Happy New Year

JimHood

Inside:

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...MINDLIND EXPOSED - PART 2

...OPTICAL DISKS

...ST SOFTWARE REVIEWS

...ST SOUND TUTORIAL

...AND MUCH MORE!!

Beginner's SIG

RICHARD STIEHL

NOW THAT IT IS PLUGGED IN...

If you consider yourself a beginner ATARI Computer User, then this is the place for you! Once a month the Beginner's SIG meets at the San Lorenzo public library.

A variety of subjects are discussed from "Booting" DOS, to connecting peripherals, to the ATARI computer itself, and how to utilize these effectively. We have even looked at and discussed certain software.

If you have any questions whether of a beginner's nature or otherwise, please come to the BEGINNER'S S.I.G. or you may feel free to call me at the following number during the day or evening: 835-9857. If I can't answer your question I will find someone who can.

Please see the CLUB CALENDAR for the date and time of the next meeting.

Software Exchange

TOM TISBY & RON DEVINE

WANTED: Users interested in trading their public-domain disks with the San Leandro Computer Club. Experience not required. All that is required however, is that you have some good new public-domain software. Individuals, national user groups, and international user groups may donate. All others can donate also too. REWARD: Free Floppy-Of-The-Month of your choice for each public-domain disk filled. If you like to participate, write for more information and/or send your disk(s) to:

Tom Tisby & Ronald Devine C/O
San Leandro Computer Club
P.O. Box 1525
San Leandro, CA 94579

Please mark "DO NOT FOLD" on your envelope.

From the Editor's Desk

RON SEYMOUR & TOM BENNETT

HAPPY NEW YEAR

We're getting 1986 off to a great start! You will notice this issue is packed with club generated articles! We have not had to rely as heavily on the exchange to put this newsletter together. A special thanks go out to new contributors Robert Packer, Chuck Amaral, and Stewart J. Dimon. You may also notice that we were assisted with the retyping of articles by Jack McKinney and Randy Duckett. We even had a submission from long distance member George Langworthy. And thanks to Jim Hood, we have yet another original graphic for our cover!

And don't let your eyes fool you. Yes, there are actually three ads this month, and they were all unsolicited.

Which brings us to our monthly appeal. We are in desperate need of an advertising manager. If we receive additional advertising, we will be able to expand the size (again) of our issues. All you would need to do is contact some possible advertisers and give them a short pitch. There must be someone out there in our 300+ membership that can take a few minutes each month and help us out.

You will also notice that there are a number of other vacant positions on the club's contact list on page two. The following SIG's need leaders: Basic SIG, Hardware SIG, ST C Language SIG, and a ST SIG Reporter that will take minutes at their meeting. Now is your chance to get out and contribute to the SLCC!

Dick Scott mentions elsewhere in this newsletter who the January guest speaker is, and I understand that this may also be a SIG night in which the SIG leaders can present their topics of interest and answer questions for you.

Perhaps you noticed last meeting that there was a rather poor response to the idea of putting a 1986 SPECIAL EDITION JOURNAL together. Since the interest was lagging in supporting this project, we have decided not to put a SE JOURNAL together this year. We will not be able to devote the time it takes to put a project of this magnitude together without a strong commitment from the membership.

And finally, we would like to commend the membership for their great response to the SLCC Food Drive. We donated over five large boxes of food for the needy of the San Leandro area. We were also able to present the San Leandro Community Center a check for $283.00 from our raffles to help buy some turkeys for the needy. This is the type of generosity that should make us all proud to be members of the SLCC.

This month's newsletter was edited on the new AtariWriter+ program just recently released. This program is a major improvement over the old standby AtariWriter, although we have have some minor gripes on some things they did with it. One problem we came across is that the new double column printing feature for all types of printers (two columns printed in one pass) will only support up to 80 columns. Unfortunately, our newsletter format requires 90 columns. We will write a comprehensive review for next month's newsletter.

ATTENTION NEWSLETTER FILE EXCHANGE

We now have enough material from our last few editions to have another disk or two to send to those groups in our file exchange. We should be sending them out by mid-month.

Our Next Meeting

DICK SCOTT

I hope that everyone had a HAPPY HOLIDAY and received all the ATARI programs that they wanted or even a new ATARI computer. I got mine early.

Now to get to the serious things, like our next meeting. Last Christmas, my wife gave me a program to check my "Genealogy" called "FAMILY HISTORY" by William Walden. I liked it so much, that I thought that maybe Mr. Walden might come down sometime to tell the club members about his great program. I finally got up enough nerve to ask him if he would consider coming to one of our meetings. He ws very gracious, and accepted the invitation to present his program at our January meeting.

He will offer club members a discount on his program. I just wish that some of the file management programs had some of the features that his has. For instance, if you are running out of space on your disk, you can compress your file and continue to update and add to it.

Enough said, be there for his demonstration of this great program.

Disk of the Month

TOM TISBY & RON DEVINE

JANUARY 1986
FLOPPY OF THE MONTH!

Well it looks like its my turn to write the article this month. Anyway, Tom and I hope everyone had a wonderful and joyful Christmas and New Years. This month is going to be packed full of surprises!!

Enough chit-chat, lets see what's going to be on our next disk.........

SCRABBLE

The famous board game now can be played on your ATARI! This one will keep you playing for hours.

MATT-EDIT

This is a 40 column text editor program. It requires an EPSON, GEMINI or graphics compatible printer to print your documents. It was written by our friend Matt Ratcliff from the St. Louis ACE.

MATT-EDIT.DOC

Documentation file for MATT-EDIT. The DOC is for REV.12 that appeared in ANALOG AUG'84 but this disk has REV.14 which has much enhanced disk handling features and supports custom character sets. There will be an enhancements article on it in a future issue of ANALOG or on their new TCS Bulletin Board System. The DISK functions should be self explanatory. Use option 7 from the main menu to go to the c-set functions menu. After loading a c-set, use the ESCAPE key when in the EDIT mode to toggle between ATARI and custom c-sets. If a custom set had been previously loaded, you will be asked to use atari set or custom set when you print your text (part of option 6 from the main menu). Read the DOC file for the rest of the details.

RAMASTER.XL & RAMASTER.DOC

This program is for 'XL computers with 64k RAM. It will control built in BASIC, turning it on & off when you want. It will also give you a RAM/OS, a feature more advanced programmers may find valuable. Read the DOC file for more information.

BASWICH.XL & SWITCH.DOC

This is a BASIC switcher only utility for the 800XL and 64k-600XL computers, and should work on the new 130XE computer also. Turn BASIC on & off from DOS at will. Just 'L'oad BASWICH.XL, allowing you to use the hidden 8k of RAM to make file copying go much faster.

GEMSETS.UTL, GEMSET.DOC, DEMOGEM.SET

This machine language program can be 'L'oaded from DOS. It is for the GEMINI 10X, 15X & EPSON FX printers only! It will put any Atari character set into your printer's own RAM! Then you may use ANY word processor to print text with custom characters, PRINTER CALLIGRAPHY for very fancy printouts. The DEMOGEM.SET is a script set, that looks better on the printer than on the ATARI screen. See the DOC file for more complete information.

SIMON2.OBJ

A machine language game, where you follow what Simon does or lose. Makes you really remember the order of things.

KEYPDLD.LST, KEYINTNL.LST, KEYDOC

The Atari CX85 keypad once sold for well over $100, but is now being liquidated through many electronics clearing houses for only $7.95! This is super for keying programs with lots of DATA. The keypad does not come the software, unfortunately. Read KEYDOC for complete information.

If you don't have the CX85 keypad and are interested in purchasing one, they are advertised in 'NUTS & VOLTS' for B.G. Micro. Their address is:
B.G. Micro   P.O. Box 280298
Dallas, TX 75226
Phone (214) 271-5546

The price is $7.95, three for $20. I suggest that you call before sending your order, they may be SOLD OUT!! The shipping is $1.50 per order.

DOCPRINT.BAS

This is a BASIC DOC file printer utility. It will print your documentation files on the printer very neatly, with a title and a page number on each page. Use it for all the DOC files here, except KEYDOC. This file is pre-formatted for the printer. Just 'C'opy the file from KEYDOC to P: and it will print just fine.

Also this month we will have the SLCC's own PRINTSHOP DATA DISK 2!! and the Digitized Photo Disk we promised last month is now here this month!

ATTENTION MEMBERS!!

Have you had troubles finding some disks in our library?? If so, no need to look anymore, we have filled the entire library! Yes every disk in the library is there!!!! So don't forget to bring extra money for our special disks and for any you have wanted but couldn't get a hold of. We have them all!!!!

See ya there.

WHAT IS RAMBRANDT ???

[A] The Most Versatile Graphics Art Program.
[B] Your Ultimate Graphic Designer's Tool.
[C] The Most Powerful "8-Bit Computer"
    Graphic Painting Program Ever.
[D] Highly Sophisticated In Command Structure.
[E] Definitely Not For Wimps Or Nerds.
[X] All Of The Above.

- UTILIZES 5 ATARI GRAPHIC MODES (NO GRAPHIC MODE 8) - MODES ARE INTERCHANGEABLE
- ENHANCES / COMPATABLE / INTERCHANGES ANY PICTURE DRAWN WITH OR USED IN:
  - [X] ATARI TOUCH TABLET   [X] MICRO PAINTER   [X] TYPESETTER "PICTURE LOADS"
  - [X] MOVIE-MAKER "BACKGROUNDS"   [X] KOALA PAD   [X] OTHER SIMILAR FORMATS
- PRINTS UP TO 46 COLOR PATTERNS ON THE OKIMATE 10 PRINTER
- PRINTS UP TO 16 SHADES OF B/W ON EPSON AND PROWRITER COMPATABLE PRINTERS
- USES STANDARD-FORMAT FONTS CREATED BY OTHER PROGRAMS
- CREATES AND SAVES - PATTERNS / BRUSHES / TILES / QUILTS - LIKE THE MACKINTOSH
- COMMANDS BY KEYBOARD / JOYSTICK / TOUCH PAD
- STORES IN MEMORY UP TO 8 PICTURES WITH 130XE [800 MOSAIC RAM-SELECT VERSION OPTIONAL]

RAMBRANDT COMMAND LIST (NOT COMPLETE) - CAN BE USED IN VARIOUS COMBINATIONS

ANIMATION	COLOR	MIRROR	PATTERN	SCALING
BOX	PROBABILITY	HORIZONTAL	TILE	STAMP
BRUSH	SELECT	VERTICAL	DEFINE	DEFINE
AIRBRUSH	SOLID	4-WAY	LOAD/SAVE	TEXT - 4 SIZES
DEFINE	TRANSPARENT	MODULE	PICTURE	WINDOW
LOAD/SAVE	DRAW LINE	PATTERN	LOAD	HORIZONTAL FLIP
CIRCLE/ELLIPSE	EXCLUSIVE OR	CHECKED	LOAD RAM-SELECT	VERTICAL FLIP
COLOR	FILL	FONT	SAVE	ROTATE
BARS	FONT	QUILT	SAVE RAM-SELECT	WIPE
CHANGE	CHAR-PATTERN	DEFINE	SHIFT	ANIMATE
HUNT	LOAD	LOAD/SAVE	PLOT	UNDO
INTERRUPTS	GRAPHIC MODE	STRIPE	THICK	ZOOM - 4 COLOR MODE

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BBS Software Review

<div align="right">MIKE SAWLEY</div>

MINDLINK REVIEW - PART 2

Looking over my November column, I see at least one error (no fair counting spelling). I stated that the MINDLOCK cartridge must be placed in the right cartridge slot for the program to work. This is almost correct. The MINDLOCK cartridge must be placed in the LEFT slot. That is of course if you own the real thing. For those of you with the venerable 400 or an XL/XE series machine, well, you have only the one slot to start with anyway, right?

Now then, we were about to use the UTILITY to create a number of files needed by the BBS and get the system online.

We already have the following files on our work disk:

A) DOS.SYS & DUP.SYS
B) AUTORUN.SYS - Our main BBS program.
C) UTIL.SYS - The UTILITY program.
D) Numerous text/data files used by the BBS.

We still need to add:

E) From 1 to 8 message zone files.
F) An Electronic Mail file.
G) A password data file.
H) Files for your download section.
I) Files for your Data Base.

My first gripe is about to show up now. Items A through G MUST ALL be on the disk in drive 1. This can lead to a storage problem if you are using a single density drive. If you are working with double density or higher, then you may want to skip on to the next section because you should have no problems. There are several ways to go if you are pressed for space:

1) Delete AUTORUN.SYS, UTIL.SYS, DUP.SYS. This will disable the AUTO-RESTART feature of MINDLINK, but will free up about 200 sectors FOR you. What is auto-restart? This is a rather unique (for an Atari BBS) feature of MINDLINK. If there is a power interruption, MINDLINK is quite able to put itself back online if AUTORUN.SYS and DOS.SYS are on the disk in D1:. When power returns, MINDLINK will boot in as a result of being called AUTORUN.SYS. It will wait a few moments for a human to take over and enter the current time/date group. If there is no human around, MINDLINK will read the time/date group that it finds in the

CONFIG.DAT file and put itself back online. This time/date may be several minutes to days behind the actual time and so is referred to as SYSTEM TIME in the manual. If this feature is not important to you and you need the space, then move these files to a BOOT DISK. I would not recommend removing DOS.SYS in any case. If there is a power failure, and you are not around when power is restored, the computer may go into a "Boot Error" loop!

2) Either shorten the length of your message zone files or totally remove an appropriate number of them. This is going to be a hard decision to make. First of all, the MINDLINK manual states that each message zone should be at least 25 sectors long. You will also need to account for about 5 sectors for an index file; one index file for each message zone. This 25 sector recommendation seems rather small to me since each message can be up to 1100 bytes or so. You will have to consider how many message zones you really need as well as how many messages you wish to have online at any one time. This is all tied to another important consideration... what will the main thrust of your system will be? If you are going to have a large number of downloadable files, then I would say you don't need that many message zones. Most folks will be spending their time downloading rather than participating in your online discussions. Perhaps the best way to go is to activate as many message zones that will fit on your work disk and still leave about 50 sectors free after all the needed files have been written.

Now that you have your disk space figured out, it is time to use the UTILITY. Boot your main work disk (or boot disk if you went that route). As the computer starts reading in data from the drive, press the ESC key for a second or so. This will tell MINDLINK that you want to run the UTILITY rather than the BBS. After a few moments, you will be presented with the following menu:

A) INTIALIZE BBS
B) EDIT BASE TITLES
C) EDIT SCREEN COLOR
L) LOAD CURRENT CONFIG
M) EDIT MODEM DEFAULTS
N) EDIT NEW-USER DEFAULTS
P) PASSWORD EDITOR
R) RETURN TO BBS
S) SAVE EDITED CONFIG
U) CREATE DISK BASED LOG
V) VIEW EDITOR CONFIG
X) EXIT TO DOS

Make sure you have your work disk in

D1: and select Item [A] to create the password, message zone(s), Electronic Mail and CONFIG.DAT files. Just follow the prompts as to names and space to allot to each file. After the files are created you will be returned to this menu. If you goofed and ran out of disk space, the program will abort. You will want to return to DOS, delete the files that were created and start over.

Next, [L]load the CONFIG.DAT that was just created from disk, just to make sure you are working with current data. You can now use the other menu items.

Item [B] is used if you wish to change the name, and hence the topic, of any message zone.

Item [C] is used to set the screen colors of your monitor. The manual suggests that you use muted colors/intensities because MINDLINK prevents the computer from going into attract mode. Personally, I don't know why they did this. It should be just as easy to let the computer go into attract mode if there has been no activity for the 9 minutes or so that it takes for attract to activate. If there is a caller, or a key is pressed, then attract could be poked off. This would still let you see everything that is going on while letting the computer protect your screen the way it was designed to.

We already used [[L]oad current config. This reads the config file to insure you are working with the latest data.

Edit [M]odem defaults **MUST** be used before you put the BBS online for the first time. This data is used so MINDLINK and your modem can work together correctly. There is sample data for the Hayes and MPP in the manual and you can enter it exactly as shown. If you are using a Hayes work-a-like, then some experimentation may be necessary, since they don't all work EXACTLY like a Hayes, notably in the pinouts and dip switches. A few more bytes for controlling the Hayes would be nice. For example, you cannot Include an ATMO command in the modem defaults so that the speaker in the Hayes is turned off. Now I realize that there is a little knob on that back of the Hayes. With this you can turn the volume all the way down. However, on my Hayes at least, the speaker does not turn all the way off, you can still hear the squeaking and squaking of data flow. Some way of altering the memory locations in the Hayes with the [S] command might be nice too, though the BBS worked just fine with the factory settings.

[[N]ew user defaults is very very important. This lets you control exactly how much of your BBS a new caller can see and exactly which commands he/she will be able to access. This is where you can also

activate the GUEST function; having the same access as a new user. Quite simply, you control everything! Everything from non-linear message zone access (you may allow a new user/guest (NU/G) to see message zones 3 and 5 but not 1,2,4, and 6 for example) to allowing access or not to your data base to how long the BBS will allow them to remain online (up to 59 mins). You can also set the idle time-out up to 255 seconds. This is used to automatically log off a caller that is not doing anything in that amount of time. You can also set the access level for downloading; the NU/G can access only those files that you permit (the same can be said for all callers, even those with validated passwords). Be careful here, you can also remove the [G] command from NU/G so that they cannot properly log off!

The command editor is rather crude right now. You must use binary bit settings to activate each and every command. For example, you will be given the prompt:

MBASE[87654321]:

Suppose you wanted to give NU/G access to message zones 1,3,5, and 6. You would than have to translate binary 00110101 to decimal 53 and enter it. A similar situation exists for all the commands in the main BBS menu. A much better way would be to have a cursor controlled editor. The message zone numbers (or better still, letters) would be displayed with the cursor positioned over the first number. Pressing [OPTION] would toggle the zone off and on and switch the number between reverse and normal video. Reverse video meaning the zone is available and normal would mean it is not. Pressing [SELECT] would move the cursor to the next number. [START] would write out the information and move you on to the next screen.

To be fair to SOFMARK, they are fully aware that the current editor needs work and have promised that an updated version will be released soon.

When a new caller logs in, he is give the opportunity to fill out a password application. This must be done if you have not activated the Guest feature. At log off, the caller will be given a prompt asking if the password information should be saved to the password data file. If [Y]es is the reply, when you will see this information when you choose item [P], the PASSWORD EDITOR.

The PASSWORD EDITOR is another area of the UTILITY that is in need of much work. You will have to set each item of the password record individually, in the same manner that you did for NU/G defaults. You will also have to manually skip past all the old records to find the newer ones. That

is, the first to log on will have their information placed at the beginning of the file, newer ones are appended after these on the file. To read the newer ones, all the older ones will have to be pulled up and placed on the screen. You will have to tell the PASSWORD EDITOR to change nothing and to continue on reading in records. There is no way to search for "New Callers Only" and there is no way to search for a individual caller. As before, SOFMARK has acknowledged the need for improvements here. I do hope they include full search routines so that you can pull up any record for review, as well as cursor control for making changes.. It would also be very nice if MASKS could be created for mass validation of new callers. Finally, a way to remove inactive accounts should not be forgotten.

[R]ETURN TO BBS should be rather obvious, it will load in the BBS program so that you can go online.

[S]AVE EDITED CONFIG is most important. If you have made any changes at all to the information contained in the CONFIG.DAT file, you must use this menu item to save it out. If you don't, then all your work will be lost. I am wondering if a better way to go would be to have the UTILITY prompt you with "Save Edited Config?" automatically when any menu item is chosen that would destroy an altered config in RAM. This way, you won't forget to save your changes. Keeping this menu item as a way of forced saving would not hurt either.

Creating a disk based log is a good idea, even if you have a printer; a must if you don't. This would let you turn off the printer so you can get some sleep and still keep track of who calls and what they are doing. Be sure you have enough room on D1: ... the BBS may crash if the disk fills up. While we're on the subject of logs, I'd like to see a little more information recorded, as well as the formatting improved. I firmly believe that there is no easier way of keeping track of how your system is used, as well as making sure the program is operating as expected, than to have COMPLETE and easy to read logs. I suppose the next Sysop will complain about "... all the paper this thing is wasting!" If that be the case, then keep a disk based log and restart it every now and then.

[V]iew Editor Config lets you see exactly what you have in memory. Use it just before you save out the edited config to make sure everything is really the way you want it.

Exit to DOS is rather obvious. Just make sure you have DUP.SYS on the disk in D1: or........ Save out that config before you exit also!

We are about to take the last two steps before putting MINDLINK online! These are creating your DATA BASE and your DOWNLOAD LIBRARY.

The DATA BASE is a collection of files that you have grouped together under the [V] command. The [V] command stands for "Virtual Memory". Why they selected this name is a little obscure. The manual makes reference to a VARIABLE BAUD RATE command, but my copy of MINDLINK did not have this function. I can only guess they made some changes in the program, but did not change the command structure, or that the Hayes version that I was using does not support variable baud rate and I got a Data Base instead. At any rate, what's in a name, eh?

The Data Base is able to hold up to 26 files, one for each letter of the alphabet. Your Data Base files can be on any drive and can be held under any file name that is not already in use. This makes it quite flexible and easy to create and update. Also, because The Data Base Index holds information on exactly which drive has any particular file, retrieval is fast.

There are two controlling files that you will need to make once you have your Data Base files the way you want them. The first is the menu that your callers will see. This should display the subject of each Data Base file as well as the key that will retrieve the file. This menu must be placed on D1: and has to be called D:DBASE.TXT. It might look like this:

```
        Virtual Memory (Data Base)

     [A] Other BBS Numbers
     [B] NEW DBASE.DAT FILE
     [C] Message editor HELP
     [D] Download File Descriptions
     [E] NEW DBASE.TXT FILE
     [F] NEW MESS.DAT FILE
     [G] NEW FUNCT.DAT FILE

     >> ABCDEFG << [RETURN] to MAIN
```

The other file is the INDEX (D1:DBASE.DAT) that MINDLINK uses to figure out exactly which file the caller wants to see and where to find it. It would look something like this:

```
        ABCDEFG
        D4:PHONE.TXT
        D1:DBASE.DAT
        D1:MHELP.TXT
        D2:DLDOC.TXT
        D1:DBASE.TXT
        D1:MESS.DAT
        D1:FUNCT.DAT
```

As you can see, the file consists of a string of letters and the file names of each

of your Data Base files. Each letter corresponds to a particular file name. (A) goes with D4:PHONE.TXT, (B) to D1:DBASE.DAT and so on. This file, as well as the menu, can be created with any word processor as long as the file is Atari DOS compatible. Naturally, make sure the menu and the index match!

Now the final step! You will want to place online a number of disk files that will make up your download library. These files can be on any disk, but will probably be found on you higher drives. They are cataloged by language (text, saved basic, object, etc.) and and type (utility, game, application, communications, etc.). You also have the ability to set the access of each and every file here. These three things are done with the file extender. For example: D4:FIREBUG.OGC would be an (O)bject file, a (G)ame, and have access level (C) which translates out to those callers with access level 2 or higher as defined in the password record. Those with access level 2 and higher will be able to see the file and download it. Here is a table that should help you get an idea of how the system works:

File Extenders:

FIRST CHARACTER of EXTENDER

Language:
==========

L-Listed Basic	S-Saved Basic
B-Basic-XL	A-AMAC
O-Object/Binary	V-Amis
P-Micro Paint	M-Mac/65
X-Action	

SECOND CHARACTER of EXTENDER

Filetype:
==========

P-Application	G-Game
D-Demonstration	C-Communication
U-Utility	M-Music
X-Text/Document	S-Source Code

THIRD CHARACTER of EXTENDER
A-Z (Represents levels 0-25)
A=0, B=1, C=2, ... Z=25

Another measure of security is that a file will be automatically set to level 11 until it is locked (as in Atari DOS command F.) This is especially true of uploads. No matter how low a caller sets the access level of his upload, it will still be level 11 until you lock the file.

MINDLINK also supports a text file that you can create to let your callers know what they are about to get. This is a nice feature, but will take a lot of work on your

part to keep updated, especially if you have high capacity drives. Since this is just a text file that is sent when the caller presses [I], you could use it for any other text file.

You'll also want to create a list of "Other BBS Numbers". This also has to be on D1:. It is, like the file above, just a text file and could contain any information that you like. Just be sure to change the prompts that lead to the file so your callers will know what they are getting.

That should about do it for setting up MINDLINK. Have a look at your D1: work disk. If there are not at least 50 sectors open, the you better go back and remove or shorten something.

Next month we shall have a look at how the BBS actually performs when it is actually online. I will have a number of comments on what I saw as well as what some of the callers actually had to say about the operation from the other end.

Guest Comment

KIRT E. STOCKWELL

MINDLINK'S RESPONSE

Thank you for the copy of the SLCC JOURNAL containing the review of the ESP MINDLINK BBS system. I was impressed at the depth in which the system was discussed. As I have said before, your group is top-notch. I appreciate also the opportunity to respond to the review.

First, let me thank you for taking the time to examine the ESP MINDLINK system. We have spent many, many hours discussing the design and execution of the system, and it is still in a state of evolution. Among other things that are currently being modified is the system with which the program keeps track of the message base files and the passwords. As currently configured, the system requires POINTER or INDEX files that correspond to the message base files. In addition, the password file is locked into the system by a set of pointers in the CONFIG.DAT file. We are currently revising this so that there will be NO INDEX FILES at all on the system. This will save a small amount of disk space, but most importantly, will allow the DOS transfer of files from disk to disk WITHOUT a special utility. If, for instance, you have been running your system on a 1050 drive, and you then upgrade your 1050 to TRUE double density, you currently will have to re-initialize the system completely. With the next release, you would be able to simply copy all files from your dual-density disk to a double density disk. No lost passwords, no lost messages.

Secondly, we have made changes in the program which will allow the user to set up the system files (message bases, password files, welcome messages, etc.) in RAMDISK. This will allow the system to operate completely from ramdisk, except for any D/L files that the SYSOP would place on a physical floppy drive. While there are several modifications to the hardware that allow large amounts of memory on the XL and XE machines, we have set the system up to use the upgrade system developed by Charlie Andrews (based in Eugene, Ore. [503] 746-5774). We have done this for several technical reasons, the most important one being that the CHARLIE ANDREWS upgrade is COMPLETELY XE COMPATIBLE. ATARI Corp., in the person of John Skruch, will have on of the ANDREWS upgraded XE machines by the time he returns from the COMDEX show. I would like to suggest that one or more of you take the opportunity to check out the machine, with its two ramdisks.

As for your comments on the MESSAGE/E-MAIL READ and ENTRY sections, we would be appreciative if we could have some specific suggestions which will help us to make the system better. Personally, I am happy with the mbase read and entry system, but then I have been using computers heavily (as a programmer, in business, and as a hobbyist) for almost a decade, and things that seem as simple and obvious as daylight (to me) are patently not so obvious to many newer users (or to those who do not have such "deep" understanding of computers and computer systems. Our intention is to make the ESP MINDLINK the ABSOLUTELY ONLY CHOICE of BBS systems for the ATARI market. We will be porting the system over to several other computers within the next several months, but we do want to finalize all design parameters first. Your review will help us in this process.

One particularly gratifying aspect of the review is that it ran in the same issue in which you reviewed the PAPERCLIP word processor from B.I. It was a big relief to me that Batteries Inc., with their huge financial resources, released a major software package that is in approximately> the same state of development as the MINDLINK. Considering the pathetically limited resources with which we are doing our development, I feel fairly satisfied with the results we have obtained SO FAR. We intend to continue to upgrade the MINDLINK until it is the unquestionable BEST BBS system available.

By the time this letter reaches you, I should have a set of the new disks ready to ship you. I will also be sending you a new MINDLOCK cartridge. Let me take a moment also to address the question of the cartridge. As stated in the literature, the cartridge DOES give the system its speed. The cartridge actually does ALL of the math processing for the system. For instance, 8-bit by 8-bit multiplication, with a 16 bit answer, require 3 store commands (in ML). Then, the program can execute other instructions for 8 machine cycles while waiting for the answer to be generated. Then, there are only 2 ML commands required to retrieve the answer. Division is even better. A 16-bit number can be divided by an 8-bit number in the same 8 machine cycles. In addition, the cartridge generates the REMAINDER (try that with the 6502!!) and even generates a status flag to indicate whether the division was correctly completed.

By including the cartridge from the earliest state of development, we were able to take full advantage of this technology. Of course, we can't tell you what chips we are using, or how to access them. A side benefit that your reviewer noticed is that the cartridge system makes the system quite protectable, without requiring the disks to be un-copyable. I believe that this is

probably the BEST software protection system developed yet for 8-bit machines. As an example, when I was with MPP, we acquired the rights to FOREM and began shipping. Less than ONE WEEK after shipping the first units, we began receiving calls from people who had NOT purchased the copies that they were trying to run. (These bozo's wanted tech support!) In contrast, we have been shipping sample and production copies of MINDLINK for almost 4 months now and have yet to hear from a single individual who was not a legitimate owner. In fact, I (and Richard Renner, the programmer) have received phone calls from IRATE PIRATES who had been driven up the wall trying to break the protection. (I didn't tell them at the time that the direct accessing of the cartridge is only the first of five levels of protection in the system. I wasn't in all that mean of a mood!) Eventually some genius will figure out how to make the system run without the cartridge. Then they will have a product that LOOKS like MINDLINK but which won't run anywhere near as fast.

For that kind of return, they might as well debug FOREM (good luck) or write their own system from scratch!

I do seem to have rambled on... Again, thanks to all of you for the time and energy that you have donated to the cause! I think that your club is one of the best in ATARI-LAND, and I believe that ATARI clubs are a cut above those inspired by the other brands (but then I'm prejudiced, right?). It is this kind of cooperation between User Groups and Software Developer that makes for high-quality products. Please express my special thanks to Mike Sawley, and a warm hello to Bob Barton and Alex Leavens (hope I spelled that right).

(Editor's note: Kirt Stockwell was once the President of ACE of Eugene, and was the Director of Technical Support at MPP before his work with his new company SofMark and Marketing Information Consulting Research Organization (MICRO). You can contact Kirt for information on Mindlink by calling (503) 689-3565, or writing to 4325 Sean, Eugene, OR 97402.)

ST Software Review

ROBERT PACKER

MICRO C-Shell
Beckemeyer Development Tools
592 Jean St. #304 Oakland, CA 94610
(415) 658-5318

When I bought my Atari 520 ST, I wasn't really sure what I could do with it. All I knew was that I had to have one! After I got done playing with the GEM Desktop long enough to crash the system (about five minutes), I began to have second thoughts about the whole idea. While the GEM Desktop is fine to show your friends how easy icon based systems are to use, when it comes to serious work I've yet to be convinced that icons and mice are for me.

This is where MICRO C-Shell comes in. I can't recommend this program highly enough. My ST would still be running graphics demos and the like instead of performing useful tasks if I hadn't found MICRO C-Shell.

I wish I could describe all of the features of this highly sophisticated software package; unfortunately we only have space for a few of the major ones here. First, MICRO C-Shell contains a command processor, which means that you type in commands instead of manipulating the mouse. Of course it has all the usual things one expects in a command interpreter. You can copy, rename and delete files using wildcard characters. You can move files from one directory (not copy, but really "move" them). And you can view and print the contents of files in a number of different ways. Most of these features are available from the GEM Desktop, you say. So what makes the MICRO C-Shell package so useful? Let me tell you.

It's not the capability of any single command (even though many are quite powerful in their own right), it's the power and overall control the C shell gives you that really makes it valuable.

MICRO C-Shell provides an "environment", not just a command interpreter. It presents a whole new approach to using the computer effectively. MICRO C-Shell is a philosophy as much as it is a software package. The basic idea being that the power of the system comes more from the way programs interrelate than from any single program. Programs that alone seem trivial, become general and useful tools when combined together. To really take advantage of the MICRO C-Shell package, you must understand not only how to use the programs, but also how they fit into the environment.

MICRO C-Shell includes more than two dozen programs so I can't describe all of them here. One program that you constantly use is called "ls". This is a funny way of saying "dir" that comes from Unix. Directories can be listed in all sorts of different and useful ways. Files can be listed in columns, or down rows. There is a long format which shows more information about each file, like its size and the last date it was written. You can show individual directories, individual files, or whole lists of files and directories. You can even get a listing of all the files and directories on the entire disk with a single command.

The list of files produced by the "ls" program can be sent to a file instead of the screen. This makes it very easy to get a hard-copy listing of the files on a disk. The ability to send a program's output to a file instead of the screen is a general feature of the C Shell, called redirection. This allows you to direct any program's output to a place other than usual.

Another program that is very handy is called "grep". This program searches through a list of files for a string, and shows each place where the string occurs in each file. Like most the programs with MICRO C-Shell, there are options to control the behavior of "grep". You can print all lines in files except the ones containing the string. Or you can just get a count of the matching lines, or just show the names of the files that have the string. Actually "grep" does more than search for simple strings; it is capable of searching for fairly complex patterns of text. For example, if you used a product code consisting of 2 digits and 2 letters separated with a hyphen like "56-GH", you could use grep to find all of these in a text with the pattern:

"[0-9][0-9]-[A-Z][A-Z]"

which says "find two numeric characters (the two adjacent [0-9] patterns), followed by a hyphen (the '-' character), followed by two letters (the two [A-Z] patterns)". It's a weird syntax, but it works.

Using the C Shell, you can hook "ls" and "grep" together in what is called a pipeline. You can connect the output of "ls" to the input of "grep" and list only files matching a certain complex pattern or list of patterns, or use another "grep" feature and list all files except those matching the pattern. This ability to connect programs together is how you can really take advantage of the MICRO C-Shell tools.

The more you use the C Shell, the more you find uses for it. I started off just copying files and what not, then pretty soon I found myself setting up long pipelines,

connecting three or four programs together producing all kinds of new and useful tools.

Another thing that you quickly fall in love with is the ability to give commands aliases. This lets you make up your own commands or rename them to whatever you like. For example the package includes a set of aliases which re-define the MICRO C-Shell commands to look like MS-DOS.

When you first run the C Shell, it looks for a special file called "login.sh". If such a file exists, the the C Shell runs any commands it finds there. This file can contain any commands you want, which gives you a way to customize the C Shell environment every time you use it, without always having to type in the same commands.

One last item to note is the command history feature of MICRO C-Shell. The C Shell keeps track of the commands you type. Re-running a previously typed command can be done with a few keystrokes. The C Shell figures out which command it is you want and runs it again. This can be very handy. For example, let's say you just tried to run a program but you found out that you had the wrong disk inserted. You just insert the correct disk and have the C Shell re-run the command. This is especially nice when the command was very long. You can also use the history mechanism to correct spelling mistakes in previous commands; and you can even pull out particular words from an old command and use them in a new command.

I've only described a few of the programs and capabilities of MICRO C-Shell. One of the aspects I intentionally skipped over is that of command files, or shell scripts. The C shell is usually thought of as an interactive command interpreter, but it is actually a programming language in which each statement runs a command. It is possible to place commands into a file and have the C shell read and execute the commands from the file. The syntax of the C shell command files looks very much like the C programming language (hence the name C shell). The C shell has expressions and variables like other programming languages and control structures like if-then-else, while, goto, etc. It would be impossible to describe the syntax and usage of shell command scripts in detail here. Like most of the MICRO C-Shell advanced features, you will always find more uses for it as you go.

Obviously, I am pleased with the product. It's abundant supply of tools make programming and using the Atari 520ST much nicer, especially for experienced users. Like all of their software, MICRO C-Shell is not copy protected, which makes it much more useful. Beckemeyer Development Tools has produced an excellent product and in my opinion no serious ST user should be without it.

Software Comment

CHUCK AMARAL JR.
"THE MAGICIAN"

VIP PROFESSIONAL

Just recently I received my copy of "VIP Professional", the much awaited integrated spreadsheet, database, and graph (1-2-3 clone) with it's GEM interface retailing for $179.00. This unfortunately is not a review. I probably will later but I'm a little too upset now to give an unbiased opinion.

I'm upset because the version I received was a "text version" with no GEM interface! There are no GEM windows or mouse controls. It's like using it on an IBM PC in color but with more cells. Inside the package was a pamphlet entitled "READ ME FIRST". This pamphlet explained why the "text version" was supplied and not the version advertised or described on the package.

Basically, it said that the GEM version will not be issued until Atari ships GEM in ROM or I have made a one meg memory upgrade to my 520ST. Well, I could understand that until I found another piece of paper entitled "GEM Upgrade Coupon". This little slip of paper is to be mailed in with the software serial number and $19.95 plus CA state tax (which would apply to me) and I would receive my upgraded GEM version.

This folks UPSETS me very much! VIP wants us to pay for a program update that we were supposed to have in the first place? All the advertisement says is that it's fully GEM compatible. Even the box says it is and shows pictures of the screens. There is no warning anywhere stating that this is not the GEM version or that you had to pay $19.95 + tax for the product that wasn't in the box. This is a RIPOFF and false advertising!!

I think that ST users should be warned about what VIP Technologies is trying to pull and that VIP should give us the upgrade (better yet - the actual advertised program) at no charge. We already paid for it, didn't we? A letter to this effect has been sent to VIP Technologies stating my views and I think that anyone else with this problem should too. I would have called them but the service number on the documentation was disconnected....

Thanks for reading my steam. I'll review the VIP Professional as soon as I cool down. Until then, I'll play around with my "text version"

Hardware News

GEORGE LANGWORTHY
FROM CURRENT NOTES
OPTICAL DISC PUBLISHING

George Langworthy
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913-722-0101 ((24 hr))
August 14, 1985

HI!! I'm very pleased to share my enthusiasm and information about the birth of an industry: optical disc publishing.

First, a little about me. I live and work in a suburb of Kansas City, have a Bachelor of Arts and M.S. in Retailing degrees from Eastern schools. I'm new to the world of ATARI. I've been a small business data processing student, programmer, manager using EDP and high technology analyst, starting off with IBM punched card accounting machines.

My point of view is that of a knowledgeable user. Sometimes for fun, sometimes for money, I've studied technology since the '50's. I look for what is available now and coming up to serve my, my business's or my client's needs. Though I have preferences, I'm not tied to any particular brand of hardware or software. Currently, the Atari 260/520 ST single user and DEC MicroVAX II 32 bit multi-user supermicro computers are the "hottest" in their respective markets, so say I.

OPTICAL DISK MEMORY: CD-ROM - WHAT IS IT?

It's darn near magic! Each 4 3/4" (120mm) Compact digital audio Disc, abbreviated CD, holds 14+billion bits of raw data. When formatted into 270,000 blocks of 2,048 bytes each, the total capacity is 550 megabytes. Look at one when you go into a record store. Notice the diffraction grating effect. The one micron data "spots" make a track three miles long.

HOW DID CD-ROM COME ABOUT?

Why is my new LP record or tape a whole bunch of bits? Over ten years and $600 million ago N. V. Phillips, Magnavox in the USA, and Sony Corporation decided that laser technology was the best available with which to develop a "perfect" replacement for LP records and cassette tapes. Digital laser recording and reproduction allows audio signals from 20 to 20,000 hertz to be reproduced + or - 1db and without distortion.

HOW DOES IT WORK?

Two channels each are sampled 44,000 times per second at 256 loudness levels. Each sample is then recorded as an 8 bit word. Information theory states that a sampling rate double the highest frequency allows 100% of the information in the original analog signal to be stored and recreated. The CD holds up to 75 minutes of perfectly reproduced music.

A marvelous bonus results for we data types. Almost all applied R & D, manufacturing, and tooling costs are being paid for by audiophiles! CD hi fi players now sell for under $250. In 1986, you will be able to buy a combination CD audio and CD-ROM player/disc drive for a hundred or so dollars more than the CD audio alone. Plug one set of wires into your stereo amplifier and the other into your personal computer.

WHAT ABOUT ATARI?

Reporting on the Chicago June Consumer Electronics Show, several industry magazines said Atari had the most significant new product. Atari demonstrated a prototype CD-ROM disc drive and controller plugged into a color 520 ST. Atari plans to have it's $499 CD-ROM drive and controller out before the end of 1985.

WHAT DATA BASE WILL BE OUT FIRST?

Grolier, Inc. and Activenture Corp., Monterey, CA demonstrated a 21 volume encyclopedia on CD-ROM. This took up less than 1/4 of the capacity of the CD-ROM disc. All seven references to "toothache" were displayed in under 10 seconds. When the 520 ST searched, it didn't have to cover each word of the entire 21 volumes. It looked at an index of the 141,000 separate words. After each word were pointers to the locations of all blocks containing that word. This software was written under Digital Research's GEM for the Atari ST. It appeared to work very well with the prototype CD-ROM and data base disc. At Chicago National Computer Conference in July, Grolier announced that the IBM version of the encyclopedia will sell for $199 list in the fall 1985.

WHY WILL THE CD-ROM CAUSE A REVOLUTION IN PUBLISHING?

As Tom R. Halfhill, Editor, COMPUTE said in the August 1985 issue, "To think of a CD simply as an efficient way to store mass amounts of data is to miss the point...a CD-ROM (system) can find the slightest, most obscure fact in a massive database in less time than it takes you to pull a book off a shelf and flip it open to the index."

CD-ROM is 1/1000 the cost of paper at one penny a page. Manufacturing cost is $2.70 each including the box. Microfilm and microfiche are at least 100 times costlier. A 500 megabyte computer disk drive and controller are 30 times Atari's proposed $500 cost. CD-ROM is by far the lowest cost way to store and retrieve from large amounts of information.

Even more significant is the accessability to any specific item in a few seconds. With proper indexing and software on the disc, you can do a free text search of everything in the data base. Boolean searches of multiple words next to each other, in same sentence, in same paragraph, on same page and in same article are all available under the Atari/Activenture software.

THAT'S AWESOME! WHAT NEXT?

The first byte of each block is an 8 bit status indicator. It tells the computer which of any of 256 kinds of information are contained in the following block. Single frame b/w and color pictures, combined audio with text, and graphics are a few of the possibilities.

Denon has announced the SL-P15, a 51 disc capacity multi CD audio player. It has CD-ROM output and a communications card for external computer control. It is 16x8x16, will be available around Christmas 1985, and carries a $1,500 price tag. Here could be a 50,000 volume, word by word indexed, reference library the size of your stereo hi fi receiver. In under 15 seconds, you could find whatever you wanted from 27 gigabytes, or 13.5 million computer pages at the hardware cost of a 40 meg disk drive.

FOR MORE INFORMATION, PLEASE READ OR CONTACT:

COMPUTE, August 1985, page 16; "Monster Memory". Describes the potential of CD-ROM and has more technical data.

DIGITAL AUDIO; monthly magazine; September 1984 ff issues have CD-ROM articles by Bryan Brewer. Address is Digital Audio, Peterborough, NH 03458-1194.

DIGITAL AUDIO; book by Nakjima and others; TAB paperback $11.95. Describes the format and error correcting scheme for the compact digital audio disc. Also in hardback. A must if you want to know exactly what CD's and CD-ROM's are.

(Written for CURRENT NOTES, Joe Waters, Editor, 8/14/85 by George Langworthy)

"Look at me when I'm programming you!"

ST Sound Tutorial

STEWART J. DIMON

SO THAT'S WHAT THE ST SOUNDS LIKE!!!

If you have taken the ST plunge, as I have, I am sure that one of the first programs you typed into ST Basic went something like this:

```
10 FOR A = 1 TO 3
20 SOUND A,10,6,6,100
30 SOUND A,0,0,0,0
40 NEXT A
```

Weren't you disheartened to discover that this ONLY worked the first time through, that is, it seems that ST Basic has some BUG that only allows the first sound channel to be addressed.

Turning a few pages back in the ST-Basic manual, we see a rather cryptic command, WAVE. Looking at the list of parameters reveals that the first one is titled ENABLE (our FIRST clue). Not only does this enable the WAVE command, but this must be set prior to any calls to the SOUND statement. Despite what the manual says, to enable a sound channel, we need to set the bits (0-2) to a value of 1 (not 0). To do this, the following chart should be used :

TO ENABLE CHANNEL(S)	SET ENABLE VALUE TO
1	1
2	2
3	4
1 + 2	3
1 + 3	5
2 + 3	6
1 + 2 + 3	7

Note, this sets the appropriate channel(s) to their "musical" mode. The sound chip has another mode. You can incorporate "noise" (sounds like a background HISS) along with any/all of the sound channels if you desire. For this, assign ENABLE the following values :

NORMAL	NOISE	ENABLE VALUE
		EEENNNXX *
		123123XX
-----	1	8 (00010000)
2	1	10 (01010000)
3	1	12 (00110000)
2 + 3	1	14 (01110000)
-----	2	16 (00001000)
1	2	17 (10001000)
3	2	20 (00101000)
1 + 3	2	21 (10101000)

------	3	32	(00000100)
1	3	33	(10000100)
2	3	34	(01000100)
1 + 2	3	35	(11000100)
------	1 + 2	24	(00011000)
3	1 + 2	28	(00111000)
------	1 + 3	40	(00010100)
2	1 + 3	42	(01010100)
------	2 + 3	48	(00001100)
1	2 + 3	49	(10001100)
------	1 + 2 + 3	56	(00011100)

*E=Enable. N=Noise Enable. X=Not Used

The next parameter determines if you wish to set up a waveform for a channel, or if you are satisfied with it being a square wave (full volume while on, no volume when off, nothing in between). The settings are identical to those used for ENABLING a sound channel (that is, values from 1..7). If a channel is NOT setup as a WAVEFORM channel, and it is enabled, then the default state is for a square wave.

The third parameter is the SHAPE parameter. According to the Basic manual, setting bits 0..3 causes something to happen. I have experimented on numbers in the range 0..15 (as parameters), and have found that there are QUITE a variety of sounds that this chip can produce. Most of the sounds are very similar, there are subtle differences regarding the attack (initial) volume. Some values start at full volume and decay to nothing, others start at nothing and "swoop" to full volume. Some settings cycle between high/low volumes, some are in repeated patterns, others sound only one time/call. (See detailed listing in file WAVE.TXT on the ST-Basic DOM).

Try experimenting around with different values. These will sound different depending on the setting of the fourth parameter, the PERIOD parameter. The period parameter sets the amount of time (in WHAT I am not sure, it is (of course) NOT documented), that it takes for the WAVE to cycle through one complete tone. This may be a POSITIVE unsigned integer value (0..65535), the larger the number, the slower the decay cycle. Through a combination of this and the SHAPE parameter, you will be able to create (almost) any sound pattern you wish, provided that it exists within the sound chip.

The fifth (and final) parameter to the WAVE command is the TIME parameter. This (like the 2nd through the 4th parameter) is optional, and if employed, will create a fixed length delay, during which time, processing of the program comes to a halt. This figure is in 50ths of a second (approximately), so a value of 50 will "delay" the processor for (approximately) 1 second.

Following are a few simple programs that will allow you to experiment with the sound command. They are intended ONLY to demonstrate the power of the sound/wave command.

The first program plays a broken chord (so that you can HEAR that there are THREE separate channels). It plays in 4 different octaves. (On ST Basic DOM as SNDTEST.BAS)

```
10 WAVE 7,7
20 FOR Y=3 TO 6
30 SOUND 1,10,1,Y,9:SOUND 2,9,5,Y,9:SOUND 3,8,8,Y,25
40 SOUND 1,0,0,0,0:SOUND 2,0,0,0,0:SOUND 3,0,0,0,0
50 NEXT Y
99 END
```

The next program, demonstrates some of the sounds that are available to you. It is a fixed tone (spread over 3 octaves for clarity), and the current SHAPE and PERIOD values are displayed in the output window. (On ST Basic DOM as WAVER.BAS)

```
10 FULLW 2
20 CLEARW 2
30 FOR SPE = 1 TO 31
40 FOR PRD = 1 TO 10001 STEP 1000
50 PRINT "The current shape is ";SPE;" Period is ";PRD
60 SOUND 1,1,1,3,0:SOUND 2,1,1,4,0:SOUND 3,1,1,5,0
70 WAVE 7,7,SPE,PRD,75
80 NEXT PRD, SPE
99 END
```

The last sample program, allows you to specify the SHAPE, PERIOD and TIME (if any) for a particular fixed note. This allows you to experiment and find that sound that is "JUST RIGHT!!" (On ST Basic DOM as WAVEFORM.BAS)

```
10 INPUT "Enter SHAPE (0..31) ";SHAPE
20 INPUT "Input PERIOD (0 to STOP) ";PERIOD
30 INPUT "Input DELAY (0 is OK) ";DELAY
40 IF PERIOD <> 0 THEN SOUND 1,1,4,5,0:
   WAVE 1,1,SHAPE,PERIOD,DELAY:GOTO 10
99 END
```

Meeting Notes

JIM MORAN

SAN LEANDRO COMPUTER CLUB
General Meeting
December 3,1985

The final meeting of 1985 was called to order by Chairman Jim Hood before a great crowd of nearly 200. The Chairman first called on several members to make brief announcements. The first of these was by Richard Stiehl who reported on an 80 column setup that he had running on an eight bit machine for members to inspect. This 80 column screen was produced by a cartridge that is inserted into the main cartridge slot of your Atari an can be used with most disk-based software. There is a version that is specially designed for the 800 that goes in the right slot so you can use normal 8K carts. in the left slot. The normal retail price on this cart. is about $50.00 and it can be had at Home Computing Centers in Bay Fair Mall and Tanforan Mall. Richard was looking to get a group purchase on these carts. so that a substantial savings could be had. For more information please give him a call at the number published in the S.L.C.C. Journal or leave him E-Mail on THE KEY SYSTEM.

Treasurer Lois Hansen spoke on a major problem she was having with a crashed disk which contained the clubs membership records. As Lois reported the records were kept using SYNFILE, unfortunately there was no backup at the time the crash happened and it caused a great deal of work to try and recover the information. Of course the first lesson to be learned from a catastrophe like this is to backup your disks, but all members were advised to use caution when using SYNFILE on very large files.

Chairman Hood advised the membership that TV channel 60 would have an AMIGA versus 520ST show on the coming Thursday night.

The highlight of the evening was President Bob Barton's awarding of a presentation gavel to past President Phil Mitchell for his service to the club during his term of office. Phil thanked the club and the officers for the gift and took the opportunity to announce that the M-SIG was back on the club calendar but at a new location. Phil asked all to call him for directions to the new address.

Program Director Richard Scott next introduced our main guest speakers for the evening... Mr. BILL WILKINSON, Compute! magazine columnist and Technical Director at OPTIMIZED SYSTEMS SOFTWARE, INC. (OSS) and Mr. MARK ROSE, Director of R&D at OSS.

Bill and Mark were here tonight primarily to show the new 520ST programs soon to be released by OSS. To preface the showing of the new programs Bill spoke on several items of interest to ST owners. The first the, lack of documentation on most of the programs being released for the new machine, as each software company tries to be the first out. The bugs in the new 520ST BASIC were reported to be numerous and relatively serious. For the eight bit machines the new KYAN PASCAL seems to be a well done product and would make a good start for anyone interested in learning the language.

In reply to a question Bill estimated that it would cost between $150,000 and $200,000 to develop a full basic language for the ST. As it now stands BASIC XE for the ATARI 8 bit machines is a faster BASIC than ST BASIC in many instances.

Using visual aids, Bill and Mark showed the first of OSS's new 520ST software release "Personal PASCAL". This will be closely followed by "Personal DISKKIT", both scheduled for release just after the first of the year. Closely after these will be Personal PROLOG. Each of them with proper documentation and each complete and ready to use. Personal PASCAL is very strong in type checking as it compiles, not waiting until runtime to find such errors. It was touted as being the 16 bit ACTION!

Personal DISKKIT is a utility program to examine and repair disk problems. Bill stated DISKKIT was definitely not a pirating tool (i.e. if a sector cannot be read by normal means, don't look to DISKKIT for help). Included with the program will be full source code.

Personal PROLOG is an artificial intelligence programming language something along the lines of LISP.

The list price of Personal PASCAL and Personal PROLOG will be $89, while Personal DISKKIT is listing in at $39.

It should be clear by now that all OSS products that are meant for the Atari 520ST will carry the name: PERSONAL ...

Bill and Mark stated that despite a hard disk crash that destroyed the OSS mailing list, the OSS newsletter will continue to be published, it is simply a matter of time until the list is rebuilt and mailings resume.

After the OSS presentation was completed Tom Bennett described all the door prize and raffle items and gave everybody a last chance to buy raffle tickets. Tom stated that as we had done in the past the proceeds from the raffle ($200) and the food items donated by club members will be given to the "Davis Street Community Center" for distribution to needy families during the holiday season.

Tom and Ron, our software Chairmen next demonstrated and explained some of the programs on this months FLOPPY, a terminal program for the 1030, several applications, special fonts, a couple of games and two great pictures should make this a popular FLOPPY.

At this time the meeting was recessed and we enjoyed our cake and delicious ice cream Christmas party. Our special thanks to Mariellen at LOARD'S ICE CREAMERY in Orinda.

Our newsletter editor Ron Seymour and his chief assistant Tom Bennett took over the podium and ran the drawings for the door prizes and raffle. Among the items were a new ATARI modem, several EPYX games, a HABA ST program, many disk based programs and some UNIQUE (odd junk ?) special items.

To close out the evening Charles Andrews from Oregon gave a short spiel on his 340K 130XE upgrade. Those interested in this copyrighted $140 upgrade may contact Charles at P.O. Box 1613, Eugene OR, 97440. You may call him voice at 503-746-5774 or via modem at the Supra Corp. BBS at 503-689-3565.

Before anyone else could get a foot in the door Chairman Hood wished all HAPPY HOLIDAYS and adjourned another very successful meeting.

ST Basic

STEWART J. DIMON

BASIC Impressions

Having worked on a variety of computers, with all sorts of BASICS, I must admit that ST-BASIC does have the "look and feel" of quite a number of other BASICS, including 8-Bit Atari and MS-BASIC. So how is it to work with? Well, I had a small (50 line or so) program that was developed on an 800-XL, and it took me about a half an hour to convert, type in, and have it up and running on an ST. I was, rather impressed, by everything except the speed of execution.

I am the FIRST to admit that I never thought that (old) Atari Basic was all that slow. After all, if I was to try and count to 10000, it would take me MORE than a minute (...or two). All that aside, I was (a little) disappointed in the speed of ST BASIC. After all, it IS running on a 68000 clocking at 8mhz. One wonders what they wrote it in that makes it slow. (I have heard a RUMOR that it was written in COMPILED LOGO, I have discounted this rumor since I have NEVER heard of such a language, LOIS, if this exists I stand corrected.)

So what are my impressions of the language overall? Well, as far as BASICS go, this one does NOT suffer from the "featurectomy" that some basics have due to a limited amount of RAM to store them in.

Strings work as they do in MS-BASIC (or GW-BASIC). Functions are supported, as are some structured statements such as while. Full DOS (or TOS) support is included, but there is only LIMITED support of GEM.

The editor is full featured too. Trace is supported as well as stop/continue. So what is it that people are moaning (griping, b------g) about? Well, three things really.

GRIPE # 1 : BUGS - Yes Virginia, ST-BASIC has bugs. But then so does LOTUS-123, TURBO Pascal, MS-DOS, TOS and any other piece of software ever written. In this case the price was right, so I am not complaining TOO loud.
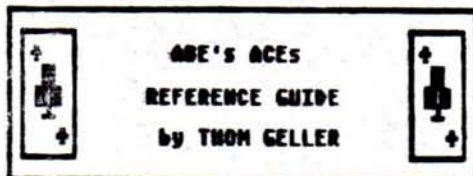
GRIPE # 2 : Ok, I admit it, it IS slow!! But so is LOGO. I have one wish regarding this. MAYBE, it was written by METACOMCO, they're the folks who have brought us AMIGA-DOS (Intuition) and AMIGA-BASIC. (NOTE - My sources inform me that ST Basic WAS written by METACOMCO, and that the command set is "identical" on the ST/Amiga). This will take some of the air out of any claims by the disciples of Jay Miner who insist that their $2000.00 was better spent than our $1000.00. Sure, I am the FIRST to admit it, I took the ST plunge, and I don't regret it.

GRIPE # 3 : The "documentation" for the ST-BASIC (which is the 'excuse' that most of us heard was the reason for the delays in the release of the final package, is no more than an (incomplete) listing of (most of) the commands that the language has to offer. One prime example, is in reference to the SOUND command (which DOES address all three channels), the manual simply fails to instruct us (the users) how to do this.

I guess that the third gripe is the one that I feel the most strongly about. There seems to be a trend in the software for the ST that documentation is erroneous, incomplete, non-existent, or resides on the disk, so that people who have taken a second mortgage for the purchase of their computers, and have not been fortunate enough to own a printer, are left to huddle over their computers like ancient monks, transcribing information from the screen onto a sheet of paper! Sure, docs show up on Compuserve, but at $6.00/hour (nights and weekends), and the fact that not everyone has a modem, makes this an UNACCEPTABLE means of distribution.

On a scale of 1 to 10, I would rate ST-BASIC about a 5 or a 6. It is a full version of Basic, which would be enhanced (say in a version 2.X). with the addition of correct documentation, extended GEM support, and an indication that there was a TURBOCHARGED CPU under the hood. It's not a bad Basic, and I guess, as far as that goes, compared to some of the Software I have paid $$$$ for, it's not bad at all.

REPRINTED FROM ABE'S ACES

```
+-------------------------------------+
| ♣          ABE's ACEs          ♠    |
| ♣                              ♠    |
| ♣       REFERENCE GUIDE        ♠    |
| ♣                              ♠    |
| ♣        by THOM GELLER        ♠    |
+-------------------------------------+
```

COMMON COMMANDS & THEIR ABBREVIATION:

BYE	B.
CLOAD	CLOA.
CLOSE	CL.
COLOR	C.
CONT	CON.
DATA	D.
DEG	DE.
DIM	DI.
DOS	DO.
DRAWTO	DR.
ENTER	E.
FOR	F.
GET	GE.
GOSUB	GOS.
GOTO	G.
INPUT	I.
LET	LE.
LIST	L.
LOAD	LO.
LOCATE	LOC.
LPRINT	LP.
NEXT	N.
OPEN	O.
PLOT	PL.
POINT	P.
POKE	POK.
POSITION	POS.
PRINT	PR. or ?
PUT	PU.
READ	REA.
REM	R. or .
RESTORE	RES.
RETURN	RET.
RUN	RU.
SAVE	S.
SETCOLOR	SE.
SOUND	SO.
STATUS	ST.
STOP	STO.
TRAP	T.
XIO	X.

XIO COMMANDS

CODE:	OPERATION:
3	OPEN
5	GET RECORD
7	GET CHARACTERS
9	PUT RECORD
11	PUT CHARACTERS
12	CLOSE
13	STATUS REQUEST
17	DRAW LINE
18	FILL
32	RENAME
33	DELETE
35	LOCK FILE
36	UNLOCK FILE
37	POINT
38	NOTE
254	FORMAT

SETCOLOR AND POKE EQUIVALENT CHART.

COLOR = 0   GRAY
Luminance = 0 ----- 0   < THE POKE EQUIVALENT
Luminance = 2 ----- 2
Luminance = 4 ----- 4
Luminance = 6 ----- 6
Luminance = 8 ----- 8
Luminance = 10 ---- 10
Luminance = 12 ---- 12
Luminance = 14 ---- 14

COLOR = 1   GOLD
Luminance = 0 ----- 16
Luminance = 2 ----- 18
Luminance = 4 ----- 20
Luminance = 6 ----- 22
Luminance = 8 ----- 24
Luminance = 10 ---- 26
Luminance = 12 ---- 28
Luminance = 14 ---- 30

COLOR = 2   ORANGE
Luminance = 0 ----- 32
Luminance = 2 ----- 34
Luminance = 4 ----- 36
Luminance = 6 ----- 38
Luminance = 8 ----- 40
Luminance = 10 ---- 42
Luminance = 12 ---- 44
Luminance = 14 ---- 46

COLOR = 3   RED-ORANGE
Luminance = 0 ----- 48
Luminance = 2 ----- 50
Luminance = 4 ----- 52
Luminance = 6 ----- 54
Luminance = 8 ----- 56
Luminance = 10 ---- 58
Luminance = 12 ---- 60
Luminance = 14 ---- 62

COLOR = 4   PINK
Luminance = 0 ----- 64
Luminance = 2 ----- 66
Luminance = 4 ----- 68
Luminance = 6 ----- 70
Luminance = 8 ----- 72
Luminance = 10 ---- 74
Luminance = 12 ---- 76
Luminance = 14 ---- 78

COLOR = 5   PINK-PURPLE
Luminance = 0 ----- 80
Luminance = 2 ----- 82
Luminance = 4 ----- 84
Luminance = 6 ----- 86
Luminance = 8 ----- 88
Luminance = 10 ---- 90
Luminance = 12 ---- 92
Luminance = 14 ---- 94

COLOR = 6   PURPLE-BLUE
Luminance = 0 ----- 96
Luminance = 2 ----- 98
Luminance = 4 ----- 100
Luminance = 6 ----- 102
Luminance = 8 ----- 104
Luminance = 10 ---- 106
Luminance = 12 ---- 108
Luminance = 14 ---- 110

COLOR = 7   BLUE
Luminance = 0 ----- 112
Luminance = 2 ----- 114
Luminance = 4 ----- 116
Luminance = 6 ----- 118
Luminance = 8 ----- 120
Luminance = 10 ---- 122
Luminance = 12 ---- 124
Luminance = 14 ---- 126

SETCOLOR AND POKE EQUIVALENT CHART.

COLOR = 8   MEDIUM BLUE
Luminance = 0 ----- 128   < THE POKE EQUIVALENT
Luminance = 2 ----- 130
Luminance = 4 ----- 132
Luminance = 6 ----- 134
Luminance = 8 ----- 136
Luminance = 10 ---- 138
Luminance = 12 ---- 140
Luminance = 14 ---- 142

COLOR = 9   LIGHT-BLUE
Luminance = 0 ----- 144
Luminance = 2 ----- 146
Luminance = 4 ----- 148
Luminance = 6 ----- 150
Luminance = 8 ----- 152
Luminance = 10 ---- 154
Luminance = 12 ---- 156
Luminance = 14 ---- 158

COLOR = 10   TURQUOISE
Luminance = 0 ----- 160
Luminance = 2 ----- 162
Luminance = 4 ----- 164
Luminance = 6 ----- 166
Luminance = 8 ----- 168
Luminance = 10 ---- 170
Luminance = 12 ---- 172
Luminance = 14 ---- 174

COLOR = 11   GREEN-BLUE
Luminance = 0 ----- 176
Luminance = 2 ----- 178
Luminance = 4 ----- 180
Luminance = 6 ----- 182
Luminance = 8 ----- 184
Luminance = 10 ---- 186
Luminance = 12 ---- 188
Luminance = 14 ---- 190

COLOR = 12   GREEN
Luminance = 0 ----- 192
Luminance = 2 ----- 194
Luminance = 4 ----- 196
Luminance = 6 ----- 198
Luminance = 8 ----- 200
Luminance = 10 ---- 202
Luminance = 12 ---- 204
Luminance = 14 ---- 206

COLOR = 13   YELLOW-GREEN
Luminance = 0 ----- 208
Luminance = 2 ----- 210
Luminance = 4 ----- 212
Luminance = 6 ----- 214
Luminance = 8 ----- 216
Luminance = 10 ---- 218
Luminance = 12 ---- 220
Luminance = 14 ---- 222

COLOR = 14   ORANGE-GREEN
Luminance = 0 ----- 224
Luminance = 2 ----- 226
Luminance = 4 ----- 228
Luminance = 6 ----- 230
Luminance = 8 ----- 232
Luminance = 10 ---- 234
Luminance = 12 ---- 236
Luminance = 14 ---- 238

COLOR = 15   LIGHT-ORANGE
Luminance = 0 ----- 240
Luminance = 2 ----- 242
Luminance = 4 ----- 244
Luminance = 6 ----- 246
Luminance = 8 ----- 248
Luminance = 10 ---- 250
Luminance = 12 ---- 252
Luminance = 14 ---- 254

GR. 0

Intensity of characters.
SE.1,___,___ or POKE 709

Screen color.
SE.2,___,___ or POKE 710

Border color.
SE.4,___,___ or POKE 712

GR. 1 & 2

Intensity of text in the window.
SE.1,___,___ or POKE 709

Text window.
SE.2,___,___ or POKE 710

Background.
SE.4,___,___ or POKE 712

COLOR OF ? #6;"ABCD"
SE.0,___,___ or POKE 708

COLOR OF ? #6;"abcd"
SE.1,___,___ or POKE 709

COLOR OF ? #6;"ABCD"
SE.2,___,___ or POKE 710

COLOR OF ? #6;"abcd"
SE.3,___,___ or POKE 709

GR. 3,5 & 7

COLOR 1
SE.0,___,___ or POKE 708

COLOR 2. Also controls the intensity of Characters in the Text Window.
SE.1,___,___ or POKE 709

COLOR 3. Also Color of Text Window.
SE.2,___,___ or POKE 710

Background
SE.4,___,___ or POKE 712

GR. 4,6

COLOR 1
SE.0,___,___ or POKE 708

Intensity of Characters in the Text Window.
SE.1,___,___ or POKE 709

Text Window
SE.2,___,___ or POKE 710

Background
SE.4,___,___ or POKE 712

GR. 8

NOTE: The color of the text window is the same color as the background.

COLOR 1. Luminance control only. Color is the same as background.
SE.1,___,___ or POKE 709

Background.
SE.2,___,___ or POKE 710

Border.
SE.4,___,___ or POKE 712

GR. 9,10 & 11   (GTIA)

GR.9

1 Color and 16 luminances. Foreground color register.
SE.4,___,0

Always use the register # 4, and a luminance value of 0. A luminance value of 0 will give you a full range of shades.

GR.10

Background
COLOR 0:No setcolor. POKE 704

COLOR 1:No setcolor. POKE 705
COLOR 2:No setcolor. POKE 706
COLOR 3:No setcolor. POKE 707
COLOR 4:SE.0,___,___ or POKE 708
COLOR 5:SE.1,___,___ or POKE 709
COLOR 6:SE.2,___,___ or POKE 710
COLOR 7:SE.3,___,___ or POKE 711
COLOR 8:SE.4,___,___ or POKE 712

GR.11

16 Colors and 1 luminance.
SE.4,0,___

Always use the register # 4, and a color value of 0. A color value of 0 will give you a full range of colors.

Use an even number 0 - 14 to control the luminance of the 16 colors.

The relationship between using:

SETCOLOR and POKE

SETCOLOR _____,_____,_____

REGISTER. ┘ | |
THE COLOR NUMBER. ─┘ |
THE LUMINANCE NUMBER. ──────┘

The COLOR number is any number between 0 and 15.

The LUMINANCE number is any number between 0 and 14. (BRIGHTNESS)

In graphics mode 0 for instance...

SETCOLOR 2,___,___   OR   POKE 710,___

Will control the background color of the screen.

SETCOLOR 2,6,6 OR POKE 710,102
Will produce the same color.

CONTROL CHARACTERS:

REGULAR VIDEO:

Q W E R T Y U I O P   - _ = |

r т ╕ ─ ● █ ▬ ▪ ▪ ♦

A S D F G H J K L   ; : + \ * ^

├ ┼ ┤ / \ ◢ ◣ " "   ♠

Z X C V B N M   , [.] / ?

∟ ┴ ┘ | | |_ ¯   ♥   ♦

INVERSE VIDEO.

(inverse video character blocks)

WILD CARDS *,*,*,*,*,*,*,*,*,*,* ?

ATARI DOS recognizes 2 "wild cards" that you can substitute for characters in a file name.

1 (*) asterisk
2 (?) question mark

Use the ? to substitute for any single character. The * can stand for any valid combination of characters or number of characters.

*.BAS = will find all files that have (BAS)as an extender.

T*.* = will find all files that start with a (T).

T*.BAS = will find all files that start with a (T) & end with (BAS)

T???????.BAS = would look for the file that starts with a (T) & ends with a (BAS).

THAT*.BAS = will find the file that starts with (THAT) and ends with (BAS)

THISTEST.BAS
THISTEST.OBJ
THATTEST.BAS

JANUARY 1985

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 New Years!	2	3	4
5	6	7 8 pm MAIN MEETING S.L. Library 300 Estudillo	8	9 8 pm EXEC. BOARD closed meeting	10	11 8 pm ATR8000 SIG for info call Mike 482-5061
12	13 8 pm ST SIG S.L. Library 300 Estudillo	14 8 pm ASSEMBLY SIG for info call Frank 632-7181	15	16	17 Newsletter Deadline for info call Ron 537-3183	18 7 pm MSIG/GAMEROOM for info call Phil 351-2208
19	20	21	22	23	24	25
26	27	28	29	30	31	

S.L.C.C. MADE IN AMERICA
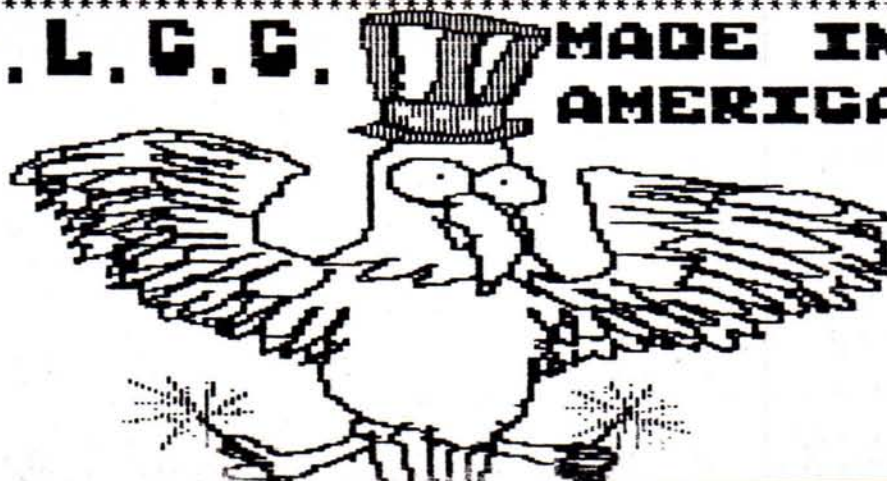
North-West
Computer Swap
10-5 pm
San Mateo
Fairgrounds

123-4231

SLCC Interface

The SLCC Interface is available to all active club members for the purpose of announcing any club function, an item for sale, swap meets, or to be used as a question/answer forum. You may give any officer your contribution to the Interface, or you can leave it on "The Masthead" message base of the Key System BBS, (415) 352-5528, operated by Sysop Mike Sawley.

* * * * *

There is a new San Leandro Atari BBS, 300-1200 baud, 24 hours. Call:
THE FORBIDDEN PLANET
(415) 481-8760

* * * * *

FOR SALE: NAP 12" Amber monitor - $60.00. MPP-1150 Interface $20.00. Call Nap Forte at (415) 569-4490.

* * * * *

GLASSES FOUND
A pair of brown prescription glasses were found at the last M-SIG. For information call Phil at 351-2208.

* * * * *

FOR SALE : 6-MEG HARD DISK. I have a 6-MEG Corvus Hard Disk for sale. A complete package NEW Hard Disk (still under 6 month warranty), Interface and Integrater Board!! and all manuals. This system has the storage capacity as 29 DOUBLE DENSITY DISK DRIVES!! This would be great for a BBS SYSTEM or or your own personal data files. I bought this system for $800 but will let it go for no less than $600!! For more info call Ron Devine at (415)537-2749...I will be at the January meeting with the hard disk!!!!

* * * * *

MAIN MEETING SCHEDULE
January 7
February 4
March 4
April 1
May 6
June 3

ST SIG MEETING SCHEDULE
January 13
February 10
March 10
April 14
May 12
June 9

SLCC Journal

P.O. Box 1525, San Leandro, CA 94577

Next Meeting:

TO:

January 7   8:00 PM
San Leandro Community Library
300 Estudillo Ave.
San Leandro, CA

7:30-8:00:   Soft/Hardware Swap
8:00 Speaker:

WILLIAM WALDEN
FAMILY HISTORY PROGRAM

186   86/05/08