#### ALPHA MICRO USERS SOCIETY

#### NEWSLETTER

VOL. I NUMBER 5 JUNE 1978

# ABOUT THIS NEWSLETTER

The AMUS Newsletter seems to be coming out every five weeks as opposed to monthly. This is largely due to late breaking stories and a lot of good information arriving late concerning available software.

Starting with this issue, we will begin publishing page-long descriptions of AMUS members' software, hardware, consultation services, training services, or what-have-you pertaining to Alpha Micros. To ease the load on the Newsletter staff, please print all information on one page, as clearly and as concisely as possible. The material sent in by RMC Computer Services in this Newsletter is a good example of the kind of thing we would like to see.

# JOHN FRENCH LEAVES ALPHA MICRO

We have received word that John is no longer the Vice President of Marketing. He is still a member of the Board of Directors.

For questions about sales, marketing, or deliveries, you can contact Patrice Martinez, Bob Hichcock, or Dennis Tofte.

Dick Wilcox requests that everyone have a little patience during this transition period.

# WORD PROCESSOR

Come on folks, who has one? Everybody wants one and is nagging us about it. Jim Taylor has written up the specks for a word processor, and if no one comes up with one by the next issue of the Newsletter, we will publish the specks and see who salutes it.

### AMUS SEMINAR

We would like to put together a seminar for new A/M owners and persons considering an Alpha Micro. Each AMOS program would be covered, along with terminal driver modification, implementing AMS format, new SYSTEM.INI's, and Memory Management. Workshops would also be held on use of the MACRO, the EDITor, TXTFMT, and ALPHABASIC with examples and hands on practice. Tenative plans call for the seminar (al least the first one) to be held in Boulder in September. If you are interested in participating, please let us know.

# WANCO FLOPPIES

If you have a Wanco, please let us know, so that we can put you in touch with other users.

# CORRECTION

Last newsletter stated that sequential files need contiguous area on the disk. Obviously, everyone knows that we should have said random files.

# TAPE DRIVE

If you have interfaced a tape drive to the A/M, please let us know.

#### SOFTWARE

Sereral folks have promised to send information on software that we have not received. Please send anything you have to AMUS so that we can get it into the newsletter. AMUS is also making up a disk of software that will be available for the cost of the disk to AMUS members.

#### 10Mbyte DISKS

The 10 Megabyte disks are being delivered...got yours yet?

# LOAD, DEL

In AMOS version 3.3 you cannot load LOAD.PRG. However, you can delete DEL.PRG.

# IF THEN

Be careful using multiple statement lines. Especially with the IF THEN command in BASIC. The following statements give erroneous results:

10 A=2

20 IF A=1 THEN 30 : PRINT A

30 PRINT "WRONG"

RUN

WRONG

# IF THEN (CONT.)

Also, the command line IF A=1 THEN 200 ELSE 300 will give SYNTAX ERROR, however IF A=1 THEN 200 ELSE GOTO 300 will work.

# BASORT - 3.3

The polyphase merge portion of the BASORT does not work. The SORT does work if all records will fit into memory.

# **EBCIDIC**

We have a requirement for the ASCII to EBCIDIC conversion for a floppy disk to be read by IBM equipment. If you have any ideas, please send them to AMUS

# PRINT COMMAND

The AMOS version of the print spooler does not function with disk names other than DSK as mentioned in the last newsletter. However, courtesy of COMPUTER WORKSHOP of Northern Virginia, we have a listing of both the LINE PRINTER SPOOLER and PRINT SPOOLER REQUEST programs with the modifications that will allow the use of the PRINT command with any disk format. Those listings are included in this newsletter.

# REQUESTS

There should be a way to prevent or recover from the problems caused by the mounting and unmounting of disks by users who do not inform other users of the disk change.

There is a need to define a real security system for the A/M, or at least define documentation about what AMOS will and won't do within it's system security.

There is a need for a command that will print leading zeros within the PRINT USING command. The use of a Ø in place of # would be handy.

# PERSCI

PERSCI has a kit available that attaches head #1 more securely.

When the mainframe power is turned off and the power is still on at the PERSCI disk drive, it is possible for the PERSCI to receive extraneous commands from the mainframe. On occasion, this command turns out to be a seek track 97, which causes the head to bang into the end of the shaft and can cause head #1 to loosen. To prevent this, always turn off the disk drive before turning off the mainframe.

# 3.4 RELEASE

A/M says that AMOS 3.4 should be out by the end of June. It will include:

An ISAM that works PASCAL BASIC fixes

# CONVERTING FROM SID TO AMS FORMAT

# Step One:

Obtain the PPN's on all the disks you wish to convert to AMS format

# Step Two:

- 1. Rename PERAMS.DVR to AMS.DVR
- 2. Change SYSTEM.INI as follows:
  - A. Insert SYSTEM DSKØ: AMS.DVR [1,6] before the SYSTEM command
  - B. Change DEVTBL; remove DSKl and replace it with AMS1
  - C. Change BITMAP DSK, 32,1 to BITMAP AMS, 39,1
  - D. Change MOUNT DSK1: to MOUNT AMS1:
- 3. Reboot the system

# Step Three:

- 1. Place a blank disk into the DSKl position in teh disk drive. This position is now referred to as AMS1: so you now have DSKØ: and AMS1:
- 2. Run AMSFMT (you must be logged in under DSKØ: [1,4]). The drive number is 1
- 3. After formatting the disk, log into DSKØ: 1,2 and SYSACT AMS1: Initialize the disk and add the appropriate PPN's
- 4. Log onto AMS1: under one of the new PPN's
- 5. COPY its files from DSKØ: to AMS1: using: COPY /X=DSKØ: [P,PN] \*

Do this for each PPN you wish to have on AMS1:

To create a system disk in the AMS format do all of the above, copying teh PPN's one at a time. Your original SYSTEM.INI must be changed to show the BITMAP size of 39 as in step two. MONGEN must be used to create a new SYSTEM.MON with PERAMS.DVR as the driver. To bring the system up inder control of your new format, if you do not have a Version D 2708 chip, bring the system up using a standard formatted disk. Load PERLOD.PRG. Switch disks, place the AMS formatted system disk in DSKØ:. Type PERLOD and it will load up your new system.

# FREE SCHOOL PUBLISHES STARTER AMOS MANUAL

The Community Free School of Boulder, Colorado has finally finished its new, improved version of a user's manual for AMOS. The manual is meant as an aid for new Alpha Micro owners who don't know all the things that AMOS assumes you know. Included in the manual are step-by-step directions for formatting new disks, and for sharing main memory and disk space. Use of the EDITor is discussed with examples, and suggestions are included to avoid fatal errors.

The manual should be an excellant introduction for dealers to have on hand for prospective customers, since it discusses what the system can and cannot do, and gives various timings for computations and file handling activities for dedicated and heavily shared systems.

The manual is available from the Free School for \$7.50 plus \$.75 mailing. Orders may be sent

Attn: Steve Elliott Community Free School P.O. Box 1724 Boulder, Colorado 80306

# HISTORY OF AMOS

The following pages were sent to AMUS by Guruprem Singh Khalsa of Khalsa Computer Systems, Inc. of Pasadena, California. They trace the development of AMOS from version 0.0 through 3.3 and show the number of blocks that each AMOS program occupied for each version. We have also included a blank page of the form that Guruprem used so that you can keep track of the upcoming releases of AMOS.

Next newsletter, we'll include the history of the drivers, command files, LISP programs, and sources.

# ALPHA MICRO SCORES ON SAN LUIS OBISBO REPORT

AMUS recently came across a report done by an independant agent that rated a dozen mini and micro systems for ease of programming, multiuser features, cost, service, and other items. Alpha Micro came out tops over an IBM system costing \$38K, a DEC system at about \$30K and four other systems more expensive than the \$14K A/M system. Its a twenty page report so there isn't room to reproduce it here. Alpha Micro plans to publish it and make it available to dealers soon, but if you can't wait, let us know and perhaps we can arrange to get it copied for you.

| •         | •           | VERS ! | VERS : | VERS | VERS           | VERC             | ! UERS !     | UEDS !       | UEDS         | UEDC             | ! VERS   | UCDS             | VERS              |  |
|-----------|-------------|--------|--------|------|----------------|------------------|--------------|--------------|--------------|------------------|--|------------------|-------------------|--|
| PROGR     |             | 0.0    |        |      |                |                  |              |              |              |                  | 3.1  |                  | 3.3               |  |
| DSKØ: 1,4 | 4           |        | ##     |      |                | ++               |              |              | ++           |                  |  | **               | -                 | •                                      |
| AMS .MC   | ON ;        |        |        |      | <del></del>    | <del></del>      | <u> </u>     |              | 1            |                  | 1  | <del></del>      | <br>}             | see AMS.DVR                            |
| AMSCPY.PI |             |        |        |      |                | <br>             | <del> </del> |              |              | †<br> <br>  1    | 1  | <br>             | <del> </del><br>  | 1                                      |
| AMSFMT.PI | +           |        |        |      |                | <br> <br>        | <del> </del> |              |              | <del> </del> -   | <del> </del>                                     | 1                | 1                 |  |
| AMSLOD.PI | RG          |        |        |      |                | <del> </del>     | <del> </del> |              | 1            | 1                | <del> </del>                                     | <del> </del>     | }<br>             | <br>                                   |
| AMSORT PI | RG          |        | <br>   |      |                | <br>             | <del> </del> |              |              | <del> </del><br> | <del> </del>                                     | <br>             | <del> </del>      |  |
| APPEND.PI | RG          |        |        | ,    | <del></del>    |                  | †            |              | <del> </del> | †———<br>  1      | 1  | 1                | 1                 | <del> </del>                           |
| ASCDMP.PF | RG ;        |        |        |      |                | }<br>}           | <del> </del> |              | 1            | 1                | 1  | 1                | 1                 | †                                      |
| ATTACH P  | RG :        | 1      | 1      | 1    | 1              | 1                | 1            | 1            | 1            | 1                | 11   | 1                | 1                 | <del> </del>                           |
| BASIC .PI | RG          | 17     | 15     | 15   | 16             | 19               | 19           | 19           | 20           | 21               | 21   | 22               | 22                | <del> </del>                           |
| BASIC1.II | NI :        |        |        | 1    | <br>           | <del> </del>     | <del> </del> |              |              | <del> </del>     | <del> </del>                                     | <del> </del><br> | <del>†</del><br>¦ | †                                      |
| BASIC1.MC | +           |        |        | 33   |                | <del> </del>     | <del> </del> |              | <del></del>  | <del> </del>     | <del>                                     </del> | <del> </del>     | <del> </del>      | !                                      |
| BASIC2.II | NI :        |        |        | 1    | <del> </del> - | <del> </del><br> | <del> </del> |              |              | <del> </del>     | <del>                                     </del> | <del> </del>     | <del> </del>      | <del> </del>                           |
|           |             |        | ##     |      |                | ##               |              | -            | **           |                  |  | ##               |                   | ************************************** |
| BASIC2.MC | ION :       |        |        | 47   |                | !                | <u> </u>     |              | <del></del>  | !                |  | !                | !                 | 1                                      |
| BASORT SI | BR          |        |        |      |                | <del> </del>     | !            |              |              | !                | !  |                  | 2                 |  |
| BAUD PI   | RG          |        |        |      |                | !                | !            |              |              | !                |  |                  | 1                 | †                                      |
| BDT .PI   | RG          | 1      | ,      |      | 1              | 1                | 1            | 1            |              | !                | !  |                  | !                 |  |
| BITMAP.PI | RG          | 1      | 1      | 1    | 1              | 1                | 1            | 1            | 1            | 1                | 1  | 1                | 1                 | !                                      |
| BMVR .PI  | RG          | 1      | 1      | 1    | 1              | 1                | 1            | 1            | 1            | 1                | 1  | 1                | 1                 | !                                      |
| CITY .PI  | RG          |        | 1      | 1    |                | :                | !            | <br> <br>    |              | !                | !  | <del> </del> -   | !                 |  |
| CLEAR .PI | RG          | 1      | 1      | 1    | 1              | 1                | 1            | 1            |              | <del> </del>     | !  | †                | <del> </del>      | 1                                      |
| CLKFRQ.PI | RG          | -      |        |      | 1              | 1                | 1            | 1            | 1            | 1                | 1  | 1                | 1                 | !                                      |
| COMPIL.PI | RG          | -      |        |      |                | 1                | !            |              |              |                  |  | †                | 18                | !                                      |
| COPY .PI  | · · · · · · | 2      | 2      | 2    | 2              | 2                | 2            | 2            | 2            | 2                | 2  | 2                | 2                 | !                                      |
| COUNT .PI | RG          | 1      | 1      | 1    | 1              | 1                | 1            | 1            | 1            | 1                | 1  | 1                | 1                 | !                                      |
|           |             |        | ##     |      |                | ##               |              |              | H            |                  |  | ##               |                   |  |
| PDT .PI   | RG ;        | 11     | 11     | 11   | : 11           | : 11             | : 11         | 11           | 11           | :11              | :11  | : 11             | : 11              |  |
| DEL .PI   |             | 1      | 1      | 1    | 1              | 1                | 1            | 1            | 1            | 1                | 1  | 1                | 1                 |  |
| DETACH.PI | RG          | 1      | 1      | 1    | 1              | 1                | 1            | 1            | 1            | 1                | 1  | 1                | 1                 |  |
| DEVIBL.PI |             | 1      | 1      | 1    | 1              | 1                | 1            | 1            | 1            | 1                | 1  | 1                | 1                 | 1                                      |
| PIAGI .PI |             |        | †      | :    | 1              | 1                | 1            | 1            | 1            | 1                | 1  | 1                | 1                 | <br> <br> -                            |
| DIAG2 .PI | RG          |        | !      | :    | !              |                  | -            | !            | !            | !                | !  |                  | 1                 | <br> <br>                              |
| DIAG3 .PI | RG          |        | !      | !    | !              | !                | !            | <del> </del> | <del> </del> | !                | !  | !                | 2                 | <br>                                   |
| PING .PI  | RG          |        | †      | !    | 1              | 1                | 1            | 1            | 1            | 1                | 1  | 1                | 1                 | †<br>1                                 |
| DIR .PI   | RG          | 3      | 3      | 3    | 3              | 3                | 3            | 3            | 3            | 3                | 3  | 3                | 3                 | 1                                      |
| DIRSEQ.PI | RG          |        | !      |      | !              |                  | !            | !            |              | 2                | 2  | 2                | 2                 |  |
|           |             |        |        |      |                | -                |              |              |              |                  |  |                  |                   | 1                                      |
|           |             |        |        | !    |                | !                | i            | 1            | ]            |                  | !  | i                | !                 |  |

| دده که در میشود داشت کرد. در میشود کرد. |                  |                  |                  |                  |                |              |                   |               |              |              |                  |                |   |
|---|------------------|------------------|------------------|------------------|----------------|--------------|-------------------|---------------|--------------|--------------|------------------|----------------|---|
| PROGRAM                                 |                  | •                |                  | •                |                | , ,          | VERS<br>1.02      |               | )            | 1            | •                |                |   |
| DSKØ: 1,4                               |                  | ##               |                  |                  | ++             |              |                   | ++            |              |              | ##               |                |   |
| DOCTOR.OPR                              | !                |                  | <del></del>      |                  | 3              | 3            | 3                 |               | }            | )            |                  | <br>!          | on DSK1   |
| DOCTOR.WS                               | <del> </del>     |                  | }                |                  |                | 53           | 53                |               | <br>         |              |                  | ,              | on DSK1   |
| DSKANA.PRG                              | 4                | 4                | 4                | 4                | }              | 4            | 4                 | 4             | 4            | 4            | 4                | 4              |   |
| DSKCPY.PRG                              |                  | <del> </del>     | 1                | }                | <del></del>    | 1            | 1                 |               |              |              | 1                | 1              |   |
| DSKDDT.PRG                              | ·                |                  | 1                | 1                |                | 1            | 1                 |               |              |              | 1                | 1              | <del></del>                                     |
| DSKDMP.PRG                              | <del></del>      | <b> </b>         | 1                | 1                |                | 1            | <del></del>       |               |              | ·            | 1                | 1              |   |
| DSKFIL.PRG                              | f                | <b> </b>         | 1                | 1                | <del></del>    | 1            | 1                 | 1             |              |              | 1                | 1              |   |
| DYSTAT.PRG                              | <del> </del>     | f                | 2                | 2                |                | 2            | 2                 | 2             | <del></del>  |              | 2                | 2              |   |
| EDIT .PRG                               | <del> </del>     | ļ                | 4                | 4                | <del> </del>   | 4            | 4                 | 5             | <del></del>  |              | 6                | 6              |   |
| ERASE .PRG                              | 2                | 2                | 2                | 2                | 2              | 2            | 2                 | 2             | 2            |              | <del> </del>     | 2              | <del> </del>                                    |
| FDBL .PRG                               | 8                | <del> </del>     | <del> </del>     | t<br>!           |                |              | <del>-</del>      |               |              |              | <del> </del> -   | <del> </del>   |   |
| FILCOM.PRG                              | 1                | 1                | 1                | 1                | 1              | 1            | 1                 | 1             | ì            | 1            | 1                | 1              |   |
|   | <u> </u>         |                  |                  |                  | ++             |              |                   | ##            | ·<br>        | ·<br>        | ##               |                | •   |
| FILDMP.PRG                              | ; 1              |                  | ; 1              | : 1              |                | 1            | 1 ;               | 1             |              |              |                  | <del></del>    |   |
| FIXMIM.PRG                              | <del> </del>     | t<br>!           | <del> </del>     | <del> </del>     | 2              | 2            | 2                 | 2             |              | <br>         | <del>!</del>     | <del>!</del>   | <del>                                    </del> |
| FIXTPR.PRG                              | <del> </del><br> | <del> </del><br> | 2                | 2                | 2              | 2            | 2                 |               | <br> <br>    |              | <del> </del>     | <del> </del> - |   |
| FLTONV.PRG                              | <del> </del><br> | <del>}</del> -   | †<br>            | <del> </del>     |                | ļ            |                   |               |              |              | <del> </del>     | 1              |   |
| FORCE .PRG                              | 1                | 1                | 1                | 1                | 1              | 1            | 1                 | 1             | 1            | 1            | 1                | 1              |   |
| FORMAT.PRG                              | <del> </del> -   | <del> </del>     | <del> </del> -   | 1                | 1              | 1            | 1                 | 1             | 1            | 1            | 1                | 1              |   |
| FTIME .PRG                              | 6                | }<br>}           | <del> </del><br> | <del> </del><br> | <del></del>    |              | <del>- </del><br> |               | <br>         | <br> <br>    | <del> </del> -   | <del> </del> - | 1<br>1  |
| HEDLOD.PRG                              | 1                | 1                | 1                | 1                | 1              | 1            | 1                 | 1             | 1            | 1            | 1                | 1              | <del> </del>                                    |
| HOG .PRG                                | <del> </del>     | <del> </del>     | <del> </del>     | <del> </del>     |                |              | <del> </del>      |               | 1            | 1            | 1                | 1              | <del> </del>                                    |
| ICOM .PRG                               | <del> </del>     | <del> </del>     | t<br>!           | 20               | 20             | 20           | 20                | 21            |              | <del></del>  | <del> </del>     | <del> </del>   | see MONGEN                                      |
| ICMLOD.PRG                              | <del> </del>     | }<br>}           | <del> </del>     | <del> </del>     |                | <del> </del> | <del> </del>      | 1             | 1            | 1            | 1                | 1              |   |
| ISAM .PRG                               | <del> </del>     |                  | !                |                  |                | <u> </u>     |                   | 12            | 10           | 10           | 10               | 10             |   |
|   |                  | ##               |                  |                  | ##             |              |                   | ++            |              |              | **               |                |   |
| ISMBLD.PRG                              | <del></del>      | <del></del>      | !                |                  |                | l            | 1 1               | 6             | 18           | 18           | : 18             | : 17           | 1<br>   |
| ISMDMP.PRG                              | †<br>!           | <del> </del>     | <del> </del>     | <del> </del>     | <del> </del> - |              | <del> </del>      | 16            | 14           | 14           | 14               | 13             |   |
| JOB .PRG                                | 2                | 2                | 2                | 2                | 2              | 2            | 2                 |               | <del> </del> | <del> </del> | †- <del></del> - | <del> </del>   | see JOBS  |
| JOBMEM.PRG                              | <del> </del>     | <del> </del>     | †<br>!           | <del> </del>     | <del> </del> - | <br>         | <del>  </del>     |               | 1            | 1            | 1                | 1              | <del> </del>                                    |
| JOBPRI.PRG                              | † <del></del>    | <del> </del>     | <del>†</del><br> | t<br>!           | t<br>!         | <del> </del> | <del>  </del>     | 1             | 1            | 1            | <del>†</del> 1   | 1              | see SETPRI                                      |
| JOBS .PRG                               | <del> </del>     | <del> </del>     | <del> </del>     | <del> </del>     | t<br>!         | <del> </del> |                   | 1             | 1            | 1            | 1                | 1              | †   |
| KILL .PRG                               | 1                | 1                | 1                | 1                | 1              | 1            | 1                 | 1             | 1            | 1            | 1                | 1              | <del> </del>                                    |
| LINK .PRG                               | 7                | 7                | 7                | 7                | 7              | 7            | 7                 | 7             | 7            | 7            | 7                | 7              | † <del></del>                                   |
| LISP .PRG                               | !                | †<br>            | !                | !                | 12             | 12           | 12                | 33*           | 33*          | 33*          | 33*              | 33*            | *on DSK1  |
| LOAD .PRG                               | 1                | 1                | 1                | 1                | 1              | 1            | 1                 | 1             | 1            | 1            | 1                | 1              | !   |
| 1                                       | !                | :                | !                | <del> </del>     | †              | <del> </del> | ! :               | ·             | !            | :            | !                | <del> </del>   | !   |
| 1                                       | <del> </del>     | <del> </del>     | <del> </del>     | <del> </del>     | <del> </del>   | <del> </del> | <del> </del>      | <del>  </del> | <del> </del> | <del> </del> | <del> </del>     | <del> </del>   | !   |

| PRO    | GRAM  | VERS |              |        |     |     |             | VERS<br>1.02 |    |    | VERS<br>3.1 |    |              | COMMENT                   |  |  |
|--------|-------|------|--------------|--------|-----|-----|-------------|--------------|----|----|-------------|----|--------------|---------------------------|--|--|
| DSKØ:  | 1,4   |      | ##           |        |     | ++  | <del></del> |              | ++ |    |             | ** | <del>*</del> |                           |  |  |
| LOG    | .PRG  | ; 2  | 2            | , 2    | ; 2 | ; 2 | ; 2         | 2            | 2  | 2  | 2           | 2  | ; 2          | 1 1                       |  |  |
| LOGOFI | F.PRG | 1    | 1            | 1      | 1   | 1   | 1           | 1            | 1  | 1  | 1           | 1  | 1            |                           |  |  |
| LPTSPI | L.PRG | 2    | 2            | 2      | 2   | 2   | 2           | 2            | 2  | 2  | 2           | 2  | 2            |                           |  |  |
| MACRO  | .PRG  | 16   | 16           | 16     | 16  | 16  | 16          | 16           | 16 | 16 | 16          | 16 | 16           |                           |  |  |
| MACl   | .OVR  | 1    | 1            | 1      | 1   | 1   | 1           | 1            | 1  | 1  | 1           | 1  | 1            |                           |  |  |
| MAC2   | .OVR  | 4    | 4            | 4      | 4   | 4   | 4           | 4            | 4  | 4  | 4           | 4  | 4            |                           |  |  |
| MAC3   | .OVR  | 9    | 9            | 9      | 9   | 9   | 9           | 9            | 10 | 10 | 10          | 10 | 10           |                           |  |  |
| MAKE   | .PRG  | 1    | 1            | 1      | 1   | 1   | 1           | 1            | 1  | 1  | 1           | 1  | 1            |                           |  |  |
| MAP    | .PRG  | 2    | 2            | 2      | 2   | 2   | 2           | 2            | 2  | 2  | 2           | 2  | 2            |                           |  |  |
| MEMDEE | F.PRG |      |              | !      | !   | !   | !           |              |    | 1  | 1           | 1  | 1            |                           |  |  |
| MEMORY | .PRG  | 1    | 1            | 1      | 1   | 1   | 1           | 1            | 1  | 1  | 1           | 1  | 1            |                           |  |  |
| MEMPLI | r.PRG | 1    |              | !      | !   | :   | !           |              |    | 1  |             |    | 1            |                           |  |  |
|        |       |      | ##           |        |     | ##  |             |              | ++ |    |             | ## |              |                           |  |  |
| MEMIST | r.PRG | 1    | 1            | : 1    | :   | !   | :           |              |    |    |             |    | 1            | see DIAG1                 |  |  |
| MONGEN | N.PRG |      |              |        | !   |     | !           |              |    |    | 1           | 1  | 1            |                           |  |  |
| MOUNT  | .PRG  |      |              | !      |     | :   |             | 1            |    | 1  | 1           | 1  | 1            |                           |  |  |
| PACK   | .PRG  | 1    | 1            | 1      | 1   | 1   | 1           | 1            |    |    |             |    | !            |                           |  |  |
| PDLFMI | r.PRG |      |              | !      |     | !   | !           |              |    | 7  | 7           | 7  | 7            |                           |  |  |
| PERSCI | .MON  |      |              | !      | 20  | 20  | 20          | 20           | 22 |    |             |    | !            | see MONGEN                |  |  |
| PERLO  | PRG   | !    |              | !      | !   | !   | !           |              | 1  | 1  | 1           | 1  | 1            |                           |  |  |
| PRINT  | .PRG  | 1    | 1            | 1      | 1   | 1   | 1           | 1            | 1  | 1  | 1           | 1  | 1            |                           |  |  |
| QDT    | •PRG  | 1    | 1            | 1      | 1   | 1   | 1           | 1            | 1  | 1  | 1           | 1  | 1            |                           |  |  |
| QUEUE  | .PRG  |      |              | !<br>! |     | !   |             |              |    |    | 1           | 1  | 1            |                           |  |  |
| RAND   | .PRG  | 1    | 1            | 1      | 1   | 1   | 1           | 1            |    |    |             |    | !            |                           |  |  |
| REDALI | .PRG  | 1    | 1            | 1      | 1   | 1   | 1           | 1            | 1  | 1  | 1           | 1  | 1            | !                         |  |  |
|        |       |      | ##           |        |     | ##  |             |              | ## | -  |             | ** |              |                           |  |  |
| RENAME | PRG   | : 1  | 1            | :1     | : 1 | : 1 | ! 1         | 1            | 1  | 1  | 11          | 1  | :1           |                           |  |  |
| REVIVE | E.PRG | 1    | 1            | 1      | 1   | 1   | 1           | 1            | 1  | 1  | 1           | 1  | 1            |                           |  |  |
| RNDRED | .PRG  | 1    | 1            | 1      | 1   | 1   | 1           | 1            |    | 1  | 1           | 1  | 1            |                           |  |  |
| RUN    | .PRG  |      | 12           | 12     | 12  | 16  | 16          | 16           | 17 | 18 | 19          | 19 | 21           |                           |  |  |
| SAVE   | .PRG  | 2    | 2            | 2      | 2   | 2   | 2           | 2            | 2  | 2  | 2           | 2  | 2            |                           |  |  |
| SCREEN | I.SBR | 1    | †<br>!<br>!  |        | ]   | -   | !           | †            |    | 1  | 1           | 1  | 1            | see ADM3.TDV<br>SOROC.TDV |  |  |
| SEEK   | .PRG  | 2    | 2            | 2      | 2   | 2   | 2           | 2            | !  | !  | !           | !  | 1            | !                         |  |  |
| SEND   | .PRG  | 1    | 1            | 1      | 1   | 1   | 1           | 1            |    | 1  | !           | ]  |              |                           |  |  |
| SET    | .PRG  | 1    | !            |        | :   |     |             |              | 1  | 1  | 1           | 1  | 1            | <i>*</i>                  |  |  |
| SETNUI | L.PRG | !    | !            | 1      |     | 1   | 1           | 1            |    | -  | †<br>       |    | 1            |                           |  |  |
| !      |       |      |              |        | İ   |     | 1           | 1            |    |    |             | !  |              |                           |  |  |
| :      |       | !    | <del> </del> | 1      | :   | 1   | †           | :            | :  | :  | :           | :  | 1            | ;                         |  |  |

|            | VERS | VERS | VERS           | VERS : | VERS | . Vers      | ! Vers : | VERS ! | VERS | VERS : | VERS | VERS | •          |
|------------|------|------|----------------|--------|------|-------------|----------|--------|------|--------|------|------|------------|
| PROGRAM    | 0.0  | 0.1  | 0.2            | 0.3    | 1.0  | 1.01        | 10.2     | 2.0    | 3.0  | 3.1    | 3.2  | 3.3  | COMMENT    |
| DSKØ: 1,4  |      | ##   | - <del> </del> |        | ##   | <del></del> |          | ++     |      |        | ##   |      |            |
| SETPRI.PRG | 1    | 1    | 1              | 1      | 1    | 1           | 1        | 1      |      |        |      |      | see JOBPRI |
| SIZE .PRG  |      |      |                |        |      | <u></u>     |          | 1      | 1    | 1      | 1    | 1    |            |
| SLEEP .PRG | 1    | 1    | 1              | 1      | 1    | 1           | 1        | 1      | 1    | 1      | 1    | 1    |            |
| SORT .PRG  |      |      |                |        |      |             |          |        | 6    | 6      | 6    | 6    |            |
| SPOOL .SBR |      |      |                |        |      |             |          |        |      |        |      | 1    |            |
| SRCCOM.OLD |      |      |                | `      | -    |             |          |        |      | 3      | 3    | 3    |            |
| SRCCOM.PRG |      |      |                |        |      |             |          |        | 3    | 3      | 4    | 4    |            |
| SUSPND.PRG | 1    | 1    | 1              | 1      | 1    | 1           | 1        | 1      | 1    | 1      | 1    | 1    |            |
| SYM .PRG   | 6    |      |                |        |      |             |          |        |      |        |      |      | see SYMBOL |
| SYMBOL.PRG |      | 6    | 6              | 6      | 6    | 6           | 6        | 6      | 6    | 6      | 6    | 6    | Y          |
| SYSACT.PRG | 3    | 3    | 3              | 3      | 3    | 3 ;         | 3        | 3      | 3    | 3      | 3    | 3    |            |
| SYSTAT.PRG | 2    | 2    | 2              | 2      | 2    | 2           | 2        | 2      | 2    | 2      | 2    | 2    |            |
|            |      | **   |                |        | ##   |             | #        |        |      |        | ++   |      |            |
| SYSTEM.INI | : 1  | : 1  | 1              | 1      | 1    | :1          | 1        | 1      | 1    | 1      | 1    | 1    | 1          |
| SYSTEM.MON | 21   | 21   | 21             | 20     | 20   | 20          | 20       | 22     | 23   | 26     | 26   | 26   |            |
| SYSTEM.PRG |      |      | ,              | 1      | 1    | 1           | 1        | 1      | 1    | 1      | 1    | 1    | 1          |
| TEE .PRG   |      |      |                | 5      |      |             |          |        |      |        |      |      |            |
| TIME .PRG  |      |      |                |        |      | 1           | 1        | 1      | 1    | 1      | 1    | 1    |            |
| TLGRAM.PRG |      |      |                |        |      |             |          |        | 7    | 7      | 7    | 7    |            |
| TODONV.PRG | :    |      | !              |        |      | 2           | 2        | 2      | 2    | 2      | 2    | 2    | )<br> <br> |
| TRMDEF.PRG |      |      | !<br>!         |        |      | :           | !        | 2      | 2    | 2      | 2    | 2    | †          |
| TXTFMT.PRG | 3    | 3    | 3              | 3      | 3    | 3           | 3        | 9      | 10   | 10     | 10   | 10   | !<br>!     |
| TYPE .PRG  | 1    | 1    | 1              | 1      | 1    | 1           | 1        | 1      | 1    | 1      | 1    | 1    |            |
| UNPACK.PRG | 2    | 2    | 2              | 2      | 2    | 2           | 2        |        |      |        |      | !    |            |
| WAIT PRG   | 1    | 1    | 1              | 1      | 1    | 1           | 1        | 1      | 1    | 1      | 1    | 1    | 1          |
|            |      | ++   |                |        | ##   |             | #        |        |      |        | **   |      |            |
| WAMFMT.PRG |      | !    | !              |        |      | !           |          |        |      |        | 1    | 1    | 1          |
| WNGFMI.PRG |      |      |                |        |      |             |          |        |      |        | 1    | 1    |            |
| KLOCK .PRG |      | ,    | :              |        |      |             |          |        | 1    | 1      | 1    | 1    |            |
| i<br>i     |      |      |                |        |      |             |          |        |      |        |      | i    |            |
| 1          |      |      |                |        |      |             |          |        |      |        |      |      | †          |
|            |      |      |                |        |      |             |          | !      |      | !      |      |      |            |
| )<br>      |      |      |                |        |      |             |          |        |      |        |      |      |            |
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| !          | !    | ;    | !              | :      |      | 1           | :        | :      | !    | !      | :    | !    | 1          |

| PROGRAM  | VERS         | VERS     | VERS              | VERS              | VERS                                  | VERS  | Vers         | VERS         | VERS         | VERS         | VERS         | VERS              | COMMENT   |  |
|--|--------------|----------|-------------------|-------------------|---------------------------------------|---|--------------|--------------|--------------|--------------|--------------|-------------------|---|--|
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```
LINE PRINTER SPOOLER
CHANCE 1: THIS CHANCE WILL ALLOW THE USE OF THE "PRINT"
          COMMAND METH FILES FROM ANY DESK POWAR AND MOT
          JUST "DSK." THIS CHANGE IS COURTESY OF THE
          COMPUTER MORKSHOP OF HORTHERN VIRGINIA.
COPY ' SYS
                           MARKET OF CHICAGO IN CHEEK TABLE
QSIZE=10
THE FIRST 2 WORDS OF LETSPL AND PREDEFINED FOR COMMINICATION
LSTS: WORD 0
                            STATES FLACE
       ;WORD
             CELE
                            SOFFSET TO CHEEK THEE
                           INITIAL CHIEF JUNE
SLEEP UNTIL MINKEMED BY PRINT CALL
             CAJOBOUR, NO
                           2SET JOB THOEK ......
LPTSLP: MOV
            J.ES
                            PRINTER EXTERNAL WATT STREET
       TIATE
                           : INSURE PRIMITER NOT ASSIGNED
LCNIK: DEASON LDB.R5
                            ; INDEX THE QUEE
       LEA
             M.QUEUE
                            QUEUE ENTT?
       131
       BEO
             LPISLP
INATT FOR 500 HS TO ALLOW-FOR POSSIBLE PRINTER DEPMIN FROM AND HER JOB
PASSIGN THE PRINTER UNLESS SOMEONE BLSE MAS IT IN WHICH CASE WE WAIT
LOURT: SLEEP 430.
                            - 24 000 FOR TOR SEALERS
       ASSIGN LDB.R5
                            INTEREST TO ASSIGN THE PRINCES
                           : BUT SLEEP MINILE IF IN USE
             LCIMT
       BE:
; LPT HAS BEEN ASSIGNED - SET REQUEST FROM QUEUE 19970 DOB
                            SAVE QUELE MASE
             M,R5
      MOV
                           SHOWE DIC-CD TO DDS
       HOV
              (R4)+.008+20
              (R4)+_DDB+24
                            SHOWE PILEMENTE TO DOB
       MOV
              (R4)+,DDB+26
       HOV
              (R4)+,DDB+30
       HOV
              (R4)+,DDB+32
       MOV
                            MOVE PER
              (R4)+,DDB+22
       NOV
                            HOVE DRIVE
JOPEN THE FILES
LCOPN: CLAB
              DDB+34
                            I DESURE NOT OFFI
                            COPEN DISK UNKUP PILE
       OPENT
              DOB
                            NOT FOUND
              LCDEL
       @R2,R3
                            ;SAVE LINK
       NOV
                            OPEN LPT CUTTUR
       OPENO
              LDB
              #1.LSTS
                            ISET ACTIVE STATUS
       BIS
IBOTH PILES ARE OPEN - TRANSPER THE DATA
                            CHECK STATUS FOR KILL
              12,LSTS
LCPRT: BIT
       BNE
              LCDIN
                            PRESTORE LINK
       HOV
              R3.682
       IMPUT
             DDB
                            HEAD RECORD
              LCDDA
                            ERROR
       BN8
       151
              DDB+4
                            18065
              LCDUN
                            YES
       DEQ
       WW
              0R2.R3
                            SAVE LINK
                            NO CLEAR TO HULLS
       CLR
              eR2
```

```
WW
               50044_L0844
                               29ET BYTE CHAN
                               ARTE OF SACA
                               400
:DID OF FILE - CHOSE OF SHOP
                              SCHOLE BUILD
COME: CLOSE
        CLOSE
               CLOSE LET
                               SCHOOL ACTIVE AND RIGH PLACE
        SEC
               13,1513
POLICIE THE REQUEST BY SHIFTING SHIFTING GIRLS THE STAN
LODEL: MON
                40014,40514
                               SERVICE CHINE
        200
               LONE
                               : 496,695 699
        W
                4884.48504
        (BA)+, (BS)+
       (RS)+, (RS)+
                (86)+,465)+
       CRA+, (85)+
       welliams for
               SCHEL
       97300
               41400
                               2014 100
        7
                ANGE!
               11
       41400
               23
               12. TOSTE
THE FOLLOWING MAIN COMPRISES THE WITH COMPRISE COMP
217 TO ALSO THE WAR WIFTER MURA WHICH IS USED ONCE THE SPECIES IS ROWING
THE STREET
       1112
                              CLERK SPRING WIND
       100
               CHERLISIS 12
                              SET CHEER THERE CORRECT
       ESTEC
               LID, TO
                              SPIC THE PROPER BRIDER
       LEA.
               R2_88
                              STREET THE MATERIA
       W
               92.BB+2
       82.12B42
               PHY ALL RESONS THE THEY PRINTE, THE LEF
       JUST
               HONEY OF SHIP SOURCE SERVICE: MANAGEMENT OF FERTON
       NO.
       PEION
               LITTOR
               LIDE
               FLEDOM+54
                              :LPT.UR WIT PUBL
       THECK ( NOT PRODE
       EXIT
       USIFIE
                              CHOCKING SIZE OF THEORYSIS PHINTSYIN
       USHIPAS
       200
               NO.RI
       JOBSET RI, JOBSIE
                              CONTINUE SHE CHIVETON
               THAD
                              ASSESSED SPONESSED
LPIDAR: BLIM
               12
                              HEYCH BOD
       RADSO
               MIT
       WIND
               406
       .=MP+510.
                              PARTY OF THE PROPERTY
```

WID 540

```
PRINT SPOOLER REQUEST PROCREM
         ; CHANGE 1: THIS CHANGE WILL ALLOW THE USE OF THE "PRINT"
                   COMMAND WITH FILES FROM ANY DISK FORMAT AND NOT
                   JUST "DSK." THIS CHANGE IS COURTESY OF THE
                   COMPUTER WORKSHOP OF NERTHERN VIRGINIA.
        COPY
                     SYS
               EXTERN
        SCAN JOB TABLE TO LOCATE SPOOLER JOB
                      @#JOBTBL,RO
        RUNN: MOV
                                    SET JOB TABLE INDEX
        SCAN:
               BIT
                      #J.LPT, JOBTYP (R0) ; SPOOLER JOB?
               BNE
                      COTCHA
                                    ; YUP
                                     KEEP LOOKIN'
               ADD
                      @#JOBESZ,RO
                                    ; UNLESS END OF TABLE
               TST
                      ero
               BRE
               TYPECR [LPISPL NOT ALLOCATED]
               EXIT
        SPOOLER IS ACTIVE - ENTER REQUEST IN QUEUE TABLE
        COTCHA: NOV
                      JOBBAS (RO), R4: ; INDEX THE PROGRAM
                                ; . WHICH ASSUMES LPTSPL IS PIRST
               ADD
                      #ZID.R4
               BYP
               LIN
(
               BEQ
                                     ; DEFAULT OF /L
                      QLST
                      @R2,#'/
               CMPB
                                     :CHECK FOR LIST SWITCH
               BNE
                      GNK
(
               CMPB
                      1(R2), #'L
               BEQ
                      QLST
        CNK:
               LOCK
                                    ;LOCK PROCESSOR
               FSPEC
                      DHB, LST
                                     GET FILE SPEC TO PRINT
               LEA
                      R1, DHB+32
                                    INDEX THE PPN
               TST
                      er1
                                     I'ME MUST SET OUR OWN IP DEFAULT
(
                       .+10
               BNE
               JOBGET
                      @RI , JOBUSR
               LEA
                      R1.DHB+22
                                     : INDEX THE DRIVE
1
               CMP
                      @R1.#377
                                     WE MUST SET OUR OWN IF DEFAULT
               BNÉ
                      .+22
                                                          ###CHANGE 1*##
               JOBGET @R1, JOBORV
( .
               LEA
                      R1,DHB+20
                                                          ***CHANGE 1***
                                                          ***CHANGE 1***
               JOBGET 
                      QR1, JOBDEV
               BYP
                                    CHECK FOR KILL SWITCH
C
               CMPB
                      @R2,#'/
               BNE
                      GNK2
                      1(R2),4'K
               CMPB
               BEQ
                      QKIL
               INIT
        GNK2:
                      DHB
               TOOKESP
                      DHB
0
                      LOOKOK
               BEO
               PPILE
                      DHB
               TYPECR < NOT FOUND>
EXIT
                                    BUMP TO THE QUEUE TABLE
        LOOKOK: ADD
                      2(R4),R4
        QLP:
               CMP
                      2(R4),#-1
                                    END OF TABLE?
```

BEO

OEND

; YUP

```
LINE PRINTER SPOOLER
 CHANGE 1: THIS CHANCE WILL ALLOW THE USE OF THE "PRINT"
                        CONSIMIO WITH PILES FROM ANY DISK POWAY AND NOT
                       JUST "DEK." THIS CHANCE IS COUNTESY OF THE
                        CONFUTER MODESHOP OF MORTHERN VIRGINIA.
 COPY ' SYS
                                                                HERBER OF CHIRICS IN QUEIE THELE
OSIZE=10
                EXTERN
 THE FIRST 2 WORDS OF LPTSPL ARE PREDEFINED FOR COMMUNICATION
                                                                 SPATES FLACS
LSTS: WORD 0
                                                                 COPPERT TO QUELE THEELE
                 :WORD
                                                                INITIAL BUTH JUST
                                THIT
 SLEEP UNTIL MAKENED BY PRINT CALL
                                                                 :SET JOS THOEK .....
                                CAJOBOUR.FO
LPTSLP: HOV
                                J.EM
                                                                 : MITTER EXTERNAL WATT STATE
                 TIME
                                                                 INSURE PRIMITER HOT ASSIGNED
 LCNHK: DEASON LDB.R5
                                PA,QUEUE
                                                                 ; MARK THE QUEE
                LEA
                                                                 QUEE BETT?
                TST
                                LPISLP
                                                                ; TES
                BEO
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 ASSIGN THE PRINTER UNLESS SOMEONE BLSE JMS 17 IN WHICH CASE WE WATT
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 LCHAT: SLEEP $30.
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                                LDB, R5
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                PART !
 :LPT HAS BEEN ASSIGNED - SET MICHEST FROM QUEUE 1990 DOG
                HOV
                                M.R5
                                                                 SAVE QUIETE BASE
                HOV
                                 (M)+,000+20
                                                                JHONE DIC-CD TO DDB
                NOV
                                 (R4)+,008+24
                                                                 HOVE FILENMEN TO USE
                MOV
                                 (R4)+,DDB+26 -
                                 (R4)+,DDB+30
                HOV
                 NOV
                                 (R4)+,DDB+32
                                                                 MOVE PEN
                                 (R4)+,DDB+22
                                                                 MOVE DRIVE
                NOV
 10PEN THE PILES
 LCOPN: CLIB
                                 DDB+34
                                                                 INSURE WOT OFFIN
                                                                 POPEN DISK DWOT PILE
                OPENT
                                DOB
                                 LCDEL
                                                                 NOT FOUND
                 HOV
                                 @2,R3
                                                                  SAVE LINK
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                                 ш
                                                                  OPEN LPT OUTFUT
                                                                  ISET ACTIVE STATUS
                                 erai, i
 BOTH PILES ARE OPEN - TRANSPER THE DATA
                                                                  CHECK STATUS FOR KILL
                                 12,LSTS
 LCPRT: BIT
                 BNE
                                 LCDIN
                                                                  AMESTORS LINK
                 NOV
                                 R3, (R2
                 INPUT
                                DDB
                                                                 MEAD RECORD
                                 LCOUN
                 121
                                                                 18065
                                 DDB+4
                                 LCOUN
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                 BEQ
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                 KW
                                                                 :SAVE LINK
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I AND CLEAR TO NULLS

CLR

eR2

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WID **D/D** 

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                      . **********************************
                                                       PRINT SPOOLER REQUEST PROGRAM
                     :CHANGE 1: THIS CHANGE WILL ALLOW THE USE OF THE "PRINT"
                                              COMMAND WITH FILES PROM ANY DISK PORMAT AND NOT
                                              JUST "DSK." THIS CHANGE IS COURTESY OF THE
                                             COMPUTER WORKSHOP OF WERTHERN VIRGINIA.
                    ;
                    COPY
                                     EXTERN
                    ; SCAN JOB TABLE TO LOCATE SPOOLER JOB
                                                      @#JOBTBL, RO
                   RUNN:
                                                                                      SET JOB TABLE INDEX
                                  MOV
                   SCAN:
                                                       #J.LPT, JOBTYP (R0) ; SPOOLER JOB?
                                     BIT
                                                                                        YUP
                                     BNE
                                                      GOTCHA
                                     ADD
                                                       @#JOBESZ,RO
                                                                                         : KEEP LOOKIN'
                                                                                         ; UNLESS END OF TABLE
                                     TSI 
                                                       ₽R0
                                                      SCAN
                                     BHE
                                     TYPECR [LPTSPL NOT ALLOCATED]
                                     EXIT
                    SPOOLER IS ACTIVE - ENTER REQUEST IN QUEUE TABLE
                   GOTCHA: NOV
                                                      JOBBAS (RO) , R4 ; INDEX THE PROGRAM
                                     ADD
                                                       #ZID,R4
                                                                                        ; .. WHICH ASSUMES LPTSPL IS FIRST
                                     BYP
                                     LIN
(
                                     BEO
                                                                                         ;DEFAULT OF /L
                                                      OLST
                                                      @R2;#'/
                                     CMPB
                                                                                         CHECK FOR LIST SWITCH
                                     BNE
                                                      GNK
                                     CMPB
                                                      1(R2), #'L
                                     BEQ
                                                     QLST
                                                                                         ;LOCK PROCESSOR
                   GNK:
                                     LOCK
                                     PSPEC
                                                     DHB, LST
                                                                                          GET FILE SPEC TO PRINT
                                     LEA
                                                      R1,DHB+32
                                                                                         INDEX THE PPN
                                     TST
                                                      @Rl
                                                                                         :WE MUST SET OUR OWN IP DEFAULT
                                     BNE
                                                       .+10
                                     JOBGET
                                                     eri Jobusa
                                                      R1,DHB+22
                                     LEA
                                                                                         ; INDEX THE DRIVE
                                     CMP
                                                      @R1,#377
                                                                                          WE MUST SET OUR OWN IF DEPAULT
                                                      .+22
                                     BNE
                                                                                                                                             ***CHANGE 1***
                                     JOBGET @R1, JOBDRV
                                                      R1,DHB+20
                                     LEA
                                                                                                                                            ***CHANGE 1***
                                     JOBGET
                                                     @R1,JOBDEV
                                                                                                                                             ***CHANGE 1***
                                     BYP
                                                                                         CHECK FOR KILL SWITCH
                                     CMPB
                                                      @R2,#'/
                                     BNE
                                                     CNK2
                                     CMPB
                                                     1 (R2) ,4 'K
C
                                                     OKIL
                                     BEQ
                   GNK2:
                                    INIT
                                                     DHB
                                    TOOKED
                                                     DHB
                                                      LOOKOK
                                     BEQ
                                                     DHB
                                     PPILE
                                    TYPECR < NOT FOUND>
(-)
                                     EXIT
                   LOOKOK: ADD
                                                      2(R4),R4
                                                                                        BUMP TO THE QUEUE TABLE
                   OLP:
                                   CMP
                                                      2(R4),#-1
                                                                                        ; END OF TABLE?
(,
                                                     QEND
                                    BEQ
                                                                                        ; YUP
```

```
0R4
                                 ; EMPTY ENTRY?
        BEQ
                COK
                                 ; YES
        ADD
                #14,R4
                                 HEXT QUEUE ENTRY
                                                         ***CHANGE 1***
                QLP
                                                                                                       OKILI
       TYPECR [NO ROOM IN QUEUE!
QEND:
QLST3: EXIT
                                                                                       QKILS: PFILE
FOUND EMPTY QUEUE ENTRY - PUT IN REQUEST
                                                                                               TYPECR < IS NOT IN THE QUELE'S
                                                         ***CHANGE ] ***
                DHB+20, (R4)+
                                ; PUT IN DVC-CD
OOK:
       MOV
                                                                                               EXIT
                                                         ***CHANGE 1***
        MOV
                DRB+24, (R4)+
                                 PUT IN NAME
                                                                                       DHB:
                                                                                               BLKW
        MOV
                DHB+26, (R4)+
                                                                                               END
        MOV
                DHB+30, (R4)+
        MOV
                DHB+32, (R4)+
                                 PUT IN PPN
        MÓV
                DHB+22, @R4
                                 ; PUT IN DRIVE
                #177400, (R4)+
        BIC
        JRUN
                J.EXW
                                 :WAKE UP SPOOLER
        EXIT
;LIST SWITCH PROCESSING
                                 ;LOCK PROCESSOR
QLST: LOCK
                #(DSK),DH9+20
        MOV
                #1,0R4
        BIT
        BNE
                QLST1
        TYPECR
                SPOOLER TOLE!
OLST1: ADD
                2(R4),R4
                                 BUMP TO QUEUE TABLE
QLST2: TST
                @R4
                                 END OF TABLE?
                QLST3
                                 ;YES
        BEQ
                                                         ***CHANGE I***
        VCM
                (R4)+,DHB+20
                                 :MOVE DVC-CD TO DHB
        MOV
                (R4) + DHB + 24
                                ; MOVE ENTRY TO DHB
                (R4)+,DHB+26
        MOV
        MOV
                (R4)+,DHB+30
        MOV
                (R4)+,DHB+32
        MOV
                (R4)+,DHB+22
       PFILE
                DHB
       CRLF
        BR
                QLST2
; KILL SWITCH PROCESSING
OKIT.
       MOV
                R4,R3
                                 SAVE SPOOL STATUS FLAG ADDRESS
                                 ;R5 BIT 0 IS SET IF CURRENT OUTPUT MUST BE KILLED
        MOV
                @R4, R5
        ADD
                2(R4),R4
                                 BUMP TO QUEUE TABLE
QKIL1:
       TST
                @R4
                                 : END OF TABLE?
        BEO
                QK TL5
                                 YES, NOT FOUND
        CMP
                DHB+20, @R4
                                 COMPARE ENTRY WITH SPEC***CHANGE 1***
        BNE
                QKIL4
                                                         ***CHANGE ] ***
        CMP
                DHB+24,2(R4)
                                                         ***CHANGE 1***
        BNE
                QKTL4
        CMP
                DHB+26,4(R4)
                                                         ***CHANGE 1***
        BNE
                ORTL4
                                                         ***CHANGE 1***
        CMP
                DHB+30,6 (R4)
        BNE
                OKIL4
        CMP
                DHB+32,10(R4)
                                                         ***CHANGE 1 ***
        BNE
                OKIL4
        BIT
                #1,R5
                                 ; CANCEL CURRENT OUTPUT?
        BEXO
                QKIL2
                                 :NO, JUST REMOVE FROM QUEUE
        BIS
                #2,@R3
                                 ;YES, SET CANCEL BIT
        EXIT
QKIL2: MOVI
                5,R3
                                 SLIDE DOWN REMAINING ENTRIES
QKTL3: MOV
                14(R4), (R4)+
                                                         ***CHANGE | ***
                                 MOVE DOWN ONE ENTRY
                R3,QKIL3
        SOB
                                 PEND OF TABLE?
        TST
                €R4
        BNE
                QKIL2
                                 SUNTINUE, CONTINUE
        EXIT
QKIL4: ADDI
                14.R4
                                 ;MISMATCH, ADV NXT ENTRY***CHANGE 1***
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: (

CLR

R5

AND CLEAR ACTIVE FLAG

These are the A/M Assembler Mnemonics. Numbers refer to A/M manual page numbers

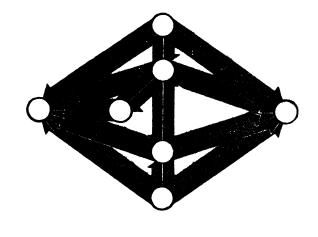
|              |               | " Abscribter Maibrites. Numbers refer to                | A/M manual   | page numbers | · ·  |
|--------------|---------------|---|--------------|--------------|--|
| ABC          | 30            | ADD CARRY   | MBBA<br>MBBD | 26           | MOVE BLOCK OF BYTES TO ADDRESS                             |
| ADDI         | 30 ,<br>14    | ADD<br>ADD IMMEDIATE                                    | MBBU         | 26<br>26     | HOVE BLOCK OF BYTES DOWN                                   |
| AND          | 31            | AND   | MBWA         | 26           | MOVE BLOCK OF BYTES UP                                     |
| ASH          | 28            | ARITHMETIC SHIFT  | MBWD         | . 25         | MOVE BLOCK OF WORDS TO ADDRESS<br>MOVE BLOCK OF WORDS DOWN |
| ASHC         | . 28          | ARITHMETIC SHIFT COMBINED                               | MBWU         | 25           | MOVE BLOCK OF WORDS UP                                     |
| ASL          | .19           | ARITHMETIC SHIFT LEFT                                   | NOV          | 32           | MOVE   |
| ASLB         | 23            | ARITHMETIC SHIFT LEFT BYTE                              | AUOM         | 33           | HOVE BYTE  |
| ASR          | 19            | ARITHMETIC SHIFT RIGHT                                  | MOVI         | 15           | MOVE IMMEDIATE   |
| ASRB         | 23            | ARITHMETIC SHIFT RIGHT BYTE                             | MSKO<br>MUL  | 6            | HASK OUT   |
| BCC<br>BCS   | 12<br>13      | BRANCH IF CARRY CLEAR                                   | NEG          | 29           | MULTIPLY   |
| BEQ          | 11            | BRANCH IF CARRY SET BRANCH IF EQUAL TO ZERO             | NEGB :       | 20 ·         | NEGATE   |
| BGE          | 11            | BRANCH IF GREATER THAN OR EQUAL TO ZERO                 | NOP          | 1            | NEGATE BYTE NO OPERATION                                   |
| BGT          | 12 `          | BRANCH IF GREATER THAN ZERD                             | PRTN         | 6            | POP STACK AND RETURN                                       |
| BHI          | 12            | BRANCH IF HIGHER  | RESET        | <u> </u>     | 1/O RESET  |
| BHIS         | 12            | BRANCH IF HIGHER OR SAME                                | REST         | 3            | RESTORE REGISTERS  |
| BIC          | 31            | BIT CLEAR   | ROL ·        | 18           | ROTATE LEFT  |
| BICI         | 15            | BIT CLEAR IMMEDIATE                                     | ROLB         | 22           | ROTATE LEFT BYTE   |
| 315          | 31.           | PIT SET   | ROR          | 18           | ROTATE RIGHT   |
| BISB         | 33            | BIT SET BYTE  | RORB         | 22           | ROTATE RIGHT BYTE.   |
| BIT          | 32            | BIT TEST<br>BRANCH IF LESS THAN OR EQUAL TO ZERO        | RRTN         | 4            | RESTORE AND RETURN FROM SUBROUTINE                         |
| BLE<br>BLO   | 12<br>13      | BRANCH IF LESS THAN OR EWORL TO ZERO<br>BRANCH IF LOWER | RRTT<br>RSTS | . 4          | RESTORE AND RETURN FROM TRAP                               |
| BLOS         | 12            | BRANCH IF LOWER OR SAME                                 | RSVC         | 4            | RESTORE STATUS   |
| BLT          | 12            | BRANCH IF LESS THAN ZERO                                | RTN          |              | RETURN FROM SUPERVISOR CALL                                |
| BMI          | 12            | BRANCH IF MINUS   | RTT          | 4            | RETURN FROM SUBROUTINE<br>RETURN FROM TRAP                 |
| NE           | 11 .          | BRANCH IF NOT EQUAL TO ZERO                             | SAVE         | 3 .          | SAVE REGISTERS   |
| 3PL          | 12            | BRANCH IF PLUS  | SAVS         | 3            | SAVE STATUS  |
| PT           | 3             | BREAKPOINT TRAP   | SBC          | . 22         | SUBTRACT CARRY   |
| R .,         | 11            | BRANCH UNCONDITIONALLY                                  | SDLA         | 17           | SHIFT DOUBLE LEFT ARITHMETIC                               |
| BVC          | 12            | BRANCH IF OVERFLOW CLEAR                                | SDLR         | 16           | SHIFT DOUBLE LEFT ROTATE                                   |
| BVS          | . 12          | BRANCH IF OVERFLOW SET                                  | SDRA         | 17           | SHIFT DOUBLE RIGHT ARITHMETIC                              |
| LR           | 19            | CLEAR TO ZEROS  | SDRR         | 16           | SHIFT DOUBLE RIGHT ROTATE                                  |
| CLRB<br>CMP  | 23<br>32      | CLEAR BYTE TO ZEROS                                     | SET<br>SETB  | 19           | SET TO ONES  |
| MPB          | 32            | COMPARE BYTE  | SOB          | 23           | SET BYTE TO ONES   |
| COM .        | 20            | COMPLEMENT  | SSLA         | 28<br>16     | SUBTRACT ONE AND BRANCH (IF NOT=0)                         |
| COMB         | 24 .          | COMPLEMENT BYTE   | · SSLR       | 15           | SHIFT SINGLE LEFT ARITHMETIC                               |
| EC           | 20            | DECREMENT   | SSRA         | 16           | SHIFT SINGLE LEFT ROTATE                                   |
| ECB          | 24            | DECREMENT BYTE  | SSRR         | 15           | SHIFT SINGLE RIGHT ARITHMETIC<br>SHIFT SINGLE RIGHT ROTATE |
| VIV          | 29            | DIVIDE  | SSTS         | 21           | STORE PROCESSOR STATUS                                     |
| -ADD .       | 36            | FLOATING POINT ADD                                      | SUP          | 31           | SUBTRACT   |
| FCMP         | 37            | FLOATING POINT COMPARE                                  | SUBI         | 14           | SUBTRACT INHEDIATE   |
| DIV          | 37            | FLOATING POINT DIVIDE                                   | SVCA         | 9            | SUPERVISOR CALL A  |
| MUL          | 37            | FLOATING POINT MULTIPLY FLOATING POINT SUBTRACT         | SVCB         | 9            | SUPERVISOR CALL R  |
| IALT ·       | 36<br>2       | HALT  | SVCC<br>SWAB | , <b>9</b>   | SUPERVISOR CALL C  |
| AK           | <del></del> 6 | INTERRUPT ACKNOWLEDGE                                   | SWAD         | 20           | SHAP BYTES   |
| DS           | 2             | INTERRUPT DISABLE                                       | SXT          | 23<br>21     | SWAP DIGITS  |
| EN .         | 2             | INTERRUPT ENABLE  | TCALL        | . 21         | SIGN EXTEND  |
| NC           | 20            | INCREHENT   | TJMP         | 21           | TABLED SUBROUTINE CALL                                     |
| NCB          | 24            | INCREMENT BYTE  | , TST        | 19           | TABLED JUHP<br>TEST WORD                                   |
| ₩2 Î         | 21            | INCREMENT WORD BY TWO                                   | TSTB         | 22           | TEST BYTE  |
| SR           | 27            | JUMP TO SÚBROUTINE                                      | WFI          | 3            | WAIT FOR INTERRUPT   |
| .CC          | . 8           | LOAD CONDITION CODES                                    | XCH          | 28           | EXCHANGE   |
| -EA          | 27            | LOAD EFFECTIVE ADDRESS '                                | XCT          | 2            | EXECUTE SINGLE INSTRUCTION                                 |
| .515<br>4ABB | 21            | LUAD PROCESSOR STATUS                                   | XOR          | 31           | EXCLUSIVE OR   |
| 1abb<br>1abw | 26            | MOVE ADDRESS TO BLOCK OF BYTES                          | •            |              | •  |
| IDDW         | 26            | MOVE ADDRESS TO BLOCK OF WORDS                          |              |              |  |

# Computer Services

June 10, 1978

Alphamicro Software

# GENERAL LEDGER SYSTEM



This general ledger system will support account #'s up to 8 digits, multiple companies, user control of asset total etc, any company year-end, program asisted monthend and year-end, automatically retains transactions for next month until the current month is closed, capability to print a simulated posting report of all or only selected transactions for the month.

# FINANCIAL REPORTS

This subsystem allows the operator to define the report format, then the reporting procedure. This approach allows a user to define one or more of his reports in more than one format or style. This subsystem works with the general ledger described above.

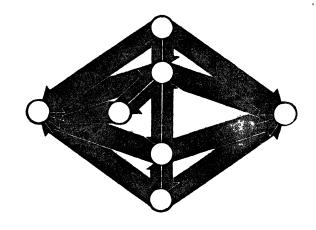
# ACCOUNTS PAYABLE SYSTEM

This system provides the user with manual & void checks, invoice discounts, periodic contract payments, invoice payment through operator authorization only, and a detailed report of all invoices both paid and unpaid by vendor. (paid invoice data limited by file size) Invoice entry and check writing generate automatic entries to the G/L system.

# PLOT

This program written in BASIC accepts X-Y point data from a sequential file, scales the data to fit user specified paper size, then outputs a plot to either a printer or another sequential file. The user has enormous control over his plot from axis annotation and titles to control of what portion of the input data gets plotted. Available through a limited license for \$50.(source)

# Computer Services



Alphamicro Software continued

# MAILING LIST

This mailing list system uses cursor control on either the ADM3 or SOROC terminal. Each file entry has space for name, company, street, city, state, zip, & phone #. You may sort on any field and print either a roster or labels. Source available through a limited license for \$50.

# DEMO PACKAGE

This package consists of eight games and two demo programs. All operate from a central demo-menu program. Program names are: FLIGHT, HANGMA, HILO, LOAN, LUNAR(with cursor control), MASTER(mind), QUBIC, SUB, TREK(enhanced), WHIZ. Source available for \$25.

#### NATURAL LANGUAGE DATA BASE MANAGER

Natural language systems have been recognized for some years as a powerful and practical method for data-base management with large-scale computers in government, military, and scientific applications. The Lawndale Data-Base Management System (LAWMAN) brings the power of natural language processing to the microcomputer field, where it can be put to use in many more down to earth applications.

Implemented for the Alpha Microsystem AM-100 Computer, processing of files is controlled by sentences written in English, rather than by programs written in some computer language. For example, in our store, we often ask the computer to "List mailing whose interest is business systems by Zip Code as labels".

Definitional capability allows easy catagorization of records into terms meaningful to the user. For example, telling the computer "DEF: Pasadena Residents: Mailing whose Zip Code is between 91101 and 91108 but not 91102" would allow subsequent processing using only the words "Pasadena Residents" to refer to that group.

Help messages are available throughout the system for user convenience. By simply entering a question mark, at any time, the system will respond with a message specifying the type of input LAWMAN is expecting. Dual question marks will print the message in greater detail.

A new approach to memory management optimizes the mapping of data, and the loading of programs, for the amount of memory available in the user's system. This is done automatically, and is transparent to the user. Thus thousands of records can be stored, ordered, catagorized and otherwise processed in a matter of seconds, rather than in minutes or hours. Practical applications include:

Mailing lists
Market analysis
Inventory files
Personnel files
Customer listing
Buyers Guide
Budget Analysis
Price lists

Real Estate listings
Quality Control Records
Telephone directory
Reservation system
Mail order management
Library cross indexing
Appointment scheduling
Employment agency file

A ready to use disk, with complete user's manual, is priced at \$1250. Manual only, \$5.00. Enhanced versions, as they become available, will be supplied to all user's for a copying charge of \$25.00, including revised manual.

For more information, call or visit the Byte Shop of Lawndale. We're 3 miles South of the Los Angeles International Airport, and three blocks South of the San Diego Freeway.

# **AM-100 GENERAL LEDGER**

The Kitzmiller Systems General Ledger is part of a comprehensive business accounting system for the Alpha Mircosystems AM-100 computer with floppy disk drives. Other parts of the total system are Accounts Receivable, Accounts Payable, Inventory Control, and Sales Analysis.

The system comes from seventeen programs of over two thousand total lines of Alphabasic computer programming code. This division into the program modules is done so that small businesses can operate with only 48,000 characters of memory.

Minimum hardware configuration includes the AM-100 computer, 48K of memory, dual floppy disk drives, a CRT and a printer. Larger businesses may require more than 48K of memory.

# EASE OF OPERATION

The system gives simple instructions which guide the user through the entire accounting process. The user does not have to be an expert in either accounting or computers.

To run the system the user simply enters the command RUN GL. Then the computer presents a set of "menu" options to the user.

# **REPORTS**

The Kitzmiller Systems General Ledger System prints the following reports:

- Chart of Accounts Listing
- General Journal Transactions
- Cash Payments Journal Transactions
- Cash Receipts Journal Transactions
- Trial Balance
- Profit & Loss (Income) Statement
- Capital (Net Worth) Statement
- Balance Sheet

The user has the option to print these reports on either his terminal or the system printer.

# **PROGRAMS**

GL - This is the main General Ledger program. It guides the user into the particular action he wishes to perform.

GLCHAR - The General Ledger Chart of Accounts program. A Chart of Accounts is a list of the many ways that a business can categorize its assets, liabilities, net worth, income and expenses. This allows the user to add, delete, and change information in the Chart of Accounts. The user has the option to print the Chart of Accounts on either his terminal or the system printer.

GLCP JR - The General Ledger Cash Payments Journal. This allows you to enter data of all transactions where your business spends money. The person entering data does not have to be familiar with the Chart of Accounts for your business. She can enter the fact that a check was written to Joe Smith. Later, in a procedure called posting, a person more familiar with the finances of the business can tell the computer which account in the Chart of Accounts such as professional fees, corresponds to the expense for Joe Smith. This procedure greatly speeds and simplifies data entry. The user has the options to add transactions to the Cash Payments Journal, post the cash payment transactions, and print the Cash Payments Journal on either the user terminal or the system printer.

GLCRJR - The General Ledger Cash Receipts Journal. This allows you to enter data of all transactions where your business takes in money. As before, the person entering the data does not have to be familiar with the Chart of Accounts for your business. She enters the fact that a certain amount of income came from a sale to Smedley Supply Company. Later, in the posting process, a person with more familiarity of the business finances can tell the computer which account corresponds to the sale to Smedley Supply Company. The user has the options to add transactions to the Cash Receipts Journal, post the transactions, and print the Cash Receipts Journal on either the user terminal or the system printer.

GLJRNL - The General Ledger General Journal Entry program. The General Journal is used when it is not appropriate to enter transactions through either the Cash Payments Journal or the Cash Receipts Journal. As with the other journals the person entering the data does not have to be familiar with the name or account numbers in the Chart of Accounts. The user has the option to enter transactions or print the General Journal on either the user terminal or the system printer.

GLMECL - General Ledger Month End Closing program. Month end closing is an accounting procedure where temporary accounts in the Chart of Accounts (income accounts and expense accounts) are reset to zero and the net amount is transferred to the net worth accounts of the owners. GLMECL handles the part of resetting the income and expense accounts to zero.

GLMEDI - General Ledger Month End Distribution program. This program transfers the net earnings to the capital (net worth) accounts of the owners of the business. This can be done for up to twenty partners in the business with the user selecting the amount of increase to be allotted to each partner.

GLMEDR - General Ledger Month End Closing Drawing Distribution program. This program adjusts the net worth of each of the partners by the amount that he has taken from (drawn) from the business or put into the business. This applies to any additional amount that is not considered to be salary. As before this can handle up to twenty partners in the business.

GLMEMA - General Ledger Month End Closing Main Program. This program guides the user through each phase of month end closing.

GLMEST - General Ledger Month End Closing Setup program. This program sets up the computer so that it knows which accounts are involved in the month end closing procedure.

GLPOST - General Ledger Posting program. This program allows the user who is familiar with the Chart of Accounts for the business to inform the computer of the account numbers corresponding to each of the various transactions entered by a less knowledgeable person.

GLREPT - General Ledger Report Printing Program. This program allows the user to print various reports on either his user terminal or the system printer. Reports are Monthly Income (Profit & Loss) Statement, Year to Date Income Statement, Capital Statement (shows increase in net worth for the month), and Balance Sheet (shows where all the assets, liabilities, and net worth are distributed). Programming optimization resulted in the savings of about 400 lines of computer programming in this program.

GLSETU - General Ledger Report Setup program. This program allows the user to make his reports to any way he wants to. The user can set up his own Income Statement, Capital Statement, and Balance Sheet. This action needs to be done only once.

GLTRIB - General Ledger Trial Balance program. This program prints out a Trial Balance, a list of all debits (assets and expenses) and all credits (liabilities, net worth, and income). The debits must equal the credits.

The system also includes several other programs for maintenance of the entire General Ledger System.

For more information contact your dealer or:

KITZMILLER SYSTEMS 252 South Oxford Avenue Los Angeles, CA 90004 Phone: 385-9388 ALPHA MICRO USERS GROUP P.O. BOX 1723 Boulder Colorado 80306

# Quill computer systems ltd.

1605 NELSON STREET, VANCOUVER, B.C. V6G 1M3 10 th May 1978

Dear Jim,

QUILL COMPUTER SYSTEMS is proud to announce the immediate availability of the following Systems Software:

- A. PASCAL Language Compiler....This version of BRINCH-HANSON's implementation was transferred from the original ppdp 11/45 public domain source to create a seven pass, incremental, AMOS compatible, multi-user package that is more efficient than the UCSD PASCAL that also will run on AM-100 systems in the future release from ALPHA MICROSYSTEMS.DOCUMENTED fully
- B. Z-80 CROSS ASSEMBLER uses macro statements defining the standard ZILOG mnemonics to allow a text file to be created with the EDIT command and generate Z-80 object from source code. Self documented source supplied. BYTESAVER is required to burn EPROMS using integral BURN program for multiple 2708's C.8080 CROSS ASSEMBLER as above allows micro development
  - using INTEL mnemonics . Self documented source supplied.
- D. Fairchild F-\*8 (3850) CROSS ASSEMBLER uses macros which define mnemonics used by Fairchild and second sources allows object code to be generated from source created with the EDIT command. Self documented source supplied.
- E. RCA 'COSMAC' 1802 CROSS ASSEMBLER as above uses RCA mnemonics for CMOS micro development via the EDIT command.

  Self do cumented source supplied.
- F. MICRO-TERM character generation program for ACT IV terminals. GRAPHIC design of symbols, APL, line drawing made easy.

# MORE SOFTWARE

| Micheal's Realty        | 313 557-0770 | Universal Data Entry and Update  |
|-------------------------|--------------|--|
| Basic Business Software | 801 531-1795 | Math Packages  |
| Ken Martin              | 801 486-5447 | Games  |
| Gene Erekson            | 801 375-6310 | Startrek   |
| Dick Leach              | 303 279-7796 | Driver for DII Terminal  |
| Stan Viet               | 212 686-7923 | PDQ Electric Memo (Data Base System)<br>Renumber Basic<br>Retail Inventory Program |
| Bruce Zimmer            | 213 371-2421 | Data Base Mgmt System  |
| Guruprem Khalsa         | 213 684-3313 | Communications Package   |
| Jack Hatfield           | 503 773-8162 | Data Mgmt Package  |

We will publish all of the software information that we have along with any description we have in the July issue.

# EXCERPTS FROM A LETTER

In answer to your questions on the PERSCI Errrors, there are two schools of thought: One is that the 6 pots in the back of the PERSCI are all synchronized at the factory and you shouldn't mess with them. The other is that turning at least the front pot has solved some problems and I haven't heard that it has created any.

Head #1 is fastened to head 0 only by a set screw and can become loosened and get out of line with head 0 especially if seek track 97 command is issued (there are only 77 track on the disk and the head bangs into the end). This can happen occassionally if the power to your mainframe is shut off before the power to the PERSCI. You can loosen the set screw, move the head, tighten the set screw, try it, repeat if necessary.

It appears that the front pot can be turned about 10 full turns and the drive will still work so it should be centered at about 5 turns each way. If you SET DSKERR and run REDALL on each drive you may find that the setting is not the same for both drives.

If you have an oscilloscope, you should be able to get the exact information you need from PERSCI. Call Fred Richardson at (213) 820-3764.

### NEXT NEWSLETTER

Deadline is July 15. Those of you that missed the June software cutoff can get them in the July newsletter.

# BASIC BUSINESS SOFTWARE OFFERS FILE HANDLING PROGRAMS

Peter Burke of Basic Business Software in Salt Lake City sent us the following information on their file handling programs. For more information, contact him directly at: PO Box 2032, Salt Lake City, Utah 84110.

BBS is offering the programs as a package for \$15.00 by itself, and for \$22.50 with the Book "Some Common Basic Programs". Price includes shipping.

- 1. CREATE This program will allocate a random file given the number of records desired, and the size of each record. It allows a practice run without actually allocating space which calculates wasted space for optimum use of disk space. It may be run in compiled mode.
- 2. RFTOSF This program converts a random file to a sequential file, and will KILL the random file if desired. Since MAP statements are used, the program must be loaded in BASIC and then RUN. There are prompts within the program for changing the MAP statements.
- 3. SFTORF This program converts a sequential file to a random file. The random file need not be allocated at, run time, since this is automatically done by the program. as with FRTOSF, there are prompts for changing MAP statements, and the program must be loaded in BASIC to be run.
- 4. RFTORF This program converts the si ze of a random file, automatically allocating the space for the new file. This is especially helpful for expanding the logical record size of a random file.
- 5. SORTER This program sorts either random or sequential files. After prompting for names, keys, etc., it chains to a command file which loads the necessary subroutines for sorting. It may be run in compiled mode.

NOTE: All sequential files are saved with the extension of .SDF, and all random files are saved with the extension .RDF. INPUT files are assumed to have the same extension.

# SOFTWARE PACKAGE NO. 1

THIS PACKAGE CONSISTS OF 76 PROGRAMS WHICH APPEARED IN OSBORNE & ASSOCIATES BOOK "SOME COMMON BASIC PROGRAMS", WHICH WAS WRITTEN BY LON POOLE AND MARY BORCHERS. THE PROGRAMS ARE BROKEN UP INTO FOUR DIFFERENT AREAS:

- (1) STATISTICS
- (2) FINANCE
- (3) MATH
- (4) MISCELLANEOUS

THIS PACKAGE IS USEFULL TO MANY INDIVIDUAL NEEDS FOR IT COVERS A VERY BROAD RANGE OF APPLICATIONS. ON THE FOLLOWING PAGES IS A LIST OF ALL THE PROGRAMS WHICH ARE INCLUDED IN THIS PACKAGE.

THE PROGRAMS WERE ORIGINALLY WRITTEN IN WANG BASIC, BUT WE HAVE CONVERTED THESE BASIC PROGRAMS TO THE INDIVIDUAL BASIC LANGUAGES THAT WE HAVE LISTED BELOW FOR SALE. ALL PACKAGES INCLUDE ONE OR MORE FLOPPY DISKS OR CASSETTE TAPES, A SUPPLEMENTARY INSTRUCTION MANUAL AND MAY ALSO INCLUDE THE ABOVE MENTIONED BOOK "SOME COMMON BASIC PROGRAMS" WHICH DOES SERVE AS THE USERS MANUAL. THIS BOOK PROVIDES LISTINGS OF ALL OF THE PROGRAMS, EXAMPLE RUNS AND INFORMATION ON HOW TO ALTER THE PROGRAMS IF YOU DESIRE TO CHANGE IT SLIGHTLY FOR A PARTICULAR NEED.

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ALPHA-MICRO ALPHA BASIC / 1 DISK / $15.00 WITHOUT BOOK / $22.50 WITH BOOK CP/M - CBASIC / 2 DISKS/ $20.00 WITHOUT BOOK / $27.50 WITH BOOK CP/M - MICROSOFT BASIC / 2 DISKS/ $20.00 WITHOUT BOOK / $27.50 WITH BOOK TRS-80 LEVEL II BASIC / 2 DISKS/ $20.00 WITHOUT BOOK / $27.50 WITH BOOK PET BASIC / 1 CASS./ $15.00 WITHOUT BOOK / $27.50 WITH BOOK
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ALL ORDERS MUST BE PREPAID AND WE PAY ALL POSTAGE



THE BASIC BUSINESS SOFTWARE COMPANY, INC.

POST OFFICE BOX 2032

SALT LAKE CITY

UTAH 84110

(801) 363-1199

# ELECTRIC MEMO SYSTEM FOR A/M

ommited.

Dravic Ltd. has developed a simple Data Base Management System for the Alpha Micro which they call the PDQ Electric Memo System. It enables a user to enter information into a data structure called a DATASET and retrieve it without any formal programming knowledge. The simplicity of PDQ lies in the fact that data fields do not have to be set up in advance and information can be entered and accessed upon demand without changing files.

The PDQ System commands are of the simple form:

NOUN' VERB' STUFF or if desired -NOUN'S VERB'S STUFF
Where: NOUN = The subject for which the data is to be stored

VERB = The Sub-subject under which the data is stored

STUFF = The data to be stored

The delimiter ' is necessary to tell the system where the format division is. The system will not work if it is

To enter phone numbers for example:
 NEXT OPERATION? JOHN SMITH' PHONE' 345-6789

or addresses:
 NEXT OPERATION? BILL JONES' ADDRESS' 156 ELM ST.

Data is accessed simply by asking for it:
 NEXT OPERATION? WHAT'S JOHN SMITH' PHONE or;

NEXT OPERATION? WHAT'S JOHN SMITH PHONE OF; NEXT OPERATION? JOHN SMITH' PHONE returns: JOHN SMITH'S PHONE 345-6789

Asking for a verb such as PHONE will cause the system to return all examples. In this case, all phone numbers.

The use of PDQ Electric Memo System enables a user to start to use the Alpha-Micro System for meaningful work with a minimum of training. Anyone can learn the system in a few minutes. A complete manual is supplied with the system, and there is no limit to the kind of data base operations that can be done with the system, since the files are all accessible by AMOS.

The system retails for \$150.00, Dealer discounts are available. The PDQ Electric Memo System is being distributed by:

Computer Mart Systems
13 East 30th. St.

New York, N.Y. 10016

Dravic also has an AlphaBasic renumbering program, and a retail inventory program called STORETROL. Contact the Computer Mart for details.

# UNIVERSAL ENTRY & UPDATE PROGRAM

Micheal's Reality is offering a program that allos operators to create an Entry program through a Specification File. The program supports Defaults, Tables, Globals Skipping, and allows Update, Delete, or Enter transaction types. Prompt sequences may be set to user program requirements.

Object code sells for \$250.00. The source code is also available in structured code with pre-processor for \$500.00.

The pre-processor may be purchased by itself for \$150.00. It supports DOWHILE, DOUNTIL and IF THEN ELSE structures. Source code for the pre-processor is \$250.00. Contact:

Micheal's Reality Roy A. Bremer 16155 W. 12 Mile Rd. PO Box 98 Lathrup Village, Mi. 48076

# SANTA BARBARA BYTE SHOP SOFTWARE CATALOG

Scott Daley, owner of the Santa Barbara Byte Shop tells us that he has a catalog of business software in BASIC for Alpha Micro available for \$3.98. His programs range from \$250.00 without source code to \$375.00 with source. Programs may also be bought with limited distribution rights for \$500.00. All programs are sent on PERSTD format disks, AMOS version 3.3.

You can order the catalog from: Scott Daley Santa Barbara Byte Shop 4 West Mission St. Santa Barbara, Ca. 93101 ALPHA MICRO USERS SOCIETY c/o COMMUNITY FREE SCHOOL PO BOX 1724, BOULDER, COLO. 80306