
THE GUILFORD 99'ER NEWSLETTER

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The Guilford 99'er Users' Group Newsletter is free to dues paying members (One copy per family, please). Dues are \$12.00 per family, per year. Send check to P.O. Box 21691, Greensboro, NC 27420. The Software Library is for dues paying members only. (Herman Geschwind, Editor)
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OUR NEXT MEETING

DATE: October 7, 1986. TIME: 7:00 PM PLACE: Glenwood Recreation Center
2010 S. Chapman Street.

Artificial Intelligence. This concept has been around in computer science circles for a number of years and now it is quite the buzzword in software marketing. How much of it is for real and how much is hype. What is it all about. Yes, AI can mean many things and even for the lowly 4A Artificial Intelligence is possible. We will cover these issues and demonstrate two simple AI programs for the 4A.

TI SHOPPER
by Bob Carmany

The price of the once expensive TI cartridges continues to come down! Once notorious for their high prices, TRITON now has the best price for the Extended Basic cartridge. The latest catalog has it listed for \$29.95!! That is the best price of all the mail-order companies. Of course, if you want some software in addition to the cartridge, TENEX has lowered the price on the Exceltec XB to \$49.95 with Extended Software's NAME-IT (data base) and TYPWRITER (word processor) included on both disk and tape. If you need an inexpensive word processor, it might be worth the price. However, just remember that FUNLWRITER and PRBASE are available as "fairware".

THE COMPUTER SHOPPER (a monthly advertising rag) has a few items of interest to the TI user. I recently wrote off for a "free" catalog from a place called "The Adventure Store". The catalog consisted of about a dozen pages that were obviously run off on a printer and, much to my surprise, identified "The Adventure Store" as a subsidiary of SYMBIOTECH. SYMBIOTECH produces adventure games for a variety of computers. Hidden in the pages were some fair prices on TI products. If you have a friend who gets THE COMPUTER (like Mac Jones), you might want to glance through a copy of it. Most of the items are not brand specific. In other words, there are disk drives, disks, fans, and various other products that can be used on a number of different computers. The subscription rate, incidentally, is \$15.00 per year -- not too bad!!

The best source of information is still the mail-order catalog. You might have to get on a couple of mailing lists, but by getting two or three different catalogs, you can usually find what you want at a price that isn't too far out of line. Even TEX-COMP has some bargains tucked away in the pages of its catalog! There are really only three major mail-order companies left that are actively promoting TI hardware and software. One more time, here are the addresses: (1) TENEX COMPUTER EXPRESS (my personal favorite), P.O. Box 6578, South Bend, IN 46660 1-800-348-2778 (2) TRITON PRODUCTS COMPANY (the

authorized TI sell-out dealer), P.O. Box 8123, San Francisco, CA 94128 1-800-227-6900 (3) TEX-COMP (good service, questionable marketing practices), P.O. Box 33084, Granada Hills, CA 91344 1-818-366-6631. The first two will send you a catalog free on request and TEX-COMP charges \$2.00 for the catalog which includes a \$5.00 savings certificate. Of course, there are many smaller, less active TI retailers around that sell through the mail and the best way to find out who they are and where they are located is to subscribe to MICROpendium, THE COMPUTER SHOPPER, or one of the other TI support magazines.

Well, it is time to turn my hand to something else so I will "shut down the system" for now. Until next month . . .

MODEM TALK

by Herman Geschwind

In our last newsletter we promised that on our bulletin board we would have the latest and best in TI software available for you to download. During the past month we have uploaded close to 4 megabytes of files for you to choose from. Following is the file list (file area 12) current as of 9/14/86.

Following are a few pointers for you to remember for a successful download:

Our bulletin board does not support TELI protocol downloads. You will need TI communications software that does support XMODEM. Recommended software is: Mass-Transfer, FastTerm, 4aTalk or Pterm. If you need a copy, let me know.

To download a file, start with a clean disk. Use a quality disk that has been formatted/verified with 0 bad sectors. Nothing is more aggravating than to spend hours downloading and then to find out that your "el cheapo" disk is giving you problems.

Files with the extension .ARC or .DCO have been "packed" with either ARCHIVER or DCCOPY. You will need these two programs to unpack disks before the files will run. Many programs are "packages" made up of a number of small and large files. By "packing" these disks you can be sure that your download will include everything that is necessary. Files without extension were uploaded "as is" and will not require unpacking.

Since not all of us have dual-drive systems, we have limited the size of the package to less than one half of a 5.25 disk so that downloading and subsequent "unpacking" can be done on the same disk. There are exceptions where this was not possible. If the BBS shows a file size of more than 44000 bytes and the file is .ARC or .DCO., then a dual drive system will be required.

In the BBS file description we will indicate which environment will be necessary to run the program. Programs that will run with Extended Basic only usually show a reference to XB. Programs that can be run with the XB and FUNLWRITER UTILITY combination (tested) show the indication FW.

Some programs are ornery enough to require MiniMemory or Editor/Assembler cartridge loaders. They are referenced with MM, E/A, E/A L&R (for load and run) or EAS (for RUN PROGRAM FILE).

The BBS number is 274-5760. After your modem connects, hit ENTER or the space bar several times to get FIDO started.

Enjoy!

Filename	Bytes	Description of File
PRB2	91264	FRBASE Documentation TI (This is the complete documentation for PRBASE. Can be printed out with an XB program which is on the program disk.)
DIZZI	12672	Music Program XB (An XB program with music and graphics by Sam Moore)
GMS2.ARC	85376	E/A GAMES #2 WITH XB LOADER
GMS1.ARC	82304	EA GAMES #1 WITH XB LOADER (Good collection of the best in TI E/A games from our friends "down under". Combine on one disk after unpacking)
UTIL1	8320	FastTerm Vers. 1.16 Part1
UTIL2	8320	FastTerm Vers 1.16 Part 2 (This is the latest version of FastTerm. Can be copied to FUNLWRITER disk and renamed MD and ME to run as FW menu selection)
TIOPOPY.ARC	86528	An EXB version of Monopoly. Packed with ARCHIVER. (Caution: This game will not unpack properly. Uploaded by by our friends in Winston Salem).
TRAC.ARC	17792	A track copier for TI and CC FDC'S
CC	4736	A TURBO copier for the CC card. Will copy DD/DD in 1.25.
MGR1	8320	New Vers. 3.3 of DiskManager 1000
MGR2	7296	Second Part of DM1000 Vers. 3.3 (A new version of DiskManager 1000. For use with FUNLWRITER the version 3.2 - as adapted for FUNLWRITER is still the best)
CATLIB	28032	Disk Library Sys. Load/Run w. FW3.3
DOC	10624	Documentation for CATLIB (Marty Kroll's diskette library management program. The best. See comments in previous newsletters).
CHESS.ARC	31616	Chess load with E/A Opt. 5 (Still the best Chess Game for the TI. Requires E/A).
MAX.RLE	8832	RLE Program load with FW or EA L&R
MAXDOC	7040	Documentation for MAX.RLE (For Graphics fans. See review in previous newsletters)
AD1	3200	Adventure Loader FW Opt3 or EA5
AD2	6272	Part 2 of Adventure Loader (Replaces the TI Adventure Module. Can be loaded with with FUNLWRITER or E/A cart. This program is a general purpose adventure loader)
PIRATE	10624	Adv. Game Load w/AD1 & AD2 (The first in a series of adventure games. Requires the loader AD1 and AD2)
FWA.ARC	40320	FUNLWRITER V 3.3 Plus part 1 of 5
FWB.ARC	39040	FUNLWRITER V 3.3 PLUS part 2 of 5
FWC.ARC	34944	FUNLWRITER V 3.3 PLUS part 3 of 5
FWD.ARC	43904	FUNLWRITER V 3.3 PLUS part 4 of 5
FWE.ARC	14208	FUNLWRITER V 3.3 PLUS part 5 of 5

(If you don't have the most current version of FUNLWRITER yet, this is IT. Combine into two SSSD diskettes after unpacking. There are a number of small files in this package and you will need all five downloads for the complete package)

C99AA.ARC 43136 C99 LANGUAGE PART 1 OF 4 PARTS
C99B.ARC 44416 C99 LANGUAGE PART 2 OF 4 PARTS
C99C.ARC 42368 C99 LANGUAGE PART 3 OF 4 PARTS
C99D.ARC 42880 C99 LANGUAGE PART 4 OF 4 PARTS

(This is the complete c compiler package for the TI by Clint Pulley. All four downloads are required to make up the complete package. Download includes docs)

MPBUD.ARC 19072 Home Budget Pgm requires MultiPlan
(Something for MultiPlan fans, developed by yours truly. Unpack with ARCHIVER. Documentation is included in download)

GMS3A.ARC 31104 New Games load with XB Part 1 of 2
GMS3B.ARC 20352 New Games part 2 of 2 load with XB
(Another game package from down under. Unpack with Archiver. Combine into one disk after unpacking. Will start with XB).

PRBA.ARC 36992 PRBASE VERS. 2.0 PART 1 OF 2
PRBB.ARC 39552 PRBASE VERSION 2.0 PART 2 OF 2
(The PRBASE program disk. Combine into one disk after unpacking. Be sure to name disk PRBASE).

EDUA.ARC 40576 Elem. Education load with E/A5
(Assembler-based educational games for first graders. E/A program files).

SPELLA.ARC 77696 Spelling Checker Part 1 of 2
SPELLB.ARC 71296 Spelling Checker Part 2 of 2
(This is a full-disk download. Download only if you have two drives to unpack. Sorry, there is no other way to handle this one).

NEAT.ARC 27264 Neatlist Extended Basic Utility
(A super program by Danny Michaels. Converted with SYSTEX for easy loading. Docs included in download.).

SDMP.ARC 19328 Epson/Gemini Screenshot for Ext. Basic
(Another Danny Michaels classic. Capture your XB screens to printer. Program resides in background and can be activated at any time with just one function key press! Includes docs.)

GMS4A.ARC 40064 E/A GAMES
GMS4B.ARC 40832 EA GAMES LOAD WITH XB PT 2 OF 2
(Another set of fantastic games. Combine into one disk after unpacking. XB loader included)

TEST.ARC 30336 Console/Memory/Speech Test XB EA MM
(Test your system memory. Docs included).

TV 7552 Color TV/Monitor Test Patterns XB
(Check your TV/Monitor alignment. Caution: High voltage do not attempt to make adjustments unless you know what you are doing. Still great to check whether your monitor is up to snuff)

ARCHIVE 7808 NEW VERSION (1.2) OF ARCHIVER
(This is a MUST download since many of the programs must be unpacked before they can be run. This new version has a buffer so that there will be less wear and tear on your drive(s))

POP.ARC 40320 Good music load&run with EA or FW
(A music program from our friends in Germany. See and listen what the TI sound chip can do when programmed with Assembler).

DCOP.ARC 6912 DCOPIY REQUIRED TO UNPACK PILOT & FORTH
(Since ARCHIVER will not handle FORTH screens, DCOPIY should be in your arsenal to unpack files with the DCO extension. DCOPIY requires the E/A cart to run).

PILOTA.DCO 88192 Pilot99 Language Part 1 of 2
PILOTB.DCO 87680 Pilot99 Language Part 2 of 2
(Pilot99 is another new language for the TI. This is a FORTH-based program, but you would not know it when you bring it up. The claimed advantages of PILOT are speed and power, yet easy to learn and program. Includes graphics, sprite and sound capabilities)

MASS1.ARC 24880 Mass-Transfer Vers. 3.9 pt 1 of 2
MASS2.ARC 28672 Mass-Transfer Vers. 3.9 Pt 2 of 2
(This is the latest version of Stu Olson's popular communications program. If you are using an earlier version, you might want to upgrade to this one).

FURTH FORUM

by Bob Carmany

This month, we are going to look at a couple of examples of writing and reading a display, sequential file. These two examples can be used in conjunction with the FILE CONTROL WORDS that are supplied with Wycove Forth. The WRITE-FILE word will create a 20 line file and LIST-FILE will read the file. Here are the two screens:

```
0 11 -LOAD PAB:
1
2 80 16 PAB: DISK DSK1.DEMO
3
4 :(*) ( -- adr len )
5 R> COUNT OVER OVER + -CELLS >R ;
6
7 : " ( " text" -- adr len )
8 " IMMEDIATE = ?COMP COMPILE (")
9 34 WORD HERE CE 1+ -CELLS ALLOT ;
10
11 :.$ ( n -- adr len : STR$ function )
12 DUP S->D (<# $S SIGN #) ;
13
14 : WRITE-FILE ( -- )
15 DISK OPEN
16 20 0 DO
17 " This is line number " DISK WITEM
18 I . $ DISK WITEM
19 DISK WRITE
20 LOOP
21 DISK CLOSE ;
22
```

23
24

The * word allows a string to be entered into a definition and the .\$ word functions the same as the STR\$ function in basic.

0 : LIST-FILE (--)
1 DISK OPEN
2 BEGIN
3 DISK ?EOF ?TERMINAL OR 0- WHILE
4 DISK READ
5 DISK RITEM
6 CR TYPE
7 -PAUSE
8 REPEAT
9 DISK CLOSE ;
10

LIST-FILE will read the short demo that you created with WRITE-FILE. ?TERMINAL allows the file listing to be stopped by pressing <FCTN 4> and -PAUSE allows the listing to be temporarily halted by pressing any key.

DISK DRIVE POWER SUPPLY

by Ken Hamai

This project requires some skills and knowledge in electronics assembly. Incorrect assembly could result in burning up your disk drive. If you are not sure how to connect the parts, contact me or somebody who can help. In any event, neither I or the ROM will cover you for any damages or losses resulting from the use of this power supply as suggested by this article and you are using it solely at your own risk.

PARTS LIST

1. Radio Shack 277-1016 power supply chassis
2. Radio Shack 273-1511 12.6volt, 3amp transformer
3. 1/2 amp fuse and holder
4. SPST bat switch
5. 5 ft. of lamp cord and plug
6. Three 6 inch lengths of 20-22ga stranded wire, different colors
7. Male plug for disk drive power connector
8. Small piece of heat shrink tubing 1/16th inch size

All of the above items except for item 7 are available at Radio Shack stores. The disk drive connector plug is available from one of our advertisers, R and D Electronic Supply, 100 E. Orangethrope Ave. Anaheim, CA 92801.

When you purchase the power supply board, you will note that it comes with instructions on a suggested wiring scheme. These instructions also recommend the use of an 18volt transformer and 2amp fuse. The reason I recommend the other transformer is because the power supply does not have to work so hard to regulate the output voltages and the lower amperage fuse gives quicker response to an overload. An added plus is that the 12.6volt transformer costs less.

Step 1. - Connect the transformer and the power supply as shown in the Radio Shack diagram that comes with the power supply.

Step 2. - Double check your connections and then plug in your supply to an outlet to test it out. Be sure to turn on the power supply switch located on the board (see fig. 3). Using a suitable volt meter and fig. 2, check that you get the indicated output voltages when you test the +5 and +12 pins and ground. The voltages MUST be pretty close. DO NOT use the power supply if you find it is off by 1/2 volt or more, especially on the +5 volt pin. If the voltages are way off, I suggest you return the board and get another one.

Step 3. - Disconnect the power to the supply and carefully bend the -5 volt pin out of the way or cut it completely off. Then solder one of the 6 inch lengths of 20-22ga wire to each of the remaining pins. Use a piece of heat shrink tubing over each soldered connection for insulation. Use yours or a friend's blow dryer at the High setting to shrink the tubing.

Step 4. - Referring to fig. 1, assemble the three wires you soldered to the pins into the power connector for the disk drive. Double check your wiring and test the connector with your voltmeter to be sure that you have the wires in the correct socket positions.

That's all there is to the wiring. If you connected up your disk drive now, it should work.

One more thing, I have not included plans for a cabinet for the disk drive and power supply. You will need to build one to hold your components together. For my demo model, I attached the transformer, fuse holder, off-on switch, and disk drive to a piece of plywood and covered the whole thing with a piece of cardboard to keep the fingers and dust out. Since various models of 5-1/4 inch floppy disk drives can be used, I suggest you take your own measurements for the design of the cabinet.

Using the above and one of the low power demand disk drives you should be able to set up a double side double density drive AND this power supply for less than \$50.00, including the cardboard and nails.

THE VIEW FROM ITALY

by Paolo Bagnarese

(Author of BA Writer) From the Ottawa TI 99/4A UG Newsletter, August 1986 issue This is a letter written by Paolo to Bob Boone of Ottawa.

TI-99/4A seems to be the fourth largest used computer, Commodore VIC 20 and C-64 being first. They are followed by ZX Spectrum and QL (Sinclair) and Apple II. However, PC IBM and compatibles are catching up really fast. Other Computers, Atari 510-1040 ST, Apple McIntosh; are slowly increasing their market share. Commodore Amiga hasn't shown up yet: it will be available in the next few months.

TI-99/4A typical configuration is console and tape recorder. A 5-10 percent of owners have also the disk drive system, expansion memory, a RS232 and a printer. Few users also have a second drive and maybe some fancy disk controller (CorComp or Atronic, this one from Germany).

Users of TI-99/4A have not gathered into any user group. This may be due to the Mediterranean way of life: everybody does not trust too much anybody else. Moreover, in a user group you would have to work for free. Are we crazy? We do not like to work even if we get paid for, let alone for free. No way we will do it. Some others argued that a TI club could be seen as a blatant American supporting team: we could be bombed by our mighty neighbor on the other side of the Mediterranean Sea (Kaddafi) as a dangerous US base (since we would have US computers we might as well have some US missile, couldn't we?). I think that it is mainly for this second reason why we do not have a user group.

There is a wild frontier life here. You exchange a program for another program, sometimes for two programs, if you are lucky. If you do not have anything to exchange with, chances are you are gonna pay for that program you want. Mind, we are talking about programs that have been imported, that are copyrighted, that are sold by dealers in North America at regular prices. Anyway, no one here seems to give a damn about copyright, about rewarding a programmer. The only concern seems to be "is it copyable? that's enough, what the hell!

Here the real smart guy will join a user group in the US, get some really good stuff and then he will sell it all over Italy: prices for any program from US span \$15 to \$35. To the smart guy that programs costs \$2.00 each, the copy fee he payed to the US user group! Good business, isn't it? Here there is a real spaghetti market. Only spaghetti, the meat balls are gone forever.

I know one of those smart guys, he lives in Bologna. He used to write US user group pretending he was a user group! He was also able to get his name published on Home Computer Magazine, Oregon, USA. In this way he was able to receive a vast number of programs. Now he can sell you ANY program you can think of, no matter what. Obviously, having been in this business for over three years, he did not have time to learn to program yet. But after all, who cares? Good money will come to him as a steady flow anyway: net income, no income tax to pay, no anything. Good life, isn't it?

Ah, I forgot to tell you: documentation will not be provided by the pirate. It is like a "mafia": a dumb user it is not supposed to have the right to know how to use a program. The less he knows, the better for the pirate distributor. Obviously the dumb user gets hungry for some understandable program. Eventually, he will some other program from the pirate distributor, a program that will be more or less the same as the one he bought previously. That program was rather useless, wasn't it? The next one will be the same. By now, the trend has already been started. The dumb user gets addicted to the

pirate distributor. He will consider him like a good willing person who does his best to help the fellow man. I pirate distributor is his friend, no doubt about it. If only those darned programs were easier to use...

On the other hand, photocopies are too costly and too time consuming. As a result, intelligent users will have to figure out by themselves how to use that pirate program: well, well, well, that is the fun or it, isn't it?

So much for the bad news. As for the good news: we have none. Here everybody seems to be waiting to see when the new Myarc computer will be working and ready to be shipped to Europe.

As for the rest of Europe. Germany (and Austria) are the strongest market for TI-99/4A. There are several companies that are developing good hardware and software. Most of what is available in Germany is already imported in North America by RYTE DATA of Canada.

France used to be a good country as for TI-99/4A. After all, the fabulous "TENNIS" game, by nicesoft, come from Nice, France. There was a French magazine "99 MAGAZINE", from Paris, that used to be pretty good. Unfortunately, it ceased publishing last year. Now we do not hear too much anymore from our cousins on the other side of the Alps.

We do not know what is going on in England. We know the Queen is still kicking and alive (God save Her), but we are afraid that TI-99/4A is dead there. I'll be happy to be wrong on that assumption.

Greece does have some small market, but they seem to have only the console, no disk drive and only a few memory expansions.

We do not know anything about Spain, aside from the fact that Bill Gronos lives there.

Back to Italy. There is a slow, but steady, shifting of users toward the PC IBM (and compatibles). Each month some friend calls me up and says: "Paolo, I am sorry, but I wanna sell out my system. Can you help? You see, I have been offered a true PC IBM compatible. It's such a deal... I know, I know, we said we will never give away our beloved TI-99/4A. But you see I simply need it for work. They recently asked us employees to become PC IBM expert. Our office will be fully equipped with lots of PCs. and I don't want to be the least informed person in my office. C'mon, don't take it so hard, after all, we did not marry TI did we?"

This rap kinda goes on now and then. Boys, does it give me a chill on my back! Will I be the last survival of an dwindling race?.

If you ever publish this article, I would be glad to receive a copy of that newsletter.

I developed a small assembler routine, named PARTS. It is good to partition the MYARC RAM DISK, and choose the drive number to emulate while in assembler. These functions can be easily performed in Basic by two CALLS provided by Myarc. However, when you are in Assembler, no hints have been given by Myarc on how to perform the same task. I faced this problem. My solution seems to work well. As explained in the source code, it will work also in a running extended basic program, while with normal Myarc calls you can't do that. It is possible to modify the source code, just to change the drive # you are emulating in a running extended basic program. You are free to publish it, if you think it is worth it.

Yours truly,

Paolo Bagnarese
Via J.F. Kennedy 17
20097 San Donato Milanese, Italy

Upload to Compuserve by Art Byers, 73157,3017 Assembler routine referred to above will be u/1 as soon as I have possession of it on disk. -Art

PILOT99
by Thomas Weithofer

The computer language known as PILOT, which stands for Programmed Inquiry Learning Or Teaching, was developed by Professor John A. Starkweather of the University of California in San Francisco in the late 1960s and early 1970s. PILOT was

developed to be a language for developing computer-aided-instruction (CAI) lessons. The developer of the language insisted that it be easy to learn and use.

PILOT 99 is an advanced implementation of PILOT for the Texas Instruments TI-99/4A. The TI-99/4A has advanced features which would not be available for use if the standard PILOT statements were not supplemented. PILOT 99 adds statements for using sprites, bit-map graphics, character graphics, sound, and files. The concept of ease of learning the language and use are maintained by PILOT 99.

With the advanced statements available with PILOT 99 the PILOT language has been transformed from a language designed solely for CAI lessons to a language that is easy to learn and use for writing home management programs as well as CAI lessons.

TI MANUALS
by Herman Geschwind

Judging from messages by other TI users, it seems that TI is clearing their last inventories of printed matter for the 99/4A.

The going price for the manuals appears to be \$3.00 for such items as TI-Writer or Editor/Assembler Manuals. Even if you are using FULLWRITER and none of the cartridges, being able to refer to the original manual might be helpful.

Call 800-TI-CARES to check on the availability of whatever you are interested in (there is also a limited supply of manuals for cartridges) and what the going price is.