

**Saving Our CLASSIC Heath 8-Bit Machines!**

# SETHO JOURNAL


The Society of Eight Bit Heath Computerists' Monthly Newsletter

Volume V, Number 9

\$2.50 a copy, \$24.00 a year

April, 1991

Subscription & Order Blank on Page 9

APRIL 1991						
SUN	MON	TUE	WED	THU	FRI	SAT
	Happy April Fool's Day!					
	1	2	3	4	5	6
7	Make doc- tor visit date for eye exam!		Commence text en- try for April Journal TODAY!!			
	8	9	10	11	12	13
14			Go see eye doctor to- day at 1:15pm For Sure!			
	15	16	17	18	19	20
21	Take Jrnl originals to copy shop to- day.	Affix mailing labels to Jrnls & post'em!				
	22	23	24	25	26	27
28		Prepare editorial material for May Journal NOW!				See PP 5 & 9 for the listing!
	29	30				

## The READER'S MAILBOX

Dear Lenny,

[Recently] finished the February JOURNAL and \* boy \* was there some good stuff crammed in there. I especially enjoyed page 2. As a veteran of a recent not-too-popular war, [let me say] thanks, I needed that! I enjoyed keying in and playing around with MENUCLDR.BAS. It worked "right out of the box" so to speak. The only thing I did was add PRINT CLS\$ between NEXT X and GOTO"+STR\$(S) in line 500. What this does is--if you make a wrong or bad entry at the menu screen after running the program generated by MENUCLDR (in this case MY-MENU.BAS)--the screen clears and the menu is re-written rather than being re-written below the old menu on screen. Cuts down on screen clutter.

Here's a thought: Perhaps some JOURNAL subscribers would like to send in their addition [or improvement] in this neat program's code what they did to make their computer BEEP at one when one attempts to make a wrong or bad menu entry. [Right on! -- ed]

In the what's-new department: Recently a friend called and informed me that he'd bought an H/Z89 computer and was having trouble getting it up and running. He said it came with an internal 48tpi hard-sector drive and two external H77 (soft-sector) drives. He had the instruction manual for CP/M 2.2.03 and original 48tpi soft-sector Distribution Discs. He is a whiz at electronics but CP/M was something new to him. He's not stupid; he read the CP/M documentation and had a vague idea of what had to be done. But the documentation doesn't always give you all the necessary information for what stuff you have [or what you want to do with it].

The first thing he found in the documentation was a caution to not use the original Distribution Discs but rather make copies of them onto formatted discs using DUP. Then he FORMATTed three discs without problems, then ran DUP and the message "Media incompatible on diskettes" came up. \*HOB0Y\* The Distribution Discs are 48tpi and the H77 drives 96tpi! I then remembered what I had to do once when I ran into a similar problem. I told him to boot Distribution Disc I, if he'd not already done so, and at the A:-prompt key in MOVCPM37 32, then follow the prompts, and when the A:-prompt returns, key in SYSGEN and put the system onto the formatted disc in drive B:. Then when the A:-prompt returns--before doing anything else--key in PIP B:BIOS.SYS[RV] and hit <RETURN>. I then said to use PIP to transfer all the Distribution Disc I files



onto the newly-created bootable disc in drive B:, so he keyed in PIP B:=A:\*.COM. This disc should now be almost like the original 48tpi Distribution Disc except that it'd be 96tpi. And I explained how he could similarly use PIP to copy files from the other Distribution Discs onto pre-formatted 96tpi discs. This got him up & running for the moment.

I informed my friend that if he wanted his system to recognise the H17 [hardsector] drive that we had additional work cut out for us, namely the (dreaded) MAKEBIOS routine. He said that he indeed wanted all drives recognised and I then told him I WASN'T about to try to talk him through that over the phone!

Some time later, I paid my friend a visit and asked if he was game to try MAKEBIOS to which he replied affirmatively, saying that he'd been reading the CP/M manual. He said the best he could make out of it was that it was best to run MAKEBIOS with three drives. I told him not to worry, he did have three drives; two physical, and one "logical". Then I had to explain the "logical" drive before placing and booting up his copy of Distribution Disc I in drive A:. We formatted a blank disc and kept it handy, then put his copy of disc III in drive B:. Next I had him key in SUBMIT B:MAKEBIOS C: B:, and shortly the message, "Put disk C into drive A and hit return" appeared on screen. The drive whirled, then we were prompted to return disc A to drive A:. His confusion about "logical drive C:" faded away....

After a lot of disc-swapping MAKEBIOS finished and I had him key in STAT BIOS.SYS \$R/W. I explained that this file couldn't be Read Only because we had to write to it from the new BIOS.SYS on disc C information about the hard-sector drive. We then keyed in PIP A:=C:BIOS.SYS[RV] and the RETURN key; this copied the new 17/37 BIOS.SYS over the old BIOS.SYS on the disc in drive A: from disc C.

To prove the pudding I told him to remove the discs, do a system reset (right-SHIFT-RESET), reinsert the disc with the new BIOS in drive A: and boot it so that we could check the sign-on message. Sure enough, the message read "33K Heath/Zenith CP/M 2.2X03 for H17 H37 Disks". We'd done it right!

We ran STAT to make sure that BIOS.SYS wasn't Read Only, then ran CONFIGUR to set modem and printer baud rates, ports, and step rates and types of drives for A:, B:, and D:, (the internal hard-sector drive), then saved the new configuration to disc and memory. Now we were ready to generate a bootable disc for a [full] 64k system and put all files he'd need onto it (FORMAT, SYSGEN, MOVCPM37, etc.). This entailed the command "MOVCPM37 \*", followed by SYSGEN. We then ran PIP and copied all the \*.COM files from the disc in drive A: to the new bootable [working system] disc in drive B:. Again we reset the computer and booted from his "working system disc". It worked just fine; the sign-on message said it was a full 64k system, so I told him he should now use this disc to make all the bootable working discs or formatted data discs he'd want.

Afterthought:

I was careful and used MOVCPM37 32, because that was the

## more "MAILBOX"

minimum system size I had found on Distribution Disc I. I do know that if you specify either MOVCPM37 \*, or MOVCPM37 64 that the C-disc after running MAKEBIOS to put the hard-sector code into the new BIOS.SYS becomes a Real Bomb at boot-up!! It shows 01K and the message "BDOS error on drive A: BAD SECTOR". I haven't yet tried using "MOVCPM37 48", but I suppose it might work....

ALLIE C LINGO, P O Box 118, Dierks, AR 71833-0118

[Hey, Allie! Thanks for all the information on hard/soft interfacing via CP/M's MAKEBIOS. Our experience here has been primarily the other way, that is--from hard-sector distribution discs to soft-sector system discs. Never thought about the MOVCPMxx size limit for some reason, just went ahead and specified 32 every time so it always worked--except for those WRONG VERSION or SERIAL NUMBERS DO NOT MATCH error messages! And we have another of ole A Stapher's "WRITING BASICally" segments in this edition which you may find entertaining--or something. Let us know what you think of this month's program after trying it out (which we also put on disc and mailed to you earlier). You may even like it enough to use it in your business! -- ed]

Dear Len,

I still have eight H/Z-89s as part of my educational computing collection which now numbers 20 machines altogether. All computers are hard sector, single-drive, except for one dual-drive HS and one 3-drive HS/SS/SS system. One of the eight needs a screen replacement (We have a spare green CRT w/yoke if you need it. -- ed), and my original Z-89 (purchased in July 1981) recently had a disk drive swap. I am surprised the drive lasted almost 10 years, as shortly after buying it I had one of those truly eye-opening experiences for a sleepy Sunday morning--streams of white smoke coming out of the disk drive and vent slots. A quick leap for the off-button saved the day, and the disk drive worked fine ever since. [Nobody likes stink of burning electronics! -- ed]

This past month, the drive lost its boot capability, so I let an 8th grader make the swap. It was a good learning experience, and the Zenith is a very good machine to take apart and put back together again. [How are the kids nerves now? -- ed]

I've included a disk with a copy of Tetris, a very nice adaptation for the Zenith machines based on the original version which came from Russia and arrived in 8-bit land by way of Nintendo. I can't remember where I got my copy, but I think it was from Lee Hart. [Thanks; we'll try it! -- ed]

My major remaining problem is with printers. My Daisy-writer will work only with CPM 2.2.04, while the Smith Corona and Epson MX-80 work only with CPM 2.2.02. It has something to do with handsking and configuration, but I've never been able to figure it out. Does anyone have any suggestions? I would love to use just one [type of] boot disk on all [our] computers.

Our other printing problem has to do with those handy \$40 [CompuAdd] converters which promises to take serial computer output and send it to the parallel inputs of most popular printers. I would love to do this, but those converter dip-switch settings are a mystery, especially since my serial communications with printers are very precarious to start off with. Has anyone tried one of the [CompuAdd] converter boxes (serial-to-parallel) and could we suggest desirable switch settings? I would even settle connecting to an Apple Imagewriter printer, if we could figure out the cabling requirements and configuration settings.

Any ideas, hints, or suggestions shall be most gratefully received!

STEPHEN H KAISER, PhD, 191 Hamilton Street, Cambridge, MA 02139

[Hey, Steve--nice to hear from you again, even though you're looking for help! Luckily we have an Epson RX-80+ parallel-input ("Centronics" compatible) which we alternately use with our LQ-800 for producing JOURNAL graphics-art originals via CompuAdd's HSP-100 Serial-to-Parallel Interface Converter. The biggest problem we had was with those little black jumper blocks...the dip switches are pretty well explained by the manual tables and the box diagram. Ours came with an external wall transformer, but it can use the d-c supply on pins 9 and 10 of the computer's RS232C serial port I/O jack. (We had to scrounge for a pair of jumpers to use the serial port's power--no space was left on our a-c power cord end for the wall transformer!) Here's how we set up our converter's switches: 1-OFF, 2, 3, 4, 5, ON, 6-OFF, 7-ON, 8-ON. It's for 4800 baud, eight data bits, one stop bit, and no parity check, matching both HDOS 2.0 LP.DVD & CP/M-80 printer interface signal requirements. The manual explains operation of the HPS-100 and what the four LEDs indicate. Our biggest annoyance was making up a short cable with DB25 male connectors on each end. The converter is too heavy and bulky to plug directly into the computer I/O jack. "Just for fun" we tried this device with both our Letter Quality 24-pin printers (which have both serial (normally used) and parallel interface ports) in the parallel mode. They both work ok but we prefer to run 'em in serial because of their 8k internal buffer capacity. The 9-pin Epson RX-80+ printer gives better graphic images under CP/M and Calligraphy-II output than the 24-pin printers do (differences in line height). We do hope this information helps, but keep in touch anyway! -- ed]

=====

SUBSCRIBER RESPONSE NEEDED... SUBSCRIBER RESPONSE NEEDED...

=====

We've finally got back onto the publishing schedule & are getting JOURNALS out within the month indicated on the front page. Please let us know the date you receive yours so that we can find out how long first-class mail takes in getting to your address. Please let us know Really Soon Now! Thanks!!!

# SEBHC JOURNAL

Volume V, Number 9, Page 4

## still more MAILBOX

Dear Lenny,

Since it's been a while since i [sic] last wrote the JOURNAL i thought i'd give y'all an unupdate of where i am & where i'm trying to go! My H8/H19 has the h17 & h37 cards in it with two 96tpi drives. I run the Packet Radio system as mentioned in an earlier JOURNAL and THANK! the individual who sent it in. The first of my two '89s has the Magnolia Microsystems' 77314 Corvus hard-drive/8" controller with the standard h17 board (plus internal h17 drive). The 8-inch case marking is: "Model I-47 'Intellegent' 8" Flexible Drive System" with a data cable going from the slave drive to the master drive, and another cable going directly to the Magnolia Interface card. The second '89 has the Heath h47 card along with the Micronics Technology 20-MegaByte hard drive.

And now the fun starts....

After installing the hard drive my h17s went flakey on me. After running the same h17 drives on another system with no problems there, i have to assume i did something wrong with the hard-drive installation. They'd access upon bootup but even with the original system discs, the system would give out a "Boot Error" message. The win[chester] bios would die on me when i went thru the makebios function with the "F" option for h17+h47, but when i ONLY selected H47 (and a small mod from Darrell Pelan) the system would come up and be able to access the hard drive. But when i ran HINSTALL to transfer the system to the hard drive it seemed to work, and after resetting the system and trying to boot from the hard drive it would die after displaying the Micronics log-in message. I'm currently trying different options, and with suggestions from Darrell Pelan, i'm hoping to figure it out....

My main reason for writing the SEBHC JOURNAL is to try to get some how-2 hints on adding another 8-inch drive set to each h89. I have two sets here, one of which i got at a ham-fest for \$5. The first set has Sanyo drives with a 50-conductor cable going from drive to drive and to the back panel. The other set which came from Philadelphia Heath Users Group (PHUG) are Qumes, with a card-edge connector & cable from one drive to the next and to a card-edge connector [jack] on the rear panel.

This weekend i scoured my SEBHC JOURNAL back issues, reviewing comparisons of the different controllers, but didn't find anything about adding 8-inch drives. Is there a standard 50-pin cable converter for the 34-pin connector on the h47 back panel? Looking through the h47 manuals i couldn't find anything on [connector] pinouts, even on the schematics which might match with the Qume maintenance manual which came with the drives. Has anyone seen a 50-pin card-edge connector lately?!

Aside from the Packet Radio station (KA3CJMN3FIH) i am tinkering with "C" and "COBOL". 8 Bitters Forever!!!

ALEX BODNAR jr, C33 Conowingo Circle, Oxford, PA 19363-1463

[Hey, Alex! We can't help with your problem here, but surely SOME readers will get in touch with you Real Soon Now! -- ed]

Gentlemen:

A friend recently brought me an H88 which he would like to use for word processing. It appears the original operating system discs have been damaged or [have] deteriorated and are not readable. The discs are [distribution copies of] HDOS version 2.0.

The SEBHC JOURNAL was recommended as a possible source of leads in obtaining a good copy of the operating system. If you could help us locate current or former users of H88s it shall be appreciated. We are looking also for other software and hardware for the machine.

If you can get us any further along it will help save one [good] old machine from the dump. Thanks.

JOHN LUEBKE, 322 Goss Hill Road, Huntington, MA 01050; 413-667-3152 [or] Compuserve 71510,1204

[John, please thank whomever it was who pointed us out to you --we need all the publicity we can get! Please note that we are sending a sample of this month's SEBHC JOURNAL to you to answer your question (and perhaps gain another subscriber). HDOS V2.0 is now in the public domain. You can get a "legal" copy of the original HDOS 2.0 distribution discs, and--if your source feels up to it--a photo copy of the manuals. Or you can buy a complete new HDOS V3.02 and manual for roughly \$89 from Kirk Thompson, Editor & Publisher of "The Staunch 8/89er", P O Box 584, West Branch, IA 52358. Please drop Kirk a postcard for his latest price and shipping data. We also have a few distribution copies of Heath's CP/M Version 2.2.03 left in stock--see catalogue page for details. Frankly, I believe that with both operating systems "up and running", you would be much better off because of the vast amount of CP/M "free" and "share" software out there. There still is a fair selection of HDOS stuff available, but it is rapidly drying up. On the other hand, if you feel you may eventually expand from your 8-bit machine into the 16-bit world, HDOS 3.02 is the Best Operating System Choice because it's such a very close relative of Z-DOS and MS-DOS operating systems. The SEBHC JOURNAL and its' subscribers also may be able to help you find other HDOS applications programs; just write us about what you need. Good luck! -- ed]

Dear Len:

I need some help from you or the readers. The June, 1985 issue of REMark had an article "Inside MBASIC Program Files", by John C Harper. I have been unsuccessful in getting the programs described [in the article] to run properly.

Is anyone aware of any additional articles correcting misprints, or does anyone know how to get in contact with the author? [Have you tried writing him in care of REMark? Perhaps Pat Swane or former HUG secretary Nancy Strunk could give you some help. -- ed] Thanks in advance for any help!

JARED FREEMAN, 600 Ginger Trail, Lake Zurich, IL 60047; 708-438-0513



## MAILBOX end & WRITING BASICally

[Jared, in '85 we did try the first two listed programs under MBASIC V4.82 with no luck, A-tall! (The original listing is for CP/M MBASIC V5.2; we were using HDOS MBASIC V4.82, maybe that's why they bombed for us.) But we didn't have any problems with the earlier item referenced in the article: "Inside Microsoft BASIC", REMark, Aug-84. We shall get our A Stapher to copy and work out the bugs in one or more of those listings & then inform you of what she finds out. Meanwhile, we hope you are enjoying the HDOS MBASIC copy of BASQUEEZ we sent you so very lately. We worked on that one for quite a while under CP/M & never could get it to work properly! Please let us know if you get it to run correctly under CP/M for you. -- ed]

=====

"Z100 LifeLine" Newsletter Editor & Publisher Paul Herman announced in his February, 1991 edition that DAYHUG--Dayton, OH H/Z User's Group are to run the second Z-100 Get-Together in Dayton, Ohio, tentatively during the last full weekend of August (24-25). These dates are being planned to coincide with Dayton's annual (now-famous) ComputerFest so that Z-100 conference attendees can get a bigger "bang for the buck"--as Paul's article says.

Registration and admission to the Z-100 conference will be no more than \$15 for each attendee. Hotel rooms are expected to average about \$50 plus tax one person/night, but reservations MUST be made by conference attendees at least THREE WEEKS IN ADVANCE. For more information about these events or to enquire about subscriptions to the "Z-100 LifeLine", write or call Paul Herman, 3620 Amazon Drive, New Port Richey, FL 34655; 813-376-5457. (Be sure to mention the SEBHC JOURNAL!)

In addition to the concurrently-running events described above, there are numerous other things to do, see, and enjoy in and around Dayton such as the famous US Air Force Museum. Note that there usually are "scads" of formerly-owned equipment bargains to be found at any computer convention such as these; you might even pick up that extra floppy drive or piece of "universal" CP/M software there!

There will be a large number of H/Z vendors (as there were last year) who will be displaying their wares at the convention so You Really Don't Have An Excuse Not To Attend. Go clean the dust and cobwebs off those cheque books & credit cards Really Soon Now; let's show those 16-bit guys that us Eight Bit-ers are alive, healthy, full of vinegar, and still a-snortin & a-kickin. YEE-haw!!!

=====

FOR HDOS LOVERS (ONLY?)  
A "Jim-Dandy" Events-Note Calendar  
by  
Editorial Assistant A Stapher

We have received several requests for our BASQUEEZ program listing (together with a disc and dollar), and have been able to fill all but a very few. One of the typical requests we couldn't fill came from our very good subscriber friend Jared Freeman but we had to send him an ASCII copy of BASQUEEZ in CP/M. The original was written in HDOS MBASIC and we haven't had time to re-work it for any version of CP/M MBASIC. We do hope Jared will be gentle with us!

This month we decided to do something strictly for our HDOS lovers. It's a calendar-printing program which had been written in a non-Heath BASIC dialect and published many years ago in one of those "other" long-since defunct "popular" computer magazines. It was translated and made to run properly under HDOS MBASIC V4.82 by our "Dear Editor", Lenny. You must have seen the calendar printout on page 1; it was done by CALNDPRT.BAS, the listing for which appears later on. We saw it as an excellent example of very good, very useful programming which illustrates how you can make an "Epson-compatible" dot-matrix printer do some very neat things. ["Stapher Baby" forgot to say that she's still working on the CP/M translation for us but it should be ready for mailing out Real Soon Now. The HDOS version you can get Right Away! -- ed]

The program does not make use of H19 or Epson graphics but the standard dashed lines are a fair substitute. If you want to spend time and re-write the program to accept and print H-19 graphics, please do send us a copy of your program so that we can put it in a future JOURNAL for everyone's benefit.

Note in the page one example printout that there is space within each day block for just 10 letters/spaces and six lines of text. This means you must be very stingy with your events notes. Of course, if you are a VERY good programmer, you can figure out how to make the printer change from standard Pica width to condensed print width WITHIN day blocks. That would give you roughly seventeen letters/spaces in every text line, but it would make text harder to read. Maybe Elite width would be better? Try it and see what you can do.

Note that CALNDPRT.BAS prints one month at a time. Other programs usually print an entire year of 12 months which virtually wipes out this program's most useful "events/notes" feature.

### LISTING 1 -- Calendar Printer Program

10 REM CALNDPRT.BAS HDOS MBASIC V4.82  
20 REM Works with any "Epson-compatible" printer

Volume V, Number 9, Page 6

```

20 REM Works with any "Epson-compatible" printer
30 ES$=CHR$(27):CS$=ES$+"E":PRINT CS$:REM CLEARS SCREEN
50 DEFINT A-Z
60 CLEAR 1000:REM Increase if entering many notes
70 CW=11:CL=7:VL$="|":HL$="-"
80 PW=CW*7+1:R$=STRING$(PW,HL$):NB=CL-1
90 OF=INT((CW-3)/2)+1
100 BC$=VL$+STRING$(CW-1," ")
110 CNS=VL$+STRING$(CW-3,"")+##"
120 MF$=VL$+"\ "+STRING$(CW-3," ")+"\ "
130 DIM MO$(12),MD(12),C(42),NL$(42,NB),WY$(7)
140 FOR I=1 TO 12:READ MO$(I):NEXT I
150 DATA JANUARY,FEBRUARY,MARCH,APRIL,MAY,JUNE,JULY
160 DATA AUGUST,SEPTEMBER,OCTOBER,NOVEMBER,DECEMBER
170 FOR I=1 TO 12:READ MD(I):NEXT I
180 DATA 31,28,31,30,31,30,31,31,30,31,30,31
190 FOR I=1 TO 7:READ WY$(I):NEXT I
200 DATA SUN,MON,TUE,WED,THU,FRI,SAT
205 PRINT
210 PRINT TAB(20)"THE TIME MACHINE: A CALENDAR GENERATOR"
220 PRINT TAB(20)"--- ---- - ----"
230 PRINT:PRINT"Enter the Calendar Month as: MONTH,YEAR."
240 PRINT:PRINT"For example: ";CHR$(34);"1,1989";CHR$(34);@
    " for January 1989"
250 PRINT:PRINT"Valid months are: 3,1920 through 11,2009"
260 PRINT:INPUT"Now type in <month,year> + <CR> ";M,Y
270 IF Y<1920 OR Y>2009 THEN 250
280 IF Y=1920 AND M<3 THEN 250
290 IF Y=2009 AND M>11 THEN 250
300 IF M<1 OR M>12 THEN 250
310 PRINT:PRINT"I'm now creating a calendar for ";MO$(M);Y
320 FOR I=1 TO 42:C(I)=0:FOR J=1 TO NB:NL$(I,J)="" :NEXT J:@
    NEXT I
330 D=1
340 Y1!=Y-1920
350 IF M>2 THEN M1!=M-3 ELSE M1!=M+9:Y1!=Y1!-1
360 JD!=INT(1461*Y1!/4)+INT((153*M1!+2)/5)+D-1
370 WD=(JD!+1) MOD 7
380 IF (Y MOD 4=0 AND Y MOD 100<>0)OR Y MOD 400=0 THEN LP=1
    ELSE LP=0
390 LD=MD(M):IF LP=1 AND M=2 THEN LD=29
400 FOR I=1 TO LD:C(I+WD)=I:NEXT I
410 PRINT:@
    PRINT"To annotate a date, type in the date (1 ~"LD");"
420 INPUT"Type 0 when finished";SD
430 IF SD<1 OR SD>LD THEN 530
440 PRINT:PRINT"Enter up to "NB" lines. Max line length"@
    "is "CW-1
450 PRINT:@
    PRINT"Do NOT exceed maximum characters; extras are lost!"
460 PRINT:PRINT"Same applies to maximum number of lines!"
470 FOR I=1 TO NB
480 PRINT:PRINT"Enter line ";I;
490 TX$="":INPUT TX$
500 NL$(WD+SD,I)=TX$

```

```

510 NEXT I
520 PRINT:PRINT"Text is stored.":GOTO 410
530 H$=MO$(M)+STR$(Y):LH=LEN(H$):TB=INT((PW-LH)/2)+1
540 PRINT CHR$(27)CHR$(69):PRINT:PRINT:PRINTTAB(25)@
  "WORKING...":OPEN"O",1,"LP:"
545 REM Set MX-80 for Emphasised, Double-Strike mode
550 PRINT#1,CHR$(27)CHR$(69);CHR$(27)CHR$(71)
560 FOR I=1 TO 3:PRINT#1,CHR$(13):NEXT I:PRINT#1,R$
570 PRINT#1,VL$TAB(TB)H$TAB(PW-1)VL$
580 PRINT#1,R$
590 PRINT#1,VL$;
600 FOR DA=1 TO 7
610 TB=(DA-1)*CW+OF
620 PRINT#1,TAB(TB)WY$(DA);
630 NEXT DA
640 PRINT#1,TAB(PW-1)VL$:PRINT#1,R$
650 LW=-INT(-(LD+WD)/7)
660 FOR W=1 TO LW
670 FOR ML=1 TO NB
680 FOR DA=1 TO 7
690 TB=(DA-1)*CW
700 PRINT#1,TAB(TB)USING HF$;NL$(DA+(W-1)*7,ML);
710 NEXT DA:PRINT#1,TAB(PW-1)VL$:NEXT ML
720 FOR DA=1 TO 7
730 TB=(DA-1)*CW
740 DN=DA+(W-1)*7
750 IF C(DN)=0 THEN PRINT#1,TAB(TB)BC$;:GOTO 770
760 PRINT#1,TAB(TB)USING CN$;C(DN);
770 NEXT DA
780 PRINT#1,VL$:PRINT#1,R$
790 NEXT W
795 REM Clear screen, reset MX-80 to "power-up" mode
800 PRINT#1,CHR$(27)CHR$(64):CLOSE:PRINT:PRINT CHR$(27)@
  CHR$(69):PRINT TAB(20)"That's all, folks!":PRINT CHR$(7):@
  PRINT:END

```

A few additional suggestions for you "hot-rock" programmer/subscribers to try: 1 - Make the program print double-wide day numbers without kinking the vertical rulings. 2 - Try to get it to print the month's name double wide AND centered in the top box. 3 - Make it accept and print one or more lines of text or notes at the calendar's bottom. 4 - Find a way to make it print on demand more than one month in a given run--example, May and June, or July, August, and September, etc.. Since this program leaves some blank space at page bottom, perhaps a Really Clever Programmer can teach CALNDPRT.BAS to print cartoons in HI9 graphics there--perhaps in addition to the extra lines suggested in 3 -, above.

[C'mon kids, stretch your imaginations & give "Ole A Stapher" a break! Remember, if the SEBHC JOURNAL accepts and prints your program or article (or both), you will automatically get a one-year subscription extension--and a chance at winning that \$25 US savings bond! So it ain't no "California MEGA-BUCKS Lottery prize", but whaddaya godda lose?! -- ed]

## 8-BIT SOURCES & A REVIEW!

==> EIGHT-BIT SOURCES, SERVICES, and VENDORS DIRECTORY <==  
[We're doing our very best to keep this list accurate!]

CDR SYSTEMS, Inc., 7171 Ronson Road, San Diego, CA 92111; ph: 619-560-1272, 9a-5p Pacific Time Zone--ask for Herman.

8-bit machine memory devices, software, etc.

D-G ELECTRONIC DEVELOPMENTS Co., 700 S Armstrong, Denison TX 75020; phone 214-465-7805 (Central Time Zone)

8-bit "Heartbeat" computer, 8-bit "Super89" CPU upgrade/replacement board. Bruce Denton, president; Service & advice available, also some H8 and H/Z89 hardware at clearance prices; contact Bruce for details. A Certified GOOD GUY.

DISK MOVERS, 8534 McCormick Blvd, Skokie, IL 60076; phone 708-679-3727 (Central Time Zone)--ask for Miriam. HARD-SECTOR and soft-sector discs for H/Z8s, '89s in bulk quantities at very low prices! VERY NICE and HELPFUL PEOPLE. (Do give them a call and mention us!)

HOYLE & HOYLE SOFTWARE, 111 Sparrow Drive, Isle of Palms, SC 29451; 803-886-5802--ask for Hughes. "QUERY-III, a data base for the unskilled!" HDOS, CP/M, ZDOS, MS-DOS & peesee-DOS machines run it. A REALLY VERY NICE GUY!

MAGNOLIA MICROSYSTEMS, 2818 Thorndyke Avenue West, Seattle, WA 98199; phone 206-285-7266 (Pacific Time Zone)

Special memory upgrades and op-systems for H/Z89, 90s MICRO COMPUTER REPAIR SERVICE, 1517 S State St, Ann Arbor, MI 48104, 313-663-3646 (Eastern Time Zone) DISC DRIVE REPAIR & SALES. Tell Mike Morris Lenny sent ya! SUPER GUY!

MICRONICS TECHNOLOGY, Suite 159, 54 Dalrada Road, Montgomery, AL 36109; phone 205-244-1597 voice, 205-244-0192 bbs, (Central Time Zone). Darrell C Pelan, president. Software, hardware--especially hard drives for '89s. Catalogue & 8-bit help available. A REALLY GOOD GUY!

New Orleans Data General Services, 7230 Chadbourne Drive, New Orleans, LA 70126; phone 504-241-9388--"Dave".

Colour and sound boards for H8, H89. Out of business, but willing to provide tech advice on their products. ANOTHER GOOD GUY!

QUICKDATA COMPUTER SERVICES, Inc., 2618 Penn Circle, Sheboygan WI 53081; phone 414-452-4172--Henry Fale (Fah-lay) Prop. Mfr, sales, service, 8-bit machine support & parts; publishes H-SCOOP Heath/Zenith user's newsletter, 24-hour H/Z user BBS. Ever busy but "A REAL GOOD GUY!"

SIGMASOFT & SYSTEMS, 2433 Winterstone Drive, Dallas TX 75023-7818; 214-596-0116 (Central Time Zone)--Clay Montgomery--hardware/peripherals mfr, software publisher, hardware & tech support, RAM drives, hires grafix add-ons for H/Z89s. Catalog & help; "A FANTASTIC GOOD GUY!"

SKYCASTLE COMPUTER PRODUCTS, Box 1412, San Carlos, CA 94070; 415-254-3931 after 6pm Pacific Coast time--ask for Mike.

Calligraphy-II and other FANTASTIC dot-matrix graphic printer software products. A REALLY, SUPER-GOOD GUY!

TMSI/LEE HART, 323 West 19th Street, Holland, MI 49423

"Inovative Products for the H/Z89"

Misc. 8-bit hardware items, hardware/software support of '89/90s. "A NICE GUY and TOP-NOTCH ENGINEER!"

### MICRONICS TECHNOLOGY MT MODEM PROGRAM REVIEW by Leonard E ("Lenny") Geisler

Darrell Pelan, Proprietor Par Excellent of Micronics Technology, Suit 159, 54 Dalrada Road, Montgomery, AL 36109, kindly sent us a couple review copies of his MT Modem program last August. One copy was for HDOS (2 or 3), the other was for CP/M-80. We gave the HDOS version a brief try shortly after we got both discs, found that it worked, made a couple notes, and then both discs got put in "a safe place". They promptly vanished from our knowledge until they re-surfaced a couple days ago!

We have bought and used a number of modem programs from HUG, HTERM (for HDOS) was the only one of which took the least mental strain to learn and which worked best for us. (Don't ask us about MAPLE for HDOS and CP/M!) We also tried the Softstuff CPS program (see our ad on page 8) which comes only in a CP/M version. It works ok, but it's nothing to get all a-twitter over. We also have REACH (a Heath product) but haven't had a chance to try it out yet. And ACCESS from Hilgreave is far too stuffy to use, besides taking up quite a bit of memory (we got rid of our CP/M and MS-DOS copies of that software Real Quick)!

Until we fired up MT Modem, we had more or less resigned ourselves to squeaking along with MAPLE (.ABS and .COM) because we're too poor to lay out gobs of cash for any more MODEM software. But after running MTMDM (\$14.95+\$2.00 shipping) we feel that someone out there really likes "ole Lenny"--or at least feels kindly toward him! MT Modem (which we instantly renamed MODEM.COM on our communications boot disc) runs without any fuss whatever. No flakey 25th line stuff like MAPLE, no keys to re-program as with CPS, and no outsize wootsie graphics or "scripts" like ACCESS uses.

Both HDOS and CP/M MT Modem versions work the same as far as the operator is concerned. If you alternately run both operating systems as I do, you can learn to love that feature! MTMDM signs on with no fuss, displays a brief menu, and is ready to run. You set baud rate on the first run-through, after that it stays put no matter how many times you call the program back. It works fine with both our "Hayes compatible" modems, accepts all the "AT" and other modem commands without bombing out--a most-admirable trait!

Thus far, I've run MTMDM on CompuServe and GENIE without a tear being shed by anyone. Haven't tried to upload any files with it yet because Darrell hasn't written the YMODEM portion yet, and GENIE uses that--I think. It does have XMODEM for receive and send files, with CRC or Checksum error checking, and a Conference Mode which can be used on CompuServe in their SIGs, or as Chat mode on other systems. But the real test of this software--I believe--will be when I try to sign onto the HUG-Groupe Bull BBS. They've made more changes to that system than Jim B's last name has letters, and they probably have junked all those wonderful old 8-bit programs...

Darrell, do hurry the YMODEM mod along, but forget scripts--they're just too fussy & time-consuming to make up!

# SEBHC JOURNAL

Volume V, Number 9, Page 8

## The JOURNAL's CATALOGUE PAGE

Discontinued ("Vintage") H/Z Eight-bit CP/M software in Original Factory-Sealed Packages. Warranties WILL BE HONORED by Heath. All "Demo" software runs EXACTLY AS WARRANTIED PACKAGES DO, but updates aren't available (usually won't matter). Continuing Education (EC) packages are complete w/lectures on cassettes & final (college-acceptable credits) examination.

Item	H/Z cat #	Description	Price
----	-----	-----	-----
SJ-XTRA	CP/M-80	for WH47--reformatted to either hard or soft sector 5.25" discs, \$8 (please specify).....	\$12.95
SJ-1	EC-1101	Programming in FORTRAN	* 19.95
SJ-2	173-57-1	MICROSOFT FORTRAN v3.4 (demo)	* 19.95
SJ-3	173-66-1	Programming in COBOL	* 9.95
SJ-4	173-58-1	COBOL-80 v4.0 Demo w/documents	* 9.95
SJ-5	EC-1110	Programming in Microsoft BASIC	* 19.95
SJ-6	HMS 837-1	CP/M MBASIC-80 softsector (wty)	* 19.95
SJ-7	HMS 817-1	CP/M MBASIC-80, hardsector "	* 19.95
SJ-8	173-56-1	MBASIC-80 (CP/M) demo w/manual	* 9.95
SJ-12	173-60-1	Softstuff CPS modem pgm (demo)	2.95
SJ-13	173-67-1	"Micropro" SUPERSORT for Wordstar	7.95
SJ-14	173-91-1	M-Pro MAIL MERGE w/warranty	7.95
SJ-15	HDR-837-3	M-Pro DESPOOLER w/warranty	7.95
SJ-16	173-201-1	MICROSTAT database wty, manual	29.95
SJ-22	173-61-1	SOFTSTUFF GENRAL LEDGER pgm	7.95
SJ-23	173-62-1	SOFTSTUFF INVENTORY pgm	7.95
SJ-24	173-70-1	DATASTAR (w/warranty)	7.95

- 1 - Prices include shipping inside continental U.S.A. only except SJ-12 modem (add 50 cents for postage).
- 2 - All "Demo" software packages work EXACTLY as warrantied versions except manual pages are red over-stamped. (They're easy to read through a red cellophane overlay.)
- 3 - Some CP/M programs may not work on non-Heath machines, but usually can be patched with DDT (or equal) & run ok. ALL will run on H/Z-100 series machines on 8-bit side.
- 4 - On request we'll convert between hard- and soft-sector formats, between H/Z 5.25" and 8" formats (KAYPRO or Magnolia ss, sd 5.25" discs on special order) at \$5 each 5.25" target disc. Original distribution disc(s) will be included with converted discs.
- 5 - These are CLOSE-OUT PRICES; once gone, that's all folks!

Contact Gus Bakalis at D:KUG.DOC, 313-755-2060, or L Geisler at SEBHC JOURNAL, 313-662-0750 if you need more information. Note: Profits from any software sales made thru D:KUG.DOC go toward D:KUG.DOC's operating expenses.

NOTE: "\*" means 10% off both packages if ordered as a pair w/matching course--example: MBASIC & Programming in MBASIC, COBOL & Programming in COBOL, etc.

(Most CP/M-80 runs on H/Z100-series machines under CP/M-85, 6)

### \*\*\*\*\* FIBRE-BOUND SEBHC JOURNAL BACK-ISSUE VOLUMES

Catalog No.	Description	Price
V-I	= Volume I (Numbers 1 thru 12) Aug-86 - Jul-87..	\$22.50*
V-II	= Volume II (Nos 1 thru 12) Aug-87 -- Jul-88....	\$22.50*
V-III	= Volume III (Nos 1 thru 12) Aug-88 - Jul-89...	\$22.50*
*	Any TWO Volumes (save \$4.50).....	\$40.50
V-PLUS	= All THREE complete Volumes 15% OFF!.....	\$57.38
BI-V5:I#	= Single Issues From Volume V only.....	\$ 2.50

### RENEWALS or NEW ONE and TWO YEAR SUBSCRIPTIONS

Order No. R-1	= Regular One Year Subscription, USA & FOREIGN,	\$24.00
Order No. A-1	= AIR MAIL USA, FOREIGN 1yr Subscription	\$35.00
Order No. R-2	= Regular Two Year Subscription.....	\$44.00
Order No. A-2	= AIR MAIL USA, FOREIGN 2yr Subscription	\$55.00

### SPECIAL INFORMATION ABOUT YOUR SUBSCRIPTION

All subscriptions start in the month your order is received. Renewals continue from expiration month (example: address label top line reads "<999> expires Aug-99". If renewal payment is received in or before August, 1999 you'll get one more full year. Label top line would then read "<999> ends Aug-2000".)

### SOFTWARE DISCS

Order No.	Description	Price
CGD#0S	40trk ss soft-sector CP/M-80 Games Disc #0.....	\$ 6.96
	(Assorted games & utilities)	
CGD#0H	40trk ss HARD-sector CP/M-80 Games Disc #0.....	\$ 7.96
HPCP#0S	40trk ss soft-sector HDOS 2.0 "Programmer's CARE Package" Disc #0 (Misc .ABS & .BAS utilities)..	\$ 3.00
HPCP#0H	40trk ss HARD-sector HDOS 2.0 "Prgrmr's CARE"..	\$ 3.66
WSKPS	WordStar H/Z19/89 Keypatch ==> DISCONTINUED <==	
HTXTS	40trk ss soft-sector TeXT PRoCessor DEMO disc..	\$ 2.50
	Version 4.1 for HDOS 2.0, 3.0	
HTXTH	40trk ss HARD-sector TeXT PRoCessor DEMO disc..	\$ 2.50
CTXTS	CP/M 40trk ss soft-sector TeXT PRoCessor Files with DEMO program & on-disc manual.....	\$29.95
CTXTH	CP/M 2-HARD-sec discs TeXT PRO, 2 ....	\$30.95

### ==> When ordering Please:

- 1 - Pay ONLY by US Dollar Cheques or Money Orders.
- 2 - Allow about four weeks for single back-issues.
- 3 - Allow 5-30 days for discs, software & bound volumes.
- 4 - Use order blank on opposite page; list catalog number price and quantity of each item and mail with payment.
- 5 - Include LATEST issue's mailing label with ANY order!

NOTE: Unless otherwise indicated, postage, "handling" and shipping is included in all above-listed prices.



## ==&gt; UNCLASSIFIED ADS &lt;==

FOR SALE -- Working 64k H89A system as follows:

Item	Org Cost	Was Asking
H89A computer	\$895.00	\$100.00
Livingston Logic 4MHz CPU	90.00	40.00
B&B Serial-Parallel Card	90.00	40.00
CDR 500k RAM Drive	250.00	175.00
New Orleans Data General Color Graphics Card		
w/math co-processor chip & speech option *	350.00	150.00
Heathkit H17 dsdd disc drive, complete	250.00	75.00
Comrix 13" composite-video color monitor	275.00	100.00
C-ITOH 8510 Parallel Interface Printer	450.00	150.00
	-----	-----
Total Original Cost	\$2650.00	
	Former Total Sale Price	\$830.00

\* Graphic card needs some work

Note: Best offer over \$325 takes all! Packing free, shipping at cost.

Software: CP/M & HDOS Word Processing, programming languages, games  
spreadsheets, plus documentation for software AND hard-  
ware. \* FREE \* if you buy the complete package!

CONTACT: Bob Hayward, 127 Mayfair Drive NE, Leesburg, VA 22075;  
phone 703-874-0422 office, or 703-777-4186 res after 5pm EST

## The SEBHC JOURNAL's Back Page



# Society and Journal Policies



\* The SEBHC JOURNAL is published once a month and strives to be mailed by the 20th of a month. Editorial copy deadline is the 10th of every month (weather & holidays permitting).

\* Subscriptions: \$24.00/year in Canada, Mexico, USA and its' possessions. All subscriptions are mailed FIRST CLASS. Subscriptions start the month following order receipt. PLEASE MAKE CHEQUES or MONEY ORDERS PAYABLE TO L E GEISLER, NOT "the JOURNAL" or "SEBHC". Current back-issue copies are available at \$2.50 each. See order blank for bound volume discounts.

\* Subscribers are automatically Society of Eight-Bit Heath Computerists members. Member's subscription number and expiration are clearly printed on mailing labels. The three member classes are: REGULAR (voting H/Z 8-bit user) ADVERTISING (one vote/vendor) and ASSOCIATE (non-8-bit computerist, library, etc.). REGULAR members can hold any elective Society office. ASSOCIATE members cannot hold office or vote. The Society's official yearly meeting place and time is announced every July in the JOURNAL. Advance registration of US\$25 for each attendee no later than 30 July, please.

\* All advertising is printed Free Of Charge. Vendors: Please do submit your B&W "camera-ready" ad copy, 7" w x 9" h (1 page to an issue) no later than the 10th of month in which it's scheduled to appear. All Society members can run one new free 250-word (maximum) Unclassified Want Ad every month.

\* All subscribers/members are urged to submit their H/Z-oriented computer articles on disc in standard ASCII format rather than as hard copy. If a word needs to be emphasised or italicised please insert these symbols PRECEEDING the word: [EMPH] for emphasise, [ITAL] for italics. We'll return your disc after copying it and will gladly copy any SEBHC JOURNAL software disc onto it. Note: We can't pay authors but we do extend their subscription another year for a published article.

\* The SEBHC JOURNAL is composed, edited and published by L E Geisler at 895 Starwick Drive, Ann Arbor, MI 48105. Phone 313-662-0750, 9am - 6pm Eastern Time Zone, Mon thru Fri only. Other times (EMERGENCIES ONLY): 313-769-6052 (residence).

## Serving H/Z 8-Bit Users Since 1986