# ar121

**COLLABORATORS**

| | *TITLE* :<br><br>ar121 | |
|---|---|---|

| *ACTION* | *NAME* | *DATE* | *SIGNATURE* |
|---|---|---|---|
| WRITTEN BY | | August 10, 2024 | |

**REVISION HISTORY**

| NUMBER | DATE | DESCRIPTION | NAME |
|---|---|---|---|
| | | | |

# Contents

**1 ar121** **1**

1.1 Amiga Report 1.21, August 20, 1993 . . . 1
1.2 Where to find Amiga Report . . . 1
1.3 From the Editor's Desk . . . 2
1.4 AR Staff . . . 3
1.5 CPU Status Report . . . 4
1.6 Fred Fish on Portal . . . 13
1.7 MagicUserInterface v1.0 . . . 14
1.8 ScreenSelect v2.0 . . . 15
1.9 UUxT v2.1 . . . 16
1.10 AmiTCP/IP Release 2 . . . 17
1.11 Amiga ELM v2.0 . . . 21
1.12 Online Weekly . . . 23
1.13 Amiga Report Mailing List . . . 30
1.14 AR avail via the WWW . . . 30
1.15 NewTek at SIGGRAPH . . . 31
1.16 SPECTRUM from GVP . . . 33
1.17 Tip of the Week . . . 38
1.18 The Emulation Examiner . . . 39
1.19 Delphi . . . 43
1.20 Bountiful Bevelled Buttons . . . 44
1.21 Portal . . . 54
1.22 World Wide Amiga BBS List . . . 58
1.23 Application for WWABBS List . . . 68
1.24 Holonet . . . 69
1.25 PageMaker 5.0 . . . 70
1.26 NVN . . . 78
1.27 BIX . . . 79
1.28 Reader Mail . . . 79
1.29 A Call for help . . . 85

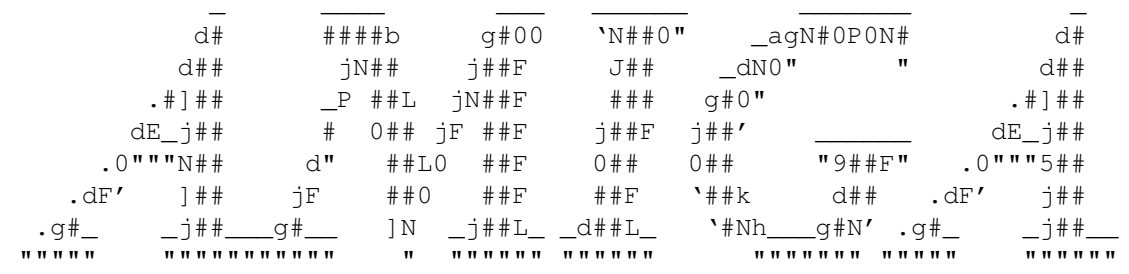
1.30 Dealer Directory . . . . . 86
1.31 Humor Department . . . . . 88
1.32 In Closing . . . . . 89
1.33 Amiga Report 1.21 Main Menu . . . . . 89
1.34 Columns and Features . . . . . 90
1.35 About Amiga Report . . . . . 90
1.36 Commercial Online Services . . . . . 91
1.37 FTP Announcements . . . . . 91
1.38 NOVA . . . . . 91
1.39 In The MeanTime . . . . . 91
1.40 Cloud's Corner . . . . . 91
1.41 Biosmatica . . . . . 92
1.42 Amiga Junction 9 . . . . . 92
1.43 p2-1-6 . . . . . 92
1.44 Freeland Mainframe . . . . . 92
1.45 LAHO . . . . . 93
1.46 Falling BBS . . . . . 93
1.47 Command Line BBS . . . . . 93
1.48 Omaha Amiganet . . . . . 94
1.49 Rendezvous BBS . . . . . 94
1.50 Realm of Twilight . . . . . 94
1.51 Metnet Triangle . . . . . 95

# Chapter 1

# ar121

## 1.1 Amiga Report 1.21, August 20, 1993

Open Magazine



International Online Magazine

August 20, 1993 No. 1.21

////////////////////////////////////////////////////////////////////////////

From STR Publishing

[S]ilicon [T]imes [R]eport

## 1.2 Where to find Amiga Report

WHERE TO FIND AMIGA REPORT
---

Click on the button of the system nearest you for more information.

FidoNet Systems
---

| | |
|---|---|
| OMAHA AMIGANET | Omaha, Nebraska |
| NOVA BBS | Cleveland, Tennessee |
| IN THE MEANTIME BBS | Yakima, Washington |
| CLOUD'S CORNER BBS | Bremerton, Washington |
| BIOSMATICA BBS | Portugal |
| AMIGA JUNCTION 9 | United Kingdom |
| BITSTREAM BBS | Nelson, New Zealand |
| REALM OF TWILIGHT | Ontario, Canada |
| METNET TRIANGLE | Kingston Upon Hull, England |

Non-FidoNet Systems
---

| | |
|---|---|
| FREELAND MAINFRAME | Olympia, Washington |
| LAHO BBS | Seinajoki, Finland |
| FALLING BBS | Norway |
| COMMAND LINE BBS | Toronto, Canada |
| RENDEZVOUS BBS | New Zealand |

## 1.3 From the Editor's Desk

/// From the Editor's Desk "Saying it like it is!"
---

Egad. You take a week off and stuff starts to pile up. Honest, I had no idea this week's issue would end up so big! Yikes. It's the largest one yet. I've been trying to keep the size under 200K, but this time I just couldn't do anything about it, not and keep information current. I left out most non-Amiga news this week, and didn't run any Usenet Reviews. And we're still pushing 225K.

The move went smoothly, and there is a new local Amiga Report distribtution site, Omaha AmigaNet (check the Where To Find section for details). Many thanks to Sysop Andy Wasserman for volunteering his system as a support site!

There will be no A.M.I.G.A. article this week from Chad Freeman. At last report, he was chasing his computer around the yard as it attempted to cut the grass. Either that or his fan was producing enough thrust to launch a 747 into orbit, I'm not sure which. He hopes to have the thing tied down in time for next week's issue. Meanwhile, if you have some heavy-duty tethering wire, you might want to send some his way.

That's it for this week. Enjoy!

Rob @ Amiga Report

## 1.4 AR Staff

The Amiga Report Staff Dedicated to serving you!
==========

Editor in Chief
==========

Robert Glover

| | |
|---|---|
| Portal: | Rob-G |
| Delphi: | ROB_G |
| FidoNet: | 1:285/11 |
| Internet: | ROB_G@Delphi.COM |

Associate Editors
==========

Technical Department
---

| | Micah Thompson | Robert Niles |
|---|---|---|
| Portal: | Coming Soon? | RNiles |
| Delphi: | | RNILES |
| FidoNet: | | 1:3407/104 |
| Internet: | BOOMER.T@genie.geis.com | RNILES@Delphi.COM |

Graphics Department
---

Mike Troxell

| | |
|---|---|
| Portal: | Coming Soon? |
| FidoNet: | 1:362/508 |
| Internet: | M.Troxell1@genie.geis.com |

---

Contributing Correspondents
==========

Jason Compton
Andrew Porter

PC DIVISION ATARI DIVISION MAC DIVISION

| ========== | ========== | ========== |
|---|---|---|
| Roger D. Stevens | Ralph F. Mariano | R. Albritton |

## 1.5 CPU Status Report

/// CPU Status Report Late Breaking Industry-Wide News
---

AMIGA HAM ECHO ANNOUNCED

Mario Bonelli, the moderator of FidoNet's AMIGA_CDROM is starting another echo called AMIGA_HAM. Chatting about anything to do with HAM radio and the Amiga. Helping amatuer operators, future operators, or those who just have an interest.

The echo is not on the backbone yet, but if you wish to join (being placed on the backbone requires a certain amount of nodes to carry this echo), please send a Netmail message to:

Mario Bonelli at 1:273/934.

---

INOVATRONICS RELEASES CANDO UPGRADE v2.5

CanDo 2.5, INOVATronics' popular multimedia authoring system software, has added exciting new features which not only utilize the capabilties of the new Amigas, but allow you to make more impressive applications even more easily!

Some of these enhancements include:

* AGA Graphics
* Stereo Music Files
* ASL Commodore Requesters

New Main Panel

The main panel has been cleaned up and reorganized. The XtraTools menu and icon have been removed and replaced with a list on the main panel. This makes it easier to find and use these tools.

New Window Editor with AGA Graphic Support

The new Window Editor is more clearly laid out. The new "Open the Window onto..." section allows you to select the screen. You can have your window

open on any "Public" screen.

The "Available modes..." button on the Window Editor brings up a requester allowing your to select from the modes available on your computer. This requester is similar to your "Screen Mode" preference setting. This method insures both the greatest possible compatibility with future Amiga enhancements and your application's ability to run on Amigas with different capacities.

Support for Music Files

You can now play stereo music files. You have full control over tempo and volume. The new InovaMusic.library supports StarTracker, SoundTracker, NoiseTracker, ProTracker, MED, OctaMED, Oktalyzer, and 15 instrument Soundtracker music files!

Expanded Requester Support

CanDo now uses the Commodore supplied ASL File Requester which has many expanded features such as Save Mode (which allows the user to create directories), Multi-Select, Filter Drawers, Only Drawers, File Patterns, and more. These features not only give you greater programming control, but provide the users of your application a standard, powerful means of selecting Files and Directories.

We even added support for Commodore's "Easy Requesters." These allow you to prompt the user with a question, have as many buttons as you need or possible responses, and have the result returned in a function call. This means you no longer have to setup a SubDeck to ask simple questions.

New SuperMover XtraTool

This Tool allows you to easily move groups of objects in a single step. You no longer have to Edit each object individually and attempt to move it at the same distance as other objects.

Full Font Support

We now fully support Compugraphic and Color fonts.

Command Expansion in the Script Editor

You can define your own shortcut sequences to use in the Script Editor. For example, you can define "wwd" to expand to "WorkWithDocument" when you press Shift-Space following "wwd".

Layout EditorTool

Some of you may remember the Layout Editor Tool from ProPak. It is now included with the released software. It allows you to flow text around complicated shapes in the window.

Using the LayOut/Helper you can wrap text around complicated objects on your window using a point and click editor. Set your margins, straight or contoured, enter your text, and the Layout Tool will do the rest. It's as easy as pie!

Amiga Guide Support

CanDo's Help system uses the new AmigaGuide help system. Furthermore, you can even add AmigaGuide help files to your own applications!

CanDo 2.5 - Real Programming made Real Easy!

Version 2.5 demonstrates Inovatronics' dedication to continually enhancing CanDo to make it the easiest, most powerful means of making real applications. Don't get left behind! Order your upgrade today!

Limited time for no Shipping Charge!

If you order by September 30, 1993, the shipping is on us!

IMPORTANT NEW SYSTEM REQUIREMENTS:

CanDo now requires a Hard Drive, 2MB of RAM, andd 2.04 or later of the OS. Furthermore, DeckBrowser is no longer included with CanDo. If you have any questions in this regard, please call us Toll Free!

CanDo Version 2.5 Upgrade:

| | |
|---|---|
| Upgrade from 2.0 | $25.00 |
| Upgrade from 1.6 | $75.00 |
| Upgrade previous to 1.6 | $90.00 |
| CanDo T-Shirt | $16.95 |

---

IOMEGA INTRODUCES BERNOULLI DRIVES FOR AMIGA

Iomega Corp. is now shipping two versions of its popular Bernoulli drive designed for use with Commodore Amiga personal computers.

Called the Box 150, the unit is compatible with Commodore computers that are SCSI (Small Computer System Interface)- capable. Iomega says the 150 megabyte (MB) capacity of the Box makes it particularly suited for personal video production.

The Box 150 Transportable is an external unit, while the Box 150 Insider installs inside the Amiga chassis. The Transportable has a suggested retail price of $1,225, while the Insider will carry a $1,099 price tag. Both models include a read and write cache, which Iomega says make them up to three times faster than competitive removable hard drive products.

The company says Iomega drives, which use removable cartridges for data storage that can be removed from the drive and locked up or used in other Bernoulli-equipped computers, can withstand up to 1,000 Gs of shock. "We

literally tossed a disk from a speeding car at 60 miles-per-hour onto a concrete highway with 100 percent data survival," according to Paul Losee, director of Iomega's channel development.

In addition to its Bernoulli product line, Iomega also markets minicartridge tape drives that use both QIC-80 and Irwin-formatted tapes, and a Floptical drive which used the company's proprietary second generation holographic technology to read and write data.

---

SPECTRONICS INTRODUCES MERLIN 24-BIT GRAPHICS BOARD

Meet the board that has been the subject of discussion on some major computer networks and Bulletin Boards for quite some time now.

Based on hardware, custom designed for Amiga, Merlin offers unbelievable speed and powerful features at an incredibly low price.

Bundled with flexible productivity software, X-Pert will once again redefine the standards for 24 bit graphics on Amiga.

A variety of outputs, such as RGB, Y/C and Composite, together with the possibility to add a genlock and a digitizer make Merlin the all-in-one solutio for demanding artists and video professionals, Fifty Megapixel per second, a Blitter forty times faster than the original Amiga Blitter, and a throughput-speed of more than 20 MB per second (2) when used in a Zorro III slot will prove powerful enough to take the wait out of even the most demanding tasks.

The integration of Picture in Picture (1) will allow you to watch real time video at 30 fps, in 24 bit and a resolution of 320x200 pixels, right on your workbench. No more jerky, black and white previews, but real live video.

Included Software:

* Merlin INTUITION EMULATOR
  2.0/2.1/3.0 (AA Chipset emulation on A2000/A3000)
* Merlin TV-PAINT 2.0
* Merlin ANIMATOR
* Merlin PICLOADER
* Merlin DIASHOW
* Merlin CHECK

Features:

* 24 bit- 16,000,000 colors
* 50 Megapixel/second
* More than 20 MB/second throughput (2)
* 1280 x 1024 in 24 bit
* 1600 x 1280 in 16 bit
* 2048 x 2048 in 8 bit

* All resolutions non-interlaced
* 1,2, or 4 MB of VRAM
  New: Up to 16 MB of VRAM on board possible
* Composite and Y/C output
* 15 pin D-Sub output
* Zorro II/Zorro III compatible with automatic detection
* 24 bit real time Picture in Picture (1)
* Electronic Monitor Switch

Price List:

Boards

  1Mb VRAM $699.00
  2Mb VRAM $799.00
  4Mb VRAM $999.00

Add-on Modules:

  Digitizer $699.00
  Genlock $699.00

 (1) Picture in Picture is only possible with the optional digitizer module.

 (2) 20 MB per second or higher throughput rate only possible when used in a
     Zorro III slot. Throughput rate in a Zorro III slot is approx. 3 Mb per
     second.

---

NEW MIRROR OF AMINET IN CALIFORNIA

Walnut Creek CDROM, makers of the Aminet CDROM, have installed a mirror of the Aminet archive on their ftp site wcarchive.cdrom.com. This mirror contains the entire Aminet archive and is updated every four hours so it will never be stale. Uploads made to our mirror will automatically be included in the main Aminet archive and all the other mirrors. Please ftp to wcarchive.cdrom.com and have a look.

If you have any comments about the mirror please address them to stark@wcarchive.cdrom.com. Also, since part of our goal is to make the production of the Aminet CDROM more efficient thereby improving its quality, we intend at some point to begin running the mirror with CDROM-like names. This means that the names would be slightly different in some cases from the names at the other Aminet sites. Please also write to stark@wcarchive.cdrom.com if you have comments about this plan.

Note: Dan Zerkle has made the good suggestion that we set up parallel
      directory structures, one with the aminet names and the other
      with the CDROM names. How's that for a solution?

LOCAL MODERATOR

      Michael Stark (stark@wcarchive.cdrom.com)

A compensated dependent of Walnut Creek CDROM

---

RIP SCRIP 'PAINT' PROGRAM AVAILABLE (DEMO)

An exciting new product for telecommunications MIGHT be available relatively soon.

This is the RIP scrip language, by TeleGrafix Corporation. Currently a Canadian is wanting to bring this to Amiga systems. Available to sysops and the end user as a RIP scrip paint program (for those of you who have seen Terminus, RIP graghics should be suported in a future version).

RIPscrip is a text based script language for displaying on-line graphics. It is a very efficient language in which graphics and the like are compressed and can be transmitted faster to the end user. A user can "point and click", selecting whatever commands available on a BBS supporting RIP graphics. The nice thing about the RIP scrip language is that it is an open protocol which may be used on a variety of platforms.

Mike Nelson wishes to bring this RIP "paint" program to the Amiga community, and he needs your help. To buy the development tools he needs $300.00. He has provided a "demo" of his future program, which can be found on many BBSes (It is currently on In The MeanTime, under the name of RIPGRAF.LHA and can either be downloaded on the first call or it may be File REQuested), GEnie, Delphi, and Portal, and needs at least 15 people to register to come up with the $300.00.

For further information see the documentation within the archive or send a letter to:

Mike D. Nelson
76 Olympus Ct. #59
Sarnia, Ontario
Canada,  N7S 4S7

---

SOFT-LOGIK TRANSLATES PROFESSIONAL PAGE DOCUMENT FORMAT

St. Louis, Missouri (August 10, 1993)  Soft-Logik Publishing Corporation today announced a change to the feature set of the upcoming PageStream 3.0, a completely new version of the #1 Amiga desktop publishing program. PageStream 3.0 will have the ability to load Professional Page documents directly. It will also be able to load PageStream2 documents and the new IFF DOC format documents.

"Document formats have been dark and secret for too long," said Deron Kazmaier, the president of Soft-Logik Publishing. "Customers want the freedom to move their documents between programs, and we are going to give them that freedom."

For the first time, users of Gold Disk's Professional Page desktop publishing program will be able to make the transition to PageStream painlessly. They have been able to use their fonts with PageStream since version 2.0, and Soft-Logik added the ability to load and edit Professional Draw illustrations in 1992. Adding support for another program's documents is an industry first and simplifies switching from Professional Page to PageStream.

Converting a Professional Page document for use in PageStream is a simple task. Just choose the Open command from the Project menu and don't worry if it is a PageStream or Professional Page file. The Professional Page document conversion module is included free of charge with PageStream 3.0.

PageStream 3.0 will be available in early fall for $395. Customers who purchase a full copy of PageStream 2.2 after March 15, 1993 are eligible for a free upgrade to version 3.0 by mailing their registration card, proof of purchase and $5 for shipping and handling, to Soft-Logik. Previous purchasers can upgrade for $125 if they own PageStream 2.0 or higher, or for only $95 if they own PageStream 2 and HotLinks Editions.

Professional Page users can upgrade to PageStream 2.2 now for only $175 plus shipping and handling, and receive a free upgrade to PageStream 3.0 when it's released.

PageStream 3.0 will change the way you think about publishing.

voice: 314-894-8608
toll free: 800-829-8608
fax: 314-894-8608

---

CALL FOR HELP

SOFT-LOGIK NEEDS PROFESSIONAL PAGE DOCUMENT FILES FOR TESTING!

PageStream 3.0 will have the ability to open Professional Page documents and save them in PageStream 3's IFF DOC format. To ensure that this feature works with real-world files, we need ProPage documents to test. We want it to work flawlessly to make your conversion to PageStream3 as easy as possible.

While we hope to make it translate 100% of every document correctly, we cannot guarantee this because the Professional Page document format is not publicly available. We believe that we have successfully documented every aspect of the ProPage document format, but we can only verify this through extensive testing. By testing your files now, we can ensure that

this feature will work properly for you when PageStream 3.0 is released.

To have your ProPage 3 or 4 documents tested with PageStream 3.0, mail them to:

Soft-Logik Publishing Corporation
Test my Documents!
11131F South Towne Square
St. Louis, MO  63123

Note: We will keep your document files confidential and will use them only for testing. Nobody outside of our programming and testing staff will see your files.

---

SIGGRAPH '93

ANAHEIM, CALIFORNIA -- The SIGGRAPH Show was full of surprises from unusual art to actual virtual reality rides for show goers. Much emphasis was made on kids, supercomputers, art, and employment opportunities as well.

Games, entertainment, and education were the themes of the show. Trip Hawkins, president and chief executive officer (CEO) of 3DO, and chairman of computer game maker Electronic Arts, was the keynote speaker. Childcare was offered at the show, but many show goes had their children with them as many of the booths and exhibits featured games or hands-on activities for children and adults. An entire portion of the show floor was given to Sigkids, an exhibit of hands-on computer activities by and for elementary age children.

But many of the adults were acting like children at play in virtual reality exhibits from Silicon Graphics Incorporated (SGI), Evans and Sutherland, and in an area where interactive art exhibits were displayed. The SGI exhibit was obviously inspired by the movie Jurassic Park and show goers where waiting over an hour in winding Disneyland-like lines to enter a giant box and get a chance to climb into a saddled Teradactyl. Of the groups who entered the box only three were allowed to actually ride, but the watchers could see the virtual scene as well.

Evens and Sutherland offered a chance to ride a virtual hang-glider through a crowded city-scape. Two hang-glider simulations were running and show goers were helped into body-length slings that hung them suspended in front of a viewing screen. Their faces were then situation in virtual space. They controlled their movement through the space via a hang-glider bar grasped with both hands. Speakers on each side of their heads provided the sound. Lines were long to ride and riders told Newsbytes the sensation of hang-gliding was very real despite the comic book appearance of the city landscape through which they flew.

In an area featuring electronic art, show goers could stop at an elec-tronic confessional to confess their sins. Based on the confessions of the Catholic church, the automated religion kiosk, called "Catholic Turing Test" by Gregory P. Garvey of Montreal, Quebec, Canada, was a thin, shiny, black plastic structure with a red neon cross at the top and a red kneeling bench

in front. Only large enough for one, an Apple Macintosh SE and Hypercard were used to create the confessional program which started by asking how long it had been since you'd been to confession and gave you the option of typing in a number and choosing either days, weeks, months, or years. Users selected sins from a menu and were told at the end of the confession what type of sins they were and how many "Hail Marys" were needed for penance.

Next door was a group of tables where show goers who sat down to relax were eventually bumped and mumbled at by what appeared to be a giant bowling ball. Called "Adelbrecht" by Momevideo, Amsterdam, Netherlands designer Martin Spanjaard, the mobile robot moved around under its own power, bumping into chairs and people, and changing direction while making beeping and whirring noises, and mumbling unintelligible speech to show goers.

The "Neuro Baby" was a monitor in a crib that displayed a pink, cartoonish, buggy-eyed "baby" face that bounced around on the screen and responded to attendees who bent down to speak into a microphone by the crib. Monitors near the crib showed people who were waiting in line the responses of the baby. The baby laughed, cried, said "Hi," rolled its eyes, and even got red-faced mad when Newsbytes laughed at it. Lines were long to talk to the baby and it was surprising how many people simply yelled into the microphone. Naoko Tosa of Ogikubo Suginami-Ku, Tokyo said the voice analysis was performed by a neural network emulator that converted voice input into "emotional" patterns based on the wave patterns to which the computer had been "taught" to respond. A Fujitsu FM Towns multimedia personal computer was used for the voice analysis, another FM Towns for voice generation, and a SGI Iris 4D was used to generate the image of the baby.

"The Flock," by Ken Rinaldo and Mark Grossman of San Francisco, California, was a room of robotic arms hanging from the ceiling and extending just a few inches above the floor. The arms responded to the movement and voice intonation of visitors. The arms were unusual as they were partially made from the dried branches of vines so they appeared to be a strange mix of organic and electronic material and looked like the limbs of live trees reaching toward and moving away from visitors. The artists described the arms as "cybernetic sound sculptures that exhibit behaviors found in natural groups such as birds, fish, and bats." Acoustic, kinetic, and infrared sensors on the arms detected sounds and movements and responded. The exhibit had visitors talking, waving their hands, and walking around these strange arms. One of the artists was seen to yell and pull at a visitor saying, "Don't let it touch you" and explained that the arms are fragile and could be broken by contact. However it was difficult with the unexpected movements of the long, jointed arms to stay out of the way.

Much talk among show goers concerned supercomputers and virtual reality and the San Diego Supercomputer Center was represented at the show. The use of supercomputers for complex techniques such as reconstructing the shape of a fetus from ultrasound measurements or visualization of global climate research was emphasized by the San Diego group.

Interactivity was emphasized, not only between people and computers, but between show attendees. Several locations had tables and comfortable seating, an international center was available, and even a jobs and message center was near the show floor. The jobs board took up two sides of the large four-sized cubical structure that housed it and every inch of space was filled with jobs postings. Newsbytes was curious to see if the jobs postings were for positions wanted, but the jobs were all help wanted ads

for graphics artists, designers, and programmers who had graphics experience from large companies such as Avid and Microsoft as well as from small companies.

Attendance figures were not available by press time, but the show took up most of the huge Anaheim Convention Center and it was crowded. SIGGRAPH runs until Friday in Anaheim. SIGGRAPH '94 has been announced by for July 24-29 at the Orange County Convention Center in Orlando, Florida.

The preceding story is © 1993 NewsBytes. Reprinted with permission.

## 1.6 Fred Fish on Portal

MORE FRED FISH DISKS ON PORTAL!

FISH UP TO #900 NOW ONLINE!
That's NINE HUNDRED DISKS, kids :)

Fish Disks #891-900 arrived in our library today. For those of you who are new here, "go amigafish" takes you to the Amiga Zone's separate Fred Fish Disk library. You will find ALL NINE HUNDRED Fish disks there, each in its own collection. Not some of them. Not just new-ish disks.

ALL. OF. THEM. ALL. NINE. HUNDRED. DISKS.

We have a LOT of disk space here. Unlike some other services whose names I won't name, we don't have to delete files every 3 minutes just so there's room for new uploads. WE HAVE A *LOT* OF DISK SPACE HERE :) so we can keep the entire Fred Fish library online, 24 hours a day, 365 days a year, no matter HOW large that library grows in the future. That's our promise to you and you can count on it. Take it to the bank. Don't worry be happy :-)))

"Go amigafish" from any command prompt anywhere on Portal takes you to the Amiga Zone Fish library.

"Go amigafish;0" to get to the area where the mass contents files and indexes and indexing programs and their databases (such as Aquarium and KingFisher and etc.) are kept.

"go amigafish;nnn" where nnn is any number from 1 to 900 to go to a particular disk instantly.

"go amigafish;p t e" to go to the newest page of disks.

And now, I need your help. Our online disks #881-890 don't have text versions of the "contents" files. I can't find Fred Fish's announcement about those ten disks (the ten before the newest ten that arrived today) anywhere.

If you have the "contents" file that Fred releases, covering

```
disks #881 through 890, please email it to "harv" here on Portal
so I can put it in the library and split it up and put each of those
ten disks' contents text with their collections.

Thanks
Harv Laser
Amiga Zone Sysop
```

## 1.7 MagicUserInterface v1.0

```
MUI - MagicUserInterface AVAILABLE FOR FTP


TITLE

     MUI - MagicUserInterface

RELEASE

     1.0

AUTHOR

     Stefan Stuntz  (stuntz@informatik.tu-muenchen.de)

SHORT

     A system to create and maintain GUIs.

DESCRIPTION

    MUI is an object oriented system to create and maintain
    graphical user interfaces.  From a programmers point of
    view, using MUI saves a lot of time and makes life much
    easier.  Thinking about complicated terms like window
    resizing or font sensitivity is simply not neccesary.

    On the other hand, users of MUI based applications have
    the ability to customize nearly every pixel of a programs
    interface according to their personal taste.

SPECIAL REQUIREMENTS

    MUI requires AmigaDOS 2.04 or greater.
    For developers, MUI comes with a C and an Oberon interface.

HOST NAME

    Aminet (e.g. wuarchive.wustl.edu)

DIRECTORY

    /pub/aminet/dev/gui

FILE NAME
```

```
    mui10.lha

FIDO FILE REQUEST

    2:246/46  (+49-8151-78880 ) magic name "MUI"
    1:267/131 (+1-518-883-5326) magic name "MUI"

PRICE

    Registered versions of MUI are available for $15US.
    See documentation for details.

DISTRIBUTABILITY

    The archives are freely distributable in original and
    unmodified form. See documentation for details.

    MUI is (c) Copyright 1993 by Stefan Stuntz.
```

## 1.8 ScreenSelect v2.0

```
SCREENSELECT v2.0 AVAILABLE FOR FTP


TITLE

     ScreenSelect - Commodity to change screen orders + Window AutoActivator.

VERSION

     2.0

AUTHOR

     Markus Aalto

     Internet address: s37732v@vipunen.hut.fi

DESCRIPTION

     Commodity program to change frontmost screen by selecting the
     screen name from ListView gadget. Also has a customisable
     hotkeys for different screens and selection of new Default
     Public Screen.

NEW FEATURES

     Whole interface code is rewritten. Quickkeys can now
     have AmigaDOS patterns so old intuition screens are
     easy to bind to hotkey. Now full support for automatic
     window activation when changing to new screen. Also
     has a support for external programs to use ScreenSelect's
     screen selection mechanism. All settings have been
```

```
     moved to separate Preferences program.

SPECIAL REQUIREMENTS

     KS 2.04 or later.

HOST NAME

     Aminet ftp sites. For example wuarchive.wustl.edu or
     ftp.luth.se.

DIRECTORY

     /pub/aminet/os20/cdity/

FILE NAMES

     ScreenSelect.lha

PRICE

     Free!

DISTRIBUTABILITY

     Freely disributable. Copyrighted (c) by Markus Aalto.

OTHERS
     Documentation about using ScreenSelect's selection
     mechanism is available later from author. Also source
     code to 'StickySelect' example will be available.
```

## 1.9 UUxT v2.1

```
UUxT 2.1 AVAILABLE FOR FTP


TITLE
         UUxT

VERSION
         2.1

AUTHOR
         Asher Feldman, asher@shell.portal.com  or  Wizard0@cup.portal.com

DESCRIPTION
         UUxT is the ultimate uuencode/decode utility for the Amiga.
         Uuencoding is the process of converting a binary file into ASCII,
         so that it may be transmitted over a text, or "mail only" network
         such as the Usenet.  Many files are posted to the Usenet daily,
         but the must be uudecoded before you can use them.  UUxT
         makes the task of uuencoding and decoding simple, with its
         amiga style command interface.  UUxT now has an Intuition front
```

```
         end (UUxT-GUI) making all UU tasks simpler for beginers.
         You can even LhA and uuencode multiple files in a single step.
         (And vice-versa)  (LhA is a popular compression program/format
         that allows you to compress and archive multiple files)  Also, UUxT
         will decode uuencoded files with multiple mail headers and other
         garbage in them.  So you can download multiple part
         archives off the Usenet, and decode them without
         editing out all the headers.  UUxT also allows you to decode
         multi-part archives without joining all the parts together
         first.

NEW FEATURES

         - Added UUxT-GUI, a point and click workbench front end for
           UUxT, making UU tasks even easier. (See UUxT-GUI.DOC for
           more information.)

         - Added Wildcard support.

         - Only known enforcer hit removed.

         - Fixed decoding of split files bug.

         - Fixed encode bug when not connected to a console.

         - More reliable decoding.

SPECIAL REQUIREMENTS
         LhA by Stefan Boberg is required to use the LhA specific
         functions.  UUxT-GUI requires reqtools.library V38 which
         is Copyright 1991/1992 Nico Frangois.  Reqtools.library is
         included.  UUxT and UUxT-GUI work under all amigados revision.

AVAILABILITY
         ftp.wustl.edu (128.252.135.4) and all other Aminet sites:
                   util/arc/uuxt21.lha
                   util/arc/uuxt21.readme

         (The above is once you are in the aminet directory.  The is
         usually /pub/aminet)

DISTRIBUTABILITY
         UUxT is freeware. However, the copyright is maintained by
         Asher Feldman.
```

## 1.10 AmiTCP/IP Release 2

```
AmiTCP/IP - TCP/IP PROTOCOL STACK FOR AMIGA RELEASE 2.0


TITLE

        AmiTCP/IP - TCP/IP protocol stack for Amiga
```

VERSION

Release 2.0

AUTHORS

The AmiTCP/IP Programming Project Group in Helsinki University
of Technology, referred further on as AmiTCP/IP Group:

Tomi Ollila <Tomi.Ollila@cs.hut.fi>
Pekka Pessi <Pekka.Pessi@hut.fi>
Markus Peuhkuri <Markus.Peuhkuri@hut.fi>
Jarno Rajahalme <Jarno.Rajahalme@hut.fi>

E-mail address for the group: amitcp-group@hut.fi

DESCRIPTION

AmiTCP/IP is the first publicly available TCP/IP protocol stack for the SANA-II interface. AmiTCP/IP provides an application level socket interface to the Internet protocol suite as an Amiga shared library.

The Internet protocols, commonly known as TCP/IP, consist of user level protocols TCP and UDP and IP as the network level protocol. There is a wide variety of different network applications and services using TCP/IP protocols. The BSD compatible socket interface to Internet protocols makes it possible to port existing applications with minor modifications.

AmiTCP/IP connects to the network via SANA-II compatible device drivers. SANA-II is a hardware and protocol independent network adapter interface specification published by Commodore. Several network adapter manufactures have made available SANA-II device drivers for their hardware. Currently there are SANA-II drivers available at least for Ethernet, Arcnet and serial line interfaces. You can connect to Internet with Ethernet LAN, or via modem line with Serial line IP (SLIP) optionally with compressed headers (CSLIP).

A typical application is to use (C)SLIP to connect univeristy and have multitasking connection: you can read mails and news, transfer files and use IRC at the same time over one modem line.

FEATURES

1. Standard SANA-II network device driver interface.
2. BSD-compatible socket interface as a Amiga shared library.
3. ARexx port for configuration and statistics.
4. Over 200 pages of documentation including:
   - Installation and configuration
   - ARexx port commands
   - Programmer's manual based on the BSD IPC manual. This is a fairly complete tutorial for developing powerful client/server applications
   - Internal description of the implementation
   - Utility and API function reference guide in AutoDoc form.

5. Basic applications with source included.
6. Based on the BSD Net/2 release.
7. Full source code included.

While all Internet services and applications (telnet, ftp, news, mail) can be accessed with AmiTCP/IP, many applications are still under development by us and others. Current release of the AmiTCP/IP contains following applications:

* Telnet - standard program to log on other systems **
* Ftp - standard program to transfer files between systems **
* Napsaterm - a VT100 terminal emulator using remote login protocol
* TCP - networking support for GNU Emacs. With TCP you can use any elisp-based networking applications (gnus, gopher, irchat etc.)
* LetNet - a simple filter for connecting to TCP based services. Suitable for scripts and testing
* inetd - Internet super server, which starts other services when needed and provides some simple services by itself
* FingerD - a Finger daemon which prints user information or a banner file
* QWriter - an application to test and benchmark network

Following network utilities are also available:

* arp - tool to handle ARP hardware address translation tables
* ifconfig - tool to control network interface parameters
* netstat - a ARexx script to get statistical information from networking
* ping - utility to test network connectivity
* route - tool to display and manipulate routing tables
* online/offline - utilities to control SANA-II device drivers

** = ported by Mark Tomlinson <mark@garden.equinox.gen.nz>
and Goeff McCaughan <geoff@equinox.gen.nz>

SPECIAL REQUIREMENTS

AmiTCP/IP can be run from floppy and with one megabyte of memory, but as usual, hard disk and more memory makes your life easier.

Amiga OS release 2.04 or newer is required.

SANA-II device driver is needed for your network adapter. A test device driver, agnet.device, is included with sources. Also the freely distributable Commodore A2060 (Arcnet), A2065 (Ethernet), SLIP and CSLIP drivers are included. SLIP and CSLIP drivers contains bug fixes made by Olaf Seibert.

LHA utility is required to unarchive distribution archives.

Most of the source files has been compiled with GNU C 2.3 and SAS C 6.3. Some utilities and libraries are compiled only with SAS C 6.3. However, only the executable files compiled with SAS C are tested. Also, the DICE C support is untested.

AVAILABILITY

AmiTCP/IP software has been uploaded to the Aminet. It should be shortly available at the following Aminet hosts:

| | | |
|---|---|---|
| Switzerland | litamiga.epfl.ch | (128.178.151.32) |
| Scandinavia | ftp.luth.se | (130.240.16.3) |
| Germany | ftp.uni-kl.de | (131.246.9.95) |
| Germany | ftp.uni-erlangen.de | (131.188.1.43) |
| Germany | ftp.cs.tu-berlin.de | (130.149.17.7) |
| Germany | ftp.th-darmstadt.de | (130.83.55.75) |
| Germany | ftp.uni-paderborn.de | (131.234.2.32) |
| USA | ftp.etsu.edu | (192.43.199.20) |
| USA | ftp.wustl.edu | (128.252.135.4) |
| Australia | splat.aarnet.edu.au | (192.107.107.6) |
| UK | src.doc.ic.ac.uk | (146.169.2.1) |

For the convenience of Finnish users, AmiTCP/IP is also uploaded to the ftp.funet.fi.

The latest version of AmiTCP/IP is located in kampi.hut.fi. This archive is not meant for massive downloading. Major new versions will be announced and distributed to other archives, too.

DIRECTORY

In Aminet: pub/aminet/comm/net
ftp.funet.fi: pub/amiga/datacomm/tcpip
kampi.hut.fi: AmiTCP

FILE NAMES

AmiTCP/IP revision 2.0 is distributed in 7 archives:

| | |
|---|---|
| AmiTCP-bin-20.lha | AmiTCP/IP binaries |
| AmiTCP-psA-20.lha | Documentation for AmiTCP (PostScript, A4) |
| AmiTCP-dvA-20.lha | Documentation for AmiTCP (DVI, A4) |
| AmiTCP-psL-20.lha | Documentation for AmiTCP (PostScript, Letter) |
| AmiTCP-dvL-20.lha | Documentation for AmiTCP (DVI, Letter) |
| AmiTCP-txt-20.lha | Documentation for AmiTCP (plain text) |
| AmiTCP-src-20.lha | Source for AmiTCP/IP |

If you just want to use AmiTCP/IP you need only archive AmiTCP-bin-20.lha containing also the basic documentation.

The separate documentation files consists of the full System manual in different formats. It is available in text, PostScript and DVI formats. PostScript and DVI documents are formatted for A4 and "Letter" page sizes, PostScript fonts have 300 dpi resolution. Normally you need only one version suitable to your printer. Full documentation includes Programmer's Manual and Implementation Notes.

To develop your own applications or AmiTCP/IP you need AmiTCP-src-20.lha, too.

Archive name contains the release number, for instance archive AmiTCP-bin-20.lha contains release 2.0.

PRICE AND DISTRIBUTION

```
        AmiTCP/IP is distributed for free under GNU General Public License
        Version 2.

PLEASE NOTE

        The second release of AmiTCP contains some improvements and bug
        fixes over first release. It is incompatible with previous version
        in binary level. Some old applications and new library _DO_NOT_
        work together. If you have an application compiled with previous
        version of AmiTCP/IP, it _MUST_ be recompiled. We hope that this is
        the only downward incompatible release.

        Documentation is still not reformatted for (La)TeXinfo or
        AmigaGuide.

HOW TO CONTACT AUTHORS

        E-mail address for:

        the group: amitcp-group@hut.fi

        bug reports and fixes: amitcp-bug@hut.fi

        developer (amitcp@hut.fi) and announce list subscribition:
        amitcp-request@hut.fi
```

## 1.11 Amiga ELM v2.0

```
AMIGA ELM v2.0 AVAILABLE FOR FTP


TITLE

     Amiga Elm

VERSION

     2

AUTHOR

     Andreas M. Kirchwitz
     E-Mail: elm-fan@zikzak.in-berlin.de

DESCRIPTION

     AmigaElm is an "Electronic Mail Reader" which allows you to read and
     write mail. Normally you'll need a properly installed UUCP package
     (eg, AmigaUUCP Plus or Dillon UUCP) to receive and send mails but
     AmigaElm is highly configurable so that you can take a mail-folder
     from a UNIX box, answer the mail and send the answers back to the
     UNIX box.
```

AmigaElm is easy to install and to use. The user interface is very intuitive and similar to the well-known UNIX-ELM. Beginners can control all basic functions with menus and some nice GadTools requesters (only with AmigaOS 2.0+). Usage with AmigaOS 1.3 is limited to keyboard control. Advanced users can use aliases, priorized message tagging, various filename-offers when saving messages and lots of options to configure AmigaElm to fit your needs. In a system with multiple users AmigaElm allows separate configuration files for each user.

AmigaElm can be invoked in a special "terminal mode" (all input/output from/to console). This is useful for running AmigaElm in the current shell window or over a serial line (eg, with AUX-Handler).

AmigaElm offers basic internal MIME (multimedia mail) functionality (eg, sending 8-bit-texts and binaries over 7-bit-lines) and supports "MetaMail" (a full-featured package for handling all kinds of MIME messages -- also available on AmiNet, see section "HOST NAME") and "ReqTools" library 2.x (reqtools.library is included).

NEW FEATURES

Changes since version 1:
Bug fixes, slightly enhanced user interface, various new features (commands, variables, configuration), noticable speed-up when reading/writing folder, terminal mode (for use with AUX or CLI), reworked alias-handling.

SPECIAL REQUIREMENTS

For normal usage: a properly installed UUCP package.
Can be configured to run without a UUCP package for processing ready-made mail-folders (eg, from your work or university).

HOST NAME

FTP/Internet: AmiNet and mirrors

For example, ftp.wustl.edu [128.252.135.4].

UUCP/E-Mail : mail-server@cs.tu-berlin.de

Send mail to the address above and put the line "send /pub/aminet/comm/mail/AmigaElm-v2.lha" in the body.

DIRECTORY

pub/aminet/comm/mail

FILE NAMES

AmigaElm-v2.lha (binary and documentation)

DISTRIBUTABILITY

```
     Shareware, Copyright by Andreas M. Kirchwitz
     (concept based on hwr-mail by Heiko W. Rupp).
     Source code only available to registered users.
```

## 1.12 Online Weekly

```
/// ONLINE WEEKLY Amiga Report Online                The lines are buzzing!
    ---------------------------------


From Portal's AmigaZone
-----------------------


.../Message Bases/General Q&A, Announcements, and Help!/The Amiga is DEAD. Why
16026.3.575.2 Amiga declining?
8/14/93 00:52 92/4571 Harv

>I have been reading everywhere that the AMIGA market is rapidly declining
>in the US. And today I learned that my favorite mag "Amiga Resource"
>will stop publication because of a "General Slowdown" in the Amiga market.

Half of that is Compute's own damn fault for doing very LOUSY
distribution of their Amiga edition, not to mention screwing
up subscriptions for MANY folks who specifically asked for the
Amiga REsource edition. I think Compute's management is just
to blind to see that they slit their own wrists on this one (sorry
to mix those metaphors). If they had simply stopped screwing around
with 436 different versions of every monthy issue, and just made ONE
Compute version and distributed it everywhere.. well, who knows.

>Seems that the Commodore 64 section has more readers, because it will
>continue to be published.

Well who knows why. You'd think that in these days of intersteller
everything that a $100 "disposable" computer that's terribly
slow, has godawful monsterous disk drives, the world's worst
operating system (if you can even call it that).. I guess people
still buy the damn things. But hell, you can buy an Amiga 600
for just pocket change more than a 64 costs these days. Then again..
who knows it exsts?

And there's the rub... Commodore's top management who seems more
concerned about gold-platnig their tennis courts with their
multimillion dollar salaries (some of the highest paid computer
execs in the world work for Commodore, believe it or not),
insulating themselves from their stockholders, not advertising
the best damn personal computer ever made (and I'll argue all
the fine points of this debate with anyone who wants to step up
to bat with me :-) - well it was suggested long ago that
CBM's motto should be "Ready, Fire, Aim!" when it comes to
marketing their product. Still rings truer than ever.
```

>Can anybody tell me how can all this be possible? Specially with the new
>Amiga 600 selling for only $179? That is less than one half what a
>Commodore 64 with Disk Drive cost the last time I saw it advertised on
>TENEX. What is going on???

See above.
Possible solutions:

1. Get rid of Irving Gould, C=’s Chairman of the board, and his
   cronies.  See Mark Rifkin’s "Stockholder" stuff in our Text library.

2. Hire an entire new board of folks who know how to market
   computers in the USA

3. Take that former top mgmt salary and hire engineers and
   reinvest the bucks in R&D

4. Advertise.

5. See #4. Lather, Rinse, Repeat.

6. Get the machine some killer well known big name applications.
   How often have you heard someone ask "But will it run [some big
   name Mac or MS-DOS app software]?" How many people bought
   clones or Macs because the Amiga’s best word processors or
   spreadsheets, even if they CAN exchange files with other platforms,
   are completely unknown in the mass marketplace?

Lemme tell ya something.. I recently spent a month at a well-known
Amiga software house writing a manual for them. It was for a Mac
product. Hey, don’t hit me, I needed the money. I used the product
while writing its docs, on a 20 Meg Mac Quadra 700 with
mongo hard drives. That machine would sell for about $8000.
When all is said and done, I would prefer to use an Amiga, selling
for a third or even a quarter of that, than that Mac. All the Mac
had going for it was its 24-bit display. Period. Quicktime is
a joke.  Multitasking is laughable on a Mac.  Hell, you can’t even
open a shell window and type "dir" if you want to.

No thank you, keep the Mac. And keep the PC with its bloated
windowed operating systems pasted on top an early 80’s DOS, that
take 4 or more Meg of RAM just to come up. IBM people get all
wet and gooey just to see icons. We Amiga people have the most
elegant operating system of ANY personal computer on the market.
What we need is a company to back it up and market the thing
in an intelligent way.

Who knows if Commodore can come to their senses. Irving Gould
has been quoted as making a sarcastic remark something along
the lines of "I wish someone would tell me how to sell computers
in the United States." Well after 8 years, it’s crystal clear
he doesn’t have a CLUE as to how to sell Amigas and it’s long
past time he stepped aside, retired to the Banahams and his
gold plated tennis court and turned the reigns of the company
over to some fresh blood with good ideas and the talent
to implement them.

As far as Compute magazine's STUPID decision to can Amiga Resource, they had THE BEST group of Amiga authors in the business writing for them, and they did not even know it.

Harv

---

.../Message Bases/General Q&A, Announcements, and Help!/The Amiga is DEAD.
16026.3.575.6 Re: The Amiga is DEAD. Why?
8/15/93 09:57 46/2509 DennyA

>How can the Amiga market be nose diving when the new Amiga 600 is selling
>for only $179? That is way lower than the price of a 64 with DD.

Olaf, I think it's because anyone buying their first computer has four or five "expert" friends who say "oh, you've gotta buy an IBM compatible." Not to mention the fact that tons of people just don't KNOW the Amiga exists. You don't see them in Office Depot and Circuit City like you do PCs and Macs, sigh/

>I have been reading everywhere that the AMIGA market is rapidly declining
>in the US. And today I learned that my favorite mag "Amiga Resource"
>will stop publication because of a "General Slowdown" in the Amiga market.
>Seems that the Commodore 64 section has more readers, because it will
>continue to be published.

I'm glad you liked Amiga Resource! I'm sorry to see it go as well. :-(

The Commodore 64 section has a TON of subscribers -- last I hear they had more than half as many as AmigaWorld does! While Harv's right that delivery problems had a lot to do with some people becoming frustrated and dropping subs, the Gazette folks have had the same problems. But the difference there is that Gazette is the ONLY remaining national C64 publication in the U.S. Amiga folks had the alternatives of AmigaWorld, a very good mag, and Amazing (mumble).

>Can anybody tell me how can all this be possible? Specially with the new
>Amiga 600 selling for only $179? That is less than one half what a
>Commodore 64 with Disk Drive cost the last time I saw it advertised on
>TENEX. What is going on???

Commodore dropped the ball. They didn't advertise back when they had the money to do so. They should have taken the cue from the Mac a couple of years ago and touted the fact that the Amiga CAN read your PC disks from work, and that there are applications that can read your PC files. But they got overwhelmed by the DOS monster. The Tenex deal is FANTASTIC, but who knows about it?

It's a rough time out there for the Amiga right now. I really hope to see a rebound. If CD32 is successful in Europe, it may give Commodore the cash it needs to climb back up. I really hope it happens.

| Denny Atkin | dennya@cup.portal.com | Mercenary Amiga |
| --- | --- | --- |
| Entertainment Editor | Portal and GEnie: dennya | Journalist for |
| COMPUTE Magazine | CIS: 75500,3602 | hire. |

--Author, DENNY ATKIN'S BEST AMIGA TIPS AND SECRETS, from COMPUTE Books--


---

.../Message Bases/General Q&A, Announcements, and Help!/The Amiga is DEAD.
16026.3.575.7 Re: The Amiga is DEAD. Why?
8/16/93 17:54 19/900 TomK

>Commodore dropped the ball. They didn't advertise back when they had
>the money to do so. They should have taken the cue from the Mac a
>couple of years ago and touted the fact that the Amiga CAN read your
>PC disks from work, and that there are applications that can read your
>PC files. But they got overwhelmed by the DOS monster. The Tenex deal
>is FANTASTIC, but who knows about it?

Its more than that. A few years back, when the 500/2000/2500 pretty
much described the Commodore line of Amigas, the user base was screaming
for Commodore to improve the resolution and color of the Amiga
chip set (which, truth be told, had needed an upgrade since the day
it was released).

Commodore made the disingenous reply that there was no reason to upgrade
the line, since the 500 was selling well.

I could only reply that by the time sales are dropping, its too late.

Guess what? Sales are dropping.

---

From Usenet's Comp.Sys.Amiga.Hardware newsgroup
---

In article <1993Jul23.154058@informatik.uni-kl.de>
feck@informatik.uni-kl.de (Christoph Feck IRZ) writes:

>In article <22mmstINNs0f@jhunix.hcf.jhu.edu>, keithc@tomahawk.
 (Keith Christopher) writes:

>> What is the possibility of getting an Amiga based on one ? It seems like
>> a hot chip.

>It would be good, if Commodore could get the same chip, that
>Apple gets - the one with hardware 680x0 code execution.

Apple is using a plain old everyday PowerPC 601 chip in their first PowerPC systems. Neither it, nor any other announced PowerPC products have any hardware emulation of the 680x0 instruction set. Apple has announced that PowerPC systems will run Mac binaries, but that's done via a soft 680x0 emulator. With enough of the Mac OS routines recoded as native PowerPC routines, the performance should be decent. Don't compare it to a PClone emulator. A good portion of the slowdown in PClone emulators isn't based on the need to emulate an 80x86 processor, but rather, the need to emulate the PC's hardware registers at the bit level. Since nothing in the Mac OS should require any such bit-level emulation (in theory -- I'm sure Jim Drew's gang could tell something about this in practice), Mac program should run at full Mac II speed, at least, on PowerPCs.
--
Dave Haynie | Commodore Technology | Ki No Kawa Ryu Aikido
daveh@cbmvax.commodore.com | High-End Amiga Systems | "Life was never meant
{BIX,Portal}: hazy | "The Crew That Never Rests"| to be painless"

"I will give the secrets you request, and you will be the one to sacrifice"
-toad the wet sprocket

---

In <CBnyAG.C4u@cbmvax.cbm.commodore.com>
daveh@cbmvax.cbm.commodore.com (Dave Haynie) writes:

>Apple is using a plain old everyday PowerPC 601 chip in their first PowerPC
>systems. Neither it, nor any other announced PowerPC products have any
>hardware emulation of the 680x0 instruction set.

However, I think it is only fair to point out that the instruction set of the PowerPC 601 is quite well suited to running emulations of other processors. It has the ability to think big-endian or little-endian, and (I am led to believe) has a wide range of bit manipulation instuctions.

I would hazzard to say that emulation of other processors was a strong design consideration.

>Apple has announced that
>PowerPC systems will run Mac binaries, but that's done via a soft 680x0
>emulator. With enough of the Mac OS routines recoded as native PowerPC
>routines, the performance should be decent.

I am told they have about 80% of the OS native 601 code. I suppose it depends a lot on _which_ 80% of the OS is native. However, it is expected that the performance will be similar to that of a 68040 Mac running at 25 Mhz, while running the emulation on an 'average' application.. Again, sweeping statements, but you get the idea.

>--
>Dave Haynie | Commodore Technology | Ki No Kawa Ryu Aikido
>daveh@cbmvax.commodore.com | High-End Amiga Systems | "Life was never meant

>{BIX,Portal}: hazy | "The Crew That Never Rests"| to be painless"

So is the "crew" thinking about porting things these days?
A 601 Amiga before mid-January would not only take a _lot_
of wind out of Apple's sails, it would surprise the whole
industry. And it's about time people had good reason to look
on the Amiga with a certain amount of awe, just like waaaay
back..

Stephen.

.....
: / T | / Stephen John McGerty (C.Sci) "Theory must never Amiga // :
: / | |/ smcgerty@unix1.tcd.ie precede creation" \// :
:.....:

---

* 24-Bit Display Board Specs *

| FEATURES | Retina | Merlin | PicassoII | Piccolo | EGS 28/24 |
|---|---|---|---|---|---|
| RESOLUTIONs | | | | | |
| 24 bit | 800x600 | 800x600 | 800x600 | 800x600 | 800x600 |
| 16 bit | 1024x768 | 1024x768 | 1024x768 | 1152x900 | 1024x768 |
| 8 bit | 1280x1024 | 1600x1280 | 1280x1024 | 1280x1024 | 1600x1280 |
| BANDWIDTH | | | | | |
| max vert. | 90 Hz. | 72 Hz. | 90 Hz. | 90 Hz. | 95 Hz. |
| max horiz. | 75 KHz. | ? | 75 Khz | 65 KHz. | 75 KHz. |
| max. bandwith | 70 MHz | 80 MHz | 80 MHz | 80 MHz. | 80 MHz |
| TECHNICAL | | | | | |
| PIP | ? | Yes(EGS) | Yes(EGS) | Yes(EGS) | Yes(EGS) |
| 32 bit blitt | No | Yes | Yes | Yes | Yes |
| monitor switch | No | Yes | Yes | Yes | ? |
| Use fast RAM | No | Yes | Yes | ? | ? |
| Frame buffer | 1,2,4 MB | 1,2,4 MB | 1,2 MB | 1,2 MB | 1,2 MB |
| Autoscrolling | No | No | Yes | ? | ? |
| Cooling | Yes | No | Yes | ? | ? |
| fast than AGA | No | May | Yes | ? | ? |
| EMULATION | | | | | |
| WB emulation | Yes | Yes | Yes | Yes | Yes |
| WB modes req. | No | No | Yes | ? | ? |
| 8 bit nonAGA | No | ? | Yes | ? | ? |
| EGS compatibl | No | Yes | ? | Yes | Yes |
| Zorro II/III | II | both | II | both | both |
| Arexx support | Yes | ? | Yes | ? | ? |
| PRICE (2M) DM. | 650 | 700 | 700 | 850 | ? |

| FEATURES | Retina | Merlin | PicassoII | Piccolo | EGS 28/24 |
|---|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| INCLUDED S/W | | | | | |
| Last version | 1.4 | ? | ? | ? | ? |
| Paint program | TVPaintjr | TVPaintjr | PPaint | ? | ? |
| viewers | Yes | Yes | Yes | ? | ? |
| animators | Yes | Yes | Yes | ? | ? |
| S/W COMPATIBLE | | | | | |
| Dpaint AGA | ? | Yes | No | ? | ? |
| AdPro | Yes | Yes | Yes | ? | ? |
| ImageFx | ? | Yes | Yes | ? | ? |
| ImageMaster | ? | Yes | ? | ? | ? |
| Cinemorph | ? | Yes | ? | ? | ? |
| Caligary2 | ? | Yes | ? | ? | ? |
| Imagine2 | ? | Yes | ? | ? | ? |
| Real3D | ? | Yes | Yes | ? | ? |
| VistaPro | ? | Yes | ? | ? | ? |
| Scenery Anim | ? | Yes | ? | ? | ? |
| Scala | ? | ? | ? | ? | ? |
| CygnusEd | Yes | ? | Yes | ? | ? |
| Prowrite | Yes | ? | ? | ? | ? |
| MaxonWord | ? | ? | Yes | ? | ? |
| FinalCopy | ? | ? | Yes | ? | ? |
| WordPerfect41 | ? | ? | Yes | ? | ? |
| PageStream2.2 | Yes | ? | Yes | ? | ? |
| ProPage | ? | ? | ? | ? | ? |
| ProDraw | ? | ? | ? | ? | ? |
| MaxonCAD | Yes | Yes | Yes | ? | ? |
| AmiBack | ? | ? | Yes | ? | ? |
| SAS C | ? | ? | Yes | ? | ? |
| GadToolsBox | ? | ? | Yes | ? | ? |

| EGS 28/24 | RETINA | MERLIN | PICASSO |
|---|---|---|---|
| GVP inc. | Macro Systems | Xpert comp. | Village Tronic |
| 657 Clark Ave. | Friedrich Ebert | Dorfstrasse 14 | Braunstrasse 14 |
| King of Prussia | strasse 85 | D-5541 | 3000 Hannover 1 |
| PA 19406 | 5810 Witten | Strickscheid | |
| USA. | Germany | Germany | Germany |
| | | | Expert Services |
| | | | 7559 Mall rd. |
| | | | Florance, Ky. |
| | | | 41042 USA. |


| | | |
|---|---|---|
| Cem Turgay | /// | Founder and owner of the |
| SYSADM1@TREARN | AMIGA/// | AMIGA-TR @ LISTEARN/TREARN |
| Systems programmer | \\ /// | AMIGASRV @ TREARN.bitnet |
| Jr. Sys. Administer | \X// | I think therefore I AMiga |


I talk to the wind, but the wind cannot hear *K.Crimson*

## 1.13 Amiga Report Mailing List

```
/// Amiga Report Mailing List
    -------------------------
```

Are you tired of waiting for your local BBS or online service to get Amiga Report each week? Have you been spending more money that you want on long distance phone calls to download it from one of our Distribution Sites? If so, have we got a deal for you!

If you have an internet mailing address, you can receive Amiga Report in UUENCODED form each week as soon as the issue is released. To be put on the list, send Email to Amiga-Report-Request@gnu.ai.mit.edu. Your account must be able to handle mail of any size to ensure an intact copy. For example, GEnie has a limit of about 40K per message, and most of our issues are well over that limit.

Please do not send general Email to Amiga-Report-Request, only requests for subscription additions or deletions (or if you are not receiving an intact copy). All other correspondence should be directed to the editor at ROB_G@Delphi.COM.

Many thanks to Bob Caron for setting this service up for us!

P.S.: Please be sure to include your Email address in the text of your request message, it makes adding it to the list much easier. Thanks!

## 1.14 AR avail via the WWW

```
/// AMIGA REPORT AVAILABLE VIA THE WORLD WIDE WEB!
    ----------------------------------------------
    By Michael Witbrock
    (mjw@cs.cmu.ed witbrock@x25.bix.com)
```

Although AmigaGuide is still the best way to browse Amiga Report, the magazine is now also available in a form which may be more convenient for people with direct Internet access.

Amiga Report is being converted weekly to a document readable via the World Wide Web, allowing immediate access without the chore of dearchiving and downloading to an Amiga. Within a day (often less) of its release, each Amiga Report starting from AR118 will be converted into an HTML hyper-document that behaves as similarly as possible to the AmigaGuide version, and will be made available at this URL:

```
<a
href="http://www.cs.cmu.edu:8001/Web/People/mjw/Computer/Amiga/OnlineMags.htm
l">
OnlineMags
</a>
```

For those who don't recognize that, a URL is a Uniform Resource Locator, which specifies access method and location information for information readable with WWW browsers such as NCSA mosaic. NCSA mosaic is a self contained program running under the X window system, and is available for anonymous FTP from ftp.ncsa.uiuc.edu in directory /Mosaic.

Even if you don't plan to read AmigaReport by this means, I strongly recommend that you get a copy of NCSA mosaic and play with it. The amount of information (in the form of pictures, sounds, text, and mpeg movies) it makes easily available is astounding, and the program itself is a marvel of good user interface design. I hope that someone will use the recent attempts at PD TCP/IP networking solutions and port the program to the Amiga.

Happy browsing!

## 1.15 NewTek at SIGGRAPH

```
/// NEWTEK UNVEILS "THE SCREAMER" AT A PARTY HELD NEAR SIGGRAPH...
    ------------------------------------------------------------
    A public message from Harv Laser


[crossposted to the LightWave and Video Toaster mailing lists]

NewTek held their SIGGRAPH party/product announcement tonite at the
Movieland Wax Museum in Buena Park, CA (about 8 miles from the site
of SIGGRAPH at the Anaheim Convention Center).

Approx. 2000 people attended.  It was jammed.  Partygoers were allowed
to tour the Wax Museum at no charge, scarf down appetizers, guzzle down
all the free drinks they could grab with both hands, and then adjourned
to an outdoor area (actually I think it's part of the parking lot) where
a large screen projection system was set up.  Your reporter ended up
standing at the back of the crowd, due to bad planning; there were way
more people than there were chairs.

Then, in sequence, Kiki Stockhammer, Wil Wheaton, Paul Montgomery and
Tim Jenison introduced varous video segments, working up from the
usual Toaster promo tapes, through a video made by a skateboarding
guy, to a lovely and cute little 5 minute 3D-rendered animation called
"Robo Jr.", then into two new Todd Rundgren videos composed mainly
in LightWave but with other Toaster effects (the audience was mixed
on these - some people love Rundgren's stuff and others can't stand
it. I thought his new videos were incredibly impressive and I like
his tunes too... Rundgren was there along with his usual
entourage... well, what can I say. He's an "artiste.") Then some short
promos for Spielberg's new seaQuest tv series were shown.
Finally, Montgomery and Jenison took the stage again (all though the
evenings performances there were constant problems with the wireless
microphones going on and off.. someone in the crowd shouted out
"time you guys made an AUDIO Toaster!"), and introduced the last video
of the night which was very short and quick blast of numbers about
```

their new product, The Screamer. They then pulled a sheet off a prototype Screamer on the stage and the camera zoomed in on it and filled the large projection screen with its image. From what I could see, it's a floor-standing tower box, maybe 3 feet high, a foot wide, and two feet deep, colored grayish silver and red, and one side of it comes up from the bottom and twists at the top. It was quickly spirited away for press interviews and I couldn't get a picture of it.. I'm sure the magazines will take care of that lack in short order.

That was it. No questions were taken. The thing was brought on, shown, and hauled away in less than 2 minutes. Immediately, a new flyer started to appear on tables all over the crowd, and I've typed in most of it for you to peruse below.

Disclaimer: I am not employed by NewTek Inc. I own no stock in the company. I don't even own a Toaster. They do throw a helluva good party though, but they almost never plan for enough space to accomodate the ever-increasing crowds that show up for their affairs. This party was jam-packed and made quite an impression. If you're part of the NewTek cult, you would've enjoyed it immensely.

Begin quoted flyer (any typos or emissions are mine and are purely due to fatigue :-) :

The introduction of NewTek's Video Toaster Screamer is about to cause a revolution in the 3D industry. Now, creating animation can take less time than you ever imagined possible. The Screamer 3D rendering engine elevates the Video Toaster into one of the fastest 3D tools ever created. High speed RISC processors drive the Toaster's built-in LightWave animation system to deliver twice the 3D rendering power of a Cray I supercomputer.

The Screamer is a breakthrough 3D rendering engine designed specifically for NewTek's Emmy-award winning Video Toaster System. The stunning computing speed of the Screamer is a result of an innovative hardware desgn based on multiple RISC processors. Four parallel MIPS R4400 RISC processors allow the Screamer to deliver over 600 MIPS system performance. By running each processor at 150 MHz with both internal and external caches, the Screamer reaches an amazing 340 SPECMarks.

The Toaster Screamer system comes complete with NTSC video in and out and takes full advantage of the Toaster's award winning LightWave 3D animation system. Already the most popular 3D animation system in the world, the Video Toaster and LightWave have been credited with bringing 3D visual effects to weekly television for the first time. With complex 3D effects sequences in every episode, shows such as Babylon 5 and Steven Spielverg's seaQuest DSV are setting new standards of excellence.

The Screamer differs from expensive dedicated 3D workstations in the same way that the Video Toaster stands out among traditional video gear. The introduction of the Screamer brings 3D rendering power that was astronomically expensive to a stunning new price point. At $9,995 the Toaster Screamer offers significantly more rendering power per dollar than any other 3D system in the world. The economics of 3D animation have just changed forever.

Specificatons:

Video Toaster Screamer:  $9995 (available 4th quarter '93)
An external rendering engine for the Video Toaster

Processors: Four parallel MIPS R4400 - 64 bit superpipelined RISC
processors

Clock Speed: 150 MHz

Memory: Internal Cache: 32K on each processor
Secondary Cache: Up to 8 MB
Program Memory: expandable to 1 Gigabyte

Requires Video Toaster Workstation

(then followed by the usual Toaster specifications which I'm not going
to type in here).

End of Quote

Contact NewTek for more information. This is all I have at this point
in time.

Harv
harv@cup.portal.com

## 1.16 SPECTRUM from GVP

```
/// New "SPECTRUM" Board from GVP  AR InfoFile
    ----------------------------------------
    Information Provided by Chris Jones


EGS-28/24 SPECTRUM PRODUCT INFO  -- Preliminary Specs Subject to Change


DESCRIPTION

The EGS-28/24 Spectrum -- the second member of GVP's EGS family of graphics
boards -- is a high-performance, high-resolution, 24-bit graphics board that
will take any Amiga 2000, 3000, or 4000 beyond AGA!  Following the same
philosophy as the first member of the EGS family, the powerhouse EGS-110/24,
this entry level graphics board provides power and performance at an
affordable price.

The EGS-28/24 Spectrum is capable of displaying video resolutions (NTSC, PAL,
and SECAM) as well as workstation-like high resolutions like Next (1120x832).
It also adapts automatically to either a Zorro-II (15-bit A2000) or Zorro-III
(32-bit A3000/A4000) bus and supports Workbench 2.04, 2.1, and 3.0 to take
maximum advantage of its environment. ( Capable of supporting Commodore's RTG
graphics standard when it becomes available.)
```

For the ultimate in convenience and functionality, the EGS-28/24 Spectrum has a built-in pass through for the native Amiga RGB display. When working with a native Amiga screen, the EGS-28/24 Spectrum simply passes the Amiga display out to the monitor! While others may claim to be a one-monitor solution, there will always be incompatible software that requires the use of a second monitor- _the_EGS-28/24_Spectrum_is_truly_a_one_monitor_solution__!

As if that weren't enough, our unique MultiGFX(tm) technology allows multiple EGS-28/24 Spectrum boards to be installed in the same machine, and the device libraries handle all of the necessary details. Multiple applications can be running on multiple EGS-28/24 Spectrum boards, each visible on a separate monitor simultaneously in stunning full 24-bit color at any resolution. This is a blessing for those who need to see a lot of different things all at the same time. For example, consider the 3D animator who needs to see a high-resolution wireframe display of the scene being edited, an NTSC (or PAL) color preview of the animation in progress, and a control panel screen with all of the needed commands available at the click of a mouse!

The EGS-28/24 Spectrum system uses the new Enhanced Graphics System (EGS) device libraries. These device independent libraries allow high-resolution, 24-bit software to be written for ANY graphics board that supports these libraries. To date, a number of graphics boards on the market already support the EGS libraries, and all software written for those boards will run on the EGS-28/24 Spectrum. Likewise, any software written to support the EGS-28/24 Spectrum will run on any of the other display boards that support the EGS libraries. Programmers are no longer committed to a single graphics board; by programming for the EGS system, programs can run _unmodified_ on any display board that supports the libraries!

The EGS libraries were painstakingly checked and rechecked by programmers around the world to make them as close as possible to existing Amiga graphics calls, differing only when necessary to support new features. This effort was taken to make porting applications as easy as possible for programmers. (Some function calls were make so identical that the only difference is the addition of an E_ in front of the function name, with all parameters and return values the same!)

The EGS libraries also provide some new and very useful additions to the basic array of graphics programming features that native Amiga programmers are used to, for example: Tear-Off menus, Menu gadgets, and more.

However, realizing that good software takes time, GVP has provided a Workbench driver for the EGS-28/24 Spectrum. This driver allows Workbench to run on the EGS-28/24 Spectrum board in any supported resolution, with up to 256 colors -- Workbench limits the color depth to 256 colors for itself and Workbench-compliant software. Any software that opens its display on Workbench will automatically run on any EGS-28/24 Spectrum Workbench. The only restriction is that no direct Amiga Blitter operations be performed by programs running on the EGS-28/24 Spectrum display, since the Amiga Blitter operates on Chip RAM and the EGS-28/24 Spectrum has its own blitter that operates on the display maintained entirely in its own DRAM. (By the way, this means that ALL Chip RAM normally used by Workbench is free for other use.)

It is also important to realize that the EGS display subsystem is entirely separate from the normal Amiga display. A two-monitor configuration allows the EGS-28/24 Spectrum monitor to display a high-resolution display (from a

CAD system for example) on the EGS monitor and the native Amiga output system to display something completely different, and even from a completely different program! An interesting and extremely useful example would be running a high-resolution paint program in the EGS display while a video application (like the IV24(tm), the Video Toaster(tm), or OpalVision(tm)) runs on the native Amiga display. As pictures are frame-grabbed and saved, an EGS Paint system can load them in for touchup, while the video framegrabbing continues--maximum productivity and efficiency!

The EGS-28/24 Spectrum hardware and the EGS system software take the Amiga platform beyond AGA and into the true-color world of high-end graphics workstations. The already installed base of A2000 and A3000 owners, and the fresh new base of A4000 owners can leap past the limitations of AGA and enter a new world of high-resolution, true-color, hardware-independent graphics. Keep in mind that when writing applications for the EGS system, they are not just for a single graphics board, they will run on any current and future graphics boards that support the EGS system libraries!

Developers interested in porting applications
to the EGS system should contact GVP for
an EGS Developer's Kit at
---
Great Valley Products, inc.
657 Clark Avenue
King of Prussia, PA 19406

FEATURES AND BENEFITS

The EGS-28/24 Spectrum Hardware

| FEATURE | BENEFITS |
|---|---|
| Zorro II / Zorro II Autosensing | The EGS-28/Spectrum takes full advantage of whatever Amiga it is installed in. Installed in a ZorroII bus it uses a 16-bit interface, and installed in a ZorroIII bus, it opens up to a full 32-bit interface for maximum speed and performance. |
| Zorro-II FORCE option | Useful when running in early Zorro-III Amiga's that still have bugs when using ZorroIII DMA. This guarantees compatibility in any Amiga. |
| Hardware Blitter | The EGS-28/24 Spectrum has a built-in hardware blitter to rapidly move chunks of data from one area of memory to another. This makes the EGS-28/24 Spectrum the perfect tool for real-time animations and 24-bit paint applications. Fills, brush pastes, region operations, image manipulation can all be performed by the blitter leaving the processor free to perform other work. |
| Amiga RGB Pass-Through Single monitor technology | Other graphics boards often require two monitors (one for the Amiga display and one for the custom graphics display), and some others like the Video Toaster(tm) require three monitors. The EGS-28/24 Spectrum has special circuitry that takes the Amiga display as input and allows software control over whether the Amiga or the EGS screen is displayed. It is truly a one-monitor solution. |

| | |
|---|---|
| MultiGFX(tm) device sharing technology | Other graphics boards often expect to be the only graphics board in the system, and if more than one is installed, the controlling software may become confused. EGS' device sharing allows multiple EGS-28/24 Spectrum boards to function independently while the libraries handle all of the work to keep things running smoothly. |
| 2MB of onboard display mem. | This allows for high-resolution 24-bit displays that are rock-solid and flicker-free. Using more memory for larger displays would result in flicker that can cause headaches. Boards claiming 4MB or more of 24-bit display memory often flicker because the graphics chip is not capable of displaying 4MB of data fast enough to be flicker-free. Other graphics boards may claim that the extra memory is used to keep multiple screens open at the same time. The EGS-28/24 Spectrum uses a smarter technique that swaps out non-visible display data to standard system RAM to conserve display memory for crisp, stunning displays. Adding memory beyond 2MB is inefficient and needlessly expensive. |
| Programmable Resolutions, Refresh rates and Scanning Frequencies | Allows the Amiga display to be as large as the monitor will allow For example, a Commodore 1950 can be used with the EGS-28/24 Spectrum now, and a larger IDEK,NEC, or other monitor later; the EGS-28/24 Spectrum will increase its displayable resolutions to match the monitor. (Or you can start with a high-resolution monitor and enjoy the benefits immediately.) |
| Custom GVP Workbench driver | Allows Workbench (and programs that run on Workbench) to be displayed on a high-resolution screen without requiring a software re-write. Existing software will run today! |
| Uses built-in hardware "pixel-packing" techniques | Only the absolute minimum amount of RAM to store a display is used, so that larger displays can be stored in a smaller amount of RAM, without affecting quality. |
| Does not use Amiga's Video Slot | EGS-28/24 Spectrum can be used with other video products like the IV24(tm), the Video Toaster(tm), or OpalVision(tm) |

Retargetable Graphics Libraries

| FEATURES | BENEFITS |
|---|---|
| Fully re-targetable graphics operating system | Programs written using the EGS libraries will run on ANY graphics board that supports EGS. Programmers can concentrate on writing bug-free, feature-filled software without worrying about which particular graphics board it will run on -- it will run on them all (with EGS libraries) |
| Complete true-color, 24-bit environment | All graphics applications in the EGS libraries are treated as 24-bit, true-color applications, even if the display device can't support 24-bit. Editing and painting in 8-bit, 16-bit, or any other mode will still maintain the quality and clarity of a 24-bit image! |

| | |
|---|---|
| Support for 1,2,3,4,8, 16, and 24 bit screens | The EGS libraries allow any color-depth screen to be opened, from black & white 1-bit screen, to a 256 color 8-bit screen, to a 16 and 24 million color 24 bit screen. Use as much or as little memory as needed by a specific application. |
| Automatic dithering to current color depth | In most graphics operating systems, opening a 24-bit application on an 8-bit screen would result in the 24-bit application failing to open. The EGS libraries automatically dither the 24-bit display using extremely fast and accurate dithering algorithms to provide a crisp display and allow the 24-bit application to continue working in 24-bit (ie. all actions occur in 24-bit and are only displayed in 8bit). If a 24-bit screen is used later, all of the quality and clarity of the 24-bit application is preserved. |
| Scalable GUI | Gadgets, fonts, and all Graphics User Interface items are completely scalable. If a smaller display is used, the appropriate items get smaller. If a larger display is used, the appropriate items get larger. All GUI aspects are completely user controllable. |

EGS Paint

| FEATURES | BENEFITS |
|---|---|
| 24-bit, real-time paint package | Allows instantaneous painting and manipulating of an image or images. Say good-bye to the "paint-and-see" days! |
| Image windows | Images are loaded into windows rather than screens. This allows multiple images to be in memory and on-screen at once for easy comparison or compositing with the Pantograph(tm) tool. |
| Resizable control panel | The Control Panel and all Toolboxes scale with the system to take as much or as little room as desired. Small displays with limit screen space can shrink the toolbox for more image area, and large displays can expand the toolbox for easier gadget section. |
| Runs on the default EGS screen | The default EGS screen is a standard ground for window-based applications. Multiple programs can open on the default screen to make data sharing and data comparison simple and easy. For example, an independent palette program can be used to generate precise color, and that color can be "copied" into the paint programs pen color for immediate use. Likewise, all sorts of other programs like clocks, work processors, etc can be running side-by-side with the paint package. |

Detailed Competition Analysis

| Feature | EGS | Retina | Picasso |
|---|---|---|---|
| Max 24-bit pixel display speed | 28MHz | 25Mhz | * |
| Max 8-bit pixel display speed | 80MHz | 70Mhz | * |
| Sys Mem to display Mem transfer | 12MB/s | 3MB/s | 3MB/s |

```
Blitter data transfer speed     |  *       |  *      |  *
Horizontal display scan rate    | 15-75KHz |15-75KHz |  *
Vertical display scan rate      | 200Hz(1) |50-95Hz  |  *
Max 24-bit display resolution   | 800x600  | 800x600 | 640x480
Max 16-bit display resolution   | 1024x768 | 1024x768| 800x600
Max 8-bit display resolution    |1600x1280 |1280x1024|1280x1024

* Not filled in in brochure
(1) At VGA 640x480 resolution
```

## 1.17 Tip of the Week

```
/// Amiga Tip of the Week
    ---------------------


Note from Robert Niles:

A while back I did an article on how to find files using the LIST command.
Well, we got a reply from amorsin@cs.vu.nl showing us a BETTER way.


From:   IN%"amorsin@cs.vu.nl"  "Morsink AW"
To:     IN%"ROB_G@delphi.com"
CC:
Subj:   Comments on AR1.11


Comments on: Tip of the Week, Amiga Report 1.11
-----------------------------------------------


Looking for files...
--------------------

Hi. In Amiga Report 1.11 (Sorry, I'm a bit behind...), Robert Niles'
Tip of the Week involved using "list" to find files on a disk. I wasn't
very impressed with his tip :) as there's a much better way... SEARCH.
WB 2.04+ search, that is (version 37.3 and up).

Instead of Robert's         "LIST DH0:(#?/#?AR10#?) [FILES]"

I have aliased "find" as "search [] file all". To stick with Robert's
example:
                            "find dh0: #?ar#?",
or, without the alias,      "search dh0: #?ar#? file all"

is a lot more effective, as "search all" checks all subdirectories. With
the "list" example, you'd have to edit and reissue the command for every
level of subdirectories...

If you're not sure on which drive/partition the file(s) you are looking
for is/are located, you can just insert more devices into your command:
```

"find dh2: dh1: dh0: #?ar#?"

---
Another approach: Use a cron to periodically list all files on all drives
or partitions to a file, e.g.:

"list dh2: dh1: dh0: sys: lformat "%F%S" all >dh0:FILES.all"

("%S" will get you the name of the file, "%F" its complete path. For other
 options, check the AmigaDOS Reference section in your system manual.)

Now you can alias "finda" (find all) as "search dh0:files.all [] nonum" for
truely carefree system-wide file tracking :). Robert's example would become:

"finda ar"

(The pattern matching is implicit as you're searching a file now.)

Depending on a whole lot of factors, either method may be faster :).

---
Oh, last but not least, I also have an alias for the old (1.3) search
functionality (searching a file for a particular instance of text):

"findc" (find contents) for "search [] all nonum quiet", e.g.

"findc dh0:AmigaReport Niles"

(AmigaReport could be either a file or a directory here.)

Due to the 'quiet' option, only the names of the files in which the text
was found are displayed. However, without 'quiet', search not only displays
the complete line in which the text occurred, but also every file it is
searching... that's why I prefer 'quiet' output :).

Phew... this got to be a little longer than I intended... all I meant to say
was "Using search is more effective", but just in case you decide to edit
this for inclusion in a future issue of AR, I decided to elaborate a bit.

Have a nice... Amiga!

## 1.18 The Emulation Examiner

/// The Emulation Examiner
    ----------------------
    By Jason Compton
    (jcompton@mlinknet.uucp)

  Or:  How to Amaze, Dazzle, and Taunt Users of Other Personal Computers

Before I begin, I have a few comments to make...

I'd first of all like to thank Robert Glover, editor of this magazine, for printing the article that I just threw at him without any warning. He's given me a chance to broadcast the knowledge and experience and opinions I've gathered with emulators to the general public, and I get to see my name in print, too. Thanks again.

Secondly, I just want to remind everyone that I would REALLY appreciate any netmail on either emulators or my articles...it would be tough to write this column without some sort of feedback...once again, my address is jcompton@mlinknet.uucp.

Finally, I'd specifically like to know if anyone can guide me to either either an Apple II+ emulator (I once had the C code to it, but it didn't compile very well...) or an Atari ST emulator that works. Thanks in advance.

Now, on with the emulating...in this issue, I'd like to tackle one of the two most practical and functional routes to emulation: PC Bridgeboards. AmigaWorld just ran an article listing and rating all (I presume) of the hardware IBM emulators. I'll do my best not to repeat their work. Instead, I'd like to take a look at the overall implications of committing to a PC Bridgeboard, and what you get out of the sucker in return.

My background on the subject? I have an A2000 with a Commodore 2286 8 MHz Bridgeboard and dedicated (no choice in the matter) 5.25 HD floppy (and you thought those 5.25 bays didn't get used anymore!), with a 20 meg C: partition on my otherwise AmigaDos Maxtor hard drive. I also do my best to learn everything I can about hardware emulators.

In this issue, I'd like to look specifically at the 2/3/4000 bridgeboard line, since I have experience with them. I may as well start with my 2286, which should pretty much cover anything you might want to know about the 2088 (the XT emulator still available through some mail-order outlets through various promotional packages). Both use Commodore's Janus program to do the communicating between IBM and Amiga. What you get with these packages is a hybrid XT/AT keyboard emulation (the BIOS apparently thinks it is XT, since the system information program Snooper returns an 84 key configuration, but that's not QUITE true.), mouse emulation, a two-floppy IDE controller, Commodore BIOS, parallel port emulation, and CGA and monochrome displays emulated through the Janus software. This graphic display is relatively choppy...at a priority of +5 on an 020/14, the screen display isn't smooth: usable, but not smooth. Both offer access to the IBM slots in your Amiga, although the XT can of course only access XT (8 bit) cards. Both accept coprocessors onboard. Both are also discontinued by Commodore, so prices may vary wildly, depending on how much dealers and mail-order houses want to ditch them (I've seen the 2088 with a 360k drive for $50 in one ad). These boards are good enough if you want to run rather old software, like public domain and commercial software from when EGA was an expensive prospect. And although Commodore actually encloses detailed instructions for using Windows on a stock 2088 or 2286, I wouldn't touch the idea with a 10-foot pole. It would be horrifyingly slow, not to mention silly (why bother with a 320x200, 2 color, insanely slow Windows when you can just left-Amiga-M back to Workbench?) These two boards are the most limited of the line: any floppy drives they use must be directly hooked up and dedicated to the BridgeBoard, so using

DF0: is out. They also come equipped with only 512k or 1 meg (the difference between the XT and 286). However, a relatively simple solution comes from Alexander Hagen (alexhagn@neabbs.UUCP according to the documentation), who has written a shareware program to allow Janus-driven bridgeboards to use Amiga memory as EMS, thereby freeing you from buying a memory expansion card for your bridgeboard. His shareware pitch: You only get 384k of EMS until you register for $30, at which point you can use up to 32 megs, if you can spare it (both the money and the memory).

This is all well and good, but if you want to go for a system that will bring you at least near par for the IBM world, you'll want to go at LEAST to a 386.

There are two options for this, but that number will soon be down to one. Commodore's 2386sx board is one route, which gets you the tried and true Janus interface, as well as newfound access to DF0:, very handy if you have a high-density floppy there. The 2386 runs at either 20 or 25 mhz (conflicting reports here: AmigaWorld lists it at 20 while I've seen it advertised at 25), and again has room for a coprocessor. Aside from gaining speed and DF0:, you don't get any improvement over the 2286, although you CAN add RAM to the board itself: but it is a highly specialized type (This is where AmigaEMS, the program I spoke of above, comes in handy again). But Commodore has apparently dropped out of the BridgeBoard market they created, and I'm told by my local Amiga dealer that it, too, has been discontinued, although I continue to see it carriedat low ($200) prices. The alternate route is Vortex's Golden Gate 386, which is where my range of personal knowledge runs out. Instead, I draw upon the wisdom of Dave Johnson's article on IBM emulators and sum up what I draw from it. Vortex gives you the parallel emulation Commodore provides, and goes a step further, giving you control of the serial port as well, should you so desire it (rather nice if you'd like to use your modem, I'd think. Or a serial mouse, but there really isn't a reason for that, since you still get mouse emulation). They also include monochrone EGA and VGA emulation directly in the software, but undoubtedly at no great speed unless you've got an 030 or better. In addition to the nice serial port, Vortex added in one more goodie: SIMM support. Even though that plant in Japan blew up recently, SIMMs are at least easier to get a hold of than Commodore's bridgeboard memory, so when prices drop again, it's a much more viable memory-adding option. This is good, because Mr. Hagen's AmigaEMS program won't work with the Golden Gate interface. That may not be TOO big of a problem, however, since according to Mr. Johnson, memory can be shared between the Vortex board and the Amiga: the Amiga can either take up to 4 megs of the board's memory, or the board can claim half of the Amiga's memory for its use. Vortex's press release about these boards claims the memory can be used as both EMS and XMS, probably with the use of DOS memory managers.

Finally, the top of the line boards: EMC's 486 bridgeboard(basically a Commodore 2386sx board with a 486SLC/33 installed, which in turn is basically an enhanced 386 with the 486sx commands) and Vortex's 486 board, also a 486SLC, this time 25mhz. These boards basically follow the patterns of their 386 cousins to the letter, although each comes standard with more memory than the earlier models (3 megs for the EMC as opposed to 1 meg for the 2386, and 2 megs for the Vortex 486 as opposed to 512k for the Vortex 386.) The price wall really hits home on these systems-I have no current pricing information on the Vortex boards, but EMC lists their stock board at $930 in their own ad. To go up to 8 megs

through them takes it to $1135. To get an 8 meg RAM/170 meg HD system, with a VGA switch box (so that you can share a VGA monitor with a flicker-corrected Amiga), and a super-crowded 16 bit card (IDE floppy/hard drive controller, paralle/serial/game ports and 1 meg SVGA display) is $1520. A VESA local bus 486/33 with all of that, PLUS a SVGA monitor is comparable to that price. So if you've got the monitor, don't mind sharing it, and don't mind the 486SLC (I believe you need to go out and get your own coprocessor for that line), it's cost-comparable. Unfortunately, you also don't get any floppy drives with it, so unless you've got a high-density drive somewhere, you're sunk again. I highly doubt Vortex's packages would come out any cheaper than that.

Maybe that's the point of the article, (which if you've been reading I'm sure you're dying to hear). Emulating an IBM is going to cost you more than going out and buying a clone. There's not much of a way of getting around that. However, if you need to conserve desk space, already have some IBM equipment (most notably a display card, VGA monitor, and spare IDE hard drive), and/or think that having an IBM multitask with the Amiga is just too incredibly neat to pass up, one of these boards might be worth a look.

Oddities: Commodore and EMC figure that you don't really NEED a PC speaker, and would probably be better off without one, but the architecture provides a place to solder one if you really want it. Vortex ships one standard.

Commodore's 2286 board is double-thick, and as such blocks the Zorro II slot it's next to. I can't speak for the other boards, but be forewarned.

(Warning: The next message is a hack I haven't yet tested. I trust the source enough to put it in, as he sells and works on Amigas for a living, but neither of us are responsible if you melt your motherboard.)

The A2000 has two AT and two XT slots, and one AT slot gets taken up by the board, leaving just one 16 bit slot available for a good VGA card and hard drive control, right? Wrong. Commodore was just too cheap to finish turning the XT slots into AT slots. Look carefully. All Commodore did was plug up the AT bus connecter holes below the XT slots. But it's still wired on the AT bus. Just get some 36-position connecters, desolder the board in that location, and solder in the connecters. Voila-4 AT slots, 3 available so you don't have to buy a multi-IO card, which are more expensive than buying their components piecemeal. You'll even probably have space for a 16 bit sound card, if you like.

Commodore and the EMC 486 give you a standard two-floppy IDE controller, leaving you on your own to get a hard drive controller. Vortex gives you a standard IDE hard drive controller, but leaves you on your own to get a floppy controller...

That about wraps it up for this week, I believe. Before I go, a few last words: I apologize for the way I introduced the column last week. The opening sentence was about 4 lines long and was REALLY lousy English. I think I was just excited. :)

PLEASE give me your thoughts and comments. My net address is jcompton@mlinknet.uucp, in case you missed it the two times above.

Lastly, I should point out that retroactive to the last article, many of the products and companies mentioned above are trademarks of their respective corporations. Any lack of acknowledgement in the course of the article is not intended as a challenge to these trademarks. The author recognizes the trademarks held by these companies.

As a final note, thanks to Katie Nelson for listening to me ramble incessantly about emulators and for helping me compare them to real-life systems.

## 1.19 Delphi

/// Delphi: It's Getting Better All The Time!
---

Amiga Report International Online Magazine is available every week in the Amiga Forum on DELPHI. Amiga Report readers are invited to join DELPHI and become a part of the friendly community of computer enthusiasts there.

SIGNING UP WITH DELPHI
==========

Using a personal computer and modem, members worldwide access DELPHI services via a local phone call

JOIN -- DELPHI
---

Via modem, dial up DELPHI at 1-800-695-4002
then...
When connected, press RETURN once or twice
and....
At Password: type STREPORT and press RETURN.

DELPHI's Basic Plan offers access for only $6.00 per hour, for any baud rate. The $5.95 monthly fee includes your first hour online.

For more information, call: DELPHI Member Services at 1-800-544-4005

DELPHI is a service of General Videotex Corporation of Cambridge, MA.

Try DELPHI for $1 an hour!

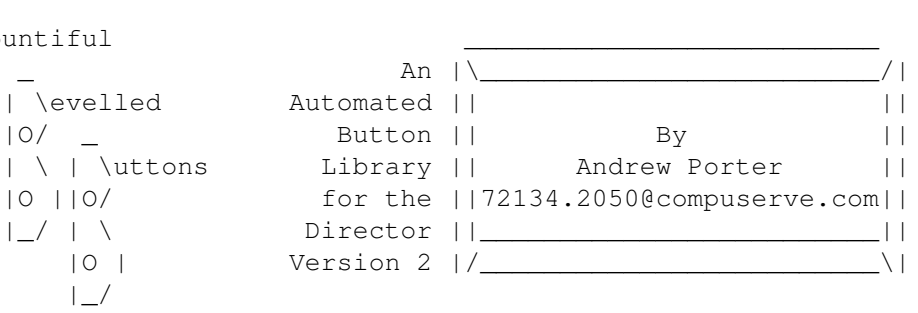
For a limited time, you can become a trial member of DELPHI, and receive 5 hours of evening and weekend access during this month for only $5. If you're not satisfied, simply cancel your account before the end of the calendar month with no further obligation. If you keep your account active, you will automatically be enrolled in DELPHI's 10/4 Basic Plan, where you can use up to 4 weekend and evening hours a month for a minimum $10 monthly charge, with additional hours available at $3.96. But hurry, this special trial offer will expire soon! To take advantage of this

limited offer, use your modem to dial 1-800-365-4636. Press <RET> once or twice. When you get the Password: prompt, type IP26 and press <RET> again. Then, just answer the questions and within a day or two, you'll officially be a member of DELPHI!

DELPHI - It's getting better all the time!

## 1.20 Bountiful Bevelled Buttons

```
/// Bountiful Bevelled Buttons
    --------------------------
    By Andrew Porter
```




*** The Tool & Goal ***

The Director Version 2 is a powerful text based authoring system for creating interactive multimedia presentations, slide shows and animations. Yet, the strength of the program is also its weakness. Although the process is easy, it needs some programming skills and careful attention to details. One area that could be streamlined is button creation for interactive presentations.

Professional looking multimedia presentations usually have 3D bevelled buttons that are not hard to create but can be time consuming create. The Director has a "Button Utility" to use with pre-drawn graphics but no built-in button creation features... yet, it does have a full list of graphic capabilities. The following is an explanation of how to develop a button "library" that will allow you to create a 3 dimensional looking bevelled button within your Director script. The command will position, size and colour a bevelled button and centre a text label on it. You can even have an optional "button hole."

For those who don't use the Director as their authoring system the BASIC language source could be easily translated to the language of your choice. It could even be adapted for use with ARexx capable paint & draw programs.

As you know, on-screen buttons are the main way to navigate through an interactive presentation. Normally, with the Director, an author would use a paint program to draw buttons,

save the image(s), and then load it into the Button Utility to mark out the hotspot locations. This is an easy, largely automated process.

Yet, there are a few potential problems with this method. If you have many different screens of buttons, each one takes up valuable disk space and waiting for it to load can slow down the presentation. Also, using a paint program to draw buttons can be time consuming and tedious, especially if you want to make many revisions. The solution? Use the graphic capabilities of the Director to render the buttons for you.

To render buttons on screen you could simply make a rectangle and stick some text on it, though it wouldn't look very elegant or professional. A powerful feature of the Director is the external library. A library is frequently used pieces of code that can be called up in any script with just a few commands. The MakeButton command described here will render buttons of any size at any location on any screen format. The size of the bevel, the location of the text, the colours and almost any feature can be modified with a few quick numbers.

*** The Essence of Buttonness ***

To get the impression of 3 dimensions, a button can have light and dark areas around it that provide the illusion that it is raised out from the screen. The bevelled look requires some work because there are five facets (or sides) that include the button top area, (the part that would be pressed) and four trapezoid "sides" (two parallel lines joined by angled lines) that appear to slope up from the screen surface to the edges of the button top. Shading of the sides, or bevels, is done according to an imaginary high, leftside light source. The bevels on the top and left are brighter than the right and bottom bevels. The use of colour and shades is what gives a button its "buttonness."

Generally, the thicker the bevels the "higher" the button appears (but, if the bevels get too large they loose the illusion.) Also, bevels usually appear equal on all sides, as if the button was looked at straight-on. One way to enhance the look of a button is to place it in a "buttonhole," such as a bevelled frame around the button with a slight gap between. This gives the impression that the button is mounted on the screen and inlaid into it. Usually the buttonhole bevels have the opposite colour scheme to make it appear to be further away instead of nearer. An author must have control over the thickness and colour of button and hole bevels and the size and colour of the gap.

Buttons without a label or picture would be quite useless. Therefore, to note their function, buttons must have text or pictures on them. For aesthetic reasons this information probably should be centred or positioned in some way and should appear to be apart of the button, ie. text should be constrained to the button and wrap around inside it if needed. The author also should be able to control the font, colour, indentation of

margins and other attributes of the text.

*** A Button Library ***

In general, an multimedia author needs to be concerned about the three basic categories of location, size and colour. Location includes the location of the button and the location of the text within the button. Size is the size of the button, its bevels, font size, and, if there is a buttonhole, the size of the buttonhole gap and bevels. Colour includes the colour of button elements and arrangement and text style and colour.

When developing a presentation an author will often have one consistent style for the whole work and will only need to be concerned with the button size, location, and label. Everything else could be set once by default or a configuration setup.

Presented here, the Button Library has four main user commands: "MakeButton" takes care of positioning, sizing and labelling; "ButtonConfig" sets up bevel sizes and the existence of a ButtonHole; "ButtonColour" sets the colours for all the various parts; and "ButtonText" sets the font type and some text attributes. There is also a command called "ButtonReset" to restore the default values. Only MakeButton actually does anything, the others simply assign variables. There are also several other procedures in the library that are not directly accessed.

*** The MakeButton Command ***

There are several ways to render bevels. One way is to create the outline for each facet by drawing a line from one point to another, resulting in a closed graphic, and fill it in with the appropriate colour. This is similar to how it would be done in a paint program. The Director has a built-in feature that can do this more efficiently. Using the POLYGON command all you have to do is feed the coordinates for each facet and the program will render it. After doing this five times you have a bevelled button.

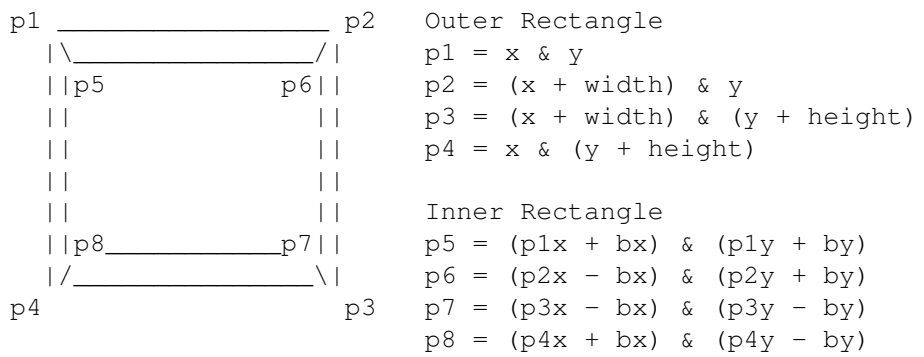
Of course, you can’t input any coordinates that you want, you have to be systematic. A bevelled button is composed of two rectangles, one inside the other for a total of eight corners or points. The bevel ends are formed by drawing a line from one inside point of the large rectangle to an opposing outside point of the smaller graphic. All the points have a relationship to each other by being equal, less or greater in value than the others, depending on the location.

The MakeButton command uses the left/top corner coordinates and the width and height of the button. A button that originates at location 10,10; is 50 pixels wide and 25 pixels high and says "Press Me" would use the command: DO MakeButton, 10, 10, 50, 25, "Press Me". MakeButton uses the PARAMETER command to grab the coordinates. It knows that the first two numbers represent the location of the top corner (10,10) and the second two are width

and height (50,25). These values represent the outside edges of the larger rectangle. The default thickness for bevels is 5 pixels, so the small inner rectangle can be calculated because it is 5 pixels smaller on all sides.

I mentioned that there are a total of eight points to be calculated. I have numbered these points P1 to P8 going clockwise around and in from the left/top corner. The math is very easy but a diagram explains it better than I can:

```
  x = the starting x coordinate (left)
  y = the starting y coordinate (top)
 p# = the two x & y coordinates
p#x = the x coordinate of the p# point
p#y = the y coordinate of the p# point
 bx = the bevel width
 by = the bevel height
```




The inner rectangle is calculated by using the values in p1,p2,p3 & p4 and adding or subtracting the bevel width or height, as required.

When calculating the coordinates, all values are in relation to the origin that is considered temporarily to be 0,0 or the top corner of the screen. This way the image could easily be moved to any location on the screen. After completing the calculations for the eight points the values are recorded in a 2 dimensional, 8 element array called "PointList". An array is a group of variables accessed by a number instead of a name. When finished, we have the relative location for all the points.

The next step is to draw the polygons. As I mentioned, an array stores the eight points for the button numbered 1 to 8. To draw each facet all that needs to be done is pass the point number and colour to the POLYGON command for rendering. We are not passing the actual coordinates, only its location in the PointList array. We do this five times: the button top and four bevels.

If a ButtonHole is to be drawn then it is be done first, before drawing the button, using the same method as above. The only difference is that the size has to be calculated to be larger than the button, it also has inverted colours.

I should note that there is an internal procedure charged

with the dual purpose of setting bevel and gap variables and adjusting for the screen format. Amiga screen formats have different pixel aspects (the ratio of width to height) and can distort images if not dealt with. Hires and Lores screen pixels are almost square but Medres (640x200) and Interlace (320x400) are double-high and double-wide, respectively. The Button library will adjust for this distortion for the bevels so they will appear to be the same thickness on all sides, regardless of screen display format.

The last deed to be done is button labelling. All that is required here is to calculate the margins of the button and use an FTEXT command to write the label. The PointList array, mentioned earlier, provides the margins that are then adjusted for screen location and indentation. The result is that the text will always wrap, left to right, in the button area. The formating codes are inserted into the text string for use with FTEXT. FTEXT outputs formatted text that can include colour, font, style and justification changes. Therefore, the author can use special codes to highlite the text.

The centre of the from top to bottom is calculated and is then adjusted for the font height. If the author wants to have it higher or lower then she or he can modify the FontHeight parameter accordingly. With this feature the button library is not limited to buttons, it also could be used to display text.

The source for this library may look long but if you use buttons frequently you probably will find that the effort to type it out is worth the convenience it provides. One word of warning: unlike ARexx, the Director is CASE sensitive for variable and procedure labels. When you type it out be VERY careful to follow any mIXeD CAsE names. You also will note that many variables have a "b" at the beginning. This is to protect against name duplication within your script which could have unexpected results. When you are finished save it as Director:library/Button.dlib.

*** Button Things Up! ***

How to do you use this library? There are a couple steps but it isn't too difficult. The first thing is to put INCLUDE Director:library/Button.dlib" in your script, usually at the top. To get a default button type:

DO MakeButton,<Xpos>,<Ypos>,<Width>,<Height>,<"Comment">
Then you have to set up the hotspot by adding the same position/size parameters to your buttonlist array (see Director manual, P11-3).

To change bevel thickness or the existence of a buttonhole type: DO ButtonConfig,<BevSize>,<HoleBev>,<GapSize>,<Adjust>

BevSize is the bevel thickness, HoleBev is the buttonhole bevel thickness & GapSize is the size of the gap. If HoleBev and

```
GapSize are both 0 no ButtonHole is drawn. Adjust turns screen
format adjustment OFF (0) or ON (1).

    To change the colour you enter:
    DO ButtonColours, <Top>,<Hilite>,<Shade1>,<Shade2>,<Shade3>,
       <Dark>,<Text>,<TextBG>

Each parameter is a colour palette number. Top is the button
colour, Hilite is the top bevel, Shade1 to Shade3 are
respectively the right-side, bottom and left-side bevels, Dark is
the gap colour, Text is the text colour and TextBG is for the
text shadow.

    To modify the text configuration use the command:
    DO ButtonText, <FontNum>, <FontHeight>, <ShadowX>,
       <ShadowY>, <LMargin>, <RMargin>, <Justify>, <Centre>

FontNum is a loaded font from 1-9, 0 makes no changes and 10
resets to default system font. FontHeight is the height in pixels
for the font, or the number of pixels text is to be offset from
the centre (divided by 2.)  ShadowX & ShadowY are the text
background offset in pixels (NONE if 0). LMargin & RMargin are
the margins within the button. Ypos is the number of pixels down
from the top edge (will approximate the centre if 0), Justify and
Centre will each turn justification or centring ON (1) or OFF (0).

    The script called ShowButtons shows how to use the button
library. Like most things, the best way to learn is to play
around. Enhancements of this library could include changable
text, rounded edges, automatic brush placement, display effects,
animation, etc. You could create a utility to save IFF pictures
to modify renderings in paint programs. Also, modification of the
Button Utility, that is included with the Director, could allow
you to interactively draw buttons, similar to a draw program. The
possiblities are almost endless if you want bountiful bevelled
buttons.


Copywrite 1993 Andrew Porter
ImagEYE Creations


;*** NOTE *** *** NOTE *** *** NOTE *** *** NOTE *** *** NOTE ***
;
;SAVE the following as "Director:Library/Button.dlib"
;Upto the next NOTE
;
;*** NOTE *** *** NOTE *** *** NOTE *** *** NOTE *** *** NOTE ***


;*********************************************************
;* Button Library    *
;* 1993 Andrew Porter, ImagEYE Creations *
;*********************************************************

  GOTO SkipButton  : REM Skip library
```

```
/MakeButton:
REM Make Bevel Buttons
IF bSetup <> 1
  DIM bButtonText[180]  : REM Records button label
  DIM bPointList[8,2],2 : REM Records button coordinates
  DIM bPolyAry[9,2],2   : REM Records polygon coordinates
  bSetup = 1  : REM Mark that arrays are setup
ENDIF
REM Get button location, size and text
PARAMETER bButLeft,bButTop,bButWidth,bButHeight,bButtonText$
REM Setup default colours, configuration and text format
  IF bSetConfig<>1 THEN DO ButtonConfig,5,3,2,1
  IF bSetColours<>1 THEN DO ButtonColours,14,1,2,3,4,0,1,0
  IF bSetText<>1 THEN DO ButtonText,0,9,0,0,5,5,0,1
DO bScreenAdjust        : REM Adjust for pixel aspect
REM Draw a button hole when bevel OR gap is given
  IF (bHoleBevelX>0)|(bGapX>0) THEN DO bButtonHole
REM Calculate the bevel coordinates
  DO bCalcBevel,bButLeft,bButTop,bButWidth,bButHeight,bButBevX,bButBevY
REM Draw bevelled button
  DO bMakeBevel,bHiLite,bShadow2,bShadow3,bShadow1,bButtonClr
REM Put a label on button
  DO bButtonLabel
RETURN

/ResetButton:
REM Resets button defaults
  DO ButtonConfig,5,3,2,1
  DO ButtonColours,14,1,2,3,4,0,1,0
  DO ButtonText,0,9,0,0,5,5,0,1
RETURN

/ButtonConfig:
REM Assign button defaults
  PARAMETER bButBev,bHoleBev,bGap,bAdjust
  bSetConfig = 1        : REM Button defaults set
RETURN

/ButtonColours:
REM Assign button colours
  PARAMETER bButtonClr,bHiLite,bShadow1,bShadow2
  PARAMETER bShadow3,bDark,bTextClr,bDropColour
  bSetColours = 1       : REM Colour defaults set
RETURN

/ButtonText:
REM Assign text configuration
  PARAMETER bFontNum,bFontHeight,bShadowX,bShadowY
  PARAMETER bLMargin,bRMargin,bJust,bCentre
  bSetText = 1 : REM Text defaults set
RETURN

/bScreenAdjust:
REM Adjust for current screen pixel aspect
REM so bevels will appear equal on all sides
RESOLUTION outbuffer,bXres,bYres,bDepth
REM All sides are equal
```

```
  bButBevX = bButBev       :   bButBevY = bButBev
  bGapX = bGap   :   bGapY = bGap
  bHoleBevX = bHoleBev     :   bHoleBevY = bHoleBev
IF bAdjust <> 1 THEN RETURN
IF (bXres >= 640) & (bYres < 400)
  REM Buffer is likely MedRes, make pixels double wide
  bButBevX = bButBev * 2
  bGapX = bGap * 2
  bHoleBevX = bHoleBev * 2
ENDIF
IF (bXres < 640) & (bYres >= 400)
  REM Buffer is likely LoRes Interlace, make double high
  bButBevY = bButBev * 2
  bGapY = bGap * 2
  bHoleBevY = bHoleBev * 2
ENDIF
RETURN

/bButtonHole:
REM Draw button hole for buttons which has inverted colour
REM Use outside edge of button to determine size
  bHoleLeft = bButLeft - bGapX - bHoleBevX
  bHoleTop =  bButTop - bGapY - bHoleBevY
  bHoleWidth =  bButWidth+(bGapX * 2)+(bHoleBevX * 2)
  bHoleHeight =  bButHeight+(bGapY * 2)+(bHoleBevY * 2)
REM Calculate bevel for button hole
  DO bCalcBevel,bHoleLeft,bHoleTop,bHoleWidth,bHoleHeight,bHoleBevX,bHoleBevY

REM Pass inverted colour scheme to button hole
  DO bMakeBevel,bShadow3,bShadow1,bHiLite,bShadow2,bDark
RETURN

/bCalcBevel:
REM Calculate inside bevel co-ordinates
PARAMETER bLeft,bTop,bWidth,bHeight,bBevelX,bBevelY
REM Set origin at Left, Top corner of button
bPolyAry[1,1] = bLeft,bTop
REM Build point list starting top/left, clockwise & in.
bPointList[1,1] = 0,0
bPointList[2,1] = bWidth,0
bPointList[3,1] = bWidth,bHeight
bPointList[4,1] = 0,bHeight
bPointList[5,1] = bBevelX,bBevelY
bPointList[6,1] = (bWidth-bBevelX),bBevelY
bPointList[7,1] = (bWidth-bBevelX),(bHeight-bBevelY)
bPointList[8,1] = bBevelX,(bHeight-bBevelY)
RETURN

/bMakeBevel:
PARAMETER bTopClr,bRightClr,bBottomClr,bLeftClr,bDisplayClr
REM Draw each facet by passing point number & cols
DO bDrawBevels,bTopClr,1,2,6,5     : REM Top bevel
DO bDrawBevels,bRightClr,6,2,3,7   : REM Right bevel
DO bDrawBevels,bBottomClr,8,7,3,4  : REM Bottom bevel
DO bDrawBevels,bLeftClr,1,5,8,4    : REM Left bevel
DO bDrawBevels,bDisplayClr,5,6,7,8 : REM Button area
RETURN
```

```
/bDrawBevels:
REM Draw the bevelled button
bPolyAry[2,1] = 100,100
bPolyAry[4,1] = 4
PARAMETER bColour,bP1,bP2,bP3,bP4
bPolyAry[4,2] = bColour
REM Get point values from point numbers
bPolyAry[6,1] = bPointList[bP1,1],bPointList[bP1,2]
bPolyAry[7,1] = bPointList[bP2,1],bPointList[bP2,2]
bPolyAry[8,1] = bPointList[bP3,1],bPointList[bP3,2]
bPolyAry[9,1] = bPointList[bP4,1],bPointList[bP4,2]
    POLYGON bPolyAry
RETURN

/bConvNumber:
REM Convert numbers to characters & retain all digits
PARAMETER tNumber,tPlaces
DIM convnum[13]
DIM tChar[2]
tDecimal = 1
FOR tCount = 1 TO (tPlaces-1)
  tDecimal = tDecimal * 10
NEXT
FOR tCount = 1 TO tPlaces
  tTempVal = tNumber/tDecimal
  tDigit = tTempVal
  tDigit = tDigit - ((tTempVal/10)*10)
  convnum$[tCount] = tDigit
  tDecimal = tDecimal/10
  tOld = tDigit
NEXT
RETURN

/bButtonLabel:
DIM bBText[200]      : REM Set up transfer string array
REM Convert colour num to 2 characters, returns convnum$
DO bConvNumber,bTextClr,2
STRING "|c";convnum$,bBText$,4  :REM Insert colour code
REM Get left margin for button
bStartX = bButLeft + bPointList[5,1] + bLMargin
DO bConvNumber,bStartX,3  :REM Convert to 3 characters
REM Insert left margin command
STRING "|ml";convnum$,bBText$[5],6
REM Get right margin, convert to characters and insert
bEndX = (bButLeft + bPointList[6,1])-bRMargin
DO bConvNumber,bEndX,3
STRING "|mr";convnum$;"|r1",bBText$[11],9
REM Has a font been loaded? Must be #1-9, 10
IF (bFontNum > 0) & (bFontNum <= 10)
REM Font 10 resets font to default
IF bFontNum = 10 THEN bFontNum = 0
STRING "|f";bFontNum;bButtonText$;"|t";bCentre;"|r1",bBText$[20],179
ELSE
  STRING bButtonText$;"|t1|r1|t0",bBText$[20],179
ENDIF
REM Calculate label position
```

```
    bStartY=(bPointList[8,2]-bPointList[5,2])/2+bButTop+bPointList[5,2]
  bStartY=bStartY-(bFontHeight/2) :REM Adjust for LF
    DRAWMODE 0
  IF (bShadowX <> 0)|(bShadowY <> 0)
    MOVE bStartX,(bStartY+bShadowY)
    FTEXT bJust,bBText$,bDropColour,bShadowX
  ENDIF
  MOVE bStartX,bStartY
  FTEXT bJust,bBText$
  DRAWMODE 1
  RETURN

  /SkipButton:

;CopyWrite 1993 Andrew Porter
;May be copied for NON-COMMERCIAL uses
;All Right Reserved
;ImagEYE Creations




;*** NOTE *** *** NOTE *** *** NOTE *** *** NOTE *** *** NOTE ***
;
;SAVE the preceding as "Director:Library/Button.dlib"
;SAVE the following in a separate file and run using the director
;
;*** NOTE *** *** NOTE *** *** NOTE *** *** NOTE *** *** NOTE ***




;************************************************************
;*         ShowButton   1993 Andrew Porter                  *
;*    A demonstration of the Bevelled Button Library        *
;************************************************************

  REM Load library
  INCLUDE "Director:Library/Button.dlib"

  REM Load a special font
  LOADFONT,1,16,"Garnet.font"

  NEW 640,200,4 :REM Open 16 colour hires screen

  REM Set colours 0-4 as shades of grey
  color 0,0,0,0
  color 1,14,14,14
  color 2,12,12,12
  color 3,9,9,9
  color 4,6,6,6

  REM Display title
  CENTER ON : SETFONT 1 : MOVE 0,20 : PEN 15
  TEXT "A demonstration of the Bevelled Button Library"
  SETFONT 0 : CENTER OFF
```

```
  REM First a default
  DO MakeButton,25,40,150,50,"Default BUTTON"

  REM Now Change the bevel size
  DO ButtonConfig,2,5,5,1
  DO MakeButton,230,45,150,30,"New Bevel Sizes"

  REM Now get rid of the button hole and screen adjustment
  REM Notice how side bevels are not as thick
  DO ButtonConfig,5,0,0,0
  DO MakeButton,410,35,225,50,"No hole, No adjust"

  REM Now reset to defaults and change colours
  DO ResetButton
  DO ButtonColours,3,2,2,4,4,0,6,0
  DO MakeButton,25,110,150,50,"New Colours"

  REM Now change the Font attributes
  DO ButtonText,1,20,2,1,2,2,0,1
  DO MakeButton,200,110,240,75,"New Font & Backgound"

  REM Now change the Font attributes
  DIM ReadText[200]
  ReadText$ = "This is an example of wrapped
  text in a button.  This could be used to
  give instructions however it is limited
  to 170 characters."

  REM Reset font, move to top, and turn centring off
  DO ResetButton
  DO ButtonText,10,75,0,0,2,2,0,0
  DO MakeButton,470,100,160,90,ReadText$

  REM Show Exit
  DO ResetButton
  DO MakeButton,25,175,150,20,"LMB to Exit"

  /EndlessPause:
  goto EndlessPause
```

## 1.21 Portal

```
/// Portal:  A Great Place For Amiga Users
    ---------------------------------------



                    Portal Communications' Amiga Zone

          The AFFORDABLE alternative for online Amiga information
          ------------------------------------------------------

The Portal Online System is the home of acclaimed Amiga Zone, which was
```

formerly on the People/Link System. Plink went out of business in May, 1991 and The Amiga Zone's staff moved to Portal the next day. The Zone has just celebrated its second anniversary on Portal. The Amiga press raves about The Amiga Zone, when compared to its competition.

If you live in the San Jose, CA area, then you can dial Portal directly. If you live elsewhere, you can reach Portal through any SprintNet (formerly Telenet) indial anywhere in the USA or through Tymnet from anywhere in North America. If you have an account on another Internet-connected system, you can connect to Portal using the UNIX Telnet programs, from anywhere in the industrialized world. Delphi and BIX users can now Telnet into Portal for a flat $19.95 a month, with *unlimited* use.

Some of Portal/Amiga Zone's amazing features include:

- Over 1.5 GIGabytes of Amiga-specific files, online, 24 hours a day. Portal has dedicated a 2.5 GIGabyte disk drive to the Amiga Zone. We have virtually unlimited space for files and new uploads.

- The *entire* Fred Fish collection of freely distributable software, online. All of it. Every disk. Well-organized so it's easy to find exactly what you're after.

- Fast, Batch Zmodem file transfer protocol. Download up to 100 files at once, of any size, with one command.

- Twenty Amiga vendor areas with participants like AmigaWorld, ASDG, Soft-Logik, Black Belt, Apex Publishing, Stylus, Prolific, NES, and many others including Compute's Amiga Resource with over 4 Megabytes of exclusive Compute magazine disk stuff you won't find elsewhere.

- 35 "regular" Amiga libraries with thousands of files. Hot new stuff arrives daily. Since Portal has FTP connections we can get new freely-distributable software online within MINUTES of its being announced on Usenet.

- No upload/download "ratios" EVER. Download as much as you want, as often as you want, and never feel pressued doing it. Start downloading files with your first session on Portal.

- Live, interactive nightly chats with Amiga folks whose names you will recognize. Special conferences. Random chance prize contests. Famous Amiga folks aren't the exception on Portal, they're the norm. Instead of stumbling around in frustration you can talk to the people who design your hardware, who write your software.

- Vast Message bases where you can ask questions about *anything* Amiga related and get quick replies from the experts.

- Amiga Internet mailing lists for Imagine, DCTV, LightWave, HyperAmi, Director and Landscapes are fed right into the Zone message bases. Read months worth of postings. They don't scroll off, ever! No need to clutter your mailbox with them.

- FREE unlimited Internet Email. Your Portal account gets you a mailbox that's connected to the world. Send letters of any length to

computer users in the entire industrialized world. No limits. No extra charges. No kidding!

- Portal has the Usenet. Thousands of "newsgroups" in which you can read and post articles about virtually any subject you can possibly imagine. Usenet feeds into Portal many times each hour. There are 14 Amiga-specific Usenet newsgroups with hundreds of articles posted every day, including postings by Commodore personnel. Since Usenet is distributed worldwide, your questions and answers can be seen by literally hundreds of thousands of people the same day you post them.

- Other Portal SIGs (Special Interest Groups) online for Mac, IBM, Sun, NeXT, UNIX, Science Fiction, Writers, amateur radio, and a graphics SIG with thousands of GIF files to name just a few. ALL Portal SIGs are accessible to ALL Portal customers with NO surcharges ever.

- The entire UPI/Clarinet/Newsbytes news hierarchy ($4/month extra) An entire general interest newspaper and computer news magazine.

- Portal featues an exciting package of Internet features: IRC, FTP, TELNET, MUDS, LIBS. Free to all Portal customers with your account. Internet Services is a menu driven version of the same kinds of utilities you can also use from your Portal UNIX shell account.

- All the files you can FTP. All the chatting you can stand on the IRC. And on IRC (Internet Relay Chat) you can talk live, in real time with Amiga users in the U.K., Europe, Australia, the Far East, 24 hours a day.

- Our exclusive PortalX by Steve Tibbett, the graphical "front end" for Portal which will let you automatically click'n'download your waiting email, messages, Usenet groups and binary files! Reply to mail and messages offline using your favorite editor and your replies are sent automatically the next time you log into Portal. (PortalX requires Workbench 2.04 or higher)

- And Portal does NOT stick it to high speed modem users. Whether you log in at 1200 or 2400 or 9600 or 14.4K you pay the same low price.

How does all that sound? Probably too good to be true. Well, it IS true.

Portal Signup or for more information:

1-408-973-9111 (voice) 9a.m.-5p.m. Mon-Fri, Pacific Time
1-408-725-0561 (modem 3/12/2400) 24 hours every day
1-408-973-8091 (modem 9600/14400) 24 hours every day
or enter "C PORTAL" from any Sprintnet dial-in in the USA,
or enter "portal" from any Tymnet "please log in:" prompt, USA & Canada
or telnet to "portal.com" from anywhere.

PORTAL'S CURRENT RATES:

All prices shown are in U.S. Dollars

| | Total Cost | Total Cost | Total Cost | Total Cost |
|---|---|---|---|---|

| | Startup Fee $ | Monthly Fee $ | Fee Per Hour $ | 1 hr. Per month $ | 5 hrs. per month $ | 10 hrs. per month $ | 30 hrs. per month $ |
|---|---|---|---|---|---|---|---|
| Portal | 19.95 | 19.95 | | | | | |
| 2400/9600/14.4Kbps, *direct 24 hrs | | | 0.00 | 19.95 | 19.95 | 19.95 | 19.95 |
| 2400/9600bps nonprime Sprint or Tymnet | | | 2.50 | 22.95 | 32.45 | 44.95 | 94.95 |
| 2400/9600bps prime Sprint +% or Tymnet | | | 5.50-10 | 29.95 | 69.95 | 119.95 | varies |
| 2400/9600bps non prime # PCPursuit | | | 1.00 | 20.95 | 24.95 | 29.95 | 49.95 |

* plus cost of phone call if out of Portal's local dialing area
Direct rates also apply to connections made to Portal using the UNIX "telnet" program from an account you may already have on an Internet-connected system.
% 9600 bps Sprintnet and Tymnet available in over 300 cities areas
+ $10 rate prevails at smaller US Cities
# PCPursuit is a service of US Sprint. Portal is a PCPursuit "Direct Access Facility" thus connection to Portal with a PCP account is simply a matter of entering C PORTAL,PCP-ID,PCP-PASSWORD at the SprintNet login prompt instead of C PORTAL.

Note:

Portal Direct 9600/14400 bps service is availble for both USR HST modems, and any V32/V32.bis modems. There are dozens of direct-dial high speed lines into Portal. No busy signals!

SprintNet 9600bps service is V.32 modem protocol only.
Tymnet 9600bps services is V.32 modem protocol only.
Again, Portal does NOT surcharge high speed modem users!

Portal subscribers who already have an account on an Internet-capable system elsewhere, can use that system's "telnet" program to connect to Portal for $0.00 an hour. That's right ZERO. From anywhere in the world. If you're in this category, be sure to ask the Portal reps, when you signup, how to login to Portal from your existing Internet account.

Call and join today. Tell the friendly Portal Customer Service representative, "The Amiga Zone and Amiga Report sent me!"

[Editor's Note: Be sure to tell them that you are an Amiga user, so they can notify the AmigaZone sysops to send their Welcome Letter and other information!]

That number again: 408-973-9111.

Portal Communications accepts MasterCard, Visa, or you can pre-pay any amount by personal check or money order. The Portal Online System is a trademark of Portal Communications.

## 1.22 World Wide Amiga BBS List

```
/// The World-Wide Amiga BBS List  AR Special Feature
    ------------------------------------------------



 VOL 93.08   ---===< The WoRLD-WiDe AMiGa BBS LiST!(tm) >===---   VOL 93.08

======================== Revision #1  Aug 15, 1993 ========================
           245 New Numbers Added -  0 Dropped - 245 Total Listed
===========================================================================
            - The MONTHLY List of Amiga supported BBS Systems!  -

                (c)1993 Ed Dukeshire, All Rights reserved!
              * Send BBS info & suggestions to Ed Dukeshire *

                      Brought to you courtesy of:
                   The AMiGa AsYLuM Bulletin Board System
                       All Amiga! FidoNet 1:324/134.0
                            AmigaNet 40:700/14.0
                         GEnie address: E.DUKESHIRE

===========================================================================
/\/\/\/\/\/[ SYSOPS: PLEASE POST THIS FILE FOR USERS TO ACCESS! ]\/\/\/\/\/\
===========================================================================
 Thanks to the following people for additions, distribution, changes,
 suggestions, help, verifying, inputing, format, etc.!:

   ALL the FidoNet and AmigaNet SysOps that sent me your information via
   NetMail and/or Origin lines!  Without your co-operation, this list
   couldn't have been possible!!  Keep running those Amiga bbses!

  Chet Solace ------ the author of "The Final List(tm)"! for creating what
                     I thought was THE most important piece of Shareware out
                     for the Amiga.
  Neil Alper ------- for spending so much time calling and verifying most of
                     the numbers on this list (I definatly DON'T want to see
                     YOUR phone bill!)
  Heather Anderson - for spending hours and hours of inputting the new
                     numbers, making changes, correcting my spelling errors,
                     and keeping ME up to date on the list!  ;-)
  Mike Soucy ------- for helping me understand the Modem Types!
  Joel Couch ------- for sending me the original 'BOSTON LIST' (which got
                     me started into this whole mess)  :-)
  Rich Lembree ----- for sending me all the Maine numbers (especially the
                     non-Fido ones!)
  Robert Niles ----- for taking interest in this list!  He's one of the guys
                     from AMIGA REPORT (THE Amiga ASCii Magazine of CHOICE)!
  Bill Beogelein --- for also showing interest and giving me the complete
                     C-NET listing (which I've yet to import!).
  Greg Bastow ------ for NetMailing me the most current Dialog BBS Listing!
===========================================================================
Understanding the codes :

Bbs Name         cS  Phone Number  City         St  Baud ModemType Nets Line
```

```
Amiga BBS System aAB 111-222-3333  ParadiseCity AA 16800 HST/v32b  AF    [2]
    ^            ^ ^       ^            ^       ^    ^       ^     ^^     ^
    |            | |       |            |       |    |       |     ||     |
 bbs name        | |   bbs number     city   state   |    modem    ||  phone
                 | |                              highest    type(s) | \  line
                / bbs software (1st 2 letters)     baud            |  \
               /  * see below for abbrievations     supported      | FidoNet
              /                                                     |
      the bbs is run on ?                                           |
           a=Amiga                                              AmigaNet
           i=IBM
```

S = Bbs Software used (2 letter abbrievation)

| | | | |
|---|---|---|---|
| AE: AmiExpress | CN: C-Net | DL: Dialog Pro | E!: Excelsior! |
| FA: Falcon | Mb: Mbbs | Mx: Maximus | Pc: PC-Board |
| PR: Proteus | Qb: QuickBBS | Re: RemoteAccess | Sb: SuperBBS |
| SK: Skyline | ST: Starnet | Tb: Tbbs | TR: TransAmiga |
| VB: VBBS | XE: Xenolink | | |

Nets = Message Base Networks (only Amiga-specific messages)

A = AmigaNet  F = FidoNet  I = Internet  U = UseNet

DISCLAIMER: ALTHOUGH THIS LIST IS AS ACCURATE AS POSSIBLE, PLEASE REMEMBER, BBS SYSTEMS WILL COME AND GO ON ALMOST A DAILY BASIS. ALL THE INFORMATION IN THIS LIST HAS BEEN COMPILED FROM NODELISTS, SYSOPS, AND USERS. IF YOU FIND A BBS ON THIS LIST THAT IS NO LONGER ONLINE, PLEASE INFORM ME AS SOON AS POSSIBLE SO IT CAN BE REMOVED FROM THE NEXT LIST. ALSO, IF YOU RUN UP A HUGE PHONE BILL, I AM NOT RESPONSIBLE! :-)

////////////////////////////////////////////////////////////////////////

DISCLAIMER NUMBER TWO: THIS LIST CAN NOT BE REPRODUCED WITHOUT MY PERMISSION. IT MAY BE VIEWED AS A BULLETIN ON ANY BBS SYSTEM AS LONG AS THE HEADER (FROM THE TOP OF THIS LIST DOWN TO THE "SYSOP PLEASE POST THIS FILE FOR USERS TO ACCESS" MESSAGE) IS INTACT!

## - - - PART I - UNITED STATES - - -

| Bbs Name | cS | Phone Number | City | St | Baud | ModemType | Nets | Line |
|---|---|---|---|---|---|---|---|---|
| **-- ALABAMA --** | | | | | | | | |
| Bodega Bay | aDL | 205-820-6972 | Weaver | AL | 16800 | HST/v32b | F | |
| **-- ALASKA --** | | | | | | | | |
| <<NONE YET!>> | | | | | | | | |
| **-- ARIZONA --** | | | | | | | | |
| AmAzing! Connec. | | 602-843-6574 | Glendale | AZ | 9600 | HST/v32 | A | |
| AmyAdviser BBS | aDL | 602-582-5174 | Phoenix | AZ | 9600 | HST/v32b | A | |
| The Bazaar | | 602-964-2640 | Mesa | AZ | 9600 | HST/v32b | A | |
| **-- ARKANSAS --** | | | | | | | | |
| <<NONE YET!>> | | | | | | | | |

```
-- CALIFORNIA ------------------------------------------------------------

Amiga Hotel          209-463-6354  Stockton     CA 14400 HST/v32b  A/F   [1]
Amiga Hotel          209-463-6525  Stockton     CA  2400 --        A/F   [2]
City Nights          209-957-8520  Stockton     CA  9600 HST/v32b  A
Fresno Area Ami.     209-226-7162  Fresno       CA 14400 HST/v32b  A/F
Modesto Ami Ex..     209-572-3602  Modesto      CA 19200 v32       A

Amiga Artists        310-618-0538  Torrance     CA  9600 v32b      F
Amiga Exchange   aDL 310-325-1796  Torrance     CA 14400 v32b      F
Amiga Rendezvous     310-923-8979  Downey       CA  9600 v32b      F

Dawn Star Amiga      408-259-6501  Campbell     CA  9600 v32b      F

Admiral Amiga    aCN 619-222-4247  San Diego    CA  2400 --        A/F   [1]
Admiral Amiga    aCN 619-222-6473  San Diego    CA  2400 --        A/F   [2]
Admiral Amiga    aCN 619-222-6474  San Diego    CA 14400 v32b      A/F   [3]
AmigaNonymous        619-477-7304  NationalCi   CA  9600 v32b      A/F
Amiga Street     aCN 619-596-1974  Santee       CA 14400 v32b      A/F
Black Magic          619-232-4919  San Diego    CA 19200 v32       A
Full Logic Amiga     619-568-0857  Indio        CA 14400 v32b      A/F
Magic Blue Smoke aDL 619-558-3413  La Jolla     CA 14400 v32b      A/F   [1]
Magic Blue Smoke aDL 619-558-7407  La Jolla     CA  2400 --        A/F   [2]
Mouse Trap       aXE 619-464-2134  San Diego    CA 16800 HST/v32b  F
Temple Of Mind       619-594-3121  San Diego    CA 19200 v32       A
Tierra-Miga          619-292-0754  San Diego    CA 14400 v32b    A

Running Rampage      707-226-5867  Napa         CA 16800 HST/v32b  A
Joe's Garage     aXE 707-437-4424  Travis AFB   CA 14400 v32b      F

0x0 Republik     aDL 714-530-5442  Garden Grove CA 14400 v32b      A

Dark Castle          805-258-8242  Edwards      CA  9600 HST/v32b  A
Flight Deck II   aDL 805-541-3538  ArroyoGrande CA 14400 v32b      A/U

Mike's Vid House aDL 818-240-1593  Glendale     CA 19200 v32b      F     [1]
Mike's Vid House aDL 818-240-5769  Glendale     CA 19200 v32b      F     [2]

-- COLORADO ------------------------------------------------------------

                              <<NONE YET!>>

-- CONNECTICUT -----------------------------------------------------------

Amiga Connection     203-389-8426  Hamden       CT 14400 HST/v32b  F
Amiga Probe          203-235-4422  Meriden      CT  2400 --        F
Earth Network        203-763-3485  Enfield      CT 19200 HST       F

-- DELEWARE --------------------------------------------------------------

AmigaNetwork         302-368-1067  Newark       DE 14400 HST/v32b  F     [1]
AmigaNetwork         302-368-3942  Newark       DE 14400 v32b      F     [2]

-- FLORIDA ---------------------------------------------------------------

Media Zone       aXE 305-821-0455  Ft.Lauderdal FL 16800 HST/v32b  F
```

```
Starfleet Comm.       407-366-8735  WinterSpring FL  9600 v32b      A
L.M.C.S.              407-330-7188  Lake Mary    FL 16800 HST/v32b  A
Space Coast BBS  iQb 407-269-2169  Titusville   FL 14400 v32b      F
Tech Forum            407-722-4400  Melborne     FL 14400 HST/v32b  A

BiTTER REALiTY   aDL 813-254-7493  Tampa        FL 14400 v32       A
Tommy's World         813-399-1376  Largo        FL 16800 HST/v32b  A

Dream States     aDL 904-331-4317  Gainsville   FL 14400 v32b      A/U   [1]
Dream States     aDL 904-331-1001  Gainsville   FL  2400 --        A/U   [2]

-- GEORGIA ---------------------------------------------------------------

Good News BBS    aDL 706-549-8072  Athens       GA 14400 v32b      A     [1]
Good News BBS    aDL 706-369-7555  Athens       GA  2400 --        A     [2]
Terminal Edge    aCN 706-571-0669  Columbus     GA 14400 v32b      F

-- HAWAII -----------------------------------------------------------------

                              <<NONE YET!>>

-- IDAHO -------------------------------------------------------------------

                              <<NONE YET!>>

-- ILLINOIS ----------------------------------------------------------------

Synapse II       aDL 217-525-6251  Springfield  IL  2400 --        A
The Quest             217-546-7608  Springfield  IL  9600 v32b      A

Chicago Amiga         312-342-0015  Chicago      IL 19200 HST       F

Emerald Keep     aDL 618-394-0065  Fairview Hts IL 14400 HST/v32   A/F
Mental Vortex    aDL 618-529-3486  Carbondale   IL 14400 Zyx       A

NezulD's DomaiN       708-559-8167  Des Plaines  IL 19200 HST       A

-- INDIANA --------------------------------------------------------------

AmigaSource           317-933-2408  Nineveh      IN  9600 v32b      F
Falx Cerebri Ami      317-290-9070  Indianapolis IN 14400 HST/v32b  F
Guru Meditation  iRa 317-486-9245  Indianapolis IN  9600 v32b      F

-- IOWA --------------------------------------------------------------

Amiga Depot BBS  aDL 319-385-7412  Mt.Pleasant  IA 14400 HST/v32b  F

-- KANSAS ------------------------------------------------------------

Game Den         aDL 316-522-7062  Wichita      KS 19200 v32       F
Boarding House        913-827-0744  Salina       KS 19200 v32b      A

-- KENTUCKY ---------------------------------------------------------

Hellfire Club         606-371-0570  Florence     KY 16800 HST/v32   A
The Cafe' BBS         606-581-7877  Newport      KY 16800 HST/v32b  A
```

```
-- LOUISIANA ------------------------------------------------------------

Amiga GateWay    aDL 504-866-5765  New Orleans  LA 19200 HST       A/F   [1]
Amiga GateWay    aDL 504-866-3443  New Orleans  LA  2400 --        A/F   [2]

-- MAINE ----------------------------------------------------------------

Ami Underground  aCN 207-882-7787  Wiscasset    ME  2400 --        F
Harbour Lights   aDL 207-967-3719  Kennebunkp   ME 16800 HST/v32b  F
Boondocks        aSK 207-498-8875  Caribou      ME  2400 --        --
Dream Link       aCN 207-786-2926  Lewiston     ME 16800 HST/v32b  F     [1]
Dream Link       aCN 207-783-6183  Lewiston     ME 16800 HST/v32b  F     [2]
Dream Link       aCN 207-786-4480  Lewiston     ME 16800 HST/v32b  F     [3]
Dream Link       aCN 207-782-9689  Lewiston     ME 16800 HST/v32b  F     [4]
Kobayashi Alt.   aCN 207-946-5665  Greene       ME  2400 --        F     [1]
Kobayashi Alt.   aCN 207-946-7405  Greene       ME  2400 --        F     [2]
Kobayashi Alt.   aCN 207-946-7246  Greene       ME  2400 --        F     [3]
Kobayashi Alt.   aCN 207-946-7041  Greene       ME 19200 HST       F     [4]

-- MARYLAND -------------------------------------------------------------

DMZ II           aST 301-863-6410  Lexington    MD 14400 HST/v32b  F
Dark Tower       aXE 301-884-2174  Mechanicsvil MD 14400 HST/v32b  F

AmigaBase        aXE 410-760-2483  Glen Burnie  MD 14400 v32b      A/F
MetroNet             410-381-9617  Columbia     MD 14400 HST/v32b  A

-- MASSACHUSETTS --------------------------------------------------------

Amiga Asylum     aXE 508-372-2258  Haverhill    MA 14400 HST/v32   A/F
Amiga Attic      aXE 508-975-2340  Methuen      MA 14400 v32b      A/F
Amiga Colony     aDL 508-663-9845  Billerica    MA 14400 HST/v32b  A/F/U
Apogee II        aST 508-520-1516  Franklin     MA 14400 HST/v32b  F     [1]
Apogee II        aST 508-520-2875  Franklin     MA  2400 --        F     [2]
Apogee II        aST 508-520-2047  Franklin     MA  2400 --        F     [3]
Cape Cod Amiga   aST 508-420-0837  MarstonMills MA 14400 v32b      --
Computer Castle  iRe 508-521-6941  Haverhill    MA 14400 HST/v32b  F
Cul-De-Sac       iTb 508-429-1784  Holliston    MA 14400 v32b      F     [1]
Cul-De-Sac       iTb 508-429-8385  Holliston    MA 16800 HST/v32b  F     [2]
Cul-De-Sac       iTb 508-429-8386  Holliston    MA 14400 HST/v32b  F     [3]
Cul-De-Sac       iTb 508-429-8387  Holliston    MA 14400 HST/v32b  F     [4]
ECIS             iTb 508-373-1985  Haverhill    MA 14400 HST/v32b  -
NightSoft Video      508-760-2147  S.Yarmouth   MA 14400 HST       F MsgOnly
Troy City BBS    aPR 508-677-4535  Fall River   MA  2400 --        -

BCS Commodore    aDL 617-729-7340  Winchester   MA  2400 --        A/F [1+2]
BCS Commodore    aDL 617-729-2843  Winchester   MA 14400 HST/v32b  A/F [3+4]
Channel One      iPc 617-354-8873  Cambridge    MA  2400 --         85 Lines
Channel One      iPc 617-354-7077  Cambridge    MA  2400 --         85 Lines
Channel One      iPc 617-354-6155  Cambridge    MA  2400 --         85 Lines
Channel One      iPc 617-354-5776  Cambridge    MA 14400 v32b       85 Lines
Channel One      iPc 617-354-3230  Cambridge    MA 14400 v32b       85 Lines
Channel One      iPc 617-354-2317  Cambridge    MA 14400 v32b       85 Lines
Channel One      iPc 617-354-3137  Cambridge    MA 16800 HST/v32b   85 Lines
Channel One      iPc 617-354-2505  Cambridge    MA 16800 HST/v32b   85 Lines
Channel One      iPc 617-354-4128  Cambridge    MA 16800 HST/v32b   85 Lines
```

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Channel One | iPc | 617-354-0470 | Cambridge | MA | 14400 | Telebit | 85 Lines | |
| Channel One | iPc | 617-354-0784 | Cambridge | MA | 14400 | Telebit | 85 Lines | |
| Crazy Cootas | aSK | 617-472-6753 | Quincy | MA | 14400 | HST/v32b | A/F | [1] |
| Crazy Cootas | aSK | 617-472-5992 | Quincy | MA | 2400 | -- | A/F | [2] |
| Grand Central | | 617-354-6073 | Cambridge | MA | 14400 | v32b | A | |
| IDCMP | aST | 617-769-3172 | Norwood | MA | 14400 | v32b | F/U | |

-- MICHIGAN ----------

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Amiga SHQ | aCN | 313-473-2020 | Livonia | MI | 14400 | HST/v32b | F | |
| Eastpointe Amiga | | 313-773-6959 | EastPointe | MI | 9600 | HST/v32b | F | |
| Skynet | | 313-772-5802 | St.ClairShor | MI | 16800 | HST/v32b | A | |
| Ancient Heart | aTR | 517-752-3203 | Saginaw | MI | 14400 | v32b | F | |
| The Starship | aFA | 517-697-5181 | Linwood | MI | 16800 | HST/v32b | F | |
| Obsticle Illus. | | 616-791-2109 | Grand Rapids | MI | 14400 | HST/v32 | A | |
| Rogue River BBS | aXE | 616-361-8267 | Belmont | MI | 14400 | v32b | A/F | |
| Sym. of Destruc. | | 616-774-0335 | Wyoming | MI | 14400 | HST | A | |
| Tele-Star | | 616-399-8174 | Holland | MI | 14400 | HST/v32b | A | |

-- MINNESOTA ----------

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Hotline BBS | | 612-933-6055 | Hopkins | MN | 9600 | HST/v32b | A | |
| House Of Yoe | | 612-780-4988 | Shoreview | MN | 9600 | HST/v32 | A | |
| Noodle Ranch | | 612-341-2263 | Saint Paul | MN | 9600 | HST/v32b | A | |
| Xenon BBS | | 612-571-2361 | Columbia Ht | MN | 9600 | v32 | A | |

-- MISSISSIPPI ----------

<<NONE YET!>>

-- MISSOURI ----------

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Gateway Amiga | | 314-423-5733 | St Louis | MO | 9600 | HST/v32b | A | |
| AAMIGAville | aST | 816-796-5954 | Indep | MO | 16800 | HST/v32b | F | |
| AUGKC | aDL | 816-322-5802 | Belton | MO | 16800 | HST | A/F | [1] |
| AUGKC | aDL | 816-322-5803 | Belton | MO | 16800 | HST/v32b | A/F | [2] |
| Laser Online | | 816-767-9323 | Kansas City | MO | 9600 | HST/v32b | A | |
| Tech Info Tele | | 816-923-8204 | Kansas City | MO | 9600 | v32b | A | |
| The File Shop | | 816-587-3311 | Kansas City | MO | 9600 | HST/v32b | A | |

-- MONTANA ----------

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Addiction 680X0 | | 406-454-2250 | Great Falls | MT | 2400 | -- | A | |
| Del's Den | | 406-452-9942 | Great Falls | MT | 9600 | v32b | A | |
| Game Connection | | 406-761-3850 | Malstrom AFB | MT | 9600 | v32b | A | |

-- NEBRASKA ----------

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Beavernet BBS | | 402-235-2210 | Plattsmouth | NE | 9600 | HST/v32b | A | |
| Blue Silver | | 402-496-1489 | Omaha | NE | 2400 | -- | A | |
| Omaha AmigaNet | aDL | 402-333-5110 | Omaha | NE | 19200 | v32b | A/F | [1] |
| Omaha AmigaNet | aDL | 402-691-0104 | Omaha | NE | 14400 | HST/v32b | A/F | [2] |

-- NEVADA ----------

```
Cure For Sanity  aDL 702-252-5783  Las Vegas    NV  2400 --        A     [1]
Cure For Sanity  aDL 702-253-6934  Las Vegas    NV 14400 HST/v32b  A     [2]
FreshWaterII         702-434-8633  Las Vegas    NV 14400 v32b      A
I.C.O.N.             702-897-4148  Las Vegas    NV 14400 HST/v32b  A
Information Ex.      702-642-1264  Las Vegas    NV  2400 --        A

-- NEW HAMPSHIRE -------------------------------------------------------

American Amiga   aXE 603-679-1762  Epping       NH 14400 HST       F
Computer Castle  iRe 603-382-3471  Newton       NH 16800 HST       F     [1]
Computer Castle  iRe 603-382-6938  Newton       NH 14400 v32b      F     [2]
DigiCon          iPc 603-743-3385  Dover        NH 14400 HST       --

-- NEW JERSEY ----------------------------------------------------------

Amiga Headquart.     201-672-8969  Orange       NJ 16800 HST/v32b  A/F
Amiga Lynx           201-368-7830  SaddleBroo   NJ  9600 HST/v32b  F
Danger Zone BBS  aST 201-347-2652  Budd Lake    NJ 14400 HST/v32b  F
Power Windows    aCN 201-492-9748  Bloomingda   NJ 14400 HST/v32b  F   [1+2]

Dynalogic Suppo. iPc 609-398-7453  Mays Landing NJ 14400 HST/v32b  F
Logopolis        aDL 609-767-2856  Berlin       NJ 14400 HST       A

The Mall             908-725-2437  Manville     NJ 14400 HST/v32b  A

-- NEW YORK ----------------------------------------------------------

Amiga Time           315-454-3072  Mattydale    NY 19200 HST       F

Liquid Sky           518-883-5326  Broadalbin   NY  9600 v32b      A
Boondocks            518-483-3348  Malone       NY 14400 HST       A
Pabulum              518-883-4175  Broadalbin   NY  9600 v32b      A

Dead Fish            914-425-6015  SpringValley NY  9600 v32b      A

-- NORTH CAROLINA -----------------------------------------------------

                              <<NONE YET!>>

-- NORTH DAKOTA --------------------------------------------------------

                              <<NONE YET!>>

-- OHIO ----------------------------------------------------------------

Amiga Asylum     aDL 216-494-7645  Canton       OH 14400 HST/v32b  F
Amiga University     216-637-6647  Cortland     OH  9600 v32       A
Starship Infini. aDL 216-923-5142  Cuyahoga Fal OH 14400 v32b      A/F
Wolf's Head          216-475-4808  Garfield Hts OH  9600 v32b      A

Amiga Warehouse      513-860-5150  West Chester OH  9600 v32b      A/F
Head East            513-424-1304  Middletown   OH  9600 HST       A

Bourbon Street   aE! 614-773-6733  Chillicoth   OH 14400 HST/v32b  A/F/I

-- OKLAHOMA ----------------------------------------------------------
```

<<NONE YET!>>

-- OREGON ----------

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Barristers' BBS | iMx | 503-228-5866 | Portland | OR | 14400 | v32b | F |
| Outer Limits | iMx | 503-581-0191 | Salem | OR | 9600 | v32b | F |

-- PENNSYLVANIA ----------

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| BerksAmiga BBS | | 215-689-4969 | Boyertown | PA | 14400 | v32b | A/F |
| Gates Systems | aCN | 215-755-6052 | Philadelphia | PA | 14400 | v32b | A/F |
| Keystone Amiga | aDL | 215-770-0774 | Allentown | PA | 16800 | HST/v32b | A/F |
| Phila Amiga UG | | 215-551-1485 | Philadelph | PA | 14400 | v32b | F |
| Traveler North | aCN | 215-239-9478 | Norristown | PA | 14400 | v32b | A/F [1-9] |
| Baudweiser | aCN | 412-751-3817 | Elizabeth | PA | 14400 | v32b | F |
| No Gurus Here | aTR | 412-322-6548 | Pittsburgh | PA | 14400 | HST/v32 | F |
| PCG BBS | aDL | 412-434-5483 | Pittsburgh | PA | 2400 | -- | A/F |
| Project Aurora | aDL | 412-962-1590 | Sharpsville | PA | 19200 | v32b | F |
| PEGASUS MultiBBS | aDL | 717-273-1622 | Lebanon | PA | 16800 | HST/v32b | A/F |

-- RHODE ISLAND ----------

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Bloom Beacon | aDL | 401-751-3831 | Cumberland | RI | 14400 | HST/v32b | F [1] |
| Bloom Beacon | aDL | 401-751-3831 | Cumberland | RI | 14400 | HST/v32b | F [2] |
| ImageNet | aST | 401-822-3060 | Coventry | RI | 14400 | HST | F |

-- SOUTH CAROLINA ----------

<<NONE YET!>>

-- SOUTH DAKOTA ----------

<<NONE YET!>>

-- TENNESSEE ----------

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| City of Brass | | 615-452-4098 | Gallatin | TN | 9600 | v32b | A |
| NOVA BBS | aST | 615-472-9748 | Cleveland | TN | 16800 | HST/v32b | F |

-- TEXAS ----------

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Amiga LANd BBS | | 214-222-2510 | Mesquite | TX | 19200 | v32b | F |
| CyBeR GrApHiX | aXE | 214-370-1505 | Dallas | TX | 16800 | HST/v32b | F |
| Last Resort | | 214-293-0022 | Cedar Hill | TX | 19200 | v32b | A |
| AAA III (CTACS) | aDL | 512-458-8004 | Austin | TX | 2400 | -- | F |
| Hotel California | | 512-385-2621 | Austin | TX | 16800 | HST/v32b | A/F |
| Winds of Change | | 512-389-1941 | Bergstrom | TX | 19200 | v32 | A/F |
| Club Amiga BBS | aDL | 713-528-7511 | Houston | TX | 16800 | HST/v32b | F |
| Murphy's Law | | 713-584-0348 | Houston | TX | 19200 | v32b | A |

-- UTAH ----------

<<NONE YET!>>

-- VERMONT ----------

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Crystal Ship | aFA | 802-223-3257 | Berlin | VT | 14400 | v32b | F |
| vtAMIGA | | 802-479-3476 | Barre | VT | 14400 | HST/v32b | A/F |

-- VIRGINIA ----------

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Inner Circle | | 804-436-5505 | Cheasapeake | VA | 9600 | v32b | A |

-- WASHINGTON ----------

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Cloud's Corner | aST | 206-377-4290 | Bremerton | WA | 19200 | HST/v32b | F | |
| Freeland MainFr. | aDL | 206-438-1670 | Olympia | WA | 2400 | -- | F | [1] |
| Freeland MainFr. | aDL | 206-438-2273 | Olympia | WA | 19200 | Telebit | F | [2] |
| Freeland MainFr. | aDL | 206-456-6013 | Olympia | WA | 14400 | v32b | F | [3] |
| NJL's | | 206-577-7358 | Longview | WA | 9600 | v32b | A | |
| Halls of Justice | | 206-565-0603 | Tacoma | WA | 9600 | v32b | A | |
| Pioneers BBS | aST | 206-775-7983 | Edmonds | WA | 14400 | v32b | F | |
| In The Meantime | aST | 509-966-3828 | Yakima | WA | 19200 | v32b | F | |
| The DarkSoft | aST | 509-886-0581 | E.Wenatchee | WA | 14400 | v32b | F | |

-- WEST VIRGINIA ----------

<<NONE YET!>>

-- WISCONSIN ----------

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modern Pastimes | | 414-384-1701 | Milwaukee | WI | 9600 | HST/v32 | A |

-- WYOMING ----------

<<NONE YET!>>

==========

## - - - PART II - CANADA - - -

==========

| Bbs Name | cS | Phone Number | City | St | Baud | ModemType | Nets | Line |
|---|---|---|---|---|---|---|---|---|

-- ALBERTA ----------

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| The Byte Bucket | aCN | 403-247-3900 | Calgary | AB | 2400 | -- | F | [1-4] |
| Amiga Devil BBS | aDL | 403-484-9200 | Edmonton | AB | 14400 | v32b | F | |

-- BRITISH COLUMBIA ----------

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Amiga Mail Sys. | aDL | 604-597-0730 | Surrey | BC | 14400 | v32b | AFU |

-- ONTARIO ----------

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Amiga Info | | 416-876-1604 | Milton | ON | 14400 | v32b | F | |
| Amiga World | | 416-824-6417 | Mississaug | ON | 14400 | v32b | F | |
| Club Z | aST | 416-934-6795 | Catherines | ON | 16800 | HST/v32b | - | |
| Command Line BBS | aAE | 416-533-8321 | Toronto | ON | 14400 | v32b | F | |
| GABB II | | 416-547-1690 | Hamilton | ON | 9600 | HST/v32b | A | |

```
InfoTech Online  iSb 416-935-9484  Catherines   ON 14400 HST       F
Sphericals       aTR 416-641-5419  Catherines   ON 14400 v32b      -
Spectrum BBS         416-385-2542  Hamilton     ON  9600 v32b      A
Underworld Eleme aFA 416-682-2909  St.Catherine ON 14400 v32b      -
Xternal Function     416-318-8915  Hamilton     ON  9600 HST/v32b  A

C.I.             aXE 519-660-6033  London       ON 14400 v32b      F
Computer Odyssey     519-457-2986  London       ON 19200 HST       A
Transference BBS     519-383-1057  Sarnia       ON 14400 HST/v32b  A

The Forge            613-544-7787  Kingston     ON  9600 HST       A

Fat Agnus BBS    aDL 705-497-3057  North Bay    ON 14400 HST/v32b  F
Jammy's Amiga Co aVB 705-566-1991  Sudbury      ON 19200 ZyX/v32b  F/U

-- QUEBEC ---------------------------------------------------------------

AmigaByte BBS        514-431-5287  Bellefeuil   QC 14400 v32b      F
Amiga ECS            514-696-6632  Pierrefond   QC  2400 --        A/F
Club Amiga Rive      514-335-4076  St.Basile    QC  2400 --        F
ComNet               514-661-0791  Laval        QC 14400 v32b      A
Contact Plus!    aDL 514-355-1280  Roxboro      QC  9600 v32b/ZyX  A
Phoenix ][           514-338-3798  Montreal     QC  2400 --        A

-- SASKATCHEWAN -----------------------------------------------------------

Computer Answers aE! 306-764-0888  Prince Alber SK 14400 HST/v32b  F/U

================================================================================
               - - - PART III - ASIA, AUSTRALIA, EUROPE - - -
================================================================================
Bbs Name         cS  Phone Number  City         St  Baud ModemType Nets Line
--------------------------------------------------------------------------------
-- AUSTRALIA -------------------------------------------------------------

Eldritch Cats    aCN 618-3626426   Adelaide  AUSTR. 9600 v32b      -

-- FINLAND ---------------------------------------------------------------

Laho BBS         iMb 358-64-414-1516 Seinajoki     14400 HST/v32   -
Laho BBS         iMb 358-64-414-0400 Seinajoki     14400 HST/v32   -
Laho BBS         iMb 358-64-414-6800 Seinajoki     14400 HST/v32   -
Laho BBS         iMb 358-64-423-1300 Seinajoki     14400 v32b      -

-- ITALY -----------------------------------------------------------------

Sky Link         aDL 39-332-706469 Malgesso  ITALY 16800 HST/v32b  F SAN [1]
Sky Link         aDL 39-332-706739 Malgesso  ITALY 19200 ZyX/v32b  F SAN [2]
Sky Link         aDL 39-332-706009 Malgesso  ITALY 14400 HST/v32b  F SAN [3]
Sky Link         aDL 39-332-767277 Malgesso  ITALY 14400 HST/v32   F SAN [4]
Sky Link         aDL 39-332-819044 Malgesso  ITALY 16800 ZyX/v32b  F SAN [5]
Sky Link         aDL 39-332-767329 Malgesso  ITALY 16800 ZyX/v32b  F SAN [6]

-- NEW ZEALAND -----------------------------------------------------------

Bitstream BBS    aXE 64-3-5485321  Nelson       NZ 14400 v32b      F
Pipeline BBS     aXE  09-262-3563  Auckland     NZ 14400 v32b      F
```

```
-- PORTUGAL ------------------------------------------------------------

BIOSMATICA BBS   aE! 351-34-382320 Portugal        14400 v32b      F

==============================================================================
 VOL 93.01   -------< The WoRLD-WiDe AMiGa BBS LiST!(tm) >=======   VOL 93.01
==============================================================================
 PLEASE NOTE: This is no where near complete!  New numbers are constantly
being added, changed, corrected, etc.!  If you know of a system not on this
list, please contact me or pass the info to another sysop.  Thanks!
 To submit numbers for this list, please consult the separate file included
with this archive named "Appl.for-TW-WABL!" (If that file is missing, then
you DO NOT have the OFFICIAL release of this archive).
==============================================================================
```

## 1.23 Application for WWABBS List

```
/// Application for the World-Wide Amiga BBS List!
    ------------------------------------------


             -------< The WoRLD-WiDe AMiGa BBS LiST!(tm) >=======

            - The MONTHLY List of Amiga supported BBS Systems!  -

                (c)1993 Ed Dukeshire, All Rights reserved!
              * Send BBS info & suggestions to Ed Dukeshire *

                     Brought to you courtesy of:
                  The AMiGa AsYLuM Bulletin Board System
                      All Amiga! FidoNet 1:324/134.0
                           AmigaNet 40:700/14.0
                         GEnie address: E.DUKESHIRE
                  Internet:  E.DUKESHIRE@genie.geis.com

                      ==============================

- This is the application to get your BBS listed, changed, etc.!

- Requirements:  Your system MUST support either an Amiga FILE and/or
  MESSAGE base to qualify for this list.

- For each line you have, please list each number you wish the caller
  to know about.

- Send the application to Ed Dukeshire by any means noted above.

- If you wish to have your bbs removed from future lists, just leave
  me a message either through NetMail, Comment to Sysop (on my system),
  or by reaching me on GEnie (E.DUKESHIRE).

- This is the format used for TW-WABL!:
```

```
Amiga Asylum     aXE 508-372-2258  Haverhill    MA 14400 HST/v32b  AF
    ^            ^ ^       ^            ^       ^    ^       ^     ^^
    |            | |       |            |       |    |       |     ||
 bbs name        | |   bbs number     city   state   |    modem    ||
                 | |                             highest    type    | \
                / bbs software (1st 2 letters)     baud            |  \
               /  * consult list for software       supported      | FidoNet
              /                   abbrievations                    |
     your bbs is run on ?                                          |
           a=Amiga                                            AmigaNet
           i=IBM

==============================================================================

Please add the following to TW-WABL! -- (just attach the information)

Bbs Name         cS  Phone Number  City         St  Baud ModemType Nets Line
------------------------------------------------------------------------------


------------------------------------------------------------------------------
```

## 1.24 Holonet

```
/// Holonet:  Inexpensive Internet Access
    -------------------------------------


                                *** HOLONET ***


HoloNet is an easy to use Internet Access BBS.

HoloNet is based on custom BBS software which provides an easy to use menu
driven interface.  HoloNet is ideal for those looking for an easy way to
use Internet services.  HoloNet does not currently provide UNIX shell
access.

Services include:

    o  Convenient Access
       A local call in 850+ cities nationwide.

    o  Online Publications
       Include USA Today Decisionline, Newsbytes, Datanet Computer News,
       Eeeekbits, and Boardwatch Magazine.

    o  USENET
       Averages over 30MB of USENET news per day.  The following news
       readers are available: NN, TIN, and RN.

    o  Internet E-Mail
       Members have an Internet E-mail address similar to:
       member@holonet.net
```

```
    o  Internet Access
       Access to telnet, talk, finger, IRC, and FTP.
       (note: you must comply with the policies of any networks you use)

    o  Single and Multi-player Games
       Board, card, fantasy, and puzzle games.

    o  Support for Eudora
       Excellent off-line Macintosh e-mail reader.

    o  UUCP E-mail and USENET feeds
       Link LAN E-mail systems and BBSes to the Internet.

How to try HoloNet for FREE:
      Telnet: holonet.net
       Modem: 510-704-1058 (Berkeley, CA) at 1200, 2400, 9600, or
              14400 bps.  There are free demo numbers nationwide, for an
              automated response containg a list of access numbers, send
              e-mail to access@holonet.mailer.net

How to get more information:
      E-mail: info@holonet.net
       Modem: 510-704-1058 at 1200, 2400, 9600, or 14400bps
       Voice: 510-704-0160
         Fax: 510-704-8019

HoloNet is a service mark of Information Access Technologies, Inc.

           Copyright © 1992 Information Access Techologies, Inc.
                          All Rights Reserved.
```

## 1.25 PageMaker 5.0

```
/// PAGEMAKER 5.0 STR InfoFile
    --------------------------


                              ALDUS PAGEMAKER 5.0
                             Macintosh and Windows

                           ABSOLUTE PUBLISHING POWER


NEW FEATURES IN 5.0!  Aldus(R) PageMaker(R) 5.0 gives you absolute power to
produce professional-quality publications. With more than 100 new or
enhanced features, PageMaker 5.0 delivers remarkable advancements in
control, integration, and versatility.

Version 5.0 introduces many new features for increased productivity and
greater freedom of design, chief among them incremental rotation of both
text and graphics, the ability to open and work on more than one
publication at a time, and built-in process-color separation.

What's more, the Control palette and Aldus Additions technology, both
```

brand-new under Windows and significantly enhanced for the Macintosh version, offer you the creative freedom and performance you need to design and produce world-class publications of virtually any kind.

MAXIMUM PRECISION AND CONTROL

Rotation and skewing of text and graphics in 0.01! increments

Horizontal and vertical reflection of objects

Intuitive Control palette to position, scale, or crop objects and select the type attributes of individual characters or whole paragraphs

Numerically exact positioning and rotation of any object, from its center or any handle

Specific "nudge" amounts for exact positioning

Incrementally rotated inline graphics

Cropping of rotated objects

Text mode of the palette visible in layout or story editor views

Numeric kerning

Baseline shift

Process-color separations of PageMaker text and graphics, as well as imported CMYK TIFF*, DCS, and EPS images, all without leaving PageMaker

Nonconsecutive page-range printing

Object-level overprinting of PageMaker graphics

Printing scalable up to 1600%

Virtually unlimited thumbnails, including from PCL printers

Automatic centering of the page on whatever paper you’re using

More printers’ marks, including date/time stamping, color-control strips, and density-control bars on separations

Overprinting for any spot or process color or tint

Spot-to-process conversion at printing

Choice of printing individual inks of process-color separations

Automatic scaling of the page to the paper size

Separate line and fill attributes

Choice of transparent or opaque dash lines

Support for up to 18 language dictionaries, plus any number of installable hyphenation dictionaries

New search-and-replace capabilities for a character's position and case

Sophisticated kerning and track editing

EFFORTLESS INTEGRATION FEATURES

Many new or improved filters, including:

- PICT-to-Metafile and Metafile-to-PICT conversions

- DXF, WPG, Kodak Photo CD

- GEM and Ventura Publisher%

OLE, using PageMaker as a client application

Ability to embed EPS files in a publication or leave them out, still linked for
ease of updating

Images scanned directly into the PageMaker publication, using the new TWAIN standard

Font mapping for identifying missing fonts in a publication and substituting others, using the PANOSE* editable font- translation list

% With PageMaker 5.0 for Windows only

** With PageMaker 5.0 for the Macintosh only

NEW FEATURES IN 5.0

UNPARALLELED VERSATILITY

Custom line weights from 0.1 to 800 points

Proprietary color libraries, including PANTONE(* (spot, process, and Euroscale), Trumatch, Focoltone, and Dainippon

Ability to create you own color libraries and reuse them

Spot colors, process colors, or tints of either

ALDUS ADDITIONS

Extend PageMaker's capabilities for specific publishing scenarios, simplify and speed up routine tasks, or write your own Addition scripts to further customize PageMaker.

Both versions of PageMaker 5.0 come with a wide range of easy-to-install Additions, each addressing common publishing needs:

CREATING DESIGN/PRODUCTION SHORTCUTS

- Build Booklet
- Drop Cap
- Group It
- Keyliner
- Open Template
- Printer Styles
- Sort Pages

MANAGING TEXT AND TYPOGRAPHY

- Add Cont'd Line
- Balance Columns
- Bullets and Numbering
- Convert Ventura File
- Edit All Stories
- Edit Tracks
- Expert Kerning
- Find Overset Text
- List Styles Used
- Running Headers/Footers
- Traverse Text Blocks

GETTING INFORMATION ABOUT TEXT

- Display Pub Info
- Display Story Info
- Display Text Block Info

GAINING ACCESS TO ADDITION SCRIPTS

- Run Script
- Run Script Repeatedly**

AN EVEN MORE NATURAL, INTUITIVE INTERFACE

Ability to open and work on as many Page-Maker publications as your system will allow;

Ability to "drag and drop" text and objects among open publications

Tile and Cascade features for organizing publications on the screen

Listing of all open publications for easily navigating among open publications

Library palette for storing common images (with "drag and drop")

Compatibility with Aldus( Fetch* image cataloging and retrieval program‘

Custom magnification (up to 800%) for zooming in to a particular part of the page

Ability to edit rotated text directly in a layout (even the cursor is rotated!)

Automatic text flow, without having to display every page

Keyboard shortcuts quickly accessible in the Control palette

Automatic resizing of Indents/tabs ruler according to the size of your screen display

Global preferences for story editor settings

Easily removable ruler guides

Redesigned print dialog boxes

Helpful suggestions from the PostScript error handler to help solve common printing problems

Color swatches on the improved Colors palette

Automatic appearance of colors used inimported EPS files

Visual distinction between process colors, spot colors, tints, and imported EPS colors

Line and fill settings specifiable on Colors palette

## SYSTEM RECOMMENDATIONS

### WINDOWS

On an IBM or compatible PC, Aldus PageMaker 5.0 requires Microsoft Windows 3.1 (or later) and Windows 3.1-compatible hardware.

A 486- or 386-based computer is recommended, with 4MB of RAM, an 80MB hard drive, a high-resolution graphics adaptor card, and a mouse.

A PostScript-language or PCL laser printer, color printer, or imagesetter

is required for output.

MACINTOSH

On the Apple Macintosh, PageMaker is System 7 savvy. It also runs under System 6.0.7 with Finder 6.1.7 or later.

Any Macintosh II series, Quadra, or SE/30 computer is recommended, with 5P8MB of RAM and an 80MB hard drive.

A color, grayscale, or black-and-white device, such as a PostScript-compatible or QuickDraw-compatible laser printer, or a PostScript-language imagesetter, is required for output.

NEW UNDER WINDOWS (contained in Mac PM 4.2)

PageMaker 5.0 is, of course, file-compatible on the Macintosh and Windows

platforms, and the new and enhanced features shown elsewhere on this brochure apply to both versions. In addition, users of PageMaker for Windows will appreciate these new features, which first appeared in PageMaker 4.2 for the Macintosh:

FOR PRECISION AND CONTROL . . .

Automatic true typographers' quotation marks

Baseline-to-baseline leading

Multiple-paste command, speeding up step-and-repeat work

FOR VERSATILITY . . .

Page sizes up to 42" x 42"

Option to unlink files

Standalone Dictionary Editor utility

No limit to the number of copies printed at once

AND, ON THE FAMOUS PAGEMAKER INTERFACE . . .

"Apply" button in the Indents/tabs dialog box

Keyboard shortcuts for applying styles

Options to save files faster or smaller

Interruptible screen redraw

Double-click shortcut to reset zero point

PageMaker 5.0 features significant advances in precision and control, smooth integration with other software and hardware, and expanded versatility in the wide range of printed communications it can produce.

With the advent of version 5.0, product functions are virtually identical under the Windows and Macintosh operating systems-so much so that customers will receive the same user manual for both computing environments.

"PageMaker 5.0 is the most ambitious release of the world's leading desktop publishing product," said Lori Birtley, senior product marketing manager. "Its feature set was designed with a great deal of customer input and is based on more than 500,000 lines of new code. We've received feedback from more than 2,500 beta sites and evaluators, and they're applauding the new features and speed improvements."

Birtley added that customer demand for PageMaker 5.0 has been extremely high, leading to a record number of upgrade orders. "This product is one of the most visible examples of our commitment to providing the best software products for the graphics professional."

Extensive third-party support reflects worldwide leadership

As the world leader in professional page-layout software, PageMaker offers extensive support from third parties. More than 30 books and training manuals about PageMaker 5.0 are being produced. Some 120 Aldus Authorized Trainers in the United States alone offer a variety of levels of end-user training. Many independent developers are readying new Aldus Additions that will continue to extend PageMaker's professional publishing capabilities. And a record number of U.S. and Canadian service bureaus are becoming members of the Aldus Authorized Imaging Center program.

To coincide with the recent introduction of PageMaker 5.0, Aldus has created special support programs for service providers, such as service bureaus and imaging centers. These programs offer, among others, regular technical bulletins, toll-free telephone access to specially trained support technicians, and discounts on Aldus software. In addition, a specially trained team of Aldus product experts has been leading seminars throughout the country. The seminars give service providers key information about the new PageMaker so they can be ready for the product when they begin receiving PageMaker 5.0 files.

In the PageMaker box itself, Aldus has included its Commercial Printing Guide, which offers help in preparing PageMaker files for prepress production, as well as tips on how to work with service bureaus.

Superior features meet the highest publishing standards

PageMaker 5.0 rotates and skews text and graphics in 0.01-degree increments, along with horizontal and vertical reflection of objects. The user can also edit rotated text and crop rotated graphics directly in page layout view. The Control palette affords precise placement and sizing of both text and graphics on the page.

Aldus has completely rewritten the PostScript printing code in PageMaker 5.0. The product brings to the market the highest quality and fastest throughput for virtually any kind of printed communication. Printing speeds, including those for background printing, are up to twice as fast as those of the nearest competitor. The Print dialog box has been redesigned to allow for pages to be printed in any sequence or group of sequences-a significant time saving. Crop, registration, and plate identification are among the printers' marks PageMaker 5.0 offers. Service

bureaus and end-users alike will benefit from its new custom printing options. For example, it's now possible to define and save print settings and to send multiple files with different settings to an output device simultaneously.

PageMaker 5.0 for Windows includes many new or improved import and export filters, such as Kodak Photo CD, DXF, WordPerfect Graphics, and Metafile/PICT conversion. The product supports OLE (as a client application) on both Windows and Macintosh systems, as well as the new TWAIN standard for direct scanning. The PANOSE font mapper, which identifies a publication's missing fonts and then substitutes other, available fonts, will also be shipped with PageMaker 5.0.

Built-in Aldus Additions technology lets users tailor PageMaker operations to meet their specific publishing needs. End-users can create their own PageMaker scripts, while third-party developers can use the technology to create Additions that give PageMaker new capabilities. More than 20 Aldus Additions are included with each version of PageMaker 5.0. Several-including Expert Kerning, which automatically adjusts the spacing between characters, and Edit Tracks, for customizing font tracking information on a point-size basis-enhance the already strong typographic capabilities in PageMaker. Other Additions are supplied for grouping objects, sorting pages, and creating running headers and footers.

PageMaker now produces process-color separations of complete pages-including text and graphics, as well as imported CMYK TIFF, DCS, and EPS images. The number of color libraries has been increased to include Dainippon, Focoltone, Munsell, Toyo, and Trumatch, as well as the PANTONE spot, process, and Euroscale definitions. Users can also create their own custom color libraries.

The product now offers the ability to open virtually any number of publications simultaneously. Tile and cascade capabilities organize the publications on screen. Customers can "drag and drop" text and graphics between open publications-saving significant time and effort. The new Library palette stores frequently used images, again with drag-and-drop capability.

System configuration

Aldus PageMaker 5.0 for Windows requires Microsoft Windows 3.1 and Windows 3.1-compatible hardware. A 486 or 386-based DOS-compatible computer is recommended, with 4MB of RAM, an 80MB hard drive, a high-resolution graphics adaptor card, and a mouse.

Technical support and pricing

First-time purchasers of PageMaker 5.0 will be able to take advantage of an innovative product-support program: For 90 days from their first telephone call for assistance, support technicians will be available to them 24 hours a day, 7 days a week. After the 90 days, 24-hour support will be offered to those customers who subscribe to the Aldus CustomerFirst extended-support program.

The suggested retail price of PageMaker 5.0 is $895 (U.S.). Customers who purchased version 4.0 (for Windows) after January 1, 1993, are eligible for a free upgrade to version 5.0, if they return their product

registration card and the dated original proof of purchase. Customers who purchased PageMaker 4.0 or an earlier Windows version before 1993 can upgrade for $150 (U.S.). Upgrades are available directly from Aldus or from Aldus dealers. Greater discounts apply for customers who have a service contract with Aldus.

Aldus Europe and Aldus Pacific Rim will announce localized language versions and support and upgrade policies for other markets shortly.

Aldus Corporation (NASDAQ: ALDC) creates computer software solutions that help people throughout the world effectively communicate information and ideas. The company focuses on three lines of business: applications for the professional publishing and prepress markets; applications for the general consumer market; and service and support programs for professional end-users. Aldus has subsidiaries in Europe, Asia, and the Pacific Rim serving a worldwide network of dealers and distributors.

Aldus Corporation
411 First Avenue
South Seattle, WA 98104-2871 U.S.A.
Tel. (1) 206 628 2320

Aldus, the Aldus logo, and PageMaker are registered trademarks, TIFF is a trademark, and CustomerFirst is a registered service mark of Aldus Corporation. Other product and corporate names may be trademarks or registered trademarks of other companies, and are used only for explanation and to the owners' benefit, without intent to infringe.

## 1.26 NVN

/// NVN WANTS YOU! Another Network Supports Amiga!
---

National Videotext Network (NVN)

National Videotext Network (NVN) has recently added an Amiga Forum to it's growing lists of available services. The Amiga Forum is ready and waiting for you!

Order an extended NVN Membership of 6 or 12 months, pay for it in advance and receive a bonus in connect time at no additional charge. Choose from two subscription plans:

6-Month Membership
---

Pay just $30 for a 6-month Membership and receive a usage credit that entitles you to $15 of connect-time in the Premium services of your choice.

Your total savings using this plan would be over $20!*

12 Month Membership
-------------------

Pay $50 for a full year's Membership and get even more free time online.
We'll give you a $25 usage credit to use in your favorite Premium services
or try out new ones.  You could save as much as $45.*

For more information about either of these plans, give us a call at
1-800-336-9096.

-=* 9600 BAUD USERS *=-
$6/hour non-prime time - $9/hour prime time

You can join NVN one of two ways.
By voice phone 1-800-336-9096 (Client Services)
or
via modem phone 1-800-336-9092.

## 1.27 BIX

/// BIX - Byte Information Exchange  Lots of information!
    ------------------------------

Give BIX a try with our new 5 for $5 offer!

Join BIX today and get 5 hours of evening and weekend access for just
$5.00! Use the rest of the calendar month to explore BIX, with the
option of continuing for only $13 per month. Further details and complete
rate information are provided during registration.

Using any communications program, dial 1-800-695-4882. At the "logon"
prompt enter bix. Then at the "name?" prompt enter bix.amw37.

Questions? Call us at 1-800-695-4775 (voice). Or fax to 617-491-6642.
Send Internet mail to bix@genvid.com

## 1.28 Reader Mail

/// Reader Mail!  The Readers Speak!
    ------------

To: RNiles
From: T-Water
Subject: AR 1.20
Date: Mon,  9 Aug 93 15:53:56 PDT

Lines: 32

August 9, 1993

Hello Robert and the gang at Amiga Report,

I would just like to comment on your article in Amiga Report 1.20 regarding the uploading of files to BBS's. I am the sysop of FileWorks and I have been doing the descriptions of files on my BBS like you suggested since I started it back in April of 1991. I don't necessarily follow the naming conventions, I usually give it the most descriptive filename I can in 8.3 characters without a version number but I always give the version number in the description along with the full name of the program.

I encourage you and anyone else to give my BBS a call and be able to determine if you want a file or not at a glance. Files are available for downloading on first call.

Phone numbers are:

(716) 377-0719 14.4 DS HST
(716) 377-3695 12-2400 BPS

Thank you for the great work on Amiga Report. I enjoy reading each and every article. Its always a popular download on my BBS.

Sincerely,

Tom Waterstraat
SysOp of FileWorks
FidoNet 1:2613/278

---

From: IN%"rickh@cap.gwu.edu"
To: IN%"rob_g@delphi.com"
CC:
Subj: a program you should see/hear

Mr. Glover,

I am attempting to proliferate a freeware program for the Amiga that implements an entirely new color-organ algorithm, which causes music and colors to sympathize better than any previous system. This program for the Amiga is currently the only decent implementation of this new system. The program is at the various aminet archive sites, but the most recent version isn't yet. I will append the archive access info and the docfile for the program. I urge you to see to it that some member of your staff reviews the

program. Any assistance I can offer will be of the utmost priority.

Thanks!

~~~~~~~~~~~~~~~

Attention midi/Amigans!

I'd like to inform you of a freebie you haven't seen before.
The archive cycluphonics.lzh contains a program called mcf
that takes midi coming into an Amiga and converts pitches
into changes in the color palette of a screen. The program
uses a new algorithm that causes the colors to sympathize
noticeably with the music. It's very pleasant and very
different. I am now in a position to provide e-mail support
for the program at
             rickh@cap.gwu.edu
    or voice (202) 364-4424    USA    anytime.

The archive may be obtained at midi ug dc (local bbs) or

Host plaza.aarnet.edu.au
    Location: /micros/amiga/incoming/misc
  FILE -r--rw-r--      17969  Aug 27 1992  CycLuPhonics.LZH
Host amiga.physik.unizh.ch
  : /pub/aminet/mus/midi
Host rs3.hrz.th-darmstadt.de
  : /pub/machines/amiga/aminet/mus/midi
Host quepasa.cs.tu-berlin.de
  : /pub/amiga/uni-kl/aminet/mus/midi
Host reseq.regent.e-technik.tu-muenchen.de
  : /informatik.public/comp/platforms/amiga/aminet/mus/midi
Host oes.orst.edu
  : /pub/mirror/amiga.physik.unizh.ch/amiga/mus/midi
Host wuarchive.wustl.edu
  : /mirrors4/amiga.physik.unizh.ch/amiga/mus/midi
  : /systems/amiga/incoming/misc
Host ftp.luth.se
  : /pub/amiga/mus/midi

  ....or contact me and I'll do my best to get you a fresh copy.
          Rick Hohensee

Rick Hohensee             (202)364-4424
internet    rickh@cap.gwu.edu
p.o. box 11340 washington d.c. 20008

may 1   1993

Midi Cycluphonics Documentation

CONTENTS  ( but read the whole file first )
     Contents  ..................... line 10
~~~~~~~~~~~~~~~

what ..... line 18
how to ..... line 61
get started ..... line 135
cycluphonics the concept ..... line 144
coming attractions ..... line 206

WHAT

The archive cycluph.lzh contains a freeware program for the Amiga called 'midi cycluphonics'. The most recent version as of this writing is the file mcf3.( mcf4) The archive also contains a variety of gizmos to go with the program including some pictures I did, an amiga midi library by Pregnant Badger, and the pic viewer 'sho'.

'Midi Cycluphonics' is an implementation of a system I have devised which I call 'cycluphonics'. Cycluphonics generally is a way to correlate musical pitches to colors or vice versa which is not specific to computers. Midi cycluphonics was written by Jim Vacarro ph.D. after much begging by me and after he saw my attempt to do cycluphonics in 16 colors on a c64, i.e. out of pity(The c64 program is called 'colorg', and isn't that bad, actually).

Cycluphonics differs from previous color-organ-like systems I am aware of in that it maps a color wheel to a cycle-of-fifths instead of a chromatic or other scale. This method causes the music and the visuals to be somewhat 'sympathetic', as Jim Willis so aptly put it. Because the spacial and harmonic reationships between the notes on a cycle-of-fifths are quite similar to the relationships between points on a color wheel, a direct mapping between the two will result in similar feelings being implied by visuals and music that are linked cycluphonically. The existence of such a relationship has been suspected since antiquity.

Mcf3 accepts midi note events, converts them to colors , blends them if appropriate, and changes the color palette of a screen to the in-coming music. It is still in the experimental stage and we are learning as we go, but it does work. The environment it works in is still rather restricted, but it works well enough for someone to decide what they think of cycluphonics, and it works well enough for an amigan with midi gear to do some rather unusual stuff.

The environment mcf3 prefers is an Amiga with an installed midi library, some external device putting midi note events at the serial port, and a 32 color screen to process the colors of. Mcf3 was written and tested initially with another Amiga running Deluxe Music as the midi source, or a cheap midi keyboard, or Miracle keyboard sequences. We have not come up with a way to run mcf3 on a single Amiga and get visuals and sound simultaneously. Another problem , which may be solved soon, is that mcf3 expects every note-on event to have an accompanying note-off event. This is crucial to note/color blending, but this is not as bad as the single platform challenge.

HOW TO

So ya wanna see some music, eh kid? Turn on your source of midi to the Amiga. Put a 32 color image such as the enclosed 'pics/barsdots' up on the screen. The enclosed image viewer 'sho' doesn't cycle colors, which would conflict with mcf3, so if you want to use an image that cycles by itself use sho. Using the mouse, drag the picture down close to the bottom of the screen. Run mcf3. Mcf3 will put up it's window ( You might also want to run

an editor window of this file initially.) It's a standard ados window titled MidiCycluphonics with the basic window gadgets. In the window are a variety of program-specific gadgets. The first row of almost-square gadgets are ....

CYCLO Don't click this one yet. It activates cycluphonics but it requires some setup. This one will be hi-lited if it's on.

SCREEN GRAB This is the one you have to click before CYCLO. This one grabs the color palette of the top-most screen for the use of mcf3. This is a bit of a hack, since it violates ados protocols. This means you have to quit mcf3 before removing your image screen or you'll guru. Be careful dragging your image screen when you've hit this gadget.

RESTORE PALETTE which puts your image's original coloration back.

USE C-Y-M stands for cyan, magenta and yellow. these are the primary colors when dealing with pigments, i.e. subtractive synthesis. This is complementary to RGB which is add-itive synthesis. Jim and I prefer CYM. This one will also be hi-lited to indicate it's state.

FLUSH COLORS Mcf3 keeps a running average of all notes currently active. If you don't get a note-off for every note-on, notes will stay in the average forever and the resulting colors will get monotonous. This gadget clears the average. Right now the actual solution to this problem is to use midi info with balanced note-ons and offs, like organ music. sigh.

REDO COLORS This gadget causes a recompute of the table mcf3 uses to assign colors to notes. That is, it recalculates the formula (in the window) hue=blahblahblah. You can get started without worrying about this one.

That's the top row. The ones you need to get started are SCREEN GRAB and CYCLO, in that time order.

Then there's a line of text in the window, 'cycle on event', it says. This means that the next line of gadgets determines when and how often mcf3 computes a new color and cycles it (fifos it?) into the image. If you click em all off nothing will happen. If only 'note on' is on a new color will be computed and added whenever mcf3 gets a note-on event. These are additive. The two clock based ones require non-zero values to be meaningful. A jiffy is one sixtieth of a second (ntsc). By using note events the cycling will be faster when the music is busier. By using one of the clocks you get a constant-rate cycling. The clock counter numbers let you vary the rate. These guys are also hi-lited when active.

Then there's that zany formula. It's there mostly to compare cycluphonics to other transforms. It lets you change the basic algorithm of mcf3 so you can see what you think of cycluphonics compared to some arbitrary mapping of notes to colors. This is included for the scientifically rigorous, but the 'offset' value, which is initially 0, can be changed without violating cycluphonics. In fact, it's rather important to cycluphonics. By varying this value between 0 and 360 you can control the overal color of a piece of music. If the offset variable is 0, then the note C gets mapped to red. The

rest of the color wheel is then mapped to the cycle of fifths accordingly. Change the offset to 120 and C becomes green. In other words, this is how you rotate the two wheels relative to each other. I'll explain the rest of the formula in some obscure journal someday. Promise.

The lower-most semantic object in the mcf3 window ( pretentious much?) is the 'saturation' variable. It defaults to 12%. Saturation represents purity of hue. Thats all I know. Play with it. Think of it as art.

So, to get started you put up a 32 color screen image, drag it down so you can leave it as the topmost screen while you do some other stuff, run mcf3, click on SCREEN GRAB which steals the color palette of that picture you've got dragged 'down' in terms of screen x,y coordinates but which is still the topmost screen in terms of ados screens, send your Amiga some midi with plenty of note-offs, cross your fingers and click CYCLO. Carefully drag the pic up so you can enjoy cycluphonics. *Something* should happen if you leave all the other gadgets and variables at the defaults.

CYCLUPHONICS THE CONCEPT

For ages musicians and visual artists have tried to correlate sounds and colors. Some famous composers have been convinced that middle C is a particular hue. The artist Kandinski, who was perhaps THE father of abstract art, was seeking in the visual realm the self-meaningfulness of music, i.e. the way that music affects the listener without necessarily relying on audio likenesses of the real world. Aristotle compared the combination of pitches to the blending of pigments. He noted that a pure harmonious interval is a distict sound from it's two component pitches, much as a blend of two pigments results in a distinct new color. Sharp cookie, that Aristotle. Cycluphonics doesn't care what color middle C is, as long as it stays a particular color for a while. The choice of what color middle C is is arbitrary. The choice is yours with the mcf3 'offset' variable. Rather, cycluphonics is based on a 'same difference' mechanism. A certain type of difference between two notes can be systematically held to be analagous to a certain type of difference between two colors. Cycluphonics considers the musical interval known as a perfect fifth to be analagous to the difference/similarity between two adjacent hues on a 12 hue color wheel, regardless of the note names of the notes or the exact colors in question. A musical fifth is analagous to a 30 degree interval on a color wheel. It doesn't have to be more specific than that. By extending the analogy to say that a cycle of fifths is analagous to a color wheel we have cycluphonics, a system which can be implemented on a variety of automata.

The cycle of fifths is taught early on in any formal music course. It is usually used in stepwise fashion to allow changing the key of a piece of music in pleasing smooth steps rather than abruptly. It is also useful in other ways, but it is usually thought of as something you traverse in steps. It is when you look at the geometry of the cycle of fifths as a whole, and by interval name from some arbitrary starting point rather than by note name, that you see it's remarkable 'analagousness' to a color wheel.

The cycle of fifths, starting at C, is.....
C G D A E B G flat D flat A flat E flat B flat F and C again.

C

```
        F            G
    B flat               D          CYCLE OF FIFTHS BY NOTE NAMES


  E flat                    A


    A flat               E

        D flat        B
             G flat
```

If this sequence is clockwise around a ring then counter-clockwise is the cycle of fourths. Any two adjacent notes on this ring are seven semitones apart, which is the most harmonious interval between two notes of different names. This interval is called the perfect fifth. This construct has a number of fascinating properties. Notice that if this is a ring,then C is opposite G flat. Nearly opposite C on either side of G flat are D flat and B. These three notes all clash harshly with C, much as colors opposite each other on a color wheel clash. This similarity of harmonic geometry is consistent, albeit approximate, all the way around the wheels. Also, these relationships work with any keynote.

COMING ATTRACTIONS

This section constitutes predicting the future, which is a tricky business, but here goes. The note-on note-off problem is a bug, but it may be squashed soon, I hope. I am eager to see an AGA version of mcf. 256 colors would make a big difference. A friend of Jim's and mine has threatened to do a version of cycluphonics on his intel-based machine. Controls for mcf could be included in with the music by dedicating a sliver of the midi info to mcf. I don't know if there's an anim player that works with mcf. I imagine that at some point there will be. Jim Willis has strongly suggested that mcf be made aware of 'general midi'. Mcf could recieve features derived from my investigations into cycluphonic motion. I'd like to see, and may write, a simpler more demo-like implementation of cycluphonics that loads and runs on a single stock Amiga without external gear. I'd like to know how to make mcf as useful as possible to Toaster mechanics. Rather than a color palette, mcf could control a red green and blue spotlight for live music, where one musician is producing midi. I've done some work on a stringed instrument that could do cycluphonics by analog means, sort of a guitar that plugs into a tv. And on and on. Suggestions are nice, and I appreciate the spirit in which they are given, but please keep in mind that I've been thinking about this and related stuff for a long time. What I really need, and what would be best for the Amiga community, is for people to try mcf3, make thier own assessment of the potential of cycluphonics, do stuff with it, preferably for public consumption, and spread the word, i.e. the archive. As of this writing there has been no public use of cycluphonics.

## 1.29 A Call for help

```
/// A Call For Help!
    ----------------
```

By Robert Niles

A while ago Amiga Report moved to the AmigaGuide format for a variety of reasons. One of these reasons was so that we could include pictures within the magazine in a easy, convenient way.

As most pictures are somewhat large, and we really don't want to start creating an archive that is a burden to download, we would like to ask someone to create a IFF brush viewing program that we may use here with the Amiga Report magazine. We wouldn't be able to pay you for your time and efforts, but we would give you the credit due, and we would be extremely grateful!

What we are looking for is this:

- A program that works well within the SHELL environment.
- Be able to take arguments (to load the picture brush file).
- Load and display 2 to 32 color IFF brushes.
- Create a border around the brush, automatically adjusting to the size of the brush.
- Have the window draggable and with a close gadget.
- Be as small as possible in size, using as little memory as possible.
- Be compatible with 1.3 systems on up to 3.0 systems.

Can this be done??

If so, this will enable us to load up picture files, and use only as much memory as needed to display what needs to be shown.

Again, we wouldn't be able to pay you, but we do not ask for any rights over the program. We would just like to be able to include it within our distribution archive as needed.

Send questions, comments to Robert Glover or to Robert Niles.

Thank you,

Amiga Report

## 1.30 Dealer Directory

/// Dealer Directory Serving our readers!

Almathera Systems Ltd
Challenge House
618 Mitcham Rd
Croydon, Surrey
CR9 3AU England
VOICE: (UK) 081 683 6418

Internet: (Sales) almathera@cix.compulink.co.uk
(Technical) jralph@cix.compulink.co.uk

Amigability Computers
P.O. Box 572
Plantsville, CT 06479
VOICE: 203-276-8175
Internet: amiga@phantm.UUCP
BIX: jbasile
(Send E-mail to subscribe to our mailing list)

Apogee Technologies
1851 University Parkway
Sarasota, FL 34243
VOICE: 813-355-6121
Portal: Apogee
Internet: Apogee@cup.portal.com

Armadillo Brothers
753 East 3300 South
Salt Lake City, Utah
VOICE: 801-484-2791
GEnie: B.GRAY

Computers International, Inc.
5415 Hixson Pike
Chattanooga, TN 37343
VOICE: 615-843-0630

Digital Arts
122 West 6th Street
Bloomington, IN 47404
VOICE: (812)330-0124
FAX: (812)330-0126
BIX: msears

Finetastic Computers
721 Washington Street
Norwood, MA 02062
VOICE: 617-762-4166
Portal: FinetasticComputers
Internet: FinetasticComputers@cup.portal.com

HT Electronics
275 North Mathilda Avenue
Sunnyvale, CA 94086
VOICE: 408-737-0900
FAX: 408-245-3109
Portal: HT Electronics
Internet: HT Electronics@cup.portal.com

MicroSearch
9000 US 59 South, Suite 330
Houston, Texas
VOICE: 713-988-2818
FAX: 713-995-4994

Mr. Hardware Computers
P.O. Box 148
59 Storey Ave.
Central Islip, NY 11722
VOICE: 516-234-8110
FAX: 516-234-8110
A.M.U.G. BBS: 516-234-6046

PSI Animations
17924 SW Pilkington Road
Lake Oswego, OR 97035
VOICE: 503-624-8185
Internet: PSIANIM@agora.rain.com

Software Plus Chicago
3100 W Peterson Avenue
Chicago, Illinois
VOICE: 312-338-6100

(Dealers: To have your name added, please send Email!)

## 1.31 Humor Department

/// The Humor Department Jokes, Quotes, Insults, Shameless Plugs
---

I dunno if any of you listen to NPR (Natioanl Public Radio) in the
morning, but today (Sun, 10Apr93) there was a news interview with a
bankruptcy judge who let this couple file bankruptcy. The couple's
$25,000 debt to this bank was dissolved but the bank's computer kept
sending the couple mail stating that they need to pay this money. The
judge ordered the bank to clear the couple's name from the computer so
that they would stop getting these notices. Well the computer kept on
sending them even though the bank cleared the couple out. After a while,
and with the judge believing that the bank was trying to resolve the
problem with the computer, the Judge finally issued a court order
TO THE COMPUTER stating that if the computer did not stop, the computer
would be in comtempt of court and fined 50MB of hard drive space and
10MB of RAM. Well the computer kept it up and so the judge ordered
THE COMPUTER to give up the 50MB of HD space and 10MB of RAM, later
the notices stopped, and found with a note from the computer signed

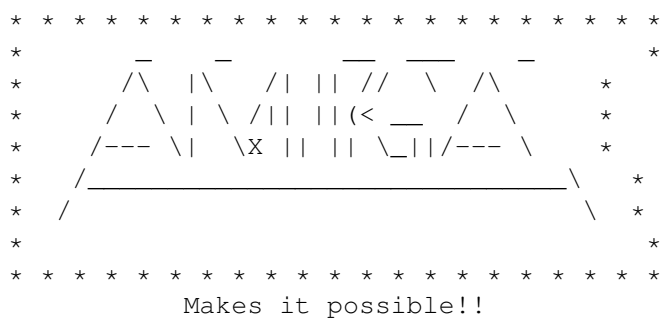
with a bar code, was a 50MB HD and a strip of chips for 10MB of RAM.
...and who says the court system doesn't work!?! (This IS a TRUE story!!).

## 1.32 In Closing

```
==============================================================================
                  Amiga Report International Online Magazine
August 20, 1993         * YOUR INDEPENDENT NEWS SOURCE *            No. 1.21
                     Copyright © 1993 All Rights Reserved
==============================================================================
```

Views, Opinions and Articles presented herein are not necessarily those of the editors and staff of Amiga Report International Online Magazine or of STR Publications. Permission to reprint articles is hereby granted, unless otherwise noted. Reprints must, without exception, include the name of the publication, date, issue number and the author's name. Amiga Report and/or portions therein may not be edited in any way without prior written permission. However, translation into a language other than English is acceptble, provided the original meaning is not altered. Amiga Report may be distributed on privately owned not-for-profit bulletin board systems (fees to cover cost of operation are acceptable), and major online services such as (but not limited to) Delphi and Portal. Distribution on public domain disks is acceptable provided proceeds are only to cover the cost of the disk (e.g. no more than $5 US). Distribution on for-profit magazine cover disks requires written permission from the editor or publisher. Amiga Report is a not-for-profit publication. Amiga Report, at the time of pubication, is believed reasonably accurate. Amiga Report, its staff and conributors are not and cannot be held responsible for the use or misuse of information contained herein or the results obtained there from. Amiga Report is not affiliated with Commodore-Amiga, Inc., Commodore Business Machines, Ltd., or any other Amiga publication in any way.

```
==============================================================================
```




## 1.33 Amiga Report 1.21 Main Menu

| | |
|---|---|
| Columns and Features | News, Reviews, and More! |
| About AMIGA REPORT | Staff, Copyright information |
| Dealer Directory | Dealer Addresses and Numbers |

Commercial Online Services  Sign-up information
FTP Announcements  Files available for FTP
AR Distribution Sites  Where to get AMIGA REPORT

/// 08/20/93 Amiga Report 1.21  "Your Weekly Source for Amiga Information"

· The Editor's Desk  · CPU Report  · New Products
· Dealer Directory  · AR Online  · Amiga Tip of the Week
· Emulation Examiner  · PageMaker 5.0  · More Fish on Portal

» World-Wide Amiga BBS List «
» Sneak Peek at GVP's new graphics board «
» NewTek Introduces "The Screamer" «

==========

Amiga Report International Online Magazine
"Your Weekly Source for Amiga Information"
» FEATURING WEEKLY «
Accurate UP-TO-DATE News and Information
Current Events, Original Articles, Tips, Rumors, and Information
Hardware · Software · Corporate · R & D · Imports

==========

PORTAL · DELPHI · FIDO · INTERNET · BIX · NVN

==========

## 1.34 Columns and Features

From the Editor's Desk  Saying it like it is!
CPU Status Report  Computer Products Update
Fred Fish on Portal  900 Fred Fish disks Online
Online Weekly  Amiga Report Online
AR available on WWW  Read it while on the InterNet!
NewTek unveils the SCREAMER  A 3D rendering engine
EGS-28/24 Spectrum from GVP  A New 24-bit Graphics Board
Tip of the Week  There's a better way!
The Emulation Examiner  MS-DOS BridgeBoards
Bountiful Bevelled Buttons  Creating Buttons FUW The Director
AR Special Feature!  The World Wide Amiga BBS List (1st ed.)
Application for the W-WABL  Get your BBS on the World Wide Amiga BBSlist!
PageMaker 5.0  A look at the newest version of PageMaker
Reader Mail  The readers speak!
Amiga Report asks for help!  We need an IFF brush viewer!
The Humor Department  Computer in contempt!

## 1.35 About Amiga Report

For Starters  Where to get AMIGA REPORT
AR Staff  The Editors, and Contributers
In Closing  Copyright Information

## 1.36 Commercial Online Services

| | |
|---|---|
| Delphi | It's getting better all the time! |
| Portal | A great place for Amiga users... |
| Holonet | Inexpensive Internet Access |
| NVN | National Videotex Network |
| InterNet | Subscribe to the AR Mailing List |
| BIX | For Serious Programmers and Developers |

## 1.37 FTP Announcements

| | |
|---|---|
| MagicUserInterface v1.0 | System to create and maintain GUIs |
| ScreenSelect v2.0 | Screen commodity |
| UUxT v2.1 | New UUencode/decode utility |
| AmiTCP/IP release 2.0 | Protocol stack for SANA II interface |
| Amiga Elm v2.0 | Electronic (UUCP) mail reader |

## 1.38 NOVA

* NOVA BBS *
Official Amiga Report Distribution Site
* Running Starnet BBS *
Wayne Stonecipher, Sysop
FidoNet 1:362/508
An Amiga Software Distribution Site (ADS)
615-472-9748 USR DS 16.8 24hrs - 7 days
Cleveland, Tennessee

## 1.39 In The MeanTime

* IN THE MEANTIME BBS *
Official Amiga Report Distribution Site
* Running Starnet BBS *
Robert Niles, Sysop
FidoNet 1:3407/104
509-966-3828 Supra V.32bis 24hrs - 7 days
Yakima, Washington

## 1.40 Cloud's Corner

* CLOUD'S CORNER BBS *
Official Amiga Report Distribution Site
Starnet/MebbsNet Support Site West Coast USA
* Running Starnet BBS *
Larry Cloud, Sysop
FidoNet 1:350/30
206-377-4290 USR HST DS 24hrs - 7 days
Bremerton, Washington

## 1.41 Biosmatica

```
                    * BIOSMATICA BBS *
        Official Amiga Report Distribution Site -- Portugal
                * Running Excelsior/Trapdoor/UUCP *
                       Celso Martinho, Sysop
                         FidoNet  2:361/9
                +351-34-382320  V.32bis  24hrs - 7 days
```

## 1.42 Amiga Junction 9

```
                    * AMIGA JUNCTION 9 *
     Official Amiga Report Distribution Site -- United Kingdom
                   * Running DLG Professional *
                      Stephen Anderson, Sysop
                Internet:  user_name@junct9.royle.org
Line 1  +44 (0)372 271000  14400  V.32bis/HST   Fido 2:253/510
Line 2  +44 (0)372 278000  14400  V.32bis only  Fido 2:253/520
Line 3  +44 (0)372 279000  2400   V.42bis/MNP   Fido 2:253/530
               Sysop Email:  sysadmin@junct9.royle.org
```

## 1.43 p2-1-6

```
                    * BITSTREAM BBS *
          The BBS of the Nelson (NZ) Amiga Users Group
             Official Amiga Report Distribution Site
                  * Running Xenolink 1.0 Z.3 *
                       Glen Roberts, Sysop
                        FidoNet 3:771/850
               +64 3 5485321  Supra V.32bis  24hrs - 7 days
                       Nelson, New Zealand
```

## 1.44 Freeland Mainframe

```
                  * FREELAND MAINFRAME *
               Offical Amiga Report Distribution Site
                   * Running DLG Progessional *
                      John Freeland, SysOp
             206-438-1670  Supra 2400zi
             206-438-2273  Telebit WorldBlazer(v.32bis)
             206-456-6013  Supra v.32bis
                        24hrs - 7 days
                 Internet - freemf.eskimo.com
                       Olympia, Washington
```

## 1.45 LAHO

```
                    * LAHO BBS *
          Official Amiga Report Distribution Site -- Finland
                    * Running MBBS *
                   Juha Makinen,  Sysop
                +358-64-414 1516, V.32/HST
                +358-64-414 0400, V.32/HST
                +358-64-414 6800, V.32/HST
                +358-64-423 1300, V.32 MNP
                    Seinajoki, Finland
```

Our machine is a 386/33 with 20MB of memory, 1GB harddisk and upcoming CD-ROM drive. The BBS software is a Norwegian origin MBBS running in a DesqView window.

We have over 6000 files online (no CD-ROM yet) containing titles for PC and Amiga or both like GIF-pictures, music-modules and text-files. The upload/download ratio is a very lousy 1:100.  (i.e. you upload a 20k file and may download 2MB).

Messages are mainly written in Finnish, but English is widely used by Swedish-speaking and international callers.

Download-access will be granted when asked. Also Amiga-areas are available for those who will need them to avoid 'wars' between PC and Amiga users. Access to sex pictures and stories are only for persons over 18 years and given when requested.

Every user has an access to download filelist (LAHOFIL.ZIP), list of Finnish 24-hour BBS's (BBSLIST.ZIP or BBSLIST.LHA) and every issue of the Amiga Report Magazine (AR101.LHA-AR1??.LHA) on their first call.

The system is 4.5 years old and sponsored by the local telephone company, Vaasan Laanin Puhelin Oy.

```
SysOps:   Lenni Uitti        (Main SysOp)
          Juha Makinen       (SysOp of the Amiga-areas)
          Tero Manninen      (SysOp of the PC-areas)
```

## 1.46 Falling BBS

```
                    * FALLING BBS *
          Official Amiga Report Distribution Site -- Norway
                    * Running ABBS *
                  Christopher Naas, Sysop
              +47 69 256117  V.32bis  24hrs - 7 days
                EMail:    naasc@cnaas.adsp.sub.org
```

## 1.47 Command Line BBS

```
                * COMMAND LINE BBS *
Official Amiga Report Distribution Site -- Canada
    Canada's Amiga Graphics & Animation Source
            * Running AmiExpress BBS *
               Nick Poliwko, Sysop
        416-533-8321  V.32  24hrs - 7 days
                 Toronto, Canada
```

## 1.48 Omaha Amiganet

```
                * OMAHA AMIGANET *
      Official Amiga Report Distribution Site
           * Running DLG Professional *
               Andy Wasserman, Sysop
                  24hrs - 7 days
                 FidoNet  1:285/11
                AmigaNet  40:200/10
          Line 1:  402-333-5110  V.32bis
          Line 2:  402-692-0104  USR DS
                  Omaha, Nebraska
```

## 1.49 Rendezvous BBS

```
                * RENDEZVOUS BBS *
Official Amiga Report Distribution Site - New Zealand
      New Zealand Excelsior! BBS Support Site
      * Running Excelsior! Professional BBS *
                David Dustin, Sysop
      Internet: postmaster@eclipse.acme.gen.nz
    +64 6 3566375  Supra V.32bis  24hrs - 7 days
           Palmerston North, New Zealand
```

## 1.50 Realm of Twilight

```
             * REALM OF TWILIGHT BBS *
  Official Amiga Report Distribution Site -- Canada
            * Running Excelsior! BBS *
             Thorsten Schiller, Sysop
        Usenet: realm.tdkcs.waterloo.on.ca
        UUCP:   ...!uunet.ca!tdkcs!realm
                 FIDO: 1:221/202
                 Fish: 33:33/8
                  24hrs - 7 days
             519-748-9365  (2400 baud)
             519-748-9026  (v.32bis)
                  Ontario, Canada
```

Hardware: Amiga 3000, 105 Meg Quantum, 213 Meg Maxtor, 5 megs RAM

## 1.51 Metnet Triangle

METNET TRIANGLE SYSTEM
Official Amiga Report Distribution Site
UK Support for Mebbsnet
* Running Mebbsnet and Starnet 1.02a *
Jon Witty, Sysop
FIDO: 2:252/129.0

| | | |
|---|---|---|
| Line 1 | 44-482-473871 | 16.8 DS HST |
| Lines 2-7 | 44-482-442251 | 2400 (6 lines) |
| Line 8 | 44-482-491744 | 2400 |
| Line 9 | 44-482-449028 | 2400 |
| Voice helpline | 44-482-491752 | (anytime) |

Fully animated menus + normal menu sets.
500 megs HD - Usual software/messages
Most doors online - Many Sigs - AMIGA AND PC SUPPORT
Very active userbase and busy conference
Precious days and MUD online. AMUL support site.