TI -99ers In The '90s

Classic Computer Column
by Barry Traver

This month's column may be both untypical and controversial, but it addresses a subject that many TI user groups are finding it important and necessary to address, whether they want to or not. It's the matter of the connection (or disconnection) of the TI with the IBM (or PC clone) world.

Back in the June 1990 issue of Computer Monthly (that's right, over a year ago), my column dealt with "a number of TI/IBM connections, particularly those made possible by Mike Dodd's PC-Transfer and PC-Transfer Utilities." Mike's programs allow the transfer of various types of files, including text files, Microsoft Multiplan SYLK files, DIS/FIX 128 files (e.g., GIF and RLE pictures), and files with or without a Paul Charlton XMODEM TIFILES header between an IBM disk and a TI disk. The tone was upbeat and positive as I dealt with these and other TI/IBM connections (e.g., the porting over of many public domain IBM graphics to the TI world by Ron Wolcott in his TI Print Shop or "TIPS" project).

Although I still see the TI/IBM relationship as a positive one, many TIers today seem to be fearful of a TI/IBM "disconnection." That is, they see "Big Blue" as a possible threat to the continued existence of the TI and TI user groups. In some cases, that fear may perhaps be justified (e.g., some believe that the TI was overwhelmed by IBM when the Rochelle, New Jersey fair, earlier known as TI-COFF, was renamed Family Computer Exposition, attempting to attract a broader audience), but I continue to believe that the relationship can be mutually beneficial if handled properly.

True, allowing an IBM "takeover" of TI user groups will certainly not help TI-99/4A owners, but I also think that ignoring the fact that many (or, in some TI user groups, most) TIers have regular access to a PC at home or at work can be harmful as well to our continued survival. In my opinion, we ought to do more exploration of the ways in which the TI and the IBM can work together as friends, rather than being regarded as simply enemies.

INCREASING USE OF THE PC AMONG TIERS?

There appears to be increasing evidence that more and more TIers do have regular access to a PC. As president of the Philadelphia Area TI Users Group, I did an informal survey of the members present at our last user group meeting. Three facts emerged: (1) most of those present had access to a PC at home or at work, (2) they had no intention of abandoning their TI (in fact, some volunteered comments about their relative dislike of the IBM), and (3) some seemed apologetic or embarrassed about their association with a PC.

I admit that the last "fact" may be a somewhat subjective impression on my part, but I do know a number of TIers who are consciously avoiding letting it be publicly known that they also own a PC. Since some of these are leaders in the TI community, it may be that they are afraid of being considered "disloyal," if the facts be known. Or it may be that they are afraid that such information may not

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be helpful to the continued welfare of the TI; i.e., knowledge of their possession of a PC may be misinterpreted as proof of an intention to desert the TI?

But think about it for a moment. There are an increasing number of people who have access to a PC, and yet choose to continue to work with a TI. More than that, the TI is the computer that is their computer by choice, not by necessity (whereas, often their use of a PC is required by their work)!

To me, such news is encouraging, not discouraging. This is not the place to rehearse the continued advantages of the TI (e.g., the fact that essentially all TIers have the benefit of speech synthesis, music with three-part harmony, color graphics with automated, animated sprites, etc., many features that are often or usually lacking from a standard PC). My point is merely that those who have access to a PC apparently see no reason to forsake their TI. Rather, they see that each machine has its own advantages. (Well, I do have another point as well, and it is this: the TI/IBM connection can be mutually beneficial, but more about that in a moment.)

THE PC AND TI USER GROUPS

Before I go on to talk about how the TI/IBM relationship can be mutually advantageous, let me provide more evidence that the subject is very relevant to TI-99ers today. As Chief SYSOP on the TI RoundTable on GEnie, occasionally I will upload files that will help TI RT members who have a PC use their TI and PC together. For example, I uploaded a STRIPPER program that works on the IBM or PC to strip off the TI-FILES header from a TI file. Although my assumption would be that few, if any, people frequent the TI RT who do not have a TI--other than owners of other "orphan" computers, to which the RoundTable is also devoted--such files (for the benefit of TIers who also have a PC) sometimes receive as many downloads as those that are devoted strictly to the TI.

I've already mentioned my informal survey of the Philadelphia Area TI Users Group. I could mention situations in many other user groups, but let me single out just one as an additional illustrative example: the Southern Nevada Users Group (SNUG). Their newsletter (The SNUGLETter, Southern Nevada Users Group, P.O. Box 26301, Las Vegas, NV 89126) indicates that they, like a number of other TI user groups, have been wrestling with how to deal with the fact that many TIers (and MYARC 9640 owners) now also own PC compatibles. The majority of the July 1991 issue was concerned with that topic.

In his "President's Message," Rudy Johnson asked whether SNUG should amend its constitution so as to support the PC in addition to the TI. According to Rudy, "a large number of SNUG members have a PC in addition to a TI or 9640 [and] at least one member has only a PC at present...."

This was also the subject of newsletter editor George Tilley's article, "The Winds of Change Are Blowing." Likewise, it was even the main item of discussion in Bob Sherburne's "9640 Corner," in which Bob comments on George's observation that "approximately half of the group now own PC compatible computers."

From my contact with various TI user groups, I do not believe that SNUG is alone in wrestling with this issue.

What are my own personal opinions on the matter? Well, right or wrong, I do believe that the primary purpose of TI User Groups is to support the TI, and that that objective ought not to be altered. There are many IBM user groups around to support the IBM or PC compatibles, so I see no reason for a TI user group to lose sight of its focus and purpose. I have no objection in principle to a TI user group exploring "the PC/TI connection," but it must be done in a way that preserves the user group's commitment to the TI.

Like others, I do not see any benefit to a "hostile takeover" of a TI user group by IBM owners so that the user group no longer effectively serves TI owners, but I would be similarly resistant to a similar "takeover" by

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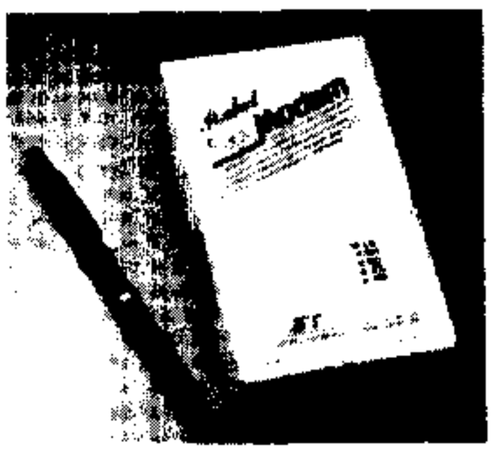

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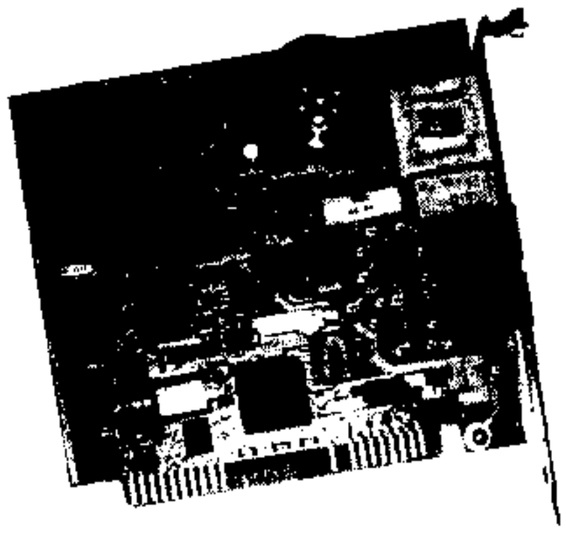

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MYARC 9640 owners so that ordinary TIers were being neglected. In addition to my TI-99/4A, I own a MYARC 9640 and a PC clone (a 386 from Gateway 2000), so I don't think my continued commitment to the TI-99/4A can be written off as due to a lack of knowledge or experience of other computers. I believe the PC and the TI can be a good combination (if handled properly), but the TI-99/4A continues--so far as computers go--to be my "first love" (as may be obvious to readers of this column).

SOME POSITIVE IBM/TI CONNECTIONS

At any rate, I would argue that (as I've said) there are lots of ways in which a PC can "Tie In" with a TI. I won't try to provide a comprehensive list here, but I do want to mention five specific examples from my own personal experience.

(1) Because of problems with noisy phone lines here recently (now solved, thanks to the local phone company, which was very helpful in the matter), I would often download TI files on the PC (using ZMODEM, which is a file transfer protocol not yet available for the TI, although I hear it may be coming in the future), and then use Mike Dodd's PC-Transfer and PC-Transfer Utilities on my TI to transfer the files over to a TI disk. (By the way, JP Software--the source for PCT and PCT-UTILS--now has a new address from that which I published in the June 1990 issue of CM: JP Software, 1014 Pine Street, Menlo Park, CA 94025. Maybe I should also mention this caution: some CM readers have reported delays in getting their orders filled by this company. That's a shame, because they are great products!)

For those not familiar with ZMODEM, it has several advantages over the usual XMODEM transfer that we use for binary files: (1) ZMODEM can be twice as fast as XMODEM (important when increased time online means increased expense), and (2) ZMODEM has impressive error recovery capabilities. That is, if your file transfer is aborted before completion, ZMODEM allows you to start again, resuming where you left off rather than requiring you (like XMODEM) to start again from the beginning--not so pleasant when, for example, you're downloading a GIF file that is hundreds of sectors long! Hopefully, someone (like Barry Boone or Gary Bowser?) may soon give us ZMODEM for the TI, but until that happens, you can download TI files via ZMODEM on the PC and then transfer the files over to your TI.

(2) Lots of PC files (text files, alphanumeric art, GIF pictures, MacPaint pictures, MIDI Cakewalk files, RLE pictures, etc.) are equally useful on a TI-99/4A or MYARC 9640. If the PC can make use of such files, there's no reason we can't do so, as well! Again, think of the thousands of public domain graphics that Ron Wolcott has ported over from the IBM world for our use on the TI. Note: once they have been ported over, you don't have to have a PC to benefit from them.

(3) Lots of PC programs (particularly those written in one form or another of BASIC) can be ported over fairly easily, also. In the past, I often did this with programs written in BASIC for the TRS-80, which showed that some fairly involved programs could be ported over with little difficulty (such as the lengthy "Basements and Beasties" program in Frank DaCosta's book Writing BASIC Adventure Programs for the TRS-80). I have started doing the same with GW-BASIC and QuickBASIC in the IBM world (my first project bringing over a text adventure game spoof my son discovered called FUNCITY.ADV). In a moment, I will make some comments on how to convert between QuickBASIC (the new standard BASIC in the IBM world, with the release of MS-DOS 5.0) and TI Extended BASIC. (If you happen to have a MYARC Advanced BASIC, you'll find it even easier to convert a program from QuickBASIC to something that will run on your Geneve.)

(4) Not only programs, but also program ideas can be obtained for the

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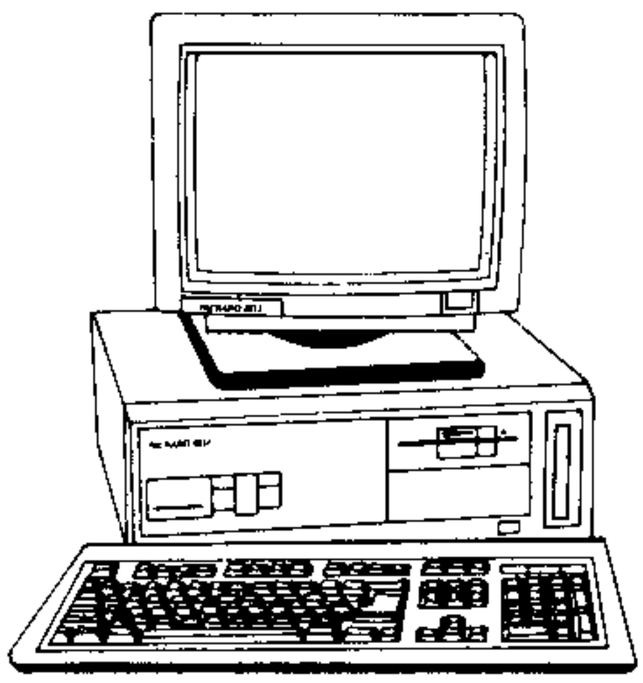

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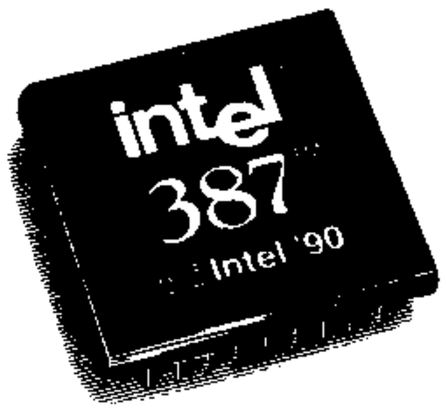

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The Contemporary CoCo

Classic Computer Column
by John McCormick

A reader's recent question reminded me of a topic I wanted to mention earlier this year, before thunderstorm season. But, alas, I neglected to, so please take this as advice for next year.

Many of you already know how important it is to protect expensive computers from power surges by using a power protection strip or more sophisticated device. Even those who understand the peril of even a few hundred volt surge when dealing with computers that operate at less than 10v probably think that just turning off your computer provides a lot of protection.

For IBM-type PCs, this is somewhat true, although a power surge can still do considerable mischief. However, CoCo owners need to be aware that their computer's power supply is always on if the computer is plugged in.

This is because of the type of low voltage switch used by Radio Shack, one which doesn't interrupt line current but rather the secondary power from the power supply to the computer itself.

This is why your computer is warm even when turned off. The power consumption isn't great, but, especially during spring and summer's thunderstorm and brownout seasons, CoCo owners would be well-advised to actually unplug their systems.

LET THE GAMES BEGIN!

Return with me now to those thrilling days of yesteryear when the CoCo was still considered a powerful machine, a TV was thought of as a fine monitor, graphics were primitive, and a 16K machine was the latest Fort Worth technology had to offer.

Because so many old games are still around, many of them at very low closeout prices or to be found at yard sales or computer flea markets, I don't want to neglect some of the very inexpensive older games that many computer freaks cut their teeth on before moving on to other (bigger, but not

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TI from the PC world. Again, in the past I've profited from getting ideas from the Softdisk diskazine my son subscribed to for his Apple II family clone, but I've already been getting new ideas for TI programs from the IBM world. For example, I hope soon to write a program for the TI that will RESTORE text files that somehow picked up a bad sector. Since I've had to do a number of repairs of files by hand for friends, I suspect that this is not an uncommon problem, but the IBM has inspired me to write a TI program to automate the process.

(5) There are certain things that may (for now!) perhaps only be done on a PC that may, however, have beneficial results for the TI. This was true, for instance, of Al Beard's TI C. Here there was an MS-DOS version before an M-DOS version for the Geneve was completed. What did the MS-DOS version of TI C do? Well, that version is what is called a cross-compiler. Although it runs on a PC, the code produced is intended not for a PC, but for a TI. You could write a program in C on your PC, and produce code to run on the TI-99/4A or MYARC 9640.

Another example (also from Al Beard): there's a PC program called A99 which runs on the PC but (like TI C) is oriented toward producing code for the TI (or MYARC 9640). Whether it's writing programs, creating graphics, working with a database, or something else, sometimes it's easier to use a PC program to do the work, and then (when the work has been done) bring the results over to the TI. (A99, by the way, like TI C, is, I believe, currently available for the MYARC 9640.)

TI EXTENDED BASIC AND PC QUICKBASIC

Depending on your circumstances, it may be helpful to convert or translate BASIC programs between the TI and the PC. GW-BASIC used to be the standard for the IBM world, but I believe that things have changed with the release of MS-DOS 5.0 (a real improvement over previous versions), which comes with a QuickBASIC interpreter included in the package. At first QuickBASIC may look strange to those accustomed to other BASICs (for example, line numbers are optional, and use of GOTO and GOSUB is discouraged), but it is not difficult to convert many programs to TI Extended BASIC (and even easier if you are using an "extension" of TI Extended BASIC, such as Harry Wilhelm's The Missing Link, available from Texaments, 53 Center Street, Patchogue, NY 11772).

One way in which TI Extended BASIC (hereafter called TI XB) and PC QuickBASIC (hereafter called QB) are alike is that they both support genuine subprograms with passed parameters. This is a feature of TI XB that often has not been fully appreciated, but it is very powerful, and you may be glad to hear that TI XB and QB handle subprograms in essentially the same way. That is, if you know how to handle subprograms in one, you know how to handle them in the other.

BASIC statements and functions are used similarly in TI XB and QB, including ABS, ASC, ATN, CALL, CHR$, CLOSE [#], COS, DATA, DIM, END, EOF, ERR, ERROR, EXIT, EXP, FOR ... NEXT, GOSUB ... RETURN, GOTO, IF ... THEN ... ELSE, INPUT [#], INT, LEN, LET, LOG, ON, OPEN [#], OPTION BASE, PEEK, PRINT [#] [USING], RANDOMIZE, READ, REM, RESTORE, RND, RUN, SGN, SIN, SQR, STOP, STR$, SUB, TAB, TAN, and VAL. Likewise, the following symbols have much the same use in QB as they do in TI XB: "=,'+*/^."

Other statements or functions may have different names, but accomplish essentially the same task. For example, CLS, DEF FN, INKEY$, INSTR, KILL, LINE INPUT, MID$, POKE, STRING$, TRON, and TROFF in QuickBASIC correspond to CALL CLEAR, DEF, CALL KEY, POS, DELETE, LINPUT, SEG$, LOAD, RPT$, TRACE, and UNTRACE in TI XB.

There are some differences in use of punctuation. TI XB uses a double colon as a separator in a multi-statement line, where QB (like most other BASICs) uses a single colon. TI XB uses an exclamation point to introduce a "tail remark," while QB uses a single apostrophe. Punctuation for the INPUT statement is also handled differently in TI XB and QB. In QB you might have INPUT "What is your name"; Name$, whereas in TI XB the equivalent would be INPUT "What is your name? ":NAME$. Note that in QB, the semicolon puts a question mark after the prompt (if you don't want a question mark, use a comma instead), while in TI XB, a colon is used instead of a semicolon or comma.

Well, we're out of time and space again, so we have to postpone any further discussion of conversion between TI XB and PC QB for now. If there is interest in the subject, perhaps we can return to it in a future column.

If you'd like more information before then, you may want to send a note and an SASE to Barry Traver, 835 Green Valley Drive, Philadelphia, PA 19128; phone: 215/483-1379.

Again, I regard my PC as a supplement to my TI, and I believe that the two can be good friends, if we are careful to make use of the PC in a way so as to help rather than harm the TI. I hope my comments have been helpful toward that end, since I certainly intend to...keep on compuTIn' with my TI! ■