Victoria U.E.

MESSAGE FROM THE EDITOR
Jan 1986

You are reading my first message as an editor with I hope rapt attention as there are a few short messages which must be relayed.

For those of you receiving this tome that are not members of our club please be advised you receive same out of our respect for you and your newsletter. We hope this reciprocal exchange of information will improve our mutual efforts and make friends over the miles. While we may have an "orphan" computer; nonetheless, if our users continue to produce the improved programs we are seeing then I will be more than happy that I did not buy brand "X,Y,Z" (A.C.I). For my investment of mere pennies on the dollar I have friends who paid much more and ended up with lesser products envious of the 11's capabilities. For those of you that have developed software for the 11 99/4a please accept our thanks for your valuable efforts. Moreover, we are including a membership list to let you know specifically who we are. You should also be aware that our newsletter is not monthly with the result you will receive 6 a year. Victoria is a very small city yeilding us a membership under 20 (about one per 6000 of population). Due to the high cost of production and postage our intent is to provide a meaty periodical devoid of fat

Enclosed for local members is a membership phone list to enable a few devoted souls to remind their fellow members of meeting days and locations. Please retain the list near the telephone so that you can make your contribution when asked. This technique has resulted in a high pecentage turnout at past meetings for other organizations

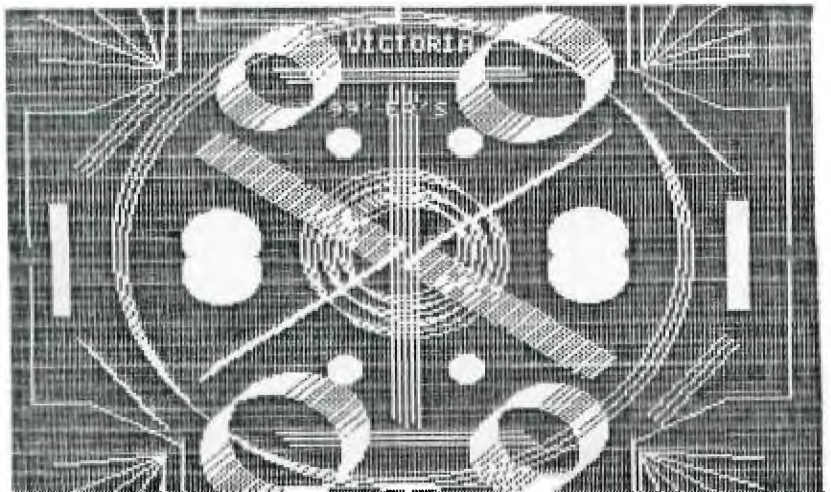
We welcome For Sale/Wanted adds and provided they are not from a business will be featured free of charge.

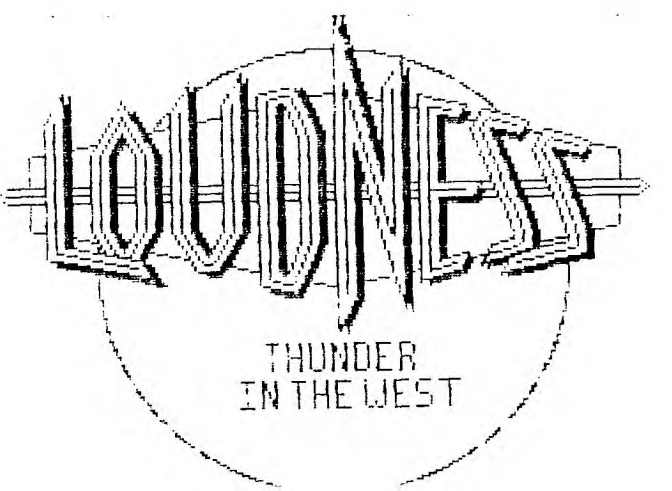
Submissions and communications for the newsletter may be sent to: Ken Armstrong, 1176 Briarwood Drive, RR#1, Cobble Hill, B.C., V0R 1L0, Canada

Membership for 1986 is $20.00. By the time you receive this newsletter it will be overdue if you have not already paid. Cheques can be sent C/O the author at the above address or to the Treasurer, Gary Hare, at the enclosed address.

Lastly, on behalf of the club and past executive I would like to thank those members who gave so much of their time and efforts to ensure the success of our group. Also a special accolade goes out to our President/Librarian, Tom Swirski, who with considerable effort and personal cost has provided us with an extensive library and vastly improved communications with other user groups

HAPPY HACKING Ken Armstrong





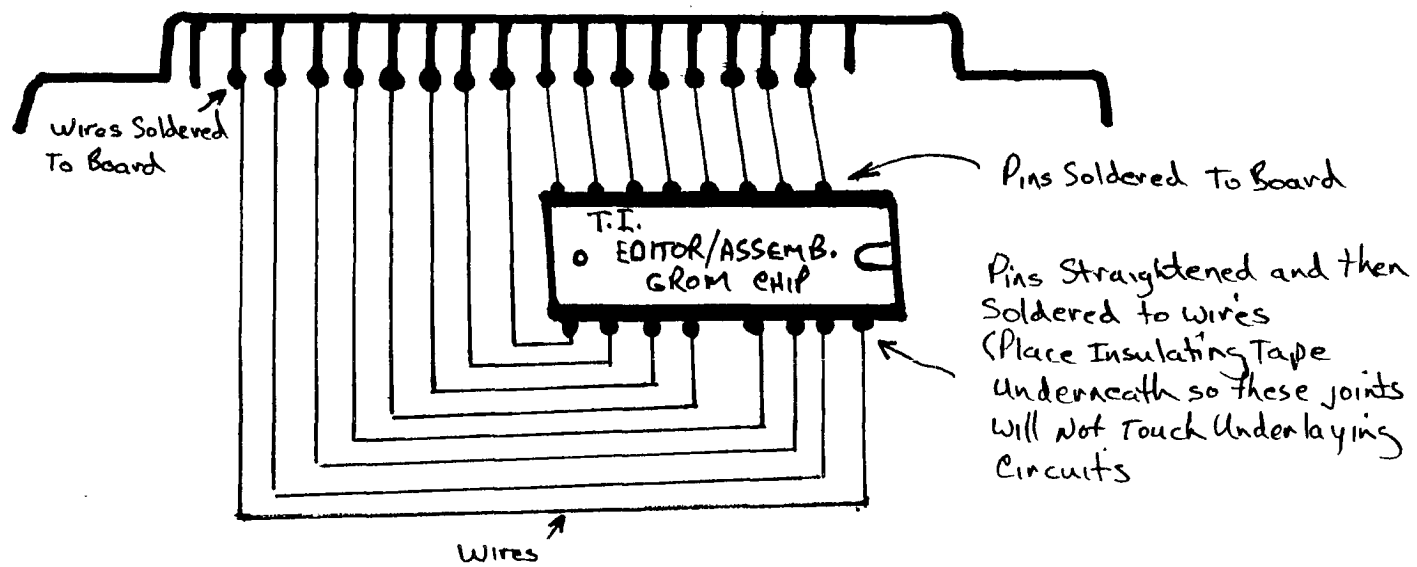
OSRAM CARD/CARTRIDGE MODIFICATION

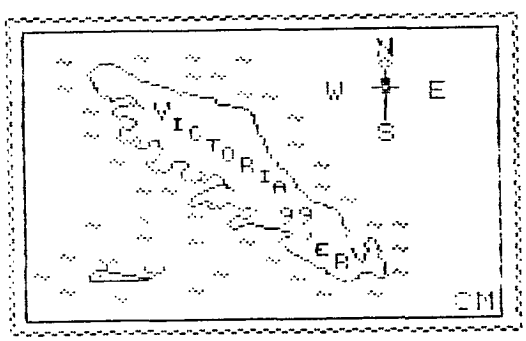
The following technical information was submitted by Johann Van Inshoot as a small electronics project that would allow the owner of an Osram Card to mount the T.I. editor assembler GROM chip to the bottom of the card thus enabling the user all of the benefits and features of both card/ cartridges. Johann has been using the Osram card for some time and it appears from my point of view that two weaknesses of the card will be overcome with this modification. The Osram Card came with scant documentation and did not have a cartrige cover. The excellent manual for the E/A alone with its cartridge cover completes this most useful mating. The actual benefits can be looked at from two points of view. Further to the significant capabilities of the Osram Card the addition of the E/A chip will enable you to "Peek and Poke to it with basic". The other way of looking at the modification is that you will improve the capabilities of the E/A chip by adding 8k of CMOS RAM with the Osram card. This expands the useable memory to 40k from 32K.

A word of caution of course is necessary. If you do not have the skills or equipment for this fairly simple task - use the skills of a friend. Be careful unsoldering the E/A chip and use the normal techniques to protect the components from heat.

The diagram shows the bottom view of the Osram Card which has no chips. The unnecessary parts of the circuit have been omitted and the drawing is not quite to scale.

For further information on the Osram Card contact OSRAM INDUSTRIES, 644 Bellon Ave., Victoria, B.C., V9A 2Z6, Canada or Phone (604) 383-1315 after normal working hours.





AN INTRODUCTION TO FILE PROCESSING WITH TI BASIC AND EXTENDED BASIC

Editor's Note: The following article was originally published in "The Suncoast Beeper", Newsletter of the Suncoast 99er's of St. Petersburg, FL.

FILES, RECORD and FIELDS

File: A file is the way basic programs communicate data with external storage devices. Some typical external devices are:

DEVICE	FILE NAME
Cassette Recorders	CS1 or 3
Disk Drives	DSK1 to 4
Parallel Port	PIO
Serial Port(s)	RS232/1 or 2

Record: A group of data items which are stored together in a file.

Field: A single data item in a record. Each variable in your program will occupy one field of a record.

A file consists of one or more records and these records consist of one or more fields. When the computer transmits data to one of the devices listed above it sends one record at a time.

FILE ATTRIBUTES:

Files may be organized in a number of different ways, depending upon the device being used and what the file is being used for. The organization and other characteristics of a file are called its attributes. When data files are opened in BASIC (using an OPEN statement) you describe the file and its attributes to the computer. In the discussion below the order of the attributes and the terms used are same as in your BASIC manual.

It is not always necessary to specify each of the attributes. In many cases the computer will select what is called a "default value" if you do not choose one. The default value that the computer will use depends on both the device selected and the other attributes of the file.

A. FILE #: May be any number from 1 to 255. (File #0 is the screen for output and the keyboard for input.)

B. DEVICE NAME: See list above.

C. FILE ORGANIZATION: The file organization refers to how individual records within the file can be accessed:

1. SEQUENTIAL: Data is read from or written to a file starting at the beginning and going through the file, one record at a time...you cannot skip around.

2. RELATIVE: True random access files. The records can be written to or read from in any order. Disk files are the only type that can be Relative. All others must be Sequential. Sequential is the default file organization.

D. FILE TYPE: This refers to the format in which the data is stored.

1. INTERNAL: The data is stored in the binary form in which it is most easily used by the computer. Files stored on cassette or disk should be INTERNAL format.

2. DISPLAY: The data is stored in ASCII format. This format is used for sending data to the parallel and serial ports. DISPLAY is the default file type.

E. OPEN MODE: Describes whether the file may be written to, read from or both.

1. UPDATE: The file may be written to or read from. This is the default OPEN MODE.

2. OUTPUT: The file may only be written to.

3. INPUT: The file may only be read from.

4. APPEND: Allows you to add additional records to the files end.

F. RECORD TYPE: Describes whether the file has FIXED or VARIABLE length records. All relative files MUST have fixed length records.

1. CASSETTE FILES: These files may be specified as fixed or variable but the computer actually uses FIXED length records, which may be 192, 128, or 64 bytes long. The default for cassetes is VARIABLE with a maximum lenght of 64 bytes. The computer actually uses FIXED with 64 bytes length.

2. DISK FILES: SEQUENTIAL Files have a default length of 80 bytes and a maximum of 254 bytes. RELATIVE Files MUST be of fixed length and may be up to 255 bytes in length.

3. OUTPUT PORTS: PIO and RS232: Have a default record type of fixed with a length of 80 characters. Other lengths may be used.

By Gary Guibor, Miami 99ers

16 BIT POKER

IN AN ISSUE OF MICROCOMPUTING, WALTER KOETKER SUGGESTED THE FOLLOWING:

```
10 FOR C=1 TO 100
20 IF SQR(C)<>INT(SQR(C)) THEN 40
30 PRINT C
40 NEXT C
```

THE 99/4A PRODUCES 10 PERFECT SQUARES WHILE TRS-80 MODEL II, APPLE, AND PET COMPUTERS FOUND ONLY 6! MICROSOFT BASIC (IN MOST CP/Ms) DISCOVERED 9. OTHER THAN THE TI, ONLY BASIC-PLUS ON A $100,000 MINI FOUND ALL 10!

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Below is a Extended Basic program that will keep your disk drives running until you push FCTN 4 (clear). Many disk drive cleaning kits require the drive to run for 30 seconds. Use this program and stop when the clean time has been reached.

```
10 CALL CLEAR
20 CALL SCREEN(13)::FOR C=1 TO 12::CALL COLOR(C,16,13)::NEXT C
30 DISPLAY AT(12,10):"CLEANING....":::DISPLAY AT(23,2):"(Hold FCTN
CLEAR to Stop)"
40 ON ERROR 60
50 GOSUB 70
60 GOTO 40
70 RUN "DSK1.B"
80 RETURN
```

Reprinted from June/July 1985 newsletter of the Wiregrass 99/4A Users Group.

(from MID ILLINOIS's MICRO)

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Here's a little program for the kiddies.....

This program lists the use of two sprites. The sprites are horses with wings, each sprite with the wings, head, and feet in a slightly different position, The sprites are shown at magnification 4 for about 20 seconds, then changes to magnification 3. When the sprites alternate while the program is running; the horse gives the impression of flying. (Taken from the A9CUG CALL NEWSLETTER)

```
100 CALL CLEAR
110 CALL CHAR(96,"0000041805380131 4F8F8F1C3028241000000088B86C62E0E0E0F824
    24488000")
120 CALL CHAR(100,"03000C020D0321514F8F0F3C5060A01000804088BC6864E0E0E0F81
    412090400")
130 CALL MAGNIFY(4):: CALL SPRITE(#1,96,2,90,90,#2,100,2,90,90)
140 CALL MOTION(#1,-1,18,#2,-1,18)
150 FOR FLY=1 TO 40 :: FOR A=1 TO 2
160 CALL COLOR(#A,1):: CALL COLOR(#(3-A),2)
170 FOR X=1 TO 90 :: NEXT X :: NEXT A :: NEXT FLY
180 CALL MAGNIFY(3):: GOTO 150
```

Thanks
SAVANNA 99ers