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# CHAPTER 1 Welcome to Valdocs 

## Introduction

Welcome Adventurer! Don't look around, we're talking to you! You're about to depart on a great adventure into the world of computers. Like most adventures, there'll be thrills and surprises. Best of all, it won't cost you much and won't put you in any physical danger. (For all you daredevils out there - sorry about that.)

The "vehicle" that will take you on this adventure is your Epson QX-10. It's outfitted with the latest in adventuring equipment-Valdocs. The Valdocs system will bring unmatchable computing power to your front door. There's no need to fear the unknown-Valdocs is friendly. Whether you're a computer expert, or even if you have never used a computer before, we guarantee that within a few minutes, you'll be using Valdocs.

Let's get moving. Our vehicle awaits.


## Why a Manual?

If you're like most people, you're probably itching to get your hands on your computer system and start using it right now. Probably the last thing you want to do is read a manual.

Well, we're going to surprise you. You don't have to go through this entire manual right now. If you just can't wait to get your bright and shining new computer up and running, take out the $Q X-10$ Operations Manual, give it a quick read through, set up your system, plug in your Valdocs disk, and fire away! You can experiment all you want with the Valdocs system.

Believe it or not, it's absolutely impossible to damage the QX-10 by pushing the wrong key. (There's no "self-destruct'" button!) And if you've ever had the experience of accidentally pressing the wrong key on a computer and losing many hours' work, you'll be glad to know that this is very difficult to do with the Valdocs system. We've designed the system so that the machine takes you through a number of steps and asks you whether you're sure before it erases anything. (Actually, there is a way to accidentally destroy a document you're working on; that's to remove a data disk from the machine. We'll talk about it a bit later.)

A good way to start is to take a look at the keyboard. Read the terms on the key caps and take a guess at what they mean. Chances are you'll guess right the first time. If you guess wrong, so what? You can't hurt anything!

## One Suggestion

Before you go, we'll give you a practical suggestion. Take a few minutes to read the rest of this chapter. It will give you a quick overview of what Valdocs is and the many ways you'll be able to use it. You might want to browse through the rest of the manual and take a look at the Valdocs Keyboard Reference Guide that is included. Although all the commands will become second nature to you in no time, the flip chart is a handy reference to the Valdocs system.

## What's a Valdocs Anyway?

Valdocs is short for valuable documents. You've heard about word processors. Valdocs is one. But Valdocs does much more than just "processing'" words; Valdocs is a document processor that creates, stores, prints, retrieves, and edits all the valuable documents you use your computer for. Valdocs has numerous features that allow you to do amazing things, not only with words, but with graphics and numbers as well.

## A Little Background

You've probably heard hundreds of times how much smarter computers are than human beings. Computers are quite a bit faster than most people, especially at handling numbers. Although computers are talented beasts, there's one very important exception. They're not very good at pattern recognition.


## How's That Again?

Don't let the term throw you. A 'pattern'" is simply a bunch of symbols taken as a whole. Human beings are the finest pattern recognizers known. You've heard about not seeing the forest for the trees? Well, we can put pattern recognition in perspective by saying that computers are excellent at counting trees, and people are great at seeing the forest (the pattern).

Let's take a common example. If you take a lot of numbers and place them on a graph, that gives you a pattern. It's easy for the computer to make the graph. But to interpret that graph in the context of a company's production is something that no computer can do.

## How Valdocs Works

Consider yourself a "pattern carpenter." Valdocs is your set of tools for creating, organizing, and otherwise manipulating symbols. It allows you to do this much faster and much more accurately than you could with pen-

cil and paper or even a typewriter. Valdocs enables you to arrange information (more commonly called data in the world of computers) to suit your purposes exactly. It presents the data as a pattern that you can interpret and allows you to communicate the result to other people.

So what does all that mean? It means that you, as a human being, get to do what you're good at-recognizing and interpreting patterns. The drudgery is left to the computer.

## Tools for the Symbols

If you stop and think about it for a while, you'll realize that there are just four types of symbols that you have to deal with in the real world:

1. Letters
2. Numbers
3. Pictures (called 'graphics'" in computer jargon)
4. Time

Valdocs gives you the following electronic tools for handling these symbols:

1. A word processor for handling words
2. An information indexer
3. An electronic mail system
4. An address book
5. A mailing label printer
6. A calculator
7. An appointment book
8. A notepad
9. A timer
10. A clock and calendar
11. A schedule printer
12. A business graph drawing system

It's a pretty impressive list, isn't it?


## How Am I Ever Going To Learn All That?

Don't be intimidated by the list! Valdocs is designed to be easy to learn and easy to use.
O.K., you've heard all that before. You might even have had the experience of trying to learn how to use a computer system and ended up spending hours of frustration before it all came clear. (Computer catharsis!) If you're a glutton for punishment with heavy-handed computer technical matters, we're sorry to disappoint you.

## Forget Memorizing!

Unlike many computer word-processing systems, which require that you memorize numerous complicated commands, Valdocs presents most of the information you'll need right out in plain view on the keyboard. As you press
the keys, you'll get messages on the screen that tell you what to do next or that ask you questions about what you want to do. If you aren't getting what you expected, all you have to do is press UNDO to back up a step or change your mind.

EPSON


## The Valdocs Keyboard—Power for the Asking

That humbie keyboard you see before you is the result of years of research into how people work. Valdocs is the ultimate computer/person connection. If you take a careful look at the top of your Valdocs keyboard, you'll see that there are four separate groups of keys. Each group represents one type of command "thing', you'll be doing:

1. System controls-interaction with the computer system

## STOP <br> HELP <br> COPY <br> DISK <br> UNDO

2. File controls-manipulation of groups of information


RE-
trieve
PRINT
INDEX
MAIL
3. Applications

## MENU

CALC

## 4. Typestyles

## BOLD

ITALIC

## SIZE

## STYLE

If we were the betting sort, we'd bet you that you can probably figure out what each of the keys means, but there's more here than meets the eye. Each individual key has a tremendous amount of power behind it. As we mentioned at the very beginning of this manual, the best way to learn how to use Valdocs is to read the key caps, guess what each one does, and experiment. Each key is covered in detail later in this manual. If you're curious, feel free to read ahead. This manual doesn't have to be read from front to back.


Mind Amplification
(No, it's not a new California fad or a new type of stereo amplifier!) Valdocs is more than your garden-variety computer program, and the QX-10 is more than just another computer. Together, they form a mind amplifier.

The Valdocs/QX-10 system amplifies the areas of the mind where people are weakest. What an automobile is to your legs, and a TV is to your eyes, the Valdocs/QX-10 system is to your mind. It makes you more powerful by giving you the information edge.

## A Note of Reality

We have to admit it: No computer will solve all your problems. It's a firstrate set of tools, but the actual thinking is up to you. Valdocs will give you the time to think and to make all those important decisions.

## Getting Started

Now that we've given you a quick overview of Valdocs, let's get down to the nitty-gritty. First, consider the computer itself. Operating the QX-10 is simplicity itself; however, once again be sure you review the "Getting Started's section of the $Q X$-10 Operations Manual. Before you can use the machine, all the hardware and cables must be hooked together as a system. The manual will also tell you where all the controls are located and get you prepared to use Valdocs. At that point, you can stop thinking about the machine as a piece of hardware and start using it as a mind amplifier.

## One Important Point!

Before your QX-10 will work with Valdocs, it's essential that the row of tiny switches on the rear panel of the main case be set correctly. (They're called DIP switches-which stands for "dual inline package.') Turn the computer around so the rear of the main case is facing you and locate the row of switches. They're located left of center, just to the right of the two round receptacles. This is the way they should look:


If the switches aren't set correctly, you won't be able to start Valdocs. Once you're sure they're set correctly, put the system in a comfortable location, put your feet up (not on the computer!) and let's continue along.

Floppy disks are wondrous things. Where else can you hold the equivalent of hundreds of pages of text in an easily portable package smaller than a "golden oldie?"' Floppy disks - or diskettes, as they're often called - are not indestructible. Before we go any further, we need to talk about handling, storing, and using floppy disks.

Floppy disks are like records made out of recording tape. And just as it's possible to destroy a tape, it's possible to destroy a floppy disk or lose some of its data. Floppy disks store data as hundreds of thousands of charged/not charged magnetic areas.

It's essential that you handle and use floppy disks properly. Don't worry; all that's required are a few simple precautions:

## 1. Make Back-up Copies Often:

 There's no better way to protect your data than to have a spare copy tucked away in a safe place. If it's particularly important data, you might even want to have more than one copy. Some people even keep their backups in a safe deposit box.On the upper left-hand side of the Valdocs keyboard is a key labeled Copy
Disk . Find it now. It's simple to use.

A
DIGRESSION TO DISKS
 You should buy yourself a box or two of floppy disks. (They should be 40-track, $51 / 4$-inch, soft-sector, double-sided, double-density.) Even though disks hold quite a bit of data, you'll be surprised at how quickly you'll fill them upespecially if you're adamant about making backups.
IMPORTANT: You should make two back-up copies of your Valdocs disk. Put the original away in a safe place,
preferably not in the same room as your computer. You can use one of the backups as a "working master" - from which to make additional back-up copies. Use the second Valdocs backup as your day-to-day 'working" disk.

If you'll be using your system on a regular basis, we strongly suggest that you make a back-up copy of your disks every day. Most professional computer users do. A little precaution now can save you a great deal of aggravation later. One of the easiest ways to make backups is to have seven back-up disks, each marked with the day of the week. At the end of each day, all you have to do is take the disk marked for that day and copy your data to it.

If you're still unconvinced, just remember Murphy's Law. If anything can go wrong it will. There are all sorts of ways to lose important data. Lightning might hit the power line, causing a power surge which may make the computer write random information all over the disk. Your children might decide to play disk jockey. You might spill coffee on a disk or even (Heaven forbid!) drop a hot ash on the disk surface, causing it to melt.

Systems do fail occasionally. The only way to protect yourself is to have backups. Get in the habit of making backups right away.

2. Don't Touch Those Diskettes! (No, we don't mean you have to wear gloves.) Just make sure you don't touch the magnetic surface of the diskette-the areas that show through the holes of the disk package. The oils on your fingers can play havoc with data. Handle disks only by their protective jackets, keep them in their protective envelopes when they're not in
use, and keep them stored in protective cases or other dust proof containers.

Just like phonograph records, diskettes hate dirt, dust, fingerprints, grime, or spilled coffee. On records, these things can annoy you, but they can be terminal for floppy disks. Once again, make backups!
3. Don't Force the Merchandise: Floppy disks are flexible, but that doesn't mean you can bend, fold, spindle, or mutilate them. Any physical abuse can damage the magnetic coating, and there goes your data.

Another important point: never force a disk into the disk drive. If it won't slide in easily, something's wrong. There may be a diskette already in the slot, and you could end up damaging both of them.
4. Beware the Magnetic Field: Remember that floppy disks store their data magnetically, just like tapes. You probably won't be running a horseshoe magnet over the surface of the disk, but you should be aware that there are many sources of magnetism in and around the home or office. The sad fact is that just about everything that uses electricity generates magnetism. Electric typewriters (why would you need one of those?), television sets, fans, speaker magnets, and telephones (which are often placed near a computer) all generate magnetic fields. Keep your diskettes away from them!
5. Keep It Comfortable: When it comes to temperature, treat your diskettes like people. Room temperature is best. If you leave your diskettes in a locked car in the middle of the summer or the dead of a northern winter, you're asking for trouble. The optimum temperature range is $50-90$ degrees Fahrenheit.


## Using Valdocs

The Valdocs system uses two kinds of disks, system disks and data disks. The system disk is the one marked "Valdocs.' It contains the software that actually makes the system work. As you become familiar with the system, you'll also use this disk to hold your personal name and address files.

The "Valdocs"' disk is always placed in the left-hand drive.


Let's get started. Put the Valdocs disk in the left-hand disk drive (it will click into place), and press the button marked PUSH on the front of the drive.


You just might want to leave the Valdocs system diskette in the disk drive, since you'll need it there every time you use the system. Make sure you have a backup, though.

The other disks you'll be using are called data disks, because they con-
tain your documents (data). Even though each disk holds lots of data, you'll probably collect quite a few data disks as you go along. At some point, you might want to consider purchasing a "hard disk'" for your QX-10. A hard disk is a special permanent disk that holds a tremendous amount of information-the equivalent of about 20 floppy disks. Hard disk systems also find information and load it into the computer at least 10 times faster than floppy disk drives.

Data disks always go in the right-hand drive. There must be a data disk in the right-hand drive in order for Valdocs to work correctly.

## Before We Go Any Further

Although we've included a blank floppy disk for you to experiment with, you should buy a box or two of blank floppy disks. You'll need them soon enough. But before you can store any data on your blank disks, you'll need to format them.

The format process divides a disk into sections called tracks and sectors (it's like drawing lines on a blank sheet of paper) and checks it out to make sure it's usable (undamaged). It's a good idea to format a few blank disks right now.

You make up blank formatted disks (also known as data disks) by using the $\begin{gathered}\text { COPY } \\ \text { DISk }\end{gathered}$ key. Once you've started Valdocs, press $\begin{gathered}\text { Copy } \\ \text { DISk }\end{gathered}$ and follow the directions by pressing $\mathbf{M}$ (make a data disk) and RETURN .

If you're a bit reluctant to use the program now, you can use the blank data disk that was included with your Valdocs system (or see Chapter 4).

At this point, you should have the Valdocs disk in the left-hand drive and a formatted data disk in the right-hand drive. The PUSH buttons on both drives should be pushed in.
IMPORTANT: Never open the drives when one of the disk drive lights is on. To do so risks destroying the information on them.


## How Much Can I Store on a Disk?

(A very reasonable question!) As you learned from reading the $Q X-10$ Operations Manual (You did read it, didn't you?), each floppy disk will store about 400,000 characters. About 20,000 of those are taken up by software that runs the system, leaving about 380,000 for your use. That sounds like a lot, and it is. It's important to remember, however, that everything is a character to a computer-letters, numbers, punctuation, even spaces, tabs, and special "invisible" characters, such as a carriage return.

For efficient use of the computer (as well as peace of mind), it's important that you break up your writing into bite-sized chunks. That's no problem if you're writing short letters or memos, but it might be if you're writing the Great American Novel. It's much more practical to divide your work into chapters-even sections of chapters. (This manual, for instance, was written as over 40 separate files!) When the time comes to print your valuable document, Valdocs gives you the option of stringing several documents together, so that you can print your entire novel at one time.

But to answer the question at hand, there are both practical and absolute limits to the size of a file. As one of Valdocs' many built-in safeguards, the system keeps a back-up copy every time you retrieve a document from a disk. This ensures that you won't be left with nothing but memory if the unthinkable happens (like a power failure). Also, to do its work, the system needs what's called a 'work space"' on the floppy disk. So, for practical purposes, the maximum length of a single document should be about onethird the size of your storage medium. If you're using a floppy disk (which you will be most of the time), that's about 50 pages of typed, single-spaced text.

## The Nitty-Gritty

Turn the QX-10's main power switch on. (It's located on the right side of the main system unit, towards the back of the case.) If this is the first time you're using your system, about ten seconds later, you'll get a (rather cryptic) message to the effect that the system is "being initialized to cold start defaults." This message will be followed by a list of various "computer parameters'" that are being set. Don't worry about the message, since you can change the settings later on using the SETUP program (see Chapter 6 on the MENU key). You'll only see this message the first time you start Valdocs.

Just press RETURN . The disk drives will whir and click quietly for about 30 seconds or so, and Valdocs will come alive-right there in front of your eyes.

Now, you can start using it. For a quick introduction to using Valdocs, press the HELP key. When you read the message, press any key and you'll be in Valdocs-ready to start typing away.

## Setting the Clock and Calendar

Before we go any further, let's set the QX-10's time and date. Once you set it, you won't have to worry about it again, since the clock/calendar works on its own internal battery, even when the power is turned off. We're going to use SCHED to set the time (it will be covered in detail in Chapter 6). Press SCHED . A few seconds later, you'll see an appointment book appear on the screen. Over on the right side of the boxed-in area (the menu), you'll see a line that says $<S>$ et clock/calendar/time divisions. Press $\mathbf{S}$ and then press RETURN. Another menu will appear, with $<\mathrm{S}>$ et the clock as the first option. Just press RETURN once again.

Follow the directions on the screen. Enter the time (e.g., 05:21:00), press TAB to move the cursor (the blinking square) to the AM/PM box, and enter AM or PM. When you press RETURN , you'll see a message that tells you to press RETURN again when the seconds are correct.

That's all! The time is permanently set. To set the date, press $\boldsymbol{A}$ and RETURN. Follow the directions on the screen and the internal calendar will be set.

To get back to the editor (the blank screen that's ready for you to start typing), just press UNDO twice.

## What Happened to the Screen?

Now's a good time to mention the QX-10's automatic screen-blanking feature. All this fancy term means is that if you haven't touched the keyboard in 20 minutes, the video display will go blank. Don't panic, it's all because of a built-in timer. To get the image back, just touch any key.

Although this feature might sound a litte strange, there's a good reason for it: If the same characters stay on the screen for a long time (several hours), they can actually become permanently 'burned'" into the screen. (Like a problem with early video games.) Valdocs' built-in timer eliminates that problem.

By the way, if you haven't thought about it, there will be times when you want to blank out the screen. (Say you're writing your Great American Novel on company time and the boss walks in.) You can blank out the screen by pressing CTRL and STOP at the same time. Once again, pressing any key will get it back again.

## So Much for the Introduction

In this chapter, we've given you a quick overview of the how and why of Valdocs. The rest of this manual fully explains the nooks and crannies of the system. Along the way, we'll give you a few special tips on using the system and show you some examples of how things should look.

In general, you won't need this manual often. There's no reason you have to read the whole thing from front to back before you get going with the system.

It is a good idea to spend some time browsing through the rest of this manual. Pay particular attention to the index; you'll find just about everything listed there.

Remember, the Valdocs system is designed to be easy to use. There's no need whatsoever to memorize all sorts of complicated commands.

However, as with anything else, practice makes perfect. Any new tool takes a while to get used to. It's kind of like trading in a hand saw for a power saw. The rewards are worth the effort.

When you're ready, you'll find that Valdocs offers many advanced capabilities. There's still nothing much that you have to memorize. In fact, Valdocs' advanced editing capabilities (explained in detail in Chapter 3) are simply a new way to do the things that you're already familiar with. Valdocs offers easy ways for beginners to do things and powerful professional solutions as you become an expert.

No manual can teach you as much about Valdocs as a few days of using it. It will all be obvious soon enough, and that's the way it should be.


## CHAPTER 2 Basic Editing

## Introduction

The "key" (actually keys) to your Valdocs system is the HASCI keyboard. HASCI stands for Human Applications Standard Computer Interface. As we emphasized in Chapter 1, we've designed Valdocs so that the things you'll be doing most often are right out there-marked on the keys.

Using Valdocs is simplicity itself. Essentially, it's a matter of turning the QX-10 on, putting the Valdocs disk in the machine, selecting the keys you need, and following the directions that appear on the screen.

Now, obviously, we couldn't put everything on individual keys, or we'd have a keyboard with so many extra keys that confusion would reign. That would be just as confusing as the special coded keys that many word processors use, which require you to memorize commands or continually refer back to the manual.

You'll probably use the basic editing commands-the ones right out in plain view on the keys-for $99 \%$ of your work. This chapter covers the basics of using the Valdocs word processor.

Throughout this book, we'll keep making the point that there's no better way to learn Valdocs than to sit down and experiment. Look at each of the keys arranged along the top of the keyboard, guess what they mean (you'll be correct most of the time), and try them out!

Remember, there's nothing you can do to harm the system-no matter which keys you press in what combination. Feel free to try anything and everything. If you're stumped and don't know which direction to go in, you can always do one of three things:

1. Press STOP if you want to stop whatever the computer is doing.
2. Press HELP for help with advanced features.
3. Press UNDO to reverse the last decision you made.


In upcoming chapters, we'll cover in detail what each of the specially marked keys does. If you're curious, go ahead and find out now by referring to the index or better yet, experiment!


If you haven't yet done so, put in your Valdocs disk as we described in Chapter 1. (Need a review? Turn on the QX-10, put the disk marked Valdocs in the left-hand disk drive and a data disk in the right-hand drive. Press
PUSH on both drives. In a few seconds, you'll be all set to go.)
As we go through this chapter, it will help you to have the QX-10 in front of you. Try the examples out along the way.

## The Valdocs Screen

It seems obvious, but we'll say it anyway. When you're using Valdocs, you'll spend most of your time looking at the video screen. (Are you a "hunt and peck" typist? Maybe you will be spending more time looking at the keyboard.)

As you work with the screen, you'll soon find that there are two main areas, or "windows," on it:

1. The document window
2. The interaction window


## The Document Window

This is the main window into the Valdocs system. Through it, you can look at, change, or do other things to the document you're interested in. If you're typing a letter, memo, or the Great American Novel (or looking at the index or electronic mail), you'll see the text (or "document") you're typing through the document window. To see how it works, you might imagine that an "endless" sheet of paper is sitting behind the screen. The text "scrolls" back and forth past the window.
Go ahead, type in some text. Notice how it appears in the document window.


## The Interaction Window

The interaction window isn't always on the screen. It appears only when you need it. Let's use an example: suppose you've finished your letter and want to print it out. With the Valdocs system, it's a simple matter of pressing PRINT. Now, obviously, there's a little more involved than just sitting back and waiting for the printer to finish its job. You have to tell the system what print quality you want, how many copies to make, and what the line spacing should be, etc.

Whenever the system wants to ask you a question or give you a message, the messages, questions, comments, etc. will appear in the interaction window. The interaction window is at the bottom of the screen surrounded by lines that box it off from the document window. Often, choices are presented to you in the interaction window. Normally, these choices are in the form of a "menu."

## Menus

As in life, you have to make decisions and choices when you use Valdocs. To help you make choices, Valdocs gives you menus. Just like the menu you'll find in a restaurant, a Valdocs menu is a list of all the possible alternatives you have. As you press the various keys grouped at the top of the keyboard, menus will appear on the bottom of the screen. (We'll cover them in much more detail later on in this manual.)


Select a function by its letter or moving the cursor then press RETURN

MDgain repeat LOOK-for or REPLACE Cook-for text
<C>onditionally replace text

〈B〉eginning of document.
(E) ᄀnd of dociment
< F >eplace text.
$\langle$ INDO to resume editing >
A menu uses the first letter of the first word as its "key." You can choose an individual item from the menu in one of three ways:

1. If the first choice on the menu is the one you want (and we've cleverly arranged the menus so that this is often the case), just press RETURN

2. By pressing the letter key corresponding to the first letter of your choice. Then press RETURN .

3. By using the four arrow keys to the right of the main keyboard to move the cursor to your choice. Press RETURN


If you decide that none of the choices is for you, just press UNDO
Just for the fun of it, press CALC. The box that appears on screen is the interaction window with "calculator menu'" displayed. To get the cursor back into the document window, press UNDO - as it advises you at the bottom of the interaction window.

## Interacting with Valdocs

Whenever you're using the word processor, you'll need to have a certain amount of information available to you at all times. (For example, the name of the document you're working on, page number, etc.) When you're using the system, this information is displayed on the screen and consists of three different areas:

1. The status line
2. The ruler
3. The flag line


The status line appears at the very bottom of the screen. It shows you the following:

1. The name of the document you're working on. (If you haven't named it yet, no name is shown.)
2. The page number.
3. The line number where the cursor is positioned.
4. The column number where the cursor is positioned.
5. The mode you're in (either "insert"' or 'replace").
6. The time.

The ruler line is just above the status line. You might think of it as the electronic equivalent of the margin, tab, and space indicators you'll find on most typewriters.

In addition to the vertical rules which indicate every tenth column position, you'll notice several letters on the line:
"Ts"' show where each tab is positioned. You "set" and "release" them

" $L$ " shows the position of the left margin.
" $R$ " shows the right margin. (Both margins are set using the CTRL 0 menu-see Chapter 3.)

The flag line is at the extreme right edge of the screen. It's a vertical series of dots. As you use Valdocs, you'll see that the dots change to other symbols. These symbols indicate special conditions. For instance:

* There's an invisible control code on the line. (We'll cover that in the advanced editing section.)
+ There are additional characters to the right of the screen edge. (With Valdocs, the actual text area can be much wider than what you see on the screen, depending on where you set the tabs.)
$\therefore$ You ended a paragraph with a RETURN
Forget the '"*" and " + " symbols for now. Type a few short lines and press RETURN at the end of them. You'll see the dot on the flag line become a " ${ }^{\prime}$ ".


## Page Breaks: What You See Is What You Get

The horizontal line that's shown on page 2-7 is a page break that indicates the end of a "page." Although a computer doesn't really need to break text into pages, in the real world you'll probably be printing out your document on paper. The page break automatically appears after every 55 lines of text, and you'll notice that the status line automatically changes to the first line of the next page number. The page break gives you a chance to see what the page will physically look like when it's printed out. It helps with the 'cosmetics' of document preparation. (For instance, it's not good form to have the first line of a paragraph at the end of a page. You should start it on the next page. The page breaks allow you to see if there are problems like this.)

To see how the page break works, press RETURN repeatedly. As you pass line 55 , the page break will appear.

## Word Wrap

If, in the above examples, you typed quite a bit of text (going past the end of the line), you probably noticed that as you were typing a word near the right margin, it suddenly appeared on the left margin.

What's going on here? It's called word wrap-because it automatically "wraps words" around to the next line without breaking them in the middle or making you press RETURN . (Pretty smart!) This is one area where Valdocs is very different from a normal everyday typewriter. There's no need to watch for the end of the line coming up or to wait for the bell or the beep that warns you of it.

What's the advantage? It's simple: Word wrap lets those creative words flow out without interruption. The only time you have to press RETUAN is when you reach the end of a paragraph.

If you haven't yet experimented with word wrap, start typing now! Notice that as you reach the end of the line, the words wrap around. If you've never used a word processor before, you'll soon see its advantages.


## Justification

To "justify"' this section, let's first define "justify" (in the context of Valdocs, of course). If you haven't heard about justified text, it simply means 'lined up vertically.' Whenever you write something-be it with a typewriter, a word processor, or even a pen or pencil, you 'left justify" what you're writing. The left column lines up vertically.
"'Right justification'’ is what newspapers and magazines use for a classy appearance. Both the left and right margins are justified. Well, justification is easy for Valdocs. Here's an example:

NOT JUSTIFIED

It was a cold and windy night. The rain was falling heavily on the windswept shores of the bay. In the distance, the heavy chiming of the bell buoy could be heard, as it rocked in the deep swells of the sea. Captain Strapp awoke to a loud banging on the door.
"Captain! come quickly!" It was his first mate. "The Nati is sinking!"

This must be some sort of joke. The Nati was one of the finest schooners ever built; she'd weathered far worse

## JUSTIFIED

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This must be some sort of joke. The Nati was one of the finest schooners ever built; she'd weathered far worse storms than this.

## If You Don't Want To Justify

Although most people like the look of a justified letter or memo, it's largely a matter of taste. And, there are some instances where nonjustified text is required. (If you're a writer, most editors will scream bloody murder if you send them a justified manuscript.)

When you first start up Valdocs, justification is automatically off. You can turn it on by pressing CTRL and $\boldsymbol{M}$ to bring you to the MISCELLANEOUS menu. Once the menu is on the screen, press $\boldsymbol{J}$ and RETURN Presto! Justification will be turned on. (You can turn it off again by pushing the same series of keys.)

## The Basics of Editing

What's 'editing'’ anyhow? The dictionary defines it as "assembling by cutting or rearranging." In the world of computers, we can widen that definition to include the actual act of putting characters on the screen through the use of the keyboard. You can think of the video screen as a large sheet of electronic paper. You use the regular keyboard to put symbols on the
"paper" and the cursor keys (the four arrows) to move the cursor around the sheet. At any point you might want to insert something or delete something else. Let's take a closer look at each of these.

## Cursor Control

No, a cursor isn't what you become when you accidentally make a mistake that erases everything you've been working on! (Valdocs pretty well protects you from that.)

The cursor is the solid square on the screen that indicates where you're working. As you enter text, the cursor moves to show where you are. You'll need to move the cursor when you want to insert or delete text in the middle of your document or make a decision among the options shown in the interaction window.


You move the cursor through and around the text you're working on or the items in the interaction window by using the four arrow keys located just to the right of your main keyboard.

The most important thing to remember about using the arrow keys is that the cursor does not change what appears on the screen as it moves over it. You can only change things by using the regular typing keys. There are several ways to make those changes, and we'll cover them in a little while.

The arrow keys move the cursor left and right one space or up and down one line. (What could be simpler?)


Use the arrow keys to move the cursor around a bit. Note that the cursor will not move past the right or left margins as indicated with " $R$ " and " $L$ "' on the status line ( $\begin{gathered}\text { MAR } \\ \text { REL }\end{gathered}$ will get around that limitation, but we're getting ahead of ourselves.)

## Moving Right Along

A faster and more convenient way of moving the cursor around is to use combinations of keys. For instance, if you press followed by WORD , the cursor will move one word to the left. Likewise, $\quad \boldsymbol{\rightarrow}$ and WORD moves the cursor one word to the right. To really move quickly through a line of text, tap the WORD key repeatedly after you've hit $\boldsymbol{\sim} \boldsymbol{\sim}$ or

Another handy combination is or $\boldsymbol{\rightarrow} \boldsymbol{\operatorname { c o m } \text { in comation with }}$ LINE . As you might guess (congratulations!), they move the cursor directly to the left and right margins of the line.

Go ahead, give it a try! Move that cursor around using the arrow keys along with WORD and LINE . Remember that once you've pressed an arrow key, then WORD or LINE will continue to move the cursor. You don't have to hold both down together to keep that cursor moving. Try it out!

What if you want to move rapidly through a long document? If you have to move several pages in from the beginning of a document, you can move a "visual" page at a time.

## What's a Visual Page?

A visual page consists of the 24 lines you can see on the screen at one time. By pressing SHIFT and $\uparrow$ or SHIFT and $\dagger$ repeatedly, you can move 11 lines at a time back and forth through a long document. (You can also use CTRL $\mathbf{L}$ to move through your document. More about that later.) Of course, you don't lose any text as you quickly look through it.

When we talked about page breaks, we were talking about actual pages ( 55 lines of text)-the way pages will appear when they're printed out.


How do you go directly to a certain actual page? That's done by pressing CTRL and $\mathbf{P}$ and following the directions on the screen.
Try the various combinations of the arrow keys to move the cursor around your text. For a little while, you'll have to stop and think about how to move the cursor more than a single space or line at a time. But fear not, it'll be second nature in no time.

## Where'd that Cursor go?

When you press one of the marked keys located along the top of the keyboard, you'll notice that the cursor moves from the text into the interaction window. You'll use it there to choose, from the menu, the action you want the computer to take. You use the arrow keys (normally just and ) lo position the cursor on the item of your choice and press RETURN to have the computer perform that action. You can also press the key corresponding to the first letter of your selection to move the cursor. Whichever method you choose, after you've made your choice from the menu, the cursor returns to its previous position in the text.

Let's review how the cursor moves:
moves the cursor right one space (repeats if held down). moves the cursor left one space (repeats if held down).
moves the text up one line.
moves the text down one line.
then WORD moves the cursor right one word.
then WORD moves the cursor left one word.
then LINE moves the cursor to the right margin.
then LINE moves the cursor to the left margin.
then SHIFT moves the cursor to the previous visual page.
then SHIFT moves the cursor to the next visual page.

## Insert

INSERT is a powerful key. It allows you to add additional text anywhere in your document. (Try doing that with a typewriter!) But there's even more to it than that. INSERT is also used to switch between the two "modes', of the Valdocs editor. Each mode makes the process of inserting text work a

little differently. As you gain experience with Valdocs, you'll probably find you're most comfortable with one of them in particular. The two modes are called replace and insert.

You can switch between the modes and see which one you're in by looking at the status line at the bottom of the video screen and pressing INSERT a few times. (Try doing it!) Notice that the second-from-the-right term changes from "REPLACE" to "INSERT ON" as you press the key.

That's nice! But what does it all mean?

Insert Mode: This is the mode Valdocs automatically starts up in when you turn on the system. Every time you move the cursor to where you want to insert and type the new text, the characters are inserted and everything ahead of the cursor is pushed forward. It makes no difference how much text you have ahead of where you're inserting. (Even if you have pages and more pages of text ahead of the cursor, everything is pushed ahead as you insert and moved down to the next line.)

To give you an idea of how it works, type in a few more lines of text. Anything will do-how about a maritime epic? Look at the status line on

the bottom of the screen and make sure you're in the Insert Mode. (The light on the key will be on.) If you're not, press INSERT until you are. Now, back up the cursor into the middle of the line and type something else.


See what happens?

Replace Mode: Many people like this mode the best. In Replace Mode, when you position the cursor over a character and type a new one, the character is replaced without any changes to the format. When you're entering your initial text, you'll find Replace Mode handy because if you make a mistake, all you have to do is back up a few spaces and type over it. When you're in Replace Mode, the red light on INSERT is off.

Go ahead! Push INSERT until "REPLACE" shows on the status line. Put the cursor in the middle of your text and type away.
when at sea.
The Captain took his time putting on his clothes. He knew that it would take some time for Fobert to gather the crew from the various taverns and inns about, old Five, and there was little that one person could do alone with a ship that was swamping.

Robert was a good man, and Captann Strapp trusted hum implicitly. There was a time when this was not trise, however. Rotert joired the crew of the Nati as a young Had, with lofty ideals and as headstrong as any boy in his teens. Eut through the years Fobert had grown; the Capt,ain now trusted him with almost, any task that he would be experted to undertake. Ore day Robert. would make a fine captam.

But not of a ship that sank at her moorings, thought Captain Strapp, coming out of his reverie. He regretted taking the shore leave himself. He was never at ease if he wasn't on his shif. Sonethirig always seemed to go wrong.

Mary came out into the hallway, rubting the sleep from her eyes. She was wearing her cap and ruffled flannel

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## The Best Way to Learn

Experiment! The best way to learn about Valdocs is to try it out!
We might be able to clear up any confusion by pointing out that as far as entering normal text goes, it really doesn't make much difference which mode you're in. When you're at the end of a document, all you have to do to add more text is just type away. The modes function differently only when you're inserting text in the middle of a document.

## Throwing It Out-Delete

With most word processors, delete keys are extremely powerful (and extremely dangerous) beasts. But Valdocs has made them friendly. Delete keys are simply used to erase something you've already typed. The Valdocs keyboard has a delete key (marked $\boxtimes$ ) which looks and acts like the one you'll find on most typewriters. But take a more careful look at the keyboard and you'll see a second delete key (marked $X$ ). Unlike a typewriter, Valdocs lets you do more than just delete backward. You can also delete forward. (Also note that holding the key down will continuously delete characters in either direction.)

Both keys work anywhere in the text. Give them a try! Notice that the text "closes up" once text is deleted.


## More! More!

There's more to the delete keys than just being able to delete individual characters backward and forward. When used in combination with the WORD and LINE keys (located above the arrow keys), they become powerful editing aids. Pressing $\underset{\sim}{x}$ and WORD deletes the entire word to the left of the cursor, and pressing $x>$ and WORD (you guessed it!) deletes the entire word to the right of the cursor.


Now, what about using the delete keys and the LINE keys? Right! Pressing $x$ or $x$ and the LINE key deletes the entire line to the left or right of the cursor.

Let's review using delete!
$\boxed{x}$ deletes one character to the left of the cursor or the last character typed (repeats if held down).
$X$ deletes one character to the right of the cursor (repeats if held down).
$\boxed{x}$ then WORD deletes the word before the cursor.
$X$ then WORD deletes the word after the cursor.
X then LINE deletes the entire line to the left of the cursor.
$\triangle$ then LINE deletes the entire line to the right of the cursor.

## Changing Your Mind

With most word processors, deleting information is dangerous. Once you've deleted something, it's gone for good. But what if you accidentally deleted a word, a line, or maybe even a whole page? With Valdocs, there's no need to despair. To get back what you've just deleted (as long as it's a word or more in length), all you have to do is press UNDO . (You may have to press it a number of times-each UNDO returns a single deleted word or character to the screen.) Voila! Everything will be back in the same form as it was before you started deleting. This is one of the most powerful features of Valdocs; when you erase something, you can bring it back (unless you turn the QX-10 off).

It's important to remember that UNDO never backs you up to the very beginning of your editing session. (You wouldn't want that anyway, since it would erase everything you've inserted.) To get accustomed to how UNDO works, do a bit of experimenting. Use the delete keys with LINE and WORD to chop up your edited version of the Great American Novel.

When you're comfortable with delete, press UNDO a few times. Notice that the last words or characters you deleted come back one at a time each time you press UNDO . That's the Valdocs confidence factor!

## Format Keys

O.K., so we've covered moving the cursor around the screen, inserting, deleting, and changing your mind. But there's another important part to basic editing. Just like on a typewriter, you'll want to set tabs and margins. In the Valdocs system, this affects both the way text appears on the screen and the way it's printed out (since these are virtually the same). You'll be interested in the following keys:

```
MAR (Margin Release)
TABET
TMAB (Tab Release)
```



## The Margins

The margin release key works just the same as on a typewriter. When you first turn on your Valdocs system, the margins are automatically set to the following values:

LEFT MARGIN $=$ COLUMN 10
RIGHT MARGIN $=$ COLUMN 70

This gives you a "standard'" 60 -character line and will print out a document on your Epson printer that's nicely centered with one-inch margins.

But there are times when you want or need to change the margin settings-either temporarily or else throughout the document you're working on. You might, for instance, want to indent an entire paragraph to set it off from the main text.

To temporarily change the margin for the line you're working on, just press $\underset{R}{\text { MAR }}$. You can then move the cursor past either the left or right margin. It's helpful when you want the headings of paragraphs you're working on to be set off from the main margins. Just like the margin release key on a typewriter, it will work for only one line-the line where the cursor is located.

To see how it works, use to move the cursor to the left margin (if it's not there already). Press | MAR |
| :---: |
| REL | and again press $x$ to move the cursor past the margin. Type a few words and press RETURN . As the cursor moves to the next line, it returns to the "standard" margin.

You can change the margins for your document at any time by pressing CTRL and $\mathbf{0}$. This causes a special menu to appear in the interaction window. All you have to do is choose from among the margin options and follow the directions on the screen. You have a wide range of choices; your document can be anywhere from 22 to hundreds of columns wide!

## Keeping Tabs

In Valdocs, tabs work the same as on a typewriter. You press TAB to position the cursor at the tab stops and type the information at that point. (There is a way to set up custom tab formats that automatically appear every time you turn on the system.)

Setting the tabs is simplicity itself. All you have to do is move the cursor (using either the space bar or $\leftarrow$ and $\boldsymbol{\square}$ to the position where


the cursor to the tab position you want eliminated and press ${\underset{\text { REL }}{\text { TAB }} \text {. Give }}_{\text {REL }}$ it a try.

You'll probably have several tab formats that you want to use on a regular basis. Rather than having to set up the tabs manually every time you start a new document, you can start a document, set tab stops where you want them, STORE the file under a logical name (like TABS1, TABS2, etc.), and trieve that file when you want a specific format. When you STORE your completed document, all you have to do is give it another name. What you're essentially doing is storing "dummy" documents that contain your tab settings.

## Decimal Tabs

When you're entering columns of numeric information (like sales figures), it's often necessary to line up the columns so that the decimal points are all in a row. That's easy to do with Valdocs. It's much easier than on a typewriter.


On the numeric keypad (just above the 7) is a ${ }_{\text {TAB }}^{\text {DEC }}$ (decimal tab) key
 You place the tabs where you want the decimal points to sit. Then, when you're entering the numbers, press ${ }_{\text {TAB }}^{\text {DEC }}$. As you enter the numbers, they'll automatically line themselves up with the decimal points at the tab stop.

Using the tab stops you set a few minutes ago, try entering some numeric data on several lines. Use ${ }_{\text {TAB }}^{\text {DEC }}$ and make sure all the numbers have a decimal point. Handy how all the numbers line up!


## Packing It Up and Storing It Away

So far, we've given you a look at most of the 'basics" you'll need to use Valdocs day-to-day. After all the experimentation you've done as you followed along in this chapter, you probably have a rather strange looking document.

Now just suppose you wanted to store this document away for future reference. (No, we're not kidding!) You've probably guessed that you'll use STORE to do it-and you're right.

Go ahead, press STORE .
Most computer systems require you to store a collection of data (a file) under a short name like '"MEMOTOSD.TXT"' or "LTTR0081.DOC." It's pretty difficult to get much useful information into so short a space.

Valdocs lets you store the name of your document using index references that can be up to two lines long. You can use names like:

Letter to John Smith confirming contract on pumps
or

List of people to send Christmas cards to

It makes a lot of sense, doesn't it?
Besides the obvious, there are many powerful advantages to being able to store names like these. We'll cover them in detail in Chapter 5.

For now, you might want to store the "experimental" text you've been working on under something like:

## Junk I typed in while reading Chapter 2

It certainly does get to the heart of the matter.

## Getting It Back

''You told me how to file it away; now how do I find it?'" you may ask. Getting back your "junk" file to work on again is also a simple matter. You've already pressed $\underset{\text { trieve }}{\text { RE- }}$-you're way ahead of us! The system will greet you with a list of the documents you've created and stored.

All you have to do is type in the name of the document you want to retrieve. Within a few seconds, your text will appear on the screen-ready to work on again. (You can also use INDEX to retrieve your document.)

Just like STORE, $\frac{\text { TRE- }}{\text { TRIEVE }}$, has a number of powerful features. Once again, we'll cover all that later on in the manual. (Is your curiosity piqued?)

## A Few Thoughts on Document "Safety"

There's probably nothing more frustrating (or maddening, as the case may be) than to spend several hours typing a long document into a computer and then lose it all if the power suddenly fails. With many systems, that's exactly what happens unless you save your document on a disk as you go along.

Valdocs gives you an extra confidence factor by periodically storing parts of your document on your data disk. You can 'back up'' the backup process by periodically making sure your whole document is saved. There's an easy way to do this in Valdocs. When you press many of the keys located across the top of your keyboard, you'll see a message that says 'STORING DOCUMENT ON DISK—PLEASE WAIT." This extra safety factor
means everything you've typed is safely stored away. If the power goes out, Valdocs will come back up with your document on the screen when the power returns. (If you've previously STORE $d$ it, there's no problem at all; you can get it back by pressing $\frac{\text { TREPE }}{\text { TRIE }}$ or index .)

HINTS: The easiest way to make sure your entire document is backed up is to press COPY followed by UNDO. In a few seconds, the document will return and you can proceed with confidence. Make it a habit!

If you're using Valdocs all the time for important work, you also might consider buying a backup power supply that automatically turns on when the power goes off. They're not inexpensive, but are the best protection against the vagaries of electric power or blown circuit breakers. (See your Epson dealer.) You also might consider purchasing a low-cost surge protector that keeps high voltage "spikes" from getting into your QX-10.

## Graphics

Another powerful Valdocs feature is its ability to generate quite a few more characters than are available on a typewriter keyboard. In addition to the characters you see on the keyboard, Valdocs can generate about 100 additional characters. These include symbols for scientific applications, foreign languages, graphics, etc.

That's nice, but where do you find these symbols, and how do you get them on the screen? Simple, of course! The flip chart included with this manual has two pages (marked "Graphics") that show you the graphics characters available. We've repeated them here for your convenience.

It's a simple matter to generate any of the characters shown. For the
 acter or symbol you want to appear on the screen-and there it is!


To generate any of the characters on the $\operatorname{SHIFT},{ }_{\text {SHIFT }}^{\text {GRPH }}$ keyboard, just (you guessed it) press SHIFT, ${ }_{\text {SHIFT }}^{\text {GRP }}$, and the key corresponding to the character or symbol.


It won't take you long to realize how valuable this special Valdocs feature is. (Remember, not all printers will be able to generate all the special symbols.)

## Where Do We Go From Here?

Congratulations! You've just earned your diploma in "Valdocs Basic Editing 101." (Easy, wasn't it?) As we mentioned way back at the beginning of this chapter, our aim has been to show you nearly everything you need to know about getting comfortable with Valdocs.
Feel free to browse through the rest of this manual, especially the chapters marked "System Controls," "File Controls,"' "Application Controls," and "Typestyles." They'll tell you everything you need to know about the groups of keys at the top of the Valdocs keyboard.

The next chapter is "Advanced Editing." But hold on a minute! We suggest that you make sure you're completely comfortable with the basics before you go on. Advanced editing will show you a faster way to do some of the things we've been talking about and take you into advanced Valdocs features that you'll find convenient. But remember this important point that we made at the beginning of the chapter. You'll use the basics covered in this chapter for most of your work with Valdocs.

If you think it's a pretty powerful system now (and it $i s$ ), just wait until you start using the advanced features.

With apologies to Shakespeare, "Read on, MacDuff!"


