SPACE

NEWSLETTER September, 1996

President's Corner

By Mike Fitzpatrick   Sept., 1996

The September meeting will be our last auction for this year. Hopefully the best!

September will also be the planning meeting for the year prior to the election of your club's officers in November.

We have a volunteer to be the BBS Sysop but the choice will be made at the meeting when everyone has a chance to voice their own desire, if any, to be the club Sysop.

Hope everyone had a great summer and will be at the meeting.

BBS News for September 1996

We have a volunteer for the BBS Sysop job; Nolan Ryan.
If any other club member wishes to have a shot at being the Sysop please be at the September 1996 meeting and express your desire.
To be the club BBS Sysop you'll have to commit to the following:
1. Provide a local call data line.
2. Provide a modem; the club's is fried.
3. Be a club member of SPACE.
4. Sign out the equipment from the club's treasurer.
Being the Sysop does have some advantages:
1. The club pays for local data line (no unauthorized long distance calls) usage.
2. You get the opportunity to learn more about your machine; the Atari Classic 8-bit Computer.
3. You get to write a newsletter article.
4. You get to fix people problems on the BBS.
Again, if you are a potential volunteer for the job of BBS Sysop please make you voice heard. Nolan has requested to do the job via the BBS but in fairness to all the selection should be made at the club meeting.

Treasurer's Report   by Greg Leitner

I don't have much to say this month as I had to leave early from the August meeting to visit my father-in-law at the hospital. I got back to the meeting just in time to see the demo of accessing the Internet with our 8-bit Atari computers. All I can say is that it does work, but I understand you really need 128K to operate most of the software that's available right now. It was noted that you can access the Internet even as low as 300 baud. The 128K is a real drawback for a lot of us who only have stock 800XL's.

Don't forget next month is our final auction for this year. Please bring in your computer related items to auction off. And don't forget that the bidding will start at $1.00 over what the owner wants. If the owner is donating the item to the Club for the auction then the bidding can start as low as $1.00. Let's make this final auction a great success. So far the Club has done very well with the first two auctions and it has helped our financial position considerably.

It was a rather small turnout for the August meeting and we only took in one membership renewal. Our only payout was $69.50 to Mike Schmidt for the wonderful items he brought to the last auction. I had the cash which I had collected from the auction to give to Mike at the August meeting, but since he couldn't make the meeting I decided to send him a check. So in turn I just deposited the cash. We only had $24.00 in software sales which means our total net deposit for the month was $39.00. Our bank balance now stands at $514.02 and that is the highest balance we have had since November 1995.

Let's keep it going with a good turnout in September and bring a lot of cash for the auction.

From the Editor:

The Minutes published last month were from the June Meeting. The following Minutes should've been in last month's Newsletter. The Minutes from the August Meeting were not posted by the time this Newsletter was ready for copying.

Minutes Of Space Meeting   July 12, 1996

Space meeting opened at 7:30 PM, Mike Fitzpatrick, club president, welcomed members to Space meeting and Space birthday party. Mike said this meeting would be very abbreviated.

Mike mentioned 5 1/4 boxes of DD computer disks,unformatted, were available for sale for $1 from Glen Kirschenmann.

Mike Schmidt, club newsletter editor, mentioned he has Atari Iron on shirt pictures available for sale for $3.

Mike Fitzpatrick also said there are other club newsletters available at meeting. Copies of the Space club Web page on the Internet are available too.

Mike asked that the minutes and treasury report be approved as written in July newsletter. Approved.

Next month will be Internet night Demo. Mike Fitzpatrick and his wife will be in Corvallis, Oregon, so Terry Streeter will conduct Space club meeting. Mike and his wife will be back in September, at which time a third Space club Atari auction will take place.

Meeting adjourned at 7:35 PM. Space birthday party followed.

Mike Weist   Space club secretary

Space Club's 14th Birthday

Well the day came, July 12th , Space's 14th birthday Party. What a sight to come into the meeting room and see a 30 foot long table full of food. Everything from a giant Tom Turkey, salads, chips, desserts, to Ray Wafer's famous potato salad, Bill Cotter's famous BBQ meatballs, Don Langford's famous BBQ smokies, and at the end a giant cooler full of ice cold pop provided by our treasurer, Greg Leitner.

The Space meeting didn't last long as reflected in Space minutes. About five minutes. Now I know why the meeting was abbreviated. Members had a chance to sit, eat hardy and do some Atari Talking. In all we had a OK crowd that attended the birthday party. We had a few people that stopped in that we haven't seen for a while. Pat Krehn and family showed up to help us celebrated. Nice to see you Pat!!! Stop in again!!

Absent was Rich Meir, Rich you missed a good party. During the party a second Space Atari auction took place. Don Langsford was the moderator. His assistant was Greg Leitner. Thanks Greg! The auction had everything from software to computer, printers, disk drives, and other items. At times the bidding was very intense. Money raised will go into the club treasury. I think the auction raises a sum of money.

The auction ended around 10 PM. Thanks is in order for the party committee, clean up crew, and for all the members that showed up to make another Space Birthday Party a big success! Hey everybody pat your self on the back. See you all at the August Space meeting.

Mike Weist

Accessing the Internet with your Atari 8-Bit
by Andy Floyd   -   Re-printed from May/June Nybbles&butes

Many people hear about Surfing the Net and World Wide Web. I've even been asked by co-workers what all that stuff is about. "What's that thingy with the 'www' on those commercials?"

Well, not knowing where to start, I'll start at the very basic, gloss over some specifics for later (if I get the chance!), and give you some idea about what it takes to get Internet access of some type.

I will be writing from my own experience and from what I use regularly. If I leave out something or get something wrong altogether, you know what I know little of without being able to check it.

The Basics
To get access to anything Internet, you need several things for your Atari:

1. Modem (well duh!)
2. Phone Line (Double Duh!)
3. Interface
4. Compatible Cable
5. Software!

So if you have your computer, disk drive, and printer, you've got that part covered.

1. Modem
Depending on the kind of access you got and what you will be accessing with your modem, the speed is somewhat important. The system I call is a local call, so 1200 baud doesn't give me too many headaches. If your provider requires a faster baud rate, you can use modems that are faster - up to and including 14.4K and 19.2K baud. World Wide Web access usually requires a fast modem, depending on what you actually do. For Email messaging, speed isn't too important. If you call long distance, then it is. The kind of modem you need is External RS-232. I don't know of

any interfaces for Internal IBM modems yet, so External RS-232 is what you should look for.

2. Phone Line
You can use any modem over your own voice line, but you'll need to have some sort of extension cord to bring it to your computer, be it 6 feet to 25 feet. Modular. Nothing big here, but I thought it important.

3. Interface
Your Atari 8-bit can't use your modem unless you have the proper interface. And the kind of interface determines the maximum usable baud rate for your system. I'm not too sure which ones are the best, because I don't use an interface with my Atari SX-212. The Atari 850, the P:R: Connection (in any of its various flavors), the R:Verter, the MIO or MIO II, and the CSS Blackbox all interface modems to the Atari 8-bit in some manner. Not sure of which is better than the others nor their maximum baud rates. I don't have that much hardware laying around to find this out, so perhaps the FAQ on Usenet's comp.sys.atari.8bit (if I got that right) has that info!

4. Cable
For the P:R: Connection and 850 interfaces at least, you do need the proper cable. Standard IBM cables will not work! Mail order sources for this cable include B&C Computervisions and American TechnaVision. Again, ask around for their latest addresses and prices, as I don't get their catalogs all that often.

5. Software
You got the modem, phone line, interface, and cable. Pretty much got it connected, and you need software to make it work. Not really giving the specifics on any one piece of software, you need a good one with the handler as part of the package you load up. Bobterm is popular, and I use DeTerm 1.59 all the time. ICE-T is used for some type of text emulation mode. And there's plenty of others. The main problem with getting the software for "modeming" is obtaining a copy to use on the 8-bit - especially when you don't have any. Best thing I can suggest is to ask a user group or have someone mail you a proper disk with the proper working software.

The Next Step After That!
Let's gloss over the specifics of setting up and getting it working to: Where do I go from here? You go get yourself a phone number, hopefully of a local system that has the Internet access you want. This can turn out to be a pay system or a local free BBS which asks for donations. Even colleges or other public institutions can provide this for free. It really depends on where you live and who is the provider. In my area, at least 2 providers have outrageous prices for World Wide Web and homepage services. One at a rip-off $25 a month with LIMITED hours per month! But the system I use, Canton Communications in Canton, Ohio, has a reasonable subscription ate and is a local call. The WWW providers require you to have a fast modem and assume you'll be using an IBM. At least one does has ASCII screen interfacing capability. This info is from the advertising leaflets I received in the mail. But Cancomm provides the first level of Internet access - Intenet Email - without limiting the amount per month I can access it.

Internet Email? So what?
This is probably the first and most important tier of Internet messaging access. Anything that can be found on Internet can be sent to your Email address! Anything! Especially Files! But you get an Email address. What does it mean? Why is it like it is? My Internet Email address is 'and 'andy.floyd@cancomm.com'. Let's dissect that. My name is in lowercase with a period between my fiat and last names. A lot of this Internet stuff is shoved through UNIX systems that use commands like "Is -I" to do a directory. These computers manipulate everything in a 100% ASCII (text) format and are very case-sensitive. Even though my system will capitalize a couple of the characters in my address. I enter them in lowercase or just hit <R>eply and I don't have to enter the reply Email address. The "@cancomm.com" is the "domain name." The ".com" is a designation to tell what kind of domain. ".com" is commercial, ".edu" means is a school or university, ".org" means non-profit organization, and ".gov" is a government designation. There's others, but these are the ones I know. So, reading it. I am "andy.floyd" at "cancomm" and it's a .com"commercial site. Anyone with the proper routing systems for Internet Email can send a

message through the proper section and send Internet Email. The specifics on how that works goes into packet-switching and network technology, so let's just say "You send it, it'll get there."

Files! How do I get files!
One of the first things I did when I got a modem was to stay up late on local BBSs downloading games until 5 am. Nice and all, but I was limited to what I could get from the local systems. Now that I can get files through Internet Email. I can get anything from anyone, anywhere in the world! But... In order to send a binary file, you have to make it 100% ASCII. This process is called UUEncoding. I don't know the exact reason for that name, but let's just say that when you UUEncode a file, you can send it in chunks and send it just like any regular Text Email message! That means you have to use a program on your end to UUEncode and UUDecode. UUDecoding is what you do to a UUEncoded file to make it a Binary file.

Why all this Encoding?
Binary files, like programs, pictures files, and whatever, use bytes whose characters are not ASCII and therefore cannot be printed. Unix systems cannot deal with these types of bytes when sending text Email messages. So you have to pull the bytes apart and restring them together to form characters that can be sent as ASCII text. OK? And there are a few flavors of UUEncoding. UUE uses the IBM 'backquote' character, ASCII 96. This doesn't translate well on the 8-bit. Then there's UAA or something. This replaces ASCII 96 with the space character, ASCII 32, and usually
includes a decoding translation table to tell your UUDecoding software how to handle that. And one becoming more popular all the time is XXE. This uses both upper and lowercase characters in its files, and is very popular on Fidonet. I get Japanese anime' pictures XXEncoded all the time, and fortunately with the XXE decoding table, The "Almost Fool-Proof UUDecoder" can handle these well.

Figure 1: XXE Translation Table

```
table
+-0123456789ABCDEFGHIJKLMNOPQRST
UVWXYZabcdefghijklmnopqrstuvwxyz
```

It's just a simple 1 to 1 replacement to make a UUE or UUA into an XXE.

One last UUE variant uses extra long lines. Some decoders can handle it, and AFP UUdecoder is one of them. It has an "S" at the beginning of the line. The AFP UUEncoder for the 8-bit makes UAA files. I have a couple of problems with it:

1. The lines have a lowercase "a" at the end. Some decoders use that final lowercase character for line-sequence checking.
2. It uses the space character to replace the backquote. The editor for Fidonet echo mail I use tends to run lines together if I don't precede each line with a space. It tends to confuse people who try to decode my UAA
postings. So I wrote a UAA2XXE program. Very short.

Figure 2: UAAZXXE.BAS - Companion program to Almost Fool-Proof UUEncoder

```
5 GRAPHICS 2:REM for speed
10 DIM l$(80),F$(20),CR$(2):CR$(1,1)=CHR$
   (13):CR$(2,2)=CHR$(10)
20 DIM XX$(130)
25 XX$=" ":XX$(130)=" ":XX$(2)=XX$
30 XX$(32,96)="+-0123456789ABCDEF
   GHIJKLMNOPQRSTUVWXYZabcdefghi
   jklmnopqrstuvwxyz"
40 DIM UU$(65)
50 UU$="!#$%&'()*+,-./0123456789:;
   <=>?C@ABCDEFGHIJKLMNOPQRST
   UVWXYZ[\]^_"
```

```
60 UU$(3,3)=CHR$(34)
70 ? "FILENAME?";:INPUT F$
80 OPEN #1,4,0,F$(85),F$(2,2)="8"
87 F$(LEN(F$)-2,LEN(F$))="XXE"
90 OPEN #2,8,0,F$
95 TRAP 200
100 INPUT #1;l$
110 IF l$="table" THEN INPUT #1;l$:INPUT
    #1;l$:GOTO 100:REM skip translation
    table in output
120 IF l$="end" THEN ? #2;l$;CR$;:CLOSE
    #2:CLOSE #1:GRAPHICS 0:DOS :REM
    reached end of input file
130 IF l$(1,5)="begin" THEN ? #2;l$;CR$;:?
    l$:GOTO 100:REM pass 'begin' line to output
140 FOR X=1 TO LEN(l$)-1
160 Y=ASC(l$(X,X))
165 ?#2;XX$(Y,Y);:? XX$(Y,Y);
180 NEXT X:? #2;CR$;:?
190 GOTO 100
200 CLOSE #1:CLOSE #2:GRAPHICS 0:?
    "Error";PEEK(195);" encountered."
- :DOS
```

(lines 10,30,50,110,120, & 130 are 1 line. They were formatted that way by me for posting purposes only. The spaces shown for formatting do not actually exist in the program in those lines.)

After ALL That...
OK.. My Internet Email access includes binary file XXE capability. That means if you send me an Email message, any length, with an XXE file in it, I'll get a binary automatically ready to download. I don't have to decode it off-line! Sometimes I get an UUEncoded file not in XXE format, and thankfully most often in chunks. Those don't decode and I do them off-line. And if you can find a automated mail server on a file site that will send you encoded chunks, you just have to capture or download them to disk, use a word processor like TextPro to put them back together in the right order, and save it all as one big file. My last gripe with "Almost Fool-Proof UUDecoder" and the UUEncoder is that it defaults to Drive 1 for all writes. I have to use SpartaDOS X's "SWAP" command to fool it into using the RAM disk for writing.

What about WWW?
That's a different type of Internet access where you store files on someone else's computer for people to get at, like an always on-line BBS area. Sort of like an "off-site backup." World Wide Web also uses domain names. A "Home page" is an area on the Web. And any homepage can have a link to anyone else's. I don't currently have any access to that. Getting a system with UUCP routed, domain-designated Internet Email is the first and most important step. Actually, as long as someone can send you a UUEncoded file, you don't need Web access. And there's always someone willing to do that.

"Remember: It's "Internet". No 'the' in front of it. Internet is so prestigious, it doesn't need an article in front. Just refer to it as "Internet" and everyone knows what you are talking about."
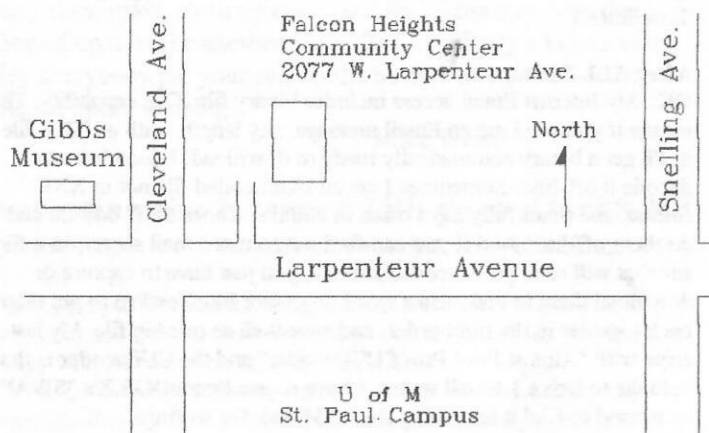
"If you say 'the Internet' I'll know you are one of the clueless.'"

Just a pet peeve of mine. I <never> refer to Internet with an article unless I talk about "the Internet Servers" or "The Internet File Archives." In those cases, Internet is a label or adjective. By itself, it's an entire entity with its own name.

CLUB OFFICIALS

President:	Mike Fitzpatrick	XXX-XXXX
Vice President:	Terry Streeter	XXX-XXXX
Secretary:	Mike Wiest (Temp)	XXX-XXXX
DOM Librarian:	Terry Streeter	XXX-XXXX
Paper Librarian:	Vacant	XXX-XXXX
Software Librarian:	Earline Fitzpatrick	XXX-XXXX
Membership Chairman:	Glen Kirschenmann	786-4790
SPACE Treasurer	Greg Leitner	455-6550
SPACE Newsletter Editor:	Michael Schmidt	757-4192

Saint Paul Atari Computer Enthusiasts (SPACE) meets on the second Friday of each month at 7:30 PM in the Falcon Heights Community Center at 2077 West Larpenteur Ave. Doors open at 7:00 PM.

Falcon Heights Community Center 2077 W. Larpenteur Ave.

Gibbs Museum

Cleveland Ave.

Snelling Ave.

North

Larpenteur Avenue

U of M St. Paul Campus

S.P.A.C.E.
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New Brighton, MN 55112

SPACE BBS

BBS Phone: (612)-427-4317

Sysop: Mike Fitzpatrick

Co-sysop: Open Position

Supporting:

ATARI 8-Bit Computers

ATARI ST Computers

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