AMARILLO 99/4A USERS GROUP
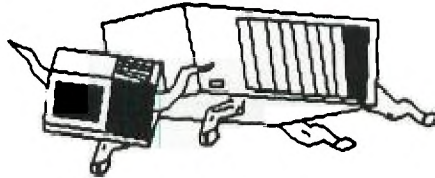
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JUNE 1989 NEWSLETTER
VOL 10 NUM 2

JUNE								JULY						
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This newsletter is the official publication of the Amarillo 99/4A USERS GROUP, a non-profit organization serving member/user of the Texas Instruments 99/4A HOME COMPUTER and compatibles.

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         *     *     *  IMPORTANT NUMBERS  *     *     *
         TI CARES          :        1-800-TICARES
         TI MANUALS        :        1-806-747-2265
         TECHNICAL ASS'T   :        1-806-741-2662
         The Amnion Helpline:       1-415-753-5581
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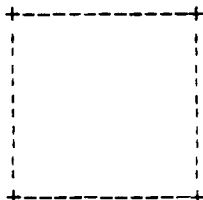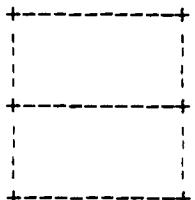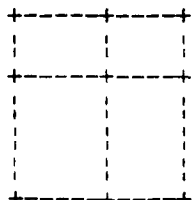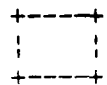
Disclaimer

The Amarillo 99/4A Users Group (AUG) releases its newsletter 12 times annually in Amarillo, Texas. Material contained within this newsletter has been freely compiled from various sources (cited when ever 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.

The Amarillo 99/4A Users Group (AUG) is not affiliated with Texas Instruments and has no type of relationship with them, either implied or otherwise. We are an independant nonprofit organization. Views expressed in this newsletter do not necessarily reflect the views of the AUG.
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All correspondence should be mailed to:

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Monthly Advertising Rates

Full Page	Half Page	Quarter Page	Business Card
$10.00	$5.00	$3.00	$2.00

For best results, each ad must be on white photocopyable media. The AUG is not liable for any damages exceeding the cost of advertising.

Keep other TI-99ers in touch with your work by contributing articles, programs, tips and helpful hints. If you want the TI community to grow and prosper, your help is needed. The staff and officers of the AUG appreciate all the help you have given in the past. We welcome articles, tutorials and application stories. Length should be 400-500 words. We prefer delivery by mail or on a 5 1/4 inch disk in TI-WRITER format. Original computer artwork (TI-Artist, MacFlix, or RLE files) are welcome! Please include a short biography and authors telephone number.

MINUTES: by Ron Sanders

   The May meeting was called to order at 7:05 PM by Joe Slutz. Discussed were
interest in flea market type set up at the Civic Center and the HAMFEST in the second
weekend in August. Possibilities in a set up table with hard and software, literature,
and people to man the tables. Fred Dennis, Joe Slutz, Frank Aleman, Sam Burton, and
Steve Eggers were interested in short term table setting. The fee per table is set at
$10.00. The group showed interest in 2 tables with a 99/4A, 99/8, and a Geneve set up
running demos. Demos at this months meeting included a demo disk sent to Sam Burton
from Turkey, Steve Eggers showed Animatem, TI's unreleased Disk Manager 3 on cartridge
and TI's unreleased Disk Duplicator on cartridge, and Joe Slutz showed SYSTEX,
Drawpoker, Calligraphy, Tocatto. The meeting broke into a copy session and was
adjourned at 8:45.

Attending the meeting were: Joe Slutz, Samuel Burton, Steve Eggers, Frank Aleman,
Ronnie Sanders, Jere Lawrence, Fred Dennis, and Jake Fortenberry

****

TREASURER'S REPORT: NO TREASURERS REPORT THIS MONTH!!!

****

Notes from the Editor.........

   I decided this month to take over the newsletter job and try to get it back on track
starting with the June newsletter. This issue will be late but at least you can say
you got one. I am going to try to put some more technical related articles in the
newsletter for you hardware hackers out there. In this issue you will see a short
article over the IEEE-488 interface as well as schematics and component layout if
somebody wants to built one of these peripheral cards using the protoboard.
   If anyone in the group would like to submit articles or just want to help, let me
know. If there is an article you would like to see in the newsletter, type out or let
me have the article so I can type it, so it can be put into the newsletter.
   Carl Bourn has notified me about the TI section on PC-Datalink. If this section of
the board is not going to get anymore activity that it has been getting then it is
not going to exists much longer. J.D. Stephens was nice enough to give this section of
his BBS to us and this is how we are paying him back. So, pull those modems out of the
closet and get on the board. If you don't like PC-Datalink anyway, then call the Burg
Board and go to the TI Town section of his board and leave some messages. Our own Fred
Dennis is the junior sysop of that section, but doesn't have a great deal of
downloads. So, take your pick between one or the other and support it!
   I recently went down to Lubbock to pick up some TI stuff and saw a lot of neat
things when I was there. I saw a Video Controller Card that would allow you use video
tape as a means of storage; a Timer Card that I am not really sure what it does. I
saw a TI Eprommmer card and a lot of HEX-Bus peripherals. I even saw a working TI-99/8
with DS/DD HEX-Bus drives. It was pretty neat.

****

PRESIDENT'S LETTER

   TI-99/4A is one of the few computers that can be used as a tool to teach. Using the
often hard to find PLATO cartridge, my 9-year old practices multiplication. Using it
everyday, she has really mastered them quite well. Every time she get good with a
special set of numbers, she can go to the next level just be replacing disks. She is
now into real simple algebra which I'm not real sure how old one begins such material,
but I really had a hard time with it when I was small. PLATO is just the ticket to
learning subjects from grade 1 through 12. I even used some of the chemistry disks
for college because I hadn't taken chemistry in high school. It really helped.

   If anyone has a subject they just want to brush up on, remember PLATO and the
99/4A.
   Hope to see everyone at the meeting in June.

                                        The Prez.

****

From the hand of the Vice President...................by Samuel Burton

   This has been a very eventful year for the Amarillo 99/4A Users Group. The group
has built up a solid membership and set up an impressive public domain library. But we
can't stop there. If more members don't call PC-Datalink, the TI area will be removed
from the BBS! Support is a two way street!!! We are fortunate to have interested
officers, and dedicated appointees to the library committee. As Vice President, I
have enjoyed working with all of you.

   Another observation is the strong feeling that most members are only interested in
the available software. These members don't seem to realize the tremendous support a
Users Group can provide. At the last meeting for example, those who attended were
shown step by step through a TI-ARTIST animation demonstration (Thanks Steve!). This
enjoyable demo could save you a lot of programming. We are more than public domain
software!

   I closing, remember to come to the June meeting...your attendance and support count!

****

Bits and Bytes by Steve Eggers

<u>ATTENTION!!!!!</u>

Steve Eggers will demonstrate his just acquired Texas Instruments TI-99/8 computer
with double sided/double density HEX-Bus drive. This is the one that got away. You
don't want to miss this meeting. You will want to see this machine in action.

PC-Datalink has a lot of TI software available for download...sign on and get the
latest software for the TI-99/4A and the Geneve 9640. Call PC-Datalink at 806-655-
7918.

Have you ever wanted to install 32K, XBasic, Speech, clock, and a parallel port in the
console itself. Then the "Zeno Board" is for you. This board comes unpopulated and is
expected to be $15.00. If you want more details, then write to: Eric Zeno, 414
Highland Road, Pittsburg, PA 15235.

Did you know that TI still supports the TI community. I recently sent back a broken
32K card and received a new one in return. It only cost $44.00. Charges on other item
are as follows:

TI-99/4A consoles -----------------	$45.00 + $6.00 (S/H)
P E Boxes -----------------	$55.00
Disk Cont. -----------------	$44.00
P-Code -----------------	$33.00
Speech Synth. -----------------	$30.00
Flex Cable Card -----------------	$25.75

For information, call Texas Instruments at 1-800-TICARES or (806) 747-1882.

<u>NOTICE!!!!</u>

DM1000 versions 3.6, 3.7, 3.8, 3.9, and 4.0 are not authorized releases. The Ottawa
Users Group has mentioned that these versions should have never gotten out to the TI
public. These versions have bugs in them and may cause you to lose your data. The
last authorized release is version 3.5!

Radio Shack sells TI equipment for the 4A. They have RF Modulators, power supplies and
keyboards. If any of the should ever go out or you just want a spare, this is the
place to get them.
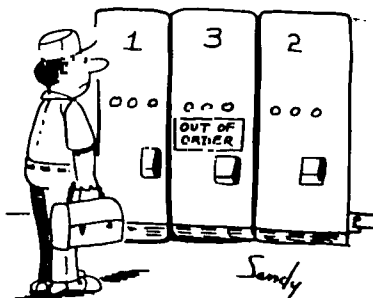
The Amarillo Armadillo

This is getting in just before deadline, but I feel our readers would like to hear about this. I went down to Lubbock, Texas and went to my friends house to buy an original, one of 250 built TI-99/8 computers with a DS/DD HEX-Bus drive. It is so neat! From what I understand, this is one of the latter 99/8's and was going to be a production version. For those of you who don't know what a 99/8 is, well, the TI-99/8 computer has 64K of CPU RAM and 16K of VDP RAM. Built in Extended BASIC II with commands such as CALL DRAW, CALL DRAWTO, CALL FILL and others to numerous to mention. Built in U.C.S.D. p-SYSTEM, speech synthesizer and HEX-Bus port.

After sitting down with it and learning the operating system, I felt very comfortable with it. I had to give up my 99/4A system to get the 99/8, but I haven't lost anything, as a matter of fact, I gained. I used to own a 9640 and when I think about all the problems I had with the Geneve, I am glad bought the 99/8. The BASIC on the 99/8 works, the p-System on the 99/8 works, the whole computer works. I feel that I own the official TI upgrade. I know that it is 64K instead of 640K, but after you load MDOS (190K) and BASIC (256K) into the Geneve, you only have 194K to work with and the way MYARC is developing the software, you will have to buy a 1.5 meg or 512K expansion card for it to use those great programs that they TALK about. I think MYARC is all talk and that's it, nothin' else. I read in Micropendium and ASGARD NEWS that support is dropping for the Geneve. MYARC should have waited till the software was complete and released it, or just abandon it. I personally don't like the idea of a computer on a card. I would have liked to have seen them build the NOAH that they showed at the Chicago Faire a few years back. Well, if anyone in the group wants to see the 99/8, just give me a call or stop by.
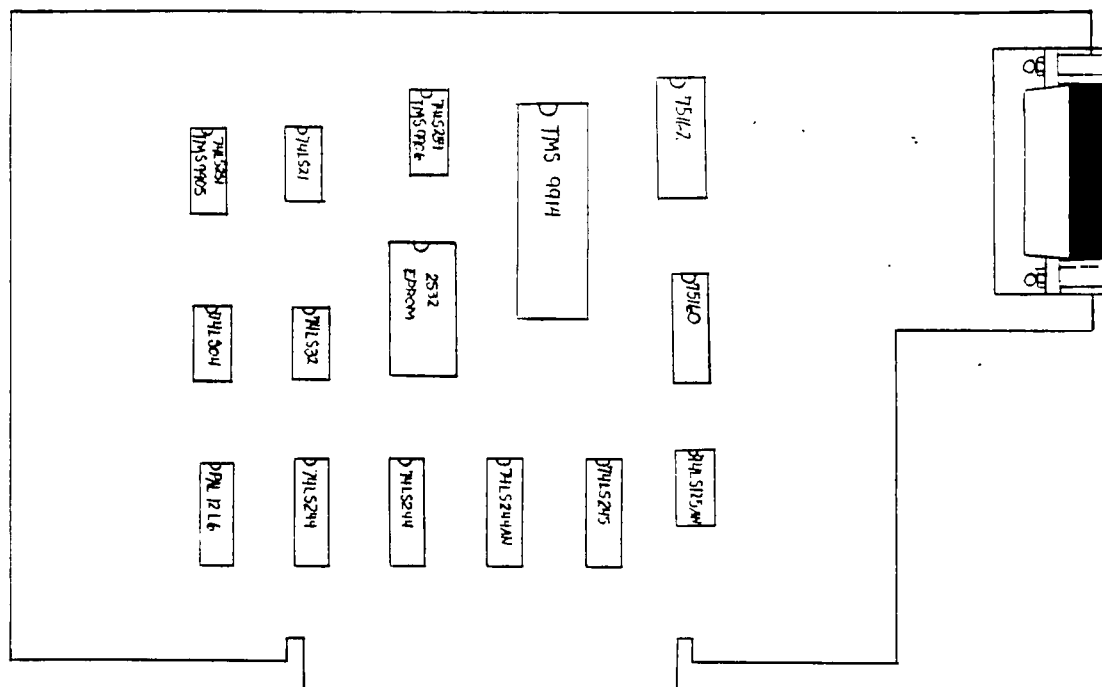
Steve

The IEEE-488 Connection

The IEEE-488 or GPIB Adapter Card enables the Texas Instruments home computer to function as part of any General Purpose Interface Bus (GPIB) system structured according to IEEE standard 488-1978, an industry standard widely followed by makers of programmable instrumentation and other computer peripherals.

With this card installed in the Peripheral Expansion System, the home computer is compatible with several hundred other devices from a variety of manufacturers which conform to GPIB specifications. The computer can control power supply outputs, take readings from digital multimeters, operate relays, or send data to a printer, to name a few examples of the numerous possible applications.

The GPIB Adapter Card provides control over bus peripheral through TI BASIC program statements. It incorporates circuitry to translate BASIC statements and commands into instruction understandable by the various bus devices, to store data temporarily, and to convert logic level and data formats to or from the forms specified by the IEEE-488 interface standard.

The TMS 9914 GPIB chip is the heart of the IEEE-488 interface and as far as I understand, this chip cannot be obtained. I know that books can be ordered through Texas Instruments over the TMS 9914 GPIB chip that covers the designated talkers, listeners and controllers involved in the use of this chip.

IEEE-488 Interface

Schematic for the IEEE-488 Interface Card.

© Harbaugh

THE MANAGER
IS A DECAL

PRESS BUZZER
FOR COMPUTER

8

ALL CHIPS ARE SOCKETED FOR EXPANSION AND MAINTAINABILITY

8k Cartridge
memory space
(:6000-:7FFF)

8k NON-DSR
memory space
(:4000-:5FFF)

8k DSR "A"
memory space
(:4000-:5FFF)

8k DSR "B"
memory space
(:4000-:5FFF)

Memory Bank 1
replaces 32k
memory exp.card

Memory SIZES
===============
- 1/64 -
U1 and U17

- 1/288 -
U1-U8, U17

- 1/544 -
U1-U16,U17

COPYRIGHT (C)1988 BY RAVE 99 CO.

C1 U1 C2 U2 C3 U3 C4 U4 C5 U5 C6 U6 C7 U7 C8 U8 C17 U17

C9 U9 C10 U10 C11 U11 C12 U12 C13 U13 C14 U14 C15 U15 C16 U16

D2 C103

D3 B1

SUPER-CAP
5 day memory
backup

LITHIUM BATTERY
5 YR.
For long term
memory backup

DSR "A"
CRU select
switches

DSR "B"
CRU select
switches

C23 C26 SW1 C22
U23 U26 U22
CA1
A1
U27 SW2 C27 C28 U28

C25 U25
SW3 AP1 RAVE 99 CO. U24 C24
MEMORY ENHANCEMENT
CARD MX01 REV.
C18 SN
C20 C21
C30 C29
U30 U29
60

RAVE 99 CO.
U18 U20 U21 U19
C19

Q3
Q2
C105
C106
VR1
Q1
H O T
R101
C101 C102
2

R6 R7 R8
R11 R12 R13
C10
R10

CARD NUMBER "ID"
SELECT SWITCHES

10

Found after months of desperate searching,

A

NEWSLETTER EDITOR

TI-99/4A INVENTORY
4-4-89

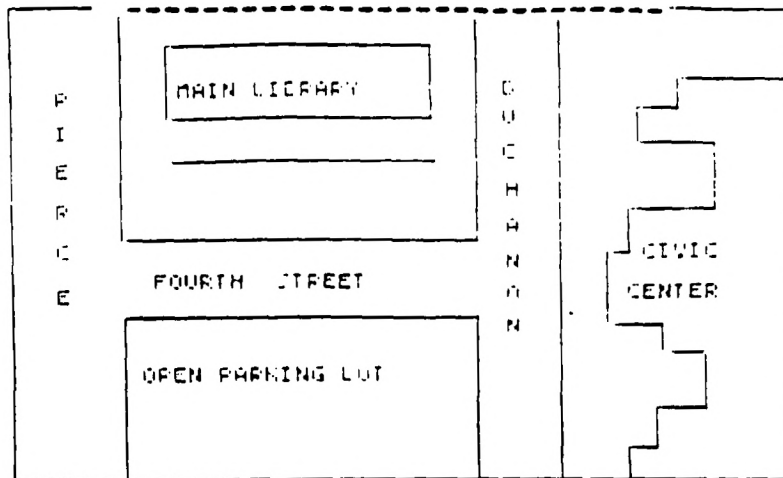| CATEGORY	ITEM	TYPE	QTY	PRICE	TOTAL
ACCESSORIES	CABLE	5PIN DIN	1	$10	$ 10
		CASSETTE - DUAL	1	$ 5	$ 5
		CASSETTE - SINGLE	2	$ 5	$ 10
		JOYSTIC EXTENSION	2	$ 5	$ 10
		JOYSTICK ADAPTER	2	$ 5	$ 10
		MONITOR, DUAL RCA	6	$ 6	$ 36
		PARALLEL PRINTER	3	$10	$ 30
		RS-232 Y-ADAPTER	1	$15	$ 15
	DISK DRIVE	DS/DD HALF-HT.	4	$80	$320
	DISKS - 10/BOX W/CASE	ASSORTED COLORS	5	$10	$ 50
	PERIPHERAL EXP. BOX	TI	1	$50	$ 50
	SPEECH SYNTHESIZER	TI	1	$30	$ 30
HARDWARE	CARD	TI DISK CONTLR	1	$50	$ 50
PART	CONNECTOR	CARTRIDGE PORT	3	$ 3	$ 9
PARTS	AC ADAPTER	TI ACOUSTIC MODEM	2	$10	$ 20
	BOARD	REGULATOR	6	$ 5	$ 30
	FUSE	IN-LINE	6	$ 2	$ 12
	KEYBOARD	MITSUMI	3	$10	$ 30
		SE-JIN	10	$ 5	$ 50
		STACKPOLE	5	$ 5	$ 25
	MODULATOR	75-OHM OUTPUT	4	$10	$ 40
	TI-99/4A CONSOLE	NO CPU BOARD	3	$10	$ 30
SOFTWARE	ADVENTURE	CARTRIDGE	3	$10	$ 30
	BUCK ROGERS	CARTRIDGE	1	$10	$ 10
	DISK MANAGER II	CARTRIDGE	4	$10	$ 40
	EDITOR/ASSEMBLER	CARTRIDGE	1	$20	$ 20
	HOME FINANCIAL DECISIONS	CARTRIDGE	1	$10	$ 10
	MINI MEMORY	CARTRIDGE	1	$10	$ 10
	PERSONAL REAL ESTATE	CARTRIDGE	1	$10	$ 10
	PERSONAL RECORD KEEPING	CARTRIDGE	1	$10	$ 10
	RETURN TO PIRATE'S ISLE	CARTRIDGE	1	$10	$ 10
	SECURITIES ANALYSIS	CARTRIDGE	1	$10	$ 10
	SLYMOIDS	CARTRIDGE	1	$10	$ 10
	STAR TREK	CARTRIDGE	1	$10	$ 10
	TERMINAL EMULATOR II	CARTRIDGE	3	$10	$ 20
	TI EXTENDED BASIC	CARTRIDGE	2	$30	$ 60
	TI LOGO	CARTRIDGE	1	$10	$ 10
	TI LOGO II	CARTRIDGE	2	$20	$ 40
	TI-WRITER	CARTRIDGE	1	$20	$ 20
	TOUCH TYPING TUTOR	CARTRIDGE	1	$10	$ 10

If interested, please call Fred Dennis at 355-3868.

Understanding the Technology!

Function Key

Floppy disk

Application Software

Main Storage

Input

User Interface

Normal Flow of Operation

Central Processing Unit

Surge Control Device

Output

Peripherals (hardware)

Overflow (input/output error)

Debugging Tool

Mouse

Back up System

Supplementary Data

Reader's Digest
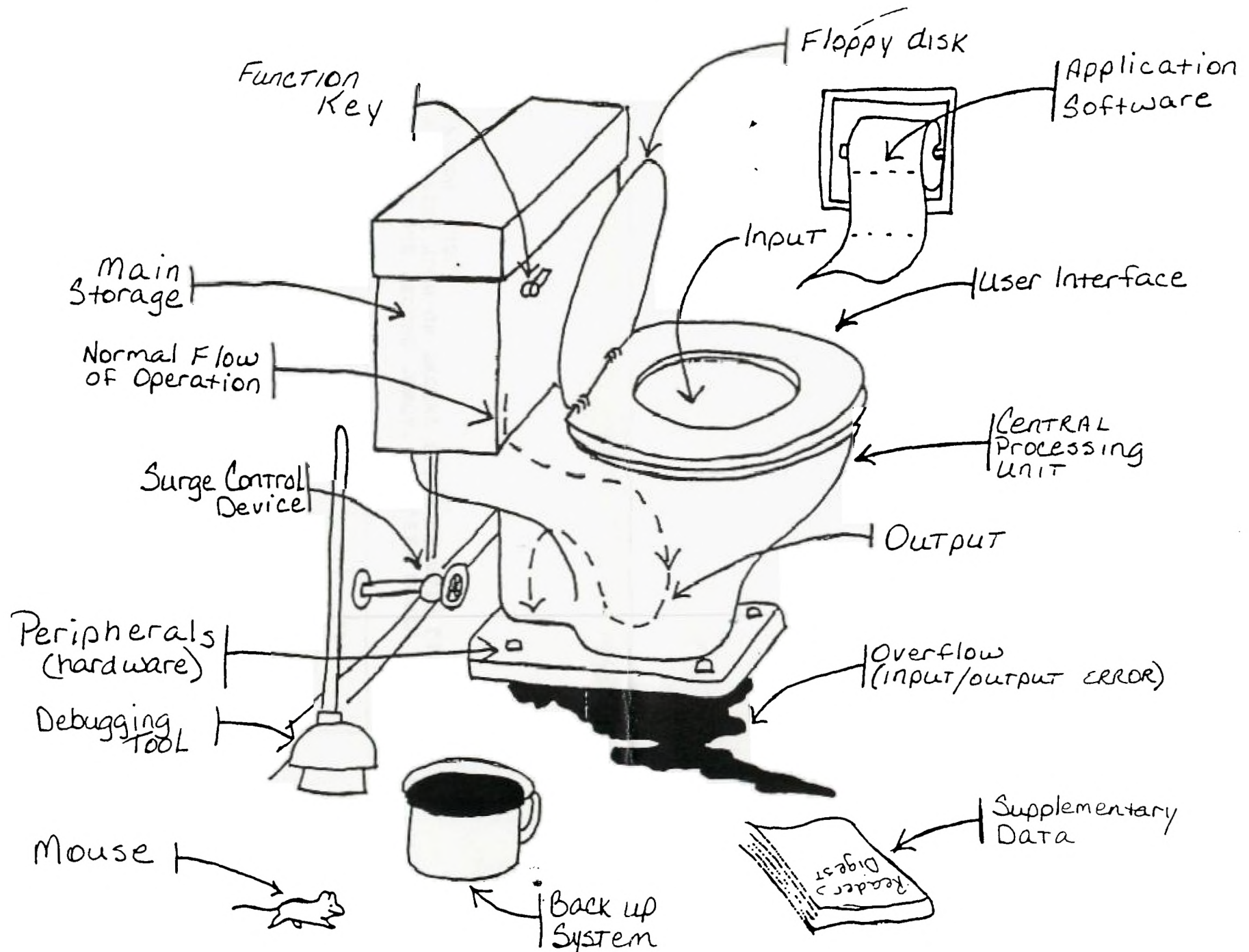
AUG MEETING LOCATION MAP

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-----------------------------------------
| P |   ---------------------   | B |          |
| I |   |   MAIN LIBRARY    |   | U |   ------ |
| E |   |                   |   | C |  |  CIVIC |
| R |   |                   |   | H |  | CENTER |
| C |   ---------------------   | A |  |        |
| E |                           | N |  |        |
|   |   FOURTH  STREET          | N |   ------  |
|   |   ---------------------   |   |          |
|   |   |  OPEN PARKING LOT |   |   |          |
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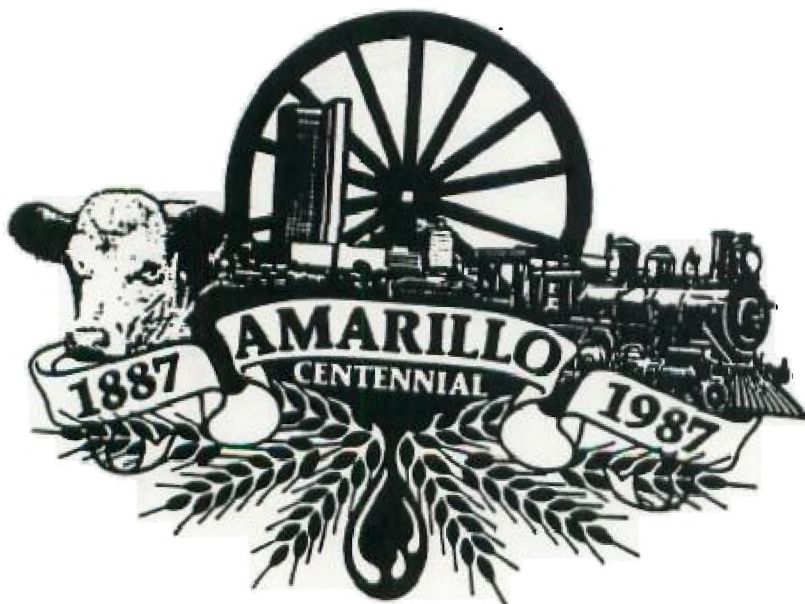
**MEETINGS ARE SECOND MONDAY OF EVERY MONTH AT 7:00 PM
IN MEETING ROOM ON SECOND FLOOR OF MAIN LIBRARY...I'LL
SEE YOU THERE!**

Amarillo 99/4 Users Group
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Amarillo, TX. 79114

LOVE
USA 45

AMARILLO
CENTENNIAL
1887   1987

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