

# Microware Review

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## The SwyftCard

**Abstract:** If you had to type "LOAD CODE.TOAST" into your toaster to make it work, how often would you take the time to make toast for breakfast? Jef Raskin, C.E.O. for Information Appliance, Inc. suggests that the average toaster user would not accept this type of operating system. The next logical question is, why do computer users in general and microcomputer users in particular accept a complex procedure to get their systems up and running. I suspect that the answer is, as Captain Grace Hopper would say, "its because we've always done it that way."

The SwyftCard is a productivity tool that facilitates word processing, information retrieval, mathematical calculation, communication with other computers and programming in Applesoft BASIC. It is distributed in a slightly unusual form in that the program is stored on a small card which is inserted into the rarely used slot 3 of an Apple He, rather than being loaded into memory from a standard floppy disk.

Functionally, I hope that this product is the harbinger of future product design strategies because it attacks many of the problems that have plagued users since the very beginning of computer development. Complex command structures, disk storage systems that allow the loss of work through human error and tardy operational speeds have virtually been eliminated.

For example, to get the card up and running, simply turn on the computer and start typing. To store what has been created, place the disk (formatted or unformatted) into the drive and press CONTROL-G. Saving a 40K file takes about 8 seconds. Locating any point in a 40K file takes about .5 seconds and entering any text character from the keyboard takes about 300 milliseconds. On an "Apple" you say ...? Get out the stopwatch and see for yourself.

### COMMANDS

Only six commands are needed to use these five applications. They are as follows. CONTROL-G (Send) transmits the highlighted text via the super serial card to the modem. CONTROL-G (Calculate) evaluates or executes the highlighted text. CONTROL-N (Print) delivers the highlighted text to the printer interface. CONTROL-L (Disk) directs the disk to

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do the appropriate disk operation. CONTROL-Z sends the next keypress as a control character via a super serial card. Key labels are provided to label these keys according to their function.

## ATTRIBUTES

No formatting commands are required. SwyftCard is a what-you-see-is-what-you-get text editor. To enter text, simply start typing. To delete text, press the delete key. The cursor simultaneously shows where the character that will be deleted is positioned and where the character that is entered will be positioned. To save or load text from an existing file, press CONTROL-L. SwyftCard determines the appropriate action. Each disk, then, becomes a 40K file.

Cursor control is achieved by using the open and closed apple keys. Ergonomically, this is more efficient because these two keys can be operated with the thumbs, just like the spacebar. Consequently, users never have to take their eyes off the screen to look for the arrow keys.

Pressing the open apple key moves the cursor one character left - closed apple, one character right. This operation is known as "creeping." Holding the closed apple key down, and pressing any key or sequence of keys initiates a "leap" to that character or string of characters anywhere in the text to the right of the cursor. Visa versa for the open apple key. If the text string desired is not found to the right of the cursor, the card automatically initiates a search to the left of the cursor. Therefore, only two conditions can exist, either a text string match is found, or it is not found. No false error messages can occur because the search was not initiated from the beginning of the file.

Block moves of text are achieved by highlighting the section of text to be relocated, deleting it, repositioning the cursor and then initiating the rewriting of the text with CONTROL-A, one of the six commands. Page breaks are automatically inserted, but can be forced by pressing the escape key. The TAB key functions as a tab key or when used in conjunction with the "leap" key initiates a "leap again" or "find the occurrence of this text string again" function. Functions like line spacing and margin settings are handled on a global basis.

Calculations can be done anywhere in the text. For example, if it was desirable to stop right here and multiply two numbers, such as 64 times 254, it would be entered as 764\*254. The answer would then appear, and the numbers would be highlighted. Pressing the delete key deletes the 64\*254, leaving the answer behind to be printed as part of the text. Similarly, programs can be written and executed from within the text editor. And, by the experienced user, this capability can greatly reduce the time required to complete repetitive tasks.

## THE PACKAGE

When the SwyftCard is delivered, the package contains the card, a set of decals to label the keys, a reference manual and a disk. On one side of the disk, there is a very good tutorial on using the card. The other side contains a conversion utility which is very similar to the Apple ProDos conversion program. It converts SwyftCard to ProDos and vice versa. This utility program provides access to the best of both worlds. SwyftCard can be used to prepare the text and print it out in a simple but efficient manner. The conversion utility can then be used to make a standard ProDos file which can be read by any of the standard word

processors. Then, any special formatting requirements or printing requirements such as font changes can be used.

### USERS BEWARE

There is some danger in doing this. When the user is forced to go back and use a conventional editor, the power and simplicity of the SwyftCard becomes very evident. What was formally thought to be "the best," has now become a cumbersome version of the horseless carriage. The user is constantly reminded of this every time a complex control sequence is required to move the cursor, find a word, when the program has to be terminated in order to do a mathematical calculation, or, when it takes a minimum of three menu options to print or store a document. SwyftCard, where have you been all this time ... ?

### FRINGE BENEFITS

Finally, SwyftCard offers some additional fringe benefits. Being that the program is contained within a set of chips on a board, there is apparently no known way to copy it. Thus, teachers, teachers/librarians and learning resource specialists who are concerned about copyright violations, can rest a bit easier. Second, because the program is hardware resident, it is always immediately available on request. Third, unless the card is physically damaged during installation, it cannot be destroyed by static electricity, bending or putting fingers in the wrong place. Fourth, users find they can purchase it on either hardware or software budgets because it is, in fact, both a piece of hardware and software. Finally, the cost is very competitive. It retails for under \$100.00 U.S. and there are educational discounts available if ten or more cards are purchased.

### THE CHALLENGE

In closing, it is interesting to note that Jef Raskin, the person primarily responsible for the design and development of SwyftCard, once worked on the development of the Macintosh. Apparently, in its early stages of development, a component like the SwyftCard would have gone to the Mac. Fortunately for the Apple II family and unfortunately for the Mac, we now have the SwyftCard because some people are still willing to act on the suggestion that "you can't do it that way." Are there any more Jef Raskins out there?