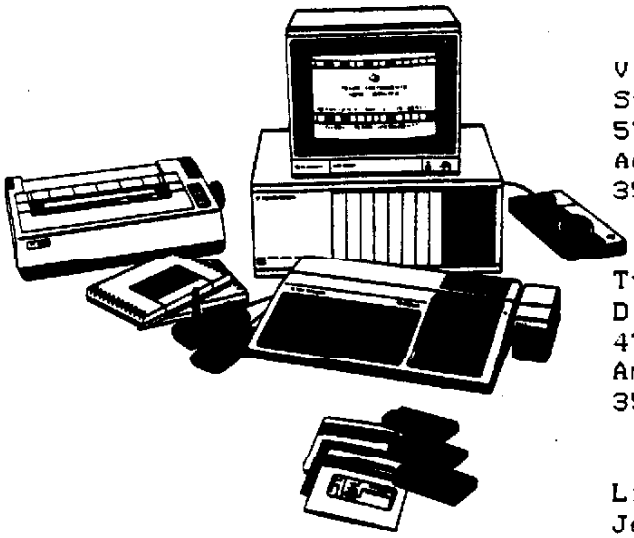
AMARILLO 99/4A USERS GROUP

P.O. BOX 8421 AMARILLO , TEXAS 79114-8421



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MARCH 1988 NEWSLETTER
VOL 8 NUM 3

MARCH

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APRIL

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

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* * * TEXAS INSTRUMENTS * * *

Do you have their number?

TI CARES	:	1-800-842-2737
TI MANUALS	:	806-741-2265
TECHNICAL ASS'T	:	806-741-2663

The Amarillo 99/4A Users Group(AUG) releases its newletter 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. Any articles concerning hardware modifications are printed with the understanding that the modifications void the warranty and are undertaken at the reader's own risk!

======== DISCLAIMER ========

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 independent non profit organization. Views expressed in this newletter do not necessarily reflect the views of the group.

===== ADVERTISING RATES =====

For best results, each ad must be on white photocopy ready media. The AUG is not held liable for any damages exceeding the cost of advertising. Members of the AUG are permitted to advertise TI equipment in the Swap and Sell section at no cost.

FULL PAGE	$10.00
HALF PAGE	5.00
QUARTER PAGE	3.00
BUSINESS CARD	2.00

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SHARE YOUR KNOWLEDGE

Keep other TI99ers in touch with your work by contributing articles, programs and helpful tips. If you want to grow and prosper then your help is needed and appreciated by the officers and staff of the AUG. For information about submitting articles, call Sam Burton - Editor, at 352-4778.

We welcome papers,tutorials and application articles. Length should be 400-500 words. We prefer delivery by mail or on a 5 1/4 diskette using TI-Writer compatible format. Double spaced, letter quality hard copy is acceptable. Original computer art work (TI-Artist or MAX-RLE files) are welcome. Please include a short biography and author's telephone number.

=

MINUTES .....By Steve Eggers (for Sam Burton)

The meeting was called to order by Joe Slutz at 7:12 PM.

Old Business consisted of putting the club's TI-system to work as a bulletin board for the Amarillo TI community. The BBS will be run by Steven Eggers. The TPA program will be placed in the group library. Documentation on disk will be provided.

New business consisted of a digitizer card for the TI-99/4A, and the upcomming TI-FAIR in Dallas. Several members have expressed interest in attending.

DEMOS: Joe Slutz demonstrated the speech to console hardware modification, the resistor to improve screen quality mod, and the fan change for the PE box. Steven Eggers showed arcturus,a demo program, and music maker cartridge.

The meeting broke into smaller discussion groups and the meeting was adjurned at 8:41 PM.

ATTENDING WERE: Joe Slutz, Steve Eggers, Diana Woods, Fred Dennis, Jere Lawrence, Jake Fortenberry, Frank Aleman, Erwin Kohn, Walt Eddie ....New Members....Corkey Billingsley, Larry DeSierra

****

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      VVV    VVV PPPPPPPP
       VVV VVV   PPP   PPP
The     VVVVV    PPPPPPPP  Downloads.
         VVV     PPP
          V      PPP
```

Well, it's time for another newsletter, and let me tell ya', it came up on quickly and suddenly. The first thing I want to say is that I want to thank you all for the support and help you have giving me with the Board. I have had a lot of problems with the software and Sam is helping me with that, then came the DS/DD drive problem and Fred helped me with that, then the Auto-Answer modem problem came and Joe helped with that. This is really going to be a User Group BBS.

I just recently got The Printer Apprentice and I am really anxious to work on and with this new Desktop Publisher for the TI. I have seen some articles in other user group newsletters done with the Printers Apprentice and it looks sharp. I will give demonstration at the next meeting.

Well, not much more to say so,

See you at the Meeting!!!!!!!

Steve Eggers

FROM THE EDITOR:

Its March, Happy St Patrick's Day! This month we were happy to have several members renew their memberships in the group. This is not only encouraging but also a good sign for our users group. Also the new faces are great to see! I feel very up on our TI 99/4A! In fact the very first TI-FAIRE is to be held in Dallas, Texas on April 30th 1988. That's right,just next month a TI faire in our own state! I'm trying to schedule a trip down there over the weekend to see what's new. This is a very good sign the TI is still strong and kicking! Non confirmed roumors are comming out of Dallas concerning a NEW HOME COMPUTER by TI. Richard Fleetwood ,president of FLUG, felt that the new computer will be MS-Dos compatible and not 99/4A compatible.I reported last month about reading in TI COMPUTING magazine , that TI would build the machine for another company.not market it under a TI label. If TI did come out with another HOME COMPUTER it will almost certainly be a DOS clone and incompatible with the 99/4A.

I have been busy organising the International Users Group Library Disks for your use. Should you like a copy of any of these programs please let me know. This newletter has a lot to offer this month. I'm continuing the Modifications Manual, Humor Page, Swap and Sell, and Programs section of the newsletter. What do you think ? If there is something you would like to see changed let me know. If you have any suggestions ...LET ME KNOW! This is our newsletter let us all work to make this group the finest in Texas. One sure way is to write me a letter,send me your graphics, and share your ideas. Send me any interesting computer articles or cartoons. I need them for the humor page. Get involved .... See you at the next meeting.

SAMUEL BURTON

********** TREASURER'S REPORT **********
MARCH 1988
****

FOR THE PERIOD MARCH 1 - MARCH 31

CASH ON HAND, BEGIN	$ 311.26
CASH RECEIPTS	0.00
CASH AVAILABLE	311.26
CASH DISBURSED	35.00
CASH ON HAND , END	276.26

RESPECTFULLY SUBMITTED: DIANA WOODS, TREASURER AUG

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HHH   HHH   IIIIIIIII
HHH   HHH   IIIIIIIII
HHHHHHHHHH     III
HHHHHHHHHH     III
HHH   HHH   IIIIIIIII
HHH   HHH   IIIIIIIII
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and good day. I was sitting at home today and I got to thinking about all of the possible ways to expand the TI-99/4A. The thought about blew me out of my seat. Here in this artical, I am going to do a little explination and list of all of the expansions for the TI-99/4A.

The first is the ultimate upgrade for the TI-99/4A, and that is MYARC's GENEVE 9640 Computer. The Geneve comes with 640k of RAM, 256 colors displayed simultaneously, the 9938 VDP chip with 7 graphics modes, TMS 9985 CPU operating at 12MHz for the speed of an 80286. The Geneve is 100% compatible with TI, Corcomp, and Myarc Disk Controllers and RS232 cards. If you have the money ($500.00) and want a non-IBM compatible machine that runs all TI sofware as well as M Dos (Myarc-Disk Operating System) software, then this is the machine for you.

The next piece of equipment is Horizon's RAMDISK. The Horizon RAMDISK has been reworked to store 1 MEG (yes! 1 Megabyte) of RAM inside of it. It is battery backed so the information will last quite a long time. If your sick of loading certain programs that you use most frequently from a drive then give the Horizon RAMDISK a try.

Do you use TI-Writer quite a bit? Don't you hate it when you print a document and your machine is locked up and you can't type until the printer is finished printing, or do hate it when your working on something important with Multiplan or TI-Writer and your wife or kids hit the console and move the foot and Speech Synthesizer and lock up the machine, or have you wondered what time it was but didn't have a clock in the room or your watch on. Then Corcomp's Triple Tech card is for you. It has a 5k printer buffer that cuts print time consideribly. A Speech Synthesizer connection that lets you hide speech in the P.E. Box and that cuts 4 inches off the side of the console. It also has a Clock/Calendar built in.

Do you have a working knowledge of CP/M? Do you use CP/M at work and would like to program in CP/M on your 99/4A. Then get a CP/M card for your TI. Rught off hand I can't remember who puts out the CP/M peripheral card but, I do know how much it costs, $425.00 mail order. I think only 2 have been sold in the U.S.

Thunderscan is a very popular program on the Macintosh. Thunderscan is an optical digitizer. Now, the TI has a digitizer it can call it own. The digitizer can be bought in built or kit form. The kit costs $189.00 so, you can imagine what it costs built.

Then there are the numerous memory expansions for the TI made buy RAVE 99, Myarc, and Corcomp. They all do the same thing, and that is expand your TI memory to either 128k, 256k, or

512k. Corcomp only put out a 128k expansion, while all the rest put out 3 different memory expansions.

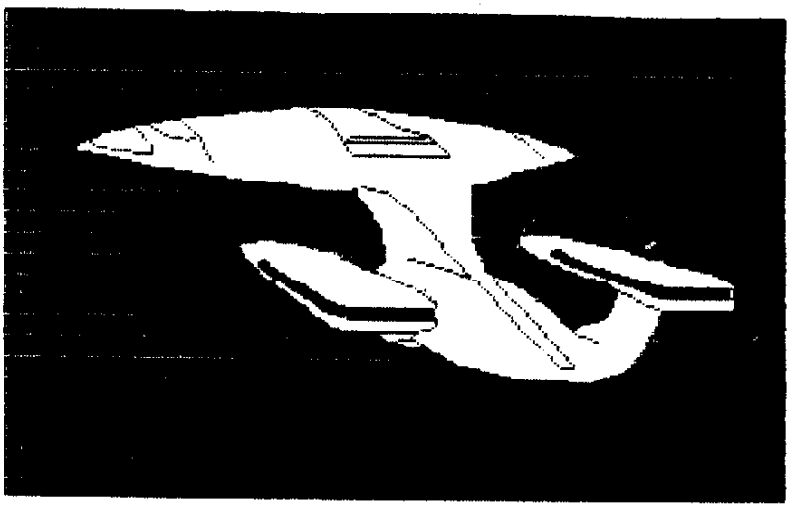
You can now buy Mechatronics 80-column card to display a full 80 columns on the screen using an RGB monitor. The 80-column card uses the Yamaha 9938 VDP to display 256 colors simultaneously. This is the same VDP used in the Geneve 9640.

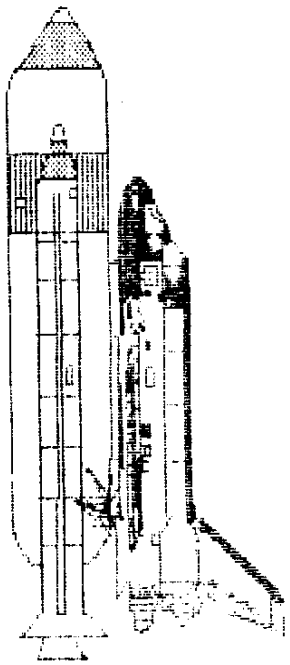
You can of course buy keyboard enhancements for the TI now like I did. Rave 99 and M.L. Systems both put out keyboard upgrade for the TI for less than $250.00.

You can also buy a Mechatronic TI-Mouse to use for mouse interfacing of programs.

Well, this little idea got rather involved but, I wanted to bring up some points and make you think about that little black and silver or beige computer sitting on you desk. I wanted to let you know that you have a very powerful computer at your disposal. All of this mentioned above is not even half of what is out for the TI. I could keep this going for another page or two. I thank you for your time and than you for reading this article. See you at the meeting!!!!!!!!!!!!!!!!

Steve Eggers





MSP99

XBASIC Quick Reference Sheet

ASCII Codes

SET	CODE	CHAR
0	30	
	31	
1	32	
	33	!
	34	"
	35	#
	36	$
	37	%
	38	&
	39	'
2	40	(
	41	)
	42	*
	43	+
	44	,
	45	-
	46	.
	47	/
3	48	0
	49	1
	50	2
	51	3
	52	4
	53	5
	54	6
	55	7
4	56	8
	57	9
	58	:
	59	;
	60	<
	61	=
	62	>
	63	?
5	64	@
	65	A
	66	B
	67	C
	68	D
	69	E
	70	F
	71	G
6	72	H
	73	I
	74	J
	75	K
	76	L
	77	M
	78	N
	79	O

SET	CODE	CHAR
7	80	P
	81	Q
	82	R
	83	S
	84	T
	85	U
	86	V
	87	W
8	88	X
	89	Y
	90	Z
	91	[
	92	\
	93	]
	94	^
	95	_
9	96	`
	97	a
	98	b
	99	c
	100	d
	101	e
	102	f
	103	g
10	104	h
	105	i
	106	j
	107	k
	108	l
	109	m
	110	n
	111	o
11	112	p
	113	q
	114	r
	115	s
	116	t
	117	u
	118	v
	119	w
12	120	x
	121	y
	122	z
	123	{
	124	|
	125	}
	126	~
	127	DEL
13	128 - 131	
	132 - 135	
14	136 - 139	
	140 - 144	

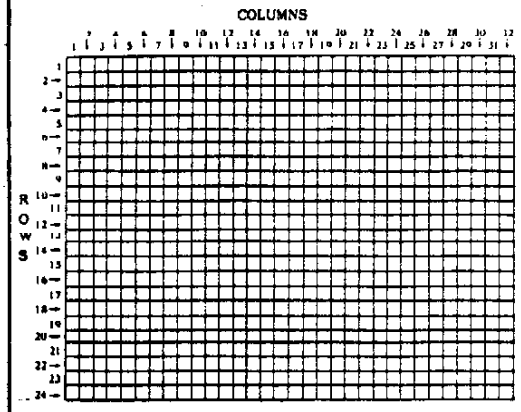
Pattern-Identifier Conversion Table

Blocks	BINARY	HEX
	0000	0
	0001	1
	0010	2
	0011	3
	0100	4
	0101	5
	0110	6
	0111	7
	1000	8
	1001	9
	1010	A
	1011	B
	1100	C
	1101	D
	1110	E
	1111	F

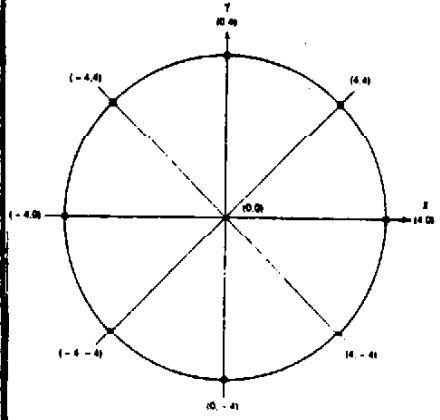
Color Codes

COLOR	CODE
Transparent	1
Black	2
Medium Green	3
Light Green	4
Dark Blue	5
Light Blue	6
Dark Red	7
Cyan	8
Medium Red	9
Light Red	10
Dark Yellow	11
Light Yellow	12
Dark Green	13
Magenta	14
Gray	15
White	16

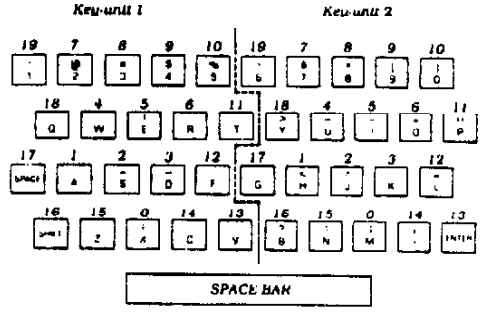
Screen Grid Layout



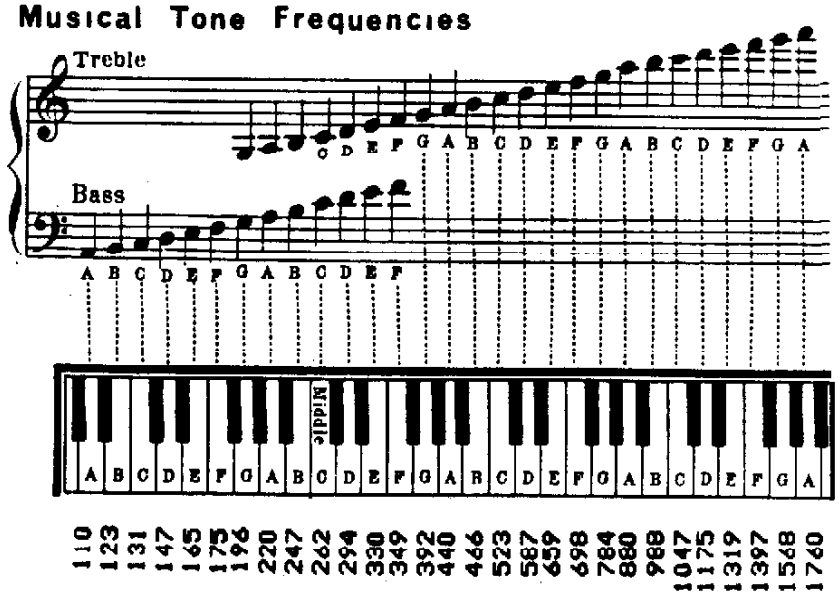
Joystick Values



Split Console Keyboard



Musical Tone Frequencies

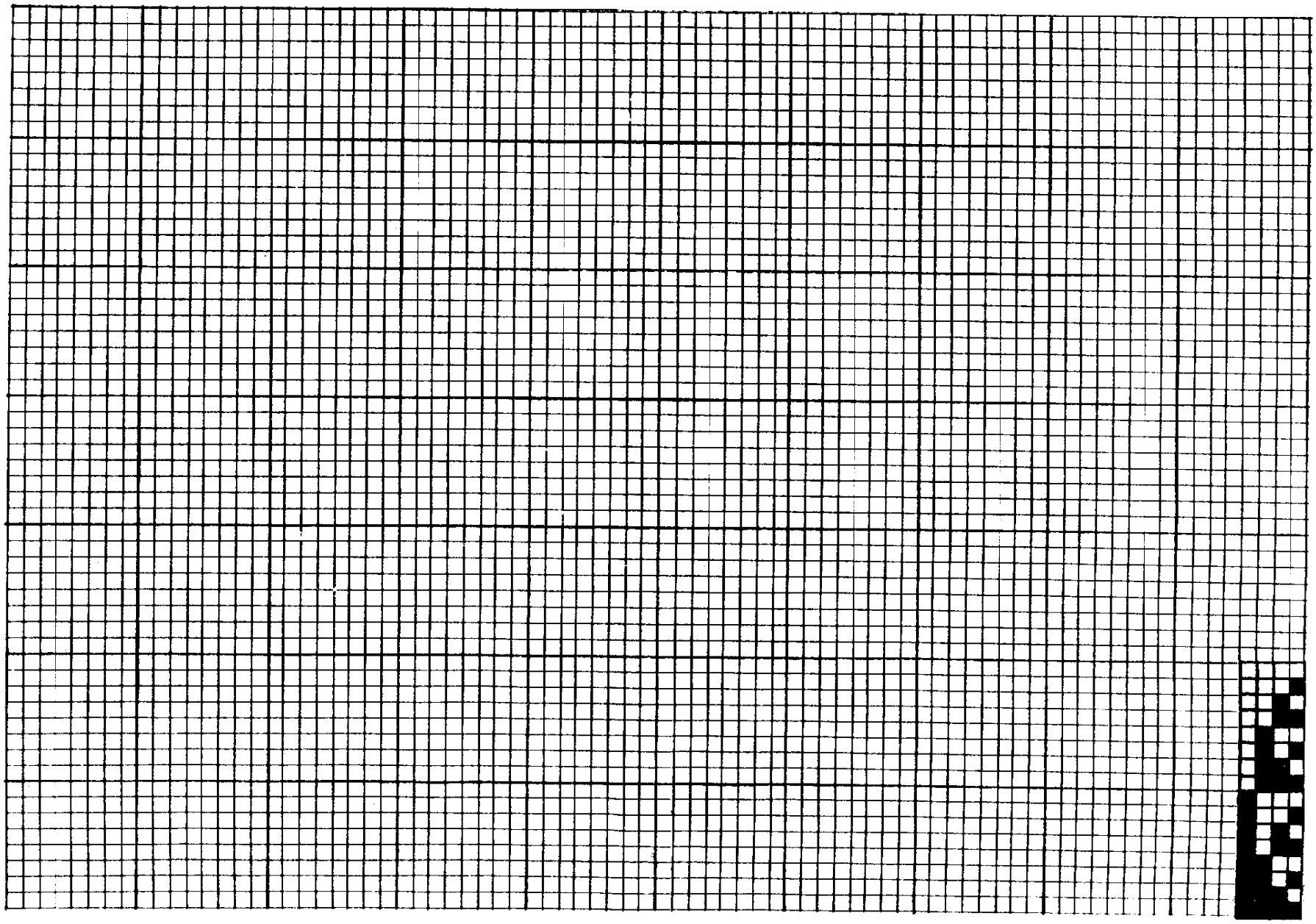


GRAPHIC CHARACTER DESIGN SHEET

PAGE __ OF __

TITLE: _____

DESIGNER: _____



Bits and Bytes.....by Sam Burton

Our Users Group is listed in a national magazine , check out this month's Computer Shopper in your local bookstore.(When we get our BBS running I will try to get it listed as well.

If you need ANYTHING for your TI call 352-4778 or contact Fred Dennis at 355-3868.

Did you know that IBM no longer makes PC,XT, or AT computers anymore? I guess that those machines are "technically" also orphans now!!

IMPORTANT!!!- This comming month is the biggest TI Fair and the first one held in the state of Texas. Isn't it ironic that the home state for the TI 99/4A has never held a fair? Or even more so that Lubbock, the home town for the 99 doesn't have a users group? I'm going to this fair...are you?

DID YOU KNOW THAT TI STILL SUPPORTS THE TI COMMUNITY? Sure enough that is the sign of a good company...coustomer service. We usually hear negative comment from other vendors but Texas Instruments does not need to do anything for the 99er community yet still does provide information, repairs, and diagnostic aids. (I bet IBM PC jr. users wish they had that kind of support from IBM.)

RAVE 99 announces a new memory expansion of up to 2 Meg of battery backed memory. They also have a speech adaptor card for putting the speech syntheszer in the PE Box and are releasing a card to use an IBM style keyboard on the TI! I am always interested in any product announcements from these guys. Just as Steve Eggers about his Rave keyboard.....

Get your latest TI-WRITER Manual Update from Dick Altman. He rewrote that whole manual into an easier to read version. It can be run interactive with TI-WRITER to give you direct use of the instructions in a real application mode. This is available on disk from Dick at no charge! Please be sure to support the reproduction and mailing costs or he'll loose his enthusiasm. The address is DICK ALTMAN

1053 SCHRADER STREET
TEL #(415)-661-1994 SAN FRANCISCO, CA 94117

COME TO THE NEXT MEETING TO SEE HOW TO SLOW DOWN YOUR SCREEN DISPLAYS USING THE MACORMICK SLOW DOWN CIRCUIT.

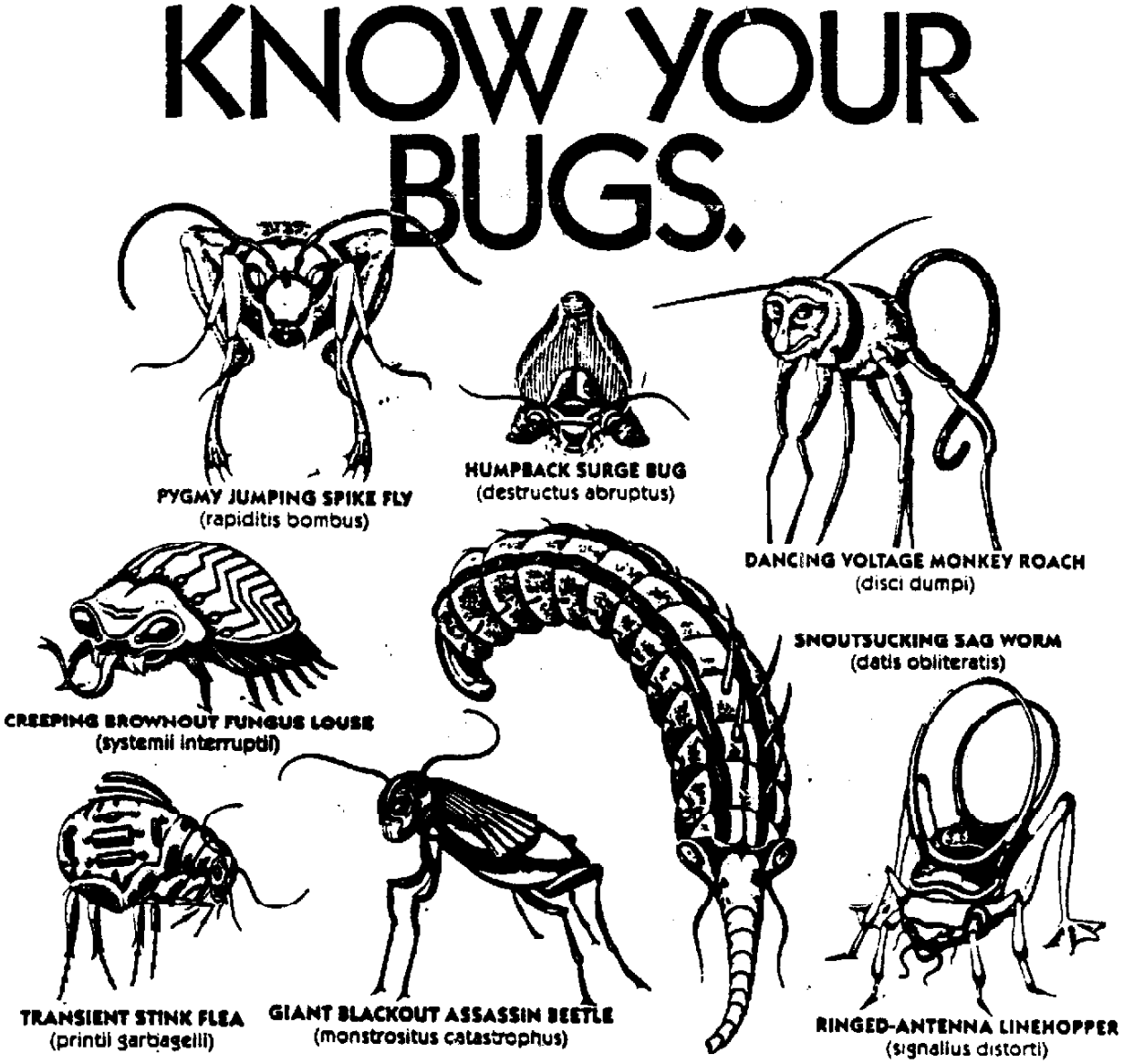
FROM: ROCKY MOUNTAIN 99ERS FEB 1988 ISSUE

How many times while working on a special project have you had the whole thing come to a screeching halt, with the computer crashing, or the printer stopping , or the modem outputting unintelligent garbage or even worse smoke curling ominously out of a piece of equipment?

Times like these are very frustrating and usually after a few choice words about the "bug" that caused our particular problem, we start all over again.

Some anonymous member of the computer community has finally identified these various "bugs" and we are happy to share this information with our readers. While knowing what "bug" caused our problem will not solve it we might find satisfaction in knowing which "bug" to blame.

Below are pictures showing the various "bugs" along with their common and "scientific" names and how they affect our equipment.



TI-TAX TI-TAX™ TI-TAX

REQUIRES:
32K
1?CPI PRINTER
MULTIPLAN

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- Are not copy protected. (Ask about "Fairware" rebates!)
- Are great for "What if...?"ing.
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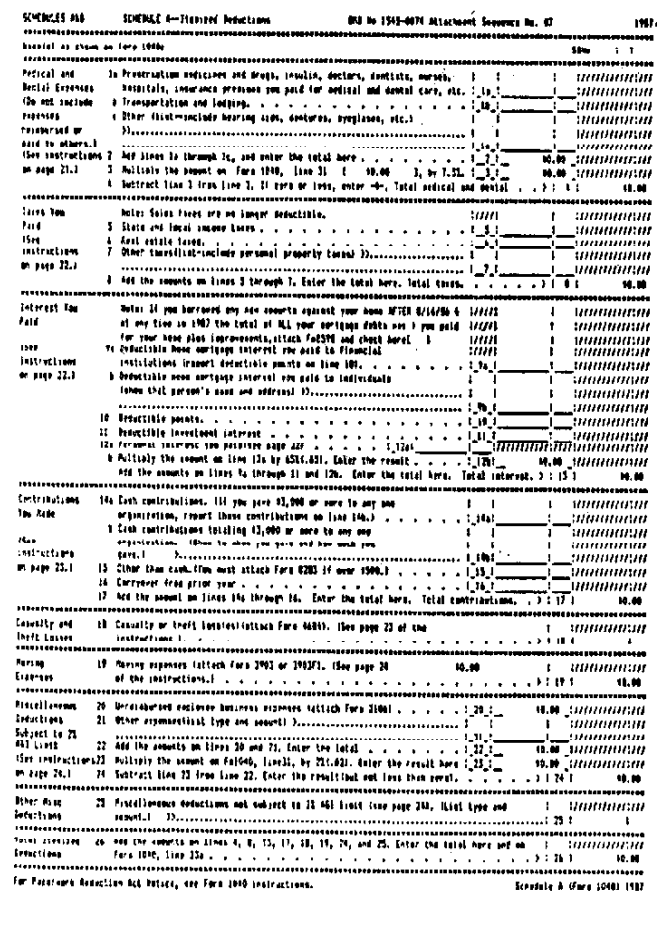
Ft Meade, MD 20755

DISK:	SHORTFORMS	LONGFORM	SCHEDULES	USUALFORMS	MOREFORMS
	$19.95	$9.95	$19.95	$19.95	$19.95
CONTAINS:	FORM1040Ap1 FORM1040Ap2 FORM1040EZ SCHEDULE1p1 SCHEDULE1p2 PRINT17 REBATES FLOWCHART USER MANUAL	FORM1040p1 FORM1040p2 (Incl Scheds x,y,&z) PRINT17 REBATES FLOWCHART USER MANUAL	SCHEDULEA SCHEDULEB SCHEDULEC SCHEDULEDp1 SCHEDULEDp2 SCHEDULEEp1 SCHEDULEEp2	FORM2106p1 FORM2106p2 FORM2441 FORM3903 FORM6251 FORM8598 FORMW4wksheet	FORM1040X FORM2119 FORM4972p1 FORM4972p2 FORM8582 FORM8615 SCHEDULER SCHEDULESE

Output samples !

Add $4.00 shipping and handling



SCHEDULE A&B — SCHEDULE A—Itemized Deductions — OMB No 1545-0074 Attachment Sequence No. 07 — 1987

Medical and Dental Expenses (Do not include expenses reimbursed or paid by others.) (See instructions on page 21.)
1a Prescription medicines and drugs, insulin, doctors, dentists, nurses, hospitals, insurance premiums you paid for medical and dental care, etc.
b Transportation and lodging.
c Other (list—include hearing aids, dentures, eyeglasses, etc.)
2 Add lines 1a through 1c, and enter the total here
3 Multiply the amount on Form 1040, line 31 (90.00), by 7.5%.
4 Subtract line 3 from line 2. If zero or less, enter -0-. Total medical and dental

Taxes You Paid (See instructions on page 22.)
Note: Sales taxes are no longer deductible.
5 State and local income taxes
6 Real estate taxes.
7 Other taxes(list—include personal property taxes)
8 Add the amounts on lines 5 through 7. Enter the total here. Total taxes.

Interest You Paid (See instructions on page 22.)
Note: If you borrowed any new amounts against your home AFTER 8/16/86 & at any time in 1987 the total of ALL your mortgage debts was > you paid for your home plus improvements, attach Form 5329 and check here( )
9a Deductible home mortgage interest you paid to Financial institutions (report deductible points on line 10).
b Deductible home mortgage interest you paid to individuals (show that person's name and address)
10 Deductible points.
11 Deductible investment interest
12a Personal interest you paid(see page 22)
b Multiply the amount on line 12a by 65%.65). Enter the result
Add the amounts on lines 9a through 11 and 12b. Enter the total here. Total interest.

Contributions You Made (See instructions on page 23.)
14a Cash contributions. (If you gave $3,000 or more to any one organization, report those contributions on line 14b.)
b Cash contributions totaling $3,000 or more to any one organization. (Show to whom you gave and how much you gave.)
15 Other than cash.(You must attach Form 8283 if over $500.)
16 Carryover from prior year
17 Add the amounts on lines 14a through 16. Enter the total here. Total contributions.

Casualty and Theft Losses
18 Casualty or theft loss(es)(attach Form 4684). (See page 23 of the instructions.)

Moving Expenses
19 Moving expenses (attach Form 3903 or 3903F). (See page 20 of the instructions.)

Miscellaneous Deductions
20 Unreimbursed employee business expenses (attach Form 2106)
21 Other miscellaneous (type and amount)
Subject to 2% AGI Limit
22 Add the amounts on lines 20 and 21. Enter the total
23 Multiply the amount on Form1040, line31, by 2%.02). Enter the result here
24 Subtract line 23 from line 22. Enter the result(but not less than zero).

Other Miscellaneous Deductions
25 Miscellaneous deductions not subject to 2% AGI limit (see page 24 of the instructions.) (type and amount)

Total Itemized Deductions
26 Add the amounts on lines 4, 8, 13, 17, 18, 19, 24, and 25. Enter the total here and on Form 1040, line 33a.

For Paperwork Reduction Act Notice, see Form 1040 instructions. — Schedule A (Form 1040) 1987

Form 2106 — Employee Business Expenses — OMB No. 1545-0139 Attachment Sequence No. 54 — 1987

Your Name — SSNo

Part I — Employee Business Expenses

Step 1 — Enter Your Expenses

		Column A (Other than Meals and Entertainment)	Column B (Meals and Entertainment)
1	Vehicle expense from Part II, line 19 or line 33	90.00	
2	Parking fees, tolls, and local transportation, including trains, buses, etc		
3	Travel expense while away from home, including lodging, airplane, car rental, etc. Do not include meals and entertainment		
4	Business expenses not included on lines 1 through 3. Do not include meals and entertainment.		
5	Meals and entertainment expenses. See instructions.		
6	Add lines 1 through 5 and enter the TOTAL EXPENSES here	90.00	

Note: If you were not reimbursed for any expenses in step 1, skip lines 7 through 13 and enter the amount from line 6 on line 14.

Step 2 — Figure Any Excess Reimbursements To Report in Income

7	Reimbursements for the expenses listed in step 1 that your employer did not report to you on Form W-2 or Form 1099		
	Note: If, in both columns, line 6 is more than line 7, skip lines 8 and 9 and go to line 10. You do not have excess reimbursements.		
8	Subtract line 6 from line 7. If zero or less, enter zero.	0 / N/A	N/A /
9	Add the amounts on line 8 of both columns and enter the total here. Also add this amount to any amount shown on Form 1040, line 7. This is an EXCESS REIMBURSEMENT reportable as income	0.00	

Step 3 — Figure Fully Deductible Reimbursed Expenses

10	Subtract line 7 from line 6. If zero or less, enter zero.	N/A	N/A
11	Reimbursements or allowances for the expenses in Step 1 that your employer identified to you, included on Form W-2 or Form 1099, and were not subject to withholding tax.		
	Note: The amount entered on line 11 should also have been reported as income on Form 1040.		
12	Enter any amount on line 10 or line 11	90.00	90.00
13	Add the amounts on line 12 of both columns. Enter here and on Form 1040, line 23. This is your FULLY DEDUCTIBLE REIMBURSED EXPENSES		90.00

Step 4 — Figure Expenses To Deduct as an Itemized Deduction on Schedule A (Form 1040)

14	Subtract line 12 from line 10.	N/A	90.00
	Note: If both columns of line 14 are zero, do not complete the rest of Part I.		
15	Enter 20%.20 of line 14, Column B.	N/A	
16	Subtract line 15 from line 14.	N/A	
17	Add the amounts on line 16 of both columns and enter the total here. Also enter the total on Schedule A(Form 1040), line 20. (Qualified Performing Artists and handicapped employees, see instructions.)		90.00

For Paperwork Reduction Act Notice, see Instructions. — Page 1 — Form 2106 (1987)

THE TIGERCUB NUTS & BOLTS DISKS

What are they? The Nuts & Bolts disks are collections of 100 or more suborograms in merge format, ready to merge into your own programs.

And what does that mean? Well, TI-99/4A Extended Basic allows the use of user-written subprograms. And what are subprograms? You know them well. CALL COLOR, CALL SOUND, CALL HCHAR - those are all subprograms which are built into the Basic language. You can write your own subprograms, to do anything that Extended Basic is capable of, and tack them onto the end of your program to be CALLed whenever you need them.

To put it in another way, using a subprogram is almost like running one program from another - except that you can access it much faster, you can pass along any values that you want to, and you can return to where you left the first program.

Also, with a disk drive you can save programs in MERGE format and then MERGE them into a program in memory. Providing that the line numbers are different, the program which you MERGE in will be added to the existing program.

The variables used in a subprogram are entirely separate from those used in the main program, therefore libraries of utility subprograms can be developed in MERGE format, and MERGEd into any program without conflict.

The Nuts & Bolts disks are libraries of such subprograms. The first disk contains 100 such subprograms, plus a tutorial on using them. Disk No.2 contains 108, and No.3 contains 140 of them in 114 files. Nothing like them has ever been offered by anyone else for the TI-99/4A computer.

These 348 subprograms have been consecutively line-numbered with high line numbers so that they will not overwrite your program line numbers, and so that any number of them may be MERGEd into a program without overwriting each other.

Advanced programming techniques have been used to make these routines as compact as possible, averaging hardly more than 3 sectors each, so that a hundred or more could be crammed onto a disk and so that they would add very little to the length of a program. If you are learning to program, you might learn a great deal by studying these subprograms.

Each disk is accompanied by several pages of printed documenation, explaining the use of each subprogram and giving a short demo routine which you can key in, run, and experiment with.

Many of these subprograms can be used by persons with almost no programming knowledge, to modify existing programs. For instance, a program written in Basic, which crashes with BAD VALUE when run in XBasic, will run with a simple CALL BXB, and CALL KILLQUIT will disable the infernal QUIT key. Many different screen character styles are available, as well as colorful wipes to replace CALL CLEAR.

However, it is the programmer who will find these disks truly invaluable. Even if you have the skill and ingenuity to develop these routines for yourself, wouldn't you rather just pay fifteen cents apiece for them?

The three Nuts & Bolts disks are available for $15 each, postpaid, from Tigercub Software, 156 Collingwood Ave., Columbus OH 43213.

TIPS FROM THE TIGERCUB

#46

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Columbus, OH 43213

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Over 130 original programs in Basic and Extended Basic, available on cassette or disk, NOW REDUCED TO JUST $1.00 EACH!, plus $1.50 per order for cassette or disk and PP&M. Minimum order of $10.00. Cassette programs will not be available after my present stock of blanks is exhausted. The Handy Dandy series, and Color Programming Tutor, are no longer available on cassette. Descriptive catalogs, while they last, $1.00 which is deductable from your first order.

Tigercub Full Disk Collections, reduced to $5 postpaid. Each of these contains either 5 or 6 of my regular catalog programs, and the remaining disk space has been filled with some of the best public domain programs of the same category. I am NOT selling public domain programs - they are a free bonus!

TIGERCUB'S BEST, PROGRAMMING TUTOR, PROGRAMMER'S UTILITIES, BRAIN GAMES, BRAIN TEASERS, BRAIN BUSTERS!, MANEUVERING GAMES, ACTION REFLEX AND CONCENTRATION, TWO-PLAYER GAMES, KID'S GAMES, MORE GAMES, WORD GAMES, ELEMENTARY MATH, MIDDLE/HIGH SCHOOL MATH, VOCABULARY AND READING, MUSICAL EDUCATION, KALEIDOSCOPES AND DISPLAYS

NUTS & BOLTS (No. 1), a full disk of 100 Extended Basic utility subprograms in merge format, ready to merge into your own programs. Plus the Tigercub Menuloader, a tutorial on using subprograms, and 5 pages of documentation with an example of the use of each subprogram. Reduced to $15.00 postpaid.

NUTS & BOLTS NO. 2, another full disk of 108 utility subprograms in merge format, all new and fully compatible with the last, and with 10 pages of documentation and examples. Also $15 postpaid.

```
$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$
$ NUTS & BOLTS #3 is now     $
$ ready, another full disk   $
$ of 140 new merge-format    $
$ utility subprograms, all   $
$ compatible with the pre-   $
$ vious. With 11 pages of    $
$ documentation, $15 ppd.    $
$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$
```

TIPS FROM THE TIGERCUB, a full disk containing the complete contents of this newsletter Nos. 1 through 14, 50 original programs and files, reduced to $10 ppd.

TIPS FROM THE TIGERCUB VOL. 2, another diskfull, complete contents of Nos. 15 through 24, over 60 files and programs, also just $10

TIPS FROM THE TIGERCUB VOL. 3, another 62 programs, tips and routines from Nos. 25 through 32, $10 postpaid.

TIPS FROM THE TIGERCUB VOL. 4, another 48 programs and files from issues 33 through 41, also $10 postpaid.

TIGERCUB CARE DISKS #1, #2 & #3, three full disks of text files, mostly of lessons on programming in XBasic, $5 per disk postpaid.

This one is explained in lines 180-190. I think that it will run on any Gemini printer.

```
100 DIM B(25,12),B$(25),CH$(
12),L$(12)
110 GOTO 150
120 S,K,T$,C$,V,J,A,CH$(),X,
X$,B$(),B(X,J),T,M,Q$,L$(),C
,C1$,C2$,L,M$
130 CALL CLEAR :: CALL COLOR
 :: CALL SCREEN :: CALL CHAR
 :: CALL KEY :: CALL NUMTH
140 !@P-
150 !SEGMENTED BAR GRAPH
     by Jim Peterson 10/87
160 CALL CLEAR :: FOR S=1 TO
 12 :: CALL COLOR(S,2,8):: N
EXT S :: CALL SCREEN(5):: DI
SPLAY AT(3,10):"TIGERCUB" ::
 DISPLAY AT(5,6):"SEGMENTED
BAR GRAPH"
170 CALL CHAR(95,"3C4299A1A1
9942")3C"):: DISPLAY AT(7,12):
"_ 1987" :: DISPLAY AT(9,2):
"For free distribution but n
o":"price or copying fee may
 be":"charged."
180 DISPLAY AT(14,2):" Will
output to a Gemini":"printer
 a horizontal bar-":"graph o
f up to 25 bars, each":"sega
mented into up to 12"
190 DISPLAY AT(18,1):",alues
, with a title for":"each an
d optionally with a":"table
 of identification of":"the s
egment symbols."
200 DISPLAY AT(24,8):"" :: D
ISPLAY AT(24,8):"PRESS ANY K
EY" :: CALL KEY(0,k,S):: IF
 S=0 THEN 200
210 ON WARNING NEXT
220 DISPLAY AT(12,1)ERASE AL
L:"GRAPH TITLE?" :: ACCEPT A
T(14,1):T$ :: T$=RPT$(" ",17
-LEN(T$)/2)&T$ :: D$=CHR$(27
)
230 DISPLAY AT(16,1):"HOW MA
NY SEGMENTS PER BAR?" :: ACC
EPT AT(16,27)VALIDATE(DIGIT)
SIZE(2):V :: IF V=0 OR V>12
THEN 230
240 !@P+
250 DATA 239,229,168,251,173
,175,184,236,169,250,160,207
260 !@P-
270 FOR J=1 TO V :: READ A :
: CH$(J)=CHR$(A):: NEXT J
280 DISPLAY AT(2,1)ERASE ALL
:"Type END when finished"
290 X=X+1 :: IF X>25 THEN 33
0
300 CALL NUMTH(X,X$):: DISPL
AY AT(12,1):"Title of "&X$&"
 bar?" :: ACCEPT AT(14,1):B$
(X):: IF B$(X)="END" OR B$(X
)="end" THEN 330
310 FOR J=1 TO V :: CALL NUM
TH(J,X$):: DISPLAY AT(16,1):
X$&" segment value?" :: ACCE
PT AT(18,1)VALIDATE(NUMERIC)
:B(X,J):: T=T+B(X,J):: NEXT
 J
320 M=MAX(M,T):: T=0 :: GOTO
 290
330 X=X-1 :: DISPLAY AT(20,1
):"Print labels? Y/N" :: ACC
EPT AT(20,19)VALIDATE("YN")S
IZE(1):Q$ :: IF Q$="N" THEN
350
340 FOR J=1 TO V :: CALL NUM
TH(J,X$):: DISPLAY AT(22,1):
X$&" label?" :: ACCEPT AT(24
,1):L$(J):: NEXT J
350 C=120/M :: C1$=C$&"B"&CH
R$(1)&C$&"G"&C$&"E" :: C2$=C
$&"B"&CHR$(2)
360 OPEN #1:"PIO",VARIABLE 2
55 :: PRINT #1:C$&"@" :: PRI
NT #1:C$&"E"&C$&"G"&C$&"M"&C
HR$(6)
370 PRINT #1:CHR$(14)&T$&CHR
$(20);"";RPT$(CHR$(229),70);
:: :: PRINT #1:C$&"J"&CHR$(1
0)
380 FOR J=1 TO X :: PRINT #1
:B$(J)&C2$ :: FOR L=1 TO V :
: M$=M$&RPT$(CH$(L),INT(B(J,
L)*C+.5)):: NEXT L
390 PRINT #1:RPT$(CHR$(232),
LEN(M$)):: PRINT #1:M$ :: PR
INT #1:M$ :: PRINT #1:RPT$(C
HR$(231),LEN(M$))
400 M$="" :: PRINT #1:C1$;::
 NEXT J :: IF Q$="N" THEN ST
OP
410 PRINT #1:"":""
420 FOR J=1 TO V :: PRINT #1
:C2$&RPT$(CHR$(232),10):: PR
INT #1:RPT$(CH$(J),10)&C1$&"
    "&L$(J):: PRINT #1:C2$&
RPT$(CH$(J),10):: PRINT #1:R
PT$(CHR$(231),10):: NEXT J
430 !@P+
440 SUB NUMTH(N,N$):: IF FLA
G=1 THEN 520 :: FLAG=1 :: RE
STORE 460
450 GOTO 480
```

```
460 J,ONE$(),TEEN$(),TEN$(),
Y,N$
470 !@P-
480 DATA first,second,third,
fourth,fifth,sixth,seventh,e
ighth,ninth,tenth
490 DATA eleventh,twelfth,th
irteenth,fourteenth,fifteent
h,sixteenth,seventeenth,eigh
teenth,nineteenth
500 DATA twenty,THIRTY,FORTY
,FIFTY,SIXTY,SEVENTY,EIGHTY,
NINETY
510 FOR J=1 TO 10 :: READ ON
E$(J):: NEXT J :: FOR J=1 TO
 9 :: READ TEEN$(J):: NEXT J
 :: FOR J=2 TO 9 :: READ TEN
$(J):: NEXT J
520 IF N<11 THEN N$=ONE$(N):
: SUBEXIT
530 IF N<20 THEN N$=TEEN$(N-
10):: SUBEXIT
540 IF N/10=INT(N/10)THEN N$
=SEG$(TEN$(N/10),1,LEN(TEN$(
N/10))-1)&"ieth" :: SUBEXIT
550 N$=TEN$(INT(N/10))&"-"&O
NE$((N/10-INT(N/10))*10)
560 !@P+
570 SUBEND
```

And a little something educational -

```
100 DIM M$(100)
110 GOTO 150
120 S,J,M$(),A$,Z$,K,W$(),X,
Y,ADV$,A,Q$
130 CALL CLEAR :: CALL COLOR
 :: CALL SCREEN :: CALL CHAR
 :: CALL KEY :: CALL ADVERB
:: CALL SOUND
140 !@P-
150 CALL CLEAR :: FOR S=0 TO
 12 :: CALL COLOR(S,2,8):: N
EXT S :: CALL SCREEN(5):: DI
SPLAY AT(3,2):"ADJECTIVE TO
ADVERB  V.1.3"
160 CALL CHAR(64,"3C4299A1A1
99423C"):: DISPLAY AT(5,6):"
@ Tigercub Software":::" For
 free distribution with  no
 charge or copying fee."
170 FOR J=1 TO 100 :: READ M
$(J):: A$=A$&CHR$(J):: NEXT
J :: Z$=A$ :: CALL KEY(3,K,S
)
180 W$(1)=" If adjective end
s in Y,     change the Y to
ILY." :: W$(2)=" If adjectiv
e ends in C,     add ALLY."
190 W$(3)=" If adjective end
s in LL,    just add Y."
200 W$(4)=" If adjective end
s in LE,    preceded by a con
sonant,     drop the E and ad
d Y."
210 W$(5)=" If the word ends
 in E       preceded by a con
sonant,     preceded by a vow
el, just    add LY."
220 W$(6)=" This word is an
exception  to the rule - the
 adverb is WHOLLY."
230 W$(7)=" If the adjective
 does not  end in C,E,LL or
Y, always  just add LY."
240 W$(8)=" This is an excep
tion to the rule. The prefer
red adverb  form is DRYLY."
250 W$(9)=" If the adjective
 ends in E  preceded by a vo
wel, drop   the E and add LY
."
260 W$(10)=" If the adjectiv
e ends in E preceded by a co
nsonant     other than L, ad
d LY."
270 RANDOMIZE :: X=INT(RND*L
EN(Z$)+1):: Y=ASC(SEG$(Z$,X,
1)):: Z$=SEG$(Z$,1,X-1)&SEG$
(Z$,X+1,255):: IF LEN(Z$)=0
THEN Z$=A$
280 ACCEPT AT(24,1):M$(Y)
290 CALL ADVERB(M$(Y),ADV$,A
)
300 DISPLAY AT(12,1):" Type
the adverb form of -" :: DIS
PLAY AT(15,1):M$(Y):: DISPLA
Y AT(18,10):"" :: ACCEPT AT(
15,15)BEEP:Q$
310 IF Q$=ADV$ THEN DISPLAY
AT(18,10):"CORRECT!" :: GOTO
 240
320 CALL SOUND(100,110,5,-4,
5):: DISPLAY AT(20,1):W$(A):
"":"" :: GOTO 300
330 !@P+
340 DATA DUE,COOL,SOLE,STOIC
,FRANTIC,COMIC,ABLE,FULL,POO
R,HANDY,SORE,SOCIAL,PENAL,SL
ON,HIGH,LOW
350 !@P-
360 DATA FRISKY,PLAYFUL,HEAL
THY,ROUGH,BUSY,SILLY,SICK,SM
ART,SORE,FAIR,ANGRY,BARE,TIR
ED,WISHFUL,ACTUAL
370 DATA HASTY,LONE,HECTIC,O
FFICIAL,MAGIC,MAGICAL,MATHEM
ATIC,LOGIC,TRAGIC,PATHETIC,T
RAUMATIC
380 DATA DRAMATIC,AUTOMATIC,
AROMATIC,EQUAL,SERIAL,BASIC,
USUAL,FAVORABLE,UNSTABLE,LEG
IBLE
390 DATA HECTIC,LIVE,WARY,VI
SIBLE,TERRIBLE,HORRIBLE,VIVI
D,FANCY,EASY,VILE,WICKED,BLO
ODY,SHODDY
400 DATA NOBLE,HAPPY,LEGAL,M
ERRY,JOLLY,CRAZY,CASUAL,CARE
FUL,FOOLISH,FAMOUS,GAY,GUILT
Y
410 DATA HOPEFUL,HATEFUL,TIM
ID,BRAVE,BEAUTIFUL,DRY,NICE,
LARGE,PAINFUL,SINFUL,SORROWF
UL,SIMPLE,WILLFUL
420 DATA MENTAL,MORAL,PALE,W
HOLE,HUNGRY,FINAL,FORMAL,TRU
E,AMPLE,DOUBLE
430 !@P+
440 SUB ADVERB(M$,ADV$,A)::
L=LEN(M$):: E$=SEG$(M$,L,1):
: F$=SEG$(M$,L-1,2):: G$=SEG
$(M$,L-1,1):: P$=SEG$(M$,1,L
-1):: H$=SEG$(M$,L-2,1)
450 IF ASC(SEG$(M$,1,1))<97
THEN A$="ALLY" :: I$="ILY" :
: L$="LY" :: Y$="Y" :: V$="A
EIOU" ELSE A$="ally" :: I$="
ily" :: L$="ly" :: Y$="y" ::
460 IF M$="WHOLE" THEN ADV$=
"WHOLLY" :: A=6 :: SUBEXIT
470 IF M$="DRY" THEN ADV$="D
RYLY" :: A=8 :: SUBEXIT ELSE
 IF F$="LL" OR F$="ll" THEN
ADV$=M$&Y$ :: A=3 :: SUBEXIT
480 IF E$="C" OR E$="c" THEN
 ADV$=M$&A$ :: A=2 :: SUBEXI
T ELSE IF E$="Y" OR E$="y" T
HEN ADV$=P$&I$ :: A=1 :: SUB
EXIT
490 IF E$<>"E" AND E$<>"e" T
HEN 530
500 IF G$="L" OR G$="l" THEN
 IF POS(V$,H$,1)<>0 THEN ADV
$=M$&L$ :: A=5 :: SUBEXIT EL
SE ADV$=P$&Y$ :: A=4 :: SUBE
XIT
510 IF POS(V$,G$,1)<>0 THEN
ADV$=P$&L$ :: A=9 :: SUBEXIT
520 IF POS(V$,SEG$(M$,L-2,1)
,1)=0 THEN ADV$=M$&L$ :: A=1
0 :: SUBEXIT ELSE ADV$=M$&L$
 :: A=5 :: SUBEXIT
530 ADV$=M$&L$ :: A=7 :: SUB
END
```

```
100 !MOCKINGBIRD TINYGRAM by
    Jim Peterson. Tap  your
    tune on the 1 to 0 keys
    (tuned A through C)
110 !Then press any other
    key to hear it repeated
120 DATA 220,247,262,294,330
,349,392,440,494,523
130 FOR J=1 TO 10 :: READ N(
J):: NEXT J :: J=0 :: DIM T(
50,2)
140 CALL KEY(5,K,S):: IF S=0
 THEN 140
150 ON ERROR 190
160 CALL KEY(5,K,S):: IF K=-
1 THEN 160 :: K=K-(K=48)*10
:: T(J,1)=N(K-48):: CALL SOU
ND(-999,T(J,1),0)
170 IF K=K2 THEN T(J,2)=T(J,
2)+1 :: GOTO 180
180 K2=K :: J=J+1 :: GOTO 16
0
190 FOR X=0 TO J-1 :: CALL S
OUND(T(X,2)*1)*400,T(X,1),0
,T(X,1)*1.01,0):: NEXT X ::
J=0 :: GOTO 140
```

A little subprogram to add a bit of variety to your "PRESS ANY KEY" routine.

```
1 CALL CLEAR :: CALL FRESSKE
Y(24)
30000 SUB FRESSKEY(R)
30001 C=C+1 :: IF C=16 THEN
30002 :: DISPLAY AT(R,1):""
:: DISPLAY AT(R,C):"PRESS AN
Y KEY" :: DISPLAY AT(R,C):"p
ress any key" :: CALL KEY(0,
K,S):: IF S=0 THEN 30001 ELS
E 30003
30002 C=C-1 :: IF C=0 THEN 3
0001 :: DISPLAY AT(R,1):"" :
: DISPLAY AT(R,C):"PRESS ANY
 KEY" :: DISPLAY AT(R,C):"pr
ess any key" :: CALL KEY(0,K
,S):: IF S=0 THEN 30002
30003 DISPLAY AT(R,1):"" ::
SUBEND
```

And a new way to wipe the screen -

```
1 CALL CORNERWIPE(30)
29000 SUB CORNERWIPE(CH):: F
OR T=1 TO 24 :: CALL HCHAR(T
,3,CH,T*4):: CALL HCHAR(25-T
,32-T,CH,T):: NEXT T :: CALL
 CLEAR :: SUBEND
```

```
 MEMORY FULL
```

Jim Peterson

Mechatronic TI-Mouse -- A Review

I recently recieved a Mechatronics TI-Mouse for my system. Let me ya', it is very slick to use and easy to interface with other programs. It was an easy decision, to make a Texas Instruments computer more user friendly.

When you recieve the TI-Mouse in the mail, you get: a mouse, an AC adapter to power the PC board inside the mouse, a 20 page user manual, and a disk with some demo programs. The disk consits of 4 main programs and they are:

1. BASIC - This allows you to run Basic programs.

2. TI-DOS - This allows you to have full disk access, cataloging 1 to 3 drives, reading DISPLAY type files, protecting/unprotecting files, loading Extended Basic programs.

3. CALCULATOR - This program uses an icon finger to push the buttons on the face of a calculator.

4. BREAKOUT - The game of Breakout is availible on every machine ever invented that could play a game of some sort. The mouse adds a new dimension to the game.

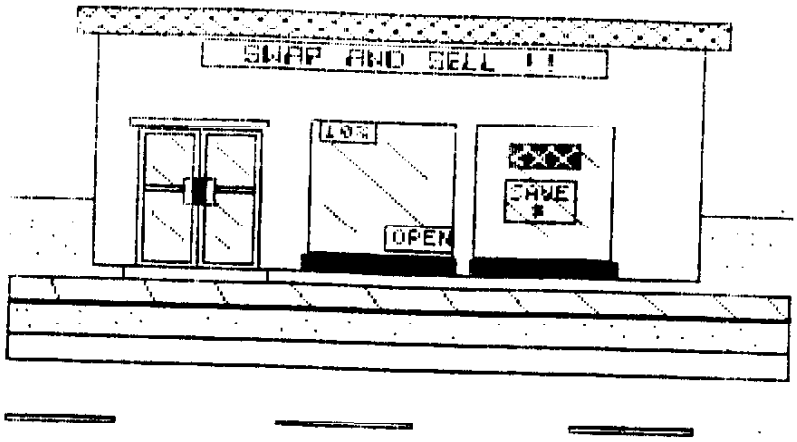
The manual notes that the disk that is supplied with the mouse is only a demo program, and there is a more complete TI-Dos package availible thru Mechtronics.

I recently got my hands on the latest version of TI-Artist. On the TI-Dos demo there is a file on the disk called MAUS, this file allows you to interface the Mechatronic mouse with TI-Artist. So, I loaded TI-Artist and loaded MAUS thru option 3, INPUT DEVICE, and then loaded TI-Artist. When TI-Artist came to the screen the action from the mouse was flawless and a beauty to work with.

I rate the Mechatronics TI-Mouse an A+ for design, layout, and ease of use. My mouse cost $130.00 but, you can find it cheaper thru some mail order companies.

If you are looking for a rather inexpensive and quite useful piece of equipment for your TI, why not give this a try.

Steve Eggers



WANTED: TI COLOR MONITOR in good shape.....
Call Sam Burton 352-4778 after 6 PM

FOR SALE: Complete TI system.....$1700.00
Contact Fred Dennis for details!!

Wanted :Your sellable TI items....call Sam Burton

FOR SALE: Various Cartridge Games ($5-10)
2 Modems 300 baude rate
TI-Writer in Original unopened package
Multiplan " " " "

PE-BOX (32K,disk controller,ss Shugart drive,RS 232 flex cable, all cards original TI equipment)
$320.00

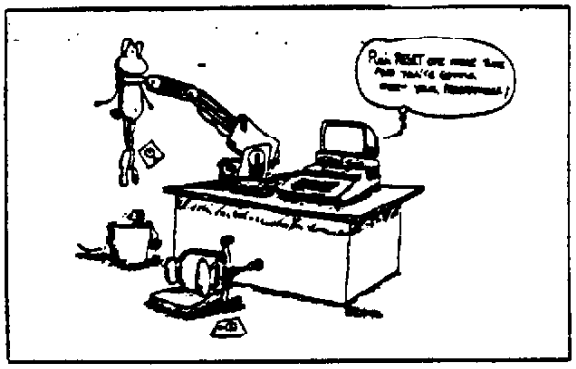
32k memory expansion card (TI original) $90.00
RS 232 card (TI original) $80.00

TI tape recorder with cables $45.00
Call Sam Burton

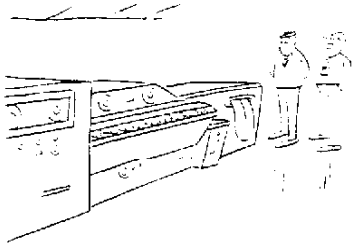
FOR SALE: Mechatronics Mouse for your TI system.. works with TI-Artist. Call Steven Eggers $150.00

NOTICE: The Swap and Sell section of this newsletter is provided for your computer needs. Should you have an item to sell or swap let the editor put your ads here at NO CHARGE.

COMPUTER HUMOR .....



"Push RESET one more time and your going to meet your programmer!!"



"The entire package mailing job is done by computer here – including sealing the envelope."

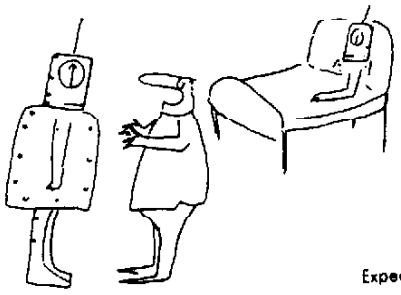
Personal Selling Power—*January/February 1988*

"Can it remember anniversaries?"

"These educational packages sure have learned me a lot, Dad!"

MSP 99 NEWSLETTER

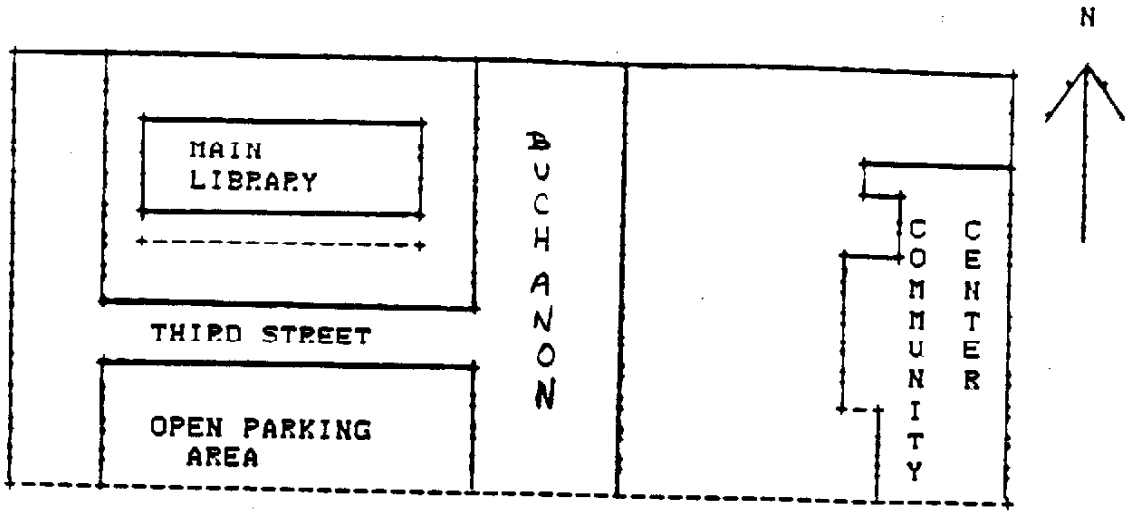
DECEMBER 1987



I realize it's a name to be proud of. But you can't call the baby IBM— it's copyrighted.

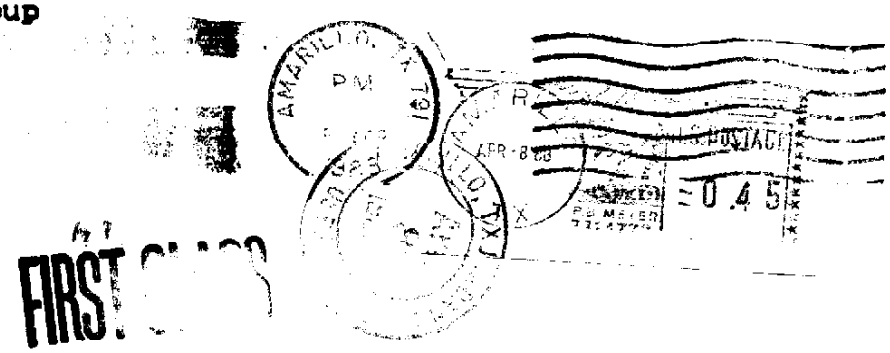
Expecting

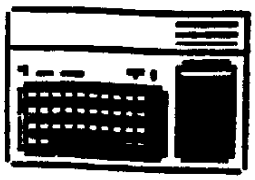
AUG MEETING LOCATION MAP



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
P.O. Box 8421
Amarillo, TX. 79114





TO

UG DALLAS TIUG %JOHN HODGES
P.O. BOX 29863
DALLAS, TX 75229