

ALPHA

MICRO

USERS

SOCIETY

Newsletter

VOL 2 NO 6 JUNE-JULY, 1979

From the President:

The NCC in New York drew lots of people. Lines and crowds everywhere. Alpha Micro had 2 booths, a large one in the personal computer section and a smaller one in the main convention hall. Alpha announced 9 new products to the public at this time. They are described in detail elsewhere in the newsletter. Many other vendors also announces new products at the show.

Another dealer meeting was held by Alpha as a continuation of a series of meetings between Alpha, the dealers of AMDEAL. I would like to give credit to Alpha Micro for making such a committment to their customer service organization as presented by Bob Kratz. I believe this committment of resources is second in importance only to Alpha's committment to stay ahead of the competition with technological achievements.

The crux of the meetings however has been to reach an agreement on a sales policy between Alpha Micro and the dealers, including the requirements for becoming a dealer. Much of this goal was accomplished at the New York meeting.

Since Alpha Micro does not deal directly with the end user, there is a need to make sure that all dealers can properly service the customer both on hardware and software. Alpha will be upgrading the dealers capabilities. If you are a dealer or OEM of Alpha Micro and have not attended any of the meetings or have not received and information concerning the sales policy, you should contact Len Backus to become aware of what is happening.

Thanks to those of you who have responded to our questionnaire in the newsletter and to Sharon's personal phone calls. We had hoped that a mail in ballot for directors and officers would be a good way to handle the voting, however the mail is very light. Please send in your ballot. Add some comments if you like.

We want to thank the people of DRAVAC for sending their word processing software to help with the newsletter. Their intention was to promote user articles. See a paragraph labeled Newsletter Articles later on.

Also thanks to Chris Brandon of Colorado Springs for making the ADM3A driver available to use. See later paragraph.

AM500 Board

We have been informed that the large 40 pin maroon chip to the left of center of the AM500 board could fail if the data stamp is 7839 or less. Do NOT remove the chip or break the seal. DO give the AM500 serial number to your dealer and your dealer will make arrangements with Alpha Micro to get it replaced.

Persci

A number of people have responded that they too have had trouble with the Persci drives. The best solution we have right now for the problem is to let you know of people who say they can fix them.

1. Fred Richardson was formerly the service manager for Persci and now has his own business. He claims to fix Perscis. I believe his address is near the manufacturing facility.
2. Bill Nesbitt at the Byte Shop of Ventura, 155 Norse Avenue, Ventura, CA 93003, claims 2 week turnaround on Persci's.
3. Dale Horn at STAT Systems in Seattle Washington is constantly fixing his own. He may be willing to try yours.

We will make other names available as we are aware of them.

Newsletter Articles

We would like to publish articles submitted by the members. I will make communications available on our machine on request until the network is set up.

You will log on to DSK1:100,1

You may copy files to your system and from your system you should leave a message in the file called MESAG.LST describing what you have left in the system. We will try to make available anything that has been sent to us including the ADM3A driver and Dravac's word processing documentation. Please leave articles and advertisement for publication; change of addresses, bugs and fixes; and subroutines to programs that you would like to give to AMUS members. That phone number is 444-7248.

ADM3A Driver

Chris Brandon stopped by the office and left a copy of the ADM3.DVR which he modified so that it will work with VUE and the Alpha business package. It now will clear to end of line and clear to end of screen if you have the switches set correctly. Mainly you must turn off the AutoNL. since he had to use the next 2 bytes not defined in the terminal definition block, we hope Alpha Micro will recognize this use and define them for this purpose.

Software by Golly

We are including elsewhere in this issue a reprint of a list of software compiled and printed by AMDEAL. We will add to that list next month.

Large file Transfers

A couple of people have called to let me know that they have successfully transferred large files from Univac 1110 and IBM 370 systems through communications. Others have accomplished it through tape.

Word Processing

Additional word processing systems are now available from:

Systems Services Specialists, 651 Palm Avenue,
Los Altos, CA 94022, 415-948-2326;
Dravac Ltd, 150 Fifth Ave. Suite 530, New York,
New York 10011, 212-989-2100; and
DPCI, 1898 S. Flatiron Ct. Boulder, Colorado 80301
303-449-8847

Bugs (and patches) from down under

Dean Elsner from Alphasoft, University Computer Club in Western Australia has sent us 10 pages of Bugs and fixes. We are including his table of contents only for two reasons. 1. length and 2. most all of the fixes are assembly fixes to 4.1 .PRG programs and many people might get in trouble if they tried to make these modifications and then didn't check them out when they got 4.2. We will pass them along to Alpha Micro and they are available to anyone who wants to ask for them. We will try to get them onto the communication system.

Sort Problems

Business Information Systems had a problem with BASORT and came to the following conclusion; If a key is floating point and Basort isn't sorting properly then try adding another byte in the MAP ahead of the floating point number. It works.

A/M Brochures

Alpha Micro now has a nice looking set of brochures for their products. We are including the ones about the AM-210, 310, 410 and 600 boards because these were just announced at the NCC and many of you may not be aware of them.

A/M Business Subroutines

We are printing the Alpha Business Subroutines list to let you know of their existence. They should be very useful to you in your software development. To get them you must pay a licensing fee through your dealer to Alpha Micro.

DING (CR)

Typing DING (CR) will create 65000 annoying dings on the terminal. Lefford Lowden and the Byte Shop of Reno have both modified the DING program so that it won't do that anymore.

SNOBOL

From Lefford Lowden's newsletter we learn that SNOBOL4 is now available from Francis Cox in England for about \$200.00. He calls it MACRO SPITBOL.

Software Agreement

Dale Horn has just had a software agreement written, typed and reviewed by a lawyer that we will make available as an example for anyone needing such a document.

D.C.HAYES VS. AM-500

Chris Brandin from Business Operating Systems in Colorado Springs tells us that he had some trouble with the D.C. Hayes board interfering with the Hawk controller board when they were placed next to each other within the box. He solved the problem by plugging in a card between the two which seemed to halt the signals broadcast by the D.C. Hayes board.

AM-210

Floppy Disk Controller Circuit Board

FEATURES

SUPPORTS SINGLE AND DOUBLE
SIDED DRIVES

SUPPORTS SINGLE AND DOUBLE
DENSITY DRIVES

SUPPORTS FIVE AND EIGHT
INCH DRIVES

1024 BYTE ON-BOARD BUFFER

ON-BOARD CLOCK AND DATA
SEPARATOR

S-100 BUS COMPATIBLE DEVICE

DESCRIPTION

Alpha Micro's AM-210 Double Density Floppy Disk Controller circuit board provides an economical interface between standard or mini-size floppy disk drives and the Alpha Micro computer system or any standard S-100 bus computer. The AM-210 can accommodate up to four single or double density floppy disk drives. IBM 3740 and other standard soft sector formats are supported for single or double sided drives. An on-board data separator provides for FM and MFM encoding.

CONFIGURATION

The AM-210 Floppy Disk Controller circuit board is contained on one 5 1/4" by 10" printed circuit board which plugs into the S-100 bus chassis.

SPECIFICATIONS

Model number AM-210

CPU Interface Standard S-100 bus

Interrupt Multi-level
Capability interrupt driven

On-Board Buffer 1024 bytes

Data Transfer Programmed, multi-
Mode level interrupts

Drives Per 1-4
Controller

Drive Types Single or double
sided, single or
double density,
5" and 8"

Input Power +8 volts dc,
± 16 volts dc

Interconnections ... One mounting slot
of an S-100 bus
chassis.
One 50-pin or
34-pin cable to
drive

Dimensions 5 1/4" x 10"
(13.3 cm x
25.4 cm)

Environment (operating)

Temperature 60° to 90°F
(16° to 32°C)

Humidity 10% to 80%
(non-condensing)

AM-310

Communications Controller Circuit Board

FEATURES

FOUR FULL COMMUNICATIONS PORTS
1024 BYTE ON-BOARD RAM BUFFER
MULTI-LEVEL INTERRUPT CAPABILITY
SYNCHRONOUS/ASYNCHRONOUS
RS-232C INTERFACE
Z-80 BASED CONTROLLER
S-100 BUS COMPATIBLE DEVICE

DESCRIPTION

Alpha Micro's AM-310 Communications Controller circuit board provides an economical communications interface between serial interface devices and the Alpha Micro computer system or any standard S-100 bus computer. The AM-310 contains four independent, fully programmable communications ports which provide the data conversion and processing necessary to "talk to" RS-232C, synchronous, and asynchronous type devices. The AM-310 can generate multi-level interrupts; all ports may be programmed to support any standard byte oriented communications protocol. The four ports may be used in any order. The AM-310 circuit board is fully supported by AMOS (Alpha Micro Operating System) software.

CONFIGURATION

The AM-310 Communications Controller circuit board is contained on one 5 1/4" by 10" printed circuit board which plugs into the S-100 bus chassis.

SPECIFICATIONS

Model number AM-310
CPU Interface Standard S-100 bus
Interrupt Capability .. Multi-level interrupt driven
I/O Interface EIA RS-232C or other synchronous/asynchronous protocol devices conforming to RS-232 levels
Number of Ports 4
Transmit/Receive Fully programmable, 16 software selectable baud rates, synchronous/synchronous Modes
Baud Rates Up to 19.2K baud
Data Transfer Mode Block transfer, programmed I/O, interrupt driven
On-Board RAM Buffer ... 1024 bytes
Interconnections One mounting slot of an S-100 bus chassis. One 26-pin connector for each I/O port.
Dimensions 5 1/4" x 10" (13.3 cm x 25.4 cm)
Input Power +8 volts dc, ± 16 volts dc
Environment (operating)
Temperature 60° to 90°F (16° to 32°C)
Humidity 10% to 80% (non-condensing)

AM-410 DISK SUBSYSTEM

Features

- 90 MILLION FORMATTED BYTE CAPACITY (15 MILLION BYTE REMOVABLE)
- 30 MILLISECOND AVERAGE ACCESS TIME
- Z-80 BASED CONTROLLER
- S-100 BUS COMPATIBLE DEVICE

Description

Alpha Micros AM-410 Disk Subsystem features large capacity, random access disk drives which record and read data on one removable and three fixed platters. The AM-410 Disk Subsystem is a single spindle drive with a formatted disk storage capacity of 90 million bytes. The disk controller is comprised of two printed circuit boards which have the ability to interface with up to four disk drives. Data is transferred at an average rate of 9.67 MHz between the controller and drives.

Configuration

The AM-410 Disk Subsystem is a completely self-contained unit, the drive includes an independent blower motor, internal power supply, and an AC power cord. The drive is rack mountable. The controller consists of two S-100 bus printed circuit boards.

Specifications

Model Number

AM-410

Disk Drive:

Disk Drive Type.
Disk Type Used.
Recording Mode
Storage Capacity

CDC 9448 "PHOENIX"
Cartridge module, model 1204
MFM recording technique
90 million bytes (formatted) including 15 million byte removable cartridge
9.67 MHz (controller to/from disk)

Data Transfer Rate
Rotation

3600 rpm
30 milliseconds (average)

Access Time

8.33 milliseconds

Latency Time

No. of Recording Surfaces

6 (5 fixed, 1 removable)

Tracks

808 per surface

Data Density

6038 bits per inch (inner)

Sectors

36 per surface

Input Power

+120 volts ac @ 8.2 amps, 60 Hz

Dimensions

Height

10.5" (26.4 cm)

Width

19.0" (48.3 cm) front
17.25" (43.8 cm) body

Depth

31.75" (80.6 cm)

Weight

170 lbs. (77.1 kg)

Environment (operating)

Temperature

50° to 95°F (10° to 35°C)

Humidity

20% to 80% (non-condensing)

Controller:

CPU Interface

Standard S-100 bus

Drives Per Controller

1-4

Printed Circuit Boards

2

Data Transfer Modes

Programmed multi-level interrupts, full sector block transfers
Serial

Data Transfer (Controller to Disk)

Data Transfer (Controller to Computer)

8-bit bytes

Data Transfer Format

512 bytes per sector, plus CRC and sentinel check bits

On-Board Buffer

1024 bytes

Error Checking

CRC error code

Input Power

+8 volts dc, -16 volts dc

Interconnections

Two mounting slots of an S-100 bus chassis.
One 60-pin cable to first drive (100 feet maximum). Four 26-pin radial cables with one cable to each drive

5¼" x 10" (13.3 cm x 25.4 cm)

Dimensions

Environment (operating)

Temperature

60° to 90°F (16° to 32°C)

Humidity

10% to 80% (non-condensing)



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92714

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AM-600

Magnetic Tape Interface Circuit Board

FEATURES

SUPPORTS HALF-INCH MAGNETIC
TAPE TRANSPORTS

FULL DMA TRANSFER CAPABILITY
ALLOWS VERY LARGE BLOCK SIZES
UP TO 65K BYTES

INTERRUPT CAPABILITY

S-100 BUS COMPATIBLE DEVICE

DESCRIPTION

Alpha Micro's AM-600 Magnetic Tape Interface circuit board provides a general purpose single board interface between the "industry standard" half-inch magnetic tape formatter and the Alpha Micro computer system or any standard S-100 bus computer. The AM-600 can support up to two formatters; interfacing with up to eight tape transports.

The AM-600 can control both seven and nine-track tape transports with bit densities up to 1600 bits per inch and tape speeds up to 45 inches per second. Full direct memory access (DMA) and interrupt capability are provided.

CONFIGURATION

The AM-600 Magnetic Tape Interface circuit board is contained on one 5 1/4" by 10" printed circuit board which plugs into the S-100 bus chassis.

SPECIFICATIONS

Model number AM-600

CPU Interface Standard S-100 bus

Data Transfer Modes ... Programmed, multi-level interrupts and DMA

Formatters Per 2
Interface

Transports Per 8
Interface

Transport Types 1/2 inch, 7 or 9 track, up to 1600 bits per inch, up to 45 inches per second

Input Power +8 volts dc

Interconnections One mounting slot of an S-100 bus chassis.
Two 50-pin flat ribbon cables to the formatters

Dimensions 5 1/4" x 10"
(13.3 cm x 25.4 cm)

Environment (operating)

Temperature 60° to 90°F
(16° to 32°C)

Humidity 10% to 80%
(non-condensing)

ALPHA BUSINESS SUBROUTINES

1. ACCEPT This subroutine provides a mechanism for accepting arbitrary data from the user's terminal, including control characters, and other characters normally trapped by the system.
2. ANYCN This subroutine is used to ask the user if he wishes to change any of the data which he has just entered. If he does, ANYCN will optionally ask for the number of the line to be changed. All ANYCN transactions occur on line 24 of the terminal screen.
3. BASORT This subroutine allows the sorting of both random and sequential files from within AlphaBASIC. If sufficient memory is available in the user's partition, an internal memory based heap sort will take place. If there is not enough space to fit all the file records into memory, a disk based polyphase merge sort will occur. The combination of these two modes results in a respectably fast sort utility.
4. COMMON The COMMON subroutine provides a mechanism for placing data into a common storage area, either to pass data between chained programs, or to pass messages between jobs, or for any other use that might be conceived. By providing each packet of information with a name, several different sets of data may be placed into common storage to be retrieved at various times.
5. DSPLY This subroutine provides a central mechanism for formatting and displaying numeric data. It accepts numeric data in either string or floating point format and will edit and display it on the user's terminal.
6. INPUT The INPUT subroutine provides a convenient method of accepting and editing data entered from the user's terminal. It provides a number of data formats to allow most any type of data to be entered and checked for validity.
7. MESAG This subroutine provides a method of outputting standardized error messages.
8. MMENU This subroutine displays the standard master file maintenance menu and accepts a selection. The name of the particular application is displayed in the upper left hand corner of the screen, while in the middle of the screen the standard menu is displayed.
9. PRINT The PRINT subroutine provides a flexible, sophisticated method of formatting printer output. It handles the job of pagination, titling, and page numbering, as well as providing several options for headers and legends.
10. RDATE The RDATE subroutine allows the user to easily access the system date from AlphaBASIC.
11. SERCH This subroutine handles binary and sequential searching of disk files. It allows the user to quickly access a file via symbolic keys, without paying the overhead costs of ISAM.
12. STENO The STENO subroutine provides a standard method of asking for starting and ending numbers, a task required in many programs.
13. STRIP Whenever random length strings are handled, it often becomes necessary to remove the trailing blanks from a string. The STRIP subroutine provides a convenient method for doing just that, at a speed of about 100 times faster than can be done in AlphaBASIC.
14. TMENU This subroutine provides a way of displaying the standardized transaction menu and accepting the user's response.
15. WAIT The WAIT subroutine provides a convenient method of displaying a variety of messages from an AlphaBASIC program.



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1979 June 4

Mr. Bob Currier & others :

Here is buglist #10. Same format as before. This time I am 4 days late. I am a very bad example. Please forgive me again.

A copy of this goes to AMUS, as usual.

Yours truly,

Robert Fowler

Robert Fowler

ੴ ਕਰ ਸਾਤ ਨਾਮ ਕਾਰਤਾ ਪੁਰਖ ਨਿਰਭਾਉ ਨਿਰਵੈਰ ਅਕਾਲ ਮੂਰਤੀ ਅਜੂਨੀ ਸੈਭਿ ਸ਼ਾਹਿ ਗੁਰ ਪ੍ਰਸਾਦਿ ॥੧॥ ਅੰਤ ਸਚਿ ਜੁਗਾਦ ਸਚਿ ਮੇਰੀ ਸਚਿ ਨਾਨਕ ਹੋਇ ॥੧॥



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Ek Ong Kar Sat Nam Karta Purkh Nir Bhao Nir Ver Anah Moorty Ajuni Sai Bhang Gur Prasad. Jap. Ad Sach Jugad Sach Mehi Sach Nghan Mohi Bi Sach

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AMOS BUGS (Version 4.1)

6/4/79

- (1) EDIT --- old, old bug

Edit a file to contain 511 bytes & exit from EDIT. AMOS crashes.

- (2) MACRO --- old, old bug

Type MACRO FRED, and see if everything is ok. If ok, then type MACRO FRED.MAC, and MACRO will hang up in phase 4. Control C will get you back to monitor level, but FRED.PRGM is not there.

- (3) MACRO --- Appendices B & C missing from new Monitor Calls manual

These have already been printed up and are available (?) from your AM-100 dealer, if not from Alpha Micro. [AM-100 dealers : yes you DO have them. Look inside your latest AM-100 cpu boxes among all the documentation. Xerox a few copies.]

- (4) BASORT --- make sure that record sizes agree

When BASORTing a random, the file must be opened prior to calling BASORT. Note that the OPEN statement will specify a record size. In addition, note that the XCALL BASORT statement will also require a record size. If these two sizes agree, all goes well. If they disagree

- (a) BASORT does NOT choose to use one or the other, but
- (b) Gives no error message
- (c) Fails to Sort the file
- (d) destroys the original data in the file
- (e) system crashes

Note : This bug was simple, but took a long time to track down.

- (5) IBMCPY & IBMDIR --- don't work

I have not personally tested this bug. It was reported to me during 4.0, but neither of these programs has changed as of 4.1. The report goes "both IBMCPY and IBMDIR go to sector 9 (rather than sector 8) to look for the Data Set Table Area."

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Ang Gur Prasad. Jap. Ad Sach Jugad Sach Mehi Sach Nghan Mohi Bi Sach



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AMOS BUGS (Version 4.1)

6/4/79

- (6) *.TDV --- they all have this bug (improper TAB range check)

Consider SOROC.TDV. Looking at SOROC.MAC[10,2], one sees that TAB(-1,n) is defined for n from 0 to 14. Anything else produces no output at all. Except : TAB(-1,15) is slipping by, and causes arbitrary output. Unfortunately, at this time, all the TDV's have been copied from the same source, and they all have this problem. Whatever the last defined n is, n+1 will slip by. To fix this, a "-1" must be inserted at the same place in each MAC file. Look for the following lines :

```
CRTS:  MOVB    R1,R1
        CMP     R1,#CRCB-CRCA -1
```

where the boxed area is to be inserted (it is now missing).

- (7) block 0 in a file --- what causes this ?

Here's your chance, readers, to repay me for any of my info that has been of help. Explain why a file somehow gets block 0. This happens every once in a blue moon on a floppy system (and finally happened on our Hawk 5+5 MByte system after almost a year of carefree usage). It is more likely to occur during some bad situation (like pulling the power plug out, etc). The file containing the block may be ERASED, but the very next block allocation will grab it up again (it now being the "first available block to the file management system"). The file containing block 0 is likely to be lost, for all practical purposes. The safest procedure to deal with this problem, is to ERASE the bad file (try to save it if you possibly can), then COPY (dont DSKCOPY) the other files onto a clean disk(ette), then re-FORMAT the bad disk(ette), and consider it clean.

Note : I have tried to artificially create this problem by using DSKDDT on block 2 (the bitmap block) to mark block 0 (the first bitmap bit) as unused (a "0" bit). It didn't work. After every COPY command, AMOS resets this bit to 1, and all is ok.

- (8) VUE --- MENU.VUE found in DSKn: rather than DSK0:

If the user is logged onto a DSK other than DSK0, VUE will not find DSK0:MENU.VUE[7,0], but will find DSKn:MENU.VUE[7,0], where DSKn: is the user's drive number. This disagrees with the VUE manual.

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Ek Ong Kar Sat Nam Karta Purkh Nir Bhao Nir Ver Anah Moorty Ajuni Sai Bhano Gur Prasad. Jap. Ad Sach Jugad Sach Hesi Sach Narak Hosi Bi Sach



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Ek One Kar Sat Nam Karta Purkh Nir Bhao Nir Ver Akal Moort Ajuni Sai Bhano Gur Prasad. Jap. Ad Sach Jugad Sach Hesi Sach Nanak Hosi Bi Sach! Ek One Kar Sat Nam! Ek One Kar Sat Nam Karta Purkh Nir Bhao Nir Ver Akal Moort Ajuni Sai Bhano Gur Prasad. Jap. Ad Sach Jugad Sach Hesi Sach Nanak Hosi Bi Sach! Ek One Kar Sat Nam! Ek One Kar Sat Nam Karta Purkh Nir Bhao Nir Ver Akal Moort Ajuni Sai Bhano Gur Prasad. Jap. Ad Sach Jugad Sach Hesi Sach Nanak Hosi Bi Sach! Ek One Kar Sat Nam! Ek One Kar Sat Nam Karta Purkh Nir Bhao Nir Ver Akal Moort Ajuni Sai Bhano Gur Prasad. Jap. Ad Sach Jugad Sach Hesi Sach Nanak Hosi Bi Sach! Ek One Kar Sat Nam!

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AMOS BUGS (version 4.1)

6/4/79

(9) VUE --- large files leave about 100 free bytes in memory

On extra large files, EDIT has always loaded as much of the file as possible, and left about 1700 free bytes for editing room. VUE, however, loads as much as it can, and leaves only about 100 bytes free. The user must detect this and YANK or UNYANK to modify his VUE "window" as needed. If he runs out of room, the entire VUE session may be lost.

(10) VUE --- No room left on disk predicament

If you FINISH a VUE session, and VUE finds insufficient room to save the file on disk, then it leaves the text in the user's memory and displays a message that (e.g.) "MEM:FRED.DAT" is in memory. The VUE manual says to SAVE it onto another disk, and then VUE it again to restore all the carriage returns. Actually, this fails. The user may save his file by instead SAVEing it onto another disk, using EDIT to delete the very first character, then using VUE to restore the carriage returns.

(11) VUE --- Global replace beyond column 80 fails

Use VUE to create a new file, and put into it 2 or more identical lines, (e.g.) "AAAAAAA ... AAAAABC", where there exactly 80 letter A's, thus 82 characters per line. Then try to use GLOBAL to replace each "C" with a "D". The first line will come out ok, but all the others will end up with D inserted after C, rather than replacing C. This epitomizes the problem. The first is a replace, the others are inserts.

(12) VUE --- replace gets fouled-up by sub-strings of the search string

Use VUE to create a file, insert the single line "AAB", and then try to replace "AB" with "C". It will fail. In general, a string search, replace, or global replace will fail for each occurrence of the search-string which is immediately preceded by a proper subset of the search string.

[I lifted both these VUE bugs, (11) & (12), from the AMDEAL letter]

(13) BASIC --- only one little semi-bug !

ALPHABASIC is getting more adamant about requiring subscripted variables to be previously DIM'ed or MAP'ped. Those old "WRONG NUMBER OF SUBSCRIPTS" messages seem to be on the rise. Or maybe I'm just getting paranoid.



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AMOS SUGGESTIONS (Version 4.1)

6/4/79

- (1) MACRO --- allow some way to input lower-case filenames

The macro FSPEC doesn't function correctly except with upper case file names. Some assembly program users express dismay that there is neither a lower case capability in FSPEC, nor is there a general macro that converts lower to upper case. Yet AMOS monitor can process lower case file names, so this routine exists somewhere in that huge monitor.

- (2) TXTFMT --- Table Of Contents improvement

The Table of Contents file is created using the CHAPTER and HEADER LEVEL formatting information. The CHAPTERS can have titles, and these titles will carry over to the Table of Contents. But the HEADER LEVELs don't have any text, and all of the corresponding lines in the Table of Contents have to be filled in by hand. If the HEADER LEVEL formats allowed an (optional) text,

HEADER LEVEL <n> <text>

then this could be done automatically.

- (3) MEM.DVR --- allow access to other memory partitions ?

Let MEM: or MEM0: represent the current user's memory partition, and let MEMn: represent the memory partition of job #n.

- (4) Spooler --- some notes & suggestions

- (a) --- In case the manual didn't make it perfectly clear, each spooler printer requires another 4K of memory.
- (b) --- The current banners require 120 columns for a full 6-letter file name. If the 3x3 "matrix" block were replaced by a 2x2 block, this banner would be 80 columns at most, and fit on a normal-sized 8½x11 page.
- (c) --- For those of you with TI810 printers, who also like banners, and further like 8½x11 paper, you can have all 3. Put the 2 characters escape, "6" in the beginning of your spooling files, and set the printer to compressed print before printing starts. This causes a compressed print banner, followed by a regular sized print (10 characters per inch) file listing.
- (d) --- Demanding users wish to see the title, page number, and date on every page spooled. This would be optional on each listing.
- (e) --- The spooler no longer shrinks itself down to 854 bytes. The banner is what is taking up a substantial portion of that 4000 bytes in each spooler job.

- (f) --- Upgrade SPOOL.SBR to include the (optional) spooler name.



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AMOS NOTES (Version 4.1)

6/4/79

(1) Spooler --- another hint to bring it up

If you are bringing up the spooler on a memory-managed system, and are moving the spooler out of the "sharable" memory into the banked memory, then remember to JOBMEM it and KILL it (like all the other banked jobs) before forcing any commands to it.

(2) BASIC --- no DEF, but

There is no DEF statement (yet ?), but there is a vestigule left over from days of better intentions. Type the statement "1 DEF=1" and you will see the message "SYNTAX ERROR".

(3) The ADDS terminal & VUE --- revisited

Remember, gentle reader, in our last buglist the ADDS had a problem with VUE. Well, apologies are in order to Alpha Micro, because the problem is actually with the ADDS firmware ROM. In some of the ADDS-100 terminals (whose serial numbers preceed #67100), the shift key affects not only outgoing characters, but also incoming escape characters. In a highly interactive situation (e.g. VUE), the user will often keep the shift key depressed while the computer is responding, and this causes all incoming escapes to be changed. Since the ADDS absolute cursor positioning command begins with an escape, this is catastrophic. If you have this problem, call Dick Kimball at 714-752-2458 (the ADDS company in Newport Beach, CA).

(4) MPL --- what is it ?

The Macro Programming Language was used by Alpha Micro in generating the source code for the Alpha Accounting system, which was first released with an AMOS release called "pre-4.0". If you look close, you will find MPL.PRG[1,4] on that release. 13 blocks. It has disappeared on-all further releases, has no public documentation, and is [Mike Roach :] "unsupported". No further plans in sight. But it lives on ! Type the ersatz device (e.g.) "DIR MPL:". Also, create, edit, and "GO" from VUE any file with an MPL extension.

(5) Hawk Users Beware --- CDC9427 ≠ CDC9427H

The disk packs for the CDC9427H (the Hawk we use) have 12 sector notches (take off the cover and look). The packs for the CDC9427 (not a Hawk) have only 1 sector notch. They are strictly incompatible with each other. Bad naming system on DEC's part.

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AMOS NOTES (Version 4.1)

6/4/79

- (9) ALPHA SNOBOL --- see enclosed advertisement
- (10) ALPHA COMMON PILOT --- see enclosed advertisement
- (11) FINDIR.MAC --- to re-construct a crunched MFD

Its a normal day, and then all of a sudden your Hawk disk has its MFD wiped out, Just 1 block, and yet what would you do ? What could you do ? Use FINDIR. It scans the entire disk(ette) for user directories, and only displays those disk blocks that have a 99%+ probability of being real directories. The source code listing itself has a summary of how to proceed after that. So, look at it.

Ek Ong Kar Sat Nam Karta Purkh Nir Bhag Nir Ver Akal Moort Ajuni Sai Bhans Gur Prasad. Jap. Ap Sach Jugad Sach Hesi Sach Nanak Hosi Bi Sach!



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AMOS NOTES (Version 4.1)

6/4/79

(12) Reversing Rub/Underline key --- answer to AMDEAL query

Some terminal drivers (e.g. Hazeltine) are desirable to alter so that the rub key is lower (not upper) case. To do this, look at the ADM3.MAC source code, which does exactly the same switch. Simply copy the (6-line) routine titled "INPUT" exactly as it is to the terminal driver program that you wish to change, and then change the very second line of actual assembler code from a "RTN" to a "BR INPUT", as in the ADM3.MAC driver source.

(13) HAZEL.TDV --- what is the matter with 4.1 ?

If you used version 4.1 HAZEL.TDV, especially ^{with} ^VUE, you probably noticed that something was different. Several things are actually going on all at once, but first lets just summarize it all.

VUE Function	VUE Codes	HAZEL V 4.0	HAZEL V 4.1
cursor up	ctrl K	ctrl K	ctrl L or up key (*)
cursor down	ctrl J	ctrl J	ctrl K or down key (*)
cursor right	ctrl L	ctrl L	ctrl P or forespace (*)
cursor home	ctrl ^	[none]	ctrl N
toggle insert	ctrl \	[none]	clear key
back page	ctrl R	ctrl R	ctrl R or home key

First, note that the Hazeltine cannot generate control ^ or \. This was unfortunate, since VUE needs these. In 4.0, the user simply did without these functions in VUE, although there were other functions that could substitute reasonably well for awhile. Second, note that use was made of the 4 special keys available on the Hazeltine 1510 and 1520 (but not on the 1500 !). These being the cursor up/down/back/forespace keys, marked with (*) above. Third, note that because of the implementation of these cute little special keys, that it was necessary to re-assign the VUE controls just for the Hazeltine.

FINDIR - FIND ALL USER DIRECTORIES ON AN AMOS DISK(ETTE)

THIS PROGRAM HELPS RECONSTRUCT A DESTROYED AMOS M.F.D.
ALL DISK BLOCKS THAT LOOK LIKE DIRECTORIES ARE DISPLAYED,
ALONG WITH THEIR LINKS (LOCATION OF FIRST DIRECTORY BLOCK).

TO RECONSTRUCT AN M.F.D., USE SYSACT TO CLEAR THE M.F.D. &
RESTORE THE PFN'S (WITHOUT LINKS), THEN USE DSKTDT ON BLOCK
1 (THE M.F.D.) TO RESTORE THE LINKS, AS FOUND BY FINDIR.

AS OF 5/11/79, FINDIR WEEDS OUT 100% OF ALL BLOCKS THAT
ARE NOT DIRECTORIES ON THE HAWK SYSTEM AT KHALSA COMPUTER
SYSTEMS (PASADENA, CALIFORNIA). NO GUARANTEES, HOWEVER ...

; Robert Fowler, Khalsa Computer Systems, Pasadena, CA 91101 (1979 Apr 27)
; revised 1979 May 11

```

COPY      SYS      ; OBTAIN SYSTEM MACROS
; INITIAL ENTRY POINT --
DSKFIX:   PUSH     #MEMLTH      ; SET UP GETMEM CALL
          PUSH     GETMEM      @SP
          POP      R5          ; ADDRESS OF MEMORY AREA
          POP

CLR       DDBIN(R5)
CLR       DDBOUT(R5)

BYP
LIN
ENE       DSKFI1
TYPECR   USAGE : FINDIR devn:0
EXIT

DSKFI1:   CSPEC     DDBIN(R5)

          INIT     DDBIN(R5)      ; GET BUFFERS
          INIT     DDBOUT(R5)
          BIS      #400,DDBIN+1(R5) ; ERRORS ARE OK

CMDGG:    TYPESP   <   FIRST BLOCK : >
          KBD
          CTRLC   EOFGG
          BYP

          MOV      #0,R1          ; BLOCK #0 DEFAULT
          LIN
          BEQ     READ
          STOCT

READ:     CTRLC   EOFGG
          MOV      R1,DDBIN+10(R5) ; BLOCK NUMBER
          READ    DDBIN(R5)
          TSTB   DDBIN(R5)        ; ANY ERROR?
          BEQ    SETREG           ; NOPE
          TYPE   <   READ ERROR AT BLOCK # :
          MOV    DDBIN+10(R5),R1  ; RETRIEVE BLOCK #
          DCVT  5,2              ; AND DISPLAY IN OCTAL
          TYPE   ? ( DECIMAL : >
          DCVT  5,2              ; AND IN DECIMAL
          TYPECR ? )
          JMP     CMDGG          ; LAST BLOCK READ

SETREG:   MOV     DDBIN+2(R5),R3  ; POINTER
          IW2    R3
          FILE1: TST     @R3
          BNE    FILE1N
          JMP    RECGO
          FILE1N: CMP     @R3,#3100
          BLO   RECGO
          ADD    #4,,R3
          TST   @R3
          BEQ   FILE1S
          CMP   @R3,#3100
          BLO   RECGO
          FILE1S: ADD    #2,,R3
          TST   @R3
          BEQ   RECGO
          CMP   @R3,#2696.
          ; ARE 1ST 3 LETTERS OF FILENAME BLANK ?
          ; NO - - - DIRECTORY NOT EMPTY
          ; IS THERE A NON-BLANK AFTER A BLANK ?
          ; YES - - - THIS IS NOT A FILE NAME
          ; GO ON TO EXTENSION FIELD
          ; IS THIS 3 BLANKS ?
          ; YES - - THAT'S OK
          ; OR IS THERE A NON-BLANK AFTER A BLANK
          ; YES - - THAT'S NOT OK
          ; GO ON TO TOTAL # OF BLOCKS FIELD
          ; IS IT ZERO ?
          ; YES - - IMPOSSIBLE
          ; CHECK IF TOO BIG FOR A HAWK DISK
```

```

        BHI      RECGO          ; YES -- FILE CANT BE THIS BIG
        ADD     #2.,R3         ; GO TO # OF BYTES IN LAST BLOCK
        CMC     @R3,#-1       ; TEST FOR RANDOM FILE
        BEQ     FILE1L        ; YES -- THAT'S OK
        CMP     @R3,#512.     ; TEST FOR SEQUENTIAL FILE
        BHI     RECGO         ; NEITHER -- DONT DISPLAY
        FILE1L: ADD     #2.,R3         ; GO ON TO 1ST BLOCK RECORD # FILE#
        TST     @R3          ; IS IT ZERO
        BEQ     RECGO         ; YES --- THIS CANNOT BE
        CMP     @R3,#9696.    ; IS IT GREATER THAN ANY HANA BLOCK
        BHI     RECGO         ; YES --- IMPUNIBLE

        FILE2:  ADD     #2.,R3         ; GO ON TO 2ND FILE'S NAME
        TST     @R3          ; ARE 1ST 3 LETTERS OF FILENAME BLANK
        BEQ     FILE2B        ; YES -- THAT'S OK
        CMP     @R3,#3100     ; IS THERE A NON-BLANK AFTER A BLANK
        BLO     RECGO         ; YES -- THIS IS NOT A FILE NAME
        FILE2B: ADD     #8.,R3         ; GO TO # OF BYTES IN 2ND FILE
        CMP     @R3,#-1       ; TEST FOR RANDOM FILE
        BEQ     FILE3        ; TEST FOR SEQUENTIAL FILE
        CMP     @R3,#512.     ; NEITHER -- DONT DISPLAY
        BHI     RECGO

        FILE3:  ADD     #12.,R3        ; GO TO # OF BYTES IN 3RD FILE
        CMP     @R3,#-1       ; TEST FOR RANDOM FILE
        BEQ     REPORT        ; TEST FOR SEQUENTIAL FILE
        CMP     @R3,#512.     ; NEITHER -- DONT DISPLAY
        BHI     RECGO         ; GO BACK TO FIRST FILE NAME
        REPORT: SUB     #32.,R3        ;
        TYPE    -1, BLOCK : ;
        MOV     @DBBIN+10(R5),R1      ; BLOCK NUMBER
        QCVT   4,3
        TYPE    0, NEXT :>
        MOV     @DBBIN+2(R5),R1      ; BUFFER ADDRESS
        QCVT   4,3
        NAME1:  TYPE    0, FIRST FILE :>
        CMP     @R3,#-1       ; CHECK FOR DELETED FILE
        BNE     PRINT1        ;
        TYPE    0--ERASED--
        JMP     NAME2
        PRINT1: PRNAM    @R3

        NAME2:  TYPE    0
        ADD     #12.,R3         ; GO ON TO RECGO FILE NAME
        TST     @R3          ; FILE THERE
        BEQ     ENDLIN        ; NO -- DONT DISPLAY ANYTHING
        CMP     @R3,#-1       ; CHECK FOR DELETED FILE
        BNE     PRINT2        ;
        TYPE    0--ERASED--
        JMP     ENDLIN
        PRINT2: PRNAM    @R3          ; PRINT NAME OF FILE

        ENDLIN: TYPECR   0
        RECGO:  MOV     @DBBIN+10(R5),R1 ; NEXT BLOCK IS SAME AS THIS ONE
        INC     R1            ; PLUS 1
        JMP     READ

        EOFGO:  EXIT

        @DBBIN=0             ; INPUT FILE DDB
        @DBROUT=@DBBIN+50    ; OUTPUT FILE DDB
        @MEMLTH=@DBROUT+50  ; LOCAL MEMORY USED

```

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END

Alpha Soft

Micro Computer System Software

Robert Finch
(206) 671-6214

403 31st Street Bellingham WA. 98225

Press Release

11 May 1979

COMMON PILOT

Alpha-Soft announces COMMON PILOT for the Alpha Micro AM-100. COMMON PILOT is the proposed standard CAI language that is available for a wide range of other microcomputers. Alpha-Soft COMMON PILOT is upwards compatible with these other versions, and has many enhancements to provide greater computational flexibility. Some of the many features of COMMON PILOT are:

1. Computational features - COMMON PILOT includes floating point numbers, scientific functions, varying length character strings, string manipulation, extensive pattern matching, and dynamic execution of instructions in character strings. COMMON PILOT includes all the features normally found in extended BASIC.
2. Virtual program space - COMMON PILOT interprets the program from disk, allowing virtually unlimited program size - limited only by available disk space. Instructional courses may then be richly branched and conversational without squeezing them into available main memory. A typical 45 minute CAI course may be 30 to 100K bytes on disk.
3. Extensive pattern matching and string manipulation provides powerful capabilities for examining student answers. Automatic features for matching spelling errors and character editing are included.
4. Graphics - COMMON PILOT supports graphics - either from a built in graphics interface or an external user supplied interface. Easy to use vector graphics are supported, and graphics input from the terminal is provided. The AMOS CRT control functions are accessible from COMMON PILOT, allowing terminal independence.
5. COMMON PILOT is a reusable, reentrant program, so COMMON PILOT can be loaded into system memory allowing simultaneous use by many jobs without each job having it's own copy of COMMON PILOT. COMMON PILOT supports any standard AM-100 devices and any version of AMOS later than V3.0.
6. A catalog of COMMON PILOT courseware is available from Alpha-Soft
7. A single CPU license for COMMON PILOT, including two sample COMMON PILOT programs is \$300.

AM-100 and AMOS are trademarks of Alpha Micro.

May 1979 Bugs - AMOS - AlphaSoft

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||||| Champaign Computer Co.

406 Elm Mahomet, IL 61853

May 31, 1979

Mr. Jim Taylor
Alpha Micro Users Society
c/o Community Free School
Box 1724
Boulder ,Colorado 80306

Dear Mr. Taylor,

Enclosed is a AMOS system program which we beleive will be helpful to AlphaMicro users everywhere. I would appreciate it very much if you would print this program listing in the next copy of AMUS. The program, MTEST3, finds common memory problems that the DIAG programs will never find. Our experience with static memory boards suggests that most memory problems with the AlphaMicro are slow chips or bad single bit errors. The DIAG programs do not exercise memory as fast as some WD-1600 instructions and will test as good chips that are in fact too slow. MTEST3 uses one of the fastest read-modify-write instructions in the machine, and it has spotted memory errors that would have been impossible to find otherwise.

Sincerely,

Bob Rubendunst

Bob Rubendunst
Systems Software

```

;
;                                     *** MTEST3 ***
;                                     A SIMPLE FAST COMPLEMENT MEMORY TEST
; 1979 CHAMPAIGN COMPUTER COMPANY AUTHOR:BOB RUBENDUNST 04/08/79
; last updated 5-10-79
; COPY      SYS

MTEST3: NOP                                ; TO ALLOW NON-LOGGED EXECUTION
        LEA      R0,TSTBAS                  ; ref r0 to test base (end of prg)
        USREND   R5                          ; R5 gets usrend
        SUB      R0,R5                       ; R5 gets # of bytes to test
        TYPECR   <MTEST3 tests all memory in your bank after MTEST3>
        TYPECR   <You may stop at any time by using ^C. Memory test base= >
        MOV      R0,R1
        OCVT     6,2
        TYPE     < Memory end = >
        USREND   R1                          ; R1 gets user memory end
        OCVT     6,2
        CRLF

;now we must zero out the test area
CLEAR:  MOV      R5,R2                      ; get byte count from r5
        LEA      R0,TSTBAS                  ; start test at end of mtest3
CLRMEM: CLRB    (R0)+                       ; clear all memory to zero
        SOB     R2,CLRMEM                  ; R2 contains byte count
        CLR     R3                          ; clear pass & error regs
        CLR     R4

;now the first of two fast complement tests
AGAIN:  MOV      R5,R2
        LEA      R0,TSTBAS                  ; R0 is mem index,R2 is count reg
LOOP1:  COMB    @R0                          ; complement memory byte
        CMPB    (R0)+,#377                 ; see if comb performed properly
        BNE     ERROR1
CONT1:  SOB     R2,LOOP1                    ; subtract one and ranch till r2=0
;second complement test
        MOV      R5,R2                      ; get user memory end
        LEA      R0,TSTBAS                  ; get test base address
LOOP2:  COMB    @R0                          ; complement again
        CMPB    (R0)+,#0                   ; should be zero now
        BNE     ERROR2                     ; show error if non-zero
CONT2:  SOB     R2,LOOP2                    ; subtract 1 & branch till r2=0
        INC     R3                          ; bump pass count
        MOV     R3,R1                       ; show # of passes
        TYPESP  <Pass>
        DCVT    0,2
        TYPESP  < complete-error count is>
        MOV     R4,R1                       ; now show error count
        DCVT    0,2

```

```

;                                     *** MTEST3 *** (continued)

      MOVI    15,R1                    ; JUST DO A CARRAIGE RETURN
      TTY
      CTRLC   DONE                      ; check for exit
      BR      AGAIN                     ; do it again

ERROR1: MOVI    7,R1                    ; get a bel
      TTY
      TYPESP  <[Error at address>
      DEC     R0                        ; adjust mem pointer to error location
      MOV     R0,R1
      OCVT    6,2                        ; type mem location on tty
      TYPESP  < should be>
      MOV     #377,R1
      OCVT    3,2
      TYPESP  <,was>
      MOVB    @R0,R1                    ; read bad memory location
      BIC     #177400,R1                ; mask out top bits
      OCVT    3,2                        ; show what was there
      TYPECR  < ]>
      MOVB    #377,(R0)+                 ;post increment to restore
      INC     R4                          ;bump error count
      CTRLC   DONE                       ;let user control c out
      BR      CONT1                       ;return for more testing.

ERROR2: MOVI    7,R1
      TTY
      TYPESP  <[Error at address>
      DEC     R0                        ; adjust pointer to bad byte
      MOV     R0,R1
      OCVT    6,2                        ; show it on tty
      TYPESP  < should be>
      CLR     R1
      OCVT    3,2
      TYPESP  <,was>
      MOVB    @R0,R1                    ; get contents of bad byte
      BIC     #177400,R1                ; mask out top byte
      OCVT    3,2                        ; show it
      TYPECR  < ]>
      CLRB    (R0)+                       ; try to restore to 0
      INC     R4                          ; bump error count
      CTRLC   DONE                       ; let user ^c out
      BR      CONT2                       ; continue zero test

DONE:   CRLF
      EXIT
      WORD    0
TSTBAS: WORD    0
      END

```

```

;*****
;
;          ADM-3A TERMINAL UNIT ROUTINE
;
;*****

```

```

;CHANGES TO SUPPORT EOS & EOL 5/26/79 BY:  CHRIS BRANDIN
;                                           BUSINESS OPERATING SYSTEMS, INC.
;                                           COLORADO SPRINGS, COLORADO

```

```

;ACTO NL MUST BE OFF

```

```

        COPY      SYS

```

```

STS=0          ;;;
ICJ=14         ;;;
IBF=16         ;;;
POB=34         ;;;
PCO=36         ;;;
ILS=44         ;;;
OOL=46         ;;;
POL=47         ;;;

```

```

;*****
;*      ADM3A      *
;*****

```

```

;TERMINAL DRIVER COMMUNICATIONS AREA
ADM3A:  WORD      0          ;TERMINAL ATTRIBUTES
        BR        INPUT     ;INPUT ROUTINE
        BR        OUTPUT    ;OUTPUT ROUTINE
        BR        ECHO      ;ECHO ROUTINE
        BR        CRT       ;CRT CONTROL

```

```

;*****
;*      INPUT      *
;*****

```

```

;ADM-3A INPUT ROUTINE REVERSES THE CASE OF THE RUBOUT KEY
INPUT:  CMP       R1,#137    ;REVERSE IF 137 OR 177
        BEQ      INRV
        CMP      R1,#177
        BNE     INPX
INRV:   XOR       #40,R1     ;REVERSE THE CHARACTER CASE
INPX:   RTN

```

```

;*****
;*      OUTPUT     *
;*****

```

```

;ADM3A OUTPUT ROUTINE KEEPS TRACK OF CURSOR LOCATION
OUTPUT: CMPP     R1,#237     ;CURSOR POSITIONING
        BHI     REST1
        CMPB    R1,#233     ;ESCAPE
        BEC     REST1
        AND     #177,R1     ;STRIP ALL BUT 7 LSB
        CMPB    R1,#37      ;PRINTABLE CHARACTER
        BEI     INCO
        CMPE    R1,#10      ;CURSOR RIGHT

```

```

BEQ      INCO
CMPB    R1,#14      ;CURSOR LEFT
BEQ      DECO
CMPB    R1,#36      ;CURSOR HOME
BEQ      CLR?
CMPB    R1,#32      ;CLEAR SCREEN AND CURSOR HOME
BEQ      CLR?
CMPB    R1,#15      ;CURSOR RETURN
BEQ      CLRO
CMPB    R1,#13      ;CURSOR UP
BEQ      DECP
CMPB    R1,#12      ;CURSOR DOWN
BEQ      INCP
CMPB    R1,#1      ;UNCOUNTED SPACE
BEQ      SPAC
CMPB    R1,#2      ;UNCOUNTED RETURN
BEQ      RETU
CMPB    R1,#3      ;UNCOUNTED LINEFEED
BEQ      LIN?
BR      REST
SPAC:    MOV?      #40,R1      ;CONVERT TO SPACE
BR      REST1
RETU:    MOV?      #15,R1     ;CONVERT TO RETURN
BR      REST1
LIN?:    MOV?      #12,R1     ;CONVERT TO LINEFEED
BR      REST1
INCO:    INCB     COL(R5)     ;INCREMENT COL
CMPB    COL(R5),#82.      ;END OF ROW?
BLOS    REST      ; NO
MOV?    #82.,COL(R5)
BR      REST
DECO:    DECB     COL(R5)     ;DECREMENT COL
CMPB    COL(R5),#1      ;BEGINNING OF ROW?
BHIS    REST      ; NO
MOV?    #1,COL(R5)
BR      REST
CLRO:    MOV?      #1,COL(R5) ;CLEAR COL
BR      REST
INCP:    INCB     ROW(R5)     ;INCREMENT ROW
CMPB    ROW(R5),#24.     ;END OF SCREEN?
BLOS    REST      ; NO
MOV?    #24.,ROW(R5)
BR      REST
DECP:    DECB     ROW(R5)     ;DECREMENT ROW
CMPB    ROW(R5),#1      ;BEGINNING OF SCREEN?
BHIS    REST      ; NO
MOV?    #1,ROW(R5)
BR      REST
CLR?:    MOV?      #1,ROW(R5) ;CLEAR ROW AND COL
BR      CLRO
REST:    LCC      10        ;SEND AND COUNT CHARACTER
RTN
REST1:   LCC      0         ;SEND AND DO NOT COUNT CHARACTER
RTN
CRT:     BR       CRT2      ;BRANCH TO CRT

```

```

;*      ECHO      *
;*****
;SPECIAL ECHO PROCESSING IS PERFORMED HERE
;RUBOUTS WILL BACKSPACE AND ERASE THE PREVIOUS CHARACTER
;CONTROL-U WILL ERASE THE ENTIRE LINE BY BACKSPACING AND ERASING
ECHO:   CMP      R1,#25          ;CONTROL-U
        BEQ      CTRLU
        CMP      R1,#177        ;RUBOUT
        BNE     ECHX

;RUBOUTS ARE HANDLED BY THE OLD BACKSPACE-AND-ERASE GAME
;SPECIAL HANDLING MUST BE PERFORMED IF WE ARE RUBBING OUT A TAB
;R3 CONTAINS THE CHARACTER BEING RUBBED OUT
RUBOUT: CMP      R3,#11          ;WAS IT A TAB?
        BEQ      RETB          ; YES
;RUBOUT WAS OF A PRINTABLE CHARACTER - QUEUE UP THE BACKSPACE SEQUENCE
KRTG:   MOVI     3,R3           ;SET CHARACTER COUNT
        LEA     R2,EPUB        ;SET BUFFER ADDRESS
        TRMBFC          ;QUEUE THE BACKSPACE SEQUENCE
        RTN
EPUB:   BYTE     10,40,12,0
;RUBOUT WAS OF A TAB - WE MUST CALCULATE HOW BIG AND BACKUP OVER IT
RETB:   MOVE     POB(R5),R4     ;SET BEGINNING POSITION COUNT
        MOV     ICC(R5),R2     ;SET INPUT CHARACTER COUNT
        MOV     IBF(R5),R3     ;SET INPUT BUFFER BASE
KRTS:   DEC      R2            ;DONE WITH SCAN?
        BMI     KRTQ          ; YES
        MOVE     (R3)+,R1      ;SCAN FORWARD CALCULATING POSITION
        CMP     R1,#11        ; TAB
        BEQ     KRTT
        CMP     R1,#15        ; CR
        BEQ     KRTC
        CMP     R1,#33        ; ALTMODE
        BEQ     KRTI
        CMP     R1,#40        ; CONTROL-CHAR
        BLO     KRTS
        CMP     R1,#172
        BRI     KRTS
KRTI:   INC      R4            ;INCREMENT POSITION FOR ONE CHARACTER
        BR     KRTS
KRTT:   ADDI    12,R4          ;ADJUST POSITION FOR TAB
        BICI   7,R4
        BR     KRTS
KRTC:   CLR     R4            ;CLEAR POSITION FOR CR
        BR     KRTS
KRTQ:   CO#1    R4            ;CALCULATE NECESSARY BACKSPACES
        AND     #7,R4
        INC     R4
        MOV     R4,R3          ;SET CHARACTER COUNT
        MOVI   12,R2          ;SET IMMEDIATE BACKSPACE CHARACTER
        TRMBFC          ;QUEUE THE BACKSPACES
ECHX:   RTN

;ECHO A CONTROL-U BY ERASING THE ENTIRE LINE
CTRLU:  TST     R3            ;NO ACTION IF NOTHING TO ERASE
        BEQ     CTUX
        MOVE   POB(R5),R3     ;CALCULATE BACKSPACE NUMBER TO ERASE THE LINE

```

```

MOVE    POB(R5),R4
SUB     R4,R3
BEQ     LCEX
CMP     R3,ILS(R5)      ;INSURE NOT GREATER THAN TERMINAL WIDTH
BLOS   .-6
MOV     ILS(R5),R3
MOVI    10,R2          ;QUEUE UP BACKSPACES
TRMBFQ
SSIA    R2,2          ;QUEUE UP SPACES
TRMBFQ
MOVI    10,R2          ;QUEUE UP BACKSPACES
TRMBFQ
CTUX:   RTN

;*****
;*      CRT      *
;*****
;SPECIAL CRT CONTROL PROCESSING
;R1 CONTAINS THE CONTROL CODE FOR X,T POSITIONING OR SPECIAL COMMANDS
;IF R1 IS POSITIVE WE HAVE SCREEN POSITIONING (ROW IN HI BYTE, COL IN LO BYTE)
;IF R1 IS NEGATIVE WE HAVE THE SPECIAL COMMAND IN THE LOW BYTE
CRT2:   TST     R1
        EMI     CRTS
;CURSOR POSITIONING - R1 CONTAINS X,Y COORDINATES
CRT3:   TTYI    ;SEND POSITION COMMAND
        BYTE    233,275,0,0 ;INSURE THAT POSITIONING CHARS ARE UNCOUNTED
        ADD     #117637,R1  ;ADD POSITION OFFSETS
        SWAB   R1          ;SEND ROW FIRST
        TTY
        SWAB   R1          ;SEND COLUMN SECOND
        TTY
        CALL   WAIT        ;WAIT UNTIL OUTPUT IS FINISHED
        SUB     #117637,R1  ;SAVE CURSOR POSITION
        MOV    R1,COL(R5)
        RTN
;SPECIAL COMMANDS - R1 CONTAINS THE COMMAND CODE IN THE LOW BYTE
CRIS:   CMPE   #9.,R1      ;ERASE TO END OF LINE?
        ENE    CRTT
        CALL   EOL
        BR     CUR0
CRTT:   CMPE   #12.,R1     ;ERASE TO END OF SCREEN?
        ENE    CRTS
        CALL   EOS
        BR     CUR2
CRTS:   MOVE   R1,R1      ;STRIP THE HIGH BYTE
        ENE    CPTU      ; AND BRANCH UNLESS CLEAR SCREEN
        TTYI    ;SPECIAL CASE FOR CLEAR SCREEN
        BYTE   32,2
        CALL   WAIT      ;WAIT UNTIL OUTPUT IS FINISHED
        RTN
;COMMAND PROCESSING PER DIRECTOR TABLES
CRU:    CMP    R1,#CRCE-CRCA ;CHECK FOR VALID CODE
        BHI    CRTX      ; AND BYPASS IF BAD
        LEA   R2,CRCA-1  ;INDEX THE TABLE
        ADD   R1,R2      ;ADD COMMAND CODE
        MOVE  @R2,R1     ;PICK UP DATA FIELD OFFSET
        ADD   R1,R2      ;MAKE ABSOLUTE DATA ADDRESS

```


<u>NAME</u>	<u>COMPANY</u>	<u>SOFTWARE AVAILABLE</u>
Steven Stoner 512-278-8861	Synchronized Systems	(N/C) Message/Communications (N/C) Terminal Drivers (N/C) System Programs (N/C) Program Driver To 3M/5500 Test Score (Sale) Recording Studio Accounting Systems
Dick Leach 303-279-6473	Computer Hut	MFR Rep Sales Analysis
Pat Terrell 503-223-2396	Byte Shops Northwest	
Bob Bruce	Management Data Services	Health Systems Fast Food
Flynn Wood	Computerland of San Bernadino	W/P (Sale) (June or July) Diablo 1620 Bi-Dir (June/July)
Robert Leis 415-546-1797	BLM Systems Inc.	Property Mangement Data Retrieval General Accounting Medical Packages
Sherman Grinberg John Pugleissi 213-464-0640	The Systems House	Four Accounting Packages running on last release, not order entry and working on "Work in Progress"
Carl E. Turner 205-533-5130	Computer Associates, Inc	Farm Real Estate Sys Pharmacy Package (Single Store)

<u>NAME</u>	<u>COMPANY</u>	<u>SOFTWARE AVAILABLE</u>
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Jay & Connie Hill 209-227-8479	Electric Brain	Inventory Maintenance Address Mailer
Ray Baqqarley 714-770-0131	Computerland of Mission Viejo	Infoton 100 CRT Driver Data Products printer driver Cash Flow Analysis Modified DC Hayes board with <u>remote reset</u>
Kathy Murphy 913-649-5942	Personal Computer Center	Available Soon: Fund Accounting School Record Keeping
Dick Moule 213-371-2421	Byte Shop Of Lawndale	Manage: Data Base Manager Enflush IDS Dialout, Hangup, Driver
John Alva 714-897-0341	RB Graphics	Inventory, A/R, OE on floppies GL, Price estimating for Print Shops, Mailing System
Simran Sat Sangee 213-684-3311	Khalsa Computer Co.	Word Processing, Data Base Manager, Inventory Management (Soon) Point of sales
Peter R. Jax 714-898-1451	APSI	Ambulance Company, Dispatch & Billing, A/P, A/R, G/L, Medical Billing, and CPA
Dalton williams 318-226-8848	Micro Business Systems	New Dealer Aviation Flight Plan
Terry Woodward 205-942-8567	The Computer Center	Job Cost (N/C) Sheet Metal Estimate Docs (Medical Package) Auto Dealer (Sale) Business Package (Sale) Terminal Drivers (N/C)
James Taylor 303-449-8847	Data Processing Consulting, Inc.	Independent Insurance Agency System Group Health Administration

<u>NAME</u>	<u>COMPANY</u>	<u>SOFTWARE AVAILABLE</u>
Jim Wawrzyniak 316-951-2112	Custom Computer Systems	Mfg. job cost with material cost interface to A/P (not Finished Quality control (data Logger) to sample measurements, analyze and report
John Clark 312-397-8700	The Data Domain of Schaumburg	Retail Store We need: Word Processing Bill of Materials Who knows what else
R.L. Hoyt 602-274-0383	Western Computing	Need....Medical Package Accounting Package Will have soon...Contributor (Fund Raising Systems)
Cary Fitch 512-991-0834	Diversa Systems, Inc.	Available.....Time Sharing Executive Retail Credit X Call Utilities Hospital Accounts Receivable.
Dale Horn 206-632-5080	STAT Systems, Inc	Medical, Dental, Chiropractic Scheduling, Healthcare Systems All 5 accounting packages Inc. OE/Inv (Documented) over the counter OE/INV. Rental/Real Estate (Quill) Insurance Broker (AIM) Lots of other stuff ?!!!!!!



QUILL COMPUTER
SYSTEMS LTD.

1500 Alberni Street
Vancouver B.C. V6G 1A8
Telephone (604) 684-5032

May 22, 1979

Mr. Jim Taylor
AMUS
P.O. Box 1723
Boulder
Colorado, 80306
U.S.A.

Dear Jim:

Quill has developed several utilities and programs which we think may be of interest to other Alpha Micro users. These are:

1) CRTINQ for Alpha General Ledger - this allows interactive screen inquiry of transaction in the general ledger year-to-date file. It asks for the beginning date and ending date, as well as the account number. It then displays the transaction details, including date, source, amount, and reference. If there are more transactions than will fit on the screen, it waits for CR to go to the next screen. This program is very useful when auditing since it means the auditor doesn't have to wade through a large printout of the year's trial balance. It is also useful if you want quick reference to certain accounts (e.g. bank) without printing the whole trial balance.

2) INCLDR - this is an Alpha Basic utility which will produce an output file consisting of a number of input files which have been "included" into the original file. For example an Alpha Basic file of the form:

```
! EXAMPLE OF USING INCLDR PROGRAM
! INCL(PAYROL.FIL)
! INCL(EMPLOY.FIL)
! END OF FILE DEFINITIONS
! INCL(MAINLN.INC) /MAINLINE PROGRAMS
! SUBROUTINES
! INCL(GETEMP.INC) /GETS EMPLOYEE RECORD
! INCL(PUTEMP.INC) /WRITES EMPLOYEE RECORD
```

when passed through Includer, will produce an output file which will have the map statements for the files PAYROL and EMPLOY, and all of the basic code contained in the files MAINLN.INC, GETEMP.INC, and PUTEMP.INC. It will optionally number the output file lines, and optionally delete comment lines. Whenever it detects a map statement, it moves it to the top of the output file. This allows the user to place map statements in the relevant sub module, but moves them to the top before compilation. This utility is extremely useful, as it allows you to debug each module, or modules, independently under interactive basic. Once this is done, the whole program can be created quickly and compiled.

It also allows you to use the same map statements for a data file in every program. If you then change the record definition for that file, you merely change the once included module containing the maps, and then re-include all the programs using it. This is much simpler than editing every program in a large system. INCLDR can be run either conversationally, or as a DO file.

We have also developed some assembly language subroutines, callable from Alpha Basic, which we are using in data base applications. They are primarily for bit manipulation and for doing fast comparisons of large numbers of integers, without the overhead of very slow for-loops.

CNTR.SBR-counts the number of 1 bits in an alpha basic variable
SETOFF.SBR-sets all bits in an alpha basic variable to 0's
SETON.SBR-sets all bits in an alpha basic variable to 1's
BITSET.SBR-sets a particular bit in an alpha basic variable to a 1
BITCLR.SBR-sets a particular bit in an alpha basic variable to a 0
BITTST.SBR-interrogates the status of a particular bit in an alpha basic variable
CONJ.SBR-takes two 512 byte basic variables and does a bitwise AND, OR, XOR, or NOT.
NXTR.SBR-starting at a particular bit number in an alpha basic variable, this subroutine finds the next 1 bit going in the specified direction.

COMPAR.SBR-takes a 1 or two byte integer, and does a comparison against a 512 byte variable. Valid comparisons are (, (=,=,)=), . It sets a bit in a resultant vector if the comparison holds true.

All programs mentioned above are available on an AMS format diskette with source and documentation for (US) \$50.00.

These subroutines were developed for use in a data base-type application and the resulting real estate accomodation location packages are targeted for marketing at a later date.

The real estate and rental accomodation packages will be applicable in a number of other areas such as personnel, automobile sales, etc.

Sincerely,

Rick Smithers
Marketing Manager

RS:eas



COMPUTER SYSTEMS INCORPORATED

500 SOUTH LAKE AVENUE, PASADENA, CALIFORNIA 91101 TELEPHONE (213) 684-3311

12 June 1979

TO: SOFTWARE EDITOR

RE: NEW SOFTWARE PRODUCTS FROM KHALSA COMPUTER SYSTEMS, INC.

Dear Sir,

We are proud to announce the availability to the general public two new software products for the AM-100 Computer System. These are:

The TYPE-RIGHT Word Processor and
Small Data Base Manager (SDBM)

The TYPE-RIGHT Word Processor is a screen-oriented word processing system using conventional CRT terminals (e.g. Hazeltine 1500, INFOTON 100, SOROC 120) in conjunction with the powerful AM-100 system. I have enclosed a two page description of this software as well as an in-house information flyer that we hand out to our customers. We feel this is one of the most powerful word processing systems available on the mini-micro level. In addition, it has a relatively short operator training period to bring the operator up to full speed. If you are interested in receiving more information on this word processing system for review or otherwise, just call or write me and I will send you an operator's manual at no charge.

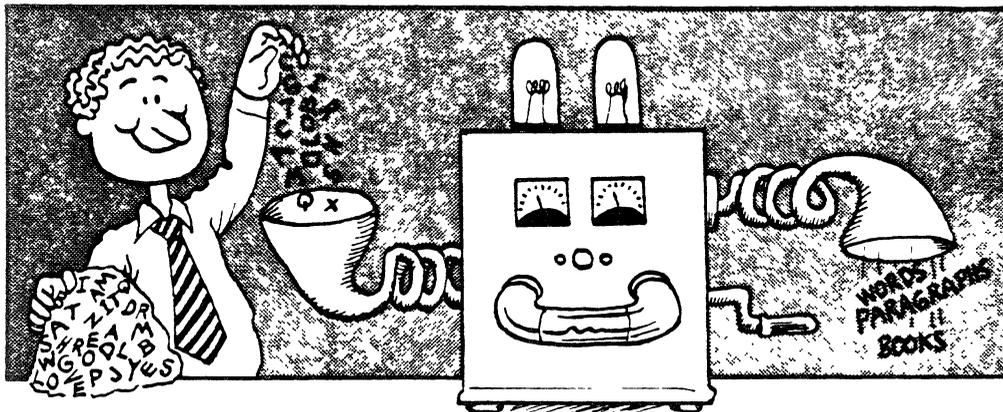
The Small Data Base Manager (SDBM) is an ALPHABASIC program which allows for variable field designation and length. It enables the user to quickly input the information and manipulate it in many different forms. An unusual feature of SDBM is that it allows the alteration of data files AFTER they have been created, thereby, giving the user the ability to use "hindsight" in his field definition. Again, if you are interested in receiving more information about this software please let me know and I will send you the appropriate manual.

Thank you for your attention. If you have any questions, please do not hesitate to get in contact with me.

Respectfully,

Partap Singh Khalsa
Partap Singh Khalsa
Marketing Coordinator

Word Processing software for the AM-100



AT LAST! After months of careful research, and many rounds of user testing and evaluation, we have developed a **POWERFUL, VERSATILE**, yet **EASY TO USE** word processing package for the Alpha Micro AM-100. Our software vastly increases the productivity of typists, while making their work more pleasant.

Users with no computer or word processing experience can easily master the **Khalsa Word Processing System** with only a half-day of training and a few days of practice. "Help" is always available at the touch of a key. Typists can enter text rapidly, because they don't have to worry about making errors or entering carriage returns — words which won't fit on one line are automatically shifted down to the beginning of the next, and errors are simple to spot and fix. Entire blocks of text can be moved about easily. Automatic form letters are handled effortlessly.

At print time, there are no surprises as there are with many other word processing systems — a document can be displayed on a terminal essentially as it will appear when printed. When completely correct, the finished document can be sent to the printer. While it is being printed, work can continue on another document.

SELECTED FEATURES:

Automatic carriage return (word wraparound) • Automatic paragraph indentation • Automatic centering • High-speed search/replace (single or multiple) • Unlimited text movement • Single sheet or continuous form printing • Scrolling — both forward and backward • Cursor control — left, right, up, down • Move to next word, tab, sentence, page • Move to beginning or end of screen, page, or text • Delete character, word, line or block • Automatic table of contents • Automatic chapter and sub-chapter numbering • Automatic page numbering — top or bottom of page, with or without header lines • Chapter-relative page numbering • Automatic file backups • Automatic or manually directed file insertions • Selected item insertion from external files ("non-linear merging") • Automatic letter writing, keyed to mailing lists • Boiler plate text insertion • Soft hyphenation (adds hyphen only when necessary) • Forced spacing (forces related words to appear together only on the same line) • Boldface printing • Underscoring • Many print format controls, including: page

length and width; line spacing; variable character spacing (pitch); left, right, top and bottom margins; right justification; page number format; default print controls; and the ability to store standard document formats for instant use with any new text.

We have the **ONLY** software which supports variable spacing for the **DIABLO** and **NEC** printers on the Alpha Micro right now. No one else can make this claim! And because our software runs under the 'AMOS' multi-tasking operating system, you'll have true multi-station word processing capability, with account/password security. Several operators can work on different parts of the same document at the same time.

WHAT ABOUT THE FUTURE? Because it's on the Alpha Micro, you have true **DEVICE INDEPENDENCE** and incredible **UPWARD EXPANDABILITY**. The system uses inexpensive, conventional CRT terminals — no custom hardware. Additional stations can be added for essentially the cost of the added terminals. Additional features, soon to come: superscripting, subscripting, footnoting, indexing, and much, much more!

WHAT DOES IT COST? Only \$450.00, when purchased as part of a complete system. Future enhancements are available for only a nominal handling charge. Every day you wait costs you money... so call or write for complete details **TODAY!** Better yet, see your local dealer for a demo... you'll be impressed.

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THE REAL OREGON COMPUTER COMPANY

207 West 10th
Eugene, Oregon 97401
TELE 484-0040

Alpha Programmers Utility Package #2

To make your programming effort more productive, here is a list of Alpha Micro Utilities available on AMS or IBM floppy disks. Many are written in assembly language and are much faster and more efficient than other utilities which perform the same function. Price is \$35.00 (dealer quantity 2-5, \$25.00 each)

XCALLS

- XMENU, menu, delimiter\$, y, x
Displays a menu on the CRT
- ASKOPT, options\$, index, immediate'mode
Asks which option the user wishes to choose.
Will accept only options the user passes to it.
- XCLR, ytop, xleft, ybottom, xright
Clears a rectangle on the screen.
- XBOX, ytop, xleft, ybottom, xright [,char (s)]
Draws a box on the screen.
- XGRAB, number'of'characters, characters\$
Grabs characters from input buffer without the use of "input" statement. Useful to control printing or processing
- XFREE, device'name\$, free'space, max'contig'area
Reports on free blocks and maximum number of contiguous disks blocks.
- XDOWN, string\$
Displays a character string vertically on the CRT
- XDATE, mm-dd-y,yyymmdd
Returns the system date in two formats (mm-dd-yy and yyymmdd)
- XLOOK, program'name'in'memory, found
Looks for a program or subroutine in memory

All subroutines are clearly documented. The price is \$35 for the floppy disk and \$125 for the HAWK version. The price includes the source and object programs plus the documentation for each. Order yours today from:

The Real Oregon Computer Company
207 West 10th Avenue
Eugene, Oregon 97401

ORGANIZATIONAL PROFILE

Dunn, Moore & Associates, a partnership formed by Bill Dunn and Jerry Moore, has been a supplier of turnkey minicomputer software systems since its inception in July 1975. Working initially with Interdata minicomputers, we have supplied applications and system software for Interdata users both in Tucson and nationwide. Our MDOS multiuser, multi-processing turnkey disk operating system for 16-bit Interdata minicomputers is used in many installations both on the East Coast and West Coast.

With the advent of Alpha Microsystems, Dunn, Moore & Associates began supplying turnkey hardware and software systems using the AM-100 processor. We believe that this computer is the finest microcomputer available with the systems software capabilities to perform complicated file handling tasks previously requiring a costly minicomputer.

Dunn, Moore & Associates has buying arrangements with several suppliers which places us in a unique position to offer economical hardware packaged with customized software systems.

A partial list of our customers is provided as an illustration of our past performance

William F. Casteen, M.D.	Bakersfield, Ca.	Alpha Micro
General Dynamics, Convair	San Diego, Ca.	Interdata
K.E.G. Construction	Sierra Vista, Az.	Alpha Micro
Lathrop Shooters Supply	Tucson, Az.	Alpha Micro
Lawyers Title of Arizona	Tucson, Az.	Interdata
Management Computer Systems	Cranford, N.J.	Interdata
Microage Wholesale	Phoenix, Az.	Alpha Micro
Optisonics HEC Corp.	Tucson, Az.	Interdata
E. & J. Rayman, Inc.	Tucson, Az.	Alpha Micro
Roberts Development Co.	Tucson, Az.	Alpha Micro
Scripps League Newspapers	Napa, Ca.	Interdata
TEC, Inc.	Tucson, Az.	Interdata

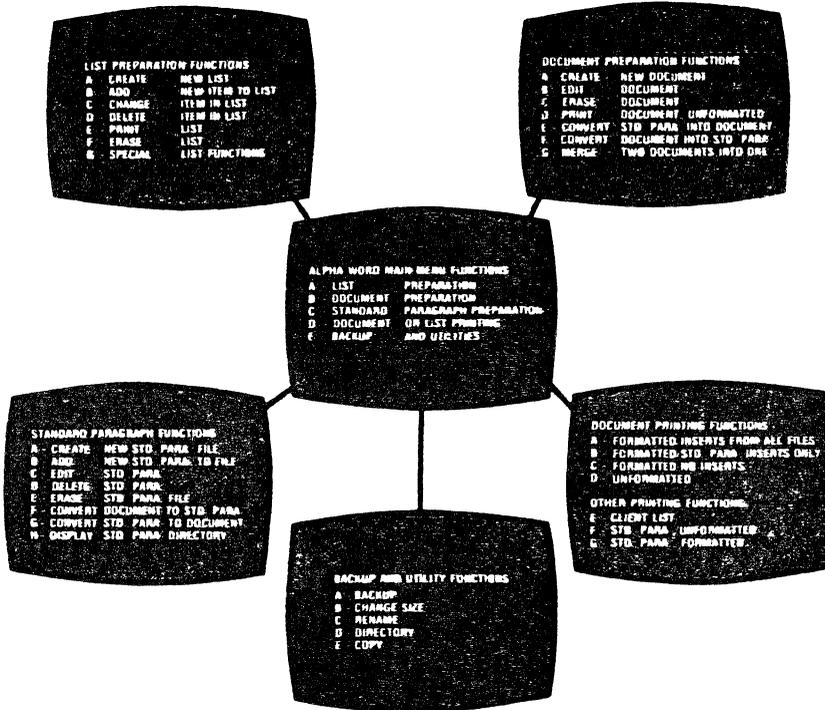
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ALPHA WORD™

IDIOT PROOF

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ALPHA MICRO WORD PROCESSOR



ALPHA WORD is a complete word processing system written for the Alpha Micro computer. Your text is managed in six line blocks and is interactively stored on disk to insure against system crashes.

The Document and Standard Paragraph processors have the main features of Alpha Micro's VUE text processor, including line insert and delete, word insert and delete, page skipping, global search and replace, automatic linefeed at the end of the line, block move, copy and delete.

The list processor is structured as a general linked list with user defined data items, and data item keys.

The users manual for ALPHA WORD is written so that your secretary can easily learn the system in a few hours. This is possible through the use of extensive examples and easy to read style. The users manual is available for \$15.

Demonstration disks with a capacity of 10 list records and 2 pages of text in document and standard paragraph processors is available for \$100 including all software and documentation.

Enhanced versions available to registered users quarterly at \$30.

Future versions will include (1) Spelling error correction and detection, (2) Automatic index and table of contents generation, (3) Half justification and hyphenations, (4) List search display similar to IBM System 6.

Dealer inquiries invited.

ALPHA WORD software is shipped on an 8 inch floppy disk in standard or AMS format.

— May be used on hard disk systems —

ALPHA WORD is priced at \$1500.

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**AMERICAN
MEDICAL
SOFTWARE,
INC.**

702 BLOOMINGTON ROAD
CHAMPAIGN, IL 61820
PH. (217)351-7123

May 23, 1979

AMUS
Jim Taylor
P.O. Box 1723
Boulder, Colorado 80306

Dear Jim:

American Medical Software, Inc. offers four medical packages for the Alpha Micro AM-100 computer:

- A - Accounts Receivable
- M - Management Reports
- S - Scheduling Appointments
- INC - Insurance Claims

A detailed list of the programmed functions that comprise each package is shown on the next page. I have also included a brochure that has examples of reports, statements, insurance claims, etc.

When configured with four floppy disks the system will provide a physician in solo practice with a capacity for up to 3,000 patients. An AM-500 10 megabyte disk meets the need of a group practice with as many as 20,000 patients.

The software has been thoroughly tested since the first Alpha Micro AM-100 installation over a year ago. Earlier this month the system was the subject of a paper titled "Computerizing a Small Medical Practice ..." which was presented at the Fifth University of Illinois Conference on Medical Information Systems. The paper was written by a physician in family practice, Richard C. Adams, M.D., and will also be published in an upcoming issue of the Physicians Microcomputer Report.

AMS software is licensed on a royalty basis to qualified Alpha Micro dealers. If a physician already has an Alpha Micro computer the software packages may be licensed directly from AMS. A floppy disk "demonstration" of the software will be available June 1, 1979 for \$25.

Please contact me if you would like further information.

Sincerely,

David Garver

David Garver
President

AM-100 and AM-500 are trademarks
of Alpha Microsystems of Irvine, Ca

INFORMATION SYSTEMS FOR THE PROFESSIONAL IN MEDICINE



**AMERICAN
MEDICAL
SOFTWARE,
INC.**

702 BLOOMINGTON ROAD
CHAMPAIGN, IL 61820
PH. (217)351-7123

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CB Change Billing
PR Print Receipt
DL Daily Log

NA New Account
CA Change Account Information
AI Account Inquiry
NP Name and Phone Inquiry

PS Print Statements
MA Monthly Account Ageing
AR Accounts Receivable Report
SN Security Number Change

DI Doctor Information
C Codes
CL Code List
D Date

MANAGEMENT REPORTS

PA Practice Analysis
DA Delinquent Accounts
PL Print Ledgers
AT Audit Trail

MS Monthly Summary
HR Hospital Register
WP Word Processing
SM System Management

SP System Parameters
SI System Installation
FN File Names Management
FS File Sizes Management

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SA Schedule Appointments
WA Walk-in Appointment
AC Appointment Cancellation
LA Look-up Appointments

DS Day Sheets
CS Charge Slips
AB Appointment Book
AD Appointments Deletion

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PI Print Insurance Forms
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CI Clear Insurance Forms

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UC Uniform Claim (AMA)
BS Blue Shield
MC Medicaid (Illinois)

INFORMATION SYSTEMS FOR THE PROFESSIONAL IN MEDICINE

BYTE SHOP™ OF RENO

CYBER SENSE, INC

CROSSROADS CENTER
4104 S KIETZKE LANE
RENO NV 89502
(702) 826-8080

A set of general purpose utility programs is available from the Byte Shop of Reno. All programs come with documentation and source code.

A generalized menu system is additionally available. This system allows programs to be interfaced through a hierarchial menu tree which can easily be extended and edited. Modifications to existing programs is trivial.

Here is a list of programs on the utility disk:

BASIC language:

AUTO Allows automatic line-numbering for BASIC programs.
CMPALL Allows 'wild card' compilation of basic programs.
IF A conditional statement processor which allows the user to control the flow of procedure files.
RENUM A program which will renumber a basic program. The renumbering can take place on specific sections if desired.
RESEQ A BASIC program resequencer. Same as RENUM, but allows imbedded line numbers.

BASIC XCALL subroutines:

CHAIN Chain allows the user to chain to a command file directly by passing it a string of commands. This allows the user to pass arguments.
CLINE Cline will fetch the command line into a string. Allows you to type things like: .RUN PROG ARG1,ARG2.
COMBLK Comblk is a general common block routine which allows common blocks to be stored in memory when chaining to other programs. It is similar to the alphaMicro COMMON subroutine, but it allows any number and size of common blocks. Common blocks may be stored in the system area also.
DATCNV A generalized date conversion routine. It allows dates to be stored in just two bytes. DATCNV will check for date legality (i.e. 2/29/77 is illegal) and is valid from 1/1/1900 through 6/7/2079.
DSKRW A Routine to read and write directly to a block structured device.
EKOSSET Turns terminal echo on or off.
GETCH Gets a character from the keyboard without the necessity of pressing return.
NXTPAR Allows easy extraction of parameters from a string.
PAUSE Allows the job to delay for a specified amount of time.
PRTErr Prints an error message and waits for return from keyboard.
PUTIN Allows the user to force characters into his own input string.
RENAME Allows a file to be renamed inside of BASIC.
RGETCH Allows real-time entry of characters from keyboard. Returns a null until a key is pressed.
TRIM Removes trailing blanks from a string. Similar to the Alpha-Accounting STRIP routine, but is smaller.

Assembly language programs:

ABBREV Allows the user to create abbreviations for commands.
Similar to U.PRG, but more flexible.
ALLOC Same as the ALLOCATE statement in basic, but entered in
command mode.
BASCNV Allows easy conversion between octal,hex, and decimal nos.
CRTCOM Used to create common blocks for the COMBLK subroutine.
EXIT Terminate a command file and print a message.
Generally used with the IF program.
GOTO Allows forward jumping in a command file. Very useful with
the DO and IF.
WAITC Same as WAIT, but waits for the job to return to command
level.
XFORCE Similar to FORCE, but allows a job to force to itself.

Changes to existing programs:

DING Ring the bell on the terminal. Replaces the DING program
provided by Alpha Micro.
LOGOFF will now delete any modules left in memory.
PRINT new options for auto file deletion, form-feed after print,
and multiple spooler capability have been added.
(Note: 4.1 makes this program obsolete)
XY Same as XY provided by Alpha Micro, but allows a comma
between the coordinates.

The Generalized Menu System (GMS) is a simple but powerful package of BASIC programs and MACRO subroutines which allow a programmer to integrate a collection of programs into a complete system through the use of a hierarchial set of menus. A list of applications is displayed on the console, and the user selects the particular application he desires by number. The menu system will at that time invoke a procedure or display another menu.

The menus consist of a title, and one or more selections. When chosen, each selection may cause another menu to be displayed, or may cause a program to be executed. If the selection is a program it is called a NODE.

Each selection may be assigned a priority from 1 to 255. Any user who has a priority equal or higher than the selection's priority may invoke that particular selection. This feature allows certain programs and menus to have restricted access. For example, in an accounting system, only people with a high priority would be allowed to access file initialization procedures.

GMS provides the user with the capability to add, delete, and change menus dynamically while he is running the system. Effects of modification of the menu tree can be seen instantly.

Prices are listed below: (GMS includes utilities)

	5MB		
	Floppy	Cartridge	
Utility	! \$35.00	\$130.00 !	
	!-----!	!-----!	
GMS	! \$85.00	\$180.00 !	Documentation only: \$5.00
	!-----!	!-----!	Blank 5MB cartridges: \$99.00



The Computer Workshop of Kansas City, Inc.

4027 NORTH OAK TRAFFICWAY
KANSAS CITY, MISSOURI 64116
(816) 452-3690

ANNOUNCING ! !

BILL OF MATERIALS

FOR

ALPHA MICRO

Now a software package is available for the Alpha Micro to handle Bill of Materials processing for manufacturers. The system also handles inventory control, purchase orders and production orders

Bill of Materials (BOM)

- BOM file maintenance
- Single level parts list (explosion)
- Detail Parts list (indented explosion)
- Summarized parts list (explosion)
- Single level usage list (where-used)
- Summarized usage list (where-used)
- Detail Usage list (indented where-used)

Inventory Control

- File maintenance
- Issues and receipts entry
- Stock status report
- Customer order processing
- Purchase order processing
- Production order processing

The software is written in Alpha Basic using ISAM and is compatible with Alpha Accounting. Software provides multi-user locks for updating at file and record levels.

JUNE AVAILABILITY



The Computer Workshop of Kansas City, Inc.

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KANSAS CITY, MISSOURI 64116
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JUNE AVAILABILITY

SOFTWARE PAC #5

PLOT

PLOT is a program which will plot a file of X, Y data points using a standard 80 or 132 column printer. It allows the user to select the following options:

- a) Specify horizontal and vertical axis
- b) Title all axes with multiple lines of text
- c) Control the scale of the plot
- d) Remove the printer distortion
- e) Print values on each line of the plot
- f) Specify special characters to be used in the plot
- g) Control the tick marks and increments
- h) Specify the maximum and minimum X and Y values
- i) Plot X values on Y-axis and plot Y values on X-axis.

The programs allow many more options, and is quite useful in a variety of applications. A 50-page user's manual is included to guide you through its use.

Available on: Alpha-Micro TRS-80 CBASIC MBASIC Apple

Price: ~~\$60.00~~ includes disc and manual

\$50.00

BUSINESS
SOFTWARE



MICRO-COMPUTER
SYSTEMS CONSULTING

THE BASIC BUSINESS SOFTWARE COMPANY, INC.
POST OFFICE BOX 2032
SALT LAKE CITY
UTAH 84110

SOFTWARE PAC #6

"ALPHA-MICRO MAILING LIST SYSTEM"

The Basic Business Software Company, Inc. is proud to announce the availability of a complete mailing-list system for the ALPHA-MICRO Computer System. This package consists of programs written in ALPHA-BASIC, and allows the user the following functions:

- 2,000 NAMES AND ADDRESSES ON EACH DISC
- MULTIPLE FILES PER DISC
- ALLOWS ENTRY OF:
 - Last Name
 - First Name
 - Phone
 - Company
 - Address
 - City
 - State
 - Zip
 - Reference Field
- REVIEW OF SELECTED RECORDS
- DELETE SELECTED RECORDS
- CHANGE FIELDS ON SELECTED RECORDS
- UPPER CASE CONVERSION
- LOWER CASE CONVERSION
- SORT ON 3 FIELDS
- PRINT A ROSTER
- PRINT A GROUP OF SELECTED NAMES ONTO LABELS
- PRINT ONTO LABELS UP TO 4 ACROSS

ALL ORDERS MUST BE PREPAID

PRICE: **\$35.00**, Postage Paid Includes 1 disk and 35-page manual

BUSINESS
SOFTWARE



MICRO-COMPUTER
SYSTEMS CONSULTING

THE BASIC BUSINESS SOFTWARE COMPANY, INC.
POST OFFICE BOX 2032
SALT LAKE CITY
UTAH 84110

Software Pac #7

"AMORTIZATION & DEPRECIATION"

This package consists of two programs which will compute and print an amortization and a depreciation schedule.

AMORT

This program will print either part or all of a loan amortization schedule.

The program takes inputs for:

- a) Amount of loan
- b) Interest rate (%)
- c) Number of years
- d) Payment frequency

The program will then format the output to a file for printing:

- Payment amount
- Payment to principal
- Payment to interest
- Remaining balance
- Yearly summaries
- Total interest paid

DEPREC

This program will print a depreciation schedule for an asset.

The program takes inputs for:

- a) Investment amount
- b) Salvage value
- c) Asset life
- d) Discount rate (%)

The program will then format the output to a file for printing:

- Monthly and yearly totals
 - Straight line
 - Sum of years digits
 - 125% declining balance
 - Double declining balance
- Present values for asset life

Price \$20.00 includes disk and a 50 page manual
Available: Alpha-Micro/TRS-80, CBASIC, MBASIC/APPLE II

BUSINESS
SOFTWARE



MICRO-COMPUTER
SYSTEMS CONSULTING

THE BASIC BUSINESS SOFTWARE COMPANY, INC.

POST OFFICE BOX 2032

SALT LAKE CITY

UTAH 84110

(801) 363-1199

SOFTWARE PAC # 8

"ALPHA-MICRO — CP/M CONVERSION UTILITY"

This software package consists of utility programs which allow the Alpha-Micro user the ability to read and write a diskette which is formatted for use on a CP/M System. The following functions are provided:

- 1) Exit to AMOS.
- 2) Display on the C.R.T. the first 32 CP/M filenames.
- 3) Display on the C.R.T. the last 32 CP/M filenames.
- 4) Spool the CP/M directory to the line printer.
- 5) Display on the C.R.T. a CP/M file.
- 6) Display on the C.R.T. a AMOS file.
- 7) Copy a CP/M file onto an AMOS diskette.
- 8) Copy an AMOS file onto a CP/M diskette.
- 9) Mount a new CP/M diskette.
- 10) Mount a new AMOS diskette.
- 11) Print a disk map of the mounted CP/M diskette.

This package will allow software developers to transfer programs between CP/M and Alpha-Micro, and with minor modifications have their software run on both systems. It will also allow Alpha-Micro users the ability to use the vast amount of CP/M-CBASIC Software which is available. The CP/M user's group has over 33 disks of CP/M Software available.

PRICE: \$75.00, Postage Paid

Includes 1 disk with Source Code and a 40-Page User's Manual

*BUSINESS
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*MICRO-COMPLTER
SYSTEMS CONSULTING*

THE BASIC BUSINESS SOFTWARE COMPANY

POST OFFICE BOX 2032

SALT LAKE CITY

UTAH 84110

(801) 363-1199

DISASM - A DISASSEMBLER FOR THE ALPHA MICRO

FEATURES:

1. Disassembles both op codes and supervisor calls.
2. Output may be directed to either a file, a device, or the terminal.
3. Generates labels for all relative references, all branch op codes, and SOB op codes.
4. Every word disassembled is printed in hexadecimal, octal, signed decimal, ASCII, and RAD 50 for proper interpretation of data.
5. Disassembles at 1 to 6K per second

PRICE: \$150.00

Includes diskette with DISASM.PRG
and a users manual.

AVAILABLE FROM:

BASIC BUSINESS SOFTWARE, INC.
POST OFFICE BOX 2032
SALT LAKE CITY, UTAH 84110

(801) 363-1199

ALPHA MICRO USERS SOCIETY - Membership Form

Please fill in as much information as possible so that we can provide you with the best possible service.

Name _____ Company _____

Address _____

City _____ State _____ Zip _____

Business Phone _____ Home phone _____

Circle one: Own/Lease/Thinking

Check all applicable: Dealer _____ OEM _____ User: Corporate. ___ or Individual _____

Describe Equipment: _____

Fill out a membership form including membership fee for each person that wishes to communicate with the Problem Coordinator. The annual dues are \$25.00 per member.

0 AMUS may use my name for mailing lists

Make check payable to AMUS

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Boulder, Colorado 80306

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