

HUG

HOUSTON USERS' GROUP
[OF THE TI-99 4A & COMPATIBLES]

AUGUST
1987

MEETING SCHEDULE

FIRST SUNDAY OF EVERY MONTH
(2nd Sunday if 1st Sunday
is on a holiday weekend)

HUG TIBBS - (713) 475-8909
24-hour BULLETIN BOARD

AT THE NEXT MEETING

SUNDAY, AUGUST 9, 1987 2:00 P.M.

St John's School - 2401 Claremont

The August meeting will feature a presentation of the X-10 Security Controller system by Wayne Jobe. This system allows for the automatic control of lights and appliances in the home. This is an excellent home security device and even better when controlled by your TI.

IN THIS ISSUE

Editors SoaPEBox
HUG Classifieds
RLE Digitizer

Best of HUG-TIBBS
HUG Library Addendum
99 FORTRAN - Review

1987 HUG OFFICERS

President --- LARRY PIPKIN... 499-9991
VP/Membership BOB MCCARTHY... 955-7939
VP/Program -- BOB FLOYD 455-1467
VP/S.I.G. --- EWELL BRIGHAM . 422-8616
Exec. Asst. - TOM JAY 850-0222

Secretary - TERRY LefEBVRE 660-8776
Treasurer - RUTH HERMAN .. 271-4171
Librarian - LARRY PIPKIN . 499-9991
TIBBS/SysOp BILL KNECHT .. 473-5713
Editor -- KIM PETERSON . 498-3047

THIS NEWSLETTER IS PUBLISHED MONTHLY BY THE HOUSTON USERS' GROUP. ANY OPINIONS OR ENDORSEMENTS ARE THOSE OF THE AUTHOR, AND MAY NOT NECESSARILY REFLECT THE OFFICIAL OPINION OF 'HUG'. PERMISSION TO REPRINT GRANTED TO OTHER USER GROUPS. SUBSCRIPTION IS FREE WITH MEMBERSHIP.

Take note the HUG group was "infamous-for-a-day" during late July (er, I mean notorious - hmmm that's not right either). Anyway, HUG was included in a feature article on a few Houston computer user groups in the Lifestyle Section of the July 28th Houston Chronicle (Sec. 6 pp 1+2). Realistically, the IBM and Apple groups with local memberships of 6,500 and 1,250 respectively, got the lions-share of the coverage, but the stalwart TI group (HUG) along with Atari and a multi-machine group (CAFE), received a well deserved tip-o-the-hat. Hopefully, with good write-ups like this the word will get around to all those closet TI computer owners that there are active users around with a viable user group for support.

In light of the Houston Chronicle's good word, how about some good words of our own. There's a lot of HUG'gers out there that pass by those archaic "cork & pin" bulletin boards locating in schools, grocery and hardware stores, auto-parts shops and the like. An it seems like we ought to be able to stick up at least one graphic/text advertisement informing the closet TI owners of HUG's existence. Therefore, how 'bout opening up some competition for the "BEST HUG ADVERTISEMENT". Say the top three get a prize, with the winner being printed up and distributed throughout town. The prizes you ask? Well were not "The Ewings of Dallas", but I figure we can come up with something well worth your while. Deadline you ask? How 'bout the September monthly meeting (9/13) to give you some time to sharpen your crayons and pick up a another BIG CHIEF tablet Give it a try, in addition to gaining a few more friends, you may get a freebie to boot!

BEST OF HUG-TIBBS

You've probably heard many of the HUG'gers harp on how usefull the user group bulletin board HUG-TIBBS is more times you can probably stand. Well, the truth is that the basis for all of the harping is well-founded. The board provides an extremely useful place for the exchange of valuable info on our machines - the TI-99/4A in addition to a good place to chat with friends. Starting with this issue I'm setting up a special section in the newsletter for particularly good info gained monthly that I think will be of use to ALL.

Now for those of you who don't have the equipment to access the board, it really doesn't cost an arm and a leg. All one needs is a MODEM (I've seen a couple of used 300 baud models for sale at the meeting for \$25 recently), COMMUNICATION SOFTWARE (the TI "TE-II" - Terminal Emulator/Speech cartridge, which you might have hidden away, I've also seen on sale at the meeting for \$8 - which isn't bad for a start) and an RS-232 PORT (if you've got a PEB and a printer, you most likely already have one of these, if not a used one can probably be had for \$75 if you can drive a hard bargain).

Now I know that for someone just starting up all this ain't just peanuts, but it really is a valuable asset for you system. Some might say the MOST valuable asset, but then again you know what they say about some people..... Kidding aside, communicating with the boards, and especially with HUG-TIBBS and The Phoenix, REALLY is asset to your system. It is also an inexpensive means of extending the use and life of your equipment as may noted by a couple of the boards messages, reprinted below:

Re GROM PORT REPLACEMENT

To ALL

By John Guion (Lubbock/Dallas)

To get a new GROM port, call TI Parts Department in Lubbock - (806)741-2265. Ask for a GROM Port Adapter for the 99/4A. Price is somewhere under \$7.00. To change the port, just unscrew the 7 screws in the bottom of the console, remove the 2 that hold the power supply and remove it, then take out the 3 that hold in main board. Remove the main board from the case, making sure you unplug the keyboard so as not to damage that connector. The GROM port is plugged into the top of the main board. Just pull it out and put in the new one. Put it back together, making sure you reconnect the keyboard plug and power supply. That's all there is to it - all screws and plugs.

Re WIDGET PROBLEMS

To ALL

By John Guion (Lubbock/Dallas)

If you use a Widget, a friend of mine found that by placing four small self-Adhesive "bumpers" on the console around the "foot" that protrudes from the bottom of the Widget, you can prevent many problems caused by jarring the unit while in use. Any small self-stick bumpers or rubber feet should work just fine. A strip of foam tape would also hold it well.

99 FORTRAN from LGMA Products
A Review of First Impressions
by Ralph Landrum, HUG member

I recently bought the LGMA 99 FORTRAN package that is advertised in the new TENEX catalog. So far I've studied the manual and compiled and linked the example programs that come with the package. It is well planned for the user. The manual is well written. It will be clear to anyone the least bit familiar with FORTRAN at any level. It is clearly meant for people who use the TI-99 in XBASIC, but who want compiled versions of their programs. Assembly language programmers can also use internal TI-99 subroutines and their own assembled code within the structure.

WHY FORTRAN?

FORTRAN has a conversational syntax like BASIC, and is therefore easier to use for me than A/L or C. In fact, the LGMA package is actually a combination of BASIC and FORTRAN II, being a subset of FORTRAN 77, rather than FORTRAN IV as advertised. I am familiar with (though not a trained programmer in) several forms of BASIC, FORTRAN II and IV. - FORTRAN uses true subroutines, which I need in what I want to do with a computer. XBASIC uses true subroutines also. - FORTRAN is a compileable language. I want to be able to compile to machine language for speed. BASIC is compileable in some versions (for example IBM PC), but no one has brought out a good compiler, using true subroutines, for the TI-99.

So, FORTRAN could let me have a more familiar language, using true subroutines, but compiled for operating speed.

THE LGMA 99 FORTRAN

LGMA Products, Box 210, RD4, Apple-Butter Hill Road, Coopersburg, PA., 18036, is a company unknown to me. Alan L. Beard signs letters for them. Their 99 FORTRAN package was advertised in the latest TENEX catalog for \$49.95. The package comprises two disks of Ver. 2.1.3, and an excellent manual. Minimum system requirements are 32K of memory, one SSSD disk drive and either E/A, TIW, XBASIC or MM.

One disk has the boot (in E/A, M/M, BASIC or TIW); the Full-screen Editor, Optimized Compiler, Linker, Debug and example programs. The second disk has an excellent object module library with 78 functions and subroutines, including math functions both single and double precision), and all the graphics and sound functions of TI BASIC. Included are: CHAR, CHARPA, COLOR, DELAY, DELSPRITE, FILES, GCHAR, HCHAR, JOYST, KEY, MAGNI, MOTION, POSITI, SCREEN, SET32, SOUND, VCHAR and WAIT.

I found the manual to be VERY well written and organized. It explains things very simply for average programmers like me, but it also goes into detail for those excellent systems programmers who will want to use internal subroutines of the TI-99 ROMS, or want to add their own assembled routines to the library. Of course, you can write FORTRAN functions and subroutines, compile them, and add them to the library. Whoever did the manual must be an expert programmer AND user.

Remember that this FORTRAN is a SUBSET of FORTRAN 77, with a few extra features. For example, it does not support the ENTRY statement of FORTRAN 77, but does support the DOWHILE statement from PASCAL -- NOT FORTRAN 77. It is a subset in other ways, of course, being shoehorned in a small computer. Its program limit is 2 segments of 8K each. Integer constants take 2 Bytes as do logical constants. Single-precision constants occupy 4 Bytes, while Double-precision ones occupy 8 Bytes. The author includes a section of the manual explaining various tricks of the system to save space.

IS THE PROGRAM WORTH THE MONEY?

If you are comparing the too cheap cost of the programs from Clint Pulley, and the FREE and from the hear contributions of Warran Agee, Ron Albright, and many others who gave and taught us our c99 language, then you will look at \$50 as a lot. However, because of the quality of work, completeness and comparison with the cost of other commercial programs, I find it reasonable.

I have not tried to program and run benchmarks against other programs, nor have I yet tested the optimizer by comparing routines like double-nested DO LDOPS compiled from source and written in assembler, but my elation in finding the system to be 77 instead of IV, the first programs I've compiled, the obvious effort of the author to make the system comparable to the XBASIC system we know with graphics and sound, and the excellent manual make me vote overwhelmingly YES, the program is more than I expected, and worth the money.

In the little time I've had to exercise the program, I find only two things I hope can be improved in the future. One is to have a scale on the screen to tell me where I am on the eighty-column line. The second is to allow the LINKER program to automatically scan through more than one library disk just as it automatically iterates to let you load more than one OBJECT file. Those are not big objections... they could just be made more convenient.

HUG LIBRARY CATALOG ADDENDUM
July 1987

- 1133 FONTASTIC**
This is a letterset design system by Mike Stanfill. Create your own font designs and character codes. 40 sectors
- 1134 99-ANIMATOR**
A "Fairware" program by Mike McCann. This program allows you to draw pictures and then animate them. A \$10.00 donation is requested. 225 sectors
- 3121 MATRIX**
This program by Tony Johnson allows you to find the determinant, inverse, and solution sets to a matrix using Gauss-Jordan method. 24 sectors
- 3122 MISCELLANEOUS CALCULATIONS**
This program by Tony Johnson contains 4 subprograms that include determinants of a 3 X 3 matrix, quadratic equations, synthetic division and zero by bisection math. 23 sectors
- 3123 RULE OF 78'S**
This program by Tony Johnson is also called the "Sum of the monthly balance method". It will allow you to figure the amount of money to be paid if a contract is paid off early. 23 sectors
- 3124 TV FREQUENCY**
This program by Tony Johnson will allow you to find what frequency your TV broadcasts are on, including range, pix carrier, color, sound, etc. 9 sectors
- 3125 X-SISTOR**
This program by Tony Johnson determines resistor values around a single transistor central circuit. 14 sectors
- 4297 PERIPHERAL EXERCISER**
This program was designed to exercise the CPU I/O selection scheme to locate intermittent failures of a peripheral device to turn itself OFF and ON when it should. 80 sectors
- 4298 TOKENS** DV/80 Printer required
This program produces a printout of the various tokens used by the 99 4/A. Written by Richard Luackin. 51 sectors
- 4299 TI 99 4/A "BASICS"** DV/80 Printer required
This is a text file on program and memory operation for the 99 4/A. Submitted by Richard Luackin. 99 sectors
- 5268 ANTHEM**
An excellent rendition of our National Anthem written by Bill Knecht. This program has excellent music and graphics. 17 sectors
- 4294 C99 OPTIMIZER** EA/5
Version 3 of C99 optimizer by Tom Wible. Produces 10% smaller code than previous ones. 130 sectors
- 4295 GENEVE TECHNICAL REFERENCE MANUAL** TI-Writer Printer reqd
This is a reference manual for the Myarc 9640. Prints out a 20 page manual. 113 sectors
- 4296 ROS** HORIZON RAM DISK
Version 6.3 of ram disk menu utility for Horizon Ram Disk. 208 sectors

I've the past I've mentioned about some of the good stuff that HUG gets through the exchange of newsletters. This section will also become a regular part of the newsletter. The following is a small example of some of that info:

THE ALL-NEW, SUPER-DUPER, HANDY-DANDY, 98 CENT, DO-IT-YOURSELF, WAXPAPER

R. L. E. DIGITIZER!

BY: RAY KAZMER, SFV 99ers

When I saw my first R.L.E., I thought, "GOLLLLL-LEEEE! I'd SHORE like to draw ME a pit-chur like THAT!!" Then I found out that it takes something called a "digitizer" to make an R.L.E. and THOSE things could cost a LOT more than my '66 Chevy (fer-shirrrrr!) Since my TI-ARTISTIC talents were FAR from perfect, I decided I'd try to make a CHEAP digitizer, one which required very little talent to use, but would yield a fairly good R.L.E.

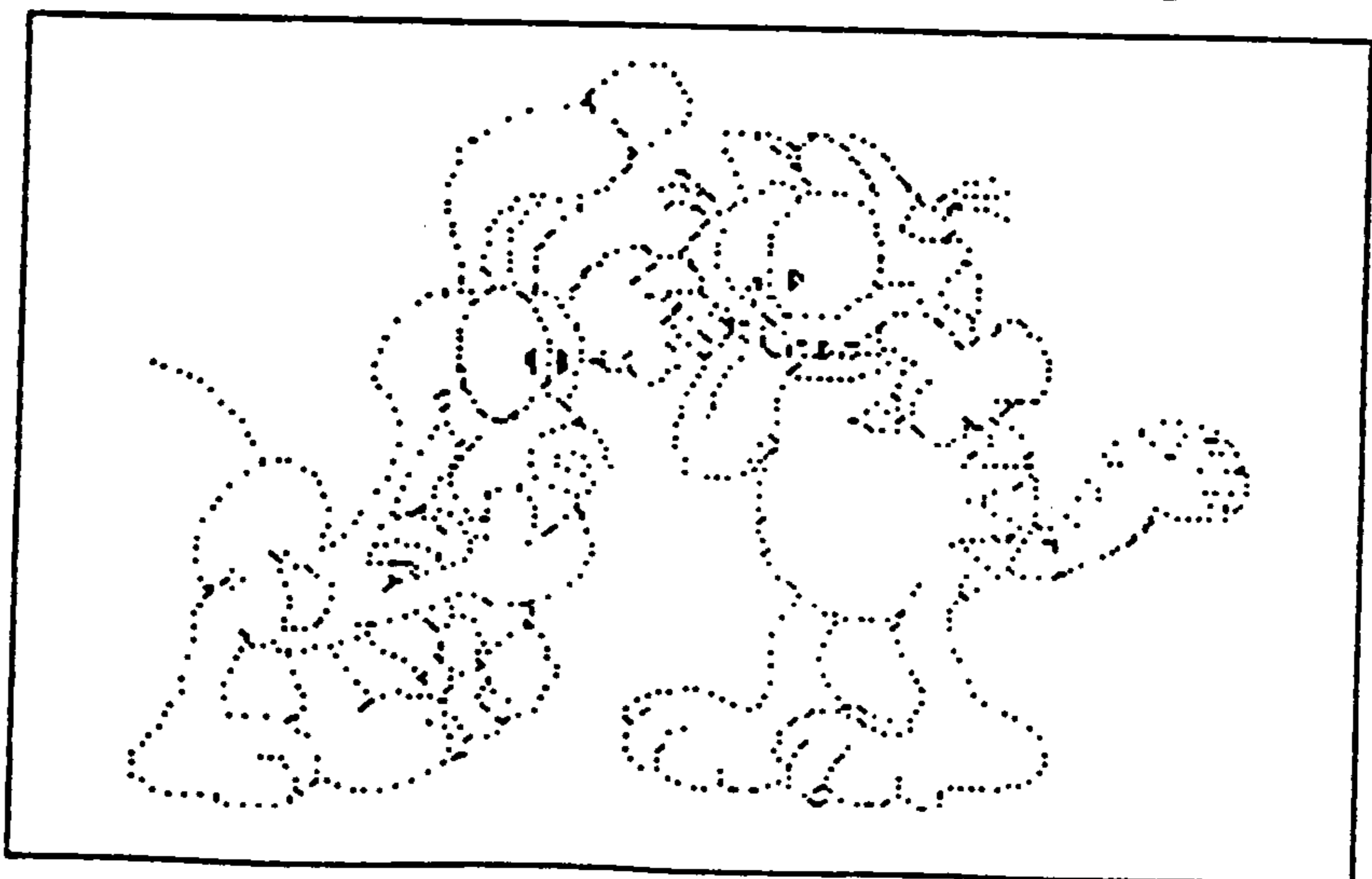
"Tracing" a picture, then sticking the paper to my TV screen, so I could move TI-ARTIST's cursor under it (drawing as I went) seemed a good idea, but regular tissue paper wouldn't let me see my cursor CLEARLY enough! I tried "plastic wrap," which certainly DID allow me to see the cursor but wouldn't hold ANY kind of ink! Besides, one touch and it was all SMUDGE, SMUDGE! And you know how it LOVES to "cling to itself!" Mur-der!

While shopping, I spotted a roll of WAXPAPER (98 cents for 100 feet) AND a (9"X12") cardboard folder (with "pockets" inside) used by school kids. Though the folder was way too big for my TV screen, the drawings of ODIE and GARFIELD on the cover (my favorites!) seemed to be just about right!

At home, I taped a hunk of waxpaper onto the folder, then QUICKLY traced over every line, "etching" the image into the waxpaper with a mechanical pencil (with the lead retracted.) THAT WAS A MISTAKE!!! If you decide to try my "digitizer" yourself, trace with GREAT CARE! Make your tracing as ACCURATE as possible! Care NOW, will save you LOADS of "correcting time" later, when you are completing your "on-screen" master-piece! Be SURE to hit ALL lines, BEFORE you remove the waxpaper copy from your "original."

Next, load TI-ARTIST and put a "frame" around the drawing screen, which helps to align the copy vertically, and can be erased later. Be SURE the copy lies WITHIN this frame, THEN tape it to your screen.

THIS PART IS MOST IMPORTANT! Find a comfortable position, "head-on" to the screen, and begin to "outline" the copy, by placing "DOTS" BEHIND the waxpaper lines. (See sample) DO NOT shift your head sideways! That causes DISTORTION and is HARD to repair later!



(more)

AGAIN, the same words of CAUTION apply when placing the dots as when you were making your WAXPAPER tracing, which is: TAKE YOUR TIME! Do NOT rush to finish it fast! CAREFULLY place each dot, as CLOSE to the "center" of each line, as possible! Although this will SEEM like a long, TEDIOUS job to you (and it IS) try to think of it as "building a strong foundation."

There is NO WAY you can follow a "traced" line by just pushing your joystick and mashing the fire-button! You'll see the cursor "weave all over the road" like a drunk driver! Before trying to make your first WAXPAPER R.L.E., plan to spend several hours with it. Be patient! Persevere! Your determination and care WILL be rewarded with a real work of art! (AMEN!)

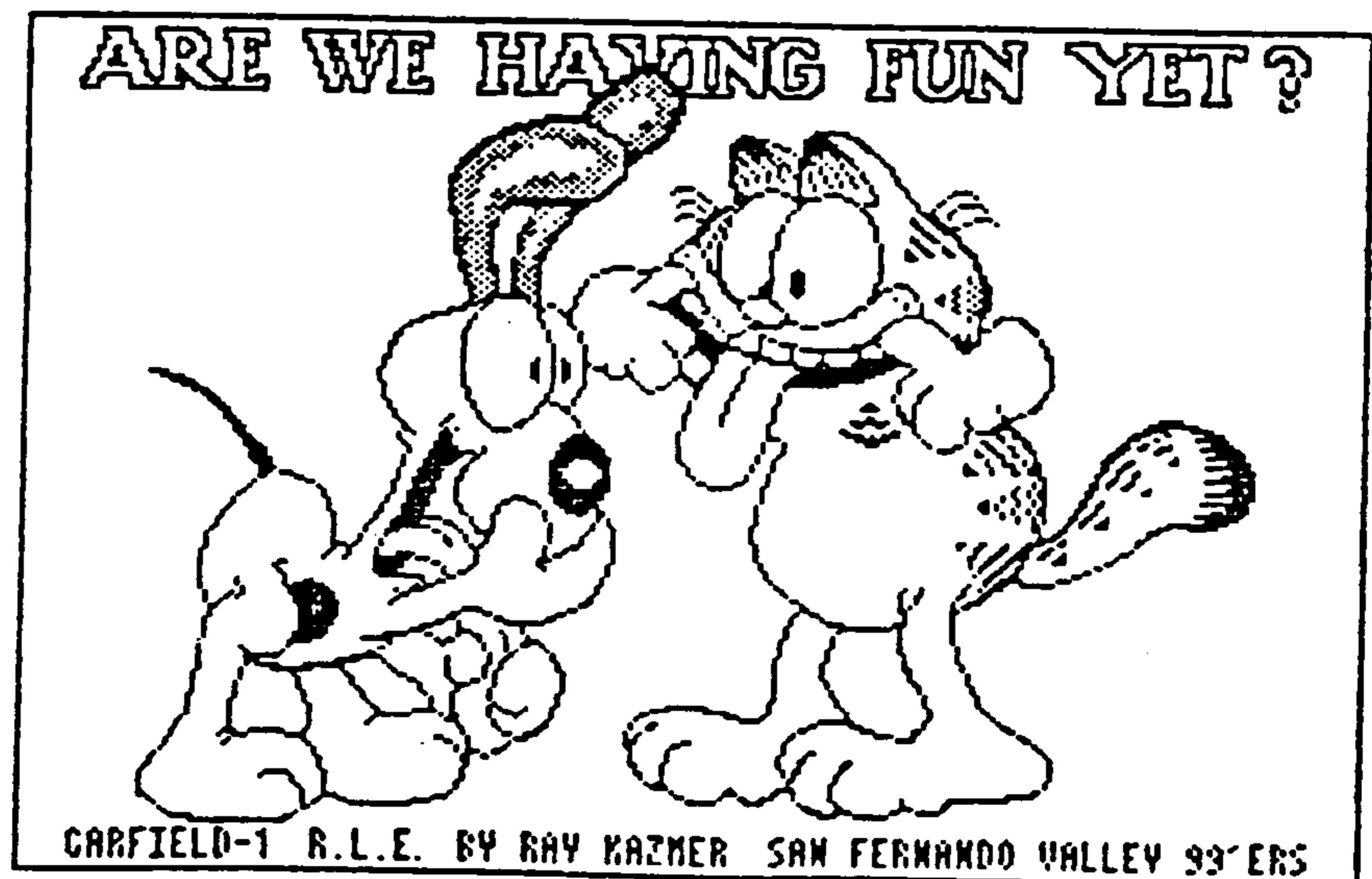
It gets easier now as you play "connect the dots." You may find the ZOOM feature a real help with this. Another tip: SAVE the picture frequently! If you make a major boo-boo, you won't lose a TOO much time and sweat by simply reloading the SAVED picture, rather than struggling to repair it.

The FINAL STEP is to give your picture a good "polishing," OR what I had referred to earlier as "correcting time." If you took the time to do all the first steps PROPERLY and your picture is now "connected" simply view "THE BIG PICTURE" and all the "rough spots" will LEAP RIGHT OUT at you!! Adding or erasing a single pixel here and there, is all that remains. It sounds simple, doesn't it? (THIS is the HARDEST part!) After you've done all the "correcting" you THINK you can find, SAVE it, then store it away someplace (for a week or two) THEN reload it and compare your picture to the original. If you can't find ANYTHING else wrong with it, it is DONE! (Use MAX-RLE to convert your TI-ARTIST "PICTURE_P" file into a MAX-RLE.)

Some last tips: DON'T strive for ABSOLUTE PERFECTION! That's IMPOSSIBLE! (Garfield's "stripes" nearly ran me up a wall!!) BUT, by the same token, if you've waited those two weeks and you spot another "flaw," DO attempt fixing it! IF (due to limitations inherent in our consoles or TI-ARTIST, OR due to approaching blindness) you CAN'T fix it (after trying for five or six years) make up some "logical sounding" excuse, when you debut the master-piece. If you make it "high-tech" enough, ANYBODY will buy it! MY winning line is: "Well, NOBODY can draw a PERFECT, curved zig-zag line!"

So, here it is! My COMPLETED work of art! It's NOT a 100% PERFECT copy of the original but what can you expect from a console with an overloaded framistan in it's quadilop?!

There are TONS of "copiable" pictures, for your "WAXPAPER R.L.E. DIGITIZER!" (Coloring books for children, atlases, magazines, calanders, etc.,) and if any 99'ERS out there, try doing some PLAYBOY stuff well, I'd appreciate a copy, (before I go totally blind!)



After ALL THAT WORK, it's time for some FUN! Here's a RIDDLE for all you sharp-eyed TI-RUNNER players. WHERE (in TI-RUNNER) do the initials "IBM" appear on screen? HERE'S A CLUE: Play the game up to Level 28, then look in the bricks, but don't look TOO CLOSELY, or you MIGHT miss them!) R.K.

Commercial Advertising Rates

Full Page: \$15.00/mo
Half " \$10.00 "
1/4 " \$ 7.50 "
1/8 " \$ 5.00 "
minimum \$ 3.00 "

(inq. about Multi-Mo. disc.)

Individual HUG Members

List your "PERSONAL" hardware/software ITEMS wanted or for sale for ---> "F R E E" <--- in this section.

FOR SALE

EQUIPMENT: Stand Alone 32K & TI Disk Controller, 2 Drives, TI Printer, TI Monitor, TI Modem, Suma Sketch Board, TI-Writer, XB cart, Multiplan. Call JOHN PIERCE @ (713) 556-2193 (work) or (713) 370-4727 (home).

- * -

P-Code Card with docs and software including Compiler \$150. Also SSSD Shugart drive in box w/power supply \$25. Leave msg for GARY HUX on HUG-TIBBS

- * -

TI GOODIES: 3 black/silver consoles w/speech synthesizer, Exp box w/P-Code, Morning Star 128K memory, TI disk controller, 2 TI RS232, TI 32K card, Myarc/Western Digital hard disk cont., 2 10 meg hard drives, Gram Kracker (80 K), Mini Mem., Super Space II, EXB, Ed/Assm, TI-Writer, TI-Multiplan, 3 Floppy DSDD drives, Spare 32K and TI floppy controller, TI Color monitor, more technical docs than you can carry, MG Explorer, MG Advanced Diagnostics, 4A/Talk, Super Forth, Pascal and more. All perfect...not beat up. Will consider selling all or part.....Lets Deal! Call JIM WRAY @ (713) 479-3297 after 9 pm or (713) 282-1759 M-F days.

- * -

PRINTER: Comrex 1 daisy wheel printer. This is the Epson version of the Brother HR-1. Speed around 20 CPS. \$150.00 Also:

SYSTEM: 2 silver consoles, PEB w/2 DSDD Queue drives, 32K, RS232, Corcomp DD Contrlr XB, Mini-Mem, E/A, TIW, Multiplan, Approx 25 modules, 200 disks of progs, magazines, extra PS for drives, also 300 baud modem. \$550.00 - JERRY ILLING (713) 664-7059 (home) or (713) 666-9880 (office)

- * -

COMPLETE SYSTEM: Black & Silver Console, PEB, RS232, TI Disk Controller, 2 SS Drives, 32K, TI Modem, Printer, Joysticks, Cassette, Zenith Monochrome Monitor, spare console, books, disks. \$400.00 - GARY HUX (713) 991-0979 or leave msg on HUG-TIBBS.

FOR SALE

Teac SSSD 1/2 height Disk Drive \$40.00. - WAYNE JOBE (713) 654-6052 or leave msg on HUG-TIBBS.

- * -

SYSTEM FOR SALE: Black & silver console, PEB, TI Disk controller, Myarc RS232, 32K, Speech Synthesizer, MBX system, XB, E/A, TIW, DM-2 and disk software. \$400.00 - ERIK KEELINE (713) 528-1425 or leave msg on HUG-TIBBS.

- * -

TI SYSTEM: \$300 Includes console, PBOX with quiet fan, 32K card, RS232, EA, XB, TI-W, Multiplan, cables, MANY disks, books, mags. Also:

Adek COLOR MONITOR: \$175, Anchor 1200-B MODEM: \$150 - DON LEWIS (713) 353-5295

- * -

NEVER USED "NEW" SOFTWARE with manuals: 4A/TALK Terminal Emulator \$12.00, GRAPHX COMPANION III \$5.00, MG NIGHT MISSION Game \$6.00 (cassette w disk version included on cassette). Also:

BOOKS IN NEW CONDITION: Best of 99er \$10, BASIC TIPS by Amlist \$12, SAMS Tool Kit Series \$2.50, SAMS BASIC Ref. Manual \$3.50, SAMS Basic Tricks \$2. - BILL KNECHT, leave message on HUG-TIBBS.

W W AAA N N TTTT EEEEE DDD
W W W A A NN N T E D D
W W W AAAAA N N N T EEE D D
W W W W A A N NN T E D D
W W W W A A N N T EEEEE DDD

LISTINGS: Place your free "personal" advertisement here. Contact editor either through HUG-TIBBS, the newsletter return address or phone (listed on front page).

```

oooooooooooooooooooooooooooo
o      1 9 8 7      o
oooooooooooooooooooooooooooo
o
o      August      o
o
o      S M T W T F S o
o      - - - - - - - o
o
o      2 3 4 5 6 7 8 o
o      <9>10 11 12 13 14 15 o
o      16 17 18 19 20 21 22 o
o      23 24 25 26 27 28 29 o
o      30 31      o
o
oooooooooooooooooooooooooooo
o
o      September  o
o
o      S M T W T F S o
o      - - - - - - - o
o
o      1 2 3 4 5 o
o      6 7 8 9 10 11 12 o
o      <13>14 15 16 17 18 19 o
o      20 21 22 23 24 25 26 o
o      27 28 29 30 31      o
o
oooooooooooooooooooooooooooo

```

<x>: HUG Meeting date

HUG Newsletter
c/o Kim Peterson
13107 Bafing
Houston, Tex. 77099-2244

HUG MEETING LOCATION MAP

```

-----
E |<= Claremont |
n | | N
t |ooooo St | W*E
r =>|o* o <= Johns | S
a |ooooo School |
n -----+-----+-----
c | Westheimer | K
e | | i
| Buffalo |<= r
|<= Speedway | b
| | y
====+=====+=====
| Sw Fwy (Hwy 59) |

```

HUG MEMBERSHIP INFORMATION

Annual Renewal Fee: \$15, Initiation Fee (new members ONLY): \$10. New members receive 6 free programs from the HUG Library. Please send renewal and/or new membership fees to: Houston User Group, c/o Ruth & Sandy Herman, 6219 Sanford Road, Houston, Tx. 77096. Membership applications are available from Ruth or the club BBS: HUG-TIBBS @ (713) 475-8909 Please direct any questions regarding current membership to Bob McCarthy @ (713) 955-7939

FIRST CLASS

Membership Renewal Status

(four digit code left of your name)

If code contains an asterisk:

- *: membership expires with this issue
- ** : dues one month delinquent
- ***: LAST ISSUE

DATED MATERIAL
DO NOT DELAY