

Winnipeg  
COPY 88



# Newsletter

## September's Newsletter

The Winnipeg 99/4 User Group is a non-profit organization formed by computer hobbyists for users of the Texas Instruments 99/4A Home Computer and compatibles. The content of this publication does not necessarily represent the view of the Winnipeg 99/4 User Group.

Next General Meeting - Date : October 2nd, 1986 (tentative)  
Time : 7:00 P.M.  
Place: Winnipeg Centennial Library  
1st Floor, Assembly Room

### Executive 1986:

President:	Jim Bainard	334-5987
Treasurer:	Bill Quinn	897-7758
Newsletter Editor, and and Book Librarian:	Mile Swiridenko	956-1793
Contributing Editor:	Paul Degner	586-6889
Inter-Group Representative and Newsletter Publisher:	Dave Wood	895-7067
Asst. Newsletter Publisher:	Hank Derkson	
Systems Co-Ordinator:	Rick Lumsden	253-0794
Educational Co-Ordinator:	Sheldon Itscovich	633-0835
Public Domain Librarian: 822 Henderson Hwy.	Gordon Richards	668-4804
Module Librarian:	Peter Gould	889-5505

### Mailing Address:

NEWSLETTER EDITOR  
WINNIPEG 99/4 USERS GROUP  
P.O.B. 1715  
WINNIPEG, MANITOBA  
CANADA, R3C 2Z6

BBS: 9900BOARD    PH#: 889-1432  
HOURS: Mon-Fri 4 p.m. - 8 a.m., Wknds 24hrs.  
PARAMETERS: 300-1200 baud, 8 bits, no parity, 1 stop bit.

## EDITORIAL COMMENTS:

Hello, and welcome back to another edition of 'As the Disk-Drive Turns'. I have had a pretty good summer and hope that everyone else has too. Hello to Steve Zabarylo in Saskatoon. Hope you and your family have settled into your new home ok. Steve one of the Winnipeg group's hardware gurus left us at the end of July. Steve can be contacted through the ENVOY 100 service, user ID SEZABARYLO.

Rumors of the new Myarc computer code named 'Geneve' fill most of the TI newsletters and the various TI supporting publications. Most say that this marvelous machine will be bigger and faster than the good 'ol /4A, as well as being compatible with 90-95% of the existing TI99 software. Some of the features include a better video display generator (ie. better graphics), a faster clock cycle, and a larger RAM memory capacity. The 'Geneve' is said to be slated for sale this fall.

Included in our newsletter this month is an original program called 'Select-a-Team'. This program was written by Brian Lesko. Brian attended the summer programming sessions which I held last year, and it makes me happy to see that he put to use some of what I showed him. Other programs include a day of week and lines demo written in c99, as well as a few short subroutines written in TMS9900 assembly language. Also in this issue is a review by Rick Lumsden of his GRAM-CARD. Rick, a regular contributor to our newsletter and an active member of our group, has reviewed the SKETCH-MATE for us in the past. Check Miscellania for news about the old Smorgas Board and the very important news concerning the the continuation of our club's meetings.

If you have a review, user hints, or helpful programming tips, get them to me for the next newsletter. The deadline that I have set for submissions is one week before the date of the group's meeting. Thanks go out to all who have submitted items for this issue of our newsletter.

## MISCELLANIA:

Miscellaneous news and reminders.

Cartridges can be rented from our module librarian, Peter Gould. A deposit of \$5 is asked, and \$2 is the rental fee.

The Smorgas Board BBS is back up, it is now called the '9900BOARD'. The number is the same but the hours have changed. It is now open from 4 p.m to 8 a.m weekdays and 24hrs on weekends. Parameters are 300-1200 baud, 8 bits, no parity, and 1 stop-bit. The number is: 889-1432.

Mark Gibson, sysop of the Grand Forks TI BBS, wishes to remind everyone that the bbs has a new phone number and hours: 1-701-772-1503, Friday, Saturday, and Sunday, noon to midnight.

This meeting we will review a video tape of last spring's Ottawa TI-FEST. This TI-FEST was quite successful as many products were displayed and many TI Users attended.

**IMPORTANT:** We discuss the fate of the Winnipeg TI User's Group this meeting. As regular supporters of our club know our membership has been declining, and we just haven't been getting enough active participation by those who do attend our public meetings. Questions to be raised at this discussion concern whether we should continue our Public meetings or whether we should meet on a less formal basis. The general consensus has been that the club should continue no matter what but that because of the declining attendance at our regular meetings it might be better if we held our meetings in the informal setting of member's homes. Our club originally started as a few guys getting together around a computer in a basement. Soon the membership grew and the club had to find a larger meeting place. The Public Library was selected and the group began to hold formal meetings. The meetings included discussion by the executive members, a question and answer period, and was often followed by programming tutorials or hardware presentations. Gradually the club ran out of things to discuss, members began to loose interest, and soon the number of members attending meetings began to decline. We are currently at the point where membership participation in the current formal meetings is almost NON-EXISTANT... There are basically not enough things going on to make our public meetings worth while. This brings up the question of whether we should continue meeting formally or whether we should go back to the more productive basement meetings. This is what the Executive, YOUR executive are concerned about and want to discuss with YOU this meeting. The only way you can make our group worth-while is by contributing your ideas, projects, and interest. Be an active member and participate!

## READER RESPONSE:

From HCM volume 5.5 1985 comes the following advertisement which may be of interest to the high tech music buffs in the TI crowd.

New World Class MIDI Software For 99/4A

World Class Software unveils TEX-SEQ, a MIDI (Musical Instrument Digital Interface) sequencer package for the TI-99/4A computer. TEX-SEQ comes complete with MIDI cable interface and software. The package allows note-by-note entry of musical compositions, which will play on any MIDI synthesizer. Software provides four play tracks and supports several different time signatures. TEX-SEQ requires 32K memory expansion, Extended BASIC, and a disk drive. Retail price is \$49.95.

World Class Software  
1500 Valley River Dr., Suite 250  
Eugene, OR 97401  
(503) 485-8796

(ed.- It might be a good idea to call first to find out if this firm is still in business.)

What is a MIDI?

A MIDI is basically a "hardware standard for physically connecting musical devices, plus a software communications protocol that governs data transmission over the interfaces". Simply put, it is a hi-speed serial port connection that allows computers to control and be controlled by special models of synthesizers. For more information read the relevant articles from the JAN 85 and JAN/86 issues of COMPUTE! magazine. Thanks goes out to Brian Lesko for bringing the mentioned COMPUTE! articles to my attention.

## REVIEWS:

This column presents reviews of materials that may be of interest to the user. The views expressed are the opinions of the reviewers, exclusively.

### SOFTWARE:

SUBMARINE COMMANDER: Reviewed by Mike Swiridenko

What I would call a simulation type game Submarine Commander stands out, in my opinion, from the rest of the shoot-them-up, chase-them-or-be-chased games. What makes this game different from the rest is its successful representation of a real life situation.

The scenario is the Mediteranean sea. You are the commander of a lone war submarine. Your mission: Destroy the enemy convoys travelling in your area. You have Fuel and Torpedoes, Sonar, Hydrophones, Compass, and a Satellite radar map of the enemy fleet. If you run out of fuel, oxygen, or torpedoes, or the hull of your sub is damaged beyond repair you have failed at your mission. If you sink all of the enemy convoys you achieve a rating according to time, fuel and torpedoes left, and the tonnage of enemy ships sunk.

Action is superb, visual displays and effects are excellent and sound effects are used quite realistically. Three separate visual displays are presented in the middle of the Submarine's instrument display. Each of the displays is selected by a key press; S displays the satellite radar map, O displays the sonar map, and = displays the periscope view.

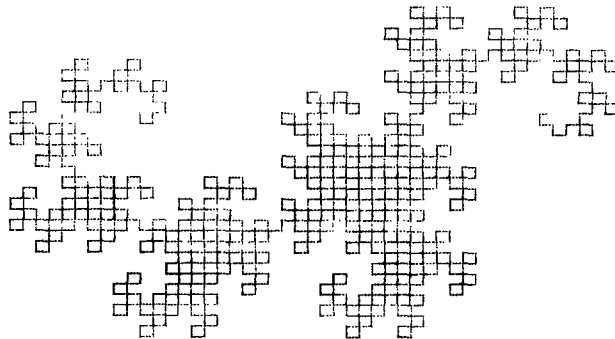
O: the three displays the periscope view is the most exciting. It is from this display that you follow the enemy ships and fire upon them with your torpedoes. When the enemy is close enough to spot you the muzzle flashes of the enemy's guns can be seen as they fire upon you. If you are at torpedo depth you will see your torpedoes as you fire them and hopefully sink your enemy ship. A direct hit to your craft results in the sound of an explosion and the disruption of your display from the shock of the impact. Damage is assessed accordingly. In turn a direct hit by your torpedo upon an enemy ship is seen as the initial impact followed by explosive flashes and the gradual disappearance of the enemy ship as it sinks.

The controls respond quickly when your ship is in good repair, less quickly as your damage accumulates. Damage is repaired over a period of time, and more quickly when traveling on the surface than beneath it. Options that are necessary in the midst of an enemy encounter are Fast-dive and Blow-ballast. The skillful use of the Map, Hydro-phone, Periscope, and Sonar enable you to track down and destroy the enemy fleet.

As the more difficult levels of play are chosen you receive less torpedoes and more enemy convoys to destroy. Each convoy consists of three ships: a Tanker, a Freighter, and a Destroyer. The destroyer is worth the least in points. With each level of difficulty the enemy becomes quicker and inflicts more damage per hit. The Destroyers in particular become more aggressive.

This is one of the most engrossing games that I have ever played. The action is demanding and the variety of operations, required to pilot the submarine, quickly demand all of your concentration. The only flaw I found was that the compass rotated counter-clockwise from the periscope view. If you are tired of the endless number of games where cute cartoon-like characters run through mazes evading monsters and would like to try a game with a more realistic theme then SUBMARINE COMMANDER is the game I recommend highly. (P.S. - A very good account of a fictional submariner's WWII tour of duty is given in the book by Commander Edward L. Beach called 'RUN SILENT, RUN DEEP'.)

SUBMARINE COMMANDER is from Thorn EMI Video Limited, (C) 1983.



GRAM-CARTE  
A Review by Rick Luasden

Just before our summer break I received my GRAM-CARTE from RYTE Data in Haliburton Ontario and brought it out to our final meeting for a demonstration. The demo was a little short and not too informative mainly because I hadn't had a chance to use the card much beforehand.

To start the GRAM-CARTE is very similar in operation to the GRAM-Kracker from Miller's Graphics and Maximem from Guy Gournay in Quebec. Essentially all three peripherals allow you to unload modules into their respective memories and then to disk. The advantage is freedom from any more cartridge swapping and consequently less wear on the console. Once the cartridge is unloaded into the memory, the code can be accessed and modified to suit your own tastes and preferences. For example TE-II can be updated to 1200 baud and other older cartridges that cannot access the PIO port can be changed to do so.

The new GPL assemblers that are coming on the market use these devices for storage of GPL code and thus a whole new area of programming is opening for the TI user. Another feature is the ability to unload the BASIC operating system and make changes to the very personality of your computer or even load in an entirely different operating system such as FORTH or whatever you please. Just remember though that any major change like this requires more than just a little knowledge of assembly and the computer itself.

The GRAM-CARTE has the ability to save your basic program in module format so that you can access your own program from the menu screen with a single keypress. Also included is the memory editor which allows you to step through various memory addresses and make changes where you see fit.

Before I purchased this unit I sent to all three manufacturers for pamphlets and information on each to try and decide which unit best suited my needs (desires actually). All three as mentioned, have the ability to save modules to disk. If this is all that each was capable of none would be worth the price. The memory available is as follows.

1. GRAM-CARTE: 128K to 512K
2. GRAM-Kracker 56K to 80K
3. Maximem 56K to 80K

Both the GRAM-Kracker and Maximem are battery backed which means they will retain the memory contents when the computer is shut down. This is one feature I dearly wish the GRAM-CARTE had. The GRAM-CARTE and GRAM-Kracker have the ability to unload the operating system but the GRAM-Kracker has the advantage of completely switching out the console GROMS whereas the GRAM-CARTE does not. This may cause some problems but can be overcome with the proper knowledge.

The GRAM-CARTE can be used as a RAM-disk but I am still having problems with this feature. The main reason is so far except for the first manual on basic operation, all the docs for the utility programs are in German!!! The translations are forthcoming but in the meantime I have no real report on the RAM-Disk portion.

The major reason I chose the CARTE over the others were.

1. Memory size
2. PEB Card, not for the GROM port
3. Utility software is onboard an EPROM so you do not have to load any support files.
4. All features are software selectable not hardware switches.

If any of you own a Widget you will understand why the Card is desirable over something hanging out of the cartridge port.

All three of these units are available from RYTE Data in Haliburton Ontario. The prices are:

- GRAM-CARTE \$325
- GRAM-Kracker \$275
- Maximem \$199

While on the subject, RYTE Data puts out an excellent newsletter for all you hardware hackers out there. I have been subscribing to it from its inception and have yet to regret it. There are many fine articles on programming and reviews. Recently Bill Bronos of Disk-Fixer fame has started an Assembler series that deals with some things that even the E/A manual won't tell you. They also handle a great deal of the new hardware and software that is being produced for the 4/A. Such things as an 80 Column card with a new 80 col. Multiplan and TI-Writer. A mouse, GPL Assembler and much more. At any rate I would highly recommend it to all members of the group because it contains something for everyone and at \$14(American) it is a bargain.

The address is:

Ryte Data  
Box 210 Mountain St.  
Haliburton, Ontario  
K0M 1S0  
(705)457-2774

I have talked to Bruce Ryan the owner on three occasions by phone and have found him very knowledgeable about the hardware he handles. I believe the business has moved to a new premises to better handle the TI public but the posties will forward the mail accordingly. Bruce needs support for his newsletter so lets all get behind him because there are fewer and fewer quality publications on the old orphan and we must support the few we still have.



```

/* the following is a lines demo program which come from
the Trois-Rivières TI user's group, Québec.
comments added by M. Swiridenko, WPS TI user's group.
*/

#include ds12.randow;
#include ds12.bitmap
main()
( /* variables used */
  int ax1, ay1, ax2, ay2, cnt ;
  int x1, y1, x2, y2, coir ;

/* select bitmap mode. */
  bitmap(16, 2) ;

/* main loop repeats line pictures */
  for (;;)
  ( bitmap(0) ; /* clear the screen for a lines picture. */
    /* assign random end points and end point velocities */
    ax1 = rnd(11) - 5 ;
    ay1 = rnd(11) - 5 ;
    ax2 = rnd(11) - 5 ;
    ay2 = rnd(11) - 5 ;
    x1 = rnd(226) + 15 ;
    x2 = rnd(226) + 15 ;
    y1 = rnd(162) + 15 ;
    y2 = rnd(162) + 15 ;

/* draw a picture of 150 lines that have moving end points. */
    for (cnt=0; cnt<150; cnt++)
      ( coir = rnd(14) + 3 ;

/* draw a line on the screen */
      line(x1,y1,x2,y2,coir) ;
/* move the end points of the next line */
      x1 = ax1 + ax1 ;
      y1 = ay1 + ay1 ;
      x2 = ax2 + ax2 ;
      y2 = ay2 + ay2 ;
/* reverse direction of motion if line touches edge of screen */
      if (x1 <= 7)
        ax1 = -ax1 ;
      if (y1 <= 7)
        ay1 = -ay1 ;
      if (x2 <= 7)
        ax2 = -ax2 ;
      if (y2 <= 7)
        ay2 = -ay2 ;
      if (x1 >= 249)
        ax1 = -ax1 ;
      if (x2 >= 249)
        ax2 = -ax2 ;
      if (y1 >= 164)
        ay1 = -ay1 ;
      if (y2 >= 164)
        ay2 = -ay2 ;
      ) /* end of lines picture loop */

/* waste some time before displaying next lines */
    for (cnt=0; cnt<32000; cnt++) ;

  ) /* end of main loop */
) /* end of the lines demo program */

```

```

*****
* REFS
*****
REF KSCAN,GPLLNK,DSRLNK
REF VMBW,VSBW,VM5R,V5BR,VWTF

*****
* KEY INPUT.
*****
KEYBRD EQU >B374
STATUS EQU >B37C
PRESS DATA >2000

*****
* FILE ALLOCATION
*****
PABBUF EQU >1000
PAB EQU >0F80
PNTR EQU >B35E
PNAM DATA PAB+5
PDATA DATA >0000,PABBUF,>5000,>0000,>000A
TEXT 'RS232/1.EC'
CLOSE BYTE >01
READ BYTE >02
WRITE BYTE >03

*****
* END OF DECLS.
*****

* D/V80 FILE SUBROUTINES...
*
FOPEN LI R0,PAB OPEN THE RS232.
LI R1,PDATA
LI R2,200
BLWF @VMBW MOVE FD TO PAB.

DSF MOV @PNAM,@PNTR
BLWP @DSRLNK OPEN THE FILE
DATA B
RT

*
FREAD LI R0,PAB READ A RECORD.
MOVE @R0,R1
BLWF @VSBW I/O OP=READ.

MOV @PNAM,@PNTR
BLWP @DSRLNK
DATA B READ ONE RECORD.

LI R0,PAB+5 TRANSFER DATA FROM VBP.
LI R1,P+506
LI R2,5
BLWF @VMBW
RT

*
FWRITE LI R0,PAB+5 # BYTES TO WRITE.
LI R1,>0500
BLWF @VSBW

LI R0,PAB
MOVB @WRITE,R1
BLWF @VSBW I/O=WRITE
B @DSF WRITE THE DATA

*
FCLOSE LI R0,PAB CLOSE THE MODEM.
MOVB @CLOSE,R1
BLWF @VMBW I/O = CLOSE.
B @DSF CLOSE THE FILE.

*****
* END OF FILE ROUTINES.
*****

```

```

/*DAY OF WEEK CALCULATION*/
/* From: 'Programming in C for the Microcomputer'
   by Robert J. Traister, (c) 1984, Prentice Hall
   Converted to z89 by Paul Degner, September 1988.
   Comments by M. Swiridenko.
*/
#include <stdio.h>
main()
{
    /* variables used for input values */
    int m, d, y;
    char month[12], day[20], year[4];

    /* variables used for day of week calculation */
    int aa, bb, cc, dd;
    int v1, v2, v3, v4;
    int xc, z, zz;

    /* main input loop */
    while(1)
    {
        /* month, day, and year are input in the following loops
           each input loop is exited when an integer is input
           ie- when a 0.
        */
        while(1)
        {
            puts("INPUT THE MONTH(1-12)\n");
            gets(month);
            m=atoi(month);
            if(m!=0) break;
        }
        while(1)
        {
            puts("\n\nINPUT THE DAY(1-31)\n");
            gets(day);
            d=atoi(day);
            if(d!=0) break;
        }
        while(1)
        {
            puts("\n\nINPUT THE YEAR\n");
            gets(year);
            y=atoi(year);
            if(y!=0) break;
        }

        /* print four blank lines before printing the day */
        puts("\n\n\n\n");

        /* calculate the day of the week (1-7) */
        aa=(16/10+17/5);
        bb=y-aa;
        cc=m+(12+aa);
        dd=bb/100;
        v1=dd/4;
        v2=dd;
        v3=(5+bb)/4;
        v4=(13*(cc+1)/5);
        z=v4+v3-v2+v1+d-1;
        zz=z-(7*(z/7))+1;

        /* print the day of the week */
        if(zz==1)
            puts("SUNDAY\n");
        if(zz==2)
            puts("MONDAY\n");
        if(zz==3)
            puts("TUESDAY\n");
        if(zz==4)
            puts("WEDNESDAY\n");
        if(zz==5)
            puts("THURSDAY\n");
        if(zz==6)
            puts("FRIDAY\n");
        if(zz==7)
            puts("SATURDAY\n");
    }
}

```

```

/* print 4 lines then wait for enter key before
   getting another date.
*/
puts("\n\n\n\n");
puts("PRESS <ENTER> TO INPUT NEW DATE.\n");

while(1)
{
    xc=poll(0);
    if(xc!=0) break;
}
puts("\n\n\n\n");
} /* end of date to day main program. */

/* atoi function called by the date to day program.
   n=atoi(s) - convert string to integer
*/
atoi(s) char *s;
{ int sign,n;
  while(*s==' ')++s;
  sign=1;
  if(*s=='-') { sign=-1; ++s; }
  if(*s=='+') ++s;
  n=0;
  while((*s!='0')&(*s<='9')) n=10*n+*(s++)-'0';
  return(sign*n);
}

* USEFULL SUBROUTINES...
*
* CLEAR  GETKEY  HONK/BEEP  EXIT
*
CLEAR CLR R0 CLEAR SCREEN.
LI R1, >2000
CLF BLWF @VSB#
INR RC
OI R0, 768
JLT CLF
CLF @LINECT
CLF @SCRPOS
RT

*
GETKEY LI R0, >0300 KEYB #0.
MOV R0, @KEYBRD
KDLY BLWF @NSCAN
MOV @STATUS, R1 KEY HELD?
ODD @PRESS, R1
JEC KDLY
KLP BLWF @NSCAN WAIT
MOV @STATUS, R1 STATUS?
ODD @PRESS, R1
JNE KLP
CLR R1 CLEAR R1
MOV @KEYBRD, R1 GET ASCII
SWPE R1
RT

*
BEEP LI R0, >0004
JMP TONE
HONK LI R0, >0006
TONE MOV @ZEROB, @STATUS
BLWF @GPLLN#
HK0 DATA >0006 HONK!!
CLR R0
HK1 LIMI 2
LIMI 0
MOV @_83CE, R0 DONE?
JNE HK1
RT

*
EXIT BL @CLOSE CLOSE RS232.
MOV @ZEROB, @STATUS LEAVE.
MOV @RTNADR, R11
RT

*****
* END OF S/Rs.
*****

```

## A TI RETROSPECT by Paul Degner

Welcome back to another installment of my little monthly expose on the 4A! This summer seems to have been extremely busy, for our 4A even though we are working with seven year old technology, believe it or not! There is alot to talk about so let's get started!

Briefs:

A couple of members have built Horizon RAMdisks as of the last meeting. Sheldon Itscovich and myself have constructed RAMdisks.

I purchased the bare board version from Horizon Computing sometime ago. This summer I finally had some time to get it all together. The construction was a bit tricky as about a thousand connections had to be soldered but hopefully all that painful work paid off! I did have some initial trouble trying to boot the card but that was solved by Gil Tennant on Timeline saying it was related to a blown Germanium diode.

With the RAMdisk you can have a functioning DSSD drive at your disposal which is about three hundred percent faster than the standard TI disk drive. You also have access to various CALL statements from any BASIC such as CALL DM (a must) that will load DM 1000 in about three seconds and a whole bunch of other CALLs to play with.

I find the Horizon RAMdisk a excellent buy, especially if you feel the need for speed!

Michel.A1401 posted the following on Timeline:

### WHAT TO DO WITH A RAM DISK

- o DM1000 - almost instant access at any time to DM1000. No need to change disks or modules. That's something!
- o TK-WRITER - I use TK-WRITER daily, to write reports, letters, articles for TUG or newsletters, or messages. Nothing more frustrating than the long normal process needed to load the EDITOR, then load a large file, to correct it, to save it again, to quit, reload TK-WRITER, load the FORMATTER, then print...then we see other mistakes...you quit again, reload TK-writer, and so on for hours until you get mad!!! The RAM DISK doesn't prevent you from making mistakes but it sure makes access to EDITOR, FORMATTER AND FILES 10 times faster!!!

- o E/A - put in your RAM DISK useful programs such as FUNNEL WRITER 3.3 and, simply using the X-BASIC cartridge you can have access to E/A without having to change modules. Add FAST-TERM and that's it, you have on your RAM DISK a word processor, a communication program and E/A. Depending of your specific needs, add a DATABASE (TC-MAIL, MULTIPLAN).

- o FAST-TERM - using the FCNT B (log file), you can dump to RAM DISK the contents of the buffer a lot quicker!

- o PROGRAMMING - run, correct, save, run, correct, save... a lot faster!

- o SECOND DISK DRIVE - one RAM DISK easily replaces a second disk drive; so think about the RAM DISK before purchasing a second drive.

- o SECOND RAM DISK - for the maniacs, use RAM DISK/1 for your programs and RAM DISK/2 (call it DSK2) for storage of large files used daily.

In my user's group, we bought PC BOARDS, bargained for good prices on chips and were able to produce a "double sided" RAM DISK for around \$135 cdn.

The construction is time consuming and I still have a bug with my first RAM DISK.

BOB BOONE (BOE.A1482); 25 Ottawa Street; Arnprior, Ontario; Canada K7S 1W7 sells them ready and tested for about \$240 (no tax if shipped in Manitoba).

I don't think anyone can beat this price; so avoid surprises and just give Bob a buzz.

This summer I came across a few hardware mods from various newsletters I receive. One is to replace the 470 ohm resistor on pin 6 of keyboard I/O port with a 1N4005 diode with cathode end facing the 9901. This mod will in fact get rid of the old alpha lock problem with your joysticks. Another is to add a 14.318 mh crystal with a two pole switch to the existing 12 mh crystal near the 9902 chip in the computer. This will speed up some programs but will interfere with ones accessing the RS232 port.

Terry Atkinson posted the following on Timeline:

For those who produce newsletters and who are tired of the errors produced when the (E) and (&) (at sign and ampersand) symbols are encountered, here is a FIX for you. This FIX replaces the above, such that the "tick mark" FCNT C can be used for overstrike, and the backslash (FCNT Z) is used for underscore. Formatting should now be a "snap", and you won't get all those errors in printing out programs and things like BLPW @VMBW will be o.k. The following is courtesy of Rick Cosmano, vice prez of the BCCB.

Search the FORMAT file for the sequence 23 21 40 26. Change the 40 26 to read 60 50. That's it. To change the formatter screen colors. Search for the combination 02 00 07 F5. Change the F5 to your favorite screen colors. Then check for the combination 80 02 01 F5. Here, also change F5 to the character colors you want. Experiment by copying the FORMAT file to a separate disk...and playing with that!!

Jane Laflamme posted the following on Timeline:

For those of you who have a Star 56-10, here is a bit of news for you. (I cannot find this in the manual...??)

Did you know that this printer will convert your basic/XB program into hex for you? Here's how it works:

Load or write a small XB program. While printer is off, press the FF (Form Feed) and LF (Line Feed) pads simultaneously, hold and turn on printer. It will buzz. List your XB pgm. in the usual manner by typing 'LIST 'PI0'' and voila! You will have two cols. of hex and the last column will be the pgm. lines.

Isn't that marvelous? But what the heck do we do with it now!!!!

If anyone has a 10 or 10X, would you check and see if it works with them and let me know?

By the way, it will print hex on a FastTerm screen dump, MP spreadsheet, and a TIW 'PF'. (Still would like to know what the h... to do with it tho!!!)

Terry Atkinson posted the following on Timeline:

All DISK+AID, Memory Manipulator users: Coe Case has purchased the rights to all of Don Thompsons software. He plans some enhancements to those programs which will include direct disk control and TI/MS DOS disk xfers.

Right now, the latest versions are: DISK+AID; v3.2, and MemMan; v1.0, and are available for \$20.

Note: Don Thompson has sold his TI systems and is wholly dedicated to the Sanyo (IBM). For those interested, Coe's address is: Coe Case; 8011 Navios Dr; Huntsville 35802

Incidentally, Coe is the one who changed Barry Boone's track-copier such that it works on the CorComp machine.

Terry Atkinson posted the following on Timeline:

RUMORS.....I love 'em

1) a new (professional) track-copier is due to be marketed by Utilitec Software called **\*\*AWSOME COPY\*\***. Apparently, it will copy anything except itself, and when it makes a back-up copy, even Awsome Copy cannot copy the backup! Can be used on a single drive system (10 passes). There are two basic options to choose from: Standard Format (non-copy protected) and Special Format (copy protected). Under "Special" you can either choose to format a disk or copy one. Under "Format" you choose which drive, which track, and how many bytes per sector: 256, 512, or 1024. Then you tell it how many sectors, and initialize the disk any way you please. A great aid for those wanting to protect their own disks. (NOTE: As Barry Traver noted....what happens when software developers start sending out copies made with AWSOME COPY. Remember, Awsome copy cannot copy it's own backups!) Jeez! What a mess!!

2) Bad news for those waiting for the MG IBM style keyboard. He has put the project on hold, apparently because one of the chips has escalated in price. When the price comes down, the project will resume. Good news along the same line. A company: RAVE 99 Co., 25 Florence St, Bloomfield CT 06002, (phone after 6pm EST 203-242-4612 and 203-872-9272) have announced two new keyboards for the 99/4. They come with telephone type coil cords. #1 has 84 keys and is apparently an standard IBM XT type. #2 has 101 keys.. Both have full numeric key pads, separate function keys, and normal access to "I ?". Prices: 64 key 124.95(IBM type); 101 key \$145.95. Custom key assignments can be built in for \$15.00 additional, plus shipping cost. A 4 page brochure can be had by sending a SASE to the above address. Release is scheduled for 1 Oct.

3) Barry Traver has announced a new ARCHIVER utility, an upgrade of the one his supplied with the latest TRAVELER disk. Enhancements include: (1) Full compatibility with all known disk controller cards.

(2) Automatic creation of a packed file that is compatible with XMODEM uploading/downloading with FAST-TERM, 4A/TALK, and the latest PTERM.

(3) Additional "pack whole disk?" option added for convenience.

(4) Selective unpacking

(5) Additional on-screen info. on files within packed file

(6) Decreased back and forth action between drives.

(7) Full compatibility with earlier versions of ARCHIVER.

Recently I've subscribed to RE Computing. Thanks to Rick Lumsden! I find it interesting and informative and have had no problems dealing with RYTE Data and Bruce Ryan.

The following appeared in V1.8:

Pat Saturn of MicroStuph in Ohio has contacted us with some great information: First they do a console upgrade with 32K, RS 202 and DS/DD disk controller INSIDE the TI 99/4A console. Nice! He hasn't sent us a picture -- there's not much to see without lifting the 'hood'. He has been able to get a fully expanded machine inside the existing case and interface the small 3 1/2" drives to the 4A. You can add up to 4 DS/DD Teac drives to a modified console. Pack up the whole affair in a small case and haul it around (to users group meetings) without the PE Box. Good work! The price for this upgrade is \$602 all features included. He has several projects on the go -- some of which are really hot!

Most important is a new expansion box for the 4A. Work is in progress to develop a unit with five slots, power supply, space for two slim line drives, interface card and a smaller ROUND CABLE without the "aircraft carrier" off the side of the console. The unit should be logical, less expensive alternative to searching for a Peripheral Expansion Box. Looks as if some of the expansion cards will be going to multi-function soon as well. Indications that the stand-alone 128K memory unit with the PIO port will be done for the expansion box. Frees up one slot for those who want a parallel printer for their system but do not need the RS-202 features. Pat tells us that GE has a new shielded cable for this project and that this expansion unit will be useful right out of the box.

We'll keep you posted.

Pat Saturn can be reached at MICROSTUPH; 1456 Grandview Ave; Columbus Ohio 43212; (614) 486-7262

The following appeared in V1.12:

"C" is one of the mainstream industries most popular programming languages. The code is easy to develop and 'port' to other systems. It is modular, similar to Pascal, compiles for high speed operation is fully supported from one machine to the next. Lotus 1-2-3 is written in C as are other major packages.

Those wishing to investigate the C99 language by Clint Pulley should contact the contributing editor.

Notes:

- o approx 200,000 TI PEBS exist.
- o Dheins Hardware; 7 W. Airline Highway; Waterloo Iowa 50702 (319) 236-3861 has TI PEBS in stock.
- o The 9938 was developed in a joint license venture with Texas Instruments and Japanese companies. TI apparently bailed out and now Yamaha has gone into production. The chip is available for experimenters and in quantity to manufacturers.
- o John Clulow is no longer associated with the Horizon Computers. Why is anyones guess?
- o Bill Bronos of IUE fame is now associated with RD Computing.
- o J. Peter Hoddie released Pre-Scan It! through Asgard Software; PDB 10306; Rockville Maryland 20850 at \$10. PSI modifies any XBASIC program saved in merge format and the result is faster startup execution time of that program. We find the mod time a bit slow but a very useful utility.
- o TI has been contacting all known users group. For what reason is to been seen but rumour has it they are going to be releasing more software.
- o Gil Tennant recently went into business with Solid State Hardware; Dept. 169; 2356 Gerrard St. E; Toronto Ontario M4E 2E2; (416) 288-9412 catering to the TI. Prices of some equipment in cdn funds: CC TT card \$199; Horizon RAMDUP DSED \$250; Janome green monitor \$80; Computer Bus Extension Cable \$30; Samsung Goldstar color monitor \$250; RS202 32K mitfam-card \$208.75; DSDD 32K mitfam-card \$345 and all other brands (ie. CorComp, Asgard, MPB, and soon Myarc with Geneve.)
- o Those interested in joining the squish-a-mouse software club please contact the contributing editor.
- o DM 1000 is now at V3.3.
- o The contributing editor is in desperate need of a copy of the speech editor manual.
- o Funny things happen when you save or old to your RS232 under xb in the gram karte.

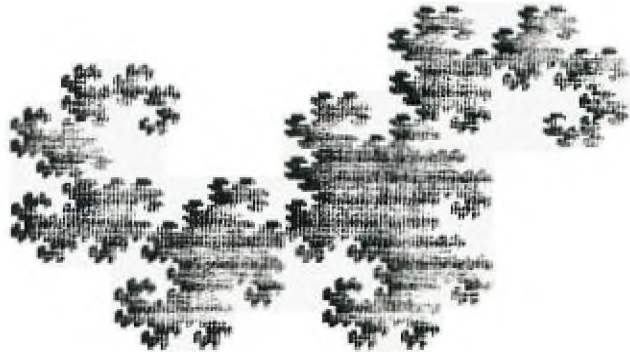
Next time we'll look at the CHARA1 file of TI Writer and some pokes and peeks you can use.



```

10 ! SELECT-A-TEAM          EXTND.BASIC REC.          BY B.LESKO 1986
    WINNIPEG 59:4A U.G. *****
20 CALL CLEAR :: ON WARNINGS NEXT
30 CALL CHAR(140,"16307EFFFF7E3018")
40 CALL COLOR(0,15,15,1,11,13)
50 R=I:U=0
60 RANDOMIZE
80 CALL SCREEN(5)
90 GOSUB 1160
100 CALL SCREEN(14):: DISPLAY AT(12,5):" S E L E C T - A - T E A M ! "
110 FOR FAT=1 TO 50 :: CALL SOUND(10,175,6,235,7):: NEXT FAT :: FOR D=1 TO 150 :
: NEXT D
140 GOSUB 1180
150 DISPLAY AT(4,1):"      NAME OF TEAM (A):"
160 ACCEPT AT(7,7)VALIDATE(UALPHA)BEEP:BL$
170 GOSUB 1160
180 DISPLAY AT(4,1):"      NAME OF TEAM (B):"
190 ACCEPT AT(7,7)VALIDATE(UALPHA)BEEP:ED$
195 NM$=BL$
200 GOSUB 1160
210 DISPLAY AT(6,1):"      ENTER DATA FOR:"":TAB(7);NM$
220 GOSUB 1170
230 ACCEPT AT(22,2)VALIDATE(DIGIT)BEEP:A
240 GOSUB 1180
250 ACCEPT AT(22,2)VALIDATE(NUMERIC)BEEP:B
260 GOSUB 1190
270 ACCEPT AT(22,2)VALIDATE(NUMERIC)BEEP:Z
280 GOSUB 1200
290 ACCEPT AT(22,2)VALIDATE(NUMERIC)BEEP:C
300 IF B=C THEN 430
310 IF A=B+Z+C THEN 340
320 GOSUB 1160
330 GOSUB 1210 :: GOTO 240
340 GOSUB 1220
350 ACCEPT AT(22,2)VALIDATE(NUMERIC)BEEP:D
360 IF D>0 THEN 380
370 RANDOMIZE :: D=INT(B*8RND)+10
380 GOSUB 1230
390 ACCEPT AT(22,2)VALIDATE(NUMERIC)BEEP:E
400 F=B*I
410 GOSUB 1240
415 DISPLAY AT(22,1):F
420 FOR FAT=1 TO 50 :: CALL SOUND(10,175,6,235,7):: NEXT FAT
430 GOSUB 1250
440 ACCEPT AT(22,2)VALIDATE(NUMERIC)BEEP:N
450 GOSUB 1260
460 ACCEPT AT(22,2)VALIDATE(NUMERIC)BEEP:F
470 DISPLAY AT(16,2):"HOME FIELD FOR:"":TAB(2);NM$:":TAB(2);"(Y/N):"
480 ACCEPT AT(22,2)VALIDATE(UALPHA,"YN")BEEP:R$
490 IF R$="Y" THEN R=3 :: GOTO 530
510 IF R$="N" THEN U=3
520 NM$=ED$
530 GOSUB 1160
540 DISPLAY AT(6,1):"      NOW ENTER DATA FOR:"":TAB(7);NM$
550 GOSUB 1170
560 ACCEPT AT(22,2)VALIDATE(NUMERIC)BEEP:G
570 GOSUB 1180
580 ACCEPT AT(22,2)VALIDATE(NUMERIC)BEEP:H
590 GOSUB 1190
600 ACCEPT AT(22,2)VALIDATE(NUMERIC)BEEP:I
610 GOSUB 1200
620 ACCEPT AT(22,2)VALIDATE(NUMERIC)BEEP:J
630 IF H=C THEN 760
640 IF G=H+I+J THEN 670 ELSE 650
650 GOSUB 1160
660 GOSUB 1210 :: GOTO 570
670 GOSUB 1220
680 ACCEPT AT(22,2)VALIDATE(NUMERIC)BEEP:K
690 IF K=C THEN 700 ELSE 710
700 RANDOMIZE :: K=INT(B*8RND)+10
710 GOSUB 1230
720 ACCEPT AT(22,2)VALIDATE(NUMERIC)BEEP:L
730 M=H*I
740 GOSUB 1240 :: DISPLAY AT(22,1):M
750 FOR MUS=1 TO 50 :: CALL SOUND(10,176,6,236,7):: NEXT MUS
760 GOSUB 1250
770 ACCEPT AT(22,2)VALIDATE(NUMERIC)BEEP:C
780 GOSUB 1260
790 ACCEPT AT(22,2)VALIDATE(NUMERIC)BEEP:Q

```



```

800 CALL CLEAR
810 IF N>0 THEN N=N+1
820 IF D>0 THEN D=D+2
830 IF K>0 THEN K=K+2
840 IF P>0 THEN P=P+1
850 IF O>0 THEN O=O+1
860 IF Q>0 THEN Q=Q+1
870 IF ((A+B+C+D+F+R)-(E+Z+N+P))>((G+H+J+K+M+U)-(L+I+Q))THEN 880 ELSE 900
880 GOSUB 1160
890 DISPLAY AT(3,4):" I PREDICT " :: DISPLAY AT(5,6):BL$ :: DISPLAY AT(7,3)
:" WILL WIN THE GAME" :: GOTO 970
900 IF ((A+B+C+D+F+R)-(E+Z+N+P))<((G+H+J+K+M+U)-(L+I+Q))THEN 910 ELSE 930
910 GOSUB 1160
920 DISPLAY AT(3,4):" I PREDICT " :: DISPLAY AT(5,6):ED$ :: DISPLAY AT(7,3)
:" WILL WIN THE GAME" :: GOTO 970
930 ! TIE AT THIS POINT.
940 GOSUB 1160
950 DISPLAY AT(4,1):" IT WILL BE A TIE GAME!!!"
960 RANDOMIZE :: IF S=T THEN S,T=INT(21*RN)+14 :: GOTO 1060
970 S=((A+B+C+D+F+R)-(E+Z+N+P))
980 T=((G+H+J+K+M+U)-(L+I+Q))
990 IF (S=0)+(S>T)THEN 1000 ELSE 1020
1000 GOSUB 1270
1010 GOTO 1060
1020 IF (T=0)+(T>S)THEN GOSUB 1280 :: GOTO 1040
1030 GOTO 1080
1040 IF S=39 THEN S=5 :: GOTO 1070
1050 IF (S>39)+(S>T)THEN GOSUB 1290 :: IF (S>39)+(S>T)THEN GOSUB 1300
1060 GOTO 1060
1070 IF T=39 THEN T=1
1080 DISPLAY AT(11,2):USING "##":S :: DISPLAY AT(11,6):BL$
1090 DISPLAY AT(15,2):USING "##":T :: DISPLAY AT(15,6):ED$
1100 DISPLAY AT(13,1):"SCORES" :: DISPLAY AT(12,1):" I" :: DISPLAY AT(14,1):
"
1110 DISPLAY AT(20,1):" TO PREDICT ANOTHER GAME " :: DISPLAY AT(22,1):" TOU
H THE SPACE BAR "
1120 CALL KEY(0,0,0)
1130 IF S=0 THEN 1120
1140 IF T=0 THEN 1120
1150 CALL CLEAR :: END
1160 CALL CLEAR :: CALL COLOR(14,2,15):: CALL VCHAR(1,1,140,24):: CALL HCHAR(1,1
,140,30):: CALL VCHAR(1,31,140,24):: CALL HCHAR(24,1,140,30):: RETURN
1170 DISPLAY AT(18,2):"TOTAL # OF GAMES FOR:" :: DISPLAY AT(20,2):NM$ :: RETURN
1180 DISPLAY AT(18,2):"TOTAL # OF WINS FOR:" :: RETURN
1190 DISPLAY AT(18,2):"TOTAL # OF LOSSES FOR:" :: RETURN
1200 DISPLAY AT(18,2):"TOTAL # OF TIES FOR:" :: RETURN
1210 FOR X=1 TO 20 :: CALL SOUND(20,110,7,500,6,-8,5):: DISPLAY AT(12,1):"GAMES
PLAYED MUST= WIN+LOSS+TIE" :: NEXT X :: RETURN
1220 DISPLAY AT(12,1):" " :: DISPLAY AT(18,2):"TOTAL # OF POINTS FOR:" :: RETU
RN
1230 DISPLAY AT(18,2):"TOTAL # OF POINTS against:" :: RETURN
1240 DISPLAY AT(17,1):"THIS IS THE TOTAL NUMBER OF POINTS IN THE STANDINGS FOR:"
:: RETURN
1250 DISPLAY AT(16,2):"HOW MANY PLAYERS, PLAYING WHILE INJURED FOR:" :: RETURN
1260 DISPLAY AT(16,2):"HOW MANY KEY PLAYERS, NOT PLAYING DUE TO INJURYS FOR:"
:: RETURN
1270 RANDOMIZE :: S=INT(14*RN)+22 :: T=INT(7*RN)+14 :: RETURN
1280 RANDOMIZE :: T=INT(14*RN)+22 :: S=INT(7*RN)+14 :: RETURN
1290 RANDOMIZE :: S=INT(21*RN)+22 :: T=INT(14*RN)+7 :: RETURN
1300 RANDOMIZE :: S=INT(14*RN)+7 :: T=INT(21*RN)+22 :: RETURN

```



NEWSLETTER EDITOR  
WINNIPEG 9974 USERS GROUP  
P.O.B. 1715  
WINNIPEG, MANITOBA  
CANADA, R5C 2Z6

EDMONTON TIERS  
PO BOX 11983  
EDMONTON ALBERTA  
T5J 3L1