

Vol. 4 No. 3
MARCH, 1985

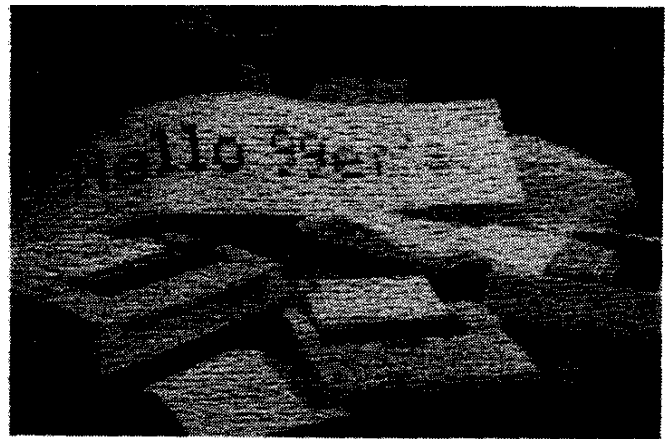
THE MSP 99 NEWSLETTER

LOOKING AHEAD: OUR 1985 OBJECTIVES

By Dick Dunbar
MSP 99 President

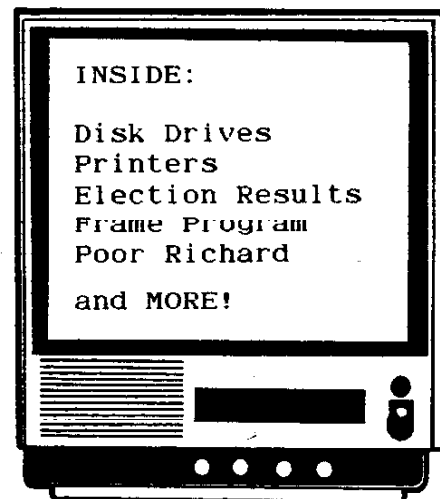
I just wanted to take a moment and a few inches of column space to say hello and to outline our objectives for MSP 99 for 1985. But before doing that, I would like to thank Joel Gerdeen and all the rest of the outgoing officers for a fine job in the past year. The past year was a hectic one, following the exit of Texas Instruments from the home computer market, leaving us all with orphan systems. Who could know what would happen? Well, things have stabilized a bit by now, and while it is still not perfectly clear how much support will remain for the TI, there is now no doubt that there are a lot of TI owners out there who are not about to give up on their computer. They are looking to the third party vendors and to users groups for the support they need. That's where we come in, of course. I want to see MSP 99 become the best users group in the United States. I want to see MSP 99 members learn how to make the best use of their machines, and to enjoy them to the fullest extent possible. To help accomplish that, I would like to see MSP 99 strive for the following goals for 1985:

OUTSIDE SPEAKERS - There are many talented and knowledgeable members in MSP 99, and they will be called upon to share that talent and knowledge with others in the form



PRINTER NIGHT

February's monthly get together was all about printers, hooking them up and using them. Pictured above are the Prowriter, Brother, Epson, and Okidata printers which were displayed and discussed with the members present. Read all about it starting on Page 2.



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The MSP 99 USERS GROUP meets each month for discussions and presentations that enable its members to be better informed about their computers. Users group members share and exchange information. Some members have a broad range of computer expertise, others are just beginning. We are not affiliated with or sponsored by any other group or company. Membership dues are \$12 a year for a family, \$10 for an individual, and \$50 for a sponsor member. You're welcome to visit a meeting before you join. Call or write for more information.

USERS GROUP MEETINGS are held the third Tuesday of each month at Dunwoody Industrial Institute, 818 Wayzata Blvd., Minneapolis, MN 55403.

MSP 99 USERS GROUP
P.O. BOX 12951
ST. PAUL, MN 55112, U.S.A.

PRESIDENT: Dick Dunbar 488-0153
VICE PRESIDENT: Ed Neu 425-8744
SECRETARY: Gary Gese (no phone)
TREASURER: Jeff Hogden 227-2378

The MSP 99 NEWSLETTER is published eleven times per year, on a monthly basis, except during July, by the MSP 99 Users Group. Members are encouraged to contribute articles for publication. Opinions expressed are those of the writers and not necessarily those of the MSP 99 Users Group, its officers, editors, or members. Materials accepted by the editors for publication in the MSP 99 newsletter, including software listings, are believed to be in the public domain. Newsletter articles may be reproduced by other users groups if appropriate credit is given to the author (if one is listed), and to the Minneapolis St. Paul 99 Users Group.

NEWSLETTER EDITORS:
Michael Kabala 780 8719
and Gary Gese (no phone)

Articles intended for the next newsletter should be submitted **NO LATER** than the Users Group meeting on the month prior to publication. Articles submitted after this deadline are likely to appear in the following month's newsletter.

COMMITTEE VOLUNTEERS are sought for all of our committees. (Education, Equipment, Program, Publicity, Software, Newsletter) If you would like to join one of these committees or have an idea for a monthly program, please contact one of the officers.

COMMERCIAL ADVERTISEMENT RATES:
Business firms that wish to communicate with our members may do so by placing an advertisement in the newsletter. Rates are: Full Page (7 1/2 X 10-1/2) \$40; Half Page (3-1/2 X 10 1/2 or 7-1/2 X 5) \$30; Quarter Page (3-1/2 X 5) -- \$22. Each ad must be camera ready in one of the sizes indicated and paid in advance. Inserts (printed by the advertiser on 8 1/2 X 11 or 8 X 10) may be inserted in the newsletter at \$20 per sheet. Contact the editors for information.

CHANGE OF ADDRESS: Before you move, please mail a change of address to the Users Group at the address listed in this issue. Please allow at least 1 month for processing.

PRINTERS, PRINTERS, PRINTERS...

By Joel Gerdeen

That's what you missed at the last meeting. We had samples of printers ranging from my Epson, Ed Neu's Prowriter, Dave Wunderlun's Okidata, Dick Dunbar's Gemini 10X to Mike Kabala's Brother electronic typewriter / printer. While I will not attempt to cover everything we discussed during the meeting, I will touch on a few of the essentials in this article.

First, the basic hardware. Printers come in several types while most (all at the meeting) are dot matrix. This means that each character is made by a series of dots. Some printers use as few as 5x9 dots per character like my Epson while others use 18x24 dots like Mike's Brother. The more dots the better the quality of the print and typically the slower the print speed. Some printers also have modes where they make several passes to reprint or offset the dots to get darker or more complete characters. Other style printers use a print wheel to produce typewriter quality type.

There are also several ways to

interface printers to your computer: serial and parallel. The serial method commonly called RS232 sends one bit of data at a time to the printer at speeds ranging from 300 baud (bits per second) to 9600 baud. It takes 8 bits minimum (plus several stop bits) to make a character so normally the fastest a printer can go is one tenth the baud rate. Most printers are actually mechanically limited not electrically. For example, my Epson prints only 80 characters per second while I send data at 4800 baud (480 characters per second). Many printers have buffers so that they can read in characters faster than they print until the buffer is full. For example, my Epson has a 2K (approximately 2000 characters) buffer that will fill up in 5 seconds and then continue to print for about 25 seconds. This is equivalent to about 40 lines of 50 characters each. This means that at the end of each printout I am back to work at the computer while the printer continues to print for another 25 seconds. Not much time but still a convenience.

Other printers use a parallel interface commonly referred to as

(continued on page 11)

MSP 99 Calendar of Events

MARCH 19: Programming Language Overview -- This month the regular meeting will consist of several short items covering the different programming languages available to the owner of the TI Home Computer, what their capabilities are as well as their limitations. You won't want to miss it.

APRIL 16: Database Management -- April's meeting will cover the sometimes confusing, sometimes overwhelming field of databases, what they are and what they can do for you. A must for anyone with lots of information to juggle.

MAY 21: Program Debugging -- The dread of most programmers. It's the inevitable error message. Find out how to deal with these annoying nasties at the May meeting.

Subgroup Meetings

ASSEMBLY LANGUAGE--First Tuesday of month, 7:00 p.m., Bryant Community Center, Bryant Ave. and 31st St.

BUSINESS--Second Tuesday of month, 7-9 p.m., Norwest Bank, Hopkins. Call Bob DeMars (544-6219) or Dick Clementson (926-8083).

EDUCATION--At monthly MSP 99 meetings.

YOUTH GROUP--At monthly MSP 99 meetings.

Committee Chairs

EQUIPMENT--We need someone.

NEWSLETTER--Gary Gese Mike Kabala (780-8719)

PROGRAM--Dick Dunbar (488-0153)

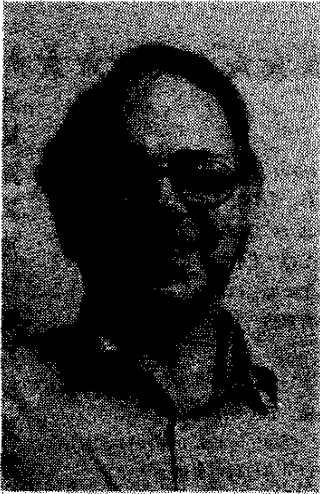
PUBLICITY--Dave Wunderlin (544-8266)

SOFTWARE-- Steve Gonnella (533-8494)

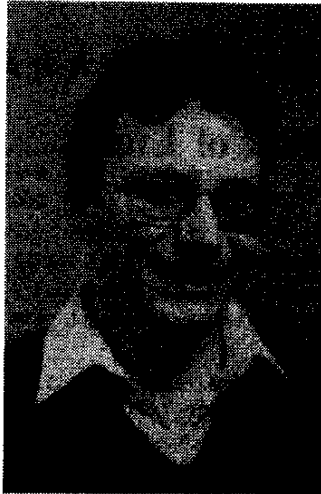
Now is the time to prepare. Polish up those home-brewed programs and get them ready. The 1985 Annual Software Contest is about to get under way. All the details have not yet been worked out, but we'll let you in on everything as soon as that information is available. We do know that the winning programs will be demonstrated at the August meeting so you still have a couple of months to get your entry in to the Software Committee.

WANTED: Equipment donations are being sought from MSP 99 members for use within the group. If you have anything you'd like to donate, please contact one of the officers.

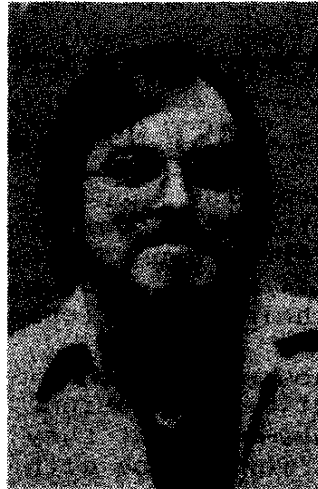
Response to February's Youth Group meeting was encouraging in spite of the fact that most of you did not receive your copy of the newsletter in time to make it. Don't despair. There is still room for you to get in on these fun and informative sessions. Many of those present have already begun to program. So consider yourselves told. Youth Group meets the 3rd Tuesday of the month beside the regular meeting.



President
Dick Dunbar



Vice President
Ed Neu



Secretary
Gary Gese



Treasurer
Jeff Hogden

ELECTION RESULTS

The votes have been tallied and the results of the election are in! Again, we apologise for the mixup and we hope that everybody will get behind our newly elected officers and really help out. The best way to introduce them is probably to let each of them say a few words to all of you. So, without further ado, here are our new officers.

PRESIDENT:

I'm Dick Dunbar, your new president for 1985. With your help and that of the other newly elected officers, I hope we can make this year the most successful one yet for MSP 99. Elsewhere in this newsletter I have outlined our objectives for 1985. Please check them out and give me your comments, and I hope, your support. The other officers and I will need a lot of help from you to make it all work, but we can do it. See you at the meetings!

VICE PRESIDENT:

I'm Ed Neu. As you can see, your new board has put together a really interesting program for the coming twelve months. I hope some of you will find any one of these topics interesting enough to volunteer to organize one (or more) of our meetings this year. Our user group will only be as good as the efforts put into it by its members.

SECRETARY:

My name is Gary Gese and I want to thank all of you that voted for me. I'm told that the job of secretary is a very easy one with not too much to do, but I am beginning to suspect that this is not to be so. However I'm looking forward to a year full of many interesting and unique things to do and people to meet. If you see me at one of the meetings, stop by and say hello.

TREASURER:

My name is Jeff Hogden and I am treasurer for the group this year. Normally I will be at each general meeting set up at a table. I will be handling the sign up of new members, taking renewal memberships, and selling some cassette tapes and diskettes for use. Besides handling the treasury books, I look forward to an interesting year of topic discussions and learning. Our first board meeting set up a diverse agenda taking into account the surveys that were handed in. I hope you will continue to participate in the plans for this year and volunteer your talents as you are able. My phone number is 227-2378 if you have questions that I might answer. I look forward to getting to know you better through the year and more than just for money.

The BASIC System



I'VE BEEN FRAMED!

by Mike Kabala

Last month's "BASIC System" column was a bit brief due to space limitations. I apologize for that and hope that future columns will offer more explanations. It is my intention with this column to provide something useful for those people who have nothing more than a TI99/4A console, a cassette recorder, and a TV set. While console BASIC does not offer the speed and versatility of other languages, it is still a good language in its own right.

I want to spend the time this month and the next talking about internal documentation in a program. Specifically, I hope to provide you with an easy but effective way of displaying on-screen instructions.

If you're like me, you probably shy away from graphics programming because of the tedium involved in coding all of those special characters. Yet, a good program can usually be made even better with the inclusion of a few relatively simple graphics techniques.

Sometimes I like to highlight some information in a program. This could be done quite effectively by drawing a frame around the text. That's what the program accompanying this article does. It is designed as a demonstration program, but could be modified for use in one of your programs by including DATA statements and changing the INPUT statement in line 370 to a READ statement.

If you have other READ statements in your program, you may also need to include RESTORE statements to be sure that each READ reads the DATA that was intended for it. If you

would like for me to talk more about READ, DATA, and RESTORE statements, let me know and I'll be happy to discuss it in a later column.

The program asks for input. After you have typed in as many lines as you like, followed by a blank line, (or after 21 lines -- whichever comes first) the program will print these lines on your screen surrounded by a decorative frame. Each line within the frame will be centered.

The characters which make up the frame are pictured below and defined in lines 200 through 270. Lines 150 through 190 read these definitions into characters 128 through 135 and also place them into array B\$ so that they can be used later without cluttering up the program with CHR\$ statements. These characters were designed so that a frame of any width and depth could be constructed simply by repeating the edge characters (129, 131, 133, and 135) as many times as needed between the corners.

The text can be framed quite easily if all lines are the same length. This way, a frame can be drawn by printing the top edge, followed by the text lines (each line bracketed by edge characters), followed by the bottom line. The top and bottom lines are constructed by repeating the appropriate edge characters until they are the same width as each of the other lines and then adding corner characters at the beginning and end of the lines. Edge characters are added to the beginning and end of each text line to form the sides of the frame.

Lines 490 through 550 find the longest line of the text and set the width of the frame to that number. The text is then centered in lines 560 through 580 by adding spaces at the beginning and end of each line, thereby making all lines the same length.

The framed text is printed in lines 640 through 690 after the top and bottom lines have been constructed. (They are constructed in lines 620 and 630.)

Lines 760 through 780 are simply included to give you time to admire your attractively framed text before going on. You probably wouldn't need these in one of your own programs. Also, lines 350 through 450 are included only to get up to 21 lines of text from the keyboard.

To use this program, simply type in what you want framed and enter a blank line when you're done. The program will then frame what you have typed and print it on your screen. After viewing the output, you may continue by pressing any key. The program will then ask you for more text to frame. If you have more, simply type it in as before and follow it with a blank line. If you are done, enter a blank line as your first line of text and the program will quit.

That's about it. I hope you have fun with this. I know I have. Incidentally, if you have Extended BASIC, change the INPUT statement on line 370 to a LINPUT statement and you will be able to include commas in your text.

One programming note: change the up carat ("^") characters to spaces when you type this in.

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100 CALL CLEAR
110 DIM T$(21)
120 REM *****
130 REM   DEFINE BORDER
140 REM *****
150 FOR I=1 TO 8
160 READ A$
170 CALL CHAR(I+127,A$)
180 B$(I)=CHR$(I+127)
190 NEXT I
200 DATA FFFFCODDDOC7D4D4
210 DATA FFFF00DD00FF0000
220 DATA FFFF03DB0EB232B
230 DATA 2B2B232B2B2B232B
240 DATA 2B2BE30BBB03FFFF
250 DATA 0000FF00BB00FFFF
260 DATA D4C4D7D0DBC0FFFF
270 DATA D4C4D4D4D4C4D4D4
280 B2$=B$(2)&B$(2)&B$(2)&B$(2)&B$(
2) &B$(2)&B$(2)
290 B2$=B2$&B2$&B2$&B2$&B2$
300 B6$=B$(6)&B$(6)&B$(6)&B$(6)&B$(
6) &B$(6)&B$(6)
310 B6$=B6$&B6$&B6$&B6$
320 REM *****
330 REM   GET INPUT
340 REM *****
350 I=1
360 PRINT "ENTER TEXT: "
370 INPUT "^^^":T$(I)
380 IF LEN(T$(I))=0 THEN 450
390 IF LEN(T$(I))<26 THEN 420

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400 PRINT "TOO LONG":
410 GOTO 370
420 I=I+1
430 IF I=22 THEN 490
440 GOTO 370
450 IF I-1 THEN 790
460 REM *****
470 REM CENTER TEXT
480 REM *****
490 MX=0
500 I=1
510 IF LEN(T$(I))=0 THEN 560
520 IF LEN(T$(I))<=MX THEN 540
530 MX=LEN(T$(I))
540 I=I+1
550 IF I<22 THEN 510
560 FOR J=1 TO I-1
570 T$(J)=SEG$(SEG$("^^^^^^^^^^^^^^^^^^^^
^^^^^^^^^^^^^^^^",1,INT((MX-LEN(T$(J))
/2))&T$(J)&"^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^^^^",1,MX)
580 NEXT J
590 REM *****
600 REM PRINT FRAMED INPUT
610 REM *****
620 TOP$=B$(1)&SEG$(B2$,1,MX)&B$(3)
630 BOT$=B$(7)&SEG$(B6$,1,MX)&B$(5)
640 CALL CLEAR
650 PRINT TAB(INT((28-MX)/2)+1);TOP
$
660 FOR J=1 TO I-1
670 PRINT TAB(INT((28-MX)/2)+1);B$(
8)&T$(J)&B$(4)
680 NEXT J
690 PRINT TAB(INT((28-MX)/2)+1);BOT
$
700 FOR J=I+2 TO 22
710 PRINT
720 NEXT J
730 REM *****
740 REM LOOP AFTER KEY
750 REM *****
760 CALL KEY(0,K,S)
770 IF S=0 THEN 760
780 GOTO 350
790 STOP
    
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TENTATIVE AGENDA

On Tuesday Feb. 26, the new officers held their first committee meeting, and among the things that were discussed was the program agenda for the coming year. Through the course of several cups of coffee, half a plate of cookies, and much conjecture, the following list of program topics was eventually decided upon. We would like to point out that many of our topics were taken from suggestions written in the survey reports sent out last October.

This is a tentative list, so don't hold us to it. If something better offers itself as an alternative there may be a substitution. Keep an eye on the monthly Calendar Of Events for any updates and more information.

volunteers are needed to contribute to any of these programs, so if you feel that you have something that you'd like to share with the rest of the group, contact one of the officers today and let him know which topic you'd like to cover.

- Mar 19, '85 Programming Language Overview
- Apr 16, '85 Telecommunications and Terminal Programs
- May 21, '85 Program Debugging
- Jun 18, '85 LOGO
- Jul 16, '85 Database Management
- Aug 14, '85 Software Contest
- Sep 17, '85 Extended BASIC
- Oct 15, '85 Speed and Memory Saving
- Nov 19, '85 Forth
- Dec 17, '85 Graphics
- Jan 21, '86 Tax Preperation
- Feb 18, '86 Sound Speech



This is better than ADAM anyway.

POOR RICHARD

By Dick Dunbar

THE BEST LAID PLANS: Alas, I had a lot of neat things I wanted to talk about this month, but much of the literature I was expecting to receive to support my ramblings failed to arrive in time for this month's newsletter deadline. As a result, I don't have as much information about some of the items I'm going to discuss as I would like to have. So, if you will just bear with me for now, then next month I will expand upon those which I have treated in too cavalier a fashion this month.

WHAT TIME IS IT, ANYWAY: One of the items that I DID get information on was something I saw advertised in a newsletter for another user group, one in Pennsylvania. It seems that there is a fellow in Girard, PA who is making this clock card for the TI99 that plugs into the P-Box. It costs \$85, and what it does is keep track of the DATE and TIME and provide it to your programs when you need it. It has a battery back-up, so it will keep time even while the computer is unplugged or turned off, uses either the 12 or 24 hour form, knows about and compensates for leap years, and has a +/- 30 second switch and an adjustable oscillator for fine tuning the real time clock. It can be used with either Basic or assembly language programs, and comes with software on disk to help you use it. It requires you to have a TI99 with expansion box, 32K memory expansion, disk drive, and either Extended Basic or Editor/Assembler. The card does not come in a metal case, just a printed circuit board with the necessary edge connectors. The support software supplied seems to be a combination of Extended Basic and assembly subroutines called from Basic. A program is supplied to set the time, one to verify the time, and a Merge format file is provided to merge into your Extended Basic programs. Console

BASIC can use the routines supplied too, but you will have to enter the routines manually, since console Basic doesn't use Merge files.

The simplest use for something like this is to use it to supply the date when you are running some program which requires it. An example is the program used to maintain the MSP99 membership and mailing list. Each month the list is updated and labels are produced for the newsletter. Labels are printed only for members whose dues are current at the time the labels are printed. This requires the date to be entered. The program could very easily be modified to make use of this clock/calendar card and eliminate the need to request the date. Presumably, the card would never enter 1984 when it meant 1985, either!

There are other uses to which a real time clock/calendar could be put, too. If you are one of those who would like to use your computer to control things in your house, there are control systems available which would allow you to turn off or on just about anything in your house through use of an RS232 interface and special control modules which you plug in around the house anywhere you have something you want to control - lights, furnace, what have you. With a clock card like this one, you could set up a program for your TI which could turn these things on or off at any time you choose, different times for different days, only on certain days of the week or month - the possibilities are bounded only by your imagination. If you are interested in this type of application, you can obtain another card from the same source which will let you detect the settings of switches or sense devices and to set them under the control of your TI. The price for this sense/control card is also \$85.

Gene Angelcyk
6920 South Creek Road
Girard, PA 16417

Incidentally, if you are interested in a demonstration of the real time clock, call the TICX BES at 814-774-4620. Don't charge the call to me, please!

NOT ONLY THAT, BUT: This same fellow is currently working on a very interesting device which is supposed to eliminate the need for plug-in cartridges for the TI99/4A. All the data that would normally reside in a cartridge (GROM or ROM) would be disk resident and loaded to this "cartridge eliminator" card on initialization. After booting up, the TI system would think there was a cartridge plugged in, when in reality it would be communicating with the GRAM and RAM on the eliminator card. Properly done, this card could be a really valuable addition to a TI system, allowing you to run all kinds of different software without ever swapping modules. If this interests you, consider dropping a line to Mr. Angelcyk to let him know he's on the right track.

MYARC MANIA, ONCE AGAIN: Myarc has really expanded their line of goodies for the TI. I recently spotted an ad for a 128K memory card, put out by Myarc, in a flyer from an outfit in Georgia called Information Associates (who apparently is the official distributor/outlet for Myarc, according to Myarc). Curious as to whether they had maintained any sort of compatibility with the memory management scheme used by Foundation in their 128K card, and to request additional information, I called Myarc. I did in fact get some information over the phone, but as I was expecting to receive the full scoop in the mail, I did not keep an accurate record of our discussion. More complete information will have to wait until the literature arrives. For now, the Myarc 128K memory card appears to come with software which lets you use part of the upper 96K not used directly by the TI99 as a print spooler. This is certainly one good way to use it. Myarc is now making memory cards, disk

controller cards, and RS232 cards for the TI99 P-box. Of course, they also make their Mini-Peripheral Expansion system which contains all of the above capabilities (only 32K memory, though) plus 1 or 2 disk drives. And there are indeed plans for a TI99/8-type follow-on computer, but no details are available at the current time, and no promises. If everything comes together right, we should be hearing something soon, however. It will be interesting to keep a close eye on developments here.

MYARC, Inc.
P. O. Box 140
Basking Ridge, NJ 07920
(201)766-1700

Information Associates
P.O. Box 2207 Oak Grove Br.
Acworth, GA, 30101
(404)428-9050

WHO'S KIDDING WHO: Remember the 99/4A National Assistance Group, which I mentioned last month and the month before? Well, they have an interesting tag in their ad in the current issue of the Home Computer Digest. It says "Available Soon!!! Super Speed!!! TURBO PASCAL - Fastest language ever for your 99/4A". I can't wait to see this. Turbo Pascal is a very well regarded version of Pascal, and the name refers to a very specific product developed and marketed by Borlund International. As of the latest information I have, it is available on MS-DOS, PC-DOS and CP/M machines, with versions coming for XENIX and for 68000 based machines (Macintosh, etc). Unless the NAG is talking about a version of Turbo Pascal which runs on either the Morningstar or the Foundation CP/M cards. I would be very surprised to see a TI99/4A version of this product. The question remains as to exactly what this product is. It could be a good product, even if it isn't the Borlund Turbo Pascal. I don't have any further

(continued on page 14)

SAVING SPACE
AN MSP 99 SOFTWARE LIBRARY REVIEW

by Gary Gese

| | | |
|-----------|--------|---------|
| Title: | Shrink | REMOVer |
| Code: | U02042 | U01192 |
| Req: | XB,D | XB,D |
| Perform: | *** | *** |
| Quality: | *** | ** |
| Document: | ** | ** |
| Friendly: | * | * |

This month, I would like to bring you actually two reviews and a comparison of two utility programs that are available to our members from the MSP 99 SOFTWARE LIBRARY. They are SHRINK and REMOVer.

In theory, these two programs both set out to accomplish the same thing - saving memory by shortening program length, and both programs are good at what they do. However, there are advantages and disadvantages to each.

I'll begin by picking on a favorite gripe...Documentation. Too many good programs make the mistake of not including on screen instructions or directions for the ignorant user, and utility programs are the worst at this. Needless to say both of these programs fall into this category.

Having such instructions enclosed only within REMarks within the program listing inhibits the user from merely loading and running, and forces him to look through an unknown listing for the necessary instructions.

Aside from this, both programs operated as designed on the tests that I ran. For sake of accuracy and to make a fair evaluation, I choose a sample program and ran it through both programs. Both did indeed shorten the test programs that I tried, and I have reasons to recommend that both of these programs be added to your library.

REMOVer (originally titled Stripper) is designed to remove

REMARKs from a program listing by deleting both fore (REM) and aft (!) remarks. It does this and nothing more, but don't think that its limitation nullifies its usefulness. I'll tell you what I mean in a moment.

SHRINK is a more complex program accomplishing several nice functions. It will also remove all REMarks, But this little gem goes a couple steps further.

It will also shorten variable names to the least number of bytes possible. It does this by re-naming each variable as it is encountered in the listing in alphabetical order from A-Z, AA-AZ, BA-BZ, etc.

And, it replaces the number 1 with the symbol. The savings all this means to memory are;

N+3 Bytes for each line that is a REMark 'N' Bytes long.

2 Bytes for each occurrence of '1'

N-1 or N-2 Bytes for each occurrence of a variable name.

The program is capable of deleting a maximum of 125 lines, and a maximum of 130 String 130 Numeric variables. It also assumes that all operations are taking place strictly on DSK1. This could of course be updated to include Inputs for more than on drive systems.

To use either REMOVer or SHRINK, the program to be reduced must first be saved in MERGED format. The original is reduced and then SAVED again in MERGED format. What is saved is only a copy. The original remains intact.

The only drawback I can see to using SHRINK is that if you were to use it on an unfinished program to save space and memory, you could end up working with some very strange variables. REMOVer would be a better program for this sort of thing. SHRINK is better suited for the final draft.

TI DISK CONTROLLER MISCONCEPTIONS

by Tom Fairbairn

This column is devoted to a discussion of general interest items. There is no special organization to anything that is under discussion here. It is made up of random items, some rumors, some facts, and some speculations to keep the thing lively.

This time the discussion is centered on disks: what you can and can not do with the TI controller and Disk Manager 2.

The original disks that TI supplied were 40-track single-sided single-density units. The TI writes on 9 sectors per track, so you end up with about 90 kbytes of data per disk.

"Everybody" knows that a TI can't run in double-density mode on its disk drives. Most people seem to assume, from this, that the TI is restricted to the original drives.

NOT SO! While it is a fact that the TI will not work with double-density, it will work with double-sided drives. By using the drives with a head for each side of the disk, you can have double the amount of space to use on each diskette. This gives you 180 kbytes per diskette.

You can not "flip" a disk in the TI without punching added holes and doing other nasties to the cover over the diskette. I don't use this approach even on a machine where it is easy, as you can do severe damage to the media and the heads in a very short time this way.

The double-sided drive has another advantage, too. The way TI uses

the two sides is to write all 9 sectors on side 0 (the normal TI side), then write the next 9 sectors on side 1 at the same position. This means 18 sectors at each position of the head. Your number of seeks are reduced by half and the distance you must seek is, on average, also less to find a given record. The wear on the access mechanism is thus reduced, and time to load is shortened a bit.

Still another advantage is the reduced number of disks you have to buy. Since each disk stores twice as much data, you only need half as many of them. I have found that the S/S disks the club sells work just fine as double-sided media on my machine, but of course this is not any guarantee since they are sold as single-side only disks.

The disk tests that are run under Disk Manager 2 can safely be used in their entirety with the double-sided drives. They appear to have been written for this use, by the way, and do not "buzz" the positioner to death as they do on the single-sided drives. They will do an excellent job of telling you if your diskette is in fact good.

You will still be able to run all your single-sided disks in the new double-sided drives; the TI system can sort this out for itself and won't mess you up. You can format diskettes either as single or two sided under DM 2. You do not have to take any special precautions to use the double-sided units at all.

More next time. Meantime, who has an 80-track (96 TPI) drive that we can try? I know the system will take counts up to 99 tracks per side, so I think we might be able to use 80-track drives (that's 360 kbytes per double-side diskette, folks!!) at single density with the original TI module and controller.

(continued from page 9)

information at this time, but I will be digging for it, you can be sure.

CALLING ALL ADVENTURE FANS: If your cup of tea is Adventure Games, then you have a real treat available for you. Tex-Comp is offering the entire series of 12 Scott Adams adventures as a set for \$49.95. You will have to be the judge as to whether that price is right for you, but it seems pretty good to me, considering that they are also throwing in a 13th adventure, "Knight Ironheart", billed as the latest adventure from Europe. Keep in mind that all these adventures require the Adventure Module (PHM3041), not included in the package but available from various places (6.95 from Tex-Comp).

Tex-Comp
P.O. Box 33084
Granada Hills, CA 91344
(818)366-6631

Be forewarned if you use the above number to try to get information - I have never been able to contact a person at that number, only an answering machine. It is (or was) apparently only set up to record orders.

YOUR THREE MINUTES ARE UP: That's all - time's up for another month. Next month, I'll try to fill you in on some of the details I didn't get in time for this month's edition. With any luck at all, that will include a review of the SST Expanded Basic Compiler, which I have ordered and am expecting to arrive momentarily. Until then, keep using those TI99 computers - we all know they are fine machines, so let's let the world know it, too. MSP99

(continued from page 10)

which eases programming, Write it down and we'll print it in the newsletter.

Articles on almost any TI related subject are needed for upcoming issues of our MSP 99 Newsletter. Don't worry if you've never written anything before, or if you feel your programming knowledge is insufficient for YOU to write for publication. Have no fear. Topics covering every programming language are being sought, and the Editorial staff will gladly help to punch-up any piece submitted to us.

But we don't insist on articles. Letters to the Editor or Group are, many times, more interesting to read than articles and tutorials because they show more of a person's feelings than the average article does. We are concerned about how our readers, our fellow group members, feel. Don't forget, Webster called us a 'Special group'.

For you writers out there, we would prefer to have all items submitted to the Newsletter on disk using TI-WRITER with the following format code on line 1:

.FI;AD;LM 0;RM 34;PL 300

Please do not include any other format codes in your article (except an occasional .NF). This is not absolutely necessary. If you prefer, you can type it or even write it out long-hand, as long as it's legible. The word here is neatness. If we can't read your piece, we can't print it. Otherwise, "we'll take 'em any way we can get 'em."

One final note: It is not necessary to wait for the final deadline to submit articles for the Newsletter. The deadline date leaves us very little time to prepare your piece for print. The sooner we get it, the better.

(continued from page 1)

of presentations. But I would also like to see us do some "importing" as well. I would like to arrange for people with experience in areas of interest (data bases, or sorting methods, for example) to come in and address the group on their area or expertise - even if they are not specifically conversant with the TI99/4A. We might even exchange experts with other users groups in the area - non-TI groups as well as TI groups (yes, there are other TI groups in the area).

SPECIAL DEALS - Users Groups often can negotiate special discounted prices for merchandise of interest to their members. We already have one such deal in the works, as I have mentioned in Poor Richard's column. I would like to see us make an effort to accomplish more in this area for MSP 99 members.

ACCESSIBLE LIBRARY - We have been attempting to find a solution for the problem of making available to the MSP 99 membership our extensive library of books, newsletters from other groups, etc. So far, we have not come up with a way of providing accessibility and the control that we need in a reasonable fashion - for example, making sure that books get back to the library within a reasonable time. This is a major item for the coming year.

IMPROVED COMMUNICATIONS - I want to be sure that all MSP 99 members have an opportunity to know what is going on in all group functions. To achieve this, at each main meeting I would like to have, as a normal part of each program, reports from each of the Special Interest Sub-groups summarizing the most recent meeting and announcing the topic for the next meeting. I also want to have minutes for each main and sub-group meeting published in the next following newsletter, along with a monthly MSP 99 financial Statement.

INCREASED PARTICIPATION - To survive, any group must be

supported by an active membership. A hand full of people cannot make this organization go. I will be calling on many of you to assist, whether it is helping to set out chairs before and clean up after meetings, or to locate a speaker (or to BE a speaker) for one of the meetings, or whatever. If many people help out, then nobody has to do very much, and everybody will benefit. I need you to help me in achieving this goal.

INCREASED PUBLICITY - There are a lot of TI99/4A owners out in the Twin Cities who never heard of MSP 99 and do not know we exist. We need to get the word out to them. I want to get a publicity campaign started so that we get to these people. I don't know yet what it will take - notices in supplies stores, on bulletin boards, in supermarkets, whatever it takes, we need to contact them. It will be to their benefit and to ours.

Well, that's my list of objectives for 1985. Those of you who were at the January meeting had heard them before, but most of you had not. Let me say one additional thing. I recently had a conversation with a member who was upset because he didn't think MSP 99 officers were receptive to suggestions from the members. Nothing could be further from the truth! However, I will admit that, when we are rushing around trying to get things straightened up and put away after a meeting, it is very difficult to remember even who was talking to you, much less what was being said. So, if you have a suggestion or comment, catch us when we have a minute to breathe, or better yet, write it down and give it to us or mail it to us so that we have a chance to consider it thoughtfully. This is YOUR group, not ours, and we really try to put together something that works for everybody. Obviously we can't have universal appeal every month, but we do the best we can. We need feedback to let us know how we are doing, so let us know, good or bad. Here's to a successful 1985! MSP99

WANT ADS

FOR SALE: 2 Consoles, 1 PE Box with 2 Half Height DSDD Drives, 1 External Half Height DSDD Drive, 32K Card, RS232, Disk Controller, P-Code Card, 2 Speech Synthesizers, 2 Cassette Recorders with cables, 1 9" color TV for monitor, Heath Serial Printer, Y Cable for RS232, 300 Baud Direct Connect Modem, 2 Sets Joysticks, TI Writer, Editor/Assembler, TI FORTH, 18 Cartridges (12 Program, 6 Game). Call Don Latterell 457-6171 anytime after 3PM

AVAILABLE from the Software Committee: TI-Writer and Multiplan Updates -- \$8.00 plus \$1.25 postage (if mailed). TI-Forth disk and manual -- \$25.00.

FOR SALE: 2 TI 99/4A consoles, 1 Peripheral Expansion Box, RS232 Card, 32K RAM Expansion, TI Disk Controller Card, 2 Teac Double Sided Double Density Disk Drives, Solid State Speech Synthesizer, Terminal Emulator 2 Cartridge, Disk Manager 2 Cartridge, TI-Writer, Extended BASIC Cartridge, Panasonic Acoustic Coupled Modem, TI Cassette Recorder, Gemini 10X Printer, 9" TMK Color TV for monitor, Power strip with Surge Suppressor, 1 pair of Wico Joysticks, 2 sets of TI Wired Remote Controllers, Games and Miscellaneous, 25 Diskettes, 3 year subscription to Home Computer Magazine with 5 issues of "On Disk". Call Bill Langeslay 489-2095

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ST. PAUL, MINNESOTA 55112

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