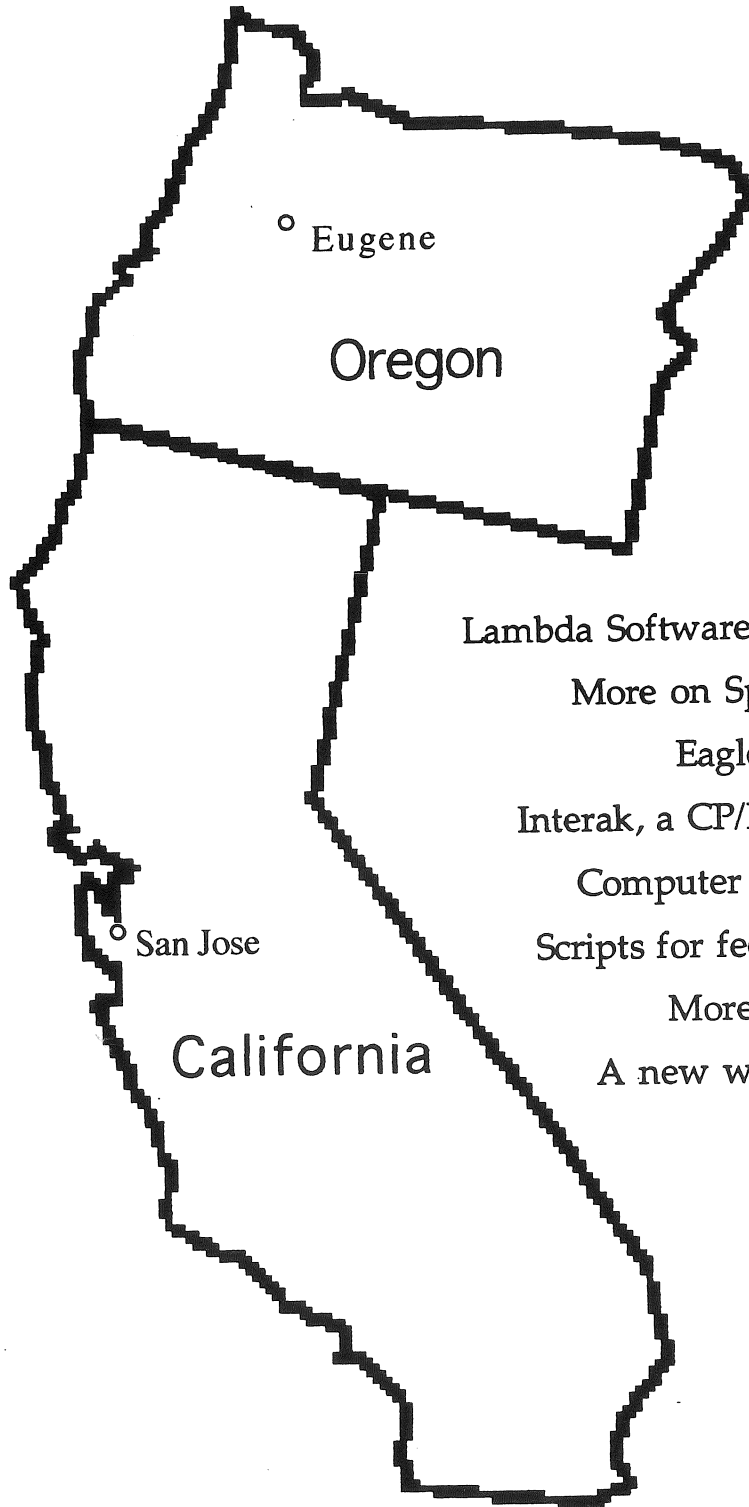


The Z-Letter

Newsletter of the CP/M and Z-System community

Number 23

January/February 1993



Lambda Software Publishing moves to Oregon!

More on Spellbinder and Kaypros

Eagle hard-disk news

Interak, a CP/M computer from England

Computer manuals on VCR tape?

Scripts for feeding multiple arguments

More on the PBM 1000

A new word-counting program

TABLE OF CONTENTS

RANDOM ACCESS <i>Editorial this and that</i>	
Trials + Tribulations = Moving	3
The Z-Letter goes bulk rate	3
Customizing a Kaypro for Spellbinder	3
Good news for Eagle owners	4
Another CP/M computer still made	4
A very special Christmas card	4
The information problem	5
A neat little system	5
Just for the record	5
SCRIPT OF THE MONTH CLUB	
Scripts for feeding multiple arguments <i>by Jay Sage</i>	6
LETTERS	
More on the PBM 1000 <i>from Jay B. Long</i>	7
Praise and a suggestion <i>from Art Welsh</i>	9
CP/M software and CD-ROM <i>from Steven Johnson</i>	9
Life in Xanadu <i>from Lee A. Hart</i>	10
NorthStar Advantage sources <i>from Jim Williams</i>	12
A new word-counting program <i>from Eugene Austin</i>	12
PERSONAL ADS	13
MAGAZINE ARTICLES	13
RESOURCES	15
EAGLE COMPUTER USERS GROUP	
Meeting place	17
October 10 meeting	17
November 14 meeting	17
December 12 meeting	17
January 9 meeting	18
ECUG software libraries	18

Welcome to *The Z-Letter*, a newsletter for the community of CP/M and Z-System users. Everything in this issue is copyright © 1993 by David A.J. McGlone, Lambda Software Publishing, 149 West Hilliard Lane, Eugene, Oregon 97404-3057, phone (503) 688-3563.

The purpose of this magazine is to spread the news about new developments in the community, and to help newcomers get the most out of their machines. So send us the news about your new software or hardware, your

opinion of someone else's product, that article you've been meaning to write, your praise, gripes, or just plain questions! This is the place.

Please submit material on 5¼" or 8" diskette in almost any format, or printed or typewritten on clean white unlined paper. We cannot pay for articles, but the author of any article we publish will receive that issue of *The Z-Letter* free. If the author has a subscription, the subscription will be extended for one issue.

(continued on page 18)

RANDOM ACCESS

Trials + Tribulations = Moving

This issue of *The Z-Letter* is written in Eugene, Oregon, the new home of Lambda Software Publishing (see back cover for new address and phone number). If this move seems sudden, it was. Deborah and I have long planned to move to Oregon "someday." Someday has now arrived. I am still out of a job, and we own a place in Eugene. Moving up here now, and keeping the rent we've been paying on the nice place in San Jose, puts us way ahead. I will miss the convenience of life in the big city, and my many friends in the Bay Area; but the first batch of stuff has already been moved.

Moving meant a lot of scurrying around to get the first batch of stuff ready to move before Lam Research, where Deborah works as a technical writer, closed for Christmas. I finished setting up Mike Skarp's Kaypro 4 (see last issue), and his wife Linda came over and picked it up. I shipped the other Kaypro 4, which I'd sold to a reader in Missouri. Jerry Davis rose to the occasion and finished putting the File 10 parts I had into the Corvus box I'd bought from Herb Johnson last February. I retrieved the TeleVideo 950 I'd loaned to Dr. Ferriss in San Pablo, and bought back from him the Eagle III and File 20, which he wasn't using since we'd got his Dynabyte working again. I got out to Sharon Industries to retrieve the TS 802H keyboard I'd left there the last time, showed Terry Torres how to use AnaDisk, and used it to copy the TeleVideo hard-disk formatting software they'd promised me.

The first installment of the move was quite modest: just my office files, my Micromint SB180FX main computer, my LaserJet Plus printer, my Tandem 6AX computer to run 22DISK, my Eagle V, the File 20, the File 10 Jerry put together, a TeleVideo TS 803H, most of the floppy-disk collection, and incidentals like clothes and a couple of file cabinets to put things in. An hour after leaving home, on New Year's Eve, a spark plug blew out. By the time we got a replacement, determined that it wouldn't go in because the threads were stripped on the hole it fits into, arranged for the car to be fixed, and rented another, our friend Conrad who was driving the van and the trailer with the rest of the stuff was five hours ahead of us; we didn't see him again until Oregon. The weather was miserable, too; because of a more than 24 hours blizzard covering the Siskiyou summit, we had to take the more scenic but longer coastal route. It's stayed miserable, with snow I

think every day I've been here. Welcome to Oregon! It's only supposed to rain here, you see.

The Z-Letter goes bulk rate

This and future issues will take a little longer to get to subscribers in the United States. Previous issues were commercially printed and mailed first class. Faced with not enough renewals and new subscriptions, I had decided that I could no longer do *The Z-Letter*, and was preparing a letter to my subscribers telling them so. I told this to Jay Sage, who mentioned it to Chris McEwen of Socrates Press, who called me with an offer to print *The Z-Letter* on his offset press, and mail it bulk rate using his bulk-rate mailing permit. *This* issue is being printed on a copier owned by a family member, and mailed with another friend's bulk-rate mailing permit, which brings the cost down to where I continue to do the magazine. One disadvantage is that bulk-rate is slower than first class. The other is that undeliverable copies are not returned to me, but simply discarded by the Post Office. So be sure to let me know your new address *immediately* if you move!

More software manuals available

Lambda has found copies of the Access manuals for Personal Pearl. These manuals may now be purchased for \$15 each. As with all Lambda products, tax, shipping, and handling are included in that price and should not be added by the customer. These changes are reflected in the Lambda ad at the back of this and future issues.

Customizing a Kaypro for Spellbinder

I used to leave copies of *The Z-Letter* at a couple of local computer stores, Computer Literacy and Weird Stuff. Though they always disappeared, I got few calls and almost no subscriptions, so I quit doing it. However, in the last month or so I've had two contacts from people who picked up copies of *TZL* that way.

Mark Perry picked up the magazine at Weird Stuff and kept it. Mark is a longtime Kaypro owner and user, who until recently did all his computing on a Kaypro 10. Then the hard disk in the Kaypro died, and Mark had a hard time finding a suitable replacement. In the end, he put a 20-Mb hard disk in, formatted for 10 megabytes; but after that scare,

he's moving to PC computing. Looking for a home for his Kaypro, he called me. I bought it, then turned around and sold it to Lee Hart for the same price plus shipping costs, taking my profit by keeping most of the non-Kaypro stuff that came with it.

While I had it, though, I played with it a bit. It was in excellent shape and had all the original software on it, including the clever Kaypro menu and the instructions for modifying it. I made a full backup of the hard disk for my archives, which came in useful immediately as Ken Thomson's Kaypro 10 did not have the menu program on its hard disk.

One of the Kaypro utilities is called CONFIG. CONFIG lets you redefine the number pad and the cursor keys on the Kaypro, which makes the KAYPRO.TAB I wrote about last issue unnecessary under most circumstances. CONFIG is also available on Kaypro 4s and IIs, as I found by checking my floppy-disk collection.

When would you customize Spellbinder for the Kaypro, and when would you customize the Kaypro for Spellbinder? If you used the Kaypro mostly for word processing, and Spellbinder was your main or only word processor, you might as well use CONFIG to change the Kaypro's cursor keys. On the other hand, if you used several programs, and most of them expected the Kaypro's cursor keys to emit the WordStar cursor codes, it would be better to customize Spellbinder and leave the cursor keys alone. That way, each program would be happy. Having the Kaypro table for Spellbinder gives you your choice of which way to go, which is the beauty of our operating system. It's also a good example of how to customize Spellbinder for some other computers or terminals which may not have a program like CONFIG.

Good news for Eagle owners

Another person I met this last month, Rick Bromagem, had picked up *The Z-Letter* in Computer Literacy. He had no immediate use for the information, until, like Mark, his old computer began to fail. In Rick's case it was a CCS S-100 system with 8" disk drives, leaving him unable to get at his old software and files on his PC or his Apple II.

I have been copying all his 8" disks to PC format for a special price plus the original 8" disks, many of which are volumes of the CP/M public-domain

library. In the process, we discovered that the DSDD CCS format of his newer disks is not in 22DISK, but it's identical to an 8" Morrow format 22DISK calls /MOR4. So I've been able to copy almost all of his files for him, and we'll get the CCS format added to 22DISK as soon as I can get one of the disks over to Sydex.

We've been able to help each other in several ways. I traded Rick a working Eagle III for his promise to fix the broken Eagle mother boards of several systems I had; the two fixed so far are for sale in this issue's ADS section. I also loaned him a File 10, the Eagle technical manual, and the source files for the Eagle hard-disk BIOS, and Rick is designing a board which will enable Eagles to use modern fast SCSI and IDE drives, and modifying the BIOS to match. I hope to have the details on this, and perhaps have some for sale, next issue! I also introduced Rick to *The Computer Journal*, so you may see some articles by him in future issues of that magazine, as well as here. Also, I'm trading Joe Wright's old Intellec-2 for a Soroc terminal that Rick's souped up.

Another CP/M computer still made

I got a letter since last issue from a Mr. David M. Parkins of Greenbank Electronics in England. Greenbank (established in 1970, according to the letter), continues to manufacture a CP/M Plus (CP/M 3.0), Z80-based computer called Interak. I have never heard of it before, not too surprising as we hear little about any computers manufactured outside the US. I will try to get more information about it. Interested readers should write to Greenbank Electronics, 460 New Chester Road, Rock Ferry, Birkenhead, Merseyside L42 2AE, United Kingdom, or call 051-645-3391. The letter lists D.M. Parkins and S. Parkins as partners, and J.H. Parkins as an associate. Thanks to Mark Minting for telling Greenbank about *The Z-Letter*.

A very special Christmas card

Deborah and I got a lot of Christmas cards this year, but the one from Lee Hart was definitely the classiest. It's a computer board, or card, in the shape of a Christmas tree 6" tall (Christmas "card," get it?). On the trace side it says *Merry Christmas*, and ©1990 TMSI. The circuit side features a chip, resistors, capacitors, and lights in various colors, tastefully arrayed like ornaments and lights on a Christmas tree. A 9-volt alkaline battery plugs into the back and doubles as a stand; when it's plugged in, the lights blink in a constantly-changing pattern (I think

the 9 lights are simply representing the digits and overflow bit of an 8-bit number, which the chip keeps incrementing as long as the battery is plugged in, but that's only a guess). Everyone I've shown this to just loves it. Are you listening, Lee? You could probably make quite a bit of money on these boards, around Christmas time each year, and not just to the CP/M community, either.

The information problem

The biggest problem our community faces is getting information – information about their own machines, information about what software is available and where to get it, information about the past of CP/M computers and software. Some of us have managed to collect a lot of information, in the form of computer manuals, software manuals, old magazines, old newsletters, and other sources less quantifiable. But making this information available to our community, scattered as it is all over the United States and the world, is an enormous problem. Paper copies are expensive to make and expensive to mail. Copies on computer disks require a lot of typing, or scanning followed by careful corrections, and eat up lots of disk space quickly.

One possibility that occurred to me was filming pages of material onto video tape. Video tape is not too expensive, is easily copied, and the majority of homes with computers have VCRs, too. A single T-120 tape can hold 720 pages, assuming it is taped at the two-hour speed and each page is filmed for ten seconds. If the pages were still legible at the six-hour speed, a T-120 tape could hold 2160 pages.

So it was worth a try. Unfortunately, the resolution of VHS is insufficient for this application. If an entire 8½ X 11" page is shrunk to fit on the screen, each line of print gets too few lines on the TV screen to be legible. Panning across the page from top to bottom solves this, but it means the entire page is never shown all at once, and fewer pages fit on a tape.

I may return to this possibility, possibly taping some old magazines this way and sending out samples for peoples' reactions. If you would be interested in participating in such a trial, please write and let me know.

Meanwhile, I'm talking to University Microfilm about prices. If anyone out there is set up to produce microfilm or microfiche, and would be willing to do so, please write. It would be a labor of

love, since I doubt there is enough interest to make this a commercial success. The best we could hope is that once the masters were done, copies could be made easily and cheaply by some means I don't know about. If so, I would be glad to sell the manuals and magazines through Lambda, or refer inquiries to the producer of the microfilms.

A neat little system

A constant stream of inquiries for boot disks for systems I've never seen, such as Durango and Digi-Log, keeps me from thinking I know "all about CP/M computers." I sell a few copies of CP/M each month, usually Kaypro, Eagle, and TeleVideo, but a little of everything else, too. Whenever I talk to someone with a working system whose boot disks I don't have, I get a copy of them so I can help someone else with a similar system down the line.

I sold a book on CP/M and an extra VEdit manual to Dave Wallace in San Mateo, California. Dave has a TRS-80 Model 2 with three 8" disk drives and an 8" 20-Mb Corvus hard disk, running CP/M. He hasn't really used it enough to appreciate how nice a system it is.

TRS-80s are often disparaged as "trash 80s," quite unjustly. While Radio Shack's native TRSDOS operating system is a very strange beast, the actual machines are Z80-based. Ignore the Model 1s, which, like the Commodore 64s and Apple IIs, have to be attached to your TV or a separate monitor. The later model TRS-80s come in one piece with keyboard, CRT, and either 5¼" or 8" floppy-disk drives. Unlike Commodores and Apples, which use other CPU chips and need a Z80 board or cartridge to run CP/M, the TRS-80s have Z80 CPUs. To run CP/M, all you need is a boot disk. The only hardware modification you may need is upgrading some of the older machines to 64K.

If you're still not convinced, and you have a TRS-80 with 64K you're going to throw away – send it to me!

Just for the record

About a year ago, I bought an off-brand laser printer (an Abaton printer, not a Hewlett-Packard LaserJet) because it had PostScript emulation as well as LaserJet II emulation, had both AppleTalk ports for my wife's Macintosh as well as serial and parallel ports, and switched between ports and emulations automatically. I returned the printer and got my

money back because the HP emulation appeared to be faulty; files that printed properly on my HP LaserJet Plus, such as *The Z-Letter*, did not print properly on the Abaton/Everex printer. In particular, when I switched from titles centered on the page to two-column print, or vice versa, the downloaded fonts went away and printing reverted to the fonts built into the printer, unless I modified the files to download the fonts again every time such a switch occurred. Needless to say, this was not acceptable.

A slight doubt lingered, that perhaps this was a quirk of my MagicIndex software rather than the HP emulation on the Abaton printer, and perhaps the same problem would occur on a newer HP printer, such as a LaserJet II. This has now been ruled out. In December my Plus, afters years of faultless

service, began putting streaks and blobs of uneven darkness on pages it printed. I requested and got the use of a LaserJet II from the company repairing the Plus, while they had it in their shop. The earlier problem did not occur on the LaserJet II. As some would say, end of story.

The LaserJet II is a nice machine. I've wanted one a long time, because it does not have the arbitrary limits on size of fonts, number of fonts per page, and number of fonts in memory that the Plus does. In addition, it's much lighter, only half as tall, and has a regular plug instead of the monster plug on the Plus (so it will plug into the printer plug on my power console). Now that I know it works with my software, I'll have to see whether I can find the \$800 that a II goes for.

SCRIPT OF THE MONTH CLUB

Scripts for feeding multiple arguments
by Jay Sage

My last column presented my recursion aliases. This time I will show you some similar, but much simpler, scripts. The recursion scripts were meant to keep doing a given task over and over again as long as one wished. Here we are going to treat the case where we want to run a given command a specific number of times with a sequence of arguments known in advance. A similar technique will be used.

First let's look at an example that illustrates why we might want such a script. Suppose we have a script called SPELL for checking the spelling in a document, and suppose we have five documents that we want to check: CHAPTER1.WS, CHAPTER2.WS, CHAPTER3.WS, CHAPTER4.WS, and CHAPTER5.WS. We could just enter the following long command line:

```
SPELL CHAPTER1.WS;SPELL CHAPTER2.WS;
SPELL CHAPTER3.WS;SPELL CHAPTER4.WS;
SPELL CHAPTER5.WS
```

Not only is it a waste of time and effort to type the SPELL command five times; it also provides an excellent opportunity to make a typing mistake. With our new alias, we would type the following simpler command:

```
REPEAT SPELL CHAPTER1.WS CHAPTER2.WS
CHAPTER3.WS CHAPTER4.WS CHAPTER5.WS
```

Here is the pair of scripts that makes this possible. First, the master script:

```
REPEAT
IF NU $2;
ECHO;
ECHO %<s%>yntax: %<$0 cmdname arg1
arg2 . . . ;
ECHO;
ELSE;
/xrep $*;
FI
```

It begins by checking for the presence of at least two tokens on the command line, one for the command to run and at least one argument for that command. If there is no second token, it displays the following syntax message (where we assume that it was invoked by the full name, REPEAT):

```
Syntax: REPEAT cmdname arg1 arg2 . . .
```

If there are at least two tokens on the command line, then the master script invokes the subsidiary script XREP with the full command-line tail. Note that we are already one IF level deeper at this point. That is important to keep track of.

```
XREP
  FI;
  $1 $2;
  IF ~NU $3;
  /xrep $1 $2
```

The XREP script first closed out the pending IF block with the FI command and then executes the command given by the first token (\$1) with the first of the command-line arguments (\$2). Then it checks to see if there is a third argument. If there is, XREP invokes itself again. This time, however, the tail passed to it is different. The same command verb is used (\$1), but now we strip off the second token and pass along those that remain (\$-2). For our example above this would be:

```
XREP SPELL CHAPTER2.WS CHAPTER3.WS
  CHAPTER4.WS CHAPTER5.WS
```

XREP would now run the command SPELL CHAPTER2.WS and reinvoke XREP as

```
XREP SPELL CHAPTER3.WS CHAPTER4.WS
  CHAPTER5.WS
```

This would continue until we have

```
XREP SPELL CHAPTER5.WS
```

Now the test IF ~NU \$3 (if token3 is not null) will be false, and the XREP invocation will terminate. Note that it does so in a false flow state without a terminating FI command; we are left one IF level down still. This is perfect, because we now return to the master script from which XREP was originally called. It has only one command left in the command line buffer: FI. This is just what we need to finish things up right!

The REPEAT script will work only under rather limited conditions. The command must take only a single argument. Thus we could not use it to substitute many commands into the command line MCOPY file B1:. One solution would be to write a stand-alone (COM-file) alias, say MCOPY-B1, with the script MCOPY \$1 B1:. This alias could then be run by REPEAT to process a number of files. Alternatively, we could have another pair of repetition scripts as shown below. We call this one REP-VF, where VF stands for *Variable-Fixed*, meaning the variable argument goes first in each invocation and the fixed argument follows it. The alias requires that all fixed parts (the command verb and the fixed argument) be given first, followed by all the variable arguments.

```
REP-VF
  IF NU $3;
  ECHO;
  ECHO %<s%>yntax: %<$0 cmdname
    fixed var1 var2 ...;
  ECHO;
  ELSE;
  /xrep-vf $*;
  FI
```

```
XREP-VF
  FI;
  $1 $3 $2;
  IF ~NU $4;
  /xrep-vf $1 $2 $-3
```

I will leave it as an exercise for the reader to trace out the execution of this script pair with an example. Similar modifications could handle cases where the fixed argument comes first or where the command takes two arguments at a time (this is a little more challenging).

LETTERS

More on the PBM 1000

31 August 1992

Dear David,

Thanks for the copy of *The Z-Letter*. Really glad that there is still some interest in the old machines. There is far too much good hardware and software out there to let it just go to waste. Hope I don't get a deluge of people wanting my PBM-1000. I wouldn't give it up, since it was my very first computer and

has worked absolutely flawlessly (knock on ST-506) since I got it in 1986.

Have done some digging and have uncovered a bit more history of the machine. It was sold under two names: PBM-1000 (PBM was short for Performance Business Machines), and CPC-1000. I have a stack of MicroPro internal documentation about an inch thick on this machine, including ECOs (Engineering Change Orders), and they also refer to a PBM-1400. I believe this may be the same basic machine, only

with a 10-Mb hard disk (ST412), but can not confirm this. It is also possible, even likely, that the 1400 was never produced, since much of the paperwork referred to it as "proposed" I do know that PBM-1000 serial number 45 was shipped on September 7, 1981, and the revised operating system v.2.204 was released 10/5/81. The serial number can be decoded by using the first two digits as the year, the second two as the week, the last four as the consecutive unit number. For example, 82220001 would be the first unit produced in the 22nd week of 1982. Version 2.210 was the last released version of the operating system that I have seen.

My machine was one of seven that we bought from MicroPro. Out of these I got three working. Two are owned by a friend who uses them regularly for office word processing. Mine is serial number 81370001. This is the week beginning September 6. Since I have paperwork stating that the "features to be programmed are not yet finalized" pertaining to firmware to run the disk I/O (dated August 15, 1981), I believe my machine may be the first one built. I also own a parts machine, although I have never had a problem with my main unit. We have a large pile of reject motherboards at the store, approximately 50-60, which I just haven't had the heart to scrap. This would lead me to believe that MicroPro must have marketed these systems at one time, although I have never seen them mentioned in the literature.

One minor correction to your article: these machines use 80K of memory, not 96 as you stated. The upper two 16K segments are alternated for the top of the 64K address space. I have run this system with two 5-Mb hard disks and four 96-tpi floppys simultaneously, using an external power supply, and have run both serial and OEM Diablo parallel printers with no problems. Really quite a system.

I have also done serial file transfer using Woolf Software's Move-It (which came on my system) to download to a PC. I tried to do a disk-based transfer, but could not get either Uniform-PC or 22DISK to recognize the disk format. I could get very small files across using Uniform and selecting IMS 5000 Turbo DOS as the format but that's as close as I could get. Since you mentioned that 22DISK now recognizes the PBM format I guess I'll contact them to get the applicable parameters to put in the driver file. Oh, by the way, if you come across a file on the PBM called U78.COM DON'T run it! I don't know what its original purpose was, but it will erase all .COM files from the drive! Scary, to say the least.

Thought I'd share what I have learned about using a 3½" drive on CP/M systems, since it may be helpful to someone. I use two Teac FD-35 drives on my Morrow MD3; they work fine if you use the quad-density operating system. This is the version that runs the 96-tpi 5¼" drives. I run two 5¼" drives and two 3½" drives simultaneously and have had absolutely no problems. The electrical interface is the same, so by simply crimping the header plugs on the cable at the 3-1/2 locations everything will work fine. On other systems, specifically TeleVideo and probably many others, there may be a problem recognizing the drives because these machines require a ready signal on pin 34 before the disk data can be received (see enclosed DOC files for more on this). In this case, the drive must be jumpered so that this signal is present. This is also a problem on many 5¼" drives, by the way; if the machine won't recognize a particular drive that is suspected to be good, this is one thing to check. On the Teac 3½" drives the jumper is marked S2 and should be closed to activate the ready signal. This may be a push-on two-pin jumper or a soldered one (a blue blob that looks like a mono cap, but is really a wire loop with a dab of paint on it). In either case, it must be present if the machine needs the ready signal. On Teac 5¼" drives this jumper is marked RY and does the same thing. Note that this function is not supported by IBM XT or AT systems so PC drives will usually not have this jumper present. On XT systems pin 34 is simply not used, while on ATs it is used for disk change. This is often the cause of an AT refusing to update a directory on an older drive (whether 3½" or 5¼"), since a drive jumpered for a ready signal will never send a disk-change pulse.

The enclosed disk contains the following files:

720K - instructions for installing 3½" external drive on XT, much applies in general to adding drives.

DRIVE.DOC - info on floppy drives, TeleVideo and others.

FLOPPY.DOC - info on adding a third and fourth floppy to an AT.

PC.DOC - general hardware overview of XT, some additional info on floppy drives.

TELE1605.DOC - more drive info plus more on the 1605.

WRITPROT - installing a write-protect switch on a ST506-interface hard disk.

These are all in WordStar 3.0/3.3 format. Hope you enjoy and can make use of some of it.

P.S. I just picked up an IMS machine with hard disk and 96-tpi floppy, haven't fired it up yet, looks interesting since appears to be a S-100 system which I've never messed with before. Thanks again.

P.P.S. I've enclosed a copy of the preliminary specs for the PBM 1000 I found in my files. Enjoy.

Jay B. Long
15039 Costela Street
San Leandro CA 94579

Jay, thanks for the information. I will try to go through your files and extract information relevant to CP/M systems in the near future; this issue I'm trying to get caught up on long-unpublished letters, like yours. 22DISK now recognizes the PBM format because I sent Sydex a PBM disk to analyze; willingness to add formats is one of the things (besides price and ability to handle user areas other than 0) that distinguishes 22DISK over Uniform-PC. I doubt U78 has a legitimate purpose; it seems to be an example of that rare beast, a CP/M Trojan Horse. Unlike a Mac or PC virus, it cannot run unless you invoke it, and it does not spread itself from system to system, so erasing it (and restoring the COM files from your hard-disk backup) ends the problem. — DAJM

Praise and a suggestion

September 3, 1992

Dear David:

Enclosed is my check for the Eagle Computer Users Group newsletter 7/87-10/90. Having used Spellbinder for several months, it is quickly becoming my favorite word processor. Hopefully your old newsletters will contain many Spellbinder tips and hints.

Your adventures in the flea markets mentioned in *The Z-Letter* have prompted a suggestion. Maybe you should consider buying and shipping machines, parts, etc. to your readers who do not have access to these sales. Do you think it would be profitable for you?

Sincerely,
Art Welsh
801 Airport Heights #387
Anchorage AK 99508

Thanks for the order, Art, and for letting me know that

you're enjoying Spellbinder. I hope you enjoy the ECUG newsletters, too. As to buying computers on speculation and dealing in CP/M hardware — sorry, that sounds like a good prelude to filing for bankruptcy. If any reader is looking for a particular system, or a system with particular specifications, I can try to find one. The cost would generally be cost to me, plus shipping, plus a little extra. Right now I have some extra Kaypro IIs, some extra Morrow MD2s, and even some extra Eagle IIIs and Eagle hard disks. But money is too short, space too limited, to try to intercept all the working CP/M systems making the trip from someone's closet to the dump. I wish I could. — DAJM

CP/M software and CD-ROM

18 October 1992

Dear David:

Thank you for persisting with *The Z-Letter*! Under the circumstances, I'm sure all of your readers would understand, if regret, a decision to suspend publication. Thank you again for hanging in.

I was delighted to read that you are getting into collecting software by the library — this certainly is a systematic way to acquire public-domain and shareware software. Don Johnson just gave me his CP/MUG and SIG/M master disks, along with a fair amount of other material, so I am feeling relatively well-stocked in the software department. I had been feeling somewhat less than well stocked since I'm no longer keeper of one of NYOUG's sets of FOG CP/M disks.

The FOG CP/M libraries, by the way, are enormously collectible, and they should turn up fairly often as CP/M-oriented FOG affiliate groups die out. There were at least two FOG CP/M libraries — one organized by machine on function (Osborne 1, Executive, Morrow, Kaypro, etc.; Games, Utilities, Applications, etc.) and one consisting of more than 220 consecutively numbered disks, each disk (or multi-disk set) having a theme. The FOG CP/M library is still somewhat active; there is still plenty of CP/M software on the main FOG board. The BBS phone numbers are (916) 678-7355 (300/1200/2400) and (916) 678-7356 (9600). I believe at least some of the CP/M download areas are open to all, regardless of FOG membership status.

Several years ago, FOG was planning to release a CD-ROM software collection containing CP/M software as well as MS-DOS and Macintosh software. Of course, a machine capable of running or

emulating MS-DOS extensions would have been required to copy the software from the CD-ROM disk to a disk for use on a CP/M system. In any case, FOG's CD-ROM plans died in the San Francisco earthquake. The group's hard disks and backup tapes were trashed when the UPS restored power to the unattended system (it had been running backup of the CD-ROM master when the quake hit).

Since I am also a CD-ROM accumulator/enthusiast, I was quite disappointed that FOG could not get out a CD-ROM containing a major CP/M library. When New York Amateur Computer Club released the latest edition of the PC BLUE library on CD-ROM, under the name CLASSIC BLUE, I was intrigued to see a directory labeled SIG/M. Delving deeper, I was disappointed to see that only disks 272-303 were included. However, something was better than nothing. And these SIG/M disks are now available on NYACC two-line BBS. This is not the only CP/M software available on a local board in New York — some shows up on Kaypro and Commodore boards — but it's probably the most accessible CP/M software around here.

Except for CP/M emulators and occasional compression/decompression programs, the only other CP/M software I have seen on a CD-ROM disk was Irv Hoff's IMP on the Night Owl's CD-ROM collection. Most CD-ROM collections do include all the handy compatibility and emulation software from Sydex.

I haven't done any calculations, but I would guess that most of the CP/M public-domain software in the world would fit on one CD-ROM disk (up to 600 meg). Trouble is, who has it all in one place? I've heard that the military-operated Simtel20 has a big CP/M collection, but I doubt that anyone will release a collection of CP/M software along the lines of the MS-DOS source code and other disks based on Simtel20's collections and released by Walnut Creek software.

As a long-time user of Z80 laptops, I appreciated the comments on the model 100/102 and the idea of a lightweight CP/M laptop. For the past three years I have been using the Cambridge Z88, a Z80 machine despite its model number, though not a CP/M machine. The Z88 is a two-pound machine with a somewhat object-oriented operating system called OZ; text editor/spread sheet, communications/file transfer, and file-management software are built into ROM. Data storage is on battery-backed RAM or non-volatile EPROMs. I got the Z88 after wearing

out a much-used Radio Shack Model 100, and I like the Z88 enough that I bought another after I wore out my first Z88. (Travel is tough on laptop screen, and they are expensive to replace.) Occasionally, I wonder whether a version of CP/M lies below the surface of inexpensive laptop word processors such as the models distributed by Panasonic and Smith Corona. I have never seen a technically-oriented description, or had the opportunity to open one up and look.

As a way of getting into the computer-museum business, have you considered getting a master's degree in museum studies? Then you could shop yourself around to technology museums with a degree and a collection.

Best wishes,
Steven Johnson
325 E. 201st, Apt. 6H
Bronx NY 10458

Thanks, Steve, for an interesting letter. The big problem with anyone putting out a CD-ROM of CP/M and Z-System software is finding customers to buy it. We don't hang out at the local computer store or subscribe to most of the computer magazines, because they long ago made it clear their opinion of us. Whoever did it would probably lose their shirt. And then where do you find another sucker willing to do it all again a month later when all the Z-System gurus have come out with new versions of half the utilities? I think Z-SUS is more practical for us than CD-ROMs, if only because few CP/M machines can read a CD-ROM. It might be different if someone developed a CP/M CD-ROM interface, and made the schematics and software available at a reasonable price (hint, hint!) — DAJM

Life in Xanadu

October 18, 1992

Dear David,

Thank you for serving as tour guide on my recent trip to San Jose. Bay Area residents may take such access to technology for granted, but I found it truly stupefying. I thought your readers outside the Bay Area might like a visitor's description of this computerphile's Xanadu.

Computer technology pervades every aspect of daily life. The streets have names like Semiconductor Way and Technology Blvd. Billboards on the freeways extoll the virtues of Intel CPUs and Microsoft Windows.

In such an environment, Fry's Electronic Supermarket may seem normal. It's not. Visualize a K-Mart with the top half of the building painted black, and silver "leads" painted down each side. That's right, the whole building is a giant integrated circuit.

Walk inside. Huge "power cables" with glowing chaser lights lead the way. The dark green floor is networked with lines of copper-orange tile; a giant PC board. The ends of the aisles have 3' resistors and capacitors, perfect in every detail. One wall is a 10' high PC board, covered with meticulously accurate ICs and components. You could film *Honey, I Shrunk the Nerds* in this place.

Then there is the merchandise. Imagine a supermarket that sells micro chips and potato chips; 16-bits and bacon-bits; programming languages and programming fluids (Coke, Pepsi); with blister-packed PC parts hanging on the hook in the checkout line next to the candy.

Fry's has a great selection of consumer electronics: TV, audio, car stereo, and telephones as well as computers. Prices are at the discount-retail level; good, but not down to mail order. Computer coverage is particularly extensive, and covers the PC, Apple, and Commodore lines.

The component aisles sell bulk-packed parts. Resistors by the spool, ICs by the tube, relays by the gross. I can't help but wonder who would buy a case of D connectors (at retail!) on a Saturday afternoon.

We also visited Halted Specialties Co. They specialize in electronic components for those who like to "roll their own." This is what Radio Shack should be like! Orderly, well-lighted aisles filled with an in-depth stock of resistors, capacitors, semiconductors, and parts of all kinds at great prices. The non-computer world is well represented, too; audio, security, ham radio, telephony, etc.

Finally there is Weird Stuff, an electronic junkyard. If you need an electropsychic aura vulcanizer, this is the place. A hundred tables piled with a thousand examples of yesterday's technological masterworks. I saw everything from a 1930 General Radio impedance bridge in its copper-lined walnut case with black crinkle finish and hand-engraved knobs, to a genuine 1982 IBM PC with 256K, text-only monochrome display adapter, and two floppies, for \$75. Trash dumpsters full of manuals. Commercial software packages at 50 cents a disk just as a source

of floppies.

Like any junkyard, the equipment was deteriorating rapidly. Cords get cut off, manuals lost, disks gone, etc. Giveaway-priced CP/M machines of every make and model begged, "Save me." Many had already been disemboweled to provide disk drives, monitors, or memory transplants for somebody's Big Blue Meany. If you plan to keep your early machine running, I strongly advise you to pick up a spare machine before it's too late.

I don't see how anyone in the Bay Area can claim that "CP/M is dead," or "nobody builds anything anymore." All three of these stores were busy; so obviously a lot of "nobodies" are buying old computers and building things. You have a better selection of dealers today than the Midwest did in the CP/M boom years!

Madness is just a state of mind,
Lee A. Hart
TMSI
323 West 19th Street
Holland MI 49423
(616) 396-5085

Glad you had a good time, Lee. If the CP/M community in the Bay Area seems a bit jaundiced, it's at least partly because there were many more such stores, with a much greater selection of CP/M equipment, just a few years ago. It's hard to get excited about Halted and Weird Stuff's mostly-PC selection when they (and Haltek and Ace and Alltronics and Curtis and many others) had huge stocks of CP/M magazines, CP/M software and manuals, and working CP/M machines of many makes and models not that long ago. Now half these stores have gone out of business, and the rest have only a leavening of interesting stuff among the PC and Mac stuff. The only CP/M machines I recall from the trip you're describing are some Apple IIs and C-64s that have been there a long time, some Access systems in pretty poor condition, a Basis with far too high a price on it, and some TeleVideo cases that never had boards or drives in them.

As for Fry's, it never had any CP/M stuff, but was a current-day, PC and Mac store from the beginning. I agree that the decor is amusing. Let me point out one thing that may not be clear from your description, that no one scale is observed in the decorations. The whole store is painted like one big chip, but the doors are labeled with replica ENTER and ESCAPE keys. Giant resistors and capacitors sit around the floor, but a whole board sits up on one wall. Meanwhile, the aisle signs are in the shape of floppy disks. Obviously, things are in all different scales.

Lee also referred John F. Sissons, who was looking for help with his ATR-8000, to Tony Venticinquie, who has one; and has been exchanging letters with Gene Austin on the Gitana laptop discussed in earlier issues. As and when this talk passes from preliminary stages, I will print some of this correspondence. — DAJM

NorthStar Advantage sources

Dear David,

Hello. It was good to read of your latest computer episodes in *The Z-Letter*. It was also reassuring to hear that the Sound Potentials library is being kept available. Hope your other ventures also are turning out well.

One of the most interesting parts of your newsletter, to me at least, was your acquisition of a NorthStar Advantage. I ran across one at a thrift store about a month ago, and its price of 45 cents a pound proved irresistible. The computer powers up, and gives the directive to **LOAD SYSTEM**. However, as with most of my compulsive purchases, it did not have a boot disk. I contacted an outfit in Emeryville, which works on NorthStar systems, but could not provide a boot disk. I would like to order the CP/M diskette for the Advantage, and a copy of the User's Manual; I'm enclosing payment of \$40. Also enclosed is an ad from *Computer Shopper* that may be of interest. You'll notice that your price for CP/M is better. Thanks for your help.

Sincerely,
Jim Williams
411 Linden Avenue
San Bruno CA 94066

Jim, by now you should have the Advantage user's guide, and the boot disk, which I tested on my own Advantage. Let me know if you have any problems. I can also copy software to NorthStar format, and I have tons of the manuals for various packages and hard-sector disks.

The places Jim mentions are: (1) MicroStrategies Service, 1240 Powell Street, Suite F, Emeryville CA 94608, and (2) Quality Discount Computers, Wellington NV, phone (510) 487-8148, orders (800) 472-7444. Quality's ad says they bought the Advantage product line. They advertise two-floppy Advantages for \$350, with 15-Mb hard disk \$500, 30-Mb \$600. 5-, 15-, and 30-Mb upgrades kits are \$200, \$250, \$350 respectively. Diskettes are 80 cents each. More than 40 software packages, including CP/M, are available for \$40 each. They also advertise repairs. I cannot recommend them, as I've never

done business with them, but this information may prove useful (or even life-saving) to someone, so here it is. — DAJM

A new word-counting program

January 4, 1993

Dear David:

I have a writer's word counter ready to field test. If there are any writers among *The Z-Letter's* readers, they may send me a 5¼" 96-tpi disk in Eagle III format, with return postage, and I'll send them copies free. All I want in return is a report on how it works, especially any problems, so I can write them out.

It should work in any CP/M or Z-System machine. There is no installation. All you do is get it onto the desired disk.

You have to remove titles, pagination and whatever else you don't want counted and save it with *filename.CNT*. (It's only a dumb machine. It can't tell the difference between titles and text.) It works cross-drive with the full range of disk letters. It will add the count to the CNT file if so instructed.

I wrote it to get clear of Spellbinder's character counter and Word Perfect's word counter, which my daughter says is junk.

For programmers, that thing wasn't easy to write. The only thing that meets editorial requirements is two word counters in one, one for numbers, one for words with operator control over how hyphenated words are counted.

The instruction manual is one page.

While writing this, I found a mistake in all of my \$250 worth of assembly-language books, and an undocumented glitch in CP/M 2.2.

1. I wasn't about to rewrite a file to add a few words to the end, so I used Function 35 (Compute File Size) to locate the last record. The books say the returned number can be used directly. *No way!* It returns the number of records, which is 1 more than the last record number. You have to decrement it to use it.
2. In the rare event that the number of characters in a file is an exact multiple of 128, CP/M will write it that way, with no CP/M EOF (Dec 26,

Hex 1A) on disk. A later attempt to read the file will lead to a DISK ERROR message. I tried it with Spellbinder with the same result.

I handled it by inserting 130 CP/M EOFs after the end of the file. To test whether write is finished, I bump DMA, then back it up and test the last character of the just written record. If not an EOF, I write another record. In the case where the number of characters is an exact multiple of 128, this causes 1 full record of EOFs, but at least it can be read.

This is so rare that it seldom causes loss of disk space. But I, being what I am, accidentally wrote a test file whose characters were an exact multiple

of 128, and spent the next two days figuring out what happened.

Sincerely,
Eugene Austin
P.O. Box 115
Tilden NE 68781
(No telephone)

Thanks for the copy of your word counter, Gene. I will have to compare its speed and accuracy with that of the standard, The Word Plus' WC. Maybe some of my readers will be interested in comparing it with the word-counting facility of their favorite word processors. — DAJM.

PERSONAL ADS

Free CP/M computer

Toshiba computer with 8085 CPU, manuals, in working condition, with 8" drives, free to anyone who will come get it in San Jose, California, so I don't have to move it to Oregon. Call David McGlone at (503) 688-3563 before the middle of February if interested.

Printer for sale

Diablo 630 letter-quality printer for sale. Includes tractor wheels and ribbon. \$100 or make an offer. Eugene Heil, 3025 Crate Lane, San Jose CA 95132, phone (408) 258-3282.

Computers for sale or trade

Two Morrow computers, two Kaypro IIs, \$50 each picked up in San Jose California before mid-February or Eugene Oregon after move, or \$50 plus shipping otherwise. Two Eagle III computers, same terms, but \$70 each. Two Eagle File 10 external hard-disk units, \$100 each, same terms. Will trade for comparable computers not represented in my collection. Contact David McGlone, phone (503) 688-3563.

MAGAZINE ARTICLES

The following magazines were received since last issue. Articles relevant to the CP/M and Z-System community, if any, are listed for each magazine. Where the address and subscription rate is not listed, see the listing for the magazine in the RESOURCES section.

The Computer Journal, #57, September/October 1992. Jay Sage's regular Z-System Corner talks about ZedFest Europe 1992 and multilingual programming. Herb Johnson begins a new regular column, Dr. S-100, specializing in S-100 system support. Rick Swenton, who wrote the CP/M, Z-System, and NZCOM interfaces to the X-10 home-control systems, describes the hardware, the interface program, and

the sources in *Home Automation with X10*. Steven G. Westlund describes *File Transfer Protocols* for downloading files from bulletin boards by modem. Terry Hazen writes about *MDISK at 8 MHz*, MDISK being a 1-Mb RAM disk Terry invented for the Ampro Little Board computer. Frank Sergeant has an *Introduction to Forth* this issue, and Walter J. Rottenkolber an article on *Shell Sort in Forth*. Lee Bradley's collection of material on MYZ80, the location of which I reported in *TZL 22*, is excerpted here as *Z at Last!* Bill Kibler's editorial feature, Computer Corner, talks about a possible Z180 PC-bus computer Herb Johnson's been suggesting, operating systems, and Forth.

#58, November/December 1992: Jay Sage continues

on handling messages in programs, including language independence. Rick Rodman's Real Computing column, rarely mentioned here because it deals with 32-bit systems, mentions a free operating system called Uzi, a Z80 Unix Version 7 clone written in C by Doug Braun. This inspired Bill Kibler to find it on GENIE and print the introduction of the documentation. Herb Johnson's Dr. S-100 column this issue discusses resurrecting an old S-100 system in a systematic way. Chuck Stafford, who sells the Turbo ROM for Kaypros, begins a Mr. Kaypro column with instructions on moving the reset button to the front. Clem Pepper presents a C program and article for *Computing Timer Values* for ICs (chips). Brad Rodriguez covers *Forth Multitasking in a Nutshell*. Other good news from the editor is that he is making issues 1-9, and 10-19, which are out of print, available a photocopy sets with plastic protective covers. Each set will be \$25 in the U.S., or \$35 outside the U.S. Bill has also gotten permission from the former publisher of *Micro Cornucopia* to sell that extinct magazine's collection of Kaypro CP/M disks. The first 21 disks are listed in this issue, and the listing will continue next issue.

Computer Monthly, in its new format, has little interest left other than Nancy Black's "Fearless Computing" column. The September 1992 issue's column rhapsodizes about dot-matrix printers, mentions a reduction of WordStar's price from \$149.95 to \$119.95 (Spellbinder is \$60, Nancy), reveals that she's acquired a PC and begun to switch over from her Commodore, and various other things. The other interesting thing this issue is an ad from USA Micro on page 68, touting Laser brand computers. Besides some Laser 386 and 486 machines, the ad lists the Laser 128 (an Apple IIe clone), and the Laser PC4. The PC4 is a CP/M laptop, marketed to PC and Mac owners as a way to take files with them on trips. The interface to the host computer varies, as does the cable, but the PC4 itself is a CP/M Plus computer with an LCD screen; and the PC version costs \$209.

Nancy's column in the October issue is titled *Moving to MS-DOS*; if you read her column for CP/M, you'll be very disappointed. *Turbo Charge Your LaserJet Printer*, by Ronny Richardson, reviews some hardware products from Pacific Data Products. *Life Online* by John McCormick discusses getting online, online etiquette, and lists the phone numbers and costs of various services such as GENIE and CompuServe.

In the November CM, Nancy Black describes her

own computer career to date, from the word-processing class at an adult education center to the Amstrad PC she now owns. Her own comments on the continued usefulness of older and simpler computers are echoed by Edward Snow of Orlando College, the institution to which I sold a Kaypro, a Morrow, and an Eagle for their history of computers classes. In the December issue, her column consists of extremely general remarks on getting started on PCs. This continues in the January issue. The trend here is towards only Nancy's column even mentioning CP/M, and hers getting less interesting all the time. All the other columns on Apples, ADAMs, etc., are long gone.

The classified ads in the back are still useful, but they too have diminished in variety. CM now costs \$15.95 for 1 year, or \$22.95 for two years, in the U.S. and its possessions. Computer Monthly Subscriptions, P.O. 620422, Atlanta GA 30362-2422.

The Cursor October, November, and December 1992. This is the newsletter of a Denver user's group called the PC-CLUB, formerly CP/M SIG. October's article is a reprint from another PC users' group, on minimum line testing requirements as set by the FCC. The November issue had no articles. The article in the December issue was a review of WordPerfect Works. The club has an extensive CP/M library as well as PC software, and should be useful to people in the Denver area. Dues/subscription is \$18 annually to the PC-Club, P.O. Box 5633, Denver CO 80217-5633. The editor is Eliot Payson, phone (303) 798-7812.

The Staunch 8/89'er #30/31, May-August 1992, arrived as I was finishing this issue of *The Z-Letter*. Talk about getting in under the wire! A postcard sent out to subscribers in November explained that his H90 had died, was being fixed, and a double issue would come out about Thanksgiving. As explained in the actual issue, things were even more difficult than he expected. The good news is that he now has a spare system.

The Zenith Users' Group (formerly HUG) has released its 8-bit (HDOS and CP/M) software to *SEBHC Journal* and *Staunch*, a matter of 60 HDOS disks so far, CP/M to follow. Kirk promises to begin listing the material next issue. Kirk also is calling for articles; write to him at the address in our RESOURCES section and ask for his writer's guidelines. Letters this issue discuss forming a co-op

to design and build the portable '89, the possibility of the various Heath/Zenith computer magazines combining, forming a Heath/Zenith users group that's actually created and run by the users, jumpering a Panasonic JU475-2, and various anecdotes. Hank Lotz supplies an MBasic routine and reviews an out-of-print but excellent book on assembly-language programming. Pete Shkabara writes about PC viruses affecting CP/M systems (impossible) and migrating from CP/M to newer computers. Kirk Thompson contributes *Patching WordStar 4.0, Part 1 of 2: Bringing Up the Function and Keypad Keys*, and *Using T/Maker, Part 1*. Dan Jerome provides *A List of Tools Needed To Repair the H-89*. Various readers are also advertising a ton of hardware and software for sale or free to good homes. This remains a terrific magazine. See RESOURCES for address and rates.

Z-100 LifeLine #21, August 1992. The Zenith Z-100 is an S-100 system with dual 8088 and 8085 CPUs. It runs Z-DOS, Zenith's version of PC DOS, and CP/M-85. *Z-100 LifeLine* is a magazine devoted to this machine. While the Z-100 cannot be upgraded to the Z-System (that requires a Z80 or later Zilog chip), several people have praised it to me as a CP/M machine, and there seem to be a fair number of them available. This issue mentions a special offer for people needing an MTR-100 ROM for their

second or third Z-100 systems, and Lee Hart's suggestion that Heath/Zenith computer users form their own group, now that the official Heath Users' Group is defunct. There's an article called *Will the REAL Heath Support BBS Please Step Forward!*, an account of the annual conference, *Z-100 Get-Together 1992*, both by Paul Herman, *ProColor 512 Board: A Review*, by Tim McCaffrey, calls for DiskPack support for a UCI Easy-PC, CD-ROM support, *Using the MTR-100 v3.1 Debugging Commands* and *Making the Most of Your Z-205 Memory Board*, again by Paul F. Herman, who's responsible for anything not attributed to someone else (the same scheme I use).

Issue #22 (October 1992) worries about its future, with fewer than 500 subscribers. Other news is that ZDS is considering reinstating software and manual support for the Z-100, due to 2 or 3 calls a day from people who have purchased them secondhand. Articles include *Processor Swapping* (remember, this is a two-processor machine), and *Floppy Drives for the Z-100* (they mean floppy-disk drives; drives themselves are never floppy). Some of the survivors from the Heath Users' Group and REMark have formed a company called Electronic Concepts Inc. *Z-100 LifeLines* offers a disk with an index to all Z-100 articles in various publications. There are lots of letters and for-sale and wanted ads. See RESOURCES for address, back-issue, and subscription information.

RESOURCES

Lee Bradley sells public-domain CP/M packages, \$15 each for the game disk, word-processing disk, dot-matrix printer disk, time-manager disk, SIL compiler disk, NPS COBOL compiler disk, mailing-list disk, spreadsheet disk. NZCOM, Z3PLUS, ZSDOS, BDS C, ZMAC also available. He also carries the MYZ80 Z80 emulator for PCs, plus a large set of Z-System utilities, as a package called Z-4-AT, at \$10 per disk; there are currently two disks. CP/M computer training, \$15/hour. Contract programming service available. Computers, printers for sale. Write Lee Bradley, 24 East Cedar Street, Newington CT 06111, or call (voice) (203) 666-3139 or (data) (203) 665-1100.

Paul Chidley is the co-inventor of the YASBEC computer. The YASBEC board is \$100 Canadian, the YASMEM memory-expansion board is \$30 Canadian, the EuroCard backplane is \$25 Canadian, and the ZVID video board is \$35 Canadian with PALs, \$25 Canadian if you wish to provide your own PALs

from the logic in the documentation. Contact Paul Chidley, 162 Hunterhorn Drive NE., Calgary Alberta, Canada T2K 6H5, phone (403) 274-8891.

The Computer Journal is the foremost magazine in today's CP/M community. Published 6 times a year. Free sample issue available. Subscription is \$18/year, \$32/2 years (US); Foreign, Surface is \$24/year, \$44/2 years; Foreign, Air Mail is \$38/year, \$72/2 years. Contact The Computer Journal, P.O. Box 535, Lincoln CA 95648-0535, phone (800) 424-8825.

Corvatek sells KEY-UP, a keyboard interface for IBM-style keyboards. The DM-1 for Big Boards, DM-2 for Xerox 820, DM-3 for Kaypro, DM-4 for Franklin, DM-5 for ASCII Universal, DM-6 for Apple II are each \$129. Inquire for other models and custom key definitions and applications. They also sell Keytronic keyboards in QWERTY or Dvorak; the KB5150 is \$112, KB5151 is \$164; shipping and handling

I had also brought to the meeting.

January 9 meeting

Attendance this meeting was limited to Bill Josephson, Ken Thomson, David Banoff, Dick Dethlefsen, Jack Morse, and Bill Bradley. A lot of the discussion was inspired by the bombshell that David McGlone had moved to Oregon and would not be attending that, or many future meetings, in person! The good news, however, is that *The Z-Letter* will continue, after all.

Other than that, Bill Bradley was helped with the replacement for the hard disk on his PC, which had died. Bill Josephson's problem with the MS-DOS version of Spellbinder has resisted solution; it will only acknowledge the first file on his hard disk's directory, and has no access to any subdirectory. David Banoff has no such problem with version 6.0 of Spellbinder on his very similar PC, but Bill's copy is an earlier version of Spellbinder, and the period in which Ltek will support Spellbinder or sell upgrades has expired. Bill likes Spellbinder and doesn't want to

have to buy and learn Word or WordPerfect, so he is resorting to running Spellbinder on a floppy in one drive, while saving files to a disk in another drive, just as though he had no hard disk. This works, because the bug, whatever it is, does not affect floppy-disk directory access.

ECUG software libraries

ECUG has two software librarians. Anyone seeking CP/M or Z-System software should contact David McGlone at Lambda Software Publishing (see back cover for address and phone number).

For PC (MS-DOS) software, our librarian is Jack Morse, 1082 W. Hill Court, Cupertino CA 95014, phone (408) 252-6103. Jack is not running a business, so when you request software from him, send him floppy disks, not money, and the postage to mail the disks. He will copy the software you request onto your disks and mail them back to you. That way no money changes hands, as would be the case if he charged a fee per disk.

(continued from Page 2)

The Z-Letter reserves the right to edit for publication letters received. If you're not willing to have your letter printed, or edited before printing, please say so in the letter. All other letters will be assumed to be for publication. All letters become the property of Lambda Software Publishing upon receipt.

A subscription to *The Z-Letter* starts with the first issue after the subscription payment is received. See the Lambda Software Publishing ad in this issue for the subscription rate and price for back issues.

Anyone may submit personal ads. Each ad will be run three times automatically. If the ad doesn't

achieve its end in that time, it can be reinstated after a lapse of one issue. If the ad succeeds before it has run three times, please inform us so we can drop it at once.

All trademarks used herein are acknowledged to be the property of their owners.

The Z-Letter is indexed as time permits. The index for issues 1-5 appeared in issue 5. The index for issues 1-18 is being prepared; issues 13-18 have been indexed.

The picture on our front cover was produced by Carol Jacobs on her Macintosh Classic.

Albert Einstein, when asked to describe radio, replied: "You see, wire telegraph is a kind of a very, very long cat. You pull his tail in New York and his head is meowing in Los Angeles. Do you understand this? And radio operates exactly the same way: you send signals here, they receive them there. The only difference is that there is no cat." - *quoted on Internet by Andrew Scott Beals, Berkeley, California*

Thanks to my new computer, I now have three ways to store my data: left of the computer, right of the computer, and on TOP of the computer. - *The comic strip Shoe,*

1/18/93

Lambda Software Publishing

149 West Hilliard Lane, Eugene, OR 97404-3057
(503) 688-3563

Operating system

CP/M (version 2.2), \$25. A lot of my customers have picked up a computer without a disk to operate it. I can sell you the disk to run your computer. (DRI)

Manuals and newsletters

Computer manuals, \$15 each. Manuals for many different makes and models of CP/M computers are available, too many to list here; please inquire. (Various companies)

Software manuals, \$15 each. *CBASIC Reference Manual*, (DRI); *MBASIC Reference Manual*, (Microsoft); *Perfect Calc User's Guide*, *Perfect Filer User's Guide*, *Perfect Writer/Speller User's Guide*, (Perfect Software, Inc.); *The CP/M Handbook with MP/M*, by Dr. Rodney Zaks (SYBEX); *Personal Pearl Manual* (Pearlsoft).

The Z-Letter, back issues: \$3/issue (US, Canada, Mexico), \$5/issue (elsewhere).

The Z-Letter, subscription: \$18/12 issues (US), \$22/12 issues (Canada & Mexico), \$36/12 issues (all other). Now published bi-monthly.

The Z-Letter, back-issue/subscription package. Get all back issues of TZL plus a current subscription for less than the cost of the individual back issues. Send the money for a 36-issue subscription (\$54 in the U.S., \$66 Canada and Mexico, \$108 elsewhere), and indicate that you want your subscription to start with issue 1. You will receive all the back issues immediately, and the remainder of your subscription as it is published.

Eagle Computer Users Group newsletter, \$15. All issues from July 1987 to October 1990.

Word processing

Spellbinder (version 5.3H), \$60. The best CP/M word processor. Includes all four manuals and full support. (Ltek)

MagicIndex (version 3.00), \$100. Text formatter used to produce this newsletter. Versions available for standard word processor or WordStar, LaserJet or

Diablo 630. Please specify your word processor and printer when ordering. (CES)

Z-Fonts catalog, \$3 (US, Canada, Mexico), \$5 (elsewhere). Samples of all the fonts available from Lambda for HP LaserJet printers, with instructions on how to choose what size, orientation, etc. you wish.

Z-Fonts, \$8 per font. (Digi-Fonts)

SuperCalc

The standard CP/M spread sheet (version 2.0), \$30. (Sorcim)

Move up to the Z-System!

NZ-COM (version 1.2d), \$50. Upgrades your CP/M 2.2 system with no hardware change, yet you can still run your CP/M programs like Spellbinder and SuperCalc. Includes a manual and a large set of Z-System utilities. (Alpha)

ZCPR 3.4 source code, \$35. (Alpha)

I/OR, \$25. Saves the screen in a file, saves printer text in another file. 15K IOP segment, ZRDOS required. (Alpha)

B/Printer, \$25. Deluxe background single-file printing. 15K IOP segment, ZRDOS required. (Alpha)

NuKey (version 2.03), \$25. Advanced function-key generator. 15K IOP segment, ZRDOS required. (Alpha)

All three IOP segments, \$60. (Alpha)

Customizable diskette carriers

Each protects up to three 5¼" diskettes from harm in briefcase, etc. Perfect for traveling or just between home and office. \$3 each.

Boot disks wanted!

I am building a library of CP/M boot disks so that I can supply working CP/M disks for all makes of

machines. The disk should contain the CP/M utilities, the formatting and other utilities that are specific to the machine, and have the operating system on the boot tracks. I will pay you \$5 for each one I don't have already, or deduct \$5 from any products you buy from me.

Disk copying – \$10 per disk

I can copy most soft-sector (both single- and double-density) 5¼" CP/M formats, including Apple II CP/M and Commodore CP/M. (Sorry, no hard-sector formats except Northstar and Heath/Zenith.) I can also copy 8" disks and 3½" formats. Copies can be CP/M <-> CP/M, CP/M <-> MS-DOS, CP/M <-> Mac, or Mac <-> MS-DOS; specify the format of your originals, and the format desired for the copies. Both originals and copies will be returned. *The responsibility is yours to ensure that you are the legal owner of material you ask me to copy.* Software you buy from Lambda will be sent to you in the disk format you request at no extra cost.

Sound Potentials public-domain software

I have acquired the rights to the Sound Potentials collection of public-domain and shareware software for CP/M systems. Thus it will stay available to our community, even though the former proprietor has retired.

To receive a catalog of Sound Potentials software on disk, send \$10. If you have a earlier catalog from Sound Potentials, you may use it to order software from me. To order software, add up the sizes of the software you are ordering, divide by the size of your disk format, and round up to get the number of disks required to hold it.

The price has gone down. While I will continue Sound Potentials' practice of putting on disk for you just the software you want, the price is now per disk, not per K of software. The new price is \$10 per disk,

same as I charge for copying disks. Obviously, then, the larger your disk format, the more software you can get for the same amount of money. As with all things I sell, there is no separate charge for shipping and handling.

I am collecting more software from a variety of sources, and the collection will be expanding in the near future. Major additions will be announced in the pages of *The Z-Letter*, and in future editions of the catalog.

Before investing major sums in public-domain software from any vendor, consider purchasing a package designed to achieve your end. For instance, if you are going to order a lot of utilities, consider upgrading to the Z-System via NZCOM, which will not only give you a later version of ZCPR than the public-domain version 2, but includes a huge set of utilities tailored for the Z-System. Before purchasing lots of patches for your copy of WordStar, investigate Spellbinder, ZMATE, VEdit, and other superior word processors. If you desire superior formatting abilities, MagicIndex may be just what you're looking for.

On the other hand, if you're almost perfectly satisfied with your present system and just need a few utilities to round out the corners of your happiness, the public domain may have just what you desire.

Ordering

Make sure you tell me your name, company name if any, address, home and business phone, and the computer format in which software should be supplied. For back issues, list which issues you want. For fonts, use the order form from a copy of the catalogue. For Sound Potentials software, list the programs you want. Your check for the total should be in U.S. funds in an international money order, or the equivalent in your country's currency. There is no sales tax in Oregon. I do not charge separately for shipping and handling.