

TI-99ers In The 90's

Classic Computer Column
by Barry A. Traver

IBM and TRS-80 Pictures for the TI!

No, I'm not talking about Ron Wolcott's TI Print Shop (TIPS) and his porting over of thousands of IBM public domain graphics for use on the TI-99/4A (discussed in previous columns here). Rather, I'm talking about something new! Dave Phillips and Ben Yates have given us fair-ware/shareware tools that allow us access to even more pictures from other machines, i.e. IBM and (now!) TRS-80.

Dave, with Ben's assistance, has written a program he calls Graphic Icon Converter (GIC), which "was created so as to allow users of the TI-99/4A running TI Print Shop (TIPS) the ability to increase the number of icon libraries available to them." Specifically, "it allows conversion of IBM Printmaster, IBM Print Shop and TRS-80 Postmaster icon files to the TIPS format."

If that wasn't enough, Ben Yates himself also wrote a program called TRSSHOW, which not only can display TRS-80 Hi-Res graphic images (640x240 HR or CHR as well as Model III 512x192 HR files), but also can convert them to TI-Artist picture format.

Ben's program has gone through several revisions and includes many nice features, such as squeezing or inverting the picture. The TI-Artist conversion was added in version 1.6 of his program.

Both programs were written in C99 (somewhat modified), and the latest versions I have are 1.1 for GIC and 1.7 for TRSSHOW. The advantage of these programs over TIPS is that--rather than relying on Ron Wolcott to port graphics from another computer for you--now you can "port your own," provided that

you have some access to IBM Printmaster, IBM Print Shop or TRS-80 Postmaster graphics (not as difficult as you might think).

How do you obtain GIC or TRSSHOW? Check your user group library, your local BBS or the networks (CIS, Delphi, GENie, etc.). How do you obtain the graphics to convert? Well, Dave and Ben aren't specific about that, but I suspect it's a matter of downloading them from an IBM or TRS-80 BBS (or else finding an IBM or TRS-80 friend who's willing to send them to you over the phone via modem). If you have Mike Dodd's PC-Transfer and PCT-Utilities, I would guess that you could also get the IBM graphics directly from IBM disks.

OPA: Our Products Are...

Original...Powerful...Amazing.... That's how I would describe the various hardware and software products available from Gary Bowser of Oasis Pensive Abacutors or OPA (432 Jarvis Street, Suite 502, Toronto, Ontario, Canada, M4Y - 2H3), our featured company in this month's column. You can phone OPA at 416/960-0925 or 416/960-1425 8 a.m. to 11 p.m. EDT/EST voice or 416/921-2731 1200/2400 baud 24 hours BBS.

It's only natural to have Gary as a featured subject here, because he has been (along with Mike Maksimik, who was a featured subject in a previous column of mine) one of the most popular guests on network Conferences in recent months. In fact, some of the information that follows was taken from Gary's COs on Delphi and GENie, while other information comes from personal conversations I have had by phone with Gary.

Needless to say, I and other people are excited about the projects of OPA for a number of good reasons, although (perhaps because

assembly language? If so, the folks at Computer News 80 have just published Z-80 Tutor, by Chris Fara. The first half of the manual is an alphabetized list of the commands and options for assembler. I don't have any price information, but it could be a useful reference manual. Contact CN80 at P.O. Box 680, Casper, WY 82602 for ordering or other information.

I'll see you next month for another installment of Your TRS-80 Column!

Dr. David Wade, a former academic, is a freelance writer and tennis enthusiast when he's not busy exploring his TRS-80s and other computers.

his company is based in Canada) he has not yet received the general attention he deserves. If you're not that familiar with Gary yourself, you should be after you read this column (although there are many exciting projects-in-the-works that I don't really have room to treat adequately here, such as Z-80 emulator, digitizer, etc.)

Great Graphics on the Screen!

TIPS, GIC and TRSSHOW are especially useful when you are thinking of graphics in terms of hardcopy printouts, but they don't offer you anything on the screen that you can't do with the 9918A video chip installed in the standard TI-99/4A computer. For better screen graphics, you need to replace that video chip. The 9938 video chip offers radical improvements, allowing 80-column displays (nice for word processing) and display of GIF pictures (similar to full-color photographs). True, you do need to move from your TV set to an RGB monitor to take full advantage of the benefits, but many TIers (myself included) will

testify that it's well worth it.

In the past, there have been essentially three popular 80-column upgrades: the DIJIT Advanced Video Processor Card or AVPC (fits right in the Peripheral Expansion Box), the Mechatronic 80-column device (connects to the right side of the console), and the Myarc Geneve (which is really a /4A-compatible upgrade, with many additional enhancements, such as a 9995 CPU instead of the standard 9900). All three of these make use of the 9938 video chip, but there is now a chip that is even more powerful: the 9958!

OPA offers, in a sense, "more for less," because its TI-IMAGE-MAKER or TIM offers you the 9958 (with a full 192K of video memory on-board) for \$150.00 US, whereas the other three products I just mentioned ordinarily cost over \$200.00 and utilize the less powerful 9938 chip. (OPA is also marketing a similar product using the 9958 for the ADAM called ADAM-IMAGE-MAKER or AIM.)

TIM is made to install right into the console. According to Gary, "the board is about 4"x3" and all you have

SEE NEXT PAGE →

CLASSIC WORLD / Your TRS-80 Column

FROM PRECEDING PAGE

version; less for TRS-80 version). You can also send Anitek a referral list of individual prospects. The company says it will automatically send the rebates to you directly if the referred individual or individuals purchase LeScript within a month of Anitek's mailing.

Contact Anitek for details at P.O. Box 361136, Melbourne, FL 32936. You may also call (407) 259-9397. Though LeScript is its flagship product, this company also offers memory boards and other products for TRS-80 (and PC) owners.

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FROM PRECEDING PAGE

to do is remove the old video chip (socketed), plug the new board in, solder in two wires, and cut a small hole in the back for the new micro 25-pin plug for future products and the RGB monitor port." So installation should not be difficult.

The hardware comes with some software and full documentation: "two disks packed with demos and assembly source code, plus a 100-page manual written in plain English for those programmers at heart," says Gary. Included is "a new GIF viewer to support the super 9958 graphic modes, which will allow you to view a 640x480 with no loss of color or detail, and a 1024x768 with a loss of pixels but no loss in color; as the new video chip can display up to 19,268 colors at once, much better than the limited 16 or 256 the old 9938 could do."

Present 80-column software--such as FUNNELWEB 4.30, TELCO, YAPP, etc.--works fine with TIM, but Gary is working on new hardware and software to fully make use of the capabilities of this TI-IMAGE-MAKER. Note: since TIM fits into the console, TIM is specifically for the TI-99/4A (and not for the Myarc 9640, which, however, itself may be available in the future in an enhanced version using the 9958).

From Pictures to Thousands of Words

In addition to improving what we can see on the TI, OPA has also been working on what we can hear. At the moment I'm not thinking about music (although there are rumors that OPA is working on that as well), but about speech. OPA is offering a Speech

Package priced at \$40.00 US, including 10 disks of software, information, new words and languages, etc., plus a programming/tutorial manual of 50 pages or so. This package will enable TIers to take full advantage of the speech synthesizer in ways, according to Gary, that even TI didn't know how to do! Incidentally, if you have a Myarc 9640 with a Rave 99 speech card, OPA's speech package should work for you as well.

What does the package do? According to Gary, it "will allow you to make new words and edit pre-recorded phrases from us or TI. You can also change the voice type and speed of the words. It's much like text-to-speech, but this utility plays with the direct LPCoding and the pre-recorded words built into the speech unit or modules, and allows you to make new words, combine words, etc." Gary states that "the software comes with a complete real programming guide, detailing things like the Parsec speech and the Bert&Ernie. In fact, the Bert&Ernie stuff will be detailed out step by step, allowing you to easily understand the transformation process and make up new words in that voice."

Using speech is easier than TI may have told us, and that may especially be true for those using Gary's package. He says, "the speech software comes with drivers to allow you to save the new speech into any BASIC or assembly program and with easy-to-use links, etc., to it. In fact, in X BASIC no assembly is needed to access the new speech: just the CALL SAY command with CALL SAY(,A\$) with A\$ containing LPCoding from the new speech editor, ...which allows you to edit waveforms and play with the controls and values in an easier-to-understand format than LPCoding."

I've always appreciated the fact that the TI-99/4A has (inexpensive!) speech capabilities, but I've always hoped for some utilities to help us make fuller use of those capabilities. For example, a number of years ago Paul Charlton wrote, at my request, a utility to extract from TI's text-to-speech diskette data that could be used independently in an Extended BASIC program. (That program was published in an early issue of the Genial TRAVELER.) It sounds like Gary has greatly expanded the possibilities of what we can do in the area of speech, and we are indebted to him for it!

Other Products Also

OPA has many other unique products for sale, but we can only briefly mention some of them. There's GIZMO, which is an 8-slot module expander, something like the familiar "widget," but with a 1-foot cable, case and fully supported REVIEW MODULE LIBRARY. It would allow you, for example, to access the Terminal Emulator 2 text-to-

speech from a running XB program and make use of the extra 4K or RAM in the Mini-Memory module at the same time! There are occasionally a few limitations as to what modules must be in which slots, but even so the possibilities are exciting.

Then there's RAMBO (Random-Access-Memory-Bank-Operator; no reference to the movie!), an upgrade for the popular Horizon RAMdisk. RAMBO allows you to use your Horizon RAMdisk for both RAM-disk space and program space (accessing the latter in a similar way to bank-switching hardware on other memory cards). OPA also offers a new ROS 8.14 for the Horizon, and the new ROS reportedly makes the bank-switching a lot easier for the programmer to write. Already a number of software programs--including an address database program called RECALLIT--have been written specifically for use with RAMBO.

Gary claims that with the use of the RAMBO memory, RECALLIT can store up to 4000 128-byte records in about 512K, "and it never takes more than a second to sort."

OPA's first all-assembly program was TASS (TI-Artist Slideshow), which is apparently still "the only slideshow on the market which can display TI-Artist color pictures without clearing or wiping the screen in between pictures during a disk access." DISKODEX, another earlier program, likewise seems still to be the only disk-organizing program that fully supports auto-reading of (John Birdwell's) Disk Utilities comments.

If you're interested in any of these products, I advise you to write or phone OPA for up-to-date information. You may also want to contact OPA just to get an update on the state of new "works in progress."

Earlier, I described OPA as "Original, Powerful, Amazing." I haven't been able to tell the whole story, but I think I've said enough to justify my use of those adjectives in describing OPA and its hardware/software!

Triton: Bad News, Good News!


Some of you may know that Triton, a major supplier of TI products, has little or no interest in supporting the TI-99/4A. So the Bad News is that Triton is no longer taking orders for TI-99/4A products. The Good News is that some former owners of Triton have apparently started another company to pick up where Triton left off, accepting orders for the products earlier carried by Triton.

The new company is TM Direct Product Marketing, Inc., located at 379 Beach Road, Burlingame, CA 94010. If you want more information, you can write them, or phone them at 1-800-227-6900. As I understand it, they expect to put out a new catalog

SEE NEXT PAGE

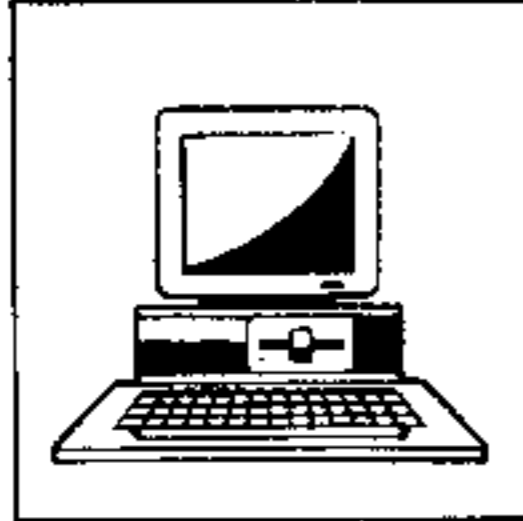
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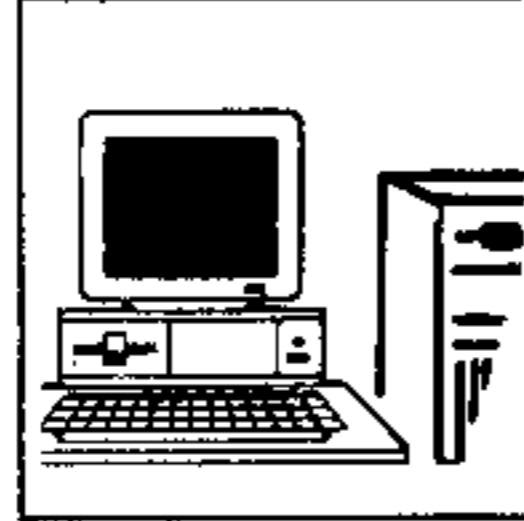
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T/S News

Classic Computer Column by Bill Ferrebee

Welcome back! Let us take this opportunity to wish you only the best for 1991. We hope the year ahead is one that is prosperous, full of happiness and health; a year that lets you expand your T/S horizons even further.

Old Business

We need to make an apology. In the September 1990 column, we accidentally stated that the secretary of the Toronto User Group was George MOCKRIDGE. We should have said George CHAMBERS.

Mr. Mockridge is affiliated with the Peninsula User Group in Northern California. We will review this fine group in a future column. Sorry George...and George. We stand corrected!

Also, in the October 1990 issue, we gave the addresses of User Groups that maintain T/S Public Domain software libraries. Here is an updated address for the Chicago User Group: Bob Swoger, 613 Parkside Circle, Streamwood, IL 60107.

We want to take this time to thank the people at Vulcan Publications for giving us this chance to provide you with this monthly T/S column. Both the Editor-in-Chief, Douglas Kilarski and the Executive Editor, Susan Storey, have been very receptive and helpful to our providing you with this information. We look forward to working with them in the future.

From Cassette To Disk

As you are reading this column, we have acquired not one, but two TS2068 disk interfaces! Both the Larken and Oliger disk interfaces have been procured. As we become more proficient

in the operation of these systems, we will share our findings with you.

Although the TS2068 cassette interface is a vast improvement over the TS1000, using disk drives will speed up I/O by at least 500 percent.

However, if you don't have a disk interface, don't worry. We will still cover the cassette-based software that is available. The nice thing about T/S disk interfaces is that, in most cases, the commands to access the drives are based on the cassette commands. You can simply think of disk drives as very fast cassettes!

Program: CALENDAR

```

5 CLS : POKE 23658,B
10 LET A="CDJANFEBMARAPRMAJUNJULAUAGSEPOCTNOVDEC SUN MON TUE WED THU FRI SAT"
15 INPUT "INPUT MONTH (JAN-DEC): "; LINE B#
25 FOR M=1 TO 12
30 IF B*(1 TO 3)=A*(3#M TO 3#M+2) THEN GO TO 45
35 NEXT M
40 GO TO 20
45 INPUT "INPUT YEAR (4 DIGITS): "; Y
55 IF Y<1752 THEN GO TO 50
60 CLS
65 PRINT AT 3,8;B#;" "Y
70 PRINT AT 6,0;A*(39 TO )
75 GO SUB 200
80 PRINT AT 8,2*4;
85 LET M=M+1
90 GO SUB 200
95 IF Z=0 THEN LET Z=7
100 FOR I=1 TO 31
110 PRINT " ";I;" ";
120 IF I<10 THEN PRINT " ";
130 IF I>27 AND 33-PEEK 23688=2*4 THEN GO TO 300
140 IF PEEK 23688=5 THEN PRINT "...";
150 NEXT I
200 LET X=0
210 IF M=1 OR M=2 THEN LET X=1
220 LET L=Y-X
230 LET X=M+X*12
240 LET P=INT (L/100)
250 LET Z=INT (13*(X+1)/5)+INT (5*L/4)+INT (P/4)-P
260 LET Z=Z-7*INT (Z/7)
270 RETURN
300 INPUT "ANYOTHER? (Y/N)";X#
310 IF X#="Y" THEN RUN
320 IF X#="N" THEN STOP
330 GO TO 300
9999 SAVE "CALENDAR" LINE 1
    
```

Soap Box

Since we are starting a new year, we felt this would be a great time to make an effort to try and expand the T/S

horizon. Here a few ways you can help: First, make sure you have sent us your name, address and type of T/S computer(s) you use. We are compiling a North American T/S User Database. A great number of you have already sent us your information.

USER GROUPS: Send us a list of your members. If you publish a newsletter, put us on your mailing list. If you maintain a Public Domain software library, send us a list of your programs.

SOFTWARE AUTHORS: We are receiving a number of requests for

sources of software. If you have EVER written a program for the TS1000 or 2068, contact us.

If you don't want to actively market
SEE NEXT PAGE ➔

CLASSIC WORLD / TI-99ers In The 90's

FROM PRECEDING PAGE

in early 1991. Prior to that time, you can use an older Triton catalog as a guide for ordering.

The TI Alive and Well in Europe!

Chris Bobbit (Asgard) and Beery Miller (9640 News) were two American attendees at the '90 All-European TI Show in October 1990 in Weisbaden, Germany. (Well, I guess it couldn't have been "All-European" since there were also attendees from outside of Europe, but you know what's meant!) There weren't many people there from the US, but there were lots of people from Austria, Belgium, Denmark, France, Germany, Holland and Swit-

zerland, just to mention some of the countries represented.

According to Chris in a Conference he gave on TIFORUM on CompuServe, the morale in Europe among TI people was "very high" and "the enthusiasm was infectious. I feel much better about the TI community...it certainly improved my morale."

Well, I must say Chris's comments improved MY morale as well, especially as he spoke specifically of software and hardware developments in Europe; some of which are considerably ahead of parallel developments in the States and others of which seem to be rather unique.

I expect that some of these European developments will be finding their way towards our direction via Asgard and 9640 News, so the Europeans may be helping to ensure

that the TI will continue to be alive and well in the US, also. I suggest you watch for announcements of new products from Chris and Beery....

I Like Letters

If you have suggestions about topics you'd like to see covered or products you'd like to see reviewed in future columns, please write to me at the following address: Barry Traver, 835 Green Valley Drive, Philadelphia, PA 19128; phone: 215/483-1379. Although I can't promise to answer all letters, I will indeed read them. Thanks to those who have already offered comments on this column, and thanks in advance to those who may finally get around to doing so this month! (grin)

In the meanTime, keep on compuTIn'!

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