

Saving Our CLASSIC Heath 8-Bit Machines!

SETHO JOURNAL

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I've Hooked Up The Cables And Turned It On...

NOW What Do I Do?!

By

Allie Lingo, Associate Editor
Dierks, Arkansas

Recently here in Arkansas some of the state technical schools held auctions to dispose of older equipment and I have been getting quite a few calls from some who purchased equipment at these auctions; Z89s, Z90s and Z100 computers.

Most of the systems were in good shape, and the prices that some folks gave for them were great. For example, a Z90 system with Z37 external dual drives, internal H17 hard sector drive, 64k RAM, 3-port serial card and amber CRT sold for a meager \$10. WOW! When all the cables and drives were hooked up--except for a few dirty keys--it worked just great!

I got a chuckle from the front cover of the September 1990 Journal and the guy carrying the H/Z 89/90 away from the garage sale. I am sure that if the guy is a "real" H/Z-89/90 user that he is smiling because he knows that he has just gotten a fantastic deal on a powerful, useful computer. On the other hand--if he's an MS-DOS user--that smile may soon

fade as did the smiles of some of those who'd purchased computers at the recent auctions.

A good example of the "short-lived smile" was the MS-DOS user friend who purchased one of these computers. It wasn't long before he made his call to (you guessed it) "good ole Allie"! The conversation went something like this:

"Hello, Allie, this is Jack B. Nimble (not his real name). I've purchased a Zenith computer from the university auction and I have a problem."

"What model Zenith is it?" says I.

It turned out to be a Z90 with external Z37 drives. Jack had hooked up all the cables and turned on the switches. When up came the "H:" prompt, he went blank, because he was accustomed to an MS-DOS computer that auto-booted from a hard disk and he was at a loss as to what to do next.

I asked Jack if the system software came with the machine and he wasn't sure but did say there was a big stack of disks and a lot of binders filled with printed material.

Then I told him the best thing for him to do was load all the gear and disks and binders into his jalopy and bring

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NOW What Do I Do? -- COBOL News

I checked the disk directory and found that most of the files from the three original CP/M disks were on it: CONFIGUR, SUBMIT, FORMAT, SYSGEN, MOVCPM37, etc...the disk was almost full.

Jack stated that he understood most everything up to this point, but he wanted to learn how to format a data disk with or without the system on it. It was a simple process for Jack to use FORMAT to make a non-bootable data disk without problems. To create a bootable disk was not like the MS-DOS format (FORMAT/S) procedure so I told Jack that we had to use MOVCPM37 to create a bootable CP/M disk and that the procedure (which I later wrote down for him just in case) had to be followed to the letter or it would not work.

I then sat down at the keyboard and told Jack to follow the procedure along closely over my shoulder. In a few minutes we had created a bootable disk. I then showed him how to use STAT to set the new BIOS to read-only status and how to hide it from the directory by giving it system status. Seeing the puzzled look on Jack's face, I told him not to worry and that he could do it just as well as I could after a few tries.

It was now Jack's turn at the keyboard. I had him use one of the disks we had formatted a little while earlier and had him go through the MOVCPM37 process a few times until he was comfortable with it. We also covered using CONFIGUR to check ut and reset the system I/O, disk-drive, and printer configurations. Later Jack commented that it wasn't any harder to make a bootable CP/M disk than under MS-DOS, it just took a few seconds longer, that's all.

After one last time through the whole process and relaxing conversation over a cup of coffee, I could tell that Jack was feeling more comfortable with the Z90. The clincher came later while I helped Jack with a copy of TXTPRO for CP/M (which I'd picked up at a computer flea market). After a little tutoring on using PIP, I had Jack copy the necessary files onto a bootable disk. With a bare minimum of help Jack started TXTPRO, and after about 30 minutes was whizzing through it. I showed him how to call TXTPRO's very good help file and that even though I did not have the printed documentation handy, said that he might never need it. (I forgot to mention earlier that Jack wanted to use the Z90 for "dedicated" text processing.)

Jack happily left my shop with a big, glowing smile on his face. Also, I felt good knowing that what little expertise I'd picked up over the past few years with the H/Z89/90 had been of some help to someone else. One more great eight-bit machine was saved from the landfill. I was also delighted to find an operating system disk in the stack that Jack had brought by--I wasn't looking forward to having to use MAKE-BIOS, especially before dinner!

Editor's note: We are most grateful to Allie Lingo for having taken time to key in this gem of 8-bit-oriented text! We really need more stories of this type from our readers who've had similar experiences, even if everyone doesn't die happy!]

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AND NOW A WORD FROM COBOL EXPERT JARED FREEMAN...

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Dear Leonard,

I've enclosed a revised version of my "ADDRBOOK" program you published in the June, 1990 edition of the JOURNAL. This disc includes the revised program, a revised listing, a revised documentation file, and a file showing program lines which were added, deleted, or changed. I used a code of A, C, or D to indicate what was done....

If any questions or comments referring to my program or COBOL in general come to your attention, I shall be happy to provide any assistance I can.

I'm also enclosing a program called "COBOLNUM.COM" which will re-sequence a COBOL source program. It's a very time-consuming process to apply sequence numbers using a word-processing program, but this program greatly simplifies the job. If there are any questions about it, let me know.

Here is a list of questions and requests with which I need some help from the SEBHC community:

- Does anyone have a copy or know where I can get a copy of Seidel's book on Microsoft COBOL?
- Does anyone use "FAMILY ROOTS" to keep track of their geneology information? If so, have you made any changes to support a hard-disc system, or any changes to allow printing of a full-name listing?
- Does anyone have a copy I can buy, or know where I can obtain a copy of "PRINTMASTER PLUS" for CP/M?

I shall be most grateful for any help I receive with these questions!

JARED M FREEMAN, 600 Ginger Trail, Lake Zurich, IL 60047

[All right, fellow SEBHCers, let's help our good friend Jared out Right Away! Please note that we are adding Jared's COBOL program to our CP/M software lineup Real Soon Now, and shall be offering it in either 40 or 80 track hard or soft-sector format. It will sell for \$4.50/cpy in either format, and we'll even give you a FREE copy of ADDRESS BOOK when you buy a set of our Vintage Software "COBOL-80" and "Programming in COBOL" package (see Catalogue Page for details). Now, that's an offer you Absolutely Cannot Refuse! -- ed]

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Are you moving--or have you moved? Please help us keep both your subscription AND our address/subscriber database intact by filling out and mailing a change-of-address card before it is too late. WE don't want to drop you from our subscriber's list with an outstanding number of JOURNALS yet to go, and we are sure that you don't want to lose any money!

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The READER'S MAILBOX

Dear Lenny,

I just found time to tear the shrink wrap off a "reference copy" of the [new] HDOS 3.02 manual. While flipping through it I discovered a MISSING section in the chapter on BASIC, specifically pages one thru 49! If you followed my directions while preparing the binder you could not have seen this [omission].

Please check your manual to see if these pages are missing from your [Beta test manual's] BASIC chapter. If so, let me know by postcard or letter. Once I have a count (I don't know now if it occurred over the entire print run), I'll arrange with the printer to prepare replacement pages and mail them to you.

This may take upwards of a month. Fortunately, the chapter it occurred in is one you're less likely to need if you already have another BASIC interpreter.

My apologies for the mixup.

KIRK L THOMPSON, Editor, The Staunch
8/89er, PO Box 548, West Branch, IA 52358

[Yo, Kirk! Checked out the entire HDOS 3.02 Beta Test Manual you sent me and didn't find any pages had been skipped. Your copy may be the onliest one to have been goofed up. But just to be sure, we've printed your note here so anyone else with a copy of the new manual can verify its' completeness. Time will eventually tell. We do thank you MUCHLY for sending us that test copy and manual, and we've been slowly working our way through getting HDOS 3.02 up & running on the H8, which seems to like it better than the all-in-one Super89. Called D-G Electronics about the possibility of getting a different monitor ROM for our machine and Dennis said he could burn one of the older ones for our machine provided he could find the original monitor ROM code list. We'll inform you of that event Just AS Soon As It Transpires. Meanwhile, we keep plugging away at getting out this year noose litter.... -- ed]

[Here's a letter we wish hadn't been written!]

Dear Lenny,

Just received my Sep-90 SEBHC JOURNAL and noted my subscription has expired. Due to no longer having any eight-bit computers, I've decided not to renew my subscription. It was nice to be a North East Associate Editor, and thanks for that honour. As one last eight-bit contribution, I have a few of the Siemens and Tandon full-height disc drives. If you or anyone else wants or needs them, let me know. "FREE, As Is" for shipping costs.

Good luck with the SEBHC JOURNAL!



BRIAN L HANSEN, 315 Roast Meat Hill Road,
Killingworth, CT 06417; phone 203-663-1425

[<Sob!> We all hate to lose you, Brian! Who knows, mayhap we shall meet again someday, somewhere, in the RAM stacks of that Great CPU in the sky.... -- ed]

Dear Leonard,

Paul Herman [Z100 LIFELINE] referred me to you.

I have a complete, working H19/H8 system which is now surplus. I hope that you can help find a new home for it with some deserving eight-bit user.

This system consists of the following:

- Original 2-MHz 8080 CPU board;
- Four-port serial I/O board;
- Full 64k memory;
- WH-8-17 hard-sector disc controller;
- Updated front-panel BOM;
- Associated H-17 disc-drive accessory w/2 full-height, single-sided hard

sector drives;

A quantity of hard-sector discs;

Both HDOS and CP/M operating systems;

Miscellaneous software, including HUG's CP/M "Big Eddy" editor & dBASE-II;

Standard H19 terminal;

And ALL of the original documentation.

I'm asking \$300 or best offer for the above-described system.

Additionally, I have an intelligent 64k RAM printer buffer I'd like to get \$50 for, and a never-used 360k, ds,dd floppy drive which should be worth no less than \$40.

Finally, there's a serial A-B data switch which I will let go for \$25....

PLEASE NOTE: Packing and shipping ARE NOT included in the prices above.

Contact me at the address below, or call 503-357-3185.

EDWARD W DAVIE, 506 Sky Lane, Forest Grove, OR 97116

[Well, Eddie, there's your letter for all our subscribers to see. We certainly do hope that you sell this Valuable Vintage System to some deserving SEBHC member Real Soon Now. You SEBHC JOURNAL readers, get in there and start bidding on it, Right Now, y'all hear?! -- ed]

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[Editor/Publisher's NOTE: If you insist on moving, please do notify us in advance so that you'll continue to receive your SEBHC JOURNALS without interruption. Thank you very much!]

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H19 SPEEDUP PROBLEMS... REPLACING HARD-TO-FIND PARTS

by Rick Swenton, N E Associate Editor
(C) 1990 by Rick Swenton

Many H/Z 8-bit users have installed some form of H19 terminal which involves increasing the H19's CPU clock speed from its' factory-set two megacycle/Second rate to 3 or 4MHz. This, in conjunction with a firmware upgrade such as the HUG/Watzman ROM, the Super-19 ROM, or the Ultimate Superset ROM will allow using much higher terminal I/O baud rates such as 19,200 or 38,400. In addition, the improved screen speed is very pleasing because it lacks those annoying black flecks cause by normal clock-speed refresh pulses.

Not all H19 Terminal Logic Boards (TLB) will work properly at these higher clock rates because sometimes the existing ICs cannot reliably function at increased speeds. Symptoms range from total failure to intermittent crashes or random characters appearing onscreen. (Lee Hart does an excellent job of addressing this issue on page 26 of his Superset Installation manual.) Usually the cure for reliable high-speed operation is to replace the slow ICs with faster types. If your system [still] doesn't come up at the faster clock rate you may have to replace the 2112 RAM ICs. These provide system RAM for the TLB's Z80 CPU. If these ICs are too slow, they generate garbage in the terminal firmware program which "runs" the terminal. This can cause complete terminal failure or no CRT filament, occasionally intermittent crashes or strange noises from the horizontal flyback transformer being driven at some unusual frequency. The type 2114 RAM ICs store characters which appear onscreen. Slow 2114s will display garbage onscreen instead of normal ASCII or graphics characters.

It's possible to get faster 2114 screen RAM ICs from many sources such as JAMECO, JDR Microdevices, or Digiquey. But I have yet to find a source of fast 2112 RAM ICs anywhere, and this prompted me to search for a substitute IC. I found a very inexpensive RAM IC which will fit in an unused IC socket on the TLB, the type 6116. It comes in several speeds with the 6116-2 being the fastest. You could use a 6116-3, but the faster (-2) version isn't that much more expensive. Only three 6116 pins are incompatible with existing H19 TLB circuitry. These pins must be bent out so they can't be inserted into the socket. Note that only one 6116 RAM IC is needed to replace the two existing type 2112 ICs.

The following steps are for installing a type 6116-2 IC to replace the two 2112 ICs. Note that IC number pairs, such as "U438 (U424)" means the first number is for an H19A TLB, and the second number (in parenthesis) for older H19 TLBs. Disconnect power cable, speaker lead, serial interface cable (on back of TLB), and keyboard cable, then remove TLB and place it on workbench before proceeding.

- 1 - Remove the 2112s at U438 (U424) and U439 (U425).
- 2 - Before installing the 6116-2, bend out pins 21, 20, and 18. Carefully plug the 6116-2 into IC socket at U436

(U423).

- 3 - Check jumper JP2 (JP23); there must be a conductor or wire between 6 and 7 to provide the A10 address line. There must be NO jumper at 3 or 8. This would apply +12v or -5v to the 6116--smoke time! [Editor's note: JP2 (JP23) is located diagonally below and left of the 6116 at U436 (U423) above JP3. Use extreme care when soldering in the new jumper as foil "lands" are quite easy to damage!]
- 4 - On the 6116, VERY CAREFULLY solder a SHORT wire between pins 20 and 12. WARNING: Pin 12 is in the IC socket, so use just enough solder to get a good electrical connection on the IC pin. DO NOT let solder spread into the socket contact or you'll be unable to remove the IC later.
- 5 - VERY CAREFULLY solder one 4-inch insulated wire to 6116 pin 21 and insert the other end into the empty U439 (U425) socket at pin 14. Make sure it's a good contact.
- 6 - Likewise VERY CAREFULLY solder another 4-inch wire to 6116 pin 18 and insert its' other end into U439 (U425) pin 13.

Inspect and double-check all work you've done on the TLB, then replace it in the terminal or computer card rack. Reconnect all cables and lines removed earlier, turn on power and verify that the TLB works. Once you've verified it's OK, replace all mounting hardware holding the TLB (and CPU) in card rack, close cover, and then enjoy! [To be continued... we hope! -- ed]

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+ Editor's note: The original manuscript of the above article came to us on two pages, the second of which somehow mysteriously vanished. If Rick still has the original text on disc, we'll be delighted if he sends us a copy so that we may conclude this great article in our December edition. We must apologise to both Rick and our readers for losing Rick's original article, and sincerely hope a similar loss never happens again. It's bad enough to have a disc or system crash half-way through an important keyboard session, but to let a manuscript stray is Really Not Very Cool! -- Lenny
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Subscribers Please Note: We're still getting "undeliverable" JOURNALS from the Post Office with those nasty yellow "postage due" stickers on them. That happens each time a subscriber moves without giving either Post Office or SEBHC JOURNAL sufficient advance (or even any) notice! Your Postal Carrier will gladly provide an official change-of-address form if you just ask...and it's *FREE*! Please Keep Us Informed So That YOU May Continue Being Informed. => "8-Bits 4-Ever!" <=

A NIFTY MBASIC UTILITY!

USEFUL MBASIC FILE CONCENTRATOR

* Saves Memory and Disc space

* Helps programmes run faster

Exclusively adapted for SEBHC JOURNAL readers--

by

A Stapher

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10 REM      BASQUEEZ.BAS      (RUNS UNDER MBASIC V4.82)
20 CLEAR10000
30 E$=CHR$(27):ED$=E$+"E":Q$=CHR$(34):VR$=E$+"p":VN$=E$+"q":@
  PRINTED$:PRINT:PRINT
40 MSG$=Q$+"BASQUEEZ.BAS"+Q$+
  " File Concentrator Version 1, Rev 0.1 ":GOSUB630
50 PRINT:PRINTTAB(5)"This concentrator removes redundant "@
  "spaces & REMarks from BASIC programs ":@
  PRINT"thus conserving memory & disc space.":PRINT
60 PRINTTAB(5)"Input file must be in ASCII (not "@
  "Microsoft compressed) format. Use protocol:"
70 PRINT"SAVE "Q$(dn:(Filename)Q$,A' to convert "@
  "target file to ASCII.":PRINT
80 MSG$=VR$+" CAUTION! "+VN$:GOSUB630:PRINT
90 PRINT"Program to be concentrated MUST NOT have"@
  "GOTOs or GOSUBs directed to REMarks as":@
  PRINT"they are removed by BASQUEEZ, and "@
  "might ruin the target program."
100 PRINT
110 LINE INPUT"Enter name of existing file to be "@
  "translated as CSORT --- ":A$
120 PRINT
130 D$=".BAS":A$=A$+D$
140 A=LEN(A$):B=A-3:B$=LEFT$(A$,B):C$="CNC":B$=B$+C$
150 PRINT"Input filename is: ":A$:@
  SPC(4)"Output filename is: ":B$:PRINT
160 FORI%=1TO1500:NEXT:PRINT ED$:PRINT:PRINT
170 OPEN"I",1,A$:OPEN"O",2,B$
180 MSG$=VR$+" WORKING "+VN$:GOSUB630
190 LINEINPUT#1,X$
200 L=LEN(X$):G=0:F=1
210 FORM=1TO6:
220 J=1:I=I+1:Z$=MID$(X$,I,J):
230 IFZ$=CHR$(34)THEN GOSUB560:
240 IFZ$=CHR$(9)THENPRINTVR$;" ";VR$;" ";VN$;:@
  F=0:C=C+1:PRINT#2,W$;" ";:GOTO280
250 W$=W$+Z$:
260 IFZ$="" THEN280
270 NEXTH
280 FORM=1TOL
290 J=1:I=I+1:V$=""
300 Z$=MID$(X$,I,J):
310 IFZ$="" THENPRINTVR$;Z$;VN$;C=C+1:GOTO430:
320 IFZ$="R"THENV$=Z$:I=I+1:J=2:GOTO300
330 IFZ$=":"THENV$=Z$:I=I+1:J=4:GOTO300
340 IFZ$="'"THENF=0:GOSUB550:GOTO430:
350 IFV$<>"'"THEN460
360 IFZ$=CHR$(34)THEN GOSUB560:GOTO420:

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370 IFZ$=CHR$(9)THENZ$="":PRINTVR$" ";VN$;C=C+1:
380 IFLEN(Z$)>1THEN460
390 IFZ$="" THENG=G+1
400 IFG>3THENK=L:GOTO430:
410 IFF=1THENPRINTW$;:PRINT#2,W$;:F=0:
420 PRINTZ$;:PRINT#2,Z$;:
430 NEXTK
440 PRINT:PRINT#2,I=0:IFEOF(1)THENCLOSE:GOTO610
450 Z$="":X$="":W$="":Y$="":V$="":GOTO190
460 IFV$=":"ANDZ$="" REM"THENI=I+5:Z$="":GOSUB550:GOTO430
470 IFV$=":"ANDZ$="" REM"THENI=I+4:Z$="":GOSUB550:GOTO430
480 IFV$=":"ANDLEFT$(Z$,2)="'" THENZ$="":GOSUB550:GOTO430
490 IFV$=":"ANDLEFT$(Z$,1)="'" THENZ$="":GOSUB550:GOTO430
500 IFV$=":"ANDLEFT$(Z$,3)="'" THENZ$="":GOSUB550:GOTO430
510 IFV$=":" THENZ$="":I=I-1:GOTO420
520 IFV$="R"ANDZ$="EM" THENF=0:GOSUB550:GOTO430:
530 IFV$="R" THENZ$=V$:I=I-1:GOTO410
540 STOP:REM Delete this line if it gives you trouble...
550 PRINTVR$;" ";VN$;K=L:C=C+1:RETURN
560 J=1:PRINTZ$;:PRINT#2,Z$;:Y$=""
570 FORM=1TOL
580 I=1+1:Z$=MID$(X$,I,J):Y$=Y$+Z$
590 IFZ$=CHR$(34)THENZ$=Y$:RETURN
600 NEXTM:RETURN
610 PRINT:PRINTQ$;A$;Q$" has been compressed into ";Q$;B$;Q$@
  " With ";VR$;C;VN$;" deletions."
620 PRINTCHR$(7);"Exiting program.":END
630 PRINTTAB(40-LEN(MSG$)/2);MSG$:RETURN

```

[Editor's notes: 1- There is nothing wrong with a programme containing a goodly number of explanatory REMarks. Also it is ok to separate MBASIC commands, variables and arguments with spaces to make it easier to read while debugging, adding extra commands, or otherwise modifying a programme. But when you're finished, all that extra baggage does take up disc and memory space--and our 64k systems don't have much to spare, hence BASQUEEZ! The above listing was compressed from its' original size (over 1000 lines) by BASQUEEZ itself and then the squeezed file was RENUMBERED. "BASQUEEZ" subtracted all unnecessary blanks and REMarks from the original listing, thus effect that saving. BASQUEEZ will also run under CP/M MBASIC-80 and on H/Z100-series machines under CP/M MBASIC-85. It may be possible to modify the program to work under ZBASIC or other non-H/Z basics. Line 630 is a message-centering subroutine which really spiffs up the display's appearance. Now, if you're too busy to key this listing in, just mail us your HDOS or CP/M FORMATTED BLANK 5-1/4" disc plus \$1.00. We'll copy BASQUEEZ plus another similar MBASIC compression programme onto your disc and return it to you immediately. Incidentally, we have heaps of BH-BAS and MBASIC utility-type programmes filling several dozens of discs which we'll be listing in the JOURNAL Real Soon Now. If you've written a Really Nifty Programme and want to share it with other readers, send it in! If/when published, you automatically get a one-year SEBHC JOURNAL subscription extension!

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ANAPRO NEWS & PRODUCTS, etc.

by
Peter Shkabara
ANAPRO, P O Box 1987
Blythe, CA 92226

Sorry that I have been silent for so long. The following will explain some of the goings on here: ANAPRO has once again moved to a new city--and is likely to do so again in the near future. (Is there no end to this?)

For those who have been following my comments, they know that I have been seeking a way to get into full time teaching for quite a while. An opportunity had come up for me to do just that in the city of Blythe, CA. There is a small community college here and they needed a computer science instructor. Yours truly to the rescue!

So here I am in the desert on the California-Arizona border. The town's population is 8200 and it's 100 miles from everything except desert rats and dust storms. Actually, it's right next to the Colorado river and does have a few redeeming qualities which at the moment seem to be eluding me. (Ahah! There's no smog!) None the less, I'm enjoying the teaching part, but my wife is having a terrible time adjusting to what the locals call "culture shock". The term would more correctly be "environmental shock" since there doesn't seem to be any culture here. The college is the only shining light around. It has a "cute" campus, and the students do treat me well even if they are not the most able or motivated that I have encountered....

Now I shall answer a letter by Mark Meidel in the last issue (Vol V, No 3, p4) regarding the CDR SASISOFT hard-disc package. Since I had this package on my H89 and have written modifications for it, I am very familiar with its operation and pitfalls. Mark Brooks of CDR had planned to make some changes but never did--and now there's no market to justify the time.

As is sits, SASISOFT does NOT allow access to more than one physical hard disc at the same time. During bootup you may select drive 0 or drive 1, but once booted, no access to the other disc is possible. A larger hard disc may be connected and partitioned as desired into multiple logical drives. There is no problem in doing that. My own system consisted of a 20Mb drive partitioned into 5 logical drives. This gave me the ability to divide up my files into categories. Yes, I had the Z-System on it and utilised all 16 user areas also (note that SASISOFT will not work well with the 32 user areas possible under the Z-System).

A word of warning about SASISOFT which I published several times before but deserves mention. SASISOFT defers writing the last sector to disc till another disc access is done. Many pieces of software do perform an additional access and there is no problem. But it is possible (and I have experienced) that a write to a floppy disc will result with incomplete files being transferred. The simple solution is to ALWAYS follow any disc write operation with a DIR request to the disc involved. Presumably, the deferred write is also

present on the hard disc but I had not caught an error there.

Incidentally, ZRDOS+ cannot be used with the CDR SASISOFT hard disc package. This means that a complete Z-System cannot be implemented. The reason is that SASISOFT uses a replacement BDOS for its hard disc operations. It's this new BDOS which contains the sector write-defer bug. If the BDOS is replaced with ZRDOS, hard disc access will be lost....

Enclosed is a disc with a program package which you may distribute. It is a sort of shareware from me. Triggered by comments which Lee Hart made in a letter to me, I created a new formatting program for the H89 under CP/M. It is a variation of the EMULATE EFORM program and allows selection of formats from a menu or entry of the selection from command line. No more answering awkward prompts. Use NULU or LU to extract members from the library....

I've also supplied Kirk Thompson [Staunch 8/89er] with the ANAFORM.LBR package.

Development of this new format program uncovered a defect in the EMULATE EFORM program. EFORM has not yet been changed to fix the potential problem area, but a modification is in the works (just as soon as I settle in). If any EMULATE owners have had problems with EFORM, let me know (at my new address below) and describe the difficulties.

That's all for now from my end. I'm catching up with unpacking from the move and may have more time to contribute in the future.

Please note my new (temporary?) address and phone number:

ANAPRO/Peter Shkabara
P O Box 1987
Blythe, CA 92226
619-922-3919 (Pacific Time)

[We thank you, Pete, for keeping us informed of your perambulations and ever-changing address! Also, we thank you for the new ANAFORM.LBR and L(library) U(tility) package. As soon as we get this issue out the door we'll have a go at it to see what it does. Your notes on the CDR problem should be most welcome to those readers who're having ZDOS trouble. If any of our readers have questions they urgently need answered we recommend that they write to Pete directly. If the question is of general interest, he'll send a copy of both your letter and his reply to us for publication in the SEBHC JOURNAL.

We also have to thank our N. E. Associate Editor, Rick Swenton who recently sent us a copy of The Universal CP/M (UCPM) Manual which we've been quick-scan reading. This manual is a compendium of General Information on CP/M Computers for Programmers. It was compiled by Ted A Campbell from CP/M user community contributions. Also included was an extensive survey form for readers using "other" CP/M machines not listed in the manual to fill out and return for use in future revision of the manual. We'll print a review of it in an early JOURNAL issue because we feel this manual is A Very Important Document Which Every 8-BITter Should Own!]

FOR THE COBOL-ORIENTED

SUPPLEMENTAL "HOW-2" INFORMATION
by

Kirk L Thompson, Editor
The Staunch 8/89er

P O Box 548, West Branch, IA 52358

In my letter of 1-Aug-90 I promised to supply you with the title of a book which supplements Heath's old COBOL Continuing Education course and REMark's COBOL series by W R Bauman. I'm expanding that to include other [valuable] information which I've stumbled upon over the last month which first-time users of Microsoft's HDOS or CP/M COBOL compilers should know about.

MOST IMPORTANT: Be careful that the text editor you use when preparing source code doesn't embed TAB characters (ASCII 9)! The COBOL compiler GAGS on these and sends garbage to the screen or printer, whichever you've set to receive the line listing during compile. The fix is to use an editor which does NOT conserve disc space by including [special-character] tabs in a file. MAGIC WAND's EDIT can be set to do this by entering "MBN<return>" at the command screen prompt.

You can also set tab positions to COBOL's (or your own) preferences. If you use Software Toolworks' PIE you'll have to change one byte in that program with a disc dump utility. Check PIE's manual and distribution disc file PATCHES.DOC for details and patching location for the version you're running.

PIE is probably the least convenient editor to use because you can't change tabs from the system default of every eight [spaces]. But you could code against the page's left margin, then use a macro to open up six spaces where the compiler expects line numbers to be. [Wonder how Heath's ED.ABS or ED.COM would work; does anyone know? -- ed]

Another editor--Newline's TXTPRO--has a tabs-setting function under the MODE (f2) key. [MODE, then the BLUE key will toggle between +TABS (off) and -TABS (on) and ERASE(oops!) will get you out of that function -- ed] Be sure to set TABS off. If you don't plan to use line numbering (not really required) in your source code you can also set TXTPRO's left margin permanently with this sequence: (Keypad) SHIFT-4, SPACEBAR 7 times, f2(MODE) twice, f2(MODE) once, white key(CONFIG) once, f1(SAVE) once. Further [cursor only] tabbing in TXTPRO is then at the Heath standard of 8 spaces.

In WordStar, its' non-document mode permits tab setting, provided you use CTRL-OV to turn on variable tabbing and CTRL-OI to set specific tabs where you want them. You might even set up a "ruler line" at the start of program development or code-entry to automatically set all tabs with CTRL-OF at the beginning of each coding session. But you MUST delete the ruler line before compilation since COBOL does NOT

recognise dot command comments! And whichever editor you use, you should use the same one to produce manually-keyed data files because compiled programs find tabs just as indigestible as the compiler does!

You might also try to locate an alphabetically-organised keyword reference book on COBOL. I have ones for BASIC and PASCAL and find them invaluable. They're much handier for quickly locating information on language specifics than thumbing through the language manual.

For COBOL, I found Donald Sordillo's "The Programmer's ANSI COBOL Reference Manual" (Prentice-Hall, 1978, hardcover) at a used bookstore. It doesn't cover everything in COBOL-80 because Microsoft made some extensions to the 1974 ANSI language standard for accessing disc files and for screen handling on micros.

The book on data-entry and screen-handling I was hunting for is LeBert and Massoni's "Advanced Interactive COBOL for Micros: A Practical Approach" (Prentice-Hall, 1988). It is not cheap at \$30, but will provide the information on interactive programming that neither Heath's continuing-ed course nor the REMark magazine series supply. The book IS specific Microsoft's COBOL for IBM-compatibles, but much of it is also applicable to Microsoft's earlier COBOL-80; many of the language extensions appear to be identical. Further, it's an intermediate-level book, so you should have some COBOL already under your belt before digging into it. And almost all my above remarks apply to the somewhat later (now very hard to find) HDOS COBOL compiler--should you stumble across a copy of it!

I've also written to W R Bauman, author of the REMark series, and to HUG. HUG once distributed a pair of discs with source code and data files specifically for the COBOL tutorial. I haven't received a reply to either letter, but will let you know if these discs are still available, or their current source--if any.

Finally, because COBOL is still actively used, many colleges and universities have course sequences in it. Check around those near you if you're having difficulty absorbing the language or need to accumulate academic credentials.

[EOF]

[We certainly thank Kirk for sending us this important information! Now, if any of our readers have "how-2" questions about COBOL and want quick answers, please contact Kirk directly. (Sending a query about COBOL to the JOURNAL is about the slowest way of getting information from an expert we can think of--nobody here knows anything about COBOL. Besides, we would have to forward your query to Kirk...and there goes some more postage!) Meanwhile, HAPPY HOLIDAYS! -- ed]

SEBHC JOURNAL

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The JOURNAL's CATALOGUE PAGE

Continued ("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 cassette & final (college-acceptable credits) examination.

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- 5 - 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. (Caveat: Some Heath Terminal escape codes aren't Kaypro 8-bit-machine compatible.)

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)

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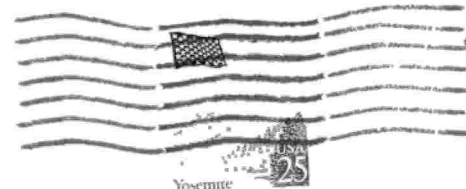
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