NOTES FROM THE EDITOR

This year I have appreciated your interest and participation in your journal. For the first year since I have been Editor, we have been able to publish TWO issues filled with significant and interesting articles. I hope that you will enjoy this issue of Bioscience.

I urge you to join me this summer in setting a personal goal to write one article for Bioscience. You are all interested in learning about laboratory experiments. Why not share your favorite with all of us? This summer, when you are on that special field trip, why not share your experiences with all of us?

If you are using a DEC Rainbow, a Zenith, or an Apple Computer, send us a disk copy and a paper copy of your article. We have these word processing systems: WordPerfect for all systems, Appleworks and Pie Writer. If you are using one of those, simply send us a disk containing the unformatted document. If you are using a different word processor on a compatible computer, send us an ASCII text file. The deadline for the next issue is November 15.

THE APPLE IIE LIVES

I am keyboarding this short story to all of you with two fingers on my Apple IIE. My message is simple - there is life remaining for the Apple II system even in the face of an emerging 16-bit computer world. In this past year, Apple Computer Inc. and other companies have decided to support and upgrade the IIE system. This article is being written on an enhanced IIE equipped with an Applied Engineering Ramworks extended 80 column card (312 K memory), an Applied Engineering Timemaster II clock card, a Street Electronics Alphabits Serial Interface, a Hayes Smartmodem 1200, and an 800K Unidisk 3.5 drive. I am using Apple Computer's Appleworks word processing program which has been modified in two ways: (1) all of the RAM memory is accessible and (2) a set of closed-apple commands have been added with Beagle Bros.'s Macroworks program. An Apple Computer ImageWriter II was used to print the text. All of the additions to the standard IIE are summarized in Figure 1.

<table>
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<th>Ramworks</th>
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<td>Unidisk</td>
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<td>ImageWriter II</td>
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Total $1865

You may find a cheaper or more expensive path to the same end. If you subtract the modem and printer, the cost drops to about $900. I have had quotations of 600 - 700 for a IIE so the entire system is about $1500. You can purchase a IIc system with 512K RAM for about $945.

Understand that I am not advocating that all of you rush out and buy such a IIE system. There may be better systems for comparable prices. We had purchased the IIE's and had the software. More importantly, we were comfortable with the software. We wanted more capacity on disks and in RAM.

APPLEWORKS

Much has been written about Appleworks so I am not going to spend time here. If you want to know more, I recommend that you read...

Appleworks is a unified interactive working environment consisting of three segments: a word processor, a database, and a spreadsheet. These are linked together by a "clipboard" which enables you to move documents from one environment to the next. Appleworks is not protected and more importantly it has an open architecture. This means that clever people can modify the program to work even better.

The clever people at Beagle Bros. have done just that. Their Macroworks enhances the function of Appleworks by introducing a series of 2-3 key macrocommands that consist of pressing the open-apple key and one other key. For example, to superscript the text you press closed-apple +. With the unmodified program to accomplish this same task, you must press open-apple 0+BRN+ERTNESC<-. Macroworks also enables you to define two temprary macros, each up to 20 characters.
The clever people at Pinpoint Publishing have pushed Appleworks in another direction. With their program Pinpoint they have significantly expanded the capability of the IIe by adding a series of accessories accessible through the Appleworks system, much like the Desktops for the Macintosh and IBM computers.

The Pinpoint System now includes a dialer, communications system, calculator, note pad, appointment calendar, and a speller. To access any of these functions, all you do is press closed apple-P and a menu appears on the screen. With the arrow keys you select the accessory. Then, the screen is saved in a temporary file and the accessory is brought to the screen. When you are finished, the Appleworks screen is reloaded and you can continue. All of this takes seconds if you rely on a disk drive and less time if everything is resident in RAM.

Also, this system enables you to merge pictures drawn with Borderbund's Dazzle Draw or Beagle Bros.'s Graphics program into your Appleworks files. Many of the accessories are unnecessary but I have found the calendar and communications programs very helpful. This program (Pinpoint & Speller) lists for $125 but I have seen Pinpoint and Speller selling for $39 each. Judging from the several additional sub-programs that are now available, I suspect that Pinpoint will be expanding the capabilities of these programs rapidly.

UNIDISK 3.5

I have had this system for less than two weeks, but I am a true believer. On one disk, I have all of my Appleworks primary program, dictionary, and an entire series of sub-directories. With all of this (about 4 full standard disks), I still have about 300 K of space available. The 3.5 disk is much sturdier - I can put it my pocket. While this is configured by Apple only for ProDOS, several other programs are available that turn the drive into two 400K DOS drives.

RAMWORKS

A 500 K Database on an Apple? Impossible? Not if you have a Ramworks II card installed in your Apple. Ramworks II replaces the 80 column card for the IIe with a card that supports an 80 column also adds considerable resident memory to the computer. With modification, the Appleworks program can be entirely loaded into this RAM significantly speeding up the operation of the program. Only the printer driver program must be accessed from the disk. Also, Appleworks itself is expanded so that you can use the available RAM space. This means that you can have large databases, spreadsheets or documents in RAM. Also, you can rapidly switch between documents.

With the supplied software, you can use the extra RAM as a ramdrive for either the DOS or ProDOS operating system. This software also enables you to configure Appleworks to utilize all of the added RAM space. In addition, you can add a print buffer to the software. With the print buffer installed, I have noted some delay in accepting keyboard input when the program is bank switching. I prefer a buffer either installed on the printer or on the printer interface.

This card has changed the IIe from a memory-limited machine to a 120 - 1000+ K RAM. I have been using the Applied Engineering card for more than a year. While I have been satisfied with its operation and with their technical support, other cards are available. Most reviews seem to favor the Ramworks II card.

ALPHABITS

Alphabits is a serial printer card introduced by Street Electronics Corporation to enable users to fully access the diverse abilities of the Imagewriter II system. With pull-down menus, a resident cropping editor for page 1, page 2, or Hi-res graphics, this system is an ideal card for the IIe operating with an Imagewriter. At $79 for academic institutions, it's a real bargain. From within programs, including Appleworks, you can place star commands that alter the action of the printer. The star commands are easy to remember and do not cause the problems for word processors that are caused by escape or control commands. This card can be equipped with a 64K print buffer so that you can print long documents and still work with other programs.