

The Z-Letter

Newsletter of the CP/M and Z-System community

Number 26

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Sony OA-S3300 or SMC-70 system

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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.

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 letters become the property of Lambda Software Publishing upon receipt.

A subscription to *The Z-Letter* starts with the first issue after payment is received. See the Lambda ad in this issue for subscription rates, back-issue price, etc.

Anyone may submit personal ads. Each ad will be run three times. 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.

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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.

This issue was printed by Alan Bard Newcomer's Hypatia Press, 360 West First, Eugene OR 97401, phone (503) 485-0947, and mailed by the Press' bulk-mail permit.

RANDOM ACCESS

Heath/Zenith conference

Owners of classic (non-PC) Heath/Zenith CP/M and ZDOS computers will be converging on the Chicago area this fall for the Fourth Annual Z-100 Get-Together. This conference brings together users and vendors supporting Heath and Zenith's pre-PC computers, including the H8, H89, and Z-100 series. Learn how to support, maintain, and repair these classics. Buy, sell, and trade hardware, software, and stories. Reminisce with the founders, and meet the vendors still adding new features and capabilities! Avoid the high-pressure hype of the IBM and Mac worlds. Join us for a relaxed, informal weekend, and put the fun back into your computing.

Join us September 11-12, 1993, at the Hyatt Regency Hotel in Oak Brook, Illinois. The conference will be open from 9 AM to 5 PM Saturday, and 9 AM to 4 PM Sunday. Registration is \$15 in advance, \$25 at the door. The Saturday night banquet is \$25 per person, followed by the auction. For registration and a detailed schedule of events, contact Paul Herman, 9317 Amazon Drive, New Port Richey FL 34655, phone (800) 346-2152. Room rates are \$69.00 per night, single or double occupancy; for hotel reservations, phone (800) 233-1234 and ask for the special rate.

Organizing your small hardware

Sooner or later, if you collect computers, you are going to have spare bits of hardware lying around. It may be S-100 cards, spare motherboards, floppy-disk drive electronics, hard-disk controllers, or single-board computers given you by PC people who have no idea what to do with them. How do you store them so that they don't get crunched, and how do you organize them so you know what you have, and can find it on demand?

One answer that seems to work is to put this stuff in hanging-file folders in file cabinets, as I have begun doing. Most of what I'm filing is S-100 boards, but Micromint GT-180 boards, YASBEC accessory boards not yet completed, Zilog single-board computers, and spare Eagle SASI boards also fit nicely into hanging file folders. Most such boards are labeled both as to maker and the name of the board; this is what goes on the folder label. Other boards, which will be entirely cryptic a year from now, you should file and label right away, while you still remember what they are.

Boards too large to be filed this way (TeleVideo TS-804 mother boards, for instance) should be stored,

carefully wrapped, in the record boxes with handles that you can buy at business-supply stores. The boxes should be carefully labeled that their contents are fragile, and numbered. The boards themselves can be labeled with adhesive tags, or tags on strings tied through the mounting holes in the corners. Once the boxes and their contents are labeled, put a folder for each in the file cabinet with the smaller boards, and in the folder put the box number and board number. That way, all your small hardware is in order, and even pieces too large for your filing cabinets have a reference in your system.

Be sure to leave plenty of room in your filing cabinets, and do not squeeze more boards into an already-full drawer; you will damage them. For this reason, it is unwise to put your file folders with boards in them in your regular drawers with folders of manuals, magazines, etc. Paper can take quite a bit of squeezing; circuit boards can not.

If you have only a few bits of hardware, you may wish to use storage boxes instead of file cabinets. Be careful, still, not to cram the boards in, and label the boxes FRAGILE in big letters, so you don't put something heavy on them.

The Computer Journal reprint volumes

I have received the two reprint volumes that Bill Kibler has prepared for issues 1-9 and 10-19 of *The Computer Journal*. This completes my collection, since all the back issues I was missing fall in this range; what about yours? Remember, while *TCJ* is not exclusively CP/M and Z-System, the way *The Z-Letter* is, it *is* the only other magazine for our community. If you are not subscribing to it also, you should be.

The reprint volumes are high-quality, double-sided xerox copies, spiral bound with black plastic spines and plastic front and back covers. They cost \$20 each, plus shipping. Write to *The Computer Journal*, at the address listed for it in our RESOURCES section.

Recommended reading

Let me recommend to you a new science-fiction novel, *Virtual Girl*, by Amy Thomson. This is the quintessential robot novel of our times. Asimov's robots were so far beyond the technology of his time that he had to invent hardware out of whole cloth, and software was so little known that the hardware dominates all discussion of his robots. Today, with so-called AI software everywhere, fuzzy logic being explored, virtual reality becoming commercial, and prosthetic joints becoming more realistic every day,

actual humanoid robots become conceivable, if not yet feasible. *Virtual Girl*, set in the near but not immediate future, tells of the robot an alienated young man builds first in software, then transfers to a robot body, and how she learns to deal with the world. It is well-done technically, and excellent writing, too. This one is too good to pass by, folks.

New Spellbinder library released

SBTABS20.LBR has been uploaded to a Z-Node, and should be available on your local bulletin board by the time you read this. SBTABS10 contained all the original Spellbinder customization tables from the generic and Eagle versions of Spellbinder, plus the ones developed over the years for various

printers and terminals by members of the Eagle Computer Users Group. SBTABS20 still contains those, plus all the tables from the Xerox and HP versions of Spellbinder.

CP/M calendar? Speak up!

There has been almost no response to my request for suggestions for a 1994 CP/M calendar (see the last two issues). This suggests that no one will want to buy one when they are printed. If this is true, simply continue to say nothing, folks, and nothing is what you will get. If you'd like to have a CP/M calendar for next year, with pictures of CP/M computers and other related things each month, respond *now* to let me know you're interested.

A PROGRAMMER CORNERED

Generating mailing labels for a magazine

If you are producing a newsletter of any sort, you will sooner or later have to get it into the hands of your readers. How big a chore this is depends on the newsletter. If it's for your church or your local library, distribution may involve nothing more than printing as many as you need or afford, then leaving them at a designated spot. Even if you mail the thing, you may have a list of subscribers that changes very slowly, or is very small. If this is the case, you can make the changes to your address file with your word processor, then print the file.

Spellbinder has a label macro, as you would expect of a software package billed as office-management software. Like many macros, it expects you to maintain your data base in a Spellbinder data base called a *customer list*. A Spellbinder customer list is a simple one-file data base, where each record has a fixed number of lines, and each line is a field. For example:

```
Carter Hall
Curator, Midway City Museum
1269 Elm Street
Midway City
Illinois
USA.
Earth
Garth Ranzz
The Legion of Super-Heroes
1 Legionnaire Plaza
Metropolis
New Jersey
```

```
USA.
```

```
Earth
```

```
Adam Strange
```

```
1 Ranagar Avenue
```

```
Ranagar
```

```
Ranagar
```

```
Rann
```

In this example, each record has seven lines. The first line is the person's name, the second is the company he works for or the organization to which he belongs, the third is the street address, the fourth is the city, the fifth is the state, the sixth is the country, and the last is the planet. I have omitted the zip code because imaginary cities don't have zip codes, and foreign countries and alien planets don't, either; but you'd better not omit them in real life!

The Spellbinder LABEL macro takes a customer list like this one as input, along with a template which you prepare, and your answers to questions such as how many labels across, etc. It then prints them out in a form which, if your information is correct, corresponds to the actual labels on a sheet. Using sheets of labels in your printer, you get labels which you can stick onto your newsletter, or the envelope your newsletter is mailed in.

I used the LABEL macro for *The Z-Letter* for quite a while, with a slight wrinkle. As I explained in issue #17, I keep subscriber information in one file, and subscription information in another, in a relational

data base using SELECTOR V. I used a SELECTOR report procedure to generate the customer list, then ran LABEL to generate the actual labels. Two other Spellbinder macros of my own invention were used to make certain changes; for instance, to change "Your last issue: 99999" to "Complimentary", and "Your last issue: Sample" to "Sample issue".

This whole arrangement was very clunky, but it worked. To make it work, I had to:

1. Go into SELECTOR, and create the report procedure. It had to be slightly different each time, because each time it was not to prepare the information for subscriptions that had already expired, or did not begin yet. In preparing labels for issue 17, subscription records where LAST ISSUE was less than 17 or FIRST ISSUE was greater than 17 were skipped.
2. Run the procedure just created.
3. Go into Spellbinder, and print the file created by SELECTOR.
4. Go into SELECTOR, and scan the subscription data base. If a subscription is cancelled, cross out the entry on the printed copy. If the subscriber has a later subscription than the current one, for instance because he renewed before his subscription ran out, cross out the number on the last-issue line and write in the number of the last

issue he's actually entitled to.

5. Go into Spellbinder and make these changes in the actual file. Then run the Spellbinder macros mentioned above, that generate the actual file to be printed.
6. Use MagiIndex to print this file, generating the actual labels on label sheets in the printer.

The first improvement I made to this cumbersome system was to eliminate some of the error-prone manual checking I had to do. I changed the SELECTOR procedure so that it skipped subscriptions that had an "X" in the CANCELLED field, and any that ended before the current issue. I no longer had to skip ones that started after the current issue. This change eliminates step 4 in the list above. SELECTOR now omits cancelled subscriptions, and I don't have to go into SELECTOR to correct the last-issue information, since it now shows up in the output file as a duplicate record with a later last issue. With this change, in step 5, I go through the file in Spellbinder, eliminating all duplicate records for a person except the one with the highest-numbered last issue.

Next I did away with having to create the SELECTOR report procedure by hand each time. Just as a SELECTOR data base is an ordinary ASCII file, so is a SELECTOR procedure. The procedure for issue 26, for instance, looks like this:

```
"LINEV"
2,"",1,"label",0,7,7,7,80,-1,1,40,"1-ZLTRSUBS 2-CUSTOMER ",2
"D:ZLTRSUBS",""
"D:CUSTOMER","1/1 | 2/1"
102,1
103,2
202,3
203,4
204,5
205,6
206,7
"",1/6,"EQ","X","SKIP","","",""
"",1/3,"LT","26","SKIP","","",""
```

What all this means is not important to our present purpose. It's enough to know that when this appears in a file where SELECTOR can get at it, and is invoked as a procedure, it causes SELECTOR to go through the customer and subscription files and prepare a customer-list entry for each subscription which is not cancelled, and which did not expire before issue 26. Also, the procedure can be altered outside SELECTOR. For instance, you can use

ZPATCH to change the "26" to "27", and the procedure then prepares the customer list for issue 27.

The easiest way, and the safest way to change the procedure is to write a program to do so. I wrote one in Turbo Pascal which accept the current issue number as a parameter. The following program GETSUBS.PAS can be compiled. If you then type GETSUBS 26, it will generate the SELECTOR report procedure we just looked at.

```

PROGRAM GetSubs (INPUT, OUTPUT);
VAR ReportFile: TEXT;

BEGIN
(* Open report file *)
  ASSIGN (ReportFile, 'GETSUBS.RPT');
  REWRITE (ReportFile);
(* Write SELECTOR report procedure. *)
  WRITELN (ReportFile, "LINEV");
  WRITE (ReportFile, '2,,,,1,"label",0,7,7,7,80,-1,1,40,');
  WRITELN (ReportFile, "'1-ZLTRSUBS 2-CUSTOMER ",2');
  WRITELN (ReportFile, "'D:ZLTRSUBS",,,,,);
  WRITELN (ReportFile, "'D:CUSTOMER",,"1/12/1");
  WRITELN (ReportFile, '102,1');
  WRITELN (ReportFile, '103,2');
  WRITELN (ReportFile, '202,3');
  WRITELN (ReportFile, '203,4');
  WRITELN (ReportFile, '204,5');
  WRITELN (ReportFile, '205,6');
  WRITELN (ReportFile, '206,7');
  WRITELN (ReportFile, ,,,,,,"1/6","EQ","X","SKIP",,,,,,);
  WRITE (ReportFile, ,,,,,,"1/3","LT",,);
  WRITE (ReportFile, ParamStr(1));
  WRITELN (ReportFile, ,,"SKIP",,,,,,);
  CLOSE (ReportFile);
END. (* main procedure *)

```

Next I turned my attention to replacing the Spellbinder macros with a COBOL program. Generally, a COBOL program will be faster than a Spellbinder macro, because a compiled program is generally faster than an interpreted one, and because the Spellbinder macros I had written had to make many passes through the customer list, where the COBOL program went through it only once. The COBOL program is also easier and safer to use; easier, because you simply type its name and tell it the name of the input file and the name of the output file, and away it goes. With the Spellbinder macros, you first go into Spellbinder, then you invoke the macros one after the other. Finally, the COBOL program is safer, because the Spellbinder macros are sensitive to the contents of the line at the top of each section of the file.

```

IDENTIFICATION DIVISION.
*
PROGRAM-ID.
  MAKELBL.
*
AUTHOR.
  DAVID ANTHONY JOSEPH MCGLONE.
*
DATE-WRITTEN.
  24 MARCH 1993.

```

```

*
DATE-COMPILED.
  25 MARCH 1993.
*
* This program uses a Spellbinder-type customer list
* as input. The customer list can be generated by a
* SELECTOR report, the COBOL program GETSUBS,
* or by hand, in the case of sample copies of
* THE Z-LETTER going out with the regular
* mailing. This program generates the actual labels
* used for mailing. MagicIndex is used to print
* the labels on my HP LaserJet+ laser printer.
*
ENVIRONMENT DIVISION.
*
CONFIGURATION SECTION.
*
SOURCE-COMPUTER.
  8080-CPU.
OBJECT-COMPUTER.
  8080-CPU.
*
INPUT-OUTPUT SECTION.
*
FILE-CONTROL.
*
SELECT INPUT-FILE ASSIGN TO DISK
  ORGANIZATION IS SEQUENTIAL

```

```

ACCESS MODE IS SEQUENTIAL
RECORD DELIMITER IS STANDARD.
*
SELECT OUTPUT-FILE ASSIGN TO DISK
ORGANIZATION IS SEQUENTIAL
ACCESS MODE IS SEQUENTIAL
RECORD DELIMITER IS STANDARD.
*
DATA DIVISION.
*
FILE SECTION.
*
FD INPUT-FILE
  LABEL RECORDS ARE STANDARD
  VALUE OF FILE-ID IS INPUT-FILE-NAME
  DATA RECORD IS INPUT-RECORD.
01 INPUT-RECORD    PIC X(45).
*
FD OUTPUT-FILE
  LABEL RECORDS ARE STANDARD
  VALUE OF FILE-ID IS OUTPUT-FILE-NAME
  DATA RECORD IS OUTPUT-RECORD.
01 OUTPUT-RECORD  PIC X(120).
*
WORKING-STORAGE SECTION.
*
01 WS-MORE-INPUT   PIC X(03) VALUE SPACES.
01 WS-LEFT-RIGHT  PIC X(01) VALUE "L".
*
01 WS-FIRST-ISSUE PIC X(05) VALUE SPACES.
01 WS-COMPARE     PIC X(05) VALUE SPACES.
01 WS-COMPLIMENTARY
  PIC X(05) VALUE "99999".
01 WS-SAMPLE      PIC X(05) VALUE "Sampl".
*
01 INPUT-FILE-NAME PIC X(14) VALUE SPACES.
01 DEFAULT-INPUT-NAME
  PIC X(14) VALUE "A:ADDRESS".
01 OUTPUT-FILE-NAME
  PIC X(14) VALUE SPACES.
01 DEFAULT-OUTPUT-NAME
  PIC X(14) VALUE "A:LABELS".
*
01 HEADER-1.
  05 HEADER-DOT    PIC X(01) VALUE ".".
  05 HEADER-NAME  PIC X(14) VALUE SPACES.
  05 HEADER-TEXT  PIC X(26)
    VALUE "is the name of this file.".
01 HEADER-2      PIC X(16)
  VALUE ". Regular text".
01 HEADER-3.
  05 FILLER       PIC X(02) VALUE ". . ".
  05 FILLER       PIC X(01) VALUE ""7E"".
  05 FILLER       PIC X(20)
    VALUE "=001+ d:p1001010.dnp".
  01 HEADER-4    PIC X(13)
    VALUE ". Bold face".
01 HEADER-5.
  05 FILLER       PIC X(02) VALUE ". . ".
  05 FILLER       PIC X(01) VALUE ""7E"".
  05 FILLER       PIC X(20)
    VALUE "=002+ d:p1002010.dnp".
  01 HEADER-6    PIC X(15)
    VALUE ". Italic text".
01 HEADER-7.
  05 FILLER       PIC X(02) VALUE ". . ".
  05 FILLER       PIC X(01) VALUE ""7E"".
  05 FILLER       PIC X(20)
    VALUE "=003+ d:p1003010.dnp".
  01 HEADER-8    PIC X(12)
    VALUE ". . m2 a6 l100".
01 HEADER-9     PIC X(20)
    VALUE ". . >5 12 30 55 62 80".
*
01 LINE-1.
  05 FILLER       PIC X(02) VALUE ">0".
  05 FILLER       PIC X(01) VALUE ""7E"".
  05 FILLER       PIC X(04) VALUE "=002".
  05 FILLER       PIC X(01) VALUE ""7E"".
  05 FILLER       PIC X(26)
    VALUE "Lambda Software Publishing".
05 LINE-1-RIGHT.
  07 FILLER       PIC X(11) VALUE SPACES.
  07 FILLER       PIC X(02) VALUE ">3".
  07 FILLER       PIC X(26)
    VALUE "Lambda Software Publishing".
*
01 LINE-2.
  05 FILLER       PIC X(02) VALUE ">0".
  05 FILLER       PIC X(01) VALUE ""7E"".
  05 FILLER       PIC X(04) VALUE "=001".
  05 FILLER       PIC X(01) VALUE ""7E"".
  05 FILLER       PIC X(22)
    VALUE "149 West Hilliard Lane".
05 LINE-2-RIGHT.
  07 FILLER       PIC X(15) VALUE SPACES.
  07 FILLER       PIC X(02) VALUE ">3".
  07 FILLER       PIC X(22)
    VALUE "149 West Hilliard Lane".
*
01 LINE-3.
  05 FILLER       PIC X(02) VALUE ">0".
  05 FILLER       PIC X(20)
    VALUE "Eugene OR 97404-3057".
05 LINE-3-RIGHT.
  07 FILLER       PIC X(23) VALUE SPACES.

```

```

07 FILLER      PIC X(02) VALUE ">3".
07 FILLER      PIC X(20)
                VALUE "Eugene OR 97404-3057".
*
01 LINE-4.
  05 LINE-4-LEFT PIC X(45) VALUE SPACES.
  05 LINE-4-RIGHT PIC X(45) VALUE SPACES.
01 SAMPLE-1.
  05 FILLER      PIC X(02) VALUE ">2".
  05 FILLER      PIC X(01) VALUE ""7E"".
  05 FILLER      PIC X(04) VALUE "=003".
  05 FILLER      PIC X(01) VALUE ""7E"".
  05 FILLER      PIC X(11)
                VALUE "Sample copy".
01 SAMPLE-2.
  05 FILLER      PIC X(02) VALUE ">5".
  05 FILLER      PIC X(11)
                VALUE "Sample copy".
01 COMPLIMENTARY-1.
  05 FILLER      PIC X(02) VALUE ">2".
  05 FILLER      PIC X(01) VALUE ""7E"".
  05 FILLER      PIC X(04) VALUE "=003".
  05 FILLER      PIC X(01) VALUE ""7E"".
  05 FILLER      PIC X(18)
                VALUE "Complimentary".
01 COMPLIMENTARY-2.
  05 FILLER      PIC X(02) VALUE ">5".
  05 FILLER      PIC X(18)
                VALUE "Complimentary".
01 EXPIRES-1.
  05 FILLER      PIC X(02) VALUE ">2".
  05 FILLER      PIC X(01) VALUE ""7E"".
  05 FILLER      PIC X(04) VALUE "=003".
  05 FILLER      PIC X(01) VALUE ""7E"".
  05 FILLER      PIC X(17)
                VALUE "Your last issue:".
  05 ISSUE-1     PIC X(02) VALUE SPACES.
01 EXPIRES-2.
  05 FILLER      PIC X(02) VALUE ">5".
  05 FILLER      PIC X(17)
                VALUE "Your last issue:".
  05 ISSUE-2     PIC X(02) VALUE SPACES.
*
01 LINE-5.
  05 FILLER      PIC X(02) VALUE ">0".
  05 FILLER      PIC X(01) VALUE ""7E"".
  05 FILLER      PIC X(04) VALUE "=002".
  05 FILLER      PIC X(01) VALUE ""7E"".
  05 FILLER      PIC X(04) VALUE "TO:".
  05 FILLER      PIC X(02) VALUE ">1".
  05 FILLER      PIC X(01) VALUE ""7E"".
  05 FILLER      PIC X(04) VALUE "=001".
  05 FILLER      PIC X(01) VALUE ""7E"".
  05 NAME-1      PIC X(40) VALUE SPACES.
  05 LINE-5-RIGHT.
07 FILLER      PIC X(02) VALUE ">3".
07 FILLER      PIC X(01) VALUE ""7E"".
07 FILLER      PIC X(04) VALUE "=002".
07 FILLER      PIC X(01) VALUE ""7E"".
07 FILLER      PIC X(04) VALUE "TO:".
07 FILLER      PIC X(02) VALUE ">4".
07 FILLER      PIC X(01) VALUE ""7E"".
07 FILLER      PIC X(04) VALUE "=001".
07 FILLER      PIC X(01) VALUE ""7E"".
07 NAME-2      PIC X(40) VALUE SPACES.
*
01 LINE-6.
  05 FILLER      PIC X(02) VALUE ">1".
  05 LEFT-DATA-6 PIC X(43) VALUE SPACES.
  05 LINE-6-RIGHT.
    07 FILLER      PIC X(02) VALUE ">4".
    07 RIGHT-DATA-6
                PIC X(43) VALUE SPACES.
*
01 LINE-7.
  05 FILLER      PIC X(02) VALUE ">1".
  05 LEFT-DATA-7 PIC X(43) VALUE SPACES.
  05 LINE-7-RIGHT.
    07 FILLER      PIC X(02) VALUE ">4".
    07 RIGHT-DATA-7
                PIC X(43) VALUE SPACES.
*
01 LINE-8.
  05 FILLER      PIC X(02) VALUE ">1".
  05 LEFT-DATA-8 PIC X(43) VALUE SPACES.
  05 LINE-8-RIGHT.
    07 FILLER      PIC X(02) VALUE ">4".
    07 RIGHT-DATA-8
                PIC X(43) VALUE SPACES.
*
01 LINE-9.
  05 FILLER      PIC X(02) VALUE ">1".
  05 LEFT-DATA-9 PIC X(43) VALUE SPACES.
  05 LINE-9-RIGHT.
    07 FILLER      PIC X(02) VALUE ">4".
    07 RIGHT-DATA-9
                PIC X(43) VALUE SPACES.
*
PROCEDURE DIVISION.
*
0100-MAINLINE.
* Display the program banner.
  DISPLAY "MAKELBL Label Generator for
          The Z-Letter".
* Get the name of the input file.
  DISPLAY SPACE.
  DISPLAY "Please enter the input-file name:"
  ACCEPT INPUT-FILE-NAME.
  IF INPUT-FILE-NAME IS EQUAL TO SPACE
  MOVE DEFAULT-INPUT-NAME

```



```

    TO INPUT-FILE-NAME
ELSE INSPECT INPUT-FILE-NAME
    REPLACING ALL "a" BY "A",
    ALL "b" BY "B", ALL "c" BY "C",
    ALL "d" BY "D", ALL "e" BY "E",
    ALL "f" BY "F", ALL "g" BY "G",
    ALL "h" BY "H", ALL "i" BY "I",
    ALL "j" BY "J", ALL "k" BY "K",
    ALL "l" BY "L", ALL "m" BY "M",
    ALL "n" BY "N", ALL "o" BY "O",
    ALL "p" BY "P", ALL "q" BY "Q",
    ALL "r" BY "R", ALL "s" BY "S",
    ALL "t" BY "T", ALL "u" BY "U",
    ALL "v" BY "V", ALL "w" BY "W",
    ALL "x" BY "X", ALL "y" BY "Y",
    ALL "z" BY "Z".
    DISPLAY " Input-file name accepted: "
    DISPLAY INPUT-FILE-NAME
    WITH NO ADVANCING.
* Get the name of the output file.
    DISPLAY SPACE.
    DISPLAY "Please enter the output-file name: "
    ACCEPT OUTPUT-FILE-NAME.
    IF OUTPUT-FILE-NAME
        IS EQUAL TO SPACE
        MOVE DEFAULT-OUTPUT-NAME
        TO OUTPUT-FILE-NAME
    ELSE INSPECT OUTPUT-FILE-NAME
        REPLACING ALL "a" BY "A",
        ALL "b" BY "B", ALL "c" BY "C",
        ALL "d" BY "D", ALL "e" BY "E",
        ALL "f" BY "F", ALL "g" BY "G",
        ALL "h" BY "H", ALL "i" BY "I",
        ALL "j" BY "J", ALL "k" BY "K",
        ALL "l" BY "L", ALL "m" BY "M",
        ALL "n" BY "N", ALL "o" BY "O",
        ALL "p" BY "P", ALL "q" BY "Q",
        ALL "r" BY "R", ALL "s" BY "S",
        ALL "t" BY "T", ALL "u" BY "U",
        ALL "v" BY "V", ALL "w" BY "W",
        ALL "x" BY "X", ALL "y" BY "Y",
        ALL "z" BY "Z".
    DISPLAY " Output-file name accepted: "
    DISPLAY OUTPUT-FILE-NAME
    WITH NO ADVANCING.
* Open the files.
    DISPLAY SPACE.
    DISPLAY "Thank you. Opening files now."
    OPEN INPUT INPUT-FILE.
    OPEN OUTPUT OUTPUT-FILE.
* Write the header to the output file.
    MOVE SPACES TO OUTPUT-RECORD.
    MOVE OUTPUT-FILE-NAME
    TO HEADER-NAME.
    MOVE HEADER-1 TO OUTPUT-RECORD.
    WRITE OUTPUT-RECORD.
    MOVE SPACES TO OUTPUT-RECORD.
    MOVE HEADER-2 TO OUTPUT-RECORD.
    WRITE OUTPUT-RECORD.
    MOVE SPACES TO OUTPUT-RECORD.
    MOVE HEADER-3 TO OUTPUT-RECORD.
    WRITE OUTPUT-RECORD.
    MOVE SPACES TO OUTPUT-RECORD.
    MOVE HEADER-4 TO OUTPUT-RECORD.
    WRITE OUTPUT-RECORD.
    MOVE SPACES TO OUTPUT-RECORD.
    MOVE HEADER-5 TO OUTPUT-RECORD.
    WRITE OUTPUT-RECORD.
    MOVE SPACES TO OUTPUT-RECORD.
    MOVE HEADER-6 TO OUTPUT-RECORD.
    WRITE OUTPUT-RECORD.
    MOVE SPACES TO OUTPUT-RECORD.
    MOVE HEADER-7 TO OUTPUT-RECORD.
    WRITE OUTPUT-RECORD.
    MOVE SPACES TO OUTPUT-RECORD.
    MOVE HEADER-8 TO OUTPUT-RECORD.
    WRITE OUTPUT-RECORD.
    MOVE SPACES TO OUTPUT-RECORD.
    MOVE HEADER-9 TO OUTPUT-RECORD.
    WRITE OUTPUT-RECORD.
*
* Turn the input-file lines into labels.
    PERFORM 0200-PROCESS-SUBSCRIPTIONS
    UNTIL WS-MORE-INPUT
    IS EQUAL TO HIGH-VALUES.
* If the left record was filled in but the right one
* wasn't, then the left one hasn't been written to the
* output file.
    IF NAME-1 IS NOT EQUAL TO SPACES AND
    NAME-2 IS EQUAL TO SPACES
        PERFORM 0500-WRITE-LAST-LABEL.
* Close the files and stop.
    PERFORM 9999-END.
*
0200-PROCESS-SUBSCRIPTIONS.
* Check for end of file before continuing.
    MOVE SPACES TO INPUT-RECORD.
    READ INPUT-FILE
    AT END MOVE HIGH-VALUES
    TO WS-MORE-INPUT.
    IF WS-MORE-INPUT IS EQUAL TO SPACES
        PERFORM 0210-CONTINUE-PROCESSING.
*
0210-CONTINUE-PROCESSING.
    IF WS-LEFT-RIGHT IS EQUAL TO "L"
        PERFORM 0300-FILL-LEFT-LABEL
    ELSE
        PERFORM 0400-FILL-RIGHT-LABEL.
*
0300-FILL-LEFT-LABEL.

```

- * Blank out all data fields in working storage.
 MOVE SPACES TO LINE-4,
 NAME-1, NAME-2,
 LEFT-DATA-6, RIGHT-DATA-6,
 LEFT-DATA-7, RIGHT-DATA-7,
 LEFT-DATA-8, RIGHT-DATA-8,
 LEFT-DATA-9, RIGHT-DATA-9.
- * Fill in subscription status.
 MOVE INPUT-RECORD TO WS-FIRST-ISSUE.
 MOVE SPACES TO INPUT-RECORD.
 READ INPUT-FILE
 AT END MOVE HIGH-VALUES
 TO WS-MORE-INPUT.
 MOVE INPUT-RECORD TO WS-COMPARE.
 IF WS-COMPARE IS EQUAL
 TO WS-COMPLIMENTARY
 MOVE COMPLIMENTARY-1
 TO LINE-4-LEFT.
 IF WS-COMPARE IS EQUAL TO WS-SAMPLE
 MOVE SAMPLE-1 TO LINE-4-LEFT.
 IF LINE-4-LEFT IS EQUAL TO SPACES
 PERFORM 0340-FILL-LEFT-LAST-ISSUE.
- * Fill in the other lines.
 MOVE SPACES TO INPUT-RECORD.
 READ INPUT-FILE
 AT END MOVE HIGH-VALUES
 TO WS-MORE-INPUT.
 MOVE INPUT-RECORD TO NAME-1.
 MOVE SPACES TO INPUT-RECORD.
 READ INPUT-FILE
 AT END MOVE HIGH-VALUES
 TO WS-MORE-INPUT.
 MOVE INPUT-RECORD TO LEFT-DATA-6.
 MOVE SPACES TO INPUT-RECORD.
 READ INPUT-FILE
 AT END MOVE HIGH-VALUES
 TO WS-MORE-INPUT.
 MOVE INPUT-RECORD TO LEFT-DATA-7.
 MOVE SPACES TO INPUT-RECORD.
 READ INPUT-FILE
 AT END MOVE HIGH-VALUES
 TO WS-MORE-INPUT.
 MOVE INPUT-RECORD TO LEFT-DATA-8.
 MOVE SPACES TO INPUT-RECORD.
 READ INPUT-FILE
 AT END MOVE HIGH-VALUES
 TO WS-MORE-INPUT.
 MOVE INPUT-RECORD TO LEFT-DATA-9.
 MOVE "R" TO WS-LEFT-RIGHT.
- *
 0340-FILL-LEFT-LAST-ISSUE.
 IF WS-COMPARE IS NOT EQUAL
 TO WS-FIRST-ISSUE
 MOVE WS-COMPARE TO ISSUE-1
 MOVE EXPIRES-1 TO LINE-4-LEFT
 ELSE MOVE SAMPLE-1 TO LINE-4-LEFT.
- *
 0400-FILL-RIGHT-LABEL.
 * Fill in subscription status.
 MOVE INPUT-RECORD TO WS-FIRST-ISSUE.
 MOVE SPACES TO INPUT-RECORD.
 READ INPUT-FILE
 AT END MOVE HIGH-VALUES
 TO WS-MORE-INPUT.
 MOVE INPUT-RECORD TO WS-COMPARE.
 IF WS-COMPARE IS EQUAL
 TO WS-COMPLIMENTARY
 MOVE COMPLIMENTARY-2
 TO LINE-4-RIGHT.
 IF WS-COMPARE IS EQUAL TO WS-SAMPLE
 MOVE SAMPLE-2 TO LINE-4-RIGHT.
 IF LINE-4-RIGHT IS EQUAL TO SPACES
 PERFORM 0440-FILL-RIGHT-LAST-ISSUE.
- * Fill in the other lines.
 MOVE SPACES TO INPUT-RECORD.
 READ INPUT-FILE
 AT END MOVE HIGH-VALUES
 TO WS-MORE-INPUT.
 MOVE INPUT-RECORD TO NAME-2.
 MOVE SPACES TO INPUT-RECORD.
 READ INPUT-FILE
 AT END MOVE HIGH-VALUES
 TO WS-MORE-INPUT.
 MOVE INPUT-RECORD TO RIGHT-DATA-6.
 MOVE SPACES TO INPUT-RECORD.
 READ INPUT-FILE
 AT END MOVE HIGH-VALUES
 TO WS-MORE-INPUT.
 MOVE INPUT-RECORD TO RIGHT-DATA-7.
 MOVE SPACES TO INPUT-RECORD.
 READ INPUT-FILE
 AT END MOVE HIGH-VALUES
 TO WS-MORE-INPUT.
 MOVE INPUT-RECORD TO RIGHT-DATA-8.
 MOVE SPACES TO INPUT-RECORD.
 READ INPUT-FILE
 AT END MOVE HIGH-VALUES
 TO WS-MORE-INPUT.
 MOVE INPUT-RECORD TO RIGHT-DATA-9.
 PERFORM 0510-WRITE-LABELS.
 MOVE "L" TO WS-LEFT-RIGHT.
- *
 0440-FILL-RIGHT-LAST-ISSUE.
 IF WS-COMPARE IS NOT EQUAL
 TO WS-FIRST-ISSUE
 MOVE WS-COMPARE TO ISSUE-2
 MOVE EXPIRES-2 TO LINE-4-RIGHT
 ELSE MOVE SAMPLE-2 TO LINE-4-RIGHT.
- *
 0500-WRITE-LAST-LABEL.

* Blank out the right-hand label entirely.
 MOVE SPACES TO LINE-1-RIGHT,
 LINE-2-RIGHT, LINE-3-RIGHT,
 LINE-4-RIGHT, LINE-5-RIGHT,
 LINE-6-RIGHT, LINE-7-RIGHT,
 LINE-8-RIGHT, LINE-9-RIGHT.

* Then write the label.
 PERFORM 0510-WRITE-LABELS.

*
 0510-WRITE-LABELS.

* First line of return address.
 MOVE SPACES TO OUTPUT-RECORD.
 MOVE LINE-1 TO OUTPUT-RECORD.
 WRITE OUTPUT-RECORD.

* Second line of return address.
 MOVE SPACES TO OUTPUT-RECORD.
 MOVE LINE-2 TO OUTPUT-RECORD.
 WRITE OUTPUT-RECORD.

* Third line of return address, then a blank line.
 MOVE SPACES TO OUTPUT-RECORD.
 MOVE LINE-3 TO OUTPUT-RECORD.
 WRITE OUTPUT-RECORD.
 PERFORM 0600-WRITE-BLANK-LINE.

* Subscription status, followed by blank line.
 MOVE SPACES TO OUTPUT-RECORD.
 MOVE LINE-4 TO OUTPUT-RECORD.
 WRITE OUTPUT-RECORD.
 PERFORM 0600-WRITE-BLANK-LINE.

* First address line.
 MOVE SPACES TO OUTPUT-RECORD.
 MOVE LINE-5 TO OUTPUT-RECORD.
 WRITE OUTPUT-RECORD.

* Second address line.
 MOVE SPACES TO OUTPUT-RECORD.
 MOVE LINE-6 TO OUTPUT-RECORD.
 WRITE OUTPUT-RECORD.

* Third address line.
 MOVE SPACES TO OUTPUT-RECORD.
 MOVE LINE-7 TO OUTPUT-RECORD.
 WRITE OUTPUT-RECORD.

* The last two lines of a subscriber record
 * are often blank.
 IF LEFT-DATA-8 IS EQUAL TO SPACES
 AND RIGHT-DATA-8
 IS EQUAL TO SPACES
 PERFORM 0600-WRITE-BLANK-LINE
 ELSE PERFORM 0800-WRITE-LINE-8.
 IF LEFT-DATA-9 IS EQUAL TO SPACES
 AND RIGHT-DATA-9
 IS EQUAL TO SPACES
 PERFORM 0600-WRITE-BLANK-LINE
 ELSE PERFORM 0900-WRITE-LINE-9.

* The last 9 lines of each label are unused.
 MOVE SPACES TO OUTPUT-RECORD.
 PERFORM 0700-WRITE-LINE 9 TIMES.

*
 0600-WRITE-BLANK-LINE.
 MOVE SPACES TO OUTPUT-RECORD.
 WRITE OUTPUT-RECORD.

*
 0700-WRITE-LINE.
 WRITE OUTPUT-RECORD.

*
 0800-WRITE-LINE-8.
 MOVE SPACES TO OUTPUT-RECORD.
 MOVE LINE-8 TO OUTPUT-RECORD.
 WRITE OUTPUT-RECORD.

*
 0900-WRITE-LINE-9.
 MOVE SPACES TO OUTPUT-RECORD.
 MOVE LINE-9 TO OUTPUT-RECORD.
 WRITE OUTPUT-RECORD.

*
 9999-END.
 CLOSE INPUT-FILE.
 CLOSE OUTPUT-FILE.
 DISPLAY SPACE.
 DISPLAY " Job finished."
 STOP RUN.

*
 END PROGRAM MAKELBL.

As it turns out, this program is very fast indeed; the difference between the time it takes to generate the label file from a sample file of six subscribers, and the actual subscriber file for each issue, is barely perceptible. The resulting label file is also much smaller than the one generated by my old Spellbinder macros, due to the elimination of lots of lines full of spaces.

The MAKELBL program is very versatile. To get the bulk-mail rate at the Post Office, I have to mail at least 200 copies at once to U.S. addresses. Since I don't have 200 regular subscribers yet (hint, hint!), I get some names and addresses from other companies serving our community each issue, to make up the difference. If I get them early enough, I simply type these into my data base, and the SELECTOR report procedure includes them with the regular subscription. MAKELBL, if the FIRST-ISSUE and LAST-ISSUE are the same, marks these as sample issues automatically. If I get the names and addresses for the sample issues too late, I simply convert the data to a customer list, run MAKELBL on this file separately from the SELECTOR output, and enter the data into my SELECTOR data base after I mail the magazine.

The whole procedure can now be automated as a Z-System alias, LABELS:

```

d1:
  getsubs $1
  selector play getsubsaut
  copy alabels a0labels$1
  IF ~ER; era alabels; FI
a0:
  sb
  run makelbl
  magic zltr$1lbl

```

To make the labels for issue 26, I type LABELS 26. The alias moves us to directory d1: because my SELECTOR data bases are on c1: and d1:, and SELECTOR, which is a CP/M data-base manager rather than a Z-System one, has no access to other user areas.

The second line of this alias runs our TURBO Pascal program, passing along our parameter of 26. This generates the SELECTOR report procedure GETSUBSRPT in directory d1:

Next, we run SELECTOR in auto-pilot mode, with the PLAY parameter that tells it to recall the keystrokes we saved in the file GETSUBSAUT. This causes it to run the report procedure, using the answers from the recorded session instead of input from the keyboard right now. This generates the file LABELS on directory a1:. If we had time to type in the sample data first, LABELS will include information for the sample issues, as well as the regular subscriptions.

After this is done, we copy LABELS from a1: to LABELS26 on a0:. If this went off without a hitch, A1LABELS is erased. Then we return to our normal work place, directory a0:

Next, we enter Spellbinder, where human intervention is now required. Reading in LABELS26, we go through it to eliminate all duplicate records for a person, except the one with the highest last-issue number. Duplicates can occur because a name I get for a sample issue is already a subscriber, because a subscriber renews his subscription before the old subscription has actually expired, or because a subscriber is getting a free issue after his subscription expires for each article of his that I printed.

I also run a very short macro, Z-LETTER.WPM, to eliminate the leading space that SELECTOR put on every line, and to print out the labels for my files. Trailing spaces are no problem, because the COBOL program will eliminate them automatically; but leading spaces will mess up the last-issue notice on the label. The COBOL program could be changed to

automatically eliminate the leading space, but then I would have to insert a leading space when I typed a file of sample data. Since I have to check for duplicates anyway, I just run a search-and-replace macro to eliminate the leading spaces. After the duplicates and leading spaces are removed, I save the resulting new file as LABELS.26/1. The /1 is Spellbinder's autovert feature, which ensures that every line ends with a carriage return and line feed. Programming languages like TURBO Pascal and Nevada COBOL expect this.

Once we exit from Spellbinder, we run our COBOL program. Since Nevada COBOL has no mechanism for parameters, I have written the program to ask me for the name of the input and output files, with default names if I hit carriage return absentmindedly. For issue 26, we tell it LABELS26 for the input file, and ZLTR26.LBL for the output file.

Very shortly after that, the COBOL program has finished, and the alias uses MagicIndex to print ZLTR26.LBL on my laser printer on sheets of labels (Avery 5164, six labels to a page). I put one label to an envelope until the labels are used up, stuff the envelopes with *The Z-Letter*, seal the envelopes with a roller, sort them according to the bulk-mail regulations, fill out the bulk-mail form, and take them down to the Post Office. Between two and three weeks later, it begins arriving at your mailing addresses.

What I have described here is the specific way I use the Z-System, TURBO Pascal, Nevada COBOL, Spellbinder, SELECTOR V, MagicIndex, and a HP LaserJet Plus to produce the mailing labels for *The Z-Letter*. Nevertheless it has general applicability. Since only two data-base files are required for this application, this is one that dBase II can handle; you could write a dBase II report procedure to extract the current information for each issue of your own data base. Any word processor could be used to eliminate duplicates, and if your data-base manager puts in leading spaces, any word processor with macro capability should be able to eliminate them. The label file heading and control codes would be different with a different formatter and/or printer, requiring changes to the data structures in the Working-Storage Section of the COBOL program. However, the logic of the Procedure Division does not change for reasons like that, and should be useful to anyone producing a newsletter.

ERRATA

The editor apologizes for the misspelling on page 4 of issue 25. "Syden" should be read as "Sydex".

"Uncle Steve" (LETTERS, page 12, issue 25) is Steven P. Johnson.

LETTERS

Sony OA-S3300 disks needed

June 9, 1993

Dear David:

I acquired a Sony word-processing system from an individual who purchased two such systems at auction [See the picture of this system on our cover -DAJM]. These are word-processing systems that were used by the State of Louisiana for composing manuals distributed to State offices. Perhaps you can help me find someone with the original diskettes for the system? I didn't get much with it.

This computer uses a CP/M 2.2 operating system. It has a version of CP/M altered by Sony, labeled Sony version 1.2. The monitor is a full-page, black and white display. The monitor and the computer are labeled Sony OA-S3300.

Both the CP/M manual and the word-processor manual I acquired say Sony SMC-70. The SMC-70 can use either black-and-white or RGB monitors. The SMC-70 has outlets for both these types of monitors, along with a Centronics printer outlet. The CP/M operating system appears to be basically the same for both the OA-S3300 and the SMC-70. This equipment was sold at auction for \$25, and it's hard to expect any more than I received. The SMC-70 does look very much like an OA-S3300, and appears to operate nearly the same way. However, booting the SMC-70 appears to be a little more difficult than booting the OA-S3300.

Software for the OA-S3300 is a real problem. All I have for the system is six work diskettes. I can't read them because of chip failure. Or perhaps it's solder-joint failure, I'm not sure which. The same problem exists in both machines. These six diskettes may have the CP/M system and the word processor on them, but at the moment, I have no way of knowing. Repairing this computer isn't going to be a problem; both machines have failed the same way, and it's obviously an easy fix. Both of the 3½" drives light, but the drive motors don't turn, so the diskettes can't be read.

The word-processor manual refers to a total of eleven original diskettes. I hope to find someone who will make copies of their originals, so I can use the OA-S3300. I also got a Sony printer as part of the

package; it is a NEC 3310 Spinwriter with a 50-wire ribbon to the computer. The printer cable terminates in a 50-pin DIN-type plug like you would find on a Heath-Zenith 89. It may be possible to change this plug to a Centronics type, and use the printer with other computers also.

Would you know of someone who has had experience with this system, and would have a set of diskettes for a Sony OA-S3300 Word Processor? I can provide serial numbers and photographs of the equipment, should that be necessary. Also, should I learn the diskettes aren't sysgenned, I may need a copy of a Sony CP/M system disk. (That is usually the case when a computer is used for a specific purpose, and the operator only learns to use the program which is installed. Diskettes just don't get sysgenned by computer operators.)

I tried placing an ad in the "Shopper" paper, which is popular in the state capital, asking for help from a State employee who has access to the manual and diskettes for this system. I did receive a call while I wasn't in, only they haven't telephoned again. It may be extremely difficult to find the word processor written for this system. I hope it is on one of the diskettes.

Is there any hope of locating a full set of diskettes for a Sony OA-S3300, perhaps through *The Z-Letter*? Or might you have copies in safe keeping?

Yours truly,
George Kleiser
P.O. Box 34
Rayne LA 70578

I have no disks or manuals for either of the Sony systems you describe, George. I would like to get copies of your manuals for my library, so that I can provide them to others who may acquire such a system.

If you would like to send me your disks, I can determine whether they have CP/M on the system tracks, and make copies for myself at the same time. I can also, of course, copy any information on them into other formats.

I would say the odds of finding the specific word-processing software designed for your Sony are pretty low. Fortunately, it isn't necessary to do so; it sounds like a standard CP/M system, and should run CP/M word processors such as Spellbinder.

If any reader can help George, please contact him at the address above. -DAJM

Word on *COMPUTER MONTHLY*

July 14, 1993

Dear David:

Sorry I haven't gotten back with you before now. I think we both have been having similar problems.

By now, you've probably disposed of the Commodore items you mentioned months ago. I'd have liked to have made you an offer for some of these, but just can't do so as I'm strapped. My "new" job didn't pan out, *COMPUTER MONTHLY* dropped my column, but still hasn't paid up for the March column they used, and my funds are in worse shape than ever!

I gave you another plug in a column I wrote, which probably won't be published by *CM*, alas. (They had three columns on hand when they abruptly informed me they were doing yet another makeover of the magazine. No one around here has received an issue since the May issue, by the way.) Yours is the most professionally produced newsletter I've seen, and I wanted to commend you for the fine job you do. Most of the technical articles are over my head, but you do an excellent job keeping resources and other general information circulated. I was very glad to see that you picked up the Sound Potentials library.

As an aside, I see from the current *COMPUTE* and an ad from Creative Micro Designs, Inc., that they have acquired all rights to *RUN* software and have purchased their inventory. They are at P.O. Box 646, East Longmeadow MA 01028, and are the ones making hard disks, RAMLink, and RAMDrive for the Commodores. Their hard disks, I understand, can also be used with other computers.

I was interested in learning from your Jan/Feb issue that the Laser PC4 is a CP/M Plus computer. I had some information from Laser a couple of years ago, but hadn't picked up on this info.

I'm still running my Commodore 128D and CP/M as well as 128 mode and (occasionally) 64 mode, as well as my Amstrad PC-20, which is now about as "obsolete" as the Commodore! I added a hard card to the PC-20, and compared to the Commodore, it flies. Not that I care that much about speed, but with WS4 on the hard disk, it's quicker to get up and running than on the Commodore. The MS-DOS version of WordStar 4 has some improved features, also, particularly the spelling checker, which allows you to check individual words as you type them. I picked up a used copy of WS4 very reasonably. Have now been given a copy of WS5, but haven't

attempted to install it.

I've begun something of a collection of computers, but have had to forego some buys for lack of funds. I've had my eye on an Amstrad PCW locally, and could probably buy it any time if I ever got the funds. It's an interesting machine.

Thanks for all the help you've given me and readers over the past couple of years. Keep up the good work and I wish you much luck in finding work and all that.

Sincerely,

Nancy A. Black

516½ East Burgess Street
Mount Vernon OH 43050

*Thanks for sharing the **COMPUTER MONTHLY** inside info and other news with us, Nancy. I haven't seen an issue lately, either, but then it's been quite a while now since there was anything in it I cared about. -DAJM*

A donation to the cause

June 28, 1993

Dear David:

I have shipped you three parcels. One package has the Kaypro manuals, plus a software package, *COMPAT*, for the Kaypro. *COMPAT* is another multi-format disk program. It requires that the Kaypro have its original ROM, and have no modifications to the disk drives. Since my Kaypros both have the Advent TurboROM and have quad-density drives, *COMPAT* won't work on them. I thought you might find it interesting, if you don't already have a copy of it.

The second package has the *Micro Cornucopia* magazines, plus some *Foghorn* magazines I forgot that I had. The third package has the *Profiles* magazines.

My interest in CP/M is now primarily in the Z-System, and in running it under MYZ80. I have found the performance of this system running on a 40-MHz 80386DX MS-DOS machine to be superior to the Kaypro system. I am keeping the Kaypro mainly for its use as a backup system that can run Spellbinder and other software I use often, and for the special software that will only run on the Kaypro graphics.

I will shortly be trying to use the MagicSeries HP LaserJet III laser-printer software, running under Z-System on MYZ80, combined with an MS-DOS program called Laser Twin that emulates an HP LaserJet III using any kind of dot-matrix, inkjet, or other laser printer on the output. I will let you know how that works out.

Looking forward to the next issue!

Yours truly,
Richard E. Brewster

Thanks for the manuals, etc. There were several of each magazine that I didn't have already. The others I will add to my duplicate magazines, to give away, trade

for other magazines, etc. I'm also glad to get, finally, a copy of COMPAT. I knew of it, but had neither the software nor the manual.

I look forward to hearing how your experiments running CP/M and Z-System software on a PC come out. Please do keep me informed. -DAJM

PERSONAL ADS

Computers for sale or trade

Six **Morrow MD2** computers, each \$50 plus shipping; terminals not included. Five **Eagle III** computers, each \$70 plus shipping. One **Eagle File 10** external hard-disk unit, \$100, plus shipping. Two **TRS-80 Model 3** computers, one with 16K, one with 32K, condition unknown, \$20 each plus shipping. Five **NorthStar Horizon** computers, condition unknown, \$20 plus shipping; wood and steel covers available. Two **Xerox 820** computers, one **Xerox 820-II** computer, all working, dual 8" floppy disk drives, each \$50 plus shipping. Other computers come and go all the time; let me know what you're looking for. Will trade for comparable computers not represented in my collection. Contact David McGlone, phone (503) 688-3563.

Kaypros for sale

Four Kaypro 4s for sale: (1) a 1983 version which has been optimized to run as fast as a 4 '84, (2) a 4 '84, (3) Two 4 '84s +88 (they have an 8088 coprocessor and 256K RAM, can run a very limited version of MS-DOS 2.2, or the memory can be used as a RAM disk for CP/M). One of the 4 '84 +88s has a bad A: drive (390K, half height); other than that they're all in working order, and in clean shape. I'm asking either \$100 each, or \$300 for the lot, FOB Dover NJ. This includes 2 extra keyboards; keyboard overlays for dBase II, Perfect Writer, and Perfect Calc; 2 non-working 390K half-height drives (can be repaired for about \$35 each); all the original manuals and software you want; and about 200 disks of other software. Contact Ron

Kleiman, Metro Flag Inc., 47 Bassett Highway, Dover NJ 07801, phone (201) 366-1776.

Software and manuals wanted

Wanted: Turbo Pascal Toolbox software, and manuals for CP/M and FTL Modula-2. Apple CP/M disk format preferred. Contact Norman Leet, 840 Hunter Road, Apt. L, Enon OH 45323, phone (513) 864-2261, GENIE NLEET1, Compuserve ID 70200,144.

Kaypros for sale

Kaypro 10 with 10-Mb hard disk, many manuals, works fine, all for \$75. Kaypro 2X with double-sided half-height drives, \$35. Both plus shipping costs. Ken Thomson, (415) 648-7550

Kaypro 4 for sale

Excellent working condition, comes with original CP/M and MBASIC disks. Asking \$75. David Samson, 1011 Valley River Way, Suite 116B-325, Eugene OR 97401, (503) 688-3563.

Available for cost of shipping

Currently I have nine Kaypro computers (seven I would recommend only for parts), one Osborne 1 (likewise), two SWP 8088 boards for Kaypros, and various and sundry manuals and software. I am willing to part with most of this, with the exception of perhaps one copy of the manuals, for reimbursement of the shipping cost. Contact Marion Wilde, 3131 Candelaria NE #179, Albuquerque NM 87107, phone (505) 243-4209.

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 are not listed, see the listing for the magazine in the RESOURCES section.

AMSTRAD PCW USER'S SIG, Vol. 1 No. 2, July 1993. The Amstrad PCW User's SIG is a special-interest group of American Mensa Ltd. for members who use Amstrad PCW computers. Membership dues are \$7/year for Mensa members, \$9/year for associate members (does that mean non-Mensa members?). For information, or a sample copy (\$150,

or \$2 outside North America), write Al Warsh, 2751 Reche Canyon Road #93, Colton CA 92324, phone (909) 370-0359.

ADAM newsletters are very difficult to cover adequately. There are a lot of them, and most are full of little articles and product reviews, that would take too much space to list individually. At the same time, they all reprint each other's articles. While this is undoubtedly a great service to their local readers, I have no space for listing an article five times when it appears in five newsletters. Suffice it to say, if you have a Coleco ADAM, you should probably get at least a sample issue of all the ADAM newsletters. Ones received since last issue include:

ADVISA, May/June and July/August 1993. *ADVISA* is the newsletter of V.I.S.A. (Vancouver Island Senior ADAMphiles), edited by David Cobley. For subscription information, write to V.I.S.A., 17-885 Berwick Road, Qualicum Beach, B.C., Canada V9K 1N7.

Albany AUG Newsletter, June, July, and August 1993, edited by Ramen G. Griffin. For subscription info, write to him to 3 Robin Hood Road, Albany NY 12203-5113.

AUGER, July/August 1993. *AUGER* (ADAM Users Group Educational Report) is the newsletter of ECAUG, the Emerald Coast ADAM Users Group. ECAUG has evolved from a local to a national ADAM users' group, and *AUGER* has regular short articles on CP/M and T-DOS. Membership in ECAUG is \$15 per family per year. A 36-page list of the disks in the group's public-domain library, plus the year's issues of *AUGER*, come with the membership. Send the money to Norman J. Deere, Treasurer and Editor, at P.O. Box 4934, Fort Walton Beach FL 32549-4934, phone (904) 244-1516. All back issues of *AUGER* are available; see the ad in any issue.

Metro Orlando Adam Users Group newsletter, July/August 1993. ADAMCON 05 has come and gone; ADAMCON 06 will be in Sarasota Florida next October. A subscription to the newsletter comes with membership in MOAUG, which is \$20 per year. Write to James Poulin, 1146 Manatee Drive, Rockledge FL 32955, phone (407) 631-0958.

N.I.A.D. newsletter, #95 (April/May 1993), edited by James Notini. This is one of the largest and

best of the ADAM newsletters. Subscriptions are \$22, \$26, and \$40 per year for U.S., Canadian, and other foreign countries, respectively, from Northern Illiana ADAM User's Group, 8125 W. Catherine, Chicago IL 60656, phone (312) 775-0409.

Omaha ADAM Users Club newsletter, #54 (June/July 1993), bills itself as the oldest active ADAM newsletter in the USA, and says it was established 11 July 1984 by Norman R. Castro, who is still the editor. Subscriptions are \$5, \$7, or \$10 per year (6 issues) for U.S., Canadian, and other foreign subscribers, respectively, from Norman R. Castro, 809 W. 33rd Avenue, Bellevue NE 68005, phone (402) 291-4405.

Classic Computer Society Newsletter, July 1993. The Classic Computer Society of Santa Barbara began when the Santa Barbara Kaypro Users Group merged with the Osborne Santa Barbara Users Group; they now serve all makes of CP/M computers. The Society's newsletter is very short (two pages, three columns per page), but interesting. For dues and/or subscription information, write to the Classic Computer Society, P.O. Box 2007, Santa Barbara CA 93120, phone (805) 684-8838. The Society meets the second Tuesday of each month.

The Computer Journal, #61, May/June 1993, and #62, July/August 1993.

In issue 61, J. William Weaver lists some user groups and newsletters, including *TZL*. Jay Sage lists and explains *ZMATE* macros for automating replies to GENIE mail. Bill Kibler has an article about the history of CP/M. The center-fold section provides Xerox 820 schematics. Ralph Tenny explains *Quality Control Using the Commodore 64*. Charles B. Stafford takes us step by step through converting a 2.5MHz Kaypro to 5MHz.

In issue 62, Jay Sage lists the products Sage Microsystems East sells, what they do, and their prices, many of which have been reduced radically. Herb Johnson gives a tutorial on buses, with particulars on the S-100 and IEEE-696 bus. The center fold is more Xerox 820 schematics. Terry Hazen presents part 1 of a *SCSI EPROM Programmer*. Brad Rodriguez' *Moving Forth*, part 3, appears. Ralph Tenny explains *Programming the 6526 CIA*, a Commodore 64 circuit.

See our RESOURCES section for address, phone number, and subscription prices for *TCJ*. And then subscribe!

Z-100 LifeLine, #26 (June 1993). This magazine is

extremely well written, and the editor writes long articles on all the ins and outs of the Z-100. Unfortunately nearly all of every issue is devoted to PC subjects. However, this issue has more information on the 4th Annual Z-100 Get-Together

mentioned in our RANDOM ACCESS section, and has an updated list of local HUG groups. See RESOURCES for address and subscription information for *Z-100 Lifeline*.

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 \$24/year surface, \$34 air, \$44/2 years surface, \$64 air, in the US. In Canada and Mexico, \$32, \$34, \$60, \$64 respectively. Elsewhere \$34, \$44, \$64, \$84 respectively. *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 extra. Corvatek, 561 N.W. Van Buren St., Corvallis OR 97330, phone (503) 752-4833.

Davidge Corporation makes and sells the Ampro Z80 Little Board, one of the CP/M computers still made. This is a 4-Mhz Z80 single-board computer with 64K RAM. The Little Board without SCSI is \$240, the Series 1B Little Board Plus is \$250. Software, BIOS source, manuals, and repair service are also available. Volume discounts available. Write to Davidge Corporation, 94 Commerce Drive, P.O. Box 1869, Buellton CA 93427, phone (805) 688-9598.

Elliam Associates sells disks of public-domain software and commercial software for most CP/M computers, including the Amstrad PCW. For a 100+ page catalog, send \$8.50 plus \$2.00 shipping and handling to Elliam Associates, P.O. Box 2664, Atascadero CA 93423, or phone (805) 466-8440.

Herbert R. Johnson is "Dr. S-100". He supports S-100 bus computers, including NorthStar, Compupro, Cromemco, IMSAI, and Vector. He can sell you S-100 boards, manuals, books, etc. Write to him at P.O. Box CN-5256 #105, Princeton NJ 08543, or phone (609) 771-1503.

Lambda Software Publishing publishes this magazine and sells CP/M and Z-System software, manuals, laser fonts, books. See the ad at the back of this magazine.

Microcomputer Mail-Order Library of books, manuals, and periodicals relating to microcomputers in general, and Heath/Zenith systems in particular, will loan you any item for 4 weeks for a handling fee plus postage. Send the deposit plus enough for postage, and the requested items will be sent you by first class priority mail. When you return them, the deposit and any left-over postage, minus the handling fee, will be refunded. For periodicals, the deposit is \$1 per issue, \$0.25 handling; books and hardware manuals are \$5 deposit, \$2 handling fee; software manuals are \$10 deposit, \$5 handling fee. The price is deliberately low to encourage people to learn more about their computers. Inevitably, some items will be lost in the mail or not returned. Donations of printed material would therefore be

greatly appreciated! To obtain a list of available items, or to borrow material, write to Library c/o Hart, 323 West 19th Street, Holland MI 49423.

Micromint makes and sells the SB180 and SB180LO computers. These are 9-MHz HD64180/Z180 single-board computers with 256K RAM. The SB180 is the size of a 3½" disk drive, costs \$299 (\$195 each 100 quantity), or \$399 with ZCPR, ZRDOS, BIOS and ROM sources. The SB180LO is the size of a 5¼" disk drive, has SCSI, costs \$400 (\$320 each 100 quantity), or \$490 with ZCPR, ZRDOS, BIOS and ROM sources, Z-System utilities. The SB180FXMME 2-Mb memory-expansion board, populated with 256K, costs \$319. Micromint, Inc., 4 Park Street, Vernon CT 06066. Technical Assistance, (203) 871-6170. To order, 1 (800) 635-3355.

MicroSolutions makes several products of interest to our community. Uniform format-translation software costs more and knows fewer formats than 22DISK (see Sydex, below), but 22DISK only runs on PCs. Versions of Uniform are available for CP/M machines: Actrix, Bondwell (12 and 14), Epson QX-10, Kaypro (all models except Robie), Micromint SB180, Morrow Micro Decision (2, 3, 5, 11, 16, and 34), NEC PC-8801, Osborne 1 (double density), TeleVideo (801, 802, 803, and TPC-1), Toshiba T100, Xerox 820-II, and Zenith Z-100. All versions of Uniform, including Uniform-PC, cost \$69.95. MicroSolutions also sells UniDOS, a Z80 card for PCs, for \$175; and their CompatiCard IV lets a PC use 4 floppy-disk drives, including 8" drives, for \$95. MicroSolutions Computer Products, 132 W. Lincoln Hwy, DeKalb IL 60115, phone (815) 756-3411.

Morgan, Thielmann & Associates sells and services computers, not only the latest 386 and 486 systems with DR DOS or Unix, but also Eagle computers, all models, and other CP/M computers. Call them at (408) 972-1965 for prices and information.

Paul F. Herman Inc. publishes *Z-100 LifeLine*, a bimonthly journal dedicated to the Zenith Z-100 dual 8088-8085 computer. A one-year subscription is \$24 per year to any U.S. zip code, \$28 to Canada or Mexico, and \$28 to any other company by surface mail, \$36 by air mail. Back issues are available for \$5 each (\$2 each is you're a *Z-100 LifeLine* subscriber); some early issues are getting low. An index disk to Z-100 articles in various magazines is available to subscribers for \$19, and an update can be purchased any time after that for \$5. Contact Paul F. Herman

Inc., 9317 Amazon Drive, New Port Richey FL 34655, or call (800) 346-2152.

Sage Microsystems East, selling and supporting the best in 8-bit software. NZCOM, Z3PLUS, XBIOS, PCED, DSD, Z-System Software Update Service, Backgrounder ii, ZSDOS/ZDDOS, DosDisk, JetFind, ZMATE, BDS C, Turbo Pascal, ZMAC, SLR Systems assembly-language tools, MEX-Plus and MEX-Pack. Next-day shipping of most products with modem download and support available. Order by phone, mail, or modem. Shipping and handling \$3 USA, \$4 Canada per order; based on actual cost elsewhere. Check, VISA, MasterCard. Specify exact disk formats acceptable. Sage Microsystems East, 1435 Centre St., Newton Centre MA 02159-2469, Voice (617) 965-3552 (9:00 AM - 11:30 PM), Modem (617) 965-7529 (pw=DDT) (MABOS on PC-Pursuit)

Chuck Stafford sells important products for Kaypro computers. The Advent TurboROM allows flexible configuration of your entire system, reading and writing additional formats, and more; \$35. The hard-disk conversion kit includes everything needed to add a hard disk except the hard disk itself; the interfae, controller, TurboROM, software and manual. \$175 without clock, \$200 with clock; very few are left, so order now. Orders receive a free copy of the schematic for the Personality Decoder Board which lets you run more than two drives, and use 96-tpi drives (when combined with the TurboROM); unfortunately there are no more of the actual boards left. Write him at 4000 Norris Avenue, Sacramento CA 95821, or phone (916) 483-0312 evenings or weekends.

The Staunch 8/89'er is a magazine for users of Heath/Zenith H-8 and H-89 computers; \$15 per year U.S. and Canada, \$19 overseas. Kirk L. Thompson, the editor, also sells CP/M and HDOS software, in all H/Z formats, including hard-sector. Write him at P.O. Box 548, West Branch IA 52358, or phone (319) 643-7136 (evenings and weekends).

Sydex sells PC software useful for copying CP/M files and handling CP/M disk formats (22DISK), running CP/M programs on a PC (22NICE), and copying CP/M boot disks without having the original machine (AnaDisk). \$25 each plus \$2.50 shipping and handling per order. Free sampler disks with the limited shareware versions are available. Talk to Chuck or Miriam at Sydex, P.O. Box 5700, Eugene OR 97405, phone (503) 683-6033.

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). Other manuals available; please inquire.

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 2

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

Move up to the Z-System!

NZ-COM (version 1.2d), \$20. 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, \$15, \$10 if purchased with NZ-COM. (Alpha)

I/OR, \$25. Saves the screen in a file, saves printer text in another file. 1.5K IOP segment, ZRDOS required. (Alpha)

B/Printer, \$25. Deluxe background single-file printing. 1.5K IOP segment, ZRDOS required. (Alpha)

NuKey (version 2.03), \$25. Advanced function-key generator. 1.5K 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.

(Ad continued on next page)

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, Heath/Zenith, and Vector.) 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

The Sound Potentials collection of public-domain and shareware software for CP/M systems is now available from Lambda, and the name Sound Potentials is now a Lambda trademark. To receive a catalog of Sound Potentials software on disk, send \$10. If you have a earlier printed catalog, you may use it to order software from me. To order, 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 to \$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.

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.

ART CREDITS

The picture of a Sony OA-S3300 system on our cover was drawn by Rick Sherman from a small color photograph supplied by George Kleiser.

NEXT ISSUE

Don't despair, Jay Sage's Script of the Month Club will be back next issue. We will also have a Computer Classics article on the Xerox computer line, an article by Eugene Austin, more great letters and some interesting news. See you then!