# Preserving Our CleasSIC Hearing & Brown Machines

# The SEBHCIOURENAU

The Society of Eight Bit Heath Computerists' Official Monthly Newsletter

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# ==> NOTICE <==

We Are Presently Experiencing "Technical Difficulties" in Getting This Publication To You Somewhen Within In A Given Month. Stand By... We Expect The Problem To Be Corrected "Real Soon Now!" Thanks....

Please Note: We're Gradually Updating Our HUG Software Price List. See The Partially-Revised List At Copy Rear. . .

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# That Old HUG Spirit Ain't Dead Yet!

CORRESPONDENCE WE'VE RECENTLY RECEIVED...

Dear Friends:

All good things seem to come to an end. As you know, the old Heath User's Group was eliminated. Recently, the former employees of HUG met to discuss the possibility of continuing the tradition of providing independent support to a well-established user community. We have contacted Heath Company with a request for permission to duplicate and distribute the entire software library. Additionally, the same personal [sic] will be available to answer your questions and phone calls.

In the past our user group was limited to supporting corporate products and peripherals only. We [now] intend to expand current systems to support a wide variety of computers, software, and other merchandise while keeping our basic roots to the products that made your group strong. Since we will be independent, we will be able to organise mass product purchases, passing these savings on to you. In addition to our planned newsletter, an electronic bulletin board service with over 3.5 gigabytes of software is already available for your convenience. TECH, or Technical Exchange for Computer Hardware and Software, offers a variety of services including access to both new and used computer products, messaging, [and] online conferencing, to mention only a few.

Pat Swayne will be the editor of our new publication. This means quality articles and information important to you as a computer user. Pat will again be accepting articles for publication with significant contribution to our subcribers. We are in the process of organising our communications networks and hope you will join in the fun! All of us are primarily concerned with providing you the best possible support. Your comments and suggestions will be deeply appreciated.

Please be sure to review the special offer [below]. Subscribe today!

Make cheques payable to: ECI, PO Box 348, St Joseph MI 49085

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[There it is, warts and all! (You guys Really Need A Good English-language Editor!) But frankly I'm delighted to find that there's life after H/Z's "conversion" by Groupe Bull. Heath Company started something that became far greater than crass commercialisation when they established the original Heath User's Group. I can remember "way back when" the MG Sports Car Club was brought into being by Nuffield Motors (England). Onstensibly, the purpose was to support MG sports car owners by providing much the same type of help which HUG supplied to Heath's computer customers. Actually, Nuffield wanted MG motorists to sell cars through general-public visibly enthusiastic participation in periodically-scheduled gymkanas, rallys, road races, and concours d'elegance. To this end. Muffield gave participating car clubs many wonderful trophies to be awarded to winning car club members at such events. Rather like the support and encouragement given us HUGgies during those wonderful yearly HUGCONs. I'm sure that MG owners were just as devastated as we HUGgies were when their company-sponsored club was blasted away by the sale of Nuffield Motors. MG sports cars were so very neat, almost as neat as our far-less no-oil-fumes-pollution 8-bit computers.... We shall have more to tell you about Electronic Concepts, Inc. (ECI), just as soon as we contact them via our (t)rusty modem. Meanwhile, good luck, you guys! -- ed]

A BRIEF PROGRESS REPORT... A BRIEF PROGRESS REPORT... A B

We have roughly 150 HUG software discs which Pat Swayne donated to us, most of which are in hard sector form. At the moment, I've been duplicating these files onto soft-sector discs which I am sending to Kirk at the Staunch 8/89er. (He doesn't have a working H17 hard-sector setup, so we're going at it this way....) I'm also cataloging the original discs while copying them to soft-sector form and now have over 30 discs' worth of software copies which I'm sending to Kirk today.

We do have a problem with the original discs: most of them have quite cryptic labels, usually without part numbers. So I must mount and read the directory of every one to make sure of what's on them. Even at 4MC/s clock speed, Heather and I can't do more than about ten discs an hour, sometimes even fewer whenever my missus has other "more important" work for me to do. Also, Hachibanko-san (the H8) has developed a very flakey H17 SY8: drive (it's 48trk) so that I'm forced to do most disc-dupe work on Heather, further slowing down JOURNAL production!

I hope to find a local SEBHCer who'll willingly lend me a hand with those discs. Then maybe I can expect to complete the job and get out the next 3 JOURNALs before year's end!

Keep tuned for future progress reports....

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# More READER'S MAILBOX & HUG Disc News

Dear Lenny.

Almost overlooked renewal time. Just caught the red mark on the back of the current issue. Enclosed is a cheque for two more years and I trust you will be publishing that long.

I still have the same bunch of gear as when I last wrote you, two Z98s, one H89A, and one Ampro Little Board that I bought from Art Carlson, former editor of Computer Journal. All are working except one 290. The picture tube faded out on it and even though I know where the problem is, have been too lazy to take everything out to get to the bad connection. All of the Zenith computers have four floppy drives, compliments of Rick Swenton who sent me a revised BIOS to accommodate the four drives. On the Ampro I still use the Z19 purchased from you.

I also have a Z49 terminal just sitting around doing nothingm. It is a dandy for use on digital modes used in amateur radio, but it leaves you without a way to store on disc. [1] would part with some of this equipment if anyone really needs and would use it. Also, I have a never-used CRT for a Z29 if anyone needs it for free.

The SEBHC JOURNAL is enjoyed [here] very much, and [I] hope it continues to be published [for] a long time, although information and articles applying to these 8-bit machines seem to be getting rather scarce.

MARVIN F ROBERTS WORDY, 4000 SW 28th St., Topeka, KS 66614-2207; 1-913-272-0497

[Ho, Marvin! Thanks for remembering to renew. Don't worry, I'm quite determined to keep on stroking this old keyboard for a long time. After all, since I'll be 100 in 2017, I shall then just consider retiring...but the JOURNAL will continue as long as we have loyal subscribers such as yourself wanting to keep their vintage machines alive and well. (Or until I can't keep the old girl in spare parts, whichever comes first--as the standard automobile warranty says...) By the way, I once saw a Z47 terminal for sale at the UM Property Disposal facility, but couldn't find a keyboard for it. Wonder if the Z49 is a later version of the H/Z29? If it is, that spare CRT just might fit it and would be worth keeping "just in case". I printed your phone number above because there might be someone really hurting for a Since you're a radio "ham", how about replacement CRT.... stroking out a brief article on how you use your computers with that communication medium? I'm sure our other "ham" subscribers would appreciate that, and any hardware modifications you might have developed for your own use. Send the article in and your subscription surely will grow by another (free) year. Meanwhile, Happy Computing! -- ed]

OTE ABOUT OUR HUG DISCS... A BRIEF NOTE ABOUT OUR HUG DISCS  our subscribeers have programs which appear to have been in development. I've tried a few and they seem to work ok, but since the discs don't have an "official" HUG part number, I'm hesitant about advertising them for sale. I've listed one below with a brief rundown of the files it contains as an example of what's available. When I get them all cataloged and listed in the JOURNAL you may buy copies of these discs for only three dollars a hard-sector disc (or \$2.75 for a soft-sector disc):

#### AH. ASM

Autoscribe/HDOS Transfer Utility BY JON FAULKNER AND PATRICK SWAYNE 29-JAN-81

This routine will transfer a file from HDOS to Autoscribe or Autoscribe to HDOS. It creates a new entry in the Autoscribe directory when you transfer from HDOS to Autoscribe

HDOS TO AUTOSCRIBE SECTION BY PATRICK SWAYNE AUTOSCRIBE TO HOOS SECTION AND MENU BY JON FAULKNER Size 40 sectors

Commented assembly-language listing only

XRFEXT. ASM EXTENSION TO THE HEATH ASSEMBLER BY PATRICK SWAYNE 24-DEC-80 ASMEXT. ASM

THIS IS AN EXTENSION TO HEATH'S ASSEMBLER VERSION 104.06.00 IT ALLOWS THE USER TO SELECT OUTPUT IN OCTAL OR HEX Size 7 sectors, commented assembly-language listing only

BASICON.BAS VERSION 1.0-M 10-AUG-80 by J D HILL, 6400 GILA CT., PLANO, TX 75023, (214) 423-0771 -- COPYRIGHT (C), 1988, CYBERSOFT--

An MBASIC program which converts MBASIC programs to Heath Basic

Size: 10 sectors

CONBASIC.BAS VERSION 1.0-M 06-JUN-80 by J D HILL, 6480 GILA CT., PLANO, TX 75823, (214) 423-8771 -- COPYRIGHT (C), 1980, CYBERSOFT--

Converts Heath BASIC program listing to MBASIC form (A short version of Dr. W Campbell's program in REMark?) Size: 9 sectors

#### LOGIC. BAS

A PROGRAM TO DESIGN DIGITAL LOGIC CIRCUITS by R S REICHERT. JUNE, 1988. THIS PROGRAM WILL SIMULATE THE PERFORMANCE OF ANY COMBINATIONAL LOGIC CIRCUIT WHICH USES THE COMMONLY AVAILABLE GATES, AND IS NOT CONFIGURED SO AS TO MAKE THE OUTPUTS OF ANY TWO OR MORE GATES RECURSIVELY DEPENDENT ON EACH OTHER. PROGRAM IS A STEADY-STATE SIMULATION ONLY: IT WILL NOT PERFORM A TIME-DOMAIN ANALYSIS. THE PRIMARY FUNCTION IS TO GENERATE TRUTH-TABLES FOR DESIGN CIRCUITS AND PROVIDE THEM IN PRINTED FORM. REFER TO THE USER'S MANUAL FOR LOGIC GATE OPERATIONAL DETAILS. (See associated DATA files listed below:)

Size: 73 sectors

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### READER'S MAILBOX Is Closed For Now...

DATA FILES, continued from overpage...

DECODER.DAT, 3 sectors; PRIORITY.DAT, 4 sectors; SELECTOR.DAT, 1 sector; XOR.DAT, 1 sector; XORTEST.DAT, 1 sector

PRINT.BAS (PAGE.BAS) VERSION 1.3
AUTHOR: DANNY CHERRY, LITTON DATA SYSTEMS
NEW ORLEANS ENGINEERING CENTER
NEW ORLEANS, LA.

PROGRAM TO PRINT ON THE LINE PRINTER FROM XBASIC MBASIC VERSION BY PATRICK SWAYNE

Size: 5 sectors

SIM. BAS

A PROGRAM TO CALCULATE AND PRINT OUT SIMULTANEOUS EQUATION MATRICES.

Author unkown Size: 6 sectors

POKEDATE.BAS AN MBASIC SUBROUTINE
MAY BE MERGED WITH OTHER PROGRAMS WHICH REQUIRE DATE INFORMATION TO WORK SATISFACTORILY.

AUTHOR: Unkown Size: 9 sectors

QSE.BAS -- "QUICK SIMPLE EDIT" WRITTEN IN HEATH BASIC A PROGRAM WHICH ALLOWS ONE TO EDIT AND SAVE ANY COMPATIBLE DISC FILE (TEXT, ASM, OR BH BASIC)

> AUTHOR: Unknown Size: 9 sectors

> > RNO. BAS

PARTIALLY CODES A MANUSCRIPT FOR PROCESSING BY RUNOFF
(ALSO INSERTS AN UNDERSCORE BEFORE ALL SPECIAL
CHARACTERS). LEAVES SOME CODING TO BE DONE with EDITOR.

This is an MBASIC program. AUTHOR: Unknown

Size: 9 sectors

XRFEXT.ASM -- EXTENSION TO THE HEATH XREF UTILITY
BY PATRICK SWAYNE 24-DEC-80

THIS IS AN EXTENSION TO THE ASSEMBLER'S XREF UTILITY THAT DETERMINES WHETHER NUMBERS SHOULD BE OUTPUT IN OCTAL OR HEX, AND MODIFIES XREF IF REQUIRED.

Fully commented. Size: 6 sectors

HDOSJ\* . ACM

A MODIFIED HDOS.ACM FILE TO DEFINE HDOS "SCALL" SYMBOLS. (One of the missing distribution disc "programming tools" files.)

Author: JON FALKNER Size: 19 sectors

==) More in our next issue if readers want it! (==

Dear Len,

It was nice talking with you this evening. I'm glad to hear the JOURNAL is still going strong. Here's a list of the Heath stuff I still have and need to find a home for:

H8 computer with Zenith Z80 CPU and 3 MHz mod, H17 and H37 controllers, 4-port serial board, and D6 64k dynamic RAM. Asking \$100, UPS ground shipping included. Will also sell these parts from it individually:

Z80 CPU \$40 H17 controller 15 H37 controller 40 Serial I/O card 25 D6 RAM card 35 Chassis P/S F/P 35

H8 chassis w/gold pin motherboard, fan, power supply, and front panel, \$40, UPS ground shipping included.

H8 8080 CPU board w/Z80 chip & adapter installed. Works just like a Z80 board at 2 MHz and is H37 soft-sector controller compatible, \$25.

Heath WH8-64 dynamic memory board, \$35.

Pair of full-height 2-sided 96tpi floppy drives, \$25 each, \$40 both.

Z128 parts computer, good working CRT, power supply, keyboard, and floppy controller but w/o disc drives. Motherboard with 192k RAM included (but has intermittent lockup problem), \$65.

Please contact me at the below address:

GARY S MELANDER, 468 Garrison Place, Virginia Beach, VA 23452 ph: 884-498-9858

[Yo, Gary! Thanks for getting in touch. Somebody surely has to want that sea-going H8 of yours, it's too good to toss out with the bath water! We now have two-and-a-half H&s, one is for parts, the other two are working (one I built, the other Pat Swayne donated to the JOURNAL). I'm still running my original H8 almost daily since Kirk Thompson sent us a Betatest copy of HDOS 3.82 for me to sweat over. I have to run it on my H8, it don't work with the D-6 Super89 CPU card--wrong monitor chip. Here's a thought: if you can't dispose of your H8, why not get a copy of HDOS 3.02 and run it on your H8?! From my own experience, it seems to be an early version of MS-DOS (maybe V 0.055) and has paths, tasks, bat(ches) and other neat stuff. Also has nine USERs (shades of CP/M)! Was it the precursor to MS-DOS's DIRectory trees? I'm readying a short writeup on "life with HDOS 3.82", watch for it....And LOTSA LUCK disposing of your surplus stuff! -- ed]

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### YOU'VE HEARD OF HOOS VER 3.02?!

A MENU SYSTEM FOR YOUR
HDOS Ver 3.0x SYSTEM DISK
by
Associate Editor Allie C Lingo

I have heard promises for a batch file tutorial under HDOS 3.0 but until now I have not seen anything in print. I also could not seem to remember half of the time to start the clock task when booting up my system disk and when I created a disk, the default time would be stamped on the files.

We have probably heard that HDOS 3.0 supports execution of "batch files". Batch files are text files containing commands which are read by SYSCMD (HDOS-3's System Command Processor). Batch files end in .BAT. The HDOS 3 command processor automatically search for and execute SYO:AUTOEXEC.BAT upon system bootup. But this is in addition to, and AFTER the system runs SYO:PROLOGUE.SYS. PROLOGUE.SYS is another story I shall leave to someone else; presently I'm interested only in developing my own batch-file menu system.

Basically, a batch file is a list (or batch) of commands which the system executes in sequence as if all were entered at the keyboard. Using a batch file, several commands can be executed with a minimum of key strokes.

My attempt at making my system disk menu driven uses an AUTOEXEC.BAT file to prompt me to set the clock, sets the PATH and runs a second file called MENU.BAT. A third batch file, PWRDWN.BAT, is called by MENU.BAT for the purpose of dismounting all the drives in preparation for turning off the system.

There are a few special characters which may be used in HDOS-3 batch files; those which I used are:

\$e = the ESCAPE character
\$, = the TAB character
\$ep = Reverse Video ON
\$eq = Reverse Video OFF
\$\text{the NEW LINE character}
\$\$ = the NEW LINE character
\$\$ = the SPACE character
\$\$ = the SPACE character
\$\$ = the NEW LINE character
\$\$ = the N

For other special characters which may be used in HDOS 3 batch files refer to the HDOS 3 documentation which has a more complete list.

The first file I created was the AUTORXEC.BAT file to remind me to enter the time by automatically starting the clock task (start clock, or st clock). This file text is as follows:

rem AUTOEXEC.BAT by A. Lingo 9/13/89
rem
start clock
echo off
echo \$eE
PATH SY0:
menu

The first two lines are BEWARKs and are not executed.

The

third line automatically starts the clock task (start may be abbreviated as 'st') and I am prompted to enter the time. I didn't put a line to prompt for the date as the system does this anyway. The next line turns echo-to-screen off so the screen doesn't get cluttered up with lots of stuff. I didn't turn echo off before starting the clock because just in case the clock task couldn't override the echo-off command, or clock task may turn the echo back on. In the fifth line I want to echo to screen \$eE. The \$e from our previous list is the ESCape character; when used with E it clears the screen and homes the cursor; emulates CHR\$(27)+"E" in BASIC. Next we set PATH so the system knows where to look for files we will use. In this case I'm using SYO:. Last but not least, we find menu. This refers to a batch file named MENU.BAT that we want ADTORXEC, BAT to run.

To recap, my AUTOEXEC file has started the clock, turned off echo-to-screen, cleared the screen, set the path, and finally runs the MENU batch file.

The next file which I shall explain is as follows:

rem MENU.BAT by A. Lingo 9/13/89

rem
echo off
:BEGIN
echo \$=E
echo \$\_\$\_\$,\$,\$,\$\$\$\$pHDOS 3.0 SYSTEM DISK MENU\$eq
echo \$\_\$\_\$\_\$,\$,\$,\$\$\$\$\$\$PLEASE CHOOSE ONE...
ask \$\_\$\_\$,\$,\$,\$epF\$eqormat a Disk \$epS\$eqysgen Formatted Disk
\$epP\$eqower Down\$\_\$\_

if key = 'f' goto FORM
if key = 's' goto SYSG
if key = 'p' run PWRDWN
if not key = 'p' goto BEGIN
:FORM
echo \$eE
RUN INIT
goto BEGIN
:SYSG
echo \$eE
RUN SYSGEN
goto BEGIN

I wrestled with how I wanted the menu to look on screen and decided it was best keep it as simple as possible. I also wanted one that used a minimum of keystrokes and would ask for specific keys pressed and ignore all others. Originally I used one file for the menu and 3 smaller batch files to be called and run singly; one for formatting a disk, the second to make a bootable disk from a formatted one, and lastly to dismount all disks and notify me to remove the discs and power down the system. This worked fine but it really wasn't what I wanted. I finally decided that the menu program only should do the work rather than several small batch files.

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# MORE ABOUT HDOS 3.02!

Getting back to the program, the first three lines have already been discussed. The fourth line is label named :BEGIN. Note the colon (:). All labels must be preceded with a colon. And labels are used with a goto. I once saw where a label was defined as the characters following a GOTO. It seems to me rather like a sign on the interstate telling the driver where he could exit, get food, etc. In the case of this file, the characters after the GOTO informs us where the next code to be executed is located if a certain condition is met.

The first line following the :BEGIN label clears the screen (ESC E) and homes the cursor. The next line echos the title of the menu to screen. The first combinations of \$\frac{1}{2}\$ insert a couple of new lines to space the title down on the screen and the next combinations of \$\frac{1}{2}\$, and \$\frac{1}{2}\$ is my attempt to center the line on the screen (NL,NL,TAB,TAB, TAB,SP,SP,). The next combination, \$\frac{1}{2}\$ep, turns on reverse video to highlight the menu title , HDOS 3.0 SYSTEM DISK MENU. The combination following the title, \$\frac{1}{2}\$eq, turns off reverse video (\$\frac{1}{2}\$ep = ESC "p" and \$\frac{1}{2}\$eq = ESC "q").

The next line echos 'PLEASE CHOOSE ONE...' to the screen and the same characters mentioned above space this line down from the title and center it on screen. Next an ASK statement follows, with our characters to center the line. Notice that ESCape characters are used to highlight the first letter in each of the menu selections. If you key these programs in, be sure the ASK statement is all on one line. At the end of the above statement are two combinations of \$\frac{1}{2}\$. These space down a couple lines. First I forgot about this and the cursor was stuck at the end of the menu selections. I didn't like the look of it so put in the '\$\frac{1}{2}\$' characters to fix that bug.

Incidently, the reason I used an ASK statement was to keep from having to type a carriage return after the first letter for each menu selection, i.e., the use of an ASK statement in combination with IF KEY = value statements. Just lazy I guess. In my case, the ASK statement shows our menu selections, waits for a key to be pressed, then saves its' value.

We mentioned an IF KEY = value statement; these are the next four lines of code after the ASK statement. The first one checks to see if the value of the key pressed is equal to "f" (doesn't matter if it is upper or lower case) and if it is we 'GOTO' the label ':FORM' and execute the code there to format a disk.

The same thing in the next two lines happens except that the value of the key pressed is checked to see if it is equal to "s" or "p". The fourth IF KEY statement is a little different. I used this statement to weed out values of all other keys. That is, all key values not equal to "f", "s" or "p". Except for Control C (CTRL-C (CR)), striking any key other than those wanted will return us to :BEGIN, whereupon the screen is erased, the menu is re-displayed, and we are

again prompted for input.

I almost forgot. You are probably asking yourself about the IF KEY statement ending with "run PWRDOWN". This statement is different too. If the key value equals "p" then a batch file named PWRDWN.BAT is run which takes us to power down. I will get into this a little later.

We have now come to the second label called :FORM. The first line following that clears the screen. (Never assume the program to be run will clear the screen.) The next line is then executed just as if we keyed it in at the system prompt. In this case, RUN INIT. We then follow the prompts of INIT, and upon exiting INIT we are returned to the next statement which is a GOTO which sends us to the label :BEGIN and displays the menu, again awaiting for us to enter a keystroke.

The third label, :SYSG works similarly except for the command RUN SYSGEN. If you wanted to SYSGEN a minimum disk SYSGEN/MIN could be substituted which would install only the necessary system files.

To recap, we find that the MENU.BAT batch file does quite a lot. It turns echo-to-screen off to prevent commands being executed from cluttering up our screen and maybe our minds. It clears the screen and types the menu to screen and waits for our selection. Sensing our selection, it checks to see if the keystroke is valid and if it isn't erases and re-displays the menu. If it was a valid keystroke the menu program will run the appropriate program, and upon exiting the program will again display the menu.

The only thing left is to attempt to explain the third batch file called PWRDWN.BAT. I had originally hoped that I could have MENU.BAT take all the load, even for the power down part. I tried putting the code in PWRDWN.BAT into a label called :PWRD but could not get it to work right ... kept getting a "batch file not found error". The code for PWRDWN.-BAT is:

The first four lines of PWRDWN.BAT have already been explained. The fifth line dismounts all units of the primary device (MD SY: = multiple dismount of SY:), i.e., dismounts

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## HDOS 3.02 Conclusion -- For Now

SY1:, SY2:, etc. The version of HDOS 3 I have—the original one—doesn't dismount SY0:. So I included 'D 0:' to dismount SY0: to get ready for power down. The backslash (\) separates the commands. The next line is WAIT 2. This holds the screen for a couple of seconds so I can see that all the drives have been dismounted. This line doesn't have to be in here. It just makes me feel better to see that the drives have been dismounted before the screen is cleared by the next line. Finally the last three lines echo to the screen that all the drives have been dismounted and that I can remove the disks and shut off the power or install a new bootable disk in SY0: and re-boot.

I sincerely hope that this article will spark some interest in HDOS 3 and the use of batch files with it. I would like to hear from others on the subject of batch files. Perhaps those who are much more knowledgable than I will put in their two cents worth as it were.

Just envision a batch menu system being created for a disk filled with applications programs. On its' boot-up, a menu of all the applications would be written to screen and only one keystroke would cause an application program to run. Upon exiting, the menu would reappear, awaiting your next instruction....

Running HDOS 3.0, Issue 50.07.00
(What A "Learning Experience" This Is!)
by
L E Geisler

Kirk Thompson sent me a humongous three-inch thick loose-leaf book of instructions for HDOS 3.8, together with John Toscano and Dan Jerome's new update disc. Earlier, Assistant Editor Allie Lingo had sent me a bunch of soft-sector discs-a complete distribution set--including a system disc prepared by Robert Musgrave, one of the original HDOS-3 programmers.

Of course, the very first thing I tried was to boot it in my 89A, but that didn't work. HDOS 3.8 expected, but didn't find an earlier version of D-6 Electronics' monitor ROM on my D-6 Super89 CPU board. Ratz! Then I called Kirk and asked if he knew any sneaky ways to get around that restriction, to no avail; I ended up running HDOS 3 on my H8 (sigh).

Time wore onward by about a year'n'arf-plus; I decided it was time I did something about '3. So I dug out all the disc stuff that Kirk and Allie had sent me and went through all which I could boot or read. I found one disc from Allie had a pretty big README.1ST file on it which I thought should be printed in the JOURNAL. Because I do most everything in the JOURNAL under CP/M (I have many utilities for that system) I

tried to convert the file into CP/M with HTOC.ABS running under HDOS 2.8. Forget it! Two can't read three's directory structure!

No way could I make an HTOC file conversion work from CP/M! Tried recording the HDOS 3.82 DOC disc onto an HDOS-2 disc; same problem--"Can't Read Disc Directory"! Bah! Humbug!! Even tried to use HRUN.COM so I could pick up the DOC files, re-format them and make hardcopy but that just made Hachibanko-san spin all her front-panel LEDs counter-clockwise and emit an ear-splitting, continuous BEEEEEeeeeepppppp...from both the H19 and her internal horns!

Eventually I resorted to subterfuge and TXTPROed one file under HDOS 3, then hard-copied the finished product. Since it takes hours to make two columns under HDOS-run TXTPRO, I printed out one column-width of text over several pages and then hand-cut and pasted (icky-poo!) the result on regularly-headed pages. It looks OK but it was no picnic!

You might like to know that HDOS 3.0xx is very similar in many ways to Z-DOS (MS-DOS 1) with paths and BATch files, &c. Allie's article above gives you a good back-door peek at how '3 works. It has many good features which HDOS 2.0 lacked, such as a built-in CLS (clear-screen) command, a system REAL TIME clock, tons of H19 screen routines and other neato stuff you'd expect to find only running on an H/Z100. It even has USER areas, similar to CP/M (only seven though). This seems to be a precursor to MS-DOS's multiple directories because you can't access files across USERs; have to change to a different USER area first, similar to "barefoot" MS-DOS.

The distribution discs I received had all the original H-DOS-2 stuff on them, from ASM.ABS through EDIT and BH BASIC. But there were more .ACM decks than HDOS 2 came with, and several more device drivers (.DVDs), including a couple for the Epson MX-80 printer. I haven't tried those out yet since my Lindley Systems LP.DVD works peachy-keen under '3 with all our "Epson-compatible" printers here.

I must say that HDOS 3.62 rather confuses me; it has many features I'm accustomed to use with standard HDOS 2 as modified by Jim Texiera's SuperSysMod. But many of HDOS-3's features don't do things the same way as Jim's modifications; many of his single-key-stroke commands have been left as multiple-key-stroke entries. Rather clumsy, I think. But maybe someone who is Real Smart can figure out how to patch those features so they work as neatly and smoothly as what I've become accustom to using....

I did find a few interesting features buried under tons of ASCII on one distribution disc. You can clear the CRT screen with just a period and RETURN (.(cr)) instead of CLS(cr). That's nice. But you must use CTRL-S and CTRL-Q to pause text files so you can read a "page", but SSM-2 lets you SCROLL-SHIFT pages-much better, I think.

Stand by; we'll have more about HDOS 3.82 next month.

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# **VENDOR'S LIST & HARDWARE ARTICLE**

==) EIGHT-BIT SOURCES, SERVICES, and VENDOR DIRECTORY (==

-) Listing last updated 20 September, 1992 (-

CDR SYSTEMS, Inc., 7171 Ronson Road, San Diego, CA 92111; ph: 619-568-1272, 9a-5p Pacific Time Zone--ask for Herman.... D-6 ELECTRONIC DEVELOPMENTS Co., 700 S Armstrong, Denison, TX 75020; phone 903-465-7805 (Cent Time). Bruce Denton pres --) Bruce is A \* Certified \* YOU-BETCHA GOOD GUY! (--DISK MOVERS, 8534 McCormick Blvd, Skokie, IL 60076; phone: 708-679-3727 (Central Time). Ask for Miriam; she STILL stocks LOW-PRICED, BULK QUANTITY HARD-SECTOR DISCS! --> Miriam is a VERY NICE, VERY HELPFUL PERSON! (--LINDLEY SYSTEMS, 8139 E Mawson, Mesa, AZ 85207 -- phone: 602-380-9175. Bob & Bill Lindley; REALLY FINE FELLOWS! MAGNOLIA MICROSYSTEMS, 2818 Thorndyke Avenue West, Seattle, WA 98199; phone 206-285-7266 (Pacific Time). memory upgrades and misc op-systems for H/Z89s & 90s. MICRO COMPUTER REPAIR SERVICE, 2308 Industrial Highway, Ste C Ann Arbor, MI 48184; ph 313-663-3646. FLOPPY DISC DRIVE REPAIRS & SALES. Ask for Mike Morris, "A SUPER GUY"! MICRONICS TECHNOLOGY, Suite 159, 54 Dalrada Road, Montgomery, AL 36189; phone 205-244-1597 voice, or 205-244-0192 bbs. Darrell Pelan, pres. 8-BIT SUPPORT, H/Z 89 hardrives Catalogue & 8-bit help available. A REALLY 600D GUY! New Orleans Data General Services, 7230 Chadbourne Drive, New Orleans, LA 70126; phone 504-241-9388. Ask for Dave, he provides only tech advice for NODGS's H/Z8/89 colour, sound & music-boards. DAVE'S \* A REALLY GOOD \* GUY! QUIKDATA COMPUTER SERVICES, Inc., 2618 Penn Circle, Sheboygan WI 53081; 414-452-4172; Henry Fale (Folley), mfgr, sales & H/Z 8-bit computer parts, support, and H-SCOOP news letter, also 24hr BBS. HANK'S \* A REALLY GOOD \* GUY! SIGMASOFT & SYSTEMS, 2433 Winterstone Drive, Dallas TX 75023-7818; 214-596-0116 (Central Time); Clay Montgomery Prop., hardware/peripherals mfgr, software publisher, hardware & tech support, RAM drives, Hi-Res grafix addons for H/Z89s. Catalog & help: A \*FANTASTIC\* GOOD GUY! SKYCASTLE COMPUTER PRODUCTS, attn: Mike Krivohlavek, 29 Honey Hill Road, Orinda, CA 94563; call 415-254-3931 after 6pm Pacific Coast time. Calligraphy-II, dot-matrix print graphics utility. MIKE is \*A REALLY SUPER-GOOD GUY\*! TMSI/LEE HART, 323 West 19th Street, Holland, MI 49423; phone 616-396-5085 (evenings, weekends--usually). Misc. 8-bit 8/89 support. Lee's "A NICE GUY" & \*SUPER\* ENGINEER!

Note: When contacting any of these nice people, please do remember to say that you found them listed here in The SEBHC JOURNAL. Thanks!

H19/89 Screen Control Comments by William B. Rothman January 6, 1981

If one uses lots of direct cursor addressing as well as

other commands to the VDT to generate a decent display with an H19 or H89, one finds that apparently random characters appear from time to time on the screen. This is rather annoying, not to say ugly. The cause of this "mung" on the screen can be traced to setting of the HDOS TT device driver "TT width" to 80 columns, which appears to be Heath's default setting.

This setting causes HDOS to output a CR/LF upon reaching column 80, which is normally not noticed, since the terminal is printing and receiving carriage returns regularly from programs and users. But direct cursor addressing and other commands to the terminal depend upon having characters transmitted in an unbroken sequence. Should HDOS interject a CR/LF in the middle of a sequence, the command does not function correctly and the characters which are transmitted after the CR/LF are printed as normal ASCII characters instead of being treated as nonprinting commands.

The fix to this problem is to SET the terminal driver to a width of 255 characters, which effectively eliminates the CR/LF injection. Note that MBASIC, quite reasonably, seems to default its terminal width to 255.

I also recommend that one sets the DIP switch on the video board to wrap at the end of lines. Although this change is not as critical, it is often of advantage to the user to have the screen in line-wrap mode. An example is the printing by SoftStuff's CPS [modem program] of periods for each line sent over the modem. With the terminal in line wrap mode, one can be assured of seeing a dot for each line, as opposed to wondering what is happening after the eightieth line is transmitted. Further, the two parts, terminal width and line wrap, are complimentary, and should be set in unison.

[Note the ancient date of the above article! We ran across it while going through that huge pile of HUG discs Pat Swayne laid upon us, and we thought the item was too good to ignore! Now, if you have recently obtained either an H8/H19 combination or an H89 computer and are upset by the "mung" referred to above, try the suggestions given above. It may just make your display look a little better. Since our H19 and H89 both have TMSI's screen fix installed, we don't experience this problem, but it does appear on an unmodified Z19 terminal. We tried the fix and it works! -- ed]

FOR SALE, CHEAP!... FOR SALE, CHEAP!... FOR SALE, CHEAP!.

30 \*-ORIGINAL-\* Heath H8 cassettes of distribution software. We can't read 'em (took out the cassette I/O card) but the cassettes will work ok for audio use. Undamaged physically, in 2 Radio-Shack cassette carriers. Plus a dozen >FREE non-computer audio tapes FREE(. Ten bucks for all, shipping included! Call Lenny at 313-662-0750, anytime except at supper time and make some kid's Christmas a happy one!!!

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# HUG'S GONE, BUT WE'VE GOT THE SOFTWARE!

		**** - / / -	B-1	LUIA DARY A	7771 5 /0500	De / a a
HUG	PART #	TITLE/DESC	Price	HUG PART #	TITLE/DESC	Price
-no	p/n-	EVRYWARE GAMES Vol 1	\$10	885-1825	RUNOFF TEXT PROCESSOR	\$10
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		(for robot control)		885-1050	HODEN COMMUNICATIONS SYSTEM	\$10
-no	p/n-	HUG FIG-FORTH (3 discs)	\$30	885-1059	FOCAL-8 INTERPRETER Disc A	Four
-no	p/n-	HDOS PRINTER PROGRAMS	\$10	885-1059	FOCAL-8 DOCUMENTATION Disc B	disc
		(by /AWIZ/)		885-1969	"DISC VI" MISC SOFTWARE	\$10
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-no	p/n-	MACRO Version II	\$10	885-1069	FOCAL-8 SOURCE FILES Disc D	\$38
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-no	p/n-	COMPLETE EDDIE-BABY	\$18	885-1075	HDOS SUPPORT PACKAGE Disc B	\$15
-no	p/n-	H-8 COLOR GRAPHICS-ASM	\$10	885-1077	BASCON/TXTCON cassette to	
-no	p/n-	HUG SYSTEM SOFTWARE &			disc conversion package	\$10
		UTILITIES	\$18	885-1678	Z80 ASSEMBLER (some docs)	\$18
-no	p/n-	AUTOSCRIBE WORKING MAS-		885-1079	PAGE EDITOR FOR H89/H8/H19	\$10
		TER Issue 150.02.XX	\$10	885-1983	"DISC XVI" MISC. SOFTWARE	\$10
-no	p/n-	CSHDOS COMPUSERVE		885-1086	TINY PASCAL Version 4.1	\$10
		[MODEM] UTILITY	\$10	885-1089	MISC HDOS SOFTWARE	\$18
-no	p/n-	HUG MAILING LIST SYS-		885-1898	MISC HOOS UTILITIES	\$10
		TEM (for internal use?)	\$10	885-1092	RDT DEBUGGING TOOL FOR HDOS	
-no	p/n-	HDOS 2.0 DESPOOLING DEV		885-1092	RDT DEBUGGING TOOL	Set:
		DRIVER - Tom Jorgenson	\$10		/*MODIFIED*/	\$15
-no	p/n-	HUG MODEM COMMUNICATION		885-1093	MBASIC DUNGEONS & DRAGONS	\$10
		SYSTEM	\$10	885-1894	FIG-FORTH "Disc #1"	\$10
-no	p/n-	HUG MBASIC GAMES		885-1095	SY: HARD-SECTOR DEVICE DRIVER	\$10
		(Bootable disc)	\$18	885-8007	EZITRANS	\$10
-no	p/n-	HDOS INVADERS GAME		885-8009	EVRYWARE GAMES DISC (boots!)	\$10
		(Includes a debugger				
		by "GAC")	\$10	"HOLIDAY F	PRICE SPECIAL": Any THREE dis	cs from the
-no	p/n-	MISC HDSO ABS & ASM		above lis	st (excepting sets) for ONLY \$25	(Shipping in-
		FILES	\$10	cluded)!	This offer expires on 24-Dec-92,	so get your
-no	p/n-	"SOURCE DEMO" (probably		order in	TODAY*-> NOT (-* Real Soon Now!	!
		an HEC promo item)	\$10			
-no	p/n-	HUGMAN & MOVIE (anima-		PLEASE NOT	TE: This list replaces those fr	om our earlie

\$10

set:

The

editions which were printed as found on an "inhouse program disc" mixed in with those received from Pat. It is an actual physical inventory of the discs on hand. We are continuing to inventory all discs on hand and will update our lists until the job is FINALLY done. There are a number of hardcopy documents on hand for many of the discs listed; they also will be inventoried and added to future listings. Please be patient, we have a whole bunch of work to do--and it's all single handed! Do I hear any offers of help from out there?! APPY HOLIDAYS, Y'ALL!... HAPPY HOLIDAYS, Y'ALL!... HAPPY H 

NOTES: 1- The above "no p/n" discs may have been Pat's working, or in-development discs. We've checked them all, and the software seems ok. \* ORDER THESE DISCS BY FULL DESCRIPTION ONLY!

(probably for HEC promo use)

tion program for H19)

HA-89-3 COLOR DEMO DISC 1

HA-89-3 COLOR DEMO DISC 2

FIG-FORTH OPERATING

SYSTEM (JWF)

-no p/n-

-no p/n-

-no p/n-

2- "HOLIDAY SPECIAL" PRICES--ANY THREE DISCS FROM THE ABOVE LIST FOR \$25, shipping included! (Does not apply to two or 3-disc sets. Expires 24-Dec-92!)

HUG PART #	TITLE/DESC	Price	
885-1022	PROGRAM DEVELOPMENT EDITOR	\$10	

Please excuse me: I must now go gnaw on a big old turkey leg bone and some other oh-so yummy stuff!

HOLIDAYS, Y'ALL!... HAPPY HOLIDAYS, Y'ALL!... HAPPY HOLID 

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If top line of label reads "{999} exp Aug-99" and we receive your renewal cheque before that expiration month, you get another full year.

Top line will then read: "{999} exp Aug-2000".

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			à .BAS utilities, games, etc.)	5.7

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Operation Manual \$29.95

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Operation Manual \$29.95

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HOYLE & HOYLE SOFTWARE SALE (By special permission)

QUERY!2, Complete Database System for HDOS w/manual \$65.00

QUERY!3, Complete Database System for CP/M-88/85 w/manual

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QUERY!2, Complete Database System for Z/MS-DOS w/man'1 \$75.00

#### ))) IMPORTANT (((

Please specify if you want us to ship the QUERY! version you order on hard- or soft-sector discs. If hard-sector, we suggest you order double-sided (if they'll work in your drives) to conserve our hard sector disc stock. Thank you very much.

\*