CLEVELAND AREA 99-4A USERS GROUPS NEWSLETTER

MAY, 1986

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EDITORIAL COMMENTS

NOTICE: To newsletter editors on our exchange list. Due to the cost of postage and printing, it is uneconomical for us to send to groups which do not send newsletters in exchange. If you have been receiving ours and would like to continue, we will be deleting those groups from our list from which we have not received a newsletter within the past two months. This will be your last issue unless we hear from you.

We sent out several on a trial basis a few months ago, the result of which is that we have almost doubled our response and appreciate the new groups which have picked us up.

It was great to have representatives from all of the clubs at the Editors' meeting this month. There was at least one person from each group and more in most cases. There are great possibilities ahead of us. The groups are sharing a common newsletter and a common library. I am sure that there are many other things we can share if we work at it.

Chuck Mareno mentions in his notes that Home Computer Magazine is no longer. Read them for the details. However, he did not give the new address: Home Computing Journal, P.O. Box 70703, Eugene, OR 97401. It is to be a quarterly publication, but no details as to when to expect the new issue. Also, the notice has no phone number for you to call. Wonder Why?

On what has to be a more upbeat note, the remaining 4 issues due for subscribers of The Smart Programmer are to be fulfilled by Super 99 Monthly starting with the April issue. It will be expanding to a 16-page publication at $15 per year.

An interesting item from the March, NW Ohio newsletter by Ed Menasion of OH-MI-TI is that transfer paper can be purchased at most outlets which sell printer paper on which you can screen dump graphics from any of your programs, or a specific graphic you have created. Then you iron the design on a T-Shirt for your own customized T-Shirts.

John Ueland of the Puget Sound 99ers says that you can get stereo out of your TV by tapping into the audio wire in the modulator. He says the wire is marked audio in the box, and in his case was yellow. The black wire was ground and tied to the case of the modulator. He soldered a wire on the back side of the circuit board where the yellow audio wire was connected and soldered the ground wire to the case. These two wires will connect directly into the LINE-in connection on the back of most stereos. Anyone want to try this for us?

Look inside for...A Ha Ha on software pirating; throughout the newsletter are various tips and notes from several members. Great to have this much local participation. We hope that Walt Ryder will be encouraged to share his assembly language knowledge with us on a regular basis. Marty Smoley has done it again with a program which will print out a customized mailer for diskettes. It looks like the Horizon Ramdisk is going to be one of the hottest items ever for the TI. Marty tells about his and Howie Winkler has gotten the kit to make one also. Dave Talan is continuing his articles on creating Tunnels of Doom adventures without the TOD editor. Reports from several newsletters were combined for the article on the TICOFF FAIRE. If you were one of the many at Northcoast last month who "won" the telephone cable in the raffle and are still scratching your head about what to do with it, read the article entitled "Cable Box".

We have a review of a new book, "Cracking the 99/4A", Odds 'n' Ends is a report of an on-site visit to Tex Comp, Miller's Graphics and DataBiotics. The library notes got a little out of hand (the editor CAN say that to the librarian), but hope it clears the air. There is a list of close to 30 new library items which are now available to ALL of the groups. A review of Nuts & Bolts #2 sold by Jim Peterson. I don't envy Tom Wellis his next phone bill from all the calls he has made to find a certain VCR tape for the Assembly SIG. It must have been great to talk with all those TI people though.

EXECUTIVE NOTES - GOLDEN CRESCENT

Our last meeting was held on April 17 at RAM Enterprises with Dwayne Hughes sharing more information on the New Horizon Ram Disk and the GramKracker.

Thanks, Dwayne, for a very interesting presentation. And, thanks to Dick Burger for the use of his store. By the way, Dick carries MICROpendium and has a number of back issues available...also for Home Computer Magazine. Give him a call at 967-1317.

At our meeting Bob Barto gave me a letter from HCM informing him and all of us that as of the Vol 5., No. 6 issue, HCM subscriptions will be picked up by Home Computing Journal, and that's the name of that tune.

The TI section of the May issue of Computer Shopper carries review of Von Graphs99 (utilities Software, P.O.Box 7275, Dearborn, MI 48121) for $19.95 and Business Graphs 99 (McCann Software available from Disk Only Software, P. O. Box 4170, Rockville, MD 20850), $29.95; also an article on figuring out files which we have covered in a past issue of ur newsletter.

Our next meeting will be on May 15, Thursday, 7:30 p.m. at RAM Enterprises, Vermilion, OH, 967-1317. We will have see of the latest freeware available, including some other brand new software.

CHUCK MARENO

REQUEST FOR INFORMATION

Have you wished that you could unplug the speech synthesizer from the side of the console and install it in the P-Box? I want to do it because on the side of console it is just one more connection that the data must pass through to get to the disk drives or the interface cards. The more connections there are, the greater the chance of having a failure.

Anyway, I made a design on paper for putting the speech synthesizer into the P-Box, but before I build the circuit I would like to know if anyone else has done this and what they have found to be the best circuit. (Yes, I know that CorComp can do it, but they do not like to share the technical details with us lowly consumers.)

If you have information on this subject, I would appreciate hearing from you. Send info to:

Jim Nekeel
Northcoast 99ers
11596 Forest View
Munson, OH 44024

We will publish the results in the newsletter.

NEED EXTRA CASH?
KILL A SOFTWARE PIRATE

How would you like to earn $500 extra cash in your spare time? It's easy--just kill any friends or associates who make illicit copies of copyrighted software. SAPSUCKER (Software AntiPirates Sentencing Unlawful Copiers to be Killed in Equitable Retribution), an organization of angry and obscenely profitable software producers, is offering a $500 bounty to anyone who can prove he or she or it has zapped a copier. The proof must include a floppy disk holding the pirated program and any vital part of the illicit copier's anatomy (a pancreas gland, for example).

If you haven't got the guts to kill the pirate, maiming qualifies you for a $250 bounty. Minimum requirements for this category are a two weeks' hospital stay, with at least one week in the Intensive Care Unit. An audio cassette of the victim's screams and moans earns you a $50 bonus.

Finally, if you have no guts at all, just pass the copier's name to SAPSUCKER, and we'll do the rest and pay you $100 as soon as the body's cold.

NOTE TO KIDS:Watch your mommy and daddy carefully.If you seetheir faces turn red after they put the funny black things in the computer, it probably means they're being bad,and making copies they shouldn't. Don't kill mommy or daddy--in most places, parricide (killing mommies and addies) is against the law. Just pick up the phone and dial 1-800-BAD-PAPA, and we'll send a big man who'll teach your mommy or daddy a lesson. And we'll give you a new bicycle and set you up in a nice new foster home after the funeral.

SAPSUCKER . 100 Piracy Way . Sleazonia,WV

The above article again comes courtesy of Personal Engineering and Instrumentation News, April, 1986, edited and Published by Paul G. Shreier (617) 969-7274.

NEW TI USER GROUP

There are reports that a new group has been formed called The Hardcore 99ers User Group, located in the North Olmsted area.

As with all new groups, they are interested in building up their library. However, there is a &WARNING& attached to all persons involved with building libraries...stay away from pirating copywrited software..it is against the law!!! This practice ultimately hurts the software developers, suppliers and consumers.

TAPE TIP
By Earl R. Blewitt

For those who opt to affix Disk Catalog Lists to their Disk folders, the following tip may be helpful:
3M has a "SCOTCH MAGIC PLUS Removable Tape 811" th will securely attach the listing to the disk jacket folder. When updating the listing, it is easily removed without tearing up the jacket paper. This tape can be purchased at Office Supply and other outlets.

SOLON EXECUTIVE NOTES MAY

Our April meeting was highlighted by a demonstration of two MULTIPLAN income tax preparation programs, shown by Ray Chown. Ray showed the group how the information required by the 1040 form is entered at the appropriate places within the program. His presentation was also a good primer on general MULTIPLAN use as well. Thanks Ray for spending the time to give us a look at one of MULTIPLAN'S many usefull applications. Next month Leonard Gammel will present the program of the month.

Bruce Young is in the process of copying and updating the current disk library. This is a large task, because it involves duplicating roughly 200 disks. Thanks to the work of some very dedicated people (specificaly Deanna Sheridan of Northcoast) we should have one of the most comprehensive T.I. software collections to be found anywhere. Deanna is constantly making additions to the disk library, and has offered to make them available to us as well. We really appreciate her work and time spent in behalf of us all. By the way, a very large majority of the programs available can be run on, or be easily converted to, tape. So if you do not have a fully configured system, there is still plenty of programs available

In light of the fact that we will now have the new library in our possession, our June meeting will be devoted to a copy session. (I hate that term, but it fits here). We will be needing volunteers to bring in their systems in order to make enough hardware available for this purpose. I will make a formal request at the May meeting in reference to this.

I'd like to clear up a point of possible misunderstanding in view of the monthly program policy. At the annual meeting in January, a policy was adopted that asks for active members to provide for a month's presentation. That person would work with an inactive member in the hopes of bring the inactive back to the status of active. This does not mean that when it is your turn you absolutely have to get up in front of the group and lecture or go through a step by step procedure. I know that most people feel uncomfortable in front of an audience, (myself included), and that it can be very difficult to present a topic even if you know it inside out. Therefore, it was stated at the time that for those who preferred not to give a demo, they could contact someone from outside of the group such as a hardware/software dealer, sales rep, or any one of a number of related persons or groups to give the demo instead. (Several years ago, a 3-M sales rep gave a great presentation regarding disk manufacture and care, for example). There is absolutely no intent on anyone's behalf to ask anyone to do anything that they would feel uncomfortable with. There is nothing worse than being put into that situation by another person or persons. Therefore when your name comes up for a particular month and you should feel that you either can't or don't want to give the presentation, NO ONE will think any the less of you for your position. We care FIRST about ALL of our members and don't want to lose a single one of you because of a bad feeling or misunderstanding. Believe me, we all understand the feeling of being put in a position of being asked to do something that we don't want to. THAT DECISION IS YOUR'S AND WE RESPECT IT!

I hope to have a few more programs to review in next month's column. I had hoped to review a program that lets you print out your MULTIPLAN spreadsheets sideways on the sheet. However, the disk I obtained had no documentation file or loader for the program. I'll try to tell you about it next month. By the way, I have a new FORMA1 file for T.I. WRITER that sets the printer default to PIO.CR instead of the RS232 default. I also have the latest DM1000 update. (V.3.1.), thanks to Deanna. I will make these available at the next meeting.

See you May 10,

Steve Weinkamer

EXECUTIVE NOTES - NORTHCOAST

At the April 12 meeting, we had a very well prepared demonstration of Video Titles II (one of 3 versions) from J&K Software by John Blackmer. John showed a videotape he made using this program to which he dubbed in music.

John Brennan of Youngstown showed a TI diagnostic module he made by buying just the grom chip. This cartridge was never widely available. Since the quiet fan did not arrive, its installation will be shown at the May 17 meeting. Pat Johnson will show MICRO Pinball and Monopoly.

We plan to raffle some E/A Option #5 assembly games which have Extended Basic menu loaders. Deanna is receiving some interesting programs in her trading - please see her report elsewhere. The copying donation box helps to support her great effort!

RON MINADEO

FORMATTING ASSEMBLY LANGUAGE SOURCE CODE.

HERE IS A TIP TO HELP ELIMINATE ERRORS. TRY TO USE THE PRESET TAB POSITIONS. THIS WILL MAKE YOUR SOURCE CODE LOOK LIKE THE SOURCE CODE IN THE EDITOR ASSEMBLY MANUAL. THE TABS ARE PRESET WHEN YOU ENTER THE EDITOR MODE. THE FIRST POSITION WILL POSITION THE SYMBOL IN COLUMN 1, NEXT TAB WILL POSITION THE OPCODE IN COLUMN 8, NEXT TAB WILL POSITION THE OPERAND IN COLUMN 13, NEXT TAB WILL POSITION THE COMMENTS IN COLUMN 26.

WALTER RYBER(921-8223)

```
10 ! ##### MS/MAILER5 ##### By: Martin A. Smoley ##### For Epson Printer #####
15 !              ##### NorthCoast 99er's UG #####
50 TO$="TO:" :: FR$="FROM:" !           ##### Extended Basic  #####
60 MYNAME$="Your Name Goes Here"
65 MYSTRT$="Your Street Address"
70 MYCTSTZP$="Your City  State  Zip"
75 DB$="     !  # #    DO NOT BEND    # #  !"
77 XR$="        # #   DO NOT  X-RAY   # #"
80 FC$="     !  # # FIRST CLASS MAIL  # #  !"
82 CD$="        # # COMPUTER SOFTWARE # #"
90 XL$="     !   #                     #   !"
95 SLINE$="- - -!- - - - - - - - - - - - - - -!- - -"
100 OPEN #9:"PIO" !          Open Printer
110 PRINT #9:CHR$(27);"0";! Skip over paper cancel
120 PRINT #9:CHR$(27);"W";CHR$(1);!      START ENLARGED
130 PRINT #9:CHR$(27);"G" ! START DOUBLE STRIKE MODE
200 INPUT "  ENTER PERSONS NAME    ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^":TONAME$
205 PRINT :: PRINT
210 INPUT "ENTER PERSONS STREET ADDRESS^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^":TOSTRT$
215 PRINT :: PRINT
220 INPUT " ENTER     (No Comas )     CITY        STATE   ZIP    ^^^^^^^^^^^^^
^^^^^^^^^^^^^^^":TOCTSTZP$
225 PRINT :: PRINT :: GOSUB 900
550 PRINT #9 :: PRINT #9 :: PRINT #9
600 PRINT #9:TAB(8);:: PRINT #9:FR$
620 PRINT #9:CHR$(15)!  SET CONDENSED MODE
630 PRINT #9:TAB(14);:: PRINT #9:MYNAME$
650 PRINT #9:TAB(14);:: PRINT #9:MYSTRT$
670 PRINT #9:TAB(14);:: PRINT #9:MYCTSTZP$
700 PRINT #9:CHR$(18)! CONDENSED MODE OFF
704 FOR I=1 TO 7 :: PRINT #9 :: NEXT I
706 PRINT #9:"       # DO #"
708 PRINT #9:"       # NOT #"
710 PRINT #9:"       # X-RAY #"
730 PRINT #9 :: PRINT #9 :: PRINT #9
750 PRINT #9:TAB(18);:: PRINT #9:TO$
770 PRINT #9:CHR$(15)! SET CONDENSED MODE
780 PRINT #9:TAB(32);:: PRINT #9:TONAME$
800 PRINT #9:TAB(32);:: PRINT #9:TOSTRT$
820 PRINT #9:TAB(32);:: PRINT #9:TOCTSTZP$
840 PRINT #9:CHR$(18)! CONDENSED MODE OFF
850 FOR I=1 TO 7 ! ### Print lines + messages ###
860 IF I=6 THEN PRINT #9:FC$ ELSE PRINT #9
870 NEXT I
875 GOSUB 900 :: GOTO 1000
900 PRINT #9:SLINE$
905 FOR I=1 TO 2
910 IF I=2 THEN PRINT #9:DB$
915 IF I=2 THEN PRINT #9:XL$
920 IF I=2 THEN PRINT #9:XR$
930 PRINT #9 :: PRINT #9 :: PRINT #9
935 PRINT #9:FC$ :: PRINT #9:XL$ :: PRINT #9:CD$
960 PRINT #9 :: PRINT #9 :: PRINT #9
965 NEXT I
970 PRINT #9:SLINE$
980 RETURN
1000 INPUT " DO YOU WANT ANOTHER (YN) ":Y$
1010 IF Y$="Y" OR Y$="y" THEN CALL CLEAR :: GOTO 200
1050 PRINT #9:CHR$(27);"W";CHR$(0);
1100 CLOSE #9 :: END
```

As some of you know I have a freeware program called "FILEREADER", which has been mailed out to a couple dozen people in the last several months. Because this was a One-Way shipment I decided that spending the "Big Bucks" on store bought mailers would have to go. At that point I turned on the old TI and came up with MAILER.

I am presently using MAILER5 and I expect to need 6,7,8 etc. down the road. I think other TI users can get some use out of this program, and your welcome to it.

The instructions are simple.

(1) Type in the program entering your name and address for MYNAME$, MYSTRT$, etc.

(2) Run the program and enter the information as requested.

(3) Cut two pieces of cardboard 6 in. by 6 in.

(4) Trim the print out along the dash (-) line and wrap the disk using scotch tape.

NOTE: If you make any interesting changes to any of the programs I've submitted I would be interested in hearing from you.

##

A SHORT CALL KEY(DEMO)

```
100 ! Short Demo of CALL KEY Function

110 FOR I=1 TO 100 ! Start of loop "A"
120 PRINT "SpaceBar = PAUSE  Q = Quit"
130 CALL KEY(0,K,S):: IF K=32 THEN 130
140 IF K=81 OR K=113 THEN 160
150 NEXT I ! loop back to 110  or  "A"

160 CALL CLEAR
170 PRINT "  Press A Key For The": : :
180 PRINT "  Following Options": : :
190 PRINT "  (Q) TO QUIT": :
200 PRINT "  (R)  TO RE-RUN"
210 PRINT : : : : : : : :

220 CALL KEY(0,K,S) !          <<==
230 IF K>90 AND K<128 THEN K=K-32 !
240 IF K=81 THEN STOP !
250 IF K=82 THEN GOTO 110 !
260 GOTO 220 !                <<==
270 END !
```

This is actually a short demo to use up this corner of the page.

Type in the program without any comments(it's short). Run it and hold the spacebar. I know, "Big Deal" right!. Well, line 130 can be inserted in your programs (by itself) in a print loop and when the spacebar is held a pause is produced. NOTE: It is not realy important to check "S" for a key press and all that fancy stuff.

Note the logic below

220 Check for Key Press.

230 If Key Press is lower-case, make it upper-case.

240 If "Q" was pressed then Quit

250 If "R" was pressed then Re-Run

260 If any Key other then "Q" or "R" was pressed then go back to line 220 until "Q" or "R" is press.

This demo is not a big deal but little tips can be interesting and useful.
AND, this one balances the page out.

4.

```
- -|- - - - - - - - - - - - -|- - -
  |  * * FIRST CLASS MAIL * *  |
  |  *                      *  |
     * * COMPUTER SOFTWARE * *

  |  * *      DO NOT BEND  * *  |
  |  *                      *  |
     * *   DO NOT   X-RAY  * *

  |  * * FIRST CLASS MAIL * *  |
  |  *                      *  |
     * * COMPUTER SOFTWARE * *


- - -|- - - - - - - - - - - -|- - -
   FROM:

   Martin A. Smoley
     MS/MAILERS
   NorthCoast 99ers


   * DO *
   * NOT *
   * X-RAY *

        TO:

        # This is a special demo #
        of the MS/MAILERS program to
        let you see the print style.


  |  * * FIRST CLASS MAIL  * *  |

- - -|- - - - - - - - - - - -|- - -


  |  * * FIRST CLASS MAIL * *  |
  |  *                      *  |
     * * COMPUTER SOFTWARE * *


  |  * *      DO NOT BEND  * *  |
  |  *                      *  |
     * *   DO NOT   X-RAY  * *


  |  * * FIRST CLASS MAIL * *  |
  |  *                      *  |
   ' * * COMPUTER SOFTWARE * *
```

By: Martin A. Smoley   NorthCoast 99ers

The first thing I would like to say is that I am not big on writing articles. I'm about as fond of writing editorial type articles as I am of changing a flat tire on the freeway in rush hour traffic. But I'd like to tell everyone who will stop and listen how great I think my new "Horizon Ramdisk" really is. I purchased it as a kit. The card, instructions, and software came from Horizon Computer, and the parts kit, with memory chips, came from Bud Mills Service. In both cases it only took about one week to receive the parts after placing my order, which I thought was exceptional. The assembly instructions are designed for a person with no electronic background. Each page handles only a limited number of parts to be soldered in place and covers what they look like, their color, and other markings to tell you which direction they should be facing when installed. The PC Board is also well marked as to where each item should be placed. I was very concerned about static electricity harming the memory chips so I worked slowly and carefully taking about six hours to complete the project. The Horizon people say it can be assembled in about four hours and I can see where that is possible. I also did the extra testing of my Ram Chips as they described in the instructions for single sided boards. After the assembly was finished the fun began. I merely plugged the card into the PEB (with the batteries in place of course), selected Extended Basic, put the Horizon software disk in drive one, and typed in the following three lines: CALL INIT <ENTER> CALL LOAD("DSK1.VER_03") <ENTER> (some software loaded at this point) and last CALL LINK("LOAD") <ENTER> the computer accessed the disk one more time and that was it. The Ramdisk was ready to be used. I plugged in my old Disk Manager II cartridge and tried to catalog Drive 3 (which is where it is when newly installed) and got back the error, disk not initalized. OK! It knows 3 is out there. Well, I will cut to the good stuff. I initalized it DS/SD with old DM II in 28 seconds, 10.5 seconds with DM-1000. If DM-1000 files are placed on the Ramdisk, it will load in 1.8 seconds from Basic or XBasis using CALL DM. They say the Ramdisk is 20 times faster than a regular disk drive and that's probably true. In some things I think it's faster than that. It can be numbered 1 through 6 using CALL DN(n) to change its access, or, if you type CALL DN(1) it will replace normal Drive one. While it is DSK1 you have the availability of very high speed loading for TI Writer or for Editor Assembler. You cannot only change from EDIT to ASSEMBLE and load the Assembler at a rapid rate, you can enter a program, save the source code to the Ramdisk, and Assemble that source to an object code on the Ramdisk. This is the process I use know and for the first time Assembly Language doesn't seem like a real chore. I am in the learning stages of Assembly Language and one thing that really discouraged me in the past was the hours I spent trying to find errors in my source code. I would load the Editor, load the source code, find some errors, save the source code, load the Assembler, Assemble the source code, which would point out more errors, etc., etc., etc. I think this will make learning Assembly Language at least twenty times easier using the Ramdisk at its maximum efficiency. I haven't tried it yet, but I can see that Data Base type sorts and any programs that access disk files will be very fast and effitient with the Ramdisk. Here is something for all the real Hard Core 99ers. There is one thing better than having a Horizon Ramdisk, and that is having both the DS/SD Horizon Ramdisk and the 80K GRAM KRACKER from Millers Graphics. With all the E/A or TI/Writer Utilities loaded in the GK, and being able to work to and from the Ramdisk, you have got real 99/Power.

Good Luck #### MS

CREATING TUNNELS OF DOOM ADVENTURES PART II
By Dave Talan (Northcoast 99'ers)

Previously, I wrote an article on how to make your own TOD adventures using a sector editing program (DISKO). If you attempted to create your own adventure, you probably found that it wasn't that hard, although the graphics may have been a problem. Well, since the graphics are the most obvious in a TOD adventure, I thought it would be a good idea to show you how to change the doors, hallways, and ceiling... something which the TOD Editor cannot!

Changing these are not hard, but it will take a little time to get familiar with the process. In designing your own graphics, you have the option of changing a graphic, or that graphic's color. get started.

First, copy the original adventure ("Quest for the King") onto a blank disk if you have not already done so. Load DISKO, and you are all set.

In my last article, I stated that sectors 2A through 2D were too complicated to explain. The reason for that was because they contained all of the door, hallway, and ceiling information. This information is layed out exactly as the other graphics. With this in mind, it will be easy to customize your own adventure.

To change the internal graphics, go directly to sector 2A with a sector addressing program. I have found that DISKO works the best. When you have gone to sector 2A, display it in hex notation. This way, you can easily recognize the CALL CHAR statements. Starting from the upper left hand corner and moving to the right, divide your screen into sections of 16 characters. These will function as your graphics. To change these graphics, just enter the corresponding graphics codes into a desired position. I would recommend that you record your hexadecimal codes on a piece of paper ahead of time to speed up the process. Here is a table which will aid you in customizing yor own TOD adventure. I have done all the "hacking" for you, so all you have to do is change the hex codes.

Table 1 COLOR TABLE (Sector 004C, addresses 003E through 006F)	
Address	Level of Color
003E ==> 0047	Level 1+2
0048 ==> 0051	Level 3+4
0052 ==> 005B	Level 5+6
005C ==> 0065	Level 7+8
0066 ==> 006F	Level 9+10

‡ Note: 1 Byte is stored in each location. Each byte contains two (2) color codes. Example: Sector 004C, address 003E contains BF. B = color 12, F = color sixteen. Th[is] means Sidewall = color 12 and the Floor = color 16. Below is a color table for those who are unfamiliar with it :

Table 2 COLOR CODES			
Color	Hex Code	Color	Hex Code
Transparent	00	Medium Red	08
Black	01	Light Red	09
Medium Green	02	Dark Yellow	0A
Light Green	03	Light Yellow	0B
Dark Blue	04	Dark Green	0C
Light Blue	05	Magenta	0D
Dark Red	06	Gray	0E
Cyan	07	White	0F

Now that you know how the color table is organized, it will be essential to know the layout of the screen graphics. That is; the sidewall, floor, door, etc. If you will recall from table 1, I will call addresses 003E ==> 0047 a group. This will make things a lot easier. A group is divided in[to] ten different categories, each having a different scre[en] location. Here are these locations.

‡ Please Note: This is an example of group 1 (003E ==> 0047). It is the same for every group.

Table 3 LAYOUT OF THE GRAPHICS	
Address	Contains
003E	Sidewall, Floor
003F	Roof, Sidewall
0040	Wall Part, Furthest Door
0041	Futherest Door, Sidewall
0042	Door
0043	Top of Side Door Intersect
0044	Fountain
0045	Fountain
0046	Side Door Bottom
0047	Open Door Picture

The above information should help you greatly if you plan to modify an existing adventure game for TOD, or create your own. I hope that the tables above will be a good starting point for changing the internal graphics. If you are not sure about something above, please feel free to give me a call at (216) 333-5829 or write to :

Dave Talan

19831 Saranac Drive
Fairview Park, OH 44126

With the information I have provided, you can make any adventure you pleases, or you can "cheat." You can make a Warrior with 120 hit points at first level, a dagger that does 99 hit points of damage, or a Dragon with one hit point. So, as you can imagine, the possiblities are endless, and are just waiting for some brave soul to take advantage of them.

REPORT OF THE TICOFF FAIRE

EXCERPTS FROM Al Trudeau's report in the April CALL SOUNDS of the Westchester, NY group...

New products announced were "The Program Manager". This allows user defined start up menus and a hierarchial structure of submenus. End result is with a little planning one can load any file from disk without typing in OLD DSK1.BLAH BLAH; instead you simply go through the menus (sub/menus) until your file appears on the screen and enter the corresponding number. This action will load and run your program...much like the big boys do. All the menus are stored on floppy, and this product is ready to ship. Price - $69 and includes a cartridge, floppy and user manual. The cartridge contains a set of E/A ROMS and the new operating system. The floppy contains the "PROGRAM MANAGER" software.

Second offering is a program which allows you to dump any cartidge to disk and reload same. The programmer claims he has successfully dumped every cartridge he has managed to get his clever little hands on...totalling some 97 to date. Once on disk you can edit the binary, but can't change the length of the object file, so editing is fairly restrictive. Price is $25.95 assuming you already own the cartridge with the O.S. I got the feeling you could have either product with your initial purchase of the O.S. for $69.

Next on the agenda was Lou Phillips, President of MYARC with presentation of the 128K Extended Basic II. This appears to be quite an exciting product, however it requires a 128K MYARC memory card.

Next, the new computer. What we got was Lou waving a small card around that would plug into your PEB. This card contained the CPU, lots of memory and a couple of connectors to plug in a new keyboard and a TV hookup. Suggested retail

price---$499.95 with delivery to start next week.

FROM ANOTHER ARTICLE BY David Hultberg of the CAPITOL AREA USERS GROUP, Harrisbug, PA...

According to reports of Lou Phillips presentation, the 1986 new computer is no longer planned as a new console. Instead it will be a computer on a card for the PEB and will connect to an IBM type keyboard. It will have no module slot at all, so we are all supposed to buy the new module emulator from Pilgrm's Pride (supported by MYARC) that will enable us to dump all our modules to disk. The emulator will cost at least $69.95. With all the cartridges on disk, there will be no need for them or Millers Graphics GRAM KRACKER or any of that sort of stuff. (Right?!) Another report said that the emulator would be included with purchase of a new computer.

There were new hardware and software products available also. Inscebot unveiled a new program called DISPLAY MASTER. It enables you to write a command file which loads a sequence of TI ARTIST screens for display in a slideshow. Captions can be added both separately and superimposed on the TI ARTIRST screens. Delays, borders, video on/off, loop (for continuous demonstrations) and color changes are some of the functions provided. Retail price is $12.95.

A new hardware item was a box from Gemany that holds 6 modules and accesses the Review Module Library routines hidden in the console. No more pushing a button or mechanical switch on a widget to change Modules!

IN THE M.U.N.C.H. (Mass Users of the Ninety nine and Computer Hobbyists) newsletter is an advertisement with a picture of the "new computer" to be available in April and selling for $420.


CABLE BOX

by Jim Edwards (SFV 99ers)

One feature of the T.I.99 that has never been hard for me to criticize is the physical size and design of the peripheral cable and connector. It always seemed to take up an undeserved portion of desk space. With only a goal in mind and virtually no "hardware saave", I set out to alleviate the problem. It seemed a simple task to build a compact connector that would plug in without disturbing the original components. Actually, the most difficult aspect of the project was rounding up the parts.

That proved to be an education. Card edges and their matching connectors have several configurations.. For example 22/44 means that it has 22 conductors on both sides. Spacings vary as well: .10, .125, .156, etc. This refers to the distance between the centers of the conductors. This project requires 44 conductors (22 on a side) with .10 centers. Finding a card edge connector was difficult enough, but finding the male counterpart was impossible. A section was literally cut out of an abandoned board.

I found most of the parts at Pacific Radio while the card was found in a card board box at All Electronics. Obviously, the exact parts may vary but be certain of the number of conductors and spacing. Once everything is rounded up, simply solder the wires together making sure to match one end to the other. Optionally, an interupt switch can be added for those screen dump programs that require one.

1 UTILITY BOX
2 CARD EDGE CONNECTOR
3 STRAIN
4 BUMPERS
5 TELEPHONE CABLE
6 CONNECTOR HOOD
7 CARD EDGE
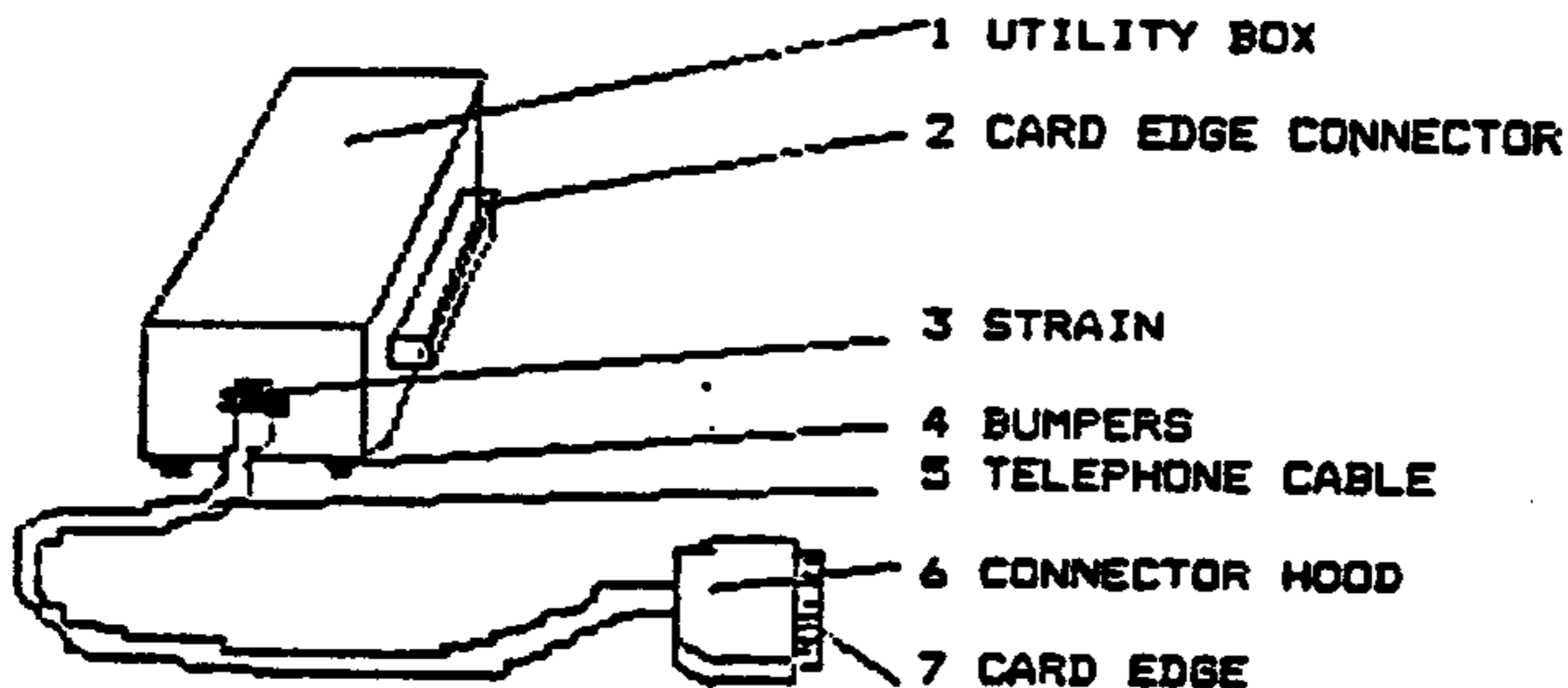
#	PART	MANUFACTURER	PT.#	COST
1	UTILITY BOX	CALRAD	90-785	$2.10
2	CARD EDGE CONNECTOR	GC ELECTRONICS	41-875	$4.74
3	STRAIN			.25
4	1/4" BUMPERS	RUSSELL IND.	REC-2076H	$1.79
5	50 CONDUCTOR TELEPHONE CABLE			
6	CONNECTOR HOOD	GC ELECTRONICS	41-1003	$2.48
7	CARD EDGE SCAVANGED FROM PC BOARD			$1.50
				$12.86

REVIEW OF CRACKING THE 99/4A
By Jack Sughrue
M.U.N.C.H., March 1986

Midnight Express Publications has put out a book (or book/disk combination) entitled CRACKING THE 99/4A. The book is $12.95. The combo is $16.95. Disk alone is $6.95. Add one dollar for shipping. (Midnight Express Publications Order Department, P. O. Box 26941, Austin, TI 78755)

CRACKING is edited by Brian Prothro and features loads of programs and tutorials by Prothro and many others.

The 170-page 6x9 paperback devotes the first 37 pages to tutorials using the build-upon-a-program-step-by-step approach: an excellent approach. You have a fine program at the end of the tutorials. This section includes discussions on how to make programs user friendly, what structured programming is, how to make linked lists. The rest of the book contains programs (those which appear on the disk) and very appropriate descriptions and helps before each program. There are five games (The "Seek and Find Puzzle Generator" actually creates those "word find" type games and is better than any other of that type I own - that includes Regena's and TI's.); three home programs (two of which I would call utility); two speech programs (one a good editor); and six utility programs (two in ASSEMBLY, believe it or not!).

Some of these 16 programs (not counting those in the tutorial sections) are familiar: Checkers, Othello, Checkbook Management, Graphics Generator, Super Cataloger. But for the most part, these versions are superior to any other versions I own or sufficiently different to be interesting.

Take "Hangman" for example. This version (XB, optional speech) has an automatic scoring system that gives additional points for guessing a word Before all the letters are filled in. I've never seen that done this way before, and I really like this feature. The program shows which letters have been guessed, has an entry correction possibility, performs automatic "rounds," has the ability to enter phrases, words, or short sentences, contains an automatic blank removal guard, and gives the player the opportunity to play against time (with the player choosing the interval).

Because blank spaces are allowed in phrases and sentences (with up to 24 letters and blanks), you can devise a "Hangman" game that is just film titles or famous authors. Excellent features in this game. And, although "Hangman" is far from the best program for ME in this book, I would have happily paid the combo price for this version of this game. For the "Seek and Find Generator" I would have paid double.

"S and F" allows up to 35 words of 10 characters or less. This lets you build just about any puzzle you want. I used it first to put in all the names of my fifth-grade class. They loved it. Then I started on the names of bones (after they had used Regena's "Name that Bone" program from the old 99er). Then I did a Halley's special with all kinds of celestial terms. And so on.

The hard copy printout is very easy to read, gives you word list and answer key, too, like the original TI wordfind puzzlemaker. But this is faster, holds more, looks better, allows you to play on screen as well.

Room limitations prevent me from going into detail about the utility, home, business, assembly, tutorial and speech sections. They are also fine. I hope Brian has great success with the publication. Maybe it'll encourage others to get back into textware for our fantastic machine.

ODDS 'N' ENDS
Edgar Dohmann, JUG, March, 1986

CALIFORNIA VISIT

Early in February, 1986, I had the opportunity to make a business trip to LA. While there I managed to visit DataBioTics, Miller's Graphics, and TexComp.

TEX COMP is primarily a mail order supplier of TI-99/4A products. They operate out of a small warehouse type building in an industrial business center north of LA. They have a substantial supply of products for the /4A and while I was there, they gave me a copy of their latest catalog. They claim to be "The number one source for TI-99/4A products in the world." I certainly have no basis for disputing these claims, but I find it incredible that they do not have a single product by either Miller's Graphics, DataBiotics, or MYARC in their 1986 catalog.

MILLER'S GRAPHICS is a true cottage industry. It is run by Craig and Sue Miller out of their condominium which was overflowing with products to be shipped when I visited them. It appears obvious to me that their business is about to outgrow their house. They are putting a tremendous amount of time and energy into their business, and I am glad to see such signs of success. Sue assured me that the final issue of the Smart Programmer series will be published as soon as they can finish the editing.

DATABIOTICS was founded by 4 men who have full-time jobs and wanted to build products and publish software for the TI-99/A as a sideline business. They lease a small building in the Lakewood area where they do development, assembly, and testing. Most order processing, advertising, etc. is done from the owners' homes. Like Miller's graphics, they have an association with several "third parties" who perform development, testing, and other services on a royalty basis.

Starting with this issue the library notes will be directed to all 4 of the Cleveland Area User Groups since all are now participating in the library additions. Because Northcoast requested some financial assistance from the other groups for the monies incurred in obtaining the many new fairware and other interesting programs, some question has arisen as to why and how a recent billing was arrived at to the other 3 groups in the area.

I would like to give a brief history of how the library has evolved the past year, what is happening now and hopefully what will happen in the future.

About this time last year Robert Van Etten moved from the Cleveland area and donated his personal library of about 350 programs to Northcoast. They seemed to be having trouble getting someone to catalog them and since typing has been my game for a long time, I volunteered to get the job done. I also had a personal library of about 250 programs most of which I had manually typed in from various sources. By the time I had cataloged these two sets of programs and deleted duplications, Northcoast added about 500 programs to their library.

At this point, through Tom Nellis, who belongs also to the Youngstown group, we were given the opportunity to share in the library they had just purchased from Aenion in California for a $1.00 per disk copying fee. The first set of disks cost $40 which we paid and which I believe $10 apiece was eventually billed to each of the other groups. Youngstown found out what a massive cataloging project this was going to be and offered the remainder of the Aenion library to us (another 50 disks) if we would assist in the cataloging job. This we(I) did and each program cataloged had an Aenion reference number so that Youngstown could take it and move it over to their library in their format. This brought our total library to approximately 2000 programs right at the end of 1985.

This, in effect, is the 2000 programs which we then offered to each of the other clubs in a completely cataloged format, with all duplications (as humanly as possible) eliminated and ready for your librarians to copy and run, for the unheard price of $10.00.

Then, we decided we had enough programs and good programs that we could try to expand and see how much of the new freeware items we could obtain. We developed some great contacts with several very generous user groups who traded with us which in turn allowed us to trade with others and expand this area. This, I believe, we did request some additional $$$$'s for at copying time. When the groups expressed the interest of having a "common" library, we felt it only reasonable that they share on a continuing basis the expenses involved. Agreement was made at the March editors

meeting to do this. Subsequently I sent a billing to each of the clubs for postage and disk costs incurred for February and March, split 4 ways. Evidently members of some of the clubs felt they should not be charged for the disks and then have to buy their own to get copies of these programs.

I in turn felt it only fair they share in these costs for the time and effort involved in obtaining programs that will come to them completely sorted, cataloged and runnable. I have figured up what this "surcharge" benefit to Northcoast will be and it comes to a whopping 10 cents per disk side. In the future I will be able to obtain disks at about 70 cents apiece plus tax. Northcoast uses flippies for exchanges and library purposes. This 70 cent disk now costs 35 cents. Split 4 ways, it is about 9 cents per club.

The past couple of months Northcoast has had a voluntary offering box in the copying area which our people have been supporting. The money coming in from this will cover our portion of the disks and postage and the library will not be a drain on the club's treasury. Believe me, if we could trade within our clubs on an equal basis as we do with other clubs across the country, no one would have to pay for anything. I hope this does not cause hard feelings to the point where people will feel that since they are "paying" for the freeware and other programs, they have no obligation to make any donations themselves.

Instead, I would hope that you will take it as a challenge to develop your own resources and take some of the pressure off me. Between trying to retype all the articles to make our newsletter look sharp and presentable and keep up with the new programs coming in, I am about computered out. I thought that the new programs for the library would have petered out by now, but instead I feel we are only starting to scratch the surface. More people are writing more advanced software whether it be commercial, fairware or public domain than ever before in the short history of our computer. I have realized for a couple of months now that there might come the time when I would have to give up either the library or the newsletter for my own sanity. I love both "jobs" if you will and it would tear me apart to have to do it. Thus, I would welcome help from anyone anywhere and you will soon understand the work and effort that goes into getting these to you so that all you have to do is put the diskette in your computer and let it run.

Enough of my soapbox, see elsewhere the listing of new software that has come in since the latter part of March and which I have not even had time to touch as far as cataloging is concerned. A "mini" copying session was held at the April Editors' meeting and since all the clubs were representated, your representatve copied any and all of the programs he wanted at that time and has them in his possesion for your next meeting.

Deanna

NEW SOFTWARE ARRIVALS

A special thanks to Mark McCauley for getting the SIDE&PRINT program for me in response to a special request we had. Most of the following are fairware programs unless noted otherwise:

1. TRIVIA99er - A TI Version of the famous game
2. FORTH BITMAP - Access Bitmap mode easily from FORTH.
3. TE4TH - A terminal emulator written in FORTH. Will download text or FORTH screens.
4. RAPID SCROLL - Assembler program that read D/V80 files and allows user to window left or right one character at a tee or up and done one line at a time without the 20-column "hop" of TI-Writer.
5. DISK MANAGER - By Todd Kaplan
6. TOMB OF DEATH - For Tunnels of Doom module.
7. FUNLWRITER - Another TI-Writer loader with options for many other programs, including E/A, FORTH, DM1000, etc. Endless possibilities. From Australia.
8. BAWRITER - A TI-Writer loader from Italy. Recently writen up in MICROpendium.
8. MAIL-CALL - A name and address mailing program.
9. SUPER DISK DUPLICATOR - Copies specified sectors.
10. SIDEWAYS PRINT - Print DV/80 and Multiplan files sideways on the paper with 2 choices of character fonts.
11. DM1000 V. 3.1 - With documentation detailing the differences between this and 2.0 which we previously had.

12. PRBASE - A 2-disk database program.
13. JP GRAPHICS - 2-disks. Incredible graphics drawing program written in FORTH.
14. c99 - The new language by Clint Pulley - 2 disks
15. Side&Print - A utility for Multiplan.
16. GENERATOR - See the announcement about this program by Dave Talan elsewhere in the newsletter.

The following are public domain programs

17. E/A MUSIC - 2 disks of music with graphics written in assembly language.
18. CIA ADVENTURE - Am told it is difficult to figure out as there are no instructions, but once you get into it, it rivals some of the Scott Adams productions.
19. Almost a full disk of tutorials, mostly on assembly language projects.
20. Another disk almost full, entirely of TI-Writer tutorial
21. A disk of print art featuring Mickey Mouse, Pac-man, Phantomjet, Pink Panther, Pluto and others.
22. Another print art disk of Star Trek characters
23. 3 more disks of Sam Moore, Jr. music.
24. A disk of graphic demonstrations. Very unusual.
25. A disk partially full of games written in assembly, including a fairware version of Breakout written by Clint Pulley.
26. A third disk of LOGO programs.

REVIEW OF NUTS BOLTS2
By Jack Sughrue
M.U.N.C.H., March 1986

From all the praising I've done of Jim Peterson's TIGERCUB SOFTWARE over the years, one would assume I had a share in the company. I don't.

But Jim's one-man operation still manages to keep up a very steady supply of some of the most practical and interesting ideas for our computer. His regular "Tips from the Tiger" columns, which appear in user periodicals throughout the country, have been a source of marvelous information and exciting routines for a very long time. Last year Jim put out a disk of these "Tips" from the first year and a half of his columns. This disk was (IS!) great. As a companion seller at the time, a second disk "NUTS AND BOLTS" was put out. This was (is) a diskful (over 100) merged subroutines that could be plugged right into your programs. Frankly, I think this is certainly THE most often used disk I own. "NUTS" comes with lengthy documentation.

NOW, there is a Volume II of each of these extraordinary disks. And if it is possible, they are even better than the first two.

"Tips" starts from #15 so no "Tips" are missing. These are priceless. But for me the BIGGIE is, of course, the "NUTS AND BOLTS" merged utility subprograms. They are 108 in VOL.II and provide even greater range to displays (always the first set I try out). There are Big Banners and Boxes and Blinkers and Curtains and Explodes and Flipflops and Titlers of all kinds. And even a Zoop!

The Character Sets are even more bizarre than VOL.I and

as much fun to put into your programs. Then there are whole sections devoted to Joysticks and Math and Graphs and Self-Changers (I love these!) and Sound Effects and Word Processing and Graphics and Programmer Utilities and File Handling and Menu Routines (very handy, these) and Sorts and Shuffles and even a Miscellaneous Secton with a subprogram called "Moon" in it.

I have to be honest; there is no way I can even begin to use all of these marvelous subprograms (and it takes about 4 months just to try them all out), but I enjoy having them done and done so well. It's surprising, too, how often I've used some routines I never thought I had a need for. "Nuts" does that to you.

These are excellent buys: "Tips" sell for $15 each Volume; "Nuts" sells for $19.95 each Volume. ($37 if you buy both) Shipping and handling included.

TIGERCUB SOFTWARE, 156 Collingwood Ave., Columbus, OH 43213. And, while you're at it, throw in an extra dollar for Jim's latest catalog. It'll be deducted from your first order. The catalog is loaded with programs of ALL kinds. Over the years I bought lots and lots of games and utilities for school (mostly), home and self-help. (But mostly FUN!). I never received anything from Tigercub that I was not pleased with. A superb company to deal with, albeit a one-man-show. You probably couldn't make a better investment.

(I wonder how many consoles Jim owns. He must have gone through quite a few in order to discover all the things he shares with us month after month.) I still wish he'd publish all his "Tips" as a book. If you do, Jim, put me down for Copy Number One.

ASSEMBLY LANGUAGE NOTES
Tom Nellis

The last meeting was well attended even though all the groups in the area had their regular meetings on the same day. An informal vote was taken and we now will only cover 1 chapter per meeting in the Molesworth book. The next chapter will be #7. We will also be studying the source code for Tombstone City. We will first look at TOMBA source code. It is not necessary to understand what each line does, but please review it before the next meeting.

Youngstown (P.O.U.G.) Assembly language notes were passed around and some useful info was acquired. Thanks P.O.U.G.. Finally, I have spoken to Danny Michael and John Taylor in Florence, Ala. It seems that thier is a VCR tape(tutorial) done by Mack McCormick which they are using in thier Assembly SIG. I am in the process of acquiring a copy of this tape (cost aprox $25). This tape is aprox 6 hrs long and comes with a disk and other documentation. More on this later. T.I.M.

TIM'S TIPS

If you have been using the IMAGE statement stop. Just assign a value to a string variable like the example below.

```
100 A$="these are numbers # # # #"
110 PRINT USING A$:1,2,3,4
```

You can also concatinate these statements together.

```
120 B$=A$&A$
130 PRINT USING B$:1,2,3,4,5,6,7,8
```

How about text and numbers mixed together.

```
140 TEXT$="#########"
150 NUM$="# # # #"
160 BOTH$=TEXT$&NUM$
170 PRINT USING BOTH$:"TEXT",1,2,3,4
```

One other useful feature that TI included is that text will be left justified and numbers will be right justified. This is helpful when printing reports.

NEW ADDRESS
CLEVELAND AREA 99/4A USERS GROUPS
P.O. BOX 23283
EUCLID, OHIO 44123

CHECK YOUR EXPIRATION DATE.
THIS MAY BE YOUR LAST ISSUE!

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04/86

3