NEWSLETTER 9T9

062
8706

photo-Steve Mickelson

photo-Steve Mickelson

Jane LaFlamme demonstrates one of RAVE's new XT-style keyboards for the 4A

Club Secretary Randy Rossetto Presents Cheque for DM-1000 to Bob Boone at Ottawa's TI Fest

FROM:
9T9 Users Group
#109-2356 Gerrard St. East
Toronto, Ont., M4E-2E2
CANADA

36 CANADA

TO:

Box 11983

NEXT MEETING

The meetings are held on the last Tuesday of each month
The next will be held at the York Woods Public Library in
Downsview, starting at 7:30 pm The library is at 1785 Finch
Ave W just west of Keele St The entrance to the library is
on Finch Avenue. See meeting schedule, below.

Meeting Schedule

June 30
July 28
August 25
September 30

New meeting place as of
July meeting. Location
to be announced.

TI SYSTEM FOR SALE

TI-99/4A Console
TI Expansion Box(with quiet fan)
TI Controller Card
RS-232 Card
32K Memory Card
300 BPS Maunual Modem
TI-Writer Module

Price: $600.
Contact: Boyd 793-3761(Evenings)

Photo -Steve Mickelson

Ryte Data's New XT case/expansion
for both the TI-99/4A and Myarc 9640
Note unique horizontal mounting of
expansion cards.

TId Bits, #10

Well, July is nearly here and so is the final version of MDOS for my Geneve, which has been sitting in its carton, unused because of an incompatibility with my Corcomp disk controller. Both Wes,(who has a Corcomp controller) and Blair, (who uses a TI conroller), have been the same boat, for the same reason. So much for being the first in Toronto with the new compatible. I must say that preliminary examination of my 9640 with the early release of the MDOS and the loan of Gary's Myarc contoller,(he is the only club member with this card!), showed that the computer seems to be all that was advertised.

I may not be at the next meeting, as I will be off that week. I have plans to be away, but an appointment Monday may result in my making it there. We plan to have a demo, by Andy, of the Maximem. This cartridge is a device which operates somewhat akin to the Gramkracker, though it has no GRAM space or memory/editing features built in to. I'll let Neil or Randy take the helm for that meeting, even if I'm there.

At our last meeting, I brought my 9640 and Gary brought his controller card. This wasn't intended to be a full-fledged demonstration. In all fairness because two individuals had to "share" parts of his respective system, to get the unit going, plus my lack of familiarity with the Myarc calls made a somewhat dismal demonstration. But considering the logistics of the situation and the fact that this was not a scheduled demonstration,(I found out late, from Randy that Bruce Ryan had cancelled his appearence, the previous absence was due to a mix-up between him and Randy on the dates), you can understand why the demo went as it did. I hope at a later date to have a more polished demo.

Speaking of MDOS, a call to Myarc confirmed that the final debugging of the MDOS had extracted a couple of the electronic insects and that the DOS will be sent to Jane LaFlamme,(via UPS-due to the postal strike), will be posted on Compuserve and DELPHI,(and probably GEnie), at the same time. I requested that they notify Jeff Guide at Disk Only Software,(where Blair & I purchased ours), to do the same. A warning to any purchasers of hardware or software by mail order, I suggest requesting an alternate shipping route, while the postal strike is on, to prevent delay's or other problems with your order.

Since I have the latest EPROM, I hope to get the DOS from a commercial data base, and we'll have a better "look-see" at this Geneve.

Who says it doesn't strike twice. Recent thunder storms clobbered Gil's and John's modems and their BBS'. Gil is running on a loaner and John is still out of commission. My modem, too, was zapped and 1200 Baud is flakey at best. A recent sale of my stock, which paide for my 9640 and new monitor will help get me back on the lines again,(no more telecomputing while it's raining!).

Compatible monitors include Zenith, Sony and the Amiga,(from Electronics Playworld). The Amiga montor can, also, be had from Comspec. Radio Shack has a new relatively high res(640 x 192)analog color monitor, for the COCO 3, at the lowest local price,(it is on sale in June for $399), but this unit appears to have no sound, you'll need an external amp./speaker. The NEC-multi-sync can be purchased from Computerland at ONLY $1150,(time to get a second mortgage on the homestead).

The speech synthsizer will NOT work when plugged in the Corcomp Triple Tech card, while using the Geneve. Lou Phillips says RAVE,(makers of the IBM-style keyboard for the TI-99/4A), will make a card to remedy the problem. Though the print spooler and clock will still work with the Geneve.

You see a couple of pictures from Ottawa on the front cover of the newsletter. I hope to have several more in the next couple of month's.

Welcome back to both Cy and Leo, from the sunny south. Cy informed me, while here, he will be running a BBS at 300/1200 BPS, 24 hrs. a day. The number for Cy's BBS is251-9920.

*** CORRECTIONS ***

There are a few corrections to be made from last month's newsletter. First Jane LaFlamme and Steve Findlay are the correct first and last names. Also, I negleted to mention that Wes was at the TI-Fest in Ottawa, even though I got a picture of him at our booth. I regret the error and would consider firing my profreader, but if I did I'd loose my key reporter, photorapher, researcher, typesetter, editor and publisher!

-Editor

-by Gary Bowser, JUNE/87

I am sorry I missed a month there, but with the Ottawa show I was a little too busy. Here is a very simple answer for the April trick. When you pressed the FCTN 4 key, you exited back to the command mode without turning off the sprites. If you want a better explanation, I will be happy to answer you at a meeting. At the June meeting there will be at least 6 more disks than are listed below.

`TRICK OF THE MONTH'

Type run this line in extended basic. When the cursor starts flashing, type in lowercase, but you will notice that the letters appear in uppercase. The trick is in the KEY statement before the ACCEPT statement. When the ACCEPT statement is used it uses the last key-unit used by the KEY statement, so if you used a CALL KEY(3,K,S) before the ACCEPT statement the ACCEPT statement would be in TI-99/4 keyboard scan. See the Appendix `Keyboard mapping' in the User's Reference Guide for a complete list of the keyboard modes. Try different key-units like 1 or 2 and see if you can find where the enter key moves to. Next month I will show you how to get a full-screen editor using the ACCEPT statement & a few more tricks.

```
1 CALL KEY(3,K,S)::ACCEPT AT(12,1)ERASE ALL BEEP:A$::PRINT A$
```

9T9 TriWare and Public Domain Software

PROGRAM		SIZE		RUNS	DISK#	DISCRIPTION	
4thMUSIC	Pub	-	1	EA/LDR	9	Music or Graphics Demo	
AFECLOCK	Pub	-	1	EA	32	Clock	
ARTIST01	Pub	-	2	RLE	51	More TI-ARTIST pictures for MAX/RLE	
AXLE	Pub	-	1	EA/XB	24	Music (Beverly Hills Cop)	
BA WRITER	TrI	-	1	XB	38	TI Writer Disk Version	
BEAKS	TrI	-	1	XB	36	Editor Assembler Disk Version	
cBASIC	TrI	$20	2	EA	14	cBasic Language Compiler	
CALENDAR	TrI	-	1	XB	48	A set of different calender programs	
CHECK/BOOK	?	-	1	XB	33	Cheque Book and Budget Management	
CHINACHESS	TrI	-	1	XB	49	A new game	
CRAPS	?	-	1	XB	26	Crap Game Requires 32K	
CRUNCH	TrI	-	1	XB	41	Crunches Dis/Var 80 files	
DIM	Pub	-	1	EA	18	Disk information manageme	
DISKU	TrI	$10	1	EA	43	Disk fixer type program with docs	
DM1000	TrI	-	1	EA/XB	42	Disk Manager 1000 from Ottawa	V3.5
DRAWFIO	Pub	-	1	EA	3	Computer assisted drawing	
FAST-TRANS	TrI	-	2	XB	44	Checkbook Recapper/planner	
FASTTERM	TrI	$15	1	EA/XB	17	Terminal Emulator program	
FORTHDOC	Pub	-	5	DV80	11,12,13	Forth Manual on disk	
FRACTAL	TrI	$10	1	EA	16	Fractual explorer	
FRENZY	Pub	-	1	XB	24	Space game very well done	
FREEWARE	Pub	-	1	DV80	50	A freeware catalog	
FUNLWRTR	TrI	$10	2	EA/XB	1	TI Writer and E/A systems disk	V3.4
GRPHJACKET	TrI	-	1	XB	40	Prints a disk jacket using a GRAPHX file	
JETSPRITE	TrI	$ 5	2	XB	20	Sprite builder program	
JFGFAPHIC	Pub	-	2	EA/LDR	8	Forth graphics and demo	
LABELER	TrI	-	1	XB	45	Print Labels with over 100 logos	
MAX/RLE	Pub	-	2	EA	2	Display special graphics, with some RLE's	
MONA	Pub	-	1	XB	23	Prints Mona-Lisa	
MONOPOLY	TrI	-	1	XB	46	A better monopoly on computer	
MS-ADVEN	TrI	$10	1	XB	30	Adventure game	
OIL INVAS	Pub	-	1	EA/LDR	10	Forth Game	
OMNLLIFE	TrI	$10	1	EA	19	E/A program loader	
POSTERS	Pub	-	1	EA	23	Selection of printer art	
PRBASE	TrI	$10	2	EA/XB	5	A good Data Base Program	
RAPID	Pub	-	1	EA/XB	19	Rapid scroll for DV80 file	
REDISK	TrI	-	1	XB	39	Disk copy program for TI Corcomp	
SCREENDP	Pub	-	1	XB	21	Screen dump to printer 32K	
SONGS/EA	Pub	-	1	EA	32	Selection of music	
SORGAN	Pub	-	1	EA	25	Makes Keyboard an organ	
STAR	TrI	-	1	XB	37	Super TI Assembly Routines for XB	
SUPERCAT	TrI	$10	1	EA/XB	4	Disk Catalog Program	
SYSTEX	TrI	$ 5	1	XB	19	Encode assy to X/B program	
TI-REWRITE	TrI	-	1	DV80	41	TI Writer Manual	
TI-SORT	Pub	-	1	EA	19	DV80 Sort program	
TI99'POLY	?	-	1	XB	31	Monopolly on the computer	
TIFORTH	Pub	-	1	EA/LDR	7	TI FORTH Language	
TIPILOT	TrI	$10	2	EA/LDR	15	TI PILOT Language	
TOOLKIT	TrI	-	1	XB	47	A set of program utilities	
TRIVIA99	TrI	$10	1	XB	27	Trivia Game	
WITGAME	TrI	$ 5	3	XB	28,29	Game	
WORDWIZ	TrI	-	1	XB	35	A word game with speech	
VCR-DB	TrI	-	1	XB	41	A Database for your VCR Tapes	

For those of you who want to hear more what happened in Ottawa, from another point of view, read on...

NOTES FROM THE OTTAWA FAIRE:

-by Walt Howe

Last Friday I drove to Troy, NY to Paul Charlton's apartment at RPI to meet Lou Phillips and Barry and John Calvin Traver for the drive up to the Ottawa Faire. While waiting for the MYARCmobile, I had a chance to admire the dozen or so computers or so that belong to Paul and his roommates, particularly the DEC PDP 11/34 running in the closet. Where else but Paul's would you find a PLP 11 in the closet?

I also had a chance to chat with Paul about the status of the DOS and some of the other developments for the 9640. All the pieces of the DOS are done, but they aren't all assembled to work together yet, and it looks like it will take at least a week to put all the pieces together. Maybe two. Paul has a version that is more complete than the interim DOS being issued with the first 9640's, but he isn't giving it out yet. He would prefer not to issue any more incomplete versions until the whole thing is done. I think Lou would like to see one more interim version to put a better capability on the street now, but I can't say who will prevail. In any case, it won't be very much longer. There is also a later version of the GPL loader than the one being issued. This one lets you change to 5 speed options in 4A mode and protect the >6000 and >7000 GROM addresses (some files need this, because they would otherwise write over the program). The final version of the system software will also require an eprom change. They are ready and will be issued when the software is ready to go with them.

Lou arrived after a while with a car stuffed with 12 new 9640's, Lou's full system, Barry and John Calvin, and all their luggage. There was no room for me, my luggage, my full 9640 system, and some Genial Computerware products I was delivering from Boston. Nevertheless, we all squeezed in somehow, and headed for Ottawa.

We arrived at Canadian customs with no experience in clearing the border with commercial products. Lou had done some checking beforehand. I was completely ignorant. (Did I hear someone say, "So what else is new?") Lou's source on handling customs had told him that customs would take a check. They would - but only during banking hours, and it was well after that! Lou for some reason wasn't carrying $600-$700 in cash, so 12 9640's were unpacked and left at the border. So was the Genial Computerware, since I hadn't brought a spare $150 or so that they thought I would owe, nor had Barry. At least we were allowed to bring our own systems into the country. We headed for Ottawa in a much lighter, roomier car.

We found our way to Ottawa and the hotel without incident, and were greeted by Bob Boone, Jane LaFlamme, and a very convivial crowd of Canadians (definition of "convivial": at least three drinks apiece). We broke the news of the 9640's at the border, but surprisingly they let us stay anyway. We soon got convivial, too (Rev. Barry and John Calvin excepted). Other USA Tiers there included Scott Darling from GENIE, Jeff Guide of Disk Only Software and DELPHI, and Bud Mills. John Clulow, who was to have come, had to cancel. Sometime during the night we got some sleep - at least some of us did. Bright (?) and early the next morning, we roused ourselves and headed for the Faire, held in a high school. Lou and I both set up our systems side by side. I was playing the role that Paul or Peter usually do in supporting Lou. We kept switching the software on display from MY-Word to Multiplan to DRAW to various examples of 4A software and answered many questions. The crowd numbered something like 300 people altogether, and most were serious 4A users. The level of knowledge was quite high, and the questions very good ones. One group came in a bus from Montreal. There were others there from as far as Nova Scotia, although Scott from Spokane was probably the farthest traveller. As usual, Lou wasn't selling 9640's, leaving that role to the dealers. Jane LaFlamme said she took many orders during the day on the strength of what they were seeing of the 9640. The fully developed (unless Peter Hoddie decides to add more changes) MY-Word, the completed 80-column Multiplan, the superb new graphics done with DRAW using a mouse, and the overall system speed were the big convincers.

Bruce Ryan of RYTE Data was at the next table. The new 4A DOS by Monty Schmidt was on sale, and I promptly bought one. If you haven't heard of it already, it gives the 4A a set of MS-DOS-like commands including DIR and DISKCOPY and lots more, usable as batch files. It requires a GRAM KRACKER, a Supercart, or any other RAM device that loads at address >6000. It came with a very hurried set of docs that list all the DOS commands and how to use them, but somehow included no directions on loading the program into RAM. I spent a while tonight (Monday) trying to figure out how to load it into my GRAM KRACKER with no luck. The GRAM KRACKER loaders do not seem to work. Neither does Peter Hoddie's GRAM PACKER. I've got some more schemes to try - at worst, I'll write my own loader, but it does seem like a rather major omission! I don't promise I'm not overlooking something obvious, but I can't recommend the product until I know it works, and that the non-expert user can use it. The docs say that more complete docs will be available later and that it may be put in a cartridge if the demand justifies it. If the product does what it says it does and the load problem is solved, it should be a very good seller and a useful program for many.

AHA!! Peter Hoddie just called from Stamford, CA, where he is visiting. I mentioned the problem, and he told me to try it without my XB II equipped MYARC RAMdisk. He says that the MYARC 128KOS that comes with the XBII competes with the DOS for the space and the 128KOS may be winning. Well, sounds reasonable, but cartridges can be loaded despite the 128KOS. OK, I try it - out with the RAMdisk, in with the old 32k. I try to load the DOS again. NO LUCK! It seems to start out all right, but it ends with an error message. Check the space with the GRAM KRACKER editor. It looks like it has loaded, but it won't work. Very frustrating. No more for tonight. Can anyone help with this one? Back to my account of the Ottawa trip. RYTE Data has another interesting product on display - a new prototype expansion box. It uses a Taiwan $20 expansion box for IBM clones as a base. It will hold up to four half height drives. It has 8 (I think) expansion slots, although you must get at cards one at a time. They are arrayed horizontally, one on top of the other, and you can't remove the bottom one until all above it have been moved. Not a big problem, I guess. Most people don't switch cards as often as I do. It also will come with power supply options, letting you run hard disks and floppies from internal power. It looks good. Estimated price is about $150. Is that a little high? Others working on expansion boxes are aiming to go for about $100, but with less features and no guarantees that they can really reach the $100 figure. I guess this is a good deal, and we're going to need it if the 9640 catches on. Old PE boxes can't supply the world forever!

Scott and GENIE have scheduled a three nation hookup for 1:00pm. The LA Faire, Ottawa, and a similar London event are going to try to talk to each other using GENIE. LA comes on without any trouble, but London never appears. Too bad. It was a good idea and worth the try. Nice to talk with LA, anyway. I help Lou with his presentation in the auditorium on MYARC's progress. Everyone seems very impressed with the demonstrations. Here are some of the many things discussed during the presentation:

~Lou outlines MYARC's priorities for future software development. He mentions Lotus 1-2-3 clone as a top priority, because so many people ask for it. (Maybe Paul will spend time this summer translating 8088 code to the 9640.) This one will sell for much less than the $695 (or whatever) list for 1-2-3, but it won't be a $100 piece of software either. If anyone is expecting a full piece of integrated business software for orphan prices, they are mistaken. (Is this what people want, or is it just necessary to have this type of software to attract buyers?) Lou says that he has checked out JACK2, an integrated program from PECAN, which runs with the p-system that the 9640 is being equipped with. It won't work right away, because it has 8088 code in it, too. Lou isn't sure it is a good enough program to warrant the further conversion required. Any input from anyone who has used it would be welcome. The p-system is up to version 4.22 now, by the way. Lou says that the p-system license for the next year is paid for.

~Completion of a full C compiler is another high priority, because many top programs today are written in C. Clint Pulley, who could not make it to the Faire, has made his c99 source code available to MYARC. Other priorities are an Advanced BASIC compiler, a full-feature word processor, a significant expansion of the TFAV program's features, and others further down the line such as a relational database.

~Paul Charlton's 80-column patch to Fast-Term is not a new, expanded program at this point. Paul intends eventually to add features to the program, but clearly he will not get to it for some time. As Lou announced, Paul will instead make the patched version available to anyone who sends him an initialized disk, mailer, and postage.

~The 9640's now being issued work only with the MYARC controller. With the complete DOS and the final eprom will come the capability to run with any of the three controllers. Anyone receiving the present version must realize its present limitations. It is important if you do buy the present version to be sure to return the warranty registration and questionnaire - both to ensure you get future improvements and to let MYARC know what you really want to see developed in the future for hardware and software.

~A decision is about to be made on the coming hard disk controller. Texas Instruments now says they can turn a new gate array around in two weeks, compared with the 7 months or so it took to get the workable product from Mitsubishi for the 9640. The disk controller can either be a very full card without a gate array or a card with a lot of space and a gate array.

~About 100 9640s have now been shipped, some to Europe. 100 more should be shipped this week, and 100 or more will follow each week thereafter.

~A new secretary was scheduled to report to work at MYARC today. MYARC's phones will finally be answered again, correspondence will start to flow, and the repair backlog will begin to ship. She won't be able to do it all in a day, so please be patient, but things are finally to start moving again.

MYARC's presentation was the last of the day. A fine banquet followed, featuring Veal Cordon Bleu. Barry Traver was presented the Ottawa Group's latest award to someone who has made a significant contribution to the community. Lou Phillips and Terrie Masters had previously received the award in

Chicago and Boston. After the banquet, the diehards reassembled in the hospitality room in the hotel seeking more conviviality. I pooped out early and actually got some sleep before it was time to leave in the morning. For that, I was elected to drive. Bob and Jane followed us down to the border to do battle with customs. Bob seemed to know what he was doing, although the Canadian customs staff seemed dubious. We left them beginning to fill out a few million customs forms, but I am sure that 12 9640's are now in the hands of buyers. We were questioned closely by US customs on the computers we were bringing into the US, but I guess they realized that noone in his right mind would go to Canada to buy a computer and bring it back unless they wanted to lose money.

Back in Troy, NY, we had dinner with Paul and his lovely friend Kim, who created the MYARC swan that will appear on the power-up screen, as well as the dragon, fox and chicken that many have seen in the DRAW program demonstrations. The DRAW program will be included if you buy a mouse from MYARC. After dinner we drove our separate ways. I returned home tired, but glad I had gone. I expect to go back next year, too. The Canadians include some remarkable people, and it is the people who make these events, not the hardware and software. Thanks, Ottawa!

-from
Chicago
Times
newsletter...

THE ANONYMOUS COLLECTORS'S

(or as T.I. Would say,)
"THEM DAMN PIRATES"

I don't know when it all started, but I have my ideas on how it started. It all started when some BIG-WIG had a brain-storm on how to go up the ladder of succes a little faster.

Besides selling computers, we can sell software too. We can make a killing on software. Well, to make a long story short, it worked! They bought everything and anything they made, at their prices, too.

The problem was, they were watched by other BIG-WIG's in other computer companies. Well, you can only get so many BIG-WIGS on that GRAVY-TRAIN before it slows down. So you can guess what happened. Not enough big money for T.eeee. Computer Co. ... So they got out.

But, they did leave something behind. US! Yea, all the DUMMIES who bought it all. ALMOST AS BAD AS HAVING YOUR MOTHER LOCKING YOU OUT WHEN YOU GO TO SCHOOL.

Well luckily we got someplace to go. Like you local USERS GROUP, or that B.B.S. that is always bush, or maybe the LIBRARIAN.

NOW, don't get me wrong. I know, and I'm glad there is still someone who is making programs for my little computer. I don't groan about the price of programs now. I look real good at what I'm buying now. There are some very beautiful programs to get now.

But watch out for that up-and-coming Mr. BIG-WIGS. Mr. BIG-WIGS COST plenty, an they don't always give you the PROVERBIAL POT. So look closely.

Myself, I see some new one's I must buy. Sorry, I won't say. But I am happy toknow about the COLLECTORS. They are getting and saving all the programs they can get.

WHY? Because they will not say UNCLE to Mr. BIG-WIGS. They are NOT going to quit T.I.

YES, all the programs that you and I have payed for to T.I. and ETC. are being collected. BY WHO? WHERE AT? WHERE CAN I GO TO GET ME SOME, TOO?

SORRY, I don't know.

But I do know that I am not throwing any of them out. You and I paid for them. Look around! Find those old program's you put in that desk drawer. They won't do nay good there, There are some very good old programs you have.

They might be some collectors items. Even if they are not, someone might like them. You know, KIDS. Think about It!

Tell someone else about that little trick you found. Send it to your CLUB or USERS GROUP. Put it on a B.B.S. WRITE IT ON A PAPER AIRPLANCE AND THROW IT OUT THE WINDOW. It will find it's way to someone else. And some day soemone will Show you a real neat trick he found. And it works good, too.

Just don't give a pirate a chance to become Mr. BIG-WIGS... YES, VIRGINIA, there ARE PIRATES out there. They're the ones who still think it is better to get money that to give help. I'm sure you can findthem. Or, should I say, they will findyou. So, if you find a PIRATE, give him your two cents worth. If you find a COLLECTOR. Ask him for HELP. BUT, don't ask him for that new amazing, does everything program that you want. It's CHEAP now! And dig deep into that dusty old drawer and findthat very old program. You could and probably will need it in the future. You know ehere it will be. Someone else might find it, too. Some day.

IT MIGHT BE YOUR KID !
or MINE !

Mother Goose and Grimm

WHAT PIRATES MUST DO EVERY MORNING...

BUG SPRAY   - by Rudy Johnson

The following article was in the SNUGLETter -- April 1987. From the Disk of Mike Dodd.

DM 1000... has an annoying little bug if you happen to own a CorComp disk controller. When DM1000 formats disks in double density, it puts 16 sectors/track on the header, even though it formats 18 sectors/track. Which is all very fine and well if you keep it on a CorComp controller, for the reason that the CorComp controller never even heard of 16 sectors, so it doesn't care what the header says. HOWEVER, if you send the disk to someone who has a MYARC disk controller, then the MYARC controller looks at the hader and sees "16 sectors per track." So it reads the disk based on that information. But it's 18 sectors per track! So, the MYARC card reports a blank disk. After having several people complain about my "blank" disk, I found a fix for DM1000. For V3.5, edit the first sector of the MGR1 file. At byte 216, you should see (in hex) 10 00 02 D0 00 5A. Change the 10 to 12. Write the sector back out to disk, and never worry about it again. If you are using another version of DM1000 that has the same problem (I don't know if any others do), search for 10 00 02 D0 00 5A. It should be very close to the beginning.

I found the above article extremely interesting and informative. For it explaind some of the problems I and others have had with disks when going between CorComp and MYARC disk controllers. I checked some of my disks and, sure enough, the ones which had been formatted with DM1000 all had 16 sector per track in the first sector, which contains the disk formatting information. (The disks formatted with CorComp Disk Manager contained the correct 18 sectors per track info. And I found that the same bug existed in all previous versions of DM1000 back to V3.3!

So I went searching for the above listed bytes on my version of DM1000. Since I use Funnlwriter on my Horizon Ramdisk I wasn't certain where the bytes resided. As it turned out those bytes are in the first sector of the MGR1 file in all versions I have checked and in the first sector of the DM1000 file (MG) in Funnlwriter at byte 216 (decimal) or D8 (hex).

It is also possible to change those disks formatted as double density by changin the sectors per track information in the first sector (Sector 0). Once again a sector editor is necessary. Sector 0 is called up for editing and byte 12 (decimal) or C (hex) is changed from the existing 10 to 12 (both in hex).

This should alleviate those problems that I have experienced. One comes to mind in which I had formatted a disk and then taken it to John's house to get some information copied. John usea a MYARC disk controller. When I got home with the disk I had problems with it inthat I had garbage come up even in the directory. When I looked at the disk with a sector editor I found that the 17th and 18th sector of each track were not used - no doubt because the MYARC controller looked at the sector info and only used 16 sectors per track!

I hope that this will help others who have experienced unusual problems when going from one type of controller to another.

NOTE: MYARC disk controller Users should not reset the sector 0 byte from >10 to >12! If you do the system will assume it is 18 sectors per track. In that case you will see the same problems that we CorComp Users have seen.

Reply From Terry

The following letter was sent to me via Compuserve Easyplex mail and seems to clear up our "tempest in a teapot" covered in last month's newsletter. I'll foreward a copy on to Terry.-Ed.(Terry, if you happen to read this, we have been sending out newsletters to TINS and have not received any issues since several were sent last November or December. Are our newsletters arriving there o.k.? As far as your offer for the sequel to the review, I would be pleased to have it, as I am trying to get more reviews in the newsletter.-Steve.)

EasyPlex
Date: 31-May-87 17:52 EDT
From: Terry Atkinson [75376,1277]
Subj: FOUL-UP

Dear Steve:

Thanks very much for the May issue of 9T9 newsletter, which I read with much enthusiasm. As I was unable to attend the Ottawa Faire this year, I especially enjoyed the article on the fair. (Incidentally, it's JANE LaFlamme, not Jeanne).

I also read and absorbed your follow-up letter to Micropendium regarding the incident of having an article 'mislabled' with my name. In doing so, I am assuming you have interpreted my letter to Micropendium to say I was putting the blame on you(?) for the mistake. Not so.

When you asked me last year if it would be o.k. to put my articles in your letter, I said yes....not knowing which articles you were speaking of (nor did I know how you came by them). As I mentioned...I write many articles and reviews and programs, each and every one being public domain, so naturally, I gave permission to use them as you see fit. And still do.

Several months ago I had a similar problem with an article in Micropendium being credited to me as author. In fact, a good friend of mine, Rick Cosmano (SCCG) wrote it. It caused me no end of (self) embarrasment when it was printed with my name. So, after talking to Rick (via Dave), he was very understanding of the problem and I decided to try to trace the source of it all. To make a long story short, I had uploaded the article to TIMELINE, Paul Degner down- loaded it and put it in the Wpg newsletter VERBATIM. Micropendium copied it from there and were responsible for the error, and had admitted it in a note to me on STC. Rather than merely re-produce the article (as should have been done) they re-wrote the article and made an error of grave consequences.

It appears the same thing has happened here, with the problem, I believe, in whatever being uploaded to TIMELINE being given a "header" with the title and uploader's name being inserted as part of the 'total file' when it is downloaded. I didn't find out about the article from you, but from Bob Boone, who "knew" me well enough to know that I was not 'partial' to Gram Krackers and the like. In fact, he thought I had bought one! When I assured him I didn't, he mentioned the articles in the 9T9 NL. I talked to Bob about the overall problem in general and this incident specifically (I had just seen it in Micropendium) and he did not seemed concerned....but knew I was. It is most embarrassing to read an article credited to me but not written by me. Not only that but it tends to detract from my credibility somewhat...at least to those who don't know me personally, and don't know my 'high' moral standards along these lines.

Not to belabour the point too much, but I feel it absolutely necessary to 'clear the air' on this subject matter. I am sure there are a couple of guys in your U.G. who visit my BBS..(Steve Finlay??)..who can attest to my honest and forthright manner.

On another note, , I see you have produced the 512K article in your NL. If you want the follow-up article, it was made available on STC and CIS, and if you can't find it on those systems, I DO keep copies of all of my articles, and can provide it to you. I prefer STC for uploads, but you did not mention your STC number in the newsletter...just DELPHI and CIS. Are you still a member of STC? At any rate, I look forward to hearing from you on the above (or any other reason).

Sincerely, Terry Atkinson
CIS: 75376,1277, STC: TI6450, DELPHI: HURON. (I don't visit Delphi very often). Later...

(I'll foreward a copy on to both Terry and Laura Burns, the latter Editor of Micropendium.-Ed.)
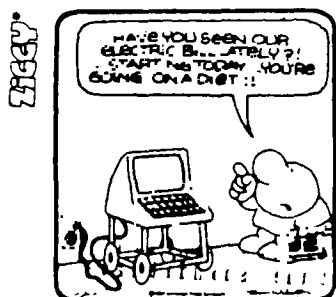
new BBS>

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A LOOK AT FRACTURED FILES...

(or what's been running through my head?)
by John F. Willforth

COURTSEY OF: The San Diego Computer Society-SIG, May 1987 Newsletter

Some of you may doubt that I really don't like to waste space in this newsletter, rambling on and on about highly technical hardware and software issue, but I really would like to discuss it in person, and if you can afford the money, feel free to call and I'll share the little that I know, and the may things that others have shared with me. I do, by the way, like to put a few thoughts onto paper. It's the only time I can say anything, and not get interrupted.

I've heard that there is some talk, even at this stage, of speeding up the TI-99/4A by changing the clock crystal, from about 12 Mhz, to 14.318 Mhz. Well about 4 years ago, I broke the very same crystal and replaced it with the same frequency that was recommended in the article, or the BBS. The results were very disappointing if you do not have the 32K memory expansion, because the 9900 chip, which is the "CPU", can only access the 16k of available memory, through the VDP chip, and it is running at a rate set by its own clock (10 Mhz.) crystal.

The unit would certainly operate faster if you would speed up the VDP clock but, if you do, things like your cassette, would only be useable "only" by you because the VDP crystal affects the CRU chip. I have tried this. Memory manipulations should be faster with just the CPU crystal changed. You could have fun TRYING anyway!

I've come across a perhaps not novel, but a very easy way to trouble-shoot and repair the video processor's 15K of memory! The symptoms vary, but usually fall into these general categories:
- BITS DROPPING ON THE SCREEN (CHARACTERS INCORRECT)
- PROGRAMS DOING STRANGE THINGS (SYNTAX ERRORS, EIC.)
- COLORS WRONG
- SCREEN APPEARS "VERY DARK", AND SHIFTED.
- COMBINATIONS OF ABOVE.

Well, if you are what you might consider, of medium hardware technical ability, I've got and "almost sure fire fix". The TI uses 4116 dynamic RAM chips, and are arranged so that each bit of a byte. are located in a different ram chip, ie: a byte with "FF", would have a "1" on in the same address in each chip. This makes it very hard to trouble-shoot to the chip, because all chips are involved in any one byte of information.

The first attempt to fix a "MEMORY PROBLEM", was to remove one chip at a time, install a chip socket, and put in a new RAM chip, and test the computer. I did this, wouldn't you know it "eight" times. It was the last chip in the console. There had to be a beter way.

I believe that I found it. The answer was very obvious, why not piggy-back the chips with a good one, trying one at a time, until the defective chip was found. The second console proved this theory correct. I put a 4116 chip directly over the first chip, and turned on the console. I repeated this until either (A) the sympton changed, or (B) the problem was corrected. The reason I specify a changing of symptoms as a identifier, is because there have been two instances where there were more than one chip at fault and because the chip may exhibit other symptoms when piggy-backed.

Now, replace the chip with a new one, by either using desoldering tools or cutting the leads to the old chip and installing the new chip in place.

I must tell you of one problem with putting 32K of memory inside your console, and that is that many of the game cartridges that plug into the right side of your console will not work. It seems that this is the only problem that I have heard of, and this is because of the heavy bus loading by the ROMS in the cartridge.

I have recently come across two console that have exhibited problems that appear as the wrong key being pressed, and the keyboard and CRU chip are not at fault. Check to see if the JOYSTICK PORT pins are BENT together. This will cause the WRONG character to be displayed with some key depressions.

Finally, I would like to apologize for the delay in getting additional hardware articles written up for you who like to do these things. I've been away most of December, and this has deprived me of the time I have spent writing for you. I hope that these hints will help make up for it. I would like to suggest that if you are interested in knowing what is new and exciting in the world of the TI user, that you subscribe to the MICROpendium and BYTE DATA. These wo are VERY GOOD.

1/9/86 (sic) JOHN F. WILLFORTH
R.D. #1 BOX 73A... JEANNETTE, PA 15644

Geneve Cable for Magnavox 8CM515 RGB Monitor

-Jerry Coffey May 1987

The Magnavox 8CM515 RGB monitor is a good performer for the new GENEVE, but is supplied only with RCA patch cords (for composite mode) and a TTL cable for the IBM PC. But since this 640 x 240 gem is available in the Washington, DC area for $279 + tax, I decided to cobble up my own cable.

The first pleasant surprise was the TTL cable -- the monitor end uses the same rare 8-pin DIN plug that the GENEVE uses. The monitor's analog input uses the more common 6-pin DIN plug (Radio Shack part # 274-020). Immediately the gears started to mesh -- if I turn the TTL cable around, and get one of those 6-pin plugs on the end....

Since I wanted to keep the original cable intact (in case I ever want to sell it to some poor soul with an IBM), a patch cord seemed the best way to do the trick. The other end of the TTL cable was a 9-pin D-shaped "joystick" plug (DB 9). So I needed to make a cable with a DB 9 on one end and the 6-pin on the other. This would also allow me to lengthen the 3 foot reach of the standard cable.

For the main run of the cable, I decided to start with a joystick extension (Radio Shack #276-1978), which already has the DB 9 molded onto one end. Doing it this way also takes care of the length of multiple conductor cable needed to carry the signal. The joystick extension is ten feet long, so can be cut to any reasonable length. I made mine 3 feet long so that both cables together would reach 6 feet. After some work with a continuity meter, I came up with the following wiring diagrams:

```
    5 4 3 2 1                          c   1-(brown)---> 1 =G
   -----------                     w   o   3-(orange)--> 3 =gnd
   | o o o o o |    _____   i   l   4-(yellow)--------------> audio
   \  holes  /     _____   r   o   6-(blue)----> 4 =R
      o o o o        _____   e   r   8-(black)---> 5 =B
     -------                         s   9-(white)---> 2 =synch
    9 8 7 6
                                    DB 9      6-pin DIN      RCA
```

The pins on the DIN plug are numbered in order the plug (number 6, the center pin, is not used). Number 4 wire (yellow) from the DB 9 must be wired to the center pin of an RCA audio plug for the sound input of the monitor. The #3 ground wire must also be connected to the shield of the RCA plug.

You can bring the audio out several ways. I made a 6-inch pigtail from a molded connector, stripped the cover back about 1.5 inches, and inserted it through a hole drilled in the hard plastic slip-on cover of the the DIN plug. The wire must inserted far enough to get clearance to solder, then pulled back through as the cover is pushed on after the job is complete. Short lengths of heat shrink tubing can be placed over the individual wires before soldering to the DIN plug to avoid the risk of shorts when the plug is assembled (just slide them down over the bare wire joint after soldering.

The finished patch cable should look like this:

```
                                              :---------
                                  /==============----:=====
                                 / /             :---------
                                / /
                               / /                RCA plug
         ---------            / /                    ---------
      :  DB 9     \  )----------/ /---------------:            :
      :  molded   /  )----------/ /--------------: 6-pin DIN   :
      :           \  /          / /              \            :
         ---------            / /                    ---------
                    <--- 3 feet --->
                                              ~U.S. FUNDS

     The prices for these pieces are:    ==== 8CM515 monitor $279 from =====
     DIN plug #274-020         $1.29     *  F.D. MICROSYSTEMS, INC.        *
     Joystick extension        $3.99     *  144 Church ST. NW  Vienna, VA  *
                                          *  ph: (703) 281-0001 or 430-5746 *
                                          ==================================
     Another piece that may be useful for GENEVE cables is the 5' Tandy
     1000 keyboard extension (8-pin DIN on each end) #26-1389   $14.95 (U.S)
```

Editor's note: Though this monitor can be readily ordered from Canada, there are a couple of things to consider. Items sold by Magnavox in the U.S. are sold under the Philips name. Philips may honour the warranty of an item under international warranty, (check with Philips to be sure!), but may have difficulty obtaining parts or schematics and returning said item to the U.S. may be the easiest, (though not cheapest), route. This could well nullify any price break one obtains from ordering directly from the states at a "lower" price. The 8-pin din plug may be obtained from Electrosonic, check with Randy for the catalog number.
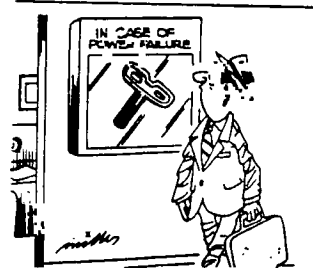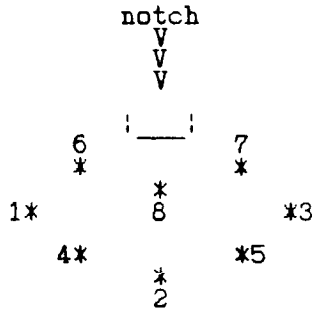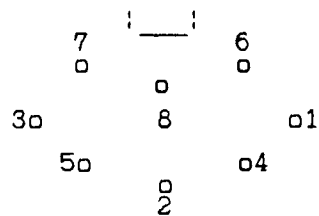
Geneve Monitor Cable

-by Richard Roseen

This is an article describe some of the basics needed to wire up the monitor port of the Geneve. It descibes the 8 pin DIN connecotr in detail. It contains the functional pin out of the Geneve monitor connector. Hope this helps. Richard Roseen of AEi.

HOW TO WIRE UP A VIDEO MONITOR CABLE WITH 8 PIN DIN CONNECTOR TO THE GENEVE

```
        VIEW INTO PIN SIDE OF 8 PIN DIN

                notch
                  V
                  V
                  V
                !‾‾‾!
          6     !___!     7
          *               *
                  *
      1*          8          *3

         4*             *5
                  *
                  2
```

```
        VIEW INTO SOLDER SIDE OF 8 PIN DIN OR INTO GENEVE CONNECTOR

                !‾‾‾!
          7     !___!     6
          o               o
                  o
      3o          8          o1

         5o             o4
                  o
                  2
```

The pin numbers are labelled correctly on the DIN connector itself on both the solder and pin sides. The solder side is the side with the solder cups for soldering the cable wires to the pins. The pin side is the side that goes into the monitor connector on the Geneve. Unfortuhantly the 8 pin DINs are not availible at Radio Shack. At Radio Shack you might find a 5 or 4 pin DIN which are compatible if you don't won't all the signals availible at the Geneve video port. For Example the 5 pin DIN is shown below.

```
        5 PIN DIN SOLDER SIDE

                !‾‾‾!
                !___!
      3o                 o1

         5o          o4
                  o
                  2
```
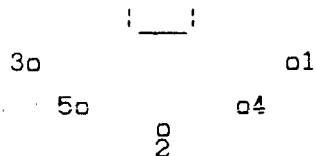
Below is a description of the pin functions availible at the Geneve 8 pin DIN monitor port. As you can see a 5 pin DIN will allow you to hook the same signals as in the 4A ie. composite video, sound or RF modulator. Your old cable will work if that is all you want. For RGB you will need the 8 pin DIN.

wire color	pin #	description
yellow	1	12v (100 mamps max!) for RF modulator
brown	2	ground connection to any kind of monitor
orange	3	audio to any monitor with sound or amplifier input
white	4	composite video out to composite monochrome or color monitor
red	5	red of RGB to analog only RGB color monitor
green	6	green of RGB to analog only RGB color monitor
blue	7	blue of RGB to analog only RGB color monitor
purple	8	composite sync of RGB to analog only RGB color monitor

KINDS OF MONITORS:

-TV using an RF modulator
-monochrome composite video monitor 80 or 40 columns worth of resolution
-color composite video monitor 80 or 40 columns worth of resolution
-Analog RGB monitor 80 or 40 columns worth of resolution

The wires above are suggested color coding of a multi-color cable with at least 8 wires. Even if you only intend to wire up only one kind of monitor now, soldering 8 wires of a cable to an 8 pin DIN now will save you trouble later. Also, you will have the ability to connector different kinds of monitors at the same time. The 8 pin DIN is a cramped thing to solder to so if you switch from monochrome to analog RGB it will not be so difficult.

-BBS news-

THE FOLLOWING CAME FROM GIL'S BBS:

I will be holding another SIG meeting on the 27th of June at 10am (until 1pm or so...). If you are interested, leave a message to me and I will tell you how to get here.

We will be making RS232 and PIO cables and talking about the standards as well as Transfer protocols (IE: Xmodem, Kermit, etc..) and what they are.

Gil can be reached at 288-9412.

```
100 REM **A GLIMPSE OF REALITY
          FOR COMPUTER ADDICTS**
120 CALL CLEAR
130 CALL CHAR(96,"1018183C3C7E3C18")
140 CALL CHAR(112,"FFFFFFFFFFFFFFFF")
150 CALL CHAR(120,"FFFFFFFFFFFFFFFF")
160 CALL CHAR(121,"5555555555555555")
170 CALL CHAR(122,"5D5D5D5C55555D")
180 CALL CHAR(128,"000011925453FF5D")
190 H=22
200 CALL COLOR(9,16,1)
210 CALL COLOR(11,2,2)
220 CALL COLOR(12,13,1)
230 CALL COLOR(13,14,1)
240 CALL VCHAR(4,16,112,3)
250 CALL HCHAR(4,17,112,3)
260 CALL VCHAR(4,20,112,18)
270 CALL HCHAR(22,1,120,96)
280 CALL HCHAR(3,18,112)
290 CALL HCHAR(2,17,112,3)
300 G=0
310 H=H-1
320 FOR Z=7 TO H-1
330 CALL VCHAR(Z,16,96)
340 CALL VCHAR(Z,16,32)
350 NEXT Z
360 G=G+1
370 CALL SOUND(15,(H*150),2)
380 CALL HCHAR(H,G,121)
390 IF G=32 THEN 300
400 IF H=7 THEN 410 ELSE 320
410 FOR F=3 TO 30 STEP 3
420 CALL HCHAR(7,F,128)
430 CALL VCHAR(8,F,122,14)
440 CALL SOUND(30,(F*200),2)
450 NEXT F
460 PRINT "NOW DO SOMETHING ABOUT IT!!"
470 GOTO 470
```

IDENTIFICATION OF 5¼" DISKS
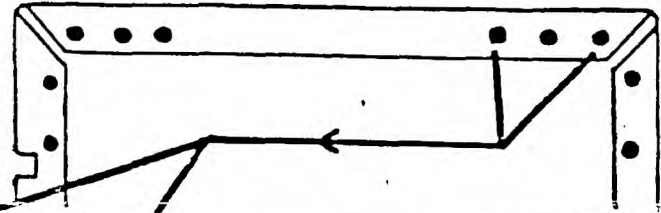
SEAL	COMPANY	COMMENTS
● ● ●	MAXELL	
COMPLETE SEAL	MEMOREX	ALSO ALBINAR (BEST Co)
● ⬤	VERBATIM	
● ♥	NASHUA	6 dots down each side
▬ ▬	BASF	
::::::::::	ELEPHANT	
▬▬▬	3M	2 bars down each side
!!!! !:::	WABASH	6 sets of 8 sqs. per side
▬▬▬▬	FUJI	
▬ ▬ ▬	CONTROL DATA	STORAGE MASTER
▬▬▬	SYNCOM	3 bars down each side
● ●	CERTRON	8 dots down each side
● ●	BONUS	
▬ ▬		

THIS CHART SHOWS THE NAME OF THE MANUFACTURER WHO MAY HAVE PRODUCED THAT DISKETTE YOU NOW HAVE IN YOUR DISKETTE DRIVE. I WOULD LIKE TO THANK THE N.O.V.A. USERS GROUP OF VANCOUVER, WA. FOR THIS CHART PRINTED IN THEIR NOV. ISSUE.

FROM THE NORTHWEST OHIO "99er NEWS"(Feb.,'87)

↰from SNUGLETter 3-87↱
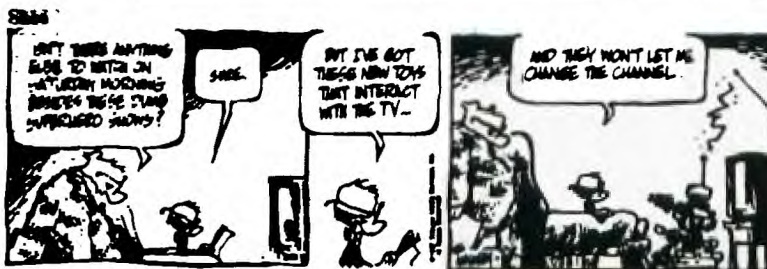
"Oh, disk — I thought you said disc!"

IMPROVING THE TI-WRITER CHARA1 FILE

-by Lutz Winkler

When TI provided the CHARA1 file together with some other enhancements for TI-Writer I was somewhat disappointed. Though it gave us true lower case characters, in my opinion it was a poor job, especially when it came to letters with descenders. TI chose to leave the a line separation equal to 2 rows of pixels, which leaves only an 8x6 matrix for each character definition. Cut that further by 2 rows for text mode and now it's only 6x6. Not very much for good characters. Though knowing it would be a tedious job, I decided to cut line separation to one pixel (using a "monochrome" monitor I felt I could get away with it), sat down and defined displayed characters from ASCII 33 to 126 to my liking. At the time I paid no attention to ASCII 0 to 31, the control characters, but did remember to round off the corners of the O and also slashed the zero to better be able to tell them apart. So much for that, I thought, and enjoyed working with TI-Writer with my larger and very legible characters.

Then there came a day when I received a text file (on disk). I only scanned it very briefly before sending it to the printer. To my surprise - and as usual, too late - I found it contained control characters which I did not see and which also turned out to be incompatible with my printer. This was not the first time that had happened to my. But, if I could help it, this was going to be the last. My solution? Make control codes easier to spot by reversing the text/screen colors.

For anyone, who has been annoyed by this situation, here is an outline of the procedure. All it takes is a good "sector editor" (John Birdwell's DSKU is my favorite). The characters involved are ASCII 0 through 31 which are all located on the first sector of the CHARA1 file. Well, not quite. The last 12 digits (of the 16-digit string which defines a character) of ASCII 31 are located at the beginning of sector 2. I urge you to do this on a backup copy of the CHARA1 file. The first six bytes (0 to 5) are the file header and must not be disturbed. But following the file header, the entire CHARA1 file consists of nothing but the 16-digit hex strings defining all ASCIIs from 0 through 127. This takes 4 sectors. If your file is longer, it can be shortened because after sector four there are only zeros.

Before I started with the text/screen color reversal I took care of another matter which had bugged me. With some exceptions (CR, etc.), when CTRL-U is used to toggle into the so-called "Special Character Mode" the display actually shows the hex value of the selected character. (See page 146 of the TI-Writer Manual.) Values from 10 thru 15, in hex, are normally indicated by capital letters, ie. A, B, C, D, and F. Why TI defined them as lower case in CHARA1 is not quite clear to me. Thus I redefined them as capital letters. I also did not care for PA, used to indicate a form feed. So in my file it is now an FF. Anyone with similar misgivings can do as I did. I suggest doing this before the next stop, ie. text/screen reversal, and to be sure that any changes are first written back to the disk.

Assuming all that has been done, it is time to proceed and make those control codes really pop out at you when they appear in a file. Reversal of the text an screen colors (also referred to as inverse video) is done by replacing the 16 hex values of the string with its complement. To understand what's happening, let's look at >0 and >F as used in CALL CHAR. While >F turns all 4 pixels of a block on, >0 does the opposite, turning all of them off >1 means that the first three pixels are off, the last pixel is on. >E does exactly the opposite.

Before I embarked on changing the hex values in my CHARA1 file, I drew up a quick reference:

```
NORM. 0 1 2 3 4 5 6 7 8 9 A B C D E F
-----------------------------------------
INV.  F E D C B A 9 8 7 6 5 4 3 2 1 0
```

The upper line (Norm.) represents the values shown in the "original" CHARA1 file. The lower (Inv.) line shows the hex complements. Simply replace the digi shown by the sector editor with the one below it. For instance, if it shows 0B74, that would translate to F48B. It is that simple, though it is a tedious task. By the way, do NOT(!) change ASCII 30 (cursor) which is located on the last line of sector one (0070 7C 7070 7070). If you reverse it, you'll get a 1-pixel wide cursor (vertical line) which is not easy to see.

The procedure I have described does not make the control characters easier to read. There simply are not enough pixels available in text mode for better definition. However, their presence is much easier to spot and that in itself has been a big help to me. There's only one more improvement that is needed: a full 80-column display. Has anyone seen that promised, but long overdue, card in operation?