

# TI-99ers In The '90s

Computer Column  
by Barry Traver

## PRINCIPLES FOR OPTIMISM IN 1991

A number of years ago, as an introductory foreword to Ron Albright's Orphan Survival Handbook (a followup to his fascinating Orphan Chronicles), I suggested what I thought were some important factors in the TI-99/4A community's being able not only to survive, but to thrive. The tone was optimistic: I argued that we CAN do it, and the "CAN" was an acrostic mnemonic that stood for the principles of "Cottageing," "Archiving," and "Networking."

My optimism seems to have been justified, and I believe the principles are still valid in 1991, although I may not have chosen the best words back then to describe them. Or, rather, two of the words. Archiving and Networking have taken on new meanings that were not part of the original intention, so that the mnemonic may now be not as helpful as before.

By Cottageing, I meant that we

ought to take advantage of the fact that "cottage industries" are a characteristic of the computer age. To survive and thrive, we are not dependent upon the support of mammoth companies like Texas Instruments; rather, small companies (like Asgard, OPA and MYARC, just to name a few examples), and individual software programmers and hardware designers are able to give us products that are a giant step beyond what was offered to us earlier by TI.

Compared with what is available today for the TI-99/4A (and MYARC 9640, a /4A compatible/upgrade), some of the disk and cassette software offered earlier by Texas Instruments seems rather primitive. Likewise, I would guess that few TIers today would be content to stay entirely with the hardware that was being produced by Texas Instruments back in 1983, e.g., 32K memory card, single-density disk controller, single-sided disk drive, etc. True, few of us can afford to own all of the many new options available, but we've grown accustomed to such things as RAMdisks, double-density

floppy disk controllers (not to mention hard drive controllers), 80-column devices to enhance screen graphics, improved IBM-style keyboards, gram emulation devices, and much more that TI never produced.

Well, most of the companies that have given us these exciting new products are not only "cottage industries," but also essentially one-person companies, usually run out of one's home. Think of MYARC (Lou Phillips), Asgard (Chris Bobbitt), OPA (Gary Bowser), Bud Mills Services (Bud Mills), Rave 99 (John McDevitt), and others. Yes, there are also some informal or limited partnerships, such as Notung Software (Ken Gilliland and Ray Kazmer), MS Express (Mickey Schmitt and Mike Sealy), and others (including now Asgard; more about that a bit later), but basically you have many illustrations of the fact that large companies are not required for significant accomplishments: a handful of talented and enthusiastic people is sufficient. (The same is true, by the way, for TI user groups, as my references to the Lima and Nutmeg groups in previous columns may have proven.)

By Archiving, I meant essentially "collecting" things of value to the TI community; I did not intend a more specialized meaning that the term may suggest today. Barry Boone's ARCHIVER had not been written at the time I wrote my earlier comments, nor, for that matter, had my own pioneer ARCHIVER program even been thought of. No, the reference was not to what most people may think of today when they hear the word "Archiving," i.e., combining/compressing files for easier uploading and downloading in telecommunications (although I do see that as important to our continued welfare), but merely to the need to gather and to preserve what has been accomplished thus far, especially in information and software. As we move forward, we must not allow what has already been done to be lost.

This gathering of useful resources can be done in user group libraries or telecommunications databases, for example, but it need not be limited to that. It can (and perhaps should), for example, also be done by individuals. One fine example of this activity is the outstanding library of over 500 disks of TI public domain software and fairware gathered by another instance of a one-man company, Jim Peterson of Tigercub Software. Send \$1.00—deductible from first order—for a 13-page catalog listing of disks at \$1.50 per disk, postpaid if you order a minimum of 8 disks. Jim's address is Tigercub Software, 156 Collingwood Avenue, Columbus, OH 43213.

By Networking, I meant simply

working together. LANs were not in view at the time! Although individual software programmers, hardware designers and one-person companies are essential to our continued well-being, equally important in my opinion is that we keep in touch with one another. Join your local TI user group. If you don't have a local TI user group, start one. If you don't have a modem, buy one (preferably 2400 baud, which are reasonably priced at present) and link into whatever TI bulletin boards you can conveniently access. Also, become an active member of TI FORUM on CompuServe, TI NET on Delphi, or the TI RoundTable on GENie. (I confess a bias for the last, since I am Chief SYSOP there, but the others have their own important contributions to make as well: the TI needs all the friends it can get!)

I believe that user groups and telecommunications are more important to us now than ever before. TIers may not need large companies to support them, but we do need each other, and user groups and telecommunications are both good ways to stay in touch. In addition to joining your local user group, you may want to become a member of, say, the Lima User Group or the Chicago User Group. You may not be able to attend the meetings, but you can benefit in other ways; e.g., by getting an excellent newsletter or (in the case of Lima) being able to view on videotape presentations what took place at the meetings. I'd like to see someone capable (e.g., Mike Wright?) organize a really active national TI user group. But until that happens, perhaps the closest thing we have to that is what is offered by CompuServe, Delphi and GENie, which involve TIers from all around the country on a daily basis.

If someone can think of a more up-to-date acrostic mnemonic to convey these three principles, let me know, because I am convinced that they continue to be crucial to our sustaining the vitality of the TI community. I believe that we "CAN" still do it throughout 1991 and beyond through Cottageing, Archiving and Networking, even if better names for these principles might be found. It is only as we continue to practice these principles, I believe, that we can continue to exist, so I do not apologize for emphasizing them once again.

There is an implicit principle underlying these principles that perhaps ought to be made explicit: we need to support those who support us. We need to avoid software piracy (that should go without saying), but we need to do more than that—we need to be willing to do our part to keep things going, and that includes reaching into our

## HARDWARE / The Contemporary CoCo

### FROM PRECEDING PAGE

ize just how much their gestures or tone of voice conveys.

If you see things like ":-)", or ":-(", their meaning can be determined by turning this page 90 degrees. The first is a smile and the second a frown. Please don't lay your monitor on its side; just learn to recognize them.

The use of these or GRIN, or some such note can make your real intention clear while not hobbling your freedom of expression.

Profanity is, of course, entirely out!

BBS systems are the easiest way to find the latest CoCo information and programs, but they have a distressing way of appearing and disappearing very quickly.

Mr. Baldish is operating one of the oldest systems, and it is only entering its 10th year.

On the day I talked to him, I tried six other BBS numbers and found them to all be out of service for one reason or another, so some persistence is needed.

I am compiling a list of active CoCo

BBS systems and would appreciate your input. Please send along any active numbers you know about so I can share them with other CoCo enthusiasts.

Below is a brief listing for any of you who thought that programs had to be very long to do anything interesting.

I tested it on several machines running Color BASIC, and it worked fine. Give it a try; it should run on all CoCos.

### SEE FIGURE 1

RUN the program, press the "enter" key two times, then start typing.

The "break" key will clear things up, but don't just delete the program; try making some changes to see what happens, even if you don't know what you are doing you might get something interesting.

Hint: There is more there than originally meets the eye; try RUNNING the program again but hitting "enter" once, then typing 100, and "enter" again. Enjoy!

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10 'BEANS'
20 CLEAR 600
30 INPUT N
40 AS=INKEY$
50 IF AS<>" " THEN AS=CHR$(ASC(AS)+N)
60 BS=BS+AS
70 PRINT BS;
80 GOTO 40
    
```

Figure 1

SEE NEXT PAGE



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pockets to pay for what we would like to see continue. Don't just borrow someone else's copy of *Computer Monthly*, buy your own copy at the newsstand (or, better yet, subscribe!). Don't just take advantage of the excellent shareware programs that are around, send an appropriate reimbursement to the author! In short, recognize that protecting your "investment" in your TI will mean the need to invest some time or money in maintenance, just as is true elsewhere in life. Maintenance for the TI is equally necessary, but the result will be greater enjoyment and increased usefulness from your own TI, plus longer life for the TI in general.

**BRASHEAR JOINS BOBBITT IN ASGARD**

Asgard Software, founded in 1984, has become probably the largest producer of products for the TI-99/4A. It currently offers over 130 products (soon to be 150, including the dozens of products currently under development but not yet officially released). For what has been essentially a one-person company from the beginning (with oc-

casional temporary part-time assistants), this is rather a significant achievement. The work involved, however, has understandably become more than one person can handle.

Thus, Chris Bobbitt, president and owner of Asgard Software (P.O. Box 10306, Rockville, MD 20849; phone 702/255-3085) made the following announcement: "After months of preparation, starting July 1, Harry Brashear will be responsible for almost all order fulfillment, and acting in the capacity as a limited partner. Lengthy delays in getting orders and update requests filled has been the biggest problem most people have had in dealing with Asgard. It has cost us many orders and a few friends over the years, but just couldn't be helped. Currently, orders take anywhere from two weeks to eight or more to be filled. Our goal is to have all orders, both new orders, as well as service and catalog requests, and updates, out the door within a week of receiving them."

Harry Brashear has gained recognition as a popular columnist in *MICROpendium* (where he wrote the "MICRO-reviews" series for many

months) and elsewhere. He himself published an excellent series on "Home Publishing on the 99/4A," providing a very helpful overview of the many different graphics programs available for the TI-99/4A. Although he will not be continuing his MICRO-reviews series in *MICROpendium* (out of concern for possible "conflict of interest" due to his new position at Asgard), I hope that we will continue to be exposed to his opinions on what's happening in the TI community. You may not always agree with Harry—Chris Bobbitt calls Harry "a controversial author" and says, "I don't always agree with him"—but you should find his comments always stimulating and worthy of consideration.

His appointment to the new position at Asgard should mean not only the speedier processing of orders, but also the freeing up of Chris Bobbitt so that Chris can spend more time on other things, e.g. new product development (including writing programs) and the resumption of the publication of *Reflections/Asgard News*. (There's a publication Harry ought to be able to write for, without any charges of possible conflict of interest!) Like some other "cottage companies" in the TI world, Asgard—as Chris says—has had some problems in the past with filling orders promptly, etc., but the addition of Harry Brashear is, in my opinion, a great decision. With Chris and Harry working together, I expect that the result will be a profitable one, both for Asgard and for the TI community.

**ACCELERATOR BOARD FOR THE TI-99/4A**

We began this column by looking a bit to the past, but it was only to remind ourselves that the same principles that enabled us to survive to the present are the ones that will take us to the future. One does not survive by attempting to "maintain the status quo," one survives and thrives by moving forward. Well, one recent exciting example of that is Don O'Neil's project of an "accelerator board" that can dramatically increase the speed of your TI.

I'll let Don tell you about it in his own words, excerpted from a conference he gave for the TIRT on GENIE in June 1991: "Over the last two years, I have been working on an upgrade to the 9900 processor for the 99/4A console. During my experimentations it evolved into becoming a clip-on style board that...contains TI's third generation of 9900 compatible processors, the TMS99105. This processor is about 20 times faster than the 9900 [in the TI-99/4A] and about four times faster than the 9995 found in the Geneve....The accelerator...has complete control over all operations that the 9900 had before, only [it performs them] MUCH FASTER!"

If that isn't enough for you, Don goes on to tell us more: "We anticipate about 16MHz speed. Also, because this accelerator has the console ROM

space mapped onto it in eight banks of 8K each, we will be able to re-write the console operating system to be a better system, more efficient, and [with] more features. Another project related to this one is my replacement P-Box interface card with 32K RAM, a 68881 math co-processor, and up to 8MB of RAMBO-style RAM using IBM type 1MB DRAM SIMMS, all of which are on the 16 bit bus from the accelerator or a special adaptor card supplied with the interface."

What does this mean? Well, "the ROMs of the accelerator, once the interface card is complete, will have full support for the math co-processor, automatically speeding up any program that uses the ROM math routines, as well as full RAMBO memory support. [RAMBO is a device designed by Gary Bowser of OPA to provide more memory for programs.] All of this allows us to emulate the Geneve, if you have a 9938 video device in your system." I would assume that, if that is true, use of OPA's "tiny T-I-M" (replacing the 9918A video chip of the /4A with a 9958 rather than merely a 9938) could give you a computer that would surpass the Geneve in graphics as well as speed.

The accelerator board (approximate cost \$250) is being marketed, I understand, by both Bud Mills Services (166 Dartmouth Drive, Toledo, OH 43614; phone 419/385-5946) and OPA (i.e., Oasis Pensive Abacutors, 432 Jarvis Street, Suite 502, Toronto, Ontario, Canada M4Y-2H3; phone 416/960-0925). A price has not been set yet for the interface card, but it is expected to be available at the Chicago TI Faire in November 1991.

What else is OPA planning on producing? According to Don in that GENIE conference, "other projects Gary has in mind for the accelerator are an MS-DOS emulator for running PC programs, [and] a CPM emulator for running ADAM, Colecovision games, SEGA and SEGA Genesis games, most of which is completed. We are also planning a Geneve emulator that will allow us to run Geneve programs as fast [as] or faster than the Geneve." Specifically, the accelerator is expected to be able to run Geneve programs "twice as fast as a Geneve," and /4A programs "10 times faster than a 4A."

If these projects come to fruition are indeed moving into the future at an accelerated rate! OPA, Bud Mills Services, Asgard Software and others are making plans for the future, providing evidence that the TI is alive and well and looking to be around for a while yet. We'll try to keep you informed here in *Computer Monthly* as the future unfolds before us.

If you want to contact me between issues, feel free to write me at 835 Green Valley Drive, Philadelphia, PA 19128, or, better yet if you can afford it, phone me at 215/483-1379 if I can answer a quick question or two for you. In the meantime, keep on computin'!

**SOFTWARE / FOG NOTEBOOK**

# What? Another Backup Alternative

by Bob Thomson Reprinted from March 90 *TOGGLE*

In recent issues we have presented articles on how to automate backup procedures or, at least, how to set up a "tickler routine" to remind you that they should be done. Backing up consists of copying files from your hard disk to floppy disks to avert disaster and to make recovery easier if data is lost due to a hard disk malfunction.

Since you have to copy the backup files to floppies anyway, some follow the practice of keeping all their data and text files on floppies to start with. In the February 27th, 1990 issue of *PC Magazine* was the following letter on the subject:

**NOT SO CRAZY MISTAKE**

In your November 28, 1989, issue, John C. Dvorak's Inside Track column features a section titled "Crazy Mistakes Dept. Redux." Mr. Dvorak relates one "crazy mistake" as follows: "And then there's the expert who says 'I only keep programs on my hard disk: data files are for diskettes!' ... Gads!"

"Well, maybe I'm missing something, but that doesn't sound so crazy

to me. In fact, it seems a whole lot smarter than writing everything to a hard disk which would have to be backed up to diskettes anyway. Think of the time (and error possibilities) necessary to then delete all the data on the hard disk to make room for more stuff that would then require more backups followed by more deleting and so on, ad infinitum. Call me crazy, John, but it seems like writing to a diskette in the first place makes more sense.

**ERIC OLSEN GRASS VALLEY, CALIFORNIA**

Eric, and the "kooks" who write data and text files to floppies instead of the hard disk, make a good case. The principal reason most of us place data and text on the hard disk is convenience. You don't have to handle all those floppies — until backup time. It also saves a little time because hard disk access times are generally shorter than those for floppies. But the time required to backup is considerable, even if you backup only data and text files. So take your choice folks. If you decide to save all your data and text files on floppies, you won't be alone.