

**ar201**

COLLABORATORS

	TITLE : ar201		
ACTION	NAME	DATE	SIGNATURE
WRITTEN BY		August 10, 2024	

REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

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Click on the button of the BBS nearest you for information on that system.

» FidoNet Systems «

FREQ the filename "AR.LHA" for the most current issue of Amiga Report!

OMAHA AMIGANET	Omaha, Nebraska
NOVA	Cleveland, Tennessee
CLOUD'S CORNER	Bremerton, Washington
BIOSMATICA	Portugal
AMIGA JUNCTION 9	United Kingdom
BITSTREAM BBS	Nelson, New Zealand
REALM OF TWILIGHT	Ontario, Canada
METNET TRIANGLE	Kingston Upon Hull, England
AMIGA-NIGHT-SYSTEM	Helsinki, Finland
RAMSES THE AMIGA FLYING	France
GATEWAY BBS	Biloxi, Mississippi
TALK CITY	Waukegan, Illinois
AMIGA BBS	Estado de Mexico, Mexico
THE STYGIAN ABYSS	Chicago, Illinois

» Non-FidoNet Systems «

IN THE MEANTIME	.....Yakima, Washington
FREELAND MAINFRAME	.....Olympia, Washington
LAHO	.....Seinajoki, Finland
FALLING	.....Norway
COMMAND LINE	.....Toronto, Canada
RENDEZVOUS	.....New Zealand
LEGUANS BYTE CHANNEL	.....Germany
STINGRAY DATABASE	.....Muelheim/Ruhr, Germany
T.B.P. VIDEO SLATE	.....Rockaway, New Jersey
AMIGA CENTRAL	.....Nashville, Tennessee
CONTINENTAL DRIFT	.....Sydney, Australia
GURU MEDITATION	.....Spain

### 1.3 Amiga Report Main Menu

Columns and Features	News, Reviews, and More!
About AMIGA REPORT	Staff, Copyright information
Dealer Directory	Amiga Dealer Addresses and Numbers
Commercial Online Services	Sign-Up Information
FTP Announcements	New Files Available for FTP
AR Distribution Sites	Where to get AMIGA REPORT

Amiga Report International Online Magazine	Issue No. 2.01	January 7, 1994
"Your Weekly Source for Amiga Information"		

- The Editor's Desk
- The Grapevine
- The Humor Department
- Computer Product News
- Dealer Directory
- Reader Mail
- FTP Announcements
- The Listening Post
- Distribution BBS's

» SPECIAL FEATURES «

CD32 Reviewed.....	Jeffrey J. Peden II
Emulation Rambler.....	Jason Compton
European Outlook.....	Jesper Juul
Usenet Review: Pinball Fantasies AGA.....	Henry Norman
Rumors from the Amiga Side.....	Richard Johnson
CD32 Titles Spot Review.....	Sean Caszatt
Usenet Review: Turrican 3.....	Mark B. Sachs
CD Platform Comparison.....	Harv Laser
Mac vs. PC: A Techincal Comparison.....	Sandberg and Hembree

%  
 DELPHI · PORTAL · FIDO · INTERNET · BIX  
 %

## 1.4 The Editor's Desk

%% The Editor's Desk By Robert Glover %%

Welcome to the new year! I hope 1994 will be as good a year for the Amiga as was 1993. If all goes well, we should see another chipset generation from Commodore, and at least one new machine utilizing that chipset. The AAA design should prove to be one of the greatest computer achievements in a long time, and should finally bring the Amiga back up to snuff with its PC contenders.

As you may have noticed, the look of AR has changed a little. We've done this to freshen things up a bit, as well as break into new ground in a few areas, and get rid of some of the excess fluff that was left around for the few people that don't like AmigaGuide. That's all gone, as we'll be 100% AmigaGuide from now on. You, the readers wanted it, and you got it!

Rob @ AR

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@ @

-----o00- ( ) -00o-----

## 1.5 Delphi

[illegible]

Amiga Report International Online Magazine is available every week in the Amiga SIG on DELPHI. Amiga Report readers are invited to join DELPHI and become a part of the friendly community of Amiga 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 Username: type JOINDELPHI and press RETURN,  
At Password: type AMIGAREPORT and press RETURN.

DELPHI's best plan is the 20/20 plan. It gives you 20 hours each month for the low price of only \$19.95! Additional hours are only \$1.50 each! This covers 1200, 2400 and even 9600 connections!

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## SPECIAL FEATURES

-----

- Complete Internet connection -- Telnet, FTP, IRC, Gopher, E-Mail and more!  
(Internet option is \$3/month extra)
- SIGs for all types of computers -- Amiga, IBM, Macintosh, Atari, etc.
- Large file databases!
- SIGs for hobbies, video games, graphics, and more!
- Business and world news, stock reports, etc.
- Grolier's Electronic Encyclopedia!

DELPHI - It's getting better all the time!

## 1.6 AR Staff

[illegible]



Editor

=====

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## 1.7 Computer Product News

%%  
%% Computer Product News %%  
%%

» Worktime Workout v1.01 «

Results Engineering, Inc. announces the release of Worktime Workout v1.01, a Windows-based video program designed to help prevent Repetitive Stress Injuries through a doctor-approved exercise routine.

Worktime Workout reminds users at an interval they select to take an exercise break, then shows full-motion videos of models performing simple stretches. Worktime Workout also includes on-line Ergonomics Hints and Body Mechanics Hints to help users reduce repetitive stress both at work and at home.

Worktime Workout starts when Windows is launched, and exercise reminders appear automatically. Users can choose which exercises to include in the workout, how many repetitions to perform, and how often to do the workout, from every few minutes to every two hours. The program includes twenty exercises for hand, wrist, eye, jaw, neck, shoulder, and back. A complete 20-exercise workout takes about five minutes.

The exercise program was developed in conjunction with Dr. Paul M. Puziss, a Portland, OR orthopedic surgeon, and Dr. Sandra K. Landis, a Beaverton, OR optometrist.

Worktime Workout requires a 386/SX or faster computer running Dos 5.0 or later and MS-Windows 3.1, plus VGA or better graphics and a mouse. Only 3 Meg of free disk space is required for program and video files. No other hardware is required.

For further information, contact

Results Engineering, Inc.  
P.O. Box 42395  
Portland, OR 97242-0395

Telephone: (503) 232-1497  
Compuserv: 71532,1426  
Internet: results@teleport.com

» The Scientific Amigan «

TITLE

Scientific Amigan

COMPANY

Scientific Amigan  
POB 60685  
Savannah, GA 31420-0685  
Compuserve 72755,135  
Internet waltal@well.sf.ca.usa

AUTHORS

Walter Lounsbery, Publisher/Editor

DESCRIPTION

Scientific Amigan is a new publication devoted to addressing the needs of research, development, and design with the Amiga. This newsletter format monthly provides the technical focus that general Amiga publications lack. Readers benefit from techniques and software developed across a wide range of disciplines, instead of occasional articles that can't get to the desired level of detail. The Scientific Amigan disk library provides a wide range of tools and data for the scientist and engineer; any two disks from the library are provided with the annual subscription to the newsletter. Reprint material is also available as a subscriber service.

Charter subscribers get a special \$10 off of the annual rate, perpetually applied to their subscription renewals. However, this special offer is only extended to subscriptions recieved through the

end of January, 1994.

For more information, please email or write Scientific Amigan at the above address. Sample issues will be available soon after the premier January/February 1994 issue.

#### PRICE

Charter Subscription \$29 per year (available until Feb. 1994)  
Regular Subscription \$39 per year

## 1.8 HWGRCS Patch level 6

» HWGRCS Patch level 6 available «

#### TITLE

HWGRCS

#### VERSION

HWGRCS 5.6 at Amiga Patch Level \_6\_

#### AUTHOR

Ported, enhanced, and maintained by

Heinz Wrobel  
Karlstr. 16  
82131 Gauting  
Germany

<heinz@hwg.muc.de>  
<heinz@edohwg.adsp.sub.org>

FAX +49 89 850 51 25, I prefer email.

#### DESCRIPTION

HWGRCS is a port of RCS 5.6[.0.1] done with SAS/C 6.3.

The Revision Control System (RCS) manages multiple revisions of files. RCS automates the storing, retrieval, logging, identification, and merging of revisions. RCS is useful for text that is revised frequently, for example programs, documentation, graphics, papers, and form letters.

For upgraders from the old RCS 4.x on Fish 281/282:

- HWGRCS supports the RCS\_link feature
- No problems with non-ASCII characters

Special features:

---

- File pattern expansion in all RCS commands
- Support for .a, .asm, .i, .fd, .guide, .ps extensions.
- GNU DIFF 2.6, GNU patch 2.1 and a N\*rtion like LP utility.
- I try to \_support\_ HWGRCS.

## NEW FEATURES

New since patch level 5:

- "-d" and "-M" should now (finally) be truly fixed.
- HWGRCS now uses the POSIX compliant "-x/v".
- LP overhauled.

## ENHANCEMENTS:

- locale.libray is now supported for TZ handling.
- Limited Un\*x filename support on the command line possible.

## SPECIAL REQUIREMENTS

V37, >1MB suggested, HD required.

## HOST NAME

Any Aminet site, e.g. ftp.uni-paderborn.de (131.234.2.32) for users in germany.

## DIRECTORY

/pub/aminet/dev/misc

## FILE NAMES

HWGRCSp6f.lha  
HWGRCSsrcp6f.lha

## PRICE

I don't declare it shareware as it is GNU SW, but donations/gifts for my support are quite welcome! Donations in physical form preferred. Support ~ Gifts, especially for commercial users.

## DISTRIBUTABILITY

RCS is distributable under the Gnu Public License.

For my support of HWGRCS I won't bill you, but I ask for donations (Hear me, commercial users? :-).

## OTHER

---

No bug reports for >~3 months. Did I finally catch them all? Report them for patch 7!

## 1.9 MainActor v1.2

» MainActor v1.2 available for FTP «

### TITLE

MainActor

### VERSION

1.2

### AUTHOR

Markus Moenig  
moenig@pool.informatik.rwth-aachen.de

### DESCRIPTION

MainActor is a modular animation package.

It allows you to create,edit,time and play animations of the provided animation formats.

You can convert any format into any other, allowing you to convert for example a range of pictures into an animation format of your choice, or resave the frames of an animation to an picture format, or simply to convert different picture formats.

The following modules are included in this release:

Animation Loader	Max. Depth	Animation Saver
-----	-----	-----
Universal		
Universal_PicassoII		
Universal_Retina		
DL	8 Bit	
FLI	8 Bit	FLI
FLC	8 Bit	FLC
IFF-Anim5	8 Bit	IFF-Anim5
IFF-Anim7_16	8 Bit	IFF-Anim7_16
IFF-Anim7_32	8 Bit	IFF-Anim7_32
IFF-Anim8_16	8 Bit	IFF-Anim8_16
IFF-Anim8_32	8 Bit	IFF-Anim8_32
IFF-AnimBrush	8 Bit	
Picasso	24 Bit *	Picasso
Picture Loader		Picture Saver
-----		-----
Universal		
Universal_PicassoII		
Universal_Retina		

GIF	8 Bit	
IFF	24 Bit	IFF
PCX	8 Bit	
Workbench-Icon	4 Bit	Workbench-Icon

- \* Only available to registered users of MainActor and legal owners of the Picasso-II board.

#### New features of Version 1.2

- MainActor/MainView now have a center option which allows highly accurate centration of your images or animations.
- New BorderBlank option.
- MainActor has a new window called Project Information Window. The new functions included in the window are:
  - \* An information window which will give you detailed descriptions of your current animation or picture list.
  - \* You can now view the size and time profiles of your projects as a graphical representation.
  - \* You can compare the decompression times of your projects through new timer functions.
- New GIF/FLI/FLC/DL loader modules and FLI/FLC saver modules.
- Chunky pixel modules (GIF/FLI/FLC) will fly if loaded through universal modules which support graphic cards (like Universal\_PicassoII etc.). You can of course also view them on your native chipset as normal.
- Introduction of a new (light) registration package. It does not have the handbook or the disk based updates but is cheaper.
- You can now use the save/append functions again, even if you have not registered MainActor. You will have to deal with requesters though.

#### General Features:

- Intelligent caching/tracking, MainActor can cache your animations and picture lists, if you have not enough memory it will directly access your data from any device. This makes it for example possible to create/edit/play a 400MB animation on your 2MB Amiga.
  - If you run OS 3.0 or higher, you will get an extra speed bonus on animations through the use of the new graphics routines. For OS2.0/2.1 users there are specific routines in the modules, which will give them the best playback speed possible on their system (and my knowledge :)).
  - Under OS 3.0 you will get the extra features of showing pictures or playing animations in a scrollable, resizable window on your MainActor or Workbench screen. The colors will be properly adjusted to your screen
-

attributes.

-MainActor has an arexx port, nearly all functions can be accessed through it. You can for example scale or dither whole animations through the use of an image processor, scripts are included.

#### HOST NAME

MainActor should be available on all Aminet sites.

For Example :

Scandinavia	ftp.luth.se	130.240.16.3
Germany	ftp.uni-kl.de	131.246.9.95
Germany	ftp.cs.tu-berlin.de	130.149.17.7
USA	ftp.wustl.edu	128.252.135.4

#### DIRECTORY

/pub/aminet/gfx/edit

#### FILE NAME

MainActor1\_2.lha

#### SPECIAL REQUIREMENTS

OS 2.0+

#### PRICE

The shareware fee is \$50 or \$25

#### DISTRIBUTABILITY

MainActor is shareware.

## 1.10 Amiga Mosaic v1.0

» Amiga Mosaic available for FTP «

#### TITLE

Amiga Mosaic

#### VERSION

1.0

#### COMPANY

None

#### AUTHORS

---

Michael Fischer  
 Michael Witbrock  
 Michael Meyer  
 email: amosaic@max.physics.sunysb.edu

#### DESCRIPTION

Amiga Mosaic is a port of NCSA's X Mosaic World Wide Web browser program. It allows amiga users with a direct internet connection to browse the World Wide Web's hypertext documents.

#### SPECIAL REQUIREMENTS

- Amiga OS 3.0 or greater
- MUI 1.4
- AmiTCP or AS225 networking software

#### HOST NAME

max.physics.sunysb.edu (129.49.21.100)

#### DIRECTORY

pub/amosaic

#### FILE NAMES

Mosaic1.0-AmiTCP or Mosaic1.0-AS225  
 www2\_mime.lha  
 www2\_rexx.lha  
 Other support files (MUI, AmiTCP, etc) in directory "support".

#### PRICE

Free

#### DISTRIBUTABILITY

Freely distributable but Copyrighted.

## 1.11 PGPAmiga v2.3a.2

» PGPAmiga 2.3a.2 available for FTP «

```
[ A Quote from Dan Follows:                -Carlos                ]
[                                                                 ]
[ " Note:  The RSA public-key encryption algorithm is patented.]
[ Therefore, it is ILLEGAL to use this software in the USA    ]
[ without an RSA license.  I have heard in my security classes ]
[ that PKP will sell you an individual license for a very     ]
[ reasonable price (< $5).  Also, it is also probably illegal  ]
[ to export this software from the US.  I don't know how that ]
[ applies to ftp.... "                                         ]
```

---



[ -Dan Z ]

#### TITLE

Pretty Good Privacy (PGP)

#### VERSION

Version 2.3a patchlevel 2

#### AUTHOR

Amiga port and enhancements by Peter Simons <simons@peti.GUN.de>

#### DESCRIPTION

Pretty Good(tm) Privacy (PGP), from Phil's Pretty Good Software, is a high security cryptographic software application for MSDOS, Unix, VAX/VMS, Amiga and other computers. PGP allows people to exchange files or messages with privacy, authentication, and convenience. Privacy means that only those intended to receive a message can read it. Authentication means that messages that appear to be from a particular person can only have originated from that person. Convenience means that privacy and authentication are provided without the hassles of managing keys associated with conventional cryptographic software. No secure channels are needed to exchange keys between users, which makes PGP much easier to use. This is because PGP is based on a powerful new technology called "public key" cryptography. And PGP performs the public-key functions faster than most other software implementations. PGP is public key cryptography for the masses.

Please take note that the archive contains a readme file, with checksums for ALL files in the distribution and is signed with my key! Please be careful, if this file is missing or rigged!

#### CHANGES

This version is re-compiled with SAS/C 6.50. A few minor bugs have been fixed. Additionally, the manual is now available in TexInfo style and can easily be converted into AmigaGuide, postscript, dvi or whatever format. AmigaGuide versions are included.

Also for the first time, the alt.security.pgp frequently asked questions (FAQ) are included in the archive.

#### NOTES

A mailing list concerning PGPAmita has been opened on peti.GUN.de. To subscribe, send e-mail to listserv@peti.GUN.de with "ADD your\_address PGPAmita" in the message body. You may add "HELP" in the next line to receive a command overview of ListSERV.

---

## SPECIAL REQUIREMENTS

none

## HOST NAME

Any Aminet host, i.e. ftp.uni-kl.de (131.246.9.95).

## DIRECTORY

/pub/aminet/util/crypt/

## FILE NAMES

PGPAmi23a\_2.lha  
PGPAmi23a2\_src.lha

## DISTRIBUTABILITY

GNU General Public License

## 1.12 Amiga Report Online

```

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%                               Amiga Report Online News                %%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

```

» FidoNet News «

```

*** Area: OMAHA_AMIGA
*** From: Lee Brittain (1:285/11.0)
*** To   : All
*** Subj: CD32

```

Date: 23 Dec 93 20:25:00

Well after a few days of playing around with this machine I have a few comments for everyone. I am really impressed with it. I think Commodore could really hit home with this. Pinball Fantasies and Sleepwalker are included with the console. Most of you already know about Pinball Fantasies but I didn't. I am really stuck on this game. The colors are vibrant and the graphics are sharp. Sleepwalker is pretty much shovelware. It's ok but that's about it.

I decided to buy a S-Video cable to see if it made a difference. Well I hadn't had any use for the connector on my RCA 27" tv anyways. The difference is quite pleasing. The colors have more luster and the very small text on the Pinball fantasies is quite sharp and legible now. It's worth the bux to buy one if you have the connector on your TV.

I have D/Generation and James Pond 2 on the way from AmigaMan. Should be here the middle of next week. I really hope to see some games made specifically for the CD32 soon. The AGA ports aren't bad but it seems a shame to waste so much

disk space. =)

\*\*\* Area: AMIGA Date: 28 Dec 93 20:39:55  
\*\*\* From: Jeff Grimmett (1:202/701.20)  
\*\*\* To : All  
\*\*\* Subj: CD32 and CGW (JAN)

Interesting article in CGW this month, they focus in on the new wave of game consoles, including the belle of the echo, the CD<sup>32</sup>. If this is old news to you, hit "N" now :-)

The CD<sup>32</sup> coverage was quite fair, IMO. They payed suitable homage to the Amiga for the fanatics out there :-) and focused in on a few of the games available. One very interesting comment: [paraphrased] Pinball Fantasies is almost worth the price of the CD<sup>32</sup> alone. They DO have misgivings about Commodore. Heh. Must already own an Amiga...

Also a first: they were one of the few magazines to call the CD-I what it was: NOT CD-I, but a completely different machine. Even the processor is different. Might shed a little light on why this machine is suddenly receiving publicity, eh?

Of course, they did not just jump on the Amiga bandwagon and call the CD<sup>32</sup> ←  
the  
game machine of choice, as I would expect. They rather expect the 3D0 architecture to run rampant, but leave open the possibility that the CD-I could take off on the basis of its support base alone (a very good possibility). However, they do not close the door on anything (except maybe the Pioneer box). As they say, the next six months may likely change the landscape completely. We shall see :-)

Anyway, among all the doom/gloom out there from certain dark corners of the small magellen clouds, I thought some folks might appreciate the fact that not all of the mainstream press is ignoring developments, nor is the world at large completely brain dead :-)

Jeff (Holder of the Seven Rings of Beta Testing)

\*\*\* Area: AMIGA Date: 2 Jan 94 8:56:00  
\*\*\* From: Jon Peterson (1:396/36.0)  
\*\*\* To : All  
\*\*\* Subj: FFish 1000th Disk Fund

Here is the list of donors for the sixteenth week of the FFish 1000th Disk Anniv thingy.

\* Individuals \*

Jon Peterson  
Matthew L. Schultz  
Chris Nelson

---

Asha DeVelder  
Marshall Freedland  
Jeremy Friesner  
Michael Phipps  
Darrin & Lisa Zimmerman (Amiga Un-Sig of Southern Michigan)  
Eric V. Peterson (Canada)  
Eric Zimmer  
Fred M. Hamilton  
Michael Meredith (England)  
David Jennings (Australia)  
Gary Delzer  
David Gomme  
Rick Russell  
Julla O. Kouppinen (Finland)  
Gary Simpson  
Robert Sudbury  
Jon Peterson (Asha's FF1000th Auction Amiga Check Pin purchase)  
Mark Baker  
Michael Berg (Denmark)  
Sam Worf  
Douglas & Susan Blakeley  
Richard A. Boedi (Germany)  
Jari Neiminen (Finland)

\* Users Group Donations \*

Gateway Amiga Club, Inc.  
Abilene Amiga Users Group  
Niagara Amiga (Users) Group N.A.G. (Canada)  
New Orleans Commodore Klub Amiga Group  
Ohio Valley AUG (A \$147 donation from this Group - Big Thanks  
and a sincere Merry Christmas.)

\* Company Donations \*

Randhir J. Jesrani (CompuQuick Media Center, Columbus, OH)  
Dale L. Larson (Intangible Assets Manufacturing, Drexel Hill,  
PA) Intangible is a new company that has just released its' first  
product by the name of Amiga Envoy. No further info available.  
Dale? This gentleman also has challenged other companies that  
have benefited from FFish's efforts to join the effort.

\*\*\*\*\*

Many thanks to Robert Glover for posting these messages  
from FidoNet in the Amiga Report (latest issues 136 and 137).  
The drive has gotten a number of donations/inquiries from Europe  
and Australia because of that publication. (This is getting more  
international..Where's Hong Kong etc.??)

Total donations as of 1/1/94 are \$839.50. Got a ways to go  
folks to purchase the (?A4000T?) but the fund drive seems to be  
picking up some steam. BTW, there is pretty reliable info  
that FFish does in fact already own an A4000 (shoot!).  
Suggestions? A CD32 looks to be the most popular alternative.  
Please talk this up with all concerned (Amiga users) and pass  
the word on to your Users Groups. If you haven't joined the  
effort, slip that hand into the pocket and pull out some bucks,

---

put it into any envelope and send it in. Let's show what the Amiga community is all about. Check over some of the programs you have benefited/are benefiting from. Register them and/or pitch in for FishFund. \* Reminder to everyone PLEASE!!! Pass the word at any Users Group meetings you attend. This is to be a group effort on behalf of all the Amiga users throughout the world. Please donate whatever you can afford - or even better - what you honestly think FFish's work has been worth to you through the years. Thanks. BTW, there have been some very nice comments to/about FFish included in the envelopes with donations. As I have been saving these, think I will include them along with the donation "pot"/A4000T when the time comes. Happy New Year to all - let's make this the year of the Amiga.

» Portal News «  
-----

Joseph P. Laleman  
November 4th, 1992

Gail Flicher  
Commodore  
Business Machines, Inc.  
1200 Wilson Drive  
West Chester, PA 19380

Dear Ms. Flicher,

I spoke with you on two occasions last week concerning my troubles with Gold Service. Yesterday, November 3rd, 1992, I received a call from a woman representing Mr. Silven Fix. Mr. Fix was the service person assigned to repair my 3000T. I informed the lady that you had authorized me to take my 3000T to my local dealer last week and that it was now working fine. The lady informed me that Mr. Fix was trying hard to get in touch with me. The telephone number that I gave Bob at Gold Service as a primary number is the same number in which you reached me on two occasions. The business has four telephone lines and a full time secretary. I am perplexed why Mr. Fix had so much difficulty reaching me. The secondary number listed with Bob is my home number and someone is at that number after 4:30 P.M. Monday through Friday. Previous to our last conversation, Bob had told me that Mr. Fix would call me immediately to arrange an appointment to repair my 3000T. "Immediately" turned out to be three days later.

The following is the progression of my experience with Gold Service:

Wednesday, October 21st, 1992 - I telephoned the Express number to use Gold Service. I discovered that I was supposed to have received a Gold Service number and was given a number to call to inquire about why I didn't receive it. I hadn't given the Gold Service much thought because I thought I was covered. I

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assumed that all I had to do was give my name and serial number to receive the service. I had a problem with the Gold Service registration initially. I purchased the 3000T with the Commodore special \$500 rebate offer in March 1992 and my dealer sent all the proper documents. I received a notice that Commodore hadn't received the receipt of purchase to authorize the Gold Service. The receipt was necessary for the special \$500 rebate and I know that my dealer received the money. To expedite matters, my dealer FAXed the documents to Commodore and I didn't hear another word about Gold Service. Unfortunately, on my initial call to the Express number, I was given the wrong number to call to inquire about the lack of Gold Service number. The telephone number I was given had been disconnected. I again called the Express number and received the proper telephone number. After my name and serial number were checked through the system, I was informed that I had duplicate serial and Gold Service numbers with someone else. The pleasant lady told me that she would tag the account and I would receive the necessary Gold Service material. I received the Gold Service material within two days. I telephoned the Express number for the third time, gave them my Gold Service number, explained my problem to Bob, and was told that the new mother board would be sent the next day (Thursday) because by this time it was late in the afternoon. I made an effort to check that all the information was correct. Even though I informed Bob that I had a duplicate Gold Service number, he had the wrong name, wrong address, and wrong model of Amiga. Someone would have received a mother board mysteriously FedExed from Commodore if I hadn't double checked the information. I was informed by Bob that, upon receiving the part, someone would contact me to arrange a time and date for the repair. At this point I thought the problem was solved.

Friday, October 23rd, 1992 - As promised, I received the mother board FedEx directly from Commodore. I made arrangements at work so I would be available to meet the repair person, but his call never came. I telephoned my Amiga dealer to see if he could install the part, but I was told to wait for Gold Service and they would take care of it.

Monday, October 26th, 1992 - After not hearing from Gold Service, I telephoned to inform them that I had received the mother board and inquire why I hadn't been contacted by a service person. I was told that Gold Service was waiting to hear from Commodore and that they would get back to me.

Wednesday, October 28th, 1992 - I discussed the problem of inaction by Gold Service with my dealer, he agreed to inquire at Commodore for me to see if something could be done to speed things along. I received a call from you. You told me that my dealer couldn't install the mother board, that I would hear from Gold Service shortly and my problem would be resolved. I did receive a call from Bob and, after apologizing for the delay, he assured me that a repair person would call and set a time to service my 3000T.

Friday, October 30th, 1992 - In the morning, I telephoned Gold Service to inquire why I hadn't received a call and was told

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that Bob was unavailable. The man asked if I wanted to speak to another representative. I spoke with a lady and tried to explain my situation in detail to give her an understanding of my problem. I had to repeatedly ask her to allow me to explain the problem. At one point in the conversation she misread the starting and ending dates of my Gold Service coverage and tried to tell me that I wasn't covered anymore. The final time she interrupt me she asked who I had spoken with before. After telling her "Bob," she said she would transfer me to him and must have thought she had me on hold, because she said to someone, "I've got a guy on the line and I don't know what he's talking about." The next moment I was hung up on. I again called back and spoke to another lady who informed me that I wasn't hung up on. They were having phone problems. For some reason, Bob was now available and he informed me that a Mr. Silven Fix would call me immediately. I explained my conversation with the lady that wouldn't give me the courtesy of allowing me to explain my problem. He informed me that she was following proper procedure and would have diagnosed the problem within 30 seconds, but he would communicate my feelings on the matter. I told Bob that I felt my treatment was poor customer relations. Even though just the day before Bob had apologized for the problems associated with my case, today he was abrupt seemed little concerned with the way I was being treated. The time was 11:00 A.M. central time and I sat through my lunch hour waiting for the call from Mr. Fix. By late afternoon I had had enough abuse from the Gold Service people and telephoned my dealer to find out how I could contact you directly again. I left a message on your voice mail and you returned my call within an hour. (Thank you for your concern and action!) You were not pleased with what I explained to you about how I was being treated and allowed me to take my 3000T to my dealer and have it repaired. If I was allowed to do that a week earlier, I wouldn't have suffered the down time and the abuse from Gold Service.

Tuesday, November 3rd, 1992 - I received a call from a woman who wanted to set a time for Mr. Fix to repair my Amiga. I informed the lady that, after a week delay, you had authorized my local dealer to install the mother board.

I am a long term supporter and user of the Amiga. I am one of the charter members of my users group and have acted as president. I have done many presentations promoting the Amiga. At one time I wrote for the Canadian Amiga based magazine Amigo Times. I have acted as a beta tester for software companies. I have two accelerated 2000's, a 3000UX, and a (of course) 3000T. My machines are loaded with all the state of the art, top quality devices I can afford. I use all my Amigas for professional video and 24 bit, single frame animation. Essentially, much of my life has been spent with Amigas.

In the video business, I deal with time related problems every day. What I hate the most is to tell my client that I can't be on time because of "technical difficulties." The customer wants the product delivered when promised. I don't want him to think that I am negligent and just using excuses of equipment malfunctions to cover my own incompetence. Gold

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Service looks great on paper. I thought that Gold Service would help protect me from missing deadlines.

I can chock my exposure to Gold Service up as an unpleasant learning experience. I understand that problems with communication can arise and action may be delayed, but the series of delays I experienced only shows that Gold Service doesn't deliver what it promises. In addition to not being reliable, the Gold Service personnel treat people in a rude, bruque manner. If the personnel can't (or won't) take the time to understand what the customer is telling them, the customer is treated as if he is the problem or that he's just plain stupid!

The only timely action I received was directly from Commodore. From my perspective, what would work well would be a system where parts were shipped promptly to an authorized service center and the dealer would install or repair the Amiga. My dealer said that he could never receive a part as fast as I did through Gold Service. The Gold Service people don't seem to have much incentive to be prompt, where the dealer has an interest in keeping his customer happy. I bought my 3000T through my dealer to receive a better quality of service and I got it. My purchases at my dealer benefit Commodore. Gold Service doesn't sell anything for Commodore.

Ms. Flicher, I would like you to understand that I am not criticizing you or Commodore. Like many people I know, I have been very encouraged by Commodore's efforts in developing the Amiga. With the technical and marketing efforts by people like you, I feel that the Amiga has a fighting chance for survival. I know that Gold Service is a separate company that you have contracted to do the work. I think a better choice could have been made to represent your service requirements.

Thank you for allowing me to express my concern about Gold Service. I hope that I am an exception rather than a normal case for Gold Service.

Sincerely,

Joseph P. Laleman

P.S.

Since my 3000UX has an EtherNet card, I have been trying to order three additional cards so I can network my Amigas together. I have repeatedly been told from several sources that Commodore is not shipping the cards even though they are available. Is there any way that I can get them? Thanks again.

## 1.13 Amiga Report Mailing List

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%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%                               Amiga Report Maillist List                               %%
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No Official Amiga Report Distribution Site in your local calling area? Are you tired of waiting for your local BBS or online service to get Amiga Report each week? 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@imtired.itm.com. Your account must be able to handle mail of any size to ensure an intact copy. For example, many systems have a 100K limit on incoming messages.

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 concerning the mailing list should be directed to Robert Niles at rniles@imtired.itm.com. Also, please do not send subscription list requests or changes to the editor.

Many thanks to PORTAL Communications 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!

\*\* IMPORTANT NOTICE: PLEASE be certain your host can accept mail over  
 \*\* 100K! We have had a lot of bouncebacks recently from systems with a  
 \*\* 100K size limit for incoming mail. If we get a bounceback with your  
 \*\* address in it, it will be removed from the list. Thanks!

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## 1.14 The Amiga CD32 Reviewed

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%% The Amiga CD32 Reviewed!                                     By Jeffrey J. Peden II %%
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Amiga CD32 Commodore's Kill-all-or-be-killed CD System

I can't express in words how great it is to be one of the very fortunate few in North America to have received the Amiga CD32 before it's official roll-out here. I have never been what I would call a hard core video-gamer, but when I read about the CD32 I just knew I needed to have one. When I read that NTSC/North American ones were being sold at the Toronto World of Commodore Amiga, I called up Amigaman

and ordered one, on the slim chance that I might be lucky enough to receive one of the units slated to come in before Christmas. Well, it's Sunday, December 26, and I am one of the few, the proud, the ecstatic.

I am now an owner of a Commodore Amiga CD32!

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## First Impressions

Even though I knew what it was, and I had paid for half of it, I was not allowed to even look at the box until Christmas Eve. The first thing I noticed was that the box was in 4 languages. English, German, French and Italian. Also, the English texts are denoted with a British flag, meaning that this is a box from the earlier European release. I expect that the machines released here in the U.S. next month will have a different box. Also extremely interesting was the fact that the whole back of the box was split up into 4 sections (one for each language) telling about the Full Motion Video (FMV) module. (It even said that the release for the FMV/MPEG module was to be Fall '93) Opening it up, you find the CD32 in the middle, being supported by foam braces on the sides (which look like they were shaped for the A1200), and in the front of the box, a container for the controller and cables. The cables are extremely low-cost. The audio cables which come with the A4000 and A1200 are pretty good quality cables (but they are by no means professional quality). These cables are cheap, and are inflexible. Also, while the CD32 supports S-Video output, no such cable comes with the unit. For RF output, it comes with a very old-style Game/TV switch. I believe it is the same one that came with my ColecoVision! I hope that Commodore does away with this style of switch in favor of the SuperNES style auto-detecting switch. It does come with a power-brick, but this one is smaller than the ones that come with the A1200 (by about 25%) and it does not have a fan. Also, the power switch is on the back of the CD32, not the power supply, which means that the black/grey brick can be put out of sight. The controller was set in the box in a way that took me a minute or two to get out, but that's nothing. :-)

## "The World's First 32-BIT CD Games Console"

I pulled the thing out of its box, and started connecting right away. I didn't even look at the "Getting Started" instructions until half an hour after it was running. We had just gotten a new RCA 27" ColorTrack Plus, which had a S-Video input, so I went digging through our Video-Room's "snake drawer" - our own miniature version of Radio Shack (we run a small video production business here, out of our home) and found an unused S-Video cable. I plugged it in, and turned it on, and jumped about a foot when the TV blared at me. I was actually pleased to see an attractive boot up/intro screen with soothing music. An animated CD spinning with plasma lights floating out of the top and bottom of the screen (a Northern Lights type of thing) and Amiga CD32 at the top. From this screen, you can hit the RED (Select) button to go to the Non-Volatile RAM control screen. From here you can Lock (protect from being over written) or Unlock the entries in RAM. There are 100 units available, and when they are all filled up, the oldest, unlocked, items are overwritten first. This is a very nice touch, because it means that you could save your Pinball Fantasies 600 Million Points score forever, and let something else be overwritten first. The interface has a scrolling list of all the entries, and on the side of what I suppose you could call a window, there is an animated golden key. This key turns when you hit the select button to lock or unlock an entry. Also from the boot up screen, you can hit the BLUE (Stop) button to bring up the language selection screen. There are between 15 and 30 languages you can select from. Mine came defaulted

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to American (as opposed to English). I would assume that this is like Locale prefs on WB 2.1+ machines, and that any program that can use the locale.library can use these languages. If there is a CD in the machine when it is booted up, most of the intro is skipped. When a CD is dropped into the top-loading mechanism (A whole lot nicer and quicker than the tray machines and the CD caddies), the CD of the Amiga CD32 begins to spin, moves over to the right, smacking the 32 off the screen, and then moves across the screen wiping away the Amiga portion of the logo. It is all very nicely done.

Inserting a music CD brings up the audio interface. This is just as creative as the rest of the machine. From the intro screen, it fades into a blue screen, with a 4x5 matrix of track indicators, and the control panel, which has buttons for Play /Pause, Stop, Forward Search/Skip, Reverse Search/Skip, Shuffle Play, Loop, and the button to switch the counter between Total Elapsed Time, Elapsed Track Time, Track Time Remaining, and Total Time Remaining. The interface and the track matrix are connected by a multi-colored bundle of wire, making things look all the more interesting. Then a track counter drops down from above, and a CD slides in from the left. The counter hangs over the CD, and a laser spits out pulses of light from the counter, to the CD, and bounces it back up to the counter. The counter moves from time to time, keeping the beam of light on the spot where it would actually be on the CD, and the CD itself spins! This is THE best CD interface that I have ever seen. Almost every function can be controlled by dedicated buttons on the controller (making it unnecessary to even have the monitor on, although you may want to) or by using the directional buttons on the pad, and using the select button when the flashing cursor is over the on-screen gadgets. Stop the playing, and open the lid, and the track counter lifts back off the screen, and the CD shoots out to the left of the screen. All the text on the screen is done in a quartz clock type of font. Hats off to the software engineers for this one! I only wish they could read the name of the CD and/or the Track title off of the CD. It does have CD+G support though, for any of those types of CDs (rare).

And don't even ask how it sounds! It is great! It has almost convinced my father/boss to buy one for our video business (considering our \$200 ADC player is on the fritz). The first CD to drop in was a collection of Christmas music (somebody else's present), and you could just about see the full orchestra encircling you on every side. And Nirvana never sounded as good as it did later, when I moved the CD32 to its final resting place. The audio alone is worth almost 3/4 of the total cost of the machine, in my not so humble opinion.

Gaming. This IS what it's for, isn't it? I got a bonus disk (well, they had better ship it with something... I don't really think they should call it a bonus though) with Pinball Fantasies and Sleepwalker. Pinball Fantasies CD Edition is not really worthy of being a CD game. It still has only 4 boards (they have 600 megs to split with Sleepwalker, I really think they could have whipped up another table or two) and it still has the crude, less than a MOD quality, music for the tables. They did put one, fairly good, CD track into the game, but that's only on the table selection screen. I find myself turning off the music every time I play. Hopefully the next in the Pinball \_\_\_\_\_ series will take advantage of the media. I know for a fact that this version of Pinball Fantasies takes up just over 4 MB of space.

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Sleepwalker is a completely different story. I was expecting some cute little platform game, with Super Mario World type graphics. Boy, was I wrong! That game is a tough sonova\_\_\_\_\_! It took me a full day to get past the first level, and left me wanting to throw the controller out the window after each of my gaming sessions. The graphics are great, and the scrolling backgrounds are nice. It is definately not for the simple minded. I couldn't even finish the training level. I love putting Master Lee in some place where he can't hurt himself, and go off and try everything I can.

One of the greatest things I've found so far is having the vampires make you a bat and going off to God Knows Where. Ocean really knows how to make a CD game! There are about 10 tracks of really great CD music. You can even access the Sleepwalker CD interface by hitting the BLUE button, while the game is booting, at the Ocean logo screen.

I think that a really good CD to come with the machine would be Sleepwalker and Oscar or Jurassic Park. And then, if space permits, throw on Pinball Fantasies. Possibly James Pond 2 or 3 as one of included platform games, but then again, if you give away everything, then there won't be anything to buy. I have already ordered Liberation, a game that I know nothing about, except that it is massive (4,000 computer generated plots, 36,000 possible locations in each city, multiple cities), and that everybody says that it is awesome. (Well, that and the fact that it is \$5 more than the rest of the titles) That will be here either tomorrow or Wednesday, depending on whether AmigaMan got the game out Thursday or is waiting until Monday.

Will it survive? It depends. If it is going to compete initially, it will have to be by merit alone. It is already doing great in Europe, and every unit that made it to the U.S. before Christmas has been sold. It is getting press, although not all of it is correct. A friend of mine tried to convince me earlier today that it was 12.5 Mhz, .2 Mhz slower than the Sega. He also tried to tell me that the Sega was 32Bit, because the Sega itself was 16Bit, and the CD portion was 16Bit, so together they are 32Bit. He says that all this he read in a magazine. The clerks at Electronics Boutique tried to tell a few of us that the CD32 was made by Atari, and that they most likely would not be carrying it, as they were going to sell the Jaguar, Atari's higher end gaming machine. It is ignorance and wrong information like this that could kill the CD32. But, there are some brighter people who do know what they're talking about when they talk about the CD32. (Other than the run-of-the-mill Amiga user who reads Fidonet or Usenet) Commodore has stated that they will be advertising the CD32 starting the first week of January. I hope they get their first ad during SeaQuest or Viper on NBC, ST:TNG on all the syndicated stations, talk shows like Letterman or Leno, and MTV. This is the crowd they should try and snag, in my opinion. It's an uphill battle, but it's entirely possible.

### 1.15 Rumors from the Amiga Side

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although some games probably won't work since they require AGA.

\* AmigaOS/Workbench 3.1 upgrade for ALL Amiga's. Includes new Datatypes (ANIM, CDXL), new multimedia extensions (realtime.library, tapedeck.gadget), CD-ROM support, tons of bug fixes and optimizations.

\* Envoy. Amiga networking system! Yes, contrary to what some individuals have said, Commodore's networking system is here. Useable over the serial ports or any networking card.

Coming in early 1994:

\* CD32 will be released in the US in January. Everybody thinks they will screw up again, but I don't. Game magazines are starting to rave about it. We're going to have a ton of games -- more than Jaguar or 3DO (or "3-DOH!" as Homer Simpson would say after blowing \$700 on one) or Sega CD. Sega CD games pale in comparison and will lag far behind in every way. 3DO games will be great, though, but will be few and far between. Jaguar games will probably be fast and relatively cool, but will have little graphics or sound because the carts are so small compared to a CD-ROM -- and will cost more. CD32 has the largest market, is the easiest to develop for, and offers a good amount of profit per disk (low cost compared to a cartridge, and Commodore's royalty is small and reasonable). The price will rapidly go down to \$300 (it's already around \$370) and a cost reduced model will get that down to \$250 in 1994.

\* CEI 4000M. An Amiga/Mac hybrid! It's an A4000 with 10MB of ram, and the EMPLANT card; with 256K Mac ROMs and System 7.1. For a price around \$2500. And of course, for another \$100 you can get the IBM emulation module. It's funny since Apple just released their Mac with IBM compatibility. I bet Apple messes bricks when they see this Amiga that does EVERYTHING! Especially since they plan to advertise in MAC magazines!

\* 3DO emulator for the Amiga! This would be a card containing the 3DO's custom chips and should cost around \$300. A Sega emulator is in the works, but I don't know why you'd want one.

\* All machines shipped with AmigaOS 3.1.

\* Reduced A1200 and A4000 prices. A1200 should get down to \$300, A4000/030 down to \$1200, and A4000/040 to \$1500. AGA actually costs LESS to make than ECS does, which is why the A1200 is so cheap. It would be even cheaper if they could make enough chips!

And coming sometime in mid 94:

\* A4000C?: Based on A4000, has only 2 Zorro slots and a small ("pizza box") case without the 5.25" drive bay. Uses a 25Mhz EC030 CPU on the motherboard. 2MB chip, 4MB fast, 120MB HD. Cost will be less than the A4000/030 is, around \$1000 street price. Looks a lot like an A1000... Also available with the 040 CPU card.

\* A4000-040/40: 40Mhz A4000, 8MB fast, 240MB HD. \$2000.

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\* A4000T-40: 40Mhz A4000T. The ultimate Toaster workstation.

And finally, in late 1994 (probably to be released at the September WOC) the ones you've all been waiting for: AAA Amigas! (names are tentative)

A1200 and CD^32: Prices down to \$250.

CD^64.

\* 4 x speed CD-ROM

\* Low end AAA chipset, 2MB DRAM.

\* 25Mhz EC030 (twice as fast!)

\* 1MB fast ram.

A1400.

\* Detached keyboard.

\* High speed 1.8MB floppy disk.

\* Low profile "pizza box" case. 3.5" floppy and HD bays.

\* 25Mhz 030, '882 socket.

\* Low end AAA chipset. 1MB chip ram (exp to 16MB), 2MB fast ram (upto 16MB).

\* CPU slot.

A4500.

\* Detached keyboard

\* High speed 1.8MB floppy disk.

\* Low profile case, two 3.5" floppy bays and HD bays.

\* 25Mhz LC040.

\* Mid-range AAA chipset. 2MB 64 bit chip ram (exp to 16MB), 4MB fast ram (upto 32MB).

\* SCSI-II

\* 3 Zorro III slots.

A5000.

\* Completely new architecture.

\* 040, 060 versions (simply change CPU modules).

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- \* RISC model in early 1995. Will use HP's PA-RISC chip.
- \* AAA chipset (of course).
- \* DSP on the motherboard.
- \* upto 16MB chip ram, upto 128MB fast ram (probably 2/8 standard).
- \* ALL memory is \*64\* bits wide. Fast ram may even be 128 bits wide, if it improves performance significantly.
- \* 64 bit PCI slots (confirmed!)
- \* Four Zorro III slots, five in the A5000T.
- \* 3.6MB floppy drive.
- \* High speed SCSI-II interface.
- \* AmigaOS 4.0 with RTG, networking standard.
- \* Price well under \$4000 (goal is \$1500-\$2000). Different models with various configurations of chip ram, ram and HD.

There will be nothing out there like this machine.

AAA chipset specs:

- \* Many different types of arrangements are possible, from low end to high end.

Low end: uses 32 bit DRAM memory, lacks Linda chip. >57MB/sec bandwidth shared between video and processors (IE, it slows down in hires/hicolour modes).

Can be expanded to 64 bit ram (mid range).

Resolutions: 640 x 480 x 16 bit (72Hz non-interlaced)  
640 x 400 x 24 bit (60Hz non-interlaced)  
1280 x 400 x 24 bit (60Hz interlaced)  
800 x 600 x 8 bit (72Hz non-interlaced)  
1024 x 768 x 8 bit (60Hz non-interlaced)  
1280 x 800 x 6 bit (60Hz non-interlaced)

Mid range: uses 64 bit DRAM memory, lacks Linda chip. >114MB/sec bandwidth shared.

Resolutions: 640 x 480 x 24 bit (72Hz non-interlaced)  
800 x 600 x 16 bit (72Hz non-interlaced)  
1024 x 768 x 16 bit (60Hz non-interlaced)  
1280 x 1024 x 8 bit (72Hz non-interlaced)

High end: uses 64 bit VRAM memory and Linda chip. >114MB/sec bandwidth for blitter, CPU, copper, and other DMA; >228MB/sec bandwidth for \*video\*. Does not slow down at all in hires/hicolour modes.

Resolutions: 1280 x 800 x 24 bit (65Hz non-interlaced)

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1280 x 1024 x 16 bit (72Hz non-interlaced)

\* 8 to 16MB of chip RAM! Can be added in 1 or 2MB increments (for 8 or 16MB).

\* Chip RAM can be a mix of DRAM and VRAM. With VRAM, there is \*NO CONTENTION\* (remember how hires gets REAL slow in 16 colours [ECS] or 256 colours [AGA]? Well no more!). The blitter will be just as fast at 1280 x 1024 as it is at 320 x 200. DRAM of course is cheaper. But you could have, say, 4MB of VRAM and 4MB of DRAM and use the VRAM for the screen and DRAM for images for optimum cost/performance.

\* Much faster, 32 bit blitter. Can blit 24 bit images FASTER than AGA can blit 8 bit images!! And thus certainly faster than any Mac or IBM..

- \* Support for Quad-density floppy drives (3.6MB formatted with FFS).

- \* Support for CD-ROM.

- \* Two 32 bit chips: Andrea (AKA Agnus/Alice) and Mary (AKA Paula).

Andrea: 32 bit blitter and copper, burst mode memory access, 110Mhz display rate (4 x AGA).

Mary: 8 channels of 16 bit CD quality audio, floppy and CD-ROM support.

- \* Two 64 bit chips: Linda and Monica (AKA Denise/Lisa).

Linda: video line buffer, controled by Andrea.

Monica: Chunky and planar video modes, HAM/HAM8, true colour, and a new compressed video mode. Any display mode can be programed.

\* Two high speed buffered serial ports.

A prototype AAA based Amiga is up and running NOW.

## BEYOND AAA chips (!):

- \* Real time 3D rendering.

- \* Gfx pipeline.

- \* Scaling, rotation, texture mapping.

## 1.16 Portal

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## Portal Communications' Amiga Zone

The AFFORDABLE alternative for online Amiga information

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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. 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
  - The \*entire\* Fred Fish collection of freely distributable software, online.
  - 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.
  - 35 "regular" Amiga libraries with thousands of files. Hot new stuff arrives daily.
  - No upload/download "ratios" EVER. Download as much as you want, as often as you want, and never feel pressured doing it.
  - 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.
  - 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.
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- 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 features an exciting package of Internet features: IRC, FTP, TELNET, MUDDS, 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.

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All prices shown are in U.S. Dollars

|                                    |                |                | Fee         | Total<br>Cost         | Total<br>Cost          | Total<br>Cost           | Total<br>Cost           |
|------------------------------------|----------------|----------------|-------------|-----------------------|------------------------|-------------------------|-------------------------|
|                                    | Startup<br>Fee | Monthly<br>Fee | Per<br>Hour | 1 hr.<br>Per<br>month | 5 hrs.<br>per<br>month | 10 hrs.<br>per<br>month | 30 hrs.<br>per<br>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       |                |                | 2.50        | 22.95                 | 32.45                  | 44.95                   | 94.95                   |
| 2400/9600bps prime Sprint +%       |                |                | 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 in over 300 cities areas

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#### Note:

Portal Direct 9600/14400 bps service is available 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!

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Again, Portal does NOT surcharge high speed modem users!

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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.

## 1.17 CD Platform Comparison

```

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%% CD Platform Comparison                                     By Harv Laser %%
%%                                                         (harv@cup.portal.com) %%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

```

This is a re-type of a two page chart labelled "Comparisons of CD Platforms" which was contained in a press kit sent to me (prior to Consumer Electronics Show, Las Vegas, Jan 6-9, 1994) by the public relations firm who is handling CD32 for Commodore. I have attempted to be as accurate as possible when typing in this chart. Any typing errors are mine.

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## COMPARISONS OF CD PLATFORMS

| Features                                       | Amiga CD32                                    | 3DO                                    | SegaCD                 | CD-I                                      | Jaguar                            |
|------------------------------------------------|-----------------------------------------------|----------------------------------------|------------------------|-------------------------------------------|-----------------------------------|
| Suggested retail price                         | \$399                                         | \$699                                  | #\$129+223             | \$499<br>(Philips)<br>\$399<br>(Magnavox) | #\$249+200                        |
| Bus width                                      | Dual 32bit                                    | 32bit                                  | Dual 16 bit            | 16 bit                                    | Single 64 bit w/16 & 32 bit ports |
| Expansion Bus                                  | Yes<br>(Processor, audio, video)              | Partial                                | Partial                | Partial                                   | Partial                           |
| Micro processor, graphics and audio processors | 68EC020/14 Mhz (32 bit)                       | ARM/12Mhz (32 bit)                     | 2x68000/12Mhz (32 bit) | 68340/16Mhz (16 bit)                      | 68000/13.3Mhz (16 bit)            |
|                                                | Sprite Engine 64 pixels wide (32 bits)        | 2 video animation processors (32 bits) |                        | *MPEG de-compression engine               | GPU (64 bit)                      |
|                                                | Graphic co-proc. (16/32 bit)                  | DMA engine (32 bit)                    |                        |                                           | Object Processor Blitter (64 bit) |
|                                                | Audio engine 4-voice (16 bit)                 | Audio DSP (32 bit)                     |                        |                                           | DSP (32 bit)                      |
|                                                | *MPEG video decompression engine 40 MHz       |                                        |                        |                                           |                                   |
|                                                | *MPEG audio decompression DSP (24 bit) 28 Mhz |                                        |                        |                                           |                                   |
| Processor acceleration upgrade capability      | Yes                                           | No                                     | No                     | No                                        | No                                |
| Internal Expansion slot                        | Yes                                           | No                                     | No                     | No                                        | Yes                               |
| Async serial port/High speed auxiliary serial  |                                               |                                        |                        |                                           |                                   |

|                           |                                                                     |                       |                     |                                 |                     |
|---------------------------|---------------------------------------------------------------------|-----------------------|---------------------|---------------------------------|---------------------|
| port                      | Yes/Yes                                                             | No/Yes                | No/No               | Yes/Yes                         | Yes/No              |
| Memory                    | 2 MB RAM                                                            | 3 MB                  | .128 MB             | 1 MB                            | 2 MB                |
| Chips                     | 4                                                                   | 2                     | 3                   | 2                               | 2                   |
| Video overlay support     | genlock<br>Yes                                                      | No                    | No                  | No                              | No                  |
| ROM cart                  | No<br>CD-ROM<br>based                                               | No<br>CD-ROM<br>based | Yes<br>16 bit       | No<br>CD-ROM<br>based           | Yes<br>32 bit       |
| Screen resolution         | Up to<br>1280x512                                                   | Up to<br>640x480      | 320x224             | 384x280                         | 768x512             |
| Colors                    | 256/256,000/<br>16.7 mill.                                          | 66536/<br>16.7 mil.   | 64/512              | 256,000/<br>16.7 mil.           | 16.7 million        |
| Sound                     | 16-bit<br>CD stereo<br>+ 4-voice 8bit<br>* MPEG CD<br>16 bit stereo | 16-bit<br>CDstereo    | 16-bit<br>CD stereo | 16-bit<br>CD Stereo<br>*MPEG CD | 16-bit<br>CD Stereo |
| CD-ROM                    | 2x speed                                                            | 2x speed              | 1x speed            | 1x speed                        | Planned             |
| Hardware video decompress | Yes, HAM8 &<br>*MPEG-1                                              | Planned               | No                  | *Yes<br>MPEG-1                  | Planned             |
| PhotoCD [tm]              | Planned                                                             | Yes                   | No                  | Yes                             | Planned             |

\* With MPEG full motion video module

# Base system, plus CD add-on

## 1.18 Usenet Review - Pinball Fantasies AGA

```

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%% Usenet Review:  Pinball Fantasies AGA                               By Henry Norman %%
%%                                                              (henryn@cpd.tandem.com %%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

```

PRODUCT NAME

Pinball Fantasies AGA

## BRIEF DESCRIPTION

Pinball game simulation. Four different pinball tables.

## AUTHOR/COMPANY INFORMATION

Name: 21st Century Entertainment, Ltd.  
Address: Westbrook street  
Blueberry, Oxfordshire  
OX11 9QB  
UK

US distributor: Digital Illusions, Inc. ("DI")

## LIST PRICE

I paid \$40 (US).

## COPY PROTECTION

Look up a word in the manual. Prompts at startup time.  
Hard disk installable.

## SPECIAL HARDWARE AND SOFTWARE REQUIREMENTS

AGA graphics. PAL mode (NTSC 1200/4000, boot system with both mouse buttons depressed, select PAL, continue boot).

Pinball runs on NTSC, but important parts of playfield are not seen.

[MODERATOR'S NOTE: Previous reviews of the non-AGA version have not mentioned any problems with NTSC vs. PAL. I suspect that either Mr. Norman purchased a PAL version of the game, or the AGA version has different requirements than the non-AGA version. - Dan]

## MINI-REVIEW

I bought Pinball Fantasies for my son's Christmas pleasures (yeah, right!). Since he's away skiing for a few days, I installed the game and took it for a spin.... Wow! \*Now\* I know why I upgraded to AGA! If you haven't yet seen this game, check it out! It is your classical "Williams" type pinball setup, with a playfield about three screens high (with absolutely smooth scrolling), offering four different "machine layouts" (DI calls them "tables"). They have the typical pinball gizmos, with bumpers, bounce areas, buttons to hit, flippers, all \*very well\* done. The really slick thing with this game, nice graphics aside, is the uncanny realism the authors (a bunch of Swedish programmers) have achieved in ball action: you're there! It is absolutely amazing (to me) to play this kind of pinball! This game should have some "addiction" government warning label on it.... Ask your C= dealer if you can check it out on their A4000 demo machine. Get this game. (No, I'm in no way affiliated with Digital Illusions. I'm just excited that in the midst of an avalanche of substandard

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games, here's a \*real gem\*!)

For some reason, DI "front-ended" the game proper with a module that attempts to stop unpaid-for copies of the game to start circulating ("yeah, right" again): you have to look up keywords from the manual and answer a question properly before you can begin shooting for those million point bonuses. This sucks. Especially considering that one only has to copy a few pages from the manual to be in business anyway (it is made thicker by making it a four-language manual :). But then I realized that this scheme forced me to read something from the manual every time I start Pinball... maybe it's not such a bad idea after all?

Pinball is following the AmigaDOS rules, and behaves well. Even though it takes over the machine completely, it gives everything back in order when it's done, and returns gracefully to AmigaDOS (as some put it, "it multitasks well". IMHO, multitasking has nothing to do with it: it is a simple matter of coding the darn thing properly).

I don't know if it is true for all Pinball Fantasies boxes sold, but the copy I picked up (at HT Electronics, Sunnyvale) didn't work right at first... a substantial portion of the playfield wouldn't show on the screen. No clue in the manual... When I saw all the Swedish names in the list of game contributors, I figured maybe this should run on a PAL machine to work right? So I booted my A4000 as a PAL machine, and lo and behold: the game came up with \*all\* of the playfield displayed (and with better vertical resolution!). It runs "semi-OK" in NTSC, but on my A4000 the crucial lower portion of the playfield is hidden (including most of the lower flippers), so it's hard to control the ball action -- the extra hassle of PAL booting is well worth it!

My only complaint is the sound effects: the vendor could have spent some more time and effort (MHO) on the noises emitted from a real pinball table. As it is, only some of the actions the ball experiences have audio (I really miss that metallic rolling sound of the ball, especially when it runs up and down these steel railings... Oh well!). This flaw is "hidden" in a cacaphony of "game music" (which can be toggled off by hitting M). However, the super realistic ball simulation more than adequately makes up for this: it is truly amazing! If this is only a forerunner of AGA productions coming out the pipeline, it's going to be expensive for me... (HaHaOS :)).

As Beavis and Butthead would have put it: "hehehe, dude, this game is cool... yeah, it kicks a\*\*! hehehehe, pinball rules!"

Merry Christmas to y'all!

Henry Norman

## 1.19 The Emulation Rambler

[illegible]



I apologize for not appearing on the pages of Amiga Report lately. I've been busy trying to compile a few other things like the first-time Amiga buyer's guide, and haven't quite had time to survey the emulation scene. It hasn't helped that Rob and I have had a hard time getting my articles to send correctly. I'll try to make up for lost time here.

I'd like to start by addressing something said by Jesper Juul, who weeks back said that "Emplant is finally getting a bad review" and "it's nice to see someone being a bit critical to Utilities Unlimited." Actually, there's quite a lot of Emplant and UU criticism floating about, and not all of the reviews have been glowing. I'd like to compare it with my own, but I still haven't gotten one yet. But, for all of you people who are keeping track, here's the latest on Emplant updates, taken from comp.sys.amiga.emulations...

Fm: Jim Drew (UU) 72662,14  
To: ?

As many of you may know, EMPLANT requires a custom logic upgrade in order to make v3.2 and later software work. This is no longer the case. Let me explain the rumors, myths, and misconceptions of v3.2's release.

Yes, we started replacing custom logic. Yes, we started shipping replacement logic upgrades (with v3.2 software). Yes, v3.3 and later no longer requires the custom logic upgrade. The reason...

A company in another country decided that they were going to start producing clones (exact duplications) of the EMPLANT hardware, and sell them as such. Although, hardware can not be copyrighted, the custom logic is considered to be software under US and international copyright laws. Thus, reproducing EMPLANT in it's entirety, would be in violation of copyright laws.

I received a phone call from somebody (anonymous) in Germany, concerning the fact that a company was about to release a bunch of EMPLANT clones, but

due to problems recreating the custom logic (it took me 3 weeks to get the different hardware emulation timings to work) the EMPLANT clones would be delayed from their Jan '94 release date. Basically, they could duplicate the hardware, but could not make it 'tick'.

This was a serious problem for us. With the World of Commodore show only months away, and the CEI4000M bundle deal in negotiation, an EMPLANT clone could be tragic.

We went into panic mode, and with v3.2 about to be released, I figured the best thing to do in order to prevent the clones from working with our 32 bit clean software would be to change the custom logic to remap our hardware differently enough that simple software patches would not work (one main reason for the extensive delay of v3.2)...so it was done.

With the help of the US government (they really do work!), we were able to stop the clones from being produced, on the grounds that the circuit board artwork was duplicated exactly. The artwork (just like paintings) is copyrightable. We are currently seeking logorights on the EMPLANT hardware, and we have been advised by the US government that a

---

patent for the EMPLANT hardware itself should be applied for in order to prevent this from happening in the future.

So, we went back to v3.2, upgraded a number of things, and added support for the older custom logic. The new version is v3.3, and can be used by any EMPLANT board. Yes, v3.3 will be made freely re-distributeable, meaning that it will be on GENie, CompuServe, Portal, BIX, our support BBS, and various FTP sites.

I appreciate your patience in this manner, and I just wanted everyone to know the truth to what happened with v3.2 and why there was an excessive delay in it's release.

Sincerely...

Jim Drew, CEO - Utilities Unlimited, Inc.  
[Endquote]

There you have it. Some people actually HAVE received 3.2, but it now appears that 3.3 is the way to go, with a much easier upgrade route... or it was, until Jim Drew came up with 3.4! This is apparently a better, new-logic-chip-less version of 3.3, but people are still having memory problems (with the computer, not themselves). Also, two FPU routines are wrong (mainly seems to affect games), to be fixed in 3.5

A couple of people have A-Max IVs and like them, but I haven't heard anything concrete and new. Nobody has a better explanation for a lack of Amax III than "They probably wanted to sound farther ahead than Emplant"...

WHEN Amax IV rolls around, I would like to stage a sort of forum of Emplant vs. Amax IV, so if you'd like to start filling my mail with your opinions, by all means do.

For my part, I have finally obtained a Spectrum emulator, but now can't figure out what to do with it for the life of me. If anyone wants to send a few programs my way, I'd appreciate it.

A64 V3.0 update: A couple of CSAE people have one, but not too much of use has been said. I'll update you next issue.

In case anyone is interested, PC-Task is now commercial software...and rather pricy at that. Tenex carries it for about \$40...which isn't bad, but an XT bridgeboard runs about that much, and if speed is more important than video (since PC-Task will get you VGA but a bridgeboard only gives CGA out of the box with no cards), then a bridgeboard is probably the better buy.

Lastly, Utilities Unlimited has agreed to send me a board: the quote I got when I called them would be this week, meaning that by the time you read this I may have an Emplant. It would be at least a few weeks before I published my full review, as I want to run it through as many tests, paces, and uses as I can find. I am trying to contact ReadySoft to get a similar contribution of an A-Max IV from them in order to do a true comparison, but haven't reached them yet.

Well, that should wrap it up for this week. Please write.

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## 1.20 CD32 Titles Spot Review

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%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%% CD32 Titles Spot Review                                     By Sean Caszatt %%
%%                                                                (40:800/910.0) %%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

```

Here's my personal opinion on the CD32 titles I've seen so far:  
 (by "seen", I mean "sat down and played for a while")

Ratings: (\*\*\*\*\*) = best    (\*) = worst

OSCAR - nice platform game, with really good parallel scrolling. Some of the screens are too "busy", and it's hard to see what you're doing with all the stuff in the background. Well done, though, and just as good as Sonic and the Mario games. (\*\*\*\*)

PINBALL FANTASIES - not exactly the most eye-catching game, but it is undeniably the most addictive game I've ever played. You know it's addictive when you're hitting the start button for that "just one more time" for about an hour. Great CD sound on this one. (\*\*\*\*\*)

SLEEPWALKER - I didn't like it on the Amiga, and I still don't like it on the CD32. It's not my type of game at all. It's really "different", but contrary to what some think...different isn't always good. The graphics are not much, and the gameplay is lousy. Good thing it's free with the console, because it's not worth buying. (\*)

CASTLES II - A strategy game for those that like medieval stuff. The graphics are good and the CD sound in the intro is spectacular. It seems like a game one could get wrapped up in, but it's hampered by the CD32's controller. This was a game meant for a computer with a mouse, not a game console with a keypad controller. I didn't try plugging in a mouse on the 2nd port. It may help...but still... (\*\* 1/2)

LIBERATION - A definite cool game! 3D texture mapped graphics and a large world to roam about in make this a game worthy of the CD32 and vice versa. It has a lot of options and is very open-ended. A lot of fun to explore and get lost in. Not a game that one can start playing in two seconds, but one that you grow into and don't grow out of. Really good! (\*\*\*\*\*)

WHALE'S VOYAGE - Another crap Amiga game trying to milk the CD32 market for some sales. The game is not worth buying for any system. Avoid at all costs and at any price. (no stars)

DEEP CORE - Adequate shoot-em-up with a lot of stuff to blow up. Nothing original, just mindless destruction. Good for what it is. Nothing special in the graphics department. (The intro sequence doesn't not appear to be converted from PAL to NTSC, so it jumps and flickers...kind of annoying, but still quite readable and does not affect the game.) (\*\*\*)

ROBOCOD: JAMES POND 2 - More platform action. A lot cleaner display wise than

OSCAR, but not quite as frantic and fun. Very nice graphics and sound.  
(\*\*\*).

TROLLS - Another platform game. A little more frantic than OSCAR and a little more annoying. So, it balances out. The graphics are colorful and the sound is good. Nothing better than a 16 bit console though, so not really worth it, if you have OSCAR already. (Their practically the same game.) (\*\*\*)

ZOOL - The Amiga's Sonic beater comes to the CD32. A really cool 3D rendered Zool character is featured in the intro...and that's where the differences stop. If you've seen ZOOL AGA on the A1200 or A4000, then you've seen this game. Nothing fascinating...just solid play. I prefer OSCAR as platforms go.  
(\*\*\*)

NIGEL MANSELL'S WORLD CHAMPIONSHIP RACING - A solid race game. Much improved over the A1200 version of the game in an intangible way. I didn't enjoy the Amiga version of this game at all for some reason. The CD32 version is good, solid fun. The game is fast, easy to control and a lot of fun. The graphics are quite good, and the sound is fair (what do you what from a racing game?) Solid entertainment. (\*\*\*) 1/2)

D/GENERATION - A novel puzzle/maze/shoot-em-up. Unfortunately, the graphics are on a par with the old 8-bit NES console and not a 32-bit CD-ROM based system. The gameplay is good, but the graphics are a real letdown. (\*\*)

ARABIAN NIGHTS - Yet another damn platform game. Annoying and not really any good. There's nothing to stand it apart from the other platform games on this system other than maybe the price. It's cheaper than the others, but remember, you get what you pay for. (\*\*)

So far, these are the ones I've played. Far and away the most addicting game is PINBALL FANTASIES. It's one of the most fun games I've played on any system ever. But, it comes with the machine in the US/Canada release of the console, and what's going to have to sell the machine are the OTHER titles. Right now, LIBERATION and OSCAR are the only other two titles I'd buy. (Maybe NIGEL MANSELL too.)

## 1.21 Usenet Review - Turrigan 3

```

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%% Usenet Review:  Turrigan 3                                     By Mark B. Sachs %%
%%                                                         (sachs@crayola.cse.psu.edu) %%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

```

PRODUCT NAME

Turrigan 3

BRIEF DESCRIPTION

It's a platform shoot-em-up game.

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## AUTHOR/COMPANY INFORMATION

Name: Factor 5/Rainbow Arts

## LIST PRICE

\$49.99 (US). Local dealer price \$35.95.

## SPECIAL HARDWARE AND SOFTWARE REQUIREMENTS

## HARDWARE

According to the manual, Turrican III will take advantage of extra RAM to reduce loading times, and will take advantage of a faster CPU to manipulate on-screen objects more efficiently. Indeed, loading times were very quick and BOB movement very smooth on my A3000. Also, there were no hassles because I happened to be running in NTSC mode.

## SOFTWARE

None mentioned.

## COPY PROTECTION

Disk protection. Not hard drive installable.

## MACHINE USED FOR TESTING

Amiga 3000, NTSC, 2M Chip RAM, 4M Fast RAM.

## REVIEW

It's been a while since the original Turrican and Turrican II blasted their way into the Amiga game scene. The first Turrican featured mind-bendingly impressive (and colorful) graphics, bloody enormous levels, kicky music and enough firepower to make even the National Rifle Association happy. Not long after that came Turrican II, with graphics that blew Turrican I out of the water, wonderful 7-voice music, and enough firepower to make even the NRA feel slightly ill. Both are classics, indeed, archetypes of the platform shooter genre.

What could top that? Not willing to leave well enough alone, Factor 5 has returned with the third part of the trilogy, imaginatively named Turrican III. The scenario is familiar. Long ago humanity's arch-nemesis, The Machine, was apparently destroyed; the galaxy enjoyed a period of existence that was happy, peaceful, and on the whole tax free. But of course this couldn't last -- the Machine returned and went back to its old tricks of blowing up planets and enslaving innocents. Who's going to drop down to the Machine's planet and blast his way through uncounted numbers of evil minions to put an end to this unpleasantness, and not incidentally rescue

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the cute manga babe whose cry for help alerted everyone to the menace? Looks like a job for Bren McGuire, who, with a heavily armed Turrican powersuit, purple hair, and chin the size of Texas, is definitely qualified to take it on. All this is explained in the game's intro -- very stylishly done, with scrolling backgrounds, text, and ominous music that matches the narrative very well.

Turrican III, like its two predecessors, is a platform shoot-em-up with bosses, powerups, hidden areas, the whole deal. As you may have guessed, the concept is not exactly intellectual; no strategy or planning involved, just straight death and destruction. But that's OK. It's worked before and worked well.

Anyway, after seeing the intro, I was very impressed, and eager to see the game itself. All that was left to do was to select Control Method (the game supports two-button joysticks and Sega MegaDrive joypads -- a definite plus), pick a difficulty level (from "Easy" to "Maniac") and off we go!

This, unfortunately, is where I stopped being quite so impressed.

Turrican III isn't BAD, really. But, sadly, it does not live up to its predecessors. Admittedly Turrican II -- with its colorful copper backdrops, multilevel parallax scrolling, massive armaments, and so forth -- is a hard act to follow, but the third installment isn't even at the level of Turrican I, much less II.

First disappointment: the flamethrower, the most useful weapon from TI and II (you can play it in any direction around you to take care of baddies above or below the level of your gun) is gone! It's been replaced by a Bionic Commando-style rope with which you can, er, swing up to high places. The rope is kind of neat, but I'd rather have the flamethrower to be honest.

Second disappointment: the graphics feel, well, SMALL. Small and junky. Console-like. Which shouldn't be a surprise, as this is really a conversion of "Super Turrican" for the Super NES console. But the stylish touches that made the previous two installments so perfect are entirely absent. The palettes are drab, rather than colorful (there is obvious dithering everywhere), the parallax scrolling looks unrealistic, and worst of all your weaponry is NOT impressive. As for the in-game music, it's OK, but it doesn't provide the wonderful atmosphere we saw in the previous two.

Third disappointment: there's a fine line between "playable" and "too damn easy." TI and II were playable. TIII is too damn easy. It took merely an hour to complete the game on Normal difficulty level; very few places were actually difficult to get through. The majority of the levels are highly linear and compressed, almost pushing you straight to the exit. Even the (few) non-linear levels are crowded with "EXIT" arrows everywhere, making finding your way through no challenge at all.

"Mark," I can hear you saying, "there must be SOME good points." Well, OK, there are a few. The intro's pretty nice, as I said. The game speed cannot be faulted -- no slowdowns anywhere. There are a fair number of bosses, which I personally happen to like. A few of the levels ARE quite stylish, such as a giant factory towards the end, swimming and underwater sections, and an H. R. Giger-esque freight train (I kid you not) that was a

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nervewracking experience to get across. But even these levels were far too short and featured few nifty or unusual touches. Um... did I mention that the intro was quite nice?

That's about all I can say. Turrican fans will be disappointed, I guarantee; the latest installment in the venerable trilogy doesn't follow the time-honored formula, smells too much of the console conversion that it is, and, well, as much as I wanted to before actually playing it, I can't recommend that you buy Turrican III.

## CONCLUSIONS

I wanted to like this game. I really did. But I didn't. Buy "Hired Guns" instead.

## 1.22 Mac vs. MS-DOS Performance

```
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% Macintosh vs. MS-DOS Performance                               By Sandberg and Hembree %
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
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[Editor's Note: This was sent to me on the Internet, so I don't really know who the authors are, I got their names from the article itself, because I like to try to give credit whenever possible. Anyway, while this is a Mac vs. PC comparison, it's more of a Motorola vs. Intel comparo, so it was suggested that it could apply to the Amiga. It's very informative, and very worth reading if you enjoy technical stuff!]

We have for some time seen claims made (primarily by MS-DOS sympathizers) that the Apple Macintosh provides inferior performance when compared to MS-DOS ISA/EISA/MCA. The points made are usually like Jim Seymour's claims that "On the price side of that equation, at every moment since its introduction six years ago, the Mac has delivered less raw computing performance at any given price level than a wide variety of comparable MS-DOS machines" and "the raw power of 25 MHz and 33 MHz 386's and 486's combined with the interprocess communication in OS/2, make a DOS machine a far more powerful platform". We can understand where a claim like this comes from - there have been virtually no realistic MS-DOS vs Macintosh benchmarks run! Byte's benchmark suit comes with the disclaimer that you cannot use it to compare the two machines and we have not been able to find a reasonable 3rd party benchmark doing so. We will disprove such claims then, not by use of extremely questionable benchmarks (one we found had the Mac IIci 1,400 times faster than an unspecified 80386 machine, clearly unreasonable), but by a careful architectural analysis of the two computer families. We have studied the two families for a considerable time and present our data and conclusions below. One of us (Sandberg) holds both a BSEE and an MSEE in computer engineering and has designed high-performance image-processing products for the ISA bus, as well as several software projects for the Macintosh. The other (Hembree) holds a BS in Computer Science with 91 hours of graduate study divided between CS, EE (digital and IC design) and Math, as well as hardware and software

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product development experience on both Mac and ISA systems.

## Processor Family Architectures

Let's begin with the fundamentals of the machines. Let's go inside the the architecture of the Mac and MS-DOS machines and see if these claims can be derived from this most fundamental level. In particular, we will begin with the beginning, the Motorola 680x0 (68k) and the Intel 80x86/88 ('86) CPU's. We will consider primarily those features of the processors available to programmers on the generalized Mac and MS-DOS platforms, not features which require hardware mods or unpopular alternate operating systems such as A/UX or OS/2.

## Registers

The first key to evaluating the potential power of a processor is its registers. The 68k family all have 8 address and 8 data registers of 32 bits each. The 68k family actually has two or three stack pointer registers but this feature is not used in the Mac and is not included in this analysis. The '86 family have only 8 registers, 16 bits in the '286 and earlier and 32-bit in the later versions, all usable as data registers and some as addressing registers. Both families have additional registers for status, PC, and control registers for special features (cache, memory management, etc.) which are not used except in OS programming (discussed below). All 68k CPU's therefore have  $(8 + 8) \times 32 = 512$  bits of user register while the '86ers have either  $8 \times 16 = 128$  bits (286 and earlier) or  $8 \times 32 = 256$  bits of user registers. We leave off discussion of the '86 family's so-called segment registers for later.

## Instruction Sets

The instruction sets of the two machines both cover all of the standard operations but with differing emphasis. The 68k family adds bit manipulation instructions and, in the '020 and later processors, bit field instructions. There are no comparable instructions in the '86 family, which requires sequences of mask and shift instructions to do the same tasks (these tasks are important in both graphics and in many efficient data structures). The '86 family supports both packed and unpacked BCD operations including multiply and divide (but only using the accumulator register AL) while the 68k family allows only packed BCD addition and subtraction, but supports direct memory-to-memory operations with limited addressing options. This feature is generally of interest only to COBOL compiler writers - and may help explain why COBOL compilers for the Mac are extinct. No 68k instructions except subroutine call and return (which implicitly use the A7 register as the stack pointer) require specific registers - i.e., if a count or bit number register is called for, any of the 8 data registers can be used.

One feature of the '86 instruction set is the ability to override a few of the implicit parameters by using prefix bytes. The two most common uses of prefix bytes are to override default segment registers (this is the only way, except in string instructions, to use the ES segment register) and to cause the "string" group instructions to repeat either unconditionally or conditionally. The third type of use is available only on '386 and '486 CPU's and specifies 32-bit data and 32-bit addressing offsets are to be used instead of the normal 16-bit data and 16-bit

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offsets. Thus, a '386 MOVES instruction could have 4 prefix bytes, overriding the source segment register, selecting 32-bit operand size, 32-bit SI and DI register offsets and a repeat prefix. A longstanding problem with, in particular, the '86 string instructions has been that the CPU, necessarily, allowed interrupts in the middle of long string moves and compares and did not save the complete processor state. In the '286 and earlier processors (we have not checked for the later ones) Intel's manuals warn that only the last prefix byte in a multi-prefixed instruction is saved during an interrupt and that this can cause improper operation under some common circumstances.

In addition to being usable as generalized data holders, most '86 "general-purpose" registers are implicit parameters in a variety of instructions such as variable-amount shifts (the CL register), and every multiply or divide (which use the AX register and also the DX for the largest operands). As an example, the 68k family has a generalized (all sizes and addressing modes allowed) memory-memory move instruction while the '86 family uses "string" instructions. The fact that 7 of the 8 general-purpose registers are also implicit parameters in various instructions in the '86 family places compiler writers in a particular bind. They must choose between not using any registers (absolutely destroying performance), trading off registers for instruction use (e.g., if the translate instruction is not used, the BX register becomes generally available) or putting register save and restore instructions around the instructions making use of the implicit registers. This last option is the one most often used but can be a fairly tricky one. The compiler must evaluate each individual occasion to determine whether the overhead of setting up for the special instruction exceeds the execution time of multi-instruction equivalent code. Although the compiler can determine which registers actually need saving, and hence the overhead associated with the save-restore template, the time trade-offs are often dependent on the repeat count and, if the count is a variable, the compiler cannot determine which method is optimal and must make an arbitrary choice (one which may never be optimal in a given use).

### Memory Models and Accesses

Another important aspect of processor power is how the CPU accesses data (how easy is it to describe where the data is and get it). This area includes the processor's addressing modes, memory model, physical memory size, and memory access speed. Remember that we are not considering special 680x0 or 80x86 features for  $x > 0$ .

For addressing modes, both processor families offer register direct, immediate, indirect, offset, dual-register with offset and direct (or absolute). Where registers are used as addresses or hold parts of a computed address, the comparison becomes much more complex. The '86 family allows any of 4 registers to be used in indirect addressing, the 68k any of 8. For offset addressing, the 68k family allows a 16 bit offset from any of 8 address registers, the '86's allow either 8 or 16 bit offsets from any of 4 registers. In dual-register with offset addressing, the '86 family allows either of 2 registers to be added to either of 2 other registers (giving a total of 4 combinations) and either an 8 or a 16 bit offset while the 68k family allows any of 8 address registers (or the program counter, in the case of a source operand) to be added to any of the other 15 registers (considered as either 16 or 32 bit signed values, giving a total of 240 or 270 possible combinations) plus an 8 bit offset.

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In the Mac absolute addressing can only be used to access a limited pool of shared system variables, every other part of the Mac system must be position independent and may be located anywhere in memory.

The 68k family also has predecrement and postincrement modes, which use any of the address registers. The only similar usage in the '86 family is found in implicit addressing modes in the string and stack operate instruction groups. In the string group, the SI and DI registers are implicit and in the stack group, the stack pointer register is implicit. In short, we see that the '86 family's addressing modes are a proper subset of the 68k family's modes and that the '86 family allows use of only half as many registers in the modes which use registers.

As for memory models, the 68k family uses a simple large linear address space which is broken on the Mac into RAM, ROM, and I/O devices (with minor complications for NuBus). The '86 family uses two address spaces, I/O and memory. I/O is a single 64k address space, accessed only thru special instructions. Memory is accessed as a series of 64k segments, requiring segment registers to specify which segment is currently being accessed. It is these segment registers which cause larger programs difficulty. Different registers used in addressing use different default segment registers, or these may be overridden with prefix bytes. In the general case, though, this means that access to an arbitrary memory location requires that a segment register first be loaded, then the access performed. The property of locality may reduce the number of segment register loads needed, but often at a cost in compiler complexity and/or run-time checking overhead. There is no way of completely avoiding the fundamental problems in a memory model which always must always use one of several auxiliary registers to determine a physical address.

Another factor in the evaluation of the benefits of addressing modes is the cost in time of using a particular addressing mode, measured in clock cycles. Here, the individual members of the two families differ in the amount of time needed, and the number of clock cycles needed to access a particular address (register direct imposes no access penalty on these CPUs).

The 8086/88 CPU's use a physical access cycle of 4 clock cycles, which drops down two cycles in the latest family members. A perusal of Intel manuals shows that each memory data reference for most data manipulation instructions adds either 6 clock cycles (for a source operand) or 13 clock cycles (for a destination operand) plus an additional effective address (EA) calculation time. This EA calculation time is from 5 to 12 additional clock cycles, with two more clock cycles needed if the default segment register is overridden. Thus, an add of a byte or word register to memory takes  $16 + (5 \text{ to } 12) + (0 \text{ or } 2)$  clock cycles or 21 to 30 clock cycles to execute, if the instruction has been prefetched (else add 4 or 8 clock cycles). Later members of the family drop this down to a minimum of 7 clock cycles, a very substantial improvement. This figure does, however, assume the instruction has been prefetched with no segment register override done. Clock speeds in the '86 family range up to 33 MHz for the fastest 80386 parts. Caches, for both instructions and data, appear only in the latest family member, the 80486.

The 68000 used 4 clock cycle reads and 5 clock cycle writes, also dropping to 2 cycles (for both read and write) in the latest family members. Motorola manuals state that, for the same class of instructions as in the

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Intel example above, a 68000 takes 4 clock cycles (memory source operand) or 8 clock cycles (memory destination operand) plus an EA calculation time of from 4 to 10 clock cycles. Thus, the 68000 takes  $8 + (4 \text{ to } 10)$  or 12 to 18 clock cycles to add a byte or word register to memory. Later members of the 68k family also improve the clock cycle performance on this instruction, down to an optimal 5 to 7 clock cycles (differing according to EA calculation times). This optimal case assumes only an instruction cache hit, and would be faster in the case of a 68030/040 data cache hit. Clock speeds for the 68k processor family range up to 50 MHz for the fastest 68030 parts. Instruction and data caches are included in the latest two generations of CPU's, the 68030 and 68040.

In summary, the Motorola processors are superior to the Intel processors in terms of instruction set, addressing modes, memory model, execution clock-cycle timing, and fastest clock speeds. In no sense, then, is the performance of the Intel CPUs up to that of their Motorola counterparts. The fact that high-performance workstation designers, have consistently chosen 68k family CPU's rather than '86 family CPU's may be taken as confirmation of this evaluation. Is there, then, a system-level implementation difference to account for the claimed Mac performance disadvantage?

## System-Level Hardware

### Macintosh

The Macintosh family is simpler to analyze, since all of the systems are manufactured by Apple Computer, Inc. The Mac Plus and SE use 68000 CPU's running at just under 8 MHz with zero wait-state memory. Their SCSI (high-speed peripheral) ports operate at 350 and 700 kilobytes per second, respectively. The Mac II uses a 68020 CPU with 68881 floating point coprocessor (FPU), running at about 15.8 MHz, with two wait-state memory. The SCSI port operates at a maximum data transfer speed of about 1.2 megabytes per second. Accesses to NuBus boards take about 800 to 1000 nanoseconds (ns), with boards that require two NuBus wait cycles (200 ns). The Mac IIX, IICX, and SE/30 each use a 68030 CPU with 68882 FPU at the clock speed of the Mac II with the same memory and SCSI speeds and, for the IIX and IICX, the same NuBus access speeds, with the SE/30's speed of access to its direct slot being dependent only on the speed of the add-in card. The Mac IICI runs a 68030 CPU at 25 MHz, with support for 80 ns DRAMs, a slot for an external cache memory card, support for burst-fill mode, and somewhat faster NuBus cycle times. For maximum performance, Macintoshes must be upgraded with processor accelerators. The highest performance of these is the Daystar 50 MHz 68030 accelerator. This replaces the CPU in a Mac II family system and adds 32K of zero wait-state burst-fill cache memory. Additionally, a private high-performance bus can connect the Daystar accelerator to video cards, SCSI cards, and memory cards.

### MS-DOS

The IBM/Compaq MS-DOS systems currently being sold use 8086/286/386/386SX/486 processors. The processor speeds range from 8 MHz to 33 MHz, with zero or 32k bytes of built-in cache and no cache expandability. Memory speeds run from zero to three wait states, generally with more wait states on the faster processors. ISA bus speeds

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run from 1.2 to 8 million bytes per second (although this later figure appears to be for DMA operations only). EISA systems are reported to have twice the data bandwidth, again for DMA primarily and slower for random memory accesses. MCA systems from IBM have high burst data rates, near the best performance of EISA, but degrade even more rapidly in random access operations. All systems support DMA and can use disk controllers whose performance is primarily limited by the disk head data rate. Caching disk controllers in some models also greatly enhance disk performance.

In general, top-end MS-DOS systems are engineered to be CPU-limited, not memory-speed limited as the top-end Mac's are. Unfortunately for the MS-DOS folks, their CPU's are much less capable than the Mac's, to the point that we have seen a 20 MHz (no wait state) 386 system outperformed four to one on some non-floating-point tasks by a Mac Plus using comparable quality commercial programs for each system. A baseline IBM AT (8 MHz) took over ten times as long as the plus for this graphics test. We believe that most of the claimed drawing-speed advantages of MS-DOS systems come from (expensive) special-purpose graphics co-processor boards, usable only from a few programs such as Autocad. In price, too, the high-end IBM and Compaq machines are substantially more expensive than the top-end Macintoshes, actually by enough to more than pay for a top-of-the-line 50 MHz 68030 accelerator for the Mac.

#### Software Issues

Therefore, if the MS-DOS world's claims of superior performance is correct, the Mac software, system or application level or both, must be terribly flawed. As we have already seen, the 68k family provides a large number of addressing modes which, used in conjunction with the large register set, allows the use of complex data structures without imposing a performance penalty. Because of this, the Macintosh toolbox has from the start been designed according to good object-oriented programming (OOP) principles. The best example of this is the Dialog Manager, which is clearly two subclasses (dialogs and alerts) of the Window Manager, which is in turn a subclass of QuickDraw. Now that language support for OOP is available, the toolbox fits even more cleanly into applications. At the OS level, the Macintosh Hierarchical File System (HFS) is clearly superior to both DOS and OS/2, even the so-called RHigh-Performance File System.S This superiority is in terms of both functionality and efficiency. HFS is simply faster, seldom requiring more than two disk accesses to read or write a file block (and usually just one). Subdirectories were implicit in the original Macintosh File System (MFS), even though it was a flat file system. This meant that users (and developers) did not have to throw out existing programs, or learn arcane CONFIG.SYS pathing protocols to use it.

This leads to another area where the Mac has a decided edge over the MS-DOS world. Apple sets the standards and developers follow them. Those who don't, die in the marketplace when their products break. Because there is a single graphics standard in the Mac (Quickdraw) which is device independent, everyone goes thru Quickdraw to image to both the screen and to printers. With the exception of a dwindling number of game programmers, Mac developers are a remarkably well-behaved bunch. We have determined by measurement that there are few performance gains to be had by bypassing the system and toolbox calls. This stands to reason since Apple spends roughly \$400 million a year on research and development.

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This is a large enough amount that it would be surprising if the system and toolbox routines and data structures weren't as close to optimal performers as can reasonably be designed. Although bad application design can ruin the performance of any system, the top performers in the Mac world are truly stellar. Such applications as WingZ, WriteNow, and Think C 4.0 are examples of how fast programs can run on the Macintosh.

In the MS-DOS world, Microsoft sets the standards, and the developers work around them. Bypassing DOS, or even the BIOS, is routine for the rocket scientists of the MS-DOS developer community, in the name of performance. The reason for this is that MS-DOS began life as QDOS, a Quick and Dirty clone of the CPM operating system for 8086 systems. What this means in reality is that MS-DOS began life as a collection of routines and data structures, flying in loose formation, rather than as a carefully integrated system. Microsoft has had to work long and hard just to get MS-DOS cleaned up and give it a rough approximation of the Mac OS (but not toolbox) capabilities. In the process, Microsoft broke most existing applications. Few DOS 1.x (or even 2.x) applications will run in DOS 3.3 if they took the normal and expected shortcuts of most high-performance commercial applications. The only reasons for an MS-DOS application to beat a comparable Macintosh application are in floating point, if the Macintosh being evaluated does not have an FPU, or in a text-based interface, where the MS-DOS application just writes a byte per character but the Mac has to draw the character (a much more complex task). With Microsoft now proclaiming - belatedly but correctly - that GUIs (Graphical User Interfaces) are the wave of the future, even this (hardware-based) advantage will be lost to the MS-DOS world. And after all, graphing and drawing programs simply can't use simple text-only display hardware.

## Summary

In conclusion, without resorting to dubious benchmarks, we see that the Mac architecture enjoys a fundamental advantage over the MS-DOS architecture at all levels from basic hardware thru system software and application software. We are quite unable to understand the various columnists' insistence that comparing generationally equivalent Mac and MS-DOS machines always favors the MS-DOS machines when, as we have shown, the truth is otherwise. Indeed, since the current generation of Macintosh hardware offerings do not wring the maximum performance out of the Motorola 680x0 CPUs, we can look forward to further improvements in Mac performance. MS-DOS machines are already pushed so near to the limits of their hardware performance potential that only enhanced CPUs will improve their relatively laggardly performance.

We are of the opinion that most or all of the so-called benchmarks which are bandied about are inadequate. A reasonable benchmark would operate on hundreds of thousands of bytes of data, and would place more emphasis on integer than floating point calculations, but would perform both. Further, the benchmark should not be concerned with any sort of I/O (which can always be sped up by throwing faster hardware into the box). For a raw system performance rating, the benchmark should be coded in assembler, not C or some other higher level language (HLL). This is because such HLL benchmarks are usually more a measure of the quality of the compiler's code generator. Common code benchmarks, where the same HLL code is executed on all of the systems being tested, are particularly susceptible to another flaw, biased coding. By biased coding, we mean writing the

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code such that the compilers would fully exploit one processor's architecture but not another's. An example of this would be not using register variables in C, or using only 1 or 2. Such code would use everything an MS-DOS CPU has but leave most of the registers of a 680x0 unused.

This is what we have observed with the Byte benchmarks. Indeed, Byte went further and reported a tiny-C compiler from a Z-80 to both systems. Since the Z-80 register set maps directly onto the 80x86 register set, this is a fairly optimal fit and uses most of the resources of the 80x86 CPU, while keeping everything in a single segment to avoid the 64 kbyte segment limits of MS-DOS. The 680x0 version of their tiny-C, on the other hand, uses less than half the CPU's registers, and those inefficiently (i.e., only the data registers and ignoring most of the addressing modes of the 68000). If Byte were serious about its benchmarks, it would declare everything registerized and pointerize the array accesses (like any good commercial developer), then compare its brain-dead-C results to MPW C, THINK C, and appropriate C compilers from the MS-DOS world. We are of the opinion that the results would be very interesting, but embarrassing to Byte.

## 1.23 BIX

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%%                               BIX - Byte Information Exchange      %%
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BIX is the premier online service for computing professionals and enthusiasts. While other online services cater to computer novices, BIX is the place for knowledgeable people to go for answers to tough questions. You're likely to find many others in similar situations who can offer advice, give technical assistance, or point you in the right direction.

BIX is divided into areas called conferences, each devoted to a particular area of interest. They range from algorithms to windows, from writers to Amiga. Conferences are categorized into groups, usually referred to as exchanges, so that you can browse through whatever groups interest you and see a list of the conferences it contains.

These are some of the exchanges on BIX:

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amiga.exchange - the place for Amiga developers and enthusiasts
byte - the full text of each issue of BYTE magazine; source code too
e.and.l - Entertainment and Leisure; music, pets, games, more
ibm.exchange - everything from OS/2 to PC clones
mac.exchange - Mac news, support, software, advice
professionals - consultants, engineers, financiers gather here
programmers - some of the best brains in the business!
wix - the Information Exchange for Windows; Windows Magazine online
writers.ex - the professional and amateur writer's exchange

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BIX also features access to the Internet - you can use FTP to transfer files from sites all over the world, telnet to log on to other online services, schools, and research sites, and send Internet mail to millions of people at services like DELPHI, CompuServe, America Online, MCI Mail, and other sites and services. Services like "WHOIS" and "Finger" are also available, with more features on the way (like USENET newsgroups; our newsreader is currently being tested and should be available very soon!) There are no usage fees or special charges for Internet access - it's all part of your BIX subscription.

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|                        |                                            |                    |
|------------------------|--------------------------------------------|--------------------|
| Tymnet Canada:         | \$4/hr eves/wkends                         | \$9/hour weekdays  |
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If you want to access BIX right away, contact your local PTT to set up a prepaid account. You'll pay your local carrier for your calls to BIX in advance, so there's no waiting period or verification needed. Or, connect at BIX via telnet to x25.bix.com.

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At the Name? prompt, type bix.amrpt

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Once your account is registered, you can connect the same way, except  
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BIX Member Services hours are 12pm - 11pm, Monday through Friday, ET.

## 1.24 European Outlook

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%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%% European Outlook                                     By Jesper Juul %%
%%                                                         (norjj@stud.hum.aau.dk) %%
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Please email me whenever anything important happens in the European Amiga world!

The Party  
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On the 27th to 29th of December, a huge computer gathering of took place in a conference center in Herning, Denmark.

Around 3000 computer freaks paid the 150 DKR (\$23) entrance fee, mostly people from Denmark, but with a good deal taking the trip from Sweden, Norway, Finland, Germany, Poland, Belgium...

Most of them brought their computers so a few thousand Amigas got together as well, perhaps 500 PCs, some 64s, CD32s, a 3DO, a Neo Geo, and even a Sparc Workstation.

In addition to the purely social aspect of getting together, various competitions were arranged. Most important of all, the demo-competition with a \$3500 prize. Then several smaller competitions: Intro-competition (small demo), music, and graphics. Commodore staged a dealer-demo competition with the nice but out-of-production 1950 monitor to the winners.

Several surprise arrangements of a less technical nature were also arranged: Tug of war, Karaoke (on the CD32, naturally), disc-os, and for the brave people, "Body Crashing": drink 1.5 liters of cola as fast as you can. Prize? -Another 1.5 liters of cola.

Commodore (along with some other dealers) seem to finally have realised that a lot of their market is "The Scene", as it's called. So they were there with a large stand displaying the whole line of Amigas, network

boards. A huge-screen demonstration of the CD32 took place in front of a large and (obviously) very receptive crowd. The interested found their way to MPEG, CDXL, and "Ask Commodore"-sessions. A tiny developer conference also happened. Scala MM300 was demonstrated by the nice Norwegian people who wrote it; Scala and C= Norway seem to have just about merged as companies. Not a bad thing at all.

On the evening of the 27th, "Top Gun" was shown on a large screen by a CD32 with MPEG. To be true, it was a PAL CD32 displaying a NTSC CD-I version of the film; it looked great nevertheless, and there's now reason to believe that that MPEG module is just as flexible as Commodore's promised. It is a bit funny to realise that Tom Cruise actually fights The Russians at the end of the movie (or does he call them "Ruskies"?). Yes, it was at that time before we found out that Russia and the Soviet Union wasn't quite the same thing, and before it became clear that we weren't going to fight them anyway. This is a good example of completely state-of-the-art technology being used with a completely outdated content! Well, the movie can be a bit of fun to watch anyway.

On a not so light note, racism reared up its ugly head; two demos were wisely barred from the competition due to fascist content. Hey, Europe did try racism and fascism 50 years ago. It was no fun, and it isn't cool either!

"The Party" (the official name) was very well organized, with 24-hour kiosks, ice-cream bar, junk food, and a cafeteria. The official party t-shirts were popular items sold. Separate sleeping quarters (or rather: rooms) had wisely been arranged. Alcohol was banned and confiscated at the entrance, to guarantee complete focus on the computer screens.

Surprisingly, the "guys" who put it all together even included members of the female gender, so contrary to what you may think, it wasn't all socially unsure young boys with acne. Computers, and even computer freaks, are becoming mainstream.

Both the printed press and TV covered the event quite well, doing interviews with brilliant questions like: "What is a demo?", "What is a group?". Some participants even explained that they were there because Amiga people are so much nicer and so much more helpful than PC people. Well that's all true, isn't it?

(Thanks to Jes Soerensen and Jesper Skov who were there.)

#### New products

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More and more Envoy (C='s networking software) licenses are appearing. Village Tronic, makers of the Picasso II board, are selling a parallel port networking solution called "Liana" for DM 129 (\$75). ABF are selling their Amiga Link solution with Envoy for DM 398 (\$229).

The first 3DO's are appearing in Europe. Price is currently at DM 1699, quite a bit (\$977).

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## Old products

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Following Jason Comptons article in AR139, I'd like to point to a few available Amiga expansions.

W.A.W. Elektronik offers the following CDTV expansions:

- A 2MB chip/ 2MB fastram expansion.
  - An 8MB fastram expansion.
  - A SCSI interface for internal or external HDs.
- (No prices listed.)

Accelerator boards for the 3000 can still be found. R2B2 advertises a '040 board for DM 1698 (\$977).

For the 1200, Micronik sells a tower box with 4 Zorro-II (yes, the ad says "II") and 2 PC slots. All for DM 499 (\$287).

## Addresses:

-----

ABF Computer GbR  
Postfach 14 25  
74304 Bietigheim-Bissingen  
Germany

Tel. 07142 93 00 10  
Fax. 07142 3 33 92

Micronik ComouterService  
Emil Nolde Strasse 32  
51375 Leverkusen  
Germany  
Tel. 0214 93186  
Fax. 0214 95791

R2B2  
Wilhelm Leithe Weg 83  
44867 Bochum  
Tel. 02327 32 19 56  
Fax. 02327 32 19 57

Village Tronic  
Wellweg 95  
31157 Sarstedt  
Germany

Tel. 05066 7013 - 0  
Fax. 05066 7013 - 40

W.A.W. Elektronik GmbH  
Tegeler Strasse 2  
13467 Berlin  
Germany

Tel. 030 404 33 31  
Fax. 030 404 70 39

## 1.25 Reader Mail

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%  
%% Reader Mail %%  
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

\*\*\* Area: NET\_1\_285\_11 Date: 3 Jan 94 16:41:00  
\*\*\* From: Rick Ethridge (1:285/11.0)  
\*\*\* To : Robert Glover (1:285/11.11)  
\*\*\* Subj: AmigaWorld Complaint

I've had problems attempting to send a subscription payment to AmigaWorld. The first payment was sent by regular mail (money order). My subscription was cancelled for non-payment without notice. I resent payment by REGISTERED MAIL followed up THREE WEEKS LATER by a phone call to IDG's 800 number. All we got was the run-around. It seems that we're small fry to this large conglomerate publishing operation! If you would, please try to intercede or put a "blurb" in an upcoming AmigaReport. With your on-line mag as informative as it is, maybe I should cancel payment on the last money order and send the money to you!

## 1.26 Dealer Directory

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%  
%% Dealer Directory %%  
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

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](mailto:almathera@cix.compulink.co.uk)  
(Technical) [jralph@cix.compulink.co.uk](mailto:jralph@cix.compulink.co.uk)

Amigability Computers  
P.O. Box 572  
Plantsville, CT 06479  
VOICE: 203-276-8175  
Internet: [amiga@phantm.UUCP](mailto:amiga@phantm.UUCP)  
BIX: [jbasile](mailto: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](mailto:Apogee@cup.portal.com)

Armadillo Brothers  
753 East 3300 South  
Salt Lake City, Utah  
VOICE: 801-484-2791  
Internet: [B.GRAY@genie.geis.com](mailto:B.GRAY@genie.geis.com)

Brian Fowler Computers Ltd  
11 North St  
Exeter  
Devon  
EX4 3QS  
United Kingdom  
Voice: (0392) 499 755  
Fax: (0392) 423 480  
Internet: [brian\\_fowler@cix.compulink.co.uk](mailto:brian_fowler@cix.compulink.co.uk)

CLICK! Microcomputer Applications B.V.B.A.  
Boomsesteenweg 468  
B-2610 Wilrijk - Antwerpen  
Belgium - Europe  
VOICE: 03 / 828.18.15  
FAX: 03 / 828.67.36  
USENET: [vanhoutv@click.augfl.be](mailto:vanhoutv@click.augfl.be)  
FIDO: 2:292/603.9  
AmigaNet: 39:120/102.9

Comspec Communications Inc  
Serving your computing needs since 1976  
74 Wingold Ave  
Toronto, Ontario  
Canada M6B 1P5  
Computer Centre: (416) 785-8348  
Service, Corporate & Educational Sales: (416) 785-3553

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Fax: 416-785-3668  
Internet: bryanf@comcorp.comspec.com  
bryanf@accesspt.north.net

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

DataKompaniet ANS  
Pb 3187 Munkvoll  
N-7002 Trondheim  
Norway - Europe  
VOICE/FAX: 72 555 149  
Internet: torrunes@idt.unit.no

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  
BBS: 617-769-3172  
Fido: 1:101/322  
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

Industrial Video, Inc.  
1601 North Ridge Rd.  
Lorain, OH 44055  
VOICE: 800-362-6150  
216-233-4000  
Internet: af741@cleveland.freenet.edu  
Contact: John Gray

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

MusicMart: Media Sound & Vision  
71 Wellington Road  
London, Ontario, Canada  
VOICE: 519-434-4162  
FAX: 519-663-8074  
BBS: 519-457-2986  
FIDO: 1:221/125  
AmigaNet: 40:550/1  
MaxNet: 90:204/1  
iNET: [koops@gaul.csd.uwo.ca](mailto:koops@gaul.csd.uwo.ca)

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

Wonder Computers Inc.  
1315 Richmond Rd.  
Ottawa, Ontario, Canada K2B 8J7  
Voice: 613-596-2542  
Fax: 613-596-9349  
BBS: 613-829-0909

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

## 1.27 The Grapevine

%  
 %% The Grapevine %%  
 %

- Omaha, Nebraska

-----

While sitting here putting together this week's issue, I was pleasantly surprised to see a rather nice trailer for the upcoming series premiere of Babylon 5. The debut date, at least here in Nebraska, is set for Sunday, January 30th. Please check your local listings for times and channel.

## 1.28 Humor Department

```

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%                               The Humor Department                               %%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

```

Operating Systems

By Bill Wilson, Rob Freundlich, Dag Gillies, and others  
in Usenet's rec.humor.

=====

Did you ever wonder what driving to the store would be like if  
operating systems ran your car?

MS-DOS: You get in the car and try to remember where you put  
your keys.

WINDOWS: You get in the car and drive to the store very slowly  
because attached to the back of your car is a freight train.

OS/2: After fueling up with 6000 gallons of gas, you get in the  
car and drive to the store with a motorcycle escort and a  
marching band in procession. Halfway there, the car blows up,  
killing everybody in town.

UNIX: You get in the car and type GREP STORE. After reaching  
speeds of 200 mph en route, you arrive at the barber shop.

Windows NT: You get in the car and write a letter that says, "go  
to the store". Then you get out of the car and mail the letter to  
your dashboard.

OS/400: An attendant locks you into the car, then drives you to  
the store where you get to watch everybody else buy filet mignon.

Taligent/Pink: You walk to the store with Ricardo Montalban, who  
tells you how wonderful it will be when he can fly you to the  
store in his Learjet.

S/36 SSP: You get in the car and drive to the store. Halfway





## 1.30 Columns and Features

|                            |                                               |
|----------------------------|-----------------------------------------------|
| From the Editor's Desk     | Saying it like it is!                         |
| Computer Product News      | Product Announcements and Info                |
| AR Online                  | The lines are buzzing!                        |
| CD32 Reviewed              | A close look at the CD32                      |
| Rumors from the Amiga Side | A look into 1994                              |
| CD Platform Comparison     | Comparing the game machines                   |
| UseNet Review              | Pinball Fantasies AGA                         |
| The Emulation Rambler      | Utilities Unlimited clears the air            |
| CD32 Titles                | A Spot Review                                 |
| UseNet Review              | Turrican 3                                    |
| MAC vs. MS-DOS             | Performance review between Intel and Motorola |
| European Outlook           | News from Europe                              |
| Reader Mail                | The readers speak!                            |
| The Grapevine              | We heard it through the grapevine!            |
| The Humor Department       | Jokes, Quotes, and Shameless plugs!           |

## 1.31 About Amiga Report

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

## 1.32 Commercial Online Services

|          |                                        |
|----------|----------------------------------------|
| Delphi   | Getting better all the time!           |
| Portal   | A great place for Amiga users...       |
| InterNet | Subscribe to the AR Mailing List       |
| BIX      | For Serious Programmers and Developers |

## 1.33 Files Available for FTP

|                      |                                |
|----------------------|--------------------------------|
| HWGRCS patch level 6 | Port of RCS[5.6]               |
| MainActor v1.2       | A modular animation package    |
| Amiga Mosaic v1.0    | World Wide Web browser program |
| PGPAmiga v2.3a.2     | Public Key encryption program  |

## 1.34 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

## 1.35 In The MeanTime

\* IN THE MEANTIME BBS \*  
Official Amiga Report Distribution Site  
\* Running AXShell \*  
Robert Niles, Sysop  
rniles@imtired.itm.com  
509-966-3828 Supra V.32bis 24hrs - 7 days  
Yakima, Washington

\*\*\*\*\* Notice \*\*\*\*\*

After 13 September 1993, In The MeanTime will no longer be on FidoNet, thus we will no longer be accepting File REquests (FREQs). We WILL be still accepting calls and will have the latest edition of Amiga Report online. Downloads to first time callers are still accepted. For the west coast call Cloud's Corner to FREQ the latest edition of Amiga Report.

Those who call for the latest edition of Amiga Report, and who do not wish to establish an account, log in as guest with the password of "guest". At the prompt type "ARMAG" (without the quotes).

## 1.36 Cloud's Corner

\* CLOUD'S CORNER BBS \*  
Official Amiga Report Distribution Site  
MebbsNet/Starnet Support/Distribution Site West Coast USA  
\* Running MEBBSNet BBS \*  
Larry Cloud, Sysop  
FidoNet: 1:350/30  
MaxNet: 90:180/10  
Internet: larryc@hebron.connected.com  
206-377-4290 USR HST DS 24hrs - 7 days  
Bremerton, Washington

New users can call and get ANY copy of Amiga Report. These are considered "free" downloads, they do not count against any file ratio. The latest issue of Amiga Reports can be Freq'ed (FileREQusted) from here as "AR.LHA", as "AR" or as ARxxx.LHA where xxx is the issue number. Freq's are valid at ANY time.

For users interested in reading AR, but who do not have access to AmigaGuide, you can freq ARBUL and get the AR in bulletin form. This service is provided for persons who do not have AmigaGuide (such as IBM users). Please note that any pictures distributed with the "regular" Amiga Reports archive will NOT be sent with this freq. This file is not available for dial-in users, but you can read bulletin #5 with your capture buffer open and get the same file.

---

## 1.37 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

```

## 1.38 Amiga Junction 9

```

* AMIGA JUNCTION 9 *
Official Amiga Report Distribution Site -- United Kingdom
* Running DLG Professional *
  Stephen Anderson, Sysop
  Sysop Email: sysadmin@junct9.royle.org

Line 1 +44 (0)372 271000 14400 V.32bis/HST FidoNet 2:440/20
Line 2 +44 (0)372 278000 14400 V.32bis only FidoNet 2:440/21
Line 3 +44 (0)372 279000 2400 V.42bis/MNP

Internet: user_name@junct9.royle.org

```

## 1.39 BitStream BBS

```

* 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

```

## 1.40 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

## 1.41 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
24 hrs - 7 days
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.
```

## 1.42 Omaha Amiganet

```
* OMAHA AMIGANET *
Official Amiga Report Distribution Site
* Running DLG Professional *
Andy Wasserman, Sysop
24 hrs - 7 days
FidoNet: 1:285/11
AmigaNet: 40:200/10
Line 1: 402-333-5110 V.32bis
Line 2: 402-691-0104 USR DS
Omaha, Nebraska
```

## 1.43 Amiga-Night-System

```
* AMIGA-NIGHT-SYSTEM *
Official Amiga Report Distribution Site - Finland
* Running DLG Professional *
Janne Saarme, Sysop
24 hrs - 7 days
InterNet: luumu@fenix.fipnet.fi
FidoNet: 2:220/550.0
+358-0-675840 V.32bis
Helsinki, Finland
```

## 1.44 Ramses Amiga Flying

```
* RAMSES THE AMIGA FLYING *
Official Amiga Report Distribution Site -- France
* Running DLG Professional *
    Eric Delord, Sysop
    Philippe Brand, Co-Sysop
    Stephane Legrand, Co-Sysop
Internet: user.name@ramses.gna.org
    Fidonet: 2:320/104
    +33-1-60037015 USR DS 16.8
    +33-1-60037713 V.32bis
    +33-1-60037716 1200-2400
```

Ramses The Amiga Flying BBS is an Amiga-dedicated BBS running DLG-Pro on a Amiga 3000, 16MB RAM, 2GB Disk space, 3 lines.

We keep a dayly Aminet site mirroring, NetBSD-Amiga complete mirror site from ftp.eunet.ch (main site), Amiga Report, GNU Amiga, Ramses is the SAN/ADS/Amiganet French coordinator.

## 1.45 Gateway BBS

```
* THE GATEWAY BBS *
Official Amiga Report Distribution Site
* Running Excelsior! BBS *
    Stace Cunningham, Sysop
    Dan Butler, CoSysop
    24 hrs - 7 days
InterNet: stace@tecnet1.jcte.jcs.mil
FidoNet: 1:3604/60.0
    601-374-2697 Hayes Optina 28.8 V.FC
    Biloxi, Mississippi
```

## 1.46 Talk City

```
* TALK CITY *
Official Amiga Report Distribution Site
708-372-0190 - 2400bps    708-372-0268 - V32 14.4K    708-372-0283 USR DS 14.4K
Fido Net 1:115/372,0    Phantom Net 11:2115/2.0    Clink Net 911:6080/4.0
UUCP tcity.com
```

Over 3 Gig of Files Online | More and More things everyday.

With Three IBM CD-ROMs online, 10 lines, support for all platforms, and a REALLY dedicated sysop (The Mayor).

## 1.47 Amiga BBS

\* Amiga BBS \*  
 Official Amiga Report Distribution Site  
 \* Running Excelsior! BBS \*  
 Alejandro Kurczyn, Sysop  
 FidoNet 4:975/7  
 First Amiga BBS in Mexico  
 (5) 887-3080 9600 V32,MNP  
 Estado de Mexico, Mexico

## 1.48 The Stygian Abyss

\* THE STYGIAN ABYSS BBS \*  
 312-384-0616 14.4 USR Courier HST  
 312-384-6250 14.4 Supra V.32 bis (FREQ line)  
 312-384-0716 2400 USR Courier

FIDONet-1:115/384.0 CLink-911:6200/2.0 NWNet-206:310/0.0--206:310/1.0  
 PhantomNet Central States Cooridinator-11:2115/0.0--11:2115/1.0  
 FaithNet Central States Cooridinator-700:6000/0.0--700:6000/1.0  
 AMINet Chicagoland HUB-559:2/5.0  
 Chicago, Illinois

Over 4 GIGS of files I Over 3700 MODS I Over 120 On-Line Games  
 Tons of digitized sounds I Over 15,000 GIFS  
 Supporting: Amiga I IBM I Macintosh I C=64/128  
 SIR SAMMY-SysOp Enter.....If you dare!!

## 1.49 Freeland Mainframe

\* FREELAND MAINFRAME \*  
 Offical Amiga Report Distribution Site  
 \* Running DLG Progressional \*  
 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

## 1.50 LAHO

\* LAHO BBS \*  
 Official Amiga Report Distribution Site -- Finland  
 \* Running MBBS \*  
 Lenni Uitti, SysOp

---

Tero Manninen, SysOp (PC-areas)  
Juha Makinen, SysOp (Amiga-areas)  
+358-64-414 1516, V.32bis/HST  
+358-64-414 0400, V.32bis/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 a CD-ROM drive. The BBS software is a Norwegian origin MBBS running in a DesqView windows.

We have over 7000 files online (both for the Amiga and PC) + 650MB stuff on the Aminet CD-ROM disk.

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) even on their first call.

The system has been running since 1989 and is sponsored by the local telephone company, Vaasan Ladin Puhelin Oy.

## 1.51 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

## 1.52 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

## 1.53 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

## 1.54 Leguans Byte Channel

\* LEGUANS BYTE CHANNEL \*  
Official Amiga Report Distribution Site -- Germany  
\* Running EazyBBS V2.11 \*  
Andreas Geist, Sysop  
Usenet: andreas@lbcmbx.in-berlin.de  
24 hrs - 7 days  
Line 1: 49-30-8110060 USR DS 16.8  
Line 2: 49-30-8122442 USR DS 16.8  
  
Login as User: "amiga", Passwd: "report"

## 1.55 Stingray Database BBS

\* STINGRAY DATABASE \*  
Official Amiga Report Distribution Site -- Germany  
\* Running FastCall \*  
Bernd Mienert, Sysop  
Email: sysop@sting-db.zer.sub.org.dbp.de  
+49 208 496807 HST-Dual 24hrs - 7 days  
Muelheim/Ruhr, Germany

## 1.56 T.B.P. Video Slate

\* T.B.P. VIDEO SLATE \*  
Official Amiga Report Distribution Site  
An Amiga dedicated BBS for All  
\* Running Skyline 1.3.2 \*  
Mark E Davidson, Sysop  
24 hrs - 7 days  
201-586-3623 USR 14.4 HST  
Rockaway, New Jersey  
  
Full Skypix menus + normal and ansi menu sets.  
Instant Access to all. Download on the first call.

Hardware: Amiga 500 Tower custom at 14 MHz, 350 Meg maxtor,  
125 Meg SCSI Maxtor, 125 Meg IDE Maxtor, Double Speed CD rom,  
9 meg RAM

---

## 1.57 Amiga Central

\* AMIGA CENTRAL! \*  
Official Amiga Report Distribution Site  
CNet Amiga Support Site  
\* Running CNet Amiga BBS \*  
Carl Tashian, Sysop  
Internet mail: root@amicent.raider.net  
615-383-9679 1200-14.4Kbps V.32bis  
24 hours - 7 days  
Nashville, Tennessee

Hardware: Amiga 3000 Tower 68030+882@25MHz, 105 meg Quantum, 225 meg Seagate,  
Zoom 14.4k modem

## 1.58 Continental Drift

\* CONTINENTAL DRIFT BBS \*  
Official Amiga Report Distribution Site  
\* Running MAXsBBS software (DLG Pro is being delivered!) \*  
Murry Chaffer & Andre Lackman, Sysops  
+612 9188375  
24 hours - 7 days  
Sydney, Australia

## 1.59 Guru Meditation:

\* GURU MEDITATION \*  
Official Amiga Report Distribution Site -- Spain  
\* Running Remote Access \*  
Javier Frias, SysOp  
+34-1-383-1317 V.32bis  
24 hours - 7days  
Spain