingers and a quick eye. Besides being a lot of fun to play, Worm helps you become accustomed to pressing the cursor control keys that move the cursor around the screen.

Here's how to select Worm.

- 1 From the global menu, select T2, Amusements, and press the Return key.
- 2 From the amusements menu, type 3 for Worm and press the Return key.
- 3 The next thing you'll see are the Worm instructions. Take time to read them. The object of Worm is to score points by having the worm eat the number prize.
- 4 When you have finished reading the instructions, press the space bar. The Worm screen is displayed.
- 5 Move the worm around with the cursor keys until its head touches or "eats," the number displayed on the screen.
- 6 Continue accumulating points until the worm runs into itself, or crashes into the screen boundary.

When the game ends, the system will ask for your name. Type your name and press Return. You'll then see a list of the 10 highest scores. If you are the first one to play Worm, only your scores will be displayed.

Shutting Down the System

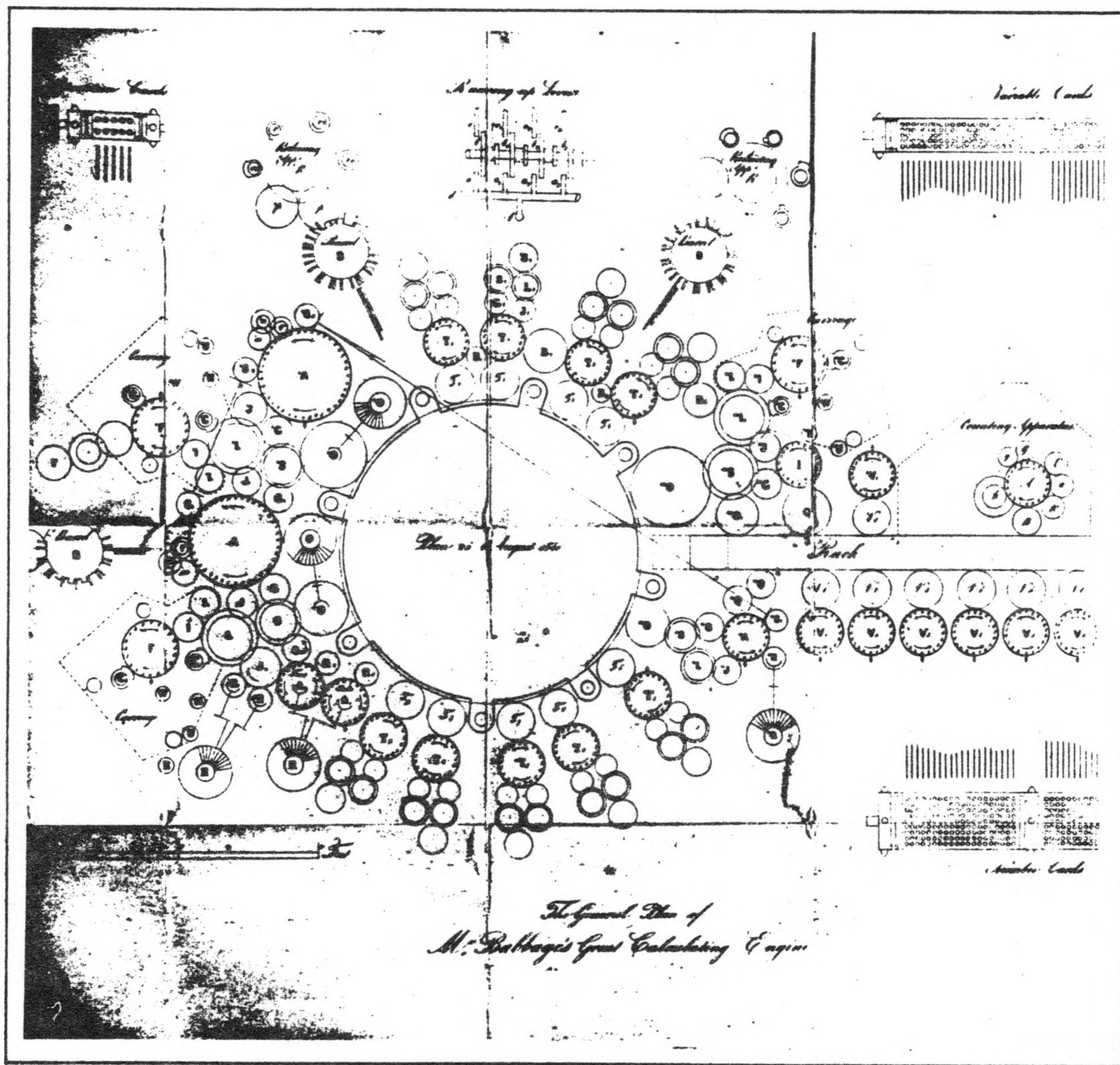
Shut down the system just as you did before. You may not use this procedure every day, but you should learn it so well that you don't have to use any procedure chart. You should be at the global menu. Here's a summary of the steps.

| !Step! | Screen Says | ! | You Type | ! | Comments | ! |
|--------|----------------------------|---|----------|---|-------------------------|---|
| ! | ! | ! | | ! | | ! |
| ! | 1 !FORTUNE SYSTEMS GLOBAL! | ! | (RETURN) | ! | | ! |
| ! | ! MENU | ! | | ! | | ! |
| ! | !SYSTEM TOOLS | ! | | ! | | ! |
| ! | ! S2 System Management ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 2 !SYSTEM MANAGEMENT MENU! | ! | (RETURN) | ! | | ! |
| ! | !30 Shutdown Computer ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | !Fortune Systems 32:16 ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 3 !Do you want to | ! | (RETURN) | ! | You must type the | ! |
| ! | ! continue? | ! | | ! | full word, <u>yes</u> . | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |

When you see the message "Please turn the Fortune 32:16 off," set the power switch at the back of the CPU to Off.

Babbage's Analytical Engine contained a great many features we now associate with much more modern computers, including the use of punch cards and a memory.

From Charles Babbage, Babbage's Calculating Engines, London, Spon, 1899.



Completing the System Setup

If your system has more than the three basic units, you need to follow instructions in this part to connect any additional unit to the basic units, and make sure that the complete system is working correctly.

In chapter 8, you'll connect additional units. Your system gets more complex, and you must put information into the computer that describes the system. This chapter tells you about the information that you need so that you can put it in the computer, and keep it available for future use.

In chapter 9, you'll connect a printer. This chapter tells you what information to look for, and how to use the information you have. To complete the process, you must turn on the system and provide information to the computer.

Chapter 10 provides step-by-step instructions for setting up a Fortune satellite workstation, connecting the workstation to the basic units, and turning the workstation on. To complete the process, you must turn on the system and provide information to the computer.

In chapter 11, you learn how to change the Fortune Operating System from a single user operating system to a multiuser operating system. This chapter provides step-by-step instructions for this procedure, and instructions for completing the process of setting up a satellite workstation.

In chapter 12, you test the system by repeating at a satellite workstation some of the procedures that you have become familiar with in the single user system. This chapter includes step-by-step procedures for those simple tests. Some simple procedures that a system manager should know about are also introduced in this chapter.

In the following five chapters, you'll learn:

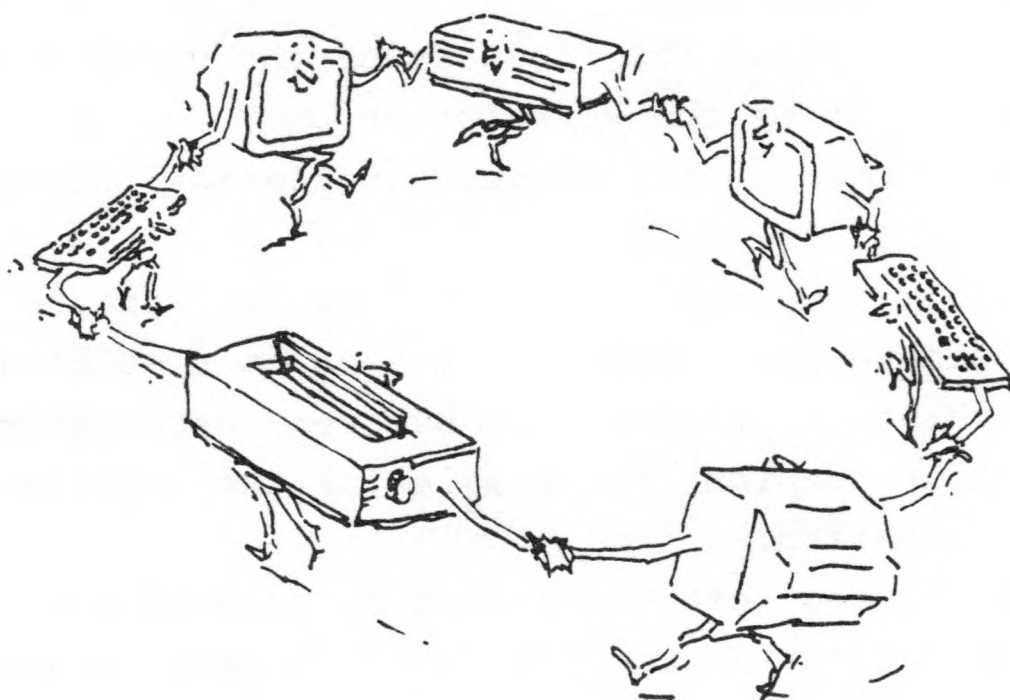
- The connections you must make between the basic units, and the additional units
- What to do to connect a printer
- What to do to connect a workstation
- How to load the multiuser operating system
- How to work with the satellite workstations

8 Connecting Additional Units

There are two parts to the process of connecting additional units: the physical and the logical. You must connect the units with cables, and perhaps put an additional controller in the CPU. You may have to install additional software. Whatever else you may do, you must inform the operating system that additional equipment has been connected.

Never connect any devices to the Fortune system while the power is On. Always shut down the system and turn off the power before connecting any unit.

It is wise to make a plan on paper of the connections you'll be making. The next section describes in detail what you'll need and how to record the changes you make to your system.



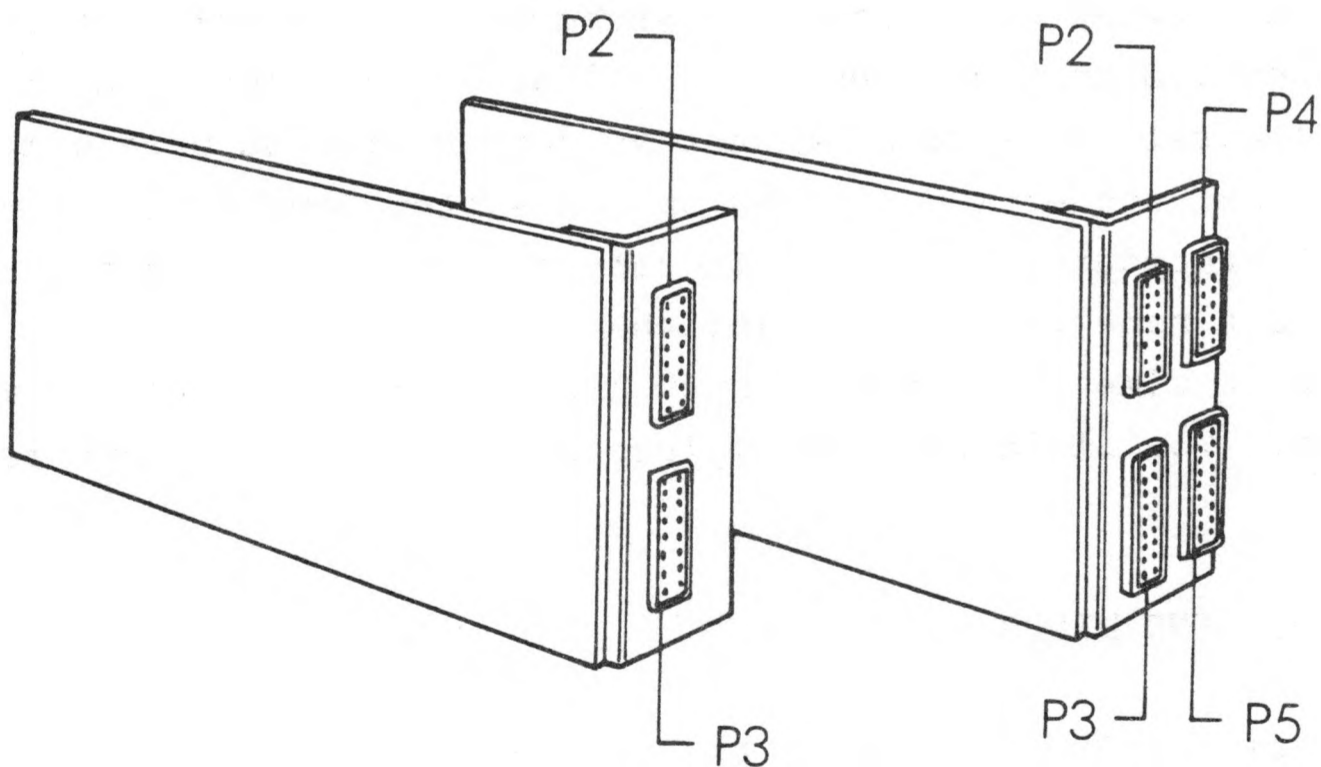
Cables and Controllers

If your only additional unit is a printer, you can connect it to the SIO connector at the back of the CPU. You'll find the connecting cable in the box with the printer. If you have any satellite workstations, you need a COM/A controller in the CPU, and a cable to connect each satellite workstation to the controller.

THE COM/A CONTROLLER

The COM/A controller (for COMMunications, Type A) is available in two models, one with two connectors, and the other with four connectors. Each connector provides a line into the CPU that is identical to the line provided by the SIO connector. These connectors can be used for printers, ASCII terminals, or for communication lines to the telephone network.

To connect a printer or ASCII terminal to the rest of the system through a COM/A controller, all you need is a cable for each unit. Printers come with the required cable.



There are two models of the COM/A controller, one with two connectors and one with four connectors.

ASCII TERMINAL

You can obtain a cable for each ASCII terminal in one of three standard lengths -- 10 feet, 20 feet, or 50 feet.

If you intend to use the telephone network, you need additional hardware. You can run a communications line between one Fortune 32:16 and another through COM/A controllers in each CPU. Consult with your dealer for detailed requirements of hardware and software.

PHYSICAL CONNECTION

If you are not using the telephone network, physical connection of an additional unit is simply a matter of installing a cable connected to the COM/A controller at one end, and to the additional unit at the other end. If you are using the telephone network, follow the instructions provided with the communications software package.

Keep a record in table or diagram form of what unit is connected to which place on the CPU. If you have only one COM/A controller, a record is convenient; with more than one COM/A controller, such a record is essential.

LOGICAL CONNECTION

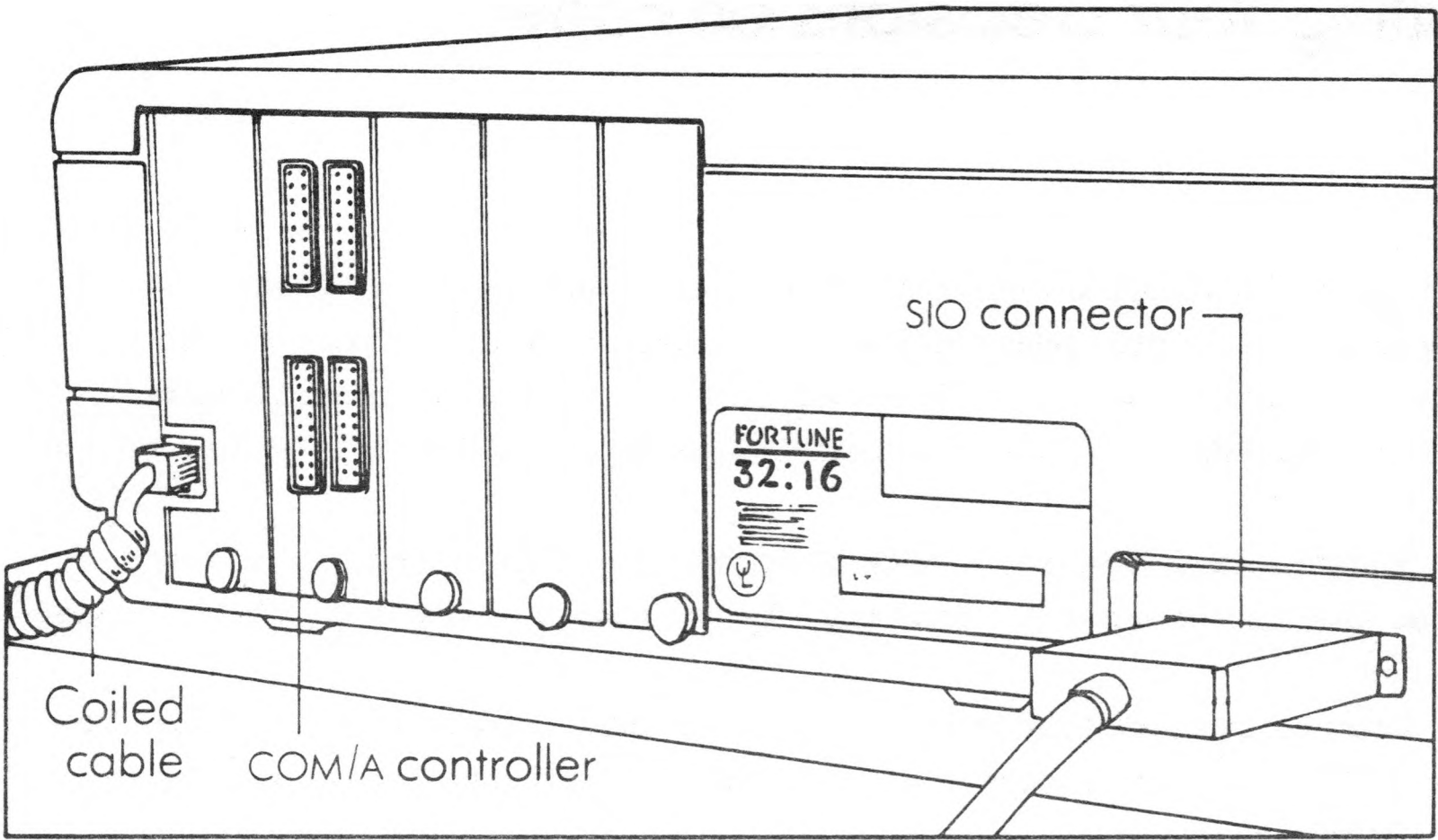
The physical connection of an additional unit prepares the system for operation. The units will not be able to operate, however, until you provide the operating system with information about the type of equipment connected to each line. This procedure, often called logical connection, cannot be done until you have completed the physical connection, turned on the system, and followed the standard procedures of typing in date and time, and logging on with the account name you have established.

At that time, you need to know the relation between hardware and software. You'll learn the complete procedure in the next few chapters.

CONNECTORS AND LINES

Your system isn't necessarily the same as any other, so you must learn to relate connectors on COM/A controllers to lines. You could have three COM/A controllers in the CPU, each with four connectors. The operating system reserves one line, designated as tty01, for the SIO connector. When you insert a COM/A controller, the operating system assigns tty numbers in sequence to each connector. If you have a COM/A controller with two connectors, P2 is assigned to line tty02, and P3 is assigned to line tty03. When you make the logical connection, you must be ready with information about the physical connection. With your written record you can be sure of correctly telling the system about physical connections.

4-4 *Completing the System Setup*



A COM/A controller is inserted in the CPU for your additional units.

Putting Your Decisions on Paper

If your only addition to the three basic units is a printer, go immediately to the section called "Connecting a Printer." If you plan to connect more than one additional unit, you should make a simple diagram or table to show how your units are connected to the CPU.

First, find the following information. The correct answers to these questions must be determined by your company for your system.

What additional unit will be attached to what connector on the CPU? (You must have this information to complete the logical connection.)

How quickly should information pass between the additional unit and the CPU? (This is known as the baud rate: the number of bits transmitted per second.)

Where will a unit that is connected to a specific connector on the CPU be located? (This information is usually needed only for satellite workstations.)

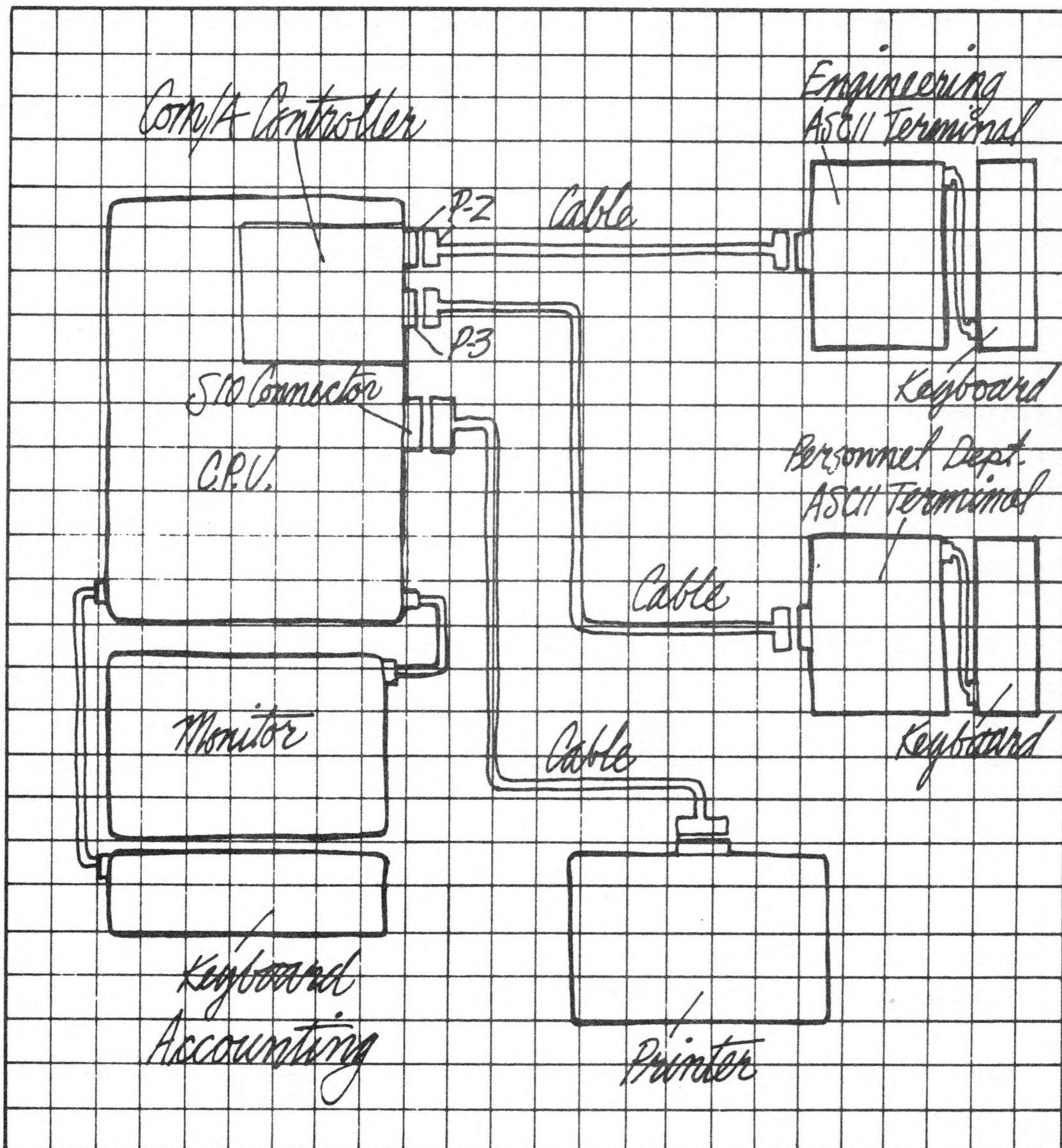
You'll need this information when you are ready to complete the logical connection or when you make any changes to your system, and possibly whenever some problem appears.

Here is a table of such information for a fictitious Fortune system with one printer and two ASCII terminals, and a cable diagram that contains the same information.

| <u>Connector</u> | <u>Line</u> | <u>Additional Unit</u> | <u>Baud</u> | <u>Location</u> |
|------------------|-------------|------------------------|-------------|-----------------|
| SIO | tty01 | Printer | 2400 | Accounting |
| P2 | tty02 | ASCII terminal | 9600 | Engineering |
| P3 | tty03 | ASCII terminal | 9600 | Personnel |

This table shows that a printer is connected to the CPU at the SIO connector. The printer is in the Accounting Department (and so is the master workstation). The ASCII terminal connected to P2 of a COM/A controller is in the Engineering Department; the ASCII terminal connected to P3 of a COM/A controller is in the Personnel Department.

For a system with more units, and a four-port COM/A controller, the table would be larger and would include entries for connectors P4 and P5.



4

Draw a diagram of your system for your records.

9 Connecting a Printer

To connect a printer to the CPU, you must first set all the controls on the printer for proper format, baud rate, print size, and other requirements. Then you insert a cable from the printer into one of the connectors on the CPU.

FIND ANSWERS TO YOUR QUESTIONS IN THE PRINTER MANUAL

Each type of printer has slightly different features, and slightly different switches and indicators. You must learn to use the guide provided with your printer to answer questions that will come up during daily use, and for information that you must have to connect the printer to the CPU.

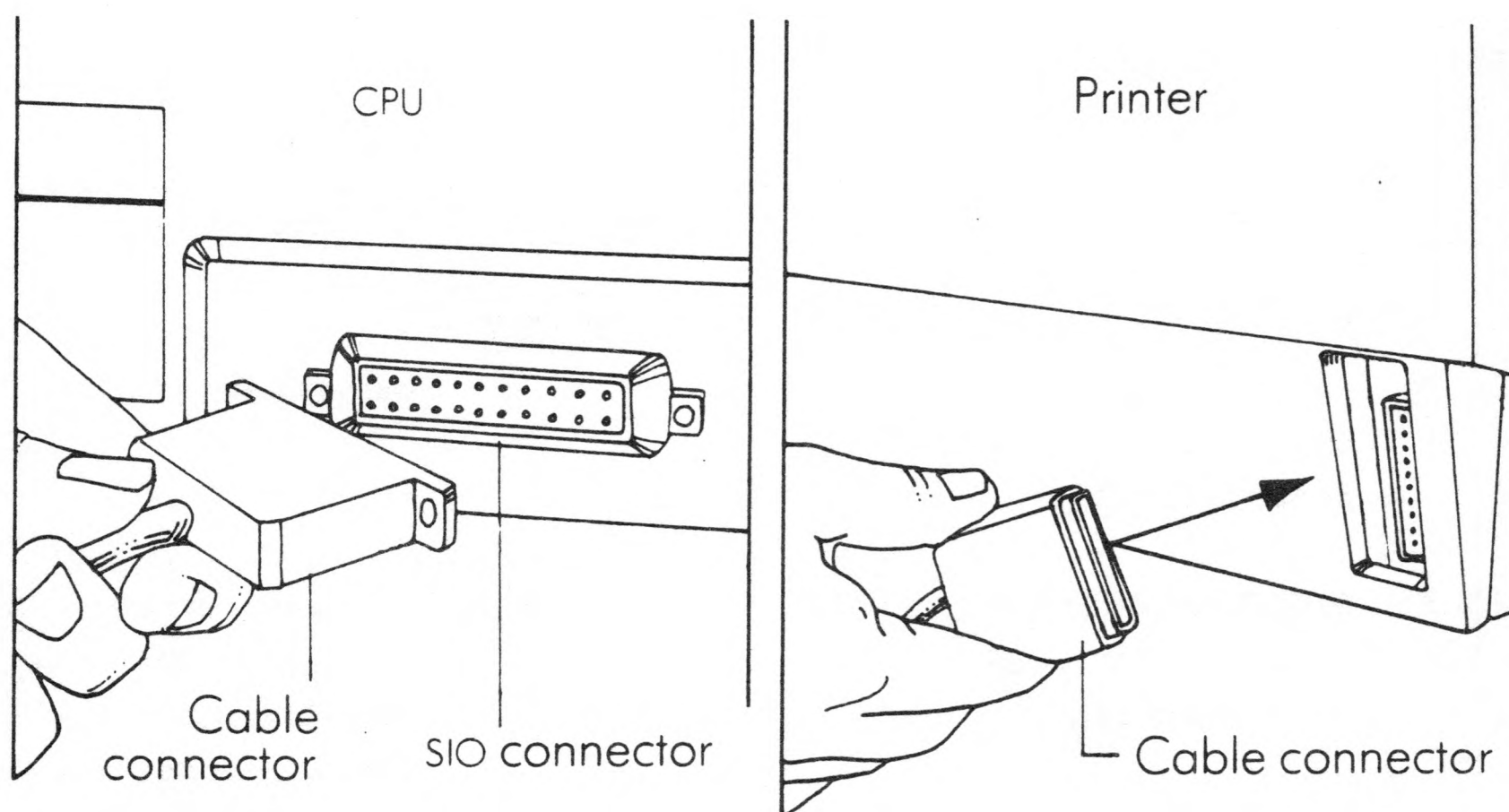
Look through the manual you got with the printer to find answers to these questions:

- How can the printer be set for serial operation?
- What are the proper settings and indications for each kind of operation of the printer, such as self-test, offline, form feed, and similar operations?
- How do you load paper into the printer?
- How do you align paper in the printer so that the type is in the proper location in forms?
- How do you change a ribbon in the printer? How often should the ribbon be changed?
- What should you do to correct a jam condition?
- How do you set baud rate and other system information, such as the use of parity or the number of stop bits?
- What are the special features of the printer character set?

You should check with your Fortune Systems dealer about the use of any printer with the Fortune 32:16. The details for connecting a Fortune System printer depend upon which printer you have. Here is a general outline.

4-8 *Completing the System Setup*

- 1 Set printer controls for the number of characters per line, type size, and other options available.
- 2 Connect the printer to a power outlet and perform the self-test.
- 3 Turn off power to the printer.
- 4 Connect one end of printer cable to the printer.
- 5 Connect the other end of the printer cable to the SIO connector on the CPU.
- 6 Turn on power to the printer and set the printer controls for online operation.



Connect the cable to the CPU and the printer.

Telling the Operating System About a Printer

After you have physically connected the printer to the CPU at the SIO and made the necessary settings, turn the printer on. It should be in online mode. This means that the printer is ready to receive data from the CPU. The last step is to tell the operating system that the printer is connected and what type it is.

The logical connection is controlled by the person logged in as system manager and should be done any time you connect a printer to the system, change the printer's baud rate, or change the connector line. The baud rate setting on the printer must match the baud rate settings you enter or the printer will not operate properly.

Following is the procedure used to make your printer known to the operating system.

| !Step! | Screen Says | ! | You Type | ! | Comments | ! |
|--------|--------------------------|---|----------|---|----------|---|
| ! | ! | ! | | ! | | ! |
| ! | 1 ! FORTUNE SYSTEMS | ! | s2 | ! | (RETURN) | ! |
| ! | ! GLOBAL MENU | ! | | ! | | ! |
| ! | ! Enter Selection & | ! | | ! | | ! |
| ! | ! Press (RETURN): | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 2 ! SYSTEM MANAGEMENT | ! | 39 | ! | (RETURN) | ! |
| ! | ! 39 Change device | ! | | ! | | ! |
| ! | ! connections | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 3 ! CHANGE DEVICE | ! | t | ! | (RETURN) | ! |
| ! | ! CONNECTION | ! | | ! | | ! |
| ! | ! Table | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 4 ! These Are Your | ! | | ! | (RETURN) | ! |
| ! | ! Current Line Settings! | ! | | ! | | ! |

| !Step! | Screen Says | ! | You Type | ! | Comments | ! |
|--------|--------------------------|---|----------|---|----------|---|
| ! | ! | ! | | ! | | ! |
| ! | 5 ! CHANGE DEVICE | ! | p | ! | (RETURN) | ! |
| ! | ! CONNECTION | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 6 ! DEVICE TYPE | ! | 1 or 2 | ! | (RETURN) | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 7 ! -Press RETURN for | ! | | ! | (RETURN) | ! |
| ! | ! menu or select ahead. | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 8 ! CHANGE DEVICE | ! | t | ! | (RETURN) | ! |
| ! | ! CONNECTION | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 9 ! These Are Your | ! | | ! | (RETURN) | ! |
| ! | ! Current Line Settings! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 10 ! CHANGE DEVICE | ! | | ! | (CANCEL) | ! |
| ! | ! CONNECTION | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 11 ! SYSTEM MANAGEMENT | ! | | ! | (CANCEL) | ! |
| ! | ! | ! | | ! | | ! |

4

After you have returned to the global menu, you are ready to test the printer.

CHANGE DEVICE CONNECTION

Enter Selection & Press (RETURN):

Valid selections are:

- 1 thru 13 for connection numbers
- Printer to set connection 1 as Printer
- table for a list of the current devices and settings.

View From Back Of FORTUNE 32:16

| | | | | | | | |
|---------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|--------------------------------|--------------------------------|---|
| | 2 <input type="checkbox"/> | 4 <input type="checkbox"/> | 6 <input type="checkbox"/> | 8 <input type="checkbox"/> | 10 <input type="checkbox"/> | 12 <input type="checkbox"/> | You may use only one of these: 1 or Printer <input type="checkbox"/> |
| CRT <input type="checkbox"/> | 3 <input type="checkbox"/> | 5 <input type="checkbox"/> | 7 <input type="checkbox"/> | 9 <input type="checkbox"/> | 11 <input type="checkbox"/> | 13 <input type="checkbox"/> | |

Not all Fortune Systems look identical to this drawing.
Press (HELP) For More Information Press (CANCEL) For Sys Management Menu

On this screen you select the line that matches the connector.

These Are Your Current Line Settings

```
-----  
Line #      Device      Baud Rate  
  
tty01      unknown     19200  
tty02      unknown     19200  
tty03      unknown     19200  
tty04      unknown     19200  
tty05      unknown     19200  
tty06      unknown     19200  
tty07      unknown     19200  
tty08      unknown     19200  
tty09      unknown     19200  
tty10      unknown     19200  
tty11      unknown     19200  
tty12      unknown     19200  
tty13      unknown     19200  
lp         dUMP        undefined
```

Please Make A Note of Desired Changes
Press (RETURN) when ready.

After you have connected all additional units, this screen contains the information you have typed in.

DEVICE TYPE

Enter Number & Press (RETURN):

- 1 Letter Quality Printer
(Set to 9600 baud)
- 2 Dot Matrix Printer
(Set to 9600 baud)
- 3 Fortune Satellite Workstation
(Set to 19200 baud)
- 4 Disable Device Connection
- 5 Set Any Other Device or Baud Rate

Press (HELP) for more information Press (CANCEL) for Systems Management Menu

At this screen, you can select standard baud rates with a single keystroke.

4

| !Step! | Screen Says | ! | You Type | ! | Comments | ! |
|--------|------------------------|---|----------------|---|------------------|---|
| ! | ! | ! | | ! | | ! |
| ! | 1 ! FORTUNE SYSTEMS | ! | s2 | ! | (RETURN) | ! |
| ! | ! GLOBAL MENU | ! | | ! | | ! |
| ! | ! Enter Selection & | ! | | ! | | ! |
| ! | ! Press (RETURN): | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 2 ! SYSTEM MANAGEMENT | ! | 39 | ! | (RETURN) | ! |
| ! | ! 39 Change device | ! | | ! | | ! |
| ! | ! connections | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 3 ! CHANGE DEVICE | ! | p | ! | (RETURN) | ! |
| ! | ! CONNECTION | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 5 ! DEVICE TYPE | ! | 5 | ! | (RETURN) | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 6 ! DEVICE CONNECTION | ! | (baud rate and | ! | Type in the baud | ! |
| ! | ! | ! | printer) | ! | (RETURN) | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 7 ! CHANGE DEVICE | ! | t | ! | (RETURN) | ! |
| ! | ! CONNECTION | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 8 ! These Are Your | ! | | ! | (RETURN) | ! |
| ! | ! Current Settings | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 9 ! CHANGE DEVICE | ! | | ! | (CANCEL) | ! |
| ! | ! CONNECTION | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 10 ! SYSTEM MANAGEMENT | ! | | ! | (CANCEL) | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |

As before, you must turn power to the printer off, then on again, to set changes you have made.

DEVICE CONNECTION

Enter Baud Rate Number & Device Type & Press (RETURN):

| BAUD | RATES | DEVICE TYPES | |
|-------|-------|--------------|-----------------------|
| 50 | 1800 | | |
| 75 | 2400 | letter | quality printer |
| 110 | 3600 | dot | matrix printer |
| 134.5 | 4800 | fortune | satellite workstation |
| 150 | 7200 | | |
| 300 | 9600 | | |
| 600 | 18200 | | |
| 1200 | | | |

EXAMPLE

Enter Baud Rate Number & Device Type & Press (RETURN): 2400 1

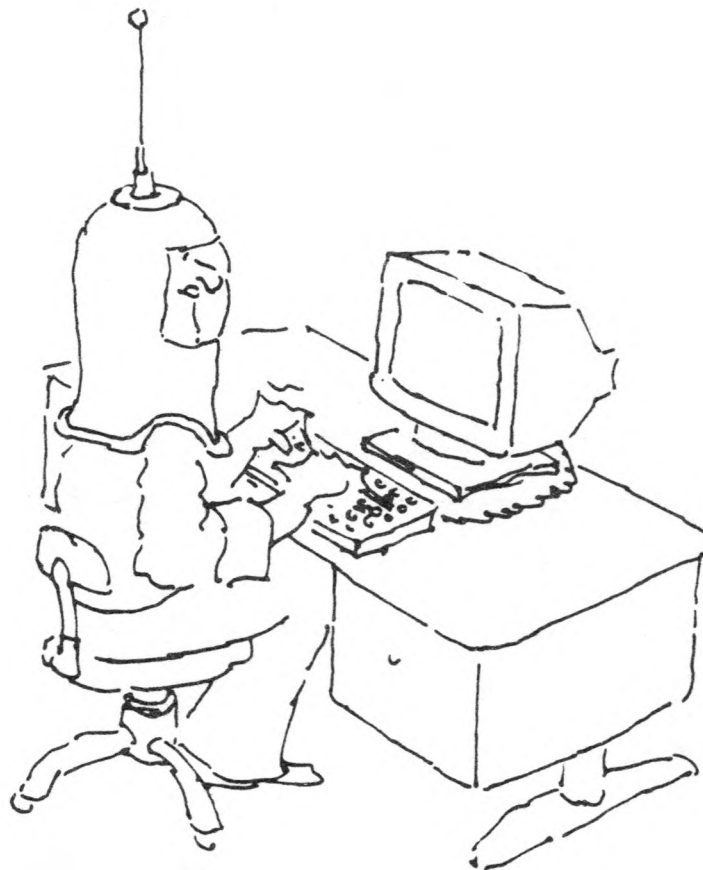
This example will set the line number you selected to have a
baud rate of 2400 for your letter quality printer

Press (HELP) For More Information

You can select any baud rate on this screen.

10 Setting Up a Satellite Workstation

A satellite workstation consists of a display unit and a keyboard connected to each other and to the CPU. If you have a satellite workstation that consists of an ASCII terminal and a keyboard, you need to unpack it, connect it to your Fortune system, and get it ready for use. After making the physical connection you'll prepare the Fortune Operating System to support more than one user in "Loading the Multiuser Operating System."



Unpacking the Satellite Workstation

The ASCII terminal comes packed with the keyboard in a carton marked ASCII. Unpack the ASCII terminal and keyboard as follows:

- 1 Remove the tape and open the top of the box.
- 2 Read the important shipping notice on the top and be sure to report any damage to your dealer.
- 3 There are two warranty cards beneath this notice, one for the ASCII terminal and one for the keyboard. Put these cards with the warranty cards from the CPU.
- 4 Remove the long box in the top center of the carton. This box contains the keyboard.
- 5 Carefully cut the tape along the cardboard sleeve. The keyboard is inside, enclosed in foam-backed cardboard.
- 6 The cords for the terminal and keyboard are wrapped in a light styrofoam sheet and packed at the back of the terminal. Unpack the cords and put them aside.
- 7 Two people will be needed to remove the ASCII terminal from the carton. Have one person hold onto the box while the other person reaches into the box, grasps the terminal near its base, and lifts it upward. When the ASCII terminal is almost out of the box, the second person should let go of the carton and help the first person gently place the terminal on the floor.
- 8 Have one person hold the terminal while the other person removes the insulating foam from both sides. Then remove the plastic wrapping and place the terminal next to the CPU and keyboard.
- 9 Put the insulation and wrapping for the cables back in the box.

SAVE THE BOXES

Keep the boxes and the shock-absorbing material. If you need to ship the system somewhere, or need to go some distance for service, you should repack the system in the cartons.

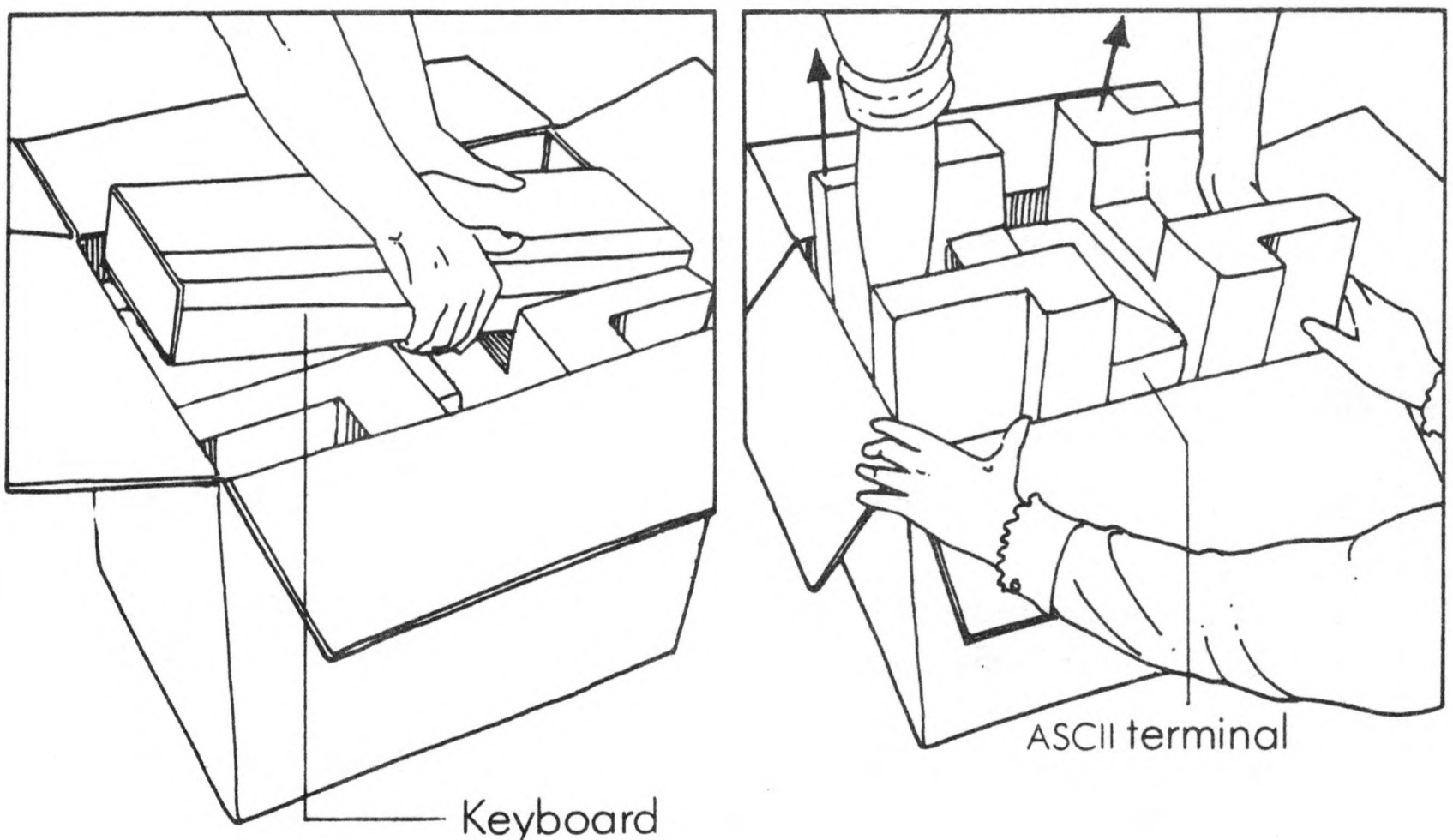
4-18 *Completing the System Setup*

WARRANTY CARDS AND INFORMATION

Make sure that the warranty cards are filled out and that the appropriate copies are returned to Fortune Systems Corporation in the envelope provided. Keep your copies in a safe place, because you'll need them if your system needs repairs during the warranty period.

There is a warranty card for the ASCII terminal and keyboard. Each unit also has an identification label with a serial number. Take the correct warranty card with you when you need service on a unit. To help you tell the difference between one card and another, the serial number is preceded by a code:

| <u>Code</u> | <u>Unit</u> |
|-------------|----------------|
| KB | Keyboard |
| AT | ASCII terminal |



This is how the ASCII terminal is packaged.

Connecting the Satellite Workstation

Now that you have the ASCII terminal and the keyboard on the operator's desk, get them connected and ready to use. The control cable from the master workstation should have been installed by this time.

PUT THE ASCII TERMINAL IN ITS PLACE

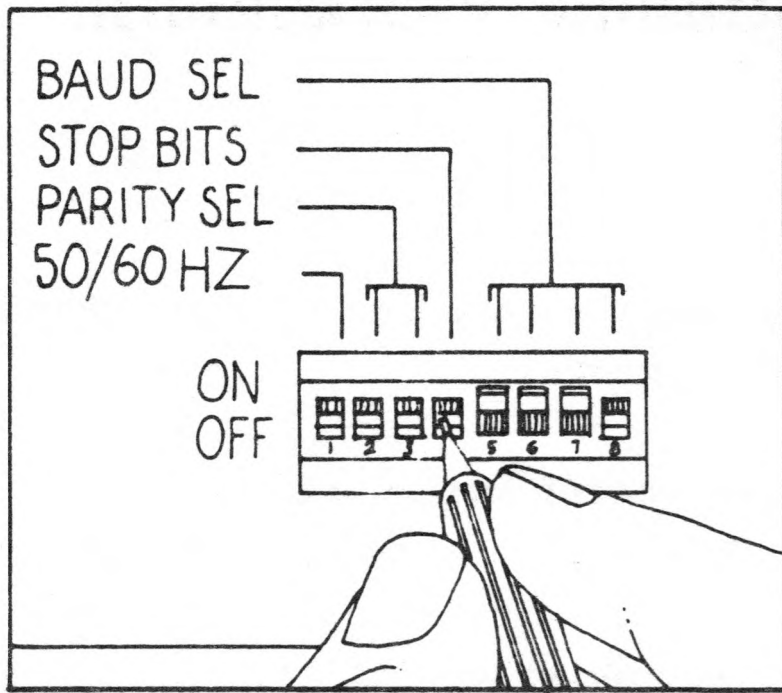
- 1 Be sure the front of the ASCII terminal faces the operator's chair. You can attend to details of placement later, after the keyboard has been connected.
- 2 Insert the plug end of the power cable into the receptacle at the back of the ASCII terminal. Do not connect the other end of the cable to an electrical outlet now. Wait until the keyboard is connected.
- 3 Insert the plug of the control cable into the connector marked Host at the rear of the ASCII terminal.

ATTACH THE KEYBOARD

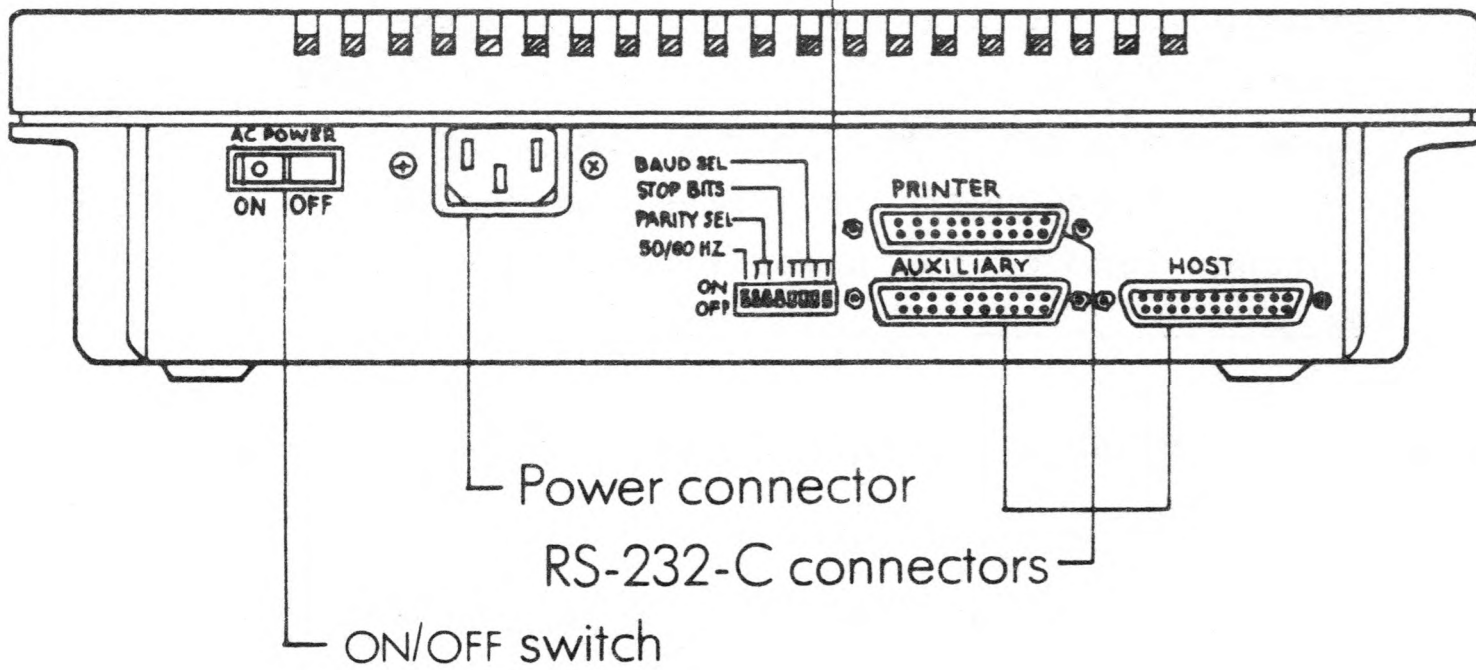
- 1 Put the keyboard on the desk in front of the ASCII terminal.
- 2 Connect the coiled cable to the connector at the back of the keyboard. Push the cable in to make sure it is firmly seated.
- 3 Insert the other end of the the coiled cable into the connector at the front of the ASCII terminal on the lower right-hand side. Push the cable in to make sure it is firmly seated.

CHECK THE SWITCHES ON THE ASCII TERMINAL

Be sure the switches on the ASCII terminal are set in the proper positions for operation of the system. You must decide the baud rate, which can be as high as 19200 baud. Refer to Part 5 for details of switch settings. You can use the tip of a mechanical pencil to set the switches. (Any tool with a tip that is narrow and strong can be used.)



Setting the configuration switches



4

At the back of the ASCII terminal are the power on/off switch, the cable connectors, and the configuration switches.

Turning On the Satellite Workstation

Now that all the units are unpacked and set up, you need to turn on the power and make some adjustments.

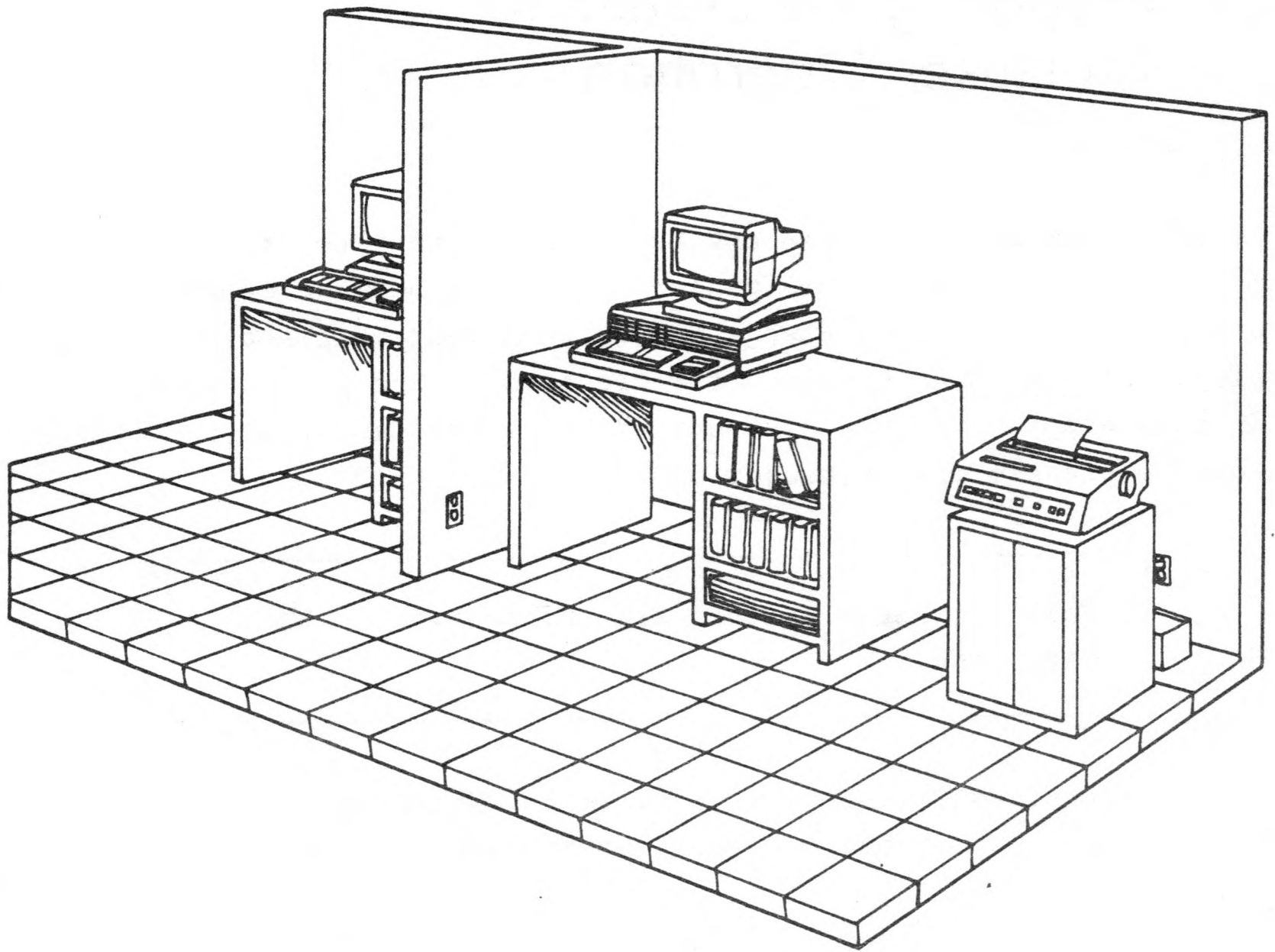
- 1 Make sure that the power on/off switch of the ASCII terminal is in the Off position. The switch has a small white dot on one side. When that side of the switch is out, the power is off. Now you should check that the side with the white dot is out.

The power cable has a three-pronged connector. If you don't have that kind of outlet, use an adapter. For your safety, and for the protection of the system, connect the ground lead of the adapter to a local ground.

- 2 Connect the power cable from the ASCII terminal to the power outlet.
- 3 Set the power switch to On. The screen will be lighted, and the cursor will be in the upper left-hand corner of the screen.

The ASCII terminal is ready, but it will not work until it has been logically connected to the system by typing in information at the master workstation.

- 4 Reach behind the ASCII terminal and set the power switch to Off until you have completed the logical connection.
- 5 Perform an orderly shutdown as described in "Shutting Down the System" in part 3 of this guide.



4

A multiuser system setup looks like this.

11 Preparing the System for Multiuser Operation

In this chapter, you learn how to prepare a Fortune system for multiuser operation. A multiuser system can be used by more than one person at a time. When a new Fortune system is set up, it is a single user system, intended for use by only one person at a time. In this chapter, you'll find out what you need and what you must know to prepare for multiuser operation.

This procedure deletes all information on the hard disk.

The detailed instructions begin with "Changing Information on the Maintenance Screen." Here is an overview of the procedure.

- Insert the backup copy labeled "cold boot disk #1" into the flexible disk drive. You made this disk earlier.
- Turn on the CPU in a special way so that the CPU displays the maintenance screen.
- Make some changes in the information displayed on the maintenance screen, and cause the CPU to read from the flexible disk.
- Make some changes in the information displayed on the screen, and cause the CPU to read more information from the flexible disk. Follow the instructions that appear on the screen as the procedure continues.
- Type in the date and time in the usual manner when the date and time screen is displayed, and log in as system manager when the login screen is displayed.
- Select Product Maintenance from the global menu and load the FOS multiuser master disk.

Loading the Operating System

When the hard disk has no information on it, or when you want to treat it as if it had no information on it, you load the operating system from the master disks (or from the backup copies). The operating system must be loaded as part of the manufacturing process. It must also be loaded in other circumstances, including the present situation, in which you want to change the single user system to a multiuser system.

NORMAL OPERATION

When you turn on your Fortune system, it automatically transfers information from the hard disk to memory, checks that the file structure is in order, and displays the date and time screen. That's what you want it to do during normal operation.

OPERATION WHILE LOADING THE OPERATING SYSTEM

To load the operating system, the computer must transfer information from a flexible disk to the hard disk. To have the computer do this, you first turn on the computer in a way that is different from normal, and change some information in its internal memory so that it will read from the flexible disk instead of from the hard disk. As you continue with the procedure, you replace one flexible disk with another, and the computer continues to transfer information until all the necessary information is on hard disk.

DISK DIFFERENCES BETWEEN SINGLE USER SYSTEMS AND MULTIUSER SYSTEMS

For a multiuser system, the operating system reserves space on the hard disk to store information for each of the potential system users. If the operating is set up for multiuser operation, but is available to only one user at a time, this reserved space is wasted. Therefore, when the Fortune system is shipped from the factory, it is set up as a single user system.

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WHAT YOU WILL NEED

To change your system to a multiuser system, you must have the following items.

- The two backup copies you made when you used the Product Maintenance selection to make backup copies of cold boot.
- The Multiuser Operating System master disk, which is an application program available from Fortune Systems Corporation.

WHAT YOU MUST KNOW

To change your system to a multiuser system, you must have answers to two questions.

- 1 What type of hard disk drive do you have? Look at the system configuration decal on the back of the CPU. The alphanumeric code in the block labeled DEVICE/LEFT identifies the type of hard disk drive. If you cannot find the decal, call your dealer to determine what code you should use.
- 2 How many users will you have on your system? (For each satellite workstation in your system, you have one user in addition to the user at the master workstation. If you have three satellite workstations, your system has four users. The options available are a maximum of three users, and a maximum of five users.)

Write the correct answers for your system on a piece of paper, so that they are available when you need them. Then follow the detailed instructions for the procedure.

Changing Information on the Maintenance Screen

The first step in loading the operating system is to display the maintenance screen. The function keys at the top of the keyboard, the Return key, and the space bar, have special uses in this procedure. Follow these steps:

- 1 Insert the flexible disk (you previously labeled cold boot disk #1) into the flexible disk drive and close the drive door. At the end of the following procedure, the computer will copy part of the operating system from this disk, and store it on the hard disk.
- 2 While holding down the Cancel Del key, press the power switch to the On position. Continue holding the cancel key until the maintenance screen is displayed, as in the illustration below.

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| | | |
|----|----------------------------|------------------|
| F1 | Change Front port speed | 2400 |
| F2 | Change Back port speed | 9600 |
| F3 | Change power-up action | Boot up |
| F4 | Change boot device | WD boot, drive 0 |
| F5 | Change boot program number | 0 |
| F6 | Change floppy drive type | Tandon |
| F7 | Set boot file name | hd02/unix |
| F8 | Read settings from EAROM | |
| F9 | Save settings into EAROM | |

EXECUTE
HELP

Type any highlighted key

EAROM has been changed 4 times

The maintenance screen first appears like this. The heading and some entries in the third column may be different on your system.

- 3 Take time now to examine the illustration of the maintenance screen below. You'll be changing the information in the third column of boot device (row F4) and the boot file name (row F7) to match that illustration.

HOW TO MAKE CHANGES

One method you'll use to make changes on this screen is different from the method you've been using. Here are instructions for practice before you use the procedure chart.

- 1 Press the F4 key. The words "Change boot device" appear in reverse video.
- 2 Press the space bar. Notice that the entry in the third column changes. Repeat the procedure of pressing the space bar and noting the entry until the entry in the third column reads "WD Boot, Drive # 0", as it did before.

Here are your changes

```
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F1      Change Front port speed      2400
F2      Change Back port speed     9600
F3      Change power-up action     Boot up
F4      Change boot device         Floppy, drive 0
F5      Change boot program number  0
F6      Change floppy drive type   Tandon
F7      Set boot file name         fd02/sa/reconf
F8      Read settings from EAROM
F9      Save settings into EAROM

EXECUTE
HELP

Type any highlighted key

EAROM has been changed 4 times
```

The maintenance screen looks like this after you have made changes.

TYPING IN THE CHANGES

Follow the procedure to change the maintenance screen. Make sure that the changes to row F4 and row F7 are as listed in the illustration before you press the Execute key.

| !Step! | Screen Says | ! | You Type | ! | Comments | ! |
|--------|----------------------------|---|----------------|---|---------------------|---|
| ! | ! | ! | ! | ! | ! | ! |
| ! | 1 ! F4 Change Boot Device! | ! | (F4) | ! | "Change boot | ! |
| ! | ! | ! | ! | ! | device" is in | ! |
| ! | ! | ! | ! | ! | reverse video. | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | 2 ! WD Boot, Drive #0 | ! | (space bar) | ! | Press space bar | ! |
| ! | ! | ! | ! | ! | until entry in | ! |
| ! | ! | ! | ! | ! | third column | ! |
| ! | ! | ! | ! | ! | changes to | ! |
| ! | ! | ! | ! | ! | Floppy, drive #0. | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | 3 ! F7 Set boot file name! | ! | (F7) | ! | "Set boot file | ! |
| ! | ! | ! | ! | ! | name" is in re- | ! |
| ! | ! | ! | ! | ! | verse video; third! | ! |
| ! | ! | ! | ! | ! | column is blank. | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | 4 ! | ! | fd02/sa/reconf | ! | Type a zero, not | ! |
| ! | ! | ! | (RETURN) | ! | capital o. | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | 5 ! | ! | ! | ! | Check that the | ! |
| ! | ! | ! | ! | ! | screen matches the! | ! |
| ! | ! | ! | ! | ! | "after" screen. | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | 6 ! | ! | (EXECUTE) | ! | ! | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | 7 ! Fortune Systems 32:16! | ! | ! | ! | ! | ! |
| ! | ! | ! | ! | ! | Please Wait | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | ! | ! | ! | ! | Fortune Systems | ! |
| ! | ! | ! | ! | ! | Next you'll work | ! |
| ! | ! | ! | ! | ! | with the confi- | ! |
| ! | ! | ! | ! | ! | guration menu. | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | ! | ! | ! | ! | ! | ! |

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Changing Information on the Configuration Menu

The configuration menu provides information about operation of the Fortune system. On this menu, you need to change root device and swap device. In each case, a change is made by moving the cursor to the entry with the Return key, typing in the change, and pressing the Return key.

Fortune Systems Configuration Menu

```
Power up action = BOOT           Console location = CRT
  Boot device = hd                Timezone = PACIFIC
  Boot drive # = 00              Daylight savings = YES
  Boot Program # = 00            Line frequency = 60
  Boot file = hd02/unix          Number buffers = 010
  Flex drive #1 = TANDON          Number inodes = 040
  Flex drive #2 = TANDON          Number files = 040
  Flex drive #3 = TANDON          Number texts = 005
  Flex drive #4 = TANDON          Number clists = 010
  Root device = hd02             Number processes = 010
  Swap device = hd01             Max process size = 160
TTY00 port speed = 2400          Set params auto? = YES
TTY01 port speed = 9600          Appx. # users = 1
```

EAROM has been changed 11 times

Revision 1.1 Mon Sep 13 10:11:42 1982
F1 = STORE F2 = READ F3 = GO F4 = REBOOT

The configuration menu looks like this when it is first displayed.

The procedure guides you through the changes on the configuration menu.

| !Step! | Screen Says | ! | You Type | ! | Comments | ! |
|--------|----------------------|---|--------------------|---|---------------------|---|
| ! | ! | ! | ! | ! | ! | ! |
| ! | 1 ! Fortune Systems | ! | (RETURN) | ! | ! Press the Return | ! |
| ! | ! Configuration Menu | ! | | ! | ! key until the | ! |
| ! | ! | ! | | ! | ! cursor is at | ! |
| ! | ! | ! | | ! | ! "Root device". | ! |
| ! | ! | ! | | ! | ! | ! |
| ! | 2 ! Root device | ! | fd02 (RETURN) | ! | ! Type a zero, not | ! |
| ! | ! | ! | | ! | ! the letter o. | ! |
| ! | ! | ! | | ! | ! Cursor moves to | ! |
| ! | ! | ! | | ! | ! swap device. | ! |
| ! | ! | ! | | ! | ! | ! |
| ! | 3 ! Swap device | ! | fd01 (RETURN) | ! | ! Type a zero, not | ! |
| ! | ! | ! | | ! | ! the letter o. | ! |
| ! | ! | ! | | ! | ! | ! |
| ! | 4 ! | ! | | ! | ! Check that the | ! |
| ! | ! | ! | | ! | ! screen matches | ! |
| ! | ! | ! | | ! | ! the "after" | ! |
| ! | ! | ! | | ! | ! illustration. | ! |
| ! | ! | ! | | ! | ! Now finish the | ! |
| ! | ! | ! | | ! | ! process by | ! |
| ! | ! | ! | | ! | ! pressing F3. | ! |
| ! | ! | ! | | ! | ! | ! |
| ! | 5 ! F1 = STORE | ! | (F3) | ! | ! Wait for the boot | ! |
| ! | ! F2 = READ | ! | | ! | ! prompt. | ! |
| ! | ! F3 = GO | ! | | ! | ! | ! |
| ! | ! F4 = REBOOT | ! | | ! | ! | ! |
| ! | ! | ! | | ! | ! | ! |
| ! | 6 ! Boot: | ! | fd02/unix (RETURN) | ! | ! Type a zero, not | ! |
| ! | ! | ! | | ! | ! the letter o. | ! |
| ! | ! | ! | | ! | ! Cursor moves to | ! |
| ! | ! | ! | | ! | ! next line. | ! |
| ! | ! | ! | | ! | ! | ! |

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After you type in "fd02/unix" and press the Return key, do not touch the keyboard until a new screen appears and prompts you for a response.

Fortune Systems Configuration Menu

```
Power up action = BOOT           Console location = CRT
  Boot device   = hd             Timezone       = PACIFIC
  Boot drive # = 00             Daylight savings = YES
  Boot Program # = 00           Line frequency  = 60
  Boot file     = hd02/unix      Number buffers  = 010
  Flex drive #1 = TANDON         Number inodes   = 040
  Flex drive #2 = TANDON         Number files    = 040
  Flex drive #3 = TANDON         Number texts    = 005
  Flex drive #4 = TANDON         Number clists   = 010
  Root device   = fd02          Number processes = 010
  Swap device   = fd01          Max process size = 160
TTY00 port speed = 2400         Set params auto? = YES
TTY01 port speed = 9600         Appx. # users   = 1
```

EAROM has been changed 11 times

Revision 1.1 Mon Sep 13 10:11:42 1982
F1 = STORE F2 = READ F3 = GO F4 = REBOOT

This is how the menu will look after you have made changes.

Selecting the Multiuser Option

Now is the time you need the information about the type of hard disk drive in your system, and the number of users for your system. During the following procedure, you make selections from menus according to the information you have, and then have the operating system organize the hard disk according to those inputs.

Select a function key: [HELP] for more information.

- [F1] To completely erase and reload your hard disk.
- [F2] To reload your hard disk without erasing or reformatting. (Not implemented yet.)
- [F3] To retry starting up the system as specified in the Maintenance Screen.
- (Anything else typed in will be executed as a maintenance command.)

Select:

Select the first option by pressing the F1 function key.

USING THE OTHER SELECTIONS

- 1 Press the F1 key. A new screen is displayed.

Your Fortune Computer is currently configured to work with a A10 disk.

Please check the SYSTEM CONFIGURATION DECAL located on the outside of the computer to determine that this is correct.

If you are unable to find this Decal, contact your Fortune dealer.

Is DISK A10 printed on your SYSTEM CONFIGURATION DECAL?

Press (F1) for Yes

Press (F2) for No

Make sure that you have the proper code before you answer yes to this question.

- 2 When the new screen appears, make sure that the disk code on the screen matches the disk code on the system configuration decal on the back of the CPU. It must be the same as the code in the DEVICE/LEFT block. If the code is correct, answer yes by pressing function key F1, and skip to step 4. If the code is incorrect, answer no by pressing function key F2, and continue and with step 3.

- 3 If you answer no, you'll see a screen that lists many disk codes. Earlier in this procedure, you noted the correct code for your hard disk. Find that code on the screen. Type in the number that is next to that code on the screen, and press the Return key. The system will begin a procedure to clear the disk and test it. This procedure may take twenty minutes or more, depending upon the size of your hard disk, and the amount of memory you have. During the procedure, you'll see the messages "Clearing hard disk. Please Wait," and "Testing hard disk. Please Wait." At the end of the procedure, you will see the same screen you saw in step 2. This time, your answer should be yes.

Please select one of the following DISKS by entering the corresponding number and pressing (RETURN):

| | | | | |
|--------|--------|---------|---------|---------|
| 1: Z5 | 5: B10 | 9: C20 | 13: E5 | 17: F10 |
| 2: A5 | 6: C5 | 10: D5 | 14: E10 | 18: F15 |
| 3: A10 | 7: C10 | 11: D10 | 15: E15 | 19: G25 |
| 4: B5 | 8: C15 | 12: D15 | 16: F5 | |

The disk information is listed on the SYSTEM CONFIGURATION DECAL on the outside of your Fortune system.

Select the code that identifies the hard disk on your system. The screen on your system may include codes that are not on this figure.

- 4 On the new screen you define the number of users in your system by pressing one of the function keys. If the maximum number of users on your system is three, press function key F2. If the maximum number of users is greater than three, press function key F3. The system will immediately begin to display messages on the screen. Follow the instructions on the screen as they appear.

```
Your system is currently configured for 1 users.  
Please select one of the following or Press EXECUTE to  
preserve the current number of users.
```

```
F1 = 1 user  
F2 = 2-3 users  
F3 = 3-5 users
```

```
b  
Installing bootstrap loader....  
Making filesystem....  
file system size = 8702  
isize = 2784  
m/n = 2 34  
Copying files....  
First Pass complete
```

```
You must now power the system off and on again (or reset)
```

Follow instruction when it appears. Do not remove the flexible disk.

The illustration shows the response to a system with an A10 disk drive and a maximum of three users. Some numbers will be different for other selections.

After you select the number of users, messages like these will appear on the screen, but numbers for your system may be different.

```
Cold boot floppy Release 1.2.1 -- Part 2
Making lost+found/ ..... done
Checking hard disk . . . .
/dev/hd02: 29 files 265 blocks 8261 free
Copying files from floppy #1 . . . .
```

```
Finished with floppy #1. Remove it and insert floppy #2.
```

```
Linking f#1 utilities . . . .
Making device special-files . . . .
Finished making special-files.
Is floppy #1 replaced with #2 yet (y or n)? y
Copying files from floppy #2 . . . .
```

```
Finished with floppy #2. You may remove it.
```

```
Linking f#2 utilities . . . .
Installation complete
B 9
```

Follow instructions when they appear.

After the last line of this screen appears, the date and time screen displays automatically.

The illustration shows the response to a system with an A10 disk drive and a maximum of three users. Some numbers will be different for other selections.

Some important points for this part of the procedure are:

- Remove disk 1 and insert disk 2 when the message appears.
- Respond to the question, or the system will stop.
- When the date and time screen is displayed, type in the correct date and time as for the normal procedure. Press the Return key and wait for the login screen.
- When the login screen is displayed, log in as manager so that you will be able to perform the necessary procedures to complete the operation.

Installing the Multiuser Operating System

The next step is to install the multiuser operating system. To do this procedure you must be logged in as manager.

| !Step! | Screen Says | ! | You Type | ! | Comments | ! |
|--------|-------------------------|---|----------|---|----------|---|
| ! | ! | ! | ! | ! | ! | ! |
| ! | 1 ! FORTUNE SYSTEMS | ! | s5 | ! | (RETURN) | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | 2 ! PRODUCT MAINTENANCE | ! | i | ! | (RETURN) | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | 3 ! Please insert | ! | ! | ! | ! | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | 4 ! This flexible disk | ! | y | ! | (RETURN) | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | ! | ! | ! | ! | ! | ! |

From this point, follow instructions on the screen.

Making a Backup Copy of the Multiuser Operating System

Now make a backup copy of the application you just installed. This procedure includes formatting the blank flexible disk. If you already have a formatted flexible disk, you can begin at step 9.

| !Step! | Screen Says | ! | You Type | ! | Comments | ! |
|--------|----------------------------|---|----------|---|----------|-----------------------|
| ! | ! | ! | ! | ! | ! | ! |
| ! | 1 ! FORTUNE SYSTEMS | ! | ! | ! | ! | ! |
| ! | ! GLOBAL MENU | ! | s1 | ! | (RETURN) | ! |
| ! | ! S1 System Utilities | ! | ! | ! | ! | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | 2 ! SYSTEM UTILITIES MENU! | ! | 32 | ! | (RETURN) | ! Select Format |
| ! | ! 32 Format | ! | ! | ! | ! | ! Flexible Disk. |
| ! | ! | ! | ! | ! | ! | ! |
| ! | 3 ! FORMAT FLEXIBLE DISK ! | ! | ! | ! | ! | ! Read screen text. ! |
| ! | ! Insert Flexible Disk! | ! | ! | ! | ! | ! Insert a flexible ! |
| ! | ! To Be Formatted | ! | ! | ! | ! | ! disk. ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | 4 ! Do you want to | ! | yes | ! | (RETURN) | ! |
| ! | ! continue (yes no)? | ! | ! | ! | ! | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | 5 ! Please Wait For | ! | ! | ! | ! | ! Do not press any ! |
| ! | ! Completion Message | ! | ! | ! | ! | ! key until the ! |
| ! | ! | ! | ! | ! | ! | ! operation is ! |
| ! | ! | ! | ! | ! | ! | ! complete. ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | 6 ! Please Remove Your | ! | ! | ! | (RETURN) | ! |
| ! | ! Flexible Disk. | ! | ! | ! | ! | ! |
| ! | ! -Press RETURN for | ! | ! | ! | ! | ! |
| ! | ! menu or select | ! | ! | ! | ! | ! |
| ! | ! ahead | ! | ! | ! | ! | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | 7 ! Do you want to | ! | n | ! | (RETURN) | ! |
| ! | ! continue (yes | ! | ! | ! | ! | ! |
| ! | ! or no)? | ! | ! | ! | ! | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | 8 ! SYSTEM UTILITIES MENU! | ! | ! | ! | (CANCEL) | ! |
| ! | ! | ! | ! | ! | ! | ! |
| ! | 9 ! FORTUNE SYSTEMS | ! | s5 | ! | (RETURN) | ! |
| ! | ! GLOBAL MENU | ! | ! | ! | ! | ! |
| ! | ! S5 Product | ! | ! | ! | ! | ! |
| ! | ! Maintenance | ! | ! | ! | ! | ! |

4

| !Step! | Screen Says | ! | You Type | ! | Comments | ! |
|--------|-------------------------|---|----------|---|----------|-----------------------|
| ! | ! | ! | | ! | | ! |
| ! 10 ! | ! PRODUCT MAINTENANCE | ! | b | ! | (RETURN) | ! Initial letter of |
| ! | ! SELECTION : | ! | | ! | | ! backup is |
| ! | ! | ! | | ! | | ! sufficient. |
| ! | ! | ! | | ! | | ! |
| ! 11 ! | ! PRODUCT SELECTION | ! | FOS | ! | (RETURN) | ! Select FOS Multi- |
| ! | ! MENU | ! | | ! | | ! user OS. |
| ! | ! Enter Selection & | ! | | ! | | ! |
| ! | ! Press (RETURN) | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! 12 ! | ! Do you want to | ! | y | ! | (RETURN) | ! |
| ! | ! backup Multiuser | ! | | ! | | ! |
| ! | ! Operating System? | ! | | ! | | ! |
| ! | ! (y/n) | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! 13 ! | ! Please label a blank | ! | | ! | | ! If necessary, in- |
| ! | ! flexible disk . . . | ! | | ! | | ! sert a formatted |
| ! | ! | ! | | ! | | ! flexible disk into! |
| ! | ! Insert the disk . . . | ! | | ! | | ! the drive and |
| ! | ! | ! | | ! | (RETURN) | ! press the Return |
| ! | ! | ! | | ! | | ! key. |
| ! | ! | ! | | ! | | ! |
| ! 14 ! | ! copy phase of ... | ! | | ! | | ! Messages appear |
| ! | ! | ! | | ! | | ! during procedure. |
| ! | ! | ! | | ! | | ! |
| ! | ! -Press RETURN for | ! | | ! | (RETURN) | ! |
| ! | ! menu or Select ahead | ! | | ! | | ! |

Telling the Operating System About Satellite Workstations

The computer now needs information about each workstation. The logical connection must be made. To do this procedure you must be logged in as manager.

The following procedure tells how to set the standard baud rate (19200) for one satellite workstation. Use this procedure for each satellite workstation. You'll see the same screens you used for logical connection of a printer. You can select lower baud rates if necessary.

| !Step! | Screen Says | ! | You Type | ! | Comments | ! |
|--------|--------------------------|---|----------|---|--------------------------------|---|
| ! | ! | ! | ! | ! | ! | ! |
| ! | 1 ! FORTUNE SYSTEMS | ! | s2 | ! | (RETURN) ! Select system | ! |
| ! | ! GLOBAL MENU | ! | | ! | ! management. | ! |
| ! | ! Enter Selection & | ! | | ! | ! | ! |
| ! | ! Press (RETURN): | ! | | ! | ! | ! |
| ! | ! | ! | | ! | ! | ! |
| ! | 2 ! SYSTEM MANAGEMENT | ! | 39 | ! | (RETURN) ! Display shows view! | ! |
| ! | ! 39 Change device | ! | | ! | ! of CPU with three ! | ! |
| ! | ! connections | ! | | ! | ! COM/A controllers.! | ! |
| ! | ! | ! | | ! | ! | ! |
| ! | 3 ! CHANGE DEVICE | ! | 2 | ! | (RETURN) ! Set connection 2. ! | ! |
| ! | ! CONNECTION | ! | | ! | ! | ! |
| ! | ! | ! | | ! | ! | ! |
| ! | 4 ! DEVICE TYPE | ! | 3 | ! | (RETURN) ! Choose the baud ! | ! |
| ! | ! | ! | | ! | ! rate of 19200 ! | ! |
| ! | ! | ! | | ! | ! for the satellite ! | ! |
| ! | ! | ! | | ! | ! workstation. ! | ! |
| ! | ! | ! | | ! | ! | ! |
| ! | 5 ! CHANGE DEVICE | ! | t | ! | (RETURN) ! If you have more ! | ! |
| ! | ! CONNECTION | ! | | ! | ! than one satellite! | ! |
| ! | ! | ! | | ! | ! workstation, type ! | ! |
| ! | ! | ! | | ! | ! in the line number! | ! |
| ! | ! | ! | | ! | ! and repeat the ! | ! |
| ! | ! | ! | | ! | ! sequence. ! | ! |
| ! | ! | ! | | ! | ! | ! |
| ! | 6 ! These Are Your | ! | | ! | (RETURN) ! 'unknown' should ! | ! |
| ! | ! Current Line Settings! | ! | | ! | ! have been replaced! | ! |
| ! | ! | ! | | ! | ! by 'FT' for each ! | ! |
| ! | ! | ! | | ! | ! satellite work- ! | ! |
| ! | ! | ! | | ! | ! station. Check ! | ! |
| ! | ! | ! | | ! | ! baud rates. ! | ! |

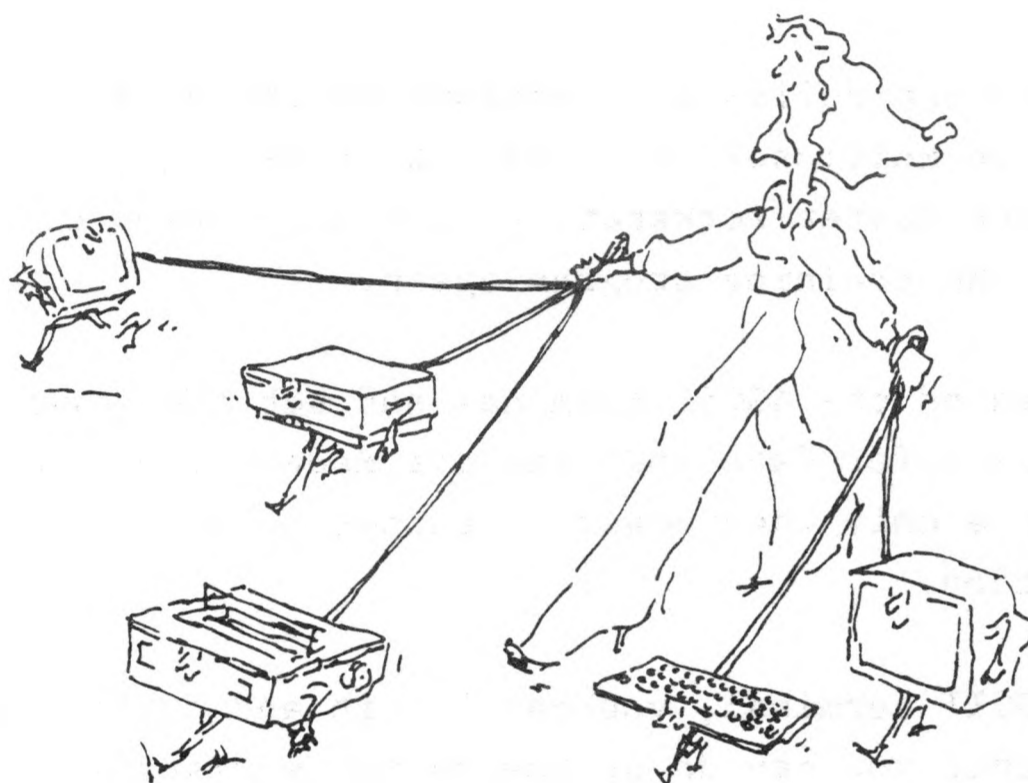
| !Step! | Screen Says | ! | You Type | ! | Comments | ! |
|--------|-----------------------|---|----------|---|-------------------------|---|
| ! | ! | ! | | ! | | ! |
| ! | 7 ! CHANGE DEVICE | ! | (CANCEL) | ! | Return to system | ! |
| ! | ! CONNECTION | ! | | ! | management menu. | ! |
| ! | ! | ! | | ! | | ! |
| ! | 8 ! SYSTEM MANAGEMENT | ! | 30 | ! | (RETURN) Start shutdown | ! |
| ! | ! | ! | | ! | procedure. | ! |

From this point, follow instructions on the screen to shut down the system.

12 Working with Your Whole System

All the additional units of your Fortune system have been installed. Now it's time to turn on the system again, and learn a few special procedures for a multiuser system. From the master workstation you can, with a simple procedure, find out who is working at each satellite workstation.

Now you'll need to learn new procedures for logging off at a satellite workstation and for shutting down the multiuser system.



Starting Up the Master Workstation

Now that all the units of the full system are physically connected and logically connected, you can turn on the power again. The messages you receive from the system will be exactly as before.

Here is how to start up the master workstation.

- 1 Turn on power at the master workstation, and enter the date and time.
- 2 Log in at the master workstation as manager.
- 3 Select s5 and follow instructions on the screen. When you changed to multiuser, you lost the training program. While you are at the master workstation, use the backup disk you made, and install the training program again.
- 4 Reach behind the ASCII terminal and set the power switch to On. No requests for date and time are made. Those operations have to be done only when power is turned on at the master workstation.
- 5 At an ASCII terminal, you can log in and do the same kind of things that you can do at the master workstation.

The procedure chart shows all the steps required to log in, use the training program, and test the printer.

| !Step! | Screen Says | ! | You Type | ! | Comments | ! |
|--------|----------------------------|---|----------|---|----------|-----------------------|
| ! | ! | ! | . | ! | | ! |
| ! | 1 ! FORTUNE SYSTEMS 32:16! | ! | manager | ! | (RETURN) | ! Continue to log in! |
| ! | ! | ! | | ! | | ! as manager. |
| ! | ! Press (HELP) For | ! | | ! | | ! |
| ! | ! Assistance | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! Type in your name | ! | | ! | | ! |
| ! | ! and press (RETURN): | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! 21% of the available | ! | | ! | | ! Actual amount of |
| ! | ! space is in use | ! | | ! | | ! available space |
| ! | ! | ! | | ! | | ! varies with your |
| ! | ! | ! | | ! | | ! system. |

| !Step! | Screen Says | ! | You Type | ! | Comments | ! |
|--------|--------------------------|---|--------------|---|--------------|-----------------------|
| ! | ! | ! | ! | ! | ! | ! |
| ! | 2 ! FORTUNE SYSTEMS | ! | t2 | ! | (RETURN) | ! |
| ! | ! GLOBAL MENU | ! | | ! | | ! |
| ! | ! T2 AMUSEMENTS | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 3 ! AMUSEMENTS | ! | 1 | ! | (RETURN) | ! Selects the Worm |
| ! | ! 1 WORM | ! | | ! | | ! game. |
| ! | ! | ! | | ! | | ! |
| ! | 4 ! AMUSEMENTS | ! | | ! | (CANCEL/DEL) | ! Leave the |
| ! | ! | ! | | ! | | ! category. |
| ! | ! | ! | | ! | | ! |
| ! | 5 ! FORTUNE SYSTEMS | ! | s1 | ! | (RETURN) | ! |
| ! | ! GLOBAL MENU | ! | | ! | | ! |
| ! | ! S1 SYSTEM UTILITIES | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 6 ! SYSTEM UTILITES MENU | ! | 18 | ! | (RETURN) | ! |
| ! | ! 18 Print | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 7 ! Enter Option 8 | ! | p | ! | (RETURN) | ! |
| ! | ! Press (RETURN) | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 8 ! Enter Filename(s) & | ! | /etc/ttytype | ! | | ! If printer is |
| ! | ! Press (RETURN) | ! | | ! | (RETURN) | ! working, file will! |
| ! | ! | ! | | ! | | ! print. |

4

Logging Off at a Satellite Workstation

There is a difference between logging off and shutting down. When you are logged off, the workstation is available for use by someone else. In this procedure, you'll log off and then log in again using your account name.

| !Step! | Screen Says | ! | You Type | ! | Comments | ! |
|--------|--------------------------|---|----------------|---|---------------------|---|
| ! | ! | ! | | ! | | ! |
| ! | ! FORTUNE SYSTEMS | ! | | ! | | ! |
| ! 1 | ! GLOBAL MENU | ! | (CANCEL) | ! | You are now logged! | ! |
| ! | ! | ! | | ! | off. | ! |
| ! | ! | ! | | ! | | ! |
| ! 2 | ! FORTUNE SYSTEMS 32:16! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! Type in your name | ! | (your account | ! | | ! |
| ! | ! and press (RETURN): | ! | name) (RETURN) | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! FORTUNE SYSTEMS | ! | | ! | | ! |
| ! | ! GLOBAL MENU | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |

If you attempt the standard shutdown steps at a satellite workstation, the system tells you to go the master workstation. The global menu should be displayed on the screen. If it isn't, press the Cancel Del key until the global menu appears. Here is the procedure to follow.

| !Step! | Screen Says | ! | You Type | ! | Comments | ! |
|--------|---------------------------|------|----------|---|------------------|---|
| ! | ! | ! | | ! | | ! |
| ! 1 | ! FORTUNE SYSTEMS GLOBAL! | ! s2 | (RETURN) | ! | Choose System | ! |
| ! | ! MENU | ! | | ! | Management. | ! |
| ! | ! S2 System Management | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! 2 | ! SYSTEM MANAGEMENT MENU! | ! 30 | (RETURN) | ! | | ! |
| ! | ! 30 Shutdown Computer | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! Please go to the | ! | | ! | You are directed | ! |
| ! | ! master workstation | ! | | ! | to the master | ! |
| ! | ! | ! | | ! | workstation. | ! |
| ! | ! | ! | | ! | | ! |

Go to the master workstation to perform the shutdown procedure. Do not log off the satellite workstation at this time, so that you see how the computer executes the shutdown procedure while a satellite workstation is still logged in.

Shutting Down the Whole System

If you shut down the system while an operator is logged on at a satellite workstation, you may destroy all the work the operator has accomplished. When you attempt to shut down a system that has satellite workstations, the screen tells you if anybody else is using the system.

The shutdown procedure you used at the satellite workstation is the right procedure at the wrong place. Now you'll attempt to shut down at the wrong time to see what happens.

The system will not prevent you from continuing the shutdown procedure. In a real situation, you should have the operators at other workstations log off before you shut down.

| !Step! | Screen Says | ! | You Type | ! | Comments | ! |
|--------|----------------------------|---|----------|---|-------------------|---|
| ! | ! | ! | | ! | | ! |
| ! | 1 !FORTUNE SYSTEMS GLOBAL! | ! | (RETURN) | ! | | ! |
| ! | ! MENU | ! | | ! | | ! |
| ! | !SYSTEM TOOLS | ! | | ! | | ! |
| ! | ! S2 System Management | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 2 !SYSTEM MANAGEMENT | ! | (RETURN) | ! | | ! |
| ! | !30 Shutdown Computer | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | !Terminal 02 is active | ! | | ! | A warning message | ! |
| ! | !please have (your | ! | | ! | tells you whose | ! |
| ! | !account name) sign | ! | | ! | terminal is still | ! |
| ! | !off | ! | | ! | logged in. | ! |
| ! | ! | ! | | ! | | ! |
| ! | 3 !Do you want to | ! | (RETURN) | ! | | ! |
| ! | !continue? | ! | | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 4 !-Press RETURN for menu! | ! | | ! | | ! |
| ! | ! or select ahead | ! | (RETURN) | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 5 ! SYSTEM MANAGEMENT | ! | (CANCEL) | ! | The global menu | ! |
| ! | ! | ! | | ! | is displayed. | ! |
| ! | ! | ! | | ! | | ! |

Finding Out Who Is Where

You can learn about who is logged on at each satellite workstation without leaving the master workstation.

Try this procedure.

| !Step! | Screen Says | ! | You Type | ! | Comments | ! |
|--------|----------------------------|------|----------|---|--------------------|---|
| ! | ! | ! | | ! | | ! |
| ! | 1 !FORTUNE SYSTEMS GLOBAL! | ! | | ! | | ! |
| ! | ! MENU | ! | | ! | | ! |
| ! | !SYSTEM TOOLS | ! | | ! | | ! |
| ! | !S2 System Management | ! s2 | (RETURN) | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 2 !SYSTEM MANAGEMENT | ! | | ! | | ! |
| ! | !31 Who | ! 31 | (RETURN) | ! | All users current- | ! |
| ! | ! | ! | | ! | ly logged on are | ! |
| ! | ! | ! | | ! | listed. | ! |
| ! | ! | ! | | ! | | ! |
| ! | 3 ! | ! | (RETURN) | ! | | ! |
| ! | ! | ! | | ! | | ! |
| ! | 4 !SYSTEM MANAGEMENT | ! | (RETURN) | ! | Takes you back to | ! |
| ! | ! | ! | | ! | the global menu. | ! |

Since you are logged in at both the master workstation and the satellite workstation, the screen will look something like the illustration. Only the account name and time will be different.

In a real situation, you may have a line for each of the workstations in your system, or you may have a line only for the console (the master workstation). In this situation, all you need to do is log off at the satellite workstation. Once you have logged off, continue with the shutdown procedure.

4

```
User "accountname" has been Active on console since Sep 29 15:17  
User "accountname" has been Active on Terminal 02 since Sep 29 16:20
```

-Press RETURN for menu or select ahead >

The "Who" screen tells you who is on the system.

Using Applications

You have already learned how to install application software. You use the "Install" selection from the product maintenance menu, just as you did to install the training program from the training disk.

If you want to install an application, follow these steps.

- 1 Turn on the Fortune system.
- 2 Type in the date and time.
- 3 Log in to the Fortune system.
- 4 Install the application, using the procedure you learned when you installed the training disks.

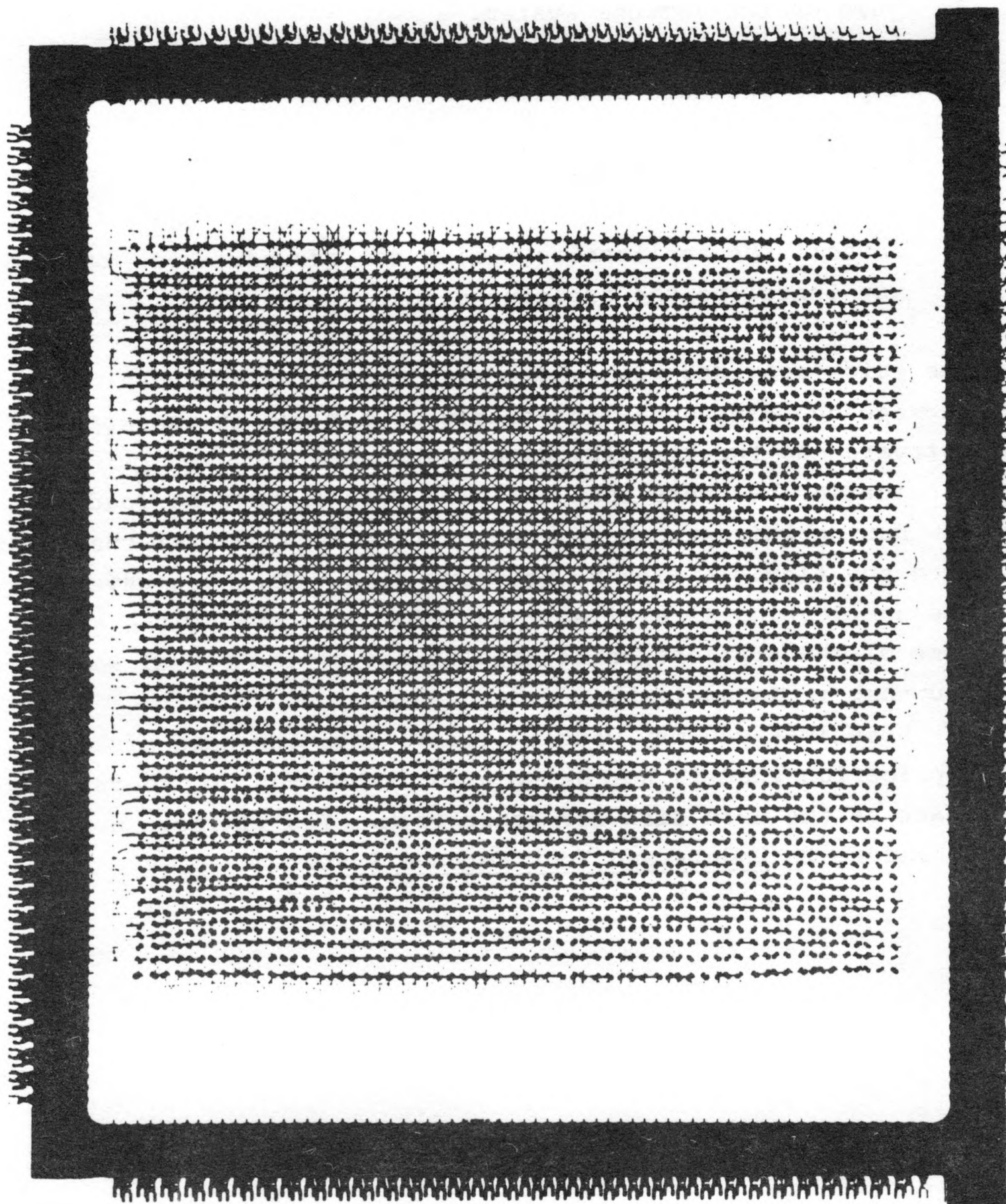
The guide provided with each Fortune Systems application software package contains detailed procedures for use of the application software and the training disk that comes with it. If your application has more than one disk, you'll have to load them all.

During this procedure you transfer each part of the application from the flexible disk to the hard disk. Once you have done this, the application is available any time you turn on the system. The name of the application is highlighted on the global menu to remind you that it is available.

Sometimes you may want to remove from the hard disk an application that is not being used. When you do, there is more space on the hard disk for other work. You'll learn details of that procedure in Understand Your Fortune System.

The core memory shown here was an innovative breakthrough only 25 years ago. It consisted of tiny doughnut - shaped magnetic material, threaded together with wires that carried signals to or from memory. Today, this technology remains in only a few computers still in use.

Courtesy of International Business Machines Corporation.



More About Your System

You may want more detailed information about how your Fortune system works. Your Fortune system has more to it than you've already learned, although you can operate it successfully without any additional information. This information will be useful to you if you're curious about the system.

In the following pages you'll learn:

- How to establish accounts and passwords
- More about the equipment you have
- More about how the keyboard works

13 Accounts

Each person using the Fortune 32:16 should have an account. An account acts like a private file cabinet in which all files are organized according to the owner's style. The file cabinet can be protected with a key, a password on a computer system. You'll learn about establishing accounts with or without passwords in this section.

ACCOUNTS

Each person who is allowed to use the Fortune system should have his or her own account. An account can be given through the procedure described in "Establishing Your Account" or it may be controlled by a person who is designated as the system manager.

NAMING AN ACCOUNT

An account name should be unique to each individual on the system. Usually the user's family name, including initials if necessary, is sufficient, though almost any name will work. Names must be entered in all lowercase letters.

A person may be assigned more than one account, each with an optional password. It is generally best for any person with more than one account to use a distinct password for each account.

Your password can be almost anything you can type on the keyboard, with a few restrictions. For now, limit yourself to no more than eight lowercase letters. Choose something that will be easy for you to remember and not easy for anyone else to guess. If you tend to use passwords that are not very secret, such as the license number of your car, names of other members of your family, or your hometown, people may try to access files. Use a less obvious password.

Establishing a Password

Your account can be assigned a password if you respond y (for "yes") to the screen message "Do you want a password (y/n)?" When you type in the chosen password, it is not displayed on the screen. This feature helps to keep the password private, because no other person can see the password, even accidentally. You should be careful when you establish a password because there is no way for you to know that you made a typing error while you typed in the password.

The system requires that you type the password a second time, and it will accept the password only if the two inputs match. If they don't match, the system's response is:

```
Mismatch - password unchanged
Do you want a password (y/n)
```

Continue from this point as if you were at Step 3 of the procedure in the chart below.

If you make the same typing error each time you type your password, that will be your password. The problem is that you won't know what the password is.

After you establish your password, you must accurately type it during every login procedure. If you know that you made a typing error, the easiest solution is to press the Return key until the message "Type in your name and press (RETURN):" is redisplayed. Then press the Cancel Del key and repeat the procedure from that point.

A password should be changed occasionally. How frequently you change your password depends upon how concerned you are about the privacy of your work.

Use this procedure to establish an account with a password.

| !Step! | Screen Says | ! | You Type | ! | Comments | ! |
|--------|-----------------------|---|----------|---|----------|---|
| ! | ! | ! | | ! | | ! |
| ! | 1 ! Type in your name | ! | newuser | ! | (RETURN) | ! |
| ! | ! and press (RETURN): | ! | | ! | | ! |

| !Step! | Screen Says | ! You Type | ! Comments | ! |
|--------|----------------------------|-----------------------|-----------------------|---|
| ! | ! | ! | ! | ! |
| ! | 2 ! Type in your new | !(your account name)! | ! | ! |
| ! | ! account name and | ! (RETURN)! | ! | ! |
| ! | ! press (RETURN): | ! | ! | ! |
| ! | ! | ! | ! | ! |
| ! | 3 ! Do you want a | ! | ! | ! |
| ! | ! password (y/n) | ! y (RETURN)! | ! | ! |
| ! | ! | ! | ! | ! |
| ! | 4 ! Type in your new | !(your password) | ! The password does | ! |
| ! | ! password and press | ! (RETURN)! | ! not appear on the | ! |
| ! | ! (RETURN) | ! | ! screen. | ! |
| ! | ! | ! | ! | ! |
| ! | 5 ! Retype new password | !(your password) | ! You must type the | ! |
| ! | ! and press (RETURN): | ! (RETURN)! | ! password exactly | ! |
| ! | ! | ! | ! as in step 4. | ! |
| ! | ! | ! | ! | ! |
| ! | 6 ! Your new account has | ! (RETURN)! | ! | ! |
| ! | ! been created. Press | ! | ! | ! |
| ! | ! (RETURN) to try it | ! | ! | ! |
| ! | ! out. | ! | ! | ! |
| ! | ! | ! | ! | ! |
| ! | 7 ! Type in your name | !(your account name)! | ! | ! |
| ! | ! and press (RETURN): | ! (RETURN)! | ! | ! |
| ! | ! | ! | ! | ! |
| ! | 8 ! Type in your password! | !(your password) | ! | ! |
| ! | ! and press (RETURN): | ! (RETURN)! | ! | ! |
| ! | ! | ! | ! | ! |
| ! | ! ___% of space is | ! | ! This message tells! | ! |
| ! | ! in use | ! | ! you how much of | ! |
| ! | ! | ! | ! the hard disk is | ! |
| ! | ! | ! | ! filled. | ! |
| ! | ! | ! | ! | ! |
| ! | ! FORTUNE SYSTEMS | ! | ! | ! |
| ! | ! GLOBAL MENU | ! | ! | ! |

14 More Information

Knowing how to operate the Fortune system is the main thing you need to know. You may, however, want to know some more about the insides of your system, the parts you can't see that make it run. This information may add to your enjoyment and appreciation of the Fortune system.

CENTRAL PROCESSING UNIT

What the parts inside the CPU do is important for you to know, but how they do it isn't so important for your purposes. Even so, you should become familiar with the vocabulary related to the CPU, if only to recognize it when you hear it.

When the names of some of the parts inside the CPU appear in the text, they look like words from a foreign language, or some abbreviations for government agencies that you haven't heard of before. Here are some examples:

| | |
|-------|---|
| MPU | microprocessing unit |
| RAM | random access memory |
| ROM | read-only memory |
| PROM | programmable read-only memory |
| EAROM | electronically alterable read-only memory |

The microprocessing unit is the brain of the computer. Over the years it has been reduced in size from an entire floor of a building to a hand-held sized unit. The MPU processes information according to a set of instructions provided by the manufacturer.

The MPU can deal with only one instruction at a time so an instruction and data storage area is necessary. This area is called memory. There are several different types of memory, each providing a special feature.

RAM memory, or random access memory, can retrieve any piece of information without having to sort through the lot. It is a temporary form of memory and is active only when the computer is powered On.

ROM, read-only memory, is similar to RAM except that you cannot write into ROM. It is useful as a source of information, but will not accept new information or input. Information in ROM is permanent and can be read as often as necessary.

PROM, programmable ROM memory, is much like ROM except that it can be programmed with special equipment. Once programmed, PROM acts like ROM and may be read, but not written to, as often as necessary.

EAROM, which appears on the Fortune maintenance screen, is electronically alterable ROM. The EAROM in the Fortune System contains information about your system that appears each time the maintenance screen is displayed. (If you have changed from a single user operating system to a multiuser operating system, you have seen the maintenance screen.) If you want to change this information, it can be changed at your keyboard, without any of the special equipment needed to change information in a PROM.

The ones you are most likely to hear about are RAM, ROM, and PROM. For one thing, you won't be able to use some applications unless you have enough memory, in this case, enough RAM. Similarly, when you want to add equipment and applications, hardware and software, you may hear about programs in ROM and PROM.

Hard Disk and Memory

The software that makes the computer do what you want it to do must be in memory to be used. While you are working, the computer continually reads instructions from memory. As it executes the instructions, it performs arithmetic operations, or searches for information in the memory, or moves information from one part of the computer to another (keyboard to memory, memory to monitor, hard disk to memory). If you have a multiuser system, operations like these are taking place at the request of each user.

MOVING THE INFORMATION

Each program and the information that it requires at any time must be available in memory, but memory space is limited. If memory gets completely filled, all work has to stop. The operating system and the hard disk solve this problem. The entire application program and the information for it are kept on hard disk. The part of the software you are using is moved to memory by the operating system. As different parts are needed, the operating system moves them to memory.

These operations are done because the hard disk has much more space than memory. Hard disk is used because space on hard disk is not as expensive as memory space.

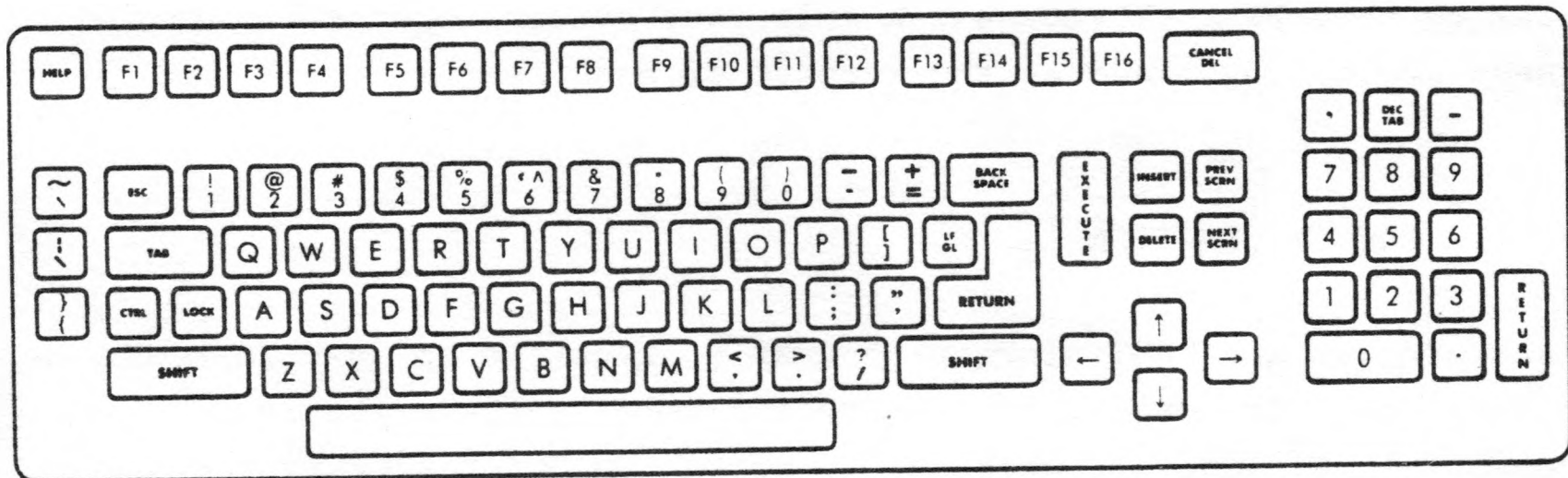
PRESERVING THE INFORMATION

Memory and hard disk are different in another important way. When you turn off the computer, everything in memory is lost, but anything on hard disk remains. When you turn on the computer, one of the first events is the transfer of the operating system from hard disk to memory. The computer must have the operating system in memory before it can do anything else.

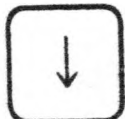
When you load the operating system, or load an application, you transfer information from a flexible disk to the hard disk. The hard disk contains the operating system, application software, and any information that you need. The operating system moves anything from hard disk to memory as you require.

The Keyboard

The Fortune system keyboard design takes into account all the features offered by various software applications. This means most operations can be initiated with one keystroke. Refer to your application operator's manual to learn what an operation does and how to do it. The function of each key is described below.



In addition to the keys that you would expect to find on any typewriter, three keys on the left side of the keyboard provide special characters. Each character is displayed on the screen when you press the key. If your printer has those characters, they can also be printed.



Four cursor control keys are marked with arrows to show that they control movement of the cursor. The cursor shows where action is taking place on the screen. When one of these keys is pressed, the cursor moves in one of four directions up, down, right, or left.



PREV SCR (for previous screen) and NEXT SCR allow you to change from one screen display to another in documents of two or more pages. INSERT and DELETE allow you to insert or delete information on those screens.

E
X
E
C
U
T
E

The Execute key tells the computer to follow instructions you have given. You use it for loading the software.

HELP

With some applications you can get help at the touch of a key. Information will come up on the screen to help you decide what to do.

CTRL

CTRL stands for Control. You can use this key to select special graphics characters. It has many other special uses, depending on what application you are using.

RETURN

Either Return key tells the computer you have finished typing. In most applications, this key is equivalent to the carriage return function on a typewriter.

LF
GL

This key generates a line feed code (LF) for use in applications that distinguish between carriage return and line feed. In a line feed operation, the cursor moves down one line but does not change its horizontal position. In the Fortune word processing application, this key means Glossary (GL).

CANCEL
DEL

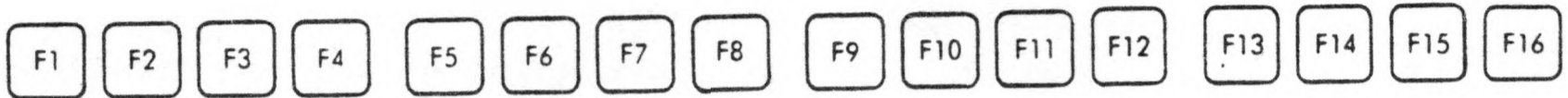
You can use the Cancel Del key to stop whatever you are doing and return you to the menu you were using most recently. Also, this key has special functions in different applications.

| | | |
|---|------------|----------------------------|
| 1 | DEC TAB | - |
| 7 | 8 | 9 |
| 4 | 5 | 6 |
| 1 | 2 | 3 |
| 0 | . | R E T U R N |

The numeric keypad duplicates a calculator keypad for your convenience in using Fortune Systems applications that require many numeric entries.

FUNCTION KEYS

The 16 keys at the top of the keyboard, labeled F1 through F16 are the function keys. In different applications, these keys are used to do different things. For one application, a particular key may mean yes in response to a prompt from the screen. For some other application, the same key may mean something else. A template for each application fits on the keyboard below the function keys. The meaning of each key is printed on the template.



The ASCII Terminal

The ASCII terminal is one of several possible satellite workstations for the Fortune system. Others include graphics terminals and color terminals.

The ASCII terminal differs from the monitor only in its base. The ASCII base contains electronics: a microprocessor, RAM, and ROM. The ASCII terminal can communicate with the CPU and display screen information. With additional memory it has the potential of working like a microcomputer without disk storage.

CONFIGURATIONS

There are three connectors at the back of the ASCII terminal. These are illustrated in the section about connecting a satellite workstation. The connector identified as the Host connector should be used to connect the ASCII terminal to the cable that comes from the CPU. The other end of the cable can be connected to the SIO connector on the CPU, but it is more likely to be attached to a connector of a COM/A controller.

The connectors identified as Printer and Auxiliary can be used to connect additional equipment to the ASCII terminal. However, additional software is required to provide a logical connection. Ask your Fortune Systems dealer about details.

CONTROLS

The switches on the ASCII terminal are set to the positions most likely to be used on a Fortune system. For your terminal to function properly, the settings must match those listed on the table on the next page. D indicates the down position, U the up position for each switch. If your system has special requirements, you'll have to change the settings. Change the settings with the tip of a mechanical pencil, or any other tool with a narrow, firm point. The table summarizes the purpose of each switch.

The settings you make determine how each piece of information, or bit is transmitted between the CPU and the ASCII terminal. Bits can be either up or down signals, to put it very simply. These signals are grouped and sent preceded by a start bit, telling the CPU some data is coming. The stop bit tell the CPU that the group is completely sent. Parity is a technique used to check for errors in data transmission. The baud rate is the speed at which bits are transmitted per second.

Switch Settings for the ASCII Terminal

| Switch Number | | | | | | | | Function |
|---------------|---|---|---|---|---|---|---|----------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | |
| D | | | | | | | | 60 Hz power source (U.S.) |
| U | | | | | | | | 50 Hz power source (other) |
| | D | D | | | | | | No parity (always space) |
| | U | D | | | | | | No parity (always mark) |
| | D | U | | | | | | Odd parity |
| | U | U | | | | | | Even parity |
| | | | D | | | | | 1 stop bit |
| | | | U | | | | | 2 stop bits |
| | | | | D | D | D | D | 50 baud |
| | | | | D | D | D | U | 75 baud |
| | | | | D | D | U | D | 110 baud |
| | | | | D | D | U | U | 134.5 baud |
| | | | | D | U | D | D | 150 baud |
| | | | | D | U | D | U | 300 baud |
| | | | | D | U | U | D | 600 baud |
| | | | | D | U | U | U | 1200 baud |
| | | | | U | D | D | D | 1800 baud |
| | | | | U | D | D | U | 2000 baud |
| | | | | U | D | U | D | 2400 baud |
| | | | | U | D | U | U | 3600 baud |
| | | | | U | U | D | D | 4800 baud |
| | | | | U | U | D | U | 7200 baud |
| | | | | U | U | U | D | 9600 baud |
| | | | | U | U | U | U | 19200 baud |

If your system is in the United States, your electrical power source is at 60 hertz (Hz) and you'll not need to change switch 1. If your system is in Europe, or some other location that uses a 50 Hz power source, set the switch to the up position.

Switches 2, 3, and 4 should all be in the down position when the ASCII terminal is used with the Fortune system. This ensures that information is transmitted between the ASCII terminal and the Fortune system.

For most operations, the position for 19200 baud is correct (up-up-up-up in the table). If your system will not work at this rate, either because the cable is longer than normal or because a great deal of electrical noise is generated in the area, keep reducing the rate until the system works.

If you change the baud rate at the ASCII terminal, you must also change the baud rate at the CPU, using the system management S2 selection, and the change device connections 39 selection.

If you are using the ASCII terminal at a remote location and communicating with the CPU through the telephone network, your Fortune system requires additional software. An operator's guide is available to help you with the installation process. Consult your Fortune Systems dealer.

5

Screens

Most computer systems have a monitor with a display screen and a keyboard for you to use. Most of what you type on the keyboard has some effect on the display. What you see on the display when you're working with it is a type of screen. The type of screen you see depends upon what you're doing or want to do. How you use the screens, what you have to know to use them, how many screens the system has, and the language you use to communicate with your computer through the screens generally determine how easy the system is to use.

Most computers offer two levels of communication between you and the system: through the operating system with a prompt where you type in commands, or through menus using menu screens.

OPERATING SYSTEM LEVEL

When you turn on some kinds of computers you see a screen that's almost empty except for a few characters, for example, a slash (/). This screen is a signal for you to respond with a command like RUN BASIC to give the system instructions about what you want to do. At this level you're communicating directly with the operating system, telling it what operations you want it to perform for you. On the Fortune system this level of communication is called the user command level. The user command level can be used only by people who are familiar with the UNIX-based Fortune Operating System. Part 2 of Understand Your Fortune System describes the basics of the user command level; the Fortune Operating System guide gives details.

MENU SYSTEM LEVEL

The other level of communication with the computer is through menu screens. This is called the menu level. Most people use the menu level because instead of typing in a command, the functions you can perform are presented as a list of selections you can choose from. Using a menu, you don't have to remember and type in a command. When you make your choice, the system performs the command without any further instructions from you.

Every application available on the Fortune system has a menu that shows you what you can do with that application. Menus define the structure of the application and list the procedures or functions you can perform. These menus are called application-specific. This means that you must use the menu for the application

to choose the function you want to perform. For example, in order to add information to your general ledger you must select the General Ledger application.

There are other types of screens besides menus. Some of these screens require you to type in some information in response to a question. The result is that you continue a process you've started, perform a process you've chosen, or see what you've typed. The manuals you receive with a Fortune Systems application identify every type of screen in an application.

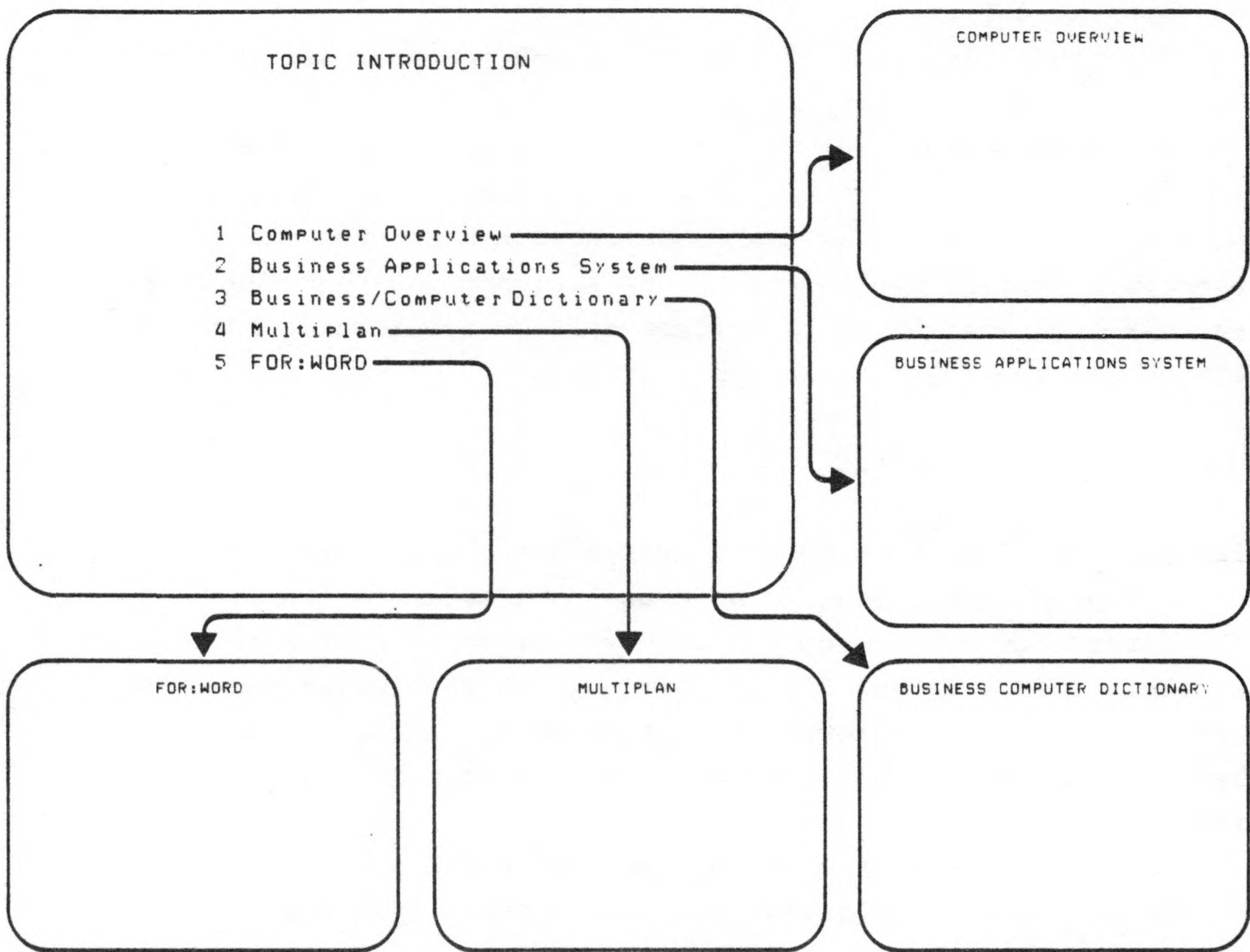
MENU LEVEL ORGANIZATION

The menu level of your Fortune system has a structure like a road map. Your present location on a map is similar to the global menu, the first menu screen you see when you start up your Fortune system. This menu has six categories, and each selection in the category has its own menu. You might think of the menus at this level as the main roads leading from your present location to your final destination.

Every Fortune system is shipped with three selections automatically available from the global menu: system utilities, system management, and product maintenance. These selections can be used regardless of the applications you have, and are necessary for the basic operation and maintenance of your Fortune system. The applications you have available from the global menu depend upon which ones you have purchased and installed on your system.

Each application has its own group of menu screens called submenus. These submenus may lead to an open screen for you to type on, as in the Fortune word processing application, or a screen with items described that you must fill in, as with the business applications. These final screens, the smaller highways and side roads on your map, are not menus. The name for these screens vary with the application. In the business applications there are three types of screens -- file maintenance, data entry, and report. In Multiplan, the final screen is the worksheet screen.

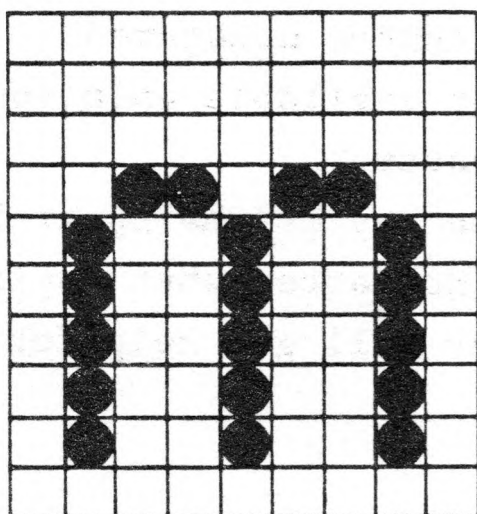
Within an application the menu, submenu, and other screens are related to each other. You go from one screen to another until you reach the screen where you want to work, just like you follow a route you've laid out on a map. Sometimes you can move between submenus or other screens using a code, like taking a shortcut between roads, and sometimes you must go backward to a specific menu and work your way down to the submenu or screen you need. Some applications require you to confirm what you're doing before you can continue. All Fortune Systems application manuals give you complete information about the menu structure for that application and how to use it.



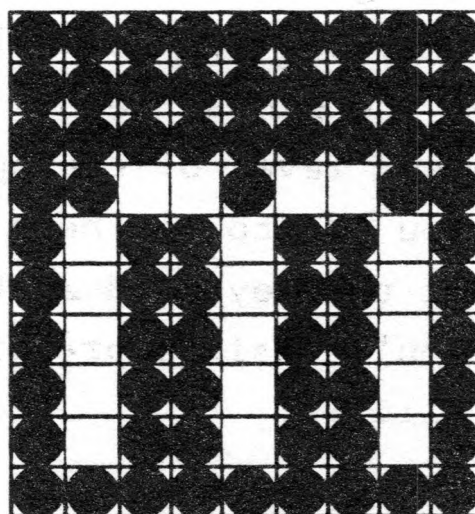
On computers, even menus have menus.

Moving Around the Screen

No matter what application software you're using, what you type at the keyboard has some effect on what you see on the screen. Form the habit of watching the screen to be sure that what you expect to happen does happen.

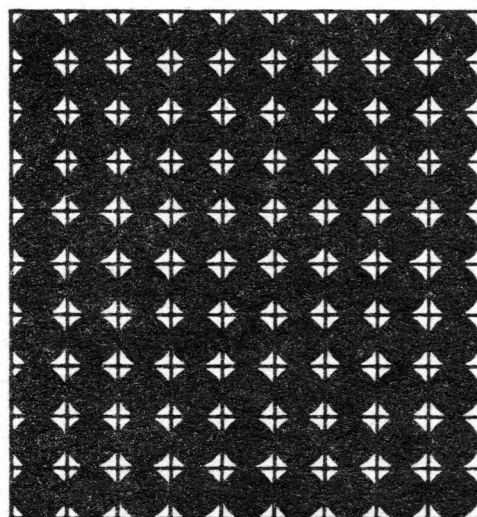


Normal video

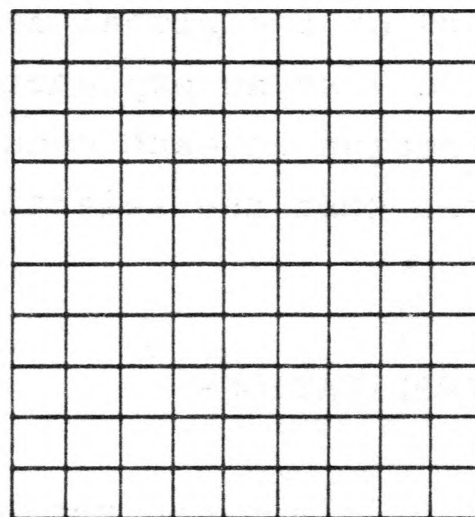


Reverse video

The characters on the screen are made up of small dots. Some of them are lighted, and some are dark. You can't see the dark ones.



Cursor on



Cursor off

The cursor is a block of light made by lighting all the dots. When you type, each character replaces the cursor on the screen. As you continue to type, the cursor moves to the right.

SOMETIMES THE SCREEN MOVES AT YOUR COMMAND

In some applications, information on the screen moves while you watch it. When you ask to view a file containing more than one screenload of information, for example, the whole screen seems to be moving upward. As one line disappears at the top of the screen, a new line appears at the bottom. This behavior is called scrolling. Sometimes, part of the screen stays fixed and part of the screen scrolls upward, with new lines appearing at the bottom.

Help

At certain points in your use of the Fortune 32:16 you can get information on the screen about how to perform a procedure, what a command does in an application you're using, or how a key works. The information you see, and the availability of Help depends on what you're doing. Generally, all applications provide some form of help, as well as the system utilities and system management selections on the global menu. Help is not available when you use the user command level of the operating system.

The key you use to get help is the blue key in the upper left hand corner of the keyboard marked HELP. No matter what application or function you're using, pressing this key will get help for you when it's available.

HELP USING THE SYSTEM TOOLS

System utilities and system management, listed under the system tools category of the global menu, provide help on the use of each function as well as an explanation of the menu. Help is available for each selection on each menu in the form of a separate screen that describes what the selection does and how to use it.

HELP USING APPLICATIONS

The level of help you can get using an application varies with the application you're using and what you're doing. Most applications provide help at the points where you are adding or changing information and not with file management activities. For example, you can get help with the Fortune word processing application when you're using the editing screen. The help screen shows you a list of word processing terms and keys. When you select the item you need assistance with and press Help again, you'll see a description of how the key is used or a definition of the term.

All user manuals for Fortune Systems applications contain information about the help available for that application.

Ease Into Computereze

Computereze is not really a foreign language, and is no more difficult than other special vocabularies you may already know.

Baseball fans talk about a "designated hitter". Tailors talk about a "matched notch". Computer professionals talk about an "operating system".

People in every field of work invent technical terms because it's easier to use these special words for complicated ideas that they must talk about almost every day. Your own field of work probably has many special technical terms.

Your life with your computer will be much easier if you pick up the jargon of computers as you go along. The best way to learn the vocabulary is to follow one simple rule -- ask questions.

- When somebody uses computer terminology, ask questions about anything you don't understand. Occasionally you should ask questions about what you think you do understand. Some computer terminology is not well-defined, and the only way you can be sure that everybody understands everybody else is to ask questions.
- Ask questions in the technical vocabulary of your own field. If you ask questions in the form, "What does _____ mean?", where the blank is some technical term, the answer will probably include more technical terms, and you'll be no better off than before.
- One good form for your questions is, "If my computer has _____, will I be able to _____?" Fill in the first blank with some kind of hardware or software. Fill in the second blank with what you want to do. Once you understand terms that explain what the computer can do for you, you can learn the terms that explain how the computer does it -- if you want to.

The training disk in this binder includes definitions of some computer terminology. Use them as a starting point and ask questions.

The first part of the report deals with the general situation in the country. It is a very interesting and detailed account of the current state of affairs. The author has done a great deal of research and has gathered a wealth of information. The report is well written and easy to read. It is a valuable contribution to the study of the country's development.

The second part of the report deals with the economic situation. It discusses the various factors that are affecting the economy, such as inflation, unemployment, and the balance of payments. The author provides a clear and concise analysis of these issues and offers some suggestions for how they can be addressed. This part of the report is particularly useful for those who are interested in the country's economic prospects.

The third part of the report deals with the social situation. It discusses the various social problems that are facing the country, such as poverty, ill health, and illiteracy. The author provides a clear and concise analysis of these issues and offers some suggestions for how they can be addressed. This part of the report is particularly useful for those who are interested in the country's social development.

The fourth part of the report deals with the political situation. It discusses the various political parties and movements that are active in the country. The author provides a clear and concise analysis of these groups and offers some suggestions for how they can be addressed. This part of the report is particularly useful for those who are interested in the country's political development.

The fifth part of the report deals with the international situation. It discusses the country's relations with other countries and the international community. The author provides a clear and concise analysis of these relations and offers some suggestions for how they can be improved. This part of the report is particularly useful for those who are interested in the country's international relations.

The sixth part of the report deals with the future of the country. It discusses the various challenges that the country is facing and offers some suggestions for how they can be addressed. The author provides a clear and concise analysis of these challenges and offers some suggestions for how they can be addressed. This part of the report is particularly useful for those who are interested in the country's future.

The seventh part of the report deals with the conclusion. It summarizes the main findings of the report and offers some final thoughts on the country's development. The author provides a clear and concise summary of the report and offers some final thoughts on the country's development. This part of the report is particularly useful for those who are interested in the country's development.

Glossary

Here is a list of words that you have seen in this guide. The list also contains some words you'll hear often and will become familiar with as you learn more about computers.

ACCOUNT

An authorization to use the system. A user may have more than one account.

APPLICATION SOFTWARE

Instructions to the computer that permit a user unfamiliar with computers to use a program designed for use in a specific field, such as accounting, engineering, or word processing.

ARCHIVE

To make a copy on a flexible disk of a file or files on the hard disk.

ASCII

An acronym derived from American Standard Code for Information Interchange, pronounced to rhyme with "passkey."

ASCII CODE

A seven-bit code that is in general use for transferring alphanumeric data from one computer to another. The ASCII alphabet includes letters, numerals, punctuation signs, and control codes.

ASCII TERMINAL

In the Fortune system, a display unit and keyboard connected to the CPU through a cable so that an operator can work with the system at distances up to 50 feet from the CPU. The ASCII terminal can be used with any computer that accepts standard ASCII code.

BACKUP

The process of copying data for reference in case the original data is destroyed.

BASIC FORTUNE SYSTEM

Consists of the three basic units: the monitor, the central processing unit, and the keyboard.

BAUD

A unit of measure for signaling speed. In computer systems, baud is usually equivalent to bits per second.

BIT

A contraction for binary digit; the smallest unit of information that a computer can recognize.

BOOT

A technique in which the computer is started up by means of a few instructions stored in ROM. As these instructions are executed, the complete operating system is transferred from flexible disk to hard disk.

CENTRAL PROCESSING UNIT (CPU)

The part of the Fortune system that contains all arithmetic, logic, and control circuits, as well as the hard disk drive, the flexible disk drive, memory, and controllers.

CODE

A general term for the way to represent information. In computers, all codes can be reduced to a pattern of bits. Codes can represent numbers, alphanumeric data, machine language instructions, or any other kind of information. The ASCII code is the most generally known code.

COMPILER

A compiler translates a program from that program language into the machine language of a specific computer. The result of the translation is a complete program that has been compiled, and can be loaded and executed. (Contrast with interpreter.)

COM/A CONTROLLER

The device in the Fortune system that provides an interface between the CPU and any serial communications device.

CONFIDENCE TEST

A test which, if completed, verifies that the computer, or some part of the computer, is responding properly to a specific set of inputs. If a confidence test is not completed, no indication of the cause of failure is provided.

CONFIGURATION

The kinds of devices in a computer system and the structure of the interconnections among the devices that make up a computer system.

CONFIGURATION MENU

The screen that allows the user to describe the system to the computer.

CONTROLLER

In the Fortune system, a device inserted into option slots of the CPU to perform operations related to a specific device or group of devices. A controller is required for the monitor and the hard disk drive. Other controllers are required for equipment external to the CPU.

CONSOLE

The device in a Fortune system that is designated to the operating system as the destination for system error messages.

CURSOR

The block of light on a screen to identify the location at which the next display character will be printed.

CURSOR CONTROL KEYS

The keys that for some applications control the movement of the solid block of light, which can be superimposed on any character on the screen.

DIAGNOSTIC PROGRAM

A program executed to test specific parts of a computer and determine, in as much detail as possible, the point in the program at which faulty operation was detected, the possible cause of the fault, and possible means for correction of the fault.

DIRECTORY

The file containing filenames kept on a disk that enables the system to locate files easily.

DISK DRIVE

A device that is capable of storing information in magnetic form on the surface of a disk, and retrieving the information from the disk surface, under control of a digital computer.

DISPLAY

Information presented on the surface of a cathode-ray tube as alphanumeric characters, or as a graphic representation of numeric data, or as a picture of some object.

DOCUMENTATION

The manuals and training materials that tell you how to use the many types of hardware and software of your Fortune system.

DOT MATRIX PRINTER

A printer that forms letters by striking closely spaced pins against a ribbon. These pins create dot patterns in the shape of letters, numerals, and other characters. A dot matrix printer usually prints faster than a letter quality printer.

ERROR MESSAGE

The Fortune system may display any of three types of error messages on a display unit. System error messages are displayed only at the console. Errors related to incorrect inputs to the operating system are displayed only if the operator is in direct communication with the operating system. Error messages related to a specific procedure in an application are displayed only if that procedure is being used. The documentation for an application describes the proper response to these messages.

FILE

A named unit of data stored on a hard disk or flexible disk.

FILE SYSTEM

A collection of files that fits onto a disk, and is attached to the root director tree.

FLEXIBLE DISK

A magnetic disk that can be inserted into the flexible disk drive for use and removed from the flexible disk drive for storage. This type of disk is called flexible to contrast it with hard disks, but flexible disks are not meant to be bent or flexed.

FORMAT

To check a flexible disk for errors and divide it into parts that it can identify for storing information.

FUNCTION KEYS

On the Fortune system, the 16 keys at the top of the keyboard that execute different software-controllable functions for each type of application software.

GLOBAL MENU

The first menu seen by an operator following the login procedure. This menu displays the names of application software available for the Fortune system.

GROUP

Users who have access rights to certain files. Groups are often assigned by department or project.

GROUP ID

A label attached to a group of users which identifies these users as co-owners of certain files.

HARD DISK

A magnetic disk that, in the Fortune system, is sealed inside the CPU. This type of disk stores application software and utilities that are directly available to the computer.

HARD DISK CONTROLLER

The device in the CPU that controls transfer of data between the hard disk drive and other parts of the CPU.

HARDWARE

Those parts of the computer that can be seen and touched.

HELP

The key that causes additional information to be displayed on the screen.

HOME DIRECTORY

The directory that an account accesses when the user logs in.

INPUT

Information passed to the computer for processing (if the input is data) or execution (if the input is a program).

INSTRUCTION

A code that causes the computer to perform a specific operation or sequence of operations. A code may be written in machine language, assembly language, or any higher-level language such as BASIC, COBOL, FORTRAN, or Pascal.

INTERFACE

The boundary between two parts of a computer, through which control signals and data signals are passed during operation.

INTERPRETER

An interpreter translates a small part of a program from that program language into the machine language of a specific computer. Each part of the program is executed as it is interpreted, and no complete interpreted program is available at the end of the procedure. (Contrast with compiler.)

KERNEL

The central part of the operating system that handles basic functions such as input, output, and disk usage.

KEYBOARD

The device that the operator uses to control operations of the computer.

LETTER QUALITY PRINTER

A printer that forms letters by striking solid formed characters against a ribbon. The print looks similar to the print of a conventional typewriter. A letter quality printer is usually slower than a dot matrix printer.

LOAD

The process of installing the operating system or an application on the computer.

LOGICAL CONNECTION

Establishing the relation between parts of a computer system by providing information to the operating system or to other parts of the software.

LOG IN

For the Fortune system, all interaction between the operator and the system from the time the message "Type in your name and press (RETURN)" is displayed to the time the global menu is displayed.

MAINTENANCE MENU

The screen that offers the user choices for telling the system what to do when the power is turned On.

MASTER DISK

For the Fortune system, the flexible disk that contains the application software.

MASTER WORKSTATION

The workstation that has its keyboard connected directly to the CPU.

MEMORY

The part of the computer that stores the information and instructions that are immediately available to the computer. Contrast with storage device.

MENU SYSTEM

The system of screens that enable the user to make selections and communicate with the operating system.

MENU

A display of choices available to the computer user.

MONITOR

The monochrome display unit that is directly connected to the CPU.

MONITOR CONTROLLER

The device in the CPU that controls the transfer of data between the monitor and other parts of the CPU.

MULTITASKING SYSTEM

A system that allows two or more tasks to be under control of the CPU. For example, a document can be printing while the operator is typing at a workstation.

MULTIUSER CONFIGURATION

A Fortune system that can be used by two or more operators at the same time.

NETWORK

A collection of computer equipment and computer systems that communicate with each other.

NUMERIC KEYPAD

A set of keys arranged in a rectangular array to make the entry of numeric data easier than with a typewriterlike keyboard.

OFFLINE

A condition in which a device is not under control of the computer. For example, a printer may be connected to the CPU by a cable, but switches on the printer may be in positions that prevent transfer of data between the printer and the CPU.

ONLINE

A condition in which a device is under control of the computer.

OPERATING SYSTEM

The software that is in control of a computer system; the software that allows a user to interact with the computer without having detailed knowledge of the configuration.

OUTPUT

Information that is the result of computer processing of input. Output is usually presented in a form that the operator is able to interpret, such as output to a printer or a display unit. However, output can be to a flexible disk, which the operator stores for later use but cannot interpret.

PARITY

When the value in the digit used for checking with the transmitted and received data is equal to its expected value.

PASSWORD

A word, a name, or a random collection of characters used by an operator to allow the operator access to personal files and to deny to any other operator access to those files. A password selected by the operator is typed in during the login procedure and must be remembered by the operator.

PATHNAME

A series of directory names separated by "/" and ending in either a directory name or a file name, which helps the system locate a file on the disk.

PERMISSION

Refers to access rights to both files and directories.

PHYSICAL CONNECTION

A connection between units of a computer system that is established by hardware such as wires, cables, plugs, and receptacles.

PROGRAM

A set of instructions, in the machine language of the computer or in some programming language that the computer system is capable of translating into its machine language, that causes the computer to perform a well-defined sequence of operations on data.

PROM

An acronym derived from Programmable Read-Only Memory. A part of the memory that the computer can read from, but not write into, and that contains instructions that are not lost when the computer is turned off. The contents of PROM can be changed offline under special conditions.

PROMPT

The symbol, such as a dollar sign (\$) or a pound sign (#), which indicates that the user is in direct communication with the operating system.

PROTOCOL

A set of rules that define a standard method for exchange of information, including the sequence of events during the exchange and the form of the information.

RAM

An acronym derived from Random Access Memory. A part of the memory that the computer can read from or write into. The RAM contains the instructions and information that are immediately available to the computer. The contents of RAM can be changed by the operating system.

READ

The process of copying a file or part of a file to another location with the read command.

ROM

An acronym derived from Read-Only Memory. A part of the memory that the computer can read from but not write into and that contains instructions that are not lost when the computer is turned off. The contents of ROM cannot be changed.

SATELLITE WORKSTATION

For the Fortune system, any workstation other than the master workstation.

SCROLL

The process of moving the display vertically across the screen.

SHELL SCRIPT

A file that contains several commands and performs a task with one command, as if each command in the file was entered separately. For example, the shell script /bin/menus allows the user to log in to the menu system.

SINGLE-USER CONFIGURATION

A Fortune system that can be used by only one operator at a time.

SOFTWARE

A general term for instructions and information coded in a form that a computer can interpret correctly.

STORAGE DEVICE

A device that is online to a computer and is capable of storing large amounts of information that can be transferred to memory under control of the computer.

SWAP DEVICE

Jobs are kept on disk and periodically transferred to main memory to be executed.

SYNC

The word that is typed before halting the CPU when a problem occurs.

SYSTEM MANAGEMENT

The process of establishing accounts for users, controlling usage, and doing back-ups, and other procedures.

TERMINAL

The device used for inputting or outputting data.

TROUBLESHOOTING

The process of searching for the source of a problem in the computer hardware.

USER COMMANDS

Bypassing the menu system, these commands can be directly typed in to communicate with the operating system.

UTILITIES

Utilities are computer programs which perform specific functions such as manipulating files or protecting your system.

WORKSTATION

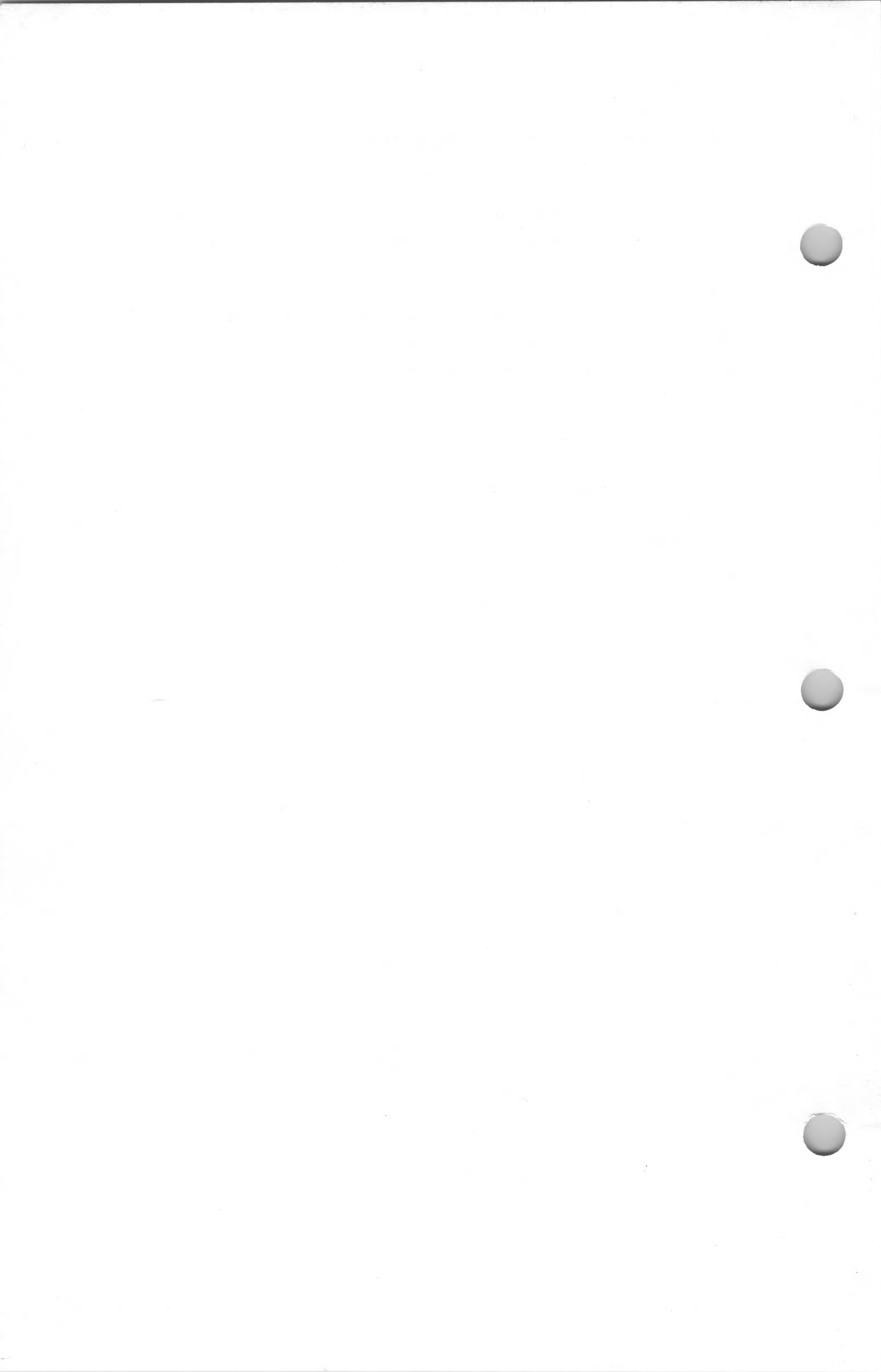
For the Fortune system, any combination of a keyboard and a display unit. The master workstation is connected directly to the CPU; a satellite workstation is connected to the CPU through a cable and a controller.

WRITE PROTECT

The condition of the flexible disk in which it is not possible to erase data by writing over it.

WRITE-PROTECT NOTCH

A small cut-out notch on one side of a flexible disk. When this is covered by a tab, information on the disk can't be changed.



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Fortune 32:16

Reference Guide

FORTUNE SYSTEMS



Fortune Systems Corporation
300 Harbor Boulevard
Belmont, CA 94002

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How to Use This Guide

You can use this guide in two ways, either by itself, or as a quick information guide to supplement Meet Your Fortune System and Understand Your Fortune System.

If you are an experienced computer user and just want to know how to set up and use your Fortune 32:16, you'll find in this guide brief step-by-step procedures for everything you'll need. For further information about the operating system and how to use it, consult the Fortune Operating System Guide.

If you've read and used Meet Your Fortune System and Understand Your Fortune System, you'll find here brief explanations for all the procedures covered in both of those guides.

This guide assumes that you're familiar with such terms as operating system, flexible disk, permissions, group, directory, and file. A glossary with the definitions of these terms is included in Meet Your Fortune System, and other terms are defined in full with examples in Understand Your Fortune System.

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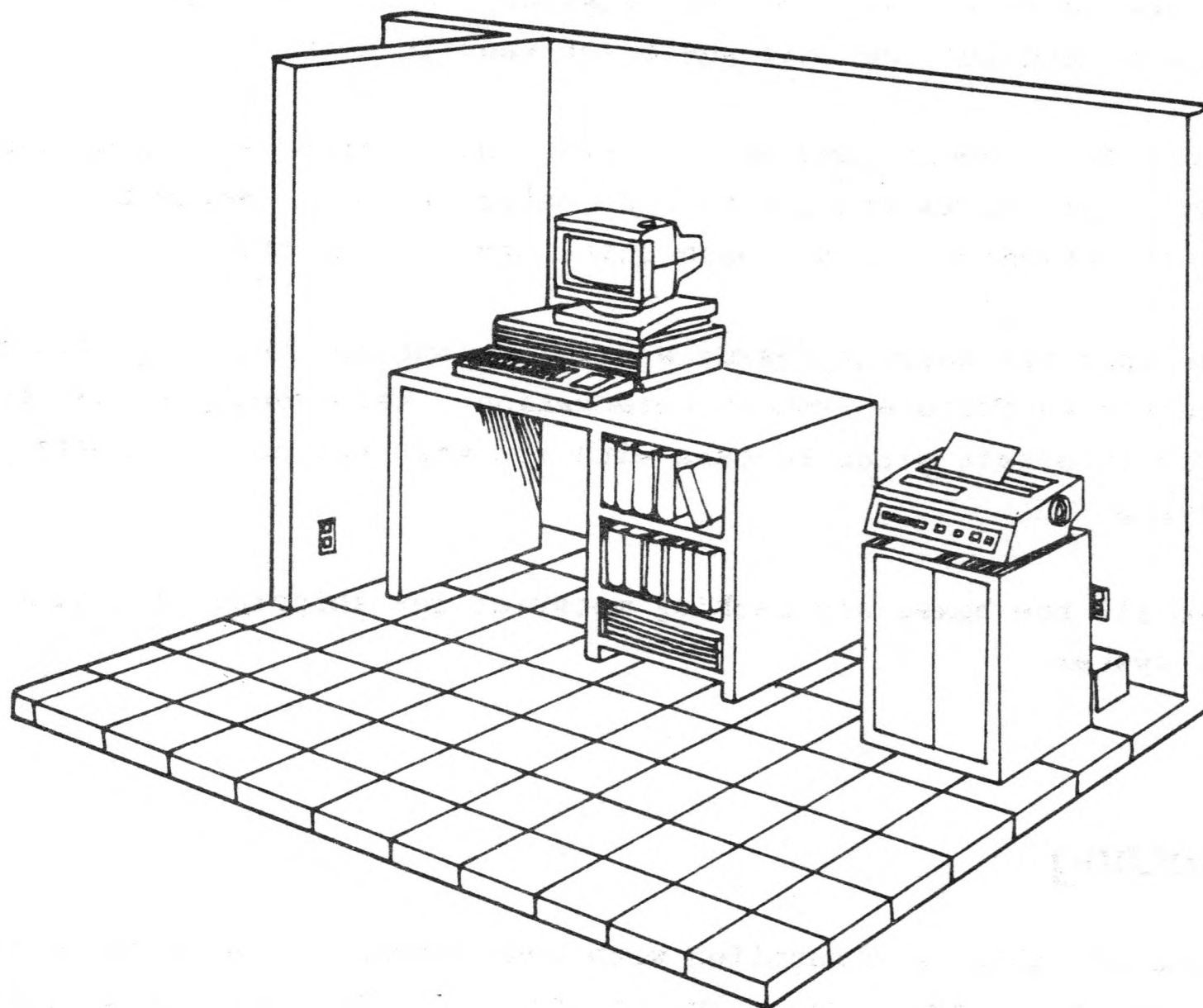
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Single User System

You'll soon be using your basic Fortune 32:16 with the procedures in this part. Be sure to follow the instructions exactly to install your system correctly. The following procedures are covered in this part.

- Unpacking, setting up, and installing the basic Fortune 32:16
- Operating the basic units
- Setting up and operating a printer



1 Basic Units Setup

Once you perform the basic system setup you won't have to do it again unless you move the system. Setting up a basic Fortune system involves unpacking the central processing unit (CPU), monitor and keyboard--this is called the master workstation--from their shipping containers and connecting the units to one another and to a power supply. The system is shipped to you with the single user operating system already on the hard disk.

Unpacking

To prevent damage to your Fortune system, unpack it following the guidelines below.

- 1 Remove the CPU from its carton and from the insulating foam. Set the warranty card and cables aside. Remove the plastic wrapping and put the unit where you want it to be.
- 2 Remove the keyboard and monitor from their carton and insulating foam. Set the warranty cards and cables aside. Remove the plastic wrapping and put both units next to the CPU.
- 3 Make sure the warranty cards are filled out and that one copy is returned to Fortune Systems Corporation. Keep your part of the cards in a safe place to take with you when you need warranty service.
- 4 Save all the boxes and packing material for shipping or moving the system.

Connecting

Two kinds of cables are supplied with your system. One is the power cable that has a three-prong plug on one end. The other is a coiled cable with a special connector on each end.

- 1 Put the plug end of the power cable into the receptacle at the back of the CPU. Don't plug the cable into an outlet yet.

- 2 Using one of the coiled cables, connect the keyboard to the FRONT of the CPU.
- 3 With the remaining coiled cable, connect the monitor to the BACK of the CPU.
- 4 Make sure the on/off switch at the back of the CPU is in the off position. Plug the power cable into a wall outlet.

2 Basic Units Operation

Operating the basic Fortune 32:16 requires knowing how to start up and shutdown the system as well as familiarity with the basic functions and features of the system.

Starting Up

You should follow the starting up procedure each time you turn your Fortune system on.

- 1 Make sure the system is plugged in.
- 2 Set the power on/off switch at the back of the CPU to On.
- 3 Set the date and time on the screen by typing over the current information with new information and then pressing the Return key.
- 4 The system checks your files for errors and then shows you the login screen. Follow the directions on the screen to type in your account name and password. If you don't have an account name, see the information on page 50 to learn about what account name means and how to use it.
- 5 You'll now see the global menu. Choose the activity you want by typing the code for your selection and pressing the Return key. For detailed operating instructions, refer to the manual for that selection.

Backing Up the Operating System

Your Fortune 32:16 is delivered to you with the operating system already on the hard disk. You should make a backup copy of it as soon as you have your Fortune system up and running. You'll need two blank flexible disks. Label them as Cold boot disk #1, and Cold boot disk #2. You don't need a formatted flexible disk. During this procedure, the computer formats the blank flexible disk.

- 1 Log in as "manager."
- 2 From the global menu, type S5 for the product maintenance menu and press the Return key.
- 3 Type b for backup existing product and press Return.
- 4 From the product selection menu, type c for cold boot.
- 5 Follow all the instructions you'll see on the screen from this point on. If you see something that looks like an error message, you may have done something wrong or have a bad flexible disk. Try following the procedure again before you contact your Fortun Systems dealer for assistance.
- 6 When the process is complete, do not put a write-protect tab on the disk labeled "Cold boot disk #1." Do put a write-protect tab on the disk labeled "Cold boot disk #2."

For additional information on this procedure refer to Meet Your Fortune System.

Disk Usage

Each time you turn on your Fortune 32:16 and log in, you'll be shown how much of the space on your hard disk is available for use. The message is: " % of the available space is in use." If the amount is 90% or more, you should make backup copies of files or programs and then remove them from the system.

If your system is turned on continuously, or if you want to know the disk usage without logging in again, use the procedure below.

USING THE DISK USAGE SELECTION

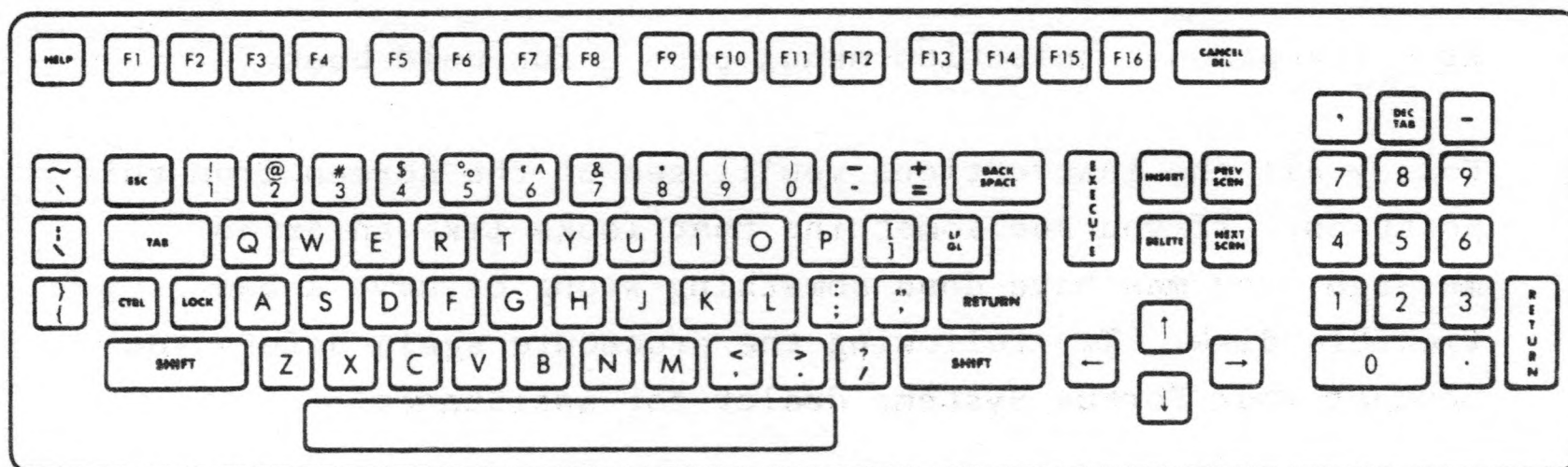
- 1 From the global menu type s2 for system management and press the Return key. Type 33 for percent of disk used and press the Return key.
- 2 You'll see a message similar to this one.

| Filesystem | Mounted on | Kbytes | used | free | % used |
|------------|------------|--------|------|------|--------|
| /dev/hd02 | / | 7771 | 3198 | 4578 | 41% |

- 3 Press Return to go back to the system management menu, and press the Cancel key to return to the global menu.

The Keyboard

The keyboard of the Fortune 32:16, shown in the illustration below, contains all the keys needed to use any Fortune Systems application or the Fortune Operating System.



TYPEWRITER-LIKE KEYS

The keys in the middle portion of the keyboard are identical in placement and function to those of a standard typewriter.

ADDITIONAL SYMBOL KEYS

The vertical row of keys to the left of the typewriter-like keys provides additional characters you can use with some applications. You can see these additional characters on the screen and print them, if your printer element includes them.

HELP

The Help key is the blue key at the upper left-hand corner of the keyboard. You can use the Help key with most Fortune Systems applications, as well as with the system utilities or system management menus. HELP gives you additional information about what you're doing.

CURSOR CONTROL KEYS

The four keys with arrows in different directions show the ways you can move the cursor. They are located to the right of the typewriter-like keys and are most often used with FOR:WORD word processing and Multiplan spreadsheet applications.

SCREEN CONTROL KEYS

These keys are used in FOR:WORD word processing for moving the cursor from one screen display to another. They are located above the cursor control keys.

INSERT AND DELETE

The Insert and Delete keys are located to the right of the screen control keys. They are used with FOR:WORD word processing to add and remove text from a document.

CANCEL DEL

This key interrupts whatever you're doing and brings back the previous menu. It also has special functions in various applications. It is located to the right of the function keys at the top of the keyboard.

LF GL

In applications that distinguish between a carriage return and line feed operation, this key is used for line feed. In FOR:WORD word processing, this key means "glossary." The LF GL key is located next to the Return key grouped with the typewriter-like keys.

CTRL

CTRL stands for "control." This key can be used to select special graphics characters and has other special uses in other applications. The CTRL key is located above the shift key at the left side of the typewriter-like keys.

RETURN

The Return key is located in two positions on the keyboard, with the typewriter-like keys and beside the numeric keypad. You can press either Return key to tell the computer that you've finished typing. It is also equivalent to a carriage return/line feed operation.

DEC TAB

This key is used with the FOR:WORD word processing application for making decimal tabs. It is located at the top of the numeric keypad.

NUMERIC KEYPAD

This group of keys to the right of the typewriter-like keys duplicates a calculator keypad for use in Fortune Systems applications that require many numeric entries.

FUNCTION KEYS

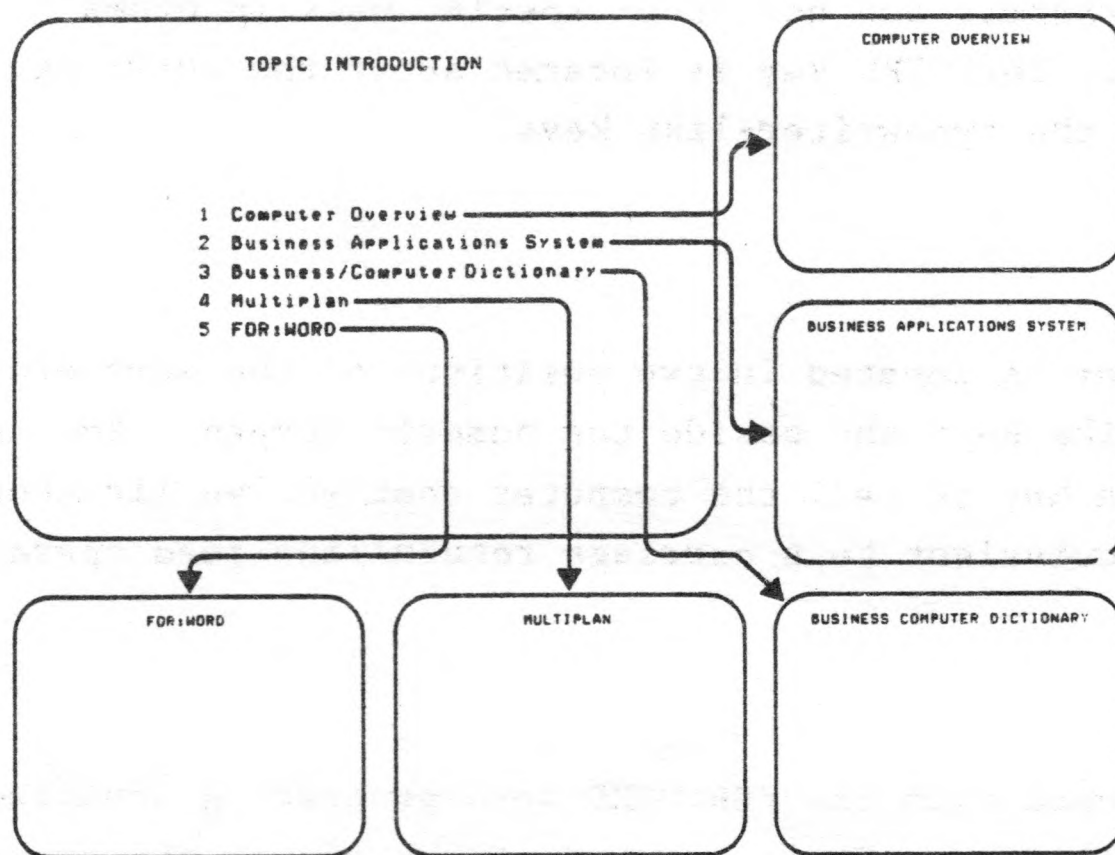
The 16 keys at the top of the keyboard labelled F1 through F16 are the function keys. All Fortune Systems applications that use the function keys are supplied with a template that fits in a channel below the keys and identifies their use for that application.

Menu Structure

The Fortune 32:16 has a set of menus used to select various functions for total operation of the Fortune system. The starting point is the global menu, the first menu after the login screen. In addition, every application has a menu that defines the structure of the application and lists the procedures or functions you can perform. Most applications also have submenus that further break down the application features into separate procedures.

The keys most often used to make choices on a menu are Return and Execute. On menus that require other choices, information is given about the alternatives and how to select them.

The illustration below shows how the menus relate to each other.



Operating System

The Fortune Operating System is the master software program on the Fortune 32:16. It controls the hardware and keeps track of where information is stored. You use the operating system indirectly when you use an application. To work directly with the operating system at the system command level, refer to the Fortune Operating System guide for detailed information.

There are two kinds of operating systems available for the Fortune system, single user and multiuser. The single user operating system operates a basic Fortune system that is described in this part. The multiuser operating system allows a maximum of 15 satellite workstations to be connected to a CPU with added hardware inside. The installation, configuration, and use of a multiuser system are described in the Part 2.

File System Structure

Directories and files are the basic units of the file system. The parent directory has other directories listed in it. These directories are called subdirectories. Files are then listed under their appropriate directories or subdirectories.

Three kinds of files are recognized by the operating system: ordinary files created by applications, special files used by the operating system for handling devices like disks and printers, and directories which are lists of files. You can create and change files using a Fortune Systems application or by using the text editor at the command level of the operating system. Refer to Understand Your Fortune System or Fortune Operating System for information on the command level.

Directories, subdirectories, and files are organized in a hierarchy resembling an upside down tree. At the top is the root directory which is designated with simply a /. All directory names are preceded with a /, for example /usr. This root directory is the parent of all files and directories on the hard disk.

There are five major directories branching down from the root directory. Operating system programs are contained in /bin, /etc, /usr, and /dev. The /u directory is the parent user directory. When an account is created for someone the operating system creates a directory for that user under the /u parent directory. This is called the user's home directory.

More detailed information on the file system structure can be found in Understand Your Fortune System and the Fortune Operating System guides.

Applications

Applications programs such as General Ledger, Multiplan, and Fortune Systems word processing can perform tasks such as accounting, financial planning, and word processing. Some people use applications software more than the operating system software.

The manual supplied with every Fortune Systems application package describes in detail how to use the application, including installing the application on your system. Part 6 of this guide describes the product maintenance features for installing, deleting, and backing up any application.

Help

You can get additional information at certain points in your use of the Fortune 32:16 by pressing the Help key. The information you see might indicate how to perform a procedure, what a command does, how a key works, or what information is required. The kind of information you see and when you can see it depend upon the application you're using. Generally, all applications provide some sort of help. In addition, the global menu, system utilities menu, and system management menu provide help.

Shutting Down

When you are finished using your Fortune system, you MUST follow the shutdown procedure before you turn off the power. There are two ways to shut down the system; using the shutdown selection on the system management menu, or using the shutdown account at the login screen.

USING THE SHUTDOWN SELECTION

- 1 From the global menu choose system management, S2.
- 2 Type 30 for shutdown computer.
- 3 Type yes to continue. Eventually you'll see the message "Please turn the Fortune 32:16 off". It is now safe to turn off the power.

USING THE SHUTDOWN ACCOUNT

- 1 From the global menu press the Cancel key and then the Return key. You'll see the login screen again.
- 2 Type shutdown and press Return.
- 3 Type yes to continue. Eventually you'll see the message "Please turn the Fortune 32:16 off". It is now safe to turn off the power.

1

3 Printer Setup and Operation

A printer can be connected to a basic Fortune system with one cable and a change to the operating system information using the system management menu.

The cable that came with your printer may not be suitable for connecting it to the Fortune system. Check with your Fortune Systems dealer to see if you need a different cable. Connecting a printer to your Fortune system without the correct cable can damage your system.

Installing

Use these steps to connect the printer and tell the system that a printer is connected.

- 1 Connect the printer to the SIO port at the back of the CPU with the appropriate cable from your Fortune Systems dealer.
- 2 From the global menu choose S2, system management, and press the Return key. Then type 39 for change device connection and press Return.
- 3 From the change device connection menu, type p and press Return.
- 4 For device type, type 1 for letter quality printer, or 2 for dot matrix printer and press Return.
- 5 Press the Cancel key twice to return to the global menu.

Testing

Before you begin using the printer with an application, follow instructions in your printer manual to load some paper and test the printer. Most printers have a self-test switch that, when turned on, prints a character test pattern.

Using

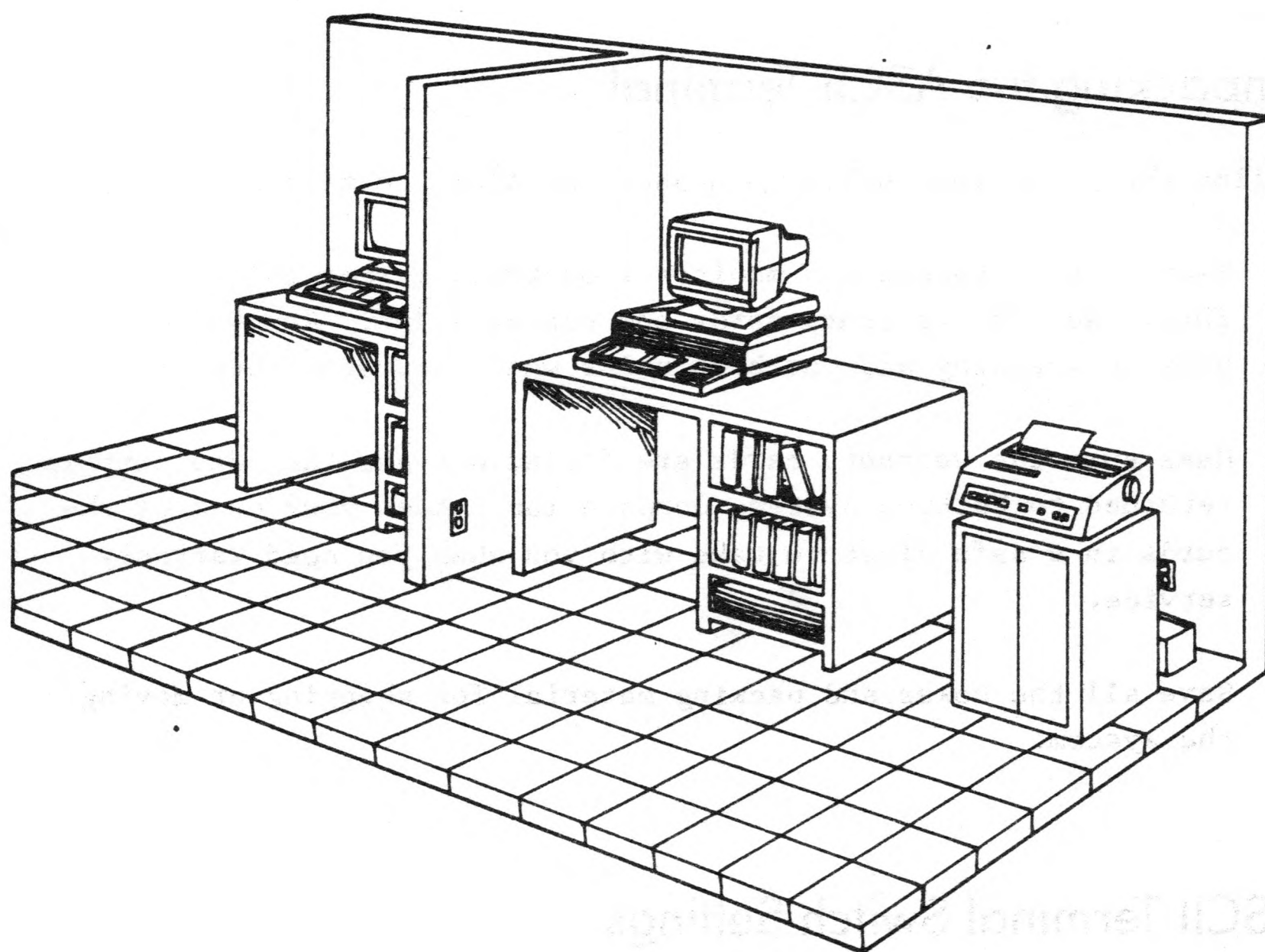
Follow the instructions in your printer manual for loading your printer with paper operating it. Before you use the printing function of an application, make sure that your printer is turned On and the paper is properly loaded.

If you have problems with your printer, check the basic troubleshooting section in Part 7 for information on correcting simple problems. Otherwise, check your printer manual for instructions.

Multiuser System

A multiuser system is defined as a basic Fortune system with additional units attached and a multiuser operating system installed. The additional units include a satellite workstation, that consists of an ASCII terminal and keyboard. This allows more than one person to use the Fortune system at a time.

2



4 Setting Up Additional Units

Additional units must be unpacked, added to the operating system list on the configuration menu, and tested. Additional units also require that you have a suitable COM/A board installed in your Fortune 32:16, depending upon the number of additional units you want to add to your Fortune system. You must also have an RS-232 cable of the appropriate length for each satellite workstation you want to connect. The COM/A board and cables are available from your Fortune Systems dealer.

When additional satellite workstations are added to a system, the original terminal and monitor become the master workstation. Shutting down a multiuser system can be done only from the master workstation.

Unpacking the ASCII Terminal

Follow the guidelines below to unpack the ASCII terminal.

- 1 Remove the keyboard and monitor from their carton and insulating foam. Set the warranty cards and cables aside. Remove the plastic wrapping and put both units where you want them to be.
- 2 Make sure the warranty cards are filled out and that one copy is returned to Fortune Systems Corporation. Keep your part of the cards in a safe place to take with you when you need warranty service.
- 3 Save all the boxes and packing material for shipping or moving the system.

ASCII Terminal Switch Settings

Use a pencil tip to change the switches on the back of your ASCII terminal. The standard settings for use with your Fortune 32:16, and the way it is shipped to you, are switches 2, 3, and 4 in the down or OFF position.

Use the chart on the next page to change the settings if you need to.

Switch Settings for the ASCII Terminal

| Switch Number | | | | | | | | Function |
|---------------|---|---|---|---|---|---|---|----------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | |
| D | | | | | | | | 60 Hz power source (U.S.) |
| U | | | | | | | | 50 Hz power source (other) |
| D | D | | | | | | | No parity (always space) |
| U | D | | | | | | | No parity (always mark) |
| D | U | | | | | | | Odd parity |
| U | U | | | | | | | Even parity |
| | | D | | | | | | 1 stop bit |
| | | U | | | | | | 2 stop bits |
| | | | D | D | D | D | | 50 baud |
| | | | D | D | D | U | | 75 baud |
| | | | D | D | U | D | | 110 baud |
| | | | D | D | U | U | | 134.5 baud |
| | | | D | U | D | D | | 150 baud |
| | | | D | U | D | U | | 300 baud |
| | | | D | U | U | D | | 600 baud |
| | | | D | U | U | U | | 1200 baud |
| | | | U | D | D | D | | 1800 baud |
| | | | U | D | D | U | | 2000 baud |
| | | | U | D | U | D | | 2400 baud |
| | | | U | D | U | U | | 3600 baud |
| | | | U | U | D | D | | 4800 baud |
| | | | U | U | D | U | | 7200 baud |
| | | | U | U | U | D | | 9600 baud |
| | | | U | U | U | U | | 19200 baud |

2

Installing the Satellite Workstation

Before you can begin multiuser operation, follow the guidelines below for correctly installing the satellite workstation.

- 1 Install the COM/A board in the CPU, following the instructions you'll find packed with it.
- 2 Connect an RS-232-C cable between the back of the terminal and a port of the COM/A board. Write down which port each satellite workstation is connected to.
- 3 Connect the additional units to a wall outlet with the power cord that is supplied with the unit.

5 Multiuser Configuration

Before the satellite workstations can be used, the configuration of the system must be changed from single user to multiuser and then the operating system can be updated to accommodate the additional workstations. This process involves installing the multiuser operating system. You will need the cold boot set you made when you first installed your basic system, and an additional disk containing the multiuser operating system.

Loading the Multiuser Operating System

Before you begin, you must have the following items.

- The cold boot set you made when you backed up the operating system of your single user system.
- Fortune multiuser operating system.

And you need the following information.

- How much main memory do you have? You need at least 512K bytes of memory to support of multiuser system.
- What type of hard disk do you have? Look at the system configuration decal on the back of the CPU. The alphanumeric code in the block labeled DEVICE/LEFT identifies the type of hard disk drive. If you cannot find the decal, call your dealer to determine what code you should use.
- How many users are there on your system? The number of users is one more than the number of satellite workstations. If you have three satellite workstations, you have a four-user system.

During this procedure, all files on the hard disk are erased. Do not use this procedure until you have made backup copies of all files that are not part of the operating system. Use the appropriate procedures in Part 4, system utilities procedures, to back up your files.

Load the multiuser operating system as follows:

- 1 Make sure all satellite workstations are connected.
- 2 Turn on the system and make backup copies of all files.
- 3 Turn the system off.
- 4 Insert cold boot disk #1 in the flexible disk drive.
- 5 Hold down the Cancel Del key, and set the power switch to On. When the maintenance screen is displayed, release the Cancel Del key.
- 6 Press function key F4, then press the space bar until the entry in the third column is "Floppy, Drive # 0".
- 7 Press function key F7. The third column is blank. Type fd02/sa/reconf and press the Return key.
- 8 Verify that the entries for line F4 and line F7 are as specified, then press the Execute key.
- 9 Use the Return key to move the cursor through the menu. Make the following changes:

| <u>From</u> | <u>To</u> |
|--------------------|--------------------|
| Root device = hd02 | Root device = fd02 |
| Swap device = hd01 | Swap device = fd01 |

- 10 Verify that the changes are as specified, then press function key F3 (to select F3 = GO).
- 11 When the boot prompt appears, type fd02/unix and press the Return key.

The system displays the normal power on message

- 12 When the next screen appears, press function key F1 to indicate that you want to erase the hard disk.
- 13 When the next screen appears, check that the displayed code matches the code on the system configuration decal. If it does match, press function key F1 for yes, and skip to step 15. If it doesn't match, press function key F2 for no, and continue with step 14.
- 14 If you answered no in step 13, you'll see a screen with many codes. Find the one that matches the code on the system configuration decal. Type the number next to the code, and press Return. Repeat step 13.
- 15 Select either function key F2 (for a maximum of 3 users) or function key F3 (for a maximum of 5 users).
- 16 From this point, follow instructions as they appear on the screen. You will see the message: "You must now power the system off and on again (or reset)". Set the power switch to Off for a few seconds, then set the power switch to On again. (Do not remove the flexible disk!).
- 17 When the message "Finished with floppy #1" appears, you can replace cold boot disk #1 with cold boot disk #2 while other messages are being displayed.
- 18 When the message "Is floppy #1 replaced with #2 yet (y or n)?" is shown, make sure that the flexible disk has been replaced, then type y and press the Return key. The procedure continues from this point to the normal starting-up sequence.
- 19 After the starting-up sequence is complete, the date and time screen is displayed. From this point, follow normal procedures for typing in the date and time, and log in as manager.
- 20 From the global menu, select the product maintenance option by typing in s5 and pressing the Return key.
- 21 Type i and press the Return key to install the Fortune multiuser application from the flexible disk.
- 22 Follow screen instructions to install the product.

- 23 When the installation is complete, press the Return key, and remove the flexible disk.
- 24 Install any applications that you have at this time. Use the product maintenance option, as you did for installing the multiuser application.
- 25 You must reconfigure your system. From the global menu, type in s2 and press the Return key to select the system management option.
- 26 When the system management menu is displayed, type in 39 and press the Return key to select change device connections.
- 27 Follow instructions on the screens to connect the printer and each satellite workstation of your system.
- 28 You must shutdown the system to complete the logical connection of satellite workstations. From the system management menu, type in 30 and press the Return key to select the shutdown procedure.
- 29 Follow instructions on the screens to shutdown the system and turn the power Off.
- 30 After the system is off for a few seconds, set the power switch to On again. You must now establish an account in the usual manner, using the "newuser" utility.

Using the Multiuser System

There are some additional procedures you must follow when you use a multiuser system to make sure that it operates properly.

STARTING UP ADDITIONAL UNITS

- 1 Make sure the basic system is turned On and the file system check is done on the master workstation. Turn on the satellite workstation(s), which will only show a blinking cursor until the login screen appears.
- 2 You'll see the date and time screen at the master workstation only. Complete the information and press Return.
- 3 You'll see the login screen on both the master workstation and satellite workstations. Have each user log in at his or her workstation and proceed with the work.

SHUTTING DOWN ADDITIONAL UNITS

- 1 Make sure everyone is logged off satellite workstations. If you're not sure, use selection 31, who is using the computer, from the system management menu.
- 2 Turn off the printer and satellite workstations.
- 3 Go to the master workstation and return to the global menu. Select system management, S2, and type 30 for the shutdown the computer selection.
- 4 Answer yes to the continuation message and you'll eventually see a "Please turn the Fortune 32:16 off" message. It is now safe to turn off the power for the CPU.

Or, use the shutdown account to turn off the system:

- 1 Go to the master workstation and return to the global menu. Press the Cancel key and you'll see the login screen again. For account name type in shutdown and press Return.
- 2 Answer yes to the continuation message and you'll eventually see a "Please turn the Fortune 32:16 off" message. Turn off the power at the CPU.

6 Multiuser System Information

With a multiuser system, you may need to know who's using it, send messages to a terminal, or send messages to the users. All the following procedures use the system management menu, selection S2 on the global menu.

Who's Using the System

This process tells you who's currently logged into the system.

- 1 On the system management menu type 31 and press the Return key.
- 2 You'll see a message for each user on the system.
- 3 Press Return to go back to the system management menu.

Writing Messages

This process allows you to send a message to a specific user, regardless of the terminal that person is using.

- 1 On the system management menu, type 37 and press the Return key.
- 2 Type in the account name and press Return.
- 3 Type in the message you want to send, and end it with a Return. Then hold down the control key and type a d.
- 4 You're returned to the system management menu. Your message will appear on the screen of the terminal where the account is logged in.

Sending Messages

This process sends the same message to all operators.

- 1 On the system management menu, type 38 and press the Return key.
- 2 Type the message to be sent, and end it with a Return. Then hold down the control key and press d.
- 3 You'll return to the system management menu. Your message is immediately displayed on all terminals.

Screen Definitions

When you're working with your Fortune system you may want to know what you can do with the, global, system utilities, system management, and product maintenance menus. This part is arranged by menu, with a short explanation of all the selections on the menus.

3

7 Global Menu

| FORTUNE SYSTEMS GLOBAL MENU | | |
|--|--|---|
| <u>BUSINESS APPLICATIONS</u> B1 Business Systems B2 Business Surveys B3 Business Graphics B4 B5 B6 | <u>PROFESSIONAL TOOLS</u> P1 Multiplan P2 Color Graphics P3 P4 P5 P6 | <u>ELECTRONIC OFFICE TOOLS</u> E1 FOR:WORD E2 Record Processing E3 Automated Calendar E4 E5 E6 |
| <u>COMMUNICATIONS</u> C1 Async C2 Bisync C3 Local Network C4 X.25 C5 SNA/SDLC C6 | <u>TRAINING/EDUCATION</u> T1 Topic Introduction T2 Amusements T3 Operator Training T4 C.A.I. Training T5 Demonstrations T6 | <u>SYSTEM TOOLS</u> S1 System Utilities S2 System Management S3 Languages S4 IDOL S5 Product Maintenance S6 |
| Store name and phone Enter selection and press <RETURN> : | | Press <HELP> for assistance |

The global menu is the starting point for use of the Fortune system. It is divided into six sections: Business Applications, Professional Tools, Office Automation Tools, Communication, Training/Education, and System Tools.

When you install an application a selection will be highlighted on the global menu. Every Fortune system is shipped with three selections already highlighted in the System Tools category: system utilities, system management, and product maintenance.

To make a choice from the global menu, type the code preceding the selection and press the Return key.

The categories on the global menu are listed below.

- Business Applications
- Professional Tools
- Electronic Office Tools
- Communications
- Training/Education
- System Tools

8 System Utilities Menu

The system utilities menu shown below contains functions for managing files, directories, and flexible disks.

| SYSTEM UTILITIES MENU | | | |
|-----------------------|---------------------------------|--------------------|----------------------------------|
| FILE HANDLING | | DIRECTORY HANDLING | |
| 10 | APPEND One File To Another | 20 | COPY A Directory |
| 11 | COPY A File | 21 | CREATE A Directory |
| 12 | CREATE A File | 22 | DELETE A Directory |
| 13 | DELETE A File | 23 | GO TO Another Directory |
| 14 | GROUP ID Change Of A File | 24 | GROUP ID Change Of Directory |
| 15 | LIST File Contents On Screen | 25 | LIST Directory Information |
| 16 | M MOVE Or Rename A File | 26 | M MOVE Or Rename A Directory |
| 17 | O OWNER Change File Ownership | 27 | N NAME Current Directory |
| 18 | P PRINT File Content On Printer | 28 | O OWNER Change Directory Owner |
| 19 | P PERMISSION Change Of A File | 29 | P PERMISSION Change Of Directory |
| 30 | BACKUP Files To Flexible Disk | 32 | FORMAT Flexible Disk |
| 31 | RELOAD Files From Flexible Disk | 33 | CLEAR Files On Flexible Disk |

Press (HELP) For More Information Press (CANCEL) For Global Menu

Enter Selection Number & Press (RETURN):

The list below shows each selection including its number on the menu and a description of how you use it. Complete instructions for using the each selection are included in Part 4, System Utilities Procedures.

- 10 APPEND ONE FILE TO ANOTHER creates a new file by combining the contents of two or more other files.
- 11 COPY A FILE copies one or more files and places them into directories of your choice.
- 12 CREATE A FILE creates an empty file or files.
- 13 DELETE A FILE removes files from the hard disk.

- 14 GROUP ID CHANGE OF A FILE changes the ownership of a file from one group to another. You must be logged in as manager to do this.
- 15 LIST FILE CONTENTS ON SCREEN shows you the contents of a file on the screen.
- 16 MOVE OR RENAME A FILE puts a file in the location of your choice or gives a file whatever name you choose.
- 17 OWNER CHANGE FILE OWNERSHIP moves the owner's access rights from one account to another.
- 18 PRINT FILE CONTENTS ON PRINTER prints files created for or by programs. Use an application to print files created by the application.
- 19 PERMISSION CHANGE OF A FILE changes access rights to a file for its owner, the group owning it, and all other users. You must be logged in as manager to change file permissions.
- 20 COPY A DIRECTORY copies a directory and all its files.
- 21 CREATE A DIRECTORY makes a new, empty directory.
- 22 DELETE A DIRECTORY removes a directory and all its files.
- 23 GO TO ANOTHER DIRECTORY changes your current directory to another one.
- 24 GROUP ID CHANGE OF A DIRECTORY changes the group owning the directory.
- 25 LIST DIRECTORY INFORMATION shows the names of subdirectories and files that are part of the directory.
- 26 MOVE OR RENAME A DIRECTORY moves the directory and all its files to a new location or gives a directory a new name of your choice.
- 27 NAME CURRENT DIRECTORY shows the name of the current directory.
- 28 OWNER CHANGE DIRECTORY OWNER moves the owner's access rights to a directory from one account to another.

- 29 PERMISSION CHANGE OF DIRECTORY changes access to the directory for its owner, the group owning the directory, and the public. You must log in as manager to change directory permissions.
- 30 BACKUP FILES TO FLEXIBLE DISK places a copy of the file or files on a formatted flexible disk.
- 31 RELOAD FILES FROM FLEXIBLE DISK moves files from a flexible disk back onto the hard disk.
- 32 FORMAT FLEXIBLE DISK prepares a disk for use in backing up files.
- 33 CLEAR FILES ON FLEXIBLE DISK removes ALL the files from a disk.

9 System Management Menu

Functions for managing accounts, groups, and the Fortune system are part of the system management menu. Following the menu is a brief description of each selection. Further information on the selections and details about using each one are listed in Part 5, System Management Procedures.

| SYSTEM MANAGEMENT | | | | | |
|-------------------|----------|-----------------------|----|---------|--------------------------|
| ACCOUNTS | | GROUPS | | | |
| 10 | Add | new account | 20 | Add | new group |
| 11 | Modify | existing account | 21 | Modify | existing group |
| 12 | Delete | existing account | 22 | Delete | existing group |
| 13 | List | accounts | 23 | List | groups |
| OTHER TOOLS | | | | | |
| 30 | Shutdown | computer | 35 | Display | current date and time |
| 31 | Who | is using the computer | 36 | Set | date and time |
| 32 | Disk | usage | 37 | Write | message to a terminal |
| 33 | Number | of free blocks | 38 | Send | message to all terminals |
| 34 | Change | your password | 39 | Change | device connections |

Press <HELP> For More Information Press <CANCEL> For Global Menu

Enter Selection Number & Press <RETURN>:

- 10 ADD NEW ACCOUNT allows a new user to use the system.
- 11 MODIFY EXISTING ACCOUNT is a separate menu of procedures that alter accounts.
- 12 DELETE EXISTING ACCOUNT removes an account from the computer so that no one can use it.
- 13 LIST ACCOUNTS shows the account information for some or all accounts on the system.

- 20 ADD NEW GROUP creates a new group or groups.
- 21 MODIFY EXISTING GROUP has a menu of options for modifying groups.
- 22 DELETE EXISTING GROUP returns the files owned by the group to the public domain.
- 23 LIST GROUPS shows the group identification chart for a group or for all groups.
- 30 SHUTDOWN COMPUTER is used to close the files before the system is turned off.
- 31 WHO IS USING THE COMPUTER tells you who's currently logged into the system.
- 32 DISK USAGE shows the amount of disk space used by an account, the current directory, or any directory.
- 33 PERCENT OF DISK USED is a repeat of the percent of disk used message you see when you first start up the system.
- 34 CHANGE YOUR PASSWORD allows you to change your password for login.
- 35 DISPLAY CURRENT DATE AND TIME shows you the date and time you used to set the computer.
- 36 SET DATE AND TIME resets the date and time.
- 37 WRITE MESSAGE TO A TERMINAL sends a message to a specific user regardless of the terminal they're using.
- 38 SEND MESSAGE TO ALL TERMINALS sends the same message to all users.
- 39 CHANGE DEVICE CONNECTIONS is used to tell the operating system about a satellite workstation or other additional units.

10 Product Maintenance Menu

This menu contains functions for installing, deleting, and backing up applications or any other kind of Fortune Systems software. Following the menu is a brief description of each selection. Complete information about the selections and how to use them are listed in Part 6, Product Maintenance Procedures. You must log in as manager to use the product maintenance selections.

PRODUCT MAINTENANCE

Install a Product (from diskette)
Delete existing product
Backup existing product

SELECTION:

INSTALL A PRODUCT moves the software from the application master disk to the hard disk and updates the global menu.

DELETE EXISTING PRODUCT is used to remove an application from the hard disk when the application is no longer needed, or when a revised version needs to be installed.

BACKUP EXISTING PRODUCT is used to back up a software product after it is installed to have an additional copy of it.

System Utilities Procedures

System utilities procedures listed on the system utilities menu include functions for working with files, directories, and flexible disks. This part is divided into four sections: files, directories, ownership and permissions, and backing up files. Within each section you will find the menu selections listed in the same order in which they appear on the menu. You'll also find instructions for using each procedure. All of these functions are available through S1 on the global menu.

4

11 Files

Below are procedures for working with all the files on your Fortune system except those created with an application. In word processing a file is called a document, and in Multiplan it is called a spreadsheet. If you are creating these kinds of files you should use their respective applications to work with the files.

On the other hand, program files created with the operating system editor can be manipulated using all the procedures listed below.

Pathnames

The pathname of a file is a description of its location in the file system structure. This includes all directories above it on the file system. A pathname always starts with a slash, indicating the root directory, for example /u/sullivan/report/contents.

Appending Files

Append one file to another creates a new file by combining the contents of two or more other files.

- 1 On the system utilities menu, type 10 to select append one file to another, and press the Return key.
- 2 Type the names of the files to be appended, separating each file name with a space. Include the pathnames if necessary. Press Return.
- 3 A new screen shows the name of the appended file. Press Return to return to the append a file menu.
- 4 Press Cancel to return to the system utilities menu.

Copying a File

The copy a file utility copies one or more files and places them into directories of your choice.

- 1 On the system utilities menu, type 11 for copy a file and press the Return key.
- 2 Type the name of the original file, a space, and the name for the copy, using pathnames if necessary. Press Return.
- 3 When the copy is complete, you are returned to the system utilities menu.

Creating a File

The utility create a file creates an empty file or files.

- 1 On the system utilities menu, type 12 for create a file and press the Return key.
- 2 Type the new file name or names separated by a space, including their current pathnames, if necessary. Press Return.
- 3 A new screen shows the names of the new files you have created. Press Return to return to the create a file menu.
- 4 Press the Cancel key to return to the system utilities menu.

Deleting a File

The delete a file utility removes files from the hard disk.

- 1 On the system utilities menu, type 13 and press the Return key.
- 2 Type the file name or names separated by a space, with the complete pathnames if necessary, and press Return.
- 3 When the process is complete you'll see the system utilities menu again.

Changing the Group ID of a File

Group ID change of a file changes ownership of a file to a different group. You must be logged in as manager to do this.

- 1 From the system utilities menu, type 14 and press the Return key.
- 2 Type the group name followed by a space and the file name. Press Return.
- 3 When the process is complete, you'll be returned to the system utilities menu.

Listing File Contents on Screen

List file contents on screen shows you the contents of a file on the screen.

- 1 From the system utilities menu, type 15 to select list file contents and press the Return key.
- 2 Type in the name of the file or files, including the pathname if necessary, and press Return.
- 3 Files that take up more than one screenfull can be seen by using the space bar to see the next screen, or by using Return or the cursor keys to see another line.
- 4 If you have specified more than one file, the files will appear in the order you listed them. When you have seen all the files you requested, press the Cancel key to return to the system utilities menu.

Moving a File

Use the move or rename a file utility to put a file in the location of your choice.

- 1 From the system utilities menu, type 16 for move or rename a file and press the Return key.

- 2 Type the present file location, including its pathname if necessary, followed by a space and then its new location name with pathname if necessary. Press Return.
- 3 When the move is complete you'll see the system utilities menu.

Renaming a File

You can also use the move or rename a file utility to give a file whatever name you choose.

- 1 From the system utilities menu, type 16 and press the Return key.
- 2 Type the present file name, including its pathname if necessary, followed by a space and then its new name and pathname if necessary. Press Return.
- 3 When the process is complete you'll see the system utilities menu again.

4

Printing File Contents on Printer

Use print file content on printer to print files created for or by programs. Use an application to print files created by the application.

- 1 Make sure your printer is turned On and set online.
- 2 From the system utilities menu, type 18 and press the Return key.
- 3 Type the first letter of the print option you want:

c for condense prints the file with blank lines removed
p for print prints the file as it is

Press Return.

- 4 Type the name of the file, including the pathname if necessary, and press Return.
- 5 When the printing is finished you'll be returned to the system utilities menu.

12 Directories

The following pages are procedures for working with the directories on your Fortune system. Some of these functions can also be performed by the applications on directories created by them. For instance, you can also use Fortune Systems word processing to create or remove a library which is word processing's name for a directory.

Copying a Directory

The copy a directory utility copies one or more files and places them into directories of your choice.

- 1 On the system utilities menu, type 20 for copy a directory and press the Return key.
- 2 Type the name of the original directory, a space, and the name for the copy, using pathnames if necessary. Press Return.
- 3 When the copy is complete you'll be returned to the system utilities menu.

Creating a Directory

The create a directory utility makes a new, empty directory.

- 1 On the system utilities menu, type 21 and press the Return key.
- 2 Type the directory name or names and pathname if necessary, and press Return.
- 3 When the process is complete you are returned to the system utilities menu.

Deleting a Directory

Delete a directory removes a directory and all its files.

- 1 From the system utilities menu, type 22 for the delete a directory utility and press the Return key.
- 2 There are two options:

e for an empty directory
a for a directory and all its contents

Type the letter for the option and press Return.

- 3 Type the directory name, including its pathname if necessary, and press Return.
- 4 When the process is complete you are returned to the system utilities menu.

4

Going to Another Directory

Go to another directory changes your current directory to another one.

- 1 On the system utilities menu, type 23 for the go to another directory utility and press the Return key. The prompt "Enter Directory You Wish To Go To:" appears at the bottom of the screen.
- 2 There are three ways to type the directory name:

| | |
|----------------------|---|
| .. | Up one level in the file hierarchy |
| (directory name) | When it is a subdirectory of the current directory |
| (directory pathname) | When it is not above or below the current directory |

Type the directory name and press Return.

- 3 You are returned to the system utilities menu. The current directory is the one you specified.

Changing the Group ID of a Directory

Group ID change of a directory changes the ownership of a directory from one group to another.

- 1 From the system utilities menu, type 24 and press the Return key.
- 2 Type the group name followed by a space and the directory name. Press Return.
- 3 When the process is complete, you're returned to the system utilities menu.

Listing Directory Information

The list directory information utility shows the names of subdirectories and files that are part of the directory.

- 1 On the system utilities menu, type 25 and press the Return key.
- 2 There are two choices for directory display:

list the names of files and subdirectories
display a detailed list of directory contents

Type the first letter of your choice and press Return.

- 3 Type in the directory name or names, separated by a space, and the pathname, if necessary. Press Return. To list the current directory just press Return.
- 4 Press Return to go back to the system utilities menu after viewing the directory listing.

Moving a Directory

Moving a directory with the move or rename directory utility moves the directory and all its files to a new location.

- 1 On the system utilities menu, type 26 and press the Return key.
- 2 Type the present directory location, including its pathname if necessary, followed by a space and then its new location with the pathname if necessary. Press Return.
- 3 When the process is complete, you'll be returned to the system utilities menu.

Renaming a Directory

The rename a directory utility gives a directory a new name of your choice.

- 1 On the system utilities menu, type 26 and press the Return key.
- 2 Type the present directory name, including its pathname if necessary, followed by a space and then its new name and pathname if necessary. Press Return.
- 3 When the process is complete you'll be returned to the system utilities menu.

Naming the Current Directory

Use the name current directory utility to find out the name of the current directory.

- 1 From the system utilities menu, type 27 and press the Return key. The directory name and its pathname are shown in the top left corner of the screen.
- 2 Press the Return key to return to the system utilities menu.

13 Ownership and Permissions

Ownership and permissions assigned to files and directories determine who can work with, look at, and use them. Changing the ownership and permissions with the system utilities menu is a way of maintaining system security. Only the system manager can change ownership and permissions.

Changing File Ownership

Owner change file ownership moves the owner's access rights from one account to another.

- 1 From the system utilities menu, type 17 and press the Return key.
- 2 Type the account name of the new owner, a space, and the name of the file with its full pathname if necessary. Press Return.
- 3 When the change is complete, press the Cancel key to return to the system utilities menu.

Changing Directory Ownership

Owner change directory owner moves the owner's access rights to a directory from one account to another.

- 1 From the system utilities menu, type 28 and press the Return key.
- 2 Type the account name of the new owner, a space, and the name of the directory with its pathname if necessary. Press Return.
- 3 When the change is complete, press the Cancel key to return to the system utilities menu.

Changing File Permissions

Permission change of a file changes access rights to a file for its owner, the group owning it, and/or all other users. You must be logged in as manager to change file permissions.

- 1 From the system utilities menu, type 19 and press the Return key.
- 2 There are four options on the permission change of a file menu:
 - all to change permissions for the owner, group, and public
 - owner to change owner permissions only
 - group to change group permissions only
 - public to change permissions other than the owner and group (public) only

Type the letter for the option and press Return.

- 3 Type the name of the file and press Return.
- 4 There are four options for permissions on the next menu:
 - read to read a file
 - write to edit a file
 - execute to execute a file
 - denied to deny a permission

Type the appropriate letter(s) and press Return.

- 5 The permission line shows how the permissions have been changed.
- 6 Press Return to return to the system utilities menu.

Changing Directory Permissions

Permission change of directory changes access to the directory for its owner, the group owning the directory, and the public. You must log in as manager to change directory permissions.

- 1 From the system utilities menu type 29 and press the Return key.

2 The permission change of a directory gives you four options:

- all to have the following permissions set for everyone
- owner to change owner permissions
- group to change group permissions
- public to change permissions for those outside the owner and group (public)

Type the of the option you want and press Return.

3 There are four permissions on the change directory permissions menu:

- read to read and list a directory
- write to change or add files to a directory
- execute to search a directory
- denied to deny a permission

Type the appropriate letter(s) and press Return.

4 The permission line shows how the permissions have been changed.

5 Press Return to return to the system utilities menu.

14 Backing Up Files

Backing up files preserves copies of the files on a flexible disk for future use. The processes involved in this are all part of the system utilities menu. Some applications, like Fortune Systems word processing and Multiplan, contain their own similar processes for backing up files. If you want to back up files created with an application, check the application manuals first for instructions.

Inserting and Removing Flexible Disks

- 1 Remove the disk from its protective envelope. Hold the disk at the top with the write-protect notch on the left side. There should not be a tab over the notch.
- 2 Open the flexible disk drive door, insert the disk, and close the door.
- 3 To remove a disk, open the disk drive door all the way and pull the disk out gently toward you. Put the disk back in its protective envelope.

4

Backing Up Files to a Flexible Disk

The backup files to flexible disk utility places a copy of the file or files on a formatted flexible disk.

- 1 On the system utilities menu, type 30 and press the Return key.
- 2 Insert the flexible disk for the files and shut the drive door.
- 3 Type the name of the file or files to be copied, separated by a space, and including the pathnames if necessary. Press Return.
- 4 When the process is complete, remove the flexible disk.
- 5 Press the Cancel key to return to the system utilities menu.

Reloading Files from a Flexible Disk

Before reloading the files, use the go to another directory utility to move to the directory where the files are to be placed. Then use the reload files from flexible disk utility.

- 1 On the system utilities menu, type 31 and press the Return key.
- 2 Insert the flexible disk containing the files and shut the door.
- 3 Type the names of the files you want to reload, separating them with a space. Press Return.
- 4 When all files have been reloaded, remove the disk.
- 5 Press the Cancel key to return to the system utilities menu.

Formatting a Flexible Disk

The formatting process prepares a disk for use in backing up files. Use the format flexible disk utility for this process.

- 1 On the system utilities menu, type 32 and press the Return key.
- 2 Insert the disk to be formatted and shut the door.
- 3 Type y for yes to continue the process and press Return.
- 4 When the process is complete, remove the disk. Press the Cancel key to return to the system utilities menu.

Clearing Files on a Flexible Disk

Clearing a flexible disk removes ALL the files from a disk.

- 1 On the system utilities menu, type 33 to select clear files on flexible disk, and press the Return key.
- 2 Insert the disk to be cleared and shut the door.

- 3 Type a y for yes to continue and press Return.
- 4 When the process is finished, remove the disk.
- 5 Press the Cancel key to return to the system utilities menu.

System Management Procedures

System management procedures should be carried out by the system manager since the procedures alter accounts, groups, permissions, and ownership. Whether you have a single or multiuser system you should attach a password to the manager account with the assign a password to an account selection to prevent others from using it.

Most of the procedures in the following pages require that you use the manager account.

15 Accounts

Having an account name allows a user to gain access to and use the system. The following pages show how to work with accounts and passwords as well as give some special assignments to accounts. These processes are done through the system utilities and system management menus.

Account Information Chart

Many account activities show the account information chart after the additions or changes have been made. The parts of the chart are identified below.

| <u>NAME</u> | <u>FLAGS</u> | <u>UID</u> | <u>GROUP</u> | <u>COMMENT</u> | <u>HOME</u> | <u>SHELL</u> |
|-------------|--------------|------------|--------------|----------------|-------------|--------------|
| one | y | 105 | users | test account | u/cat | /bin/menu |
| two | n | 106 | users | test account | u/dog | /bin/menu |

Adding a New Account

A new account can be created either by typing in newuser when asked for the account name at login, or by using the add new account selection on the system management menu.

USING NEWUSER TO CREATE AN ACCOUNT

- 1 Start up the system, type newuser for the account name on the login screen, and press the Return key.
- 2 Type in your new account name and press Return. You will be asked if you want a password. Type a y for yes or n for no and press Return.
- 3 If you decided to have a password, you'll be asked to type it twice.

- 4 Press the Return key to try out the account name and password and gain access to the system.

USING SYSTEM MANAGEMENT TO CREATE A NEW ACCOUNT

- 1 From the system management menu, type 10 for add new account and press the Return key.
- 2 Type the account name or names, separating them with a space. Press Return.
- 3 The account information chart shows the name, flags, user ID, group, comment, home directory, and login shell.
- 4 Press Return to go back to the system management menu.

Modifying Existing Accounts

Modify existing account is used to gain access to a menu of procedures that alter accounts. The individual procedures are listed below.

ASSIGNING A NEW ACCOUNT NAME

Assigning a new account name changes the name of an account.

- 1 From the system management menu, type 11 for the modify existing account menu and press the Return key.
- 2 Type the old account name and press Return.
- 3 Type n for assign new account name and press Return.
- 4 Type in the new account name and press Return.
- 5 The account information chart shows the new account name under the name column.
- 6 Press Return to return to the modify existing account menu.
- 7 Press the Cancel key to return to the system management menu.

ASSIGNING A NEW PASSWORD

Assigning a password to an account requires the user to type in a password to use the system. The manager account should ALWAYS have a password.

- 1 From the system management menu, type 11 for the modify existing account menu and press the Return key.
- 2 Type the account name and press Return.
- 3 Type the password and press Return. The FLAGS column of the account information chart shows a p for password.
- 4 Press Return to return to the modify account menu, and then press the Cancel key to go back to the system management menu.

REMOVING A PASSWORD

When a password is removed, a user can log in and use the system without a password.

- 1 From the system management menu, type 11 for the modify existing account menu and press the Return key.
- 2 Type in the account name and press Return.
- 3 Type an r to remove the password and press Return.
- 4 Press the Return key to return to the modify existing account menu, and then press the Cancel key to go back to the system management menu.

ASSIGNING A USER ID NUMBER

Adding a new user ID number allows more than one person to use the same account name.

- 1 From the system management menu, type 11 for modify existing account and press the Return key.
- 2 Type in the account name or names separated by a space and press Return.

- 3 Type a u to change the user ID and press Return.
- 4 Type the user ID number and press Return.
- 5 The account information chart shows the new user ID under the UID column.
- 6 Press the Return key to return to the modify existing account menu, and then press Cancel to go back to the system management menu.

ASSIGNING A GROUP ID NUMBER

Assigning a group number changes the group the account is connected with. This must be done for all new accounts added to a group.

- 1 From the system management menu, type 11 for modify existing account and press the Return key.
- 2 Type the account name or names, separated by a space, and press Return.
- 3 Type g to change group ID of the account(s) and press Return.
- 4 Type the group ID number and press Return.
- 5 The account line information shows the new group ID under the GID column.
- 6 Press the Return key to return to the modify account menu, and then press the Cancel key to go back to the system management menu.

ASSIGNING A HOME DIRECTORY

Assigning a new home directory allows the user to have access to a different directory at login time.

- 1 From the system management menu, type 11 and press the Return key.
- 2 Type in the account name or names separated by a space and press Return.

- 3 Type h to assign a new home directory and press Return.
- 4 Type the new home directory and pathname if necessary and press Return.
- 5 The account information chart shows the new home directory under the HOME column.
- 6 Press the Return key to return to the modify existing account menu, and then press the Cancel key to go back to the system management menu.

ACCEPTING INFORMATION LITERALLY AND IGNORING THE OPERATING SYSTEM STANDARDS

The procedure can be used to change several operating system standards including account names of fewer than two characters, passwords shorter than five characters, or typing options in lowercase letters.

- 1 From the system management menu, type ll for modify existing account and press the Return key.
- 2 Type in the account name or names, separated by a space, and press Return.
- 3 Type e to ignore system standards and press Return.
- 4 The account information chart shows on the screen. Press the Return key to return to the modify existing accounts menu and then press the Cancel key to return to the system management menu.

TURNING ON AN ACCOUNT

Turning an account on allows an account name to be used until it is turned off. All new accounts are automatically turned on.

- 1 From the system management menu, type ll for modify existing account and press the Return key.
- 2 Type in the account name or names, separated by a space and press Return.

- 3 Type on to turn the account on and press Return. The FLAGS column of the account information chart shows a y for the account.
- 4 Press the Return key to return to the modify existing account menu, and then press the Cancel key to go back to the system management menu.

TURNING OFF AN ACCOUNT

Turning off an account will not allow anyone to use it until it is turned back on again.

- 1 From the system management menu, type 11 for modify existing account and press the Return key.
- 2 Type in the account name or names, separated by a space, and press Return.
- 3 Type off to turn the account off and press Return. The FLAGS column of the account information chart shows an n for the account.
- 4 Press the Return key to return to the modify existing account menu, and then press the Cancel key to go back to the system management menu.

ADDING AN ACCOUNT TO A GROUP

Adding an account to a group can be done only for those users working at the user command level of the operating system. After adding the account, use the change group ID of an account utility so that the account can use the group's files.

- 1 From the system management menu, type 11 for modify existing accounts and press the Return key.
- 2 Type an a to add the account and press Return.
- 3 Type in the group name and press Return.
- 4 The account information chart shows the new group name listed in the GROUP column.

- 5 Press the Return key to return to the modify existing accounts menu, and then Cancel to go back to the system management menu.

DELETING AN ACCOUNT FROM A GROUP

Deleting an account from a group prevents the user with that account from using the group.

- 1 From the system management menu, type ll for modify existing account and press the Return key.
- 2 Type a d to delete the account and press Return.
- 3 Type in the group name and press Return.
- 4 The account information line is displayed. The deleted group name no longer appears in the GROUP column.
- 5 Press the Return key to return to the modify existing accounts menu, and then Cancel to go back to the system management menu.

ASSIGNING A SHELL SCRIPT

Assigning a new shell script allows the user to change the area of the operating system at login time. To use the menu system, type /bin/menu. To use the user command level, type /bin/sh.

- 1 From the system management menu, type ll for modify existing account and press the Return key.
- 2 Type in the account name or names separated by a space and press Return.
- 3 Type an s to change the shell (login procedure) and press Return.
- 4 Type the new login procedure (either /bin/menu or /bin/sh) and press Return.
- 5 The account information chart shows the new login procedure under the SHELL column.
- 6 Press the Return key to return to the modify existing account menu, and then press the Cancel key to go back to the system management menu.

DISPLAYING A NEW COMMENT

A 15-character comment can be attached to an account for information about the account using the display a new comment selection.

- 1 From the system management menu, type 11 for modify existing account and press the Return key.
- 2 Type in the account name or names, separated by a space, and press Return.
- 3 Type c to choose display comment and press Return.
- 4 Type the comment, which must be only one word long but can be several words separated by an underline or dash. Press Return.
- 5 The account information chart shows the new comment in the COMMENT column.
- 6 Press Return to return to the modify existing accounts menu, and then press the Cancel key to return to the system management menu.

Deleting an Existing Account

Delete an existing account removes it from the computer so that no one can use it.

- 1 From the system utilities menu, type 12 and press the Return key.
- 2 Type the name of the account to be deleted and press Return.
- 3 When the process is complete, press Return to return to the system utilities menu.

Listing Accounts

The list accounts utility shows the account information for some or all accounts on the system.

- 1 From the system management menu, type 13 and press the Return key.

2 There are two options:

- printer to list accounts on the printer
- screen to list accounts on the screen

Type the letter of the option you want and press Return. If you choose the printer option, make sure the printer is On.

3 Type the name of every account you want to list, or type all to list all the accounts. Press Return

4 Press the Return key to return to the list account information menu, and then press the Cancel key to go back to the system management menu.

16 Groups

Every user with an account can belong to only one group. The following pages contain procedures for working with groups, including adding and deleting groups, adding and deleting passwords, and changing group IDs.

Adding a New Group

The add new group utility creates a new group or groups.

- 1 From the system management menu, type 20 and press the Return key.
- 2 Type in the name of the new group(s) and press Return.
- 3 The group information chart shows the new group name, group ID, and membership.
- 4 Press Return to go back to the system management menu.
- 5 Type 11 for the modify existing account menu. Use the add new users to a group option to assign members to the new group.

Modifying an Existing Group

This selection leads to a separate screen that shows selections for modifying groups.

ENTERING A NEW GROUP NAME

This selection alters a group name while leaving the accounts associated with it unchanged.

- 1 From the system management menu, type 21 for modify existing group and press the Return key.

- 2 Type the group name to be changed and press Return.
- 3 From the modify existing group menu, type n and press Return.
- 4 Type in the new name for the group and press Return.
- 5 The group information chart shows the group's new name, group ID, and membership.
- 6 Press the Return key to go back to the modify existing group menu, and then press the Cancel key to go back to the system management menu.

ASSIGNING A NEW GROUP ID NUMBER

A new group ID number changes the way in which the operating system identifies a group.

- 1 From the system management menu, type 21 for modify existing group and press the Return key.
- 2 Type the group name and press Return.
- 3 From the modify existing groups menu type g and press Return.
- 4 Type in the new group ID number and press Return.
- 5 The group information chart is displayed. The new group ID number is listed in the GID column.
- 6 Press the Return key to return to the modify existing group screen, and then press the Cancel key to go back to the system management menu.

ACCEPTING INFORMATION LITERALLY AND IGNORING THE OPERATING SYSTEM STANDARDS

Changing the operating system standards for a group permits use of a group name of one character or a group password of less than five characters.

- 1 From the system management menu, type 21 for modify existing group and press the Return key.

- 2 Type in the group name or names separated by a space and press Return.
- 3 Type an e and press Return.
- 4 The group information chart shows the current standards.
- 5 Press the Return key to return to the modify existing group menu, and then press the Cancel key to go back to the system management menu.

Deleting an Existing Group

When a group is deleted, its members must be added to a different group. All the files owned by the group will return to the public domain.

- 1 From the system management, menu type 22 for delete existing group and press the Return key.
- 2 Type in the group name or names separated by a space and press Return.
- 3 When the process is complete, you'll see the system management menu again.

Listing Groups

List groups shows the group identification chart for a group or for all groups. You do not have to be logged in as manager to list a group.

- 1 From the system management menu, type 23 and press the Return key.
- 2 There are two options:
 - print to print the list
 - screen to see the list on the screen

Type the code for the option and press the Return key. Make

sure your printer is turned On and ready if you choose to print the list.

- 3 Type the group name or all to see all the groups. Press Return.
- 4 The group information chart is displayed or printed. Press the Space Bar if the information you need to see fills more than one screen.
- 5 Press the Return key to return to the list group information screen, and then press the Cancel key to go back to the system management menu.

17 Other Tools

The additional tools on the system management menu are used to get and change information on the Fortune system.

Shutting Down the Computer

Shutdown the computer is the process used to close all files and prepare the system to be turned off.

- 1 On the system management menu, type 30 for shutdown computer and press the Return key.
- 2 You'll see information about notifying other users of the shutdown before you continue.
- 3 Type yes to continue and you will see the shutdown messages. After the last message, "Turn your Fortune 32:16 off," you can turn off the system.

5

Who Is Using the Computer

This process tells you who's currently logged into the system.

- 1 On the system management menu, type 31 and press the Return key.
- 2 You'll see a message for each user on the system.
- 3 Press Return to go back to the system management menu.

Disk Usage

You can see the amount of disk space used by an account, the current directory, or any directory with the disk usage function.

- 1 On the system management menu, type 32 for disk usage and press the Return key.

- 2 Type the letter for the option (a, c, or o) and press Return.
- 3 Type the account name, or the directory name and its pathname if applicable. Press Return. The list of files appears on the screen.
- 4 If you select option a or c, the message "--More--" is displayed if more than one screenful is available. Press the space bar to view the next screenful.
- 5 If you select option o, you can stop the display by holding down the Control key and pressing s. Press the Return key to continue the display.
- 6 When the list is finished you'll see the prompt "-Press RETURN for menu or select ahead."

Percent of Disk Used

With this utility you can see a repeat of the disk usage message that is seen when you first start up the system.

- 1 On the system management menu, type 33 for percent of disk used and press the Return key.
- 2 You'll see a message similar to this one.

| Filesystem | Mounted on | Kbytes | used | free | % used |
|------------|------------|--------|------|------|--------|
| /dev/hd02 | / | 7771 | 3198 | 4578 | 41% |

- 3 Press Return to return to the system management menu.

Changing Your Password

You can change your password for login this selection.

- 1 On the system management menu, type 34 for change your password and press the Return key.
- 2 Press y to confirm that you want to change your password.
- 3 Type in the new password and press Return. You'll be asked to

retype the password and press Return again.

- 4 Press Return to return to the system management menu.

Displaying Current Date and Time

Display current date and time shows you the date and time you used to set the computer.

- 1 On the system management menu, type 35 for display current date and time and press the Return key.
- 2 You'll see the current date and time on the screen.
- 3 Press Return to return to the system management menu.

Setting Date and Time

You can reset the date and time with the set date and time selection.

- 1 On the system management menu, type 36 and press the Return key.
- 2 You'll see the set date and time screen. Type over the current information with a new date and/or time and press Return.
- 3 Press Return to return to the system management menu.

Writing a Message to a Terminal

Use this selection to send a message to a specific user, regardless of the terminal that person is using.

- 1 On the system management menu, type 37 for write message to a terminal and press the Return key.
- 2 Type in the account name and press Return.
- 3 Type in the message you want to send, and end it with a Return. Then hold down the Control key and type a d.

- 4 You'll be returned to the system management menu. Your message will appear on the screen of the terminal where the account is logged in.

Sending a Message to All Terminals

Send message to all terminals sends the same message to all operators.

- 1 On the system management menu, type 38 and press the Return key.
- 2 Type the message to be sent, and end it with a Return. Then hold down the Control key and press d.
- 3 You'll return to the system management menu. Your message is immediately displayed on all terminals.

Changing Device Connections

Change device connections is used to tell the operating system about a satellite workstation.

- 1 On the system management menu, type 39 and press the Return key.
- 2 From the change device connections menu, type a number from 1 through 13, corresponding to the interface where the workstation is connected. The number 1 is for the SIO connector, and 2 through 13 are connectors on the COM-A board.
- 3 For device type, type 3 for the ASCII terminal and press Return.
- 4 Press the Cancel key twice to go back to the global menu. You must use the shutdown the computer selection from system management to incorporate the changes.

Product Maintenance Procedures

The product maintenance procedures are used to maintain applications on your Fortune system. These processes include installing, deleting, and backing up Fortune Systems software. You must log in as manager to use any of the selections on this menu.

18 Installing a Product

Installing a product is the process of moving a copy of the application or other software from its master disk to the hard disk. This process makes the software available for your use and updates the global menu so that the appropriate selection is highlighted.

In the case of business applications such as General Ledger and Payroll, the Business Applications selection under Business Systems on the global menu is highlighted.

Most applications include a training disk. As part of the installation procedure, you'll be asked if you want to install the training data also. If you don't intend to use the application's Operator's Guide for training, type n for no.

- 1 From the product maintenance menu type i for install a product and press the Return key.
- 2 Put the application disk in the flexible disk drive, close the door, and press Return.
- 3 Type y to proceed with the installation and press Return. You'll see an identification of the product on the screen, and you'll be asked to insert additional disks if necessary. You may also be asked if you want to install the training data.
- 4 You'll see the message "Product installation is successfully completed" when the process is finished. Remove the flexible disk and press Return to go back to the global menu.

19 Deleting an Existing Product

Use this process to remove a product from your hard disk when you want to install a new version, when your disk has run out of space, or when you no longer want to use the product. You can also use this selection to remove the training data from your disk.

Deleting a Product

- 1 From the product maintenance menu, type d for delete existing product and press the Return key.
- 2 Select the application to be deleted. Type P1, for example, for Multiplan, or move the cursor bar over the application name with the cursor keys, and press Return.
- 3 Type y to continue the process and press Return. When the process is finished, press the Return key to return to the product maintenance menu.

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Deleting the Training Documents

- 1 From the product maintenance menu type d for delete existing product and press the Return key. You'll see the product selection menu.
- 2 Type the code that precedes the name of the training data you want to delete, such as P1T for Mutliplan, and press Return.
- 3 Press Return to continue.
- 4 If you are deleting business applications training data you'll see a separate list of the training data bases. Type the number for the one you want and press Return.
- 5 When the "Deletion is complete" message appears, press the Return key to return to the global menu.

20 Backing Up an Existing Product

Immediately after you install a product it's a good idea to back it up onto other flexible disks. This gives you a copy of the application besides your original master disks in case you need to re-install the product. Be sure to back up the operating system using the procedure below as soon as you have your single user or multiuser system operating.

- 1 On the product maintenance menu, type b for backup existing product and press the Return key.
- 2 Select the application you want to copy by moving the cursor bar to it with the cursor control keys, or by typing its code, for example P1 for Multiplan. Press Return.
- 3 Type y to continue and press Return. When you see the message about inserting a disk, put a formatted flexible disk into the flexible disk drive, shut the door, and press Return.
- 4 When the copying process is finished, remove the disk and press the Return key to return to the product maintenance menu.

System Problems

The following pages contain information about how to recover from system problems. Problems are of three types. The first type is a hardware malfunction or problem, the second type produces error messages on the screen that you must interpret and respond to with an appropriate remedy, and the third type is a system failure of which you may not have any warning and which requires special procedures to overcome.

In all cases, if you follow the instructions on the following pages and the problem is not solved, contact your Fortune Systems dealer or service representative for assistance.

21 Basic Troubleshooting

Before you can resolve your problem you need to know what the problem is. By taking a few minutes to assess the situation, you can simplify the solution.

Determining What the Problem Is

If your system or a part of it doesn't work, check the things below to determine where the problem is. Write down what you do at each step in the troubleshooting so that you can report this information to your dealer or service representative.

- 1 Make sure that the piece of equipment you wanted to use is connected and turned on.
- 2 If the equipment is connected and turned On, check the monitor to see if there are any messages for you on the screen.
- 3 If you see error messages while using an application, first check the application's reference guide for a solution.
- 4 If the error message isn't there, check the error messages in the next chapter for a solution.
- 5 If the problem seems to be with the hardware, check the situations and solutions below, depending upon the unit that isn't working properly.
- 6 If you see an error message that says you should contact your dealer or service representative, do that, and read your list that tells what you were doing when.

Hardware Problems

If your hardware problem is a simple one you may be able to solve it with the guidelines below. If you try a solution and it doesn't work, contact your Fortune Systems dealer or service representative. Be sure to have your list of troubleshooting steps ready.

THE CPU

NEVER open the CPU cabinet. By doing so you'll invalidate your warranty. Check the situations and solutions below to see if you can solve the problem before you call your dealer or service representative.

Situation

Solution

Flexible disk cannot be formatted.

Disks can get damaged. Try the same procedure with a new disk.

The fan is not operating.

Turn off the system immediately. Call your dealer or service representative for repair service.

No lights are on, and there are no sounds from the system.

Make sure that the system is plugged in.

MONITOR AND KEYBOARD

The monitor and keyboard act as a unit. Use the guidelines below to determine which unit has a problem.

Situation

Solution

The monitor doesn't come on.

Make sure the monitor is plugged into the CPU securely. Adjust the brightness knob.

The display has lines on it, or blinks, squeezes up, or otherwise isn't right.

Check the cable connection between the CPU and the monitor.

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What you type on the keyboard doesn't show up correctly on the monitor.

Check the connection between the keyboard and the CPU and make sure it is secure.

The keyboard doesn't beep when the system is turned on.

Check the connection between the keyboard and the CPU and make sure it is secure.

PRINTERS

Consult the troubleshooting section of your printer manual for information about correcting printer problems. You may also want to use the list below for some general hints on solving printer problems.

Problem

Solution

Paper is feeding crookedly or is bunched up.

Reload the paper.

The printer won't print.

Make sure you have the correct printer cable.

Make sure the printer is turned on and is securely connected to the CPU.

Check the control switches to make sure they're set correctly.

Make sure you've directed the printing to the correct printer.

The printer stops printing.

Check the error lights on the printer to see what the problem is. Some error lights are self-explanatory. A ribbon light, for example, means that the printer needs a new ribbon. Consult your printer manual for more information.

The printer operates, but does not print correctly.

Check your application software to see if you have selected the printer correctly.

Check the operation switches and configuration switches to make sure they're set properly.

Check your printer manual for more information.

Software Problems

Software problems usually show up as an error message on the screen. Some error messages indicate that you have done something wrong in your use of an application. Review the procedures you followed before you saw the error message to see if you can determine what your mistake was. Also, check the error messages section of your application's Reference Guide to see if you can correct the error. If you don't find the error message listed, the problem may be in the operating system. Check the error messages in the next chapter for operating system problems.

22 Error Messages

Error messages appear on the screen to tell you when there is a problem. They are produced either by the operating system or by the application you're using. The troubleshooting guidelines below will help you determine which kind you're seeing.

- 1 First try to find the error message in the charts on the next few pages. If you don't find it there, and if you were using an application, check the error messages listed in the application guide for a solution. Follow the instructions in the guide for solving the problem.
- 2 If the error message solution has no effect, turn off the system and try again from the beginning.
- 3 If this doesn't work, write down a description of what happened, including the error message you saw, and call your Fortune Systems dealer or service representative for help immediately.

| Message Format | Action |
|--|---|
| Hardware problem (number) Solution: See system manual section on "Problem Recover" Notes: Refer to the "Problem Check List" before you continue with recovery. Call service only after you have tried recovery. | Note the number in the parentheses that follow "Hardware problem". Look for that number in the tables on the following pages. Follow the action described for that error message. |
| (Possible additional messages) The error has been logged onto the computer The system has now been halted | |
| Software problem (number) Solution: See system manual section on "Problem Recover" | Note the number in the parentheses that follows "Software problem". Look for |

| Message Format | Action |
|--|--|
| <p>Notes: Refer to the "Problem Check List" before you continue with recovery. Call service only after you have tried recovery.</p> <p>(Possible additional messages) The error has been logged onto the computer The system has now been halted</p> | <p>that number in the tables on the following pages. Follow the action described for that error message.</p> |
| <p>error on dev xx/yy bn=aaaa er=bbbb,cccc</p> | <p>A disk drive had an error. xx is a device number. yy is a partition of the device. aaaa is a block number. bbbb and cccc are error codes.</p> |
| <p>out of space</p> | <p>Call your Fortune Systems dealer.</p> |
| <p>Remove write-protect</p> | <p>Remove the disk, take the write-protect tab off, and continue.</p> |

Error Messages from the Operating System

Error messages are listed in numerical order, regardless of whether the message is related to a hardware problem or a software problem. Look for the number in the left-hand column, and follow the instructions in the right-hand (Action) column.

| No. | Meaning | Action |
|-----|-------------------------------|---|
| 1 | Invalid block device | Call your Fortune Systems dealer. |
| 2 | Invalid device table entry | Call your Fortune Systems dealer. |
| 3 | Error in swap I/O | Call your Fortune Systems dealer. |
| 4 | IOCCOM | Call your Fortune Systems dealer. |
| 5 | No file system | Call your Fortune Systems dealer. |
| 6 | Timeout table overflow | Set power switch to off, wait ten seconds, then set power switch to on. If the same error message is displayed, disconnect some workstations from the system and try again. |
| 7 | No mount table | Call your Fortune Systems dealer. |
| 8 | Error reading in root inode | Call your Fortune Systems dealer. |
| 9 | Running a dead process | Call your Fortune Systems dealer. |
| 10 | No more process table entries | Call your Fortune Systems dealer. |
| 11 | No more swap space | For error 11 or 12, set the power switch to off, wait ten seconds, then |
| 12 | No more swap space | set the power switch to on. If the same message is displayed, run fewer applications and try again. If the problem continues, call your Fortune Systems dealer. |
| 13 | Unexpected trap | Turn off power for at least ten seconds, then try again. If the same message is displayed, call your Fortune Systems dealer. |

| No. | Meaning | Action |
|-----|--|--|
| 14 | Kernel bus/address error | Record the message number, and as much as you can remember of the events immediately preceding the message. Turn off power for at least ten seconds, then try again. If the same message is displayed, call your Fortune Systems dealer. |
| 15 | Invalid ROM format | A ROM has failed. Call your Fortune Systems dealer. |
| 16 | Double parity error | Turn off power for at least ten seconds, then try again. If the same message is displayed, call your Fortune Systems dealer. Some part of the computer memory has failed. |
| 17 | Refresh timeout | Turn off power for at least ten seconds, then try again. If the same message is displayed, call your Fortune Systems dealer. Some part of the computer memory has failed. |
| 18 | The init file died | Call your Fortune Systems dealer. |
| 19 | Mfree overrun Memory allocation error | Set the power switch to off, wait ten seconds, then set the power switch to on. If that doesn't work, call your Fortune Systems dealer. |
| 20 | Zero wchan Software error | Set the power switch to off, wait ten seconds, then set the power switch to on. If that doesn't work, call your Fortune Systems dealer. |
| 100 | Hardware failure | The system crashes. Another message will follow. |
| 120 | Parity error Memory read error | This is a hardware problem. Set the power switch to off, wait ten seconds, then set the power switch to on. If that doesn't work, call your Fortune Systems dealer. |

| No. | Meaning | Action |
|-----|---|---|
| 121 | Unable to log error | Call your Fortune Systems dealer. |
| 122 | Spare table overflow Space unavailable Hard disk and flexible disk overflow. | Call your Fortune Systems dealer. |
| 123 | Spurious interrupt Unexpected hardware problems | Call your Fortune Systems dealer. |
| 124 | Can not read configuration block Hard or flexible disk problem. | Set the power switch to off, wait ten seconds, then set the power switch to on. If error persists, call your Fortune Systems dealer. |
| 125 | Invalid magic number in config- uration block. Hard or flexible disk problem. | Set the power switch to off, wait ten seconds, then set the power switch to on. If hard disk, try cold boot. If error persists, call your Fortune Systems dealer. |
| 128 | Physio to an odd address Error in a user program. Config- uration is inaccurate. | Set the power switch to off, wait ten seconds, then set the power switch to on. If that doesn't work, call your Fortune Systems dealer. |
| 129 | No more file table entries | Set the power switch to off, wait ten seconds, then set the power switch to on. If that doesn't work, go to the configuration menu. Change F7 to |
| 130 | No more inode table entries | hd02/sa/reconf, press the Return key. Increase Appx # of users by one. |
| 132 | Address in inode 2 24 File system error | Wait 45 seconds, turn power off. Turn on after 10 seconds. Log in again. |

| No. | Meaning | Action |
|-----|--|---|
| 133 | Stuff Operating system error | Call your Fortune Systems dealer. |
| 134 | Invalid user access Operating system error | Call your Fortune Systems dealer. |
| 135 | Error doing suiword Operating system error | Call your Fortune Systems dealer. |
| 136 | Error in process queue | Call your Fortune Systems dealer. |
| 137 | No text table entries | Use the configuration menu to increase the Apprx.# of users by one. |
| 138 | Random interrupt Hardware problem | If this occurs only once, continue working. If more than once, set the power switch to off, wait ten seconds, then set the power switch to on. |
| 139 | Bad free count File system error | Wait 45 seconds, turn power off for ten seconds, then turn power on. |
| 140 | No space The disk is full. | Try turning the system off, then on. If that doesn't work, remove some files. |
| 141 | Bad block The file system is not properly configured. | Try turning the system off, then on. |
| 142 | No inodes The disk is full. | Try turning the system off, then on. If that doesn't work, remove some files. |
| 143 | Bad count The filesystem is not consistent. | Set the power switch to off, wait ten seconds, then set the power switch to on. |

7

| No. | Meaning | Action | |
|-----|-----------------------|--|---|
| 144 | Err Hardware error | A message will follow giving more information. | |
| 200 | Hardware error | " | " |
| 400 | Software failure | " | " |
| 800 | Software error | " | " |

Application Error Messages

Most application software can detect an improper response from you. Whenever you hear a beep, check the screen to see what's happening. If you request something that can be a problem if it is a mistake, like typing letters when you should be typing numbers, some application software checks your response and lets you know that what you've typed is unacceptable.

If you see an error message while you're using an application that doesn't appear on the system errors list, check the error messages section of your application's reference guide for information on what to do.

23 System Failure and Recovery

Even the most carefully maintained computers will involuntarily power down, or crash, due to a power failure or other system problem. Some symptoms are that the screen will freeze, the keyboard will be inoperative, or you may see the message "Something's Wrong...Start Over." If you are sure that this is the cause of your system problems, you recover your system.

Recovering a system is a complex process which requires a detailed explanation and your complete attention for every step in the process. The procedures to use depend on whether you have a single or multiuser system and the extent that the system has failed. These procedures are provided in detail in Part 3 of Understand Your Fortune System.

