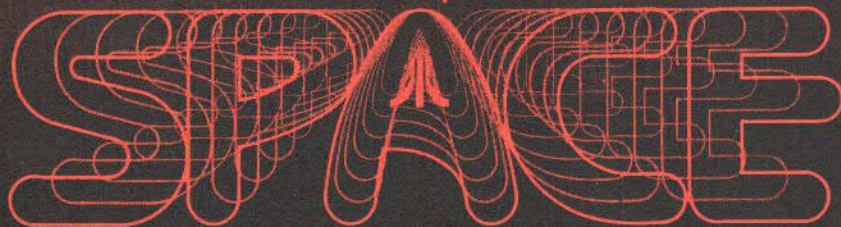


Saint Paul ATARI Computer Enthusiasts



An independent computer user group

N O V E M B E R , 1 9 8 7

SPACE Meeting Friday, Nov 13 at 7:30pm
MAST Meeting Friday, Nov 20 at 7:30pm
At the Falcon Heights Community Center
2077 Larpenteur Avenue West

MAST PROGRAMMERS Meeting Monday, Nov at 7:30pm
At First Minnesota Bank Building - second floor
Lexington and Larpenteur, in back of building

Bruce Haug	President	774-6226
Jim Schulz	Vice President	537-5442
	MAST Co-Chair	
	MAST Disk Librarian	
Bob Floyd	MAST Co-Chair	484-7576
	Newsletter Editor	
Joe Danko	SPACE Secretary	777-9500
Dan Stubbs	MAST Secretary	433-3708
Bob Siede	Treasurer	489-3982
Frank Haug	SPACE Disk Librarian	774-6226
Jim Scheib	SPACE Paper Librarian	721-4185
Neil Palosaari	MAST Paper Librarian	646-1272
Allan Frink	MAST Membership Chair	482-7911
Phil Seifert	MAST Demo Coordinator	



Minnesota
Atari ST



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SPACE/MAST BULLETIN BOARDS

SPACE/MAST East (XE) - Sysop: Frank Haug
- BBS Phone: (612)-774-0135
(Home Phone: 774-6226)

SPACE/MAST West (ST) - Sysop: Steve Pauley
- BBS Phone: (612)-560-9254
(Home Phone: 560-2917)

BYTES from the PRES, by Bruce Haug

November Elections are here, and a big THANK YOU to our nominations committee!! Looks like we have people volunteering for every office. I am looking forward to the time when I can be your full time SYSOP on the 8-BIT BBS, and not have to be concerned about what to do at the next month's meeting.

I could not have done my job as president of SPACE without the help of ALL the OFFICERS - SPACE and MAST. THANKS TO EVERYONE, this includes all of you MEMBERS who come to the meetings, SPACE, MAST, MAST PROGRAMMERS, and board meetings. THANKS!!!

We did have a problem with one of the disk drives for DOM, if you have a bad disk, bring it back and we will see to it you get a good one. The problem was with the drive we were reading with, not the one that did the writing. Believe me, I'm using the same drive to write this article with as I have done for 2 years, and no problems.

Two more BYLAW changes to vote on, read about them in this newsletter, all for the good of SPACE, and MAST..

See you Friday, THE PRES..

SPACE/MAST ELECTION INFORMATION

SPACE Nominating Committee: John Mitchell - 645-9673
Larry Vanden Plas - 636-2415

MAST Nominating Committee : Allan Frink - 482-7911
Dave Meile - 377-1884(H)
625-3694(W)

Nominations thus far (11/5/87):

SPACE President: Larry Vanden Plas
SPACE Vice President: John Novotny

MAST President : Jim Schulz
MAST Vice President: Phil Seifert

SPACE/MAST Treasurer: Bob Siede of SPACE
Allan Frink of MAST (uncertain)

PROPOSED CHANGES TO THE SPACE/MAST BYLAWS

ARTICLE IV OFFICERS

Section 2. The treasurer shall keep two sets of books, one for each group.

[Old Sections 2 through 5 have been re-numbered to be 3 through 6, respectively.]

ARTICLE IX AMENDMENT OF BYLAWS

Section 1. These bylaws can be amended at any regular monthly meetings of SPACE/MAST by two-thirds vote, provided that the amendment has been submitted in writing at a previous meeting of either group and printed in the newsletter.

Section 2. Voting shall be by paper ballot and will be tallied as the sum of the ballots collected from both group meetings in that month.

VP Notes, by Jim Schulz

Well, I'm back for the last go around. This month is election month as it is nationwide and also for SPACE. This month we say goodbye and thanks to our old officers and bring in some new blood with new ideas to continue the work. Before I get too far, I would like to give a few of our leaving officers the thanks that they so richly deserve. The unsung heroes of SPACE!!!! First, I would like to thank Bruce Haug for all of his time and effort to SPACE and MAST. Bruce has spent a lot of time supporting SPACE, more than any officer to date starting all the way back to cassette librarian many moons ago. Bruce has done

a lot to keep the group together and keep it moving. Without Bruce's time and effort, it's hard to really think of where SPACE would be today. Although Bruce will still be in the background running the SPACE BBS, his efforts to the club will be greatly missed by all. Also greatly missed will be his two cohorts who are probably the most unknown factor in SPACE's success, namely Diane and Frank Haug. Without Diane and Frank's work with the ANALOG and SPACE DOMs, the money would not roll in and memberships would likely fall. Both have given many years to SPACE both in foreground and background support for the club. Finally, there is Bob Floyd. What can you say about Bob??? Bob has filled in wherever he was needed and has always been available for the club. Starting from secretary to president to newsletter editor, Bob always gives his all. Bob contributions to both SPACE and MAST will be greatly missed. Between the four of them, there is good bulk of success of SPACE. All deserve a round of thanks for all for their years of support. Remember all of this is volunteer so their help will be greatly missed. I have seen the list of candidates for officers for SPACE. As well as being a lot of new faces, there are a lot of new ideas and new excitement to keep the club moving ahead. With the status of the current 8 bit hardware, that's the best that the club can ask. Good luck to all!!!

Finally, before we move on to the news, I would also like to personally thank all of the SPACE member for their support of me. I will also be leaving SPACE after the November meeting for bigger and better challenges. I have appreciated my time with SPACE and wish you well in the months ahead. This column next month will most likely be replaced by one by the new club officers. I will still stay around in spirit with 8 bit contributions to the new or should I say renewed newsletter editor starting next month Steve Pauley. A lot of good 8 bit articles have popped up in the last month so expect some good stuff in the months ahead. Things seem to be looking up for the 8 bit so stay tuned and stay active for the good stuff in the months to come. Once again, thanks for all of your support and good bye.

Now on to the news..... What's new for the 8 bit hardware-wise???? What's new on TV for the 8 bit????.... Another one bites the dust???? Comdex, is it for the 8 bit, find out????... Finally, what other goodies are elsewhere???? Let's get going....

First up, our monthly look at the 8 bit promises and excuses. First, the modem. The SX212 1200 baud modem is out. It works as is with an 850, but for some reason Atari still does not have the direct connect SIO connection done. The new driver is currently in test at Atari as well as SX Express. Both will be sold separately as a package at a future date. In the meantime, it has been found that the R:verter handler will work with the modem as is and will also work with Amodem and Hometerm. The modem sells for \$99.95. Second, the 80 column box. The XEP-80 80 column box is also out. It works as advertised previously, but currently has no software available to run on it. A version of Atariwriter 80 is due out any day now. The 80 column box sells for \$79.95. Next, the XE game machine. The XE game machine is out and selling at KayBee Toys. I have seen so it does exist. This comes with an Atari 65XE with keyboard, a gun, Flight Simulator II on cartridge and Missile Command. This sells for \$149.95. This would make a good demo as soon as a member buys one. It also includes a game called Bug Hunt for the gun. Finally, the disk drive. No word and no release date. But rumors say that it had better be soon. You see Atari is running out of 1050 disk drives if they aren't out already. If they don't release it soon, current 8 bit owners as well as new XE game owners will have no disk drives. More on these and other news at the meeting....

The 8 bit on TV????? Yes, it's true. Since the last meeting, I have seen a number of Atari commercials advertising the Atari 2600, Atari 7800, and the XE

Game System. All seem very well done and should be enough to get the name of Atari back in the forefront. These commercials were initially seen only on cable, but in recent days have also popped up on some of our local stations and independent as well so Atari is moving ahead. Watch for it on a TV near you. Now if Atari would only advertise the ST?????

Well, another bites the dust!!! Infocom, one of the longest supporters of the Atari 8 bit, has decided to dropped support for the 8 bit. Why I don't know??? Sales, I'm sure, have decreased, but the cost of producing an Infocom conversion should be quite low. If you are an adventure fanatic, like yours truly, a letter to Infocom would make an impact and make your concerns known. For even more startling news, read my Infocom news on the ST in this month's ST News. Infocom has been a Atari supporter for a long time. Their support will greatly missed.

Comdex, anyone??? As I write this Comdex is going on in Las Vegas. Comdex, this year is an ST show for Atari. No news on any 8 bit front has been heard. If there is anything new, you'll hear it first at this month's meeting.

Finally, let's check out what's around elsewhere in this month's issue. First, in this month's 8 Bit Xtra, there is a mishmash of information about addresses of companies and 130XE keyboards. This information sounds interesting so it is included for your perusal. Also this month is part 2 of the machine language tutorial series started two months ago. Next month, part 3. Finally, we have a letter from Neil Harris, the Atari spokesman, explaining Atari reasons for going with the XE Game System and future support of the 8 bit computer. This is very interesting reading for all 8 bit owners. Also starting next month is a new series of Basic tutorial articles. I have seen three in this series already with more to come so expect this new addition next month.

Well, that's it for this month and this column. It's been fun and good luck to all. I hope to see you all at this month's SPACE meeting and on the SPACE BBS.

Da DOM:Final Chapter, by Frank Haug

Actually, it's my final chapter, not SPACE's DOM. As most of you know, I am not going to be the DOM librarian after the November elections. I just thought I'd say that I've enjoyed being the Librarian for SPACE these past few years and hope that our new DOM librarian will help add new blood to the DOM.

Continuing in the BEST of series, this month (which I believe will be the last in this series at least for a while), we have some of the best demo's of the past. Also I hope to show off some of the older 'special' disks at the meeting.

Now for the November 1987 Disk Of the Month.

1. Bioplot - Enter - A modified version of the old favorite, which now correctly accounts for leap years and other things, and plots out to a 1020 plotter.
2. Waterfall - DEMO - A very well done color animation demo. Classic.
3. Solitaire - GAME - Great rendition of an old favorite.
4. Cesdemo - DEMO - Yes its old, but for some of our new members... the 1985 CESDEMO with the robot and spaceship. Incredible graphics.

5. Fawcett - DEMO - A classic, the dripping fawcett Done in GTIA graphics.

6. Picture -DEMO - Draws a GTIA picture of lincoln and mona lisa.

Well, that's all she wrote. Good luck to the new DOM librarian, and a final appeal to you all -- You make the DOM what it is, submissions help us to trade for new programs to give you. And thanks to all who helped me in my term of office. Farewell.

SPACE MEETING FOR OCTOBER, recorded by Joe Danko, Secretary

1. The meeting was called to order October 9th at 7:30 pm by President Bruce Haug. Approximately 35 members present.

2. Vice-president's report and ATARI news: Jim Schulz. Jim reported on the latest rumors concerning releases of new products. Atari's \$79.95 80 column adapter for 8-bit machines is now available to dealers but there is no software released although 80 column versions of ATARIWRITER and SILENT BUTLER should emerge someday. The \$149.95 65XE GAME SYTEM is also available to dealers and is packaged with a light gun and a game that uses it called BUG HUNT. It also comes with a 256K cartridge version of FLIGHT SIMULATOR II. Atari's \$99.95 SX212 300/1200 baud modem is also available to dealers but is usable with 8-bit systems only with the RVERTER modem handler and terminal software that needs an external handler. New software: GAUNTLET, TAX ADVANTAGE, CELEBRATY COOKBOOK, VIRTUOSO, NEWSROOM plus several releases from SSI and ELECTRONIC ARTS. Products soon to be available: SX212 modem software, DD/DS 8-bit disk drive is waiting for Bill Wilkinson of OSS to finish the new DOS (SPARTADOS will also be updated). VAPORWARE: An unidentified firm is developing an expansion box for 8-bit systems that will provide super high-resolution graphics, extra RAM, 80 columns and various interfaces for less than \$200.

3. President's report: Bruce Haug. Bruce reported on the disposition of the by-laws changes prior to the vote at this meeting.

4. Treasurer's Report: Bob Siede.

SPACE BAL.= \$417

MAST BAL. = \$324

TOTAL BAL.= \$733

5. Secretary's report: Joe Danko was out of town during all of September so Bob Floyd was kind enough to handle the minutes. I am now back for at least the next 3 months.

6. Newsletter Editor: Bob Floyd. Thanks to Larry Serflaten for his excellent technical discussion of Atari 8-bit character-set programming techniques. Members are urged to write articles, especially hardware and software reviews and opinions. The deadline is the Monday 10 days prior to the next SPACE meeting for submission of input for the next newsletter. Contact any club officer if you can't upload your article to the SPACE BBS.

7. PAPER LIBRARY: Jim Sheib, Librarian. If any member needs old magazine issues, call Jim at home. His phone number will be on the front of the August newsletter. Jim will bring current newsletters and magazines. Please return any borrowed materials by the following month.

8. BBS NEWS: The BBS has logged 2300 users and currently has about 150 registered users. Frank Haug will be retiring as head SYSOP and Bruce Haug will take over the duties of SYSOP. Frank should be available from time to time as a consultant. A hint to new users: don't forget to leave a message in <E-MAIL> addressed to <SYSOP> the first time you sign on with your name and phone number otherwise you will not get any privileges on the BBS. This so the SYSOP can call you to verify your existence as a human being.

9. Ribbon Re-inker: Larry Vanden Plas. Larry has a new adapter for the small PANASONIC ribbons that turn counter clockwise. Larry also showed some examples of nice printing with a well-inked ribbon in case anyone at the meeting was unaware of what good printing looks like.

10. DOM: Disk Librarian, Frank Haug. Last month's DOM was filled with best selections from years past. The club's 810 disk drive has a serious mechanical problem that has caused creation of bad DOM disks in the past. It will not be used again until it is repaired. Anyone interested in helping with DOM duties in the future please contact Joe Danko at the meeting, by phone or via the BBS EMAIL.

11. The November SPACE meeting will feature floor nominations, approval of nominations and official SPACE officer elections. Under the new bylaws the elected officers of SPACE will be President, Vice President and a joint SPACE/MAST Treasurer. All other duties will be voluntary.

The SPACE nominating committee members are John Mitchell (645-9673) and Larry Vanden Plas (636-2415).

12. New Bylaws: The new bylaws were read, compared to the old ones, discussed and approved by voice vote. There is at least one additional change that will be up for approval in November. The New Bylaws will be posted on the BBS and in the Newsletter.

13. New Business: CURRENT NOTES is available at a group subscription rate of \$17 for 6 or more subscribers in a user group. The regular rate is \$20. Interested parties can contact Joe Danko at the meeting or on the BBS.

14. Offers and deals: KayBee toy store has 65XE GAME MACHINES and Atari TRAKBALL controllers. Nathan block mentioned an Atari SIO to Centronics printer cable/interface for \$19.95 available at one of the TARGET stores. PROTECTO mail order is selling a thermal printer that is compatible with PRINTSHOP for \$30 and interface for \$20. The printer is called BIG BLUE.

15. DEMO's: Nathan Block demonstrated his copy of the BOP 'n WRESTLE game. Joe Danko showed his 4.5 inch B/W TV for use as a monitor. Games and 40 column text are quite legible.

Atari Responds about the 8 Bit Future, With Comments by Jim Schulz

If you have been wondering where Atari is headed with the 8 bit, this is must reading. This is a letter from Neil Harris, the Atari mouthpiece, about the future of the 8 bit computer line. This answers a lot of the criticism that Atari has taken and answers a number of questions asked by members and yours truly. This was only recently posted by Neil Harris so although the date is a month old the letter is new to the Atari public at large.

September 25, 1987

CompUtah c/o A.C.E. of Salt Lake City P.O. Box 26664 Salt Lake City, UT 84126-0664

Dear Editor:

In the editorial of your September issue, you take exception with my statement concerning the Atari XE Game System. Since the statement was a brief one, I'd like this opportunity to give you a clearer idea of Atari's position on this system and why it should be a good thing for 8-bit computer owners.

At the time of the formation of the new Atari Corporation in the summer of 1984, the 8-bit line was not faring too well in the mass merchants. It seems that the computers were neglected during the last year or so of Atari Inc. The largest companies selling the computers, such as Sears and K-Mart, had taken the position that the 8-bit Atari computers were dead, and they proceeded to close out their inventories of computers, peripherals, and software at below-cost prices.

Compounding the situation was the set of records that were inherited by the new company. According to our books, many of the big accounts owed us millions of dollars for products shipped. According to their records, though, Atari owed them millions for product returned. When two companies have many millions of dollars in discrepancies on the books, it is very difficult to do business together. In fact, the K-Mart account was finally settled this past summer, fully three years after the new company was formed.

So we have the situation where the product lines were closed out at a loss, and the stores have the attitude that these products are old and dead. In some cases, the buyers at the stores were fired due to the losses they took at the end of the home computer era. These were not just due to Atari -- none of the mass merchants sell "home computers" any more; K-Mart does not (although a few isolated stores buy some Commodores from distributors), J.C. Penneys does not, Montgomery Wards does not, and Sears sells only business computers.

At the current time, Atari U.S. has a substantial supply of 8-bit computers in stock. Very substantial. We have every motivation to sell 8-bit computers. At times we've been accused of trying to kill the line. Why would we want to? Because many of us came from Commodore, where we competed fiercely with Atari? Most of us had substantial respect for the Atari computers as competitors (as opposed to, say, Texas Instruments and Radio Shack). Personally, I have a fair amount of experience in Atari home computers dating back to before I joined Commodore -- check out Compute's First Book of Atari for one of the articles I wrote for them long ago.

Despite our interest in selling 8-bits, they don't sell. During the past three years we've tried advertising, without success. We've released more new 8-bit products than anyone -- DOS 2.5, the XEP80, the SX212, AtariWriter Plus, Atari Planetarium, Silent Butler, Music Painter, Star Raiders II, etc. Not to mention the 65XE and 130XE computers. We are frustrated.

Stores don't want to carry the products. We even offered to let them have the machines without paying for them until they sell! If you know anything about Jack Tramiel, this isn't something he likes to do. But stores value their shelf

space, and buyers value their jobs, and we had little success.

On the other hand, there's the video game business. We fully expected video games to be a dead issue upon joining Atari. After all, everyone knew the video game business was dead. At Commodore, we thought we'd killed it! But, we were surprised when the existing inventory of about a million 2600 systems sold during the first year of the new Atari Corporation, without any advertising and with little effort. As a kind of experiment, we built another million machines and sold them during the next year. "Aha," we said to ourselves. "Doesn't look like a dead business to us!"

So we went forward with the 7800 system, for which parts were already available, and lo! and behold, we sold all we could make of them last year also.

Now Nintendo and Sega have jumped in with high-end, \$150 game systems. Nintendo in particular is doing very well indeed. They don't sell as many of these as we sell, but they sell for more money. So Atari took a hard look at the marketplace and determined that we should do a \$150 system as well.

Examining the products, it seems that Nintendo has decent graphics, a light gun, not much of a joystick... and a robot. What does the robot do? Well, it photographs very well in their commercials, but really it doesn't do anything to help in playing games.

For the same \$150, we can provide the consumer with a game system, light gun, three pieces of software -- and a computer-style keyboard. While not as dramatic looking, I'm sure all computer users know that some games just can't be played with a joystick alone. Flight Simulator II, which comes with our XE Game System, needs the keyboard. So do adventure games and most other strategy games.

We can't get stores to carry the 8-bit computers. They won't even sell the software to their existing customers -- for a while software companies had to put the 8-bit programs on the back of the C64 disk to get shelf space at all! But when we showed the XE Game System to the buyers, they were totally enthusiastic.

This is truly marketing in action.

We have something like 50 cartridges in inventory from the old days, and are feverishly working on converting disk games to cartridge. With some clever programming, we can now get 256K of ROM on a cartridge, instead of the 16K in the old games. That's how we got Flight Simulator II *plus* a scenery disk onto a single cartridge. There is nothing different about the XE Game System to make this work -- existing 8-bit computer owners can use the very same cartridges.

So what does this mean to you? In the beginning, all it will mean is that more games will be coming in 8-bit Atari format. But, what we hope is that this will be the springboard to revitalizing the 8-bit Atari computer line. Once the XE Game Systems start selling (and they have just begun arriving in stores this past week), we have a potential market of hundreds of thousands of consumers. At this time Commodore is selling around 300,000 C64's annually. With a market this size, the motivation for software developers to bring out new titles in our format is enormous.

Remember, the XE Game System is totally compatible with your 8-bit computers. Once the customer takes the XE Game System home, they discover in the manual

that the system includes the Atari BASIC language and that there is an SIO port for computer peripherals. We expect that people who may have been frightened of computers, or leery of spending the money on a computer with a drive (\$400+) initially, may very well upgrade to a fuller system. And we hope that they will then demand the kind of software that we need to see developed -- serious applications software.

While this is happening, we continue to sell the 8-bit computers. Contrary to some published reports, we cannot simply remove the motherboard from the 65XE's and put them in the Game Systems. It's a different board. So, we still have the large inventory of computers. And we expect that smart Atari dealers will use the advertising campaign for XE Game Systems and sell the computers as a compatible alternative. "Why," they might ask a customer, "should you spend \$150 when you can buy the system ala carte, with a computer for \$99 in a more compact case and then buy whatever software you want?"

Lets all hope this works. Atari has tried just about everything in our power to keep the 8-bit computer line going. This is probably our best shot,

One last fact -- for our customers in areas where there are Federated stores, Jack Tramiel has said that these stores will carry a full line of Atari 8-bit computers. So availability should be a whole lot better in California, Texas, Arizona, and Kansas.

Thanks for giving me the time to explain in much more detail than I can online. We've been through some tough times together. Please try to keep the faith and bear with us just a little longer while we get the 8-bit situation straightened out.

Best regards,
Neil Harris

XE Machine Language Tutorial, with comments by Jim Schulz

This is the second in the series of machine language tutorial articles. I'm sorry about the delay in the series. Things got a little hectic last month. So here we go with part two explaining more about the basics of machine language programming and where to look for more help.

Machine Language: How Does It Work? by Dr. Warren G. Lieuallen

As we discussed last month, the first consideration in writing a machine language program is where to store it. Now that that problem is solved, we're ready to begin actually writing our program. But, as you are no doubt aware, the commands in machine language are not as easily and intuitively understood as those in BASIC. The machine language commands are simply numbers from 0 to 255. What do those numbers mean?

Each of the "numbers" in a machine language program is a code; each number represents a specific command which can be executed by the 6502 microprocessor. Just as there are commands in BASIC (such as GOTO, POKE, IF-THEN, etc.), there are commands in machine language (such as JMP, LD, BEQ, etc.). These commands constitute the machine language program, just as in any other programming

language. The difference is that machine language is a "low level" language, meaning that the commands are much closer to the actual instructions carried out by the microprocessor, and are therefore not as "user-friendly" as the higher level programming languages we are accustomed to, such as BASIC, FORTH, LOGO, etc. However, because it requires less "translation" by the microprocessor, a machine language program will execute much faster than one written in a higher level language (as always, there are exceptions!). And this speed is the reason that programmers turn to machine language.

A short example should clarify this point. Suppose we want to fill the screen with a particular character. In BASIC, the program might look something like this:

```
10 GRAPHICS 0
20 FOR I=40000 TO 40959
30 POKE I,10
40 NEXT I
50 GOTO 50
```

This program will clear the screen, and then place the internal code for an asterisk in the memory locations which correspond to the graphics-zero screen display. This routine takes about seven seconds to do the job.

Now, when using machine language, the program may be entered in several ways, depending on whether you have a machine language assembler/editor program or not. The following program will work from BASIC to "assemble" the machine language codes in memory:

```
10 FOR I=1536 TO 1569
20 READ J:POKE I,J:NEXT I
30 GRAPHICS 0
40 X=USR(1536,10)
50 GOTO 50
100 DATA 104,201,1,208,254,
104,104,170
110 DATA 165,88,133,204,
165,89,133,205
120 DATA 138,160,0,145,204,
230,204,208
130 DATA 250,230,205,166,
205,224,160,208
140 DATA 242,96
```

This routine (which is relocatable--refer to last month's article if you're not sure what that means) will also fill the screen with asterisks, but is nearly instantaneous. So, you can see that machine language can be very useful where execution speed is essential. For longer, or more "serious" applications, the difference in speed would be even more dramatic. Also, although the machine language program looks longer, it occupies only 34 bytes once loaded, while the BASIC screen-fill routine requires 61 bytes of memory.

So, as the example demonstrates, machine language does have some advantages over other programming languages, but it also has one BIG disadvantage; machine language is much more difficult to learn and use. That's why the higher-level languages were written in the first place!

It is not my intention to teach you how to program in machine language. In the first place, I'm only just learning to do so myself. In the second place,

several good books already exist to do just that, and you have to pay for those books! If you're still interested, here are some of the books I've found helpful:

Programmer's Reference Guide for
the Atari 400/800 Computers
by David Heiserman Publ. by
Howard Sams & Co.

This book contains, among other things, a complete instruction set for the 6502 microprocessor, their decimal and hexadecimal op-codes, their effects on the various flags, and a brief explanation of their functions.

Atari BASIC, Faster and Better
by Carl M. Evans Publ. by IJG
Enterprises

This book contains many useful BASIC and machine language routines, and although does little to explain the source codes, is a very good tutorial nonetheless.

My introduction to machine language was on a Timex-Sinclair 1000, so I have no experience with a book directly concerning machine language for the 6502 microprocessor in the Atari computers. However, browsing through a bookstore should turn up several good titles. Other books are available to cover specific areas, such as The Atari Assembler by the Innans.

I wish you much luck and success in your journey into the exciting and often frustrating world of machine language!

Notes From The Editor and MAST Co-Chair, by Bob Floyd

As most of you know, I am stepping down from both of my posts at the November elections. I don't plan to volunteer for anything again in the near future due to increased activities at home. I'll still be around, but not as active. Thanks to all who helped and best of luck to those who are carrying SPACE/MAST onward.

I can't go without passing on another gripe about a program I've often griped about. You may have already guessed that its VIP Professional. How would you like to pay \$35.00 for an upgrade to version 1.2 and find almost nothing changed including one fatal bug plus some buggy graph routines. This stinks. Can't they at least support their software a little bit? Don't they think we're smart enough to run into their bugs? Do they think we're dumb enough to keep sending them money? Well, I was several times. But I won't send them any more of my money!! And, I don't recommend that you do either.

Bye.

News from the Co-Chair, by Jim Schulz

Well, it's November and it's election time for MAST for the first time. It has been fun working with MAST for the last 20 months and now it's time to move forward. Before we move on to other things, I think it is appropriate to thank

two of our members who are moving on to bigger and better things. First, MAST owes a lot to Bruce Haug. Bruce has supported the club through thick and thin and given quite a bit of his time and effort to a computer which he doesn't even own. Without Bruce's help, MAST would not exist today. I don't have the time to do a lot of the things that Bruce has done and neither does Bob. Bruce will be sorely missed for his help. Second, Bob Floyd. As I said in my 8 bit article, what can you say about Bob??? Bob has been my right hand or should I say left hand man for the last 20 months of MAST. Bob helped with the creation of MAST and has always been there with help at the meetings, ideas, and moral support. In addition to all of this, he has lately been doing the newsletter. Bob made my job of helping you a lot easier. Continuing without Bob will truly be tough going. Both of the SPACE/MAST members have given their all to MAST. MAST owes a round of applause and thanks to both of them for their help.

And now before we move on, how about me??? I would also like to thank all of the member for their support of MAST. MAST has come a long way over the last 20 or so months. That first meeting we were all of six member strong and from there we have grown to about 60 in size. I have enjoyed working with you all and my hope is that the new president and vice-president will continue to head MAST into further growth. MAST is quite strong and it's future is only limited by the ideas and participation of its members. Thanks.

Now on to other topics..... First, I hate to do this, but I will anyway. What is a user group??? No, this is not going to be another lecture, I hope. In the September issue of Computer Access, the other computer newspaper in town, they list a number of services that the best user groups offer. As we move to the next step in MAST's development, let's see where we stand. First, software libraries. I think that we have this covered. With a software disk library to top 200 disks this month, I think that we have one of the best collections in the country. Second, BBS. This looks good, too. With the help of the uploads of the members and our first rate sysop, Steve Pauley, the MAST BBS has become quite popular in town. Third, Hot-lines. This is where we might be deficient. The current hotline consists of me and Bruce and the BBS. This is one area which could deserve some serious work over the next year as long as member are willing to share their ST knowledge. Fourth, demos. Yes, we do have these. And now with Phil coordinating these each month, the demos keep getting better and better. Fifth, newsletter. We have that!! Otherwise, I wonder where you are reading this. Sixth, SIGS. Well, currently we have a programmer's sig with the possibility of a new user's sig as well. Do we need more??? Do you want more??? It's up to you. Seventh, classes and clinics. Here again, I think we need work. There are a lot of good topics which could be discussed in a class or clinic session better than in a demo. This deserves more discussion and attention. Eighth, buying co-ops. This we also have covered with our double-sided disk sales which have been going quite well except for the good problem of trying to keep them in stock. So where do we stand??? According to this list, quite well. One thing missing from this list is dealer discounts which are also included with a membership. I still think MAST, though, does have a ways to grow and that growth is more dependent on the members needs than the leaders needs. It will be to the new MAST leaders to find your needs and satisfy them.

Now on to club news... First off, I'm sorry that I couldn't make last month's meeting. My only sister only gets married once in life so that is one event which takes precedence over MAST. Because of this, the number of disks were down as well. I would like to thank Phil for filling in for me and keeping those rumors coming in my absence.

Next up, beginner's group/new users group. I proposed last month here a new

group to meet at the same time as the programmers group across the hall to answer all of those itching new user questions and fill the void between the beginner and the expert. So far, there has been no response. A couple of members have asked for it, but they are not around to say yea or nee. As I said last month, we need at least 10 members to get it started and we're off. Its meeting format will be a topic or two preplanned on anything from ramdisks to modems followed by user questions and hands on help with the ST. Also several DOM programs will be shown in more detail. Done properly, this group could serve both new and old users alike and also offer comparison demonstrations of available databases, wordprocessing programs, and spreadsheets as well. But as always, it's up to you. Do you find this type of meeting useful??? More on this at the next MAST meeting.

Help needed in town. I got a call from a business in town right before the last MAST meeting. This business is into publishing and is looking for volunteers to modem files to them from ST formatted disks so that they can be further formatted and printed. No compensation was discussed or if there was any current need for these services. I think the owner has heard about the popularity of the ST and wanted to make sure this option was available to his customers if the need arose. If you are interested in helping, see me at the meeting, drop me a note on the BBS, or give me a jingle. I'm sure that he would glad to talk to you.

Disks.... Blank double-sided disk sales have gone quite well. My only current problem is trying to keep them in stock. The place where I order them is running into the same problem. The turnaround time of only one week has increased to three to six weeks. Another 150 disks are on order. If they arrive by the next MAST meeting, they will be there. Otherwise, we will have disks for the December meeting. Remember, each disk sells for \$1.10 each. Not bad for the disk that Chuck can't break.

Speaking of disks.... This month, a new possibly bimonthly disk will be added to the MAST library. Dave Meile has put together the first MAST newdisk, a newsletter on a disk. I have seen a preliminary copy of this disk and it is very well done. This disk, so that all members can get a copy will sell for \$2.00. Check it out and let Dave know what you think. If the club buys it, we will see more of these in the months to come. In other DOM news this month, disk number 200 will be made this month so stay tuned for the special disk. The DOMs for this month include a Christmas music disk along with copies of two previous Christmas music disks for \$4.00 each, a four disk set of MicroEmacs 3.9 editor with source, docs, and a whole lot more, Steelyboink, a new boink demo from Tom Hudson, DLIBs, new C libraries with source from MAST's own Dale Schumacher, another disk full of Spectrum 512 pictures, and updates to Mark Johnson public domain C, Stwriter, and the 8 Bit Emulator which now works in both color and monochrome. As always, updates are \$2.00 and the original disk. In addition to all of these goodies, expect the normal big 5 of goodies and some surprises as well. All sorts of good stuff this month from the MAST DOM.

This month's meetings.... Okay, so what's in store for this month... In addition to the usual news, rumors, and questions with lots of answers, we will look at this month's COMDEX show with commentary from our MAST member on the scene, Todd Burkey. We will also have a goodly number of DOMs including number 200. Also a number of demos this month by Phil and Dave including a demo of Word Perfect and Shanghai. Also we will elect a new president and vice president to direct the group for the next year. Also don't forget this month's MAST programmers meeting with talks with month as usual by Chuck Purcell and Dale Schumacher. Chuck, this month, will be showing off his port of the ed editor and First Word Plus. As always, all are welcome and more is forthcoming.

Oh, lest I forget, this month we will also be playing MidiMaze after the meeting in preparation for the December showdown contest at the December meeting. So bring your ST, and practice up for the big December MidiMaze contest with the club vs. Phil. For more on this month's meeting, check out the MAST BBS.

Speaking of the BBS, check out the MAST BBS for all of the latest ST news. In addition to the usual ZMAGS and ST Reports and constant news and rumors, check out the MAST BBS for the latest news from this month's COMDEX show. I have three reports already with more to come. So check it out at 560-9254.

So that's about it for this month, but before I go, it's time for the envelope..... Let's see what's inside for this month..... Let's see, first off, Word Perfect. If you need a good word processor that does it all and can afford, this is the one. Some of the listings off this were laser printer quality on an Epson LQ. Check this one out. Also, the ST now have a first rate communications program. Flash! has gone one better with their latest version and we now have a quality command language program. This program is worth another look now at a new lower price. Also, Spectrum 512. The authors of this program have taken the ST one more step in terms of color. This is at least a must see if not a must own. Finally, Beyond Zork. Infocom, the leader in adventures, have come up with the ultimate and now with graphics. This is a must see for adventurers of all kinds.

So that's it, thanks for listening. I hope to see all of you at the next MAST meeting as we elect the officers for the MAST for the next year. Until then, happy computing!!!

MAST MEETING MINUTES, by Dan Stubbs

The October MAST meeting was opened by Bob Floyd. Phil Seifert filled in for Jim Schulz who could not attend. Bob reported on the new bylaws for MAST and SPACE. Elections for the coming term of office will be held at the next meeting. Allan Frink (482-7911) and Dave Meile (H:377-1884 and W:625-3694) have volunteered to serve as a nominating committee for the upcoming MAST elections. People who would like to nominate someone for an office or who would like to volunteer to run for an office should contact one of these gentlemen. Phil reported on the DOM's. The treasurer's report for MAST was \$288.19 with no outstanding obligations. In the News and Rumors Department Bob and Phil reported on: the VIP version 1.2 upgrade (Text or Gem version) for \$35 for registered owners of the original version; ST-Transformer, an 8 bit ATARI emulator for the ST is out; some programs are experiencing incompatibility problems with the new ROM TOS; newer 1040 ST's have sockets for the blitter chip; ICD is marketing a 20 MB hard drive unit for \$699 with built in fan and 6 SCSI ports; Flash v. 1.5 is shipping; Wordperfect listing for \$395 will sell to students for \$99. Ted Holman reported that he has experienced difficulties with the Aerco memory expansion board not opening DEGAS ELITE. Dave Meile is putting together a newdisk with articles, reviews, and columns that will be finished shortly. Demonstrations were given for KISSTERM, MARBLE MADNESS, GAUNTLET, and BOLDERDASH CONSTRUCTION SET. At the end of the meeting four ST's were connected via their MIDI ports and a demonstration of MIDIMAZE was held by Phil Seifert. This was enjoyed by everyone and some MIDIMAZE tournaments will probably be held.

Coming this Month..... MAST Newdisk #1

What is a newdisk??? It is a disk full of informative articles of interest to any owner of an Atari ST computer. This first issue includes a RAM disk (YARD.PRg), ARC.TTP, and a sample music program made with the Music Construction Set. Articles include "Setting up a RAM disk", an "ARC tutorial", "Getting started using Mark Johnson's C", plus reviews and other articles and columns.

It is hoped that MAST members will find this a valuable addition to the information they find in the SPACE/MAST newsletter. The NewsDisk will be available for the low cost of \$2.00 to MAST members. If you cannot get to the MAST meeting, you can send \$2.50 (the added 50 cents to cover postage) to Jim Schulz, 3264 Welcome Avenue North, Crystal, MN 55422.

If the response is favorable, more MAST NewsDisks will be put together, probably on a bi-monthly basis. Please note that this is a product of a lot of work by MAST's Dave Meile for the members of MAST. He has spent a lot of time and effort and shows. Dave's hopes are to emulate the FASTER disks of Canada, but at a cheaper price so that all MAST owners can own a copy. I would like to thank Dave for his contribution. Pick up a MAST Newdisk at the November MAST meeting and let us know what you think.

Children Will Play, by Phil Seifert

Ah, what a time of year this is. Christmas and Channuka are coming and new programs are bounding around in Phil's head for his own Christmas gifts. Of course, that is much better than his head bounding around all the time like it does in Bard's Tale. Keep getting himself killed, he does. Bard's Tale? Oh, didn't he mention that once in one of his previous columns? Yes, but, that program should be mentioned again. It is one heck of an adventure gaming system. If you are into adventures via computers, this is one to check out. From Electronic Arts and retailing at \$50. If it does not take you several months to complete, don't tell Phil, he will just go bonkers and play til he finishes it.

Beyond Zork was released for the Atari ST. I have not seen it yet, but it definitely is available now. Hopefully I will be receiving my copy of it soon. This game is an enhancement of the Zork playing system. Now, instead of just worrying about how many total points you have, you must also worry about your other attributes like strength, wisdom and so on. Much more like an adventure gaming system. This game also supposedly has one of the best parsar systems ever produced for a computer game. Might be worth taking a look at. From Infocom and I am not sure what the price is, probably also around \$50.

Playing games and musis are not the only thing children can play at. Some children like to play with programming languages (right Steve?) like Personal Pascal from O.S.S. Version 2 is finally available after many delays and hardships, methinks sometimes they were playing an adventure game like how long can we wait til we get our heads chopped off. Personal Pascal appears to be the definitive pascal for the ST right now, placing ahead of Pecan and Alice. Retailing either for \$89.95 or \$99.95 (not sure which, they may have raised the price).

Another language, if you are serious about programming with the Atari ST is Mark

Williams C 2.0. This also seems to be the language of choice now for developing programs for the ST. You can pick this one up for \$179.95 retail but don't expect that to be all you spend. Mark William's C works pretty much of hard drive systems only for files of any great size. You could get by with small programs on a single floppy and ram disk.

Something else that I have been playing with recently is Tackle Box ST 2.0. This set of Pascal and C routines are almost a complete development system unto themselves. SRM Enterprises did one heck of a job laying this thing out and does it ever come with a lot of documentation. Nine hundred plus pages worth. Almost as big as the official set of documentation from Atari. Only real difference it seems is that Tacklebox is makes sense and is well laid out. Atari could take a lesson from that company. Tacklebox ST sells around \$80 if I remember right.

Another new game that came in recently is Empire from Interstel via Electronic Arts. This is a classic strategic wargame and it looks real good. Probably the best wargame I have ever seen and I think the first real one out for the Atari ST. Sells for \$55 retail.

MIDI MAZE.....MIDI MAZE....MIDI MAZE.....so goes the chant from the crowd. It seems this game is really starting to catch on with some of the members of the MAST group. If I can get things organized at the November meeting, we will have a tournament for the December meeting. What better to celebrate the good will towards your fellow man than to blast him as he runs away from you down a long hallway. If you would like to enter this tournament and it will be restricted to MAST members only, please let me know. Either at the meeting or leave a message on the MAST bulletin board. If you could bring your ST, power strip, and a midi cable, it would greatly be appreciated. I might even have a prize for the winner of the tournament, but it will not be a synthesizer like Hybrid Arts has been giving away at their tournaments.

One last thing I have been playing quite a bit with the last few days is the Spectrum 512 drawing program from Antic APX catalog. Uh, this thing is GOOD!! Definitely worth picking up if you are into 512 color art. This program has helped set aside some of the regrets I had at not picking up an Amiga. With 48 colors per scan, it does a very good job. Sells for \$69.95.

Hope to see all of you at the November meeting. Please come and participate in the elections of your club officers. They will need to see support from the group and hear what you might like to do as a group. If you could also aid the club in some functions, be sure to tell the rest of us. I hate to see good talent wasted just sitting around. Til balloting, adios.

ST Xtra, With Comments by Jim Schulz

This month's ST Xtra looks at COMDEX and gives you a first hand look at what Atari is saying about their new products. So read on and see if you can pick out the truth from the standard Atari hype.

PRESS RELEASE: OVERVIEW OF COMDEX 1987 ATARI BOOTH
First uploaded to Genie 10/2/87

CONNECTIVITY, SOLUTIONS, AND TECHNOLOGY:
ATARI ANNOUNCES NEW PRODUCTS AT COMDEX

(Las Vegas, NV -- Comdex Fall 87)... In a series of major product introductions, Atari Corporation emerges as a maker of a complete line of high-performance, low-cost solutions for the business world.

New technology is showcased by Abaq, an ultra-high-performance workstation with blazing speed and dazzling graphics. The Abaq, based on a sophisticated "transputer" chip, runs more than 10 times faster than a PC/AT technology and more than 5 times faster than the 68020 with math processor. The parallel processing capability of Abaq lets a single system multiply its processing power by adding extra transputer chips.

Atari unveiled its new CD player capable of reading CD-ROM disks and of playing musical CD disks. The CD-ROM is supported by a Mega and ST-compatible DMA interface, and will retail in early 1988 for under \$600.

Atari's connectivity answer is a LAN which is compatible with the NETBIOS standard used by IBM and Novell. It communicates data at 1 megabits-per-second to PC's and over 250K bits-per-second over Appletalk. Atari is planning to manufacture "PromiseLAN" adapters for the Mega, ST, and PC computer lines.

The Atari Mega computers are showcased with a variety of solid business solutions. Desktop publishing is represented by both the Atari SLM804 Laser Printer and by G.O. Graphics, who are porting their Deskset program (CompuGraphics compatible) which Atari will market. Word Perfect is displaying the recently shipped Word Perfect ST and Atari is displaying Microsoft Write. A group of vendors are appealing to VARs with vertical packages running under the IDRIS multi-user multi-tasking operating system. Several new high-end CAD packages are on display including Foresight's Drafix 1.

Atari expanded its PC-compatible offerings by adding two new models, the PC2 (PC XT compatible) and PC4 (PC AT compatible), both with EGA graphics, high clock speeds, and low price tags. A variation of the PC3 will operate in VGA graphics mode as well. The PC2 and PC4 will be offered with 3.5" or 5.25" floppy disks and with hard disks. These new models join the PC1, which at \$799 is a basic 512K PC XT compatible, suitable for use as a LAN workstation and for standalone personal computing. The PC2 includes XT-compatible slots, while the PC4's slots are PC AT compatible.

"We offer complete systems for the office," said Atari president Sam Tramiel. "I can see Atari Mega computers with laser printers as desktop publishing stations exchanging data with a satellite group of PC1's as LAN stations. An entire office environment can be created. The PC, the Macintosh, and the Atari computers co-exist. Each can do the things they do best."

Demonstrations for MAST, by Phil Seifert

Hi again, just thought I would let you know what I have scheduled for the MAST demonstrations this month. After we dispense of the all important elections and so on we shall see the following barring some kind of unforeseen happenstances:

Dave Meile will be demonstrating SHANGHAI, an addictive and colorful rendition of Mah Jong (I hope I spelled that right).

Bob Taylor (er, one of his sons, can't quite remember the name) will be giving us a demonstration of MICRO LEAGUE BASEBALL.

And I will be demonstrating the following two programs, SPECTRUM 512 and WORD PERFECT.

These last two might take a little bit of time since I do anticipate quite a few questions on them, so I am not going to have quite as much demonstrated at the meeting like I normally would. Along with the fact that it is also election night for officers in our group, there may not be as much time. We shall see.

Again, this is a standard plea, I am only the demo coordinator. If there is something that you use quite a bit and would like to share your opinions with the membership, come forward and talk to me. Also if there is something that you would like to see demonstrated, also let us know so we can see if there is a possibility we could have it demonstrated. I can be reached at Wizard's Work (559-4690) during the day, on the MAST bulletin board (560-9254) or, of course, at the meetings. If you would like to share your experience with something but are unable to attend the meetings, then write a review for the newsletter! They can be uploaded to the MAST board also.

RIBBON RE-INKING - Larry Vanden Plas - 636-2415.

The club can re-ink most printer ribbons (black) for a small fee. There is no longer a reason to use a faded ribbon! Ribbons that can be re-inked are:

\$1.00/ribbon

- Spool to spool (all types)
- Epson MX-80 and compatibles
- Epson LX-80 and compatibles
- C. Itoh Prowriter and compatibles (NEC 8023A/C)
- Citizen 120 D
- Panasonic - small ones that turn counterclockwise

\$2.00/ribbon

- Epson MX-100 and compatibles

Other ribbons can be attempted, too. But if you prefer, you can buy an adapter (\$8.50 + \$3.50 shipping and handling) for the club and receive half that amount in credit towards re-inkings. See Larry Vanden Plas at the SPACE meeting, or Bob Floyd or Bruce Haug at the MAST meeting. Also, ribbons can be dropped off with Larry at his place of work at the Roseville Professional Center at Hamline Avenue and Highway 36 (fifth floor - make a right turn out of the elevator & then another right to the end of the hall, then drop the ribbon through Larry's mail slot). Or, you can drop ribbons off with Larry at his home - 850 Emerald Court, New Brighton, MN, 55112, phone 636-2415. Please pay in advance and be sure to have your ribbon(s) in a plastic bag.

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