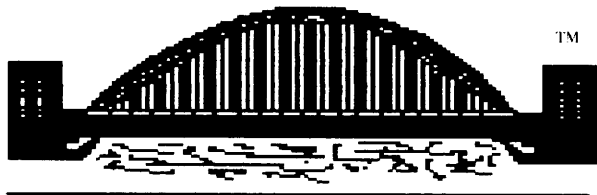


# *TYNE & WEAR*



**A T R I**

*USER GROUP*

**Issue 32**

**May/June 1998**

# TWAUG NEWSLETTER

## **Publishing**

TWAUG NEWSLETTER is published bi-monthly, around mid-month of (Jan, Mar, May, July, Sept and Nov.)

It is printed and published by TWAUG, no other publishing company is involved.

**Opinion** expressed by authors, in this newsletter, is their own opinion and do not represent the views of TWAUG.

The Atari Fuji symbol and Atari name are the trademarks of Atari Corporation. The Fuji symbol on the front cover, is for informational purpose only.

TWAUG is entirely independent and is in no way connected with Atari Corporation or any associate company.

Do you need to **Contact** anyone at TWAUG, for a chat, then phone

**Alan Turnbull** on: 01670 - 822492

or **Max** on: 0191 - 586 6795

## **Our Postal address:**

TWAUG

c/o J. Matthewson  
80 George Road  
Wallsend, Tyne & Wear,  
NE28 6BU

## **Max's apology**

Well here we are with issue #32 and I am still running late. We had the same trouble with issue 31 as we had with #30, breakdown of the photocopier. There it is, I know some of you will be saying what a feeble excuse, but that's what happened and we have to live with it. Anyway, Alan is having a look at it and we are keeping our fingers crossed and hoping that he can make a better job with the machine than those so called experts.

---

## **AMS 98**

The show at Bingley Hall Stafford this year is on November the 14th and it should be the biggest show ever.

ATARI COMPUTING have decided to work with Sharwood Promotions, the organisers of the show since 1988 and combine their annual ACC'98 with AMS.

It will be well attended by Atari dealer, TWAUG will be there, Atari Computing will have a stand, Titan Designs, Imprint Solutions showing Calamus SL98 on a HADES with Magic C Mac with 21" Monitor and many more. FaST Club, Floppystore, System Solution and 16/32 Systems.

So pencil in November the 14th for that special date.

# TWAUG NEWSLETTER



## PUBLISHING!

This newsletter is set up with the Desktop Publishing program "TIMEWORKS 2", with a Mega 1 ST and 4 meg of memory. Files received are first converted into ASCII format and then transferred to the ST usually with TARI-TALK. The files are then imported into the DTP and printed with the CANON BJ-30 Bubble Jet Printer at 360 dpi.

TWAUG

NEEDS  YOU

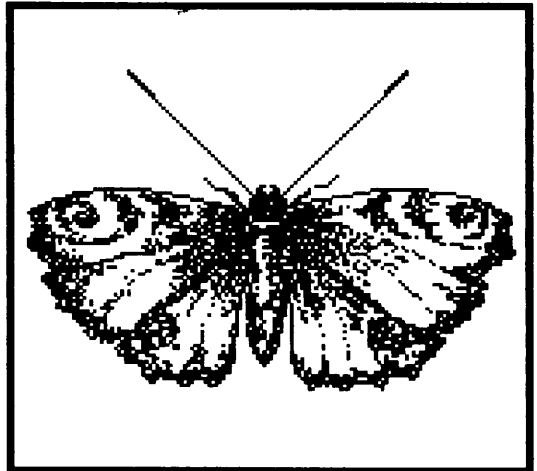
## TWAUG subscriptions

Home ..... 1 Copy ..... £2.50  
- DO - ..... 6 Copies.. £12.50  
Europe ..... 1 Copy ..... £2.50  
- DO - ..... 6 Copies.. £13.50  
Overseas.. 1 Copy ..... £3.50  
-- DO --..... 6 Copies.. £16.00

Issue 33 is due mid-July 98

## ISSUE CONTENT

REMINDER & APOLOGY .....	2
CONTRIBUTIONS & CONTENT .....	3
FREQUENTLY ASKED QUESTIONS .....	
ON MODEMS & WEB ADDRESSES ....	4
PROGRAMS FOR XL/XE EXPLAINED ..	
by Bo Schreurs .....	23
EMULATOR HELP FAQ .....	
by Bill Kendrick .....	29
FOR SALE .....	34
DISK CONTENT .....	35
JOINING THE INTERNET .....	
by Max .....	36



# TWAUG NEWSLETTER

## **World Wide Web What WWW pages support the 8-bit Atari**

How can I retrieve files from FTP sites by e-mail?

**T**here are several general-purpose FTP mail-servers. These may be used to retrieve any files available from anonymous FTP sites on the Internet.

- 1) `mailto:ftpmail@decwrl.dec.com` with no subject line, and two-line body with line 1 `help` and line 2 `quit`

## **FREQUENTLY ASKED QUESTIONS AND ANSWERS**

- 2) `mailto:ftpmail@grasp.insa-lyon.fr` (body: `help` ) Please, European users only.
- 3) `mailto:bitftp@pucc.princeton.edu` (body: `help` or `ftplist` for a list of anonymous ftp sites)

Of the mail-servers listed here, I recommend this "BITFTP" server. To help you get started using it, try this example of retrieving files from the Umich Software

## **ON MODEMS AND WEB SITE ADDRESSES**

Archives (through the `barnone.citi.umich.edu` mirror site). Send a message to `bitftp@pucc.princeton.edu` that says exactly:

```
ftp barnone.citi.umich.edu user anonymous cd atari/8bit dir cd Telecomm dir  
get ft80v037.txt get icet.txt binary get ft80v037.arc get icet.arc quit
```

- 4) mail `BITFTP@DEARN` or to `mailto:BITFTP@vm.gmd.de` (body: `help` or `ftplist` for a list of anonymous ftp sites) (Europe only)

**How can I post to Usenet newsgroups by e-mail?**

# TWAUG NEWSLETTER

From the internet-services/access-via-email FAQ, maintained by "Doctor Bob" Rankin. (1995/08/28 edition)

Mail the text of your post to:

group.name@pubnews.demon.co.uk group.name@dispatch.demon.co.uk  
group.name@paris.ics.uci.edu group.name@crs4gw.crs4.it group.name@ber-  
lioz.crs4.it group.name@magus.dgsys.com (unverified)  
group.name.usenet@hkucs92.air.org (unverified)

For example, to post to comp.sys.atari.8bit, you might send your message to:

comp.sys.atari.8bit@pubnews.demon.co.uk

Be sure to include an appropriate Subject: line, and include your real name and e-mail address at the close of your note.

## **How can I access the World Wide Web by e-mail?**

Swiped from the WWW FAQ, which is maintained by (Thomas Boutell), here is how to access a web page by email:

mailto:boutell@netcom.com mailto:server@mail.w3.org (preferred) or to  
mailto:listserv@info.cern.ch (older address) containing the following single line.  
(What you put on the subject line doesn't matter; blank is OK. This line should  
go in the text of the message.) You will receive as a reply a simple page  
intended to help you learn more about the Web.

send <http://www.earn.net/gnrt/www.html>

## **What is the University of Michigan Archive?**

The University of Michigan (UMich) Software Archives hold a huge number of files for many computing platforms, including the Atari 8-bit computers. For more information:

Bill Kendrick, mailto:kendrick@zippy.sonoma.edu (8-bit Atari files) Mickey Boyd,  
mailto:boydm@atari.archive.umich.edu (the entire Atari Archive). Michael  
Dautermann, mailto:myke@umich.edu (the entire UMich Software Archives).

Downloading -----There are numerous methods available for downloading files from the UMich Archive. The Archivists request you use these mechanisms in this order of preference:

# TWAUG NEWSLETTER

1) The number one way to get into the UMich archives is via AFS. If you have AFS, all our files are kept in the directory `"/afs/umich.edu/group/itd/archive"`. If you have AFS, PLEASE USE IT! Specifically, use:

`file:///afs/umich.edu/group/itd/archive/atari/8bit/`

2) Gophering to `gopher.archive.umich.edu` and looking under the "Software Archives" choice. Specifically, use:

`gopher://gopher.archive.umich.edu:7055/11/atari/8bit/`

There are also mirror Gopher servers:

`gopher://wuarchive.wustl.edu:70/11/systems/atari/umich.edu/8bit/`

`gopher://sunsite.doc.ic.ac.uk:70/1/0-Most-Packages/atari/umich/8bit/`

`gopher://gopher.orst.edu:70/11/g-i-s/computer/zftparea/mirrors/archive.umich.edu/atari/8bit`

3) The WWW interface is fine, at this point. `http://www.umich.edu/~archive/` Specifically, use:

`http://www.umich.edu/~archive/atari/8bit/`

A mirror web site: `http://sunsite.doc.ic.ac.uk/computing/systems/atari/umich/8bit/`

4) FTPing to `atari.archive.umich.edu` and looking in the "8bit" subdirectory. Specifically, use:

`ftp://atari.archive.umich.edu/atari/8bit/`

The `atari.archive.umich.edu` FTP site is chronically overloaded, but there are several mirror sites which are all updated from the home site regularly:

`ftp://wuarchive.wustl.edu/systems/atari/umich.edu/8bit/`

`ftp://sunsite.doc.ic.ac.uk/computing/systems/atari/umich/8bit/`

`ftp://info2.rus.uni-stuttgart.de/afs/umich.edu/group/itd/archive/atari/8bit/`

`ftp://ftp.orst.edu/pub/mirrors/archive.umich.edu/atari/8bit/`

`ftp://barnone.citi.umich.edu/atari/8bit/` ( <-- RECOMMENDED )

`ftp://ftp.kendall.mdcc.edu/pub/atari/umich.edu/8bit/`

# TWAUG NEWSLETTER

<ftp://ftp.toad.net/pub/umich/8bit/>

Brief FTP tips: - user name is "anonymous"; password is your e-mail address - Remember to set file type to BINARY when downloading non-text files (.arc, .com, .dcm, etc.) by FTP.

5) E-Mail FTP gateways. See the section of this FAQ list entitled "How can I retrieve files from FTP sites by e-mail?"

Uploading -----General uploading tips: - No uploads may be made to the Archive's mirror sites. - Please also upload a short text file describing what your upload is. You might also suggest what permanent 8bit subdirectory you'd like your file to end up in. - Note that the 8bit/New directory is "write-only."

1) upload via AFS: Just copy files into file:

<///afs/umich.edu/group/itd/archive/atari/8bit/New/>

2) upload via FTP: FTP to [atari.archive.umich.edu](http://atari.archive.umich.edu), cd into "8bit/New", and upload your files.

Brief FTP tips: - user name is "anonymous"; password is your e-mail address - Remember to set file type to BINARY when downloading non-text files (.arc, .com, .dcm, etc.) by FTP.

3) upload via E-Mail: Simply uuencode the file, (please split it into parts of 60 K or less) and mail the result to

<mailto:lenn@atari.archive.umich.edu> (Jody Lenn).

Please name the parts in the subject line. This is really helpful as the parts usually don't arrive in the proper sequence. Also, please include a message labeled "file transmission," containing a short description of the file, etc. Shar files are also acceptable, but uuencoded is preferred.

## **What is the Boston Archive?**

Here's an 8-bit Atari FTP site located at Boston University. It is maintained by Adam Bryant,

<mailto:adb@albert.bu.edu> .

This site seems to have seen no uploads for years, but there are some files here that aren't on any of the other sites. [IS THIS SITE LOST? - 10/13/95]

# TWAUG NEWSLETTER

<ftp://cs-ftp.bu.edu/PC/ATARI> (128.197.13.20)

## **What is the PVV Archive?**

This is a mid-sized Atari FTP site maintained by (Eyvind Bernhardsen)  
<mailto:eyvind@stud.unit.no>

PVV stands for ProgramVareVerstedet, or The Software Workshop, a student society at the University of Trondheim, Norway.

<ftp://ftp.pvv.unit.no/pub/atari/8bit/> (129.241.210.232)

Uploads go to `/incoming/atari/8bit`; Eyvind will move them to the appropriate directory. Please include a readme file with each upload, so people know what they're downloading.

## **What is the ClarkNet Archive?**

This smallish 8-bit Atari FTP site is maintained by Kevin Atkinson,  
<mailto:kevina@clark.net> .

<ftp://ftp.clark.net/pub/atari> (168.143.0.2)

Write to Kevin for uploading instructions.

A mirror of the ClarkNet Archive, kept by Jason Duerstock:

<ftp://ftp.kendall.mdcc.edu/pub/atari/clark.net/> (147.70.146.36)

## **What is the Gatekeeper's Archive?**

This small FTP site offers most of the resources provided on the Atari 8-Bit Home Page. Kept by (Ivo van Poorten, The Gatekeeper).

<mailto:ipoorten@cs.vu.nl>

<ftp://ftp.cs.vu.nl/pub/ipoorten/atari.8bit> (192.31.231.43)

## **What is the QACE Archive?**

The Queensland Atari Computer Enthusiasts have a fairly large FTP site. It is located in Australia and is the local internet sight of Super Products. Contact James Bradford, <mailto:sup8pdct@closer.brisnet.org.au> for more info.

<ftp://203.4.149.98/8bit>



# TWAUG NEWSLETTER

## **What is the Polish Demo Archive?**

It's a place when you can get all Polish (not only) demos on a Atari 8-bit. If You have any comments, write to:

mailto:LukSoft@hipokrates.am.lublin.pl

ftp://hipokrates.am.lublin.pl/sys/pub/atari8/

## **What is the Slovakian Archive?**

This FTP site contains some demos, games, utils, zines from all the world. Here you can also find some Slovak or Czech stuff.

Contact: mailto:mchorvat@econ.umb.sk (Marco, of GMG)

ftp://svs.scsss.sk/pub/atari/

## **What is the Cleveland Free-Net Atari SIG?**

The Cleveland Free-Net is the hub system of the NPTN, the National Public Telecomputing Network. It can be accessed by any of the following:

telnet://freenet-in-a.cwru.edu, telnet://freenet-in-b.cwru.edu,

or telnet://freenet-in-c.cwru.edu (129.22.8.32 or 129.22.8.51).

Type "go atari" to reach the Atari SIG.

Those who add their names to the Atari SIG user directories are automatically members of the official Atari user group C.A.I.N. - Central Atari Information Network.

The Cleveland Free-Net Atari SIG publishes the CAIN Newsletter, maintains the CAIN Home Page on the WWW, and keeps the "Who's Who in the Atari Community E-Mail Directory" listing. Send correspondence and press releases to mailto:xx004@cleveland.freenet.edu (Atari SIG).

## **What is the National Capital Free-Net Atari Users SIG?**

National Capital Free-Net (Ottawa, Canada)

Internet access to NCF is via

telnet://guest@freenet2.carleton.ca (134.117.1.39) type "go atari" at any menu

telnet://guest@freenet3.carleton.ca (134.117.1.22) type "go atari" at any menu

# TWAUG NEWSLETTER

gopher://gopher.ncf.carleton.ca and choose: 'National Capital Freenet (NCF) Information by Gopher'

<http://www.ncf.carleton.ca/freeport/sigs/computer/atari/menu/>

This is the Atari computer(\*) users special interest group.

Select the Bulletin Board for the latest Atari related news on the SIG To get information on the other options select the menu option in question and read the ABOUT message.

For more information, please contact Jack Kitowicz (ac382) on the National Capital FreeNet. Comments & Suggestions for improvements to the Atari SIG are always welcome.

## **What is the Victoria Free-Net Atari Computer Users SIG?**

Victoria Free-Net (Victoria, Canada)

telnet://guest@freenet.victoria.bc.ca (199.60.222.1) type "go atari" at any menu

Facilitators: Gord Hooper (mailto:ua558@freenet.victoria.bc.ca) Ted Skrecky (GCACE Librarian) (mailto:ud264@freenet.victoria.bc.ca)

The aim of this SIG is to assist Atari Computer users. We can provide assistance with XL/XEs, STs, and Falcons, whether you are a new or experienced user.

## **What is the Closer To Home BBS?**

Kept by mailto:Dave.Blears@closer.brisnet.org.au (Dave Blears),

this is a BBS in Australia which supports the 8-bit Atari.

telnet://guest@closer.brisnet.org.au (203.4.149.97)

## **How can I access the World Wide Web by Telnet?**

This section swiped from the WWW FAQ, which is kept by

mailto:boutell@netcom.com (Thomas Boutell).

An up-to-date list of these is available on the Web as

<http://info.cern.ch/hypertext/WWW/FAQ/Bootstrap.html>

and should be regarded as an authoritative list.

# TWAUG NEWSLETTER

telnet://telnet.w3.org

A telnettable browser provided by the W3 coalition.

telnet://www@www.cc.ukans.edu

Offers Lynx, a full screen browser which requires a vt100 terminal. Log in as www. Does not allow users to "go" to arbitrary URLs, so GET YOUR OWN COPY of Lynx and install it on your system if your administrator has not done so already. The best plain-text browser, so move mountains if necessary to get your own copy of Lynx!

telnet://www@www.njit.edu (or telnet 128.235.163.2)

Log in as www. A full-screen browser in New Jersey Institute of Technology, USA.

telnet://www@www.huji.ac.il

A dual-language Hebrew/English database, with links to the rest of the world. The line mode browser, plus extra features. Log in as www. Hebrew University of Jerusalem, Israel.

telnet://sun.uakom.cs Slovakia. Has a slow link, only use from nearby.

telnet://www@info.funet.fi (or telnet 128.214.6.102).

Log in as www. Offers several browsers, including Lynx (goto option is disabled there also).

telnet://www@fserv.kfki.hu Hungary.

Has slow link, use from nearby. Login is as www.

## **What WWW pages support the 8-bit Atari?**

This should be a complete list of WWW pages supporting the 8-bit Atari.

VENDORS/DEVELOPERS/PUBLISHERS:

See my companion vendor/developer list:

USER GROUPS:

Atari Bit Byter User Club e.V. (ABBUC e.V.)

# TWAUG NEWSLETTER

<mailto:0236639623-0001@t-online.de>

<http://www.cip.rus.uni-stuttgart.de/~inf11492/abbuc/>

Atari Boise User Group (ABUG) Ron Whittam, [whittam@primenet.com](mailto:whittam@primenet.com)

<http://www.primenet.com/~whittam/atari.html>

Atari Computer Enthusiasts of Columbus (ACEC)

<mailto:rwarenz@freenet.columbus.oh.us>

<gopher://gopher.freenet.columbus.oh.us/11/specialinterestgroups/>

[Atari%20Computer%20Enthusiasts%20of%20Columbus](http://www.freenet.columbus.oh.us/~acec/)

The Atari Exchange of Louisville (AEL)

<http://ourworld.compuserve.com/homepages/rlink/>

Central Atari Information Network (CAIN) Cleveland Free-Net Atari SIG,

<mailto:xx004@cleveland.freenet.edu>

<http://ace.cs.ohiou.edu/personal/mleair/cain.html>

Edmonton Atari Computer Hobbyists (EACH) Leslie Hartmier,

<mailto:leslieh@tibalt.supernet.ab.ca>

<http://www.compdirect.com/each/>

NorthWest Phoenix Atari Connection (NWPAC) John Collins, Club Webmangler,

<mailto:coolzip@host.yab.com>

<http://www.yab.com/~coolzip/club.html>

Queensland Atari Computer Enthusiasts (QACE)

<mailto:qace@closer.brisnet.org.au>

<http://www.closer.brisnet.org.au/atari/atari.html>

St. Paul Atari Computer Enthusiasts (SPACE) Michael Current,

<mailto:mcurrent@carleton.edu>

<http://www.library.carleton.edu/space/>

# TWAUG NEWSLETTER

Toronto Atari Federation (TAF)

<mailto:taf@io.org>

<http://www.io.org/~schrist/taf.html>

## OTHER HOME PAGES:

Atari 8-Bit Computers FAQ and Vendor/Developer Lists Michael Current,  
<mailto:mcurrent@carleton.edu>

<http://www.cs.ruu.nl/wais/html/na-bng/comp.sys.atari.8bit.html>

The Atari 8-Bit Home Page Ivo van Poorten,

<mailto:ipoorten@cs.vu.nl>

<http://pmwww.cs.vu.nl/home/ipoorten/Atari.8bit.Homepage/>

Atari 8-bit Resort Marek Tomczyk,

<mailto:Marek.Tomczyk@stud.uni-karlsruhe.de>

<http://www.uni-karlsruhe.de/~Marek.Tomczyk/8bit.html>

Big Atari 8bit Home Page Tomasz Tatar,

<mailto:tatar@student.uci.agh.edu.pl>

<http://student.uci.agh.edu.pl/~tatar/Atari/hp.html>

Some Atari 8-bit Stuff Rob Funk,

<mailto:funk+@osu.edu>

<http://er4www.eng.ohio-state.edu/~funkr/Atari/>

Atari XL/XE-System ACF Design Team,

<mailto:wwg28@rzserv2.fh-lueneburg.de>

[http://rzserv2.fh-lueneburg.de:8080/Atari\\_2](http://rzserv2.fh-lueneburg.de:8080/Atari_2)

ATARI XL/XE - Homepage Stefan Lausberg,

<mailto:lausberg@studbox.uni-stuttgart.de>

<http://wwwcip.rus.uni-stuttgart.de/~inf11492/>

# TWAUG NEWSLETTER

Tolkien computer games for the Atari 400 Fredrik Ekman,

<mailto:ekman@lysator.liu.se>

<http://www.lysator.liu.se/tolkien-games/atari.html>

The good old Atari Computers (1978-1985) Sacha Hofer,

<mailto:hofer@iamexwi.unibe.ch>

<http://iamexwi.unibe.ch/studenten/hofer/atari1.html>

WWWorld of Atari 8-bit... <mailto:pdg@alexia.net.au>

<http://werple.net.au/~lions/atari.htm>

Alternate Reality Homepage Robert Hagenstrom,

<mailto:sp93rob@ksk.sala.se>

<http://www.ksk.sala.se/~sp93rob/dungeon/>

Reminiscing: 8-Bit Atari Games John V. Goodman,

<mailto:jgoodman@tiac.net>

<http://www.tiac.net/users/jgoodman/atari/atarienter.html>

Classic Home Video Games Museum Dennis Brown,

<mailto:dgb@owlnet.rice.edu>

<http://www.owlnet.rice.edu/~dgb/museum/>

La cueva de los 8 bits Mariano Domnguez Molina,

<mailto:mariano@ce.fciencias.unam.mx>

<http://graf.fciencias.unam.mx:100/~mariano/atari.html>

Alternate Reality The Classic Role Playing Game Matt Roller,

[kirk.webb@m.cc.utah.edu](mailto:kirk.webb@m.cc.utah.edu)

<http://www.cc.utah.edu/~krw8466>

Atari 8-bit Emulation Tony Smolar,

# TWAUG NEWSLETTER

<mailto:asmolar@fast.net>

<http://www.users.fast.net/~smol/8bitemu.html>

Atari 8-bit Utilities (emulators/SIO2PC/APE) Preston Crow,

<mailto:crow@cs.dartmouth.edu>

<http://www.cs.dartmouth.edu/~crow/atari/>

BRITiSH Underground Atari 8-bit Craig Lisowski,

<mailto:clisowsk@mcs.kent.edu>

<http://intrepid.mcs.kent.edu/~clisowsk/8bit.html>

Homepage Nyman: Atari 8 bit Peter Nyman,

<mailto:N94PetNy@Midgard.Liu.Se>

<http://www.geocities.com/SiliconValley/2741/8bit.html>

Atari 8-bit Emulator utilities Ivan Mackintosh,

<mailto:ivan@dales.rmplc.co.uk>

<http://dales.rmplc.co.uk/ivan/atari/>

Draco's Atari area Konrad M. Kokoszkiewicz,

<mailto:conradus@plearn.edu.pl>

<http://www.orient.uw.edu.pl/~conradus/atari.html>

8-Bit Atari Emulation and Games David Grieve,

<mailto:DavidG@bagend.otago.ac.nz>

[http://www.otago.ac.nz/Web\\_menus/User\\_Homepages/david/](http://www.otago.ac.nz/Web_menus/User_Homepages/david/)

Cartridge List for the Classic Atari 800/XL/XE Computers Andrew Krieg,

<mailto:krieg@execpc.com>

<http://www.cs.uwm.edu/public/krieg/links/atari.8bit.carts>

**What IRC channels discuss the 8-bit Atari?**

# TWAUG NEWSLETTER

==> #atari8 - Just for 8-bit Atari users!

==> #classic - Classic Games and Systems Collectors.

mailto:cmwagner@gate.net (Chad Wagner) writes:

If you have access to a Unix host then you should be able to get to irc by typing irc at your shell prompt and jumping on an EFnet server (irc.portal.com, irc.eskimo.com, dewey.cc.utexas.edu) and joining #atari8.

If you are using a host that has a menu system then locate IRC and go there, and join #atari8 (and hope your on EFnet, :).

If you are using SLIP/PPP then download a client (for Windows users, download mIRC for Winsock archives, and I would guess that most SLIP/PPP users -- if they have gotten that far -- are familiar with IRC, :) and select one of the servers and join #atari8. There is many IRC servers on EFnet, chances are the one your on is on EFnet.

## **What's this UUEncoding stuff (.uu, .uue files) all about?**

UUEncode/UUdecode is a UNIX utility that will convert a binary file into 100% printable ASCII characters, so that the file may be posted or e-mailed anywhere a text message can go. The 8-bit Atari is perfectly capable of UUEncoding/ UUdecoding as well. On the archives:

Uudecode 1.2a by John Sangster - very functional. filenames:

Archivers/uudecode.bas, Archivers/uudecode.doc

Yet Another UU-coder by John Dunning - both decoding/encoding. filename: Archivers/yau.arc

Uudecode.com, Uuencode.com by ??? - "newer, cleaner, easier to use."  
filename: Utilities/uue.arc

Dumas UU-coder by John Dunning filename: Cc65/dumasuu.arc

## **What is an .arc file?**

A file with the extender .arc has been archived in a standard manner that is common in the MS-DOS world. This is done to make the file shorter, so it takes up less space on your disk and it takes less time to transfer between computers. The archives contains several 8-bit Atari archivers fully compatible



# TWAUG NEWSLETTER

with this standard, including:

Super Un-Arc 2.3, Super Arc 2.0 by Bob Puff - highly recommended. filenames: Archivers/supercarc.arc - both Super Un-Arc & Super Arc Archivers/suprarc2.arc - Super Arc Archivers/supunarc.com - Super Un-Arc Archivers/supunarc.uue - Super Un-Arc.

## What are the .DCM, .ATR, and .XFD file formats?

These are all filename extensions used to name files containing entire 8-bit Atari floppy disk images.

**DCM** - Disk Communicator format. Invented by Bob Puff, <mailto:76702.1076@compuserve.com> for his Disk Communicator 3.2 utility. Used when working with native Atari hardware.

**ATR** - Atari disk image format. Invented by Nick Kennedy, <mailto:nkenedy@cswnet.com> for his SIO2PC project. Used when working with non-Atari hardware.

**XFD** - Xformer disk image format. Invented by Emulators Inc, <mailto:emulators@msn.com> for their ST Xformer emulator. Identical to ATR except without the 16 byte header. Used when working with non-Atari hardware.

**PRO** - APE ProSystem format. Invented by Steven Tucker, <mailto:classics@nacs.net> for his APE ProSystem device. Used with APE, the Atari Peripheral Emulator.

## What are the .XMO and .BIN file formats?

**XMO** stands for XMODEM. The idea was that the file was not plain text, but was a binary file. As a binary file, it had to be downloaded using a file transfer protocol such as XMODEM. The use of ".xmo" as a filename extender was popular once, but has been discouraged for years.

**BIN** - another filename extension sometimes used to designate binary-load files. Like .xmo, use of .bin is discouraged.

## What 8-bit Atari emulators exist for other computing platforms?

These are the five emulators that are usable.

1) ST Xformer 3.0, from Emulators Inc, for the Atari ST.

# TWAUG NEWSLETTER

<mailto:emulators@msn.com>

<http://www.emulators.com/>

2) PC Xformer 3.5, from Emulators Inc, for MS-Windows.

<mailto:emulators@msn.com>

<http://www.emulators.com/>

3) Rainbow 1.3, by Chris Lam, for MacOS/Windows 95/NT

<mailto:jx91@cityscape.co.uk>

<http://www.cityscape.co.uk/users/jx91/rainbow.html>

4) Atari800 Emulator for Unix and Amiga, by David Firth Latest version: 0.4.5

<mailto:david@signus.demon.co.uk>

<ftp://ftp.demon.co.uk/pub/emulators/atari/> (158.152.1.44)

5) XL-it! 0.16, by Markus Gietzen, for MS-DOS

<mailto:iig05-1@htw.uni-sb.de>

<http://www.htw.uni-sb.de/people/mgietzen/atari/xl-ft.html>

## **What are the best terminal emulators available?**

Here are some of the more popular PD/freeware/shareware terminal programs available.

**BobTerm 1.22**, shareware by Bob Puff Emulates:

VT52 Text: 40 columns in gr.0; 80 col. w/ XEP80 File Xfer:

XMODEM, YMODEM, FMODEM Autodial: Yes

Backscroll buffer: No

Capture-to-disk: Yes

Summary: Feature-filled; excellent for BBSing filename: Telecomm/bterm12.arc

**Kermit-65 3.7**, PD by John R. Dunning Emulates:

VT100 Text: 40 columns in gr.0; 80 col. in gr.8; 80 col. w/

# TWAUG NEWSLETTER

XEP80 (sort of) File Xfer:

Kermit Autodial: No

Backscroll buffer: No

Capture-to-disk: No

Summary: Excellent VT100 emulation; rock-solid

Kermit Xfers filenames: Telecomm/k65v37.arc - latest version Telecomm/k65doc.arc - documentation Telecomm/k65src.arc - source code

**OmniCom** by CDY Consulting

Emulates: VT100

Text: 80 columns in gr.8

File Xfer: XMODEM,

Kermit Autodial: No

Backscroll buffer: No

Capture-to-disk: No

Summary: Combination VT100, XMODEM, Kermit; buggy at file

Xfers filename: Telecomm/omnicom.arc

**VT850 B1**, shareware by Curtis Laser

Emulates: VT100/VT102 (plus complete VT220 keymap)

Text: 40 columns in gr.0; 80 col. w/ XEP80

File Xfer: None

Autodial: No

Backscroll buffer: No

Capture-to-disk: Yes

Summary: Excellent at VT100 on the XEP80; 1200bps top speed filename: Telecomm/vt850b1.arc

# TWAUG NEWSLETTER

**FlickerTerm 80 v.0.51**, freeware by LonerSoft (Clay Halliwell)

Emulates: VT100, IBM ANSI

Text: 80 column via a special Graphics 0 screen (no hardware req'd)

File Xfer: None

Autodial: No

Backscroll buffer: No

Capture-to-disk: No

Summary: Fastest and most complete VT100 emulation; readability a minus filename: ?????

**Ice-T 2.71 XE (128K) or 1.1 (48K)** by IceSoft (Itay Chamiel)

Emulates: VT100

Text: 80 column via a fast-scrolling graphics 8 screen

File Xfer: XMODEM download

Autodial: Yes (2.7 XE) or No (1.1)

Backscroll buffer: Yes--8 screens (2.7 XE) or One screen (1.1)

Capture-to-disk: Yes--up to 16K (2.7 XE) or No (1.1)

Summary: Excellent for high-speed VT100 emulation available from <mailto:brucka@eruvn.jct.ac.il>

## **What BBS software can be used on the Atari?**

This section by <mailto:winston@merk.com> (Winston Smith)

Here is the run down of ATARI 6502 8-BIT BBSes that I am aware of:

☆ A.M.I.S. BBS -- The A.C.E. Message Information Service.

This BBS was written in BASIC by the Atari Computer Enthusiasts computer club (was it the Michigan chapter?). It included designs for a ring-detector. You needed a sector editor and had to allocate message space by hand, hex byte by hex byte.

☆ FoReM BBS -- Friends of Rickey Moose BBS.

# TWAUG NEWSLETTER

At the time, there were a lot of BBSes around called things such as "FORUM-80" and "BULLET-80", ergo the name. FoReM BBS was the first truly RBBS-like BBS for the ATARI 8-bit. It was programmed in BASIC and was somewhat crashy. I think that this is the great-grandparent of the FOREM-XE BBSes that survive today.

Matt Singer, <mailto:msinger@oe.fau.edu> writes: FoReM BBS derived from an early AMIS. When multiple message areas were added the name was extended to FoReM 26M. Then, When OSS released BASIC XL the program was rehacked and called FoReM XL... Bill Dorsey wrote most of the Assembler routines (where is he now?).

☆ ABBCS -- The ANTIC Bulletin Board Construction Set.

The user design of the ABBCS was very good. It sported features such as intra-line editors. Unfortunately, the coding of the ABBCS was really poor. You could practically blow on your keyboard and crash this BBS. The BBS would sometimes crash several times a day.

☆ NITE-LITE BBS -- Paul Swanson's BBS with RAM disk.

Paul Swanson was a programmer from the Boston, Massachusetts, USA, area. I'm not sure whether his BBS for the Atari 8-bit has been placed into the public domain or not. This BBS was the first to support a RAMdisk, which Paul Swanson called a "V:" device for "virtual disk". This BBS was written in Atari BASIC and required a joystick hardware "dongle" device. This was notable as being one of the first Atari 8-BIT BBSes that could actually go for a week without having to be rebooted. Pointers to the message base were kept in an Atari "very long string" (for which Atari BASIC is famous). The BBS would only have problems (for the most part) if this string became corrupted.

☆ ATKEEP -- An Atari 8-bit version of CITADEL BBS.

I believe that AT-KEEP, like FOREM-XE, requires the use of the commercial BASIC XE cartridge to run. This BBS program was very popular around Louisiana, USA, from what I understand.

☆ Benton's SMART BBS -- BBS written in BASIC by Marco Benton.

This program is written entirely in BASIC. It expects to be running under a SpartaDOS environment. This was a problem until very recently, when the disk-based version of SpartaDOS was re-released as shareware. This BBS program uses a "modem clock string" rather than an R-Time 8 cartridge in order to retrieve the current time. It also comes with an Atari BASIC game door

# TWAUG NEWSLETTER

called "Sabotage".

☆ FOREM-XE -- FOREM using BASIC XE.

This version of FOREM BBS requires the commercial BASIC XE cartridge in order to run. It is in the public domain and can import and export messages from the Atari PRO! BBS EXPRESS-NET (7-bit text only, control ATASCII graphics are reserved for message data-structure bytes). FOREM-XE BBS is still currently in use as we speak, and may be reached via the PRO! EXPRESS-NET as long as the cross-networking "transnet" is still in effect.

☆ The BBS Express -- PRO! BBS demo program.

This is the public domain version of EXPRESS!-BBS, which is the Keith Ledbetter companion project of the EXPRESS!-TERM terminal program of days gone by. I am not familiar with this program. I think that it is written in Action! and only supports XMODEM Checksum transfers. I have never called or seen this program demonstrated.

☆ OASIS JUNIOR III -- OASIS BBS demo program.

OASIS JUNIOR III is the --ALL MACHINE LANGUAGE--demo version of the OASIS BBS program. OASIS is very crash-resistant and comes with a "dial out" screen so that the Sysop can use the BBS as a terminal program to call and fetch files without having to bring the BBS down and reload a terminal program. OASIS supports "Door programs" which it refers to as "OASIS PAL modules". This OASIS demo module comes with an excellent message system. The OASIS file system is one of the most complicated that I have ever seen. It consists of "file libraries" with suites of "file types". There is quite a bit of overhead involved in performing a download (which may be a good thing, as it discourages file hogs). There is a commercial version of OASIS called "OASIS IV" that performs networking. There was an OASIS network between Boston, Massachusetts, USA and Murfreesboro(SP?), Tennessee, USA. Occasionally word of the OASIS IV developers reaches the network from New Zealand or Canada.

☆ Frank Walters BBS -- I know nothing about this BBS except that Frank Walters wrote it.

OASIS IV, CARINA, and BBS-EXPRESS-PROFESSIONAL! are all commercial programs. I haven't heard anything about OASIS IV and CARINA for a while, but PRO!-BBS is still a viable commercial enterprise last that I had heard.

**What vendors, developers, or publishers support the 8-bit Atari?**

# TWAUG NEWSLETTER

See the "Atari 8-Bit Computers Vendors and Developers List." The latest version may be obtained in the following locations, among many others:

<ftp://rtfm.mit.edu/pub/usenet-by-group/news.answers/atari-8-bit/vendev>

<http://www.cs.ruu.nl/wais/html/na-dir/atari-8-bit/vendev.html>

news:comp.sys.atari.8bit

news:comp.answers

news:news.answers

mailto:mail-server@rtfm.mit.edu,

message says: send usenet/news.answers/atari-8-bit/vendev quit

You can also ask me for a copy at <mailto:mcurrent@carleton.edu>

---

## ATARI XL/XE

**T**his page was last changed on: March 13th, 1998

**Please select one of the item you're interested in below:**

- [Image] **WHOAMI** - let me introduce myself
- [Image] **README** - read me first!
- [Image] **POOLDISK** - a cdrom full with public domain and shareware software
- [Image] **POOLDISK TWO** - soon to be released, read all about it!
- [Image] **DIR2ATR** - convert all Atari 8 bit files located in a PC directory to one or more .ATR disk image(s)
- [Image] **XDIRLIST** - gives an overview of all Atari 8 bit files on your PC located in .ATR and .XFD disk image(s)
- [Image] **ATR2XFD** - convert .ATR disk image(s) to .XFD disk image(s)
- [Image] **XFD2ATR** - convert .XFD disk image(s) to .ATR disk images(s)
- [Image] **XDIR** - inspect those .ATR and .XFD disks images on the fly, NOW VERSION 6.0! W95 Comp.

**Back to HOME page:**

**WHOAMI**

# TWAUG NEWSLETTER

Hi,

My name is Bo Schreurs, male, 39 years young, and collector of Atari XL/XE equipment. I think it is one of the finest machines ever made. Many people think it is not anymore, but how wrong can they be! It supports High Density diskettes, SCSI and IDE hard disks, ZIP drives and they're working on cdrom support at this moment. You can connect to bbs systems with high speed modems, and even surf over the internet! So this machine is still alive and kicking. At a certain point in time I started collecting the equipment instead of actually using it. Nowadays one can emulate the Atari XL/XE on PC's, MAC and even UNIX computers. However, they still can not emulate the look and feel of the original machine.

My brother and I are the producer of the Pooldisk cdrom, mentioned further on. We're planning to produce a Pooldisk II in the near future and are looking for Public Domain or Shareware for the Atari XL/XE. Or if you have a photograph of rare Atari equipment or other interesting stuff for our classic computer (i.e. list of all cartridges ever produced, description or reviews of games, commercials aired on tv, interesting html pages, etc.), please email them to me. We will place them on our next issue (when ever that will be released)!

**Back to TOP of page:**

## README

All programs for the Atari XL/XE or IBM pc computer on this page can be downloaded freely. You may pass them around freely.

**WARNING** However these programs may not be used commercially in any way, they may be changed, but not be sold!

**DISCLAIMER** Although I'm certain no program causes the loss of data in any way, using the downloaded programs will be at your own risk! I'm not responsible for any loss or damage to data files, programs or computer equipment!

**Back to TOP of page:**

## POOLDISK CDROM

Order me! -----Ever heard of the POOLDISK cdrom? It is a cdrom especially created for the classic Atari! Loads and loads of public domain and shareware 8 bit software for the Atari XL/XE computer systems. Contains disk



# TWAUG NEWSLETTER

images from the Bellcom library, ABBUC, POKEY, SAG, S\*P\*A\*C\*E, LIAUG, and many many more. Contains a lot of Atari 8bit emulators intended for the ATARI ST/STe, IBM pc and the Macintosh. 90% of the software comes on disk images in the .ATR and .XFD format, so you can load it directly into SIO2PC, APE and ST/XL link. It also contains lots of photo's in .pcx format of Atari XL/XE equipment. This includes the dual disk drive 850 and the rarely seen 1450XLD computer!

The format of the cd is ISO9660.

The price of this CD is only \$35 US, and this includes shipping! If interested, please send an email to: Ernest Schreurs

**Back to HOME page:**

## **POOLDISK TWO SOON TO BE RELEASED!**

It's been a while since we've created the POOLDISK cdrom, and because of all the activity going on lately concerning our beloved 8 bit, the software we've received, the impact of internet and the dropping of prices concerning cdroms, we thought it's time for a follow up of the POOLDISK cdrom.

We're currently wording on a revised and extended version of POOLDISK TOO! It will be a double cdrom edition! What will be on the 2 cd's? First of all the existing .ATR images of POOLDISK ONE so to speak, with addition of the complete SAG usergroup library, the complete ABBUC library, all Compushop magazines, an updated POKEY library, the LACE library, and disks from other usergroups, plus various internet libraries like Close To Home. We've converted all pictures from pcx to jpeg format. This saves space. We've added more than 300 pictures of scanned cassette covers, included more than 500 Mb of Webpages (so you don't have to download them), we're also planning to add some more interesting stuff. If you've got something you would like us to add on the cdrom, please email it! Look at it as a permanent backup for your software! Please do not send us commercial material, because we will certainly NOT included that. Thanks!

Send your stuff (scanned pictures, programs, concerning Atari 8bit, Jaguar or Lynx or whatever as long as it is Atari related) to: Ernest Schreurs Even if you've got nothing to send us, if you've got a good idea, or a nice Web site we should include (or FTP site), mail us too! We need your help in this!

We think this project will be completed around Christmas 1997. The 2 cdd's will

# TWAUG NEWSLETTER

probably be sold for \$15 including shipping. We're thinking of giving our previous buyers of Pooldisk One a discount. Read more on this page around Christmas.

**ATARI 8 BIT, REAL POWER WITHOUT THE PRICE!**

**Back to HOME page:**

## **DIR2ATR The Image Creator**

You know how cumbersome it is to put Atari 8 bit files on an Atari 8 bit disk image. The only product I know is ATR2IMG which let you select Atari 8 bit files and places them in an .ATR disk image. It uses a nice graphical shell, but is still limited in some way. Especially when you want to convert 2,000 Atari Basic files into a disk image "archive". But ATR2IMG is still a very good product, download it now, and look for yourself.

**Download this Atari 8 bit disk image creator for the Atari XL/XE ATR2IMG NOW!**

Anyway, now there is DIR2ATR. This PC utility let you turn a complete PC directory, containing Atari 8 bit files, into one or several .ATR disk images. It will create the disk images containing DOS 2.5 or MYDOS DOS files. Or if you do not want to include a DOS on it, that's possible too! It will create .ATR disk images starting from 001.ATR up to 999.ATR, depending on the amount of Atari 8 bit files residing in the specified PC directory.

Normally the utility will always start with disk image 001.ATR, but if you specify the "/A" parameter, it will continue adding after the highest nnn.ATR disk image found in the target directory. The utility comes with a short readme file, which you should read. The syntax of the program is as follows:

```
DIR2ATR [disk1:][path1] [disk2:][path2] [/D][/M][/A]
```

Disk1 and Path1 specifies the source, the Disk2 and Path2 the target. Once again, read the supplied text file. Let me know what you think of this program. Maybe I will consider your comments :)

**Download this Atari 8 bit disk image creator for the Atari XL/XE DIR2ATR NOW!**

**Back to HOME page:**

## **XDIRLIST The Image Disk Directory Lister**

# TWAUG NEWSLETTER

You probably have a lot of Atari 8 bit disks, and you know that is isn't easy at all to locate a specific file on one of those >----!----!----!----!----R disks.

You have to turn on your 8 bit (which isn't THAT bad of course), turn on you drive, load the disks and get a directory listing. Right, of course, there are programs out there which let you index all your disks. But do you really use them? If yes, I like you to continue reading anyway. If you convert all those disks to .ATR or .XFD format using SIO2PC or XFormer, you're still ok with that.

But then, if you have the POOLDISK cdrom, or download .ATR or .XFD disk images from the Internet, how do you know where a specific file is located? You cannot use your previous tools anymore. And you know, you don't want to browse through all those disk images by hand, do you.

You can use XDIR to browse fast through those disk images of course, but after 10 or 20 disks you tend to loose track. Now if there was an utility which would produce a list of all Atari 8 bit files on all those .ATR or .XFD images, wouldn't that be nice. Yes, it would.

And you guessed it, XDIRELIST will just do that! You can run it from a specific PC directory or specify a file mask. From that point on it will scan that directory and all subdirectories for .ATR or .XFD disk images. It will check if the disk image contains a Volume Table Of Contents (VTOC), and if so, it will retrieve the Atari 8 bit files from it, and write out the results to a disk file. Run from the root of a drive, it will scan through ALL directories on that drive. The output file will be placed at: C:\LOCATOR.TXT The file will look something like below:

Atari File	Size	Lck	Ext	Del	Pc Path
DOS.SYS	37	No	No	No	C:\XL\DOS25.ATR
DUP.SYS	42	No	No	No	C:\XL\DOS25.ATR

It specifies the Atari 8 bit filename, its size in 128 byte sectors, if it is locked, contains sectors above sector 720, if it is considered deleted, and the PC disk image path and file.

You can import this list file easily into Microsoft Excel or Microsoft Access. With the help of these tools, you can easily locate a certain file, or notice that you miss a certain file from your collection <grin>. Try this program for yourself, and be amazed.

# TWAUG NEWSLETTER

Download this Atari 8 bit disk image lister for the Atari XL/XE XDIRLIST NOW!

**Back to HOME page:**

## **ATR2XFD Convert ATR to XFD**

So you've downloaded these Atari 8 bit disk images, and you own an Atari ST running ST XFormer. Somehow this program does not load .ATR disk images, but only .XFD images. The only difference between those two images is a 16 byte .ATR header. ATR2XFD just strips of this header of the .ATR disk image, and copies the rest of the disk image to a .XFD disk image. Now you can load the .XFD disk image into your ST XFormer.

Download this Disk Image conversion program for the Atari XL/XE ATR2XFD NOW!

**Back to TOP of page:**

## **XFD2ATR Convert XFD to ATR**

So you've downloaded these Atari 8 bit disk images, and you own an IBM compatible PC. Some programs only process .ATR disk images, and it seems the disks you've downloaded are in the .XFD disk image format. How sad. The only difference between those two images is a 16 byte .ATR header. XFD2ATR will insert this .ATR header, and copies the rest of the disk image from .XFD disk image to the .ATR disk image. Now you can load the .ATR disk image into the PC program which requires this.

Download this Disk Image conversion program for the Atari XL/XE XFD2ATR NOW!

**Back to TOP of page:**

## **XDIR The Disk Image Browser**

Remember how easy it is to request a directory listing on your Atari XL/XE?

But then again, you will have to insert a disk into the disk drive each time, before you can request such a listing. When running an emulator on the PC it's the same thing. You'll have to load a disk image into the emulator first before you can request a directory listing. Wouldn't it be nice to have a program which gives you a directory listing without loading a disk image into an emulator? XDIR does this, and more! It's written in Turbo Assembler 5.0 from Borland. XDIR allows you to "extract" files from the disk image to your PC's hard disk as

# TWAUG NEWSLETTER

well. Even "deleted" files can be extracted if you want to. Version 6.0 is Windows 95 compatible. You can run it with DOS or Windows 95! When Atari files get extracted from the disk image, you get a nice progress bar now. When time allows a next version will be able to write files from your PC to a disk image as well.

Download this directory lister for the Atari XL/XE XDIR NOW!

---

## The Atari 8-bit New User, Emulator Help FAQ

Revision 2.1, August 29, 1997 By Bill Kendrick

**F**or general help (hardware, magazines, etc.) please check the Official Atari 8-bit FAQ file:

- Atari 8-bit FAQ

(<http://www.cis.ohio-state.edu/hypertext/faq/usenet/atari-8-bit/faq/faq.html>)

- You can also ask the FAQ keeper, Michael Current, for a copy at:

[mcurrent@carleton.edu](mailto:mcurrent@carleton.edu) \* The two parts of the FAQ are also posted on the 1st and 15th of each month to the comp.sys.atari.8bit newsgroup.

If you want the latest copy of this FAQ:

- Atari 8-bit New User and Emulator Help FAQ

([http://zippy.sonoma.edu/kendrick/nbs/new\\_and\\_emu.html](http://zippy.sonoma.edu/kendrick/nbs/new_and_emu.html))

- Ver. 1.5 En Espanol

([http://zippy.sonoma.edu/kendrick/nbs/new\\_and\\_emu.espanol.txt](http://zippy.sonoma.edu/kendrick/nbs/new_and_emu.espanol.txt))

- You can also instantly receive a text copy of this file by sending e-mail to the author at: [kendrick@zippy.sonoma.edu](mailto:kendrick@zippy.sonoma.edu) and placing the sentence "send emulator faq" in the "subject" of the message.
- This file is also occasionally posted in text format on the comp.sys.atari.8bit and comp.emulators.misc newsgroups.

Recent Changes:

- Since v.2.0 (August 1, 1997): Changed all "gopher" links to UMICH into

# TWAUG NEWSLETTER

“http” (web) links.

- Since v.1.6 (February 22, 1997): Cleaned up a lot. Info. on “large text” modes added (oops!). Info. on “Covox” audio hardware upgrade added. Mentioned “.PRO” along with the other disk image formats. Made the “DOS QuickReference” less MSDOS-centric by adding Unix examples of the AtariDOS commands. Explained COLOR and SETCOLOR more thoroughly. FAQ now points to the “Atari BASIC Instructions” document. APE usage described in “Getting Atari Files to an IBM.”
- Since v.1.5 (July 7, 1996): Cleaned up formatting of some URLs. Added info about Rainbow 95.
- Since v.1.4 (May 13, 1996): Corrected bad Web URLs and updated links to Atari Archive
- Since v.1.3 (April 16, 1996): Corrected Micro Discount’s phone numbers, added information about “ACE”.

Summary of Atari 8-bit’s and emulated 8-bit Atari’s:

Real Ataris: Atari 8-bit computers were produced between 1979 and 1987. The major models released were the:

- ☆ 400 - 8K-16K, 400/800 OS, CTIA or GTIA graphics (depends when made)
- ☆ 800 - 8K-16K-48K, 400/800 OS, CTIA or GTIA graphics (depends when made)
- ☆ 1200XL - 64K, 1200XL OS, GTIA graphics
- ☆ 600XL - 16K, XL OS, GTIA graphics
- ☆ 800XL - 64K, XL OS, GTIA graphics
- ☆ 800XE - 64K, XL OS, GTIA graphics (European release)
- ☆ 65XE - 64K, XL OS, GTIA graphics
- ☆ 130XE - 128K, XL OS, GTIA graphics
- XEGS (Game System) - 64K, XEGS OS (“Missile Command” game built-in), GTIA graphics All of the XL’s except the 1200XL had BASIC installed on ROM.
- BASIC can be purchased on cartridge for the 400, 800 and 1200XL.
- Emulated Ataris:
  - ☆ On IBM PCs/compatibles: + PC Xformer 2.x. Limited Freeware demo (no source code). + PC Xformer 3.0x. Powerful Commercial version (no source code). + XL-It! Powerful Public Domain version (no source code yet). + ACE Unfinished, Public Domain “vace” for SVGA (including source

# TWAUG NEWSLETTER

code). + Rainbow 95. Limited Freeware demo (no source code). + Rainbow 95. Powerful Registered Shareware version (no source code).

- ☆ On Apple Macintoshes: + Rainbow. Limited Public Domain demo (no source code). + Rainbow. Powerful Registered Shareware version (no source code).
- ☆ On Atari STs, TTs, and Falcons: + ST Xformer 2.x. Limited Public Domain (previously commercial) (including source code (I think)).
- ☆ On UNIX and X Window: (including PC and Amiga) + Atari 800 Powerful Public Domain version. + XL-It! Powerful Public Domain version. + ACE Unfinished, Public Domain "xace" for X-Window (including source code).

## Capabilities of an Atari 8-bit:

### Graphics:

#### ● Playfield Graphics (Bitmaps):

- ☆ The Atari has maximum resolution of 320 x 192 x 2 colors. (standard, non-overscanned screen).
- ☆ 160 x 192 x 4, 160 x 192 x 2, 160 x 96 x 4, 160 x 96 x 2, 80 x 48 x 4, 80 x 48 x 2, and 40 x 24 x 4 graphics are also supported.
- ☆ GTIA (newer 800's and all XLs/XEs) graphics support 80 x 192 x 16 shade-only, 80 x 192 x 16 hue-only, and 80 x 192 x 9 color screen modes.
- ☆ Special software-based modes (using page-flipping and interlacing) can achieve 80 x 96 x 256 colors, 80 x 192 x 256 colors, 80 x 192 x 4096 colors, and 160 x 192 x 30 greys.

#### ● Text:

- ☆ In all text modes, character set indirection (fonts) is available. The XL/XE's also come with a second ROM-based font which contains "international characters" in place of the graphical shapes.
- ☆ 40 x 24 x 256-character (128 normal, 128 inverse) text mode is standard (2 colors). 20 x 24 x 64-character and 20 x 12 x 64-character modes are built-in. (The remaining 192 characters are identical to the first 64, but in 3 different colors) 40 x 24 x 128-multi-colored-character (4 colors per character allowed, the other 128 characters have pixels of the 4th color changed into a color #5) and 40 x 12 x 128-multi-colored-character screen modes are available, and in the XL/XE's are available through the OS (on the 400/800, you must create them yourself).
- ☆ Underscan/Overscan: Normal (bordered), narrow (underscanned), and wide (overscanned) screen widths are available. In modes which typically have 40 bytes per line, narrow mode presents 32 and overscanned mode presents 64 bytes per line.
- ☆ Display Lists: Screen modes can be mixed (by lines) down the screen using the Display List (similar to "Copper Lists" on the Commodore Amiga;

# TWAUG NEWSLETTER

a "program" which is executed by the ANTIC graphics chip every screen refresh (60 times per second on real NTSC Ataris, 50 times per second on real PAL Ataris). All other screen attributes (color, player/missile horizontal position, screen width, player/missile/playfield priority, etc.) can be adjusted at any point down the screen via a "Display List Interrupt," where the CPU is interrupted to execute special code when a line containing an "interrupt" is processed by ANTIC.

## ● Scrolling:

- ☆ Fine scrolling (both vertical and horizontal) can be enabled on any line on the screen.
- ☆ Player/Missile Graphics (Sprites): Four 8-bit wide and 128 or 256 byte high single-color "players," and four 2-bit wide, 128 or 256 byte high single-color "missiles" are available. A mode to combine the 4 missiles into a 5th 8-bit wide player is also available, as is a mode to XOR colors or blacken out colors when players overlap (good for making three colors out of two players!) Players and missiles have adjustable priority (you can specify which players and missiles appear "on top of" or "below" other players, missiles or playfield graphics) and collision detection (where, instead of creating your own complicated code, the ANTIC chip can tell you when players and/or missiles touch each other or the playfield).

## ● Sound:

- ☆ Four voices of 8-bit pitch-resolution (3.5 octaves), 4-bit volume-resolution, and one of 8 "distortions" can be produced. 2 voices (voices 1 and 2, and/or voices 3 and 4) can be combined to make 16-bit pitch-resolution. Also, 4-bit volume-only modes can be enabled for digitally sampled soundreplay.
- ☆ A fifth "voice" is produced by the internal speaker on Atari 400/800's (for keyclick and buzzer) and in the XL's and XE's this was rerouted through the normal audio output. (The OS's keyclick can be disabled, and you can of course create your own sound.)
- ☆ Some hardware stereo upgrades (like "Gumby") exist which double the number of voices and add a right-channel to provide true stereo. (Not much software supports this.)
- ☆ Some hardware upgrades (like "Covox") exist which double the resolution of the "volume-only" audio capabilities of the Atari to 8-bits. (Not much software supports this, either.)

## -- Getting Atari files to an IBM: --

- How can I read Atari disks on my IBM? Note: Someone please give more details or corrections here! Thanks!

If you have double-density Atari disks, you can use the program "Util" on the IBM which can read double-density Atari disks.



# TWAUG NEWSLETTER

If you have an Atari 1050 disk drive, you can use the program MULE to copy files, one file at a time, 20k chunks at a time, from the Atari to the IBM. You first must format a 180k disk on your IBM, then run MULE on your Atari to get a file onto the MULE disk, then run MULE on the IBM to get the file onto the IBM. Tedious, isn't it? MULE wasn't meant to be a fully-functional program, just a demo to show that this was even possible.

If you're fortunate to have a Black Box interface on your Atari, you can get an external IBM drive and the Black Box's add-on, the Floppy-Board and simply copy files from your Atari disks or hard drive(s) onto IBM disks via the floppy board, then load them up on your IBM.

● Ok, I can't do any of that, now what?

☆ Drive Emulators:

You can use SIO2PC or APE, which are programs for IBM's which turn your IBM into a set of Atari disk drives. You need an "SIO2PC cable" or something similar (which you can purchase, assembled or unassembled, or buy parts and build it yourself) and the SIO2PC or APE software (available at UMICH).

SIO2PC users: Connect your IBM to your Atari, load SIO2PC, and then run the program FILE2PC on the Atari to transfer files to the IBM's hard drive. Or instead create a disk image within SIO2PC and copy files from one disk (a real Atari floppy) to another (the SIO2PC image) with the Atari or MyDOS "C"opy command. If you want to extract files out of the SIO2PC disk image file and store them on your IBM's hard drive or floppies as single files, either again use FILE2PC or use S2PC, an IBM program which can extract files from or add files to MyDOS-compatible SIO2PC disk images!

APE users: You can turn one of the 8 Atari drives into a "PC-Mirror" drive, allowing access to save and load files directly onto your PC's disks.

- ☆ NULL-Modem: You can use two modems (one on your PC and one on your Atari) to download files from your Atari 8-bit.
- ☆ FTP From Archives: If you don't necessarily want files that you already have on your Atari 8-bit, you can download files from the huge collection available at FTP sites and Atari 8-bit supporting bulletin boards and save them onto your IBM.
- ☆ Using an online account for one-modem transfers: If you have only one modem, so you can't connect both your Atari 8-bit and your IBM together via modems, you can do it via null-modem, OR you can upload files from your Atari to some bulletin board or account you have access to, and then connect the modem to your IBM and download the files.

# TWAUG NEWSLETTER

## For Sale

Atari User Magazines: 1 to 4 in Binders, also Page 6 New Atari User Magazine: 34 to 68 in 3 Binders. £5.00 per Volume, Buyer collects or pay postage.

ATARI SOFTWARE: Visicalc £10.00 incl. P&P

Superscript £10.00 incl. P&P

Page 6 Printshop Collection 5 Disk Set. £5.00 (needs Printshop program to use disks). All original disks, Manuals included. Sold by Tom Wood.

Also - Atari 800XL Upgraded to 256K, 1050 Disk Drive with write protect switch & Happy Board fitted. Philips Green Screen Monitor, 9 pin Epson LX86 Printer and Disks & Magazines. Sold by Tom Wood £120.00 or near offer PHONE Max: 0191 - 596 6795

Atari 8-bit software: sold by Max  
Flight Simulator 2 with scenery disk:  
Star disk contains: San Francisco & The Bay Area. Scenery disk 3: Scenery disk 4: Scenery disk 5:

4 Books: Learning to Fly with Flight Simulator - Flying on Instruments - 40 Great flight Simulator Adventures & 40 MORE Great Flight Simulator Adventures: All Original disks and includes Manual and Maps for each Area. All incl. P&P £60.00 O.N.O.

Fighter Pilot: a real time Flight Simulator. F-15 Strike Eagle. Solo Flight. Tomahawk a combat Helicopter. Blue Max 2001 & Pole Position:

## For Sale

Continued from previous column:  
£10.00 each or £75.00 the Bundle.

Also Transdisk IV & Mini Office incl. or £5.00 each. Cartridges: Flight Simulator II, Basic XE, Atari Basic, Assembler Editor and Miner 2049, thrown in.

A 24 pin Printer STAR/LC24-100 with Manual, 6 brand new ribbons and 14 re-inked ribbons and also 2000 sheets of fanfold paper in box - all for £90.00 or near offer. (must collect or pay P&P)  
PHONE Max on 0191 - 586 6795

Atari ST upgraded to 2500 Meg, 50 Meg Hard Drive, Star LC-240C colour Printer, includes all cables with ICD Link 2 connected to Hard Drive, SM 124 Mono High Res Monitor.  
PHONE Max on 0191 - 586 6795

## Contacting TWAUG Members via E-Mail:

Alan: [a.b.t@zetnet.co.uk](mailto:a.b.t@zetnet.co.uk)

John: [J.Matt@Cableinet.co.uk](mailto:J.Matt@Cableinet.co.uk)

Max: [amg@zetnet.co.uk](mailto:amg@zetnet.co.uk)

# TWAUG NEWSLETTER



## DISK CONTENT

---

### Content of this issue disk:

**BACTERION:** Objective: Prevent the six different strains of bacterion from removing the cerebral cells in the centre of the screen symbolizing the centre of the brain. Some of the cells may be on top of others so may not be visible. Getting started: Use SELECT to choose between 1 and 2 player games. Use OPTION to choose which political leader you will operate on. Use START to begin play. In the 2 player game both players work together to defend the cerebral cells.

**BONK:** 1 Player Arcade Game. 9 Levels. Objective: Collect all the valuable objects on the screen without being killed by the whirly-gigs or touching the walls.

**CANYON RUNNER:** Objective: Fly your aircraft through the canyon while avoiding the enemy copter and its fire.

**MYRIAPED:** 1 Player CENTEPEDE look-a-like.

**PAC-FAKE:** 1 or 2 Player PAC-MAN clone. Needs translator for XL/XE machines.

**SMUSH:** 1 Player game. Objective: Climb as high as possible up the skyscrapers wall without being knocked off by falling objects or bitten by dangerous insects.

**SPACE WAR:** 1 or 2 Player game. Objective: Fight your opponent in outer space. Requires translator on XL/XE machines.

**TWO GUN:** 2 Player game. Obtain bullets from the flashing gun. Needs translator for XL/XE. **WARRIOR:** 1 Player Arcade game.

**XPOKER:** 1 or 2 Player SOLITAIRE poker game. Player 1 uses PORT 1. Player 2 uses PORT 2.

**SIDE B: SMART ART II:** A high quality art package.

# TWAUG NEWSLETTER

☆ Is there any easier way to get Disk Communicator (Atari disk image) files to and from SIO2PC disk images or PC/ST Xformer XFD disk images other than using Disk Communicator 3.2 on my Atari! I mean, both files are disk images! They're both on my PC's hard drive! [cry] (AND NOTE: DiskComm. doesn't like SIO2PC a lot of the time anyway!)

---

## JOINING THE INTERNET?

**A**re you connected yet to the Internet? Or are you thinking about it? You can with an Atari, but an Atari ST is much better than just the 8-bit.

I found that connecting the Atari machine to the Internet the first time is a bit of a pain in the neck. Internet Service Providers (ISPs) provide software mostly for Windows user, Atarians who want to join the communication revolution are left to find their own way through the minefield. I was lucky, a friend directed me to a UK based Atari friendly ISP.

I also invested in a book that doesn't assume you have a degree in communication technology.

The author Roy Golding says in his forward, the aim of this guide is to make it as simple as possible for Atari users to get up and running with an internet connection.

When the author went online a couple of years ago it provoked him to sit

down and write this guide. Initially this guide was for use with the ZETNET ISP, but has since been expanded to cover most UK Atari friendly ISPs, it also takes a look at Atari BBS's and the CIX conferencing system.

The book is an A4 size comb bound 100 page guide. It starts with a brief description of what the internet is all about and its history.

Perhaps the most important section takes a look at setting up most of the current Atari software PD/Shareware. This includes STIK and STING TCO/IP stacks, Antmail, AtariIRK, Telnet, CAB web browser, NEWSie, MG-FTP and Oasis 2. Novices may prefer to obtain the Internet Access Pack. A collection of software to work together and comes with an installer.

The cost is £6.50 from

Roy Golding

95 Washford Farm Road

Ashford, Kent, TN23 5YA