

Microcomputer — New Tool of Communication

By John Hoke

In the Spring of 1980, this writer acquired a small microcomputer system — primitive, by today's standards, and lacking many of the "bells and whistles" current machines exhibit. But this modest system enabled the user to vastly improve the efficiency and effectiveness of a host of many workaday tasks.

A 'Field'-Supporting Tool

While a microcomputer is usually associated with 'numbers-crunching' its capabilities go further. I have used it frequently to help communicate information about such chores as the testing of new tools and technology. An example includes an effort to make the management of the water bodies on the National Mall less costly. 'Swimming-pool' treatment techniques used earlier involved frequent, messy, and costly purges and cleaning of the pools. These systems now are kept healthy by managing them as self-sustaining, self-cleaning living aquatic ecosystems. But this involved making many changes in our maintenance techniques and the use of new tools.

Complete with Pictures

Each change in technique had to be tested first. The writer would photograph the trial operation with polaroid shots — and then quickly dash off the whole thing on the microcomputer, while the memory of it was still fresh. Using a word-processor program, the story-telling sequential aspects of the effort could be set down, with gaps left in the evolving text to accommodate those pictures that best illustrated the test effort. The final result was usually a one or two-page treatment then run through a copier for distribution to staff and maintenance forces who would have to make the system in the future. Being a 'one-man' operation and used to being strapped with the multiple-drafts process that so often attends going from idea to final copy, I found the microcomputer process was fast and got the results quickly into the hands of those who needed it.

To Make 'Spreading the Word' Easier and Faster

These mini-reports were not works of art (although polaroid pictures reproduce well on a photo-copier in good condition), but they guaranteed that everyone involved had a clear understanding of whatever new process was being explained. On occasion, from start to finish the time lapse was one of overnight delivery. Subsequent refinement made these papers publishable in journals with wider distribution.

Simple Chores Made Easier

While also respected for its ability to handle vast amounts of data, equally appreciated is the easy way the microcomputer handles such mundane chores as writing up flawlessly-executed requisitions and other administrative 'formulary.' For example: you can "blank out" a basic DI-1 form as a small mini-program you can store on a disk. It then becomes a snap to call it up when needed and just "fill in the holes" with specific ordering information. When you print it out on the DI-1 form itself, everything falls in the right blocks and lines of the form. Should it be a frequently requisitioned item, this, too, can be stored for future call up, revision, and re-ordering.

Their Use as 'Word Processors' Will Always be Important

While microcomputers are noted for handling numbers and data manipulation chores, their potential really is much broader. The typical resource management project consists of two major tasks: Collection

and analysis of data and conversion of this summary data into graphic and, ultimately, written format. Somewhere along the line it is equally important to write up whatever you are doing in clear, concise English.

New Programs Combine These Abilities

The resource manager will find that new microcomputer technology includes combined data-managing and "writing" software that can help provide the kind of bottom-line results in the format best understood by management staff. These new "integrated" programs make it easier both to gather and analyze data — and then to render it in a form easily understood by people of many differing disciplines.

A Microcomputer is Simply a New Communications Tool

Resource management specialists and related professionals will find the microcomputer an effective communications tool. Aside from its ability to produce results in a hurry it is uniquely able to render results with greater clarity. With a microcomputer one person — one mind — can stay on top of the process, from beginning to end. Often, the vital element of clarity becomes lost when too many people, lapses of time, and sometimes even lapses of memory occur during the execution of work.

Their Programs Make Them Flexible Tools — For Everybody

With the ever-growing kinds of programs the microcomputers can use — available at a nominal cost compared with almost any form of fixed-station computer or word-processing systems — a microcomputer system can be as varied as the tasks that face NPS resource management. To make sure that what comes out at the end of the process will be readable, it is suggested that the data-related programs you select also include a good word-processing program. (And this includes hardware capable of producing letter-quality copy: Unless it is of superb, almost deceptive quality, dot-matrix printing of textual material gives many readers — particularly editors — a headache.)

You Don't Have to Know Something Special to Use Them

You do not have to know touch typing to utilize word processing programs with these systems. With a word processor program any kind of typing is made worlds easier; correcting mistakes is a snap on a microcomputer — regardless of how well you can type.

There Is No Microcomputer for All Seasons

Our diverse professional roles rule out finding any basic, or standard microcomputer system — something everyone will use. Trying to find a single system that can network the whole National Park Service, and thus be cheaper-by-the-dozen, can be hazardous. Their basic virtue — flexibility — may well be sacrificed in the process. Developing a single vehicle that will fly, land on the water, sail on it, travel submerged, crawl out on dry land and then traverse it — and do all these things fast — sounds like a great idea. It may even be possible to make a vehicle that *does* all these things but there is doubt that it could do any one of them *well*. No such vehicle exists — and this goes for microcomputers, too.

The key to any search for uniformity lies in selecting software programs that are widely used by the many microcomputer systems now available — programs that can “talk” to almost any system. If you select compatible software program packages, equipment choice can then be confined to hardware that handles graphics requirements best, is easily portable (for use in the field) or otherwise best meets some individual or special requirement.

They Can Really Reduce Costs

The Darnell Institute of Business indicates that the cost of doing a standard letter — from idea to mailed envelope — has risen to \$7.60. Herein lies another mundane, but fruitful, use of the microcomputer. Many communications can be moved via a short note attached — one that you quickly compose and type yourself. The use of formal letters and memoranda thus can be reduced.

Using a microcomputer vastly simplifies filing needs: Reams of copy can be stored on small floppy disks. Whole filing cabinets full of stuff will fit on maybe a dozen of them — in a small box on the corner of your desk. Professionals who are bereft of (or must share) secretarial support will find this feature of particular benefit. And with the ‘search-and-find’ capabilities of the microcomputer, records on disks are worlds easier to find.

They Can Vastly Expand the Scope of Your Work

Microcomputer capabilities are mind-boggling and often frighten the timid. But the instrument remains no more than a fine new tool. The use of only a fraction of its potential can result in savings that more than return the investment, compared to doing business “the old way.” And those who have reason and ability to exploit the technology’s full potential will find they have increased incredibly their professional scope and productivity.

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