

Saving Our HEATH Eight-Bit Machines!

SETHO JOURNAL

Volume IV, Number 6

\$2.50 a copy, \$17.50 a year

January, 1989⁹⁰

We Wish

One

and

All

A Very

PROSPEROUS

and

HAPPY

NEW YEAR!



SEBHC JOURNAL

Volume IV, Number 6, Page 2

The Readers' MAILBOX

Dear Lenny,

Over the holidays I have been re-reading my back issues of the JOURNAL and other [newsletters] and noticed the last JOURNAL I've received was the October (IV:3) issue! I'm now wondering if the November and December issues were sent, or if the Post Office didn't deliver?

But that's not why I'm writing this. I saw your software sale [advertised] in IV:3, page 7 and have some questions about the CP/M-80, Ver 2.2.03 package. Does this package contain a list of disc files, are these discs 5" or 8", and is documentation complete?

My reasons for asking are: I need to verify that my own version 2.2.03 files are complete. Also, I want to complete my CP/M documentation. And are there any CP/M-80 packages still in stock?

Please tell your Associate Editors that I especially enjoy their informative articles, especially the Z-System series. After reading Rick Swenton's Product Review on Lee Hart's Superset firmware I just had to immediately get the entire package from Quikdata!

Have a great New Year! We [readers] appreciate your efforts. And let's hope the '90s will be greater, kinder, and gentler to us all!

One last thing: My copy of III:8 (Mar., '89) had page 11 blank, but the other side (p12) was ok. Can you send me a replacement page?

AL BJORLING, P O Box 917, Melville, NY 11747-0917

[And a Prosperous and Happy New Year to you, Al! We filled your back issues order and it should be in your hands by now. I think we remembered to stick in the replacement for III:8, pages 11 - 12 with them, but check it out and let us know if we didn't--we'll send it to you! Surely you must have gotten the Nov & Dec editions by now. We were terribly overworked throughout November so that edition wasn't ready to mail until 16-Dec! Rather than two mailings, we put both month's editions into one GIGANTIC mail sack which we mailed on 20 Dec. Regarding your query about the CP/M 2.2.03 we have, they're brand-new, sealed packages. We're now all out of the 5-1/4" packages, only the 8" is still in stock. If you have all 3 original distribution discs your set's complete. (2.2.04 has one extra--the "Setup Disc". It also has hard-copy source code.) Let us know if you want us to try rounding up whatever you're missing. -- ed]

Dear Lenny,

You indicated in your kind response to my sending you a



copy of MYCHESS instructions that my subscription had expired.

[But] the mailing label on my JOURNAL reads 7.90, which I take to mean that I'm paid up through July, 1990.

Am I confused?

MARK A BUCKINGHAM, 981 Bell Avenue, Teaneck, NJ 07666

[No, I got confused while I was typing my response to your generosity! Your subscription is ok. Sometimes it gets pretty hectic around the "old computer shack" because there's only one of me & so very many jobs to do.... -- ed]

Dear Mr Geisler:

Felicitations for your JOURNAL and your luck into some original H/Z 8-bit software! Please find enclosed my money order in the amount of US \$77.40 to renew my subscription and for the indicated software.

If I'm too late, could you provide me with information for obtaining Ashton Tate's dBASE-II (CP/M version) that will run on my H89? Or is there anyone who might sell me his copy?

[Unfortunately] I cannot read 8-inch discs, so I need them transferred to standard 5-1/4", 48tpi DSDD. I've an H17 and H37 disc controller.

On reading Volume IV:3, page 6, I would be interested in getting the schematic diagram for a hard-disc interface. I have a Seagate ST-225 (20Mbytes) hard disc along with the PC controller and would like to install the hard disc in my H89. I would buy the software from Quikdata. What else would I need? [Quikdata's Henry Fale might help you there.... - ed]

I'm looking into getting ZCPR to upgrade my standard CP/M 2.2.04. But after reading [the JOURNAL's] articles, I'm confused about ZRDOS, ZSDOS, ZDDOS, P2DOS, NOVADOS, etc.. And what about Z-System, NZ-COM also? What are the differences? I'm planning to buy the Write Hand Man, but scared if I upgrade my CCP or BDOS....

Any comments about Small-C compared with C/80 Compiler?

Thank you for your help and your good work!

ROGER F DUPIS, P Eng, 978 Francis, Longueuil, P Quebec, CANADA, J4J 1E4

[Thank you M Dupis for your letter and software order. Your software was shipped via UPS on 29-Dec-89, and we hope it got through Canadian Customs without undue delay or excessive import duties! (We've heard some terrifying horror stories about Canadian Customs charging exhorbinant duty on just ONE disc!) Your software distribution discs are standard 5-1/4", soft-sector types so they should be working quite properly

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for you. In connexion with your question about the H89 hard-disc interface card, I purchased several of those cards in "as-is" condition and haven't had time to either test them or buy documentation from the Heath parts department. With any luck at all, I should be able to send you some information on the hard-disc interface card Real Soon Now. You also might get in touch with Henry Fale at Quikdata; he'll give you lots of information and Good Advice! As to your query about Write Hand Man, I'm sure it will run ok with ZCPR-3, as the version I have works just fine with Livingston Logics Lab's BIOS-80 modification on both my H89A (with the D-G Electronics Super-89 CPU installed) and on my H-8 with Heathkit's Z80 CPU card (the H8's terminal is a standard Heathkit H19). With Small-C and C/80, I can't help you! I do have C/80, but have yet to try doing anything with it (there's only so much a man can do in eighteen waking hours)! I do know C/80 is popular with many "Seb-bekers" so perhaps one of them might be getting in touch with you Real Soon Now--at least I do hope so! We wish you a Most Happy and Prosperous New Year and do hope you'll keep us informed of your progress. -- ed]

Dear Mr Geisler:

Thank you for your help on the telephone back in the first week of December. I had called because my H89A's screen had gone blank and I wanted some [technical] advice.

It turned out that all the connectors you had told me to check were just fine, and the proper voltages were available on the proper pins from the power supply. I [then] decided that something mysterious had happened to the video board, so I started to pull it out.

Removing the board gave me a better view of it and I found that R252 in the horizontal sweep circuit had fried. When a resistor goes it's usually because of a [bad] transistor, so I checked Q213 and found that it had an emitter-to-collector short.

Just for fun I decided to see if the short was still there if I lifted the transistor from the heatsink. [When I did that] the short miraculously disappeared! The plastic insulating wafer had burned through.

I replaced the resistor and mounted Q213 on its' own isolated heatsink--one designed for a T220 case--and my machine was running in two hours. By the way, my screen had been exhibiting occasional twitches. They're gone now!

Thank you again for the advice.

KARL G RULING, 222 Berkeley Road, Fairfield, CT 06430

[Hey, Karl! Glad to have been able to point you in the right direction. And thanks for giving us your new address. Now that you are reasonably close to Rick Swenton, why not get in touch with him; you two might cook up an article for an early edition of the JOURNAL! Speaking of twitching screens, several of the older '89s & '90s I've been working on exhibit identical symptoms as well as my H19. (It may be that a bad batch of insulating material crept in somewhere.) My H19

twitches so badly that the system often crashes! All this time I've been blaming Northwest Digital's GP-19 graphics modification for the trouble, and your experience makes me think I've been quite wrong! I'll have to tear into and "de-twitch" them all Real Soon Now. -- ed]

Dear Sir:

A few months ago the sister of my daughter's friend (ten years old) was using a desktop publishing program with me on my ibm compatible. She told me that she too had a computer and that she used it to write stories, but wished she had some games for it.

I went over to see her machine and it looked like a Commodore Pet with a 5-1/4" disc drive built in. She also has an extra unit with two additional drives. I'd never heard of this machine, but I knew of Heathkit because I had bought a stereo kit from them in the early 1960s. She has a word processor and Microsoft BASIC. Later, I discovered that [the machine] runs HDOS 1.6, and has 48k of RAM.

Being a member of the Long Island Computer Association, I thought I'd be able to get some information and maybe some games from the members if I asked the newsletter's editor to publish a request for same. [As the result] I received two calls from fellow members. One gentleman gave me some public domain games (some in BASIC) that ran under CP/M. The other came from a subscriber to your newsletter by the name of Lee Stoller who told me about HDOS and the hard-sectored discs that [the H89] uses. He also sent me a copy of your newsletter, the SEBHC JOURNAL.

Now to the purpose of this letter: Would you be able to put us in touch with someone from whom we could obtain some games that would run on Nicole's machine? Also have I given a sufficient description of it to ensure that whatever games I do eventually find will in fact run on the machine? Any help or advise [sic] you can give will be greatly appreciated.

CHARLES N KUTTRUFF, 6 Redwood Path, Glen Cove, NY 11542

[Thank you for your enquiry in Nicole's behalf! As you can see from this issue of the SEBHC JOURNAL we've sent you (as a compliment) there are several games discs available from us. Many of our subscribers have accumulated early Heath Users' Group games which they might make available to Nicole as soon as they read your letter. You might like to know that the model she has is one of the very early ones--quite possibly an H88. If that is so, it may not run the Heath CP/M operating system until several vital ROMs have been changed. I suggest that you ask JOURNAL subscriber Lee Stoller about that; perhaps he may be able to help. Also, there are later versions of the Heath Disc Operating System (HDOS 2.0, 3.0, 3.03 the latest bearing remarkable similarity to MS-DOS). In many cases "generic" CP/M software can be readily converted by an experienced '89 user to run under HDOS. Since the little girl knows how that system works, it might be cheaper

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for her to stick with it. Now, have you thought about giving Nicole a SEBHC JOURNAL subscription for her birthday? I am sure she would get A Really Big Kick out of that! -- ed]

Dear Lenny,

I regret to inform you that I'm leaving the group SEBHC as my interests and second family have found my H89A lacking.

In July, 1989 I purchased an AT clone kit for approximately \$1900 from a local outfit called Domino Computer. Their computer tech helped me assemble the system which consists of the following:

- * AT 12MHz motherboard w/640k ram
- * VGA+16 graphics board w/256k ram
- * I/O board for one 5.25", 1.2Meg & one 1.44Meg 3.5" floppies
- * One 40Meg, 38millisecond hard disc
- * A 14", Relisys VGA colour monitor w/tilt base
- * AT 101-key keyboard
- * Game port for 2 joysticks

Back in March of 1982 I sent Heath Company my cheque for \$2871 as payment for an H89A kit w/double-density controller, H14 printer kit, the HDOS operating system with update and CP/M for the H37. I later bought an H37 double-density drive kit for \$699 (they were out of kits so received an assembled unit). But compare what I got for \$1900 with the \$3500 I put out back then!

Now I have two adopted boys (ages 5.75 & 6.5) who are my second family. I wanted a computer that would offer educational programs, colour, relatively easy use, and which may be around a little more than seven years.

I researched the AMIGA for titling VCR tapes, subscribed to "COMPUTE!" magazine because it covers all the popular computers. [I get more information about] the ATs from "REMark" and the local 'free-bees'.

I am pleased with my clone (already need more RAM) and DOS 4.01 with 'DOSSHELL' which my children and WIFE started to use immediately. (But I still get to set up the 'start programs'.)

I joined "PC CLUB HOUSE" [which offers] over 2400 discs of freeware and shareware but I wasn't able to salvage any programs and am starting over with [a] word processor, spread sheet, and data-base. I have yet to spend over \$90 for any shareware programs, and all are in colour and VGA.

I'm missing out on software and hardware to title my VCR tapes which are Super-8mm films transferred to tape, also camcorder [sic] films. Maybe someone will get around to genlocks, etc. [?] for clones, or maybe [I'll find] a used Amiga 500??

My, but I'm wordy today! I hope that this local PC club has people comparable with the Heath eight-bit crowd.

Adios, with sadness....

GEORGE A DeKELVER, 6832 Corte Sonada, Pleasanton, CA 94566

[Dear former Charter Member George: We hate to lose subscri-

bers and losing you is rather too much! But we are grateful to have had you amongst our very first 100 subscribers--you must realise that you have gone down as an important part of the JOURNAL's history! We do hope that you and your family will continue to enjoy computing into the far distant future! -- ed]

Dear Lenny,

For your information, my Nov 89 and Dec 89 SEBHC JOURNAL issues were both stamped as [having been] mailed on 20 Dec 89. The Dec issue arrived 6 Jan 90 and the Nov issue arrived 8 Jan 90.

I just replaced the diode bridge BR-1 which failed on my H89. It was the source of an intermittent problem until it settled into a good solid failure which was then easy to identify.

The first symptom was 60-cycle interference floating down the screen which would go away after things warmed up. I suspected a diode in one of the bridge rectifiers, but didn't know exactly which one, so I decided to wait it out until permanent failure [occured].

The next symptom was a spurious reset which reset both TL8 and CPU. This happened because BR-1 supplies current to the TL8, which reset following a momentary absence of power as the bridge diode continued deteriorating. Whenever power returned, the TL8 would issue a reset signal to the CPU as it's designed to do.

The final stage of failure provided insufficient voltage to the TL8; no [automatic] power-up reset occurred when the computer was turned on.

Not wanting to wait for a replacement part from Heath, I used a Radio Shack rectifier bridge. This required a new mounting hole in the heat sink. It also meant carefully locating the larger replacement bridge so that it cleared the power-supply-board filter capacitors. This bridge is rated at 25 amps and 50 PIV. I believe the original Heath part was rated at about 10 amps and 20 PIV.

After finishing this repair, I performed the H89 cooling enhancement described in an earlier JOURNAL. (I had been meaning to do that for quite a while, but never seemed to have time and I moved that task up the priority list Really Fast.) Now that the cooling slots are longer and the fan is blowing down on the power-supply heat sinks there is a definitely noticable drop in exhaust-air temperature. The TL8 and CPU generate more heat than I had imagined. I plan to add some kind of filter material over the fan intake to cut down on dust. The above failure probably would not have occurred had I made the cooling slot and fan mod when I first read it.

My H89 has a full 64k RAM, H37 soft-sector board, Magnolia SASI interface card (which includes 3 serial I/O ports) and the original (internal) floppy drive, probably a typical power load.

Feel free to publish this letter; somebody else may have noted symptoms similar to those I've described. My experience may help them to diagnose their own problems. [GOTO P5]

The Reader's MAILBOX

[continued from page 4]

Also, thanks for publishing the cooling modification article!

RICHARD TURK, 274 Lakeshore Drive, Warner Robins, GA 31088

[Hey, Dick! Thanks for your informative letter. We're sure at least ONE other SEBHCer will be helped by your experiences and hope they'll write about their fix(es). We recently got an H89 in for repair which has symptoms rather similar to yours, but it's quite possible there's more than one bridge which is sick. This problem shows up as alternating normal-width, normal brightness and half-bright, slightly narrower bands of a full text screen. These bands also slowly migrate up the screen. The machine was built as an H88 and later upgraded to full H89 status, with an H47 8" interface card and two half-height internal drives replacing a standard 40 track, single-sided drive. Checking the power-supply card plugs did not show signs of overheating, but reading your letter tells us the problem fairly obviously centers in the power-supply area. (Incidentally, there's an almost full-scale mystery story about this machine's builder and former owner; we hope to bring it to you in the very near future!) -- ed]

Dear Len,

Just a quick note on some comments in the SEBHC JOURNAL, IV:4, pp5-6 concerning Magnolia's CP/M and the boot ROM:

Actually Magnolia's CP/M WILL boot from Heath's standard MTR88 or MTR90 ROMs. (I don't have any experience with MTR89 so can't say what will happen there.) I've been using both Magnolia's and Zenith's CP/M on my "old Neanderthal" for some eight years without replacing the original ROMs, except when I installed MTR90 and the Z89-37 soft-sector controller. The reason may be because my system is so old that originally couldn't boot CP/M so I installed Magnolia's not-out-of-production "latch" kit (used during memory remapping when either CP/M or HDOS 3.0 are booted) in late '81 or early '82. Also, Magnolia's license agreement with Digital Research restricted sale of CP/M to Magnolia's hardware product buyers--so it was never available as a separate item [from Magnolia].

As for Magnolia's boot ROM, I too have heard a lot of bad stories about its' kinkyness. Which is the main reason why I've never bought it. (Why, when I can have the benefits of Magnolia's CP/M without it?!)

Magnolia never published the source [code] for its' BIOS either. So any comparison of that with Zenith's source would have to be from a disassembly, probably of MOVCPM, since object code for most ever CP/M version's modules are contained in that program. Zenith's external BIOS.SYS is non-standard, but most other CP/M-based systems also never have had to contend with FOUR different possible external media options (H17, H37, H47, and H67)!

Stuffing the entire system into a disc's reserved tracks, as Magnolia and most other implementations do, also has limitations. For example, I cannot SYSGEN a hard-sector disc from the Magnolia soft-sector system because the system

module is too big for the hard-sector disc's reserved tracks.

As for reader Julian Loui's question, like Pat Swayne, I can't answer it either! I hope that someone experienced with Magnolia's hardware can....

KIRK L THOMPSON, Editor, The Staunch 8/89er, #6 West Branch Mobile Home Village, West Branch, IA 52358

[Thanks for the input Kirk! It's a very good thing that we have readers with so wide a variety of experience with our 8-bit machines. And I hope that Julian has by now worked his way around Magnolia's problem. We regret that the JOURNAL's "technical staff" couldn't help him anywhere as much as your explanation has helped us here! Again, thanks. -- ed]

Dear Mr Geisler,

You might like to know that I managed to stop my two external Tandon 96tpi drives (used with Magnolia CP/M) from continually giving me BDOS errors. Henry Fale (Quikdata, Inc.) kindly helped me to identify and correct the problem. There were terminating resistor packs in BOTH drives instead of just one. Rick Swenton also wrote in the SEBHC JOURNAL to check for this problem, and Lee Hart of TMSI wrote to me suggesting the same.

Thank you, everyone, for the help! My H89 now runs like a charm.

DAVID E YOUNG, 402 Houghton Street, Ontonagon, MI 49953; ph: 906-884-2961

[Happy that you quickly & simply licked the problem! We thank all those folks who so generously helped you; us "orphan 8-bit users" really do stick together. -- ed]

Dear Lenny,

Received both November and December issues 18-Jan-90. Seeing the [Dec] Table of Contents, I was wondering if there was to be an award for the most letters or contributions [because] several names keep reappearing.

Yes, the COBOL package I ordered arrived safely and WORKS. As I already knew COBOL from an IBM 360/50 mainframe, I don't really need the educational package.

San Luis Obispo Community College--that's a good one! In this area there are three, stretch to 4, educational facilities "locally". Two are Junior Colleges, one Cal State Univ., one U of Cal campus. But to name one of them as above, you've just started another round of local bickering. People from one side of the county resent it being located so closely to the county seat and they don't get much out of it. Just be glad your reply appeared only in the JOURNAL and not in one of the local papers!

I doubt if Pete Shkabara knows too much about local touchiness, he hasn't lived up in north county long enough to feel the effects. That's all from here for now....

/s/SPRING S SMITH, 6055 Gary Place, San Luis Obispo, CA 93401

The Readers' MAILBOX

[Spring, what would we do without loyal subscribers such as yourself Making Us Aware Of The Facts?! You're one of a very few subscribers who received IV:4 & IV:5 simultaneously; most got them in separate deliveries, so you must be Very Special! wonder if I can lean on your shoulder some time soon? I just cracked open a COBOL package for someone who needed it on hard-sector discs, and I was quite intimidated by the huge number of auxilliary files COBOL uses. I'd been thinking to "buy" a copy of COBOL and the C.E. package for the "staff" here, but it looks extremely "like, y'know, OH WOW...Man!" and I don't know that I could learn how to use it in the 30 to 50 years I've left on this ole ball of mud! (Note: I'll be 100 years old in 2017 and MAYBE thinking about retiring then....) It took me about a full year to earn my "Programming in Micro Soft BASIC" C.E. certificate. Do you think I could emulate that speed in learning How-2 run COBOL? Write again Real Soon Now, y'all hear?! -- ed]

Dear Len,

Your records will show that I have been a JOURNAL subscriber since day 1. I love it----worth its' weight in gold!

Seems quite a while since I received a copy, could I have been so negligent as to not have renewed my subscription?! Last copy I received was Vol III #9. Guess I'm a little confused.

In any event, I enclose a cheque in the amount of \$17.50. Please do not let me miss an issue. If your records show that I have all ready re-subscribed, then you may either send my cheque back or apply the money to next year's subscription, at your option.

You are doing a fabulous job--hope you can keep it up for a long time.

SAFFORD MAGEE, 234 Oak Street, Audubon, NJ 08106

[Hey, Safford! Long time no hear from! Checked our backup subscriber files and found you hadn't renewed since we mailed your last issue in March of 1989! (Your label then showed [084.3.89].) Normally we'll send an additional copy in these cases to nudge people into re-subscribing, but we might have slipped up or because you may not have seen "EXPIRED, RENEW" on your address label. We have credited your \$17.50 payment and are sending your missing issues (III:10 thru IV:5) plus this one. Please study your mailing label on this edition; it shows when your restored subscription again expires (3/90). Thanks for hopping back aboard; we need all the loyal readers we can hold onto! -- ed]

Dear Lenny,

Concerning Part 1 of "Do You WANT To Be Poor?!" [IV:5, p3] here are a few hints your readers may find of value if they're thinking of starting a business on a TRIAL BASIS:

- 1- To avoid governmental snooping, entangling paperwork and *unneces\$ary expen\$e\$, DO NOT GET A:
 - * business phone
 - * business license
 - * sales tax number

- 2- DO NOT place business-type ads anywhere! Rather, put "person-to-person type" ads in magazine and newspaper classified-type advertisement sections.
- 3- Prevent unneces\$ary complication\$:
 - a. Always remember that you are a Sovereign Individual
 - b. Operate your business as a Free Market Contractual Company (it's YOUR business, no one elses!)
 - d. Go to public library for mailing list sources
 - e. Keep your business records private; do NOT reveal ANY PRIVATE financial details to anyone!

o -----o
 |NOTE: What you earn from your efforts such as|
 |wages, salary, fees, commissions, etc., is NOT|
 |"income" (see Eisner vs Macomber, Vol 252 United|
States Reports, pg 207)

4- Getting governmental "privilege" (such as a corporation license, sales tax collection number, etc.) means that you are waiving, giving up, abandoning, or surrendering your Sovereign Individual status! Do you WANT to do THAT?!

Just sign me "SMILEY"

[Pretty strong advice, Smiley! But until the Great White Father in Washington decides to change ALL the rules, there's nothing to prevent most ordinary folks from exercising their innate, uniquely-American right to freely trade, swap, or shop between fellow 8-bit enthusiasts and friends! -- ed]

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LETTER TO RICK SWENTON... A LETTER TO RICK SWENTON... A L

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Merry Christmas, Rick,

Received your letter of Dec 2, and thanks for the comments on NZCOM. I tried your suggestions on loading it from the HD and finally got it to work...reasonably well. I brought the hard disc up with the regular CDR CP/M, then used MKZCM to make the NZCOM system. It wouldn't work full size, so I started taking out parts, and when I removed the IOP, and trimmed the NDR to seven instead of 21, the thing will boot ok. So that's the way I'll use it. I usually don't use Smartkey or any of those, except one for SuperCalc. I haven't tried that program yet with NZCOM.

Now I have to figure out how to get a few of my application programs to work on the hard disc--some of them are pretty set in their ways and balk at anything but A: and B: drives. On one of them--in BASIC--I may have to go in and change a few bits of code. Also, I have to figure out how to use SETDRU with WordStar so I can get it working in user areas on the HD. More fun.

MAILBOX Bottom <> Misc. Notes

Then next is to get ZSDOS going. Looks pretty complicated for a know-nothing such as I am. I'm going to give it a good try before I scream for help. As I mentioned in my last letter, I may have to set up my second machine with plain-vanilla CP/M, and some sort of HD equipment in order to get enough TPA to run a couple memory-hog programs which I use all the time, assuming that I can find the necessary hardware.

Thanks again for all your good help. I will try to let you alone for a while!! Have a good Holiday and a great New Year.

BOB EVANS, 44115 Palm Avenue, Hemet, CA 92344

[Seems that Rick has satisfied another perspiring soul! - ed]

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UNCLASSIFIED ADS... UNCLASSIFIED ADS... UNCLASSIFIED ADS

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FOR SALE -- Z89 System with Magnolia CP/M, Magnolia controller, Magnolia 100k RAM Disc, ANAPRO 4MHz Speed Mod, Ultra ROM one internal 5-1/4" drive, full-height dual double-sided 8" drives, plus operating system, and an extensive assortment of Zenith software: WordStar/DataStar/MailMerge, CONDOR DBMS, Peachtree Small Business Package, COBOL, FORTRAN, BASIC & BASIC Compiler, Zenith CP/M, SuperSort. Asking \$300 minimum for all, FOB South Bend, IN--or you pay shipping. Contact TIM SMUDZINSKI, P.O. Box 73, South Bend, IN 46624; phone 219-288-4685 days, 219-288-2003 evenings.

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FOR SALE -- H/Z90 System, 64k RAM, w/5.25" internal H17 drive, Z89-37 controller, two H37 dual-drive assemblies, complete set of manuals and schematics, some HUG software, CP/M 2.2.03, BASIC-80 (CP/M), EPSON MX-100 w/GRAFTRAX and manual, assorted CP/M and BASIC reference manuals. Excellent condition, still in daily use; last serviced by Heath, 11/88. Will sell only as a complete system, shipping included. Contact me--the original owner--WALTER MELCHING, 5220 Derby Avenue, Spring Hill, FL 34608; phone 904-683-7220 after 5pm.

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WANTED -- Magnolia Microsystems' 128k-byte RAM expander and software to utilise it as RAM drive. Contact DAVID E YOUNG, 402 Houghton Street, Ontonagon, MI 49953; phone 906-884-2961.

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ATTENTION SEBHC JOURNAL SUBSCRIBERS: Do you have a full set of JOURNAL back issues in your library? You better use the order blank at the rear of this edition Real Soon Now!

--<<[[8]]>>---

COMPUTER QUERIES & REPLYs

Peter McWilliams
Sarasota Herald-Tribune

Q: I'd like to get into the "computer age" as inexpensively as possible, but won't any computer I buy be out of date in six months or less? Also, prices keep falling and computers keep getting better.

R: No matter what you pay today for a new computer there's always some wise-acre who'll pounce on you and say: "Why didn't you ask me? I could have gotten you the same (better) model at half what you paid!" And don't you believe computers now are much better than those which came out six months (or even six years) ago! Most changes are cosmetic, such as new keyboard colours and possibly layouts, new paint job, etc.. No matter what all your "computer-literate" friends tell you, almost any computer you bought about five years ago (even an ibmpeesee jr) is still just as good as the day you got it! What goes out of date is software sources for it.

Q: Isn't there a danger that the computer I buy now will become obsolete?

R: That's one of the Great Myths about computers; they NEVER become obsolete! The computer you buy today will do exactly what it does now--word processing, game playing, whatever--twenty years from now. State-of-the-art may change, but as with an automobile, if it gets you from point A to point B today, it will make the same trip the same way as long as you own it, and keep it in good repair.

Q: I'm a grandfather and my grandkids have a computer. How can I repair myself to understand and use a computer?

R: Bless you for even wanting to understand! No need to go on a Grand Quest; you have the finest resources available for understanding computers: your grandchildren. Sit down with them and their computer and get involved. Ask questions, try things out, have fun--just like they do. You won't be sorry!

Q: Can people become addicted to computers?

R: Yes. They can also become addicted to automobiles, telephones, television, radio, food, sex, central heating, books, and all the other good things in life. Don't believe everything the nay-sayers spout forth! We know a couple of good fiction writers whom--after buying computers--became so fascinated with the things that they've stopped writing fiction altogether; they're addicts. But they are writing great numbers of books about computers and seem to be quite content. Unlike drug addicts, they're hurting absolutely nobody!

[Look for more "Qs & Rs" in future SEBHC JOURNAL editions...]

SEBHC JOURNAL

Volume IV, Number 6, Page 8

Do You WANT To Be Poor?!

MAKE MOOLA WITH YOUR H/Z 8-BIT MACHINE

Part II

by

Contributing Editor A. Stapher

Last month we left you knowing something about selling and costs of doing business. We also told you a little about writing classified ads and an ad technique which worked for us. What we didn't say was how effective our "flashing sign" trick was. Compared with running the same ad daily, every-other-day insertion brought in from three to five orders every day. After about three years of this our competition caught on, but by then we had moved on to another line of endeavor so it didn't matter.

Now we'll suggest a few product(s) ideas, pricing, and how and where to place your ads. In order to slant advertising properly and to choose the best places to advertise you must understand your potential customers. Hardware hackers, programmers, and unsophisticated users are the three general types for products or service in the microcomputer field. Examine the various computer publications to find which types of customers at which they're aimed. Lots of circuit diagrams means a publication is aimed at hardware hackers. Articles about operating systems and programming techniques or languages generally appeal to programmers. General articles, software and hardware reviews, listings of ready-to-run programs mean they're usually slanted toward users.

Some products, such as tee shirts, bumper stickers, or computer jewelry probably will appeal to all three types of customers. Humorous computer bumper stickers could provide a nice mail-order item. They're inexpensive to make and mail, and you don't even need a computer, just a sense of humor and some imagination. This is an item for which the market will continue growing as general interest in computers increases.

Unusual, computer-related greeting cards are another good mail-order product. Computer owners should be good customers for this item. Also you might spend a couple hundred bucks for a hand-operated badge-making setup. Edmund Scientific advertises one in their latest catalogue. Computer shows, fairs, or user conferences can also move hundreds of product-oriented badges if you contact the promoters several months in advance. These badges would also go well if you advertised a line of "personalised computer badges" ("send \$1 for catalogue") in the above publications, or even make them "while-u-wait" at a show. Computer expertise isn't required to sell these products.

Don't overlook selling information by mail. Consultation-type information and lists of software publishers are currently being successfully sold this way. Also booklets of program listings for H/Z 8-bit computers are nice mail-order items. If you don't have a copier, local "instant printing"

shops can rapidly and inexpensively print booklets for you. Rather than hiring someone to prepare text for these booklets, do it yourself. If you don't think you can write well, contact the English department at a high school or junior college. And be sure to check all work you have done for you before it is printed--avoids later complaints.

You can think up other things for mail-order selling. For example, story-telling games, animated video graphics, or computer-aided teaching programs in game form which would run on our Heath 8-bit machines. Sell any of these with a small instruction booklet accompanying each software package.

You should be by now starting to think of other products you could sell by mail. Make a list of every idea--no matter how far out--so you won't forget them. Ideas appearing impractical today could be tomorrow's winner. In particular, try to think up new personalised software products because most people like to see their names on the computer screen.

If you intend to sell services, this activity usually aims to get consumers from the local population. None of the services we'll mention here involve business consulting, most require little or no skill, others require some programming ability.

Renting a computer to someone who only needs temporary use of it with appropriate applications software is a good type of service to provide. Renters who otherwise would be spending a lot of money elsewhere will be paying you a small fee for short-term use of a specific program. Our 8-bit machines are quite easy for "non-computerate" people to learn how to use.

Be sure to advertise in high traffic areas where potential renters tend to congregate. And super-market, university, or college bulletin boards often are available "free". Use your own computer and turn out an attractive, legible ad. Post it on as many boards as possible. Do include your phone number and best time for customers to call. If you have an answering machine that's even better. In your ad offer a couple hours of "free" instruction and consultation with each setup.

Considering what H89s are selling for in good operating condition, demand at least \$250 deposit--more if a printer is included. And anywhere from \$100 to \$150 a month rent. List available software such as word processors, accounting/book-keeping packages, data bases, mathematics and spreadsheets. Post "difficulty rating" values alongside each software item. Clients are slow responding? Take all your ads down, wait a week or so then replace them with new ones which show lower prices on some items (but not all--be conservative).

Don't forget potential low-income or small-family computer renters. We'll have a bunch of ideas for you in part three in next month's JOURNAL. Be sure to read it!

8-Bit Lindley Systems Products Still Available

LINDLEY SYSTEMS is continuing its tradition of support of the Heath/Zenith 8-bit computers. Proof of this is our newest product, PC89LINK. It is currently available for HDOS and MS-DOS, and a Heath CP/M version will be available shortly.

In addition, our famous drivers, the Ultimate and the UPC, are still available. The HDOS versions have been updated to include support for HDOS 3 features like UNLOAD.

PC89LINK

This new product allows you to transfer files between an H-8 or H/Z-89/90 (running HDOS 2 or 3) and a Z-100 or PC compatible computer at baud rates up to 19200. (Also between two '89s, a Z-100 and a PC, two PC's, etc.)

- HDOS and MSDOS wildcards are supported, so sending "*" sends the entire disk or subdirectory
- Automatically determines whether files are binary or text and does appropriate translations. (HDOS does not want Carriage Returns in its files; MSDOS does.) Or force Binary or Text mode for special applications.
- Supports all serial ports on H/Z-8/89/90, Z-100, and PC.
- HDOS version supports disk mount, dismount, and reset for flexibility. MSDOS version allows change directory and current drive.
- Only a simple three connection serial cable is needed.

Order #150, \$25.00 postpaid (two disk set, one HDOS one MSDOS). Specify Hard or Soft Sector HDOS disk and 5.25" or 3.5" disk for MSDOS.

Commonly-Asked PC89LINK Questions

- Q: Will my files run after I transfer them?
A: HDOS ".ABS" files cannot be executed under MS-DOS, nor can MS-DOS ".COM" or ".EXE" files be executed under HDOS. However, you can use your text files or data files under the other operating system. With some work, it's even possible to get most BASIC programs to run. (To transfer BASIC files, be sure they're saved in ASCII mode!)
- Q: What about transferring to/from CP/M?
A: A CP/M version of PC89LINK will be available in Spring 1990. It should run under Heath CP/M (and possibly Magnolia CP/M as well).
- Q: What type of cable do I need, exactly?
A: Just three wires: pins 2, 3, and 7. Some connections require pins 2 and 3 cross over (a "null modem" cable); complete directions and examples are included.
- Q: Can I really transfer files at 38,400 baud?
A: 9600 baud is the default. The maximum effective rate depends on the clock speeds of the two computers (an AT and a 4MHz '89 should work at 38,400 baud). If you select too fast a speed, files will transfer slowly from all the Retries.

Ultimate Driver

For the H-8 and H/Z-89/90 Computers
Now Includes HDOS 3 Support!

Control all the features of your printer - the Ultimate Driver includes:

- Up to four automatic initialization sequences (HDOS: Send files to LP4; for condensed, etc.)
- Use of visible character (default is tilde (~)) to represent "control" codes in your text. Thus, to represent Escape-X in your text, you would put "~[X" in your text.
- Line merge for preparing long lines
- Left Margin, Page length, Auto Perf, skip selectable
- Support for all popular serial and parallel interfaces
- Printers: Epson and compatibles, Star, NEC-8023, C. Itoh 8510, Okidata Microline, MPI, Paper Tiger.
- CP/M version auto-installs into Heath CP/M 2.2.02, .03, .04.
- Source code is included.

Please specify operating system (HDOS or CP/M), printer type, and whether you would like Hard or Soft sector disks. \$20.00 postpaid. (See SPECIAL OFFER below)

UPC Driver

User Programmable Characters

This driver is unique in that it runs the printer entirely in graphics mode. It uses Heath compatible escape sequences, and can print all the Heath graphics characters, including inverse characters. Will print files created with Video Artist or Ed-A-Sketch.

Also can print double or triple width, and/or double height characters. Set the dot density of your printer to control darkness and size of the characters.

A character generator is included - design your own characters or modify the existing ones. (Print Greek, math symbols...)

HDOS version is device GR:, CP/M version installs as device UL1: into Heath CP/M 2.2.02, .03, .04. Graphics print program can be used with Magnolia CP/M and most others (diskette conversion may be required).

Source code is included. Please specify operating system (HDOS or CP/M), printer type (from list in above Ultimate Driver description), and whether you would like Hard or Soft sector disks. \$25.00 postpaid.

SPECIAL offer to SEBHC Journal Readers: Order both the Ultimate and UPC drivers for a combined price of \$35.00 (HDOS or CP/M). Or order all four drivers for your printer (Ultimate and UPC for HDOS and CP/M) for \$45.00.

Special offers expire 4/30/90.

**Lindley Systems 4257 Berwick Place,
Woodbridge, VA 22192 (703) 590-8890**

Call or Write for Free Catalog and Product Information.

HEY! LIGHTEN UP!



"I still think the best teaching machine is 36-24-36!"



"There must be some mistake! I was seeking detailed information on CAI -- not the C.I.A.!"



"DON'T GET MAD GEORGE, YOU KNOW IT WAS ONLY TEASING..."

The JOURNAL's SOFTWARE CATALOGUE Page

Heath/Zenith 8-bit CP/M software still in Original Factory-Sealed Packages. All Factory Warranty documents WILL BE HONORED by Heath Company, the original vendor.

All "Demo" software packages run EXACTLY AS THE WARRANTIED PACKAGES DO except they cannot be updated.

Item	H/Z cat #	Description	Price
----	-----	-----	-----
SJ-1	EC-1101	Programming in FORTRAN, with lectures on cassettes & final Continuing Education exam	* 39.95
SJ-2	173-57-1	MICROSOFT FORTRAN 3.4 (demo package, 1 only)	* 39.95
SJ-3	173-66-1	Programming in COBOL, with cassettes & final C E exam	* 39.95
SJ-4	173-58-1	COBOL-80 v4.0 Demo w/docs	* 39.95
SJ-5	EC-1110	Programming in MBASIC, with cassettes & final C E exam	* 39.95
SJ-6	HMS 837-1	Microsoft BASIC-80 soft sect w/warranty, manuals	* 39.95
SJ-7	HMS 817-1	MBASIC-80, hard sector, w/warranty, manuals	* 39.95
SJ-8	173-56-1	MBASIC-80 demo w/manual	* 33.95
SJ-12	173-60-1	"Softstuff" CPS: demo pkg	19.96
==> Get a FREE copy of CPS with any one order from February listing! Offer expires 1 March, 1990 <==			
SJ-13	173-67-1	"Micropro" SUPERSORT (w/warranty & manual)	29.95
Note: "*" means 10% off any two packages wher ordered with matching course (ex: MBASIC plus Pgm in MBASIC).			
SJ-14	173-91-1	MAIL MERGE (w/warranty)	29.95
SJ-15	HDR-837-3	DESPOOLER (w/warranty)	29.95

SJ-16	173-201-1	MICROSTAT (database w/wty)	49.95
SJ-18	HRS-837-5	Peachtree INVENTORY MANAGEMENT	39.95
SJ-19	HRS 817-37-1	Peachtree GENERAL LEDGER	39.95
SJ-20	HRS 837-37-1	Peachtree ACCOUNTS PAYABLE (all above Peachy items w/wty)	39.95
SJ-21	173-197-1	Peachtree INVENTORY MGMNT demo	29.95
SJ-22	173-61-1	Clark GENERAL LEDGER (PT equal)	29.95
SJ-23	173-62-1	Clark INVENTORY (PT equal)	29.95
SJ-24	173-70-1	DATASTAR (w/warranty)	29.95
SJ-27	SF9110	MYCHESS w/wty, manual (1 only) (may not run on Kaypro 8-bit machines)	29.95

1 - Prices include shipping inside continental U.S.A. only.

2 - We WILL NOT accept opened returns.

3 - All "Demo" software packages work EXACTLY as warrantied versions except instruction manual pages are red over-stamped. They're easily read through a piece of clear RED plastic wrap laid over the page.

4 - Some programs may not work on non-Heath machines, but usually may be patched so that they'll run ok.

5 - We can convert programs between hard- and soft-sector formats, between Heath 5-1/4 and 8-inch formats, and KAYPRO ss, sd 5.25" discs on special order. Conversion does NOT affect program operation. Price is \$5 each 5-1/4" target disc. The 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 313-755-2060, or Leonard Geisler at 313-662-0750 for more information. Note: Proceeds from all software sales made by D:KUG.DOC will cover that newsletter's operating expenses.

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The JOURNAL's GENERAL Catalogue Page

FIBRE-BOUND VOLUMES OF BACK ISSUES

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*
Special discount: * Any TWO Volumes for \$40.50 (Save \$4.50)		
Order No. V-X = All THREE Volumes for \$57.38 (15% OFF!)		
SI-(V#,I#)	A SINGLE ISSUE FROM ANY ABOVE VOLUME YEAR...	\$5.00

RENEWALS or NEW ONE and TWO YEAR SUBSCRIPTIONS

Order No. R-1 =	Regular One Year Subscription.....	\$17.50
Order No. A-1 =	AIR MAIL/NON-U.S. 1-Year Subscription..	\$25.00
Order No. R-2 =	Regular Two Year Subscription.....	\$33.50
Order No. A-2 =	AIR MAIL/NON-U.S. 2-Year Subscription..	\$45.00

SPECIAL INFORMATION ABOUT YOUR SUBSCRIPTION

All subscriptions start the month in which we receive your order. Renewals continue from month of expiration (example: your address label name reads "John Smythe [999.8.89]". If we received payment in or before August, 1989 you would receive another full year and your label name would then read "John Smythe {999.8.90}").

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	40trk ss soft-sector WordStar CP/M Version 4 H/Z19/89 Keypatch for Special Function Keys....	\$12.50
WSKPH	40trk ss HARD-sector WordStar Keypatch.....	\$13.50
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	40trk ss soft-sector TeXT PROcessor DEMO disc..	\$ 2.50
	Version 4.1 for H/Z CP/M-80	
CTXTH	40trk ss HARD-sector TeXT PROcessor DEMO disc..	\$ 2.50

Notes

- 1 - Please make payments ONLY by U.S. Dollar cheques or Money Orders. We can't take foreign currency.
- 2 - Allow about six weeks for single back-issues
- 3 - Discs and bound volumes take from five to 20 days for us to process and ship to you.
- 4 - Please remove or copy bottom half of next page, enter your order on it and send to us with payment.
- 5 - When renewing subscription or ordering be sure to include your latest issue's mailing label with order.

N.B.: Postage/shipping is included in all prices.

LETTERS POLICY

Our "MAIL BOX" feature has been provided as an open forum for the free exchange of H/Z 8-bit computer information between all subscribers and readers of the SEBHC JOURNAL. We ask all correspondants to keep their letters reasonably concise and preferably around 250 words maximum length (about six screens, 24 lines on screen of ASCII text). The JOURNAL shall exercise its' right to condense letters exceeding this recommended maximum unless that might destroy their intent or meaning. In such cases we shall contact the writer.

The SEBHC JOURNAL RESERVES THE RIGHT TO REFUSE TO PRINT any letter containing profanity, derogatory racist, or sexist remarks, specific political or libelous statements of any nature directed toward any individual or organisation. The JOURNAL will not knowingly publish malicious fabrications, lies, or distortions of fact, but will take appropriate legal action against any individual(s) uttering them.

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The Subscription & Order Blank

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H/Z Computer: H8[_] H88/89[_] H90[_]	[_____]	[__]	\$_____	\$_____
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NOTE--From 1-Dec-88, only bound copies of Volume I and Volume II.

THANK YOU FOR YOUR ORDER!

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: \$17.50/year in Canada, Mexico, USA and its' possessions. FIRST CLASS and FOREIGN are US\$25/year. Subscriptions start the month following order receipt. PLEASE MAKE: CHEQUES or MONEY ORDERS PAYABLE TO L E GEISLER, NOT "the JOURNAL" or "SEBHC". Single 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 follows their name on mailing label. 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, Monday thru Friday. Other times (EMERGENCIES ONLY): 313-769-6052 (residence).

Serving The H/Z 8-Bit User Community Since 1986

SEBHC Journal

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