

**A**LPHA

**M**ICRO

**U**SERS

**S**OCIETY

**Newsletter**

VOL. 1 no. 6

July, 1978

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The Alpha Micro Society Newsletter is mailed monthly  
(usually) to members of AMUS under a bulk mailing permit  
held by the Community Free School of Boulder; hence the  
return address of P.O. Box 1724, Boulder, Colorado 80306.

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## THE AMUS NEWSLETTER

Late again! and it's all my fault. Knives & daggers may be directed to Steve Elliott. August will be a smaller issue printed in the middle of August, followed by a truly on schedule September issue and on schedule thereafter.

Some AMUS members have inquired about the extravagant waste of multiple newsletters. ( some folks receive two and three newsletters) The reason for this is that we are sending all the U.S. newsletters via bulk mail (at a considerable savings), but to bulk mail, we must have at least 200 items per mailing. Since the AMUS members in the U.S. do not total 200 yet (getting close) we mail two copies to some folks. If you are one of these lucky individuals, please try to pass on a newsletter to someone who can use it.

AMUS now has a disk available for AMUS members with several handy programs on it including resequence, force, mail, cross reference, pack, format print, XCALL NoEcho, XCALL Immediate mode, and the ever popular games. Copies may be obtained by sending \$10.00 to AMUS DESK1: P.O. Box 1723, Boulder, Colo. 80306. Price includes postage. Identify STD or AMS format.

Many AMUS members will be presenting talks and demonstrations at the WEST COAST COMPUTER FAIRE to be held in Los Angeles on November 3rd-5th. If you have something to share at the FAIRE, contact Ron Eade at Computer Center, 8205 Ronson RD., San Diego, CA 92111 or (714) 292-5302. Ron is coordinating the AMUS offerings. There will be a general meeting of the AMUS members which will include elections of officers, formation of an Alpha-Micro phone network (for the passing of programs & data, general communications, medical systems, group meetings, word processing meeting, software licensing & distribution, and other AMUS business. Bring your suggestions, complaints, and yourself.

### Travel for Convention

You can get good air fares to the convention by calling Professional Travel Advisors, Inc. in Boulder Co. Phone number for outside Colorado is (800) 525-2837. Within Colorado call (303) 444-5454.

### Seminar

We have not had much response for the seminar we suggested in September. We will be specific as to time and cost in the August newsletter. Please let us know if you are interested.

The seminar will be aimed at the novice user, and dealers who will have to deal with novice users. The format will be something like the following:

- Friday Night - System Architecture for the Pre-Novice.
- Saturday AM - Discussion of every program in the system.
- Afternoon - BASIC questions and answers (not the entire course)
  - PASCAL, an introduction
- Sunday AM - How to configure a system: Hardware and Software
  - Use of EDIT, TXIFMT, and CMD files.

The cost should be about \$75.

## Wait

If you have a program that is looping and checking the time to get out of the loop, you are wasting CPU time since your program will sit and execute the loop for your entire time slice. We have written an assembly subroutine to XCALL that will put your program to sleep for n clock ticks. This frees up the CPU.

Define your variable in a map statement as follows: MAP1 SLEEP,B,2

USE: XCALL SLEEP,SLEEPY where SLEEPY contains the number of clock ticks.

The Program:

```
EXTERN
COPY SYS
RADIX 10
CMP @4 (R3),#0
BNE AA
MOVI #1,@4(R3)
AA: Sleep @4(R3)
RTN
END
```

After compiling the program with MACRO and LINK, rename the .PRG program file to an .SBR extension.

Last newsletter, we mentioned a report from the San Luis Obispo county on several computer systems rated against the Alpha Micro. Here is more information from that report. It is rather distilled, but we thought that AMUS members would be interested to see how the Alpha Micro rates with other systems.

The report was prepared by Pete Mattson on January 6, 1978. It investigates the possibilities of using microprocessors for the general use of the San Luis Obispo County and City governments. Ratings were given and points were awarded for four categories: Ease of programming (0-5), Multiple user features (0-5), Other hardware capabilities (0-2), and Maintenance (0-3) for a possible total of 15 points.

Ease of programming looked at record length, disk access methods (ISAM was a requirement), interaction of disks and CRT (no calls outside of user programs), and the ability to sort easily.

Multiple user features compared the Maximum number of terminals per system, Password protection, the availability of a Priority scheme, and the use of a Spooling printer.

Under hardware capabilities, the report studied the ability of the system to communicate either directly or via phone to the county's IBM 370. The ability of the system to grow into a hard disk was also taken into account.

The highest points under maintenance were awarded to systems that offered service contracts. If customer maintenance is performed, points were given for repair turnaround time of defective boards, and backup boards were recommended.

RATINGS

<u>Microcomputers</u>	Ease of programming	Multiple user features	Hardware capabilities	Maintenance	Total
ALPHA MICRO	5	5	1	1	12
CROMEMCO	1	0	1	0	2
IMSAI	3	0	1	0	4
MITS (ALTAIR)	2	4	1	0	7
OHIO SCIENTIFIC	0	0	1	0	1
WAVEMATE	0	0	0	1	1
 <u>Minicomputers</u>					
DATA GENERAL	4	2	1	1	8
DATAPOINT	5	0	1	1	7
DEC	4	3	1	2	10
IBM	3	4	2	2	11
RANDALL DATA SYSTEMS	4	1	1	2	8

### Comparisons of Ratings and Prices

The computers are listed by ascending price within total score. Price is for a single terminal system and the estimated 5-year cost including maintenance. The data in this report reflects prices as of November, 1977.

<u>Computer</u>	<u>Score</u>	<u>Price</u>
ALPHA MICRO AM-100	12	\$14,469
IBM SERIES 1	11	38,930
DEC 11V03	10	20,440
DATA GENERAL	8	29,030
RANDALL LINK 100	8	33,340
DATAPOINT 1500	7	14,214
ALTAIR 8800B	7	14,590
IMSAI VDP-80	4	16,099
CROMEMCO CS-3	2	16,860
OHIO SCIENTIFIC CHALLENGER III	1	11,256
WAVEMATE III AT	1	17,646

## AM - 100 Demonstration

DPCI ran a demonstration on the Alpha Micro which included 64K, 10MB Hawk, 3 terminals and three printers. We ran 7 programs concurrently.

3 jobs simulating data entry

1 Job simulating a background transaction processor

1 job simulating the generation of a report

1 spool file being printed

1 control terminal to do what ever we wanted, in data entry, displays, print labels, print reports, print letters.

Conclusions reached include the following :

1. The system handles everything like it is supposed to.
2. The hawk works like a champ.
3. System degradation is not bad if the data entry isn't too heavy.
4. You can do wonders by changing the priorities.
5. On the 30 CPS printers you need more than a 1 character output buffer on the TRMDEF to drive them at full speed.

You can get more information and even the simulation programs by writing Jim Taylor. The simulation programs have many parameter driven random number generators.

## Real-Time Clock

The 4 page document entitled Alpha Microsystems AM-100 system that you get with your system has a paragraph about the real-time clock. It says to connect to an 8 volt AC lead. This should be 16 volt AC. Alan Christensen said he had to modify the CLKFRQ Command.

## Direct Memory Display

Has anyone used the VDM or Polymorphic display for anything other than a monitor especially in a multiterminal environment? This would simulate the way a Four-Phase computer works.

## DEVCPY

When you receive your 10MB CDC Hawk, the system will include a program called DEVCPY.PRG as of version 3.4 but it is not documented at all. This program will copy all files in all PPN's except PPN [1,\*] . It works the same as if you would log into each PPN and run COPY /x=DSKx:[p,n]\*.\*. It apparently will add the PPN to your directory if not already there. DEVCPY also works fine on floppy drives. Format is: DEVCPY DSK1:=DSK0:

## Boxes

The best boxes identified so far are TEI and Equibox. Both have good terminated mother boards and plentiful power supplies. TEI has replaced the reset button with a key switch which is nice for protection but the switch does not automatically return to normal position and if left in the reset position it could harm the machine. TEI is less expensive than Equibox. Equibox has a modified box especially for Alpha Micro, mainly the hinged top so you can get at the format switch. The hinged top however when in the closed position is so close to the AM-300 board that it touches the pins and after a while pin holes will develop in the coating causing shorts which present themselves as ERRORS. You will be unable to identify the cause of the error until you find that the errors go away when the Lict is up.

## Help

We have a problem with the EDIT. When editing large programs we quite often have one or more bytes changed or dropped unintentionally. It appears that the byte in question is the last byte of a 512 byte block. Does anyone else have this problem?

## Are YOU a User

If you are actually using the A/M in your business and would be willing to talk to a few potential users, please let us know who you are and what you are using the system for. There are a lot of potential A/M owners who just want to talk to a satisfied user.

We will not give one users name to all who want to talk but rather, many of you will respond with many different systems. Who knows you might get a chance to talk to someone from Europe, Alaska, Hawaii or even Hong Kong.

If you know someone who would be willing, have them send us the information.

### Cable Length

We have been questioned about cable length limitations in regard to terminals. The information we have from cable manufactures is 50 feet, but equipment manufactures say 25 feet to be safe. The problem is that the longer the cable the more susceptible you are to picking up electrical noise as data. If you use a well shielded grounded cable, you should be able to run 200 to as much as 500 feet of cable without problem. If you need the length but have noise problems, reducing the baud rate may eliminate the problems.

### Free School's Manual

The Free School's AMOS Manual has hit a snag in printing, but will be mailed as soon as it returns from the printers. Those of you who have ordered the manual, please hang on, and it will be sent out as soon as possible. If you haven't ordered yours yet, use the order form on the inside back cover.

### Chip Problem

There is a problem with: for I=1 to 10000:print I; next I  
A number of people have experienced erroneous results. It is apparently caused by a bad chip on the AM100 board. Call Patrice at A/M.

### Break Save

If you are testing a program using BREAK and you save the .RUN version, you will get errors when you try to run the program.

### Building A Communications Package

An AMUS member is willing to design a communications board if we can suggest what the hardware and software should do. Suggestions should be sent to Robert Williams Micro Mouse Enterprises, Box 69, Hollywood, California 90028.

### 8080/AM-100 CP/M/AMOS

George Battelle of Acedemia in Harbor City Ca. wants to know if anyone has used an 8080 with the A/M system. He is especially interested in using COBOL from Microsoft in Albuquerque, N.M. George would like to use either the A/M-100 to bring up the CP/M, or the CP/M to activate the A/M-100.

## ISMBLD

We understand that ISMBLD works fine when you enter all of the parameters from the console but when you put all of the parameters into a CMD file and try to execute the CMD file you get CANNOT ACCESS "File name".IDA Device full.

## Tech Tip 14,15

TT14 may solve one of your flaky problems, i.e. the system just randomly disappears. This modification to the AM-100 board solves an interrupt problem.

TT15 is for all you folks who have been wanting more than 6 serial ports. Now you know how to put more than one AM-300 board in the system.

Ed: You can't use interrupt vector #4 , you must use interrupt vector #2

## Personal Computer Conference

The PCC is in Philadelphia this August 24-27. Alpha Microsystems will have a booth there. AMUS will at least have a card or flyer at the booth and Jim Taylor will try to get there at least one day probably saturday.

## Another OH -NO

Watch out for ERASE \*. Don't tell me I erased the whole thing. See Khalsa's note elsewhere in this issue.

Note you can halt the ERASE.PRG with a Control-C.

## Unterminated Bus

If you have an unterminated mother board and have any flaky problems, such as, the system reboots itself if you look at it crosseyed on the morning after a hard night out with the boys, you can buy a Godbout terminator board or others for about \$30. It just plugs into the S-100 just like any other board.

## Multiple Statement Lines - Again

The IF statement is designed to execute multiple statements on one line with colon separators, so the problem we identified in the last news-letter was really a logic error. Some people have made our example work by putting in 2 colons but don't do it because that is a system error and will be corrected in the future.

### Bugs In 3.3 (Maybe even in 3.4)

Some suggestions and bug reports from Larry White of the Byte Shop of Pasadena:

1. Image Mode input allows all characters but 'Control S', 'Control Q', and "Escape" to be passed to the user program. These characters should be passable to user programs in image mode.

2. The following programs cannot be loaded into memory and reused: DIRSEQ, DSKANA, DSKDMP, LOG.

3. DIRSEQ will free up disk blocks, but these are not returned to the disk bitmap until DSKANA is run. DIRSEQ will also delete a file with a null extension.

4. DYSTAT apparently is added to the scan queue every time it is called for, so typing DYSTAT ten to twenty times will hang the system, (AMOS should check to see if DYSTAT already exists). Also a misspelling of DYSTATT will crash the system.

5. When a file being edited ends with a prefix of a string being searched for, the system may crash. For example, create a file with the following:

```
asdf CRLF
```

```
LF
```

```
qwerty CRLF
```

and type the following editor command:

```
j8<f CRLF
```

```
LF
```

```
$-d$0tt>$$
```

The following bugs and suggestions are from Khalsa computer systems in Pasadena:

1. When a file with  $n*510+1$  bytes is written out by EDIT, the system crashes. For example: Create and edit an empty file: 511<i#4>\$\$  
e\$\$

2. A multiple line FORCE command may not be left by 'Control C'. Typing a control C results in the program repeatedly forcing a NULL, followed by the rest of the previous line to the forced job.

### AMOS Bugs (Version 3.3)

1. ALPHABASIC --- subscripts sometimes give incorrect error messages.  
For example, get into Basic and type the single line  
10 A(B)=C (Basic will respond with an error message)  
This bug is left over from Version 3.2  
Ed: True - You must enter the Map for A or Compile if it is already entered.
2. ALPHABASIC --- branching out of a FOR loop too often causes crash.  
For Example, get into BASIC and type the following:  
10 J=0  
20 J=J+1  
30 FOR I=1 TO 1  
40 PRINT J  
50 GO TO 20  
60 NEXT I  
RUN  
The integers from 1 on will be displayed until (it seems) some kind of stack is filled up, at which point a crash will occur. With 64K, it happens to me after J reaches 1784. This bug was present in earlier BASIC versions, then was fixed in 3.2, then it appeared again.  
Ed: True - You must fall thru the NEXT instruction to relieve the stack-completing an outside loop will also relieve the stack.
3. ALPHABASIC --- concatenation of strings within relations fails.  
For Example, get into BASIC and type the following:  
10 INPUT X\$  
20 IF ("A"="B"=X\$) THEN PRINT "EQUAL" ELSE PRINT "UNEQUAL"  
30 GO TO 10  
and input several values for X\$ ("","A","AB","ABC"). All of them will cause the answer "EQUAL" to be displayed.
4. ALPHABASIC --- INPUT doesn't reset the "column counter" back to 0  
At any given point of execution, BASIC thinks that the CRT cursor is at column n; if the user returns the carriage via type-ahead capabilities, BASIC will still output as if the cursor were at column n (not column 0). This is particularly noticeable when TABs are outputted, which can erase part of the output already made. The INPUT LINE acts properly, and resets this pointer to 0 after the input; INPUT, however, does not reset this pointer if only a carriage return is entered.  
For Example: get into BASIC and type the following:  
10 PRINT "A"; TAB(10); "B";  
20 INPUT X\$  
30 GO TO 10  
RUN  
Then enter as input just a carriage return. This causes the following printout from line 10 to be fowled up. If you input any non-empty string, things will be ok.

5. SPOOL --- doesn't work from any device except DSK.  
 For example, SPOOL AMS1:FRED.DAT 1,4  
 For Example, LOG AMS1:1,4  
                   SPOOL FRED.DAT  
 Either case will cause a very abrupt response on the system status monitor (run by DYSTAT), and then the spooler will be idle.  
 Ed: See June Newsletter for fix.
  
6. 2 dual floppy drives cause system crashes.  
 Matson & Moss (in San Luis Obispo) have 2 dual Persci drives, and experience crashes whenever two users run the same program at the same time (e.g., DIR). This does not occur with 1 dual drive. We have also had this problem whenever we configure 2 dual drives.  
 Ed: Send your fixes to AMUS.

#### AMCS Suggestions

1. SPOOL --- add option to delete spooled file after it is printed.  
 For Example: allow PRINT FRED.DAT/D
  
2. ERASE ---demand an extension for wildcard extensions.  
 For example: sooner or later, everyone of us here has typed ERASE\*, when he actually wanted to type ERASE\*.BAK or some other similar entry. Usually, one loses 2 programs before he realizes what is happening and exits with control-c. Note that this can happen by making one mistake (i.e., entering a carriage return after the \*). If an extension were required, then a triple-mistake would have to be typed (i.e.,ERASE\*.\*) in order to execute the same flub. Effectively, it wouldn't happen.  
 Ed: ERASE can be used to efficiently erase multiple files in a PPN and can be stopped with a control-c.
  
3. COMPIL --- theoretical size limit is about 90 blocks source code.  
 Just a note to say that we have compiled an 83-block BASIC source code program, which created a 38-block RUN module. The theoretical limit appears to be about 90 blocks. Without the compiling within BASIC & saving the RUN package without executing it) was around 45 blocks source code. These figures are exclusive of any exotic array allocations, or the like.  
 Ed: We have trouble with a 60 block source with lots of Maps.

4. MIM.DVR --- fixed by Jim Dunham (it works. . .try it)  
See enclosed listing of MIM,MAC with all revisions marked in purple (!).  
Jim is in the service department here.  
ED: Send for MIM,MAC to Khalsa or AMUS.
  
5. PACKER.BAS & RESEQ.BAS --- please see enclosed diskette.  
Hope this is useful; these two programs are somewhat of an improvement over the DELREM.BAS & RENUM.BAS distributed on the version 3.3 update. PACKER.BAS removes all unneeded blanks, REMs, etc., from any BASIC source code (leaving the original unchanged) and writes the packed form into a new file with extension .PAK ALL the necessary documentation is in the REM lines of PACKER.BAS RESEQ.BAS resequences ALPHABASIC programs within the program code, not just on the line numbers. It currently has problems with ASCII tabs (if they are used as blanks within the code), but otherwise works fine. It is self-explanatory at runtime.

Philip Hunt  
100 E. Norwich Ave., #3  
Columbus, OH 43201

May 4, 1978

Jim Taylor  
DPCI  
P.O. Box 1723  
Boulder, Colo. 80306

Dear Sir:

As an avid computer user who has just recently purchased and recieved (today!) an Alpha-Micro AM-100 system, I have some initial user comments and questions on the AMOS operating system for your comments.

The biggest comment or complaint as you may, that I have is the relative ease by which AMOS can be crashed. A new release should be didicated to correcting AMOS bugs and changes reported in the manuals as "in the next release" but then mysteriously not present. Some of these follow:

- 1) QUEUE SYSTEM - This should not cause unpredictable results when there are no QUEUE blocks available. The message 'SYSTEM ERROR-QUEUE FULL' should appear to the offending user.
- 2) JOBMEN.PRG - Jobmen.prg as well as all memory allocation programs should be made 'user-proof'. The initial documentation on JOBMEN.PRG states that the first release of said program will contain no error-checking. That was three releases ago, has error-checking been implemented as of release 3.3?
- 3) BASIC.PRG - 'MAXIMUM MEMORY EXCEEDED' should be reported when a user program reaches within a fixed number of bytes of the end of his memory partition. It should not just overrun it.

I have also noticed that documentation on the complete software package is out of date. Some programs listed in the manuals do not even exist or have had their names changed. Also, there is absolutely no documentation on SET.PRG, and others. A completely rewritten AMOS OPERATORS MANUAL should appear and new releases of AMOS should include change sheets, similar to the BASIC change sheets now distributed.

There are also many enhancements I would like to see in AMOS. The biggest of which is a file read protect system. Files should default to read and write protection (except to user and [1,4]users) and a program 'UNPROT.PRG should be written which would let a user change protections of his files (i.e. UNPROT \* .BAS/w would mean set all files with the extension BAS to WRITE protect but at the same time, reset the READ protect making files readable by other users.) Other enhancements I would like to see implemented follow:

- 1) User set LOCKs (XCALL XLOCK in Basic) and permanent memory files should be DELETED by LOGOFF.PRG as a logoff means processing completed. If locks are not reset, the QUEUE can fill up with unwanted LOCKs that the user who set them has forgotten about.
- 2) ATTACH.PRG should not allow user to attach to a job already attached to another terminal as this effectively KILLS the first user. Also ATTACH to a detached job should force user to enter the password of the PPN the detached job is logged in under.
- 3) The user, under no circumstances, should be given the entire memory, locking out other users. He should be given an INIT-time defined default value if none is explicitly requested. Also user should not be allowed to increase memory above a system defined maximum. I propose the following additions to SET.PRG:

```

      SET MAX xxxK      ; set max user area size to xxx,000
      SET MIN xxxk     ; set default area size to xxx,000

```

These c ommands would be privileges for use by 1,\* users only.

I have some comments and questions on BASIC:

- 1) Are multiple lines per statement numbers ever going to be supported?
- 2) In all advertisements for AMOS, a macro definition feature for statements is mentioned, does this exist in any form whatsoever? I cannot find it. Ed: Not yet!
- 3) A mention was made that no error-checking is made on immediate mode statements for legality, thereby causing system failures occasionally. Has this been fixed?
- 4) The TIME and DATE functions should look like functions, not variables, i.e. TIME(X),DATE(X) where X is a dummy variable. This would help readability greatly.
- 5) The functions IO(X),BYTE(X),WORD(X) as well as TIME and DATE on the left side of an arithmetic assignment statement should be privileged for [1,\*] user's use only. The IO,BYTE,WORD can cause system failures, the TIME=DATE= can cause other user's headaches. Actually, TIME=,DATE= should not be part of BASIC, but should be part of SET.PRG and should be privileged, such as the following:

```

      SET TIME xxxxxxxx ; set time words to xxxxxxxx
      SET DATE xxxxxxxx ; set date words to xxxxxxxx

```

- 6) As I have just recieved my system, I have not had a chance to see if the following 'standard' extended BASIC statements are implemented. The documentation says NO, but they really should be:

```

      DEF - FNEND      ; define user functions (single and multi-line
                       ; where the FNEND statement is used)
      CHANGE           ; change character string to array of numbers
                       ; representing the ascii values of the string
                       ; and the reverse also

```

Now that I have 'bombed' you with my version of 'FATHER's SORRY WOES', I would like to say that the AMOS system is the best operating system for micros that I have seen, and I've seen plenty!! It is very well written.

I would appreciate your comments on my comments, as well as ALPHA MICRO's and anyone else's you might think of showing this letter to. Thank-you for your time.

Sincerely,

Philip Hunt

P.S. Could you please send me an AMUS application??

Sunny Computer Stores, Inc.

Dear Sirs,

We now have available a complete, intergrated Business System. Inventory Control - Wholesale & Retail version. General Ledger with Operating Reports. Our system is a departure from what we have seen around.

We use a formmated screen that elimates the tiresome scrolling. All prompts and error messages occur on the same lines of the screen. Each system and subsystem have tither which are always displayed on the top of the screen with today's date.

We went overboard on editing. We edit lengthy alphabetic, numeric, range, valid dater etc. The system begins by establishing todays date with the help of a calendardisplayed for the month in question.

I will be glad to make up a demo disk for you if you would like to "kick the tires".

Bill Miller

#### FOX ASSOCIATES

Jill Fox of Fox Associates (located about a block away from Alpha Micro in Irvine California wrote to us and says that she has a word processing system that she offers to her customers. We would like to hear more about her word processing, and her comments about our proposed word porcessing system.

She also wanted the list of AMUS members so that Fox Associates could mail directly to members. We are currently maintaining a policy not to give out our mailing list, but rather to give free space to those members who want to reach our membership.

Jill can be contacted at: Fox Associates, 5211 Chablis Circle, Irvine, California 92714

## You Asked For It - Word Processor Specs

One of the most evident needs of the Alpha Micro System is a good word processor. As a start in this direction, Jim Taylor has set up a first draft for the specifications of what he thinks a word processor ought to do. What follows is set forth as food for thought, and your responses will be appreciated. If 10 people will respond with additional ideas we could have the definition of the worlds foremost word processing system. Hopefully one or more people will write parts or all of the system and give it to AMUS. Then we can all be happy. In any case anything we get, you get.

The main philosophy of this proposal is to utilize the most efficient user oriented text editing capability we can build, allow for dynamic definition of which text goes with which data and utilize the existing TXIFMT capability to do the printing.

### Files:

Any number of sequential text files with extensions of .WRD with imbedded word processing commands. These commands would allow Editing, Text Insertion, and Data Fetches. Any number of Sequential files with extension .WPD which contain commands such as "Print file #12" or data such as "Name is Sam Jones." (Name.WRD) files created manually or with TXEDITOR - contains letter text with any special function statements - and TXIFMT commands.

The operator edits at a CRT using functions in 'image mode' including:

1. Character insert, delete
2. Line insert, delete
3. Scroll forward, backward, maybe sideways
4. Move a string of text
5. Copy a string of text
6. Find & substitute a string once, in multiples, or all cases
7. Display text with all commands showing for editing
8. Display text as it will appear without commands and formatted

Enter "text Insertion" commands, {filename}

Enter "DataFetch" commands, {identifier}

Enter "text input" commands /display text/

Enter text formatting instructions

The text insertion command could contain an imbedded data fetch command. I.e. [{}]. This would allow files of boiler plate letters or paragraphs.

### (Name.WPD)Files:

The WPD file could be created manually, or by a computer program. i.e. a magazine publisher could have letters for advertising, renewal, thankyou's, 1st overdue notice, cancel notices, etc.

It would contain:

- 1) which letter(s)
- 2) data to be inserted
- 3) data identifiers
- 4) special commands
- 5) possible chain to another name.WPD file

All of the commands normally applied to sequential files such as PRINT, TYPE, AND EDIT would apply.

Commands within WPD files would be:

1. PF=123 would print file 123.WRD
2. DT=Change Forms to #4 would display text "change forms to #4"
3. WR would wait for response
4. CH=ABC would chain to file ABC.WPD

Data can be in free format with identifiers that would match those in the "data fetch" command. i.e., A=Joy Jones B= 142 3rd St.(CR)Houston, TX 40605 C= \$145.23.

The data could contain an imbedded "Text insertion" command such as D={124} or an imbedded "Text Input" command: F=/enter amount/

(Word Processor Program) WPTXFM print or display:

Word processor program -WPTXFM

1. Reads in designated .WPD file.
2. Flows through file .WPD file.
  - a. read letter .WRD(s) designated in .WPD
  - b. makes inserts using data .WPD
  - c. dumps out letter .TXT(3) file
  - d. possible chain to another .WRD file

All of the word processing commands would be executed and dropped while all of the TXIFMT commands would remain part of the string. This creation of the data string should be done as the input function of the TXIFMT print program. If that is impractical, the data string could be created and stored in a file which the TXIFMT program would read, format, and print.

The need to create the intermediate file would make it much more time consuming to display the edited text on the CRT for editing purposes.

(Text Formation) TXIFMT

1. reads designated LETTER.TXT file.
2. creates LETTER.LST file to be printed

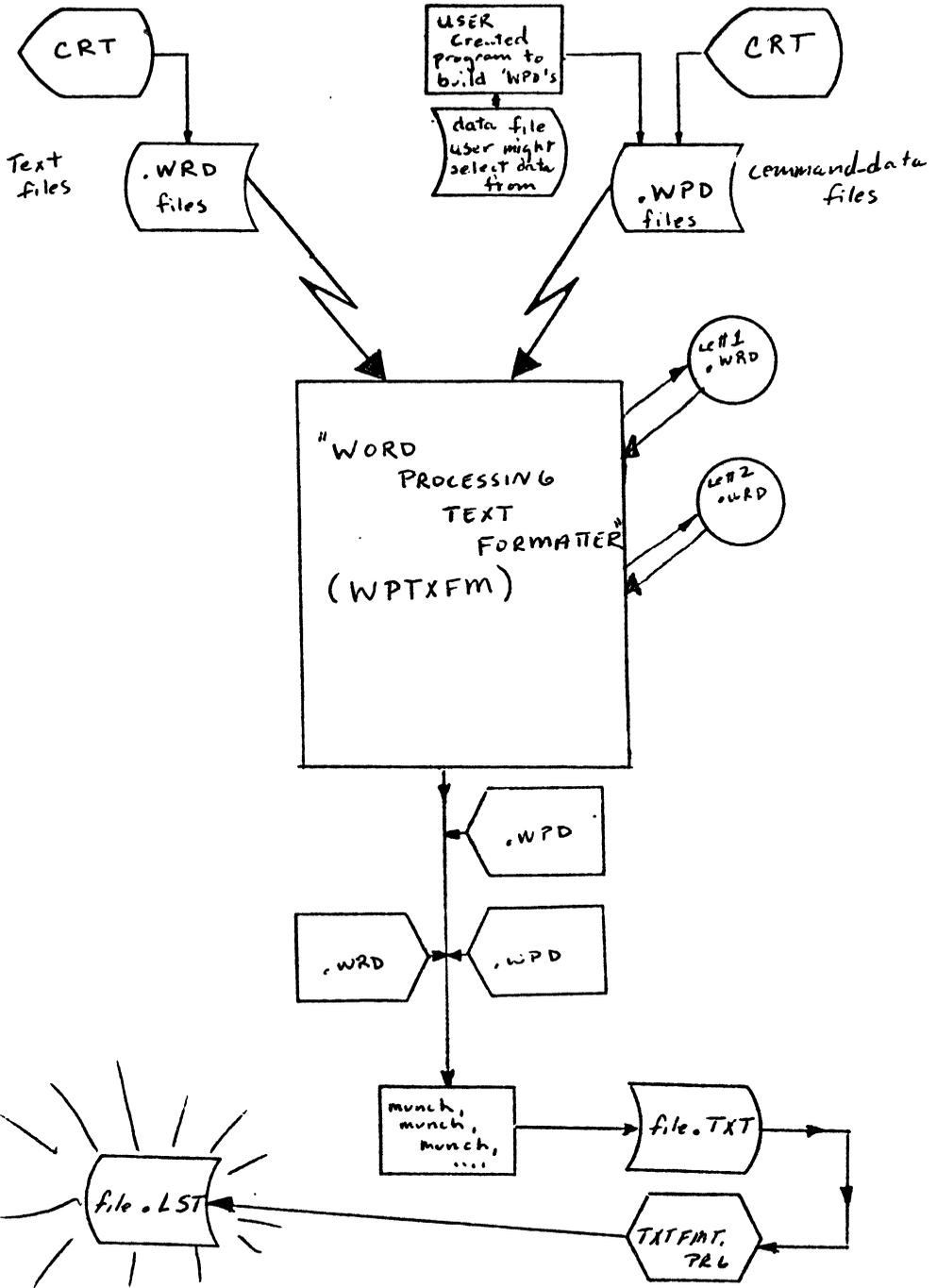
Programs:

WPLJIT Word Processing EDIT

WPTXFM Word Processing Text Formatter

User programs would create WPD file(s)

Standard PRINT, TYPE, AND EDIT would apply to WPD files



## DEMARCO-SHATZ PRODUCTS/SERVICES

General Business Systems: Complete business systems including Inventory, Sales (POS Style), Receivables, Payables, Purchasing, and General Ledger. Full menu structured, Input prompting, Time-shared, with Two security coded modes.

Medical/Dental Billing System: Prepares all insurance forms, Handles private patient statements, Time-shared, Comprehensive reports, Handles up to fifty doctors, and offers On-line patient information.

Custom Designed Systems: Demarco-Shatz specializes in designing complete computer systems in either assembly or high level languages. Typical applications are: Word processing/phototypesetting, Mailing list generator, Income tax, Big ticket inventory, Rental management, Booking/reservation, Clinical lab analysis, and Credit/history checking.

Contact: Daryll L. Shatz, Demarco-Shatz Corp., 952 Manhattan Beach, California 90266.

### Resort Reservation System

Complete system for reservations, renter recievables, owner statements escrow accounting, cleaning & maintenance accounting, seminars and statistical reports. Available Nov. 78. Dick Leach (303) 2797796

### History of AMOS - Continued from June:

Following is the history of the drivers, command files, LISP programs, and sources. Thanks to Khalsa Computer Systems Inc. we now know the number of blocks for each program for each version.

Stay tuned to the AMOS Newsletter for the information on 3.4.

PROGRAM	VERS	COMMENT											
	0.0	0.1	0.2	0.3	1.0	1.0	1.02	2.0	3.0	3.1	3.2	3.3	
DSKO: [1,6]													
ACTIV .TDV												1	
ADM1 .TDV												1	
ADM2 .TDV												1	
ADM3 .TDV								1	1	1	1	1	
AMS .DVR								2	1	1			see AMS
AM300 .IDV								1	1	1	1	1	
CEN .DVR	1	1	1	1	1	1	1	1	1	1	1	1	
DMEDIA.TDV												1	
HAZEL .TDV											1	1	
ICM .DVR	4	4	4	4	4	4	4	1	1	1			see ICMIME ICMSTD
ICMIMG.DVR											1	1	
ICMSTD.DVR											1	1	
** ** ** **													
IMG .DVR										1			see IMG
IMSIO .IDV								1	1	1	1	1	
LPT .DVR	2	1		1	3	1	1						
MTM .DVR	2	2	2	2	3	3	3	3	3	1	3	3	
MTM .SIO					2	2	2						see MTM.DVR IMSIO
M40 .TDV												1	
PER .DVR	5	5	5	5	5	5	5	2	2	1			see PER
PERAMS.DVR											1	1	
PERIMG.DVR											1	1	
PERSTD.DVR											1	1	
PS3 .IDV								1	1	1	1		
SIL700.TDV								1	1	1	1	1	
** ** ** **													
SOROC .TDV									1	1	1	1	
TELTYP.TDV								1	1	1	1	1	see TPR
TPR .DVR			1	1	1	1	1						
TRIT25.DVR												1	
TRIT50.DVR												1	
TRM .DVR								1	1	1	1	1	
WNGAMS.DVR											1	1	
WNGIMG.DVR											1	1	
WNGSTD.DVR											1	1	







MICHAEL ADAMS  
2448 28th St.,  
Santa Monica, CA 90405

TABLE2:

ASCII to EBCDIC

BYTE 000, 001, 002, 003, 067, 055, 056, 057, 026, 005, 045, 013, 014, 015, 016, 017  
BYTE 020, 021, 022, 023, 074, 075, 062, 046, 030, 031, 077, 047, 042, 035, 065, 037  
BYTE 100, 132, 177, 173, 133, 154, 120, 175, 115, 135, 134, 116, 153, 140, 113, 141  
BYTE 360, 361, 362, 363, 364, 365, 366, 367, 370, 371, 172, 136, 114, 176, 156, 157  
BYTE 174, 301, 302, 303, 304, 305, 306, 307, 310, 311, 321, 322, 323, 324, 325, 326  
BYTE 327, 330, 331, 342, 343, 344, 345, 346, 347, 350, 351, 000, 340, 000, 000, 155  
BYTE 171, 201, 202, 203, 204, 205, 206, 207, 210, 211, 221, 222, 223, 224, 225, 226  
BYTE 227, 230, 231, 242, 243, 244, 245, 246, 247, 250, 251, 300, 117, 320, 241, 007

These two tables are used to convert between ASCII and EBCDIC. The byte to be converted is treated as an eight-bit number, and is added to the address of the table. The resulting address contains the converted value.

For example, convert an ASCII "A" to EBCDIC. An "A" is represented internally as octal 101 (decimal 65). Adding this value to the address of TABLE2 will yield the address of the byte in the fifth row, second column. The value of that byte is octal 301, a dc d-ringer for the EBCDIC "A". (If you're checking my arithmetic, remember that the first item in the table is item number zero, not item number one.)

Characters that are not common to both codes will translate as zero.

Note: the following ASCII characters have no EBCDIC equivalent: square brackets (octal 133 and 135), and carat (octal 136). If you wish to transmit these characters, you'll have to make an arbitrary assignment (be sure to change both tables).

Note: The high order bit in an ASCII character is often a parity bit. Be sure it's a zero by ANDing the character with an octal 177 before adding it to the table address.

MICHAEL ADAMS

2448 28th St,  
Santa Monica, CA 90405

TABLE1:

EBCDIC to ASCII

BYTE 000, 001, 002, 003, 000, 011, 000, 177, 010, 000, 000, 013, 014, 015, 016, 017  
BYTE 020, 021, 022, 023, 000, 000, 010, 000, 030, 031, 000, 000, 000, 035, 000, 037  
BYTE 000, 000, 034, 000, 000, 012, 027, 033, 000, 000, 000, 000, 000, 005, 006, 007  
BYTE 000, 000, 026, 000, 000, 036, 000, 004, 000, 000, 000, 000, 024, 025, 000, 032  
BYTE 040, 000, 000, 000, 000, 000, 000, 000, 000, 000, 000, 000, 056, 074, 050, 053, 174  
BYTE 046, 000, 000, 000, 000, 000, 000, 000, 000, 000, 000, 041, 044, 052, 051, 073, 000  
BYTE 055, 057, 000, 000, 000, 000, 000, 000, 000, 000, 000, 054, 045, 137, 076, 077  
BYTE 000, 000, 000, 000, 000, 000, 000, 000, 000, 140, 072, 043, 100, 047, 075, 042  
BYTE 140, 141, 142, 143, 144, 145, 146, 147, 150, 151, 000, 000, 000, 000, 000, 000  
BYTE 000, 152, 153, 154, 155, 156, 157, 160, 161, 162, 000, 000, 000, 000, 000, 000  
BYTE 000, 176, 163, 164, 165, 166, 167, 170, 171, 172, 000, 000, 000, 000, 000, 000  
BYTE 000, 000, 000, 000, 000, 000, 000, 000, 000, 000, 000, 000, 000, 000, 000, 000  
  
BYTE 173, 'A, 'B, 'C, 'D, 'E, 'F, 'G, 'H, 'I, 000, 000, 000, 000, 000, 000  
BYTE 175, 'J, 'K, 'L, 'M, 'N, 'O, 'P, 'Q, 'R, 000, 000, 000, 000, 000, 000  
BYTE 134, 000, 'S, 'T, 'U, 'V, 'W, 'X, 'Y, 'Z, 000, 000, 000, 000, 000, 000  
BYTE '0, '1, '2, '3, '4, '5, '6, '7, '8, '9, 000, 000, 000, 000, 000, 000

## ALPHA Tape Interface

The Alpha Tape Interface is being offered as a combined hardware/software package for \$1000.00. The system is designed to run with the Digi-Data 1600bpt, 9 tract tape drive, model 1739-86-4-2RW. A minimum dual buffer of 512 bytes is required, Digi-Data model LP-PE-941, formatter. The system will run with either a floppy or hard disk system.

A thirty day guaranty from date of delivery on all parts and labor, FOB San Francisco, is included. The \$1000.00 package also includes: one interfac-card, one 50-wire 3M cable, one diskette with software, and instructions.

More information on the Digi-Data tape drive can be obtained from your local representative, or by contacting Digi-Data directly, (301) 4980200. Any other questions should be directed to:

Rick Parfitt  
(415) 566-1391  
1580 5th Ave. #104  
San Francisco, CA.  
94122

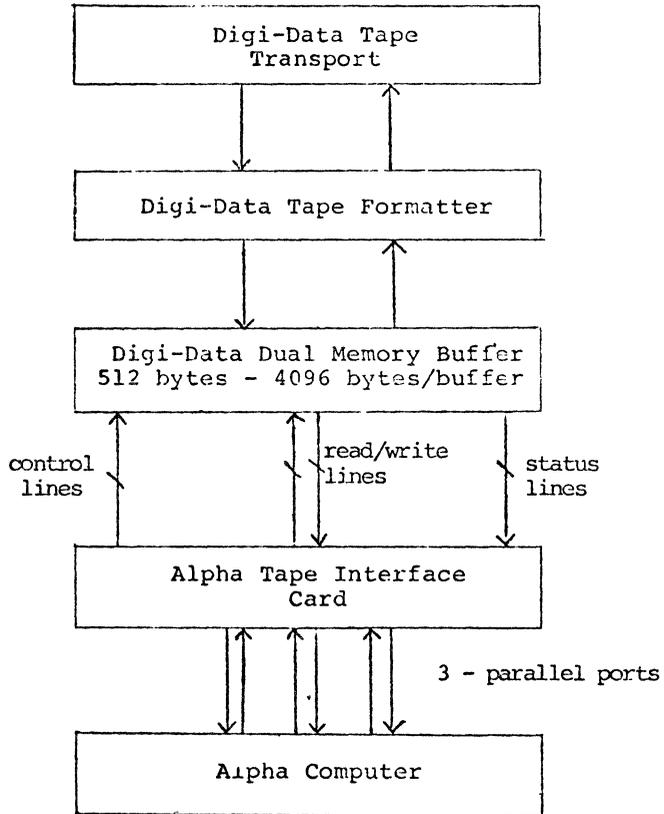
To order a Alpha Tape Interface, send purchase order with 30% deposit to above address. The difference will be collected COD on shipment. All orders will be shipped within thirty days.

The Alpha tape interface card is an S-100 wire-wrap card. It uses parallel ports 0-2. Port-1 is used for reading and writing data. Ports 0 and 2 are used for control and status. The card provides all the necessary logic to interface to the Digi-Data dual-buffered tape formatter. With this interface card and a Tri-dent disk system a 2 mega-byte file can be read (written) in approximately six minutes. The card provides parallel ports to the Alpha, buffers to the tape formatter, and read (write) pulses for maximum transfer rate.

The Alpha tape controller program consists of two parts: a low level assembly language module for all major functions, and a simple BASIC PROGRAM for handling file I/O. The assembly language program is optimized for maximum tape transfer rates. The BASIC program is designed for easy modification by the user. The standard BASIC program handles 512 byte records. The program allows the user to specify the number of blocks to be read or written. The user also specifies a file to be used for the I/O transfer. If the file does not already exist, one will be created for the specified number of blocks to be transferred.

Further documentation on the functions performed by the assembly language module are provided in the standard BASIC tape interface program. The assembly language module interfaces to BASIC through an XCALL. The BASIC program is called TDRIVE.BAS. The assembly language module is called TAPE.SBR, which must be loaded prior to execution of the BASIC program - "LOAD TAPE.SBR".

BLOCK DIAGRAM OF TAPE SYSTEM



**FUTURE BUSINESS SYSTEMS, INC.**  
 783 Acacia, Suite C  
 Goleta, CA 93017  
 (805) 968-4188

We currently have the following software available for the ALPHA-MICROSYSTEMS hardware. All packages have been running on users systems from 3 to 5 months.

**I. ACCOUNTS RECEIVABLE:**

- Up to 1500 accounts on one disk (more than one disk possible).
- a. Data entry files for fast input and secure audit trail.
- b. Average access time of 3 seconds for seeing and altering data base.
- c. Statement writer formatted to our statements. (option to print on users statements for additional cost)
- d. Various edit lists (aged trial balance, data entry files, etc.)

**II. INVENTORY**

- a. 14 information categories on each inventory item.
- b. P.O. generator by vendor or for all low stock.
- c. Manual P.O. generator
- d. Backordering of single items on P.O.
- e. P.O. printouts by vendor or job #
- f. Physical inventory update of inventory of record (with comparison printout)
- g. Data entry file for new inventory record creation.
- h. Data entry file for receiving inventory items.

**III. PAYROLL:**

- a. Two level hierarchical structure (corporation & stores within it, etc.)
- b. W-2 and 941 forms printed
- c. Employee edit list
- d. All printouts are hierarchically grouped and sub-totaled
- e. Program to calculate withholding.

**IV. SALES JOURNAL:**

- a. Two level hierarchical structure
- b. Categories user selectable
- c. Monthly printout (can be printed any time)
- d. Categories for both dollar and strictly numerical data

**V. EDUCATIONAL PACKAGE:**

- a. Variety of educational same type programs stressing math practice.
- b. Test writer: 2 program package to write teacher selected or computer generated T F, multiple choice, fill-in, and matching tests on any subject. Prewritten questions available in certain subject areas.

**SOON TO BE RELEASED:**

**VI. ACCOUNTS PAYABLE:**

- a. Ties in directly to inventory
- b. Printouts by all appropriate categories
- c. Automatic or delayed payment
- d. Much more

**VII. GENERAL LEDGER:**

- a. Includes both regular and budget accounts with cost center and three level account structure to help you analyze all aspects of your business.
- b. Projected amounts for all accounts given following past trends, by month
- c. Ties directly to all other packages or can be used entirely separately.

**PRICE LIST:**

Accounts Receivable .....	\$1000.00
Inventory .....	\$1000.00
Payroll .....	\$1000.00
Sales Journal .....	\$ 500.00
Accounts Payable .....	\$1000.00
Educational Package .....	\$ 400.00
General Ledger .....	\$1000.00

**DEALER MARGIN:**

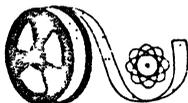
Up to \$10,000/Annum .....	25%
10,001 to \$20,000/Annum .....	25% on first 10,000
	30% over 10,000
Over \$20,000/Annum .....	35%

Demo disks are now available. There is a \$100 deposit required which is refundable on your first sale. We currently have dealers in 15 locations throughout the U.S., Canada, and Australia. We offer complete turnkey systems designed for each user. When you place an order with a 20% down we can deliver in usually two weeks a system which will run without modification the first time it is brought up. I think you will be satisfied with our service and the ease with which you can make a sale. Let the user sit down to the computer and try it for himself. The careful prompting will guide and instruct him to the point that you will not need to say anything while he is at the keyboard. The programs will speak for themselves.

I hope to hear from you soon.

Wishing you great success,  
**FUTURE BUSINESS SYSTEMS, INC.**

Ronald S. Surratt  
 President



## COMPUTER SYSTEMS SERVICE

Data Processing Service Bureau  
230 Brookside Drive  
Springville, Utah 84663

108 West Center, Suite 202  
P. O. Box 104 — Provo Utah 84601  
Business Phone (801) 375-6310

June 6, 1978

Alpha Micro Users Society  
Suite N  
17875 Skypark North  
Irvine, Ca 92714

Dear Sir;

It has been brought to my attention that you are looking for a set of games that can be offered for use on the Alpha Micro System.

We have developed a series of games which are operational for the Alpha Micro System. These include Star Trek, two math games, Hurkle, Lander, Hanrabi, Taxman and others.

These games reside in source and run modules on one floppy disk.

For \$25.00 we will ship a floppy disk in Alpha Micro standard format, prepaid, anywhere in the Continental United States, \$28.00 outside the Continental United States.

Contact: Gene M. Erekson  
Computer Systems Service  
108 West Center, Suite 202  
P.O. Box 104  
Provo, Utah 84601  
Phone (801) 375-6310

Very Truly Yours,

Gene M. Erekson

GME/ase

**dravac** lid

896 midland rd · oradell nj · 07649 · 201-265-4917

JULY 17, 1978

STEPHAN K. ELLIOTT  
COMMUNITY FREE SCHOOL  
885 ARAPAHOE  
BOULDER COLORADO 80302

DEAR STEVE,

WE RECEIVED THE SOFTWARE LICENSE. THANK YOU FOR BOTH IT AND THE ORDER. I HOPE PDQS IS TREATING YOU RIGHT. SHOULD ANY PROBLEMS CROP UP OR IF YOU HAVE ANY QUESTIONS, PLEASE CONTACT US AND WE'LL DO WHAT WE CAN TO HELP.

THERE WAS SOME MIX UP ALONG THE WAY CONCERNING THE PRICE OF PDO. THE ACTUAL END USER PRICE IS \$185.00, NOT THE \$150.00 AS STATED. WE HAVE BEEN SHIPPING AT THE QUOTED PRICE AND WILL CONTINUE TO DO SO UNTIL AUGUST 1.

WE ARE MOVING!! AS OF AUGUST 1 WE WILL BE LOCATED AT:

13 EAST 30TH STREET  
NEW YORK, NY 10016  
(212) 532-2235

NOW THAT I HAVE YOU BY THE EYEBALLS, I WOULD LIKE TO TELL YOU ABOUT SOME OF OTHER SOFTWARE PACKAGES. PLEASE PASS IT ON TO THE AMUS MEMBERS.

1. BASIC UTILITY PROGRAMS

RENUM - RENUM WILL RESEQUENCE LINE NUMBERS IN A BASIC SOURCE PROGRAM BASED ON A USER SUPPLIED STARTING LINE NUMBER AND DELTA. UNLIKE THE ALPHAMICRO SUPPLIED RENUMBER PROGRAM, RENUM WILL CORRECTLY MODIFY LINE NUMBERS REFERENCED IN BASIC STATEMENTS, I.E. GOTO 2010.

AUTO - AUTO IS USED TO CREATE BASIC (OR ANY OTHER TEXT FILES) WITH AUTOMATIC LINE NUMBERING. THE USER SUPPLIES THE STARTING LINE NUMBER AND THE DELTA AND AUTO WILL PROMPT FOR EACH LINE IN THE FILE.

PRTEXT - PRTEXT IS USED TO PRINT SEQUENTIAL ASCII FILES ON EITHER THE TERMINAL OR SPOOLED TO THE LINE PRINTER. THE USER SPECIFIES THE INPUT FILE; TITLE; NUMBER OF LINES/PAGE; NUMBER OF CHARACTERS/LINE; OUTPUT DEVICE. AND WHETHER OR NOT TO NUMBER THE OUTPUT LINES (HANDY FOR ASSEMBLY PROGRAMS).

PRICE: \$50.00  
AVAILABILITY: NOW

## 2. DISK SECTOR PATCH PROGRAM

PATCH - PATCH IS USED TO DISPLAY OR MODIFY DATA WITHIN ANY SECTOR ON ANY DISK (IMAGE FOPMAT IS NOT SUPPORTED) DATA MAY BE DISPLAYED OR MODIFIED IN ASCII, HEX, OR RAD50. PATCH MAY ONLY BE RUN BY PPN 1,2 TO PREVENT "RANDOM" ACCESS.

PRICE: \$50.00  
 AVAILABILITY: AUG 1 - AUG 15

## 3. PDQ ELECTRIC MEMO

WHAT CAN I SAY? YOU'VE GOT IT.

PRICE: \$185.00  
 AVAILABILITY: NOW

## 4. ALPHAC

ALPHAC IS A LARGE SUBSET OF THE "C" LANGUAGE. IT IS A FUNCTION ORIENTED HIGHER LEVEL LANGUAGE. ACTUALLY THERE IS SO MUCH TO SAY ABOUT ALPHAC, THAT WE A PREPARING AN ABSTRACT OF THE PACKAGE AND WILL WHIP ONE ON YOU AS SOON AS IT IS COMPLETE.

PRICE: APPROX \$200. - ALPHAC AND MANUAL  
 \$40.00 - MANUAL ONLY  
 AVAILABILITY: SEPTEMBER

NOTE: THE MANUAL WILL BE AVAILABLE AUGUST 1. IT WAS WRITTEN BY TINY C ASSOCIATES WHO HAVE LICENSED US TO PRODUCE AND MARKET ALPHAC.

## 5. SEX

YES THAT'S RIGHT, SEX! DRAVAC LTD HAS DEVELOPED SEX FOR ALPHAMICRO. NOW BEFORE YOU CALL THE VICE SQUAD OR THE ACM, I SHOULD TELL YOU THAT SEX IS A SUPER TEXT EDITOR, (WHICH REALLY SPELLS OUT STE...CALL IT POETIC LICENSE) SEX IS A LINE NUMBER ORIENTED TEXT EDITOR WITH A NUMBER OF POWERFUL COMMANDS AND FEATURES, ONE OF WHICH IS A VIRTUAL MEMORY HANDLER (WHICH WE WILL BE OFFERING SEPARATELY IN THE FUTURE), WHICH ALLOWS SEX TO WORK WITH TEXT FILES AS LARGE AS 64K WITH AS LITTLE AS 1300 BYTES OF FREE MEMORY IN THE PARTION.

PRICE: \$175.00  
 AVAILABILITY: SEPT -OCT

## 6. WORD PROCESSING

WORD - WORD IS A WORD PROCESSING SYSTEM. IT ACCEPTS AS INPUT ASCII TEXT FILES AND PRODUCES AS OUTPUT: FORMATTED DISK OR TERMINAL OUTPUT USING TEXT IMBEDDED COMMANDS. IF A DISK FILE IS PRODUCED, IT WILL BE SPOOLED TO THE LINE PRINTER DRIVER. WORD SUPPORTS THE USE OF STANDARD PHRASES: INDEXING; TABLE OF CONTENTS BUILD; JUSTIFICATION; PLUS THE FULL RANGE OF NORMAL WORD PROCESSING TYPE COMMANDS.

PRICE: \$175.00  
~~\$325.00~~ FOR BOTH WORD AND SEX PURCHASED TOGETHER  
 AVAILABILITY: SEPT - OCT

## 7. GAMES...GAMES...GAMES...

REVERSI - YOU AGAINST THE COMPUTER IN THIS COMPUTERIZED VERSION OF AN OLD ENGLISH GAME (MARKET NAME: OTHELLO)

QUBIC - 3D TIC-TAC-TOE

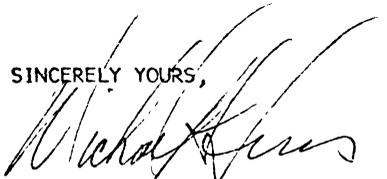
WIZARD - A SORT OF MAGICAL GAME OF RISK FOR 2-4 PLAYERS

ETC. MEANING KING, HAMABI, STARS, NONSENSE, AND ANYTHING ELSE WE GET TIME FOR, ABOUT 10 GAMES IN ALL.

Price \$25.00 AVAILABLE AUG. 1

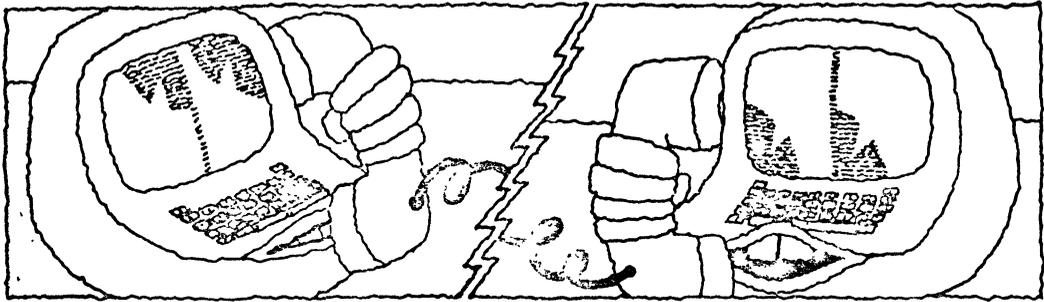
THAT ABOUT SUMS UP WHAT HAS BEEN AND WHAT IS ABOUT TO BE RELEASED BY US, IN DEVELOPMENT ARE A FULL BLOWN DATABASE MANAGEMENT SYSTEM; AN ANSI 74 COBOL COMPILER; ....

SINCERELY YOURS,



MICHAEL A. LEWIS  
 PRESIDENT

# TELECOMMUNICATIONS software for the AM-100



Do you have an AM-100 or sell them? Wouldn't it be easy if it had remote timesharing capability? WELL NOW IT DOES! Wouldn't it be useful if it could interact directly with other with other computer systems? WELL NOW IT CAN!

Khalsa Computer Systems has completed a powerful, easy to use telecommunications software package for the D.C. Hayes modem card running with the Alpha Microsystems AM-100. Add a phone line and a data coupler (DAA), and you have the capability to interact with virtually ANY COMPUTER or TERMINAL IN THE WORLD at up to 300 baud.

**IT ANSWERS THE PHONE . . .** A remote terminal with a standard modem may call your computer and use it just as a local terminal would. Passwords on user accounts protect your system from unauthorized use. Applications.

1. You can actually provide a REMOTE TIMESHARING SERVICE for subscribers and make money doing it.
2. You can have an AM-100 at your office and use it from your home
3. You can keep your AM-100 at home and still use it from work!
4. You can enable or disable the dial-in capability of a single line or of all the lines anytime, from your terminal, so your system can conveniently be made 'accessible' or completely 'secure'

**IT MAKES PHONE CALLS FOR YOU . . .** You may have your AM-100 call a remote terminal and have it connected as if it had called in. You may have your computer system CALL ANOTHER COMPUTER SYSTEM, allowing you to use the entire AM-100 as an intelligent terminal on the remote system. Think of it.

1. You can use the AM-100 to develop large programs 'off-line', then submit them to a remote system by phone when you are ready. You probably know that massive on-line editing on a large timesharing system can be costly. (You can send single or multiple files from your AM-100 system to a remote system.)
2. You can have the AM-100 collect data via card, paper tape, or optical character (OCR) readers, keyboard terminals, or lab instruments, PRE-PROCESS the data to eliminate errors, reformat the data, etc., then send it on to a larger system for further processing. The telephone company has done this for years with the phone repair data it collects in the field on mark-sense cards.
3. You can acquire data files from a remote system, storing them on your AM-100 disk.
4. You can even record every character of a session on a remote system for later editing or study. . .

**IT'S DONE RIGHT . . .** Our telecommunications package is VERY GENERAL in scope. It requires no special software in the remote systems you connect to. It is completely compatible with the Alpha Micro operating system, as we provide an interface driver (IDV) for the modem board and use the operating system for all data transfers. This preserves COMPLETE DEVICE INDEPENDENCE. You may have as many incoming or outgoing telephone lines as you need, and attach to them whatever terminals you like! We provide corrections and enhancements in the form of updates. We plan to put the AM-100 on the PCNET (a worldwide personal computer network) in the near future. We think you'll be pleased with our documentation too, as we give explicit instructions on installation, testing, AND usage.

**FREEBIES . . .** To make it even easier for you to say "I'll take it!", we are also providing several valuable extra programs for FREE. One allows users to send single or multiple line messages from any AM-100 terminal to any other - with the source terminal being automatically identified at the destination terminal (a la PDP-10). Another lets you get a directory of all the files on a disk, but writes the output to a FILE instead of just to a terminal. Another is a DISK CRASH RECOVERY program, which helps find and restore files, even if the master or user file directories are destroyed. Finally, we're throwing in vital details about QDT and DSKDDT, two very powerful debugging programs which Alpha Microsystems hasn't gotten around to documenting yet. . .

**WHAT ABOUT AVAILABILITY AND COST?** Both the software and the necessary hardware are IN STOCK NOW. The complete source code for ALL the programs is available for (a very reasonable) \$300. Object code alone is only \$125. Add \$275 if you want the D.C. Hayes modem card too (\$279.95 when purchased separately). We are proud of this package, and we are sure you will be pleased with it too. Call or write to receive full details, or better yet, **COME SEE IT WORK!**

**Come See Us**

**KHALSA**

COMPUTER SYSTEMS INCORPORATED

500 South Lake Avenue, Pasadena (213)684-3311  
Tuesday-Friday 12 noon to 8 pm, Saturday 12 noon to 6 pm  
Closed Sunday and Monday

Khalsa Computer Systems, Inc. has also been known as the Byte Shop of Pasadena since we opened in 1976.



# KITZMILLER SYSTEMS

JAMES W. KITZMILLER, MS  
PRESIDENT

252 SOUTH OXFORD  
LOS ANGELES, CALIFORNIA 90004

## BUSINESS MANAGEMENT SYSTEM May 1978

The Kitzmiller Business Management System for the Alpha Microsystems AM-100 includes 1.Order Entry, 2.Inventory Control, 3.Sales Analysis, 4.Accounts Receivable, 5.Accounts Payable, 6.General Ledger. It is a fully integrated system containing approximately 50 programs. It will work on dual floppy disk drives and can be easily expanded to multiple disk drives. It is menu oriented thoroughly so no flow chart is necessary to use it. The system guides you smoothly through its use.

The Order Entry System contains:

- a. Customer File Maintenance-will change, add to or delete from customer file records and will list customers on your printer or CRT.
- b. Order Entry-will enter sales transactions and print the Order Entry Journal(Sales Journal) on your CRT or printer.
- c. Print Invoice-is a feature set up for you to print out invoices.

The Inventory Control System contains:

- a. Inventory File Maintenance-allows you to change, add to or delete from your inventory file and will print it on your printer or CRT.
- b. Inventory Status Reports-lists your items in stock; their quantity, location, how many of any given item are on order and how many items are back ordered.
- c. Inventory Shortage Report-prints out items of inventory that should be ordered.
- d. Order Selection-allows you to select the items you are going to order.
- e. Physical Inventory Checklist-is a print out used as a reference when doing a physical inventory; counting what is in stock. It includes information regarding storage location of each item and has space for you to fill in things that you need. It is printed on 8½" by 11½" paper so it can be used on a clipboard.
- f. Inventory on Order Report-is a print out of the items you have ordered but havn't received.
- g. Inventory by Value Report- is a print out of all the inventory you have in stock, sorted in the order of the net worth of each inventory item.
- h. Purchase Orders-is a feature which will print purchase orders for you.
- i. Add Items to Stock-records the fact that you have received stock from vendors.

The Sales Analysis System contains:

- a. Salesman File Maintenance-which lists salesman on your CRT or printer and allow you to add to or delete from the salesman file.
- b. Sales Analysis by Product-lists the dollar value of sales of each particular type sold so you can see which products are moving well.
- c. Sales Analysis by Customer-lists sales, in dollars, to each customer so you know which customers are buying the most.

The Accounts Receivable Report contains:

- a. Accounts Receivable by Age-sorts your accounts receivable so you can see who has owed you money for the longest time.
- b. Accounts Receivable by Customer-lists how much each customer owes you with invoices catagorized by age(oldest first).
- c. Invoice Print-will print invoices for you.

The Accounts Payable contains:

- a. Vendor File Maintenance-which will print vendor list on your CRT or printer and allow you to add to or delete from your vendor file.
- b. Aged Payables Report-is a print out of accounts payable by age. Your oldest bills are listed first.
- c. Selection of Bills to Pay-allows you or your accountant to select which bills to pay and records the payment automatically in the General Ledger system and deletes the amount paid from the accounts payable records.

The General Ledger contains:

- a. Chart of Accounts-is a listing of each account in your general ledger system. An account is a slot where money is spent or received. A chart of accounts is a list of where your money has come from or gone to. This can be printed on the CRT or system printer.
- b. Report Structuring-enables you to set up of configure the profit-loss statement(income statement) and the balance sheet.
- c. General Journal-will print all general journal transactions and allow you to put data into the general journal.
- d. Cash Receipts Journal-lets you enter transactions in the cash receipts journal and get a print out of transactions as needed.
- e. Cash Payments Journal- allows you to enter transactions in the cash payments journal and get a print out of transactions as needed.
- f. Trial Balance- is a listing of the dollar amount associated with each of the various accounts, whether it's a debit or credit, and the report will list and sum up all of the debits and credits, which will be equal.
- g. Print Reports-allows you to print profit and loss(income) statements and balance sheets when you desire.
- h. Month End Closing-wraps up all of the accounts at the end of the month. There is no report associated with this.

If you purchase the Kitzmiller Business Management System you will receive the object code(those compiled programs which make up the Business Management System) and a license to use this copywrited system on a single computer.

A note on using the Business Management System:

File maintenance is done through use of a form which is displayed on the CRT. To add records the user simply enters the data at the appropriate point, as called for by the computer, on the form. Data is stored and retrieved by specifying a code number such as a part number, vendor number or customer code.

To change records the user enters the code of the item to be changed. The computer automatically displays values of each data item in the appropriate place on the form on the screen. You can then change only the data items you wish to change and the record is updated automatically.

To delete items you simply enter the code for the item to be deleted. The computer then displays the full data for that data record. Then you can decide whether or not you really want to delete that record and do so.

More comprehensive data listing is available in easily readable form on a 132 character wide printer.

ANNUAL CONVENTION

of the

ALPHA MICRO USERS SOCIETY

at the

Los Angeles Convention Center

November 3-5

Held in conjunction with the 3rd West Coast Computer Faire

Contact Ron Eade about special  
interest group meetings, participating on a  
panel or helping him. Computer Center  
8205 Ronson Road  
San Diego, Ca 92111  
(714) 2925302

Meet Alpha Micro Personnel

Learn at the Booths

Voice your opinion

Discuss AMUS with Jim Taylor

See who is inventing the same wheel

Hear latest news from A/M

Bring your problems and solutions

Visit with friends

See a wizard at work - Jim Warren

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.

AMUS INFORMATION

If you need more newsletters, brochures, or information, please fill out the order form and return it to AMUS, c/o Jim Taylor, P.O. Box 1723, Boulder, Colorado 80306.

\_\_\_\_\_ Copies of the AMUS Brochure and Membership blank..Free

\_\_\_\_\_ Copies of the Current Newsletter @ 15¢ each

\_\_\_\_\_ Copies of back issues of the Newsletter @ 15¢ each

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

ENCLOSED \$ \_\_\_\_.

ALPHA MICRO USERS SOCIETY  
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