

The Armadillo



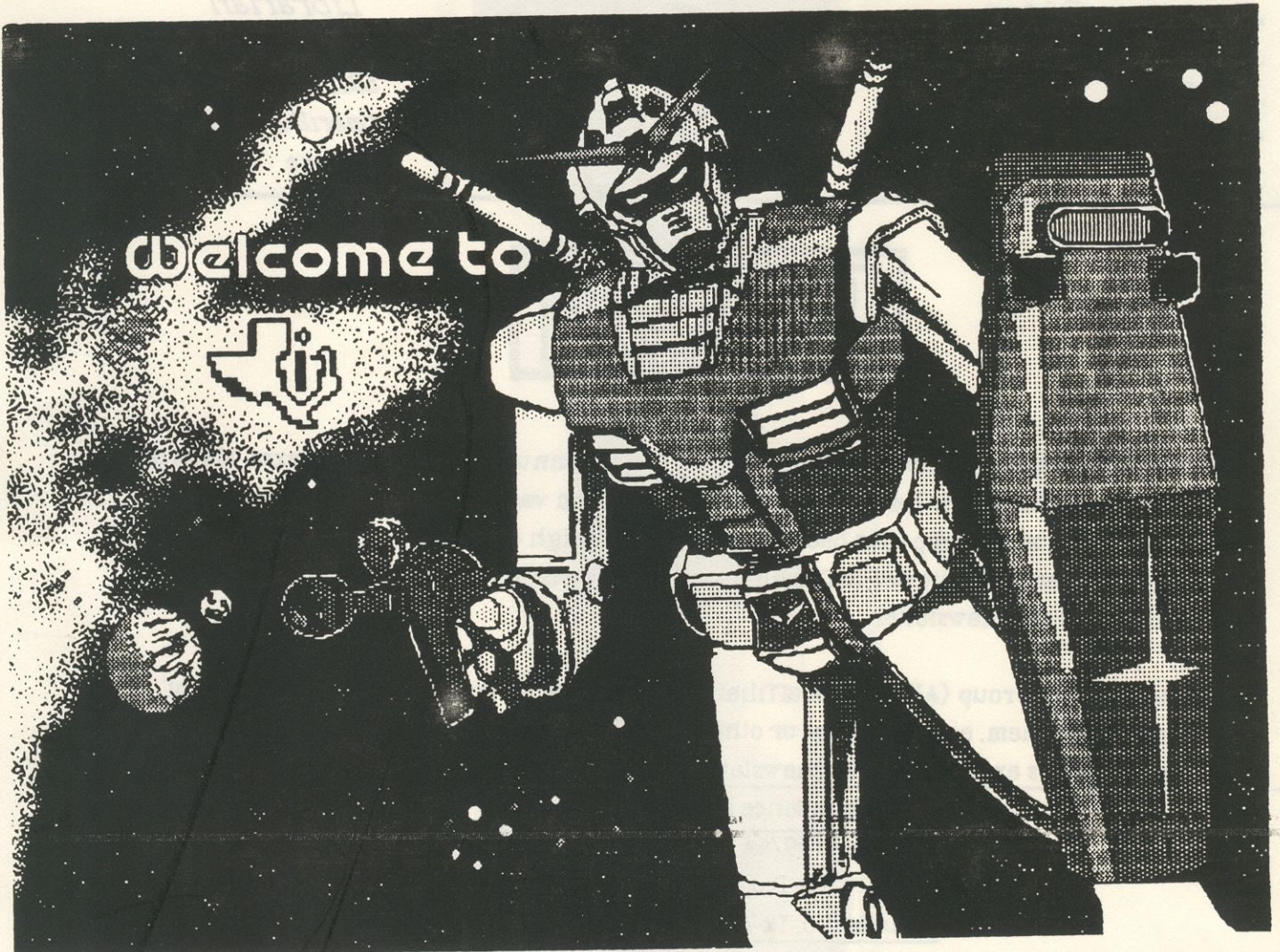
August 1989

Vol 10 Num 5

The official newsletter of the Amarillo 99/4A Users Group

Editor: Steve Eggers

Remember the HAMFEST AUGUST 12 & 13



Just like the picture reads, "Welcome to TI"

In this issue.....
Upgrading the Power
MYARC's Hard Disk System

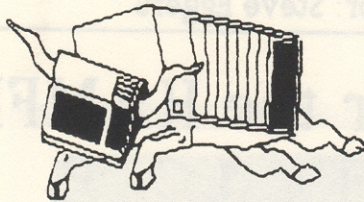
SuperModem Card Layout
Peeks and Pokes

and much, much, more!!!!

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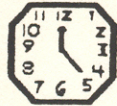
The Amarillo Users Group releases its newsletter 12 times annually in Amarillo, Texas. Material contained in this newsletter has been freely compiled from various sources (cited whenever possible). While every attempt has been made to provide high quality factual and interesting articles, the AUG and its editorial staff cannot accept responsibility for errors in advertising or text appearing in this newsletter.

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All correspondence should be mailed to:

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Keep other TI'ers in touch with your work by contributing articles, tips, and helpful hints. The staff and the officers of the AUG appreciate all the help you have given in the past. We welcome articles, tutorials, and application stories. Length can be any size. We prefer delivery by mail in hard copy format. Original artwork is welcome! Please include a short biography and authors telephone number.



The July meeting was called to order by Joe Slutz at 7:15p.m. Old business of information on the HAMFEST and that fliers were not available for the July meeting. No new business was discussed.

Demos were shown by Steve Eggers Steve passed around one of the few TI-99/8 "Getting Started" manuals that was to be packed with the 99/8. Steve Eggers then showed a disked containing Espial, Popeye and Video Chess dumped to disk that will work on the 99/4A without a hitch.

The meeting was then adjourned at 8:00p.m. and broke up into smaller discussion groups

Members attending.

Samuel R.M. Burton, Frank Aleman, Ron Sanders, Fred Dennis, Steve Eggers, Joe Slutz, Jake Fortenbery, Walt Eddy and Jere Lawrence.

The july meeting was incredibly small and was quite disappointing. As you can see above, the members that showed up to the meeting were the hard core members. What the group needs is some enthusiasm. It makes me feel that our group is slowly fading away and I don't like that. I don't wish us to just fold up and disappear.

And now.....A little poetry

Some members keep a group so strong,
 while others join just to belong.
 Some dig right in, some serve with pride,
 some go along for the ride.
 Some volunteer to do their share,
 while some lie back and just don't care.
 Some always pay their dues ahead,
 some get behind for weeks instead.
 Some do their best, some build, some make,
 some do neither, but only take.
 Some lag behind, let things go,
 some never help their group grow.
 Some drag, some pull, some don't, some do,
 CONSIDER WHICH OF THESE ARE YOU!!!!!!

Peeks and Pokes

by Steve Eggers,
Secretary/ Editor, Amarillo U.G.

Hi guy's, it's me again, your friendly newsletter editor and secretary. I am glad to mention the the group now has a Horizon Ramdisk user. That's right, Walt Eddy purchased a Horizon Ramdisk with 512K on it, WOW!! and Ron Sanders picked up a Rave 99 1 MEGABYTE expansion board. It is unbelievable the size of the expansion cards for the TI-99/4A. I wish that I could get some of the action on this equipment, but I can't use any of it on my 99/8. I figure that I might have to break down and buy another 99/4A. Oh well, not much more to say here, so I will catch you all at the HAMFEST on the 12th and 13th of this month. See you at the meeting!

Steve

Read This!!

Just a little note.....

I have decide to make a deadline for any article this is to be submitted into the newsletter. I am doing this because I have little and sometimes no time to do the mewsletter. This will make it easier on me to get the newsletter out on time. The deadline for any and all articles is at the meetings. So, if a person wanted to submit an article for the September newsletter, it will be due at the August 14th meeting and so on.



"YO! I THINK WE GOT A NEW KINDA VIRUS HERE."

Tech Talk

A New Twist To An Old Connection.....by Fred Dennis

Several times in the past our group has demonstrated hooking two TI systems together via the RS-232 ports. Programs and other files transfer rapidly at speeds up to 9600 baud over a simple 3-wire cable as long as 75 feet. One drawback is that commercial RS-232 cable is usually made up of 9 or 25 wires, making a 50-foot length rather bulky to carry around with the system. I proposed a novel approach Rod Cook and I had come up with several years ago, which was to convert the standard DB-25 connection to modular phone hookup using adapters. At that time such adapters were not commercially available but could be fabricated with a little effort and ingenuity. Not finding the time or energy to do any creating engineering, I simply dropped the project. Now Radio Shack has introduced just such an adapter in their general line under the catalog number 276-1405. This \$2.99 package contains one DB-25 hood with a built-in modular phone jack and a 25-pin male plug at the opposite end. There are 6 color-coded wires coming from the phone jack with crimped-on pins for the DB-25 plug along with two 2" jumpers with pins at each end. All hardware for assembly is included. Instructions are printed on the back of the package for assembly. Two such adapters are used to connect TI computers in a null modem configuration. Both of the adapters must be wired the same, since the criss-crossing of transmit and receive data lines is handled by the unique way modular phone cords are wired. The pin connections from the jack are inserted into the DB-25 plug as follows:

Red	-----	pin 2
Green	-----	pin 3
Black	-----	pin 7
Yellow	-----	pin 1

The remaining blue and white wires are not needed and may be clipped off near the modular jack. Ordinary four-conductor modular phone cords can not connect to these pins. Save the two jumpers as their pins might be handy spares. Following final assembly of the adapters the connection can be tested using any commercial phone cord up to 50 feet in length and any of the slicker terminal programs like Telco, Fast-Term, Mass-Transfer, or 4A/ TALK. Connection can also be made to IBM PC, Tandy, Apple, Macintosh, or other computers using an appropriately configured adapter at the other end. Specific connection for IBM PC and compatibles for both 9 and 25 pin serial ports can be obtained from the technical committee of the Amarillo 99/4 Users Group. At a mere \$2.99 each, these adapters are well worth having in the TI hacker's inventory.

.....Fred Dennis

RS232 Interface Card

Exchanging Programs with **SAVE** and **OLD** Commands

This example demonstrates transferring a TI BASIC program from one TI Home Computer to another. After the program transfer is complete, the receiving computer can use the program just as if it had been entered there. This procedure is useful for exchanging programs without having to reenter the program statements from the keyboard.

If transmission is over the telephone, programs are exchanged by the following procedure:

1. Call the other user; then place your phone in the modem. See the modem owner's manual for specific instructions.
2. The sender types **SAVE "RS232"** or **SAVE "RS232/1"** (or **"RS232/2"** if the second serial I/O port is used) and presses **ENTER**.
3. The receiver types **OLD "RS232"** or **OLD "RS232/1"** (or **"RS232/2"** if the second serial I/O port is used) and presses **ENTER**.
4. The number 255 then appears at the top center of each computer display. Once the link is established, this value is replaced by the number of 256-character records remaining to be exchanged. This value decreases as each record is transferred. When it reaches zero, the complete program has been transmitted.
5. If the number 255 remains on the screen longer than 10 seconds, the person at the receiving end must press **CLEAR** and reenter the **OLD** command.

Note: If the two computers are attached by direct cable through the parallel I/O ports, the procedure is the same as in Steps 2 through 5, except that the **SAVE** and **OLD** commands should be **SAVE "PIO"** and **OLD "PIO"**.

These are just two examples of ways to use the RS232 Interface Card. In addition to TI BASIC programs, certain Command Modules also use the RS232 Interface Card. For example, the Terminal Emulator module allows you to use the interface unit and Telephone Coupler to access time-sharing computer services. Check with your local dealer for information about these modules and other accessories and services available for use with the RS232 Interface Card.

Upgrading the Power

By Ronald Sanders

Recently, I have had some (an UNDERSTATEMENT) problems with the Geneve 9640 and the TEXAS INSTRUMENTS PEB. I asked questions in the Users Group, asked other groups, and finally decided to change my power supply to try to remedy the shut down just when the work was rendering completion.

If any else is having problems and are thinking of doing something short of PEB murder, here is a change for the better (how about 8 hours without a crash, lockup, or shut down). I purchased a 150 watt power supply from a PC clone, that doesn't require a lot of special fitting: a set of board pedasatls and 4 pin connectors (optional). I then went after the troublesome PEB. (THIS POWER SUPPLY WILL LAY FLAT ON THE EXTENSIONS IN THE SAME SPACE AS THE ORIGINAL TI POWER SUPPLY).

Depending on the supply you get (I have seen three or more different supplies), look on the board itself and look for the voltages and the polarity, making notes as you go along to save time. As you may have guessed, you must take the new power supply out of its case. The wire on the I/O bus are just as important to keep straight, so make note as to where everything goes. *IF YOU DO THIS, IT IS AT YOUR OWN RISK, I or the AMARILLO USERS GROUP CANNOT BE HELD ACCOUNTABLE IF YOU MESS UP AND BLOW UP YOUR COMPUTER OR EXPANSION BOX, but mine worked this way.*

From the new power supply, connect the wires as follows:

- +5 to the green wire on the ECB
- +12 to the brown wire on the ECB
- 12 to the yellow wire on the ECB
- GROUND to the black wire on the ECB

use the power recepticle and the fan out of the new power supply, the new fan is 12 volts and much quieter.

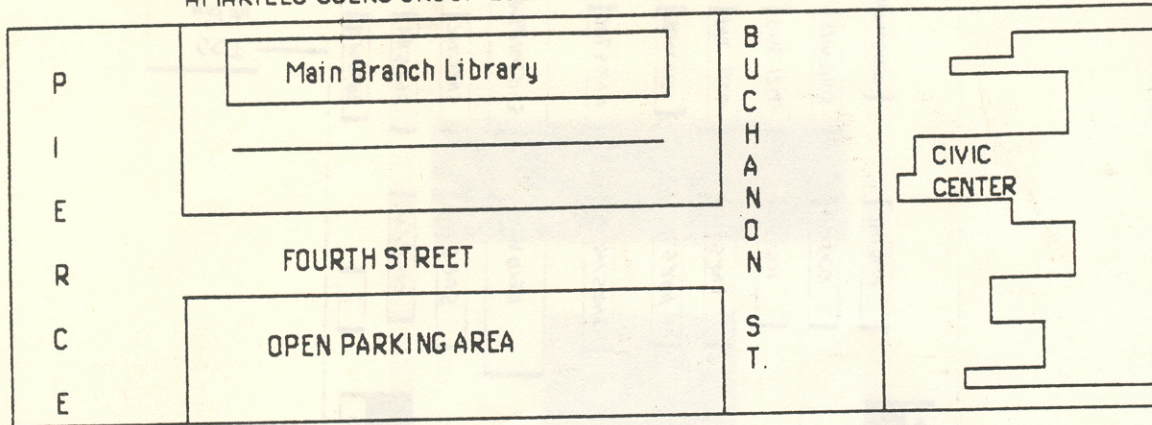
NOW, the hard part is over, right? WELL, you have a few more things to do after you get all of this stuffed back into the PEB. Every card that is plugged into the PEB must be altered. YES, what fun it is to take all of the cards out of the clam shells and alter something that was working. What you need to do is bypass ALL of the voltage regulators, leave the bolt in if it was there initially and leave the center "leg" alone, but unsolder the other two "legs" and bypass them with a short piece of small wire. Re-install them in the clam shells if you wish, but I left mine out to help in cooling (also if MYARC decides to do anything else, I'm ready), put them back in the PEB just like you had them before, and everything should work better than before.

TI-99/4A ITEMS FOR SALE
7-15-89

<u>CATEGORY</u>	<u>ITEM</u>	<u>TYPE</u>	<u>PRI</u>
ACCESSORIES	CABLE	5PIN DIN	\$10
		CASSETTE - DUAL	\$ 5
		CASSETTE - SINGLE	\$ 5
		JOYSTICK ADAPTER	\$ 5
		MONITOR, DUAL RCA	\$ 6
		PARALLEL PRINTER	\$10
		RS-232 Y-ADAPTER	\$15
		ASSORTED COLORS	\$10
		75-OHM OUTPUT	\$10
		MONOCHROME	\$60
		TI	\$30
PARTS	DISKS - 10/BOX W/CASE MODULATOR MONITOR SPEECH SYNTHESIZER AC ADAPTER BOARD CONNECTOR DISK DRIVE FUSE KEYBOARD	TI ACOUSTIC MODEM	\$10
		REGULATOR	\$ 5
		CARTRIDGE PORT	\$ 3
		DS/DD HALF-HT.	\$80
		TEAC 54A	\$40
		IN-LINE	\$ 2
		MITSUMI	\$10
		SE-JIN	\$ 5
		STACKPOLE	\$ 5
		NO CPU BOARD	\$10
		CARTRIDGE	\$10
SOFTWARE	TI-99/4A CONSOLE ADVENTURE BUCK ROGERS DISK MANAGER II EDITOR/ASSEMBLER HOME FINANCIAL DECISIONS MINI MEMORY PERSONAL REAL ESTATE PERSONAL RECORD KEEPING RETURN TO PIRATE'S ISLE SECURITIES ANALYSIS SLYMOIDS STAR TREK TERMINAL EMULATOR II TI EXTENDED BASIC TI LOGO TI LOGO II TI-WRITER TOUCH TYPING TUTOR	CARTRIDGE	\$10
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CARTRIDGE	\$10		

FRED DENNIS
(806) 355-3888

AMARILLO USERS GROUP LOCATION MAP FOR MEETINGS



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TO:



Users of the TI-99/4A, TI-99/8
 and the Geneve 9640 computers

