Saving Our HEATH Eight-Bit Machines!

SEBHC JOURNAL

Volume 4, Number 8 $2.50 a copy, $15.00 a year March, 1988

This is the Year of The Dragon -

HDOS Disc #0 Improved & Revised

NEW: HDOS GAME DISC #1!

Cumulative Index -- Finally!

Details Inside...

READER'S LETTERS

Dear Len,

As an advertiser, I appreciate your policy of free ads for vendors of CP/M-compatible products. As you know, I took advantage of your kind offer last fall, two months running. I haven't sent ads since then because:

1) It takes time and energy to produce good ad-copy
2) Our product mix hasn't changed, so we don't have new products to announce
3) New as well as old subscribers have access to JOURNAL back issues in which our products were reviewed and advertised.

As an alternative, would you consider publishing a monthly listing of companies who still promote CP/M, maybe noting some of the products they offer? I wouldn't mind sending you a postcard each month telling you we're still here. [Sure--consider it a new feature! -- ed]

I have not yet received the diskette you sent, the one with a blurb I could post on BBS"s here in Chicago. Want to try again? Or maybe you could send a paper copy. I think your policy of free ads for CP/M vendors should draw some response. [OOPS! I think that disc was one I bulk-erased without thinking! A new one is on the way...ed]

Finally, I'd like to compliment Lee Hart for his "who-done-it" article in your January '88 issue. His "How NOT to Fix Delicate, Expensive Equipment" was fun to read, and it passed along some ingenious tips and strategies besides. [Lee will be delighted to read your reaction! -- ed]

The twisted-drive-frame problem he mentioned is one I experienced with my SA-800 8-inch drives. When I started having problems reading the inner tracks, I originally discounted the possibility of a twisted frame. The frames were made of thick steel, and both drives were sitting firmly on top of my IMSAI's case. But when I finally shifted the IMSAI mainframe around, to minimize the possible effect of the swayback in my workbench, the problem disappeared. This was about 8 years ago, and the problem has not recurred.

Thanks again for your lively and useful newsletter.

R LIPSCOMB, Logic Associates, 1433 W Thome, Chicago, IL 60660

[Ray, I've checked over the software files you sent--thank you very much indeed. I've de-librariedthat REDIRECT.LBR file--but that's one which will have to wait until after this edition's out the door. It takes me an awful lot of time to put one of these editions together, what with trying to run my analogue computer service business alongside the JOURNAL. But, One Of These Days, Real Soon Now I expect to have someone to help as regular part-time editorial staff and general office assistant. When That Day Arrives, you'll see the JOURNAL getting out the door Much Earlier Than Usual! And I'm Reasonably Sure you'll get the "blurb disc" before you read this. -- ed]

Hi Len!

Thanks for another great issue (Feb '88). Have you given any thought to making an index to vol. 1 (or from issue 1 to date)? I'd be glad to pay extra for it, or even have part of a regular issue devoted to it. Or perhaps you could offer it on disc as part of one of your disc packages. You could do it as regular ASCII text files, which readers (users) could access with their favorite text editor.

Strum's forthcoming series looks great! Have you considered editing down some of the letters to make room for more tutorials, product evaluations, etc.?

I had a most enjoyable phone chat with Lee Hart yesterday. His new number is (616)-782-3980 (different from what you published). By the time you print this, Lee [told me he] will be caught up on 19/89 SUPERSET orders and ready to immediately fill new orders. Let's get behind him and encourage him. [Right on! See Lee's note elsewhere in this issue. -- ed]

TERRY HALL, Wheaton, Il 60187

[Nice to hear from you Terry. We've taken your advice and put a Cumulative Index in this edition. Have you ever considered writing an article for the JOURNAL? You have a lot of good ideas which I'm sure many readers would greatly appreciate seeing in print (wouldn't you, too?). -- ed]

Hi Len,

Just a quick note to let you know of a couple of problems. First one is that I received two copies of the JOURNAL. [Thanks for notifying us, the problem (one more leftover from that SEBHCMBR.DTB file garble) has been fixed. -- ed]

The other thing concerns ARRAY SOFTWARE who have advertised in your fine [THANKS! -- ed] newsletter. I ordered a copy of MBASIC from them. I got quick service and the product was as advertised (Zenith software in the original cartons). The program worked fine but the problem was that every page in the manual had a big red stamp covering it that said "This manual is for demonstration purposes only and may not be copied or sold. This product may be purchased from your Zenith Data Systems dealer." The manual is still readable but the big red stamp is a little disconcerting. It didn't bother me too much because I already had two copies of the manual I obtained from other sources. I do feel that it might be a good idea to warn your readers about the situation and maybe find out if anyone else has encountered the same problem. Keep up the good work.

BOB OLSON, Hemet CA 92343

[Bob, that's a "dealer demo" package which Zenith forced HECs to buy. I read my copy through a sheet of clear, red plastic which filters out the red overprinting. Try it. -- ed]

Dear Len,

I would like to convey my continuing poor experience with Trionyx Electronics Inc. to my fellow SEBHC JOURNAL's readers.

Back in 1983 or 1984, when the release of the CH8 Universal Floppy Disk Controller was announced, I jumped on it. I think

LETTERS, Continued

of myself as having a little more than a fair amount of patience, but it took me about 6-1/2 months to build the kit version.

Then I sent off a letter ordering the mass memory board for my H-8 and asked if the CH8 could be used with my H-47 system. They responded promptly and told me that it would work under HDOS. But under CP/M I would have to modify the BIOS.

So far so good... I finally got around to installing my CH8 in January of 1987 but without success. I wrote to Mr. Perry asking for suggestions on trouble shooting this board. He sent me a number of suggestions, with the last stating I should send it back to Trionyx for repair.

After a week or two of following every [pc-board] trace, looking for bad solder joints and triple-checking that the right part is in the correct location, I finally sent the CH8 back to Trionyx (March 1987).

Come June 1987 I sent a SASE to Mr. Perry asking if they recieved my board and how long they estimated its' repair. They returned my SASE to advise me that they did indeed recieve my board and to expect 4-6 weeks' repair time. Well, knowing the past record of Trionyx, I read between the lines and translated that to mean 4-6 MONTHS.

In December of 1987 I sent off a letter asking for the status of my CH8 and placing an order for the Mass Memory Controller card BUT only to make shipment after my CH8 has been repaired. Now its February 1988 and I am still waiting for an answer!

I hope they see this [letter], because I am looking forward to running my H-8 with a memory disk! Although Trionyx has the BEST products for the Heath eight bit world (they even have a connector box to tie an H89 to a 16-bit H8) Trionyx's correspondence with their purchasers is "The PITS"!

I'm winding this up with a few questions for our readers:

1. Will the Magnolia MicroSystems Winchester card (part #77314) take any 20 Meg drive or MUST it be a CORVUS?
2. Is HDOS 3.0 available on any Mid-Atlantic 88S's?
3. Does Henry Fale's booklet still have H-8 + H-89 stuff? I'm looking for a H8-47 card.

Hope to hear from you soon and Thank You.

ALEX BODNAR JR, C33 Conowingo Circle, Oxford, PA 19363-143

[And thank you, Alex. Now, will our other readers please answer Alex's questions? And how about it, Bill Perry--you folks still in business? If so, send us your 7-inch-wide by 9-inch-high line-copy-only ad for *FREE* SEBHC JOURNAL inclusion in an upcoming edition. There're at least thirty-five potential customers among our 300-plus paid-up subscribers (myself included) who Really Need or Want your H-8 products! -- ed]

Dear Lenny,

It just keeps getting better! I've just finished [reading] the February JOURNAL. WOW!

In the FOR YOUR INFORMATION department... While looking through a surplus catalogue (government, commercial, etc.) I came across a listing for a Zenith CRT. It was described as a 12-inch diagonal green video display, p/o Heath/Zenith H/Z100 microcomputer. It includes an MN1210P31AU CRT and printed-circuit board with adjustable focus, brightness, vert-size and width. It is NEW with no frame or AC supply and the cost is $12.95. This seems like a good deal for a spare CRT and parts for the '100. [Too bad this tube is too long for our beloved H19/89s! -- ed]

My hat is off to Mr. Henry Fale of QUIKDATA, Inc. After searching for almost 2 years for a copy of M8ASIC for HDOS, I found Quikdata, Inc. had one. Although there wasn't any documentation with it, I'm sure I can find it somewhere. Perhaps one of the JOURNAL's readers will have a copy they'd like to sell? Anyway, I can now check out those programs on your HDOS "Programmer's CARE Package" Disc #0 which use M8ASIC.

Speaking of discs. Has there been an upgrade to your CP/M GAME DISC #0? While thumbing through Volume II, #4, I read about a program called WOODCUTS.BAS (pp2 & 4). Since I sometimes do a little woodworking I though this program may be of help. I checked my GAME DISC #0 copy and didn't find WOODCUTS on it. If the JOURNAL has an update which includes this program, please let me know so I can send in my disc for the update.

Keep the good "stuff" comming. And a SEBHC JOURNAL BBS sounds good to me. I believe it would nicely complement the JOURNAL!

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

[Congrats on your finding a "legal" copy of M8ASIC 4.82! If you can't get a "surplus" copy of the manual, I know somebody who'll slip you an "illegal" photocopy of it for a nickel/page or so. What with Heath (and Zenith) abandoning one of their more-popular product lines, this may eventually become the only way any of us can keep our still-working machines going! There probably are a gang of "Legal MENSAs" out there who are ready to lean back in their leather-clad swivel chairs to tell us about all the penalties we may accumulate by ignoring H/Z's copyright notices, but H/Z still has not made any public response to Kirk Thompson's letters! If H/Z continues to ignore us we can only interpret their silence as tacit approval to go ahead and "pirate" anything we can! Are you reading us, H/Z? Now, about your HDOS "Programmer's CARE Package" Disc #0 question: Yes, we've revised this disc and have created a companion disc, the "SEBHC JOURNAL HDOS GAMES DISC #1". Both discs sell for $3.00/ea, soft-sector, $3.66/ea, hard-sector. (See our "NEW DISCS DIRECTORY" elsewhere in this issue.) If you or any other reader wants a free upgrade of HDOS Disc #0, send it to us with a US $1 stamp to cover (about half of the) return cost. Or, if you want to get the upgrade AND our new HDOS GAMES DISC #1, forget the $1 stamp and include your cheque to cover GAMES DISC #1 price and we'll upgrade your original disc FREE and send you BOTH discs in the same mailer. How's that for a real, honest-to-goodness bargain?! -- ed]

LETTERS, Continued

Dear Mr. Geisler:

Please find enclosed a check for renewal of my subsription.

And thank you for printing my article on ZCPR3 in II:7. I hope your readers found it enjoyable and of some value. If you would like more on the subject of ZCPR3 later, I shall be happy to send another report. [Please do! -- ed]

I have been meaning to write an article on yet another speedup modification for the H/Z89A. This one a friend and I built about six years ago. Its' claim to fame is that software patches or changes need not be made (at least, the only program I couldn't run at 4Mc/S was USCD Pascal using p-System) of all the software I've tried. This modification DOES NOT require cutting any printed-circuit traces. Only a toggle switch, costing less than $10 and mounted at the computer's rear, is needed to toggle the system between two and 4Mc/S. Installation shouldn't take more than three hours, even if you have ten thumbs and no fingers! And if you are running at 4Mc/S, the system automatically switches to 2Mc/S when it accesses any hard-sector drive.

I think you are providing a great service to those of us who feel [Don't you mean "know"?! -- ed] that the eight-bit world is still alive and well. Keep up the good work, and thanks.

RON EGGEMEYER, 2209 N 17th Ave, Phoenix, AZ 85007

[Ron, check your mailing label on this edition--you're in for a nice surprise! Surely by now you realise that what keeps us at the JOURNAL going is the steady flow of "how-2" or "Gee Whiz! Look What I Did--Now You Can Do It Too!" articles flowing in from enthusiasts such as yourself. New information is the incentive keeping our subscribers happy and the fuel which keeps their machines Up And Running! -- ed]

Dear Lenny,

It was great talking with you yesterday. Hope all is going well in the "Midwest".

Thanks for holding those H8 memory cards for me. [You are quite welcome! -- ed] You'll find enclosd an IMO for US $79 for 64k of memory cards and one year's extension to my membership/subscription.

What's happening up here [in B.C.]? Lots! My main machine is an H89A with the D-G Electronics S89 CPU board, H17 inboard dual Z37s outboard, and an MX80A running off the serial port. I also have the FBE Spooldisk installed. Quite a lot to cart around when working out of town as I am now. My other H89A--a "stock" machine with 3 H17s (and 2 Z47s as soon as I get some other things done) and a 3-port serial card with nothing attached--sits at home on my mother's desk running Roots/89. In the "computer room" downstairs in various states of disassembly are a Z25 printer, an unbuilt H19A, two H8s, sundry modems, switches, etc. I should also mention the H11A for which I have only UCSD Pascal. Anyone out there have a spare copy of the Heath OS (HT-11)??

Those [H8 memory] cards are for me--or a new aquaintance who picked up a working H8 at a swap meet although it has just the CPU and 8k [of memory installed]. I have on hand several H8-4 serial cards, a few H8-5 cassette boards, and an undetermined quantity of surplus memory cards for the H8. Open to offers. Possibly swap for an H8 H17 controller (also willing to buy one).

My current projects are as follows:

a. Using an H8 as a programmable serial switcher - the boxes are fine, but with all the possibilities which I have. . .
b. Programming an H8 or H89A as a security system incorporating the now-discontinued BSR X10 serial interface. . .
c. Getting my Prometheus 5 on-line. This is an ancient 5.25-inch hard disck built for the TRS80 Model I, I'm told. The interface looks like a Western Digital card such as Sigmasoft uses on their system.
d. Adding computerized detection and signalling to my model railway, similar to the CMRI interface described in "Model Railroader" magazine last year.
e. Becoming more fluent in Assembly Language as well as BASIC, FORTRAN, and COBOL. Getting to know UCSD PASCAL.

I do have one problem to report. Perhaps you can help, Lenny. My main machine will not print when running CP/M at 4Mc/S using S898IOS Version 2.2.10. The machine works fine with CP/M 2.2.04 or 2.2.10 at 2Mc/S, and under HDOS 2.0 at both speeds. Any suggestions?

Keep up your great work on the JOURNAL. Every issue is exciting. Keep those eight-bit machines humming, too. Mine do, all the time.

BRIAL L DOBBIN, 4808 Trafalgar Street, Vancouver, B.C., Canada, V6L 2M9

[Hey Brian! Thanks for the International Money Order! Your subscription just grew another year. And now I've got to dig out those three memory boards, pack 'em, take 'em across the boarder to Windsor and mail them parcel-post. (If I send that large a package by U.S. Snail it may never get there--especially if it has a customs declaration on it!) As for your "don't print" problem, do you mean you can't send stuff out to LPT: or LST:? I don't have that kind of trouble with my D-G S89-equipped H89A, just the inboard 40trk double-sided A: drive crashing boot discs every now and then! I do sometimes have problems with the cache memory under HDOS 2.0 when doing a Hoyle & Hoyle QUERY!2 SORT routine--then whole gobs of data just vanish into the elsewhen, never to be seen again by mortal eye. How about some of you other SEBHCers getting in touch with Brian, Right Away?! -- ed]

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NTED. . . HELP WANTED. . . HELP WANTED. . . HELP WANTED. .

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I need to contact anyone who has interfaced an H89 with a ham radio using the Heath HD-3030 terminal interface. How do I connect the various hardware components? Jared Freeman, 600 Ginger Tr, Lake Jurich, IL 60047--312-438-0513 after 6pm CST.

LETTERS, Continued

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ALE... FOR SALE... FOR SALE... FOR SALE... FOR SALE..

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H19A with green screen, $100.00 or best offer. Jared Freeman 600 Ginger Trail, Lake Zurich, IL 60047 Phone 312-438-0513, after 6pm CST.

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Dear Lenny,

I have moved from my temporary address in Kalamazoo. The new address for me (and TMSI) is:

TMSI c/o Lee Hart
28612 Middle Crossing Road
Dowagiac, MI 49047
Phone 616-782-3980

By the way, I have not received the February SEBHC JOURNAL yet. Has it been sent? [Yes, by bulk mail, but to be quite sure we sent another one first class to your new address immediately on receiving this note. -- ed]

Regarding the letter from Mr. Ridlon in the Dec 87 JOURNAL (printed contrary to your published policy of notifying the vendor first), I STILL have no record of any order from him, he has not contacted me, and he has not answered my letter. You should print a retraction since [to the best of my knowledge] no such order exists.

Regarding the letter from Mr. McFarlane [which] you published in the Jan 88 JOURNAL, I wrote him in mid-January asking for a copy of his order, since I hadn't received anything from my [former] office help on it. On 25 January I received the office records from my old office [in Ann Arbor] and Mr. McFarlane's order was in the delivered stuff. Mr. McFarlane also sent me a copy of his check and order. My old office records verify that his order and check were received in Ann Arbor. I have therefor shipped the Superset to him.

LEE HART for TMSI, Dowagiac, MI 49047

[Lee, thanks for the address update. We called Mr. Ridlon to find out what happened and he said that you sent him a letter explaining why his order hadn't yet been processed. He also told me that he is going to mail you a charge slip photocopy to prove he'd actually ordered a Superset upgrade for his H19 terminal. I hope this information will blow away the clouds of misunderstanding and ill will... And good luck in your new location! Keep us informed. -- ed]

Dear Mr. Geisler:

In the Jan '88 issue of the JOURNAL, J D Miner asks for a source of hard-sectored discs. When I first got my H89, hard sectored discs were expensive so I purchased a leather hole punch (US GENERAL, 100 Commercial St, Plainview, NY 11803, stock #48785--$4.99) and made a template from an original 10-sectored disc. Since then, I've purchased soft-sectored discs whenever they are on sale for five to six bucks a box and make my own holes. To date I haven't had any problems reading these home-made hard sectors. [Great idea! Always though one could do it that way, but never had enough gumption to try it myself. -- ed]

Now, in response to D Gilbertson's question (Feb '88), I purchased the Herby board with 256k onboard RAM and expanded it to 512k. Installation was easy, and when I ran into trouble and called TD Engineering I got immediate help. The utility files which came with the board are excellent and the board works great! [Good news, indeed! -- ed]

I do have a question: I received the replacement for that defective Game Disc #0 and have shipped back the bad one. Have you received it? [Yep, found out it had been partially erased after reading it with SZAP! What's with those blokes at the Post Office? -- ed]

NICOLAS PINILLA, 1530 Commonwealth Ave, Bronx, NY 10460

[See, your letter proves that us old-time H/Z 8-bit types are resourceful and ingenious! Keep up the good work. Would you --or someone--take a few step-by-step photos of how you make those hard-sector discs? I think the rest of our hard-sector users would appreciate this kind of hands-on information--I would! We'd be delighted to run your story and pictures in the SEBHC JOURNAL--and of course you'll get a subscription extension as honorarium. Now that "no-name" soft-sector discs are available in bulk for twenty-five cents each, this technique certainly will help cut costs in keeping our equipment up & running. -- ed]

Dear Lennie,

I bought Don Deck's H1000 because I have day-dreamed over the ads for that board for as long as I've seen the ads, and I'm a dyed-in-the-wool H89er! Even though I've had my H89A for six years, I am just now beginning to aquire real programming skills and learn how the computer's guts work.

I don't fancy retracing my learning steps on a newer generation computer--not at my present absorption rate, that is! I really didn't begin to make progress until I aquired Borland's Turbo PASCAL when buying my second (of three) H89s. I heartily recommend this language to all, 'though you should also get "Mastering Turbo PASCAL" by Tom Swan to help you painlessly learn and aquire proficiency in the language.

In my own case I have been able to write a SCREEN program in Turbo PASCAL which you might consider for inclusion in the SEBHC JOURNAL's budding library. Here's what it does:

a. Draws on the screen in normal/reverse graphics using the shifted keypad to position the cursor (including diagonal) with a 25th line help [display].
b. Saves screen to memory upon leaving DRAW mode or within DRAW using Alternate Keypad (a stroke of the RED key).
c. Saves memory to disc or calls File to memory.
d. Prints screen to MPI printer in normal/reverse graphics (doesn't yet intermingle ASCII).

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LETTERS Concluded & NEW-DISC NEWS

e. Uses Alternate Keypad for several functions

I will include the complete source code and a compiled version and any instructions for madyfiying it that I can get to between now and then. The biggest drawback is that each printer would need its' own routine to shift into graphics mode, and a complete library of Heath graphics characters built in similar to the one I did for the MPI-99.

Now that I'm the owner of an H1000, I'm interested in the success/failure ratio of other H1000 owners, and would like to see some kind of H1000 special interest group initiated. [I rather fancy the name "SIGH-1k" -- ed] It would be quite nice to have a running correspondence with other owners of H-1000s to avoid the trial and error which goes with wondering what will work, what won't, and why [it does or doesn't]. For instance, I've just bought MIX C (for MS-DOS) language, which I'm trying to install--with only limited success--on my '1000. The whole package--Editor, Compiler, and fancy Debugger--only cost $39.95. If I can't get it up and running, it looks so good that I'll probably order the CP/M version. I'm sure that MIX C (which claims 100% full C capability) WILL install on an H89/H90 because it is [advertised as] one of the standard installation options (I saw it in "Computer Shopper").

Obviously, if I still have an MPI-99 printer, I don't chase after the "Lastest and Greatest" [hardware], and the fact that I went to such great lengths to build my own graphics driver over the course of several years identifies me as pretty cheap. [Not to ME, it don't! You are simply conservative, ingenious, and THRIFTY! -- ed] I don't mind spending money on my computer, but by golly, I'll get my money's worth out of it before I chuck it! [You & me both, chum! -- ed] I've just this week finally ordered a 2400-baud modem after five years of 300 baud. So I intend to get used to this H1000, and continue using my other Magnolia-carded H89A. I'll probably continue subscribing to the SEBHC JOURNAL as long as you continue printing it.

ED THOMAS, 4108 Lees Corner Road, Chantilly, VA 22021

[Hey, Eddy! Don't let the clowns bug ya! We've got a long, L-O-O-O-N-G way to travel before our grey boxes gather any scrap-heap potential. Read R K Strum's article--he proves it is cheap & easy to keep your H/Z 8-bit machine humming along! Meanwhile, I'm eagerly awaiting your software "baby". -- ed]

Disk C: #0 - Label: SEBHC JOURNAL CP/M-80 GAME DISC #0

ACES	.bAS	15K	NEWPIP .cOM	8K	XDIR .cOM	8K	
CLS	.aSM	1K	PIPHELP .aSM	1K	XERA .cOM	1K	
CLS	.cOM	1K	PIPHELP .hEX	1K	ZDIR .cOM	3K	
COPY	.cOM	1K	READTHIS.qST	5K			
ERRORS	.cOM	1K	RENAME .cOM	1K			
FOGINDEX	.bAS	11K	RENUMBER.bAS	5K			
IDENT	.sYS	1K	SETMX .aSM	6K			
LABEL	.aSM	2K	SETMX .cOM	2K			
LABEL	.cOM	1K	SETMX .hEX	4K			
NEWFBAD	.cOM	4K	WOODCUTS.bAS	10K			

23 Files. Used = 93K. Free = 55K.

Disk DK0: #0 Label: SEBHC JOURNAL HDOS 2.0 "Programmer's CARE Package" Disc #0

Name	Ext	Flg	Size							
BCH	DVD	W	7	HC	ASM	W	37	SYSCHECKABS	W	10
BCM	DVD	W	7	HC	DOC	W	12	SYSERR ABS	W	2
BHB2MBASBAS		W	12	MBSORT	ASM	W	16	YNKEYS BAS	W	5
BHFILES	BHB	W	5	MBSORT	DOC	W	13			
CHEKBOOKBAS		W	16	NEWLABELABS		W	3			
DEVICES	ABS	W	2	OUTLINE	BAS	W	7			
DISASSEMABS		W	35	README	DOC		25			
EXTRACT	BAS	W	6	RENUMBERBHB		W	18			
FOGINDEXBAS		W	37	SD	ABS	W	16			
HC	ABS	W	5	SEARCH	BAS	W	6			

23 Files, using 302 sectors (314 allocated, 54 free).

SEBHC JOURNAL's HDOS 2.0 GAMES DISC #1

Disk DK0: #1 Label:

Name	Ext	Flg	Size							
BANDITO	BHB	W	24	NUMBERS	BAS	W	25			
BHB2MBASBAS		W	12	README	DOC	W	28			
CHESS	ABS	W	26	WOODCUTSBAS		W	38			
CHESS	DOC	W	21							
HEADLINEBAS		W	10							
INSULTS	BAS	W	7							
INSULTS1BAS		W	8							
LETTRES	BAS	W	46							
MICTALK	BAS	W	22							
NOEL	BAS	W	83							

13 Files, using 350 sectors (354 allocated, 14 free).

The JOURNAL's CP/M & HDOS DISC-CONTENTS Described Briefly
(See Order Blank on page 15)

CP/M GAME DISC #0

o ACES.BAS (Lee Hart)--World War I aerial dogfight game. ****
o CLS.COM (Staff)--Clears screen easier than SHIFT-CTRL-ERASE finger-stretching exercise! *****
o COPY.COM (from REMark)--Easier to use and smaller than PIP, moves files (incl $SYS files) w/o lst changing flags. *****
o ERRORS.COM (fm REMark)--Checks for & lists soft disc errors since last warm boot. Very handy if drives are suspected. **
o FOGINDEX.BAS (CodeWorks) Also on HDOS disc, below. ****
o LABEL.ASM (Staff)--Label your CP/M boot discs and use AUTO COMMAND to display on either cold or warm boot--or both. ***
o NEWFBAD.COM (Pub domain) Non-destructive FINDBAD program to run after FORMAT. Locks out bad sectors on active discs. ***
o NEWPIP.COM, PIPHELP.ASM, 'HEX (Lee Hart)--Standard PIP but with a help file. See READTHIS.1ST file. *****
o RENAME.COM (fm REMark)--Easier to use than resident REN command because it uses English-language command form. *****
o RENUMBER.BAS (CodeWorks)--Goes *INSIDE* MBASIC to renumber chosen blocks of lines. Serious worker's "Must" utility! *****
o SETMX.xxx (from old HUG CompuServe library)--Changes Epson printer fonts from computer keyboard. "Must" utility. ****
o WOODCUTS.BAS (CodeWorks)--Computes and prints scrapless cut guide for serious, economy-minded woodworkers. ****
o XDIR.COM (GEnIe download)--Lists all files on a disc in 4-column alpha display, displays user areas, file status, file space used & remaining free space. "Help" included.
o XERA.COM (from REMark) Easier use than STAT plus ERA, has prompt menu, help file, hard to make errors. "Must" utility.
o ZDIR.COM--short version of XDIR.COM, only alpha sorts files starting with lst letter (or number) in filename AND extension, shows occupied and remaining space.

HDOS 2.0 "Programmer's CARE Package" Disc #0

o BCH.DVD--Simplified HDOS version of HUG's KEYMAP.COM. Use with Benton Harbor BASIC as BC.DVD One-key cmnd word entry.
o BCM.DVD--MBASIC version. Both programs courtesy of Maurice Desmeules of Montreal, Quebec, Canada HUG. *****
o BH2MBAS.BAS--Converts BHBASIC programs to MBASIC format and changes some BH cmds to MBASIC version. Dr Wm Campbell *****
o BHFILES.BHB--BH BASIC program lets you read directories without exiting BASIC. Duplicates MBASIC "FILES". From REM.
o CHEKBOOK.BAS--Computer version of regular check-book register in MBASIC 4.82. Can work under CP/M. From REM. ****
o DEVICES.ABS--Checks and displays devices and status on the booted system disc. Handy if your own memory's weak. ****
o DISASSEM.ABS--(Old CompuServe HUG download) Works something like ASM, in reverse. No document file, test it on a "junk" file and let us know how to use it! ?????
o EXTRACT.BAS--"CodeWorks" program, self-prompting, extracts stuff from any ASCII file. Must use to appreciate! *****
o FOGINDEX.BAS--Fine "CodeWorks" program helps you write better English; self prompting, run *before* submitting anything to a publisher. ***
o HC.ABS--(Old CompuServe HUG download) Sends H19 or H/Z89/-90 screen to LP:. HC.DOC file has instructions. **
o MBSORT.ASM--(From pre-BH CIS HUGBB library.) When assembled can be loaded and called from a program. See .DOC file.
o NEWLABEL.ABS--Pat Swayne's "LABEL.ASM" from REMark with added help file for easier use. Re-labels discs with up to 240 characters/ spaces. (INIT only allows 65!) *****
o OUTLINE.BAS--"CodeWorks" MBASIC programmer's utility, self-prompting, helps you write programs & prints results. ****
o RENUMBER.BHB--REMark program renumbers any BHBASIC program SAVEd in standard ASCII format. Similar to MBASIC RENUM function. Self prompting. "Must" BHB utility. *****
o SD.ABS, SD.DOC--(CIS HUGBB) Similar to above CP/M XDIR.COM. Short form prints sorted directory showing space used, flags & space left. Long form shows file creation, last revision dates. Has cryptic help file. *****
o SEARCH.BAS--"CodeWorks" MBASIC utility, looks for a particular item in an ASCII program file. Self prompting, valuable programmer's timesaving tool. Sends output to LP:. *****
o SYSCHECK.ABS--(From Maurice Desmeules) prints full-screen graphics display of disc statistics per HDOS 1.6's STAT command. SYSERR.ABS is "short form" of this utility. ****
o YNKEYS.BAS--From REMark. Lets you do more with MBASIC 4.82. Appended to or MERGE in any MBASIC program. **

HDOS 2.0 GAMES DISC #1

o BANDITO.BHB (Staff)--Cassette BAS game re-done in BHBASIC. Simulates one-arm bandit. Will run in MBASIC w/few changes. ASCII file. Jazz up "fruits" display & it's a winner! *****
o BH2MBAS.BAS (REMark)--Doc Campbell's utility converts BH-BASIC program to MBASIC format. Self-prompting. *****
o CHESS.ABS (Netherlands HUG)--Stand-alone SARGON-type game. Instructions are in CHESS.DOC. Several play levels. *****
o HEADLINE.BAS (Staff)--MBASIC random sentence generator dup-"National Enquirer" headline style, language. FUN-NY! *****
o INSULTS.BAS, INSULTS1.BAS (REM w/Staff embellishments)--Another FUNNY language program. More work possible. ***
o LETTRES.BAS (Maurice Desmeules/Montreal HUG)--A neat FRENCH Language w/graphics program. Can you improve it? *****
o MICTALK.BAS (Microcomputing/Staff)--More funny stuff! Generates often hysterical simple declarative sentences. *****
o NOEL.BAS (REMark/M Desmeules)--Nifty version of J. McGraw's animated Christmas graphics program. *****
o NUMBERS.BAS (REM/Staff)--Computer-Aided Instruction graphic program teachs kids simple math. Can be improved. ***
o WOODCUTS.BAS (CodeWorks)--Cabinet-maker's friend. Eliminates tedious hand-layouts of material cuts for minimum waste.

NOTE: Above discs in sssd hard-sector or ssdd soft-sector format. See prices on order blank, page 15. Improve any of these programs, send us the new code & maybe earn royalties!

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Concluding article in this very informative series. Includes a general description of Tim's ADL package and how to order it.
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SEBHC JOURNAL

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EIGHT BIT SURVIVAL IN A peesee WORLD

Part One

"Eight Bit Survival in a peesee World" was
Copyrighted in 1988 by R. Kenneth Strum

The H-89 series of computers are not for "mainstream computing" as Joe Katz describes peesees. I think that in a few years, the more numerous peesee users will start similar series when the PS/2 and Mac-II machine types achieve domination. Peesee users take note: Learn from the H8 and H89/90 pioneers!

The H-89 can, using the right software tools and hardware support, perform well as a personal computer for a great number of tasks. MYCALC for H-DOS or Multiplan for CP/M will not stand head to head against Lotus 1-2-3. But both MYCALC and Multiplan will crunch numbers. Rembrandt, a CP/M program, will take numbers from a spreadsheet and make a graph. Perhaps not as pretty as Lotus 1-2-3, but very nice anyway. Also, a four Mc/S Z80-equipped H-89, with 19.2KB terminal setting is a fast machine compared to a 4.77 mHz 8088 peesee. The '89 is extremely fast if it has a RAM disc (such as the Super Ram 89) installed. The AT class of peesee will overwhelm the '89 at almost any level of performance (except if you have to buy one, but don't have the money).

The key to getting best performance out of your '89 is application programs (tools), vendor support, and utility (support hardware, operating system, and utilities). There is a very good selection of all these items for '89 users. We'll explore some of these tools in the months to come. First, let's look at two vital support programs that help us survive in a peesee world.

CPC FILE TRANSFER PROGRAM

CPC, from ANAPRO, is a set of two programs. One formats DSDD PC-DOS discs on an H-89 with Z-37 disc controller. The other program is a sweep type program that copies files to and from both Heath/Zenith soft-sector CP/M and PC/MS-DOS discs. Powerful stuff. Allows free movement of all types of files between the two operating systems. Note that you can't run a MS-DOS program on a H-89. For example, if you have Wordstar or New Word on your H-89 at home and use them on a peesee at the office, then you can bring home your work on a MS-DOS data disc. Use CPC to copy the files to your CP/M data disc and work away. When finished, use CPC to copy the updated CP/M file to the MS-DOS disc, then take it back to work. I've used CPC since it was first announced. It's one of my most valuable support utilities.

CPC's format program, PCForm, is simple to use. Execute as: "PCFORM". The program comes up, announces its' version, (mine is 1.10) and which of the one format(s) available do you want to use. The currently available format is PC-DOS 2.0 DSDD 48 TPI, with a storage capacity of 360 K. CPC has the capacity to read many other PC formats. The program shows side and track being formatted, similarly to PC-DOS FORMAT. That's it. My PCForm runs under 64 K CP/M-80 (Heath/Zenith 2.2.04) and a 63K Z-system on the Super Ram 89. It doesn't seem to run with less memory. But it also runs on a plain-vanilla 63K Z-system.

The file transfer program is named "CPC". It's patterned after the sweep and Disk77 programs. Movement of files across the CP/M and MS-DOS disc formats is very easy. In moving files you have the capability to:

- Group move (copy) files by tagging them first (what a blessing!)
  From MS-DOS to CP/M
  or
  From CP/M to MS-DOS
- Access MS-DOS subdirectories as source (not destination)
- Move individual files
- Erase CP/M and MS-DOS files and subdirectories
- View and print text files
- Rename files
- Debug and adjust disc parameters

CPC will read the following PC disc formats:

PC-DOS 1.0 SSDD 48 TPI (160 K 8 sector)
PC-DOS 1.0 DSDD 48 TPI (320 K 8 sector)
PC-DOS 1.0 DSDD 96 TPI (640 K 8 sector)
PC-DOS 2.0 SSDD 48 TPI (180 K 9 sector)
PC-DOS 2 & 3 DSDD 48 TPI (360 K 9 sector) "the standard"
PC-DOS 2.0 DSDD 96 TPI (720 K 9 sector)
Eagle 1600 800K 5 sector 96 TPI

Requirements for CPC are: H-89 or H-8 with soft sector controller. H-37, CDR, and magnolia controllers are supported. CP/M versions for Heath/Zenith 2.2.03 & 2.2.04, CDR 2.91, Magnolia 2.24, and Z-system are supported. Both 48 and 96 TPI double sided drives are supported.

CPC is simple to use--just follow the menus. A hint for its' use: ANAPRO uses the term "move" to denote copying between CP/M and MS-DOS. Invoke CPC with "CPC". Then, select the disc type of MS-DOS disc to read from the menu. Then, when prompted, select which drive will be used for the MS-DOS disc. You are now at the CPC main menu. It assumes a MS-DOS to CP/M transfer. If desired select "C" from the menu and get ready to copy from CP/M to MS-DOS.

CPC has the capability to recover deleted MS-DOS files. I haven't used that feature so I can't detail its' operation. According to the CPC manual, it requires some paging through the MS-DOS disc to find the end of the file you want to recover. CPC includes tools to locate and isolate the possible sectors.

Here is a list of CPC main menu commands:

MS-DOS ==> CP/M FILE TRANSFER

B - Back up by one file (also BS & DEL)
N - Next file (also SPACE & RET)
T - [Tag] transfer with same name

EIGHT BIT SURVIVAL - Continued

R - [Tag] rename before transfer
U - [Tag] untag
M - Move tagged files to CP/M
C - Copy CP/M files to MS-DOS
V - View the file
X - Exit (also Q)
? - More help (also H & ctrl-C)
F - File recovery
S - Sort the Directory
D - Directory display
L - Log a new MS-DOS disc
G - Group map
I - Info on free groups
J - Set the date and time
P - Printer toggle
K - Erase (kill) MS-DOS file
A - Adjust disc parameters
% - Toggle deleted files

CP/M ==> MS-DOS FILE TRANSFER

B - Back up by one file (also BS & DEL)
N - Next file (also SPACE & RET)
S - Sort the CP/M Directory
T - [Tag] transfer with same name
R - [Tag] rename before transfer
U - [Tag] untag
M - Move tagged files to CP/M
V - View the file
C - Copy MS-DOS files to CP/M
X - Exit (also Q)
P - Printer toggle
K - Erase (kill) MS-DOS file
J - Set the date and time
L - Login new CP/M disc
% - Toggle deleted files
? - More help (also H & ctrl-C)

CPC has worked flawlessly for me for nearly a year. it's not complicated. It does just what it's supposed to do. It is an essential package for any H-89 user who must interface with the peesee world. I rate CPC "FOUR STARS".

CP/EMULATOR

CP/Emulator is a set of HUG programs that do two things:

(1) set up a Z-100 terminal emulator on a PC (ZEmulator)
(2) allow CP/M programs to execute under PC-DOS (CPM)

CP/Emulator's virtues include price ($20), 63 K TPA (the memory area where programs execute), partial H-19 graphics support, and for many programs, execution.

ZEmulator alters memory, so be careful. Best to use this in stand-alone mode with CPM, (that is, don't try to run this package under Windows).

Using CP/Emulator is simple. Set up ZEmulator once in accord with the clear instructions. There's a version for Zenith peesees and one for all others. ZEmulator defines the peesee terminal as a Z-100. This includes the H-19 graphics set. After executing ZEMULATOR, you can run CP/M programs with the command "CPM PROGRAM ARGUMENTS".

"PROGRAM" is the name of the CP/M program you want to run.

"ARGUMENTS" are any command line terms such as switches or file names. The CP/M program will then run.

There are two types of programs that simply won't run under CP/Emulator:

(1) Programs that perform a directory on startup

(2) Programs that modify or alter (even in memory only) the operating system

For example, you must patch Wordstar or New Word to disable the "Directory on Execution" feature for them to work. Pat Swayne (the author) includes the patch for Wordstar 3.3. New Word users can select "No Directory" with the install program.

Emulation programs usually run slower than the non-emulated versions. CP/Emulator is no exception. On a AT or Z-248 machine, the lag isn't bad.

Sweep programs such as Hug File Manager (HFM), Disk77, and Datsweep won't run, period. Ditto for other programs that automaticly make a directory call on startup.

What works best with CP/Emulator? Programs that don't address the directory, don't use overlays (overlays require disc access which slows the program down), and where execution speed isn't important.

The program has paid for itself for me by allowing me to use LONG and LOUD (printing utilities) on a peesee. These very useful programs print banners in large print (using dot matrix printers) and "sideways" (again, using dot matrix printers). I don't use these programs every day, but I've saved money by being able to legally use them on my Z-90 at home and when needed, on my peesee at work. Another program I use, Milestone Project Manager runs fine under CP/Emulator. So, I can use it to help manage my personal and business projects. Rembrandt programs work well under CP/Emulator. I haven't been able to get Thoughtline (an outline processor) to run under CP/Emulator. (Note: I use the programs on one computer at a time, in accordance with the license agreements and copyright laws. If a software company doesn't allow this, I don't use their products.) CP/Emulator has many competitors. This is the only one I've used. The inability to use programs that make directory calls limits CP/EMulator

EIGHT BIT SURVIVAL - Continued

usefulness. If I could only get Thoughtline and HFM to work...

I rate CP/Emulator "TWO STARS".

EMULATE

Emulate is a program that allows H-8 and H-89 computers using Heath/Zenith CP/M 2.2.03 or 2.2.04 (CP/M-80), Z-System, or CDR CP/M BIOS 2.91 to read other CP/M disc formats. The Heath/Zenith version for H/Z-37 controller also has a format capability for those same disc formats!

Unlike CPC, Emulate requires patching or replacement of the standard BIOS. ANAPRO includes several common disc driver combinations ready to replace the standard BIOS. ANAPRO includes support for their four and six MC/S speedup modifications. Patching is needed only if you have customized your BIOS. This is relatively painless since there is a "SUBMIT" type of utility included that will make the patches automaticly to your BIOS.ASM file.

The procedure for installing Emulate includes these steps:

FORMAT & SYSGEN a new disc. It becomes your Emulate master disc.

Put the following CP/M utilities on the new disc:

STAT.COM
CONFIGUR.COM
MOVCPM37.COM
SYSGEN.COM

Copy the Emulate BIOS module from the backup copy you made of the Emulate distribution disc. (You did make a backup, didn't you?)

Reset the computer and re-boot.

Make the BIOS read/write-able with the command:

STAT BIOS.SYS $R/W <RETURN>

Erase BIOS.SYS.

Rename the Emulate BIOS module to "BIOS.SYS".

Issue the following command:

MOVCPM37 * BIOS.SYS <RETURN>

Note: The above command will generate a 64K BIOS if you have 64K RAM installed. If you need a small BIOS because you use "overhead memory", then replace the asterisk with the number of K you want the BIOS to be. For example, if I need a 1K overhead for KEYMAP, then I would use the command "MOVCPM37 63 BIOS.SYS".

SYSGEN from the memory image by issuing the following commands and responses:

SYSGEN <RETURN>
<RETURN>
A <RETURN>

Reset and reboot the computer.
CONFIGUR to your system parameters.

Your Emulate system disc is now ready to work. And work well, it does. Support includes 48 TPI and 96 TPI drives. There are over forty formats in all. Some of the formats supported are:

Kaypro II SSDD
AMPRO SSDD, DSDD, 80TK DSDD
CDR SSXD, DSXD, 80TK DSXD
Magnolia SSDD, DSDD, 80TK DSDD
Osborne I SSSD, SSDD
TRS80/3 Montezuma SSDD
TRS80/4 CP/M+ SSDD
TRS80/4 Montezuma SSDD, V1.30 DSDD, V1.32 DSDD, V1.42 DSDD, 80TK DSDD

Emulate works only when you specifically call it up. Otherwise, your system works as normal. When you need emulation, execute with "EMULATE". A menu appears. Choose which drive you want to be which format. Then, exit. If you chose "B" as a Kaypro II drive, then you can put a Kaypro II disc in "B" and read and write to it. You can execute "non-terminal specific" programs from the "B" drive. Whenever you want "B" to be a Heath drive again, run Emulate and chose the "Unpatch" option.

Right now the only limitation with Emulate is its' inability to read/write to Kaypro II DSDD format. ANAPRO tells me this is a limitation of the method in which Kaypro used the "side select" feature. They expect a solution in the future. I rate Emulate "THREE STARS".

VENDOR SUPPORT

Vendor support is critical. I relay heavily on ANAPRO and QUIKDATA for the vast majority of my software and hardware upgrades. HUG is an essential support organization, with Pat Swayne as a "Numero Uno" for HUGgies. As we progress through the items I'll discuss vendor support for those items.

APPLICATION TOOLS ARE THE KEY

Despite this month's emphasis on utilities, the real key to survival is using good tools that do what you need doing.

EIGHT BIT SURVIVAL Part 1 End

Those tools might be word processors, spread sheets, financial analysis packages, banner print programs, etc. Program developers might use MBasic, C, Fortran, or Lisp. The support tools have to provide a platform for the application tools. We'll take a look over the next few months at some outstanding tools that will run on the '89.

Some of the application programs (tools) we'll explore:

o "Thoughtline" is an outlining program, designed to be used with a word processor. It uses the Wordstar/NewWord control key sequences. Produces files easily used by those programs. The outlining programs can help a writer home in on a paper's basic points. Thoughtline does its' job very well. I rate it "THREE STARS".

o "Newword" and "The Word Plus" as distributed by ANAPRO was, in my opinion, the best word processing package available. I think it had the right mix of features, performance, and price. The inclusion of "The Word Plus" as a spelling checker weighed heavily in its' favor. I rate it "FOUR STARS".

o "Rembrandt". This is a series of programs that produces business graph charts. It has a driver that allows graphics to be incorporated with wordstar or Newword documents. Particularly impressive. Also, has utility to read in Ed-A-Sketch files. I rate "Rembrandt" "THREE STARS".

o "Long" and "Loud". Two programs which work separately and give first-class results. Both are simple, menu-driven, and work without modification under CP/Emulator. "Long" allows dot matrix printer users to print "sideways". "Loud" is a banner producer. I rate both utilities "THREE STARS".

o "Milestone". This is a good project-management program which simplifies the Critical Path Method of project management. Generates several fixed reports. Rates "THREE STARS".

CONCLUSION

With ANAPRO'S CPC and Emulate utilities, it's easy to move data to and from the H-89. The other computers can be 16-bit or CP/M machines. "Emulate" also allows you to aquire public domain programs from your friends CP/M machines other than yours. Some vendors sell generic CP/M programs in one format (ex: Kaypro-II). "Emulate lets you buy and use those programs. CP/Emulator allows the limited reverse of CPC: running CP/M programs (including those with H-19 characteristics) on 16-bit systems. Use the right application tools, and the H/Z89 holds its own against many personal computing jobs run on overpriced 16-bit machines.

***** STAR RATING SYSTEM *****

FIVE STARS - Fulfills promise of powerful, uncomplicated computing and works as advertised. Impossible to lose data. Documentation is superb. Training is included or--better yet --not needed. Price is fair, considering power and usefulness. It's the ultimate Dream Program. I have yet to meet a FIVE STAR program in either MS-DOS or CP/M...

FOUR STARS - Powerful software which lives up to its' advertising. Not as slick as five star program, but stands nose-to-nose with anything similar. Data autosave may or may not be included in the exit routine. Documentation is good, organized for quick access. Little training required and price is fair. Few programs rate FOUR STARS...

THREE STARS - Powerful program which performs pretty much as advertised without undue complication. You may have to make more decisions such as which drive to save on, etc. Useful, though perhaps a bit tougher than four-star version to use. Losing data takes effort, although carelessness may allow you to exit without first saving. Documentation has all the information you need. Little training is required. Price is reasonable for the power and usefulness provided. Really, this is a four star program which is not as highly polished as we'd like. Most successful commercial programs generally fall into this category...

TWO STARS - Here, we really move down a notch. The program is useful, does what it says, although it may not met expectations. Can, but may not be complicated. Losing data is not easy. Documentation may not be complete, but the most important elements are there. Training may or may not be needed, depending on complexity. If the program is complex, ?training is needed. Price is high, compared with usefulness and expectations. This is your average program.

ONE STAR - Again, we move down a notch. Program concept is useful, but may not perform as advertised. The program will execute and save data (if data creation is part of its' function). Command structure is awkward, illogical. Documentation may not contain vital information. Price isn't a determinate factor since I won't buy or recommend a ONE STAR program.

NULL DEVICE - Absolute zero. High price, lousy or no documentation, high data loss, etc. NULL DEVICE software is cheap, won't work, or is ridiculously high priced.

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product data

CPC Version 1.3 (includes PCForm 1.1) $35 plus $4 shipping--
EMULATE Version 2.3 $59 ($49 for CDR 2.91) plus $4 shipping--
Vendor:

ANAPRO CORPORATION
205 Lake Nacimiento Drive
Paso Robles CA 93446
phone 805-239-1273

CP/EMulator II and ZEMULATOR HUG Part Number 885-6002-37--
$20 plus $2 shipping (see REMark and HUG catalog for latest prices, ordering, and shipping information)
Vendor:

HEATH/ZENITH USER'S GROUP
P.O. BOX 217
Benton Harbor MI 49022-0217
phone 616-982-3838

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* 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. Off hours, try 313-769-6052 (home).

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