

Newsletter

VOL 3 NO 6 JULY 1980

ALPHA MICRO USERS SOCIETY 1216 Pearl St., P.O. Box 1723 Boulder, Colo. 80306 (303) 449-6917

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AMUS office hours are from 8:00 AM to 5:00 PM, Mountain Time. Our overworked secretary is Sharon Greene who is happy to assist you with any question you might have about AMUS, or the Alpha Micro Computer. If she doesn't know the answer to your question, she will try to direct you to someone who does.

The AMUS Newsletter is published monthly and sent to all AMUS members. Additional copies and back issues of the newsletter may be ordered from Sharon Greene. AMUS members may place one full page advertisement in the newsletter each month at no charge. Please submit material as high contrast, camera ready copy on 8 1/2 X 11 inch white paper. Bug, fixes, articles, letters, reviews of software and information about Alpha Micro applications are happily accepted. material must be received by the 20th of the month for inclusion in the following month's edition.

The Alpha Micro Users Society Network is a computer system meant to give members access to information and other Alpha Micro users with similar interests. It consists of an Alpha Micro computer with a Hawk disk drive, a 300 baud modem, a 1200 baud modem, and 160K of memory. AMUS members are given an individual account and password on the Network so that they may receive personal electronic mail. Many thanks to Alpha Micro Systems in Irvine, California; North America Title Co. of Houston, Texas; and The Byte Shop of Reno, Nevada who have donated equipment and software to the Newtork.

AMUS has a library of programs that have been donated by members for distribution to other members. Programs are available either through the AMUS Network, or, if you prefer, we can make floppy or Hawk cartridge copies and mail them to you. Orders may be placed through Sharon Greene.

AMUS July, 1980 Current membership: 950

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FROM THE PRESIDENT

This last month several things happened that will help to make AMUS a better organization. The board of directors held a conference call meeting and covered several items including plans for a week of seminars and meetings to be held in Florida in January. Bill Miller is heading up efforts to assemble rooms, courses, and topics. If you have any ideas for items that you would like to see presented, discussed, or that you would like to share with other AMUS members contact him. A considerable amount of discussion centered on software evaluation. Burl Hubbard's committee on software evaluation has developed three possible forms which we are going to review, and one will be selected as a guide for evaluating products. Means were also discussed for covering the expense of producing software reports.

The Network has been having it's problems. We were without a terminal for over three weeks due to a blown picture tube and crossed communication with vendors, repair shops, UPS, and every other thing lurphy could throw at us. When we did get the system back up, the driver for the D C Hayes board didn't want to cooperate with the new User Accounting System that we got from the Byte Shop of Reno, so we are waiting for the new interrupt driven one from Khalsa Software to arrive in hopes that we will cure the problem.

We also are going to start using the Data Base Management System from Khalsa to keep track of AMUS members. We will be wanting more information from members about interests, how they are using the Alpha Micro, and what their special talents are. Once we have all this loaded up and on line, we will be able to share information, and find answers to problems more quickly. One of the most frustrating things is to know that we heard a member mention that they had a piece of software, or a fix to a problem, and not be able to find where it came from when another member calls in with the same problem. Hopefully, a DBMS system will help eliminate some of the lost answers.

You have noticed the new format for the newsletter by now. We are getting used to the larger page size, and believe that the improved quality of printing will entice more software and hardware developers to submit good quality announcements of their products. Every AMUS member is entitled to one page of advertisement per month at no charge. Please take advantage of this so that everyone can see what you're up to. AMUS is here to spread information around. We'll try our best to keep track of who has what, who wants what, and how to find same. We can only do that if you keep in touch with us, and tell us what you have, and what you need.

One of the best ways to tell the world about your software is to fill out the software survey form that is in the back of this month's newsletter. Please copy the form if you have more than one product, and send us the completed form as soon as possible. Sharon is going to put all of the information into the Network so that anyone who wishes to browse through software for sale will see your description.

We are looking for experts who are willing to answer questions from AMUS members on various topics. If you would like to help other members and have an area of expertise, we would like to keep your name on file. When someone has a problem, we will contact you, you can decide whether you can handle the problem, and if you like, call the person collect.

Please contact us when you have solutions totricky problems. We hear about problems, but we don't hear about people who have solved problems. It would be nice to have information about how to hook up Apple computers as smart terminals to the Alpha Micro, we know it's been done, but we can't tell other people how to do it until you send us the information.

Stephan K. Elliott

The AMUS Newsletter is published monthly by AMUS, P. O. Box 1724, Boulder, Colorado 80306. Subscription rates are \$7.50 per year. Application to mail at second-class postage rates is pending at Boulder, Colorado 80302.

This month's cover was created by Alan Martin on the CDC 7600 using a graphics software package called DIGRAF.

MOHLER ARMATURE AND ELECTRIC, INC. RR #3, Eby Road Boonville, IN 47601

This is my first letter to AMUS. While I have only been on this Alpha Micro computer for a short time, one of the best things that I have found is this newsletter. I have learned a lot from just reading this year's copies that I didn't find in Alpha's documentation. I appreciate the listing of bugs even if another reader didn't. If he can't ignore what he already knows and just looks for what applies to him, that is his problem, not yours. Sharon doesn't apply to me, I file it away for future reference just in case.

I have found my dealer (Data Domain) in Bloomington, Ind. to be very helpful and reasonably accessable when needed. They have two toll free numbers you can call - one in state and one for out of state. In addition, I also have the home number of their main Alpha programmer. Can't ask for more than that I guess.

Documentation is my biggest complaint about Alpha Micro. It is completely inadequate for someone who is new to the system. I have had to learn more by trail and error or calling Mike at Data Domain than be getting out the manuals and looking something up. The documentation is not in very good order and there seems to be a lot missing. I have had on order for several weeks a duplicate complete

set of documenation in case something was misplaced by the previous systems operator and I can't find it. Maybe when this arrives, my supporting documentation will be more complete.

One of the first editions of the newsletter that I read had a letter from Champaign Computer Co. discussing a bi-directional driver for the NEC 5510 printer. I called them and talked to Ir. Bob Rubenhunst who wrote the driver. He was extremely friendly and helpful. He was able to give me information than would speed up my printer without even changing the programming. However, I did go ahead and purchase his driver. The printer now prints in both directions just as fast as it would only print before in one. I have also been looking at their accounting package. It definately has a lot of improvements over the standard Alpha Accounting.

By the way, anybody else crash when trying to TXTFNT a letter? I've run into an occasional problem if I list my parameters in a certain order. Where does Alpha's documentation tell you about that?

Sincerely, Lee W. Besing

American Chemical Society 1155 Sixteenth Street, N.W. Washington, D.C. 20036 202-872-4433

The American Chemical Society acquired its third Alpha-Micro system in January. We have a 192k multi-user system, with 5 Soroc 140's, a modem and portable terminal, Persci and Hawk disk drives, one TI and two Qume printers on this system. I act as "System Administrator", coordinating the use of the system by several departments.

With the exception of the first month of use, the Alpha-Micro has proven itself to be a powerful and essential tool for our work. (The first month was plauged by crashes due to static and the fact that several long terminal cables, which spanned 5 floors, were not shielded from nearby power cables).

We use the computer primarily in two areas: word-processing, and statistical analysis of surveys. We use VUE and TYPE-RIGHT for word-processing work, and write our own data entry and statistical analysis programs.

- I would be interested in communicating with anyone using their Alpha-Hicro for statistical work. We have the "Statistics" software package from Basic Business Software, but haven't found it applicable to our work. Any information available on statistical packages which will run on the Alpha-Micro (something similar to MINITAB, SPGS, or SAS) would be valuable to our work.
- I have written a series of programs which produce "cross-tabulations" of data from our surveys. The produce statistics such as counts, row and column percents, means, percentiles, and standard deviations for each table cell. I am currently working on generalizing the data set and would be interested in any ideas that would be useful to survey analysts.

In closing, I would like to commend the people who put together the AMUS Newsletter. It is packed with much useful information not documented in the AMOS manuals.

Respectfully, Harry J. Foxwell

AMUS SEMINAR

COMMUNICATIONS ON THE ALPHA MICRO COMPUTER
August 19, 1980
Boulder, Colorado
Taught by
Larry White
of
Khalsa Research Corp.

This seminar will discuss the communication capabilities of the Alpha Micro computer. Larry developed the D.C. Hayes communication packages for the Alpha Micro and will be demonstrating how that system, among others, works. The AMUS Network will be available along with another machine equiped with communication facilities at the site, so that calls can be made and received within the clasroom.

This is a hands on workshop where ideas can be tried out, and participants will be able to see every example work.

Cost for the one day seminar is \$100.00. Contact Sharon Greene at the AMUS office for further information and registration. Limited to 10 participants

AMUS SEMINAR

DISK RECOVERY TECHNIQUES SEMINAR August 20, 1980 Boulder, Colorado

This seminar will cover the techniques used to recreate the master file directorie and user file directories that have been lost through some unfortunate mishap. In addition to learning exactly how the directories are constructed, and how they can be saved, you will learn how to prevent such problems, and how to save hours of work when a disaster does strike.

The class will be limited to ten participants. Contact Sharon Green at the AMUS office for further information and registration.

A M U S S E M I N A R
AMUS NOVICE SEMINAR
August 21-22, 1980
Boulder, Colorado
Taught by
Steve Elliott
President, AMUS

Course Outline:

- A. The overall picture of the AMOS operating system
 - 1. User accounts
 - 2. Disk file handling
 - 3. Memory configuration
 - 4. AMOS manuals
 - 5. System updates from Alpha Micro
- B. Bringing up & configuring a system
 - 1. SYSTEM.INI
- C. AMOS
 - 1. The AMOS Top 40 system commands
 - 2. Command files
 - 3. The terminal drivers
- D. VUE
- E. TXTFMT
- F. AlphaBASIC
- G. Miscellaneous things to know
- F. Open for questions and practice

The two day seminar will cost \$150.00. Contact Sharon Green at the AMUS office to register.

AMUS SEMINAR

ALPHA ACCOUNTING SEMINAR August 21-22, 1980 Boulder, Colorado Taught by Jim Taylor

Data Processing Consulting, Inc.
Boulder, Colorado

- I. All the sub-systems will be covered except the Order Entry and Inventory. This sub-system is new and not well enough known yet. For each of the other sub-systems (AR, AP, GL, and PR), the following topics will be covered in two days, approximately four hours for each sub-system:

 - 3. Data flow
 Where the data is and what you can't
 do about it
 Recovery and backup
 - 4. Accounting practices observed in the system Open-Item, Balance-forward type accounts Accounting integrity
 - 5. Other topics as time permits or in place of planned topics.
- II. Pre-requisite for attendance will be a valid user's license.

Cost for the two-day seminar is \$150.00. For registration information, contact: Sharon Greene at the AMUS offices, (303) 449-6917.

THE WP WORD PROCESSING SYSTEM BOB TOXEN COMPUTER SYSTEMS 2319 De La Cruz Santa Clara, CA 95050 408-496-0855

Professional quality word processing for the Alpha Micro computer at an affordable price. This system has been develoed for the businessman and professional. Don't be fooled by low-grade software that promises to eventually have some useful features.

Here are a dozen of our most useful formatting features:

- Easy to use software with a well-written manual, examples, and an on-line help facility.
- Spelling error and typo detection using an on-line 70,000 word dictionary.
- Automatic hyphenation at end-of-line using the dictionary, justification and proportional spacing.
- Bold printing, underlining, superscripts, subscripts, and footnotes. -
- Table of Contents and alphabetized index generated automatically.
- 6. Centering of lines automatically.
 - Three part running titles and footers with automatic page numbering in many formats including Roman Numerals.
 - Easy preparation of tables and automatic multi-column (like a newspaper).
- Tailor-made commands using our macro faility.
- 10. Form letter generation with selective extraction from Alpha Accounting including numeric fields.
- 11. File merge capability to quickly piece together sales brochures, legal briefs, large manuals, etc.
- 12. Have today's date and/or current time printed automatically.

Here are a dozen of our most useful editing features:

 Can be used with any terminal having an addressable cursor (including the new full page terminals), but will use insert and delete line if terminal has them.

- The commands are easy to remember i.e. d for down, x to delete a character, a to add text, etc. and can use function keys.
- Can move the cursor left or right by specified number of columns or words.
- 4. Can move the cursor to the Nth previous of next occurence of a specified character on current line.
- 5. Can move the cursor directly to the beginning or end of the line.
- 6. Can move the cursor up or down by the specified number of lines or pages or to a specified line or page of document.
- Can add text before or after any line or in the middle of a line.
- 8. Has wrap around: If you type past the right margin the word you are typing will automatically be moved to the beginning of the next line where typing can continue.
- Can search the entire document for a word or phrase.
- 10. Can globally search and replace every or selected occurrences of a phrase with any other phrase.
- 11. Can move, copy, or delete any section
 of text (cut and paste).
- 12. Can save entire document on disk without leaving the editor for backup in case you subsequently issue the wrong command or the system crashes.

We give a written 90-day warranty: we will fix any bugs or give you your money back. Does anyone else give you any warranty? Updates for any later version are only \$30 even after warranty period.

Compare our features to the competition and you'll realize that there is no serious competition.

References from happy customers available on request.

Prices: Hawk \$599.99, Phoenix \$799.99, Floppy \$499.99, Supply your own hard disk and the price is \$499.99.

Khalsa Research Corporation

Simple Data Base Manager (SDBM)

Khalsa Research Corporation is now offering a <u>Simple</u> Data Base Manager for the Alpha-Microsystems AM-100 computer. This software product provides an easy to learn and simple to operate method for storing textual data in fixed format records. This really IS a simple data base manager. It is not high priced and it doesn't have a lot of complex features — but it might be just the thing you need. Novice users rave about it because they can get useful results so readily at so little cost.

New data structures are easy to create. SDBM allows you to set up an arbitrary length file of records, where each record is fixed length, and contains a fixed number (up to 20) fields of characters. The user specifies how many characters are to be stored in each field, and gives each field a name and a data type.

The user can add, delete, and modify any of the records in the data base. Records may be added, up to the number of records available in the file. Records may be deleted, and later packed together at the end of the file. The fields in any record may be modified by entering new text from the user CRT terminal. The records in a file may be sorted on the basis of any combination of up to three fields.

A very powerful data-base to data-base selective merge capability makes it easy to modify old data structures and to generate new ones from composites of others. A simple report generator program, SDBMR, comes with the data base manager, and may be used to generate easily readable printed output.

SDBM and SDBMR are written in BASIC, and run in 32K bytes (not counting the RUN package). This EASY TO USE and VERY INEXPENSIVE system may be licensed through your local AM-100 distributor if he is a licensed dealer for us. If there is no KRC software dealer near you, just give us a call and we'll help you out.

As with all our products, you can update to a new release for \$25.99 plus shipping and any applicable sales tax. We recommend that you license the SOURCE files for this package, so that you can recompile when necessary due to Alpha Micro revisions of the operating system or the BASIC run-time interpreter.

Khalsa Research Corporation Lamanda Park 108 131 N. San Gabriel Blvd. Pasadena, CA 91107. (213) 681-5111



automated information management

Alpha Micro User's Society P.O.Box 1723 Boulder, Colorado Attention: Sharon Greene

Dear Alpha Micro Dealers;

We have two systems that Insurance Agents are talking about. Our Property and Casuality Systems provide independent insurance agents a mean to better handle their information management problems and also help maintain and build that ever important client base.

Our AIM Life Management System is specifically designed with Life Insurance agents in mind. This AIM System provides agents with the basic capabilities he needs for sophisticated finacial analysis and proposals. With each of these AIM Systems, the agent can provide services to his client that are unsurpassed by any other insurance agent.

To obtain further information about the AIM Insurance Systems please call or write me. I think we can do business together.

Talk to you soon,

Scott Weaver

Marketing Representative

Data Processing Consulting, Inc. P.O. Box 1723 1900 Folsom, Suite 212 Boulder, Colorado &0306 303-449-8847 DISK #9 M.U.B.S.

(Municipal Utilities Billing System)

The MUBS package is written so that it can interface to AlphaAccounting or replace the Accounts Receivable module of AlphaAccounting.

MUBS does all utilities billing, including calculated and fixed rates and budget billing.

MUBS will handle:

- * all types of meters: gas, water, electric
- * sewer charges, fixed or percentage
- * garbage collection
- 3 types of taxes (user programmable)
- * 2 different types of adjustments (fuel cost adj., purchased gas adj.)

The Main Menu is shown below:

PLEASE SELECT APPLICATION:

1. CUSTOMER FILE MAINTENANCE	9. CUSTCMER ACCOUNT INQUIRY
2. METER FILE MAINTENANCE	10. PRINT ANALYSIS REPORT
3. METER READING PROCESSING	11. CALCULATE/FOST FINANCE CHARGES
4. CR MEMO / DR MEMO ENTRY/EDITING	12. PRINT MONTHLY SALES SUMMARY
5. CASH ENTRY/EDITING	13. PRINT MONTHLY CASH SUMMARY
6. APPLY CPEN CREDIT	14. PRINT MAILING LABELS
7. PRINT RTE SEQ METER LISTING	15. PRINT PAST DUE REPORT
8. PRINT TRIAL BALANCE	16. SYSTEM MANAGEMENT

Purchase of MUBS source package requires an AlphaAccounting License.

MUBS is an extensive package of 107 programs, residing on 3407 blocks with elaborate documentation.

The run files require 1079 blocks.

2000 meters can be handled on a 1010 system. 9000 meters on a 1030 system. 29000 on one disk of a 1050 system.

Now being installed in Clinton, IL.

FORTH NOW AVAILABLE FOR THE ALPHA MICRO

The FORTH programming system is now available on the Alpha MicroSystems AM-100* computer. Based on an implementation model by the Forth Interest Group, AM-FORTH runs under the Alpha Micro Operating System (AMOS)* and includes the basic FORTH programming language, an interface to the AMOS file structure, and a FORTH text editor.

FORTH consists of a flexible yet simple programming language coupled closley with a compiler, editor, disk file structure, and other operating system functions. Tasks are accomplished interactively by direct execution of defined operations or "words in the dictionary". Over 130 user oriented operations are included in the basic vocabulary.

The user may easily extend the language by defining new words in terms of other already defined words. These may be entered directly

from the operator's terminal or placed on mass storage using the editor for later recall and entry into the dictionary. FORTH strongly encourages use of top down program design techniques and facilitates bottom up testing resulting in more efficient and reliable programs.

AM-FORTH includes the basic programming language, a flexible interface to the AMOS file structure, and a FORTH text editor. The system requires a minimum of 8k bytes in the user's memory partition and expands as needed to accommodate a growing dictionary. An AMS or STD format disk is available along with implementation documentation at a cost of \$40.00. Contact George Young, SIERRA COMPUTER COMPANY, 617 Mark NE, Albuquerque, NM 37123.

* (ALPHA MICRO, AM-100 and AMOS are trademarks of ALPHA MICROSYSTEMS, Irvine, CA.)

Alpha Microsystems 17881 Sky Park North Irvine, CA 92713

A few comments about some items in the latest newsletter:

A few minor corrections regarding Electronic Mail; this was never scheduled to be released with 4.4. It was being shown at the NCC in a preliminary form to show its capabilities; it is not yet ready to be distributed. While we were uing a UDS modem at the show, we have not yet selected a particular modem for use with the system.

PASCAL, likewise, was not scheduled for 4.4; instead, it will be distributed on a seperate release in August. Ordering information will be supplied in the next issue of "Software Notes"; until then please don't try to order one.

lir. Davidson does not seem to understand how the verification feature of the AM-500 driver is intended to work. All data read from the disk is checked for integrity via a CRC code. CRC codes are very good for detecting errors in data; however, CRCs are only checked during the read operation. This means that in the event of a bad area on the disk, the user would not know of the error until he tried to read the dta back; no error would have been given during the write operation. Due to the inherent reliability of the disk, this is not

normally a problem. However, in a few applications it is desirable to detect this type of error during the write operation; for this reason the VERIFY mode was added. What this does is perform a read-after-write operation to verify that the data is readable, and that the CRC is correct. Given the properties of the CRC code, it would be superfluous to compare each byte of the disk block, as well as requiring an additional 512 byte buffer. Therefore, the SET VERIFY command works just as it was intended. It should be noted, however, that ONLY the AM-500 and AM-410 drivers have this option implemented.

Mr. Feldman's fix for the AM-100/T serial ports (pulling out pin 18 of the 2651) solves one problem while creating another. By removing pin 18, you will prevent the port from functioning properly with a device which uses the Data Terminal Ready line. A software fix for the original problem, which does not cause this second problem, is included on 4.4.

I hope this information is of use to you. If I can be of further assistance, please don't hesitate to write.

Sincerely, Bob Currier

DUNN, MOORE & ASSOCIATES

¥ 8 USED SOFTWARE FOR SALE RENTAL PROPERTY MANAGEMENT (RPM) ¥ Economical used software from 1979 Model, running condition. A Dunn, Moore & Associates will complete system for residential provide years of dependable and/or commercial application. service. These products have (See June 1980 Amus Newsletter) been heavily used by present MEDICAL ACCOUNTING (MEDSYS) owners, but are still fully warranted by the manufacturer. Priced appropriately for end-100% OF OUR DOCTORS AGREE! ¥ users or dealers. MEDSYS provides faster relief than Bayer, Excedrin or Anacin × and doesn't upset your stomach. -12 ¥ * * * * MEDSYS * * * * ¥ y. × A well-designed, cost effective accounting tool with unique .3 ¥ features, MEDSYS provides the answer for physicians who seek ¥ relief from the blizzard of paper that medical accounting procedures typically require. ...Diagnosis and treatment, charges and credits, ¥Ę ¥ billing and bad accounts, and other information ¥ is entered and stored for instant access at any CRT workstation. æ. × ...Patrent invoices are automatically printed, whether personal statements, private insurance ¥ bills, medicare or state welfare forms. ... Billing can be accomplished in one working day, including an aged receivables report. ...Transactions are totalled daily with automatic deposit slip printing. ... All stored data is protected by non-displaying, * user defined passwords which may be initiated, ٠, changed and deleted at your discretion. ... Telecommunications is provided for instant software support.

4.4 bugs as per John Lindsay and Dick Leach

- In the SYSTEM.INI file if there is no WAIT after a FORCE, and you follow the FORCE with a MOUNT, the system hangs up.
- DUMP with no arguments is a disaster. Also, DUMP will not take a number as the first character in a filespec.
- 3. VUE now uses a control 'P' to mark blocks. You can't use just one control 'P' to mark a single line, you must use two.
- 4. The IBM 3103 terminal works ok for most stuff on Alpha Micro, except that the way it handles screen attributes (intensity, page send, etc) tends to interfere with VUE and other fancy screen functions. I'm not sure how all of this works...John Lindsay can fill you in on all the details if you need to know more.
- The Hazeltine driver doesn't check for the 8th bit, so you can't swap the RUBOUT key.
- 6. BASIC doesn't exit properly if you control out of image mode. (That's what my notes say, but I don't understand it.)
- 7. Also (speaking about BASIC), BASORT will add duplicate records to a random access file. Dick Leach also had a customer that reported BASORT error messages in 4.4 where here were none in 4.3A. It complains of improperly opened files. It appears that you cannot sort a sequential file back into itself. You must open a second file with a different name for output.
- 8. Yes, there really is a PROM change in 4.4 for the Phoenix drive. We had a notice about that in the newsletter.
- FIX is a mess. Alpha Micro says that dealers who request a working FIX can order it. You must call them, they won't call you.
- 10. If you have an AM100-T with a 210 board on it, it won't boot under 4.4.

4.4 bugs as per William Miller

DSKCPY.PRG = 650-333-006-154

- Does not recognize write protected output drive. (Gives verification errors).
- Any label on the output disk is written over with the input disk's label. (Only FMTnnn.PRG, CRT 410.PRG and LABEL.PRG should affect a label.)
- 3. Works faster even on floppies. FIX.PRG = 723-735-752-215
 - Could not get it to work at all. Kept getting "FWT0:?Buss error - PC000022" message.

VUE.PRG = 224-074-510-267

- 1. CTL (toggle entry) the letter "I" is
 not displayed on screen. (CTL "Q"
 (Toggle Chara Insert) works fine).
- Bottom line of screen is filled with last line of text when CTL "Z" is hit. Successive CTL "Z's" will cause "bottom line creep". (A horrible terminal disease).
- 3. Last line remaining in a text cannot be CTL "Z"ed. Leaves a control at sign followed by remaining text on line.
- 4. The MENDEF.MAC (see VUE Appendix B) was omitted from the release 4.4. Cannot work on menus.
- 5. The ref. to "2.5.2" on p. 3-16 should be 2.4.2.
- 6. Mode problem after YANK & UNYANK. Puts user in insert mode after YANK regardless of original mode.
- 7. Professional product. TELVID.TDV = 305-606-760-347
 - - Too many bugs to mention. Needs a lot of work.

Jonathan Barrow, at Eastern College in St. Davids, PA is interested in starting an Educational subgroup. If you are interested, please contact him at Eastern College, St. Davids, PA 19087 or call him at 215-688-3300.

SPARE EQUIPMENT FOR SALE

1 DC HAYES 103A Modem Board for sale for \$200.00 and 2 Piiceon 64K Ram Boards priced at \$1,100 each. For more information contact Mike Sanderson of Honeywell, Inc., at either 317-243-0831 ex. 219 (work) or 317-291-7333 (home).

BUGLIST #14 (version 4.4) per Bob Fowler

First of all, thank you for electing me to the Board of Directors at May NCC.

Second, as of 6/9/80, I am now at Alpha Information Systems in Silicon Valley.

Third, I am now surrounded by more Phoenixes than Hawks/Floppies. Thus, more often than before, I will quality bugs reported herein as to whether they occured on a Phoenix/Hawk/Persci (usually the first). Most bugs won't change from one drive to the next.

Fourth, it was pointed out in the last newsletter that there has been a proliferation of buglists in AMUS newsletter, many silly, unchecked, late, and unreproducable. This is true. Buglsts have bugs themselves (they're recursive, like PASCAL). Each time I send a buglist, I know the odds are high that some sections will fall into one or more of the above categories. Because it is a convenient

way to share information, I send AMUS a copy. Because AMUS can only do so much, there is a minimal editing done. Because actual software distribution is such an involved process, Alpha Micro is reticent to distribute "fixed" programs between releases; DDT fixes are sent out for the more critical problems. Dealers must be prepared to take up the slack on the remaining problems. I agree that it would improve things if Alpha Micro sent out an informal but regular software newsletter to all dealers and AMUS. What ever happened to Software Notes? Exactly one "monthly" issue has come out so far (Feb. 80).

Finally, Version 4.4 is a pre-release to dealers; most users will never see it, but will receive the 4.4A final release. Buglist \$14 is here now because Alpha Micro has solicited comments from 4.4 users; 4.4A will reflect some of these dealer comments.

Bob Fowler

AMOS BUGS (version 4.3A)

- 1. Software Notes -- new publication
 Volume I #1 of Software Notes came out
 dated Feb. 1980. It is intended to be
 an informal (hence quick)
 communication of bugs/patches from
 Alpha to dealers. As of today, there
 has been only one issue. Since 4.4 is
 out, this is old stuff, but (for the
 sake of completeness), let me
 summarize the contents of this
 publication.
- 2. Bugs reported in Software notes #1
 - a. BASIC —— if SCALE is set to 0, them EXP will not function correctly.
 - b. FIX --- execution of FIX (-0.5) will crash the system.
 - c. FOR-NEXT --- each NEXT that is skipped over takes 18 bytes off the user's memory; after enough time, crash.
 - d. TXTFMT --- UNFORMAT should doesn't automatically do a BREAK (see 4.4)
 - DSKANA --- doesn't update bitmap in memory afterwards (see 4.4)
 - f. SYSMEM --- reports each end address as 2 bytes less than it really is
 - g. CMD files --- no longer automatically executes last line is if :R were set

- 3. Fixes given in Software Notes #1 (call it version "4.3B?)
 - a. DSKANA --- corrects slow output on large block numbers
 - b. ICMDVR --- corrects an error generated by FIXDVR
 - c. ICMDVR --- remedies IO port conflcts on ICOM+HAWK systems
 - d. AMSORT --- corrects a bug when sorting files in descending order
 - e. SYSTEM.MON --- character was left in input buffer after exiting VUE.

AMOS BUGS (version 4.4)

AMSORT --- changed from .PRG to .SYS

The sort programs were changed significantly, and so was AMSORT (FLTCNV remains the same). Because of this, it appears that Alpha wisely chose to rename AMSORT. Thus, there is no way that a user can unwittingly mix the sort programs from different AMOS versions and not realize it. Unfortunately, Alpha unwisely makes no reference to this renaming. Any command files that LOAD AMSORT.PRG (1,4) will need editing. Thus, if you use Alpha Accounting, you must edit the 5 command files L??.CMD(2,2).

2. BASIC --- another MAP problem

The following program took a looooooooooo time to isolate and simplify:

- a. MAP1 A\$,S,1
- b. MAP1 B\$,S,1

c. MAP1 C\$,S,6,A\$+A\$+D\$+E\$+F\$+B\$

If this program is COMPILed on disk, and then run, we get a BUSS ERROR on our Phoenix System. If the 3 lines of code are simplified in any way, the problem will appear to go away. So if you're listening out there, Alpha, be sure to type it in exactly this way. Also, run it from job #1. Finally, if this program is LOADed and RUN in BASIC, it will crash system.

3. BASIC --- CALL doesn't check

Enter BASIC and type "CALL A". BASIC responds with "Stack Overflow".

4. BASORT --- sequential bug?

Dick leach has a customer (Colorado) who reports that 4.3 BASORT correctly performed a sequential file sort. With no change in program code, 4.4 BASORT now fails to do the sort and gets a message "file improperly opened". This is with 4.4, not 4.4+fix (see last bug in this section).

5. DSKCPY between Phoenix drives --- problems?

This may be our problem, but we are not quite sure. The symptoms are: On two phoenix drives (DSK0:-DSK5: and DSK10:-DSK15), we could DSKCPY fine within either drive, but were unable to copy between the drives. First DSK10: was CRT410ed, then DSK0: was DSKCPYed to it. During the DSKCPY, about 15 verification errors were reported. It turns out that each of these blocks corresponded to sector 24 of its particular track. A subsequent REDALL turned up errors also, but at different block numbers, and these were always at sector 0 of some track. A second attempt was made, using Similiar CRT410, DSKCPY, REDALL. obtained; were non-verifying blocks were different, but were again all sector 24's. finally made the transfer by DSKCPYing onto the cartridge, loading the cartridge into the other drive, and then DSKCPY it within that drive.

6. FIX manual --- erratum

4.4 FIX just plain doesn't work. Crashes system. Beside that, there is a minor error in page vii of the manual. In the table on that page, the SWAP command character is missing. It should be a tilde.

7. FIXDVR --- documentation erratum

On page 3 of the command reference sheet for FIXDVR, it says that the "AM-210 does not support CDC floppy disks". Should read "AM-200".

8. HASHER --- doesn't work

We tried "HASHER DSK0:" on our Phoenix system, and got this response: (Hashing 29088 records) ?Disk size not defined in copy table

This error is mentioned (but not explained) in the HASHER reference sheet.

Disk LABELs --- disk characters gets chopped off

The 5 data fields currently used in disk labels are supposed to allow up to 10,30 or 40 characters (depending on the field), but are actually only allowing up to 9, 29 or 30 characters. A DUMP of block 0 on the disk shows that the fields are also chopped on the disk itself.

10. Disk LABELs --- not consistent

When DSKCPYing disk A to disk B, there are 3 possible labels that can be left on disk B by DSKCPY, namely:

- a. Label A (ie, each label is copied along with its software)
- b. Label B (ie, each label is left along with the hardware)
- c. (blank) (ie, clear the label and
 make the user re-label)
 It appears that, for Phoenixes, DSKCPY
 uses method (c), and for Hawks it
 users method (a). Over the phone,
 Bill Miller took a strong stand in
 favor of (b). Confusing, isn't it?
- 11. Disk LABELs --- a funny situation
 occurred

When a DSKCPY between 2 (Phoenix) disks was control-C'ed after several seconds, and LABEL was used to replace the Disk Label, a funny situation developed: LABEL and MOUNT would now both read the new LABEL on the disk, but XMOUNT in BASIC would not. If an

"XCALL XMOUNT, VOLID\$" were run in BASIC, then VOLID\$ would return with a null string.

12. Disk LABELs --- copied into BADBLK.SYS
 file?

When DSKCPYing a Phoenix cartridge (DSK5) onto two fixed disks, it appears that the DSKCPY to DSK1 was ok, but the DSKCPY to DSK0 copied the BADBLK.SYS Volume ID of DSK5 into the BADBLK.SYS Volume ID or DSK0.

13. MACRO (Assembler) Manual --- erratum

On page 5-10, 2 lines before section 5.4.4, the expression "generates CALL PC,TAG" should read "generates JSR PC, TAG".

14. MACRO --- command reference sheet
 update missing

The command reference sheet introduction lists MACRO among the changed sheets. It is actually missing from the packet.

15. TXTFMT --- Double Indent must be abbreviated?

Since it was introduced, DOUBLE INDENT would always fail if written out in full. The manual indicated it could be spelled out or abbreviated. In the 4.4 manual, "DOUBLE INDENT" is now the only command that is not shown in a spelled-out form (although this is not emphasized). Evidently the syntax is colliding with another command(s) and is a problem.

16. new VUE menus --- MEMDEF.MAC

Appendix B of the new VUE manual describes the new VUE menu format, and mentions that the macro definition needed to support it are in the new file MENDEF.MAC. This file is missing.

17. VUE manual --- some new things omitted
 from the summary pages

The new SAVE (and obsolete SMART) commands should be added to the command summary table on page vii, and control-G (important) should be added to the controls summary table on page viii.

18. VUE manual --- erratum

In section 3.5, line 3, "Section
2.4.5" should read "Section 2.3.5"

19. VUE --- Control z bug

Enter the following, starting at monitor level:

20. VUE --- beware control S too early

If you have just typed "VUE (filename)", and VUE is being loaded, then type a control s, AMOS will grab it and stop output to your crt. As soon as VUE gets loaded, you are stuck, because any subsequent control Q will be grabbed by VUE (or something else), and AMOS wil no longer "hear" you.

21. VUE --- HELP doesn't work

Evidently, either "HELP (boolean)" or "HELP? (boolean)" is a legal syntax for this command. However, if a VUE menu is currently enabled, then "HELP FALSE" does not disable the menu. In addition, VUE will respond to "HELP FALSE" with the phoney error message: "Warning: undefined boolean in INI.VUE". If the baud rate is 9600+, this error message zips by quite fast. This error is supposed to be given when (e.g.) "HELP=YEAH" is in INI.VUE.

22. VUE --- fails to find (eg) search
 string "AB" within text string "AAB"

Create a file, put the single line "AAB" into it, and then try to either SEARCH, REPLACE, or GLOBAL the string "AB". In all 3 cases, VUE will find "0" occurrances of the string, and make no REPLACEments. The same thing happens when you attempt to find "ABC" within "ABCBC". What is evidently happening is that when VUE finds a match in the first character positions, it goes on to compare the 2nd, 3rd, etc characters; if a complete match is found, fine; if a mismatch occurs at the nth at position #(n+1), rather than position #2, in the text. This bug also exists in 4.3A VUE = 4.3 VUE = 4.2 VUE. Also, I seem to remember this same bug reported in AMUS for 4.1 or 4.0 VUE. I heard that someone at Alpha Micro had made a bet that there were "no bugs" in 4.2 VUE; can I collect?

23. AM100,FIX,BASORT --- 3 problems reported by Alpha Micro

Dealers received a call from Alpha Micro concerning these three problems. (we received our call on 6/23/80.)

- a. FIX --- acknowleded to be unusable; will be fixed on 4.4A
- b. AM100T --- boot prom doesn't work with the AM210; fixed ones now exist.
- c. BASORT --- duplicates records on some random files; a DDT fix will be mailed out to dealers within a "few days".

AMOS SUGGESTIONS (version 4.4)

 PRINT, SPOOL.SBR --- allow LPP without H

As of now, the spooler ignores the LPP (lines per page) switch unless the H (header) switch is also currently in effect. This is made clear in the XCALL SPOOL documentation, and UNclear in the PRINT documentation. There doesn't seem to be any reason why LPP shouldn't be possible without H. LPP is useful in environments where printouts are needed both with and without perforation skips.

 Conversion of AM410 disks --documentation not worded well

AM410 (Phoenix) users must convert pre-4.4 disks to the new format before using 4.5, and a procedure for conversion is described in: "AMOS VERSION 4.4 METHOD OF HANDLING BAD DISK BLOCKS (DWM-00100-68)" The procedure may be summarized as follows:

- a. Boot up on 4.4
- b. "create a backup copy" of disk onto a (scratch) certified disk
- c. CRT410 the source disk
- d. COPY the scratch back onto the source

It is not clearly stated what it is going on in (b). Obviously, COPY (not DSKCPY) must be used, but this should be clearly stated. The remainder of the procedure is then evidently set up so that the proper results will beobtained whether the scratch disk has been certified uner 4.3 or 4.4. This should also be clearly stated, since cautious users would appreciate some assurance at this point. Finally, if the scratch disk is going to ultimately be re-certified under 4.4 anyway, then it is faster in the long run to do the conversion as follows:

- a. Boot up on 4.4
- b. CRT410 the scratch disk
- c. COPY the source disk onto the scratch disk
- d. CRT410 the source disk
- e. DSKCPY (not copy) the scratch disk back to the source disk

 Note that for further disk conversions, (b) may be replaced by:
 (b) LOG (scratch device): (1,2)

LOAD BADBLK.SYS

SYSACT scratch device, initialize it, create (1,2), exit

SAVE*

Which can save oodles of time....

3. VUE manual --- to QUIT or not to QUIT

In section 15.4 (on Quit) the manual describes the classic situation where one has entered many new lines, and then accidentally deleted many old ones. The decision to Quit is then presented as a highly likely choice. I suggest that a few more innovative (but short*) comments at this point in the manual could make lots of friends, such as: "If your new lines were all inserted at one place in the file, then use the UNYANK (filename) command to throw those lines out to a new file first, before typing Quit. The, VUE your old file again and YANK this file of insertions back in." "If your accidental deletions were all in one chunk, then don't Quit* Finish, rename your .BAK file, VUE this file, UNYANK the deleted lines to a third file, exit, then YANK the third file back into your previously-VUEed file."

4. VUE --- control-P is not same as (* and *)

The (* and *) markers allow you to mark off a block that begins and/or ends in the middle of lines of text. Control-P always marks off entire lines. This is not made clear in the manual. Indeed, Appendix A states that control-P is easier to use (true) and that (*/*) is useful for crt's without dual intensity (true), but doesn't mention that control-P cannot be set in mid-line. Minor point, I agree.

5. Monitor Calls summary --- revisited

In Buglist #12 I suggested re-including the Monitor Calls summary table in the Monitor Calls manual. Actually, they were always there, in the missing Appendices B and C. These

Appendices have been available, but dealers should make sure that they get them with the manuals --- as late as mid-March manuals were being shipped without these appendices.

 TXTFMT --- formatting of "¢" into "/" not documented

Normally, a line beginning with "/" is treated by TXTFMT as a command, not text. But what if you want to put text in that begins with "/" (for example, if you are creating TXTFMT.TXT, a TXTFMT manual)? Answer: use "¢". It is converted by TXTFMT into "/". This is not documented in the TXTFMT manual.

1. Disk read times --- revisited

In buglist #13 (last), I gave some timings for ramdom disk reads for several devices. Please note: these timings were done using 4.2 AMOS, (whereas I had said that the buglist in general covered 4.3A). Version 4.3 improved disk access times, so here are some more readings, made using Version 4.4 (with 4.2 timings for comparison):

Device	Format	1000 RNDRED Reads		
		4.4	AMOS Ver.	4.2
Hawk	Hawk	62	seconds	71
Persci	AMS	150	seconds	166
	STD	239	seconds	253
Phoenix	SMD	50	seconds	?

SC/AMUS (Southern California User's Society) meets at Fullerton, California Savings & Loan, 12860 Euclid (Just North of Garden Grove Blvd), Garden Grove, California - next meeting is August 10, 1980. Dues are \$10.00 initially, plus \$12.00 per year. Send to:

Phil Putman 16168 Beach Blvd #141 Huntington Beach, CA 92647

Newsletters are 50 cents each (two free are sent to prospective members).

Jack Hewlett, 2751 E. Chapman, Fullerton, Ca 92631 is sorting a sequential file created with vue. Basort adds an an extra line after each record.....anyone have a fix for Jack? 714-738-6434

Paul Barhan, 3350 Troost St., Kansas City, MO 64109 is looking for a sub-routine to return the largest continguous disk space available. Please contact Paul if you can help, 816-931-2244.

D.C. HAYES DRIVER - thanks to KHALSA and the BYTE SHOP OF RENO, AMUS is up and running. It seems our DCH driver and the User Accounting System were argueing as to who got the interrupts.

For all of you who would like to communicate with the Network, the following stop and start bits work:

Start Bit - 7
Stop Bit - 2
Parity - 0

The TRMDEF statement should read:

TRIDEF NAME, DCH=0:234 (ETC)

Thank again to Larry White for all his help with our system.



AMUS NETWORK LIBRARY

GAMES

ABAGEL BAS BURBS A THREE LLITTER WORD BAS TRADE FURS AT FOUR DIFFERANT FORTS FUFS ACEYDU BAS BET THAT THE MEXT CARD WILL BE IN BETWEEN THE FIRST TWO GOMUNO BAS ORTHATAL GAME (LINE TIU-TAC-TOE) BAS ADDIS UP A BUNCH OF NUMBERS OFAFH WAS GRAPHS CERTAIN FUNCTIONS ADDUL BAS PRINTS "STUFF" GUMERI BAS DESTROY A RANDOM TARGET ADDSC - DAS DEMONSTRATION OF REGENT TERMINAL GRAPHICS GUNNER BAS FIRE AT THE ENEMY AMO IN BAS INVENTS MAZES GYPSY BAS YOUR FORTUNE TOLD APTIMAL BOS THENK OF AN ANIMAL AND THE COMPUTER WILL GUESS IT HAMURA BAS YOU RULE A KINGDOM ASTRO BAS CHARTS YOUR ASTROLOGICAL HOROSCOPE HANGE BAS CHESS A WORD AWARI BAS AWARI. BASIIIII HANGMA RAS GUESS A MULTIPLYCATION PROBLEM BAGELS BAS GUESS A THREE LETTER WORD HANGMN RAS GUESS A WORD BANDIT BOS PLAY THE SLOT MACHINE HILD BAS GUESS A NUMBER HAME BAS RUSSIAN ROULETTE BAS JUMP THE MEGS AND TRY TO LEAVE ONLY ONE LEFT BANNER BAS PRINTS MESSAGES IN BIG LETTERS HNGMAN MAC WORD GUESSING GAME BATTLE BAS WIFE DUT BAD GUY FLEET HNOWKK MAC PART OF HNOMAN BAS CHARTS BIORYTHEM HORSE BAS BET AT THE HORSE RACES BLACIA BAS PLAYS BLACKJACK HUPALE WAS FIND THE HURALE BOAT HAS YOUR NAVEL BOAT AGAINST COMPUTERS SUB DAT INTERESTING NAMES FOR COMPUTER MANUFACTURES BOMBER BAS BOMB THE ENEMY FLEET KING BAS RUN A COUNTRY BOUNCE BAS GRAPHS BOUNCE OF A BALL I. LFF. DOC DOCUMENTATION FOR LIFE ROWL BAS PLAYS A GAME AT THE BOWLING ALLY MAC A GAME OF CELLS LIVING AND DYING - READ LIFE.ABS! BOXING BAS PLAYS A ROUND AGAINST THE COMPUTERS BOXER LUNAR BAS LAND YOUR SHIP ON THE MOON BOXNG1 BAS PLAY A ROUND AGAINST THE COMPUTERS BOXER MADRLI BAS A MATH DRILL HUTTON BAS GUESS WHO HAS THE BUTTON MANULA WAS PRINTS A MANULA CALNOR BAS PRINTS A CALENDER MASTER DAS GAME OF MASTERMIND CHANGE BAS COMPUTER DETERMINES CORRECT CHANGE MUCUMP BAS FIND THE MUGWUMP CHECK DAS PLAYS CHECKERS NICOMA BAS THE COMPUTER GUESSES A NUMBER YOU MAKE UP CHECKE MAS LESS ADVANCED CHECKERS PARAB BAS COMPUTES ALL THE INFO RELATING TO A PARABOLA CHESS DAS PLAYS CHESS PRDES BAS PUTS DESCRIPTIONS ONTO SEQUENTIAL FILE CHESS! BAS PLAYS CHESS PRIMES MAC GENERATES PRIME NUMBERS THESS! MAC MACRO PROGRAM FOR PLAYING CHESS DUBTO BAS THREE DIMENTIONAL TIC-TAC-TOE REVISE BAS TRY TO GET A SET OF NUMBERS INTO ORDER COMBAT BAS YOUR COUNTRY AGAINST COMPUTERS SCIFI BAS YE OLD COMPUTER TELLS SCIENCE FICTION STORIES COMPOS BAS COMPOSES A MELODY TOUNT MAC COUNTS NUMBER OF LINES IN A FILE SNARK BAS FIND THE SNARK COUNTL RAS TRANSLATES DIGITS INTO ENGLISH SOLIT BAS COMPUTER PLAYS SULTTAIR COUNTY BAS COUNTS FROM ONE NUMBER TO ANOTHER SPACWR BAS DESTROY THE KLINCONS SPIRAL BAS DISPLAYS A SPIRAL PATTERN CUBE BAS FINUS SOLUTION TO CUBE-GENIUS PUZZLE SPLAT BAS SIMULATES A PARACUTE OPENING DANGLE BAS GRAPHES A STRING DATING BAS COMPARES COMPATABILITY OF TWO POEPLE START BAS PLAYS STARTREN STAR? BAS PLAYS STARTREK BAS COMPUTES THE DAY STAILS BAS TESIS ABILITY TO NAME STATES DEFUSE BAS FIND THE BOMB BEFORE ITS TO LATE STOCK BAS PLAY THE STOCK MARKET DEPTH BAS DESTROY A SUB IN FOUR TRIES BAS *** FRINTS OUT DESCRIPTIONS TO FROGRAMS *** STRIRK BAS STARTREK SWAMI HAS COMPUTER GIVES ADVICE DESCRI BAS A NECESSARY PART OF DESCRI DESCRI BAS ADUS DESCRIPTIONS ONTO PROGRAMS ſΑX 1.63 CONVERTS PAYROLL TAXMAN BAS IRY TO GET MORE MONEY THAN THE TAXMAN THESORY THAT STORES THESE PTIONS TOTAC1 BAS TIC-TAC-TOE DESCRI ONC COCUMENTATION FOR DESCRI TUTROL BAS LEARN THE BASIC COMPUTER LANGUAGE DESCRI FAB BACKUP TUTRO2 BAS E LESSON TWO T BAS SIMULATES ROLLING OF TWO DICE TUTRO3 BAS C LESSON THREE 1 DIMNUL BAS PRINTS A PREITY DIMOND PATTERN TUTRO4 BAS C LESSON FOUR 1 MINION HAS DIVIDES ONE NUMBER BY ANDTHER UPPER BAS CONVERTS A BASIC FILE TO ALL UPPER CASE CIPFOR BAS TRY TO GET ALL THE "X"'S TO "O"'S WELDAY BAS CIVES FACTS ABOUT DAYS OF INTEREST TO YOU FI TOHI TIES CALCULATES A FI TOHT IN AN WEDDER BAS TRY TO GAIN WORLD FOWER FITTEL BAS PLAYS LOOTBALL WUMPS HAS FIND THE WUMPHS WUMP3 BAS FIND 1.2.3 OR 4 WUMPUS IN 12 MOVES

AMUS NETWORK LIBRARY CONTINUED ULILITY PROGRAMS

oc.e	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
ASCII BAS LISTING OF ASCII CODES	MESSAG BAS SENDS MESSAGES TO OTHER TERMINALS
ASCII LST LISTING OF ASCII CODES	NECDUR BASINES SPINWRITER DRIVER (IN BASIC)
ASCII1 LST ASCII CODES - IN DECIMAL, BINARY, OCTAL, AND HEX	NECDUR DOC DOCUMENTATION FOR NECDUR - NEC DRIVER
ASCIIZ LST ASCII CODES - IN DECIMAL, BINARY, OCTAL, AND HEX	OCTFOR LST OCTAL TO BASE FOUR CONVERTION CHART
ATIAITA GA GALLO OTTO TALATIANTA	OPTAR MACCONHECTE DIANKE TO TARE HUEN ACCOMPATATE
MACURE OF CHILD CORD IN MILHRIA	OUTPUT RAS OUTPUTS DOCUMENTED PROGRAM LISTINGS
DENCH DAG DENCHARK AND MH TIDLE TERMINAL TEGT	PACKER BAS PACKES SOURCE CODE PROGRAMS
DITMAD MAC DESCRIAGE AND FOLLIFE FERMINAL TEST	PACKHX MAC FACKS AN ASCII NUMBER TO HEX FORM
BASWRD LST LISTS ALL RESERVED WORDS BENCH BAS BENCHMARK AND MULTIPLE TERMINAL TEST BITMAP MAC DISPLAYS A BITMAP BKSP MAC BACKSPACE SUBROUTINE	PRAD50 MAC PACKS A STRING INTO RAD50
BKSP MAC BACKSPACE SUBROUTINE BPRINT BAS BATCH PRINTER	PRIME1 BAS COMPUTES PRIME NUMBERS
	PRIME2 BAS SAME
The second secon	PRIMES BAS SAME
COMMON MAC COMMON VARIABLE STORAGE PROGRAM CONVER BAS CONVERS NO. FROM BASE 1 TO 36 INTO BASE 2, 8, 10, % 16	PRINT MAC PRINT SPOOLER REQUEST
	PRTARG MAC PRINTS ARGUMENT LIST FOR BASIC PROGRAMS
COUNT MAC COUNTS NUMBER OF LINES IN A FILE	PRIVAR MAC PRINTS VAR INPUT IN OCTAL
CRYPTO BAS ENCODES/DECODES FILES DATE MAC INPUTS DATE AND TIME	PYMD MAC PACKS DATE INTO INTERNAL FORMAT
	QDT DOC DOCUMENTATION FOR QDT - MEMORY EDITOR
DATIM BAS INPUTS DAY AND TIME	RECEIV DOC DOCUMENTATION FOR RECEIV.MAC
DAYDIF MAC INPUTS TO PACKED DAYS AND RETURNS DAYS DIFFERENCE DCH DOC DOCUMENTATION FOR THE DCHAYES COMMUNICATIONS ADAPTER	RECEIV MAC RECEIVS FILES SENT BY SEND
	RENUM BAS SOURCE FILE RENUMBERING UTILITY
DCH MAC DCHAYES COMMUNICATIONS ADAPTER PROGRAM	RESEQ BAS RESEQUENCES LINE NUMBERS IN FILES
DELREM BAS DELETES ALL REMARK STATMENTS FROM A FILE	RESEQ1 BAS SAME
DES BAS TYPE OUT LISTING OF DIRECTORY WITH DESCRIPTIONS	RESEQ2 BAS SAME
DESCRI DAT PROGRAM FOR ADDING DESCRIPTIONS	DECLUZ DAG CAME
DETACH DOS DOCUMENTATION FOR DETACH	RESLO3 BAS SAME ROLDAT MAC CHECKS FOR MID-NIGHT, SETS TIME DATE
DETACH DOC COCUMENTATION FOR DETACH CETACH MAC DETACHES TERMINAL FROM JOB DIRLST DOC DOCUMENTATION FOR DIRLST DIRLST MAC LISTS DIRECTORIES ONTO A FILE DISNRW MAC DISK READ/WRITE UTILITY	COLUMN THE CHECKS FOR HID-RIGHT, SELS TIME DOTE
DIREST NOC DOCUMENTATION FOR DIREST	RPLFRM BAS REPLACES FORM-FEEDS WITH LINE-FEEDS
DIRLS! MAG LISTS DIRECTORIES ONTO A FILE	SCREEN MAC COURSOR SUBROUTINES SEND MAC SEND MESSAGES FROM ONE TERMINAL TO ANOTHER
DISTRICT PRODUCTION READ/WRITE UTILITY	CINCLE TAC
DOFW BAS COMPUTES DAY OF WEEK	SINGLE BAS
DSECTION FOR DESCRIPTION FOR D	SINGLE MAC SIZE MAC DISPLAYS SIZE OF A FILE
CONFIX DOC DOCOMENIALION FOR CONFIX - FIXING MESSED OF DISVE	
DSKFIX MAC UTILITY FOR HAND-FIXING A MESSED UP DISK	SLEEP MAC
ECHO MAC	SNTCLR CA CALLS CBBS IN SAINT CLAIR, CA. SGROOT BAS COMPUTES SGROOTS
FBKSP MAC UNDERLINES AND REPOSITIONS CURSOR	
FILCOM MAC COMPARES TWO FILES	SECCOM MAC COMPARES TWO FILES
FILTER BAS FRINTS SUBRCE FILES	STATUS MAC SHOWS STATUS OF JOBS STRTST MAC TEST FOR WHATS IN A STRING
FILCOM MAC COMPARES TWO FILES FILPRT BAS PRINTS SOURCE FILES FINUER MAC FINOS DIRECTORIES ON MESSED UP DISKS FP MAC FLOATING POINT CONVERTION PROGRAM	SVCC DOC DOCUMENTATION FOR SVCC - CALL DISPACHER
FP MAC FLOATING POINT CONVERTION PROGRAM	SVCC MAC DISPACHER FOR HANDLING SVCC CALLS
GET MAC GETS FILES FROM OVER THE PHONE GET1 MAC GETS CHARACTERS FROM THE TERMINAL	SVCCIN MAC FINDS SVCC
GET3 MAC GETS FILES FROM OVER THE PHONE	SYSTAT MAC SYSTEM STATUS - UPDATED
HANGUP MAC HANGUP PHONE	TALK DOC DOCUMENTATION FOR TALK TALK MAC TALKS TO OTHER TERMINALS
INCDAY MAC ADDS NUMBER OF DAYS TO PACKED DATE	
IRS BAS HELPS COMPUTE INCOME TAXES	TALK3 MAC TALK THROUGH DCHAYES COMMUNICATIONS
ISMEXM BAS EXAMPLE ON HOW TO USE ISAM FILES	TALKTO MAC TALKS OVER PHONE TODAY BAS QUICK WAY TO GET SYSTEM DATE
KOMON1 MAC ALPHABASIC COMMOM VARIABLE STORAGE	
KOMON2 MAC ALPHABASIC COMMON VARIABLE STORAGE - UPDATE	TRMVAL MAC TERMINAL SERVICE SYSTEM PARAMETERS
LIBRUN MAC LIBRARY PROGRAM	TXTABR LST COMMANDS FOR USING FORMATED TEXTS FILES TXTPRT BAS PRINTS FORMATED FILES
LOG MAC LOGIN COMMAND FROGRAM	
LOGOFF MAC LOGOFF TERMINAL	
LOGS LST MACRO ASSEMBLE LISTING OF LOGS	TYPE MAC TYPES OUT FILES (HAS PAGE OPTION) TYPRED BAS GIVES SCORE ON TYPING TEST
LOGS MAC LOG ON COMMAND PROGRAM	
LPTSPL MAC LINE PRINTER SPOOLER	UNPKHX MAC UNPACK HEX ROUTINE
LSUB MAC LOADS A LIST OF SUBROUTINES FROM BAS:	URAD50 MAC UNPACKS A STRING FROM RAD50 XLOCK MAC MULTI-USER LOCKS
MEMTST MAC TESTS MEMORY FOR READ/WRITE	
· · · · · · · · · · · · · · · · · · ·	XMOUNT MAC MOUNT ROUTINE (FROM BASIC)

AMUS NETWORK LIBRARY CONTINUED

DRIVERS AND SUBROUTINES

ACTIV MAC ACT-IV TERMINAL ROUTINE MAC ADDS TERMINAL UNIT ROUTINE ADMI MAC NOM-L TERMINAL ROUTINE ADMITS MAC ADMI DRIVER FOR UNBUFFERD TERMINALS ADM? MAC ADM-2 FERMINAL ROUTINE AUM3 MAC ADM - 3 TERMINAL ROUTINE AUM 3A MAC AUM - 3A TERMINAL ROUTINE ADM 48 DOC DOCUMENTATION FOR CONVERTING ADM-3A TO ADM-3B ADM 3B MAC DRIVER FOR ADM - 3B AM300 MAC AM300 TERMINAL INTERFACE DRIVER MAC REPHIVE B-100 DRIVER BOSPRI MAC BOSPRI GENERAL PRINTER DRIVER CEN MAC CENTRONICS DRIVER OCH DOC DOCUMENTATION FOR DCHAYES DRIVER OCH MAC DCHAYES COMMUNICATIONS DRIVER OFS BAS LISTING OF FILES (WITH DESCRIPTIONS) DESCRI DAT HOLDS DESCRIPTIONS ULARI MAC DIABLO 1500 PRINTER DRIVER DIABLO MAC DIABLO HITTPE II DRIVER UMEDIA MAC DATA MEDIA DRIVER NUMBER MAC PRINTER DRIVER FILERR MAC FILE ERROR MESSAGE ROUTINE FILSER MAC FILE SERVICE FIXMIM MAC MTM DRIVER FIX HAZLI MAC HAZEL TERMINAL DRIVER HEIRM MAC H-P INTERFACE DRIVER IMSIO MAC [MSIO S10-2 DRIVER INTUR MAC INTERTURE DRIVER JST MAIL M40 MAC TELTYP MODEL 40 DRIVER MEM MAC MEM: DRIVER MIM MAC MULTI TERMINAL PRINTER FRINT BAS PROGRAM TO TURN THE AUX FORT ON THE SOROC IQ 120 ON % OFF P53 MAC 3P + S DRIVER RUP MAC DUME PRINTER DRIVER RES MAC RESIDRIVER SIL700 MAC SILENT 700 DRIVER SUPOC MAC SORUC DRIVER TELTYP MAC TELTYP DRIVER TRISET MAY RECONFIGURE TRIDENT SYSTEM MAC TERMINAL DEVICE DRIVER THMSER MAC TERMINAL SERVICE TVI MAC TUI DRIVER - UPDATED TUTOLD MAC TUT DRIVER

KHALSA COMMUNICATION SOFTWARE

CALL	MAC	ORIGINATE CALL ON DCHAYES COMMUNICATIONS ADAPTER
UCH	DOC	DOCUMENTATION FOR DCHAYES COMMUNICATIONS ADAPTER
DCH	MAC	OCHAYES COMMUNICATIONS ORTVER
DES	BAS	TYPE THIS IN FUR DESCRIPTIONS OF FILES
DETACH	DOC.	DOCUMENIATION FOR DETACH
DETACH	MAC	DETACH TERMINAL FROM JOB
DIALER	RAS	DIALS ABUS/CBBS IN DIFFERENT PLACES
UTALER	UUC	DOCUMENTATION FOR DIALER. BAS
GE T		OETS FILES FROM OVER THE PHONE HANGUP PHONE
		CALLS CBBS IN PASADINA, CA.
		CALLS CRBS IN SAN DIEGO, CA.
SEND		SENDS FILES OVER THE PHONE
SNTCLR	CA	CALLS CBBS IN ST. CLAIR, CA.
TALK	MAC	TALK TO ANOTHER TERMINAL
FALK	DOC	DOCUMENTATION FOR TALK
TALKTO	MAC	TALK TO PHONE

MISCELLANEOUS USEFUL PROGRAMS

ALGOR	BAS	PHONETIC ALGORITHEM
CRYPTO	BAS	ENCODES/DECODES FILES
OES	BAS	LISTS DIRECTORY WITH DESCRIPTIONS
		FINANCIAL COMPUTATION PROGRAMME
INTERE	BAS	MONTHLY INTEREST COMPOUNDING PROGRAM
UPPER	BAS	CONVERTS A FILE TO UPPERCASE

ALPHA MICRO USERS SOCIETY

Software Report Form

Software name		Software category (legal, medical, etc.)
Developer		
Number of current users:		
References:		
Special hardware requirement	:s:	
Batch mode: yes no	-	Real time: yes no
Multi user: yes no	-	Interactive: yes no
Language:		
Documentation supplied:		
Price:		
Hard disk (specify model)		Floppy disk (specify format)
Source		Source
Object		Object
Company name:		
Address:	City: _	State:Zip:
Telephone:		Contact:

Please complete and return to Sharon Greene, AMUS, P.O. Box 1723, Boulder, Colorado 80306 (303) 449-6917

ALPHA MICRO USERS SOCIETY MEMBERSHIP FORM

Please fill out as much information as possible.

Name	Company		
Address	City		
StateZi	p Code		
Business Phone	Home Phone		
Circle one: Own Lease Thir	nking		
Check all applicable: Dealer	OEM		
User: Corporate Individual			
Describe equipment:			
AMUS may use my name for mail:	ing lists		
Make checks payable to AMUS			
Annual dues are \$25.00 per men	nber.		
For more information call Shar write AMUS, P.O. Box 1723, Box			

AMUS p.o. box 1723 Boulder, CO 80306 Application to mail at 2nd class postage rates is Pending at Boulder, Colo. 80302