

Saving Our HEATH Eight-Bit Machines!

SETH JOURNAL

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Details on Page 2.



SEBHC JOURNAL

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Postal Service?!

We have been forced to increase our yearly SEBHC JOURNAL subscription price from \$15/year to \$17.50/year as of 1 August, 1988. There is no foreseeable change in the single-copy price. (Renew your subscription NOW and save money!)

There are two reasons for the price increase, both traceable to the Postal "Service". The first is--obviously--their recent inflationary increase of postage rates.

The second is due to bad handling of JOURNAL copies by the postal "service"--an on-going problem without a cheap cure.

We originally sent JOURNALS by first class mail because we didn't have enough subscribers (or money) to justify becoming involved in compliance with the torturous, complex maze of government regulations required for us to obtain "official" newspaper or magazine publisher status which would let us use the less-expensive second-class postage rate.

We finally topped two hundred subscribers and decided we'd use third-class bulk mail because it's so much cheaper than 1st class. For example, a standard business-size letter then went at twenty-two cents and the 1-1/2-ounce JOURNAL cost thirty-nine cents to mail. But third-class let us mail items weighing up to four ounces for twelve and a half cents. Also no stamps, only a bulk-mail permit printed on the front.

The lower 3d-class rate has some built-in problems: Copies of the JOURNAL often arrive either badly torn up and mutilated, or late, or both, or are "lost" in transit! Then we tried sealing JOURNAL copies in plastic baggies. This virtually eliminated their being chewed up by the postal machinery, and 99.999% of them actually got through undamaged and in a fairly reasonable amount of transit time.

But grocery-store baggies cost over a nickel each because we had to use large 12 x 15-inch baggies. We'd stuff the addressed JOURNAL in the bag, seal it, remove excess plastic, and then stick a small postage-stamped piece of address label onto the baggie's exterior near the address. It took us over a day and a half to do only 150 JOURNALS that way! The package was good, but far too expensive and labor intensive. This virtually forced us to resume the staple-fold-and-staple format described above--it's, like, y'know, VERY gnarly?!

Now that our bulk-mail rate is up to 16.7 cents a copy, we have located a reliable and inexpensive source of bulk 9-inch flat plastic tubing. We have had to design and build our own labor-and-time-saving packaging station because available units are priced absurdly high. We expect plastic wrapping cost will eventually drop to roughly two cents a copy, but we feel that's a small price for quality packaging. And don't you want your JOURNAL to arrive every month in good condition?!

--==<<8>>==--

-- Condor 3 Notes

CONDOR COMPUTER CORPORATION, 2051 South State Street, Ann Arbor, MI 48104, has graciously supplied your editor with an evaluation copy of their "generic CP/M" Condor-3 Database Management System. Unfortunately for us, the software came on a single-sided EIGHT-INCH DISC--and how many H/Z eight-bit users have those? But we were lucky enough to find a local JOURNAL subscriber who copied the software to standard H/Z 5.25-inch discs and we're now getting Condor-3 to run properly on our '89 and H8. With any luck at all, we should have an evaluation report for you in our June issue, but here are a few preliminary notes:

Condor-3 arrived with an impressive, very thorough, well-illustrated instruction manual which is quite easy to follow. The software is not pre-configured for any particular terminal, but it's easy to set it up so that TERM = HZ19 (or HZ89, etc.) after you load DBMS.COM. Although the program is written in assembly language, there is no provision for patching any part of the code--for example, I wanted to set my TERMINAL to allow use of the H/Z89 nine special-function keys rather than use two-key CTRL(x) commands to perform specific tasks. I soon learned that Condor-3 also has a limitation which can frustrate computerists with only one high-capacity drive: It won't accept CP/M-standard disc swaps! But one hopes this may soon be gotten around...

On my first run-through of the manual's example programs I found that everything worked as advertised--despite having to go back and re-do some things due to "operator malfunctions". It took me about an hour to set up and list to the printer my sample SUBSCRIB database input form. This compares favorably with past experience running Hoyle and Hoyle's QUERY!2 database system which I've been using under HDOS 2.0 for years.

I've been taking notes as I go along and have found a few discrepancies between the manual and what's happening. When I get along far enough, I'll take my notes over to the folks at CONDOR and let them explain the "whys and wherefores" of what's been going on. One of my non-computerist daughters is also doing a test evaluation of Condor-3 on my "spare" computer so that we can give you a better idea of her experiences (she's never used a database system before). I made up her copy on hard-sector discs. So far she has not had any trouble running the program; in fact she got into it much quicker than I did because she had no pre-concieved notions of what it "should" do! She's also taking lots of notes about Condor-3, but unlike mine, her's are concerned with how to avoid repeating her mistakes! Hmmm-m-m-m.

I'm quite sure that we should be able to do more with this software. I'll be looking for a way to make a "minimum system" Condor-3 disc (manual isn't clear about this). My 80trk dsdd boot disc has all fifty-nine Condor-3 files on it, plus the mandatory BIOS.SYS, PIP.COM, and STAT.COM. With 40trk ssdd drives, minimum system discs are absolutely imperative!

ANAPRO's Z-System Explained

H-89 Journal: Menu Driven Computing With Z-System

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R. Kenneth Strum

INTRODUCTION

Being able to quickly produce useful work is what personal computer systems are all about. Z-System is a CP/M-80 upward compatible operating system which makes the H-89/Z-90 and H-8 microcomputer systems far more useful than they are with just CP/M-80 and H-DOS alone. This article isn't a review of Z-System. Instead, it shows you how to get Z-System from ANAPRO up and menu-running in a minimum of time. See articles in Table 8 for reviews of ZCPR3, and the Z-System. If you aren't familiar with Z-System's utility programs, skip down to the section titled "Z-SYSTEM UTILITY PROGRAMS I FIND MOST USEFUL" for a short description of what some of those programs do.

My review of CP/Emulator last month might have been of the wrong version. While I was looking back through old issues of REMark, I saw an article in the Jan 87 issue with a description of CP/Emulator II. The description didn't match the program with its utilities which I had purchased in September 1987. The order numbers matched but the performance and programs on disc seemed to be for the older version. By next time, I'll have worked this one out with HUG.

OVERVIEW

This month we'll explore the menu capabilities of Z-System. We'll take it from the shipping box to useful, menu driven computing in less than two hours. Specifically, we'll be:

- o Preparing a working Z-System Boot Disc
- o Making menu startup automatic
- o "Programming" menus (it's really too easy to be called programming)
- o Selecting some really useful Z-System Utilities

Working with Z-System means learning about shells. The menu programs included with Z-System are shells. Echelon (the company which is the source of ZCPR3 and Z-System) defines a shell as "...a program which, after performing many tasks, knows how to return to itself and may have a unique command language to simplify and streamline computer operations".

Two special shells, MENU and VMENU, allow you to work from an environment isolated from the operating system. Operations can be defined once, then called later with a single key stroke. The ability to build complex, but important command lines without the operator understanding or knowing the syntax can hardly be understated in building easy to use

personal computer systems.

Menu driven computing can be either a boom or a bust, depending on how it's implemented and what programs are used. If it takes more keystrokes to do something with a shell than without, and the operator uses the programs frequently, then a shell may not be productive. The menus describe in this article reduce my keystrokes. I also have a menu driven program disc which sets the date and time on the Real Time Clocks in both my H-89A and Z-90 computers. Each requires a different program to do this. I set the clocks infrequently. Use of the menu means I don't have to crack the manual to check syntax or remember which settings go with what program or which computer.

Last time I promised to take you from shipping package to menu driven computing in less than two hours. And that's just what we're going to do. You'll need to take a few minutes to read the instructions ANAPRO provides with Z-System. Also, read the steps below, and then go to it. If you don't have any trouble you'll be up and running in less than two hours. I'm betting you won't have trouble if you use a pre-assembled BIOS.

Preparing a working Z-System Boot Disc.

First, open the package and read the directions. Then and only then, are you ready to do something. Next, write-protect the distribution discs with a write-protect tab (sticker). You'll find that the original distribution disc from ANAPRO is bootable. However, there may be cases where you need one of the special BIOS modules provided with Z-System. If you are running at 4 or 6 MC/S, or use Emulate, there are a few additional steps. They are straightforward and easily accomplishable. They are described in the ANAPRO instructions and later in this article.

Next, make two DUPed copies or two FORMATED/SYSGENed/PIP *.*[V] copies of the boot discs. Then make two DUPed or FORMAT/PIP *.*[V] copies of all the other distribution discs. One set is your master copy, the second is a working copy of the distribution discs. All further work is done with the working copies. Print any update or readme files.

Now, if you need a special BIOS (because you have ANAPRO modifications such as a 4 or 6 MC/S CPU, or EMULATE), you replace the one on the working copy with another assembled BIOS provided. Table 5 summarizes these steps. If you use a disc system such as the Z-47 or Z-67, you'll need to actually do some assembly work with M-80. There are batch files available on disc to assist you. Go to TABLE 6 if you need to assemble a custom BIOS.

If you need a BIOS with less than 64K of RAM available to the operating system, then run MOVZRN and SYSGEN to produce

Z-System, continued

the memory map needed. MOVZR17.COM is for hard sector (H17) system discs. MOVZR37.COM is for the soft sector (H37) type boot disc systems. For example, if you use Super Ram 89 you'll need a 63K BIOS so the RAM disc can use 1K of working space above the BIOS. You have to let the Z-System utilities "know" your memory map. It's not hard to do. After resizing the memory map with MOVZRnn.COM, re-boot the disc and note the Z-Base address. Use an editor and change the ZBASE EQU to the new address you noted. Then, rename the file with a new name like "Z63.ASM" Assemble (ASM.COM) the file. Next, LOAD the "Z63" file to produce a COM file which you should rename to "Z63.ENV". Lastly, run Z3INS on all working copy of files. Use the FILES.INS list provided (also see Table 3) for easy (and inclusive) installation of the environmental descriptor file.

Making menu startup automatic

Run CONFIGZ and select the "Run program on warm boot" or "...cold boot" option. Unlike CP/M, you don't type the name of the program you want to execute. Instead, Z-System always executes a program called STARTUP.COM if you choose to have a autostart. Use ALIAS.COM to create the STARTUP.COM file. STARTUP.COM can be the name of a program or be a string of commands. This use of the multiple command line capability of Z-System to execute a series of commands and end in program or menu execution gives it far more power than CP/M.

Before I made an ALIAS file, I was confused by what I had read about ALIAS. If you've used the HDOS SuperSysMod2 DDCOM feature which works similar to CP/M's SUBMIT, understand that ALIAS works similarly. If you're still confused about ALIAS, don't worry. You can learn how to use it by calling ALIAS, then type in a program name or a command. and hit return. When ALIAS asks for a name, reply with "TEST". Then, after exiting ALIAS, enter TEST.COM and watch it do what you typed into ALIAS. This gives you a basic understanding of ALIAS.

FIGURE 1: EXAMPLES OF STARTUP.COM created with ALIAS

```
WATZ;DATSTAMP;MENU

ZEX STARTUP

MENU

WATZ;ARAM;DATSTAMP;B0:ZEX B0:STARTUP

WS

DBII

ERROR4;IF;ZEX BEGIN
```

The last item of either the multiple command line or the ZEX (SUBMIT) program should be either MENU OR VMENU if you want to execute a menu driven system. You can use ALIAS to create and have either ZEX or the multiple command line buffer execute a file with a standard name such as "DISKSTRT.COM". For one disc, DISKSTRT.COM would execute WS, for another, MP, another VMENU, and so on. This allows you to use a standard startup procedure and batch file. The only thing which needs to be changed is the command line which DISKSTRT.COM executes. ALIAS allows you to do that easily.

Next, add the application programs to your system. If you have two drives A: might contain the Operating System, utilities and applications. B: might be the data drive. And on a three-drive system might be set up with A: as the system drive, B: applications, and C: as data. In any case, the setup with Z-System will likely be the same as with either CP/M or HDOS.

"Programming" menus

We now have a working system and we're ready to transform our computing from command line using the "A:>" to menu-driven.

Z-System has two ready-to-configure menu shells. One is called MENU.COM. The other is VMENU. Both require an ASCII-format file for operation. MENU.COM uses a *.MNU file while VMENU uses *.VMN.

MENU is most useful when you want to run programs or jobs from a fixed list which seldom changes. Set up which programs you want to run and which command lines you want to automate. For example, I include the "Archive Data Disc" in all my application menus.

VMENU is most useful when you want to execute COM files from a dynamic list which is renewed each time your screen is refreshed. You can also include static commands. VMENU is also good for producing a "quick and dirty" menu driven application which will later be changed into a MENU system. VMENU supports an "execute the highlighted file" function. Use cursor movement to point to the file you want to execute. Then type the letter of your execute command. See example below.

Use of a shell such as MENU and VMENU to generate and execute complex or seldom used command lines is extremely powerful. This allows you to automate vital functions such as backup, startup, etc. Z-System will allow you to set up sub-menus to run different versions of directory programs, file managers, copying programs, etc. The actual use is limited only by your needs and imagination. The concept is applicable to other systems such as MS-DOS, when a shell is added.

Z-System, continued

I recommend starting simply, with either a VMENU or an abbreviated MENU file. Use the one presented here as your guide. If you include the "SETFILE 4 *.COM" command as part of your transition to a VMENU menu.vmn, only command files will be displayed for execution.

Create MENU.MNU and MENU.VMN with either a word processor such as New Word/Wordstar or an editor similar to PIE or TEXT PROCESSOR. So far, I've been unable to create either a VMENU or MENU file with Ed-A-Sketch or Rembrandt. I had hoped to include graphics in menu screens. The ZCPR3 manual and help files explain the making of menus pretty well. Tell me if you're able to incorporate graphics into your own menus.

[Editor's note: See SEBHC JOURNAL Vol I No 2 pp 9-15, Graphics on the H-89 by Lee Hart and Vol I No 5 pp 3-8, Graphics "Easy as PIE" by George Ewing for ideas!]

FIGURE 2--Hints on producing MENU.MNU files. (I'll step thru my example and comment on selected lines. The ";" and comments after it aren't part of the MENU file. See FIGURE 3 for the unannotated ASCII file which MENU uses to create the new menu program.)

-cpDX ;Displays menu, shows command line execution, and exits shell

;Section separator

^A ^B ;Control A, Control B. MENU uses these to highlight everything between them in reverse video.

WORD... ;Label to the menu. Optional.

N - Ne.. ;Labels to show an operator which key to press to begin executing a command.

;The next section is what MENU actually uses to build command lines.

N!NW217 ;Note: N here matches N above in the operator's section.

! ;Tells MENU to wait until the program is exited before it regains control

NW217 ;My ame for my version of New Word NW.COM

C!WC "WHICH DISK:FILENAME.EXT? " ;Produces a prompt for the operator to fill in. MENU then builds the command line to execute WC.

;The following are additional lines.

AC ;Archive Copy Program which permits 2-stroke backup

A!AC "WHICH DISK IS THE DESTINATION? "::- "WHICH DISK IS THE SOURCE? " :*.*/AG

;Note use of space preceding righthand quote marks. This is essential.

W!WSCON "WHICH DISK:FILENAME.TYP? "

S!DICTSORT "WHICH DISK USER:FILE.EXT? "

;Next line clears user area 0 of disc A:, my RAM disc. I use this when I change applications and need more free RAM disc space. It erases A0: completely.

9!ERASE "TYPE 'A' TO ERASE ALL APPLICATION PROGRAMS IN RAM DRIVE AREA A0: "0:*.*

Xshctrl p; cls ;This is my exit routine. Since most of my programs exit with "X", I built this into my menu.

ZA15:;VMENU;setfile 4 *.com ;Logs into user area 15 on disc A:, where I keep system and system utility programs. After login, it executes another menu program, VEMENU (use MENU if desired) and sets the directory display to only COM files.

U:2 ;Sets "U" as selecting the second menu

;Second menu--which I use for selected utilities--works same as main menu. Return by hitting comma key. Use SHIFT-< as memory key. Second menu format is similar to 1st.

#

UTILITIES MENU 11/26/87

S - SUPER DISK DIRECTORY

A - DATSWEEP

D - DIRECT

X - XDIR III

#

S!SDD "ENTER DRIVE YOU WANT TO CATALOG ":

D!DIREC "ENTER DRIVE YOU WANT TO CATALOG ":

A!DATSWEEP "ENTER DRIVE USER YOU WANT TO SWEEP ":

X!XDIR "ENTER DRIVE & USER " : "ENTER OPTIONS "

;This is the end-of-file marker for MENU.COM

Figure 3. Here's a sample MENU.NU which I use.

#

WORD PROCESSING AND OUTLINER

MASTER MENU

>>Version 1.4<<

N - NewWord 2.17A (Word Processing)

U - ZCPR and
System Util-
ities

[continued]

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H - thoughtline (Outline Processor)
T - The Word Plus (Spelling Checker)
C - Word Count
F - Word Frequency
A - Archive Data Disk
9 - CLEAR PROGRAM AREA!
S - Sort a list alphabetically

W - Convert ASCII file to Wordstar/New Word format (Works only in user area 0)

X- exit to OS
A15:SYSTEM (ZCPR)

```
#
N!NW217
H!TL
T!TW
C!WC "WHICH DISK:FILE.EXT? "
F!WORDFREQ "WHICH DISK:FILE.EXT? "
A!AC "WHICH DISK IS THE DESTINATION? " := "WHICH DISK IS THE
SOURCE? " : *. * /AG
W!WSCON "WHICH DISK:FILENAME.TYP? "
S!DICTSORT "WHICH DISK USER:FILE.EXT? "
9!ERASE "TYPE 'A' TO ERASE ALL APPLICATION PROGRAMS IN RAM
DRIVE AREA A0: " 0: *. *
Xshetr1 p; cls
ZA15:VMENU;setfile 4 *.com
U:2
#
```

UTILITIES MENU 11/26/87

S - SUPER DISK DIRECTORY
D - DIRECT

S!SDD "ENTER DRIVE YOU WANT TO CATALOG ":
D!DIREC "ENTER DRIVE YOU WANT TO CATALOG ":
A!DATSWEEP "ENTER DRIVE USER YOU WANT TO SWEEP ":
X!XDIR "ENTER DRIVE & USER ": "ENTER OPTIONS "
##

Instructions: Use ^A, ^D, ^E, ^X to move the cursor to the program you want to run. Press <Return>. The program will execute. Upon completion, you'll return here. To goto the applications menu, choose option "B" below.

A - Execute "Pointed-to" program ;Put cursor on file you want to execute and hit "A".

B - Goto to A0:Base (application programs);Returns to application menu.

A!\$PN "Type Arguments, if any, then <RETURN> ";Executes pointed-to file and prompts user for any arguments. Handy for directory programs. If no arguments, just hit return.

BA0:;SHCTRL P ;Similar to MENU's Exit-to-Operating-System command. When used by a shell under a shell, just returns to original shell.

;Other commands are just like MENU.COM's.

Figure 2. And here's a sample VMENU which I use.

```
-x
#
(Instructions: Use ^A, ^D, ^E, ^X to move the cursor to the
program you want to run. Press <Return>. The program will
execute. Upon completion, you'll return here. To goto the
applications menu, choose option "B" below.)
```

A - Execute "Pointed-to" program

B - Goto to A0:Base (application programs)

C - Set display files to only COM type

```
#
A!$PN "Type Arguments, if any, then <RETURN> "
BA0:;SHCTRL P
CSETFILE 4 *.COM
##
```

Selecting some really useful Z-System Utilities

Table 1 lists files ANAPRO includes with Z-System. Table 2 lists MAC assembly source code files available from ANAPRO. Table 3 is FILES.INS list provided by ANAPRO to help you use Z3INS for the environmental descriptor. It also lists most COM files available in ANAPRO's implementation of Z-System. Note: "*" denotes non-Z-System utilities ANAPRO has included. [continued]

FIGURE 3: PREPARING A TEXT FILE FOR VMENU: MENU.VMN.

-x ;Only option available is ability to exit or not.

;Note there is no header. VMENU generates a fairly busy screen without adding anything.

;The following is a text paragraph just to remind me what to do. It appears under the directory listing.

Z-System, continued

Z-SYSTEM UTILITY PROGRAMS WHICH I FIND MOST USEFUL

Not all Z-System utilities supplied will be useful to you. Here is a list of some which I find particularly important:

AC - Makes archival copies of files

ALIAS - Calls up programs or command lines in the form of a COM file

ELSE and IF - Flow-process commands for carrying out a series of instructions from a submit-type file. Allows computer to "intelligently" run batches.

ERASE - A more sophisticated erase program

ERROR4 - Allows batch or submit processing to continue even when errors are encountered. Simply bypasses the program which won't work.

FINDF - Search all physical drives for the file you want.

MCOPY - An elegant copy program. Unlike CP/M's PIP, MCOPY copies files into a User Area--without being in the same User Area.

MENU and VMENU - Shell programs which act as front-end processors to the operating system.

PATH - Allows you to set up the order of discs and User Areas you want Z-System to search for command files.

RENAME - An easier to use file-renaming utility

PWD - Lists names of your working directories

SETFILE - Used with VMENU and other programs to show which files will be listed by that program's directory function.

SHOW - A menu-type program which displays status of a multitude of elements about your system at any given moment.

SHCTRL - A utility which allows shell programs to be terminated or to roll on top of one another.

UNERASE - Used to recover ERASEd files.

VFILER - Screen oriented file management program. Similar to HUG File Manager. Too bad PC and MS-DOS doesn't have a similar utility.

XDIR - Directory utility which displays or prints or sends to disc a directory listing for any disc, User Area, or for all directories. Displays them vertically or horizontally.

There are many other utilities included with Z-System.

Some, I don't use. Others, such as the New Library set (NULU and associated programs) will be used as I enhance my setup.

CONCLUSION

Now you've got a basic menu driven application system in operation. With this base, you can easily grow MENUs and VMENUs in various levels of complexity and power.

The key for fast implementation of new software is understanding the basics of both software and your system. That's what this article is trying to help you with. Z-System's multiple command buffer and batch processing capabilities can open your computing to a menu driven application and utilities package. The system is easy to set up and enhance. A simple menu will get you started and give you ideas for improvements. This can make your computing really effective.

Lastly, the principle of shell processing is applicable to MS-DOS computing. The exact method may differ, but the principle remains.

Next Time: Some hardware fixes for the H-89/Z-90.

Next Time plus one: Software Reviews.

TABLE 1 - Files distributed by ANAPRO with Z-System as of 7-24-87

-M80	.DOC	4k	CONFIG26.COM	16k	SZAP	.COM	8k	
BIOS-R	.SYS	12k	DISKRST	.Z80	4k	SZAP	.DOC	4k
BIOS4-R	.SYS	12k	FILES	.INS	4k	UPDATE	.DOC	4k
BIOS4E-R	.SYS	12k	FORMAT	.COM	8k	Z3INS	.COM	4k
BIOS6-R	.SYS	12k	INIT.	.ASM	4k	Z3LOC	.COM	4k
BIOS6E-R	.SYS	12k	IOP	.ASM	4k	Z64	.ENV	4k
BIOS6-R	.SYS	12k	MOVZR17	.COM	12k	ZENV	.ASM	8k
BIOSH8-R	.SYS	8k	MOVZR37	.COM	12k	ZRDOS	.DOC	16k
CONFIG2	.COM	16k	SYSGEN	.COM	4k	ZSYS	.DIR	8k
AC	.COM	8k	DIFF	.COM	4k	ERROR1	.COM	4k
ALIAS	.COM	4k	DIR	.COM	4k	ERROR2	.COM	4k
CD	.COM	4k	DIREC	.COM	4k	ERROR3	.COM	4k
CLEANDIR	.COM	4k	DISK77B	.COM	4k	ERROR4	.COM	4k
CMD	.COM	4k	DISKRST	.COM	4k	ERRORX	.COM	4k
CMDRUN	.COM	4k	DOSERR	.COM	4k	FINDF	.COM	4k
COMMENT	.COM	4k	DOSVER	.COM	4k	GETVAR	.COM	4k
COMP	.COM	4k	DPROG	.COM	4k	GOTO	.COM	4k
CPSEL	.COM	4k	DRO	.COM	4k	HELP	.COM	4k
CRC	.COM	8k	DU3	.COM	12k	HELPCX	.COM	4k
DEV	.COM	4k	DUMP	.COM	4k	HELPPR	.COM	8k
DEVICE	.COM	4k	ECHO	.COM	4k	HSH	.COM	12k
DFA	.COM	4k	ERASE	.COM	4k	IF	.COM	4k

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Z-System, continued

[Table 1 - Continued]

IFSTAT	.COM	4k	PUBLIC	.COM	4k	TCMAKE	.COM	8k
LDR	.COM	4k	PWD	.COM	4k	TCSELECT	.COM	4k
LGET	.COM	4k	QUIET	.COM	4k	UNERASE	.COM	4k
LHELP	.COM	4k	RECORD	.COM	4k	VALIAS	.COM	8k
LLF	.COM	8k	REG	.COM	4k	VERROR	.COM	4k
LOGGED	.COM	4k	RENAME	.COM	4k	VFILER	.COM	16k
LX	.COM	4k	RESOLVE	.COM	4k	VID	.COM	4k
MCOPY	.COM	8k	SAK	.COM	4k	VIEW	.COM	4k
MENU	.COM	8k	SETFILE	.COM	4k	VMENU	.COM	12k
MENUCK	.COM	4k	SFA	.COM	4k	VMENUCK	.COM	4k
MKDIR	.COM	8k	SH	.COM	4k	VTYPER	.COM	8k
MLOAD	.COM	4k	SHCTRL	.COM	4k	W	.COM	8k
MOVE	.COM	4k	SHDEFINE	.COM	4k	WHEEL	.COM	4k
MU3	.COM	4k	SHFILE	.COM	4k	XD	.COM	4k
NOTE	.COM	4k	SHOW	.COM	8k	XDIR	.COM	8k
NULU	.COM	16k	SHSET	.COM	4k	Z3INS	.COM	4k
PAGE	.COM	8k	SHVAR	.COM	4k	Z3LOC	.COM	4k
PATH	.COM	4k	SRO	.COM	4k	ZEX	.COM	8k
PMOVE	.COM	4k	SRW	.COM	4k	ZRDINS17	.COM	8k
PRINT	.COM	8k	SUB	.COM	4k			
PROTECT	.COM	4k	TCHECK	.COM	4k			

ALIAS0	.MAC	4k	IF	.MAC	12k	SHOW	.MAC	32k
ALIAS1	.MAC	12k	IFSTAT	.MAC	4k	SHVAR	.MAC	12k
CD	.MAC	4k	LDR11	.MAC	16k	SUB	.MAC	24k
CLNDR11	.MAC	12k	MCOPY42	.MAC	24k	SYSFCP	.ASM	20k
CMRUN	.MAC	4k	MENU36	.MAC	40k	SYSIOP	.ASM	32k
COMMENT	.MAC	4k	MENUCK	.MAC	12k	TCMAKE	.MAC	20k
CPSEL	.MAC	8k	MKDIR32	.MAC	20k	TCSELECT	.MAC	12k
CRC	.MAC	20k	NOTE	.MAC	4k	UNERASE	.MAC	16k
DEV	.MAC	12k	PAGE	.MAC	24k	VERROR11	.MAC	16k
DEVICE	.MAC	12k	PATH	.MAC	12k	VFILER40	.ZQO	92k
DIFF21	.MAC	12k	PRINT	.MAC	28k	WHEEL	.MAC	4k
DIR	.MAC	8k	RECORD	.MAC	4k	XD	.MAC	20k
ECHO	.MAC	4k	REG	.MAC	4k	XDIR	.MAC	40k
ERASE	.MAC	12k	RELS	.UTL	4k	Z3INS	.MAC	12k
ERROR1	.MAC	8k	RENAME	.MAC	16k	Z3LIB13	.REL	12k
ERROR2	.MAC	12k	SAK21	.MAC	8k	Z3LOC	.MAC	4k
ERROR3	.MAC	4k	SETFILE	.MAC	4k	Z3TCAP17	.MAC	32k
GOTO	.MAC	4k	SH	.MAC	16k	ZEX	.ZEX	4k
HELP5	.MAC	28k	SHCTRL	.MAC	4k	ZEX31	.ASM	48k
HELPCX	.MAC	12k	SHDEFINE	.MAC	12k			

Table 3 - COM files which are installed by Z3INS

ALIAS	.HQP	4k	MENU	.HQP	20k	Z3TCAP	.HQP	24k
CMDFILES	.HQP	16k	MU3	.HQP	8k	Z3UTIL11	.HQP	20k
COMPARE	.HQP	4k	NDIRS	.HQP	12k	Z3UTIL12	.HQP	16k
DIRS	.HQP	16k	NULU	.DOC	4k	Z3UTIL13	.HQP	4k
DISK778	.HQP	8k	NULU15	.DOC	36k	ZCPR3	.HQP	4k
DPROG	.HQP	8k	PUBLIC	.HQP	4k	ZDU	.HQP	4k
DU3	.HQP	28k	SH	.HQP	12k	ZRDOS1	.HQP	8k
HELP	.HQP	4k	SHUTILS	.HQP	4k	ZRDOS1A	.HQP	8k
HELPSYS	.HQP	20k	SYSRCP	.HQP	8k	ZRDOS1B	.HQP	4k
HSH	.HQP	4k	VFILER	.HQP	12k	ZRDOS1C	.HQP	12k
IF	.HQP	8k	VMENU	.HQP	24k	ZRDOS1D	.HQP	4k
ID	.HQP	8k	VTYPER	.HQP	4k	ZRDOS1E	.HQP	4k
LU23	.HQP	8k	Z3RES	.HQP	8k			

-UPDATE	.DOC	4k	BH#ENV	.LIB	4k	BIOS	.ZEX	4k
BH#17DVD	.LIB	8k	BH#EQU	.LIB	12k	Z3BASE	.LIB	8k
BH#37DVD	.LIB	8k	BH#FCP	.LIB	12k	Z3HDR	.LIB	8k
BH#47DVD	.LIB	8k	BH#HDR	.LIB	4k	ZCPR3	.MAC	64k
BH#67DVD	.LIB	8k	BH#I/O	.LIB	12k	ZCPR3	.ZEX	4k
BH#CBOOT	.LIB	12k	BH#NDR	.LIB	4k			
BH#DISK	.LIB	12k	BIOS	.MAC	4k			

Table 2 - Optional source code files available for a copying charge

ALIAS	.ZEX	4k	HELPPR	.MAC	28k	SHFILE	.MAC	4k
-------	------	----	--------	------	-----	--------	------	----

[there's more!]

AC	.COM	ERASE	.COM	MU3	.COM	SHSET	.COM
ALIAS	.COM	ERROR1	.COM	NOTE	.COM	SHVAR	.COM
CD	.COM	ERROR2	.COM	NULU	.COM	SRO	.COM
CLEANDIR	.COM	ERROR3	.COM	PAGE	.COM	SRW	.COM
CND	.COM	ERROR4	.COM	PATH	.COM	SUB	.COM
CMRUN	.COM	ERRORX	.COM	PMOVE	.COM	TCHECK	.COM
COMMENT	.COM	FINDF	.COM	PRINT	.COM	TCSELECT	.COM
COMP	.COM	GETVAR	.COM	PROTECT	.COM	UNERASE	.COM
CPSEL	.COM	GOTO	.COM	PUBLIC	.COM	VALIAS	.COM
CRC	.COM	HELP	.COM	PWD	.COM	VERROR	.COM
DEV	.COM	HELPCX	.COM	QUIET	.COM	VFILER	.COM
DEVICE	.COM	HELPPR	.COM	RECORD	.COM	VID	.COM
DFA	.COM	HSH	.COM	REG	.COM	VIEW	.COM
DIFF	.COM	IF	.COM	RENAME	.COM	VMENU	.COM
DIR	.COM	IFSTAT	.COM	RESOLVE	.COM	VMENUCK	.COM
DISK778	.COM	LDR	.COM	SAK	.COM	VTYPER	.COM
DISKRST	.COM	LGET	.COM	SETFILE	.COM	W	.COM
DOSERR	.COM	LHELP	.COM	SFA	.COM	WHEEL	.COM
DOSVER	.COM	LLF	.COM	SHCTRL	.COM	XD	.COM
DPROG	.COM	LOGGED	.COM	SHDEFINE	.COM	XDIR	.COM
DRO	.COM	LX	.COM	SHFILE	.COM	Z3INS	.COM
DU3	.COM	MCOPY	.COM	SHOW	.COM	Z3LOC	.COM
DUMP	.COM	MENU	.COM	SHVAR	.COM	ZEX	.COM
ECHO	.COM	MKDIR	.COM	SRO	.COM	ZRDINS17	.COM

Z-System, continued

Table 4 - ANAPRO Z-System BIOS status as of 7-24-87

---BIOS NOTES

This BIOS package is current as of the above date. We have listed below all known changes to the original released version of Z-System.

* Assembly of H11 parallel I/O board driver routines has been made optional (save 178 bytes of code). See H11 EQUates in BIOS.MAC.

* Optional H8 code assembly has been included.

* Conditional EMULATE, 4MHz and 6MHz assembly mods are included for owners of ANAPRO speedup products.

* BREAK key has been set up to ask on the 25th line for confirmation of abort before exiting. Avoids accidental abort of a running program.

* Minor modifications to BH#CBOOT module now displays base address of Z-System on cold boot instead of BIOS. Makes it easy for user to reassemble CPR module.

* All modules have been renamed with LIB filetype. This separates them from BIOS.MAC file and indicates that individual files cannot be assembled by themselves.

* Some variables and equates have been changed to allow inclusion of substitute H17 or other drivers. A BIOS-80 driver is now available.

* Two ZEX files have been added to allow automatic assembly and installation of BIOS and the CPR. Examine these ZEX files to determine what other programs and files you will need to run them. Note that reference is made to drive M: which is a RAM drive in our system. You will need to substitute the drive designation which you intend to use.

* With above-mentioned ZEX files, you may reassemble the BIOS for support of a single drive type to shorten the code. Note that you will also need to reassemble CPR to include Z-System base address. First reassemble BIOS and boot it to get a display of new ZBASE value.

* MOVZR files have been improved by removal of system version test. You may now run them under CP/M to create new Z-System discs if needed.

* CPR assembly will display an error message if code size is exceeded. A defect in the Echelon version of ZCPR3 has been fixed. The "S" option for SAVE command now works. Our own enhancements include CLS, FF and LF functions. See UPDATE.-DOC file on boot disc.

---Known limitations:

The LDR.COM utility looks at environment descriptor and then ignores information it contains. If you use it to load a new named directory, you will destroy the environment descriptor! Avoid using LDR.COM. If you must change directory names, use SZAP.COM (or your own patch program) to modify the named directory area in the BIOS.SYS file. You may reassemble BIOS.SYS if you wish.

Changing directories by entry of DIR: format is not supported by our version of the CPR. To include this feature would add about 2K to the size of the BIOS. We did not feel this was justified. Instead, we have modified the CD program to allow both the DU: and DIR: format entry. Otherwise this CD program works as described in the ZCPR3 manual.

A defect in ZCPR3 as distributed by Echelon has been fixed in this release of our Z-System package. The CPR will now properly accept the "S" option for SAVE as described in the ZCPR3 manual.

JUMP and GET commands are not included in this collection but are available in the source files. These relatively unused commands have been omitted to make room for the abovementioned fix, also the addition of our own features. A LF (line feed) command is our latest addition to the CPR. You may now type "LF 3" to send three line feeds to your printer. Use a space after LF and specify the number of lines to send. Note that FF (form feed) and CLS (clear screen) commands are also part of our enhancements.

If you want the GET and JUMP commands you may reassemble ZCPR3.MAC after setting the appropriate options in the Z3HDR.LIB file. Keep in mind that you will need to omit some of the other features to make room for these commands. If your CPR size becomes too large, there will be an error message given during assembly.

Additional files supporting EMULATE and our speed modifications have been added. These BIOS.SYS files are included:

BIOS-R.SYS - standard Z-System BIOS with resident FCP
 BIOS4-R.SYS - ANALYTICAL PRODUCTS 4MHz patches included
 BIOS6-R.SYS - ANALYTICAL PRODUCTS 6MHz patches included
 BIOSE-R.SYS - EMULATE version 2.3 patches included
 BIOS4E-R.SYS - EMULATE and 4MHz patches
 BIOS6E-R.SYS - EMULATE and 6MHz patches
 CONFIG6Z.COM is a 6MHz compatible version of CONFIG7.COM

Table 5 - Installing a pre-assembled BIOS in place of the one provided as a boot BIOS

1. Choose the BIOS needed from the list in Table 4.
2. FORMAT and SYSGEN a new working disc.

[continued overpage]

Z-System Concluded

3. MCOPI the following files to the new working disc:
 - BIOS module you want to use
 - ERASE.COM
 - CONFIGZ.COM
 - SYSGEN.COM
 - MOVZRnn.COM (nn = 17 or 37 depending on disc system)
4. Boot the new working disc.
5. ERASE BIOS.SYS.
6. REN BIOS.SYS: (name of BIOS module you want to use)
7. MOVZRnn * BIOS.SYS (for less than the full amount of memory in our system, replace the * with amount you want Z-System to access. Example: if using Super-Ram 89, replace the "*" with 63).
8. SYSGEN <Return>
A (no return)
9. Reset computer when SYSGEN asks for another destination.
10. CONFIGZ to your system specifications.

Table 6 - Assembling a BIOS with a Z80 assembler

(There are complications in doing this, says ANAPRO. I tried it and was successful. But I've been unsuccessfully trying to get ZSystem to work on my H89A which uses a Z-47 drive system. If anyone has done it with ANAPRO's Z-System, drop me a line and we'll share your know-how. As far as I know, modifying the BIOS.MAC source code isn't difficult. There are EQUATES for each disc system. Set one or two of them to "TRUE". You can also set EQUATES for 4 or 6 Mc/S operation if you have installed ANAPRO's speed mods. There are also EQUATES for EMULATE--reviewed last month--the H11 parallel port board, and H-8 operation.)

To produce a bootable disc using the modules you:

- o Put all the needed files on a working CP/M boot disc.
- o Change BIOS.MAC EQUATES as needed.
- o Run M80 and L80 as described in ANAPRO's BIOS.ZEX batch file.
- o Boot the newly BIOSed disc.
- o Get the Zbase from signon message.
- o Run M80 and L80 as described in ANAPRO's ACPR3.ZEX batch file.

Now you have a ready-to-run, customized Z-System, and you can now MOVZR and CONFIGZ as needed.

Table 7 - ANALYTICAL PRODUCTS M80 problems with Z-System.

You may encounter several problems when using Microsoft's M80 assembler under the Z-System. Here are the problems and their solutions:

- * version 3.40 of M80 accepts only 6 character long labels. Since many Z-System BIOS labels are longer, we recommend an upgrade to M80 version 3.44. Alternately, shorten all offending labels (can be done but is very tedious).

* There are several release versions 3.44 of M80 having different date codes. The version dated 29-Oct-82 from Heath won't run under the Z-System. Also some M80 versions from Heath won't run at 4 or 6MHz. "Piracy protection" in the program which tests for a Heath environment causes this.

* Z-System problem: Part of the code checks the CP/M BDOS serial number to see if it's a Heath product. ZRDOS does not have Heath's serial number, so M80 will quit on you.

* CPU speed problems. Part of the M80 code checks monitor ROM contents by momentarily switching out the zero-origin RAM. If your ROM doesn't respond properly at higher CPU speeds, your system will hang up.

ANAPRO has FIXES. Find them in Z-System's UPDATE files.

TABLE 8 - SELECTED ZCPR Bibliography

o REMark Magazine, January 1986, "The Power of Z-System", Rick Swenton, pp 43-46

o REMark Magazine, November 1985, "Upgrade your CP/M 2.2 with ZCPR3, A Z80 Based Command Processor", Rick Swenton, pp 9-14.

o REMark Magazine, November 1985, "Installation of ZCPR3 For Heath Computers", Richard P. Allen, pp 15-20.

o BYTE MAGAZINE, September 1985, "Build the S8180 Single Board Computer, Part 1: The Hardware", Steve Ciarcia, pp 87-101.

o BYTE MAGAZINE, October 1985, "Build the S8180 Single Board Computer Part 2: The Software", Steve Ciarcia, pp 87-97.

o "ZCPR: The Manual", Richard Conn, 351 pages, New York Zoetrope, 80 East 11th St, New York NY 10003, \$19.95. Included with Z-System when purchased from ANAPRO. Written by the ZCPR programmer and system developer. Chock full of technical information as well as a clear explanation of ZCPR3 in the first chapters.

[Editor's notes: Even though this is a very long article, we feel that all the information printed here is Very Important and Quite Necessary for anyone thinking of buying ANAPRO's Z-System. Whether you are running ZCPR3 or Z-System (or both) there's a whole lot of stuff you may either have forgotten or didn't know how to use. So this article should be of considerable value to you as well. A few public-domain Z-system-like utilities are provided on our SEBHC JOURNAL GAME DISC #0 and they seem to run under CP/M-80 pretty much as the author describes here. Another subscriber runs Z-System on a "plain-vanilla" Z90--finds it works as good as CP/M "but differently". How about you other Z-system owners telling us if or how you like it compared with plain CP/M-80?

The Society's Mail Bag

Dear Lenny,

I finally was able to put together and send you the CP/M MBASIC-80 programs I promised a while back. They are all in ASCII. Here is a list and explanation of files:

1 - CHECKREG.BAS: This is a checkwriting program. It produces hard copy and keeps a running balance. I write some checks longhand and later enter them into the program for a record. I have changed all the account numbers, so feel free to use to use the program as is. This will work with a printer has a "platen" [single-sheet capability].

2 - LOGIN.BAS: This program I use to VOID errors, enter cancelled checks and reconcile my bank statement. Sometimes I have to do it the second time, and it works. It will work with the data file and I believe the program is self explanatory.

3 - CKSAVE.BAS: This program is (have any suggestions on freeing sticking keys???) for saving a month's worth of check data. Must put a space before single months (i.e. jan "1"). This should be fixed but I'm not free as I once was to work on programs etc..

4 - CKREGPRT.BAS: Gives a hard copy of a data file. I'm changing my copy to print out similar to "Checkreg". This program should also be easily modified.

5 - MATHCALC.BAS: This is one I got from REMARK.

6 - CHECKREG.DAT: My current listing for Feb. and March. as an example.

These all worked--or at least worked today. I believe all of these individual programs may be incorporated into one program. The various aspects should then be selected from a menu.

I have intended to enlarge my menu and delete the screen-printed checks. The menu is now too hard to read.

I'll keep this H89A until I can't get it repaired [any more]. I have a SigmaSoft board in it and I understand that getting a nonstandard H89 repaired by Heath isn't always possible, therefore I am leaning towards [buying] an Atari or an Amiga in the future, since I have two four year old boys.

I am using "NewWord", a relatively new acquisition. After using PIE, I have been known to use some "bird" languages. This version of NewWord is from Analytical Products and is customized??? for the H19--after a fashion.

Keep up the good work. I always look for new information in the Journal.

GEORGE A DeKELVER

[Thanks for the disc of software! I've given all the files a cursory reading and it seems as if they'll work ok. Your own CHECKREG seems to be more complete than ours on HDOS "Programmer's CARE PACKAGE" DISC #0. Think we can use yours on a new "CP/M Programmer's Helper Disc"? -- ed]

Dear Lenny,

Here's a program I wrote which may be of some commercial value to the JOURNAL and my fellow 8-bit subscribers. It's

named "ADDRBOOK.COM" and it is written in MICROSOFT COBOL-80. Being a stand-alone file, you hardly need to understand COBOL to successfully run this self-explanatory program. If you do feel the program needs any modification--and you have a copy of COBOL laying around, feel free to play around with the ADDRBOOK.PRT file. If you somehow make it do something really different, get in touch and we'll see if anything can be worked out. Here's a very brief description of the six available ADDRESSBOOK options [described fully in README]:

Option 1 - ADD, CHANGE OR DELETE ENTRIES--allows you to add new names/addresses to your address book, change addresses previously added, or delete address records.

Option 2 - SEARCH FOR NAME--This option allows you to look for a specific name in your address book. You can enter one particular name and go directly to that name, or enter the first name on file and browse through the entire file.

Option 3 - PRINT 3X5 CARDS--This option will print the entire address book file on one-up 3 x 5 inch cards.

Option 4 - PRINT CHRISTMAS LABELS--Prints all name/address labels which were flagged with a "Y" in XMAS FLAG. This option is designed to print on one-up labels which are 1-1/2 inches long.

Option 5 - PRINT RETURN ADDRESS LABELS--Prints up to four lines on a one-inch long label. Asks you to enter four lines of information and the number of labels you want printed.

Option 6 - EXIT PROGRAM--Exit to operating system.

A sample name address file is provided for you to test the various options. The filename is NAMASTER.DTA. It is set up to default to the B: drive. The first thing the program asks is for the name of your file, or to accept the default. If a file is not present under the name you enter, the program will ask you to verify that you are starting a new file. You have the option at that point to say yes or no.

Please let me know how this software runs for you.

JARED FREEMAN, 600 Ginger Trail, Lake Zurich, IL 60047
(312) 438-0513

[What can I say? I have an orphan copy of NEVADA COBOL which I've never touched even though REMARK printed an entire COBOL programming article series. Because you obviously have compiled your program which seems written for one without COBOL training, I'm going to give it a try and print my experiences in the JOURNAL. Please let me know if you'd like me to offer the program, either as part of a new CP/M-80 Programmer's CARE Package disc we're putting together --or in it's own right. In the latter case, let me know what you think we should charge for it. Presently we're paying Lee Hart a modest royalty on each copy of his ACES.BAS sold (we split the net profits of CP/M GAMES DISC #0). And we have another very nice software package advertised in this issue by R K Strum--another loyal JOURNAL subscriber/author--updating WordStar-4 for H/289s. Ken's named us distributor for his "CP/M-80 H/2-19 Function and Cursor Key Implementation Patch" and told us to charge \$12.50/copy for it. Please get in touch! -- ed]

More Society Mail Baggage

Dear Mr. Geisler,

I recently managed to get hold of a 289-11 2-port serial, 1-port parallel I/O card. What I now urgently need is the original Heath documentation which came with this card.

Specifically--for my H25 printer--I need to know where to set the interrupt jumper on the I/O card, and if it is necessary. My printer's operating instructions requires that the interrupt jumper for port 340Q be set to OFF on the serial interface card (Heath part# unknown). There are no instructions for the 289-11 card [with the printer], but I assume that the jumper settings for the '-11 card's serial ports are similar to the 3-port card, except there is no OFF jumper location on it!

On the schematic which accompanied the '-11 card there is an OFF location shown but it doesn't seem to be connected anywhere. Does this mean that jumpers aren't needed? Or am I just whistling in the dark?! Any suggestions?

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

[Ya got me! My brother down in Sarasota, FL has a Z90 with a H&H multi-port serial/parallel I/O card from the serial port of which he runs his H25 printer. I don't think he needed to set any jumpers (my "forgettery" is better than my memory), once he got his H25 working, I believe he just plugged it into port 340Q and it ran. Anybody nearby to San Luis Obispo and S.S. Smith who can solve her problem, please contact her, Right Away! -- ed]

Dear Lenny,

Here's some vital information for JOURNAL readers interested in my wordstar H/Z19 KEYPATCH software disc:

If you're an 8-bit H/Z computerist looking for Wordstar, Release 4: ANAPRO Corporation, 6905 El Camino Real #4, Atascadero, CA 93422, phone 805-466-1589, is selling the CP/M edition for \$135 plus \$4.00 shipping (California residents pay 6% sales tax). Wordstar-4 is available in several H8/H89 formats. The price includes a patch for implementing H19 functions and cursor keys. This's the best dealer price I've seen for such a complete package. I've been an ANAPRO customer since 1985 and can personally recommend them.

There are now at least three sources supplying Wordstar-4 for H/Z-8-bit machines, ANAPRO at \$135 (see above); MoproPro, P.O. Box 7079, San Rafael, CA 94901-0079--about \$100, upgrade only in non-Heath formats; Central Computer, 330 Central Ave., Filmore, CA 93015, ph 800-533-8049, \$295+\$4.50 shipping w/tax extra. I've bought stuff from all three vendors who've given excellent service. If you buy a non-Heath Wordstar-4 (KAYPRO-II) version from anyone other than ANAPRO you will have to use ANAPRO's EMULATE or Central Computer's UNIFORM copy program to read and copy the "foreign" discs to your own H/Z discs. Or, you can save some money and buy my WS4 patch from the SEBHC JOURNAL in H/Z-90 soft-sector format for only \$12.50 [\$13.50 if in 40trk, ssdd hard-sector], postage prepaid.

Recent HOT news: I have Z-System up & running on a Z47 eight-inch dual disk system. What speed! This monster tapdances now!!! Additionally, I've "improved" the menus I originally wrote about [in the JOURNAL]. As I continue using ANAPRO's Z-System my understanding of how to use its' menu capabilities has increased. In my next column I'll give you the "latest and greatest" Z-System menus--Wordstar text files which MENU.COM uses for its' menu system. Presently I'm running two basically different disc files. One's for my Z90/H37/H17/SuperRam89 setup, the other is for my H89/Z47/H37 setup. They both work just fine!

R K STRUM, 757 Titus Avenue, Rochester, NY 14617, phone 716-342-0195

[Hey there Ken! You're really getting into this WordStar thing! I've been told that Heath's Magic Wand is somewhat of a "poor-man's WordStar" word processor. I once had an opportunity to try learning how-2 use Magic Wand and was quite unhappy with MW's raft of special "dot codes" and other foofraw which seem unnecessarily complicated. Also, unlike my favorite editor (Newline Software's TeXT PRocessor), Magic Wand doesn't have a callable HELP file; does WordStar? Maybe this is another area where you might try writing something--lord knows there are a lot of folks who don't use word processors every working day, and a help file has great potential usefulness for them. And I'm glad to hear you've gotten your H47 setup working properly. Is it hard or soft sector, and if soft, are you running it in straight single-density or double density mode? One of our local subscribers (Roger Bliss, Dexter, MI) donated (YES, DONATED!) a pair of 8-inch single-sided drives complete with power supply, an unidentified single-board computer--less terminal--and a Xerox keyboard. He also let me photocopy his Tandon 8-inch service manual. As yet I've not tried to get these monsters up & running (have to publish this, y'know!). I've also recently acquired a twosided 8-inch Tandon, complete with power supply and unidentified I/O cards. This item has the name "Alspa Computer Inc." on the back panel and a model number ("ACI-1") on the front. What's more curious about it are the three female DB-25 jacks on the back, marked "0-4-2", a legend w/box, "Port Typical Use, Port 2-Terminal, Port 4-Modem, Port 0-Printer", below. But there's no visible provision to connect the typical 40-conductor I/O line between a computer and this drive. Does anyone know of Alspa Computer's address or where I can find out how this crazy device works? I verified that it works to the best of my ability (power goes on & motor turns with a disc inserted), but I don't know if it will run if plugged into my general-purpose port 320Q. And if it does, what software codes are required to set up communications with it? According to the manual, it can put up to 1.8 Mbytes on a dsdd disc. That's a LOT of storage capacity--not necessary to buy a hard-disc setup quite yet! Can anyone out there help? I'm offering a CASH REWARD to the one helping me get it up and running. -- ed]

Still More Mail Baggage

Dear Lenny,

I'm returning my two SEBHC JOURNAL discs for update; CP/M-80 Game Disc #0, and the HDOS "Programmer's CARE Package" Disc #0. I've also enclosed my cheque for your new HDOS 2.0 Games Disc #1.

I have just finished reading most of JOURNAL issue II:8, including my letter on page 3. As sometimes happens when trying to do several things at once, I evidently forgot to include the name and address of the firm which had the replacement CRT for the H100. [Are you sure I didn't drop it in the heat of publication?! -- ed] Here it is again:

FAIR RADIO SALES CO., Inc., 1016 E Eureka/P.O. Box 1105,
Lima, Ohio, 45802-1105, phone 419-227-6573.

Well, Lenny, I guess there are two of us [JOURNAL subscribers] who have owned up to having bought an MPI-99 printer, myself, and Mr. Ed Thomas. I've not had much problem with mine. In fact, I own two of them. The first cost me over \$600, and the second--which I bought later--cost about \$100. Both were new. The only thing I've had any trouble with is the price of replacement ribbon cartridges, at about twenty bucks a whack! Replacement time comes far too often, and I decided to check around for better prices. I found that Lindley Systems Inc., has ribbon refills for only \$3.00 each, complete with a pair of gloves. That means I get six ribbon refills for \$18, much less than the \$20 single cartridge cost! [You forgot Lindley's address & phone number! -- ed]

I managed to find a "legal" HDOS MBASIC V4.82 manual with the help of a fellow JOURNAL subscriber. [We have some very nice folks reading the JOURNAL! -- ed]

Thanks for the "Cumulative Index" in the March issue. I'd planned to use HUG's Autofile to set up a database with basically the same information you have in the "Index". I may yet do this, later. [How about a cross-index by subject matter? No need to repeat all of my work. -- ed]

I enjoyed the short writeup on the EMULATE product. I had seen it advertised [before], but being cautious I'd never considered [buying] it. I'm reluctant to buy anything from an advertisement for what you see there is not always what you get! I'd rather wait and read about other folks' [good] experience with the product and then think about buying it.

Thanks again to you and your JOURNAL's contributors for a job well done.

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

[Y'all welcome, Allie! Your discs will get to you before you read this--of course. But do let us know your reactions to how we've reorganised the older discs as well as the new HDOS Games Disc. We're putting together a new CP/M-80 programmer's helper-type disc, and expect to announce it in our next issue. It will have a whole bunch of neat software stuff on it in ASM, COM, and BAS form; most we gleaned from the public domain and put together for everyone's benefit. -- ed]

Dear Lenny,

Peter Shkabara of ANAPRO Corp. recently wrote me and recommended that:

"... the H8/H89 community... form a 'demand group' for [H/Z 8-bit] products. For example, CDR had discontinued their RAM board but when sufficient demand had built they made another run. It was only an additional 30 boards, but the point has been made. It is possible for the Staunch 8/89er to be a clearing house for such demand. Readers should submit their requests or orders to the editor. These would be collected 'till the quantity justified an order. The manufacturer could ship a bulk order to the Staunch 8/89er at volume pricing as appropriate. The price to the end user would be adjusted to cover costs."

Peter's suggestion is a good one, and I would be happy to serve as coordinator of such a "demand group".

But I need to know from your readership if there is an interest in this kind of arrangement, and which products they'd be interested in buying through it. Peter suggested CDR as a start. But other vendors who have in the past supported the eight-bit community might also be amenable. And some might not. There also is the question of what quantities a particular vendor might feel justified a [special] production run.

Because the Staunch 8/89er's circulation is growing I feel this [idea] should not be reserved to [just] its subscribers. I'm sure many of your readers have tried to buy products only to discover they have been discontinued, or would like to buy products already discontinued. The formation of a large "demand group" could justify limited production runs by vendors who otherwise would not make them. In this context, bigger IS better!

So, I'd like you to poll your readership. Please ask them to write me at the address below.

If response is great enough, I'll survey vendors of those products most requested the see if they'd cooperate and what the prices might be. Then I could determine whether or not a "demand group" is practicable. Don't send money! We'll keep everyone informed of the project's progress by postcard.

Finally, remind your readers that the H-8 and H/Z-89/90'll [surely] die if these machine's users believe they are dead! But we can keep them alive and functioning [only] as long as we all work in unison by communicating with each other through newsletters such as yours [and mine].

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

[RIGHT ON! In union there is strength! All SEBHC JOURNAL subscribers are hereby ordered to *immediately* contact Kirk Thompson. Let him know what H/Z parts or eight-bit software you want to see restored to life. Be sure and list all items you'd buy if again made available; money really talks! -- ed]

SEBHC JOURNAL

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ODD'n'ENDS and SPECIAL DEALS

Upgrade your '89 NOW while
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The READER'S LETTERS feature is 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/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 SEBHC JOURNAL's Back Page

Society and Journal Policies

- * The SEBHC JOURNAL is published twelve times a year and strains to get mailed the 22nd of the month. Editorial deadline: 10th of each month.
- * All advertising is printed free of charge. Vendors will please submit B&W "camera-ready" ad copy, 7" wide by 9" high (one page/issue) no later than the 15th of month in which it's scheduled to appear. All Society members can run one free--new--250-word Want Ad a month.
- * Subscriptions are \$15/year in Canada, Mexico, the U.S.A. and its possessions (all others \$25/yr) and start in month following receipt of application. Please make cheques or money orders payable to L.E. Geisler. Single back-issue copies by special order--allow 6 weeks for processing.
- * Subscribers are automatically Society of Eight-Bit Heath Computerists members. Members' ID# and expiration follows the name on mailing label. The three member classes are: REGULAR (H/Z 8-bit user), ADVERTISING (one vote/vendor), ASSOCIATE (non-8-bit computerist, library, etc.). REGULAR members can vote and hold any Society office. ASSOCIATE members cannot hold office or vote in Society elections. The Society's official meeting coincides with HUG's annual conference; place and time announced in each July JOURNAL issue.
- * 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).

SEBHC Journal

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