



The NEWJUG NEWS

Helping the USERS of
the TI-99/4A and
Myarc Geneve 9640 into
the dawn of a new decade.

NEXT MEETING:
JANUARY 5, 1980

NEWJUG NEWS
c/o Bret Musser
60 Broadway Road
Warren, NJ 07060

NEWSLETTER EXCHANGES: PLEASE NOTE
NEW ADDRESS!



Dallas TI Home Computer Group 9/99
P.O. BOX 29863
Dallas, TX 75229



NEWJUG MEETING SCHEDULE

1988 The main meeting will start at 7:00 in
JANUARY 5 the Iselin Public Library on Green St. in Iselin.
FEBRUARY 2 Come early to get settled down for the meeting and
MARCH 1 for an informal discussion period on any topic of
APRIL 5 your choice.
MAY 3
JUNE 7

NEWJUG Club Officers

President: ** ELECTIONS THIS MONTH!
Vice President: ** CHECK THE MINUTES TO SEE WHO IS RUNNING!
**
**
**

Secretary: Johan Nykvist.....727-6217
Treasurer: Mac Rochan.....463-1918
Software Librarian: Dave Green.....463-9133
Newsletter Editor: Bret Musser.....647-1437

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Warren, NJ 07060

Membership dues: \$15 for individual
\$20 for family membership

Send all dues to: Mac Rochan
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Piscataway, NJ 08854

If possible, pay your dues at the meeting.

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long as the original author(s) is recognized.

From the Editor: A semi-special issue.

Welcome to 1988! Also, even though it may be too late,
depending on when you receive this issue, Merry Christmas and
have a Happy New Year.

Please, above all else, DON'T DRINK AND DRIVE! The numbers
of our Users' Groups are decreasing anyways, but let's not have
it decrease this way.

Well, to bring in the New Year, I am presenting for your
enjoyment a special issue to celebrate the coming of the New
Year. Originally, I had hoped to make this a bumper issue, with
extra pages and all, but due to a lack of response to my queries
for help on local BBSs, I could not gather enough information to
make a good shot at breaking the 6 page barrier. So, enjoy what
you have here.

In our group, I am hoping that 1988 will be a great year.
After a year without real leadership, though Bill Reiss did try
at first, this year we are getting organized. Nineteen Eighty
Seven's meetings were run without planning and scheduling. In
1988, we hope to be able to meet before the next meeting and
discuss what is going to happen and to draw up some sort of
outline for the meeting. It looks good to me, and I think that
it'll look good to you too. I KNOW that we need more members, so
if you know anyone with a TI in their closet, ask them to bring
it back out into the open and use it, and, of course, remind them
to come to our meetings.

Well, since this is a new year, what is your New Year's
Resolution or your New Year's Wish? I just wish that I get
accepted to any of the colleges I have applied to. Gosh, I'll
probably have a nervous breakdown if I am rejected to all of my
choices...and also very embarrassed. My fear is that each
college might say, "Oh, he's a good student, so I'm sure he can
easily get in elsewhere, so he won't mind if we reject him..."
Any resolutions for me? To get more involved with my Geneve. I
just spend so much time writing about my machine and about BASIC,
etc. that I don't get much time to do any programming.
Naturally, I'll have resolutions about not procrastinating, but
I'll put those off until next year when I have more time... What
about you?

What would a month be if I didn't beg for articles? Well,
there is a lot to ask for, but here is something for starters: an
article explaining how to calculate your taxes using Multigian.
Or, if you have saved up enough money and would like to buy
something, how about an article about some of the new hardware
introduce at Chicago's TI Fair (see small overview of the Fair
inside). Since I haven't been getting any response from my
begging, I'll leave it at that.

Happy Computing!

--Bret :-)



MINUTES

DISK SUMMARY
12/29/87

LIBRARY REPORT

The regular monthly meeting of the New Jersey User's Group (NewJUG) was held at the Iselin Public Library on Tuesday evening, 1 December 1987.

Mr. Dave Green opened the meeting with a report on the club library. Seventy-two blank disks were purchased by him for the library. There are presently 685 programs in the club library. A MOTION was made and seconded that the club reimburse Mr. Green \$18 for the disks purchased. The motion was CARRIED.

Two programs were given to members to use and evaluate for the club. A review of the programs are to be included in the next newsletter. The programs will also be demonstrated at our next meeting. Mr. Jim Balantine will review DM1000, v3.8 and Mr. Stan Rosenthal will review Turbo 3.

Mr. Mike Tierstein contributed six disks of Math Routines to the club that he had developed.

Copies of the minutes of the previous meeting and of the financial report as of 1 December 1987 were distributed to the members without being read.

The business portion of the meeting was devoted to nominations of officers to be elected at our next regular meeting on 5 January 1988. In accordance with the motion passed at our last meeting nominations were made from the floor.

Nominated were: President	Herbert J. Oppenheimer
Vice Presidents	Dave Green John Molinelli Dan Gazy Bret Musser
Recording Secretary	Johan I. Nykvist
Corresponding Secretary	Stan Rosenthal
Treasurer	S. Mac Rochon

A MOTION was made, seconded and CARRIED that the nominations be closed.

The remainder of the meeting was devoted to demonstrations of software and an informal discussion by the nominees for office and other members of the direction to take in the New Year.

The meeting adjourned at about 8:45

Respectfully submitted,

Johan I. Nykvist
--Secretary

DISKNAME	AVAIL	USED	# PROGS
ANIMATOR	135	223	7
BEST/HYMNS	23	335	24
BEST/SONGS	0	358	18
BITROUTINE	314	44	2
BOARD&PUZL	110	248	7
C-TUTOR:V3	11	347	56
C992#10BX	294	424	13
C99REL2#1	5	713	46
C99REL3UP	4	354	21
CALENDAR	139	219	9
CALLIB#14	83	275	5
COMP/CRAPS	32	326	9
COMP/UNCOM	322	36	2
DIR99	44	314	12
DM10003/5	4	354	8
DM1000_3:B	24	334	7
DMGR-1000	127	231	6
DSKPRINT	241	117	6
DVUGSAMPLE	4	354	24
FAST-TERM	40	318	13
FASTERM162	147	211	9
FILEREADER	171	187	14
FNLWR3/3-E	573	705	33
FUNL_WRT	6	352	17
GPL-1	8	350	18
HOMEFINAN	41	317	9
HORIZON-6	0	358	30
MASSCOPY	291	67	3
MENULoader	156	202	11
MINIBASE99	200	158	5
MXI_4:3	0	358	8
NEATLIST	0	358	16
P-MANUAL	24	334	1
PILOT	0	358	3
PRBASE	630	648	16
PROG_AIDS	205	153	12
SBU6-V3/1+	0	358	7
SCRABBLE	56	302	6
SCREENDUMP	51	307	8
SIDWAYS	78	280	16
SIDEWRITER	28	330	11
SPEECHSAVR	78	280	20
STAR11	6	352	20
SUPERCOPY	316	42	1
TI-REWRITE	15	343	10
TIMP&TIWRT	67	291	12
TK-WRITER	1	357	17
TRID+FWIA	226	132	4
TRIVIA99ER	49	309	14
UTILITES1	160	198	10
UTILITIES2	211	147	5
WEATHER	72	286	7
X-MODEM+	108	250	7
X0-11DEMO	924	514	17
XBTOOLS	63	295	13
X_D	20	338	23

NEW THIS MONTH:
DM 1000, version 3.8
Disk Print 2
Fast Term 1.16
XB Tools

See elsewhere for a review of DM 1000 Version 3.8.

Disk Print 2 is a utility to print labels for disks and to print out files.

Fast Term 1.16 is the latest version of this ever popular program. For a brief review of Fast Term, as compared with other terminal emulators, see the BBS column.

The XB Tools disk contains various files and utilities to aid Extended BASIC programming.

Started last month (Dec.) is a new library offering: agree to review a new disk that is going to be put into the library, demonstrate that disk at the meeting and, of course, write up a small article on the disk for the newsletter and that disk is yours, free! It is really not as hard as it sounds. So get involved and sign up for this special program with Dave Green, our librarian!

TOTAL DISKS = 56 TOTAL FILES = 720

EAST COAST COMPUTER SHOW - OUR 3RD YEAR

T.I.C.O.F.F.'88

Roselle Park High School

(Exit 137 - Garden State Parkway)

Saturday, March 26, 1988

9:00 - 4:00

All Proceeds go to Student Scholarships!

Admission: \$5.00

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Geneve column: A lot is happening!
by Bret Musser

Welcome to 1988. Gosh, it seems like I've said that enough for one newsletter... Anyways, this was written before the New Year, but I feel warm greetings can be given anytime, and that is exactly what has been happening in the Geneve world. I reckon that there must be around 1000 Geneve owners out there, most of who are very happy with their machines. Of course, life is not all rosey, and there are people that are dissatisfied, but this goes without saying. Unfortunately for Geneve owners, non-owners, and Myarc, is that many of these dissatisfied customers are so because of ignorance. To me, it seems that a lot of the "problems" could have been solved if the person with the problem spent time asking for help, and not writing nasty letters that gives the Geneve a bad name (I can't pronounce it, but it isn't a bad name...). Some complainers have done just this -- I read on Bill Wright's Turbo BBS (I think it was that one) a letter by a distressed Geneve owner, and a very reasonable reply to all of the person's problems. I believe that the letter was downloaded from Compuserve. But the point is that the person asked for help, and got it, which is a whole lot more than I can say for a lot of other Geneve owners out there who complain, but do not try to solve it (or at least do not mention doing so in their nasty letters). I read a letter in the Dallas 99 Interface, the newsletter for the large Dallas, Texas group. The letter had been downloaded from a California BBS. The writer complained and insulted the Geneve and Myarc to all ends, but he failed to think about what was happening! He complained about software incompatibility with the Geneve and TI-99/4A. Yes, he was right about some of the programs that he had mentioned, but he failed to ask anyone else if there have been updated versions of software to work with the Geneve, and indeed there had been (programs such as FastTerm, Mass-Transfer (see below) and PR-Base). Also, he mentioned that he had a Triton Turbo XT, and then made suggestions that the Geneve was not a real computer... his next problem (besides his emotional ones) was in his display. He hooked the Geneve to his RGB monitor--wait! If he took the monitor off of his Turbo XT, then of course it wouldn't work, since IBM monitors are RGB DIGITAL, not RGB ANALOG! He didn't mention that. Sigh.

Well, what have I done recently? Well, over Thanksgiving, I had my usual once-every-two-years Compuserve visit, and it was well worth the money spent on line. I downloaded Mass-Transfer version 3.9 for the Geneve, a special linker for creating program image files to run under MDOS, and, although not specific towards the Geneve, Archiver 2.3 by Barry Boone. Mass-Transfer on the Geneve is really nice: I finally have an option to fastTerm. Mass-Transfer is entirely menu-driven, and has a lot of features not found in FastTerm, such as Multiple XModem Transfers, a much more flexible Echo control, and a much better buffer/ASCII capture. Naturally, it does have some deficiencies, such as a limited selection of baud rates (Mass-Transfer only allows 300, 1200, or 2400 baud, while Fast-Term allows all the baud rates possible for your particular RS232 card, meaning up to 19200 baud for my Myarc card). So what? I also use my computer directly connected to another computer, and in doing so, I use the super-fast baud rates. Also downloaded off Compuserve is a special linker for assembly programs. You run the program, enter in the filenames, and out pops a program image file supposedly ready to run under MDOS. Very useful if you do assembly language programming. (Of course, you must first assemble the program in

TI Mode, not forgetting SFIRST, SLOAD, and SLAST.) I also downloaded Barry Boone's Archiver II version 2.3, with data compression. My initial opinion: great! Finally, the TI world is getting a real archiving program! (No, I didn't forget the compressing archiver by Al Beard, but I just think that Barry Boone's will be more successful, since he has the lead of his popular Archiver II program.) The IBM world has always had real archivers, and having used them, I was really disappointed at the earlier archiver programs -- I expected something like what I saw on the IBMs...and now we have it! My only question is why didn't this come sooner? (But hey, now is fine with me!)

Speaking of assembly programming, I said that I was going to write an assembly program to run under MDOS. Well, without the new linker, I could not do it, so maybe I'll give it a try before the end of this column (I do take breaks while writing it). Anyways, I was able to run the program, the Sieve of Eratosthenes, under TI mode, and it really Zinged! What follows are my results:

ASSEMBLY LANGUAGE BENCHMARK: THE SIEVE OF ERATOSTHENES

PROCESSOR	MHz	Rating	Execution time	NOTES
TMS9995	3		0.95	0 Wait states
68000	8		1.12	BYTE, 9/81
8086	8		1.9	BYTE, 9/81
TMS9995	3		2.08	1-2 wait states
8088	5		4	BYTE, 9/81
280	4		6	BYTE, 9/81

*In this version, I just ran it without any special options, thus causing it to run from the normal dynamic RAMs of the Geneve, at 1 or 2 wait states.

**In this version, I performed an ADRG >F000 just before my code, thus placing part of my code and all of my registers in the FAST, 0-wait-state RAM that is on board the TMS9995 microprocessor. As you can see, this greatly decreased execution time. (My registers and the first 224 bytes of program code were placed in the on-chip RAM.)

The point is, if we were to assume that all of the programs were run under similar conditions, then the TMS 9995, the heart of the Geneve, is faster in this particular program than an 8 MHz Motorola 68000 (now to be found in the Macintosh, Amiga, and Atari ST computers). Please note that this does not mean that we are running faster than an Amiga or Mac is -- their high level languages are much more efficient and blow the doors off of c99, etc. But on the assembly level, we're pretty much equal. There is one possibly sour note about the results: the times for the other chips are eight years old, possibly run on developmental systems, which might have the processor controlling everything from keyboard to the screen, which would mean that the timings would be affected. If anyone knows assembly on a 68000, or on a 8086, and has access to an assembler and machine, please run the benchmark and tell me the results. What it does mean is that we Geneve owners have a machine that has the potential to be as powerful as a Mac or ST or Amiga. All we need are some good programming tools, such as a real, super-optimizing, C compiler, or a full Pascal implementation, etc. Especially with the advent of p-code Pascal, the Geneve should gain a larger software base (unless no one cares to port over the existing p-code software, which I hope someone does).

Until then, the major piece of software for the Geneve is the GPL interpreter. But that isn't so bad--software that doesn't work on the Geneve in the original TI versions has or is being ported over to the Geneve, like PK-Base, FastTerm, Mass-Transfer, etc. Speaking of data, please note one more thing about the above chart: it was done on the Geneve upgrade of Multiplan. As I mentioned before, it has no new features, but it is much faster than the TI version, but that is of course due to the faster speed of the Geneve. Hmm, maybe I'll run a few benchmarks comparing the TI version of Multiplan running at speed five and the Myarc upgrade and see which is faster... [I just took a break to try it out. Guess what: the Myarc version IS faster than the TI version when run at the same speed. Whew...] I never used Multiplan on the TI, so I have nothing to compare it to, but let me say that I only gave a cursory glance to the manual before really beginning to use Multiplan, and have not touched it since. At \$20, Multiplan is a real steal now. Don't expect a version of Multiplan to be running out of DOS in the near future -- Myarc won't touch it, since Microsoft owns the copyrights (and the lawyers). They could relicense Multiplan, but in my opinion, humble may it be, we don't need it, although it would be nice.

Okay, now for the usual updates on dates for software releases. MDOS 1.0 is already out and about. The only function missing is print screen. It should have been in, I'm told, but the author of the print screen utilities had some unavoidable delays. Also, a bug has been recently found and confirmed by yours truly--a problem in the RS232 device while running DOS. It seems that when you use a serial printer in MDOS, at least for the present, garbage is printed out every few hundred characters in a very repeatable cycle. [Update: that has been fixed and version 1.01 has just been created and has undergone extensive testing. Ed.] This will soon be cured, I'm told. Advanced BASIC goes into final testing in about two weeks. Maybe I can get an advance copy to play with and to write up. The P-code system should be out "soon," says Myarc, but since it has to go through Pecan first, Lurd knows how long it will take... Third party developments: an 80 column FORTH editor will be coming out, and there have been rumors of an 80 column Infocom interpreter, thus allowing us to run the latest from Infocom. Also, from AEI, Inc., the guys that promised a BASIC compiler, a Pascal, and AMOS, a multitasking DOS, they are saying that the BASIC compiler should be out in the first quarter of 1988, and Pascal in the second or third quarter. A date for AMOS? Who knows...

The last month or so has been kind of slow for me -- all that I have been doing is word processing, and a little programming in assembly, and a lot of dreaming about what is to come. MDOS 1.0 is as expected, but it is quite different than what the Geneve manual says, but that is what you get when the documentation is written a year before DOS is finished! Hopefully, a complete rewrite will be coming (I was never fond of the manual anyways). For any hardware people out there, here is something that could be of great use, at least to me: an Ethernet card. Ethernet is a type of Local Area Network, 1987's big fad in computers. Basically, a local area network is a bunch of computers tied together, able to pass to each other data and program files. Usually, there is a file server, a computer that directs the network and acts as the mass-storage device for common files. For colleges, Local Area Network type layouts are very popular, since it is such an easy way to tie together all the dorms, or a whole room of computers for teaching purposes, etc. What has been done with LAN (local area networks) is truly amazing. Bringing such ability to the Geneve would be wonderful, and would help establish it outside of the immediate TI community, especially if used on a non-TI LAN. Just a thought for any hardware designers out there.

REVIEW OF DM1000-3.8

by

James Ballentine

A disk manager utility by Bruce Caron and
Ralph Komans of the Ottawa TI-99/4A U.G.

This is basically the same DM-1000 we, or at least most of us, have come to love over the last few years. With Version 3.5, however, the author of this fantastic disk management program has changed, and he is determined to make it even better. It seems that the original author, Bruce Caron, had sold his TI and left the rights of this program to the Ottawa Users Group to continue the tradition. The TI community shall regret his leaving I am sure.

Version 3.5 revamped the program to make it more user friendly and to remove some bugs that appeared from time to time. Version 3.8 is mainly an update to the documentation. The DM1000-3.8 seems unchanged, at least to the user, from 3.5 from all the paces I ran it through.

The manual has all the changes from the original version up to and including 3.5 plus two appendices. Appendix A deals with the history of the authors; who does what now and the leaving of Bruce Caron. Appendix B deals with the changes made in the latest versions.

As I said before, I found this version identical to version 3.5, but the updated manual alone would make it worth obtaining this program.

If you do not possess any version of DM1000, then you are probably missing out on the greatest disk manager ever written for TI.

To get DM 1000 version 3.8, see our club librarian, Dave Green. He will be happy to supply you with the latest version for just a couple of dollars to cover copying fees and the cost of the diskette.

The BBS Scene: Terminal Programs.
by Bret Musser

When I say "terminal emulators" what first enters your mind? Hopefully, they will make you think of a computer being able to talk to another computer. If you thought it to be a dead Mockingbird, then...well...er...you know better now. A terminal emulator program transforms your computer into a terminal, or a device used to communicate with other computers. Ten years ago, you had large, noisy devices called Teletype terminals, which were basically printers with keyboards and an interface for a mainframe computer. Their purpose was to allow the user access to a large computer without the hassel of the infamous punchcards or ticker tape. Nowadays, with a terminal emulator program for your home computer, you too can have access to mainframe computers, computer networks, and even other personal/home computers. All that is required is a RS232 card, usually expanded memory, disk drives, and other assorted add-ons for your TI. Most of you have this equipment, so I shall not dwell on it.

One problem common to most computers is what terminal program to use. Here I shall try to examine four major terminal programs, all of which are "Fairware" or User Supported Software (where if you use the program, you are bound by your honor to donate some money to the author): Mass-Transfer, Fast-Term, Omega, and P-Term.

Before we start, please note that all of the programs are available in our library, care of Dave Green. Also note that when I say a program requires the Editor/Assembler, I also mean that an E/A emulator can also run the program (programs like Funnelweb).

Let us start with FastTerm. FastTerm is written by Paul Charlton, a very experienced assembly language program who is also writing the system software for the Myarc Geneve computer. FastTerm, in its most basic configuration, is a very simple terminal program: it does not include XMODEM, a transfer protocol discussed last month, nor does it include TI's TE-II transfer protocol (never worry if a program includes TE-II or not, because it is so rarely used). What does it include? ASCII capturing (stores and then saves each character that is transmitted, except during file transfers through XMODEM), ASCII sends (uploading), print spooling (dumps to your printer all of what comes to the screen), and a variety of screen control commands. FastTerm also has a feature which I use a lot: the ability to use high baud rates (up to 19200 baud), which allows you high speed connections when you are connected directly with another computer. No other program reviewed here allows such flexibility in baud rates. There are two major problems with FastTerm: one is the command structure--all the commands are keystrokes, thus requiring you to have them memorized, or at least kept close at hand. This does mean that your commands are executed a little faster, but I feel that it is not worth the trouble, especially if you don't use the program for a few weeks and then forget the commands. The other problem with FastTerm is it does not include any non-ASCII file transfers as standard. You must obtain an additional program to use XMODEM or TE-II (to use XMODEM, assuming you have gotten the program, you load the XMODEM file first, then FastTerm and run FastTerm). There some feature that I love about FastTerm--the timer (showing you elapsed time -- very handy on paid services such as Compuserve) and you have fairly decent screen control:

you can change colors at will, you can freeze the screen, and once frozen, you can then page back to review previous screens. With the XMODEM option, FastTerm is a very powerful program. FastTerm is written in assembly and requires Editor/Assembly or Mini-Memory to run.

P-Term is a small, almost cute, program. The main point to P-Term is simplicity. It does NOT have XMODEM, nor TE-II, and it does NOT have any provisions to add them in, such as FastTerm did. Also, it only has two baud rates: 300 and 1200. What does it have? A very flexible method to configure your RS232 port, a larger ASCII capturing buffer (all the programs store the characters in a buffer, then save once full), a printer spooler, and is just a simple program to use. You load and run the program, and you are presented with a few prompts. The first is where you printer is. If you have no printer, then just press enter. Then it asks questions to define your modem/RS232 parameters: baud rate, stop bits, parity, and data bits. Then you enter terminal mode. You can toggle your printer on and off, prepare to upload (transmit) an ASCII file, transmit one line or transmit the entire ASCII file, prepare the download (capture) buffer, save the download buffer (in FastTerm, saving was done automatically), and return to the parameter selection screen or return to the title screen of the 99/4A. I have found FastTerm to be more than adequate, and even preferable, when I logon with the intent not to download a file, such as when I logon to the UAG (Online Airlie Guide, where you can make plane and hotel reservations all over the world) where all that is needed is a printer spooler and ASCII capture and just a 40 column display. For just looking around a BBS, it is an excellent program, but other than that, I have not used it for much else in the five months I have had it. P-Term requires an Editor/Assembler.

The third program in the lineup is Mass-Transfer. Mass-Transfer differs radically from the two previously mentioned in that it has only one key to memorize! The entire Mass-Transfer program is menu driven, and to get from the terminal mode to the menu, you press FCTN 7 (AID). Once you're at the menu, everything is self explanatory. To clear the buffer, press C; to turn the buffer on, press B; to adjust the echo, press E, then press the number corresponding to the type of echo you want (with the monitor echo ON, then the characters you type will be displayed to your screen, and sent to the system. With remote echo, the characters that come in will be retransmitted back to the original sender and confirmed by displaying the character on the screen.). Very simple. Also, Mass-Transfer includes the XMODEM transfer protocol standard in the basic program. Also, there is a Multiple Xmodem transfer option, allowing, if the BBS or other computer supports it, to just keep downloading a specified number of files without interruption. Not many TI BBSs support this option, though. Baud rates are limited to 300, 1200, and 2400; just the usual baud rates for modems. Soon, I hope that up to 19200 baud is allowed, since I do hook my computer directly to another computer, so I use the high speed, and there are also 9600 baud modems appearing on the market today. Obviously, of the three mentioned so far, this is the easiest and most powerful. Oh, one feature I forgot: an auto-dialer. In the set up program, you can create a telephone directory that Mass-Transfer can load and use to dial your phone from. The only requirement is that you have a "smart" modem (ie. auto dial), but you don't have to use this option. Mass-Transfer requires an Editor/Assembler.

The final program I will discuss departs in one radical sense from all terminal programs available for the TI today: Omega. Omega's most striking feature is its ability to display RLE graphics *while on line!* RLE graphics are the graphics found on Comuserve in the weather maps, etc. RLE is an acronym for Run Length Encoded, the method used to store the graphics. All RLE pictures are black and white, 256 x 190 pixels, so they can be displayed on practically any home computer. Also, you can program function keys 1 and 0 to do anything you want them to -- up to two lines of text/commands! As the Ginsu knives commercial say, "But wait, there is more!" You also have a buffer mode, where you type your text in a special little window on the bottom of the screen, and then the text is squirted into the conversation that you are in, such as a conference on the Source or Comuserve, or in the chat mode of a BBS. The log feature creates multiple BK files on your disk named like LOGA, LOGB, LOGC, LOGD, etc. (Thus, it takes a break to dump the buffer to disk every BK). BK is the amount of text I used to describe everything up to the end of Mass-Transfer in this article. Guess what? There are even more features! There is a elapsed time clock, just like in FastTerm, a word-wrap feature (just like in TI-Writer), and a Snapshot feature (saves a screen to memory). You can also catalog disks, view the contents of your buffer, change colors, and all of this information (well, not quite all) is displayed in a status line. Actually, the status line just shows the hand rate, remaining buffer size, if RLE is active, the elapsed time clock, and the RS232 port the modem is on. Wow! But, everything is not all rosey. You cannot change Duplex (echo), nor can you change if linefeeds are sent (or not), and there is no print spooler feature. Somewhat less minor is that you cannot send an ASCII file line by line. You must admit, this is the most professional terminal program of the ones described. Sadly, there is only one reason I have not used it extensively -- it does not work on the Geneve. P-Term works just fine on the Geneve, and FastTerm and Mass-Transfer have special Geneve versions, but I have yet to find an Omega version for the Geneve. If I found it, Omega would become my most used terminal program. I'm not sure what baud rates it supports -- the documentation does not say what baud rates, and my TI console fried itself before I had time to look at the program again (I was fiddling around with the hardware in my console and blew my power supply, or at least I think it is my power supply I blew...). One more problem with Omega is that the ASCII capture files area saved as D/F12B, so must be converted to D/VB0 to be used by TI Writer. With Corcomp's Writerease, you would not have to convert the files. Omega requires the Editor/Assembler.

So, my conclusion about the terminal programs reviewed here? Well, even though I sound like a cliché, each program does have its own strengths and weaknesses. I would name the overall winner as Omega, because of all its features, but it is not right for everyone, since it does not have a print spooler, nor does it have the ability to change duplex. FastTerm I always use in direct computer-to-computer connections, because of its support of the higher baud rates, but its major downfall is all the commands that you must have memorized or written down somewhere. Also, FastTerm does not have XMODEM standard. The program that I'm currently using is Mass-Transfer because XMODEM is standard, and because there really is nothing to memorize -- just run and follow the menu. P-Term is a very limited program, but it does have the largest text buffer, which I have required for reasons too complex to talk about here. Also, it does have some beauty in its simplicity. P-Term has been very consistent to me all of

the times that I have used it and has never failed. That alone would keep it in my active library of disks, but that and its simplicity of use guarantee it a position.

So, now that you have a terminal program, or have prepared to get one from our club library, what do you do with it? Well, the most popular use for home computers is hooking into some sort of central computer that has places to explore that interest you, such as the TI Forum on Comuserve, or similar groups on the Source, 6Enie, Delphi, etc. Just ask club members for more information on these. Of course, you must pay for all of these, which brings me to free services. The only free services around are user operated, dedicated to serving the interests of a certain computer, in our case the TI-99/4A. These services are called Bulletin Board Systems, or BBS for short. Just read some previous columns for the telephone numbers of local TI BBSs, and you'll be on your way.

Now for local BBS news. I'm getting sick and tired of having to reprint the BBS listings every month, so I'm not going to this month, trusting that you keep back issues of the NewJUG News and can look the telephone numbers there. Anyways, on to local news: UBT was down for about two or three weeks they had troubles with their disk controller, requiring the Reiss' to send the controller back to Myarc for repair. Beaver BBS is very much recovered from it's reckless user a few months ago. c99 files seem to breed like rabbits there, for every time that I'm on, more c99 files appear! If you want Dan Gazy's articles that appear here in electronic form, visit Beaver BBS, since he also posts his tutorials there (naturally). Turbo BBS, run by Bill Wright, is just humming along quite fine, with one exception: the phone lines around his house seem to give more garbage than other phone lines, i.e. more error-prone transmission. Just something to keep in mind to check before you download and waste time on XMODEM retries.

Welcome to 1988 and happy computing!
 [****LAST MINUTE UPDATE**** Due to declining use and extremely shaky transmissions on his BBS, Bill Wright has decided to close his BBS (Turbo) forever on February 1, 1988. We will all miss him, but we all know why he is doing this: a lack of interest by those who use the BBS.]

T.I.C.O.F.F.'88 - Our 3rd Big Year
 The Orphans and Clones Computer Show
 for the TI-99/4A and the IBM PC
 March 26, 1988
 Roselle Park High School
 185 West Webster Avenue
 Roselle Park, New Jersey 07204

Sponsors
 T.I.C.O.F.F.'88 is a "non-profit" venture sponsored by the Student Council of Roselle Park High School. Cooperating with the Student Council in producing the event are six computer User/Owner Clubs. (NJUG - The New Jersey Users Group, NJUG North - New Jersey U.G. North, North Jersey T.I. Users Group, Central Westchester 99'ers Club of New York, L.I.U.G. - Long Island Users Group, and The T.I. Tex Club of N.Y.).
 Net proceeds of the show goes to the Student Council Scholarship Fund.
 Adult participation is on an unpaid and

volunteer basis.
 CALL
 (201) 241-4550

In accordance with the celebration of the fifth year without TI, here is a little of what has been going on in the TI community, and a little of what is to come...

Written by Warren Agee [CIS: 70277,2063]

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I had the pleasure of attending the Fifth Annual Chicago TI FAIRE, one that is fast becoming the grand-daddy of national TI/Geneve gatherings. This was the third consecutive faire I have attended, and it gets better every year. A good number of people showed up, and although I don't have the exact attendance figures, the room seemed just as full as last year. The faire itself seemed very well-organized, with a "mixer" the evening before the show (which I did not attend) and a banquet for vendors, faire organizers, and other VIPs (which I did attend). What follows is 1) A report of the faire itself, highlighting new products; 2) A brief summary of all the great personages I had a chance to meet; 3) A brief description of the banquet afterwards.

Unfortunately, there were too many people to meet and not enough time to spend sufficient time at every single booth at the show, but I think I did manage to see most of the 'new & exciting' products at this year's gathering.

GENIAL COMPUTERWARE: this booth, headed by the ever-popular luminary J. Peter Hoddie, was very busy all day long, and for good reasons: they released PC-Transfer by Mike Dodd, which facilitates the transfer of data between the 99/4A or Geneve and an MS-DOS system. It can format an IBM 360K disk with a TI drive, and transfer files between the two systems, both ways. CorComp has been selling a similar product for quite some time, but it's on a cartridge and costs twice as much as PC-Transfer, which sells for \$25. Also released was Remind Me! by John Johnson, which is a very slick calendar program that helps manage a monthly schedule. Price: \$15. Lastly, they had a new program called Graphics Expander (by JPH) which takes a TI Artist or CS6D font and changes its size. Written entirely in assembly, it allows you to stretch a font horizontally and vertically, and you can save the result as EITHER a TI ARTIST or CS6D font. That means you can easily convert fonts to either format! Again, very slick, and it sells for \$10. Peter also gave a presentation at 3:00pm during the show, at which he gave a brief autobiography of himself and demonstrated his company's new software. Startling revelation: the J in his name stands for James. IMPORTANT!! Due to his untimely illness, Barry Traver, the other half of Genial Computerware, was unable to attend this year's faire, and he was sorely missed. Everyone say a prayer for Barry that he return to us soon and in good health.

RYTE DATA: I only was able to get a brief demonstration from this company, but I thought it appropriate to mention RYTE Data's new 99AT Expansion System for both the /4A and Geneve. It looks like an IBM PC on the outside, but the innards have been rearranged to hold a large power supply, up to four half-height drives (including a hard drive), and five slots for standard TI size cards made by TI, Myarc, CorComp, Horizon, Foundation, Mechatronic, etc. Now that the Myarc Geneve computer is available, we need a new expansion box, and here we have one.

Price: \$155 with 135 watt power supply and built-in system interface. Just plug in your Geneve and assorted cards, some drives, and you're all set. \$165 for the above with 99/4A interface cable set installed.

McCann Software: I give this the 'Most Interesting Announced Product' award of the show. I also hope that they change their name, cuz the new product isn't software, it's hardware! The 'Avanti 99' is a multiprocessor Board for the TI/99/4A powered by the NC 4016 Forth Engine. Details that I have were a bit sketchy, but this is what the handout says, in part: The Avanti 99 is fully programmable. Each card has an 8K battery-backed DSR RAM fully accessible to the programmer. The NC4016 Forth Engine on each card has 48K of its own high-speed static ram, and each card has the CM-FORTH operating system in ROM. Several of these cards can be installed and used for different operations in the PEB at the same time. One card is fast - they say it runs at 5 MIPS, which stands for 5 Million Instructions Per Second. Apparently, as you add more cards, you can have a total of 25-30 MIPS of computing power. For some reason that sounds more like a marketing maneuver than fact. I will defer to the experts on that matter. Suggested retail price is \$500, available before January 1. (which year? the circular did not say. <grin>)

DIJIT Systems had their AVPC card running Multiplan in 80 columns. Asgard was there with their full line of software, and a smiling Chris Bobbitt wearing an Asgard tee-shirt. Jim Horn manned the DOS/Compuserve TIFORUM booth while the entire TIFORUM message base scrolled by continuously on his transportable Zenith computer (I think), complete with an inoperative shift key. 'Twas a great pleasure to see Terrie Masters again at the LA 99ers booth, and had the honor to meet Tom Freeman for the first time. Richard Mitchell had his customary position on the floor in the Bytemaster Booth show his String Master utility for programmers and various issues of the Smart Programmer and Super 99 Monthly. Jack Riley was holding up the fort at the Myarc booth while being bombarded with questions about everything from "where is the HDCC" to "why did you wear a polkadotted tie". Where is the HDCC? Real Soon Now. Lou Phillips, who was scheduled to speak, was conspicuously absent at the show. (This was a shame, since people asked Jack several technical questions during his presentation that he could not answer. Peter Hoddie helped Jack out at the tail end of the presentation by talking about My-Word (and My-Word 2) and demonstrating MY-ART. Regarding MY-Word 2, Peter says in general he plans to make MY-WORD function more like a main-stream word processor. That means <insert> continuously inserts as you type, <backspace> deletes as you backspace, etc. A significant improvement will be macros, where you can define any key combination (including predefined ones) to do anything you want. He would basically like to see MY-Word completely user-definable. He did not specify a completion date, but estimates that perhaps it would be ready by mid- to late-winter.

I met Mike Dodd, whom Peter describes as "scary, he so good." Only fifteen years of age, he does work for Myarc, writes commercial software (like PC TRANSFER), and authors a Geneve column for MICROpendium. Now if J. Peter Hoddie calls Mike Dodd scary, that scares me even more! Great talent, and a nice guy to boot.

Lesse now..anyone else I missed? I missed Paul Charlton, but that was because he could not make it to the show. I finally got to meet Barb Wiederhold, owner of the Queen Anne Computer Shoppe in Seattle, Washington, a computer-evangelist extraordinaire. I

heard they had to PRY the microphone away from her at the Mixer held the night before. She was at it again during the show, when she spoke about the future of the TI and Geneve markets. Quite an enthusiastic lady who is genuinely excited about the Geneve 9640. Scott Darling, sysop of the TI Roundtable on GENIE, was gruff and coarse and rude as always, and it was great to see him too.

That's it for the FACTS concerning the Chicago TI FAIRE. I'm sure I've missed something, but there was a lot to see, both in booths and people. Even though I go because I own a /4a, what brings me back year after year is the PEOPLE. At the banquet held after the show, I sat a table with Peter Hoddie, Mike Dodd, Corcon Wyman, Todd Kaplan, Jim Horn, and some others (whose names do not ring a bell at the moment, sorry!!) I got this great sense of community which I seldom feel sitting in front of the screen typing away on CompuServe. All these people, whether they be programmers, marketing-types, vendors, or everyday hobbieists and users, flew or drove hundreds and thousands of miles to gather in one spot to talk techie and spend their wads. We even had two people from Italy and two from the Netherlands in attendance! What commitment (and lack of sanity, as Peter might say) we all have! What friends we have made! What fun we have had! I'm already shining my shoes for the next faire...BRING ON 1988 AND THE NEXT SHOW!

PS: Understandably, I forgot to mention that even though Myarc's Jack Riley spoke at a presentation, he didn't announce anything new. He did hint that some sort of IBM emulation in hardware would be coming sometime in the future.

Review of DC Fair Oct 24th & 25th

by Dan Gazsy

On Oct 24th and 25th, the Washington D.C. area UG's held a TI/IBM fair at the Sheraton at Tyson's Corners, Va. I found the show accommodations provided by the hotel to be more than adequate but I imagine they paid for it too!

One of the first booths I stopped at was Myarc's. Here I was greeted by Jack Riley, the Geneve 9640, a mouse and MYARC!. My main reasons for stopping here were to get a good look at MDOS and to see the new hard/floppy disk controller in action. Jack was running the Geneve with a Tandon ZUMB hard drive in the PEBox and using MDOS ver .097. Knowing that the latest version of MDOS is currently .99b, I decided to forego viewing MDOS and pursue the disk controller. To start with, Jack had the card available to view and was using one in his demo system. Realizing that MDOS supports subdirectories, Jack confirmed that the system could support 127 directories with 127 files in each directory. I figure if you need more space than that (16,129 files), you could always get a second hard disk. The software for the hard disk controller was completed just this past week and the floppy support software will be completed within a few weeks. The card still supports Seagate hard disk technology and will be shipped without cabling. Most mail order distributors include the cabling with the controller (at least in the IBM world). Since most potential hard disk users will be getting their hard disk from a mail order distributor, they'll most likely be expecting Myarc to provide the cabling. Jack Riley was made aware of this and hopefully we won't be disappointed.

Before leaving the booth, Jack did manage to show me MYART! Yes, the program is impressive and one of the people attending the show managed to draw a rather impressive picture "apple with a worm".

Later on in the day, I found myself wandering into a demonstration of Ramdisks. At this demo, Ken Peyton explained the virtues of the Horizon Ramdisk while Jerry Coffey did the same for the Foundation and Myarc ramdisks. Not being a ramdisk owner, I found this session to be quite informative. Major issues for me were: 1) ease of implementation 2) current/future software compatibility and 3) device failure rates. The Horizon ramdisk utilizes static ram as opposed to dynamic ram used in the Foundation or Myarc cards. The Horizon ramdisks have battery backups and can be removed from the PEBox and retain memory as long as the batteries are in place. Ken Peyton has run into occurrences of losing the operating system, but this generally occurred when he was doing something exotic. The Horizon ramdisk is 9640 compatible! The other two ramdisks, Foundation 128k and Myarc's utilize dynamic ram. Of the two, the Myarc is probably the easier of the two to use. The Foundation card had quite a few limitations and you had to have some assembly expertise to make use of the card. It turns out that Steve Lavless had written quite a bit of support software for the Foundation card. Since then, Quality 99 Software has put out a product called QSRD for the Foundation card which treats the memory like a normal ramdisk.

The last stop for me at this fair was the demonstration of Al Beard's Fortran 99. To provide you with a bit of background on the product, let me say first this product wasn't developed overnight. Al spent close to 5 years developing this Fortran IV package. The entire system is menu driven and comes with a 150 page manual. Included in this system is an editor to create DV80 files, a linker to create assembly object files, symbolic debug capabilities and the ability to create additional support libraries. There are roughly 40-50 graphics functions available and they are modeled after the TI Basic commands. Also available are roughly 70 math functions and a small Fortran 77 subset library. As with KYTE Data's Basic compiler, you needed the loader to execute any of the applications developed by this package. This made writing applications for commercial resale a problem. Seeing this, Al put a Fortran 99 loader out in the public domain to be used with any and all applications. The only other problem I saw with the package was that it didn't readily support character strings. The one feature I did see in this package, previously missing in others, was a symbolic debugger. This debugger lets you perform most of the normal functions of the assembly debugger, set breakpoints and modify program variables.

Support does not seem to be a problem for this product. Al has created some rather unique applications for the TI99. One in particular was an implementation of the Kermit protocol transfer. Al has taken user comments and upgraded the product. Previous to this fair, Fortran 99 version 2.0 was being sent out to his customers. Al announced that version 3.0 is now shipping and is available through either Tenex or Quality 99 Software at a suggested list price of 49.95.

Since I only saw a limited portion of the fair, this review only covers the booths and demos I saw. My apologies to any booth or speaker that I might have missed.

IS THIS OUR FUTURE?

by Bret J. Musser

**The opinions expressed here belong solely to the author and do not reflect the opinions of the NewJUG News, nor NewJUG itself.

When I first had the concept of writing a special article or two for the NJUG News here, I thought that the best way would be to log onto some BBSs, leave a couple of messages asking for other peoples' opinions, collect, edit, and then print the opinions. So, that is exactly what I did, except for one major difference: no one left any responses to my messages! Needless to say, I was, and still am, quite angry at all of the users of the BBSs I left the message on, with the exception of one BBS that went off line shortly after I left the message (temporary down time due to the holidays). So, what follows are my opinions of what the next couple of years have in store for us:

First off, the TI community will continue to decline. One major point of proof is the response to my message for opinions for this article, or more accurately, the lack thereof. All clubs, with one exception, had declining membership in 1987. The exception was the Chicago TI UG, and only because of their mail order membership; the attending membership did decline. Within the year, quite a few clubs will die, and I, as Newsletter editor, could probably guess which ones, simply by looking at the club's newsletter. A good, strong, full newsletter, such as the Chicago Times, or the Dallas 99 Interface are signs of a vital club, and one that will live for many more years. Other groups, such as the North Jersey TI UG, and the North Jersey 99ers, have newsletters that have no real effort put into them: the "editor" just photocopied some Tips from Tigercub and distributed that. Please note, editors from those groups, that I am not attacking you, but the seeming lack of interest of your group. Now that Jim Peterson has retired the Tigercub, what will you guys do?

Because of the first reason, all the rest is pretty downhill. There will be quite a few hardware and software developments, such as the Avanti 99 from McCann Software, etc., and these will slow the emigration of members, but the flow will not stop. For those that do remain, we will be greatly rewarded.

The Geneve from Myarc is a breakthrough, but to be honest, without a large number of potential customers, it will not last. First off, it requires the previous ownership of an Expansion Box, which thus limits the customers to TI owners -- it will never hit any other market until that restriction is cut away with. Also, at its current price, the machine is quite expensive, and if you include an RS232 interface, the new Hard Disk Controller, a 20 Meg-hard disk, a floppy or two, and the base price of the Geneve, and the price of an expansion box, we are talking a price well into the thousands (\$1400 if bought separately). If the Geneve will make any impact anywhere, then this price MUST come down. That price would be a full system with RS232, a hard disk, etc. and is about the same for an equivalent IBM-compatible system, and this is where the Geneve runs into trouble: for the same price, you get a system with an infinite amount of software and a "standard" that will not die in the next 10 years, and the software is truly professional software. The Geneve lacks in software, and more importantly, writing software for the Geneve (not for TI mode) will be very difficult with the memory management system included (remember, the 9335 can only address 64K at one time).

So what am I saying? The TI is dying, and the community is whittling away to a number of hard-core users (those who will die before trading away their TI). The Geneve is a hope, but only when some real software comes out for it. My-Art is nice, but is simple. My-Word is just an upgrade to TI-Writer, and is far from being anything but "a glorified typewriter." A "Windows" type program will be very nice, but remember this: the Amiga computer from Commodore has a very nice windowing system, and a lot of time and effort has been spent on it, but it has many flaws and took over two years to develop to where it is now. In two years, the Geneve might be dead, simply because of that long wait for professional software...but I hope not, and my money says that it won't die by then.

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A brief look at our past
by Bret Musser

Spring, 1976: TI announces the TMS 9000, the first 16 bit microprocessor.

June, 1979: TI unveils the 99/4, at a cost of \$1150, with monitor. This machine is based on the 16-bit TMS 9900, and thus is the first mass-marketed 16 bit computer.

Sometime, 1981: Software finally begins to roll out for the TI-99/4A, as Microsoft introduces Multiplan for the 4A, and TI-Writer is finally introduced, along with Extended BASIC. But third party software is still discouraged.

1982-1983: The big "computer shakedown" begins and climaxes as the low end computers (VIC 20, Atari 800, Mattel Aquarius, TI 99/4A, etc) begin a great fall in prices as competition reaches its fiercest. There was no winner, but because of this, the price of many higher priced computers did fall as the influence of the shakedown hit them too.

November 1983: TI, after posting losses of tens of millions of dollars in the home computer division, finally pulls the TI-99/4A. TI was supposedly losing money on each unit it sold when it pulled out of the market.

1983-?: Thanks to the pullout of Texas Instruments, the users of the 4A became extremely knowledgeable of the machine. TI learned too late how to share technical information, but at least it did enough to get the users hacking into their machines to produce such beauties as Miller Graphic's Explorer and Gram Kracker, which was pulled off the market less than 6 months ago.

May, 1987: Myarc finally releases the long awaited Geneve computer. People awaited its arrival for two years, and the actual finished product was radically different from the original proposals.

November, 1987: Myarc finally releases a version of MDOS for the Geneve computer. Until then, the machine ran solely on "TI mode," an emulation of the TI-99/4A.

November, 1987: We enter our fifth year without TI.

Now, I'm sure there is a lot of information that I forgot, but without the help of the users I had so greatly hoped for (off of BBSs), and was so disappointed in, I was unable to get much more. If you know of any dates, please send them to me, and I might publish an article next month with a better outline of our history.

Scheduled for this month was the third part in Dan's ongoing c99 tutorial, but due to my desk's organization, or more accurately, the lack thereof, I am forced to print this instead. Hopefully, I can find the third part by next month...

C99WINDOWS Review
by
Dan Gazsy
Sysop, Beaver BBS

In late September, I called the OTTAWA 99'ers UG BBS (613 738-0617) and found two archived files available in the c99 download area called C99WINDOWS and WINDOWV1_2. After unpacking both files, I found one to be an application program (WINDOWV1_2) and the other to be library functions (C99WINDOWS) for all the window functions.

The next few days were spent playing with the application program and reading the docs for the library functions. The files located in C99WINDOWS are primarily source code files and documentation. Before you can utilize these functions, you'll have to go about the process of compiling the library functions. The directions for this process assumes that you have rev 2.1 of Clint Pulley's c99 compiler and a copy of the Graphics Library (GRF1 also written by Clint Pulley). The entire process of creating all the object files will take you about an hour to perform. Also included is a demo file called WDEMOC that you'll want to compile. This demo makes reference to a function called char_load() and was written by Tom Bentley. It's purpose is to redefine the character sets and will load files like CHARAI (commonly found with the E/A editor). If you don't have it, just comment out the statement and compile the demo. To run Tom Bentley's demo you'll need the following files WDEMO (name of object file), GRF1, WINDOWS, WMSG, WCMDBAR, WPOPUP, CSHP and WINDOWSGO.

After you finish going through the documentation, you will be pleasantly surprized to find out that WINDOWS is the kernel for the main functions and the extended functions are written as separate object modules. This saves you from wasting space used by functions you don't utilize. The routines are written to be as closely compatible with normal puts and gets, hopefully making window implementation as easy as possible for existing applications. The last and probably the least recognized feature is the fact that these library functions are FREE. The author only asks that you send him a copy of anything you might write using these functions.

The functions available although quite powerful usually require at least one other command to function properly. A prime example of this would be the use of w_locate(); in conjunction with w_cmd(). Otherwise the cursor could appear outside the currently opened window. Changes made to the virtual buffer will not be displayed to the screen unless the buffer is flushed to the screen.

After running the demo written by Tom Bentley, I soon realized that the capabilities of the demo program barely demonstrates the power of the library. If you want to see just how powerful the functions are, unpack the archived file called WINDOWV1_2 and run the application called WINDOW (opt 5 E/A title). The only problem is that the source code for this application is not included (oh well). My decision at this point was to write a demo program which concentrated more on the windowing functions and less on the different types of menus (w_cmdbar, w_popup, etc). To do this, I turned to the documentation and went through the examples included with the different commands. For the most part, the examples in the documentation were accurate, here are the exceptions I found
buf_col Needs a w_init() call as the first command, otherwise the example won't function.

use_vbuf Also needs a call to w_init() and I also found the example to be very poor. It should have demonstrated both use and non-use of the virtual buffer. Demo program W_DEMO2C has a much better example of it.

w_box Example is good but it's function is extremely limited. It's sole purpose is to create a border and does nothing for the area it encapsulates.

w_clrbuf Example will work but it demonstrates nothing to the user. A better example would be the following:
w_init();

```
use_vbuf=1;
```

```
w_open("Virtual Buffer in use");
```

```
w_puts("This is an example");
```

```
w_clrbuf();
```

```
w_flush();
```

w_cmd Example as written does not work. Use of Ctrl S,D,E,X or function 5 does nothing. Command requires an argument to be passed to function properly.

There are two things internal to these functions that I'd like to see changed. The first is the rewriting of all opened windows whenever the current window is either resized or closed. The other problem is the fact that I can only work on the top window. To access prior windows, I have to close the current one till I reach the window I want.

Writing demos are nice but usually they serve no practical purpose. Awhile ago, I started to write an editor that would allow me to edit a common file and cut/paste lines from other files. Being a SYSOP, it becomes necessary at times to be able to perform maintenance on the BBS message base. Using library functions like these could make this a rather easy process.