TI-99'ers in the 90's

Classic Computer Column
By Barry A. Traver

IBM: "I've Been Moved" To A TI!

Of interest to TI'ers is their computer's ability to make use of materials (pictures, text, templates, data, etc.) from a non-TI computer. Last month we briefly considered one limited TI/Mac connection (the porting over of MacPaint pictures to the TI); this month we plan to consider a number of TI/IBM connections, particularly those made possible by Mike Dodd's PC-Transfer and PC-Transfer Utilities, two useful software packages available from JP Software (2390 El Camino Real, #107, Palo Alto, CA 94306; phone 415/328-0885; $25 for PCT and $10 for PCT Utils plus $1 shipping and handling).

With PC-Transfer, you can move a text (ASCII) file from an IBM disk to a TI disk (or vice versa). The program allows you to view the catalog of any MS-DOS or TI disk and mark conversion to the other format. (You can even read files from subdirectories on IBM disks.) You can also format IBM disks on the TI, in case you don't have an IBM or IBM-clone nearby. (PCT supports all four of the most common IBM formats.) Since IBM disks are in double-density format, you do, however, need a MYARC or CorComp disk controller to be able to benefit from PC-Transfer; the TI disk controller is not sufficient.

PC-Transfer itself only handles transfers of text. PC-Transfer Utilities enables three more types of data transfer.

First, PCTU includes the option of porting SYLK files (INT/FIX 128 on the TI), used by many spreadsheet programs (including Microsoft Multiplan, although almost every IBM spreadsheet program includes an option to import or export SYLK files).

Second, PCTU can port over DIS/FIX 128 files, which means (among other things) the ability to move GIF and RLE pictures. Since this option can convert any PC file to DIS/FIX 128 format, other PC files can also be brought over to the TI and then manipulated (even by Extended BASIC), since the files are now in regular TI format. (An example of such an application would be the bringing over of database data files from the IBM to the TI, so that, for example, the data can be converted to JP Software's FirstBase format for use

with their database program for the TI.)

Third, PCTU is able to convert files with a TIFILES header (referring to a special 128-byte header invented by Paul Charlton for XMODEM transfers on the TI). Without going into technical details, what this means is that a person can download TI files with his PC and then transfer the files over to a TI disk. (The same routine would be useful to a Sysop running a TI BBS on a IBM, in that he could physically transfer TI files to an IBM disk with TIFILES header rather than having to upload them with a TI to accomplish that end.)

Note that all of these transfers are from one physical disk (IBM or TI) to another, opening up the MS-DOS world in many ways to the TI'er. We're talking, of course, about different types of data files rather than transferring runnable programs from one realm to the other, but even the latter in some cases may be facilitated by PCT! For example, if you transfer the text listing of a BASIC program from one format to the other, then that text file can be edited as necessary (e.g., changing CLS to CALL CLEAR or vice versa?) and then converted (using an appropriate utility) to a running program. With the assistance of PCT and PCTU (which will run on either the TI-99/4A or MYARC 9640), many types of files can assert, "I've Been Moved!"

UPDATE ON MYARC HARD DRIVE CONTROLLER

In April's column, I reviewed the Hard and Floppy Disk Controller ("HFDC") made by MYARC, Inc. (50 Darren Woods Drive, Martinsville, NJ 08836; information help-line in Alabama: 205/854-5843). If you were puzzled by the sentence beginning with "For me, t????me for a subdirectory at that level," it was because somehow three paragraphs got compressed into that one sentence! We're not sure how it happened, but here are the three paragraphs as they should have appeared in the April 1990 issue (page 82):

For me, the most striking thing about a hard drive is that you have the stability of floppy disk storage but the speed of operation of a ramdisk. (Of course, it is possible to "crash" a hard drive - I managed to do it myself by turning off the components of my system in the wrong order - but for the average user that happens very rarely, if at all, and if you use a hard drive properly, you will have safeguarded yourself beforehand by having made use of appropriate backup procedures.)

For those not familiar with hard drives, it is similar to using floppies, but with much more flexibility. Your top directory can have subdirectories, they in turn can have their own subdirectories, and so on. On any level, the (sub)directory can have up to 127 files and 114 subdirectories of its own. Any subdirectory can be regarded as the rough equivalent of a floppy disk, except that it does not have to be any set size (e.g., SS/SD or DS/DD): its size is in fact "adjustable" and changes as you add or subtract files (or subdirectories) at that level.

Since you may have to go down several levels to reach a particular file, you designate the route by the "pathname," i.e., all the (sub)directories you go through t1 reach the file. For example, the full name of a file named BUDGET might be WDS1.DSK.TIMP.BUDGET. Let's take that example apart. The WDS1 at the beginning indicates that the file is on hard drive 1 (remember: you can have up to three hard drives, and hard drives today don't cost much more than floppy disk drives). (The WDS stands, I think, for Western Digital Systems, who set hard drive standards.) The DSK is the name of a subdirectory at the top level. (Another very useful name for a subdirectory at that level is DSK1, but more about that in a moment.) TIMP is the name of the subdirectory on the next level (TI MultiPlan(TM) looks for DSK.TIMP, just as PRBASE looks for DSK.PRBASE or TI-Artist for DSK.INSCEBOT). Thus the pathname is WDS1.DSK.TIMP, and the full name of the file is WDS1.DSK.TIMP.BUDGET.

One of the nice things about the HFDC is that there are actually three different ways of fooling a program into thinking that it is accessing a floppy disk instead of a hard drive: DSK1 directory emulation, DSK directory emulation, and DSK1 file emulation. (See April 1990 issue of Computer Buyer's Guide for details.)

Working with a hard drive is much easier than all this might sound, and (two months later) I'm still enthusiastic about mine. There is an encouraging note concerning cost: although the "official" price at the time I write this is still in the $275 to $325 range, the HFDC has been sold recently as a "show special" at some TI faires (e.g., Tucson and New Jersey) for less than $200, which may suggest that MYARC may perhaps be considering lowering the price across the board (but that may not necessarily be the case, so I report that only as hopeful speculation, not as fact).

WYSIWYG Desktop Page-Publishing!

Asgard Software (P.O. Box 10306, Rockville, MD 20850; phone 703/255-3085) seems to have a real winner with Page Pro 99, a page-making program for the TI-99/4A and MYARC 9640. Unlike many predecessors that also allowed you to combine text and graphics, PP99 is "WYSIWYG" ("What-You-See-Is-What-You-Get," pronounced whizzy-wig). What you see on the screen is essentially what will appear on your printout (although, of course, you don't get to see the whole page on the screen at one time).

The user-friendliness of the program combined with Asgard's impressive continued support have already made the program a "standard" with TI-99/4A users. More about that continued support in a moment, but first some general comments about PP99. You can use standard TI Artist pictures (up to 28 on a page) and fonts (one large font and one small per page), so the program allows you to make use of various commercial and public domain collections of images or type styles. (You can also convert TI Artist pictures to a special Page Pro format to make more efficient use of disk space.) Designed for Epson and Epson-compatible printers, PP99 will print out pages in single, double, or "quad" density.

As you're creating your page, you can set PP99 to type in any direction: up, down, left, or right. To speed up operation further (the program is in assembly), you can tell the program not to redraw the pictures when you move around the page but instead use P's to show where the picture is placed. You can import and export TI Writer files, save and load Page Pro 99 pages, convert TI Artist fonts and instances, create two-column text, and more. A special version of the program is included for those who own a Geneve.

Now concerning that "continued support".... Author Ed Johnson listens to suggestions and constructive criticisms from PP99 users, as version 1.5 of the program demonstrates. The introduction of a useful catalog routine as well as other improvements relating to error handling, importing and exporting text, etc., demonstrate committed support of the product. When Ron Wolcott of TIPS fame made available over 2000 public domain graphics (importing them over from the IBM world), Ed Johnson soon had available for PP99 users a program to quickly convert

TIPS format pictures to Page Pro format.

For those who are into telecommunications, Asgard Software maintains limited-access libraries on both CompuServe and GEnie specifically for the support of owners of Page Pro 99. (If you're a CIS subscriber, just enter GO TEX-200 to go to TI FORUM; if you're a GEnie subscriber, enter M 575 to go to the TI RoundTable. In either case, if you're a registered owner of PP99, just leave a note to Chris Bobbitt - Asgard president and PP99 co-author - requesting admittance.) In these libraries, you will find that TIPS2PP program I mentioned as well as collections of helpful graphics for use with PP99. In addition, Chris is available to answer questions via the message base on TI FORUM on CompuServe, and both Ed Johnson and Chris Bobbitt are available on the message base for the TI RoundTable on GEnie, where an entire CATegory is devoted to Asgard Software and a specific TOPic to Page Pro 99.

If you purchase Page Pro 99 ($24.95 plus .75 shipping), you'll also want Asgard's Pix Pro program as well ($14.95 plus shipping). Pix Pro - authored by Jim Reiss - lets you load in pictures stored in any of 8 different formats (TI Artist instance, TI Artist picture, Graphx, Picasso, Page Pro, PIX, RLE, or MacPaint) and save them in any of 6 (i.e., everything in the preceding list except the last two). Pix Pro does more than convert pictures: you can, for instance, also use it to print out a full-page MacPaint picture if you wish (as mentioned in last month's column), but it is as a picture-conversion utility that Page Pro users may find it most useful. Page Pro Fonts, Pics, and Utilities are also available from Asgard.

As I said, Asgard's Page Pro 99 seems to have become the standard for TI-99/4A owners. More popular perhaps among MYARC 9640 owners is The Printer's Apprentice for $30 from McCann Software (P.O. Box 34160, Omaha, NE 68134), which is another program that offers WYSIWYG editing. Version 1.3 is currently available for the Geneve (as well as a version with fewer features for the TI-99/4A). Thus both PP99 and TPA are available in TI-99/4A and MYARC 9640 formats, although TPA seems to be becoming the standard for Geneve owners (and may deserve a more thorough review of its own in a future column).

We haven't yet really arrived at true desktop publishing for the TI-99/4A, but Asgard's Page Pro 99 and McCann's The Printer's Apprentice present a definite advance beyond programs previously available. It's nice to have WYSIWYG capabilities, even if we have to do our publishing a page or two at a time!

Reader Comment Encouraged

In order to make this column most helpful to its readers, it would be good to hear from you. For example, if you would like to see more material for owners of cassette-only systems (e.g., information on faster loaders and how to run assembly programs from cassette), you need to let me know; otherwise I will assume that most of my audience have disk systems. I can't promise to answer every letter I get, but your input should make this column a better column. If you would like to write to me, my address is as follows:

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In the mean TIme, keep compuTIn'!