what a word processor should do: allows you to concentrate on your writing and not worry about or become expert on the writing tool.

Word II is surprisingly powerful and places few constraints on your writing. You can create files, footnotes, headers and footers of any length and are not restricted in the size of text you wish to move or delete. You can also create a document with margins that are such that you would not normally be able to see the whole thing on the screen — there is an unusual Fold feature that allows simultaneous display of both sides of a wide document. Word II keeps careful track of footnotes and prints them on the appropriate pages, no matter how much editing you do on the text. The Search and Replace function is comprehensive. It can find almost anything that you specify and, depending on your preference, replace text automatically or stop and wait for your approval. You can split the screen to display two files simultaneously, each of which can be created, edited and moved separately.

There is automatic reformatting after editing, automatic checking for hyphenation possibilities and automatic alignment of numbers. Calling up standard paragraphs is handled in Word II's efficient manner.

You store standard text as a separate file and then insert it where needed by pressing a few keys. Word II also has a sophisticated Merge function for form letters and mailing lists.

Word II shines when it comes to formatting — having different formats for different sections of a document is no problem at all. You need not worry about typing embedded codes, looking for style sheets or second-guessing how the printout will look. Pressing the Format key moves the cursor to the format line where you can make changes. The prompt then asks how much material is to be included in the new format — a question you answer by pressing, for example, the Paragraph or Page key. Pressing Return executes the command, and the designated text is shown in the new format. A Print menu offers a list of 17 options that includes everything from line spacing to number of copies to skip pages to stop printing at a certain page. Word II supports a number of popular printers.

Samna customers get 30 days of unlimited access to a toll-free information line. The responses to our calls were prompt, pleasant and helpful.

Word II does have a few moderately inconvenient flaws. The greatest obstacle for many users will be the expense of adding sufficient memory to bring the Rainbow up to the Word II's required 256K of random-access memory (RAM).

Word II can also be annoyingly slow. Operating under the CP/M operating system, it takes 50 to 60 seconds for the program to begin operation. It takes only about half as long when operating with MS-DOS or a hard disk, so users without hard disks would do well to get the MS-DOS version.

Although Word II's automatic reformatting after editing is generally a boon, you have to wait for the process to end before getting back to work. This can be bothersome when dealing with long paragraphs that require numerous changes.

There is also an easy-to-fix problem in the otherwise fine documentation. Instructions for installing Word II on a system disk (you can make two copies) are not included as a page in the manual; instead, they are written on a card hidden behind the disk jacket. It took us some time to realize that the information was available and then actually locate the card.

Despite these complaints, we think Word II is far ahead of much of the competition. It combines the ease of use found on the simplest systems with the power and sophistication provided by the most complex. It allows beginners to start working in minutes, yet will not disappoint experienced users who spend hours a day on it. If you own a DEC Rainbow, you would be well advised to take a look at Samna Word II. ●

Volkswriter Deluxe: Similar to original, but improved

BY JOHN LOMBARDI
Contributor

With word-processing programs appearing and reappearing at a fantastic rate, it's not surprising to see Volkswriter Deluxe, another incarnation of the original and successful Volkswriter. This version includes added features and special capabilities, but the program looks and feels much the same as the first edition. With its new features it approaches the standards of top microcomputer-based word processors such as WordStar.

Word processing consists of two important functions: editing and formatting. When you edit you are primarily concerned with the content of the document. You enter text; rearrange words, sentences and paragraphs; determine section titles; and consider chapter divisions. Once you get the content the way you want it, you then focus on the formatting, or how the document will look on the printed page. Issues of spacing, placement, boldfacing, underlining and the like all become paramount.

Volkswriter's editing functions are fast, clear and comprehensive. The program can handle documents of up to one megabyte in size if you have enough disk space to hold the overflow from memory. The program uses whatever memory is in the system and then keeps the rest of the text on disk.

Practically anything you may want to do while editing text is possible. The range of editing features is almost complete. Though you can delete by word, line and block and from the cursor position to the end of a line, you can't delete from the

cursor position back to the beginning of a line. Lines cannot be joined by deleting the end-of-line character; instead, you are required to reformat the paragraph. Indents work effortlessly. The tabs are easy to set and clear, though you can't tab from right to left. There is no hyphenation facility.

Volkswriter Deluxe allows you to move the cursor over the text rapidly and effectively. Although you can't insert place markers, you can move line by line, scroll through the text a half-screen at a time and go to the beginning or end of the document or to specific page numbers. This is more than adequate for most uses.

Block operations of the cut-and-paste variety are effected quickly and easily. To make multiple moves or copies of the same block, you must reset the block markers each time.

Find-and-replace operations work well. You must specify an exact match (including uppercase and lowercase letters), and you can only go forward in the file. Once you specify a search string, the search can be repeated as often as you like until you reset the search string. If you're in the middle of a file, you can find and replace to the end of file and then continue from the beginning.

All editing operations in Volkswriter Deluxe use function keys, sometimes in combination with other keys. Volkswriter does not use control keys directly for editing. The argument over control-key versus function-key editing often generates more heat than light, but it's probably fair to say that whatever you use the most will seem to be the best. Some fast typists prefer the control keys because they are easier to manage on the run. If you insist

Before the personal

on control-key editing, this program is not for you.

Scrolling, screen redisplay and other cosmetic features of this word-processing program work cleanly, predictably and fast. When you come to the end of the last line on the screen while typing, Volkswriter jumps up half a screen and continues. This happens so fast that it can be a bit disconcerting at first.

Line 25 on the screen displays line, column and page numbers along with the name of the last file accessed by Volkswriter. A minimal Help screen provides reminders of what each function key does. It is not possible to determine how much disk space is available for storage, how large the current document has become in bytes or the length of the file in characters.

Volkswriter can manage two kinds of files. Its word-processing files contain both the text and some information used in formatting the document for printing. Volkswriter can also produce standard ASCII text files that are used for program coding and the preparation of data for use by another program.
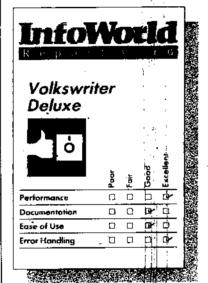
Editing often leaves spaces in the text. To clean up the screen, Volkswriter reforms paragraphs with a Reform key. This process must be initiated for each paragraph, and the reforming works reasonably quickly. As there is no repeat function, you must reform each paragraph manually if you want to change your margins.

You can determine the appearance of a printed document in three or four different ways. Most important, you can create a special file that lists the built-in features of the printer that you wish to have automatically activated when you print. Standard line lengths, character spacing, line spacing, boldfacing, single or continuous forms and the like can all be selected here. You can invent any number of variations on these formats, and you can arrange to attach the appropriate format to specific documents whenever you edit or print that document.

Volkswriter Deluxe expects you to be able to visualize some of the formatting characteristics and does not show them on the screen. There is no screen representation for justification, proportional spacing or line spacing, though the length of screen lines takes proportionally spaced character widths into account. Volkswriter only shows things on the screen that affect the location or appearance in a way that requires operator attention. If you use justification, you don't need to see what it looks like on the screen because justification doesn't change the number of words per line, only the spacing of characters on the line. Page breaks are always visible on-screen.

A second way to affect appearance is by setting boldfacing, shadow printing, strike through, underlining and superscripts and subscripts in the editor itself. You can also select up to four different fonts from within the editor, should your printer have the capability.

Appearance of the text can also be affected by the insertion of dot commands. These direct the Print Formatting program to implement headers and footers, set page numbers, insert files or change formats in mid-document. The range of dot commands and print-time formatting available from within Volkswriter is adequate for most applications, though not as comprehensive as those available in WordStar. Volkswriter Deluxe easily manages multiple-line headers and footers, and will place this text left, right, centered or on alternating sides of the page. You can also chain files and print particular pages. You can print multiple copies simply by

InfoWorld
Report Card

Volkswriter Deluxe

	Poor	Fair	Good	Excellent
Performance	☐	☐	☐	☑
Documentation	☐	☐	☑	☐
Ease of Use	☐	☐	☑	☐
Error Handling	☐	☐	☐	☑

Summary: Volkswriter Deluxe is a top-notch word-processing program that has excellent editing, strong formatting, good user documentation and tutorials, modest on-line help, an adequate list-processing function and excellent keyboard/printer customization routines. You must have a good deal of knowledge about your printer in order to use the program well.

chaining the same file in a loop.

Volkswriter allows you to manipulate the printer directly by entering special control characters into the text. You can also insert a dot command that requires Volkswriter Deluxe's formatter to print all subsequent text verbatim without interpreting any control characters.

The combination of all these features produces a formatting capability that is flexible and powerful. The specific formatting features available to you, however, will depend in part on the special intelligence built into your printer. For example, Volkswriter can usually manage underlining, strike through, boldface print, superscripts and subscripts, and justification on printers that have no built-in word-processing intelligence but do have flexible line and character spacing. The program will not give you shadow print on such a printer (unlike WordStar).

The package has a special program called Configure that allows you to tell it what printer you are using so that Volkswriter can take advantage of its features. Unfortunately, the exceptionally useful features of this configuration program are virtually undocumented in the materials that come with the program. With all the expertise the Volkswriter people have with printer drivers, it's a peculiar anomaly that their description of their own program's printer setup is so deficient.

The feature that makes this word-processing program indispensable for specialized applications is the ability to customize the program. Volkswriter lets you set up your keyboard and printer any way you choose. This means that you can have your keyboard set up to work with foreign-language characters or rearrange the keyboard to suit your writing style. Doing this does not require much effort on your part beyond careful attention to the code numbers for each key and each displayed character.

Volkswriter Deluxe expects a lot of knowledge from you. You must be willing to learn what your printer does, how it does it and how to instruct Volkswriter Deluxe to work with it. If you learn all this, Volkswriter will provide you with a powerful and flexible word-processing system.

If you want to use this program with a variety of different printers you will incur a substantial training cost or will need to be sure there is a Volkswriter Deluxe guru available to set up special formats and deal with printer peculiarities. Volkswriter does not always handle the printer for you, but does give you the ability to extract the most from whatever capability is in the printer.

For example, there is no software "handshaking" (instructions that make

sure the printer and computer are ready to communicate with each other) in Volkswriter's printer files. If your serial printer is connected to the computer with a cable lacking the alternate hardware handshaking wires (a shortsighted but common arrangement), Volkswriter won't work properly. You must also know what characters are on your print wheels, and their positions, in order to use the powerful special features that customize the printer output to match a custom keyboard assignment. None of this is particularly difficult, but it presupposes quite a bit of computer knowledge on the part of the operator.

Textmerge is Volkswriter's built-in form-letter, mailing-list and boilerplate facility. The program works with standard comma-delimited files produced by Basic and most data-base programs. It does not have the extensive special options available in comparable programs such as MicroPro's MailMerge.

In sum, this is a unique word-processing program with excellent editing, strong formatting, good user documentation and tutorials, modest on-line help, an adequate list-processing function and good keyboard/printer customization routines. The program is distributed without irritating copy-protection schemes and is easily installed on a hard-disk system. Lifetree, the distributor of the program, provides exceptionally helpful and competent assistance to registered owners. ●

DSN/Link: communications package for the HP-150

BY STEVE MANN
Contributor

DSN/Link, from Hewlett-Packard, is an excellent communications package with a variety of capabilities. This program is designed primarily to enable you to link two HP-150 personal computers or to link an HP-150 to an HP-3000 minicomputer. It is flexible enough to allow you to connect an HP-150 to almost any type of machine, large or small. The hookup may be either local or through a modem to a geographically remote system.

Why would you want to hook a Hewlett-Packard personal computer to another machine? Well, there are several possible reasons. First of all, the HP-150 can function as an intelligent terminal and, at the same time, let you use all of its computer capabilities. Even more important, depending on the type of machine at the other end of the cable (typically called the host), you can transfer program and data files from the HP-150 to the host and vice versa.

You must install DSN/Link on the HP-150 so that it executes under Personal Applications Manager (P.A.M.), the 150's MS-DOS command shell. Once this is done, the program has five basic functions — File Transfer, Command Entry, File Management, Data Logging and Help.

File Transfer lets you move information between the two computers a file at a time. Command Entry permits you to enter one of about 30 commands directly to the HP-150; these commands control certain aspects of the communications connection. File Management gives you access to all of the HP-150's file- and directory-manipulation capabilities. Data Logging records your conversation with the host on either a printer or a disk file. Finally, the Help function gives you a brief description of each command.

This product is, in fact, supplied as two parts — DSN/Link and DSN/Monitor. When you link two HP-150s, DSN/Link runs on one and DSN/Monitor on the other. DSN/Monitor sets up the second system as a "slave" to the first. The Link station initiates file transfers and can access the Monitor station's disk directories. The Monitor station, on the other hand, primarily responds to commands

DSN/Link is designed to work with the HP-150's asynchronous serial ports. This means that you cannot use it to connect an HP-150 to any system that uses synchronous communications, but you can use DSN/Link with almost all micros and minicomputers, except larger IBM machines. This product works equally well with local, direct-cabled connections and remote systems accessed with Hewlett-Packard's internal modem for the HP-150.

Setting up DSN/Link is easy. You must follow several steps to configure the HP-150's serial port so that the HP-150 and the host machine can communicate properly. If you are connecting two systems locally with a serial cable, you may have some problems unless you have a universal RS-232 cable. DSN/Link's documentation does not include any technical information about the signal connections for the HP-150's RS-232 serial ports. This information isn't included with the HP-150's documentation either. Fortunately, you do

have a great deal of control over the serial-port setup, so that even simple RS-232 connections should work.

DSN/Link's documentation is excellent. It contains detailed sections on all the product's functions, including tutorial materials and a complete, foldout reference card. It contains appendices that cover configuration of the HP-150 for connection to almost any type of system and an appendix. that describes the HP error-checking protocol, so that you can, with a bit of work, write custom file-transfer software for almost any machine. The documentation also includes extensive command-file samples that show you how to use DSN/Link with HP minicomputers, The Source, the Dow Jones News/Retrieval Service and DEC VAX-11 and Amdahl mainframes.

DSN/Link has excellent error handling. The program is structured in such a way that, unless you are using the special commands, it's difficult to make errors. If you incorrectly enter one of the approximately 30 special commands, the program's error handling is comprehensive. The messages are clear and understandable, leaving you with little doubt as to the nature of the problem.

from the Link system. Both stations can send simple messages back and forth.

When you use DSN/Link to connect your HP-150 to another type of system — either a Hewlett-Packard minicomputer or another computer — the HP-150 functions as an intelligent terminal. You can enter legal host commands but still use all of the HP-150's personal-computer capabilities. If the host system has special software capability, you can also transfer

This product works equally well with local, direct-cabled connections and remote systems accessed with the internal modem for the HP-150.