Puget Sound

June 86

PUGET SOUND 99ERS
PO BOX 6073
LYNNWOOD, WA 98036

OFFICERS

PRESIDENT : CHUCK WYNNE	745-3249	VICE PRESIDENT: RICK LEWIS 568-#296
SECRETARY : GEORGE SJAASTAD	522-11#1	TREASURER : DENNIS WOOD 641-#298
NEWSLETTER: GENE CHRISTIANSEN	641-1#32	LIBRARIAN : JOHN UELAND 672-7593

NEXT MEETING
DATE : THURSDAY, June 19, 1986   TIME: 7:## PM
PLACE: Bellevue Public Library, 115#1 Main St., Bellevue

AGENDA: * Officer reports   * Name the newsletter voting
             * Mini Writer III demonstration   * 128K Demonstration
             * Extended BASIC tutorial-Rick Lewis * General discussion session

JULY MEETING
DATE : THURSDAY, July 24, 1986
TIME : 7:## PM
PLACE: Kirkland Public Library
        4#6 Kirkland Ave, Kirkland

AUGUST MEETING
DATE : Thursday, August 21, 1986
TIME : 7:## PM
PLACE: Kirkland Public Library
        4#6 Kirkland Ave, Kirkland

IN THIS NEWSLETTER

SOME LOCAL BULLETIN BOARD NUMBERS

TITLE	PHONE NUMBER
PUGET SOUND 99ERS BBS-SEATTLE	784-4142
TIBBS NW-ED DURFFEE-BELLEVUE	641-5884
QUEEN ANNE COMPUTER SHOPPE	283-0953
BMA-CMS (NORTH END CALLERS)	775-3660
BMA-CMS (SOUTH AND EAST CALLERS)	789-2752
NEW WORLD BBS	365-6938
BAINBRIDGE ISLAND	1-598-3228
ABERDEEN	533-0951
TELETRAVEL	742-9034
SHUTTLE	885-INFO
TROTHGUARD-BURIEN	824-6757
RADIO 1	878-0158
GEnie	1-800-638-8369

THE PRESIDENT SAYS
By Chuck Wynne

One of our personal recent purchases was the 512K Ram Disk from Myarc. I can't say it is not without bugs as they have EPROM memory to run the card with many issue numbers on them. We are still trying to figure out what all the bugs are. I am not discouraged, though, as the card is of great value. You see, a DSDD disk only holds 256K maximum. This means that a whole disk can be resident in RAM, and is powered by a transformer so when the computer is powered down, the memory remains. I'll have more on this in the future.

For those with the basic system, there are some great things out there! How about Mini-Writer III. This is a cartridge that will allow you to word process right from the basic system. It has a connector on it to plug in a printer. You can save your letters to cassette or disk (if you have one). Barbara from Queen Anne Computer Shoppe will have it to demo at the next meeting.

Computer Shopper is getting larger in the TI section. On page 181, Clint Pulley's "C" language is represented. If you send in for it, they will include a reference guide free. Hey, this is the one Tom Wynne made for our news letter of April 1985. We will send an original to them in hopes Tom can appreciate some recognition for his endeavors.

A sad note says we may have to raise the dues. Our expenses are larger with the BBS and the larger news letter. We are non profit, but have to keep our heads above water.

C Regena is on selling her own programs directly now. For a list send $1.00 to REGENA, PO Box 1502 Cedar City, Utah 84720.

We're trying to establish a permanent meeting place so all can go every month. The concensus was to be at Kirkland from now on. Any comments should be expressed now. You know as well as I do, you can't please them all.

BITS AND PIECES
By GENE CHRISTIANSEN

Many new and exciting things have been happening in the TI world. New products, news of the new Myarc "Card Computer", and other news highlight this month's column. However, it is my sad duty to inform our readership of the passing of one of its friends. Chet Hoover, author of the popular tax-preparation software we recently reviewed, died as the result of a long illness last Saturday, June 7th. Chet was the "kindly grandfather" who could be found helping out at "Bits and Chips". Always ready to help, and a

veritable fount of knowledge on TI Multiplan, he was one of the staunchest supporters of the TI 99/4A. He was also an immediate friend to all who met him. Cards of sympathy can be sent to the Hoover residence at 815 124th S.W., Everett, WA, 98204. He will be deeply missed.

Some of the new products on the market include the "Module Emulator" by John Keown. Though not as powerful as the "GramKracker" by Miller Graphics, this product allows a person to "load up" modules to disk and then be run them via menu. All that it seems to lack is the ability to change or manipulate the module's program. That is, you are not able to "improve" the module but you can eliminate the wear and tear that it does to your system. And because it retails for just $65.00, it appears to be a very good buy.

The Queen Anne Computer Shoppe is getting the new 80 column card in for testing. Barbara already has the new TI "mouse" for sale, as well as new Extended BASIC II Plus. The latter offers more commands and some interesting graphic capabilities to XB, while retaining compatability with all the existing TI XB software and commands.

The Queen Anne Computer Shoppe will also be featured in an upcoming television program to be aired on cable TV. The show, "The Talk of the Town", is to showcase locally-owned small businesses. QACS is the only computer store that will be shown. Look for this program on Group W's Channel 10 and Viacom' Channel 3 at 6:30-7:00 PM from July 7-11 and from July 14-18. We can never get enough advertising on the TI!

Mike Allen has an alternate number for his bulletin board, "BMA-CMS". The number, 789-2752, will allow those in the south-end and on the east-side to call without incurring those nasty long-distance charges. His 775-3660 number, for those in the north end, is still in effect.

Mike Shafer has his "New World BBS" up and running. The number for it is 365-6938.

For a "California connection", try Cliff James' board over on Bainbridge Island. That number is 1-598-3228.

Look for news concerning the Seattle TI Convention in the next issue of Micropendium!!!

The reason for lateness of the newsletter concerns what may be a possible bug in "MASS TRANSFER". Using the utility to receive a story for the newsletter, I managed to wipe out the entire newsletter disk!!! (Thank goodness for backups!) The problem seems to be that the program doesn't know where to write the received file and just starts writing anywhere on the disk!!! My suggestion is that if you must use this utility, received stuff on an otherwise blank disk. The heartache you save could be your own!!!

Barbara Wiederhold will demo the new MINI-Writer III at the next meeting. This word processor package comes with

its own printer interface! Sounds pretty handy to me!

A new user group (as yet unnamed) will have its first meeting on Wednesday, June 25th. The meeting will start at 7:30 PM and will be at the Valley View Library (Burien?). Call the library at 242-6044 for further details. Let's go support these fellow TI-ers!!!

Entries are still coming in for the on-going "Name the Newsletter" contest. The selection will take place at the June meeting...BE THERE!!!

Finally, we can arrange for YOU to have your name in print!!! Just submit a letter, article, or a program to this newletter!!! Think of the prestige and honor that can be accorded you and your family!!! Why not send something in TODAY?

MYARC NEWS
By GENE CHRISTIANSEN

Lou Phillips has taken a working, running model of his "Card Computer" to the Chicago Consumer Electronics Show. Various sources inform me that this machine, the "Model 9640 Family Computer", comes with 640K RAM built in, supports both a 40-column and an 80-column display on both an analog RGB or a composite monitor. An IBM-type keyboard plugs into it allowing one to do away with the TI console and its black "umbilical-cord" (which will be replaced by a phone-type cable). It is also compatible with the Myarc 128K Memory Card. Expandable to 2 MEGABYTES, the new machine will run about 2 to 3 times faster than the 99/4A.

The "GENEVE", as it is alternately known, will have Myarc's 3.1 version of BASIC built in. What it won't have is a module port. The remedy for this is that a Keown "Module Emulator" will be shipped with the new computer card and the purchaser will then load his modules to disk. The software will then be ready to run on the new machine. Some other enhancements include true 80-column versions of both TI-Writer and Multiplan. Availability is expected for about mid-July with the initial production run being "about 1000 units". The selling price will be $495.00, which includes the IBM-type keyboard. When questioned, Phillips replied that a less-expensive package, minus the keyboard, may be offered.

LEARNING ASSEMBLY
By DOUG ROW

Before I bought my computer, I had decided I should take some time and learn somthing about them. I took two courses where I work. One was called BASIC and the other,

introduction to Microprocesors. I thought I should start at
the beginning, right? Well, I quickly found out that
"Introduction to Microprocessors." wasn't really a beginner's
course.

        I couldn't understand why someone would want to program
in assembly when BASIC was so much simpler. After all
computers could make calculations millions of times a
second.   With somthing that fast I felt that BASIC would be
as fast as I would ever want to go.   Besides, I already
could do something with BASIC after a couple of classes.
Assembly Language really intrigued me, though.

        Knowing everything that computers do is done with the
manipulation of just two numbers (1 and 0), seemed quite
amazing. It wasn't until after I bought my TI that I found
out how slow BASIC really is. I wanted to learn assembly
language again - but at home, where I had easy access to a
system.

        I waited for TI to release their Editor/Assembler
package but, I soon heard that it was not intended to be for
beginners.   I stopped in the TI store at the Alderwood Mall
and asked them for some advice. There, they mentioned the
"University Board".   I knew a little about this because I
had seen it in the 99'ER (the now defunct Home Computer
Magazine). I was very excited about getting this.

        It had 1K of memory -expandable to 4k or somthing close
to that. It retailed for around $400 dollars and I picked
it up at a steal for a $100 when the TI store was closing
down. This computer or microprocesor has a calculator type
keyboard and a display mounted on a circuit board with no
case. The power supply was separate and plugged into the
computer like the way you plug power into your disk drive.

        Now I was set to learn assembly language. I had the
Universtiy Board, an actual course to learn assembly, and
all the books to go with it. I read the first three
chapters, and read them, and read them, and read them.   I
seemed to get more confused as time went by. I felt I was
wasting my time. I spent so much energy trying to learn
assembly (and I seemed to make such little progress) that I
decided to give it up.

        Finally, I realized that this was indeed a "University"
course. One where you need a teacher. Right then and there
I decided that I wasn't going to attempt to learn assembly
unless I had a well-written book to learn from.

        Then, one day, while going through Boeing's list of
self-learning courses, I found a course with both a book and
a series of tapes by TI called "TEXAS INSTRUMENTS 9900
SOFTWARE DEVELOPMENT SYSTEM". Well, with this book (and
another called "LEARNING THE TI99/4A HOME COMPUTER ASSEMBLY
LANGUAGE PROGRAMMING" by Ira McComic), I decided it was time

to start trying to learn assembly again.

This article is aimed at those who, like me, are afraid
to commit themselves to learning assembly language for fear
of failure after spending much time and energy. I hope the
information in these articles over the next few months will
help relieve at least some of your anxieties.

That is what this series is all about, learning
assembly from a beginner's point of view.   I have a very
short program which doesn't do much by itself. What I'm
going to do is give you an idea how to use the assembler.
Then, take the hexadecimal code produced and explain each
number and how the machine (the 4A) interprets it.   Then I
will write a little about the registers.

I'm also going to show you how TI's Debugger works and
explain a few other things that I feel are very important to
a beginner.

If you have been receiving "MICROpendum" since about
October when Mack McCormick's assembly articles started and
have experienced trouble with those tutorials, then I hope
this is of value to you. Although I'm not as knowledgeable
as Mack on the subject, I trust having this information
presented from a beginner's point of view is helpful.   Until
next month----

TI LOGO (PART 2)
MULTIPLE PROCEDURES
By TIM BABCOCK

In the last article, I talked about the steps on how to
create a procedure in LOGO. In this lesson, I will talk
about how to create multiple procedures to make a program.

As I talked about in the last lesson, all Logo
procedures begin with the first line, starting with TO, and
is followed by the procedure name. A procedure name can be
up to any size, but remember that each line in a Logo
procedure can be up to 30 characters long. Usually it is a
good idea in this language to abbreviate anything that is
possible especially since this language involves a lot of
english words and not so much symbols and numbers.   With
this in mind we will start. (If you need a reference to the
editing keys in Logo, pages 9 and 10 of the Logo II manual
cover the various function keys.)

Let's start by typing in:
          TO SQUARE (followed by Enter, of course)
When you get to the green screen press enter and type
in the following lines:

     FORWARD 30
     RIGHT 90

```
FORWARD 30
RIGHT 90
FORWARD 30
RIGHT 90
FORWARD 30
RIGHT 90
END
```

When you press Function 9 after the program is finished, you can type in SQUARE and a square will appear on the screen. For the rest of the procedures I will type in the whole proceedure beginning with the TO followed by procedure name and ending with END.

```
TO SQUARE2                          TO SQUARE3
PENUP                               PENUP
FORWARD 5                           FORWARD 5
RIGHT 90                            RIGHT 90
FORWARD 3                           FORWARD 5
PENDOWN                             PENDOWN
FORWARD 15                          FORWARD 8
RIGHT 90                            RIGHT 90
FORWARD 15                          FORWARD 8
RIGHT 90                            RIGHT 90
FORWARD 15                          FORWARD 8
RIGHT 90                            RIGHT 90
FORWARD 15                          FORWARD 8
RIGHT 90                            RIGHT 90
END                                 END
```

Now each of these procedures could be executed one procedure at a time by manually typing in that procedure name, but there is a way to link the procedures together to create a working program. Type in the following procedure:

```
TO START
TO SQUARE
TO SQUARE2
TO SQUARE3
END
```

When you type in START to execute the program you will see SQUARE, SQUARE1, and SQUARE2 procedures one at a time and then end the program. Make sure you type in TELL TURTLE before running any of the procedures since the procedures work with the turtle.

In the next article I will cover the ways to abreviate the procedures we just used in this lesson.

BBS HELPER
By CHRIS GEORGE

I was talking with our secretary, George Sjaastad, and he was telling me that the 99'ers have well over 100 modem users!!! I could not believe him! On the BBS we have only about 8 people who REGULARLY call and post a message and say "hi!". But we need more, since everyone is helping to support this BBS, I think that everyone with a modem should call it since now it has many advanced features. I have made the menus a little bit shorter, and we now have an expert mode, back when we were running the "FIRST" version of the board, it did not have anything except a features section (that was too complicated and took too much time for Ralph to maintain) and 9 message bases that were really a pain to everyone. Now we only have 2 message bases, a nice Bulletins Section that allows <P>ause, <C>ontinue, <Q>uit...

When Phil Bogle called it the other night, even he was suprised to see that with Jim Williams newer modem, the board functioned a lot better. He was also suprised to see that the Xmodem was finally working. I can guarantee you a good time with the BBS once you get started. In the next section, I will show you guys how!

BEGINNING USERS

In order to log on with your computer on to the club's bbs, you need to have:

        1.) A modem
        2.) Obviously a computer with an RS232
        3.) Terminal Emulator software.

I will cover the software first, then describe how to get in on the fun! First, I suggest that you start out with TE-2, becuase it is SO easy, it comes with a COMPREHENSIVE manual that has BEGINNING users language in there. It is very simple to call with TE-2 to our board. Insert the cartridge in your widget/console carefully. Then turn on the computer. Then press any key. You will then see 3 options on the 99/4A console screen:

            PRESS
              1 FOR TI BASIC
              2 TERMINAL EMULATOR
              3 DEFAULT TE-II

Please select #3. It will save you some time. You are now set (software wise). Next are the instructions to get connected to the 99'ers board. (Smartmodem users should have their manuals handy.)

LOGGING ON TO THE SYSTEM

It is simple to log-on. The system has been improved so don't be afraid to make a mistake. The system can reset itself and recover.

To log-on:

1.) Call the telephone number, 206 784-4142. If you own a smartmodem, it will show you how to dial in the manual, if you own an accoustic (like me), such as TI's, as soon as you hear the BEEEEEEEP sound, place your phone over the rubber cups, exactly like the little picture right next to the ready light.

2.) Once you have done that...you will get carrier, and you will be connected.

3.) You will see some text come on the screen after you get connected, it will instruct you to enter a password. Use the same password every time you call so you can delete a message that you post (if you choose to) or read messages to you.

4.) After you enter your password, hit enter, and the computer will take you on. You will then be asked to enter your name. After you get to that point, you are ALL SET FOR FUN WITH YOUR MODEM!

5.) Once you have done that, some questions will come like: "Do you wish to quit?" The reason that is there is becuase sometimes someone will call later that day to see if there are any new messages and, if there are none, hang-up right there (Preceding the question, it shows when the bulletins file was last updated and it also shows who posted the last message.)

6.) You enter "N", then your choice if you want your computer to beep at the prompts. Then it asks if you are a new user. Select "Y"! Do not be afraid to select Y!!! It will help you and no one else will know except you. Selecting "Y" will entitle you to see all the menus without having to ask for them and it helps when you post messages and don't know whatthe message bases are. So please enter "Y" if you are a new user!! It will help you greatly!!!

7.) Now the Bulletins File comes, it shows you the commands at the top of the screen. <P>ause, <C>ontinue, <Q>uit. Don't be afraid to use these functions. If you want to download a piece of

information to printer with TE-2, just hit 'P', then
hit CTRL-2, then enter "PIO" and hit enter. Once your
computer is done, you can just hit 'C' and then the
BBS will continue.

8.) Main menu. If you selected N at the log-on area, and
are having trouble, just hit '?' for a menu, or hit X
(eXpert toggle) to change to Expert mode and back
again. It is simple. If you get confused with the
board (because you are in Expert Mode), just hit X at
the main menu, and that will help you. The menus will
come back, and you will be able to see everything.
Hey, even I HAD TO START AS A BEGINNING USER!! So
don't feel embarassed to ask a question.

(You are supporting the club's hardware with your
dues, so ask questions if you don't understand. If you
have a question while online, just leave a message to the
Sysop in MESSAGE BASE #3.)

Congrats!!! If you made it through the 8 steps, you
will do great (I know)!!! All you need is a little bit of
confidence and some time to get used to the commands on the
board. Enjoy the system AND CALL SOON!!!

Mechatronic Extended BASIC II Plus Review
By Tom Wynne

Mechatronic Extended BASIC II Plus is a new product
from Germany which adds new routines to the TI Extended
BASIC. What you get is a module, with 48K of new routines
added. It, however, does not have any improvements to the
existing Extended BASIC such as a 40 column display, better
editing, or the other extras. The new routines are loaded
with one command: 'CALL APESOFT'. Apesoft is the name of
the software company producing this product. This command
loads the routines from the module to memory expansion so
you need the 32K in order to use these routines. The
routines are accessed by 'CALL LINK' statements. These new
commands offer you to use a limited bit map mode which has
a resolution of 128 X 120 pixels or 16 columns X 15 rows
because of the memory needed for BASIC programs and
variables. These commands include: CIRCLE, ELLIPS, RECT,
TURN, AXIS, INVERT, BHCOPY, MOVE, and others which draw in
the bit map mode within the 128 X 120 square. The BHCOPY
command will initiate a screen dump to your printer in bit
map mode. There are also other commands which move, load,
save, peek, and poke memory.

The advantages of the Mechatronic BASIC is that it adds new commands via CALL APESOFT to the TI Extended BASIC. You do not need to get expanded memory like a 128K card. It does not require 32K expansion but you must have it in order to use the enhanced routines. This Extended BASIC could have come on diskette and you load the routines by a CALL LOAD but instead they put the routines into the module and the CALL APESOFT command loads them into low memory expansion for use with CALL LINK.

Unfortunately there are more weaknesses of the Mechatronic Extended BASIC than advantages. First, it does not improve upon the TI Extended BASIC features like 40 column editing, speed, etc. It does add new CALLs, however, such as NEW, BYE, WAIT, RESTORE, QUITOF, QUITON, SPROF, SPRON, SCREENOF, SCREENON, FIND, and others. The enhanced screen commands, however, are assembly language subroutines which are accessed by a CALL LINK. I think it may get tiresome typing CALL LINK for every command. The bit map mode is nice but is restricted because of the memory limitations. It also has a problem with the Navarone Widget. No matter where you have the switch set to, Mechatronic Extended BASIC appears on the main menu so you must unplug it in order to use your other modules. One of the major drawbacks is the documentation. If you do not own a TI Extended BASIC to begin with, you will not know how to use it. The manual only talks about the enhancements. Their is nothing about DISPLAY AT, CALL HCHAR, PRINT etc. Also, the manual is not completed (At least mine isn't). The commands are not in alphabetical order and the table of contents does not have any page numbers so it is impossible to find a command easily. However, a strong point about the documentation is that they give plenty of sample programs. There is just about a program on every page that you can type in.

To conclude, the Mechatronic Extended BASIC II Plus module is a little more expensive than TI Extended BASIC but you get more routines and good examples of how to use them in the documentation. If you are looking for 40 column display, better editing features, faster execution, etc. Mechatronic will not meet your needs. If you are looking for Extended BASIC for your computer and already have knowledge of TI Extended BASIC, then I recommend you buy the Mechatronic. It is a few dollars more, but it has many powerful routines that make it well worth it.

DISK FILE NOTES
by Edgar Dohman
(from the Johnson Space Center TI Users Group)

First let's examine the basic file types that the
TI-99/4A supports. There are 3 major file types: DISPLAY,
INTERNAL, and PROGRAM. DISPLAY and INTERNAL types may be
FIXED or VARIABLE, expanding the number of file types to 5.
For addtional flexibility, the record length of DISPLAY and
INTERNAL Variable file types can be specified.

The explanation TI gives for these files is that the
Display files are stored in ACII format, the INTERNAL files
are stored in binary format, and the PROGRAM files are
memory images which have been SAVED. This is basically
true, but not totally accurate and certainly not complete.
After all, no matter what you call a file type, it's still
a collection of sectors (256-byte blocks) with information
stored in binary format. It is up to the program reading
the data to make sense out of what is stored there.

Since a file must be called Display, Internal, or
Program (the only types that are supported), we must always
select one of these types. From BASIC, the TI explanation
generally holds, but as we shall see, programs can actually
be stored in a variety of forms. Let's now look at some of
the file types you are likely to see in a library's catalog
listing.

Program-- The description of a memory image dump is
accurate for this file type. However, a Program file can
be SAVED from Editor/Assembler as well as from BASIC. If
you cannot load and run a Program file with BASIC or
X-BASIC, try using the Editor/Assembler cartridge and
select the "Run Program File" option. There is a
possibility the program still may not run if it was
generated with Mini-Memory, for example, which has some of
the utilities that the program may need at different
locations than Editor/Assembler.

DIS/VAR 80-- These are very often data files or text
files. TI-Writer creates text files in this format. The
Editor/Asembler can create this type of files as well as
DIS/FIX 80. You will need to use either TI-Writer,
Editor/Assembler, or a program that can input such files to
be able to read these files.

INT/FIX 80--These may be text files that were saved by
the Editor/Assembler or data files for a program. However,
they are usually assembly language programs which were
generated by the Editor/Assembler. Some of these files can
be loaded from X-Basic (first, enter "CALL INIT" and then,
"CALL LOAD"). If you load it from X-Basic, you also have
to know the name of the starting location for a CALL LINK

in order to run the program. Unfortunately, DIS/FIX80 Assembly Language files come in to flavors, standerd and compressed. The X-Basic loader can only handle the standard (vanilla) flavor. The Editor/Assembler loader can handle all varieties and you load them from the "Load and Run" option. Depending on how the program was written, it may auto-run after loading or you may have to type the name of the starting location in order to run the program.

INT/VAR 254-- This may be a data file created by a program but it is probably a BASIC or X-B program. If so, it is a program that was stored as a PROGRAM file (now that makes a lot of sense, doesn't it?). This type of program file can be loaded and run just like any other BASIC or X-BASIC program.

DIS/VAR 163-- This may be a data file created by a program, but it is probably an X-Basic program stored in MERGE format. To load it, you will have to type "MERGE" DSKn.FILENAME from the command line. You can not include a statement like this in a program. Also, unless you want to combine the program into any other program in memory, be sure you type "NEW" before you do the "MERGE". After it is loaded you can list it, run it, or edit it, etc. just like any another BASIC program.

Other files with different record lengths than those listed above are probably data files for a program.

(NOTE: I hope this is of some value to those who have wondered about how to load some of the programs and, if it doesn't work at first, how to try another way to run a program.)

MISCELLANEOUS
By DOUG RUSE.

GEMINI 10X OWNERS:

You may not have the final instruction manual for your printer!!! The 10X initially was sold with a stapled paper "preliminary" manual. The final edition came out later and was a spiral-bound book, about 1/2 inch thick, with a slick cover. It is much more instructive than the preliminary. You may obtain the manual by writing to STAR MICRONICS INC.,P.O. BOX 1630, EL TORO, CA.,92630. The price is $5.00 plus tax and shipping (total is near $8.50). Unfortunately, when the manual was being written, they apparently didn't know about the Home Computer, so you should also ask for the "TI 99/4A Addendum", which tells of specific use with our computer.

NEWSLETTER:

        Now, as you have noticed, our newsletter has changed
in physical shape as well as increased in content.   This is
because of an aggressive campaign by our newsletter editor.
And, yes! He caught me! If you don't like the direction of
the club, the newsletter, the mettings, or whatever, just
remember you get out of the club what you put in.   "Garbage
in, garbage out!!!
        We presently need people to write articles for this
Newsletter.   Even one article per year from every member
would make this newsletter one of the biggest and the best!

GET INVOLVED!!!

        A good place to bring up new ideas is at the executive
meetings.   It is also a good place to see what being an
elected officer of the club entails (for those interested
in running for office).   All members are permitted (and
urged!) to attend these meetings.   (However, voting is
limited to the executive level.) Call Chuck or Rick so that
room can be made for you. This is the heart and soul of
our group!!! It is here that all the major planning is
done! If you are just curious about the executive meeting
and would like to see what goes on there, then grab this
opportunity! These meetings are just as interesting as the
regular ones, but just a little more personal.
        There are new TI groups starting up around the area
and talks about more coming. We will try to put
information on meeting times, etc. if those clubs pass it
on in time to us.   I feel I'm speaking for everyone in the
club when I say that we wish you the best of luck and if
you need help getting started, give us a call! On the other
hand, if you want to start another group without really
giving this one a chance (by getting involved), then we
wish you would think it out a little more.   It may be that
you can make a contribution to this group first!!! **GET**
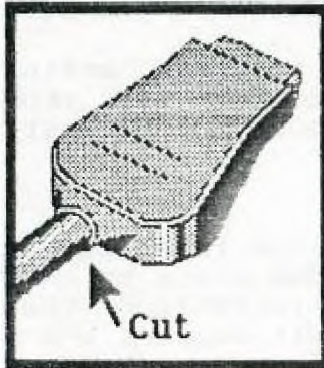INVOLVED!!!

HC JOURNAL

        The Home Computer Magazine is now replaced with the
Home Computer Journal. A magazine on disk.   One volume
(five programs on disk plus a magazine (for all computers)
is $25.ØØ.   Two volumes are $45.ØØ, and four are $75.ØØ. A
suggestion is to at least send them your opinion of what
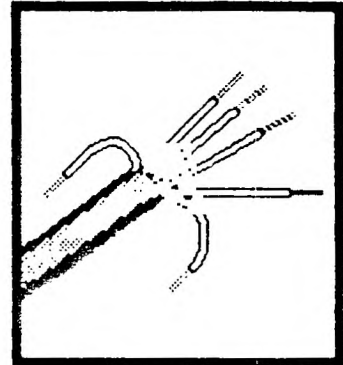you think! Make them aware your out there.

Atari to TI-99/4a Joy-stick Conversion

Here is a way to use that old joystick that has been under foot since your Atari game system was superceded by your TI.
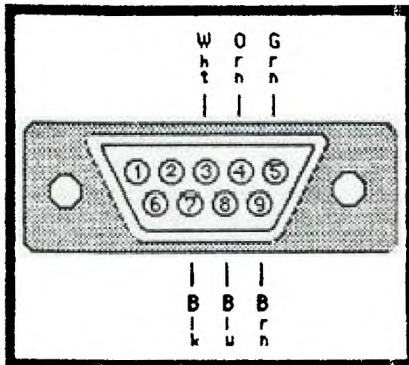
(The 9-pin plug can be found at Radio Shack for $4.95.)

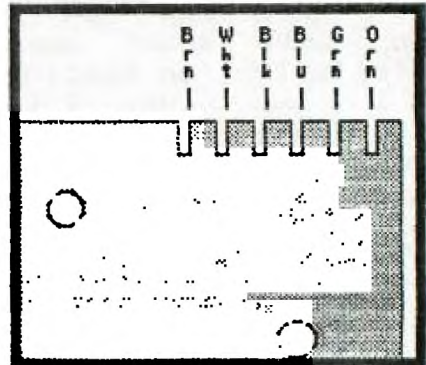Cut the cable as close to the plug as possible to keep as much length as possible.

Trim back the outer insulation $3/4$ to $7/8$ of an inch. Then trim back the insulation on each wire $3/16$ of an inch.

Tin the wire tips and solder in the following manner:

White to pin 3   Black to pin 7
Orange to pin 4   Blue to pin 8
Green to pin 5   Brown to pin 9

It is not necessary to open the joystick to complete the process but if you do these are the wire connections on the board inside.

- by Mark G. Webb