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suspicion...
the enforcers – net cops or net vigilantes?

paranoia...
conspiracies, politics and flamewars on usenet

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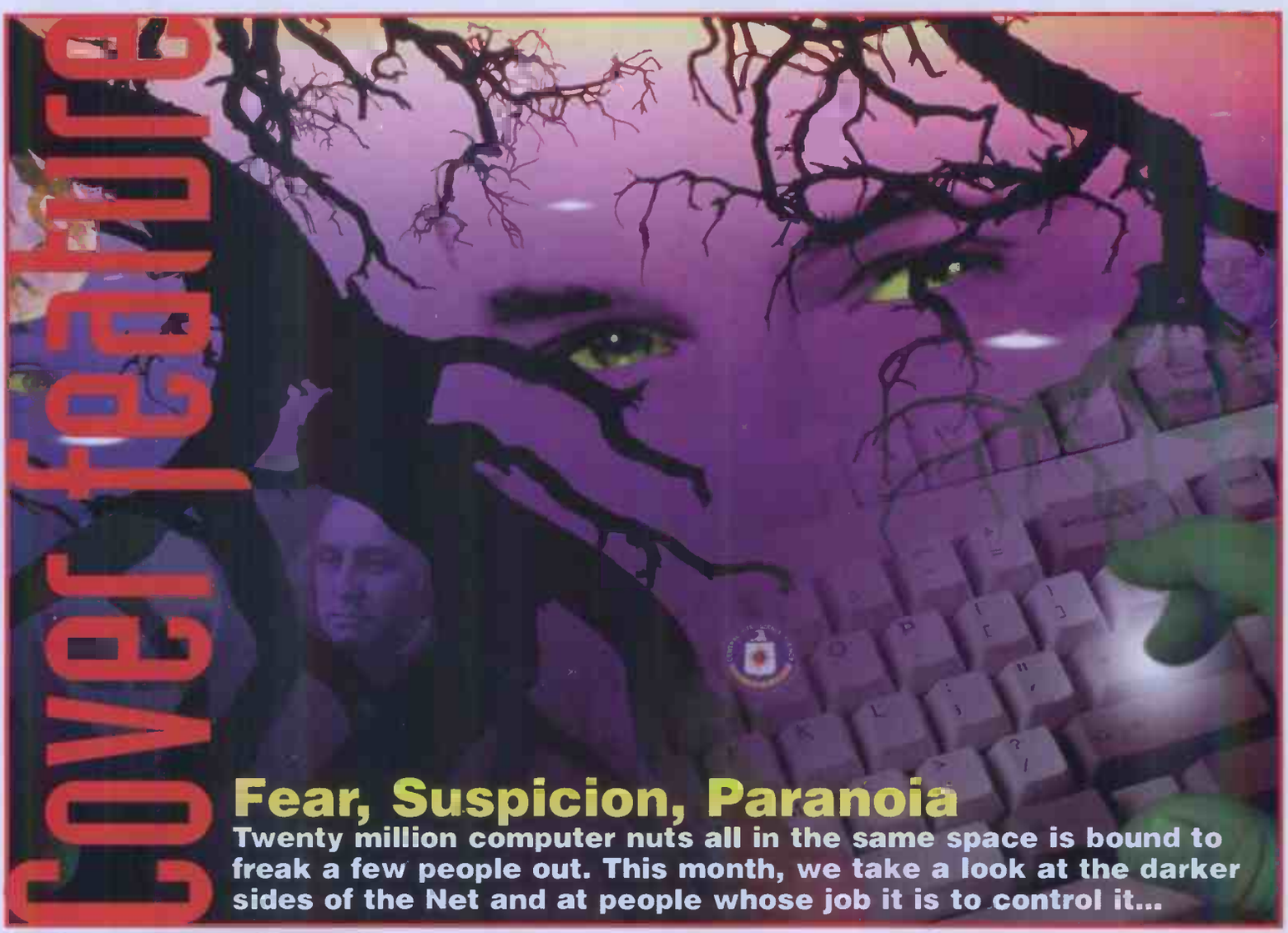
Issue 6 April 1995



cover feature

Fear, Suspicion, Paranoia

Twenty million computer nuts all in the same space is bound to freak a few people out. This month, we take a look at the darker sides of the Net and at people whose job it is to control it...

logon

issue six

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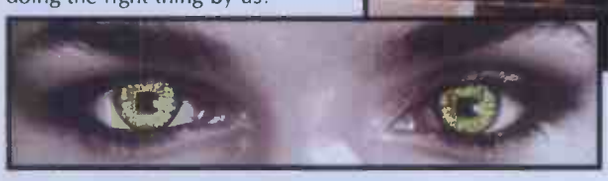

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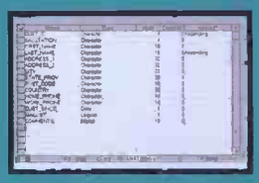

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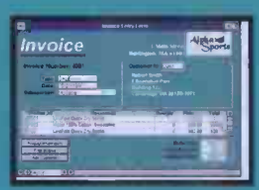

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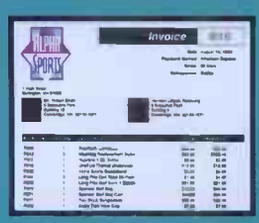

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The backlash has begun

Hands up if you're a 'pornographer and paedophile'. No? Didn't think so. Now hands up if you think our MPs think you're a 'pornographer and paedophile'. Let me just count those hands there at the back...

What's sparking these thoughts is a recent article in The News, a Portsmouth-based paper, which voiced police concerns about a tide of Internet-based "vile pornographic" images supposedly accessible by children, and a coincidental report in Computing magazine which says that the Government is "taking a stance against pornography on the Internet with the formation of the 'Internet Ethics Collaborative Open Group'".

The reported idea behind this group, which is run by the CCTA, is to monitor user complaints and concerns about unethical bulletin boards and Net practices, with a view to recommending a course of action to the Government within the next few months.

It appears our MPs are a suspicious lot. Every time a new piece of technology comes along, there's a moral panic, and it always seems to involve sex for some reason. OK, fair enough, there are some pretty unpleasant people using the Net for some pretty nasty reasons, but if you want that stuff you actually have to know where to look.

It's hugely unlikely that you're going to stumble across a hard-core paedophile FTP site. In fact, it's about as likely as randomly dialling a number in a telephone book and contacting some S&M specialist (although I'm sure there must be MPs who try). Other sex areas on the Net are clearly flagged – the alt.sex newsgroups couldn't be any more explicit as to their subject matters.

The main problem with the Net, from the viewpoint of those people who'd like to censor it, is that it's a communications medium first and foremost. So it's hardly surprising that people – good and bad – use it as such.

The problems begin when you try to regulate a communications system like this. To regulate a system, you need to be able to monitor it in some way, and that's practically impossible with the Net, for two reasons. The first is the sheer size of the thing – I could download stuff to an FTP site in China somewhere and nobody would know what was on the site unless I told them. The second is: perfect encryption methods. If the police want to prosecute a person for possession of pornographic or other illegal material, they're going to have to do it using more traditional methods. Provided seized material is encrypted and the key is unknown, the police will have no evidence.

Our trouble in this country is that we never start these arguments from a 'free speech' stance – the first thought, the first reflex is always a censorious one. More sinister though, is the fact that there is a double standard operating here.

Firstly, what are the issues? Why should the Net be regulated because a few paedophiles decide to use the Net to send their nasty wares to each other? That's not a case for regulation of the Net, that's only a case for tracking down paedophiles and locking them up.

Secondly, why should the Net be regulated because a few kids can access some porno pictures on Usenet? Kids looking at pornographic material in playgrounds is nothing new. If it wasn't stuff downloaded over the Net, it would just be pages from pornographic magazines instead, which, strangely enough, are freely available in most newsagents.

If we want to stop kids accessing such adult material, then all we have to do is provide Internet software which parents can use to lock their kids out of areas – newsgroups in particular – which they don't agree with. Or alternatively, lock them into parts of the Net that they do agree with. Such approaches are used in video recorders and so on, and it would be blindingly easy to create such a system with Net software. This whole thing is for entrepreneurs to sort out, not the Government.

Here's a line from one of the MPs making a fuss about this. He says, "I am very concerned that children, who often know more about computers than their parents, will simply stumble across this material." So what's he saying? That, because some parents are ignorant about technology they flippin' well ought to know about as we move into the 21st Century, those who have made the effort to get to know about such technology are going to be penalised? Ridiculous.

And isn't it funny how a medium like newspaper, which is useful to the Government, gets to regulate itself, while a new medium like the Net doesn't? Perhaps we need to start paying a Tory tariff to buy them off. Demon and Pipex could offer it as part of their joining fee – say an extra £2 – and pass it on for us.

And again, isn't it funny that when it comes to business users of the Net, the Government is proud to claim that its free market principles mean it has no information superhighway policy, but when it comes to the ordinary Joe (or Joanna) at home, the restrictions begin to pile up?

Anyway, given all of the above, there's one certainty – that it will actually be impossible to regulate the Net. Us Net users know this, so we're in for a pretty entertaining time watching the Government trying to figure this out.

Who knows, bearing all this in mind, maybe our 'political classes' will have to start to trust their constituents for a change. They may find it does them some good. They may even find they like it.

→ **Nick Merritt**

internet AND COMMS TODAY

Paragon Publishing Ltd.
Durham House,
124 Old Christchurch Rd.
Bournemouth, BH1 1NF

Phone: (0202) 299900
Fax: (0202) 299955
Email: paragon@itoday.demon.co.uk

Editor
Nick Merritt

CONSULTANT EDITOR
John Kennedy

GROUP ART EDITOR
Mark Kendrick

PRODUCTION EDITOR
Kirsten Foster

DESIGNER & ILLUSTRATOR
Martin Ollman

CONTRIBUTORS
Jack Schofield
Jonathan Miller
Darren Irvine
Jeremy Young
Colin Turner
Geoff Spick
Joel Furr
Sara Edlington
Charles Salem
Mark Ogier
The Zookeeper

ADVERTISING SALES
Ian Kenyon (Group Ad Manager)
Yvonne Mitchener (Recruitment Advertising)
Diana Monteiro (Senior Ad Sales)
Sam de Voil (Senior Ad Sales)
Megan Hall (Ad Sales)

ADVERTISING CONTACT
Phone : (01202) 299900
FAX: (01202) 555011
Email: Ads@itoday.demon.co.uk

ADVERTISING PRODUCTION
Alex Tilbury
Christa Fairchild
Clare Loggey (Assistant)

PRODUCTION MANAGER
Jane Hawkins

SYSTEMS MANAGER
Alan Russell

PRE-PRESS
Suzanne Ryan
Ted Dearberg

PUBLISHER
Jason Spiller

PUBLISHING DIRECTOR
Pat Kelly

PRODUCTION DIRECTOR
Di Tavener

MANAGING DIRECTOR
Richard Monteiro

SUBS/MAIL ORDER
Karen Sharrock
on (01202) 299900
Email: itsubs@itoday.demon.co.uk

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bulletin

news

Black News for the Baron

Scotland Yard has revealed that the Black Baron, allegedly the author of the UK's most seriously damaging virus programs, has been charged under the Computer Misuse Act 1990, and at the time of writing was scheduled to appear before Plymouth Magistrates Court on February 14 this year.

"Christopher Pile (aka the Black Baron) aged 25, and unemployed, will appear before Plymouth Magistrates, charged with 10 counts under the Computer Misuse Act," a spokesman for Scotland Yard's press office, told I&CT.

According to the spokesman, Pile has been charged on five counts under Section Two and five counts under Section Three of the Act. "The offences relate to the two computer viruses known as Pathogen and Queeg," said the spokesman.

The two viruses which Pile is alleged to have authored, are reported to have destroyed data on users' PCs. When the damage routine had executed, the victim's PC screen threw up the message: "Smoke me a kipper, I'll be back for breakfast. Unfortunately some of your data won't."

Pathogen and Queeg were first discovered by British virus experts in February of last year and, according to the Scotland Yard Computer Crime Unit, are "some of the nastiest trigger routines ever seen."

The viruses randomly corrupt data on the hard drive and, under some circumstances, can also disable the floppy drive.

The terms Pathogen and Queeg are known buzz-words from the BBC TV series Red Dwarf. When activated, Pathogen writes random data across the infected machine's hard disk. Queeg operates similarly, I&CT notes.

Peter Sommer, a security consultant and senior with the Computer Research Centre at the London School of Economics, told I&CT that proving damage may be difficult, although not impossible, for the prosecution to achieve. "It comes down to Section 69 of the Police & Criminal Evidence Act, which requires the user of the PC to certify that the machine was functioning correctly at the time when the virus allegedly caused damage," he said, adding that this was a lot more difficult than it sounds.

"If the defendant pleads not guilty, then the case could take some time to put together. The police will have an extremely difficult prosecution ahead of them, and it will make for a lengthy and very interesting case," he said.

BT Announces Further ISDN Savings

British Telecom has announced a series of discounted long term contracts designed to cut the cost of ISDN (integrated services digital network) line rental for companies prepared to commit to longer than the standard one-year minimum.

The deals follow in the wake of a three-month discount of £100 on the normal installation costs of £400 for an ISDN-2 circuit from BT.

According to June Campbell, ISDN Business Development manager with BT, the aim of these deals is to get people interested in the advantages that ISDN has to offer. "We're committed to providing the best value for small and larger business customers alike. This latest price initiative gives companies an opportunity to gain from a long- term investment in high-speed, digital communications at reduced cost," she said.

Times On The Internet

→ The Times Higher Education Supplement (HES) has set up a server system on the Internet. According to Sonia Allen of the Times HES promotions department, the aim is to 'publish' the Times HES into an international marketplace, rather than the Internet acting as a replacement for the paper edition of the weekly newspaper.

The Internet service will not give the full text of the HES. Instead, the headlines and first paragraph of each story will be available online, along with a list of letters to the editor with author and subject, summaries of opinion, and feature articles.

Book reviews will be listed as they appear, and plans call for the Internet service, unlike the printed paper, to carry lists of selected new editions which cannot be reviewed due to reasons of space.

According to Philip Crawley, Managing Director of The Times Supplements, electronic publication will also allow an extended version of the Noticeboard page to be published online. Known as NetGazette, the Noticeboard extension will list more appointments and research grants than the printed version. Plans also call for the service to provide opportunities for users to contribute to debates about higher education.

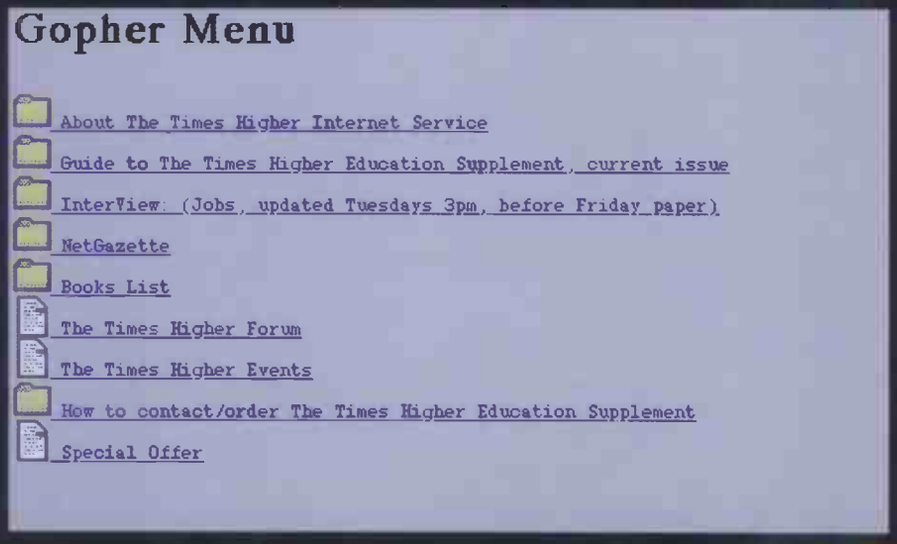
"The arrival of The Times Higher on the Internet is an important milestone in the development of multimedia applications for News International. For the first time in this country, we are making advertisements available online ahead of the publication of the paper itself," he explained.

The Times Higher Education Supplement can be found on the Internet at gopher.timeshigher.newsint.co.uk

What about readers of the HES who are not online to the Internet? Allen explained that, although the marketing of Internet services – such as The Sunday Times' linkup with Delphi UK – is under review, there are no plans to market 'starter kits' for the Internet at the moment.

Contact: Times HES (0171) 782 3000

→ Access the Times Higher Educational Supplement via gopher.

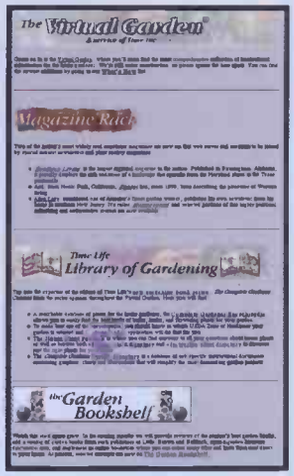


Green Finger

Green thumbs will have information at their fingertips in the Virtual Garden on the Internet. A project of Time Life, the Virtual Garden features articles on gardening from regional lifestyle magazines like Sunset and Southern Living.

However, the sponsors of the system have ambitious plans to include gardening information from many other publications and sources, and are inviting anyone else with expertise in horticulture to contribute.

According to an introduction on its home page (**http://www.timeinc.com/vg**) by Sean Callahan, Managing Editor of Time Life Digital, the Virtual Garden, "will not limit its content to information derived from a single sponsoring publisher. Instead it will consist of a panoply of features derived from several Time Inc. magazines and book publishers as well as contributions from the world's leading public gardens and arboreta, professional botanists, horticulturists and landscape architects, and plant societies and gardening experts."



→ Access all the gardening information you could want, via the WWW.

Created as World Wide Web documents, and still under construction, the Virtual Garden takes advantage of computer capabilities to offer features not available in the magazines. Gardening articles from past issues of the magazines are available in the Virtual Garden, and include photos which ran in the magazines. A major fj4

eature is a database of about 2,000 plants, including pictures, which can be searched by filling in a form. Another section reviews books on gardening and offers excerpts.

The Garden Project Directory will become an encyclopaedia of detailed instructions on how to perform many garden tasks. One item, for example, provides step-by-step instructions on replanting balled and burlaped shrubs and trees.

The instructions will also be available as Adobe Acrobat files which can be printed and taken to the garden, since "taking your CPU out to the garden is not especially convenient."

Contact: callahan@hand.timeinc.com

CompuServe To Develop 24-Bit GIF

Online giant CompuServe has asked graphics developers to join it in developing GIF24, a "free and open" 24-bit graphics file standard to succeed its current eight-bit GIF (Graphics Interchange Format) standard. The announcement came in the wake of recent controversy when Unisys Corp. claimed royalties on compression technology used in eight-bit GIFs.

Speaking for CompuServe, Pierce Reid told I&CT: "CompuServe is completely committed – as it was intended with the last version – to have GIF24 be open and entirely free to developers and the entire online community."

The new GIF standard must be capable of 24-bit lossless compression. Asked if the service had considered moving to the JPEG (Joint Photographic Experts Group) format, Reid said that, while JPEG is useful in some contexts, it is too "lossy" to replace GIF. Lossy compression techniques intentionally lose some graphical detail in return for a smaller file size.

Explained Reid: "JPEG is very good for certain things. For example, if you want to download and view pictures on your screen, JPEG is adequate. But for people in the development community – for people in digital picture markets, publishers, people reprinting on paper media – a lossy method like JPEG is not an adequate solution.

Reid said CompuServe has been quietly working on an update to the GIF standard for some time, but the recent controversy about royalties had made the project more urgent.

He explained: "A combination of the discussion on the Internet and the huge volume of useful suggestions during the tempest in a teapot of the last couple of weeks made a big difference.

"The carping got a lot of attention," he added, "but the ones who said, 'hey, let's use this as a means to leap to the next level,' those people were a real credit to the Internet community. They've helped us move this project onto the front burner."

Multi-multimedia

You can't hear the calls of "Extra, Extra, read all about it!" in cyberspace. But the Hearst Corporation says it is making buying magazines, audio CDs, and videotapes easier on the Internet, with its new Multimedia Newsstand service.

Multimedia Newsstand is an interactive shopping and entertainment service available to anyone using the Internet's World Wide Web. Besides magazines, CDs, and videotapes, Sharan said the service will later be expanded to include the sale of CD-ROMs and other electronic products.

As of now, Sharan said browsers can subscribe to more than 250 magazines, search and select magazines by category, and preview editorial content samples and covers of the magazines, among other features. "This is truly the newsstand of the future," he said.

Purchasing any of the items offered at the Newsstand can be done in several ways, including electronically by entering a credit card number. Sharan said this feature makes the service even more attractive. "We are offering excellent prices, time advantages, and entertainment, all in the privacy of the customer's homes."

The Multimedia Newsstand can be accessed at **http://mmnewsstand.com** via the World Wide Web.

World Vision

Australia on the Net

→ **SYDNEY, AUSTRALIA** – Australia's main telecommunications carrier, Telecom, is expected to take over the running of AARNet, the Australian Internet backbone.

Two reports in the Sydney Morning Herald newspaper say that AARNet (Australian Academic Research Network) has been in discussion with Telecom. It is anticipated that Telecom will take over the day-to-day running of the network, giving it a significant advantage in the "information provider" race that is now on around the world. Around half a million Australians use the Internet, either directly or indirectly.

At present, the AARNet belongs to all Australian universities, and cost around US$6 million to run in 1994, mainly for telecommunications costs. Telecom's role could be to bill commercial users of the Net, with universities continuing to use it as they do presently. Other carriers, such as British Telecom and Australia's Optus, are known to be interested in the Australian Internet market and this move would allow Telecom to aggregate the Internet traffic with its existing overseas data traffic, with subsequent cost advantages.

There are a number of commercial Internet access providers in Australia, and these all have a vested interest in ensuring continued access to the Internet via AARNet. One, Oz-Email, is believed to be arranging its own two megabits-per-second link to the US, bypassing AARNet. Some providers are also changing from connect-time charging, to volume-based charging, anticipating changes in their service access.

US Robotics Goes Cellular V.Everything

→ **SKOKIE, ILLINOIS** – US Robotics says it has licensing agreements in place with AT&T Paradyne and Microcom that will let the company include the other firms' cellular data transmission protocols in US Robotics (USR) cellular data products. USR called it a "continuation" of its "V.Everything" approach to data communications.

The two licensed protocols are AT&T Paradyne's ETC (Enhanced Throughput Cellular) and Microcom's MNP 10 (Microcom Networking Protocol, level 10). Including the two popular cellular protocols will increase both product compatibility and data throughput on systems equipped with those protocols.

USR said its first product to use the newly licensed protocols will be the Enterprise Network Hub (ENH), the firm's high-density modular network system. The ENH serves various data communications purposes, such as remote LAN (local area network) access, transaction processing and Internet access. Corporations use the ENH to give employees fast remote access, and it is also widely used by cellular carriers. USR will start shipping cellular ENH modules in February.

USR spokesperson, Lauri Lentz, told I&CT the agreement is still too new for the firm to comment on, regarding other specific products it will equip with the protocols. However, she did say the company expects to make announcements about other cellular V.Everything products at the ComNet show scheduled in Washington DC later this month.

USR's V.Everything approach to data communications devices has been popular because it makes for devices that are widely compatible with other products. Jonathan Zakin, the firm's Executive Vice President, said the firm counts cellular service providers, information services, and Internet access providers among its customers. He said V.Everything would let customers connect a wider variety of users at the maximum speed and reliability the users' equipment can handle.

About future products, Zakin remarked: "The cellular products that we'll be announcing over the next few months, including portable cellular products, will combine with the Enterprise Network Hub to provide our customers with a complete, end-to-end cellular solution."

Contact: (0101) 800 877 2677

Teen Sex and the Internet

→ **VANCOUVER, CANADA** – Those still poking along on the byways of the computer industry may look with envy at the Information Superhighway, but it isn't for everyone, said Mark Skapinker, President of Delrina Corporation. In the opening keynote address at Comdex/Pacific Rim, Skapinker warned that the Internet is not completely reliable, and is insecure, heavily used by interest groups, disorganized, and full of sex and politics.

The Internet, Skapinker said, is much like teen sex. Teenagers think and talk about it all the time, and think everyone else is doing it when in fact almost no one really is. The few who are, he said, are "doing it poorly, sure it will be better next time, and are not practising it safely."

Banking and commerce are the areas which offer both the greatest opportunities and the most danger, because of security loopholes on the Internet.

"Perhaps, just like in the Wild West, you are best off keeping your money under your mattress," he said.

Although financial organizations do their best to secure their systems, the Internet is "hacker city".

"The outlaws have the place surrounded," Skapinker said, adding that until it becomes socially unacceptable to break into Internet-based financial institutions, security will never be adequate. However, in spite of these difficulties, Skapinker believes that "the opportunities are endless and some people and companies are going to do really well as a result."

He suggested that those interested in using the Internet find a reliable vendor, get good software for accessing the

bulletin

News

wildfire

Cheap Usenet Access On the Way

→ Cheaper access to Internet newsgroups will soon be possible for millions of Europeans with satellite dishes pointed at the Astra satellite. UK company Wildfire is planning to broadcast the Usenet feed daily across a channel on the satellite into decoders connected to users' satellite receivers.

Wildfire intends to collect Usenet news over a 24-hour period using a conventional leased line connection to the Internet. The system will send it as a compressed stream across Astra in the early hours of the morning when most people aren't using their systems.

The only hardware needed is a satellite receiver and special decoder which will initially be available as a plug-in card for a PC. The decoder takes the compressed feed and extracts only the newsgroups of interests onto the subscriber's hard disk.

Users will still need access to an Internet service provider for posting articles to newsgroups and all other Internet applications.

Contact: Wildfire. wildfire@tecc.co.uk

US Robotics Intros V.32 Mac Modem

US Robotics has announced an Apple Macintosh compatible version of its flagship Sportster modem, costing £299 for a 28,800 bits-per-second (bps) V.34 standard version.

According to Lucy Brown, USR's UK marketing manager, the Sportster Mac & Fax is designed to meet the needs of high usage "Internet surfers" and teleworkers who dial into V.34 modems and want to take full advantage of the high speed connection. As well as coming ready fitted with a Mac-compatible cable, the package also includes Smith Micro's MacComCenter data comms and fax software.

The fax side of the modem supports Group III fax and complies with both EIA Class 1 and Class 2 standards making it compatible with what US Robotics claims is the widest possible range of third party fax software packages.

"It's important to get people up and running as soon as possible when they buy a new modem. The all in one approach gives us a 'plug and play' solution for the Mac market," Brown said.

Contact: US Robotics (01753) 811-180

Hayes Fever

Hayes Microcomputer Products has announced the ESP 8port/ISA, an eight-port enhanced serial port system for PCs that features an Industry Standard Architecture (ISA) bus and can support eight serial port channels at speeds of up to 921,600 bits-per-second (bps).

Jane Rimmer, a spokeswoman for the UK/European arm of Hayes, told I&CT that the system is being launched globally, and is already available in the US. "We're just waiting for the system to start being stocked in the distribution channel in the UK," she said.

Pricing on the unit has been set at £549, which I&CT notes is about mid-market for devices of this type. Dennis Hayes, the company's co-founder and President, is quoted as saying the unit is the best in the market at its price and "brings to the Novell Network the benefits of Optima 288, 230,400 bps high-speed modem, without any significant loading on the server."

According to Hayes, the ESP unit is Novell-tested and approved for use with NetWare 3.12, 4.02, Connect 1.0.34 and Global MHS (Message Handling System 2.0). Test results using the unit and NetWare Connect, the company claims, show a sustained data throughput of 230,400 bps on 16 ports simultaneously.

Contact: Hayes UK (01252) 775-555

New Internet Security Risk

The Computer Emergency Response Team, a government-funded group based at Carnegie-Mellon University, has warned of a new way to vandalize the Internet, through a technique known as 'spoofing'. The centre posted a message on the Net on Monday, describing attacks in which intruders create false Internet Protocol (IP) addresses and then take control of "any open terminal or login session from users on the system."

To gain access, says the centre, "intruders create packets with spoofed source IP addresses. This exploits applications that use authentication based on IP addresses and leads to unauthorized user and possibly root access on the targeted system."

According to the centre, even systems with 'firewall' protection are vulnerable "if they are not configured to filter incoming packets whose source address is in the local domain. Once the intruders have root access on a system, they can use a tool to dynamically modify the Unix kernel. This modification allows them to hijack existing terminal and login connections from any user on the system."

According to the New York Times, the first known attack using spoofing occurred on Christmas day against a security expert at the San Diego Supercomputer Center. Intruders took over his computer for over a day and stole security programs he had written.

Information about the spoofing attacks and other centre material is available by anonymous FTP from **info.cert.org.**
Email **cert@cert.org**

World Vision

Internet, and be adventurous.

Some of the 'hot' ideas of today, such as video-on- demand, have little long-term future, Skapinker suggested. One Toronto vendor who provided real video-on-demand – delivering tapes to people's homes, and picking them up later – went under, although not before discovering that the only successful portion of the business dealt with pornographic videos delivered in plain brown wrappers.

China Daily Goes Online

→ **BEIJING, CHINA** – China Daily, the only official English language newspaper in China, has begun an online service. An online user can browse the electronic version of the China Daily and the research for any articles published by the newspaper within the past year.

In recent years, the number of subscribers to China Daily has increased significantly. Those interested in the paper range from foreigners living and working in China, to the many Chinese working for foreign companies, as well as those learning English.

China Daily began an online electronic version of the newspaper early in January. Jie Zhou of China Daily told I&CT that it is very convenient to read the electronic version since the user can freely browse the newspaper onscreen.

Any computer with a modem capable of at least 2,400 bits-per-second (bps) can connect to the online service. However, the subscription fee for the electronic version of China Daily is high, at US$70 per month. Those subscribing for six months or longer can get the connection software free.

Zhou also introduced the newspaper's 'Business Network' service to I&CT. He said there are about ten business news stories every day in China Daily. However, Business Network will provide about 30 business news stories every day and the user can search for news from the last six months. The fee for Business Network is US$300 per month. However, subscribers to Business Network are allowed to access China Daily for free.

Online publishing explodes

→ **PRINCETON, NEW JERSEY, U.S.A.** – The number of newspapers offering information through online or voice services in the United States has grown from 42 to 3,200 over the past six years, according to estimates made by The Kelsey Group. The publishing and consulting firm also noted that daily and weekly newspapers approach interactive services in different ways.

John F. Kelsey III, president of The Kelsey Group, told I&CT that his firm's estimate of 3,200 American newspapers running interactive services this year is up from 2,700 in 1994, 2,000 in 1993, and only 42 in 1989, the first year Kelsey conducted its survey.

The most common reason daily newspapers get into interactive services is to hold onto their status as number-one information sources in their respective markets, Kelsey said. Because of this, many offer information services at no charge.

Weekly newspapers, on the other hand, usually are not the primary information sources in their markets to begin with, Kelsey observed. They are more likely to see interactive services as sources of extra revenue, so they are more likely to offer pay-per-call services.

In general, the Kelsey survey indicates, weekly newspapers are less excited about electronic information than dailies. Kelsey noted that about 60 percent of the daily newspapers that responded to this year's survey have at least one full-time person – in some cases a whole department – concerned with information technology.

"Every major newspaper chain in the United States is actively pursuing some form of interactive services," he added.

Contact: The Kelsey Group

CompuServe's New Lotus Notes Services

→ **COLUMBUS, OHIO, U.S.A** – Online giant, CompuServe Inc., has rolled out a series of new support products for users of Lotus Notes, the dominant workgroup communications tool. The new products range from a CD-ROM supplement in Lotus Notes format to a new Enterprise Connect replication service for businesses.

The service also announced a 21 percent drop in connect time rates for Notes users, from $22.80 to $18 an hour. Prices for some of the new information services will be higher or entail extra charges, the service said.

CompuServe said the new services to Notes users expands on public and private support services offered since December, 1993. The expansion has been linked to the increasing popularity of Lotus Notes, as more people do their computing in a work group environment.

"The forecasts that we've seen from analysts indicate that Lotus Notes is just going to take off and become a sort of standard for group ware," CompuServe told us. "We feel we're in a great position to offer our global network combined with their platform. After all, we'll have a product that's ready to roll, ready to take orders, in two weeks."

The replication service is aimed at large enterprises that need to make data widely available. Databases or other files can be copied onto a CompuServe server and made available to Notes users through any of the service's local access numbers.

This approach can relieve congestion on a local server, provide extra security to systems when the managers are nervous about providing public phone access to the local network, and eliminate the need for travelling employees to call in by long distance.

CompuServe believes that there's a huge, pent-up demand for this kind of service. The company has already signed up several Fortune 500 companies, and has received expressions of serious interest from many more companies.

While Enterprise Connect is aimed at businesses, other parts of the expansion, such as increased content in Notes format, will be available publicly through the information service itself.

Pat Kloepfer, Product manager on the Public Information

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Dial by Modem 071-284 2424 ▶ On connection enter @D <return> ▶ At username prompt enter GODELPHI ▶ At the password prompt enter CM4

Settings should be 8,N,1 XON/XOFF VT100 Note, @D and Password will not show on your screen
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→ ***Want to find out about the new Star Trek programme? This is the place to come.***

The Voyage Home (page)

Star Trek: Voyager, the venerable sci-fi series' fourth trip to the TV well, is now cruising cyberspace on Internet's World Wide Web. The site features footage and sound bites shot on location specifically for the Web, which producer Paramount proclaims to be a Web first.

The Web site, at **http://voyager.paramount.com**, is produced by Viacom Interactive Services and Paramount Television Group, both part of Viacom Inc.

Viacom spokesperson Betsy Vorce told I&CT that the firm has had good experiences interacting with fans on the Web for other projects, and expects the same from the Voyager site.

"We had a Web site to promote the Star Trek: Generations movie, and it was extremely successful," she explained. "We heard from users all over the world. By early January we had served up literally millions of files – cast photos, preview clips and so forth. We expect the same kind of success for the Voyager Web site."

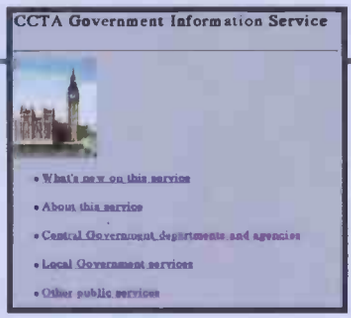
The design somewhat resembles a computer game. The visitor is given a scenario on entering the site, and then is assigned a mission. To carry it out, the visitor interacts with different site areas. The producers say they will change the scenarios often as they update the site with information and clips from future episodes.

In addition to sound bites and video clips created for the Web site, users can download Quicktime clips of the 2-hour premiere episode; pictures and biographies of the characters and the actors who play them; information about the technology found aboard the new starship Voyager; information on the show's creators and product; facts about Star Trek and its history; listings by state of UPN affiliates which air the show; and an area for sending email to friends.

Another Web page that points fans to the latest on the various Star Trek shows is located at **http://www.ftms.com/vidiot/**

Contact: **http://voyager.paramount.com**

Yes, Prime Minister



10 Downing Street has announced that it will test an Internet connection with a service on the World Wide Web and a possible link to email allowing voters to send in their comments directly to the PM.

The news was revealed in answer to a written question from David Shaw MP, member of Parliament for Dover and Deal in South East England. Shaw is an active user of the Internet and for the last six months has been questioning Government departments about plans to make information available on the Internet, informing them as to what the Internet can do, and giving briefings to interested departments.

A statement from the Prime Minister's office said, "The trial will examine the possibility of offering a World Wide Web service to Downing Street. The trial will also examine ways of allowing users to electronically retrieve documents which would normally be available through more traditional sources. Any system chosen would not replace any of these normal distribution methods."

Full access to the UK government might be far off though. David Shaw told I&CT that the House of Commons has an internal email system but only around 100 MPs used the network. Currently there is no external connection to the Internet.

The UK government has only recently set up its first World Wide Web server, The Open Government site, which can be accessed at URL **http://www.open.gov.uk/**. The site has had 300,000 accesses since first going online in November last year.

Some Government departments are considering making information available to Internet users but at present very little is online. One section of government that has ruled out any type of connection for the time being is the Ministry of Defence which cites possible security problems as the reason.

World Vision

Service side, told I&CT: "The bottom line is that we're positioning CompuServe to be the leader in providing public services for users of Lotus Notes. That covers your basic services, such as mail and Internet gateway, to content services like Usenet newsgroups and mailing lists, financial and business information. It's the first step in a whole series of content releases. And everything is natural and native to Notes users."

Contact: Network Services, (0101) 800 433 0389; Notes user services (0101) 800 233 2247

Money talking

→ **NEW ORLEANS, LOUISIANA, U.S.A.** – The commercial future of the Internet was a noticeably strong theme at this year's USENIX conference, which was held recently in New Orleans, Louisiana, and several of the invited speakers described new systems and technologies that would be available for the exchanging of money in the worldwide network of the future.

Particularly interesting were back-to-back sessions held by Nathaniel Borenstein, Chief Scientist of First Virtual Holdings – a credit card intermediary which is aimed at the Internet marketplace – and David Chaum, whose DigiCash system has been lauded as a clever way to allow electronic money to preserve all of the privacy that comes with the use of ordinary cash.

First Virtual's plan is to act as an intermediary between traditional credit card processing and the Internet (or electronic-mail)-based electronic information merchant. Each user signs up with a credit card then gets a different account number to use in the making of purchases. Each purchase made with this account number gets verified with a piece of email to the owner of the account, and the money is not debited unless confirming email is returned. As such, these account numbers can be sent over public channels, since they can only be used by the actual person whose email address they are associated with.

DigiCash proposes a system where the privacy and anonymity of the buyer is assured using public key cryptographic technology. In a world where many are concerned that our transactions will be subject to the prying eyes of 'Big Brother' organizations that will soon know everything about us, DigiCash offers the ability to use electronic money that cannot be traced back to the spender, offering a reassuring amount of anonymity.

A piece of digital cash is a very large magic number containing a digital signature from a reputable bank. This signature, which cannot be forged according to current cryptographic theory, assures that the cash is a valid electronic 'bank note'.

Chaum, in his talk, outlined one such system which requires that the merchant be online with the bank to confirm that the digital cash tendered over the network is legitimate and has not been spent before. To the surprise of many, however, Chaum did not describe his unique system which allowed offline transactions, allowing the exchange of money between parties not currently connected to the Net. Many wondered if Chaum had reduced his efforts due to pressure from government entities who fear the effects of digital cash and the privacy it gives citizens.

Government agencies once studied how they could most effectively "control society", according to Chaum, and their universal conclusion was that the elimination of cash would do the trick. Fear of this type of Police State was one of the forces that drove Chaum to create DigiCash.

Sony & Microsoft To Collaborate On I-TV

→ **REDMOND, WASHINGTON, U.S.A.** – Microsoft Corp. says that it will work with Sony Corp. to develop the hardware and software that will be necessary for interactive broadband networks.

On the development schedule are continuous media servers for on-demand audio and video and interactive home terminals to allow users to access and navigate the growing list of network services expected to be available. The two companies said they will also explore the creation of new markets in electronics for consumer and professional applications through the development of next-generation devices and services.

Sony is expected to develop a set-top box, along with video servers that would use Microsoft's 'Tiger' technology to link PCs rather than supercomputers to deliver video-on-demand.

Alan Yates, Microsoft Senior Manager of Business Development in the advanced consumer technology division, said the collaborative effort will produce a set-top box for to be used in trials during 1996. Yates declined to be more specific.

Silicon Graphics hits WWW

→ **MOUNTAIN VIEW, CALIFORNIA, U.S.A.** – Silicon Graphics Inc. has introduced a product line of workstations and servers for creating 'media-rich' content for the World Wide Web (WWW) on the Internet. SGI said its new WebForce line combines high-bandwidth visual computing systems with authoring tools and server software.

WebForce also includes SGI's WebMagic Author authoring software and MovieMaster, an encoder to create MPEG-I (Motion Picture Experts Group) and QuickTime Cinepak movie files, the firm said. SGI noted that WebMagic Author includes technology licensed from Amdahl Corp.

The firm said it will market the new line to online publishing and retailing markets, plus non-commercial areas such as education and internal network communications.

The WebForce server systems are based on SGI's Indy and Challenge S lines, plus Netscape's Netsite server software, the firm said. The Challenge S system offers a high-bandwidth 267 megabits-per-second (Mbps) system bus. Servers can be expanded to even more powerful SMP Challenge servers, broadening bandwidth to 1.2 gigabytes-per-second (Gbps) speeds, the firm said.

SGI's Web pages are located at: **http://www.sgi.com**

joel furr STATESIDE

Joel Furr is not a surfer, he's not a knight and he's definitely not a warrior. He's just a normal hu... well, he's a human being.

It may seem a little odd to you, the British readers of a magazine which dedicates itself to the exploration of Cyberspace, to read a rant from one of the columnists about how much he hates the term 'Cyberspace', but there's method to my madness, so bear with me in the following paragraphs.

You can barely pick up a magazine, newspaper, or box of Wheat-O Cereal these days without reading about the 'New Frontiers of Cyberspace'. A term I'd never have expected to see connected with silicon chips and modems – 'surfing' – is the favourite buzzword of people who have no idea what an FTP site is, or where you would be if you were in alt.config, or what a MUD is, or why you shouldn't send email to Kibo. Ladies and gentlemen, I'm going to lay it on the line. The Internet is NOT 'Cyberspace'. It's NOT sexy to 'surf' it, and you're NOT any cooler just because you know where the 'dial' command is on your telecommunications package.

'Surfing Cyberspace' has become a term that almost without exception can be used to tell the real 'Net-savants from the poseurs and fakers. I first noticed this when I attended a Toastmasters conference in Virginia this past June. After each speech contest, the contestants were asked about their hobbies, interests, and activities. Not a few of them proudly thumped themselves on the chest, faced the audience, and said "I surf Cyberspace."

Pleased to meet a few Net users in a sea of strangers, I went up to each, once the speech contests were over, and introduced myself.

"Hi," I said. "You like to surf Cyberspace, huh?"

"Oh, yeah!" they'd say. "My family hardly ever see me anymore. I'm always logged in."

"Wow," I said, not impressed. "Well, I'm Joel Furr."

Their reactions were all wrong. They were supposed to go, "Wow! *You're* Joel Furr? *The* Joel Furr?" Instead, they smiled placidly and said "Nice to meet you."

That was the first thing that made me a little suspicious of their 'surfer' claims.

Continuing, I said, "So, anyway, what newsgroups do you hang out in? Maybe I've seen your posts."

Blank looks. "Huh?"

"What newsgroups do you hang out in? Or do you just lurk?"

"What's a newsgroup?"

"You know, like Usenet news? rec.humor? alt.sex? alt.fan.joel-furr?"

Blank looks. "Huh?"

"Aha," I'd say to myself each time. "Another poseur."

Not one of those proud, chest-thumping cybersurfers I encountered that weekend had the slightest idea what a newsgroup was. They didn't even know what one was when I abandoned jargon and described one to them, but they all agreed that these world-wide discussion forums must be a lot of fun and maybe one day they'd figure out how to use them.

"Well," I said, "you could just type 'trn' or 'rn' or 'tin' at your UNIX prompt. That usually brings them up."

"UNIX prompt?"

"Let me guess. You're on Prodigy or CompuServe or America Online."

"No, but I've heard of those."

None of these people did anything more sophisticated than read a couple of mailing lists on their office email system. All well and good, but please, people, if you don't even know what the Internet is, don't go telling people that you're a sophisticated cyberjockey or that you "surf Cyberspace".

And don't go ranting about the Information Superhighway, either. It's the Internet. People who use the Net do not go around making jokes about rest areas, on-ramps, roadkill and speed limits. In fact, most of the people I've talked to on the Net have a definite loathing for people who, as soon as they've figured out how to use their modems, immediately start babbling about roaring down the Info-Highway. It's the Internet. It's not sexy to use it. It's just there. You use it, you do your thing, you get your stuff and you have done with it. Please, don't try to impress the masses with all your sexy metaphors.

In fact, let me dissuade you of another common belief. People who use the Internet are not what most people would regard as sophisticated cyberwarriors. We're not black leather-clad Knights of the Wire and, in fact, quite a few people you'll meet on the Net are rather pasty-looking from spending all their time downloading pornographic pictures from one of the thousands of free download sites, while subsisting on a diet of Jolt Cola and whatever's left in the snack machine down the hall.

To be honest, the Internet is just one more communications medium. It's complicated in its inner workings, but so is the telephone switching network, and what would you say if you had a conversation with someone like this:

"Whoa ho ho ha," they chortle. "I use the TELEPHONE. Vrrrrrooom!"

"Wow," you say.

"Yeah, I'm a knight of the wires. I can pick this little baby up here and choose my on-ramp. I can contact hundreds... THOUSANDS of people around the WHOLE WORLD with this! Nothin' can hold me back."

"Wow," you say. "Who are you connecting with now?"

"Pizza Hut. I'm hungry."

In the last 24 hours I've used the Internet to chat with someone about meeting them at a convention, participated in an online game of Diplomacy, posted comments about a local restaurant that offers salmon cakes with everything to a local dining discussion newsgroup, put files up on an FTP site for people to access, sent submitted messages on to a newsgroup I moderate, sent information on t-shirts to people who read about them in Internet and Comms Today, and received email from my mother. At no point during any of this did I put on black sunglasses, get out my Samurai sword, chant mystic mantras, or use the phrases 'Information Superhighway' or 'Cyberspace.'

Using the Internet is not sexy. It just is. It's no sexier than programming a VCR and at times is about as much fun. Or, it can be a lot of fun. But it's not Cyberspace, and you don't surf it. It's not the Information Superhighway and there's no roadkill and no rest areas. It's the Internet, and you don't get any cooler just because you've worked out how to send electronic mail.

On the other hand, if you do use terms like 'surfing Cyberspace' and 'speed bumps on the Information Superhighway', people who actually use the Internet in their daily lives are going to nod to each other and quietly say, "Newbie".

You see, of course there's nothing wrong with being new on the Internet. All of us were new once. But newbiehood is all in the attitude you take towards the Net. If you make an effort to learn how it works and don't overdramatize it, you can stop being a newbie almost instantly. If you go on thinking of it as some hyper-cool thing that it's not, you may stay a newbie for years.

Joel Furr is not only a Net superstar and The Voice of Reason, he is also one of our regular columnists. You can send any fan mail to him at this address: jfurr@acpub.duke.edu

News

→ Become a Virtual Lovejoy at the Micro Media Mall.

Virtual Mall

Micro Media Services have created an online shopping mall through the World Wide Web. The company has launched a new, UK-based advertising and shopping resource on the Web where shop-keepers and companies can rent space from which to sell their products on the Internet.

This Micro Media Mall, which boasts the largest collection of antique dealers on the Internet is accessible by users worldwide and will be registered on academic and business sites in Europe, the USA and the Far East.

The Mall can also be accessed through Micro Media's Lynx text browser. Customers are pointed to other interesting sites on the Internet when using the Mall, and it is hoped that the site will host a number of newsletters of interest to shoppers. The Mall can be found at the URL:
http://www.micromedia.co.uk

Portable Plug-in

Guildford-based PCMCIA (Personal Computer Memory Card International Association) distributor, Portable Add-ons has released a PC card for hooking up mobile computers to Ethernet-based LANs (Local Area Networks).

→ The small, but perfectly formed, Ethernet+.

The card, called the Ethernet+, allows PCMCIA-equipped notebook PCs to share resources, such as file-servers and printers, with desktop computer users already on a network. With burst data rates of up to 1.2Mbps and sustained transfer rates of 600kbps, the Ethernet+ is a power-efficient PCMCIA Type 1 card which is compatible with all major network operating systems, including Novell Netware, Banyan Vines, Windows for Workgroups, Lantastic, Windows LAN Manager, LAN Manager and future systems such as Windows '95.

For ease of use, the card can be inserted or removed without the need to reboot, and comes packaged with SystemSoft's Cardsoft+ 3.1 automatic configuration software for easy installation. The RRP for the product starts at £135. Contact Portable Add-ons (UK) Ltd on (0843) 440777, or fax (0483) 452304.

Exposed

Continuing our irregular series on Net statistics...

→ There is four times more interest in suicide than in being happy
– Number of Usenet groups with the word 'suicide' in the title – 4
– Number of Usenet groups with the word 'happy' in the title – 1

→The number of people on Usenet interested in guns is almost exactly the same as the number of people talking about conspiracies
– Number of Usenet groups dealing with guns – 8
– Number of Usenet groups dealing with conspiracies – 7

→58 Usenet newsgroups exist for the sole purpose of flaming

→There is about as much interest in lesbian feminist poetry as there is in the films of Kenneth Brannagh
– Number of Usenet groups dealing with lesbian feminist poetry – 1
– Number of Usenet groups dealing with Kenneth Brannagh – 1

→There is 127 times more interest in sex than in love
– Number of Usenet groups dealing with love – 1
– Number of Usenet groups dealing with sex – 127

World Vision

Mitnick Not Nicked

→ **WASHINGTON, D.C., U.S.A.** – The US Marshals' Service is on the trail of a computer hacker who has disappeared after being convicted of one electronic crime and charged with another.

Authorities say that they are trying to locate Kevin David Mitnick, aged 31, who originally comes from Sepulveda, California.

Deputy US Marshal Kathleen Cunningham told I&CT that the Marshals' Service has had a probation violation warrant for Mitnick since November 1992, and that they almost caught up with him in Seattle last October.

Cunningham said that Mitnick is a ham radio enthusiast and it is believed that he uses a scanner to keep track of police movements in the area where he is hiding. "(The local police) didn't use any radio security, so as soon as his address was mentioned over their radio he was out of there. He just left everything."

Cunningham said authorities were able to get quite a bit of information about Mitnick from the things he abandoned when he fled the Seattle location.

Mitnick is considered to be something of an expert at gaining control of computers in order to monitor or use communications systems and he also knows how to manufacture false identities using computers.

The authorities warn people who might come into contact with Mitnick to be very cautious. "He possesses an amazing ability to disrupt one's personal life through his computer knowledge, for instance through tampering with TRW's (credit ratings), phone services, etc." warned the US Marshals' Service.

Online Healthcare Arrives

→ **IRVING, TEXAS, U.S.A.** – GTE performed a demonstration earlier this week of how physicians who are working in locations thousands of miles apart can use standard interactive video conferencing technology to deliver health care to just about anywhere on the globe, and that includes your very own living room.

The telemedicine demonstration linked physicians around the world in Canada, Venezuela and Hawaii as they diagnosed a patient in the Dominican Republic. This was achieved using video transmitted over existing telecommunications networks.

Nine sites participated in the video conference, which was staged in conjunction with the 17th Annual Pacific Telecommunications Conference in Hawaii. The areas taking part in the video conference were Caracas, Venezuela, Texas, Hawaii, Canada, Dominican Republic, Florida and California.

During the diagnostic demonstration, Dr. Edwardo Mejia Habib examined the eardrum of a patient in Santo Domingo. Using an ENT (ear, nose, throat) videoscope, he relayed video images of the patient's eardrum to fellow doctors situated in Caracas and Canada. From this information the physicians were then able to diagnose the problem as a perforated eardrum.

GTE spokesperson Nancy Bavec told I&CT that the technology used for the videoconference consisted of basic videoconferencing equipment. "This equipment is available in most parts of the world, and is certainly available in every part of the United States. One of the things that is often discussed is whether the information highway is going to come to rural areas, which is where people can most benefit from this type of technology. Using simple videoconferencing technology combined with some of the software programs and applications that companies are developing that allow imaging and diagnostics to take place, then you have a possible helpful tool."

Contact: GTE Investor Relations (0101) 203 965 2789

White House Urges Less Online Regulation

→ **WASHINGTON, D.C., U.S.A.** – Competition and not regulation is the key to expanding access to the so-called 'information highway', according to Mike Nelson of the White House Science Office.

Nelson was one of the guests on Sun Microsystem's latest Sunergy broadcast at ComNet '95 in Washington DC. The Sunergy broadcast was also being relayed to the rest of North America and on to Central and South America, Europe, and Africa via a network of satellites.

Mike Nelson was responding to a question about how best to pay for the building of the ' information superhighway' and a query as to what were the best ways to move forward towards further development.

"There are two very important questions, the first is, who pays for it? And the answer in most cases will be the private citizens and users of this new network. The better question is, how can we make it cost as little as possible?"

He cited three answers to this question. "The first is competition – we think that is fundamental and we are urging other countries to adopt policies that will enable full competition in this market place. Today there are states where it is illegal to compete with the local phone company."

"The second fundamental is technology, and we believe that the federal government working with industry can help develop new technologies that will make high speed Internet connections much more affordable and much easier to get in every part of this country."

"Lastly, we believe that there is a place for regulation in some cases, as a last measure, to ensure that prices are not exorbitant, to ensure that there is universal service and to make certain that everyone can get access to these high-speed systems. Today, thanks to regulation, 93% of Americans have phones in their homes. They can afford it because we've developed a system that provides some money for those people in rural areas that otherwise couldn't afford a phone system. We do that because everyone benefits from having a universal network."

Miller Light

Jonathan Miller discovers that it may be good to talk, but only as long as you're not asking BT for an ISDN link.

On the infostrada, we wanna go faster. Surfing the nodes at 64k ought to be a basic constitutional right. Thrust is a must. Drag is bad. If anyone should be good at this, it ought to be BT. Haven't we all seen them on the telly promising that our friendly, neighbourhood telephone company was ready for the future with asynchronous subscriber digital loops that could blast the bits at us fast enough to light up a VHS quality, full-motion television display? We have read the speeches of BT's richly paid chairman, Iain Vallance, about BT's role as the national champion of telecommunications. Government ministers like the absurd Heseltine boast about how clever BT is. So I do what any rational consumer would do: I phone BT, and say: "Let me have the works!"

It wasn't that simple.

Now, don't misunderstand. I like BT. I want it to be successful. I don't care how much Iain Vallance makes, as long as there's cool stuff to buy from them. If only they would sell it to me.

Actually, they will sell it to me. I have this rather major problem, though, with the price. I have also to question exactly what it is they are attempting to engineer. Perhaps they have in mind a tidy monopoly with Microsoft. All I can say is, I hope Microsoft has a Plan B.

What is likely to be more effective in persuading BT that they must try harder? I have tried being rude. I have tried the forensic approach, pointing out the inconsistencies and distortions of their tariffs. I have tried to appeal to their sense of adventure.

I keep seeing BT men on the hustings claiming to be in the fast lane of the infopike, but when it comes to getting me on to it, BT remains almost useless. Take ISDN 2, for example. Or rather, don't bother. Anyone who has run Netscape at 64kbps knows it is the only way to fly. Once driven, forever smitten, as they say in Charlotte Street, and so I want it at home, too. So, I call BT and ask what it will cost for me to dial-up the Internet over their vaunted and supposedly globally competitive data service.

First, I want an ISDN2 line, for my house. There is no special residential ISDN tariff, though. Instead, you order it through the business office. First shock: ISDN installation costs £300 plus £84 a quarter for line rental. But this doesn't even begin to cover the bits you need – like a ported ISDN telephone (£700) and various other expensive bits of hardware. The calls cost the same as a regular phone, i.e., they are outrageously over-priced, especially off-peak.

Still, I am a determined man. Say I to BT: "Okay, gimme one of those."

Now, I want to dial the Internet at 64k. So let's give BT a chance to go for this one. I am eventually given the number of the BT Internet unit. BT currently offers only business Internet. When it gets around to offering consumer Internet, it will do so at a Maximum Speed Limit of 14.4. In the meantime, the only way in is on a business tariff. BT has 64k points of presence in London and Manchester (I don't know what they are doing with all their inter-city, fibre-optic trunk, but they're evidently not using much of it for data communications).

And then, after the binge, the bill. Oooops. A wee bit more than Demon. BT Internet charges an annual subscription of £3,000, plus VAT.

But wait, there's more. Expense, that is. You will need a lot of stuff on your computer, including hardware bits and cards that might easily cost you several thousand more and may not work without getting in experts to sort them out. BT will try and hold your hand, or you can go to Pipex, which sells its own dial-up ISDN version of the Internet for £2,000 a year.

I figure that if you can handle that, you'd really enjoy your ISDN link. In fact, you'd have the coolest connection in the neighbourhood. You could also, alternatively, go out and buy a really nice old Porsche, which is what I did.

I still want ISDN in my house. But I'm not willing to pay five grand just to get started.

What I want to know is this: if we could send a man to the moon (before most of the readers of this magazine were in long trousers) why can't we move the bits into and out of our homes at a respectable speed, using technology just a little bit more sophisticated than the stuff used by Alexander Graham Bell?

Let me be the first to promise to subscribe to the first vendor who gives me some decent speed. I'd be deliriously happy to pay a premium, say £150, to get connected, maybe £500 for plug-and-play hardware, and perhaps £10 a week for unlimited off-peak access. But I don't see why I should be left without a shirt.

The rulers of BT are likely to say this is impossible. Why? It ought to be their future. They can always use a new business, and this one suits them particularly well. Sadly, if BT has recognised this fact, it has yet to match its perception with products. Instead, it offers brain-dead GNS at 2,400 and 9,600 baud! BT is supposed to be in the fast lane. It is, but only as road-kill.

In time, the throttle of the copper pair will be bypassed, and if Beattie doesn't get off her butt, you can expect to see the national flagship humiliated. Iain, pay attention!!!

I have recently criticised British journalism schools for surrendering the Internet to the techies, but the problem is wider-reaching. While there is increasing entrepreneurial access to the Net on UK campuses, only a tiny proportion of British University students has access to the Net, and most of those who do are likely to be in the computing and engineering departments.

I like techies. The computer kids are in fact dazzlingly inventive, but the Net needs more. The UK can be a gigantic success in the new multi-billion dollar, global hypermedia industry. Vice-chancellors please note: the tools of the new trade must fall into more hands.

I see Bill Gates recommending in his pathetic column in The Guardian that budding software entrepreneurs should eat pizza. This is obviously very bad advice as the best code-writers I know swear by jellied eels.

This is an example of the very bad advice you will get if you read untrained columnists, such as Bill Gates, in low publications like The Guardian, instead of professional opinion-formers such as myself.

→**Jonathan Miller is Editorial Director of Delphi and is a regular contributor to Internet and Comms Today. He also writes a weekly column for the Sunday Times.**

bulletin

News

Creative Arts Attack

→ Creative Arts' UK operation has announced plans to open up a European counterpart to the company's World Wide Web site on the Internet in the US.

According to Paul Fletcher, European Developer Support Director, the site is designed to cater for European Web users, as well as those in the US. "What we're trying to do is to give anyone who is into multimedia an interesting Web site to access," he told I&CT.

Fletcher explained that the Web site is currently in the process of being set up on a Demon Web set of pages and will be known as Multimedia Central. "This will work in tandem with the company's existing Web site in Oklahoma," he said.

"The idea is that, as well as telling potential users about Creative Labs products, we also act as a central linking point for multimedia information," he said, adding that the Web pages will provide 'jump points' to other Web sites covering MPEG (Motion Picture Experts Group), CD-ROM standards, and other multimedia topics.

Future plans for the Web site include the facility of downloadable driver updates, listings of European shows to be attended by Creative Labs, and software reviews. "We have a lot of plans in the pipeline for Multimedia Central," he said.

Fletcher said that, although the site is under beta test development, it currently has around 20 pages already online, and plans call for that number of pages to be doubled each week for the next couple of weeks.

"The Web is quite interesting in what you can do with it. The possibilities are quite open. We could be looking at offering a retail front-end on the Web in the future, to offer those products, particularly the low price applications that we couldn't offer through dealers, on a direct downloadable basis across the Internet," he told I&CT.

Contact: Creative Labs (01743) 248-590 Email: paul@cluk.demon.co.uk

What ever happened to...? HAL

When you look back on the rather sad depiction of computers in films or on TV, it's easy to detect a common thread. Either computers are crazed with a devilish lust for power (Demon Seed) or they're homicidal maniacs crazed with a devilish lust for power (Daleks). And if you want to know why this is, it's not too hard to figure out.

One name towers above all others in the mad, all-conquering psychotic machine department and that's the original biggest, baddest one of them all – HAL.

HAL, which stands for Heuristic ALgorithmic, was the real reason people watched 2001 – A Space Odyssey. Forget all the fancy music and balletic space stations – we wanted blood and HAL was the dude who was going to give it to us.

HAL's first few deaths were boringly cunning – the old 'switching off the deep freeze' routine soon took care of a large percentage of the crew, but things happily grew increasingly bloody with Frank Poole being blown out into orbit around Saturn. A nation tired of state-of-the-art SFX and philosophising about mankind's beginnings cheered heartily.

What was great about this was that it was the beginning of a more healthily sceptical appraisal of scientists after their big promises of the 1950s. And what better way was there of showing this than by having HAL waste a few scientists too?

At the end of 2001, we see HAL being turned off with a large axe by a rather irate Dave Bowman – none of this 'Shutting Down' and 'It is now safe to turn off your computer' business for him. But by the mid 1980s, HAL was back in 2010 – Odyssey 2. And again, fitting in with the spirit of the times, HAL's murderous impulses were psychoanalysed in such a way that this time it was the dead guys who were the baddies and HAL was merely a victim of circumstances.

And just to really disturb our safe assumptions, who is it that gets saved by Dave Bowman at the end and given immortality? Why, it's HAL of course. Maybe these mad computers really did know something we didn't..

Line Drawings

→ Patriotic 'toon lovers can now support European cartoonists by logging onto CartooNet – the European Cartoon Arts Network on the Internet. This Web-based service has been established to promote the work of Europe's many talented cartoonists, comic strip writers and artists, world-wide.

A partnership of 10 pan-European cartoon organisations and agencies has come together to defend Europe's cartoon artists against American and Japanese high-profile competition. Visitors to the service's Web pages can browse through the dozens of cartoon databases which make up the CartooNery 'virtual gallery'. Or they can get up-to-date reports on developments in the cartoon world from CartooNews.

Each of CartooNet's partners has their own Web page featuring newsletters, information and more cartoons and other pages carry publicity on cartoon festivals, conferences, exhibitions, competitions and publications. Brighten your day and point your Web-browser at the URL: **http://www.pavilion.co.uk/cartoonet/**

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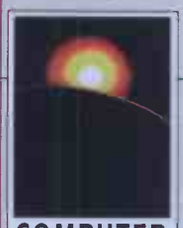

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Visitor

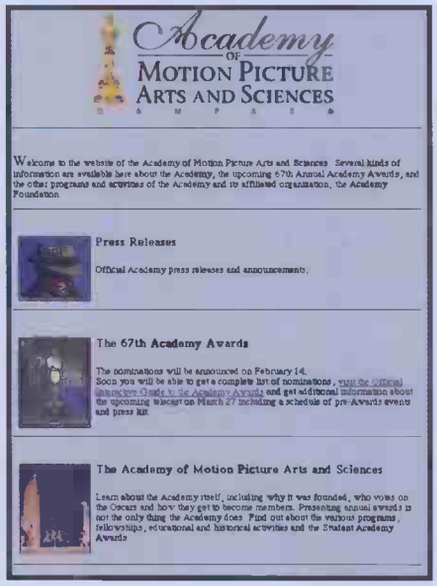
Images from the last Shuttle mission were posted to Nasa servers while the astronauts were still in space. The images, launch schedules and other information can be found in the Today at Nasa section of the Public Affairs pages at the URL (Uniform Resource Locator or address):

http://www.hq.nasa.gov/office/pao/NewsRoom/today.html

Nasa press releases are also available via a list server or by FTP. Email the message subscribe press-release to **domo@hq.nasa.gov** for the mailing list, or visit **ftp.hq.nasa.gov/pub/pao** to fetch files.

Nasa is also a good source of pictures taken with the Hubble telescope, but if you're interested in a different kind of star, point your browser at:

http://www.oscars.org/ampas/



This is the new Web site opened by The Academy of Motion Picture Arts and Sciences to announce the nominations for this year's Oscars and, presumably, publish the results. It also offers an Official Interactive Guide to the Academy Awards.

Much early Web publishing was sponsored by print publications, but film companies, TV stations and similar outfits are now getting in on the act. One of the latest is the CBS Television Web site, Eye on the Net@CBS, at:

http://www.cbs.com

It should be of particular interest to David Letterman and Tom Snyder fans. By the time you read this, a rival Jay Leno/Tonight Show page should also be available at:

http://www.nbctonightshow.com

Up to the Minute News, another late-night programme on CBS Television, is constructing a Web site at:

http://www.pipeline.com/uttm/uttm_home.html

Yet another newcomer is The Discovery Channel Canada, which offers visitors the chance to download Big Files. The URL is:

http://www.discovery.ca

Information for UK film-makers – sources of development finance, production statistics, the UK Top 10 etc – can be found on pages that Nick Hobdell (Nick@nick-h.demon.co.uk) is now constructing at:

http://www.ibmpcug.co.uk/~scrfin/

The pages are connected with the Screen Finance, the Financial Times's film industry newsletter, and offer lots of good links to other resources, though the home page is a fairly long download.

Of course, newspapers and magazines still dominate Internet publishing and new ones are popping up all the time.

In the UK, the BBC has done some real pioneering, and viewers of BBC-2's Westminster On-Line can read about the programme, and submit questions to studio guests, via the server at:

http://www.bbc.co.uk/westonline

The programme also takes calls over a video conferencing link and sends out live transcripts via IRC (Internet Relay Chat) on #westonli

One of the best is The San Jose Mercury, a Silicon Valley newspaper, which is now on the Web at:

http://www.sjmercury.com

This offers sections on Breaking News, computing (Computer Currents) and the O J Simpson trial.

The first Australian daily newspaper to appear on the Web is the Melbourne paper, The Age. It has sections for Marvellous Melbourne and Computer Age, plus a Cool Kids page. It's not in the same class as the Mercury's site, but Webweaver Sibylle Noras (snoras@theage.com.au) thinks that if enough people visit it, the paper will be encouraged to improve it. The address is:

http://www.vicnet.net.au/vicnet/theage.htm

While you're down under, you can also drop in on the University of Queensland's Department of Journalism Home Page at:

http://www.uq.oz.au/jrn/home.html

and read The Weekend Independent, "Brisbane's quality fortnightly", which has been on the Web for about a year.

Other publications joining the Web include the American Journalism Review:

http://jnews.umd.edu/ajr/home.html

IBM System User International, a UK-based business and technical publication:

http://www.globalnews.com/ibmsu/

Datamation, the American magazine for computing professionals:

http://www.datamation.com

Xephon, a UK consultancy and publishing company that specialises in IBM and mainframe computing:

http://www.hiway.co.uk/~xephon

Many Internet publications have no paper equivalents, and the Net provides a cheap way to reach a world-wide audience with less commercial material. The World Wide Stage, for example, has been set up to "feature work from any author, artist, poet, lyricist etc who would like to reach a wider, or new, audience" The URL is:

http://www.iol.ie/~westrock/

Cranial Mastication is "a net magazine on music, culture

Jack Schofield is Computer Editor of the Guardian and writes the Netwatch column, which is published every Thursday in its OnLine section.

and anything else that may irritate someone out there," according to Adam Fraser. "We also have a number of so-called art pages. The editor and contributors are based in Manchester, UK, but we do get around." If this sounds your sort of thing, point your Web browser at:

http://www.salford.ac.uk/docs/depts/eee/cranial/homepage.html

If you prefer still ink on dead trees, the Internet has something different to offer. Visit a new site called Tables-of-Contents Inc, which lists the contents of 146 magazines and journals. The magazines are arranged in five categories: computers, electronic and video games, sports, science, and music & entertainment. The URL is:

http://www.mag-browse.com

The plan is to have the tables fully indexed for WAIS searches.

And if you don't understand some of the odd words in computer magazines, you can look them up Babel, a glossary of computer-oriented abbreviations and acronyms. This isn't new, but has only just been launched on the World-Wide Web at:

http://www.access.digex.net/~ikind/babel95a.html

There are other ways to get a copy of Babel. You can use Gopher software to go to gopher.temple.edu and select Temple University Computer Resources and Information. Next choose Internet & Bitnet Information (Help-Net) and, finally, Glossary of Computer Abbreviations and Acronyms (BABEL95A.TXT). Alternatively go via FTP to **ftp.temple.edu**, log in as anonymous and use the commands:

cd /pub/info/help-net
get babel95a.txt

Dozens of Internet sites have been launched by computer companies who usually have the necessary equipment and expertise. Most of these are really easy to find: just type in:

http://www.<name>.com

where <name> is the name of the desired company. Pick large companies and you'll be surprised how often this works.

One newcomer is Lotus Development, which has opened a Web site at:

http://www.lotus.com

This is running on a beta test version of Lotus InterNotes Web Publisher, which takes data stored in Notes and automatically translates it into HTML pages.

Head for the "fun spots" section to get clips from Lotus TV adverts, the chance to meet a Lotus executive – Lotus has a great sense of fun – and the Freebie of the Fortnight, which provides software for you to download.

A new site you wouldn't guess is Multimedia Central, which is being constructed by Creative Labs Europe. CLE plans to provide information about products, links to multimedia information and, in future, software drivers and reviews. The address is:

http://www.demon.co.uk/cluk/

and it's almost worth visiting just for the fractal graphic logo.

Another new site might appeal most to Acorn fans. It has been programmed by Zynet staff and covers Minerva software. The URL is:

http://www.zynet.co.uk/minerva/

For PDA fans there's NewtNews, a weekly newsletter about the Apple Newton. You can get the latest number and back issues from:

ftp://io.com/pub/usr/btorres/NewtNews or subscribe by emailing the message subscribe newt_news to

Majordomo@pentagon.io.com

NewtNews also has a Web site at:

http://www.ridgecrest.ca.us/NewtNews/NN_top.html

which offers links to other Newtonian sites on the net.

I'm still waiting to learn John Major's email address, but it can't be far away. The CCTA, the government's computer agency, is becoming increasingly involved in the Internet, and has set up 13 COGs (Collaborative Open Groups) to discuss issues arising from its use. The topics include disabilities, education, and ethical questions such as the distribution of undesirable material and the misuse of facilities such as electronic mail. The discussions are being held via mailing lists. Email the word help to listserv@ccta.gov.uk for details. Information on the COGs is available on the World-Wide Web at:

http://www.open.gov.uk/cogs/coglist.htm

Some other sites I've visited recently include:

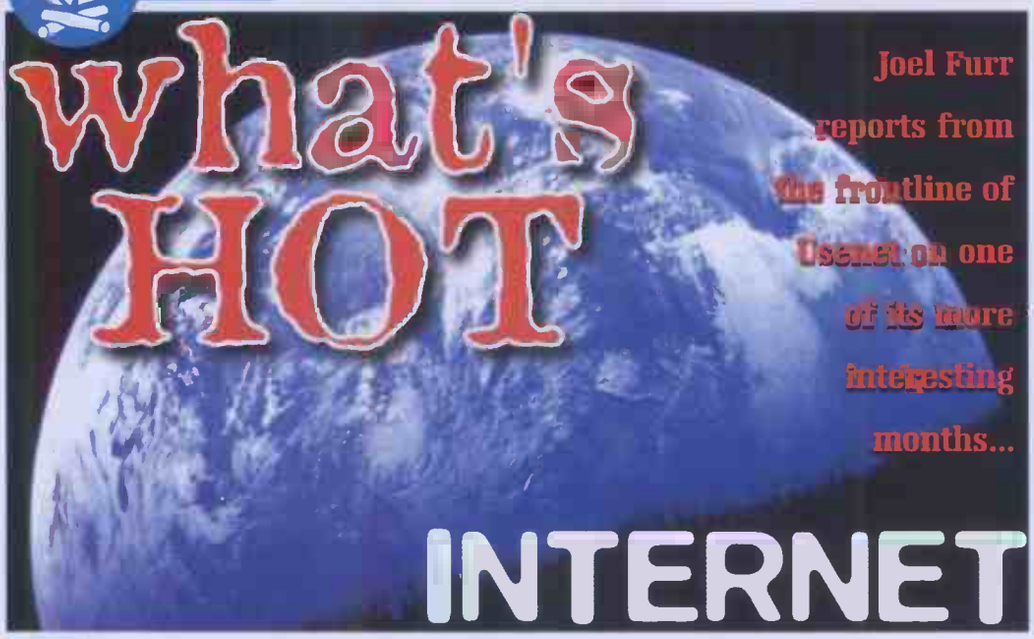
▶ **GOLFWEB** This aims to be "the complete source for everything related to Golf". Features include golf results and statistics, a databases of last year's golf results, live reporting from major events, golf reference materials and online shopping. The URL is:
http://www.golfweb.com/

▶ **INNOVATIONS** The catalogue firm claims it has opened "an on line giftpoint which is a revolutionary new concept in interactive shopping". It's not that exciting, and you have to register before you can use it, but for fans the URL is:
http://www.innovations.co.uk/giftpoint/

▶ **PASTELBLUE** This claims to be "the first (and still the only) CD and video shop on the internet in the UK". It has just moved to a new site at:
http://www.demon.co.uk/pastel/
where there are price lists for 42,000 CDs, 3,500 CD singles and more than 16,000 videos. There's also a "Search server" you can email for help at search@pastel.demon.co.uk

▶ **GARDENNET** An information centre for gardening enthusiasts on the Web, it offers listings of more than 700 public gardens in the US, 150 catalogs, a calendar of events a "writer's corner", news and other services. The URL is:
http://www.olympus.net/gardens/welcome.html

▶ **VOLCANO WORLD** Nasa has funded this new web site "to provide information about volcanoes to school kids and to visitors at Hawaii Volcanoes National Park and Mt St Helens National Monument. We have reports and pictures of the latest eruptions, photos of many other volcanoes, a developing virtual field trip to Kilauea volcano, an Ask the Volcanologist section, lesson plans, and even a volcano mall". This one is well worth a visit. The address is:
http://volcano.und.nodak.edu/



It's been a strange and somewhat ugly last thirty days on Usenet. We've had an insane flood of new and totally unnecessary alt.* hierarchy newsgroups created by a bunch of juvenile idiots; we've had a bizarre war break out between the moderators of soc.religion.islam; spammers have reached new heights of idiocy; the Church of Scientology has run amok.

Fortunately, good things have also happened: new newsgroups have been created on useful subjects; new WWW sites have gone up; a few more Internet weddings have taken place. As far as I know, no one's brain has spontaneously exploded as a result of using the Internet. We must count our blessings.

Alt.* goes berserk

You'll note that the 'New Newsgroups' listing contained no alt.* newsgroups. In the month of January, things got totally out of control in the alt.* hierarchy, with literally hundreds of new alt.* newsgroups being created by idiots who didn't take the time to propose them in the alt.config newsgroup first.

As a result, the people who normally issue new alt.* newsgroups after discussion in alt.config spent most of their time cleaning the mess up, removing the bogus new alt.* groups. One worthwhile new newsgroup of interest to UK residents was **alt.movies.branagh-thmpsn**, a newsgroup dedicated to fans of the movies of Kenneth Branagh and Emma Thompson. Otherwise, not much that's useful has been created recently in alt.*.

Soc.religion.islam goes berserk

Soc.religion.islam is a moderated newsgroup for discussions of Islam. It's moderated because the people who created it were rightly afraid that violent, flame-ridden discussions would plague the group if it weren't.

Unfortunately, once or twice a year for the last four years, the moderatorship of soc.religion.islam has totally broken down, with accusations flying left and right about how so-and-so is really letting so-and-so do their moderation duties and about how so-and-so is cancelling (erasing) so-and-so's articles, and it's usually months before someone finally steps in, removes all the moderators and replaces them with new moderators... who, in a few months, repeat the process. At the time of writing, this has just happened again and multiple flamewars are taking place between various **soc.religion.islam** factions in the newsgroup 'news.groups'.

As a result, **soc.religion.islam** is not worth posting to – you can't be sure your articles will ever appear, and one moderator may cancel the other moderator's submissions. If you're interested in discussing Islam, check out the alt.* newsgroup **alt.religion.islam** or check on **news.lists** for the list of mailing lists – there are several that deal with Islam in a more civilised fashion. If, on the other hand, you want to see some of the most clueless idiots on Usenet bashing away at each other, check out the ongoing flamewars in **news.groups**. Bring a bag of crisps and a pint; it's better entertainment than the cinema.

Alt.religion.scientology goes berserk

In the month of January, the American headquarters of the so-called Church of Scientology declared war on the alt.* newsgroup **alt.religion.scientology**, which has long existed as a forum for opponents of Scientology to post their opinions and as a forum for Scientologists to offer rebuttals. Church of Scientology lawyer Helena Kobrin (**hkk@netcom.com**) began, in January, to issue rmgroup messages to try to erase the newsgroup altogether, while simultaneously an anonymous Church of Scientology defender posting under a pseudonym began cancelling messages critical of Scientology. The rmgroup messages, intended to remove the group from systems worldwide, were widely ignored.

The Church of Scientology asserted that any system which carries the newsgroup is in violation of their trademark on the term 'Scientology' and could face legal action. This assertion was received with much amusement by

New Usenet Newsgroups...

rec.ponds – the somewhat cryptically-named newsgroup for those of you who have garden ponds and want to talk to pond aficionados about how to keep things alive and growing in your pond.

rec.music.promotional (moderated) – the newsgroup for information and promo materials from record companies. It's moderated to keep it from turning into a dumping ground for advertising.

rec.music.makers.songwriting – The how-tos and trade talk of songwriting.

rec.music.country.old-time – American old-style music which, despite the name, doesn't really have a lot to do with Nashville-style Country music. It's about bluegrass, mountain music, stuff like that.

rec.music.classical.recordings – Discussions of commercially-available classical music (which recordings are no good, which are worth buying, which ones got recorded even though there was this guy who kept coughing during the aria, etc., etc., ad nauseam).

sci.geo.earthquakes – a newsgroup which came in handy this month when everything fell apart in Kobe, Japan. Theoretically, the newsgroup is supposed to be about the geology and science of earthquakes, but predictably, it's getting used for the Earthquake of the Month.

misc.entrepreneurs.moderated – The existing newsgroup, misc.entrepreneurs, was swamped by people posting what some people charitably call 'scams' – get-rich-quick schemes of dubious legality and legitimacy. Misc.entrepreneurs.moderated was created to provide a moderated forum for people who wish to seriously discuss entrepreneurship, new companies, venture capital, and so forth.

soc.support.fat-acceptance – A newsgroup for obese people to talk about how they're PROUD to be obese.

rec.animals.wildlife – For fans of woodland critters, basically.

rec.arts.comics.alternative – R.a.c.a is for discussion of so-called 'alternative' comics. In a nutshell, if a comic book isn't about superheroes or funny animals, it's probably 'alternative' in the eyes of Usenet comic-book fans. The group was created mainly by Americans who view virtually any comic book published in the U.K. as 'alternative'.

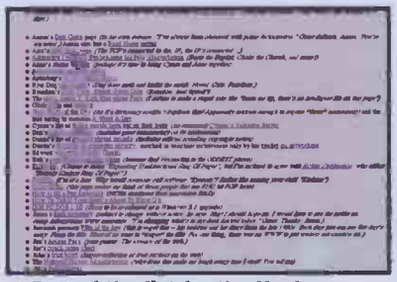
Self-referential absurdity on the WWW

Any casual student of the World Wide Web will have noticed the bizarre and often completely useless information that people put on their WWW home pages: what they had for lunch, pictures of their pets, complete listings of their compact disc collections. Finally, those of you who like to wade through the depths of pointless WWW information have a source for one-stop shopping: the Useless WWW Pages WWW page: **http://www.primus.com/staff/**. Maintained by Paul Phillips (**paulp@Usenet.com**), the Useless WWW Pages page contains links to such wonderful and useless pages as:

- the **Talk To My Cat** WWW page, where some guy has hooked his WWW page up to a speech synthesizer and lets you type in things for it to say to his cat, which is home by itself during the day.
- the **Snapshots of My Office** WWW page, where someone has hooked up a camera to their WWW page. The camera takes a picture every half hour of what's going on in their office and electronically puts it up on the Web.
- the **What I Had For Lunch** page at various people's sites. You thought I was kidding, didn't you? The Useless WWW Pages page really does contain links to the Lunch pages at various sites.
- and much much more.

If you know of useless WWW pages that have been put up, send mail to **paulp@Usenet.com** with the addresses and he will add them to his page.

→ Yes, this madman really did shave off half his beard. And here's the proof.



→ Part of the list for the Useless sites. Now you can see why.

opponents of the movement. Since Kobrin's campaign to get the group removed failed to have any effect whatsoever, and since the message-canceller was also ignored by most news administrators, plan #3 was hatched by one Russell Shaw (**wonderfulr@aol.com**).

Shaw proposed that all loyal Scientologists systematically spam newsgroups containing material critical of the Church of Scientology with megabytes of noise to punish those groups and get the Scientology critics to shut up. To tune into the ongoing stupidity, check out **alt.current-events.net-abuse** and **news.admin.misc**, where discussions of the Scientology Follies make up a large percentage of the daily discussions.

Spamming goes berserk

Spamming, which is defined as 'posting identical or nearly-identical messages to multiple newsgroups in an attempt to get as many people as possible to see your message', has become much more common – the result of many more commercial users getting onto the Internet. To avoid the ghastly spectre of having most .newsgroups teeming with junk mail advertisements for various scams, Usenet users have taken to operating 'cancelbots'.

Cancelbots are programs operated by humans which post cancel messages for each message in a series of spam messages. On most worldwide systems, once a cancel arrives, the message it is cancelling is simply erased. News administrators who don't like someone cancelling messages on their site can explicitly turn down approval of cancels.

One such canceller, 'Cancelmoose' by name, posts from **na48985@anon.penet.fi** and has been both applauded and cursed in newsgroups like **news.admin.misc** and **alt.current-events.net-abuse** for ridding newsgroups of ads. As Cancelmoose always says, though, it's not the content of messages that gets them cancelled, it's the volume (in other words, the number of times you post it). Since there's no excuse for posting the same message dozens of times over, you shouldn't be surprised when someone cleans up after you!

US.* on the way

U.K. readers who've noticed that Americans often treat the worldwide Usenet hierarchies (comp.*, sci.*, misc.*, soc.*, news.*, talk.*, and rec.*) as their own personal stomping ground, expecting other nations to confine their newsgroups to national hierarchies like uk.* or aus.* (Australia), will be pleased to know that the Americans are finally getting their act together on the creation of a us.* hierarchy where postings discussing topics of interest related to the United States can be read and answered.

After much argument about proposed plans throughout 1994, the plan that seems to have won out is simply to propose groups in **us.config** and create them if no one shouts really loudly. The first such groups, **us.state.iowa**, **us.politics.bob-dole**, and **us.politics.phil-gramm**, have now been created and are seeing moderate use. It remains to be seen whether people will flock to this new hierarchy or whether it will remain a backwater.

rec.sport.table-soccer – A newsgroup for fans of the tabletop football games found in some bars, pubs, and restaurants. Mainly populated by Americans, who call this 'sport' by the name 'football'.

soc.culture.jordan – For Jordanians at home and abroad, and students and devotees of Jordanian culture. Some postings will be in Arabic.

sci.bio.paleontology – Palaeontology is the study of fossilized animals; in other words, this group is largely dedicated to discussions on dinosaurs.

soc.culture.bolivia – This newsgroup is for Bolivians at home and abroad, and students and devotees of Bolivian culture, or for people who are simply trying to find someone to ship them drugs from the fine Bolivian cocaine plantations. Some of the postings here will be in Spanish.

rec.arts.tv.soaps.cbs, rec.arts.tv.soaps.abc, rec.arts.tv.soaps.misc – Once again, the Americans act like they own the Internet. CBS and ABC are American broadcast television networks. In the USA, soap opera TV programmes are generally broadcast from noon to 3 or 4 pm on competing networks, so the Americans, in their infinite wisdom, decided to split the rec.arts.tv.soaps newsgroup up into subgroups based upon which network the programmes are shown on in the USA.

This of course means that people who live in other countries and who get American programmes rebroadcast will have no idea where to talk about their favourite American soaps and will have to ask around. The proposal to create these groups barely passed, and as a matter of fact, one proposed group, rec.arts.tv.soaps.nbc didn't pass, so if your favourite American soap was on NBC, you'll have to use rec.arts.tv.soaps.misc. Ditto for any soap operas you like and want to talk about that aren't American.

rec.crafts.textiles.quilting and **rec.crafts.textiles.misc** – Craftspersons who work with textiles, and especially those who make quilts, will find these newsgroups useful.

sci.engr.metallurgy – For discussions of metallurgy in engineering.

sci.lang.translation – For discussions of the science and techniques of language translation.

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Internet Access Software

INTERNET CHAMELEON, from NetManage

NetManage's Internet Chameleon is the world's leading professional Internet access software for Windows. This high-value package contains a host of applications including WebSurfer, NewtNews, Gopher, FTP, a range of Internet diagnostic tools and fully-featured email with MIME. Internet Chameleon is quick and simple to install and gives you every Internet facility you need to roam the super highway in style. Leaf Distribution is an authorised Distributor of NetManage products and fully supports this unbeatable Internet connectivity solution.

Internet Provider Services

SERVELAN, from Leaf Distribution

Leaf's own total Internet Service, **SERVELAN** offers unlimited access to the Internet through a nationwide network of Points of Presence (POPs). Your link into the Internet is usually only a local phone call away. Using the Pipex backbone, **SERVELAN** offers a totally reliable service, with full email facilities. **SERVELAN** is fully-supported by Leaf, with quick and economical connection and total support. Call us now...you'll be agreeably surprised at how simple Internet connection can be.

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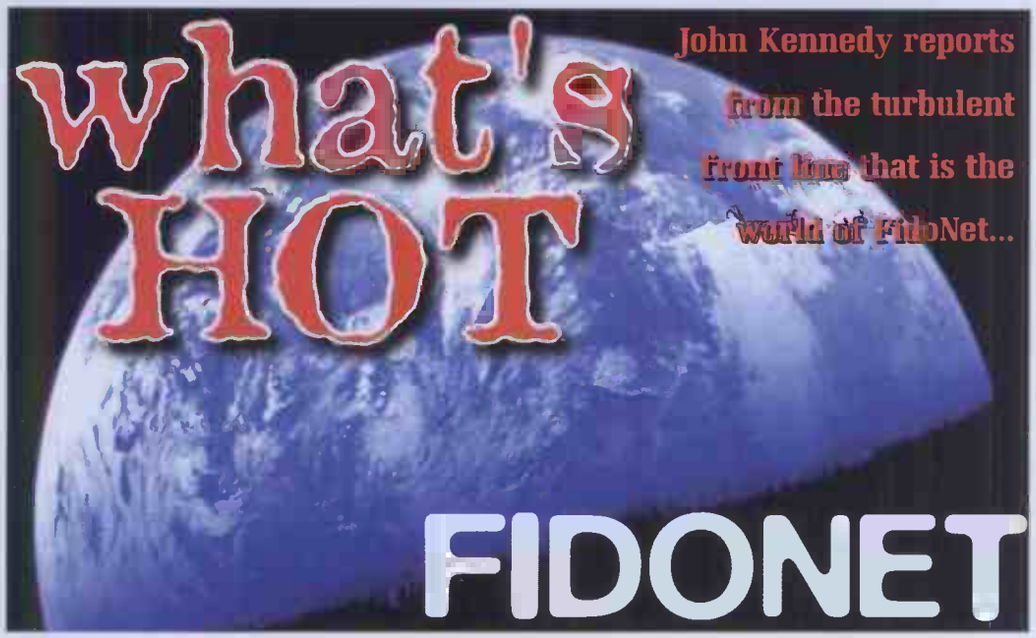

Blast from the past

Using an old DEC computer but finding contacts difficult to come by? Are your pleas for help with your Rainbow being swamped by other chatter in the 'VAX' echo? Asked for assistance with your DecMate in 'OBSOLETE' but found no-one who could help? Well try **'DEC_MACHINES'**!

'DEC_MACHINES' is the new echo specifically intended for users of DEC micros or mainframes (though not PC clones) to come and chat and exchange information about their favourite machines. It's only available at the moment from **WinterMute, 2:2500/163**.

Also available from this site is **ARCADE_TECH**, which is all about arcade machines and PCBs. If you are looking for others who are interested in this field and would like to swap information on PCB, join today. The more technically knowledgeable you are the better.

VGA Planets Echo

Anyone out there interested in an echo for VGA Planets? Here it is, and it's exclusively for the discussion of VGA Planets written by Tim Wisseman, and all of the game's associated utilities and add-ons.

The aim is to encourage new players for the game, and to discuss strategies, problems, ideas and anything else about the game.

The tagname is **F-VGA_PLANETS**, and the echo is currently available from:

2:259/2 & 3	**Alba Maximus** (24 Hrs)
2:255/76	**Silicon Heaven** (10 pm - 6:30 am)
2:259/91	**Dark Hours** (Midnight - 7 am)
2:259/88	**Firelink** (24 Hrs)
2:259/67	**Touchdown** (9 pm - 7 am)
2:259/68	**Blue Lagoon** (24 Hrs)
2:251/6	**Logical Connection** (9 pm - 7 am)
2:25/10	**Aspects II MNL**
2:255/1	**Trinity Mail Centre MNL**
2:442/403	**Coracle Board (Cliff Harold's MNL)**

Rodina Station Update

Here's a BBS undergoing a re-vamp on 01232-492320. Sysop Clive has just forked out to operate a Demon gate via **@rodina.demon.co.uk**, and he might even FTP for you if you ask nicely.

Babylon 5

And more news on the Babylon 5 echo. Apparently **B5_UK** is going to become one of the first cross-network echoes. It will be gated from Fido to Usenet, so Usenet users can get it too. The mind boggles what will happen when Fido and Usenet collide.

→The Babylon 5 team gear up their trusty Video Toasters...

Busy Local Points

Many boards are reporting an unprecedented surge in local points traffic (that is, messages posted between local users). The Heart of Gold has been buzzing, and so has Quantum Shuffle.

Quantum Shuffle is now at V34 on 01757-701785, taking 100s of FidoNet echoes and now with Internet access for subscribers.

2:2502/18. The local points echo has over 200 messages a week all from local pointers. Quantum is also the home of the Comms UK FidoNet FAQ (freq COMMSUK or logon and download).

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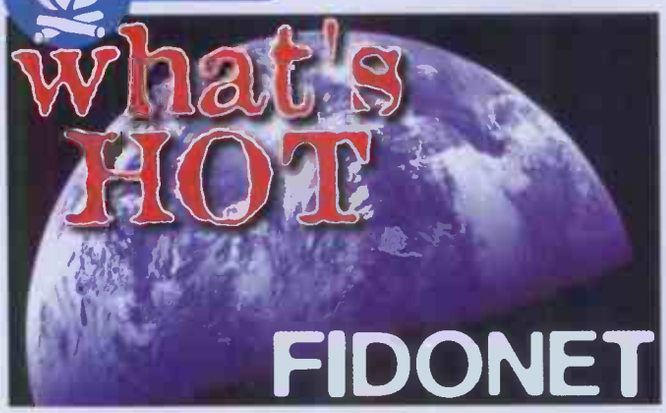

The East Midlands Net

The East Midlands Net is a set of echoes that are kept in **net2503** (The East Midlands), writes Chris Asher (**2:2503/203.18**). The echoes currently set up include:

- **EASTMID:** East Midlands Chat. General light-hearted chat and banter between users ranging from 14 years to much older.
- **EM_AUTHOR:** East Midlands Budding Authors. Where we attempt to write stories and poems to impress the other users... Yet to succeed! :-)
- **EM_DOOM:** East Midlands Doom Players. Have a guess! <g>
- **EM_FILE:** East Midlands File-Find. Post a message asking for a file and all the BBSs in the EM_Net automatically reply to you saying what files they have that match the criteria you set.
- **EM_HEAVY:** East Midlands Serious Discussions. for the more serious topics that don't really belong in EM_Chat.
- **EM_INTERNET:** East Midlands Internet chat. The latest addition to the EM_* family – Help for new Internet users.
- **EM_KIDS:** East Midlands Kids chat. Somewhere for the Sysops' & Users' younger kids to talk.
- **EM_KITES:** East Midlands Kite Flyers.
- **EM_MUSCLE:** East Midlands Muscular Dystrophy Sufferers.
- **EM_PUZZLE:** East Midlands Puzzles. Got any hair? Have a look here to lose it quickly! <g>
- **EM_SELL:** East Midlands Buy & Sell.
- **EM_TECH:** East Midlands Technical Discussions.

The East Midlands Net is really held together by two of the Sysops who put a lot of time and work into keeping things running:

- **Paul Carroll (2:2503/104.0)**
- **Simon Gledhill (2:2503/203.0).**

They both contribute regularly to the echoes and are happy to set up new echoes if there is a demand. EM_KIDS was set up as the younger kids wanted a place to chat together. EM_INTERNET is for all the people who want to discover the Internet but haven't bought I&CT yet... :-)

The thing that really attracts people to the EM_Net is EM_Chat. EM_Chat is all light-hearted chat, banter and generally poking fun at each other. All the users know each other as we regularly have meetings at pubs (and pizza restaurants!) around Nottingham and Derby.

For more details contact the two Sysops, or Chris, via email.

Chaos in Scotland

Want to visit one of the busiest boards that's around at the moment? Try the Chaos Engine which has seven CD-ROMs and a whole host of games to play. Sysop Mike Henderson also tells me the Scottish BBS scene is current running an election for NC of **2:259**, and the situation is getting rather heated as each candidate tries to convince everyone else that he or she is the best for the job. Full report (and (hopefully) pictures) next month!

Frontier

Not fronty enough? Need to be even frontier? Then... oh, right, I've just been told this echo is actually about the game called 'Frontier'. Silly me. Anyway, it's available from:

- **Touchdown BBS** 2:259/67 (9pm-7am) 01475-785-589
- **Blue Lagoon BBS** 2:259/68 (24 Hours) 0141-644-5429
- **Bandit's II BBS 2:** 442/612 (10pm-7am) 01222-628-829
- **Steelers BBS** 2:259/9 (9pm-6am) 01475-728-430
- **Nth Degree BBS** 2:442/616 (10pm-7am) 01222-224-424
- **Ooh! BBS Node 1** 2:254/233 (24 Hours) 0181-395-1028
- **Ooh! BBS Node 2** 2:254/233 (24 Hours) 0181-395-3108

The moderator is Brice Simpson, who would love to hear from you, as long as you're not a Thargoid, of course.

FidoGossip

- Sexism and harassment on the FidoNet are hot topics. I&CT writer Sara Edlington reports a terrific response to her article on nuisance email in I&CT 4.
- The Internet_UK echo is miraculously free of mis-posts from users expecting it to be a gateway to the rest of the Internet (it's not – it's a discussion echo on various Internet topics).
This can really only be put down to the number of new University students realising their mistakes after the peak of a few months ago. (Although the message to Children's BBC was a classic!)
- 'Hacker Slang' is on the decrease. Hopefully sightings of messages like "heY d00dz, got some warez?" will vanish completely within the next few months.
- The COMMS_MAGS is still chugging away. Current debates centre on coverdisks and CD-ROMs for comms magazines, and complaints about the term 'furniture polishing'.
Also, the Fido user everyone loves to hate, Mr. Mat T. Bettison, seems to have gone into self-imposed exile. Bandwidth across most of the FidoNet has dropped by at least 15% as a result.
- Other networks are springing up, and many existing ones deserve more of a mention, so expect many more reports from other FidoNet Technology Systems in the months to come.
- So, as my Spanish correspondent, Jose Vergara puts it at the start of his mail: "Para que no se enterara nadie, John Kennedy me dijo al oido muy bajito" or "For keeping it secret, John Kennedy told me at my ear whispering". See you next month!

Reviews

Esther Rantzen can't always be with you. So, before making any purchase, peruse our comprehensive and ruthless reviews section, the consumer's friend, for real purchasing power.

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Comms Software
Modem Equipment
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Service Providers

The Ratings Panel

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▲ **Uppers:** Here we tell you what's good about the product
▼ **Downers:** Here, what's bad
➜ **Published by:** The publisher!
➜ **Price:** The RRP
➜ **Contact:** Who to call

The ratings panel gives the score out of five for each product, represented by the number of red PC icons. This score is supplemented by a quick overview of the product's good and bad points.

If you still want to buy it after all that, we also tell you how much you might pay, where you can find it and who to contact for further information.

Compaq Presario CDS

An all-in-one style PC for a gentle intro to PC comms.

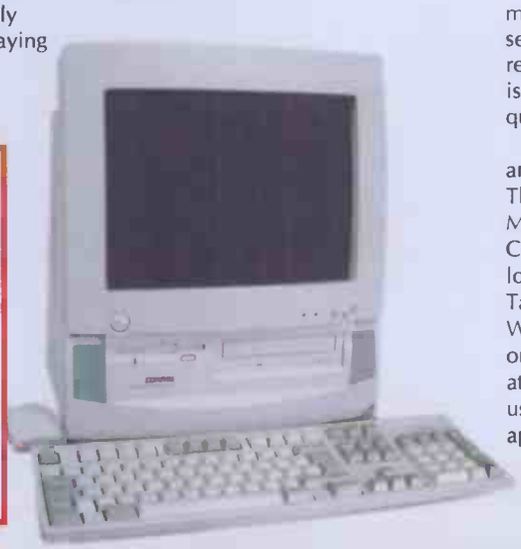
Outwardly, the Presario looks the part (although it does bear a striking resemblance to the age-old Amstrad PCW) with the appearance of a competent and well-built machine.

Inside the Presario's tan case lurks a 486SX2-66 processor, which should be enough processing power for the average home user, but which can be found definitely lacking when it comes to playing serious CD-ROM games or using processor-intensive applications, such as spreadsheets. The 4Mb of RAM seems slightly on the small side. It would have been preferable to see an 8Mb machine.

A healthy-looking 420Mb hard disk and a rather cheap-feeling IDE CD-ROM drive provide the storage space available to the user, along with the obligatory 1.44Mb floppy drive. When tested, the CD-ROM provided some pretty standard results for a double-speed drive (Transfer rate: 248K/sec, Av. Seek: 281ms) but I was left with the impression that the CD drive seemed rather cheap and flimsy. The same could be said for the mouse, which I thought also felt very tacky indeed.

486SX2-66
4Mb RAM
420Mb HD
IDE CD-ROM drive
SoundBlaster sound card
Internal modem
Built-in speakers

Software:
Tabworks
MS Works
MS Money
CompuServe WINCIM pack
DOS 6.2
Windows 3.1



The keyboard and the overall general construction of the PC is well thought out, resulting in an efficient and easy-to-use machine. The monitor sports a selection of buttons along its front for controlling the volume of the internal speakers, saving you the hassle of having to fiddle around the back of the PC for the sound card volume control.

The Presario comes complete with a built-in modem which sets it apart from other multimedia machines of the same level. What is an essential part of an MPC, however, is a quick Windows setup. Sadly, the Presario uses a slow Cirrus Logic graphics card and this, coupled with the relatively slow SX2-66 processor, makes using Windows for any serious multimedia application a real pain. The hard disk, although it is of a reasonable size, was also quite slow.

The Presario comes with a fair amount of software bundled with it. The normal Windows Program Manager has been axed in favour of Compaq's Tabworks. Acting, and looking like a personal organiser, Tabworks arranges separate Windows groups into 'pages' of the organiser. There is also a strip menu at the side of the screen that can be used to hold your most-used application icons (such as a word processor and spreadsheet), thus eliminating the need to flip back and forth between pages.

Microsoft applications feature heavily in the software package, with MS Works and Money coming pre-installed on the machine, extending the potential usefulness of this PC and widening what might otherwise have been a narrow market for it. The internal modem is supported via the Compuserve WinCim pack (also pre-installed) which comes complete with a special introductory membership offer for purchasers.

If intend to do nothing except manage your finances or write letters, or you are looking for an easy and comprehensive system to introduce you to PC comms, then this is a good buy. The Presario offers competent (if slightly slow) performance for a wide range of applications. It scores a lot of points for its compactness, but still looks like a second-rate PC.

➜ **Dino Boni**

Compaq Presario

▲ **Uppers:** Complete package – no messy cables!
▼ **Downers:** Cheap peripherals
➜ **Price:** £999.00 inc VAT

review

The Mosaic Navigator

A book which aims to trap you in its Web...

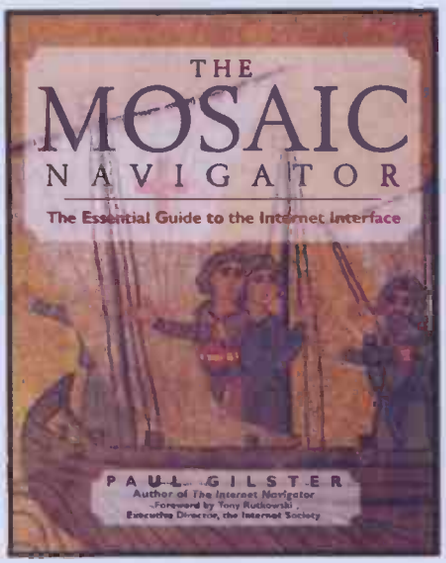
It's big news, the World Wide Web, and it's going to get a whole lot bigger. Its multimedia facilities are allowing people to create a whole new range of services, from home-based eZines to full-blown mail order and customer support operations.

Any entrepreneurs, or even just creative types, will want to know about the Web and in particular how to create their own HTML pages, so a book like this is, in theory, perfect.

So what does this book offer? Firstly, the book's main focus deals with the original NCSA Mosaic and not the more up-to-date Netscape. This is not a real problem provided you are not interested in some of the more advanced HTML functions provided by Netscape (and not by Mosaic) – however, for reasons of compatibility, it's probably best to avoid using the extended functions at all. People using lesser browsers like MacWeb for example, won't find much here to interest them, although again, the sections on building HTML pages might be useful.

The book starts with the really basic stuff like installation. On a Windows machine, this can be a lengthy procedure, but devoting 14 pages to installation on the Macintosh (probably the easiest machine in the world to get new software up and running on it) seems a little excessive. However, useful and potentially tricky customisation details like installing Mosaic's support programs (like JPEGview and Stuffit) correctly is covered and, on balance, it's better to be comprehensive than not, I suppose.

After this, the World Wide Web itself is examined in some detail – what it is (and isn't), hypertext linking, the people behind the Web, and all with Uniform Resource Locators (URLs) so you can find out more if you want to. It's simple and easy to understand for non-technical types, with plenty of examples to help you.



The next section deals with some of Mosaic's non-Web applications, like FTP, which is useful but not of much use to experienced FTPers (as most people are before very long).

Likewise with Telnet, Gopher, WAIS and so on, the book has useful introductory information for the beginner, but for people looking for a deeper understanding of Mosaic itself, this section is not a great deal of help.

Better is the discussion of some of Mosaic's features like Annotations, Hotlists and Quicklists. Even experienced Mosaic users might not have been aware of some of the stuff covered here, as the program's ease of use often, paradoxically, discourages further exploration of its features.

The Internet Business Guide

Make money from the Net with the help of this new book.

You've read Canter and Siegel's book, but you've decided that their way is not appropriate for a responsible entrepreneur like yourself. What do you do?

The Internet Business Guide proposes to help you, and comprehensively too, weighing in at a pretty hefty 420 pages or so. Well, that might seem like a lot, but the wordcount per page isn't that impressive.

I decided to search in the index for a reference to Canter and Siegel. Reading what the authors had to say about these two would provide a good example on their attitude to Net commerce – i.e. were they offering responsible information to readers? I'm glad to report that they are, and their criticisms pertain to good business reasons why a C&S-style Usenet spam is bad practice. Their main reason is that it is bad marketing – putting aside the risk of upsetting potential customers, the book points out that trying to reach the entire Net community in one go is plain stupid. Good marketing involves identifying market segments – people who will be receptive to your product, so the book offers some advice on targeting your potential customers effectively.

Encouragingly, the book is at pains to point out you need to do your homework on the Net and its community before trying to make money. There's nothing intrinsically wrong with business on the Net – it's how it's done that's important.

What the book offers is a collection of case studies, do's and don'ts, Web page addresses of currently operating commercial sites, 'getting started' advice, an email tutorial, advice on how to start your own Usenet newsgroup (a potentially troublesome procedure, that one), a list of global Internet service providers (honestly, not a tremendous amount of use) and a guide to other online companies like CompuServe – although it's heavily USA-based with information on the likes of Prodigy.

By far the most interesting stuff in the book was about business info available on the Net. This stretches from newsgroups (including a few I wasn't aware of before) to the usual Web sites and press releases. There's also more information on the companies using the Net for commercial reasons, but one big hole in the book is its lack of coverage of ordering via the WWW. Many companies want to use the Net as a mail order device in the first instance, so it's a pity that the 'forms' feature of HTML+ isn't covered. This may be because the book was in production before HTML+ was released.

However, the book does offer plenty of case studies, with interviews with people who are responsible for their company's Net business arms. For instance, there's a look at how DEC use telnet and the WWW to give their customers the chance to order upgrades and keep in touch with product releases.

The issues of data security are covered briefly with a reference to PGP encryption, but on the whole not enough is probably made of the problems to do with sending secure information over the Net. Certainly, it's probably the biggest barrier to doing full business over the Net and we're going to have to wait until one or other of the browsers starts to use some kind of safe, standard encryption method.

On the whole, this book is a very good starting point for those interested in business on the Net. Although it doesn't tell you some of the 'hows' (like how to build a WWW page), what it does tell you puts other, more exploitative efforts like Canter and Siegel's into their proper place. A highly recommended first step.

➜ **Nick Merritt**

The Internet Business Guide

▲ **Uppers:** Comprehensive look at doing business on the Net
▼ **Downers:** Some stuff not covered deeply enough
➜ **Price:** £25
➜ **Published by:** SAMS Publishing
➜ **Tel:** Computer Manuals (0171) 706 1250

The Internet Yellow Pages 2nd Edition

Your guide to the virtual world.

What makes a good guide to what's on the Internet? There are two main things to bear in mind when choosing which guide book to spend your hard-earned and harsh-taxed money on – one is the price of the book, the other is the number of sites listed inside.

I've worked out a very approximate test for the top three Internet directories: Netguide costs about £20 for about 3,600 listings, a ratio of 0.6 pence per listing, The Net Directory costs about £30 for about 12,000 listings, a ratio of 0.3p/listing, while the Internet Yellow Pages costs about £30 for about 5,600 listings, a ratio of about 0.5p/listing.

On that alone, it would seem that the Yellow Pages is barely worth the money, but it's not fair to judge a directory on that criterion alone. Certainly, the Yellow Pages could have been improved by the very simple expedient of just cramming more site listings on a page, dropping a lot of the jokey rubbish (which seems only to be there to make the directory look like a 'real' Yellow Pages phone book), reducing the thickness of the volume and therefore chopping a tenner off the price. But as we all know, computer

The section that is potentially most useful, though, is the one on customising Mosaic. Here, the reader learns about HTML tags, and before long, it is possible to begin constructing Web pages of your very own.

Of course, the problem after that is one of finding a server that you can place your pages onto, but that's becoming easier all the time now. Good page design is covered, but because this book is dealing with Mosaic and the basic HTML format, more advanced stuff like interactive forms provided by HTML+ are not covered.

Finally, the book ends with information on the future of the World Wide Web which is interesting reading for anybody who's serious about getting involved with the Web in the long-term. In addition, there's a glossary of useful and interesting Web sites – I didn't check these so I don't know how many are still active, although it's likely that a few might have gone offline.

All in all, this is a very good book for those new to the Web and who might want to know what the possibilities are, but experienced Webnauts might find a lot of the material here is pitched at too low a level. However, I'd argue that it's a useful reference guide anyway and is certainly worth considering.

➜ **Nick Merritt**

The Mosaic Navigator

▲ **Uppers:** Comprehensive introduction to Mosaic and the Web

▼ **Downers:** Aimed too much at beginners

➜ **Published by:** John Wiley & Sons

➜ **Price:** £13.95

➜ **Tel:** (0243) 779777

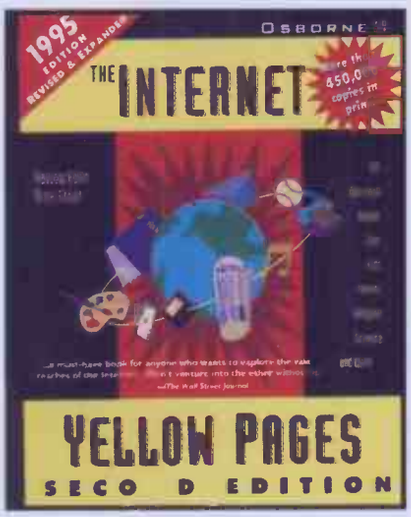
books are a licence not just to print money, but embezzle it as well.

What this directory offers that its competitors don't is essentially bad jokes. As you read through the thing, you keep tripping up on inspirational mottoes like, "Why are you reading this when you could be looking at the sex section" which presumably assumes that the book's readers are as sad as the authors. Here's another: "The Internet will set you free." I'm afraid I define freedom as a great deal more than locking myself into a bedroom for 24 hrs a day to ruin my eyes in front of a VDU. And as for: "The Net is Mankind's greatest achievement" – well, sorry but I beg to differ. Some people might prefer to nominate the contraceptive pill or quantum theory for that particular accolade.

If you are able to grit your teeth through this claptrap, you might also notice rather a lot of Usenet listings, which is a bit cheeky considering it's pretty easy to figure out which Usenet groups might be useful to you without spending £30. Hardly a major feat of research, it must be said. Better are the FTP and Web listings, though.

The book seems to have been written for the Netsurfer although it's being published at a business book price, which seems a little curious. You'll have to decide whether the tone and style of the book is to your liking – I suspect that a reference guide like this will soon start to get annoying if you find yourself constantly wading through padding. I'd recommend Netguide for a cheap directory and Internet Directory for a really comprehensive collection of sites.

➜ **Nick Merritt**



The Internet Yellow Pages 2nd Edition

▲ **Uppers:** Comprehensive listing of Internet sites

▼ **Downers:** Rubbish gags, not cheap

➜ **Publisher:** Osborne

➜ **Price:** £30

➜ **Available from:** Good book shops

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review

How to make a fortune on the Information Superhighway

Canter and Siegel's guide to spamming.

It probably isn't necessary to go into the details of who Canter and Siegel are, such is their notoriety amongst the Internet community. Their Green Card spam caused a massive amount of criticism to wing their way last year, and began a debate about the desirability of commercial activities on the Net which continues to this day.

This book can be seen as their attempt to justify their actions. But more than that, it is also a 'how to' book, which on first impressions might remind you of one of those "I was broke six months ago but now I'm a millionaire" affairs (where some guy tells you how some dodgy pyramid selling scheme will make you money).

This can be divided into several sections: firstly, a history of what Canter and Siegel did, secondly, how you can get online and do the same thing yourself, and thirdly, an extended harangue against those people who disagree with C&S about the morality and correctness of what they did.

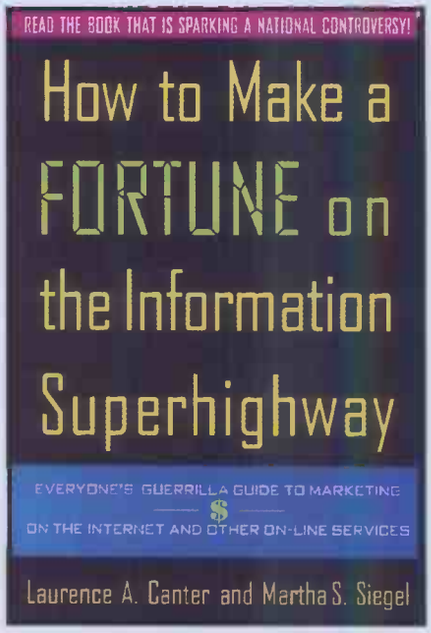
After an extended reading of the book, one thing becomes clear – that Canter and Siegel really do not seem to like much of the Net community – the same community they are urging people to accept as their customers. There are myriad references to the geeky or nerdy aspects of Net culture, which, although they clearly exist, are referred to in highly condescending terms. If Canter and Siegel are serious about helping people use the Net for commercial reasons, then they're starting off on totally the wrong foot.

The key to any successful business in the long-term is to treat your customers with respect. Canter and Siegel's recommended approach builds in the kind of customer contempt that's a poor foundation for business success.

Secondly, and perhaps more unforgivably for a book supposedly about helping people make money out of the Net, is the almost total lack of anything to do with the World Wide Web. It's fair to say that the bulk of the commercial opportunities available on the Net within the next few years is going to arise out of mail order, pay-per-view Web pages or advertising-supported 'free sheets'. All Canter and Siegel are really doing with their spam ideas is using Usenet as a traditional advertising system. For some small businesses, this may be a good idea, for others with a more local base, as most small businesses are, it's a waste of time.

Finally on this point, a budding business person thinking about commercial opportunities on the Net is likely to be put off by reading Canter and Siegel's account of what happened to them. C&S downplay the negative effects on them, but it's noticeable that they have never tried to spam the Net in the same way since. Would anybody serious about making money via the Internet really consider using Canter and Siegel's approach as any proper kind of model?

Canter and Siegel received criticism after their spam for breaching the rules of Netiquette, a kind of unwritten code of conduct meant to regulate how the Net conducts itself. Naturally, this code of conduct is in many ways incompatible with some types of commercial activity on the Net, so it's in C&S's interest to dispose of it as soon as possible. And C&S do make a fair point that people break this rule all the time on the Net –



CompuServe®
for Europe

A GUIDE TO THE INFORMATION SUPERHIGHWAY

Roelf Sluman

THOMSON

$15* Credit + disk included

CompuServe for Europe

CompuServe joins us in the European Union...

If you, like me, grit your teeth every time some American infonaut presumes that the Internet starts in California and ends in New York, then this book for European CompuServers out there will be a big relief.

As CompuServe has expanded from its American roots, it has had to start offering services outside of its usual Americentric focus. This then, as far as I am aware, is the first book to provide a guide to CompuServe's European services. Rather slyly, it flags itself as 'a guide to the Information Superhighway' thereby proving that in the act of separating gullible consumers from the contents of their wallets, the phrase 'information superhighway' is right up there with 'pension salesmen'.

The book dives straight in with talk about CompuServe's much- maligned pricing policy (which is given it its Internet nickname 'CompuSpend' or 'Compu$erve'), pointing out that CompuServe's pricing is not obvious at all. Email charging is explained too, which can be one expensive area if you often send large files to people.

Next up is a guide to modems and computers, so the book is clearly pitching at the complete novice here. However, there is an excellent section on connecting your laptop to CompuServe via the kind of 'hard wired' connections you are likely to come across in countries with underdeveloped phone systems. Not only does it mention how you can physically attach your modem to these sorts of telephone lines, but it gives CompuServe addresses of where you can get help files and tips sheets which go into more detail.

Next up is a long section on getting to know the CompuServe Information Manager programs (which are used to 'dial-up' into the CompuServe system). The bias is towards getting to know the WinCIM program in particular (for Windows PCs) but there are neat hints and tips again for international travellers, covering stuff like customising CIM access from different countries. The Navigator programs are covered as well, as is email and actually accessing CompuServe's other services (like the conferences and the forums). However, what these sections are

including the many people who objected to their breaking of the rules.

But the difference between what C&S did and minor breaks of Netiquette like incorrect grammar or flame wars was the premeditated nature of C&S's actions. While receiving a flame can be unpleasant, they usually occur because someone has engaged the keyboard before engaging the brain and has said things in the heat of the moment. What C&S did, by their own admission, was very different – they hired a programmer to write a mailing algorithm to post to 6,000 of Usenet's newsgroups.

And in dismissing Netiquette, C&S make no mention of the likely consequences of doing so, of newsgroups endlessly clogged up with junk mail, of endless flamewars erupting across the Net between budding commercial operators and newsgroup moderators.

The worst thing about this book is not its encouragement of the commercial uses of the Internet, to which most people probably would have no objection at all, but the way the book recommends people to do it. There's little discussion of how would-be spammers can protect themselves against the kind of retaliation that C&S had to deal with. The book instead merely acts as a method for encouraging the unscrupulous.

As a record of Canter and Siegel's actions it's worth reading, if only to hear their side of the story. And we do owe Canter and Siegel a vote of thanks for opening up the whole area of commercialisation to debate. But on a practical level, making money by Usenet spams is not a serious prospect for anybody looking for a long-term business opportunity on the Internet and, because of that, this book is something of a red herring. For a better guide to business opportunities on the Net, try The Internet Business Guide, reviewed elsewhere this month.

➜ **Nick Merritt**

How to make a fortune on the Information Superhighway

▲ **Uppers:** C&S's side of the story
▼ **Downers:** But you won't learn how to make a fortune
➜ **Published by:** HarperCollins
➜ **Price** TBA
➜ **Tel:** (081) 741 7070

basically doing is just offering a tutorial on using CompuServe and there's very little Europe-specific stuff.

There is one interesting list of (supposedly) common forum posting abbreviations (as in 'IMHO' for 'In My Humble Opinion'), although anybody who would really want to remember a list that long really should probably just go off and get a life instead. I mean, abbreviations are handy and all that, but 'POSSLQ' for 'Person Of Opposite Sex Sharing Living Quarters' is going just a little bit too far.

Now for the bit that I really thought this book would be all about – what CompuServe actually has to offer in terms of services. The title of the book would lead the casual reader into thinking that what was on offer here was a directory of Euro-specific services. Although there's some UK, French and German-specific stuff listed here, there's still too much reliance on American stuff.

For instance,Computer and Software News' tells us all about PC News Weekly and Mac News Weekly, "two of America's most famous weekly computer magazines". But the UK edition of Computer Shopper has a CompuServe presence – surely a book supposedly promoting the European aspects of CompuServe should highlight this instead?

I'm not criticising the book for this. It's up to CompuServe to take its European duties more seriously, and the author is, after all, only able to cover what's actually online at the time. However, when you consider that the cost of the book is about £20 and that you get the excellent, "I didn't know I could do that on CompuServe" book free when you join up (which provides a complete listing of every CompuServe service available plus a short description) you have to ask yourself if this book is worth it. Certainly, if you're a beginner, this book might well be worth considering, but for more experienced users, it's probably not worth spending the money on.

➜ **Nick Merritt**

CompuServe For Europe

▲ **Uppers:** Good intro to Compuserve
▲ **Downers:** Not enough Euro stuff
➜ **Price:** £19.95 (inc. disk)
➜ **Published by:** Thompson Publishing
➜ **Telephone:** (071) 497 1422

ATLAS INTERNET

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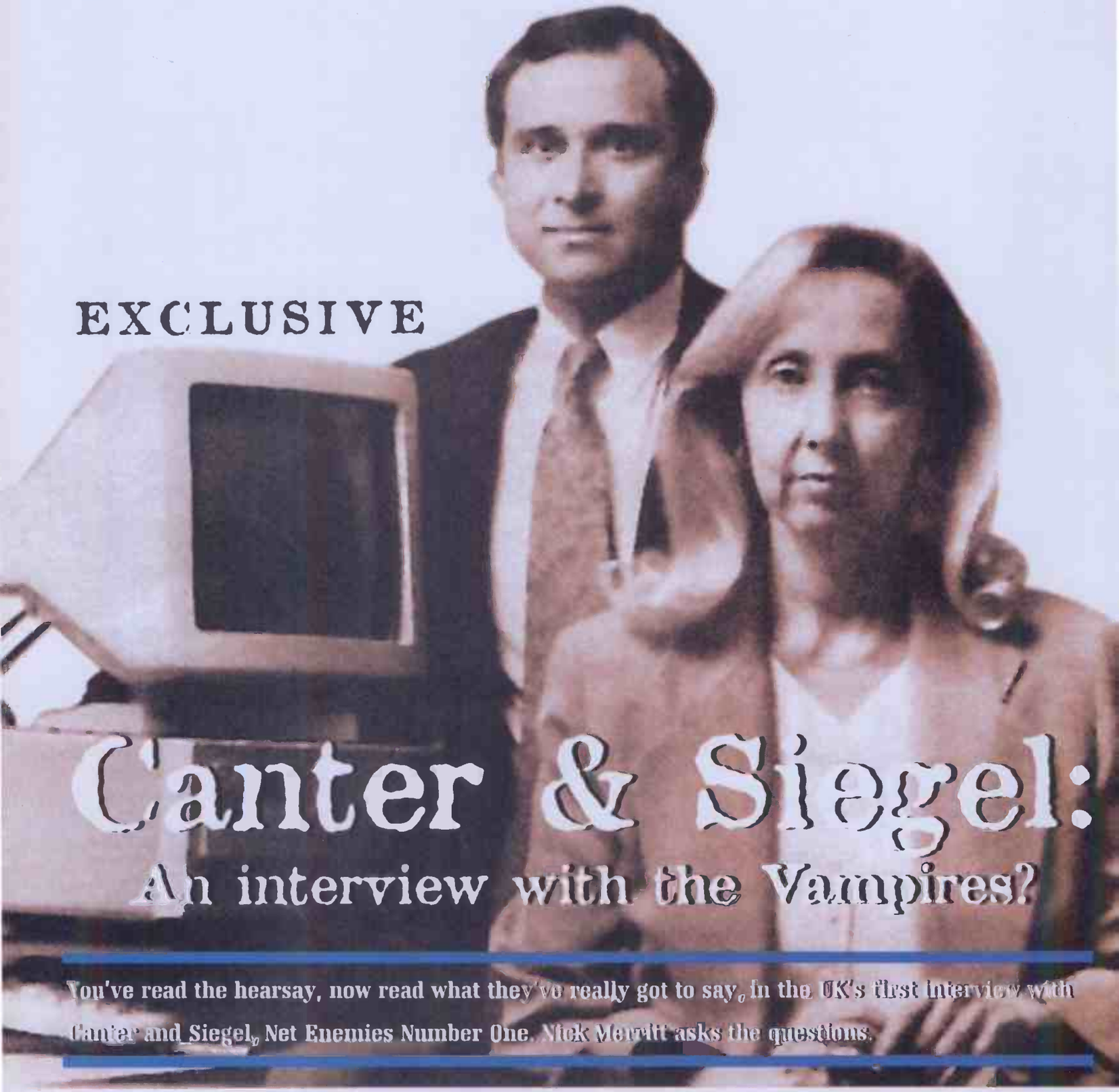


EXCLUSIVE

Canter & Siegel: An interview with the Vampires?

You've read the hearsay, now read what they've really got to say, in the UK's first interview with Canter and Siegel, Net Enemies Number One. Nick Merritt asks the questions.

Canter and Siegel are infamous amongst the Net community. All the angst and questioning about commerce on the Net has its source with them. On April 12th 1994, they posted a message advertising their legal service for people interested in the annual American Green Card lottery to 6,000 Usenet newsgroups.

Their story is well-known now – the outraged response of some of the Net community, the flames and so on, but this hasn't stopped Canter and Siegel. They now run their own company, Cybersell, which advises on the business opportunities connected with the Internet, and they have a new book, published in the UK last month, which tells you "How to make a fortune on the Information Superhighway."

Nearly all of the press coverage they've attracted in the UK so far has been limited to rehashed versions of the story of their spamming and the responses to it, and nearly all the press coverage has been slanted against them in some way. Internet and Comms Today has therefore decided to let these Net-scapegoats speak for themselves...

You've said that you didn't think there were any moral issues surrounding the Green Card escapade. Could you expand on this?

▶ **Martha Siegel:** I don't think anyone can justify [the statement] otherwise. There is no law broken, there is no moral tenet broken. We have not stolen anything from someone, we have not lied to anyone, we have not harmed anyone.

My personal set of moral tenets is that you don't lie to people, you don't hurt people, you don't deceive them, and we've done none of those things.

A number of people have proclaimed themselves annoyed – I can't believe that annoying someone is immoral – I can tell you that plenty of people annoy me every day. If we considered it a morally reprehensible act to annoy somebody, I'm sure we'd all go to hell after we die.

I fail to see that we have cheated, stolen, lied or done any of the things that I personally consider as moral issues.

The view of Performance Systems International [their USA Internet service provider] was that they asked you to stop what you were doing because you were violating the NSF's Acceptable Use Policy.

▶ **MS** I know Steve Wolf very well – his comment to me regarding the NSF's AUP was that, in terms of their application to systems like PSI, referring to them was a red herring.

▶ **Laurence Canter:** The NSF policies would actually prohibit almost any kind of activity that goes on on the Internet because if you look at the NSF policies, they preclude anything that doesn't have an academic or research purpose. Even somebody at a University sending a casual email letter to a friend would be violating NSF policy. And of course, here in the US we have CIX – a new commercial Internet backbone – and the traffic goes over that and nothing we've done violates CIX policy.

Do you think it's fair then to post messages about a legal service to newsgroups dealing with other topics – I'm aware that you tried to filter out some inappropriate newsgroups.

▶ **LC** I don't see anything more wrong with that than advertising in a newspaper or on television on a topic not directly related to the article or show that you're reading. We found it to be very effective. As we point out in the book, although there were certainly many people who didn't like it, there were also many more who wanted the information and many of them ultimately hired us. So we have to conclude from that, that there wasn't anything wrong with it and that it's a viable way to do business.

▶ **MS** The question of fairness is that reasonable minds will differ over what is valuable and what is not valuable. Let me answer your question with another question: Is it fair – when there are lots and lots of people out there who would like to get information on the Green Card Lottery – for those who don't want it, to mail bomb, to try to get in the way of communications between us and the people who do want that information.

I'd agree with that. It seems strange to me that many people who object to you breaking unwritten rules are prepared to do exactly the same thing themselves.

▶ **LC** If you tune into Usenet much yourself you know that people break these rules continuously, not just on advertising. There are many groups where there are more flames on the group complaining about somebody's grammar or an unpopular comment that somebody made than on the subject itself.

Although you say your method has been successful and that you are recommending people to follow your example in your book, surely this cannot be a good, long-term way of conducting this kind of business?

▶ **LC** I think that you're right in the long-term, but at the moment, although the Web is very interesting (and we have our own Web site), the truth is that most people don't have real access to the Web.

You could argue though that most people without Web access are probably the ones you don't want to deal with anyway, people like academics who are busy hassling you all the time.

▶ **LC** Well, I don't know if that's true. The number of users on the Internet is growing at a geometric proportion – I'm not sure if anybody really knows how many there are now. A lot of them are coming in through large commercial online services like CompuServe, and their Internet access is actually rather limited. They do not at the moment have access to the Web at all. There are also some other practical problems with Web advertising in that people have to know that you're there.

▶ **MS** And one thing that might be of interest is, recently in fact, in this week's Sport's Magazine...

▶ **LC** Actually the January 30th issue, just come out...

▶ **MS** ...has a big article and the general gist is that advertising on the Web is ineffective. The point they are making is that there are people up there on the Web and nobody is making any money. That's not a situation that I believe, personally, will continue.

▶ **LC** One of the points about our book, really, the market the book is aimed at, is that for the average man who wants to run a small business, to put up a Web server is relatively complicated for most people and requires a fairly large outlay of cash to have a proper connection. But to advertise on the Usenet, the simplest Internet account can do that.

▶ **MS** And one important point that I think you must drive home about Usenet advertising over and over and over again, is that the fact that it works is proof not everyone is against it.

But wouldn't you agree that most forms of advertising are regulated in some way?

▶ **LC** I can only speak for laws in the United States, because I realise they may differ for different places, but there are really very few laws that regulate advertising further than general trade laws requiring things to be truthful and claims to be substantiated and so forth, and we advocate, if you see in the back of the book, guidelines on advertising. Basically, they follow the same type of guidelines that newspapers, radio and television use here.

I'm interested in what other ways you use the Internet – do you use it for personal pleasure at all? Or do you just see it as a commercial thing?

▶ **LC** I think it's everything, and it's going to become more and more mainstream over the next few years. We have this vision that sometime in the next ten years, the Internet and television are going to join somewhere and that it will be hard to tell one from the other. The main problem with the Internet at the moment is that it is still in a primitive development stage, and when we're talking about marketing we should keep in mind that two years from now there may be a way to market things on the Internet that just does not exist today.

I'd agree with you there.

▶ **LC** I think that one of the reasons we got so much flak was not so much that they don't like what was done with the Usenet but they somehow resent the fact that someone is able to advertise to so many people and in effect not pay for it. That just doesn't sit well with them.

▶ **MS** I've seen an awful lot of articles from people, and we even mention one in our book, that say the people who are angriest over the fact that we advertised and didn't pay for it are the people who sort of had it in the back of their mind that they would take things over and be the one that you paid. So it's not so much that we we're not paying that's bothering them, it's that we're not paying them.

I notice that you mention the incident with Joel Furr* in your book, where you apparently objected to his T-shirts on the grounds of trademark infringement. Why did you back off on that?

▶ **MS** We didn't object on trademark. He wrote a letter and normally it's our policy not even to respond but Larry was in a mood and just wrote him back, and pointed out to him the hypocrisy of what he was doing.

The other thing I am interested in is your view on Netiquette. When I first went onto the Net, I thought Netiquette seemed like a fairly reasonable thing but you don't agree. I think you say in your book, "if you had to worry about that much in the real world, you'd never say anything at all".

Joel is famous in the States for a run-in he had with Canter and Siegel regarding 'Green Card T-shirts' he made and sold over the Net – see issue three for his side of the story. We contacted Joel Furr for his response to Canter & Siegel's remarks, which he fully denies. We are unable to print all of Canter and Siegel's remarks about Joel or Joel's replies to Canter and Siegel for legal reasons.

▶ **MS** I am a great believer in people being nice to each other. The point that I was making was that I don't need a special code to tell me that. I already know how to be polite. The specific rules of Netiquette, things about grammar and spelling and so forth, well once again I think it's axiomatic. I'm not saying that I disagree with Netiquette, I'm saying it's kind of unnecessary. But when an element of Netiquette says advertising is rude, then that's not Netiquette anymore, that's commerce. But let's not try to use subterfuge and put something that is a commercial consideration under the banner of etiquette.

So on the whole, you like the Internet? You don't seem to just regard it as a commercial opportunity.

▶ **LC** It's a tremendous communications tool. I usually go on the Internet for research purposes. As a lawyer, I want to access various government databases that are sometimes hard to get hold of. That's actually how all of us got started.

▶ **MS** What's become cynical [about the Internet] is that almost everyone makes a perjorative remark: "You're doing this for money." Well, what's wrong with doing something for money. Are you not writing this article for money? You're being paid for it aren't you?

I hope so.

▶ **LC** It's inevitable for the Internet to turn commercial because the government simply doesn't want to and probably can't pay for it.

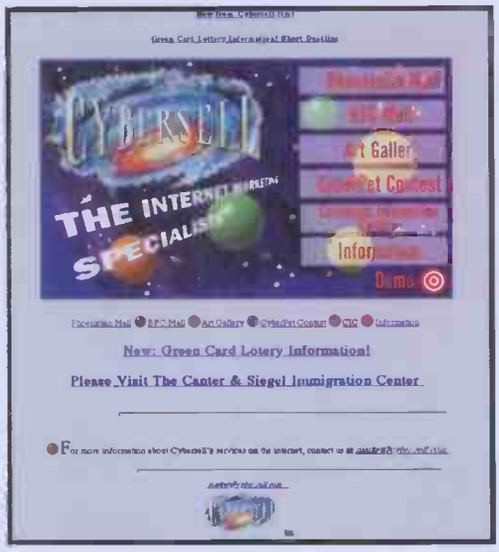
What then are your views on the Net becoming a commercial system as opposed to a public access system?

▶ ***LC*** We're very much in favour of free market principles in general. But I hope that it doesn't become too expensive for people to do marketing on it. That's a danger – that it'll ultimately get into the hands of the few, just like television and so forth, and we hope that doesn't happen. We feel that the small business needs to take advantage of the opportunity right now because it is available.

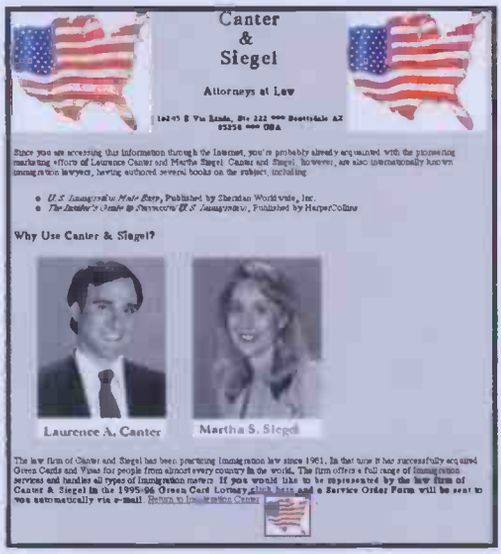
▶ **MS** And it would be too bad if it was really taken over by a few commercial interests. You would lose that free, easy-entry, free-spirited atmosphere, but I have to tell you that if I had to guess what was going to happen, I think that's exactly what will happen. It's not a toy and it requires a lot of money to run it, and there's a lot of money to be made off it.

You've received a lot of flak for your activities. Are there any specific things you can do if you want to set up a commercial operation on the Net to filter out these negatives?

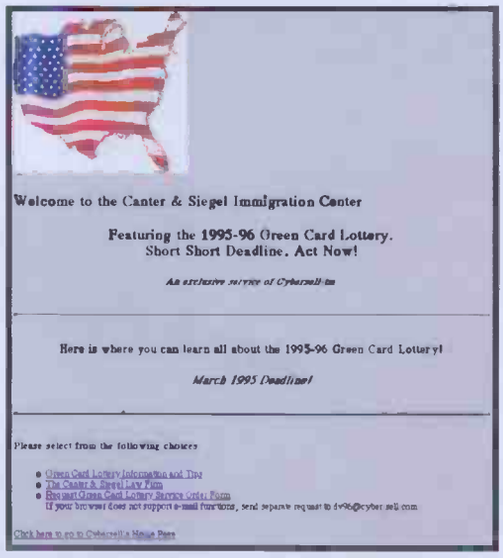
▶ **LC** I don't think there's anything you can do affirmatively. But as more people try to market product through the Internet and through Usenet, the old-timers will become more and more accustomed to it. We are already seeing many people trying to market things more or less the way we did and I hope that our book has something to do with that.



▶ ***Take a look at Cybersell's home page here. You get to take a look at a variety of commercially-based pages.***



▶ ***Find out more about the infamous duo here.***



▶ ***Canter and Siegel are mainly confining their advertising activities to the World Wide Web now. If you fancy taking a look at their pages, point your browser to: http://cyber.sell.com/***

▶ **MS** Also, reports of things that have happened to us have been greatly exaggerated. It just didn't make that much difference. I mean, these people that mail bomb and make obscene phonecalls, sooner or later, as much as they hate it, they are actually forced to go back to their jobs and do something constructive with their lives. It just didn't go on that long.

Do you get much more of that at the moment?

▶ **MS** No, we get none of it anymore. Every time something happens, a couple of people – the same people – write nasty letters. Every time an article comes out, it stirs them up. When our Web site first went on, the minute it went online before we did anything at all, we started to get mailbombs from MIT.

MIT? The Massachusetts Institute of Technology?

▶ **MS** They are the worst of the lot – they are horrible. Just terrible people there. I called them up and I said make it stop or I'm calling the Police and magically it stopped.**

Do they tend to be people from the computer department?

▶ **LC** Yes. Well, they're of course one of the innovators in a lot of the high technology areas so you have a lot of the very hard-core Internetters that are a part of there and train there.

So do you think that all the trouble, on balance, has been worth it?

▶ **LC** Absolutely.

▶ **MS** There's no question that it's been worth it and I think the thing that's important for the writers to understand – I think most of the writers tend to see it from the perspective of the people on the Internet, not the majority of people on the Internet, but the people that they interview on the Internet, which are mainly the people from alt.current-events.net-abuse, who are a very small group with a very rabid viewpoint. You talk to the millions of people who are just 'out there' – the general Internet users or members of the public, and they don't see it from that standpoint. They don't see anything wrong with it. Many more people are on our side than against us. We have a new company which is doing just fine, we have written one book and our publisher is getting ready to take another book from us. None of this would be possible if everyone was as against us as this very small, vocal handful would have you believe.

Thank you for your time.

***Martha Siegel is referring to elements at MIT and not of course, to the establishment as a whole.**

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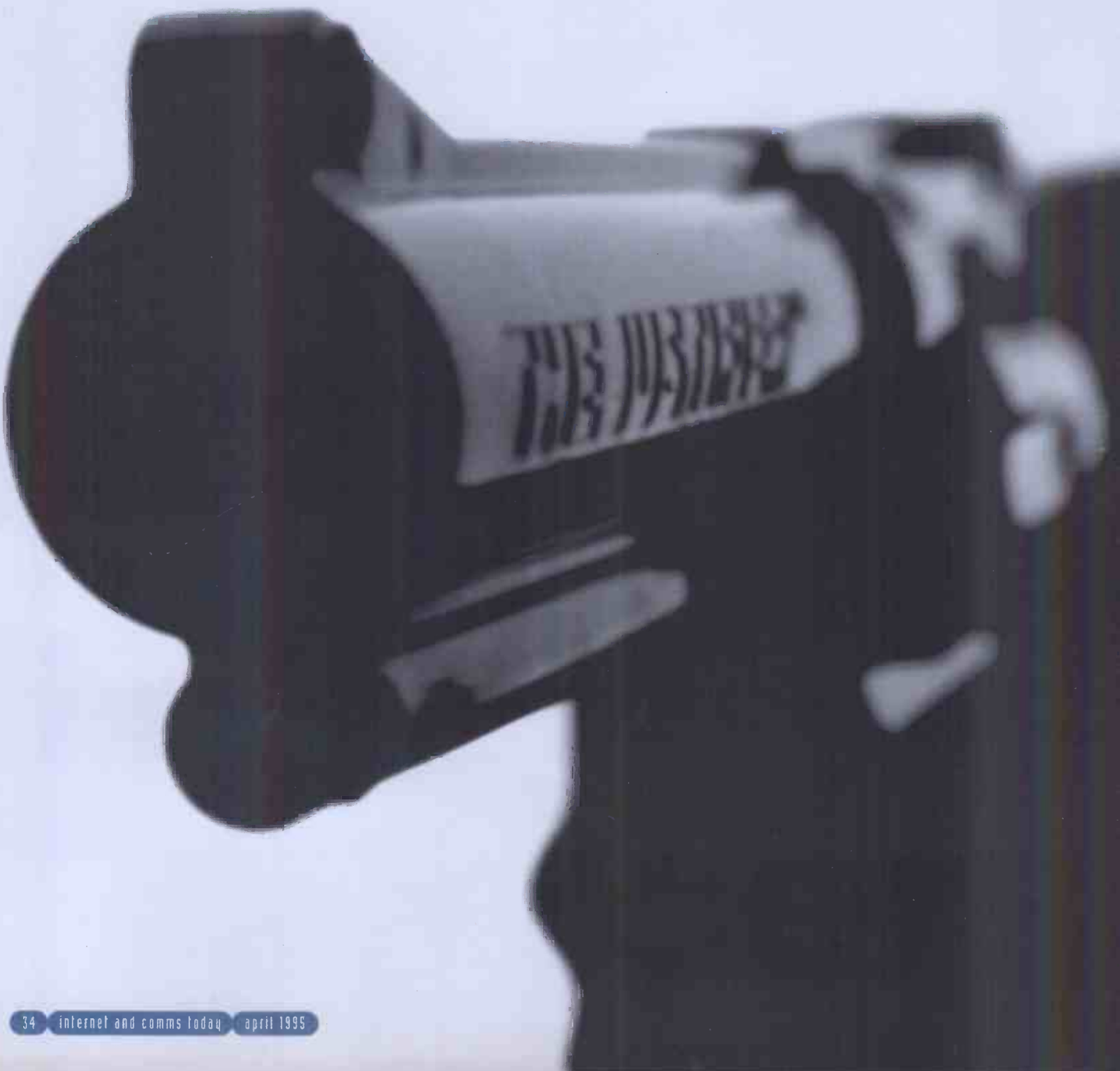
feature

The Enforcers

Net Vigilantes?



When breaches of the Net's code of conduct occur, The Enforcers swing into action. But are these guys really doing us a favour? Simon Cooke finds out...

There are two ways that people can look at the Internet. One way is as the frontier of the computer and communications revolution, a great challenge to be met in the fashion of the Wild West of old. The other image is that of a police state; Big Brother constantly watching with all-seeing eyes, leaving no email unturned, no talk-request unscanned in the search for anti-government plots and views. Fortunately, the former is now the accepted view, but during the late seventies and throughout the eighties it was common practice to provide food for Big Brother by putting 'sensitive' words at the end of an email, so as to overload these snooper systems with a deluge of otherwise innocuous text. The hackers at MIT and those spanning the globe were a paranoid breed, ever fearful of the government invading the privacy of their almost-revolutionary, definitely anti-establishment, new form of communication.

This fear still persists, in one form or another. Phil Zimmerman invented the US Munitions' List-rated Pretty Good Privacy, which is now regarded by many as the de facto standard for email and data file encryption. Unlike the Clipper Chip, proposed by the US Government (the first level of encryption of which was cracked by hackers within two weeks of getting hold of the chip), with which the NSA purportedly has a back-

"The hackers at MIT and spanning the globe were a paranoid breed, ever fearful of the government invading the privacy of their almost-revolutionary, definitely anti-establishment, new form of communication."

door into the encoded data, PGP provides a near crack-proof public key encryption system. Sporting three levels of encryption (User, Commercial and Military), it aims to resolve, once and for all, the problem of Government snooping. In the course of doing so, Zimmerman has served a jail term, and is still in trouble with the US authorities. The fact that PGP is still freely available from hundreds of FTP sites world-wide is testament to the dream of hackers the world over – not only does information want to be free, but now a perfect mechanism exists through which its liberation is possible.

In amongst the PGP public keys, although less common now, you can still find the Big Brother food. It seems that the Usenet reflector sites themselves seem to be doing what the Big Brother machines were expected to. I've seen posts which have ended with fodder such as "We obtained the plastique from the Iranians at 6 am, and have set the bomb for midnight tonight," to the end of which has been tagged a disclaimer from the site itself which explains that this message probably contains Spook Fodder, and that the views of this user are not those necessarily held by the sysadmins themselves.

But the practice is dying out. Today most people recognise that due to the sheer volume of information which passes through the collection of machines that we describe as the Net, there is no way that a policy of examining all data traffic could work. However, consultants at a conference in Washington on "National Security" in October 1993 claimed that the US Department of Defence intercepts and stores all material passing over the Internet. They also point out that the same Department of Defence appears not to understand exactly what it is that it has been looking at.

Big Brother is dead

The Internet is a big place, a seething mass in which sites are born and die, constantly shifting and rearranging itself. It is no wonder that the Big Brother system was doomed to failure, even if it ever existed. This leads to a problem, of course. With an entity as large as the Internet, how is it possible to police the system?

To a greater or lesser extent, the Internet is self-policing. Netiquette is the guiding force in this, as the Green Card Lawyers learned to their cost. Decisions are quick and punishments severe in much the same way as the Drumhead battlefield court-martials of old. Yet there are situations where the protocol of Netiquette is inadequate. In these situations a vigilante system of justice has arisen where hackers mete out the punishment to those who transgress the accepted bounds of netiquette and morality. These 'Net Equalisers' appear to be normal users on the surface. Some run their own Talker systems, some are Sysops, others are merely hackers who use the Internet in their spare time, one is a network manager in Seattle, another is a lecturer in Sydney. It is not their occupations that allow them to keep the bad guys in check, but their extensive knowledge of how the Net operates at a technical level.

Terminating the Paedophiles

One good example of the Net Equalisers' actions can be seen in the case of a janitor at an American university. The university leased him a SLIP line to which he connected a NeXT machine. Then, using code based on Neil Robertson's NUTS talker system, he set up his own string of Talker sites. Three of these were 'normal' sites, however there were a further twelve talkers which were invitation-only. These were specialist boards devoted to subjects such as bondage and domination. Normally this would have been ignored – the Equalisers are not concerned with enforcing their views on what are essentially the private pursuits of consenting adults – and the Sysop would have been left to his own devices. But this Sysop didn't stop there.

He began to annoy, and in some cases harass, other members of the Internet community. At first there were just isolated incidents; the Sysop would become friendly with women he met on the normal talkers, and would get close to them. When things turned sour, he would start to hound them across the network, spreading vicious rumours about them. He began to distribute digitally edited pictures of the women, with their heads pasted onto other bodies. When they tried to fight back he would ban them and their entire Internet sites from his Talkers so that they could not defend themselves on his system.

This was what first aroused the interest of the Net Equalisers, who waited and watched to see how the situation would evolve. The Sysop then began to claim that people were hacking into his talkers and were deliberately crashing his system, to which he would retaliate by attempting to crash their systems. Rumours were spreading fast that on his system Wizards (Sysops and semi-Sysops) could record text and listen in to conversations in private rooms, which is a very serious invasion of privacy. More ominously, it appeared that he was using his site as a child pornography repository. It was at this point that the Net Equalisers moved in.

By working with the Equalisers, I was able to uncover many of the different tactics they use. For example, this particular Sysop claimed that there were also two other Sysops on his system, who could be found on his talkers from time to time. By interrogating his system, the Equalisers found that the other Sysop accounts on his machine did not exist. Later, as the Equalisers' target began to grow suspicious over the increased attention that these 'Sysops' were attracting, he did set up accounts for them, but they were never logged in.

Using multiple aliases is not uncommon on the Talker scene. I once sat in on a conversation where there were sixteen users logged in, all of which were generated by myself and a friend at Loughborough University on an otherwise totally empty talker system. With practice it is easy to hold a conversation with yourself and at the same time convince others that you are two or more separate people, and the results are often incredibly amusing. The janitor in question would use the other aliases to find out what people thought of him and to discover more details about his female victims, but the Equalisers had been able to find out that his aliases, as many people had suspected, were really just that – aliases.

Once they were certain that he was the only user of the machine and that there were no superiors to which he could be directly reported without revealing their own existence, the Equalisers switched to the offensive. A catalogue of his talker sites was made using a utility called 'ISUP' which invisibly interrogated his machine to produce a list of open connections – the talkers. These addresses were then hacked and attacked, the aim being to crash them and to cause him inconvenience. To slow down his machine, the PING command was used as a background process, large data packets which demand a reply being repeatedly sent to his machine, in an attempt to increase the load on his system to unmanageable levels. A lot of these tools are freely available from FTP sites and, if necessary, existing versions of them can be rewritten by anyone with a healthy knowledge of C and of the nature of the Internet.

At this point the janitor hit out again, harassing people and trying to crash even more systems. Ideas were thrown around as to how to stop him, and this is where the Net Equalisers' technical skill came to the fore. They quite happily threw around ideas ranging from removing his site from existence to finding the guy and pouring brake fluid over his car... In the end, it was only necessary to crash his site repeatedly for the janitor to get the message.

I don't know all the details of what happened to this guy, but I do know some of the things that were planned for him...

You're a fake, baby

"It is ridiculously easy to remove a site from the Internet. All you have to do is fake a message to the name server and routers claiming that the site is down. It will be wiped from existence."

The technical validity of such a claim is dubious, but the mechanism is there. Router systems hold information regarding how to make a data connection between your machine and someone else's. A testament to the flexibility of the way the Internet actually works, if you were logged into a machine in the UK, your entry point into the US network would be most likely via the Fat Pipe (a large volume data connection from the UK at Imperial College, which most of the Euro-American data traffic passes through).

When your data reaches the US, its actual path can vary from moment to moment – it's the Internet's way of trying to spread the load and to make sure that even if a section of the network goes down there is some way of getting the data through. At times it fails. For some reason, central routers in the US seem to go down quite often. One Christmas, thieves hacked their way through the cables of the Fat Pipe while they were in the process of stealing the contents of the computer room at Imperial College. When that happened, connections to the US were down for three days. But the system does its best.

Each router has a table of alternative pathways to the different sites on the net. When one pathway becomes unavailable, it tries another, and then another. If there is no way through to a site at all, a 'site unreachable' message is sent. Sometimes, for diagnostic purposes, sites mark themselves as shut-down or unreachable. This is where the Equalisers came in. They planned to fake a message from the janitor's site, which would inform the routers that his site was not available. Ergo, it would cease to exist and all traffic to his machine would stop.

They didn't actually do this, but it was one of a number of plans at the front of their minds. Another plan was based on the fact that our

janitor friend was incredibly homophobic and that the Equalisers had his home telephone number. It is an old prank, used by phreakers the world over, which allows you to get back on people who have annoyed you by publishing their home phone number as a BBS that has all the latest Kool Warez. Knowing how people react when they find a site offering all the latest pirated and cracked software, the recipient of the prank will find themselves receiving a deluge of phone calls at all hours of the day and night. There are other variations to this. The traditional pizza deliveries, refuse skips and mounds of slowly setting, ready-mixed concrete smeared all over the drive way are just a few of the more innocuous ones.

Harassing the harasser

The way to deal with the janitor was to fake a posting on alt.sex.wanted and alt.motss (members of the same sex) from him, leaving his home phone number and claiming that he had qualities akin to a Martini – any time, any place, any where... It was also planned to claim that his boards were all totally gay friendly and that he would welcome the attention – it would be a place where people could act as they pleased. While there are a few talker sites like this, the janitor's was not one of them. To someone as homophobic as him, it would verge on the terrifying to be confronted in such a way.

While it may not seem nice or fair, it was something that they could very easily do. Learning how to send fake mail and how to make fake postings to Usenet is one of the first things that a hacker learns to do when confronted with the Internet, and it is stupendously easy. In my time I have sent many a message from God, signed Yours Faithfully. The difficulty is in making it look, to even the most well-trained eye, that the message has come from where it claims.

Something that most people never look at is the message headers, which gives a detailed breakdown of the machines that the email or Usenet posting has passed through on its way to your machine. This is the way that most people are caught out. A while ago, in the autumn of 1993, someone posted to alt.fan.douglas-adams claiming to be Douglas himself and generally being rude and abusive, claiming to have entered a whole lot of people into his killfile. Right at the top of the header chain was where the message had actually originated from. Rather than Adams' home site, it was the address of an American university.

The janitor eventually got the message after a month of persistent prodding, and nothing more has been heard from him since – his presence is suspiciously absent from his Talkers, even though they are still up and running from his machine. He has been under investigation by the FBI because of the paedophile FTP site he was running since early 1994, and for a while his connection to the university systems was shut down.

One thing that comes to mind about this whole business is that it's a good thing that these vigilantes are on the side of good and morality. One can't help but feel, though, that they are just wannabes, wanting to act like God over the Net, keeping the talkers safe from the scourge of immoral (evil?) Sysops everywhere. Their heyday may be over now – when they started out, there were only a few talkers systems around, the most notable of which were Hectic House run by Neil Robertson (Boltar) and the Virtual Campus run by Charlie Vald. Now there are more and more starting every day as system administrators and network managers become more lenient to what many consider a waste of system resources.

As time goes on and the volume of talker traffic increases, it may be impossible to police the systems any more. In much the same way that the Big Brother systems of the Department of Defence and the NSA cannot check your emails, the Net Equalisers may be in the process of becoming obsolete. But one thing is sure, if you are on a talker and you need help, never fear. Big Brother may be dead, but somewhere, somehow, the Net Equalisers are watching over you.

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feature

Pressure groups claiming to be 'the Voices of the Net' have sprung up recently. But who asked them to? Sara Edlington finds out who the hell they think they are...

Self-imposed or Self-important?

– Who do the E.F.F. and CommUnity think they are?

As the Net has grown, so have groups dedicated to conserving the Net as it is, grown with it. These organisations and pressure groups are speaking for all of us. They are, in effect, the self-appointed 'voices' of the Internet.

The American, Electronic Frontier Foundation (E.F.F.), and the British CommUnity are two of the most important. Both were set up in response to threats to the Net.

The E.F.F. was started in June 1990 by Mitch Kapor of Lotus 1-2-3 fame, and John Perry Barlow, a lyricist. Both men were visited by the FBI who were investigating the unauthorised copying and distribution of disks containing source code for the Apple Mac's Rom. The full story appears in Bruce Sterling's book 'Hacker Crackdown'.

CommUnity, or the Computer Communicators' Association, was set up in response to threats to the BBS scene. This threat came from E.L.S.P.A. the European Leisure Software Publishers Association. In their journal, the E.L.S.P.A Express, they said that some BBSs were actively involved in software piracy and that all BBSs should therefore be licensed. E.L.S.P.A. wanted both FAST (the Federation Against Software Theft) and MPs to back them in their calls for regulation.

Apparently, Roger Bennett, who made the allegations, later withdrew them, but by then CommUnity was well on its way to becoming the UK's voice of the Internet. With names such as Davey Winder associated with it, CommUnity was open for business.

The way in which both groups were set up, shows how powerful the cyberspace community can be when it so desires. The E.F.F. would never have been set up if it hadn't been for talks between Kapor and Barlow on the American WELL (Whole Earth 'Lectronic Link). And CommUnity would not have appeared if it hadn't been for the thriving Fido community.

Not everyone has been that impressed with these groups, though. Both have had a number of accusations thrown at them. The E.F.F. and CommUnity have been accused of trying to police the Net through the back door, as well as being nothing more than 'elitist clubs' set up to force their views on the majority.

"Not so!" says Peter Ceresole, an active Internet member of CommUnity. "As for the idea that it (CommUnity) wants to impose on the majority, its views about the development of the Internet, that's fantasy. For a start, how could it?"

CommUnity states in its FAQ (frequently asked questions), that its main interest is "promoting greater access to cyberspace, protecting the rights of people using computer-based communications and preventing misrepresentation of the online community."

Not much evidence of taking over the Internet there. The above sums up CommUnity's attitude towards the Net. It sees itself simply as being the public face of the online community.

CommUnity may not have had the high profile publicity that the E.F.F. has had, but this doesn't mean its members have been sitting around idly. They keep a close eye on the media at large and don't waste any time when it comes to correcting any glaring media mistakes. But they also help prevent further ones, by offering their expertise to the largely ignorant mass media. CommUnity members have been firing off letters to programmes such as ITV's Cook Report and Channel 4, after their programme Hackers and Phreakers was shown. They also sent a lengthy and well-written report to the Home Affairs Select Committee enquiry into Computer Pornography.

> **I can see a time when the Net descends into anarchy. As the two sides, the academics and the non-academics, slug it out to decide who is the dominant force on the Net.**

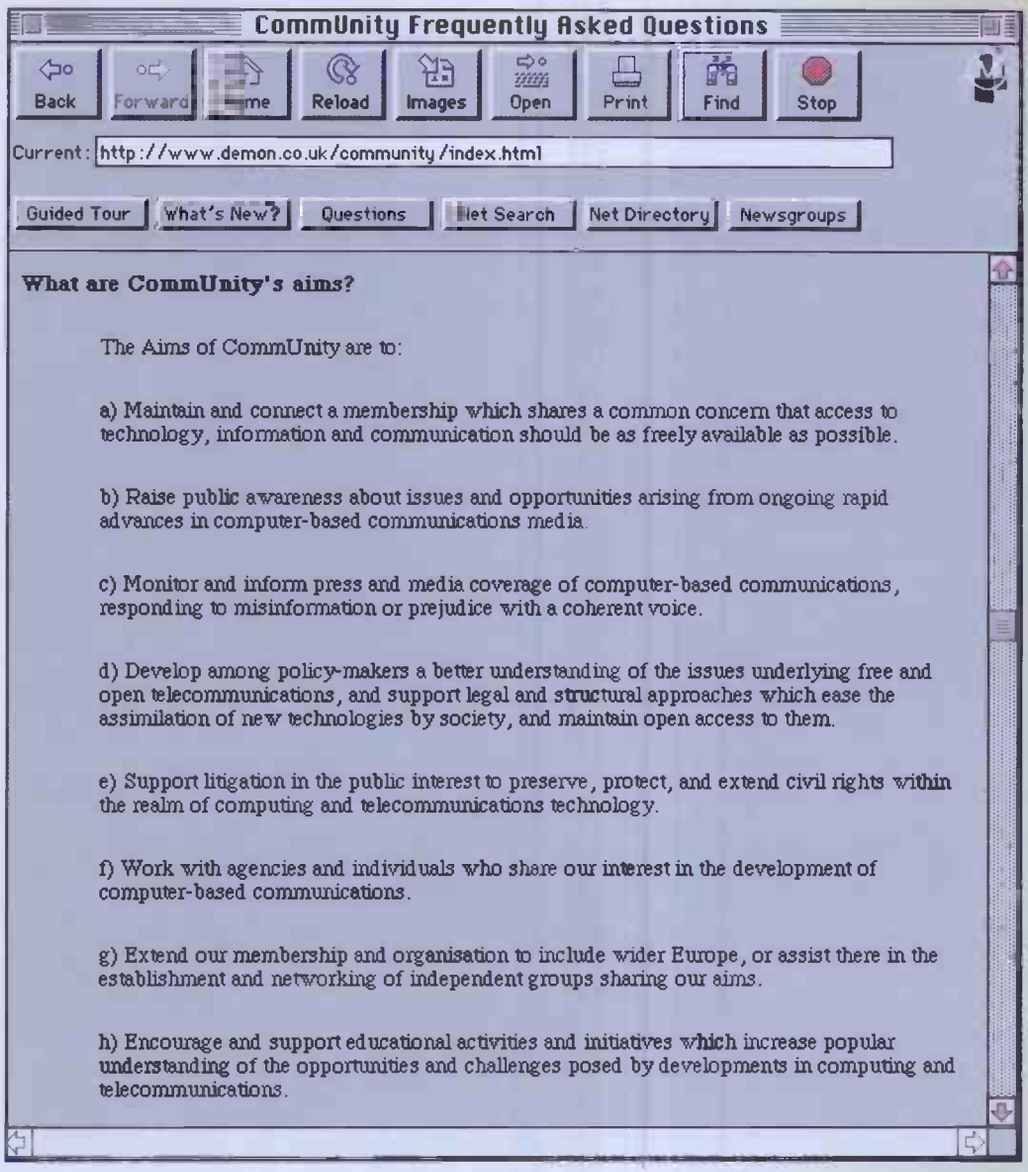
CommUnity does have a few glitches in its shiny armour, though. There are no women on its committee, for one thing. Some of its members feel "it isn't doing enough," and have said so publicly. There was also a low turn-out at their recent A.G.M., and arguments within CommUnity itself haven't helped its image.

That said, CommUnity is growing and is in the best position possible for the next threat from 'outside'. When the time comes, be glad these guys are on your side.

CommUnity have their own Usenet group uk.org.community and a Fido echo 'CommUnity'. Both are full of debate and discussions of the latest Net issues and discussions on what CommUnity should be doing in the future. They also have their own electronic magazine, The CommUnicator, as well as Web pages and an archive at Demon. This diversity is what makes CommUnity unique, as it represents both Fido and the Internet.

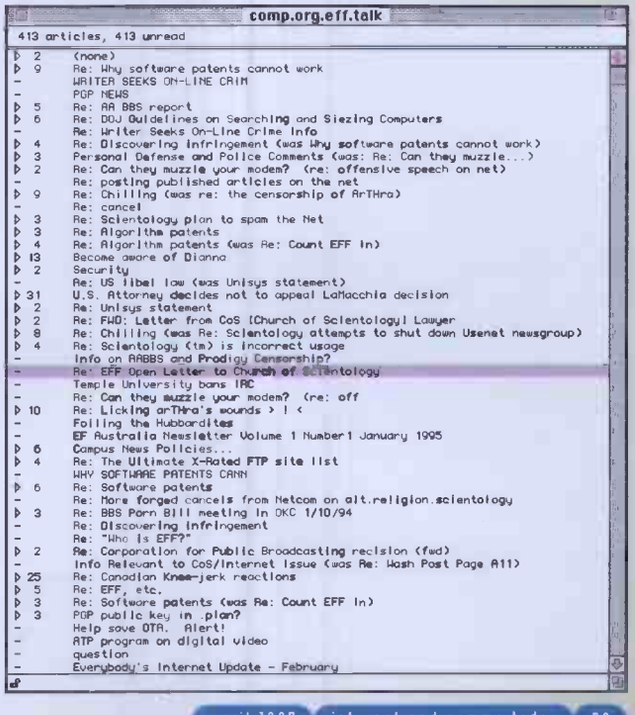
Electronic Freedom Fighters?

The E.F.F., on the other hand, generally focuses more on the Internet. Its aims are very similar to CommUnity's. It



→ Above: CommUnity's aims are displayed for all Net users to read. The ideas are all very honourable, but are they followed up?

→ Right: Net users discuss the aims and activities of E.F.F. Are they the Net's White Knights or self-imposed vigilantes. Are they cleaning up the Net's media image or soiling it?



> **It would be a ludicrous and counter-productive for CommUnity to make a public stand on students being denied tax payer-supported access to pornography, because that is the way it would be reported, and there'd be an uncomfortable amount of truth in it.**

wants to encourage understanding of computing and telecommunications outside of the computing community. It also wants to develop what it calls a "better understanding of the issues underlying free and open telecommunications," and support legal and "structural approaches which will ease the assimilation of these new technologies by society." No Borg jokes please.

By far the biggest area the E.F.F. is involved in, is what it calls the "civil liberties issues". These include "support litigation in the public interest to preserve, protect, and extend the First Amendment rights within the realms of these new technologies by society."

They would also like to see non computer users get easier access to the Internet by supporting developments in these areas.

They have huge files on every subject from 'how to lobby politicians' through to information on 'being an on-line activist' and even a 'Freedom of Information kit'!

If you want the latest information on comms-related stories, the E.F.F. is the place to visit. They have FAQs on items like Clipper (complex issue, read the FAQ) and keep regular updates on what the American Government is up to in relation to comms.

Their files are well worth a visit, here you'll find 'underground' magazines like Phrack and the Computer Underground Digest., as well as their own EFFector newsletter. Their successes frequently make the headlines, usually involving the E.F.F.'s old friend, the FBI. The cynical, would add that "without the activities of the FBI and the U.S. Goverment, the E.F.F. wouldn't be so well known!"

All this is fine, I hear you say, but what are these groups doing for us, the normal everyday users?

The recent story about JANET is a good place to start looking at this. For those of you who have just returned from a year-long trip to Jupiter, I'll summarise it for you. JANET has barred students from getting hold of the alt-sex newsgroups. This has stirred up a debate about censorship on the Net.

Peter Ceresole's personal view is one shared by many. "JANET is an academic network, paid for by the taxpayer. The JANET administrators decided that they didn't want to carry these groups because (one of the reasons I've been given) they didn't want to increase the size of their operation to bring down what they regard as material which isn't of primary academic interest."

Students disagree. John R. complains "We're having an important part of student life taken away. Loads of people read those groups, it IS censorship."

Peter Ceresole again, "It would be a ludicrous and counter-productive for CommUnity to make a public stand on students being denied tax payer-supported access to pornography, because that's the way it would be reported, and there'd be an uncomfortable amount of truth in it."

A fair point. So how are CommUnity dealing with the way the Internet is portrayed in the mainstream media? Are they trying to give it a more realistic, positive image?

Jim Mowatt is an active Fido member of CommUnity, "We certainly are and this is the primary reason for the existence of CommUnity. We are engaged in a letter writing campaign to combat every item of comms mis-representation that we encounter."

He adds that "There has been a considerable improvement in the way comms have been represented in the press in recent months. We believe this has been brought about by many factors. CommUnity is one factor, others are comms magazines, comms ambassadors such as Dave Winder and most important of all, the increase in the use of the comms technology."

All this bodes well for the future of the cyberspace community.

Make friends and influence people

Not to be left out is Fido. CommUnity has its presence there as well. The CommUnity echo has many postings sent across from the Internet, which gives those without Internet access the chance to take part in debates.

But it's not all happening on the Internet. Local areas on BBSs are busy, with users arguing, falling in love, and breaking up, all at once. Here you'll find the passion for the Net at its height. Mention any sort of threat to the BBS scene and the strong words come out faster than a 28,800 connection.

James R. "I'm fed up with hearing, about the JANET censorship thing, it's been blown up out of all proportion. But if they were to say, for example, that the sex echoes on here should be barred, then that's another thing."

The Net needs an outside voice and these groups provide it. I mean, without them you wouldn't know how issues dealing with the Net affect you. It would be all rumour and no facts.

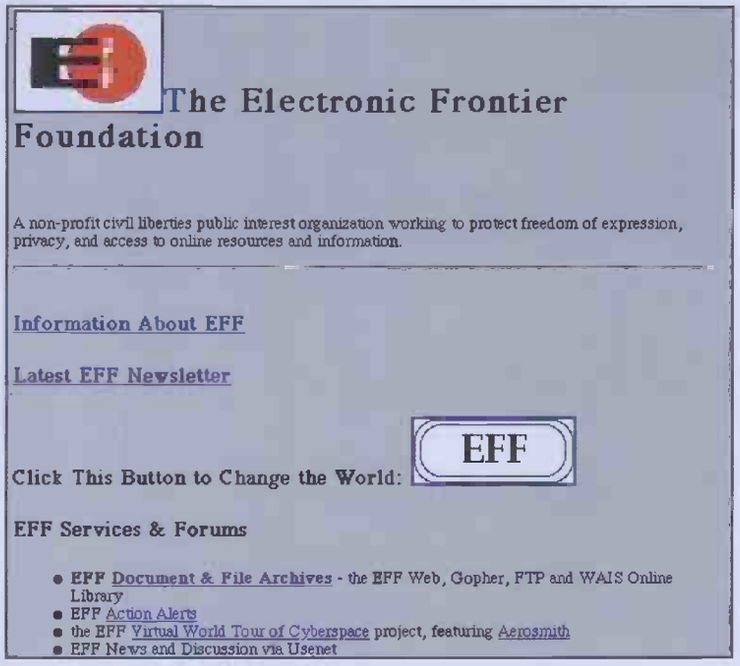
Julie W. has her own views on the way the media treats Fido. "After the fuss about licensing boards, which I doubt will ever really go away, I think the media has got its ideas about Fido and BBSs stuck. We're always portrayed as a poor man's Internet. Personally, I prefer here to the Internet, it's more friendly."

But BBS users don't just debate the big issues online or in the echoes, they take them outside. Comms Meets, as any regular Fido user will tell you, are one of the best parts of being on a BBS. Usually organised by Sysops, they often attract users from all over the country.

Here, people meet face to face, sometimes for the first time, and then talk and talk. And don't run up their phone bills. BBS numbers are swapped, horror stories of 300 baud connections are told and everyone generally has a good time.

Some meets are held in pubs, others at the Sysops' house, for a behind the scenes look at how a BBS works. Some Sysops take it further than that, arranging relevant days out.

As Darren L. says "This is the virtual community at its best. You can sit and swap BBS numbers, file names, and talk nothing but comms for a few hours. Some talks at the



→CommUnity members organise against the threat from Government-imposed censorship and control.

→The E.F.F. publishes its newsletter on the World Wide Web, to rally Net activists to the cause of civil liberties on the Net.

comms meet I go to, get heated, but it's great fun."

Sysops like the meets because as one said, "you get to find out what's right and wrong about your board." Most Comms Meets are held once a month and are usually advertised on the board concerned. It's a case of anyone being able to just drop in and chat.

But what does the everyday user of the Net make of all this?

Greg J. describes himself as one of the Net's old guard. He's been around in comms for at least ten years.

"As far as I'm concerned, groups like CommUnity are a good thing. If they keep the outside image of the Net clean then that's great. I wouldn't join one though, too many meetings for my liking."

Pete B., another long time user, is not so impressed. "They're just groups of people trying to make themselves some sort of 'voice of the Net.' The Net has been getting along nicely without them and it would keep doing so, whether they are here or not."

Alec J. describes himself as a seasoned Net surfer. He's been on the Net for about 5 years. "The whole Net community thing seems to be getting a bit 'luvvie' to me. I might join something like the E.F.F., but I'm not sure they're doing that much good. How can you say the Net is unregulated when these people are around? They are, in effect, speaking for people like me, but are they really asking people like me what I think or want?"

Jez W. is a newbie and, as far as he's concerned, the likes of CommUnity are a great idea. "From what I've seen, the Net needs an outside voice and these groups provide it. I mean, without them, you wouldn't know how issues dealing with the Net affect you. It would be all rumour and no facts."

The Net community is growing day by day. As more users join, it will need the likes of CommUnity and the E.F.F. But what could happen to the virtual community in the next few years? Will it descend into anarchy? Or will it grow too large for itself? And how will the commercial aspect of the Net change things.

Many believe that the Net has started on the long road to becoming more commercialised. Pete B. sees it as "becoming a huge shopping centre, with chat areas like Usenet, dotted around. It'll be hard to tell what is commercial and what isn't. But I reckon it's going to be fun. There'll be lots of new users, hopefully more women and a lot more controversy."

Peter Ceresole believes that the Internet is moving in a more commercial direction with the likes of AT&T encouraging more new users.

"I think that's good, as it will get millions more people on-line."

His view on what will happen to the people on the Net is interesting: "I believe that the result will be that users will become polarised, between the academics and the 'electronic crusties,' who are already here, and a marshmallow world in which suburban lawnmower people, urban lager people and fast-track yuppies will find the kind of Innovations world they already inhabit in the Sundays. I think the Net will gain from all this, as the two worlds will cross fertilise; the techies providing new goodies and the lawnmowers the money to get them implemented."

Robert H. worries that it will all go wrong. "I can see a time when the Net descends into anarchy, as the two sides, the academics and the non-academics, slug it out to decide who is the dominant force on the Net."

Jim Mowatt sees it a bit differently. "I would hope that it continues in the same vein with its blossoming creativity and the wonderful balance of individuality and community amongst the inhabitants of the Net. In cyberspace there is room for everyone."

How the virtual community develops is up to all of us, newbie or not. You may not like it, but it's a fact that we are stood at the threshold of a new type of community. It's the people on the Net today who will shape it for those tomorrow. That's a big responsibility, the question is, are we up to the challenge?

For Your Information

The Electronic Frontier Foundation can be contacted at:

Newsgroups: comp.org.eff.talk
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Web Pages: http://www.eff.org/
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Issue 2

More on video-on-demand, as we look at British Telecom's plans in the UK and Time-Warner in the USA. Also, we take a squint at the phone phreaking scene in the UK and unveil Super JANET!

Issue 3

The Internet and Commerce – what does it all mean for us? We show you the sites currently operating. Netscape is unveiled and we look at the history of the hacker in the UK.

Issue 4

Electronic Publishing – it's what the future of the Net is all about. We look at the Electronic Telegraph and look at the Zine scene, and what the future holds. Also: Sexual harassment on the Net – the story that caused a storm.

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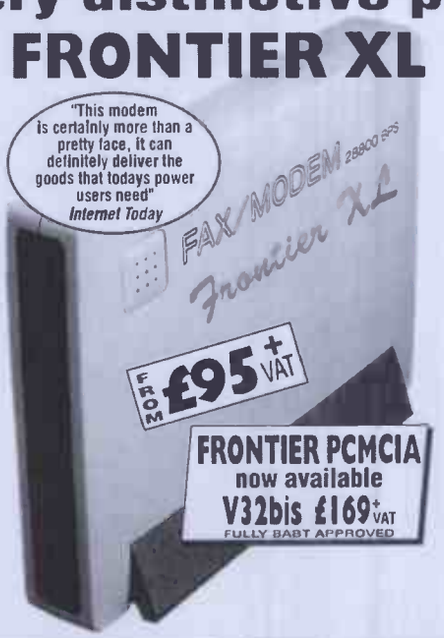

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feature

Belfast Child

If you thought that London's 'Cyberia' was the first Internet Cafe, take a trip to John Kennedy's home city, and you might be surprised.

→ ***It may not be on the TV, it may not have a flash image, it may not have international cyber-stars as its patrons, but Belfast's Bytes is a real, live and very lively working cybercafe.***

You have probably heard of the Belfast Falls district, most likely from some old Nine O'Clock News footage. It's easy to get to: follow the new M3 across the Lagan, drive along the Westlink and turn right up the Donegal Road and you're there. If you need to know which side's 'territory' you have entered, the political murals painted on the gable ends will inform you.

Here you will find a shopfront with a large logo and a sign which says 'Bytes'. If the desks with Apple Macs look slightly incongruous in this setting, well, at least they aren't sitting unused on a display counter in the local Dixons.

I first heard of Bytes when I tried to find out why my local dial-up Internet PoP (Point of Presence) was always engaged every Monday to Friday from 9am to 5pm. "Sorry," Genesis would tell me, "it's that Bytes crowd again. They'll probably be off soon:" They never were.

Finding someone who uses the local Internet gateway more than I do is always interesting, but when I found out what was going on there, it was time for an official visit. The Falls Road centre is one of four Bytes centres in Belfast, each sponsored by the Department of Education through the 'Making Belfast Work' initiative. It's aimed at 16-25 year olds who would otherwise probably never use any technology more advanced than arcade games machines. The goal is simple: to use modern technology to help young people achieve their true potential.

The Bytes centre is a long, thin building which looks as though it might have been a hairdressers in a past life. Desks along the sides are taken up with Apple Mac LCIII computers and printers, and the rear of the shop has a counter supplying teas and coffees.

As I entered, someone was sitting on the floor rummaging though a huge pile of Technical Lego for the finishing piece to add to the robot arm they were constructing, and several, extremely smart young women were holding an impromptu fashion show, filming the proceedings with a professional quality video camera. If they had wanted to they could have edited their footage on the non-linear digital editing suite running on a

Sponsors

The Bytes centre is sponsored by Apple and Lego, and funded by the Department of Education of Northern Ireland. More corporate sponsorship is welcome.

→ ***Bytes users write poetry, copy notes for work or training, or just chat on IRC.***

Mac Quadra hidden behind the heaps of Lego.

If the other folks working on the Macs thought this was out of the ordinary, they didn't show it. One was typing up her poetry and getting it onto floppy disk so it could be published, and another was preparing the notes she needed to help her start her own business. Both explained how Bytes was the ideal place to come for free access to computers.

The centre is run by Daithí and Michael, both of whom admirably combine their technical knowledge with the social skills necessary to keep a large number of extremely boisterous young people in check.

→ ***Michael and Daithí, Bytes organisers who run the centre in the Falls Road.***

But Bytes is not a training centre. The kids who use it don't want training – the System has already failed them in that respect. They are what Michael and Daithí call "unattached" – no school, no Government schemes, no jobs. If Bytes wasn't open they would have nothing to do but watch daytime TV and hang around on corners, watching the caged traffic lights change colour.

Inside the Bytes centre, the technology is there, and it's certainly used. Teenagers will be teenagers, and Michael took great delight in telling me of their exploits. One of the favourite Internet pastimes at the centre is IRC – Internet Relay Chat, the real-time email system that enables messages to be shared across the Net in seconds. The Falls group were quick to capitalize on the anonymous nature of IRC, and two male users quickly had some equally male (but more gullible) users in the Rathcoole centre excitedly typing back under the impression they had two hot dates waiting for them...

And then there was the day that peace broke out. A group from Bytes grabbed the centre's video camera, went out onto the street and stopped people, posing as an ITN newsgroup. The fact that none of the team were over 20 years old didn't seem to worry members of the public, who were ready as always to unload their opinions.

Of course, besides the fooling around, there is also a lot of positive work being done in the centre. Some participants move on to higher education, vocational training and employment. Some are sent to America on courses, some win EC grants to fund projects such as 'Choices': an interactive multimedia CD-ROM aimed at explaining to school leavers what options wait ahead of them.

All of those who visit Bytes, and that's over 300 in the Falls centre alone (a third of which are female), leave with a renewed sense of optimism, and their horizons are expanded sometimes more than they ever thought possible.

"There was a kid who was taking photographs of the murals around here" Michael told me. "I took him into the Shankill district – the 'other side'. He'd never been there, and it's only a few minutes away. You should have seen his face: he was expecting London after the Blitz or something."

The Internet has opened the world up to these young people. Many may still never leave the district they were brought up in, afraid of what their parents and political leaders have told them about the 'other side'. But now, with the World Wide Web, IRC, and email, they can explore the planet for themselves. They chat with users in other Bytes centres and arrange meetings. They talk to other children in America and swap experiences. Has there ever been a more worthwhile use of the Net?

Daithí came back from helping someone with their Apple. "The secret", he said, "is never to take the mouse off them. It's a natural reaction, to snatch the mouse off them and show them how to do it – but it's wrong. They have to do it themselves."

Michael laughed as the fashion models reviewed their show on the video monitor. "I love sitting in a pub on a Sunday evening. The other blokes there all stare at their pints and complain about Monday morning and having to go back to work. Me, I can't wait!"

WWW Design

Bytes are available to undertake World Wide Web page design, and have a full complement of image scanners and video digitisers at their disposal. If you need any pages designed, please contact them c/o **bytes@worknet.thegap.co** or **info@cinni.org.**

Mission Statement

"Bytes for Belfast will provide opportunities in an informal setting for young people to accelerate their own personal development through the creative and enjoyable use of technology.

Bytes for Belfast will actively seek out those who, because of their social environment or personal experience, face obstacles to personal advancement.

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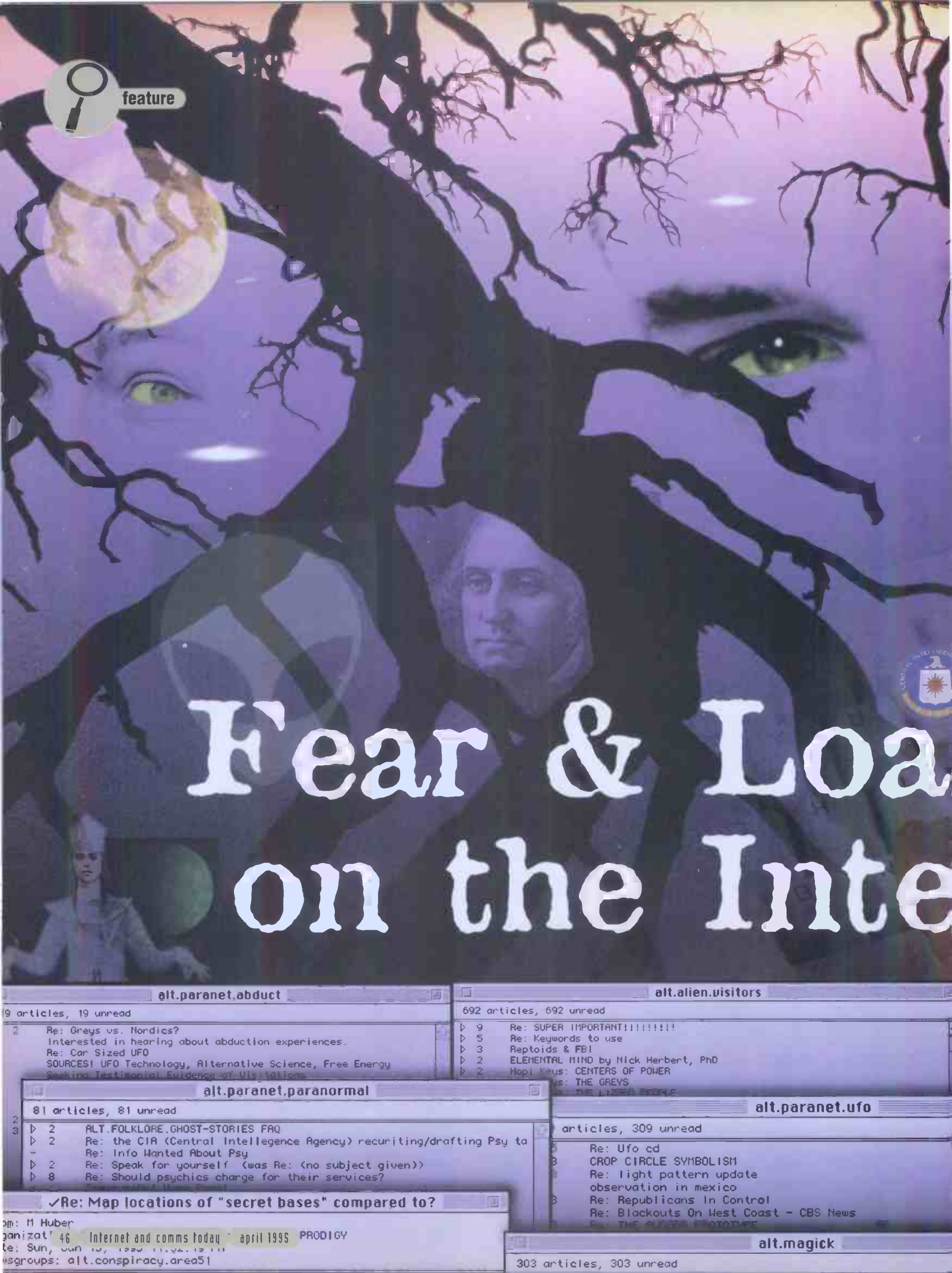
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2 ALT.FOLKLORE.GHOST-STORIES FAQ
2 Re: the CIA (Central Intellegence Agency) recuriting/drafting Psy ta
Re: Info Wanted About Psy
2 Re: Speak for yourself (was Re: (no subject given))
8 Re: Should psychics charge for their services?
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articles, 309 unread
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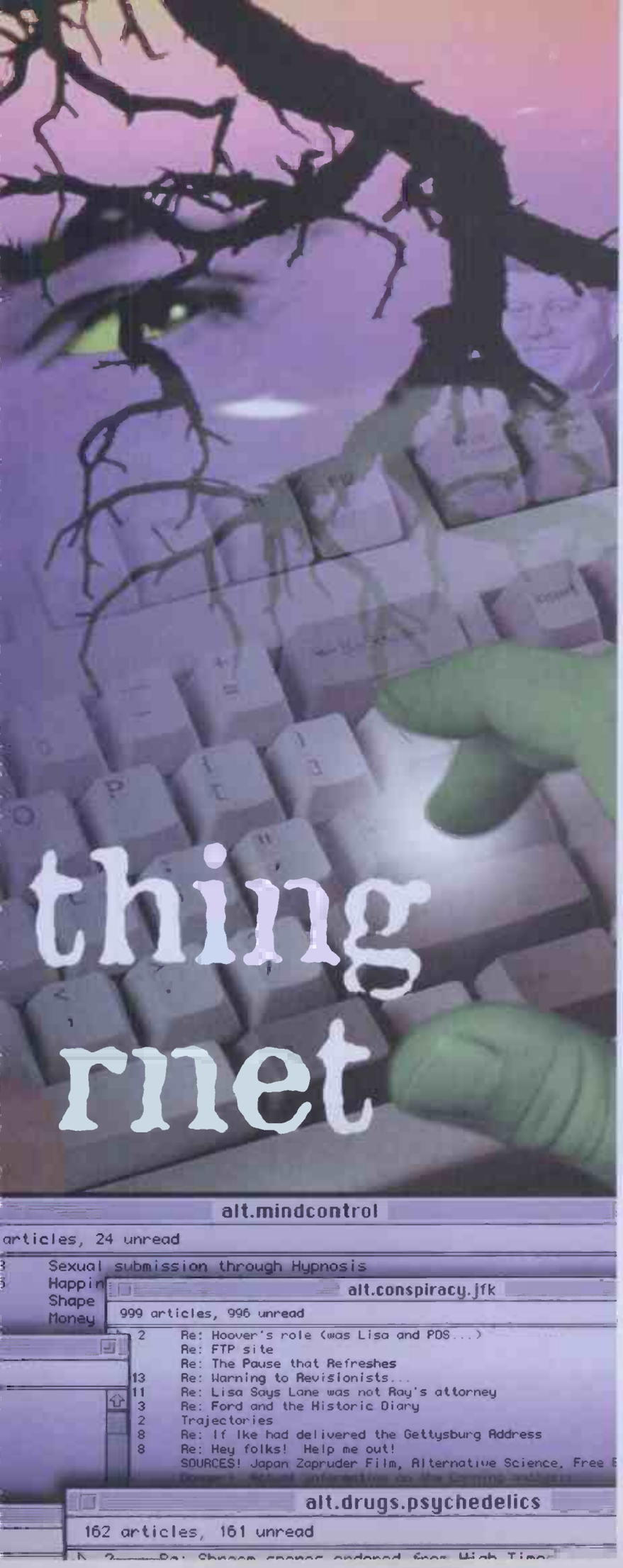


If your guinea pig has been behaving strangely, and you've noticed Russian soldiers creeping about the local high street, Joel Furr has the newsgroups for you.

It's both a blessing and a curse that Usenet newsgroups are open to all – both the reasonable, sane, everyday citizens and the real loonies. There are quite a few genuinely paranoid people on Usenet, and if you get a bunch of them all chattering away at each other in the same newsgroup, it's like being in Bedlam on the day they run out of Prozac.

I tend to define paranoia as 'the belief that people are out to get you'. And you know what they say: "Just because you're paranoid doesn't mean that people aren't out to get you." It seems that at times a very large percentage of Usenet users firmly believe that *everyone* is out to get them. You've got the people who believe that the U.S. Government is funnelling foreign troops into out-of-the-way bases in the American midwest to train for a mission to overthrow democracy, take everyone's guns away, and cremate anyone who resists. You've got the people who are convinced that women are trying to enslave men. You've got the people who think that computers are the work of Satan and that barcodes represent the Number of the Beast. Crimony, but there are some strange people on Usenet with the strangest beliefs. I have personally seen Usenet messages from people who firmly believe that Mother Theresa of Calcutta is secretly in charge of a World Conspiracy to Fluoridate Water and Destroy Our Minds.

In other words, it would actually be easier to make a list of which Usenet newsgroups are completely paranoia-free:

1. * alt.dev.null

2. Er... that's about it.

But some newsgroups are more paranoid than others, and, if you're the sort of person who likes to see others working themselves up into a manic froth over their paranoid conspiracy theory du jour, you might want to check out some of the more volatile Usenet newsgroups listed over the page:

feature

comp.os.linux.advocacy, comp.os.ms-windows.advocacy, comp.os.os2.advocacy, comp.sys.amiga.advocacy, comp.sys.atari.advocacy, comp.sys.mac.advocacy, comp.sys.next.advocacy, comp.unix.advocacy

Who's out to get whom?
Manufacturers of other operating systems are out to get competing systems' manufacturers and users, and manufacturers are out to get their own users for diabolical reasons known only to a few.

These newsgroups are home to some of the worst paranoid ravings on Usenet. All of these newsgroups are supposedly home to fans of a particular operating system or line of computers, but what they're actually home to is savage flamewars between opposing factions.

In the **comp.os.ms-windows.advocacy** newsgroup, you'll always find the recurring threads about how Microsoft is out to wreck the world's computing market through deceptive sales practices, time bombs hidden in their Windows '95 code to screw up non-Microsoft applications, and bribes to people not to sell IBM's OS/2 Warp operating system. You'll also find constant flamewars between this newsgroup and **comp.os.os2.advocacy** over which operating system is better: Microsoft Windows or IBM's OS/2.

The other newsgroups tend to be full of paranoid ravings about how manufacturer X, Y, or Z is planning to stop supporting product A, B, or C. You'll also find a lot of message threads with people beating their chests like silverback gorillas and loudly proclaiming that THEIR operating system is the best. This is particularly true of **comp.os.linux.advocacy** – Linux is a shareware version of UNIX that has perhaps the most passionately loyal devotees of any operating system on the planet. In the Linux advocacy group, they beat their chests about how good Linux is, even if there's no one around to say "Linux sucks".

sci.bio.evolution talk.origins

Who's out to get whom?
Evolutionists are out to get the Creationists; 'so-called real scientists' are out to get the Velikovsky followers.

sci.bio.evolution and **talk.origins** are two newsgroups which address the issue of where Man came from, and both tend to be rather full of paranoid misfits for whom the scientific method is just this wacky, newfangled idea. It doesn't take a genius to guess what point of view the misfits keep putting forward: that evolution is a sham theory advanced by an international conspiracy of Satan-worshippers and others who hate Christianity.

talk.origins has some real gems – people who believe Immanuel Velikovsky's theories about how Earth used to orbit Saturn and about how Venus used to be a comet, a comet which passed Earth in Biblical times, causing the Earth to stop turning for a day and dropping manna to the Israelites. As with any other kooky, pseudo-scientific gibberish, the **talk.origins** Velikovsky fans feel that there's an international conspiracy, trying to keep the world from understanding the TRUTH.

sci.crypt

Who's out to get whom?
Governments are trying to keep their citizens from having secure cryptography.

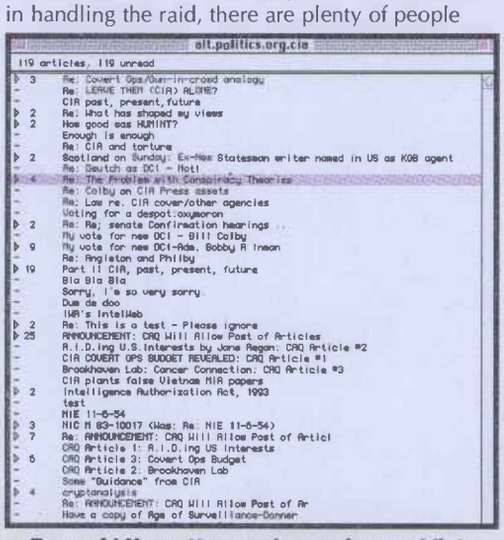
Not without justification, the readers of **sci.crypt** believe that the governments of the world are trying to keep their citizens from having access to secure cryptography and encoding schemes.

The U.S. Government has gone to great lengths to keep unbreakable encryption out of the hands of the citizenry, because they fear that criminals would make their phone and data communications secure from government-ordered wiretaps. Unfortunately, the **sci.crypt** people get a little too worked up on occasion and accuse governments of having other, more nefarious reasons for wanting to keep really good encryption out of their citizens' hands.

alt.politics.org.batf, alt.politics.org.cia, alt.politics.org.nsa

Who's out to get whom?
The American Bureau of Alcohol, Tobacco and Firearms, the Central Intelligence Agency, and the National Security Agency are all up to no good.

Classic paranoids have long felt that the CIA is secretly ruling the world. Not a few people like to accuse the NSA, the U.S. Government's secret communications-monitoring agency, of trying to do likewise. There are many people who put 'NSA bait' in their Usenet messages to irritate the NSA, which is supposedly scanning and monitoring all Usenet traffic for anti-government conspiracies. And after the Waco disaster of 1993, where a bunch of Branch Davidians burned themselves alive in Texas, due to the ineptitude of the BATF in handling the raid, there are plenty of people who have simply dug out old conspiracy theories and filed off the serial numbers, accusing the BATF of trying to take everyone's handguns away.



→ ***Paranoid Usenetters and conspiracy-addicts investigate the investigators.***

sci.nanotech

Who's out to get whom?
Irresponsible scientists are out to get everyone on the planet (yes, even you). They will do this by using microscopic machines under their control to destroy the world.

Nanotechnology is the scientific study of microscopic machines; theoretically, it should be possible to create self-replicating machines which are small enough to move atoms and molecules around, enabling mankind to create whatever we want.

Some members of **sci.nanotech** accuse scientists of incredible irresponsibility and of wanting to destroy civilization by unleashing zillions of tiny robots.

sci.skeptic

Who's out to get whom?
Governments and scientists are out to keep the truth about psychic powers from becoming known by the public.

sci.skeptic was created to serve as the forum for scientists to post debunkings of fraudulent psychics. Unfortunately, 'psychics', and those who believe in them, flocked to the newsgroup and now, if you post a message there condemning psychics as frauds, you'll get a mailbox full of abuse from credulous people who really believe that people like Uri Geller really can bend spoons with their mind, see the future, find dead bodies for the police, and so forth.

Scientists like James Randi, internationally-known psychic debunker, who are trying to discredit people like Geller, are supposedly doing so purely for their own, selfish reasons. Uh huh. Right. Sure.

rec.org.mensa

Who's out to get whom?
Everyone is out to get MENSA.

MENSA is an international organization made up of people who score in the top 2% of the population on intelligence tests. Unfortunately, MENSA has just as many whackos as the rest of the population, and not a few of them have come to the conclusion that everyone is out to get them, destroy MENSA, and stamp out intelligence, supposedly for jealous, hateful reasons. **rec.org.mensa** is almost unreadable as a result of the flamewars, which some people participate in just to work the MENSAns up into a trembling froth because it's so much fun to watch.

soc.culture.*

Who's out to get whom?
Everyone is out to get everyone else.

There are dozens of **soc.culture.*** newsgroups dedicated to various countries and some cultures that don't neatly fit into national boundaries. To describe the loony nationalistic ravings that take place in the spectrum of **soc.culture.*** newsgroups would require an article three or four times longer than this one, so you'll have to go explore for yourself. Be warned. Take flameproof armour.

soc.men, soc.women, alt.feminism, alt.dads-rights, alt.dads-rights.unmoderated, alt.mens-rights, alt.feminazis

Who's out to get whom?
Women are out to get men, men are out to get women.

Things have become so bad in **soc.men**, **soc.women, alt.feminism** and the **dads-rights** newsgroups that one wonders how the race ever manages to survive from one generation to the next. Evil, vile, lying women are trying to ruin men and take their children away and deny them parental rights; evil, chauvinistic-pig men are trying to force women back into a life of drudgery and slavery.

The only really amusing group in this lot is **alt.feminism**, which is almost entirely populated by men – men who agree that feminists are a nasty lot, and who don't really worry about the fact that there aren't even any women there in the group to complain about. The real feminists are over in **soc.feminism**, a moderated newsgroup where you're not allowed to say bad things about women.

alt.bonehead.joel-furr

Who's out to get whom?
I'm out to get everyone.

Yep, there are even people paranoid about me – and they post to **alt.bonehead.joel-furr** and accuse me of trying to take over Usenet. Needless to say, I happily agree with them and they wander away, confused.

alt.college.fraternities and alt.college.sororities

Who's out to get whom?
Fraternities' members are rapists and batterers of women; sororities are preservers of an antiquated society which preaches subservience of women.

American fraternities and sororities are single-sex social organizations at colleges and universities, which usually have their own houses for the members to live in, and which spend most of their time having parties and lying around drunk. There are quite a few fraternity-bashers who make **alt.college.fraternities** almost unreadable with their long rants about the number of fraternity men who commit rape.

alt.conspiracy, alt.conspiracy.jfk, talk.rumors

Who's out to get whom?
Everyone's out to get everyone else (again).

alt.conspiracy and **talk.rumors** are Paranoid Loony Ground Zero. It 's impossible to describe all the idiots who post there; there are just too many of them. But there are still people who believe that the break-up of the USSR and the end of Communism in Eastern Europe is actually a clever plot by the USSR's leaders to lull the rest of the world into submission before unleashing their Marxist hordes to conquer the rest of the planet. And there are people who really believe that U.S. President, John F. Kennedy, was assassinated by a conspiracy of the New Zealand sheep herding industry. In other words, there is no paranoid belief so bizarre that it won't find adherents in **alt.conspiracy** or **talk.rumors**.

alt.fan.karla-homolka

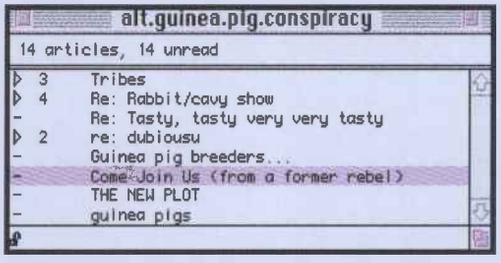
Who's out to get whom?
The Canadian Government is out to get Canadian citizens who post information about the murder trial of Karla Homolka to this newsgroup.

Karla Homolka, and her husband Paul Bernardo, brutally murdered several Ontario women. The resulting publicity about the case was so extensive that the Ontario provincial government slapped a publication ban on facts about the case in order to preserve Homolka's right to a fair trial. A newsgroup was promptly created to disseminate facts about the case. But the Ontario provincial government and the Royal Canadian Mounted Police began a crackdown on any Canadians who posted to the newsgroup. Needless to say, this meant Americans started to handle the postings and Canadians got accounts on American sites.

alt.guinea.pig.conspiracy

Who's out to get whom?
Guinea pigs are out to conquer the world.

This group doesn't get much traffic, presumably because the guinea pigs ruthlessly hunt down anyone who posts to it, but once in a while it'll have a spurt of traffic from people who believe that guinea pigs are not quite the sweet, little, harmless animals that they seem.



→ If you are worried about your guinea pig having meetings with his little friends, post here.

alt.politics.correct

Who's out to get whom?
The forces of 'political correctness' are out to make any form of critical speech illegal.

If you've seen rants about how it's no longer okay to refer to people in wheelchairs as handicapped and how we're now supposed to call morons and imbeciles 'mentally challenged', then you know what **alt.politics.correct** is full of. Conservatives post to this newsgroup accusing liberals of mind-control and totalitarianism. Liberals accuse conservatives of not wanting their dominance of the planet challenged. It's kind of pathetic.

alt.politics.white-power

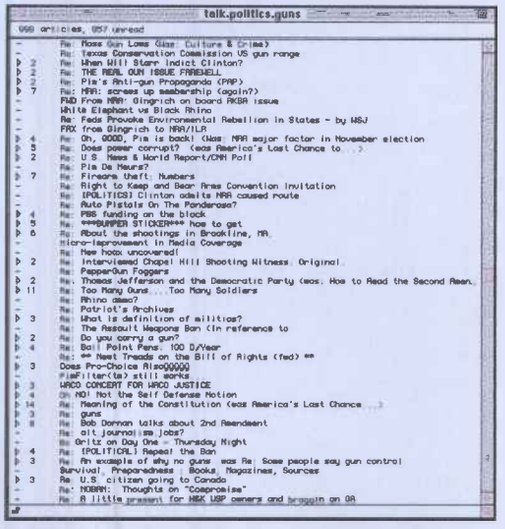
Who's trying to get whom?
Blacks are trying to take over the world.

Sadly, the Americans still haven't rid their society of racism; quite a few people firmly believe that 'race-mixing' and 'miscegenation' are to blame for everything that's gone wrong in the USA in the last fifty years. Sigh. And here's where they tell us all about it.

alt.revisionism

Who's trying to get whom?
Jews and the International Jewish Conspiracy are supposedly trying to blame the Germans for a Holocaust that the Germans say actually never happened.

alt.revisionism is the home of the ongoing, obscene flamewar between Holocaust revisionists and defenders of history. The deniers of history say that the Holocaust never happened, that the gas chambers were a "hoax" and that the six million Jews who "supposedly died" never existed at all, or other insane variations on that theme, and the other side patiently post proof that yes, the Holocaust did happen.



→ The newsgroup defending the right to kill.

misc.headlines, talk.politics.guns

Who's trying to get whom?
God only knows.

misc.headlines and **talk.politics.guns** are full of psychopathic loons who see a bugbear behind every door, who believe that the U.S. government is training Russians to take everyone's guns away, who believe that the Armenians are preparing to kill all the Turks, who believe that an international conspiracy of drug dealers is preparing to openly announce that they are ruling the world, and so on into the absolute depths of idiocy. There should be a big sign over the doors of **misc.headlines** and **talk.politics.guns**:

ABANDON HOPE, ALL YE WHO ENTER HERE.

feature

Bruce Tober finds out how the Internet proved its worth in the recent terrible Japanese earthquake.

Earthquake!

How the Internet helped in the Kobe disaster

For the sake of an "S"

Is it possible that the Internet could have potentially reduced the devastating effects of the Kobe earthquake? The message quoted in full below was sent on 10 Jan. It was sent to the **sci.geo.earthquake** newsgroup. The problem was, the newsgroup's actual name is **sci.geo.earthquakes** (note the "s")!

Mikhail A. Merzlyakov, Senior Scientist, Novosibirsk State University, Department of Atmospheric Investigation, Novosibirsk, Russia, in an email interview with ICT, explained the story behind the message, right:

ICT - You are quoting Yuryi Bragin?

MM - Yes

ICT - Dr Bragin tried to warn that there would be a major quake?

MM - Yes

ICT - His warnings were not listened to?

MM - We got a lot of responses.

ICT - Who are you? Do you work with Mr Bragin?

MM - Dr Bragin is author of the prediction. I am a specialist in spectroscopy and have developed a spectrometer – a gas analyzer with extraordinary sensitivity (up to ppt range or 0.0000000001 vol.%). This is a very interesting direction. Since I have access to the Internet I spend a lot of time in front of the computer (as a hobby). Dr Bragin learnt about my hobby and asked me to provide him with seismic info and to spread his forecast. So I am only the provider and translator of the message.

ICT - Did Mr Bragin try to warn the Japanese government?

MM - We have no contacts with the Japanese government.

Further questions as to whether or not contacts were made with either the Japanese government or its meteorological agency were unanswered by Merzlyakov at the time of going to press. Spokesmen for the Japanese government refused to comment. Communication through the Internet may be a lifeline for individuals trying to get news of friends and family, secondhand, but the tragic events described above highlight its inherent weaknesses as a medium of urgent and accurate communication.

From root@spectr.nsu.nsk.su
Article: 67618 of soc.culture.japan
From: "Mikhail A. Merzlyakov" <root@spectr.nsu.nsk.su>
Newsgroups: soc.culture.japan
Subject: earthquake forecast
Date: 10 Jan 1995 15:44:53 +0600
Organization: Novosibirsk State University
Lines: 25
Sender: news@mx.nsu.nsk.su
Distribution: world
Message-ID: <ABaKb4led9@spectr.nsu.nsk.su>
Reply-To: root@spectr.nsu.nsk.su
NNTP-Posting-Host: mx.nsu.nsk.su

Dear Sir
My attempt to put the article into sci.geo.earthquake failed. My news server answered: Group sci.geo.earthquake does not exist. Help me please spread this urgent message in Japan.

----------Cut here----------

We observe seismically active period since January 4 around the Earth. I predict the most powerful earthquakes between Jan. 10 (post meridian UTC) and Jan. 11 (ante meridian). Then frequency and magnitude of earthquakes will decrease. Minimum will come Jan.13 (post meridian).
Note. The picture of earthquake precursors for 10-12 Jan. is complex. Some details are like (and stronger) precursor Japan earthquake Jan.6 Therefore I expect earthquake more than force 7 (Richter scale) at night between Jan. 10 and Jan.11.
Yuryi Bragin
Chief of Novosibirsk State University
Atmospheric observatory

----------Cut here----------

Thaks in advance for your help
Mikhail Merzlyakov

When Jeffrey W. Lee <jlee@wimsey.com> of The Vancouver Sun, Vancouver, B.C. heard about the Kobe earthquake he was worried. His parents, Melvin and Beverly Lee, were in Japan. He tried ringing them, but couldn't get through. Did he try to relay a message through a local ham radio operator? No.

He really didn't have to do much of anything because within hours he had an email message from his mother telling him they were all right. "My father's not computer literate yet," the paper's General Reporter said.

In the not-so-distant past, the typical means of trying to get in touch with friends and loved ones, to find out if they were okay, in disaster situations, was by ham radio. But now, it appears that's changing.

The ham radio operators provided, and still provide, a wonderful and much needed service. But radio communications are iffy at best in such conditions, finding someone with a ham operation is not terribly easy, and telling a very personal message to a ham operator and hoping it gets across properly and translated correctly on the receiving end is something which would concern many people. With the Internet becoming such a buzz-word today, increasing numbers of people are turning to it as an emergency source of information. And why not? The Internet was established to survive disasters, to be used in case of disasters.

How ironic. Why? I'll let David Farber from the Internet Society <farber@central.cis.upenn.edu> explain that aspect. On 17 Jan, he posted the following: "It's 46 minutes past midnight in Machikaneyama, Toyonaka, Osaka. We're pretty close to the active fault from Awajishima-Kobe-Takarazuka, which caused the major disaster about 19 hours ago. We're okay – but people in Kobe city are now shivering and starving.

"Kobe," he continued, "was the host city of INET '92, a successful first INET conference held by the Internet Society. But the city is now mere debris. And the southern coast of the city is still BURNING. Food supply is low, traffic is congested, and trains cannot reach Kobe."

Jeffrey Lee told I&CT: "I got two messages from my mother. The first was very broken up, but the second was fine. Actually email is the way we communicate most." Lee's father is a lecturer in nutrition at Hiroshima Jogakuin University, and his mother is a researcher at the University of Hiroshima.

"We felt a little shaking and didn't know there was a serious quake until the morning," Melvin, Jeffrey's dad, said. "My wife sent each of our four kids an email. We didn't even try the phone."

feature

Kobe Quake sites

Internet sites were set up on the following Web, Usenet, and IRC sites:

http://150.26.230.162/kobe/quake.html

http://hoshi.cic.sfu.ca/~anderson/

http://shika.aist-nara.ac.jp:80/earthquake

http://www.csl.sony.co.jp/earthquake/index.html

http://www.geophys.washington.edu/seismosurfing.html

http://www.gps.caltech.edu/~polet/recofd.html

http://www-Ieland.stanford.edu/~shimpei/quake.html

http://www.kobe-cufs.ac.jp

http://www.kobe-cufs.ac.jp/kobe-city

http://www.msen.com/~emv/kobe.html

http://www.nando.net/newsroom/sources.html

http://www.nando.net/newsroom/nt/world.html

http://www.niksula.cs.hut.fi/~haa/kobe.html

http://www.ntt.jp/whatsnew/index.html

http://www.rcac.tdi.co.jp/~kenji

http://www.timeinc.com/pathfinder/features/kobe/kobe.html

gopher://disaster.cprost.sfu.ca 5555

gopher://hoshi.cic.sfu.ca 5555

gopher://wealaka.okgeosurvey1.gov:70/11/other_bulleti

ns/neis/n eislist

alt.current-events.kobe-quake

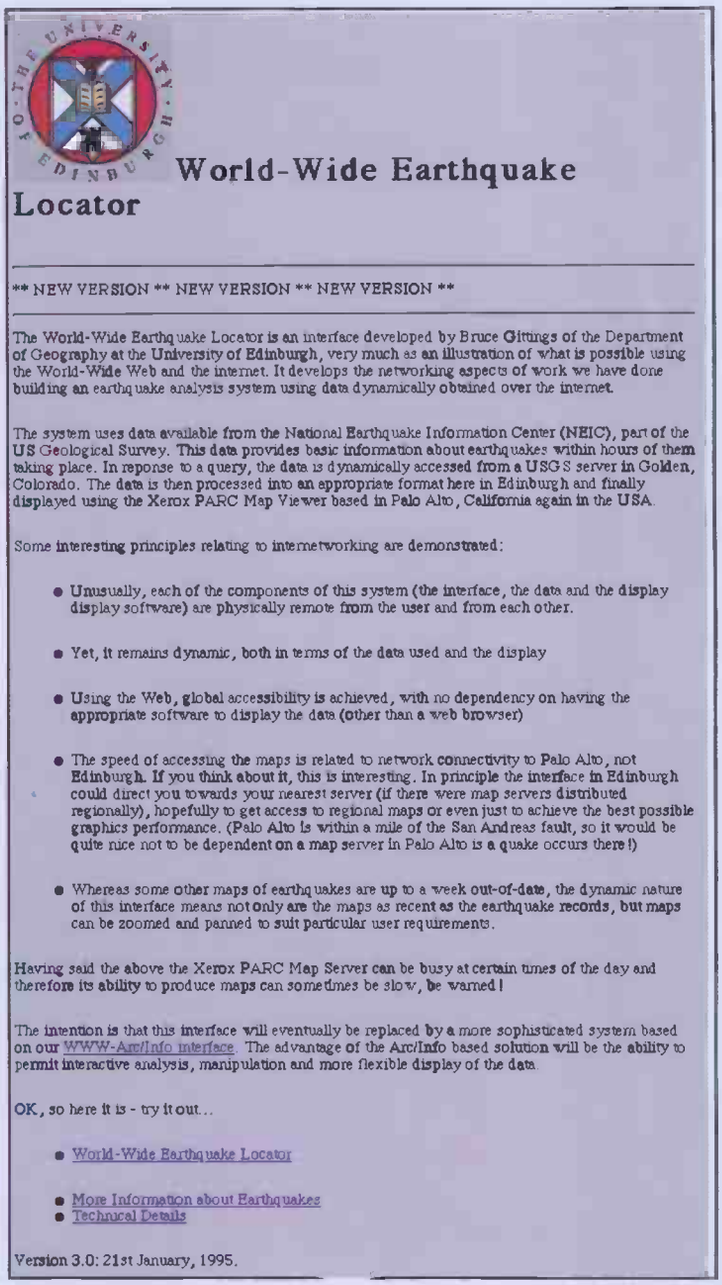
alt.disasters.earthquake

sci.geo.earthquakes

soc.culture.japan

IRC Channels:

#kobe; #japan; and #disastercom



→ The World Wide Earthquake Locator can be found at the URL http://www.geo.ed.ac.uk/quakes.html, to keep you up to date with all the latest seismic activity in the world.

"We felt a little shaking and didn't know there was a serious quake until the morning. My wife sent each of our kids email. We didn't even try the phone.

Within hours of the quake, various newsgroups were set up to provide the world with news of what was happening and to provide a means by which people could find out about, and communicate with, friends and loved ones.

During the next day, companies in Japan were also contributing information. The Sony Corporation provided a page on the World Wide Web which indexes much of the information, although most of this is in Japanese. The Sony page is at **http://www.csl.sony.co.jp/**.

The Japanese PTT also set up an automatic mailer that provided the latest version of the list of deceased. Send a blank email to **quake@ponytail.ntt.jp** for the list, which is available only in Japanese.

Despite the massive damage in Kobe, the local University's Foreign Studies Department still had their Internet connection and a spokesperson told I&CT that, although the University sustained some damage, the network remained up and functioning normally. A World Wide Web page has been set up which offers access to pictures of the quake taken by a faculty member. The address is **http://www.kobe-u.ac.jp/**. Sony notes, however, that the link to Kobe is fragile at present and should not be abused.

True stories

Everything was published on the newsgroups, from words of sympathy to heart-rending pleas for information about friends and relatives; lists of the dead and injured; emergency services' phone and fax numbers in the Kobe area; copies (illegally breaching copyright law, as several news agencies

These pictures, which show the devastation that resulted from the earthquake at Kobe, were downloaded from the World Wide Web, offering instant images of the carnage.

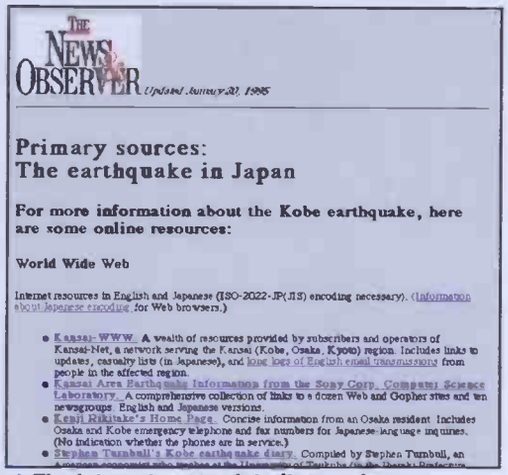
were quick to point out) of newswire reports on the disaster; and most evocative and tragic, eyewitness accounts of the events:

A day after the disaster, pliniokd@scl.kyoto-u.ac.jp reported, "Sorry the last message was delivered with one day of delay because the supercomputer laboratory was disconnected. This is an updated report. Kyoto shrines: Some damages are reported from many shrines in Kyoto. Sanjusangendo, six of the Kannon are damaged because were falling down... The damages seem however, considered the power of the earthquake, relatively little. Nuclear plants: No damages!!! (At least is the official report)... Thermopower plants; Many of them are stopped for damages or controls..."

And then poignantly he asks "Questions: How can the hospital of a city as Kobe collapse! How can the firemen remain without water? How is possible to say for hours that there was only one person died escaping in Osaka? How can people remain without help for hours? How can structure projected for earthquake bigger than that of Kanto collapse?"

From another survivor, Hajime Murao, on Thursday: "Many, many houses were broken and many people were buried. The earthquake just attacked to the area we were living. Many many houses were broken... There are too many people died around us. But, I and Kyoko is still alive. It should be a good news to you and Dylan? (Of course, to me :) I think you are so lucky to be able to see the Kobe before broken the town. And also lucky to you, there are no need to see the broken Kobe. I'm quite sorry for the broken Kobe! I wish we can meet at the beautiful Kobe again."

And this touching plea from a young man, Ken Miyamoto, whose family is from the Kobe area, "My uncle and his family live in Takarazuka near Kobe. I am worried about them. Can anyone let me know about the damage Takarazuka has got from the earthquake? Thanks."



THE NEWS & OBSERVER *Updated January 20, 1995*

Primary sources:
The earthquake in Japan

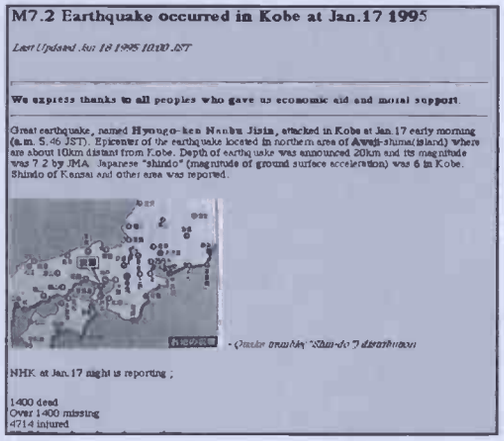
For more information about the Kobe earthquake, here are some online resources:

World Wide Web

Internet resources in English and Japanese (ISO-2022-JP(JIS) encoding necessary). (Information about Japanese encoding for Web browsers.)

- Kansai-WWW. A wealth of resources provided by subscribers and operators of Kansai-Net, a network serving the Kansai (Kobe, Osaka, Kyoto) region. Includes links to updates, casualty lists (in Japanese), and long logs of English email transmissions from people in the affected region.
- Kansai Area Earthquake Information from the Sony Corp. Computer Science Laboratory. A comprehensive collection of links to a dozen Web and Gopher sites and ten newsgroups. English and Japanese versions.
- Kenji Rikitake's Home Page. Concise information from an Osaka resident. Includes Osaka and Kobe emergency telephone and fax numbers for Japanese-language inquiries. (No indication whether the phones are in service.)
- Stephen Turnbull's Kobe earthquake diary. Compiled by Stephen Turnbull, an

The internet comes into its own in an emergency, offering a link for the millions of ex-pat Japanese to news of what is happening.



M7.2 Earthquake occurred in Kobe at Jan.17 1995

Last Updated Jan 18 1995 10:00 JST

We express thanks to all peoples who gave us economic aid and moral support.

Great earthquake, named **Hyongo-ken Nanbu Jisin**, attacked in Kobe at Jan.17 early morning (a.m. 5.46 JST). Epicenter of the earthquake located in northern area of **Awaji-shima**(island) where are about 10km distant from Kobe. Depth of earthquake was announced 20km and its magnitude was 7.2 by JMA. Japanese "shindo" (magnitude of ground surface acceleration) was 6 in Kobe. Shindo of Kansai and other area was reported.

NHK at Jan.17 night is reporting ;

1400 dead
Over 1400 missing
4714 injured

Shimpei Yamashita (**shimpei@leland.Stanford.EDU**) wrote back, later the same day, with less than encouraging news, "(as of 10:58pm PST) From IRC (#kobe) and a phone call from my mom: a hospital collapsed and 70 people are dead in Takarazuka. Phone calls from Tokyo to Takarazuka are not going through. It doesn't look good."

But fate seems to have smiled on Miyamoto's family, "Thank you for your concern about my relatives in Takarazuka. I still can't call them, but my mother who lives in Yokohama told me on the phone that they were safe, and that their house was okay. But I'm not sure whether they have electricity and gas."

Miyamoto, a student at Princeton Theological Seminary in New Jersey, USA, added in an email interview with I&CT, "From the information I got from Internet, I learned Takarazuka had been hit badly by the quake, and that more than 80 people died there. I hope the lives of those hit by the quake will be back to the normal as soon as possible.

"Being far away from Japan, I have chiefly relied on the Internet as the source of information on the quake. TV news and newspapers have been too slow. They've provided no information of the damages in a small city like Takarazuka. That's why I relied on the Internet, particularly Usenet. I posted a few messages asking the situation there, and received several helpful responses. Since the quake, I have also followed most of the messages posted in the newsgroups... These messages have kept me updated constantly.

"The Kobe quake taught me that the Internet is a powerful means of communication."

Fire, Flood and Theft in the USA

When they're not sandbagging their houses or mopping up after torrential downpours, the residents of flood-ravaged California can take time out to check the latest flood news and advice on the Internet.

The California Environmental Resources Evaluation System, a project of the State of California, is providing wired residents and Internet users around the world with the latest news of the floods, including satellite weather pictures, flood watch reports, details of what's coming with a weather forecast section, highway reports and listings of flood shelters.

Douglas P. Wheeler, Secretary for Resources, says, "A wide variety of information about the floods and the continuing response to them is now available on the 'information superhighway.' CERES puts at one's fingertips information about the current status of local flooding, shelter locations, road closures, and general information about how people should protect against and prepare for floods."

CERES is also aiding in the dissemination of information needed after the floods have hit, with sections ranging from 'how to file a flood insurance claim' to the FEMA individual assistance program.

The CERES system first went online last year and acts as a single source for environmental information pertaining to California. The system is not so much a new computer database as a means to bring together all existing information available on the Net from contributors such as the State and Federal agencies and University sources.

Other information available to users includes data from, among others, the Departments of Forestry, Conservation, Water Resources and the Energy Commission.

Internet users can access CERES through the World Wide Web by pointing their browsers at **http://resources.agency.ca.gov/.**

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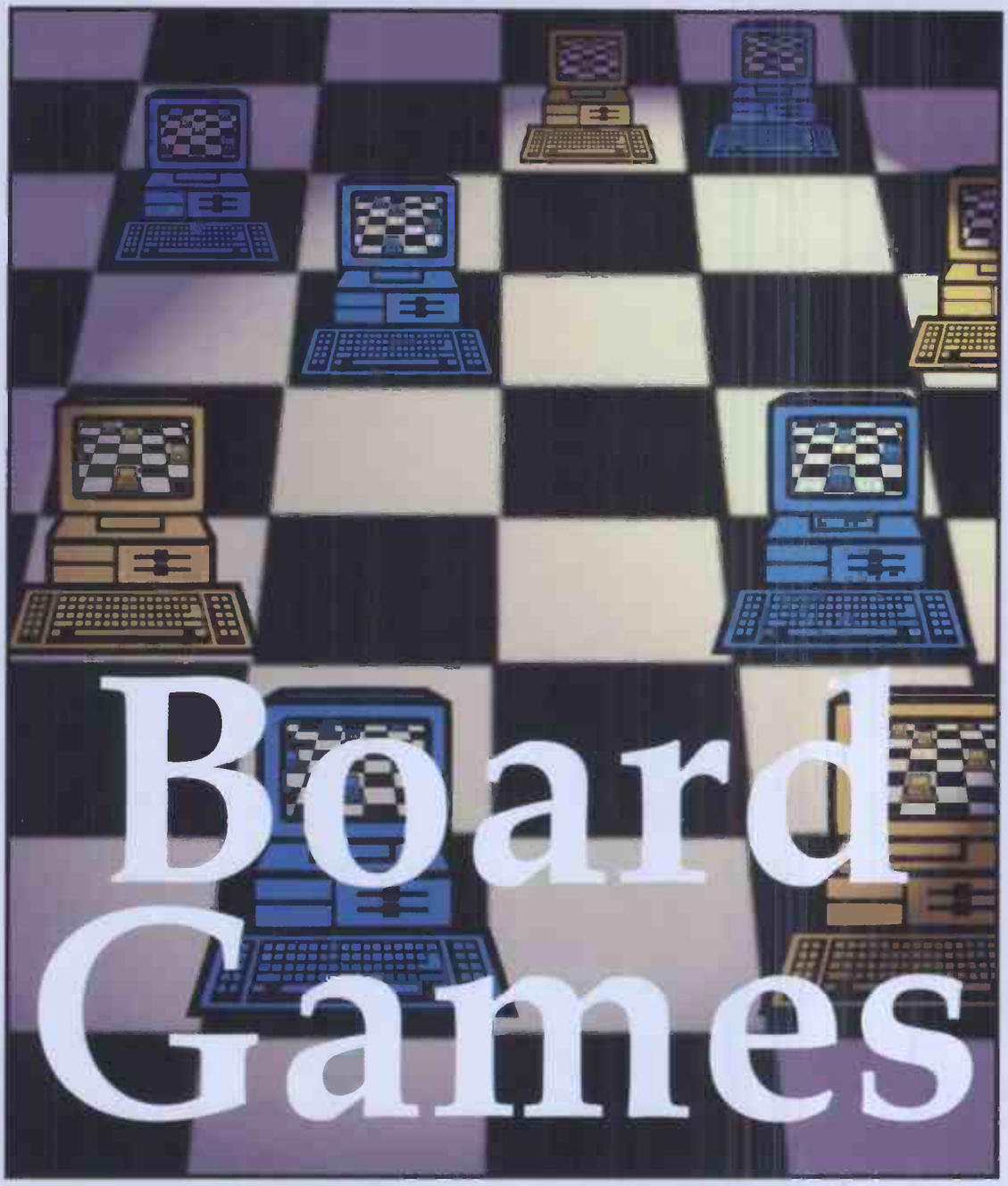


Board Games

Who ever said BBSs were boring? Colin Turner has been looking at some of the many games available on a free-to-use Bulletin Board near you.

Playing games has always been one of the most popular pastimes in computing, and so it's not surprising to discover that there are a number of games you can play over the phone using your modem. One of the biggest advantages of ordinary comms is that it is 'non-platform dependant' and this carries over into many of the games. For example, my BBS may run on a PC, but people using all sorts of computers can access the features on it, which include a small collection of games. This is achieved by making the calling computer behave just like a dumb terminal. It merely sends keypresses down the phone line, and sends the received serial stream to the screen.

Traditional high resolution graphics games that you run on your own computer involve accessing many pixels. This information must be sent quite rapidly from the computer to the monitor. Unfortunately, even the fastest modems are extremely slow compared to these speeds and, as the terminal can only display what comes down the serial port, games must find inventive ways around this restriction. This means that traditional graphical games don't work very well in this sort of environment, as it simply takes far too much time to transfer the information needed to redraw the screen.

There are, of course, many games that rely only on text, and these are ideally suited to the BBS

feature

VGA Planets

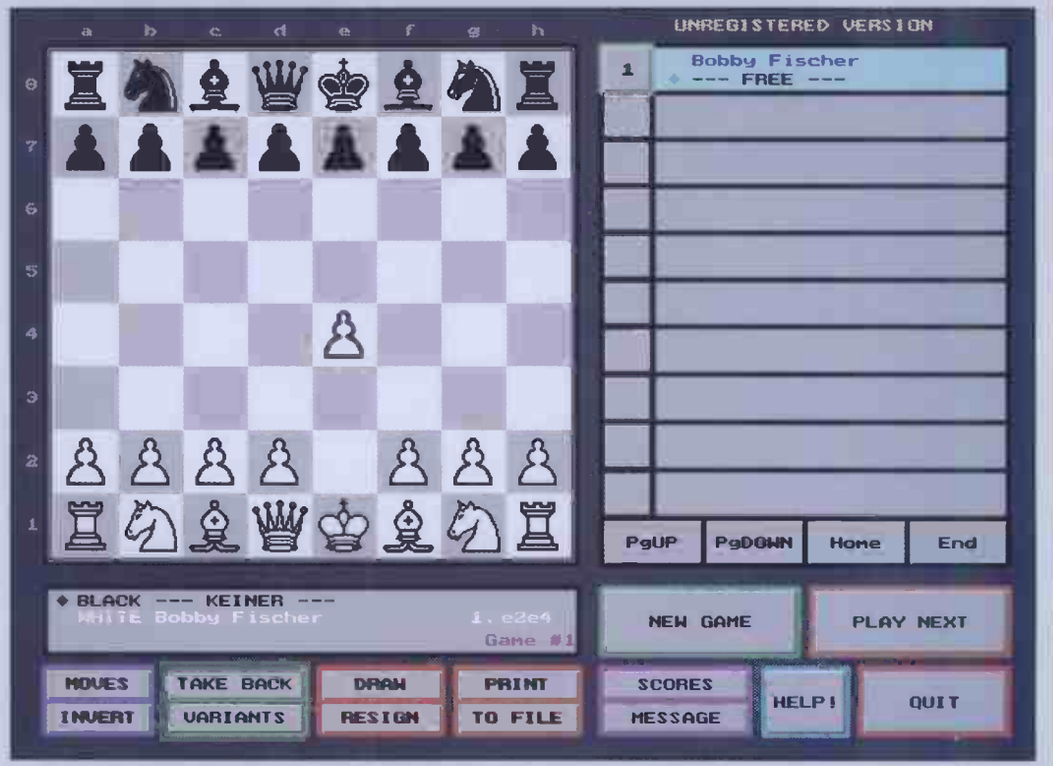
So far, all the games we have looked at have been interactive – that is, you play them when you are actually on the phone line. Obviously, playing these sort of games can have serious consequences for your phone bill, but there are ways to avoid this. *VGA Planets* is an example of a game which is played entirely offline. In fact, it can be played without a modem or network at all. There are several advantages to an offline game – graphics can be handled by the local machine, as in the *ProChess* game, and there is no need to monitor the serial port or network as an online game must do, making an offline game easier to write. The disadvantage with these games is that the program is machine-dependant, and so a separate version must be written for each type of machine.

VGA Planets is a multi-player game which is perfectly suited for a BBS, even a single-node system. It requires a host computer to run on. This should ideally, but not necessarily, be a BBS machine. The owner of the host machine runs a program which generates all the game files, deciding how many players will be in the game etc. A game packet is then produced for each player. The only online section of this game consists of distributing the packets to all the players. Even if the Sysop cannot assume the role of host, the distribution can still be accomplished by the host user uploading the game packets into a special file area which you can ask your Sysop to create, so that the other game users can get their packets.

Whoever runs the host computer decides how long a turn in the game will be. The players will then download their game packets, log off, and then place the packet in their own *VGA Planets* game copy. The game will then allow the player to make his/her moves for that turn. This involves selecting ships, choosing places to go and where to mine. When this is completed, the game will produce a reply packet which is uploaded back to the BBS.

After the length of time decided for a turn has passed, the owner of the host computer collects all the reply packets that have arrived and processes them on his machine with the game program. It will process each player's moves and then save them all to player files which must be downloaded, and the cycle continues again.

→ ***VGA Planets, a game played offline in which the aim is to mine as many minerals as possible while blowing your opponents into small pieces. Ah, the simple pleasures are the best.***

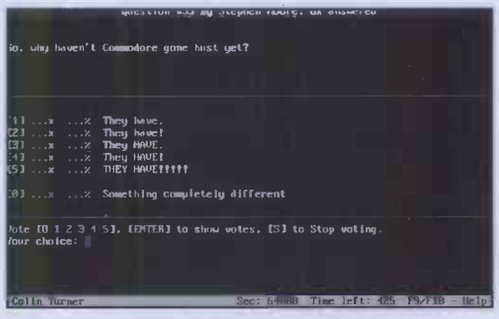


→ ***How a ProChess game looks in its special VGA terminal. The game is a completely mouse-driven front-end for the actual BBS door.***

environment. An example of this sort of game would be a text-based adventure, or perhaps a quiz game. Most games of this type can run online in an interactive manner, and if the ASCII character set is used then computers of all types are able to play the game. The major problem with the ASCII set is that there is no system of colour and only primitive cursor positioning codes. This means that ASCII-based games are black and white and scroll down the screen with every move.

→ Here's a game that works perfectly in ASCII or ANSI. Kannons and Katapults is a simple, scrolling text, strategy game for those of you who cannot spell.

→ Tombs and Tunnels is a simple ANSI game. The keys on the numeric keypad are used to guide your happy face around a dungeon collecting money and bashing lots of ferocious characters like 'R' and 'E'.



→ Features such as voting doors may not always be classed as games, but they can be quite entertaining on a lively BBS.

→ A nice version of the old favourite, Tetris. This game has a nice feature which allows a BBS user to play against the Sysop.

Fortunately most computers have terminals which support the ANSI standard. Think of ANSI as an extension to ASCII with the usual character codes, but with special sequences for cursor positioning, colour, and simple teletext-like characters. At the very least, ANSI provides a way of brightening up simple text adventures by adding colour. However, it can also be used for creating simple graphical games like *Tetris*. The teletext-style graphics are sufficient to create simple block shapes for the game. When a piece has to, for example, be rotated or dropped a level, it is easy to use the cursor positioning codes and colour sequences to blank the original position of the block, and then to redraw the block in its new position. Lots of other games can be coded in ANSI, for example bat and ball games, mazes and so on would be suitable for this code.

If you really are addicted to fancy, high-resolution graphics, then ANSI games are unlikely to satisfy your needs. The best way of getting round the problem is to use a game with a built-in terminal. *ProChess* is an excellent example of such an idea. The game can be played in ASCII or ANSI on just about any machine, but there is a special terminal for playing the game with a VGA-equipped PC. The theory is simple. Once you've logged on to the BBS and started *ProChess* you can kick up your special terminal. It will read the layout of the board from the serial port, but instead of simply printing the characters straight to screen it will process the layout of the board and draw it on the screen in high-resolution graphics. So, in this case, all the graphics work is done by the local computer, from information it gets from the BBS computer. In the same way, the move could be handled on the local machine by a mouse or particular keys, and then passed to the BBS via the serial port using the game's usual key presses.

The disadvantage of this method is that the end user must download or have a program which is specifically built to receive the characters the game sends it, so a new version may have to be downloaded as the game is upgraded. In many ways this method of operation is identical to the way CompuServe operates. All the memory-consuming, high-res graphics are stored at the user end and this specialised terminal communicates with the CompuServe end by prearranged character sequences. Just like CompuServe, however, separate terminals must be produced for each machine you wish to access the system, and so comms loses some of its machine independence.

There are even some games that can be played by NetMail on FidoNet Technology Networks. *ProChess* accepts NetMails so that users on different BBSs can play chess against each other. Many Amiga points who use Spot play a version of Noughts and Crosses with each other. So there is a wide variety of games for comms users and many methods in which they work. Almost every BBS has a few online games to sample, so have a look around when you next call your local BBS.

→ Some games are designed to allow several players on a network to play together. In these cases relatively small amounts of information are sent between network stations. Imagine, for example, a game of *PacMan* where each player has a Pacman on the same board. As each player moves around the board, a message could be sent over the network detailing the player number and position. This small packet can be decoded on each player's machine which would then handle the graphics locally.

More and more games are now being produced with network gaming capability. Examples of top games that you can play against friends include *Magic Carpet*, *Syndicate* and *Wing Commander Armada*. But the champion is *Doom*. A network game of this seminal shoot-'em-up has to be played to be believed.

Everyone plays the game with their own copy of the *Doom* program, so coded information can be sent between stations that the program can interpret. As these packets of information are small, it is practical to transfer them via modem. So, for example, a sort of server could be set up that accepts these information packets centrally and then sends results to each machine.

Michael Clark in Cardiff has set up a *Doom* multi-player server, allowing four people to play *Doom 1.2* or *Doom 2* as if they were networked together. You can call Michael's board on (01222) 362361. Michael's system was so busy I couldn't even get onto it, so I hope you all have better luck.

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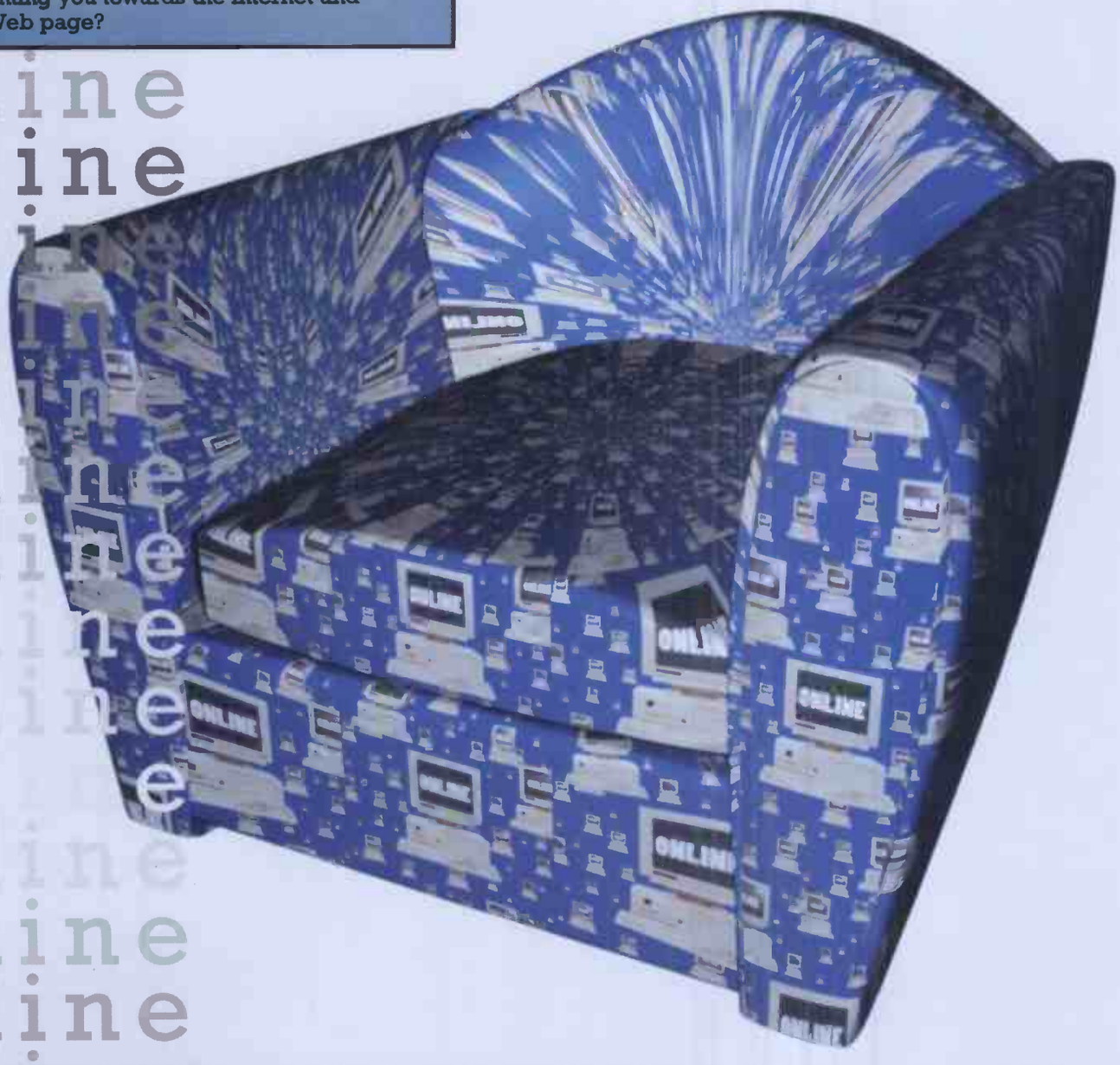

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online

Advice

It makes sense to try a board near to where you live, but remember that at the evenings and weekends the telephone line rates are a lot cheaper. Please note any special opening times – the line is probably being used as a standard telephone number outside these hours.

The vast majority of these boards are part of the FidoNet system, which means you can send mail to other FidoNet systems (and to the Internet through a suitable gateway).

UK Bulletin Board List

The numbers listed here are for Bulletin Boards – they are not voice numbers, so don't dial them with your telephone. To access a board you will need a modem and terminal software for your computer (for example, Windows' Terminal program, Z-Term on the Mac or TERM on the Amiga).

NAME: **Ace Logic Technical Support**
NUMBER: **01494 462136**
TIMES: 24hrs
LOCATION: High Wycombe, Bucks
SYSOP: Stephen Bromwich
HOST MACHINE: Viga 486 SX/33 w/1Gb HD
HOST SOFTWARE: FD/RA
SPECIAL INTEREST: Technical Support
COMMENTS: This BBS is open to all callers

NAME: **Amiga Junction 9**
NUMBER: **01372 271000/278000/279000**
TIMES: 24hrs
LOCATION: Leatherhead/Epsom Surrey. (M25 J9) SYSOP: Stephen Anderson
HOST MACHINE: Amiga 2000 40MHz '030
HOST SOFTWARE: DLG Professional
SPECIAL INTEREST: Amiga, Bjork Fan Club.
COMMENTS: 4 public phone lines, MUD's, 7 CD-Roms online by January'95, direct access to Internet e-mail and Amiga Usenet Newsgroups, This system has been totally FREE since it started in 1991. Local to London. Free calls to local NYNEX Cable customers. FidoNet 2:440/20, Amiganet 39:133/1

NAME: **Arcade BBS**
NUMBER: **0181 654 2212** (4 lines) and **0181 655 4412** (1 line Fido Node).
LOCATION: London
SYSOP: David Dade and David Coleman
HOST MACHINE: Acorn RISC PC
SPECIAL INTEREST: Acorn computer systems.
COMMENTS: Free! FidoNet 2:254/27.0

NAME: **Audio Dynamite BBS**
NUMBER: **0171 813 3221**
ADDRESSES: Fido - 2:254/402, Mercury - 240:102/6, SBCNet - 14:200/0,
Internet - Adam.Edwards@dynamite.embassy.co.uk
TIMES: 24hrs
LOCATION: Central London
SYSOP: Adam Edwards
HOST MACHINE: IBM PC
HOST SOFTWARE: LoraBBS-OS/2 v2.40b3
SPECIAL INTEREST: Soundcards/Multimedia/Games
COMMENTS: FidoNet, Mercury, SBCNet, Internet, 2 CD's online. All file and mail areas are dedicated to the special interest subjects. Importer of the "Sound Board Connection Network". Nodes welcome. Points welcome. Internet email and newsgroups available. Loads of MID/MOD/WAV files and DOOM! files.

NAME: **Aural Ecstasy**
NUMBER: **01344 762056**
TIMES: 24hrs
LOCATION: Crowthorne, Berks.
SYSOPS:Jon/Mat Meredith
HOST MACHINE: IBM Pc Clone (Knackered)
HOST SOFTWARE: Remote Access
SPECIAL INTERESTS: Sound 'n' Graphics, games (inc. Doom)
COMMENTS: A founding member of WAPOW net.

NAME: **Avalon**
NUMBER: **0171 813 3311**
SYSOP: D. Austin, Y. Simmons, D. James
HOURS: 24 hours
LOCATION: Central London
COMMENTS: The premier multi-user real time adventure scenario. 15 lines and internet access on Avalon.co.uk (193.132.124.2)

NAME: **Avalon**
NUMBER: **0114 2671671**
SYSOP: D. Austin
HOURS: 24 hours
LOCATION: Sheffield
COMMENTS: Roleplaying adventure scenario in real time. 10 lines.

NAME: **Black Hole BBS**
NUMBER: **01392 439663** (voice **01392 498022**)
TIMES: 24hrs
SYSOP: Paul Walker
SOFTWARE: Wildcat
SPECIAL INTEREST: VGA Planets multi-player comms game.
COMMENTS: Large files area with all the latest utllities to be downloaded. Also games to join. Free shareware copy of VGA Planets can be downloaded. I also sell the registered versions of the game.

NAME: **Black Ice**
NUMBER: **01481 39633 & 35323**
TIMES: 24hrs
LOCATION: Guernsey
SYSOP: Damien Guard
COMMENTS: All speeds up to 28,800. Supports Amiga, PC, Mac, BBC, Spectrum and others. Now 3Gb of online disk, and CD-ROMs rotating daily. FidoNet, MercuryNet, RANet. Active online games bashing others up. Internet email free to all users.
NAME: Borland International UK Limited
NUMBER: 0734 321044 (3-Lines)
COMMENTS: Languages Technical Support

NAME: **Blue Ridge**
NUMBER: **01734 755000**
LOCATION: Reading, Berkshire
TIMES: Open 24hrs
SYSOP: Simon Still
SPEEDS: 2400-28800 dual std (inc VFC/V34/H16)
SPECIAL INTERESTS:1.5+ Gigs of files on line (mostly games/demos/graphics) TOTALLY FREE INSTANT ACCESS: 5megs + 2 hours to ALL users everyday! FREE! Internet eMail and netmail.
HOST: WAPOWnet net 691 host.
COMMENTS: FidoNet: 2:252/308, WAPOWnet: 42:691/30, RANet: 74:7441/102

NAME: **BubbleGum BBS**
NUMBER: **01705 799529**
TIMES: 7pm to 7am
LOCATION: Fratton
SYSOP:Gary Young & Paul Davies

NAME: **Catflap!**
NUMBER: **0793 887043**
TIMES: 24Hrs
LOCATION: Swindon, Wilts.
SPEEDS: **ALL** up to **19.2Kbps**
BBS SOFTWARE: WILDCAT 4!
NOTES: This BBS is currently investigating connection to FidoNet echomail. (Help and advice is gratefully received!) Beginners to comms are especially welcome to connect.

NAME: **CCL4** (Tetrachloromethane for long)
NUMBER: **01482 798249**
TIMES: 24hrs
LOCATION: Hull
SYSOP: Dr Chasm, Lord Hickery & Captain Scarlet (Deceased)
HOST MACHINE: Acorn RISC Machine
HOST SOFTWARE: VHost
SPECIAL INTEREST: Fish & Bang
COMMENTS: We've banned smilies. Viewdata support.

NAME: **Chemi-Call BBS**
NUMBER: **01322 278652**
TIMES: 24hrs
LOCATION: Dartford, Kent
SYSOP: Steve Gooding
HOST MACHINE: IBM PC
HOST SOFTWARE: Binkleyterm/Remote Access
SPECIAL INTEREST: Chemistry
COMMENTS: FidoNet (2:440/51) CDs online for files

NAME: **Cheshire Cat BBS**
NUMBER: **01625 590219**
TIMES: 24hrs
LOCATION: Alderley Edge, Cheshire
SYSOP: James Youatt
HOST MACHINE: Amiga 4000/040
HOST SOFTWARE: TransAmiga/TrapDoor
SPECIAL INTEREST: Files/Mail on many of topics
COMMENTS: Home of the new CatNet. Also FidoNet online.

NAME: **Chip Shop BBS**
NUMBER: **0161 707 2666**
TIMES: 22:00 - 07:00 (Mon-Sun)
LOCATION: Manchester, Greater
SYSOP: Jonathan Boyd
SPECIAL INTEREST: DOOM
COMMENTS: Friendly BBS... Sysop always willing to chat and help out. The board is heavily geared toward the ID game Doom. With Many Add-on levels, Graphics, Sounds and Utils.

NAME: **City College Manchester BBS**
NUMBER: **0161 957 1583**
TIMES: 24hrs
LOCATION: Manchester
SYSOP: Andrew Warman
HOST MACHINE: Elonex PC-425X
HOST SOFTWARE: Remote Access 2.02+ Pro
SPECIAL INTEREST: Education & electronic mail
COMMENTS: FidoNet (2:250/157). Large selection of FidoNet, echoes but limited file space. FREE Internet email to ALL users once verified. Each has their own Internet address. Users from other educational establishments particularly welcome.

NAME: **Conqueror BBS** "or" **Conqueror Midnightline**
NUMBER: **(01480) 471634/471134/17234**
VOICE: (01480) 395676
TIMES: 24Hrs (Mail only during 00.00 - 06.00)
LOCATION: St Neots, Cambridgeshire.
SYSOP: Martin Hill
HOST SOFTWARE: Frontdoor 2.20c.mL / Remote Access
Host Machines: Networked/Multitasking Homebrew PCs (4)
SPECIAL INTEREST: Electronic Mail/Files
COMMENTS: Over 400 file areas with 3Gb of files. Over 1200 echomail from 13 networks.

NAME: **Creations (South)**
NUMBER: **0181 6659887**
TIMES: 24hrs
LOCATION: London
SYSOP: Mat Bettinson
HOST MACHINE: Amiga 3000
HOST SOFTWARE: Xenolink
SPECIAL INTEREST: Serious Amiga and Art, Articles, Programming.
COMMENTS: Fidonet, Amiganet and Barnet (I) Unique Art, Renders and Articles. Amiga Fido points considered.

First time on a BBS?

Ensure your modem is connected. Load your terminal emulation software. If all is working, you should be able to enter:

ATZ <return>

and the modem should return

OK

If this doesn't happen, please refer to the instructions which came with your modem and/or terminal software.

Now you can pick and dial one of the BBS numbers listed. You can add the number to the phone book option in your terminal software, or enter:

ATDT <number> <return>

The modem will dial out – you should be able to hear the modem generating tones.

If the line is engaged, you will have to try again later. If the line answers (and it should do so after only one or two you should see some text appear on the screen in front of you.

If you have never logged onto a BBS before, here is what to expect.

First of all, you may be asked to press ESCape twice. This is to inform the host software that runs the Bulletin Board that you are a human user – not another piece of mailing software.

You will then see a title screen, and will be asked to enter your name. If you have never used this particular BBS before, you will need to answer a few questions about yourself.

You will also need to choose a password – try and pick one which contains a jumble of letters and numbers and make a note of it somewhere safe.

Depending on the way the Board operates, you may have to wait a day or so until the Sysop (the person running the board) verifies your name and adds you to the system.

When you are accepted onto the system, you will be presented with a menu offering several choices which will offer something like he following:

The most important places on the Board to visit are:

1. The Mail Area.

This is where you can send and receive messages.

2. The File Area.

This is where you can download and upload software.

Each Bulletin Board System runs its own host software, so no two systems will look alike. However, all boards follow the same basic format and once you have visited one you'll be able to use them all.

NAME: **Den's Den BBS**
NUMBER: **01702 464818**
TIMES: 24hrs
LOCATION: Southend, Essex
SYSOP: Dennis Luckett
HOST MACHINE: AMIGA
HOST SOFTWARE: TransAmiga
SPECIAL INTEREST: Spectrum Games
COMMENTS: FidoNet, AmigaNet, over 1 Gig of files

NAME: **EDIMatrix BBS**
NUMBER: **0181 501 3096 & 3097**
TIMES: 24h
LOCATION: Chigwell ESSEX UK
SYSOP: Chris Johnson
HOST MACHINE: PC
HOST SOFTWARE: TCL 0.98
SPECIAL INTERESTS: PC utilities
COMMENTS: TCL is a Unix-style KOM system. 18 CD-Roms online. 4.5GB of files on HD as well. FidoNet and TCLNet member.

NAME: **Enterprise BBS**
NUMBER: **(01273) 881701**
TIMES: 24 Hours
LOCATION: Brighton
SYSOP: Paul Sheppard
HOST MACHINE: 386sx25
HOST SOFTWARE: RA2.02/FD2.12
SPECIAL INTERESTS: Sci-Fi/Star Trek
COMMENTS: Huge Message area, Online games, Files, etc...

NAMES: **Forest BBS**
NUMBER: **01425 629629** (4 Nodes)
SPEED: 14.4
SYSOP: Robert Maynard
BBS Software: Major BBS V6.2
TIMES: 24 hrs
LOCATION: New Milton, Hampshire
COMMENTS: New BBS! Friendly atmosphere geared toward Chat and Games! Lots of games & Files. 4 Lines and a Sysop who won't harrass you. Anything goes. If the line is busy, keep trying – it's worth it.

NAME: **Formal Dress Not Essential**
NUMBERS: **0116 270 0368** (Speeds up to 28800 VFC) **0116 270 4521** (Speeds upto 14400 V32bis)
TIMES: 24 hrs
LOCATION: Leicester, Leicestershire
SYSOP: Nick Petkovich
HOST MACHINE: 386 & 486 PCs
HOST SOFTWARE : RemoteAccess 2.02+
SPECIAL INTEREST: Has almost everything
COMMENTS: FidoNet/RA-Net/SBC-Net/WAPOW/Internet email/Usenet. Over 4.6 Gigs of files. Home of the official MicroProse Formula 1 Grand Prix League. Married with Children forum. Doom forum (with 80Mb of files). X-Files forum. Star Trek forum. Lots of files about TV shows.

NAME: **Fortress**
NUMBER: **0181 244 9825**
TIMES: 24Hrs
LOCATION: London, Plumstead
SYSOP: Kevin Osborne
HOST MACHINE: Atari ST
HOST SOFTWARE: Semper Mailer/JetMail/Octopus BBS
SPECIAL INTEREST: Atari Support Site
COMMENTS: Atari Only BBS with internet email access. All users have their own personal address.

NAME: **Frost Free BBS**
NUMBER: **01484 842341**
TIMES: 24hrs
LOCATION: Slaithwaite, West Yorkshire
SYSOP: Dave Naylor
HOST MACHINE: AMIGA
HOST SOFTWARE: Trapdoor/Excelsior
SPECIAL INTEREST: Rugby League Echo
COMMENTS: FidoNet/Catnet/AminET/YACKNET online CDs, loads of Amiga Goodies. New points Welcome. FidoNet 2:250/366

NAME: **Galaxy-Ten**
NUMBER: **(01621) 850032**
VOICE: (01621) 850032
LOCATION: Maldon, Essex.
TIMES: 8pm - 10am, daily.
SYSOP: Jon Hepburn
HOST MACHINE: IBM PC
HOST SOFTWARE: VBBS/VFIDO
SPECIAL INTERESTS: OS/2, Business & Commerce.
Comments: Virtualnet, Fidonet, Mercurynet. Dedicated OS/2 only BBS; Only UK BBS operating VBBS under OS/2; Geared to helping new OS/2 users; emphasis on quality of files not quantity; Special areas for Maldon Chamber of Trade & Commerce (Host). Entirely FREE.

NAME: **Glass Asylum**
NUMBER: **01268 510709 / 01268 515347**
TIMES: 24hrs
LOCATION: Canvey Island, Essex
SYSOP: Glen Chambers
SPECIAL INTEREST: Electronic Mail

NAME: **Hard Rock Studio**
NUMBER: **0191 455 0321**
TIMES: 9pm-8am Weekdays, All Day Sat/Sun
LOCATION: South Shields, Tyne & Wear
SYSOP: Andrew Davison
HOST MACHINE: PC 486
HOST SOFTWARE: RemoteAccess
SPECIAL INTEREST: Music
COMMENTS: Fidonet, CD-Rom online.

NAME: **Hawk's Castle**
NUMBER: **(01344) 411621** and **(01344)869277** (four public access lines)
VOICE: (01344) 860890
TIMES: 24 hrs per day 365 days a year
LOCATION: Bracknell, Berkshire
SYSOP: Gerald Janes
HOST MACHINE: 486 DX/2 66 and 386 PC's on a network
HOST SOFTWARE : Wildcat! 4.01 250 line Multiuser on a network, with D'Bridge front end mailer
SPECIAL INTERESTS: BBS Support for Wildcat!, TBBS, D'Bridge & BFE plus US Robotics SysOp offers plus IBM PC and Mac files
COMMENTS: Established for over 10 years. An ASP Approved BBS with CDROMs online plus free access to basic services incl free Internet Mail. Members of Fidonet, Internet & TheNet mail plus full Internet connection coming soon

NAME: **Hole Heffalump**
NUMBER: **01903 879896**
TIMES: 24HRs
LOCATION: Upper Beeding, Nr Worthing. West Sussex SYSOP: Simon Marshall
HOST MACHINE: IBM
HOST SOFTWARE: Remote Access 2.02+
SPECIAL INTERESTS: Sci-Fi, Red Dwarf, Fantasy, Cars and Bikes. BBS mainly interested in mail.
COMMENTS: The BBS has been designed for sinplicity of use. IE no Adverts etc, just stright to the main menu. Bluewave OLR supported. InterNet access.

NAME: **House of Ill Compute**
NUMBER : **01702 584337**
TIMES: 24hr
LOCATION: Southend-on-Sea, Essex
SYSOP: Lee Gibling & Harvey McCallum
HOST SOFTWARE: Wildcat! 4.0 MultiLine
COMMENTS: FREE, Modem speeds upto 28800, TheNet, UFONet, BBSNet, FidoNet: 2:254/225.3

NAME: **iBase**
NUMBER: **071 244 8824**
LOCATION: London
SPECIAL INTEREST: iBase is a free bulletin board service in London. As well as forums and a very easy to use shareware library there are online games, entertainment and information. One of the most exciting features is Farebase, a searchable database of discount air fares to destinations everywhere in the world. All the fares are valid, up-to-date and immediately bookable.
COMMENTS: Settings 8 data bits, one stop bit, parity none. Ansi emulation, line wrap on, echo off.

NAME: **Information Technology Exchange** (Cambridge).
NUMBER: **01223 501215**
TIMES: 24hrs
LOCATION: Cambridge
SYSOP: Tony Rolt
SPECIAL INTEREST: Files & Education
COMMENTS: In the region of 2 Gigs of PD/Shareware, will be specialising in Education, Electronics & Networking (Novell style)

NAME: **Ironbridge BBS**
NUMBER: **01952 676176**
TIMES: 24 hrs
LOCATION: Telford, Shropshire
SYSOP: Mr. Eddie Hulme
HOST MACHINE: PC
SPEEDS: 28.8k downto 1200 with Hayes OPTIMA 288 + FAX
HOST SOFTWARE: FD/RA/Bluewave/QWK
SPECIAL INTEREST Modems/comms/Hayes Tech Support Notes / Comments: FidoNet, Mercurynet, RaNet, Quicknet, Usenet, Internet email. Shareware and Public Domain. Largest Mail System in Shropshire. 700+ online mail areas + Usenet. Worldwide software retrieval for users.

NAME: **The I.T.E.C BBS**
NUMBER : **0223-501215**
LOCATION: Cambridge
TIMES: 24hrs
COMMENTS: 6+ Gigs of recent PD & Shareware, Internet email & Newsgroups, Fidonet, MusicNet, RaNet, Help & advice for novices, New users always welcome

NAME: **Lightning BBS** (London)
NUMBER: **(0181) 863-7623**
TIMES: 24 hrs
LOCATION: Harrow, NW London
SYSOP: David McGarry
SPECIAL INTERESTS: Specialises in GIF files, 5 CDROMs online.
COMMENTS: 300-28800 (USR V.34 DS modem)

NAME: **Mac Jungle BBS**
NUMBER: **01235 520507**
TIMES: 24hrs
SYSOP: Jules and Karyn Marshall
HOST SOFTWARE: Telefinder
SPECIAL INTEREST: Mac shareware

NAME: **Manchester File Library**
NUMBER: **0161 256 2220**
TIMES: 24 Hours a day 365 days a year
LOCATION: Manchester
SYSOP: Andy Fairbanks
HOST MACHINE: IBM PC Compat
HOST SOFTWARE: RemoteAccess 5 Node Pro Mail NETWORKS: Internet email/Usenet Newsgroups, FidoNet, RaNet, ChatNet, SBCNet, MercuryNet and VirNet OLMR support: BlueWave, JC-QWK and of course Point setups are available.
SPECIAL INTEREST: Home to Epic MegaGames & CD Rom User Group. DOOM utils, The latest shareware, one of the largest file libraries around.
COMMENTS: Excellent ANSI graphics (No garish colour schemes here), RIP graphics are also used here. Internet email and Usenet News (WWW via email is available) 6 CD-ROMs online as well as an excellent choice of latest releases.

NAME: **Me/2 <Meet You> BBS**
NUMBER: **0181 442 8560**
TIMES:24Hrs -ZMH
LOCATION:Stamford Hill, London
SYSOP:Andrwe Grillet
HOST MACHINE: home made 486DX2/66
HOST SOFTWARE: Binkley/2 + Maximus/2 on OS/2
SPECIAL INTERESTS: OS/2, Industrial Archeology
COMMENTS:Sysop has own printer drivers for WORD 5.x and WP5.1

NAME: **MKBBS**
NUMBER: **0908 234583** or **0908 695009**
TIMES: 24 hrs
SPECIAL INTEREST: We run a number of local conferences. We additionally provide Internet mail and Usenet news for users. Users are allowed to request Newsgroups of interest. We exchange messages with our internet provider ibmpcug 3 times a day using UUPC.
COMMENTS: We hold 65,000 files on-line either via CD-ROM or on our 2.5GB of disk space. MKBBS has been written in house in Borland Pascal for Windows. One of the few BBSs that is a Windows app. We run up to V32.turbo+ (21.6) and will be moving to V.34 as soon as the US Robotics V32.Turbo upgrade to V34 is affordable.

NAME: **ModSoft BBS**
NUMBER: **01702 552633**
TIMES: 24hrs
LOCATION: Southend, Essex
SYSOP: Dion Young
HOST MACHINE: AMIGA A1200
HOST SOFTWARE: TransAmiga
SPECIAL INTEREST: Files and Mail on many assorted topics
COMMENTS: Fidonet and CatNet

NAME: **Mostly Harmless**
NUMBER: **(01705) 614824/791916**
LOCATION: Havant, Hampshire
SYSOP: Lee Sanders
SPECIAL INTEREST: 100% Amiga only. 1.5Gigs Only, CD-ROM
350+ Mail Echos.
COMMENTS: VERY Popular Local Chat Echo Friendly Technically Minded Sysop.

NAME: **Multimedia Machine BBS**
NUMBER: **01204 370280**
TIMES: 24hrs
LOCATION: Bolton
SPECIAL INTEREST: Multimedia

NAME: **Nick's Nick**
NUMBER: **(01323) 648066** (modem)
VOICE: (01323) 732858 (voice support: 9am to 11.30pm)
TIMES: 24 hours
LOCATION: Eastbourne, East Sussex
SYSOP: Nick Jay
HOST MACHINE: Omni Digital 486DX-33 PC
HOST SOFTWARE: VFIDO and VBBS

MODEM: Courier HST Dual Standard Plus – all speeds to HST 14k4 and V32B SPECIAL INTERESTS: The Prisoner, CommUnity, VBBS Support, Echoes/Mail. COMMENTS: FidoNet, RANet, Mercury, VirtualNET and free netmail/E-mail. Carry offline mail readers, software for points or new SysOps. Very friendly experienced SysOp always willing to chat and help anyone.

NAME: **Oddballs Diner BBS**
NUMBER: **081 244 2919** 24hrs
LOCATION: London
SYSOP: Darren Maunders
SPECIAL INTEREST: Specialize in Mods and Demos
COMMENTS: Free calls to local Videotron Cable callers. Most colourful ANSI around. Mad Sysop!!! (It sez here).

NAME: **Ooh! BBS - London.**
NUMBER: **0181 395 3108/1028**
LOCATION: London
SYSOP: Peter Friedlos
SPECIAL INTEREST: Host of the BBSNet Echomail net (currently with 75 nodes) FidoNet, UFONet, MercuryNet and TheNet. FREE Internet email for all callers. 1.5 Gigabytes online. Games doors
COMMENTS: QWK Offline Mail. Speeds to VFC 28.8k. Points Welcome. Running Wildcat! 3.91 MultiLine BBS Software.

NAME: **Over The Wall BB**S
NUMBER: **01322-384209**
TIMES: 24 hrs
LOCATION: Dartford
SYSOP: Jon Hockley
HOST MACHINE: PC 486 DX 50
HOST SOFTWARE: Frontdoor/Remote Access
SPECIAL INTERESTS: Fidonet & Doors
COMMENTS: Ever been to prison? Try it NOW!!....

NAME: **Pacific Lightning**
NUMBER: **01622 692944**
TIMES: 24hrs
LOCATION: Maidstone, Kent.
SYSOP: Colin Spice
HOST MACHINE: IBM Compat. PC
HOST SOFTWARE: D'Bridge/RemoteAccess
SPECIAL INTEREST: All round
COMMENTS: CD-Roms, Online Games, Whole Fido Backbone Echo

NAME: **PC Soundtrack**
NUMBER: **0743 360287**
SYSOP: James Ball
COMMENTS: UK Support board fro Creative Labs. Six lines to V32

NAME: **PinPoint**
NUMBER: **0839 363708**
TIME: 24hours
LOCATION:London
SYSOP:Vincent Tillman
HOST: IBMPC
SPECIAL INTEREST: Technical Information, games and shareware.
COMMENTS: No subs, no registration, no questions. Full access from first call. Vast file base. Calls charged at 39p/min cheap rate, 49p/min all other times.

NAME: **PMG Support BBS**
NUMBER: **0789 414495** (Volce: 0789 297000)
SPEEDS: 14.400
TIMES: 24hrs
SPECIAL INTERESTS: The board contains file areas for the Amiga and the PC.. (the PC area is a bit tiny at the present but we are getting ANOTHER CD-Rom drive for this purpose!) We have the current Aminet CD online 24hrs a day and well over 200MB of files of all sorts on HD. Internet email and Usenet supported... plus we offer members the ability to FTP with email.
Other services include the ability to upload your graphics files for printing/plotting out onto large format media (up to A0)... Yes we are a graphics bureau too!
COMMENTS: Reach us on FidoNet: 2:253/171.0

NAME : **Primal Disorder**
NUMBER : **01628 74179**
TIMES : 24hrs
LOCATION : Maidenhead, Berkshire
SYSOP : Tim Mole
HOST MACHINES: Three system LAN – 486/sx33 (16mb ram 520mb HDD), 486/25 (240mb HDD), 386/dx40 (100mb HDD) Hayes 28k8 Modem
HOST SOFTWARE: Frontdoor 2.02, RemoteAccess 2.02+, Bluewave
SPECIAL INTEREST: PC Demo Scen /Leisure Related Stuff (games, music etc) Internet email address for all users.
COMMENTS: Best board in Maidenhead. Distribution Site for various people (Skyjump Team, Omicron, LiVE, Inertia Modplayer, Morgul Modplayer, AMBiANCE Music Crew). Friendly Sysop, The Best ANSI you've ever seen on a UK BBS! 20mb New files a week, online doors, various mail networks (SBCnet, TREKnet, WAPOW). Bluewave OLR.

NAME: **Quantum Data eXchange**
NUMBER: **0121 7070681**
TIMES: 24 hrs
LOCATION: Solihull, West Midlands
SYSOP: Paul Brownlow
HOST MACHINE: Amiga A3000
HOST SOFTWARE: Dialog Professional
SPECIAL INTEREST: Virtually Everything
COMMENTS: Mail Networks: Fidonet, Amiganet, Treknet, Incarnet, Mercurynet, Satnet. Over 7000 files online, incuding Aminet CDROM. Some PC file areas. Using USR V.

NAME: **Quantum Shuffle**
NUMBER: **01757 701785**
TIMES: 24hrs
LOCATION: Selby, North Yorks
SYSOP: Andrew Reid
HOST MACHINE: PC
HOST SOFTWARE: RemoteAccess 2.02+
SPECIAL INTEREST: Text Files, Windows Shareware.
COMMENTS: 2:2502/18 at FidoNet. Overy 5Mb of new file online each week, and over 60 message areas including the full YackNet backbone.

NAME: **Rainbows' End BBS**
NUMBER: **0181 4593440** (line 1) upto 28k8 VFC, **0181 8302069** (line 2) upto 9600 V32
TIMES: Line 1 – 24 hrs except ZMH
TIMES: Line 2 – 22:00-10:00
LOCATION: London
SYSOPS: David Bell / Dave Holden
HOST MACHINE: 386 DX-40
HOST SOFTWARE: RemoteAccess/FrontDoor
SPECIAL INTERESTS: Adult CUGS, Travel, Ecology, Techies Commts Now in its 5th year, Rainbow's End was among the first BBSes to use all of RA's stunning ansi graphics capabilities. Not so much a BBS – more a Work of Art.

NAME: **Scorpion Systems**
NUMBER: **01228 26478**
TIMES: 24hrs
LOCATION: Carlisle, Cumbria
SYSOP: Bill Searle
HOST MACHINE: 486dx2/66
HOST SOFTWARE: FrontDoor
SPECIAL INTEREST: Anything PC & Amiga
COMMENTS: FidoNet, TrekNet, RANet, 2gb disk, 2 CDs online, Internet on the way.

NAME: **Shades BBS**
NUMBER: **01670 787672**
LOCATION: Northumberland & Tyneside
HOST SOFTWARE: Mustang Wildcat!
SPECIAL INTEREST: <ASP> Shareware (Assn of Shareware Professionals)
COMMENTS:-Speeds to v32bis 14.4k Messages Confs: TheNet, BBSNet, UFOnet

NAME: **Shareware Support BBS**.
NUMBER: **01442 891109**
SYSOP: Adrian Mardlin
SPECIAL INTERESTS: This is currently a 5 line board running Wildcat. We provide Internet Email and Newsgroups, Fido, TheNet and ILink messaging. On the files side, we receive over 500MB of new files per month (yes, you did read that right! :-)

NAME: **Silicon Heaven**
NUMBER: **01626 834331**
TIMES: 10 PM to 6.30 AM
LOCATION: Bovey Tracey, Devon.
SPECIAL INTERESTS: Lots!
MAIL: FidoNet, Treknet, RAnet, Vimet, Mercurynet, Internet, Usenet. Comments: Needs a company to sponsor it otherwise its future is uncertain, call for info.

NAME: **Squaddies Retreat**
NUMBER: **01603 219462**
TIMES: 24hrs
LOCATION: Norwich, Norfolk
SYSOP: Col. Kelly
HOST MACHINE: Pentium PC
HOST SOFTWARE: RemoteAcces 2.02/Pro
SPECIAL INTEREST: Ex & Serving Servicemen BBS
COMMENTS: Fidonet, RAnet, Chatnet, Mercurynet, InterNet, - InterMail UK Sales and support.

NAME: **Staffordshire BBS**
NUMBER: **(01785) 824019**
TIMES: 20:00 to 08:00
LOCATION: Staffordshire
SYSOP: Dave Williams (2:2500/153.0)

NAME: **StateSide BBS**
NUMBER: **0181 220 7000** V22 - V32bis,
0181-220 7020 V32 - V34 HST/FAX
SYSOP: Brian Willis
COMMENTS: StateSide was originally set-up with the novice, and experienced user in mind, for the old hands, plain and quick text based menus are available. For the less experienced user, full colour ANSI graphic screens guide the user around the system. For those with RIP capability, there is a modest implementation also installed.

NAME: **Strange Phenomena Investigations BBS**
NUMBER:**01506 854696**
TIMES:10pm till 7.30am
LOCATION:Uphall , Broxburn , West Lothian , Scotland SYSOP:Mike Mitchell
HOST MACHINE:Pc 486 dx2-66
HOST SOFTWARE:Front door/Remote Access
SPECIAL INTERESTS:UFO's , and other strange phenomena COMMENTS:Also part of MUFONet the worlds largest ufo dedicated mail network.

NAME : **Stlvian Nights**
NUMBER: **01480 381232**
TIMES: 24Hrs
LOCATION: St Ives, Cambs
SYSOP: Ian McWilliams
HOST MACHINE: PC 486
HOST SOFTWARE: Frontdoor/Remote Access 2.02+
Interests : Networks, Graphics & Games
COMMENTS: Fidonet

NAME: **Telesystems Support BBS**
NUMBER: **01494 891903**
TIMES: 24hrs
LOCATION: Prestwood, Bucks
SYSOP: Glyn Pointon
HOST SOFTWARE: Wildcat! v4 Multi-Line 250
SPECIAL INTEREST: Wildcat! support site (Telesystems Ltd are the UK distributors of MSI's Wildcat!)
COMMENTS: Internet email, support conferences and file areas for Wildcat! and other MSI products, fax-on-demand service

NAME: **Telesubs Online**
NUMBER: **071 244 8824**
LOCATION: London
SPECIAL INTEREST: This a a free bulletin board service for people who work in the media. It was launched in August and the intention is to make it an arena for professional discussion and a marketplace for jobs and freelance work. Only genuine media people are allowed to register and gain full access to the board.
COMMENTS: Settings 8 data bits, one stop bit, parity none. Ansi emulation, line wrap on, echo off. Follow the onscreen hints to get to Telesubs.

NAME: **The Backyard Bulletin Board.**
NUMBER: **0181 424 2065**
TIMES: 24hrs
LOCATION: London
SYSOP: Anthony Brice
SPECIAL INTEREST: Barnet SlimeLite Bar
COMMENTS: Huge storage space with file areas covering all from Utilities and Comms, to Blitz, Amos, A64, PlaySid. Renders, Artwork, game fixes and all sorts more. Online Advertising service. Hard working and handsome Sysop. Point available for all Nets.

NAME: **The Black Hole**
NUMBER: **01302 761489**
TIMES: 24hrs
LOCATION: Doncaster, South Yorkshire
SYSOP: Fone Phreak
HOST MACHINE: PC
HOST SOFTWARE: RemoteAccess
SPECIAL INTEREST: ANSi
COMMENTS: FidoNet, IceNet, MercuryNet, 2Gigs, Free Access

NAME: **The Colosseum**
NUMBER: **01482 837475**
TIMES: 24Hrs
LOCATION: Hull
SYSOP: Damian Walker
HOST MACHINE: IBM PS/2
HOST SOFTWARE: FrontDoor/RemoteAccess 2.01
SPECIAL INTEREST: Games, Games, more Games
COMMENTS: Growing northern inter-BBS games hub

NAME: **The Cosmic Gerbil BBS**
NUMBER: **01253-859159**
TIMES: 24 hrs
LOCATION: Blackpool
SYSOP: Darren Wolfe
HOST MACHINE: 486DX2 66
HOST SOFTWARE: Frontdoor & WildCat! V4.01
SPECIAL INTEREST: Anything and everything! Raytracing, MODs, MIDs, pics...
COMMENTS: Blackpool's biggest BBS! 3.7gig online, Fidonet (2:250/221), TheNet, WildNet, BBSNet, Homenet - Something for EVERYONE! All free except phone bill!

NAME: **The Feline BBS**
NUMBER: **01673 857044**
TIMES: 24 hour
LOCATION: East Barkwith, Lincs
SYSOP: Andy Sayers
HOST MACHINE: PC 486DX/33. 3 hard drives, CDRom
HOST SOFTWARE: Remote Access 2.02 / FrontDoor 2.12
SPECIAL INTERESTS: Cats! Also help, advice and support for beginners
COMMENTS: The OS2 Internet file area (hobbes.cdrom.edu) available directly from our CDROM copy. This speciality CDROM is regularly updated and although held offline can be made available by either paging the Sysop, or if unavailable, a message can be left and files required from it can be left "on-hold" for later collection. Internet email and Usenet groups available to benefactors (those who make a small donation towards the BBS running costs.)

NAME: **The Field BBS**
NUMBER: **01706 868997**
TIMES: 24 hrs
LOCATION: Rochdale, Lancashire
SYSOPS: Peter and Tim Goddard
HOST MACHINE: IBM compatible PC
HOST SOFTWARE: Frontdoor/RA 2.02
SPECIAL INTEREST: General/VGA Planets
COMMENTS: FidoNet and Quicknet, Good Message Base, BWave & JCQWK OLRs, CD Rom On-line, Friendly Sysops, No Subs, No Ratios. All speeds up to 14,400 supported.

NAME: **The Gothic BBS**
NUMBER: **0509 237963**
HOURS: 20.00 - 08.00 ONLY!
SYSOP: Andrew Cunnington
SOFTWARE: VBBS 6.14
COMMENTS : 300 - 14,000 bps (V32bis, sorry no HST), V42/V42bis Error Correction/Compression Networks : VirtualNET @44509000. FidoNet 2:2503/310 now also MusicNet 808:501/111

NAME: **The Hellraisers BBS**
NUMBER: **0161 707 9962**
LOCATION: Manchester
SYSOP: Richard Dearden

NAME: **The Land of Oz BBS**
NUMBER: **(081) 851 4522**
LOCATION: South East London
SYSOP: Kevin Watt
COMMENTS: Huge File areas, CDRoms, Big Messagebase, Games, etc...

NAME:**The Mega BBS**
NUMBER: **0294-604833**
TIMES:24Hours
LOCATION:Saltcoats, Ayrshire, SCOTLAND
SYSOP:Bill Wells
HOST MACHINE:486,66Mhz PC network 66, 66, 50.
HOST SOFTWARE:RemoteAccess 2.02Pro 10Node
SPECIAL INTERESTS:Linux
COMMENTS:33,660+ files online

NAME: **The Motel**
NUMBER: **01203 372005**
TIMES: 23 Hrs (closed 0230 - 0330 for mail)
LOCATION: Nuneaton, Warks.
SYSOP: Nigel Bates
HOST MACHINE: Amiga A1200 Networked with an A1500
HOST SOFTWARE: DLG/TRAPDOOR
SPECIAL INTEREST: GFX/MODS/AGA Demos
COMMENTS: Fidonet connected. Hack and Slash (Fully Registered Version) online. 17 Bit CD-ROM online. *NO* Upload/Download Ratios!

NAME: **The Musicbox**
NUMBER: **01508 538510**
TIMES: 24 hours
LOCATION:Norwich, Norfolk
SYSOP: Gareth Watts
HOST MACHINE: 386 PC
HOST SOFTWARE: RemoteAccess 2.02+
SPECIAL INTERESTS:Music files & messaging for PC and Amiga COMMENTS: Full range of music related files and messages as well as .MOD and MIDI files. Support for the PC and Amiga based computers.

NAME: **The Rave!! BBS**
NUMBER: **01928 725538**
TIMES: 24hrs
LOCATION: Runcorn, Cheshire
SYSOP: Chris McLean
HOST MACHINE: PC
HOST SOFTWARE: RemoteAccess v2.02+/Frontdoor
SPECIAL INTEREST: Music + Graphics
COMMENTS: Fidonet/RANet/MercuryNet/QuickNet/InfiNet, 3Gb of PD, support for PC and Amiga. Internet email. Massive mail board!

NAME: **The Rowley Rag**
NUMBER: **01384 256961**
TIMES: 24 Hrs
LOCATION: Rowley Regis, West Midlands
SYSOP: Derek Coxon
HOST MACHINE: Dan 486 50Mz
HOST SOFTWARE: LoraBBS OS/2
SPECIAL INTERESTS: Mail & OS/2
COMMENTS:FidoNet 2:2500/76, OS2Net 81:440/10, SatNet 601:316/2
IncarNet 154:225/3, ChatNet 44:2520/1001, MercuryNet 240:355/9

NAME: **The Snakepit BBS**
NUMBER: **(01779) 470948**
TIMES: 22:00 - 07:00
LOCATION: Peterhead, Scotland
SYSOP: John Reilly
HOST MACHINE: Amiga A1200 pameted to A1500
HOST SOFTWARE: XENOUNK 1.95
COMMENTS: Large Message Base with Fidonet,Amnet,Sf-Net and Jedi-Net. Aminet CDROM always online.

NAME: **The Undiscovered Country**
NUMBER: **01689 830026**
LOCATION: Kent
SYSOP: Simon Gregson
COMMENTS:Lots of files to grab, lots of games to play, Echomail, FREE netmail, Bluewave & QWK offline mail.
ds of files especially .GIFs. Check them out.

NAME: **The Village BBS**
NUMB ER: **01232 602972**
LOCATION: Belfast
SYSOP: Harry Broadrick
TIMES: 24 hours
SPEEDS: To 21.6k HST D/S
HOST MACHINE: PC 486
HOST SOFTWARE: RA & FD
SPECIAL INTEREST: Files, Files, & more Files
COMMENTS: 12 CDs, all latest editions Online, another 2 coming soon, making a massive Filebase of over 9 Gigs of programs for the PC and Amiga user. 400 Mb of WADs and utilities for DOOM 1 & DOOM 2. A subscription of £1.00 per month is required to access CD files. FREE access to 800Mb of files on the hard drives and to all mail options & networks FidoNet, Mercury, Worldnet, Amiganet. Points welcome and supplied with all required software (PC) with easy to install utility on 2 HD disks, which will have you up and running and collecting mail within 10 minutes!

NAME: **Unicorn BBS**
NUMBER: **0191 513 0887**
TIMES: 24hrs
LOCATION: Seaham, Co. Durham
SYSOP: Bill McLaren

HOST MACHINE: 486 PC
HOST SOFTWARE: Portal of Power, Remote Access
SPECIAL INTEREST: Mail (connected to 7 networks + others soon)
COMMENTS: Over 700 Mail Echos. 1 CD of shareware always on line plus
8 others to chose files from. 300+mb of files on the hard drive including Dos,
Windows, OS/2 and Amiga areas.

NAME: **Universal BBS**
NUMBER: **(01734) 461286**
LOCATION: Reading, Berkshire
TIMES: 24hrs
SPEEDS: All to 28.8k (VFC)
HOST SOFTWARE: RA, FD
SPECIAL INTEREST: Chiefly PC, though Amigas supported
COMMENTS: Friendly Sysops – willing to help anyone who cares to
call. Points welcome to use Universal as a host for mail. 550mb online storage (HD).

NAME: **USS MegaByte – NCC 2907**
NUMBER: **01449 675967**
TIMES: 24 hrs
LOCATION: Stowmarket, Suffolk (East Anglia)
SYSOP: Matthew Peddlesden / Peter Peddlesden
SPECIAL INTEREST: Programming/Star Trek/Games
COMMENTS: All speeds up to V34 28800 (USR V.everything). Loads of shareware authors directly contactable here. Any info you want for Programming (including Games Programming). LATEST released games from Apogee, Epic etc. Access to Fidonet and TREKnet. BBS is completely free of charge.

NAME: **Warp Drive BBS**
NUMBER: **01772-629586**
TIMES: 24 hrs
LOCATION: Preston, Lancs
HOST MACHINE: Runs on a Fast 90Mhz Pentium with 16Mb Ram
SPECIAL INTERESTS: Amiga/PC/ATARI, Point support, 200+ file areas over 800mbs on-line, new files daily Internet Access/usenet Access. Private Internet addresses available for users & points
QWK/Bluewave/Siver Xpress OLR. Online Games. Online Anti-Virus Database
24Hrs
COMMENTS: 300-28800 Baud

NAME: **Woody's Node 1**
NUMBER: **01689 815931**
LOCATION: Orpington Kent
TIMES: 24hrs
SYSOP: Steve Woodmore
HOST MACHINE: AMIGA
HOST SOFTWARE: TRAPDOOR/TRANSAMIGA
SPECIAL INTEREST: TRANSAMIGA Support and registration site
COMMENTS: All R25 Backboned FidoNet echoes Mercury, Amiganet, and RA-net.

NAME: **Woody's Node 2**
NUMBER: **01689 815932**
TIMES: 24hrs
LOCATION: Orpington Kent
SYSOP: Steve Woodmore
HOST MACHINE: PC
HOST SOFTWARE: VFIDO/VBBS
SPECIAL INTEREST: Over 1500 mail areas, 1300 in full Colour!!!
COMMENTS: Virtualnet Full ansi colour mail Fido, Amiganet, Ra-net, Mercury, & Worldnet

NAME: **23rd Century BBS**
NUMBER: **01494 766666**
TIMES: 2000h-0800h (8pm to 8am)
SYSOP: Robin Curtis
LOCATION: Amersham, Bucks.
COMMENTS: FidoNet Node 2:252/325.0 TREKNet Node 107:1702/9.0 SF-Net Hub180:4022/0.0

Scotland

NAME: **Alba BBS**
NUMBER: **0141 880 7863 & 0141 880 7845**
TIMES: 24hrs
LOCATION: Glasgow
SYSOP: Donald Whannell
HOST MACHINE: PC
HOST SOFTWARE: Maximus
SPECIAL INTEREST: Astronomy
COMMENTS: Fidonet, 1Gb PD for PC, also support for Amiga, Atari & Apple Mac, no registration fees.

NAME: **Blue Lagoon BBS**
NUMBER: **0141 644 5429**
TIMES: 24 Hrs
LOCATION: Glasgow
SYSOP: Richard Weir
HOST MACHINE: PC 486SX
HOST SOFTWARE: FrontDoor/RemoteAccess
SPECIAL INTEREST: Message Areas/Internet E-Mail+NewsGroups Access/CD-ROM's
COMMENTS: FidoNet, RANet, MercuryNet, TonyNet, LionNet, IncarNet

NAME: **Cabbage Factory BBS**
NUMBER: **01779 838736**
TIMES: 24hrs
LOCATION: St. Fergus, Peterhead, Scotland
SYSOP: Harry Hopkins

HOST MACHINE: P.C.
HOST SOFTWARE: Wildcat, Wildmail, Frontdoor
SPECIAL INTEREST: Beginners welcome
COMMENTS: 5 Mail Networks, 12 CDs to choose from

NAME: **Chaos Engine BBS**
NUMBER: **01346 510727**
TIMES: 24hrs
LOCATION: Fraserburgh, Scotland
SYSOP: Mike Henderson
HOST MACHINE: Amiga
HOST SOFTWARE: Trapdoor/Excelsior Professional
SPECIAL INTEREST: Imagine Objects & Textures
COMMENTS: Over 400 Message areas in Fidonet, Mercury & Amnet. Fidonet points supported. Shared chat area with Heart of Lothian BBS.

NAME: **Firelink BBS**
NUMBER: **01698 854685**
TIMES: 24 hrs
LOCATION: Bothwell, Glasgow
SYSOP: Donald Kerr
HOST MACHINE: 486DX266 CD 300-28k8
HOST SOFTWARE: Remote Access
SPECIAL INTEREST: General and Fire Brigades
COMMENTS: Fidonet, Aqualink, Shareware & Public Domain.

NAME: **Genesis BBS**
NUMBER: **01786 825368**
LOCATION: Stirling, Scotland
SYSOP: Steven Ross-Watt
HOST MACHINE: 486DX/2 66Mhz
HOST SOFTWARE: Remote Access
SPECIAL INTEREST: Doom Wads. Currently upto 600 online at one time. Masses of Gifs and Mods, Midi files.
COMMENTS: It has a Gig online with speeds of upto 28.8k. We are not at present members of any mail networks but hope to be soon.

NAME: **Heart of Lothian Amiga BBS**
NUMBER: **01620 826004**
TIMES: 24hrs
LOCATION: Haddington, East Lothian, Scotland
SYSOP: Andrew Dowds
HOST MACHINE: AMIGA
HOST SOFTWARE: TRAPDOOR/Excelsior Pro
COMMENTS: Vast file area, Aminet CD rom online, and more CD rom
drives to come, Over 600 message areas in 4 networks, very lively local chat echo.

NAME: **Punjab Express.**
NUMBER: **0131 467 4379.**
TIMES: 24hrs.
LOCATION: Edinburgh, UK.
SYSOP: Mohammed Amjad.
HOST MACHINE: PC.
HOST SOFTWARE: RemoteAccess/Frontdoor.
SPECIAL INTEREST: All interests.
COMMENTS: Fidonet, MercuryNet.

NAME: **The Dockyard Gate**
NUMBER: **0383 410704**
TIMES: 24hrs
LOCATION: Inverkeithing FIFE
SYSOP: Geoff Bassett
HOST MACHINE: PC
HOST SOFTWARE: FD/RA
SPECIAL INTEREST: Programming
COMMENTS: FidoNet, Stormnet, Treknet, Pascalnet, Musicnet and Amnet.

Wales

NAME: **Backroom/2**
NUMBER: **01222 733093**
TIMES: 22:00-07:30 ex. ZMH
LOCATION: Cardiff, SOUTH WALES
SYSOP: Martin Davies
HOST MACHINE: IBM PC
HOST SOFTWARE: LoraBBS-OS/2 v2.40b3
SPECIAL INTEREST: OS/2
COMMENTS: FidoNet, OS2Net, DragNet, YackNet. Over 2600 OS/2 related files available from first call. Chatty, helpful SysOp - why not page?

N Ireland

NAME: **A-Central**
NUMBER: **0232 710960**
TIMES: 24 hours
LOCATION: Belfast
SYSOP: Gavin Hamil
HOST MACHINE: Amiga
SPECIAL INTERESTS: Amiga stuff
COMMENTS: Check your grammar – extra picky sysop lives here.

NAME: **Heart of Gold**
NUMBER: **01247 274919**
TIMES: 24 hours
LOCATION: Bangor, N. Ireland
SYSOP: Colin Turner
HOST MACHINE: PC
SPECIAL INTERESTS: Astronomy, Comms_mags echo

NAME: **Rodina Station**
NUMBER: **01232 492320**
TIMES: 24hr
LOCATION: Belfast, N. Ireland
SYSOP: Clive Richardson
HOST MACHINE: 486DX PC
HOST SOFTWARE: Maximus/2 & BinkleyTerm/2
SPECIAL INTERESTS: OS/2, TCP/IP software, text files.
COMMENTS: FidoNet, TrekNet, OS2Net, WarpSpeed, IncarNet, AcaNet,
StormNet, etc. Free. Latest Hobbes OS/2 cd online. Points very welcome. USR V32Turbo.

NAME: **The Steam Packet**
NUMBER: **01247 472934**
TIMES: 23.00 to 08.00
LOCATION: Bangor, N. Ireland
SYSOP: Barry McGregor
HOST MACHINE: PC 486DX-33
HOST SOFTWARE: FD.RA.202
SPECIAL INTEREST: Batch Files
COMMENTS: Fidonet mercury, PD, subscriber to P.S.L 1 a month

Eire

NAME: **Exec BBS**
NUMBER: **+353 61 229998**
COMMENTS: Speeds up to 28k, running on RoboFX with full GUI interface (not RIPterm), 256 colours, online GIF pre-viewing, over 1GB of shareware and PD software available for download, Silver Express OLR, no membership or registration fees at present, no upload/download ratios - just good clean fun

NAME: **Spartacus BBS**
NUMBER: **+353 40 33161**
TIMES: 24hrs
LOCATION: Arklow, Republic of Ireland
SYSOP: Barry Kingston-Wyatt
HOST MACHINE: 386DX-40
HOST SOFTWARE: RA 2.02+ and FD 2.12+
SPECIAL INTERESTS: Aids Information, Regional Host for Aqualink Network
COMMENTS: Many File and Message Areas covering a wide variety
of topics, CD-ROMS, FREE ACCESS. Max Speed 14K4 (soon 28K8) FidoNet 2:263/404. Friendly & helpful Sysops. Points Welcome.

Subscription Boards

Note: These boards either require a yearly subscription, or allow downloads on premium rate lines. Please dial-in for more specific details – this will not cost anything more than a normal telephone call.

NAME: **GamesNet**
NUMBER: **01222 362361**
TIMES: 24hrs
SYSOP: Michael Clark
COMMENTS: The UK's FIRST DOOM multi-player BBS Access
COST: Approx £10 per month

NAME: **Gates of the Underworld**
NUMBER: **081 813 5003/ 5618/ 5641/ 5762/7633/5644/5796**
TIMES: 24hrs
LOCATION: London
SYSOP: Jim Kenyon/Sean Dempsey
HOST MACHINE: PC
HOST SOFTWARE: Remote access pro
SPECIAL INTEREST: Fast BBS with NO CDs online, but 8Gb on-line, Zip compression, 14.4 - 28.8 modems, internet / fidonet mail (free) Apogee / Epic Games, over 1,400 Doom I and II add-ons, 16 nodes.

NAME: **Worldlink BBS Limited**
NUMBER: **01422 824949**
TIMES: 24hrs
LOCATION: Halifax, West Yorkshire
SYSOP: Jon Moorhouse
HOST MACHINE: PC
SPECIAL INTEREST: User friendliness
COMMENTS: ASP Approved BBS. Five nodes open to users, we pride ourselves on the quality of the file areas not just the quantity. 5 Gb plus CD-ROM, modem speeds 2400 to 28,800, full-time sysops and on-line help all available.

NAME: **Worldlink BBS Limited**
NUMBER: **01332 830362**
TIMES: 24hrs
LOCATION: Derby
SYSOP: John Kirkman

WANTED

Would you like your BBS added to the list? This listing is currently a free service for all interested Sysops. We won't include boards from any copyrighted lists without asking permission first. Send your details (in an identical format to that used below) directly to Fido address 2:443/13.4 or johnk@infosys2.thegap.com. Or via snailmail using the following coupon, or copy of it:

NAME OF BBS:
MODEM NUMBER:
VOICE NUMBER (for I&CT's use only):
LOCATION:
TIMES:
SYSOP:
SPECIAL INTERESTS:
COMMENTS:

If your board is no longer working, please let us know immediately so that we may remove it from the list. Please note that boards not sent to us in the suggested format won't be included!

DISCLAIMER:

Internet and Comms Today cannot be held liable or responsible for the accuracy or otherwise of this list. If we have made a mistake, we will be happy to correct it. We cannot accept responsibility for the content of the Boards listed here – we accept all submissions in good faith.

Send us details!

April

If you'd like your BBS included here, please fill in the following, cut it out, and send it to BBS Watch, Internet and Comms Today, Paragon Publishing, Durham House,
124 Old Christchurch Road, Bournemouth, BH1 1NF.

NAME OF BBS: .....
MODEM NUMBER: .....
VOICE NUMBER (for I&CT's use only):.....
LOCATION: .....
TIMES: .....
SYSOP:.....
SPECIAL INTERESTS: .....
COMMENTS:.....

online

the Directory

It's the Directory, Britain's most comprehensive guide to what's online! If you are looking for a particular site on the Internet and can't find the information here, try finger yanoff@alpha2.csd.uwm.edu for Scott Yanoff's own list of Internet resources. If there are sites which have expired, please let us know by emailing direct@itoday.demon.co.uk

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68 Business and Finance
68 Games and Sport
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70 Leisure and Travel
70 Public Affairs and Media
71 Nature, Science and Technology
73 Reference

Arts & Entertainment

Art and Design

ArchiGopher at the University of Michigan
The ArchiGopher is dedicated to all aspects of architecture and design. As well as a vast array of architectural information and images, there are also images of Kandinsky paintings and samples of the work done by the University CAD group.
- Internet: Gopher libra.arch.umich.edu

One of the images from the University of Michigan's CAD department.

Baroque art and architecture
An exhibition of a wide range of Baroque and Renaissance art and architecture including a "Rome Reborn" exhibit featuring works from the Vatican library. There is also a wide range of texts relating to Renaissance art and culture.
- Internet: Gopher gopher.virginia.edu

Mona Lisa
Download a digitised version of the world's most famous smile from Augsburg college in Minneapolis. You can also find pictures of Reagan and Bush here, if that's the sort of thing you're interested in.
- Internet: FTP aug3.augsburg.edu
  Path: /files/jpeg/monalisa.jpg
- WWW: Le Web Louvre,
  http:// mistral.enst.fr/~pioch/louvre

OTIS (Operative Term is Stimulate)
Pictures, collages, raytraces, digitised photos and other assorted artwork from the OTIS project at the University of North Carolina.
- Internet: FTP sunsite.unc.edu
  Path: /pub/multimedia/pictures/OTIS/

Graphics images
- Usenet: alt.binaries.pictures.fine-art.graphics
- WWW: Strange Interactions, http://amanda.physics.wisc.edu/show.html
- WWW: ArtSource, http://www.uky.edu/Artsource/artsourcehome.html

Fine Art discussion forum
- Usenet: rec.arts.fine
- WWW: Fineart Online, http://www.msstate.edu/Fineart_Online/home.html

Global Access Inc
A gallery of pictures covering many subject areas, you can download prints of any image you particularly desire.
- WWW: http://www.mgainc.com/Art/HomePage.html

Online Gallery
- WWW: http://amanda.physics.wisc.edu/show.html

H.R. Giger Gallery
A collection of Giger artwork from the man famed for his Alien creation.
- WWW: http://heiwww.unige.ch/art/Giger

Authors

Douglas Adams
- Mail: adamsd@cerf.net
- Usenet: alt.fan.douglas-adams

Lewis Carroll
- Internet: FTP nic.funet.fi/pub/doc/literary/etext/alice.txt
- Internet: FTP nic.funet.fi/pub/doc/literary/etext/jabber.txt etc

Charles Dickens
- Internet: FTP nic.funet.fi/pub/doc/literary/etext/carol.txt etc

(In fact nic.funet.fi has complete works by a great range of authors)

Terry Prachett
- FidoNet: PRATCHETT
- Usenet: alt.fan.pratchett

Books

Big Dummy's Guide to the Internet
This humorous guide to Net survival can be found in various archive sites, among them the Electronic Frontier Foundation. This archive site also has a collection of hacker-related material such as Phrack, and a complete collection of the back issues of Computer Underground Digest.
- Internet: FTP ftp.eff.org
  Path: /pub/EFF/papers/big-dummys

Book reviews
- Internet: FTP csn.org
  Path: /pub/alt/books/reviews/
- Usenet: alt.book.reviews

Books from the Wiretap
- Internet: FTP ftp.spies.com
  Path: /books/

Poems and Prose
- FidoNet: PROSE&VERSE

Online Book Initiative
- Internet: Gopher world.std.com
- Choose: -> OBI The Online Book Initiative

Roswell Electronic Computer Bookstore
- Internet: Gopher nstn.ns.ca
- Choose: -> NSTS Electronic Shopping Mall -> Roswell Electronic Computer Bookstore

Classical Music

Classical & Traditional music
Classical music newsgroups
- Usenet: alt.fan.shostakovich
- Usenet: rec.music.classical
- Usenet: rec.music.early
- Usenet: rec.music.classical.performing

Celtic music newsgroup
- Usenet: rec.music.celtic

Folk Music Archives
- Internet: Gopher gopher.uwp.edu
- Choose: -> Music Archives -> Folk

Compact Disks
- FidoNet: CD_ECHO

Comics and Cartoons

Anime
If your interests run to Dominion, Gunhead, Akira or Manga stuff in general, you'll probably find something to interest you here. Check out the appropriate newsgroups too, for further information.
- Internet: FTP ftp.tcp.com
  Path: /pub/anime/Images/

- Usenet: rec.arts.anime.stories
- Usenet: rec.arts.manga
- FidoNet: ANIME

Disney
If you're a Donald Duck fan, or you want to know more about Minnie Mouse, check out this FAQ, which tells you all you need to know.
- Internet: FTP rtfm.mit.edu
  Path: /pub/usenet/news.answers/disney-faq/

Dr.Fun
Dr.Fun is "the first daily cartoon on the Internet", and can be found (among other places) at panix.com.
- Internet: Gopher gopher.panix.com
- Choose: -> New York Art Line -> Images and Imaging Software -> Art & Images (Texas tech. U) -> Dr.Fun

Comics and cartoons
- Usenet: alt.comics.peanuts

Humour

Fun
Having fun is a very serious thing in all walks of life, and the Internet is no exception. To find out just how much fun is available on the Net, take a look at the Big Fun List.
- Internet: FTP owl.nstn.ns.ca
  Path: /pub/netinfo/bigfun
- Internet: finger conan@access.digex.net
- WWW: Dr. Fun Page, http://sunsite.unc.edu/Dave/drfun.html

Joke collections
Do you find your after-dinner conversations lacking that 'je ne sais quoi'? Knowing the right joke can be just the thing you need. Just about every category of joke is catered for on the Net, and they're pretty easy to find too
- Internet: Gopher ftp.spies.com
- Choose: -> Wiretap Online Library -> Humour -> Jokes
- Internet: Gopher uts.mcc.ac.uk
- Choose: -> Gopher Services -> The Joke File
- Usenet: alt.tasteless.jokes
- Usenet: rec.humour
- Usenet: rec.humour.funny
- FidoNet: PUNCH
- FidoNet: PYTHONESQUE

One dimension rendering
If you find 3-D rendering to be a bit of a drag, and even 2-D imaging is getting you down, check out the discussion in the newsgroup devoted to a single point.
- Usenet: alt.1d

Practical jokes
If you find it amusing to cause others distress, discomfort or actual physical suffering, check out this text of some of the best practical jokes ever perpetrated. Check out the corresponding newsgroup for up-to-the-minute japes.
- Internet: FTP elf.tn.cornell.edu
  Path: /shenanigans/
- Usenet: alt.shenanigans

Cool Site of the Day
Changes on a daily basis.
- WWW: http://www.infi.net/cool.html

Music

Techno, ambient and rave music
Check out this site for information on rave locations, and flyer pictures. There's also information on drug problems and information for techno and ambient musicians, including sound samples from old analogue kit and song construction data.
- Internet: Gopher hyperreal.com
- WWW: http://techno.stanford.edu
- FidoNet: MUSIC
- FidoNet: NEWMUSIC
- WWW: Computer Music Journal, ftp://mitpress.mit.edu:/pub/Computer-Music-Journal/CMJ.html

Acoustic Guitar Archive
Play that geetar and appear on 'Unplugged'.
- Internet: FTP ftp.acns.nwu.edu
  Path: /pub/acoustic-guitar/

Bagpipes
- Internet: FTP cs.dartmouth.edu
  Path: /pub/bagpipes/

Music Archives
- Internet: FTP ftp.uwp.edu
  Path: /pub/music/

Rock And Pop

Elvis Presley guide
A guide to his life and music, includes pictures and a tour of Gracelands.
- WWW: http://tamsun.tamu.edu/~ahb2188/elvishom.html

Warner Brothers Web
Home of the Warner Music Co. and their legion of stars. You can get biogs, album listings and sound samples.
- WWW:http:www.iuma.com/Warner/html/

Sony Music site
Works on the same principle as the Warner site but the information included is about Sony artists (obviously).
- WWW: http://www.music.sony.com

Thomas Dolby home page
- WWW: http://kspace.com/KM/spot.sys/Dolby/pages/home.html

Internet Underground Music Archive
Listen to, watch or buy your favourite artist's video or record.
- WWW: http://www.southern.com

Yello home page
- WWW: yello.space.net/yello

New ways to Noise
- WWW: http://www.maires.co.uk/nw2n

How to get to where you want to go

Please note that this is a very brief guide – please follow the full guides in this and other issues of Internet and Comms Today. Also, the exact operation of telnet and FTP may differ depending upon which computers you are using. Please also remember not to logon to certain computers (ones with edu after them, for instance) when students or other workers are likely to be using them, as doing so will slow down access for them.

If the entry has Internet: telnet next to it:

Internet: `telnet zippy.ucla.edu 4000 Login: hello`

Telnet is a program that allows you to connect to an Internet computer, as if you were actually sitting at a keyboard in the building where it is located. Use the telnet program (provided by your Internet service provider). Run the program. If successful, you should see the telnet prompt – it looks like TELNET> or TELNET:.

Find out the address – it should be listed after the Internet: telnet bit in this Directory. Type: open <address>. The address will be given in the entry. If there is a space and a number as part of the address, please include it. Follow the on-screen instructions.

When you are asked to LOGIN, use the ID listed, or if there isn't one, just press RETURN. When you are asked for your password, use the one listed, otherwise if there isn't one, just press RETURN. If you're asked about which terminal to use, say VT100.

If the entry has Internet: ftp next to it:

Internet: `ftp ftp.zippy.ucla.edu Path: /pub/`

FTP is a program which allows you to copy or fetch files from an Internet computer to your own. Use the FTP provided by your service provider. Run the program. Type: open <address>. The address should be listed next to the Internet: ftp bit in the Directory.

When asked to LOGIN, type ANONYMOUS. When asked to give your password, type your own e-mail address, i.e. something like ralph@my_place.demon.co.uk. You should now be connected. Now go to the directory listed in the guide.

If the entry has Usenet next to it:

Usenet is a section of the Internet which deals with the latest news, debates and so on. If you are a new user, please do not try to do anything more than read it at this stage. You will need a newsreader program before you can interact with the newsgroups.

Please refer to your newsreader manual for full information on how to access newsgroups.

If the entry has FidoNet next to it:

FidoNet is a network of bulletin boards. You will need to ask your local FidoNet Sysop to provide you with the Fido echo if it isn't already listed.

If the entry has Email next to it:

You will need to email the Sysop listed to ask for access before you are allowed on their system. Please follow the instructions listed in the Directory entry. i.e. If the entry reads: Internet: email listserv@robot.ucla.edu – In message, write sub stuff <your full name>, do the following:

- Prepare an email message to be sent to listserv@robot.ecla.edu.
- Put in the email message SUB STUFF JAMES PARKER if that's your name. Don't write anything else.
- If the Directory entry says something like ASK TO SUBSCRIBE, do just that. Write a short note asking to join. Don't use the approach outlined in the point above.
- You many be asked to provide your email address as opposed to your full name.
- To unsubscribe, write UNSUBSCRIBE instead of SUB. If the entry said ASK TO SUBSCRIBE, then write a note asking to be taken off the mailing list instead.

If the entry has WWW next to it:

The World Wide Web (WWW) is a collection of interlinked pages which can display pictures or play sounds or even moving video.

To access a World Wide Web page you need a program called a Web browser, the best-known of which is Mosaic (and now Mosaic Netscape) which is available from most FTP sites. You can also use programs such as Lynx, which is found on the CIX system.

online

Rock and Pop Newsgroups

- Usenet: alt.exotic-music
- Usenet: alt.music.ebm (electronic body music)
- Usenet: alt.music.hardcore
- Usenet: alt.music.ska
- Usenet: alt.rock-n-roll.hard
- Usenet: alt.rock-n-roll.metal
- Usenet: alt.punk
- Usenet: alt.rap
- Usenet: alt.rave
- Usenet: rec.music.folk
- Usenet: rec.music.indian
- Usenet: rec.music.industrial
- Usenet: rec.music.progressive
- Usenet: rec.music.reggae
- Usenet: rec.music.makers.bands

(Check out the alt.fan newsgroups too, for pointers to info on your favourite bands)

TV and The Movies

Sitcom info
- Internet: Gopher info.mcc.ac.uk
- Choose: -> Miscellaneous -> The definitive list of UK sitcoms

TV & movie archives
- Internet: FTP quartz.rutgers.edu
  Path: /pub/tv+movies/
- Internet: FTP nic.funet.fi
  Path: /pub/culture/tv+film/

UK television information
- Internet: Gopher uts.mcc.ac.uk
- Choose: -> Gopher Services -> Useful UK Television Related Addresses
- WWW: Cardiff's Movie Database http://www.cm.cf.ac.uk/Movies/moviequery.html

Red Dwarf
If you enjoy Red Dwarf so much that you wish to discuss it with other smeg-heads, check out this newsgroup.
- Usenet: alt.tv.red-dwarf
- FidoNet: SMEG

Max Headroom
- WWW: Network 23, http://net23.com/

MTV Oddities
- WWW: http://mtvoddities.viacom.com/

Pulp Fiction
- WWW: http://www.musicbase.co.uk/movie/pulp
- Usenet: alt.fan.tarantino

Tim Burton
- Usenet: alt.movies.tim-burton

Kenneth Branagh and Emma Thompson
- Usenet: alt movies.branagh-thmpsn

Science Fiction

Discussion newsgroups
- Usenet: rec.arts.sf.science
- Usenet: rec.arts.sf.reviews
- FidoNet: F&SF.UK
- FidoNet: FANTASY.281

Fandom newsgroups
- Usenet: alt.fandom.cons
- Usenet: alt.fan.pern
- Usenet: alt.fan.piers-anthony
- Usenet: alt.fan.pratchett
- Usenet: rec.arts.sf.fandom

Fantasy, sci-fi and horror info
- Internet: Gopher gopher.panic.com

Sci-fi archives
- Internet: FTP ftp.spies.com
  Path: /Library/Media/Sci-Fi/

Star Trek archives
- Internet: FTP ftp.uu.net
  Path: /doc/literary/obi/Star.Trek.Stories
- FidoNet: STARTREK

Startrek conference web page
- WWW: http://metaverse.com/startrek/index.html
- WWW: http://www.kli.org/

Computers & Software

Amiga

Amiga Archives
- Internet: FTP wuarchive.wustl.edu
  Path: /systems/amiga/
- Internet: Gopher gopher.eunet.sk
- Choose: -> Archive of EUnet Slovakia -> Amiga Archive
- Usenet: alt.amiga.demos
- Usenet: alt.amiga.slip
- Usenet: alt.comp.sys.amiga.advocacy
- Usenet: alt.comp.sys.amiga.announce
- Usenet: alt.comp.sys.amiga.applications
- Usenet: alt.comp.sys.amiga.cd32
- Usenet: alt.comp.sys.amiga.audio
- Usenet: alt.comp.sys.amiga.*
- Usenet: comp.binaries.amiga
- Usenet: comp.sys.amiga.datacomm
- Usenet: comp.sys.amiga.eulations
- Usenet: comp.sys.amiga.misc
- Usenet: copy.sys.amiga.*
- Usenet: amiga.x11
- FidoNet: AMIGA_UK
- FidoNet: AMIGA_MAGS
- FidoNet: AMIGA_INT
- FidoNet: AMIGASOFT
- FidoNet: AMIGA_COMMS
- FidoNet: AMIGA_PROG
- FidoNet: AMIGA_VIDEO
- FidoNet: AMY_TECH
- FidoNet: AREXX

Graphics and Design

Graphic images
This is a very popular European archive site that has a very wide selection of graphics files in GIF and JPEG formats. Logging in as "anonymous" also gives you access to a diverse collection of documents, ranging from the Necronomicon and the Voynich Manuscript to stuff about flight simulators.
- Internet: FTP nic.funet.fi (login as "pictures")
  Path: /pub/pics/

Greta Garbo
Pictures of the great Garbo, from the finnish archive server that bears her name. You can also find here various utilities and screensavers.
- Internet: FTP garbo.uwasa.fi
  Path: /garbo-gifs/

Computer Music and Sound

Amiga Samples
- Usenet: comp.sys.amiga.audio
- FidoNet: AMIGA_MUSIC

Sound samples
If you're looking for sound samples in Sun and NeXT formats, try the Athena server and the San Diego State University. If you have some obscure samples yourself, have a look in the /sound_requests/ directory – someone, somewhere may be desperate for your sample of the death cries of the Venezuelan tree frog.
- Internet: FTP athena.sdsu.edu
  Path: /sounds/
  Path: /pub/sound_requests/

Makin' Waves Studios
Offers five 'novelty Australian sound files' for you to download and use in Windows
- WWW: http://cyberzine.org/html/Waves/wavepage.html
- Email: kjones@adam.com.au

Computer News

EFFector Online and EFF News
- Internet: FTP ftp.eff.org
  Path: /pub/EFF/newsletters/

OS/2
OS/2 WWW HomePage
- WWW: http://www.mit.edu:8001/activities/os2/os2world.html

Salford Uni OS/2 Info Service
- WWW: http://www.iti.slaford.ac.uk/os2power/os2power.html
- FidoNet: OS2
- FidoNet: OS2BBS
- FidoNet: OS2BEGIN
- FidoNet: OS2CDROM
- FidoNet: OS2COMM
- FidoNet: OS2DOS
- FidoNet: OS2GAMES
- FidoNet: OS2DB
- FidoNet: NI_OS2

Computer Shopping

Marketbase
- Internet: Gopher mb.com Electronic Shopping Mall
- Internet: Gopher nstn.ns.ca
- Choose: -> NSTS Electronic Shopping Mall
- Email: Send email to: taylor@netcom.com with Subject "send mall"
- FidoNet: BUY

Hacking and Security

Security Gopher at the University of Hamburg
- Internet: Gopher gopher.informatik.uni-hamburg.de

Public Key encryption
A couple of newsgroups relating to the use of public key encryption, and information on how to obtain the notorious PGP "Pretty Good Privacy" encryption program.
- Usenet: alt.security.keydist
- Usenet: alt.security.pgp

Security archives
- Internet: Gopher quartz.rutgers.edu
- Choose: -> Computer Sources, Documentation -> security

IBM PCs, DOS

Software archives
- Internet: Gopher micros.hensa.ac.uk
- Internet: FTP wuarchive.wustl.edu
  Path: /systems/ibmpc/
- Usenet: alt.binaries.warez.ibm-pc
- Usenet: comp.binaries.ibm.pc.*
- Usenet: comp.sys.ibm.pc.*
- FidoNet: IBM
- FidoNet: OS/2

Macintosh

Software archives
- Internet: FTP oak.oakland.edu
  Path: /pub2/macintosh/
- Internet: FTP ftp.uu.net
  Path: /systems/mac/
- Usenet: alt.sources.mac
- Usenet: comp.binaries.mac
- Usenet: comp.sys.mac.*

Multimedia

Sunsite Multimedia Archives at the University of North Carolina
- Internet: FTP sunsite.unc.edu
  Path: /pub/multimedia/
- WWW: WaxWeb, http://bug.village.virginia.edu:7777

Science and Engineering

General science
- FidoNet: SCIENCE

Optical computing
Find out what's happening in the world of optical computing research at the Colorado State University Optical Computing Lab. Download documents and reports relating to photonics.
- Internet: Gopher sylvia.lance.colostate.edu

Software

Silicon Graphics & Sun Workstation utilities
At the North Arizona University, you can find a wide range of software utilities for nice, expensive workstations that, although public domain, are not widely available anywhere else.
- Internet: FTP ftp.nau.edu
  Path: /pub/

Software – huge piles of it
There is a huge range of software for a wide range of platforms available at the University of Vaasa in Finland. There is also quite a bit that can be found at the Washington University archives. Flick through and find everything to turn your machine into a boy racer!
- Internet: FTP garbo.uwasa.fi
  Path: /mac/
  Path: /next/
  Path: /pc/
  Path: /unix/
  Path: /windows/

Unix

GNU Archives
- Internet: FTP aeneas.mit.edu
  Path: /pub/gnu/gcc-2

Hensa Archives
- Internet: Gopher unix.hensa.ac.uk

Windows

Utilities archive
- Internet: FTP ftp.cica.indiana.edu
  Path: /pub/pc/win3/
- Internet: FTP wuarchive.wustl.edu
  Path: /systems/ibmpc/win3/

Emwac
Free Windows NT software for running Web and Gopher servers.
- WWW: http://emwac.ed.ac.uk/html/top.html

Anti-Piracy Agencies

Software Publishers Association
Were you in cyberspace when the last piracy scandal erupted?
Did you see anyone acting virtually suspiciously? If so, you'd better email the SPA then, like a good Net citizen should.
- Mail: 74431.3233@compuserve.com

Acorn

Acorn computers
- FidoNet: Archimedes
- FidoNet: ARCNET
- FidoNet: ARCCOMMS
- FidoNet: ARCPROG
- FidoNet: ARCBINKLEY
- FidoNet: BBC

Virus Protection

Virus protection
- FidoNet: VIR_AMI
- FidoNet: VIR_MCAF
- FidoNet: VIR_OS2
- FidoNet: VIR_PROG
- FidoNet: VIR_TEXT

Telecoms & Electronics

BBS and Net info

Archie sites
If you don't have local access to Archie, telnet to one of the public access Archie sites, and look for the files you need.
- Internet: telnet archie.mcgill.ca
- Internet: telnet archie.funet.fi
- Internet: telnet archie.au
- Internet: telnet archie.cs.huji.ac.il
- Internet: telnet archie.doc.ic.ac.uk
- Internet: telnet archie.sura.net
- Internet: telnet archie.unl.edu
- Internet: telnet archie.ans.net
- Internet: telnet archie.rutgers.edu

BBS newsgroups
If you need information on various BBSs around the world check out these newsgroups:
- Usenet: alt.bbs.ads
- Usenet: alt.bbs.internet
- Usenet: alt.bbs.lists
- Usenet: alt.bbs.lists.d

December list
A list of information sources on the Internet.
- Internet: FTP ftp.rpi.edu
  Path: /pub/communications/internet-cmc

Unix public access sites
If, for some reason you want to practise using Unix, but don't actually have access to a Unix box, you can telnet onto one of the publicly accessible Unix sites on the Internet.
- Internet: telnet nyx.cs.du.edu
  Login: new
- Internet: telnet hermes.merit.edu
  Which host: um-m-net enter "g" for guest
  Login: newuser

WAIS servers
If you don't have direct access to WAIS (Wide Area Information Service) on your local machine, telnet to a site that does.
- Internet: telnet quake.think.com
- Internet: telnet nnsc.nsf.net
- Internet: telnet wais.funet.fi
  Login: wais

World-Wide Web servers
In a similar way to WAIS, if you don't have WWW on your local system, telnet to the guys who do.
- Internet: telnet info.cern.ch
- Internet: telnet eies2.njit.edu
- Internet: telnet vms.huji.ac.il
- Internet: telnet info.funet.fi
  Login: www

Web publishing guides
- WWW: http://www.webcom.com/html/

Big Boards

Launchpad BBS
This is a very well featured BBS, which is particularly friendly to new users. It offers complete network news, as well as access to WAIS, Gopher and a range of other information systems. It's well worth a look if the only Internet access you have is via telnet.
- Internet: telnet launchpad.unc.edu
  Login: launch

Phantom
Another BBS system – goodness knows what goes on here.
- Internet: telnet phantom.com

Cybernet
This is an Internet-connected bulletin board, available through telnet. It offers a wide variety of resources, including mail, Usenet, file areas, and games.
- Internet: telnet cybernet.cse.fau.edu
  Login: bbs
- WWW: Cybernet
  http://venus.mcs.com/~flowers/html/cybernet.html

Cyberspace Groups

Cyberspace communications
- Internet: Gopher gopher.well.sf.ca.us
- Choose: -> Communications

TCP/IP and networking Info
- Internet: FTP ftp.spies.com
  Path: /Library/Techdoc/Network/

Service Providers
- WWW: Cityscape
  http:// www.cityscape.co.uk/
- WWW: Genesis, http://WWW.gpl.net

Religion & Politics

World Religion

Atheism
- Usenet: alt.atheism

Bible Online
- Internet: Gopher
  joeboy.micro.umn.edu
- Choose: -> Ebooks -> By Title -> King James Bible
- FidoNet: VICARS

Church of the SubGenius
Information relating to the weirdness that is the Church of the SubGenius can be found at the Rutgers text archive. Find out details about their Messiah J.R. "Bob" Dobbs, and the SubGenius foundation in Texas. Is it a parody or are they for real? You'll probably never know.
- Internet: FTP quartz.rutgers.edu
  Path: /pub/subgenius/

Kibo
Kibo is a semi-mythical Net-god, and is said to be omnipresent everywhere on the Internet. Apparently if you post to any Usenet newsgroup with the word "Kibo" anywhere in the text, Kibo will see it and may even answer.

Washington Online

With OJ on the box, you may be forgiven for thinking you're in America. So if you want to keep up to date with what the greatest and craziest power in the world is doing, try the new House of Representatives server:

URL: http://www.house.gov

which contains, phone numbers, pictures, maps and info on legislation and government services.
Alternatively try:

http://thomas.loc.gov

or the existing House gopher at:

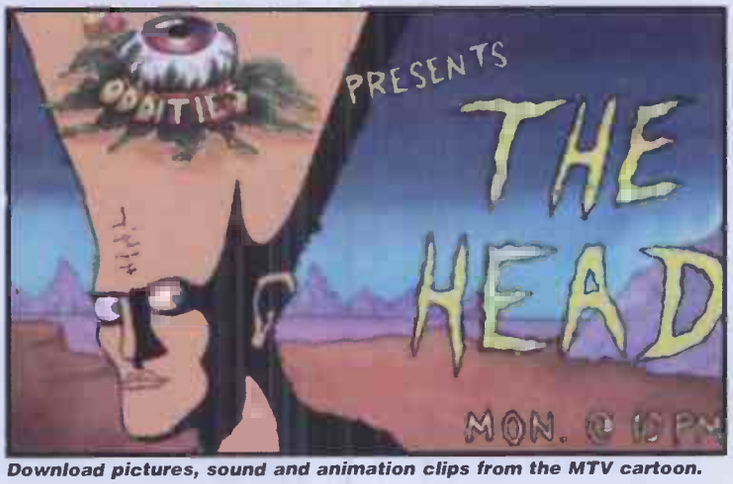
gopher://gopher.house.gov/

Get Sonny Bono's email address from the Congress gopher.

There's also an unauthorised guide to the US Congress, called CapWeb which can be found at:

http://policy.net

TV Biz



Download pictures, sound and animation clips from the MTV cartoon.

TV Net is a lively and colourful jumping off point for all tv fans who want to explore the weird and wonderful land of US TV. These Web pages act as a server, linking you to other pages dedicated to particular shows and studios. There's also a TV poll, list of best sites and a Virtual Agent which carries the interactive multimedia CVs of reporters and presenters! Find it at:

http://tvnet.com/TVnet.html

MTV Oddities is exclusively devoted to new, weird stuff from MTV's cartoons. You can browse through animated clips, pictures and soundbites, illustrating the warped genius of MTV's animation talent.

The URL is: **http://mtvoddities.viacom.com/**

→ Usenet: alt.religion.kibo

Paganism
→ Usenet: alt.pagan

Religious texts
If you're looking for the complete text of the Bible or the Koran, or some other religious documents, in your search for enlightenment, try logging on to this server at Berkeley.
→ Internet: FTP ocf.berkeley.edu
Path: /pub/Library/Religion/

Wicca
→ Internet: FTP nic.funet.fi
Path: /pub/doc/occult/wicca/

Zen Buddhism & Taoism Information (Borlaenge Univ., Sweden)
→ WWW: http://tpx5.hfb.se:8000/~d93cge/engtaozen.html

An Introduction to Buddhist Theravada Teachings (NCF, Canada)
→ WWW: http://www.ncf.carleton.ca/freenet/rootdir/menus/sigs/religion

Chogye Zen Buddhism Information, (UT Houston-HSC,USA)
→ WWW: http://oac11.hsc.uth.tmc..edu/zen/index.html

Dharma Electronic Files Archive, (DEFA\U.Nth Carolina,USA)
→ WWW: http://sunsite.unc.edu/dharma/defa.html
→ WWW: http://www.well.com/Community/Brian.Tanaka/dw.html

Dharma Web [Zen Buddhism]
→ WWW: http://www.well.com

Journal of Buddhist Ethics (Penn State Univ., USA)
→ WWW: http://www.psu.edu/jbe/present.html

Tibetan Buddhism Texts & Commentaries (Virginia Univ., USA)
→ WWW: http://hopper.itc.virginia..edu/~wam/

World Politics

Conservative archives
→ Internet: FTP cathouse.org
Path: /pub/cathouse/conservative/

New Republic Magazine
→ Internet: Gopher gopher.internet.com 2101

Political Party platform statements
→ Internet: Gopher wiretap.spies.com
→ Choose: -> Government Docs -> Political Platforms of the US

NATO handbook
→ Internet: FTP ftp.spies.com
Path: /Gov/NATA-HB/

Iran
→ Usenet: alt.silly-group.persian

Business & Finance

Business News

General news
→ Usenet: clari.biz.misc

Hot news
→ Usenet: clari.biz.urgent

Legal news
→ Usenet: clari.biz.courts

Merger news
→ Usenet: clari.biz.mergers

Personal finance news
→ Usenet: clari.biz.finance.personal

Top news
→ Usenet: clari.biz.top

The Economy

Economic BBS
→ Internet: Gopher infopath.ucsd.edu
Choose: -> News & Services -> Economic -> EBB and Agency Info.

Economic newsgroups
→ Usenet: clari.biz.economy
→ Usenet: clari.biz.economy.world

The Markets

Stock Market news
→ Usenet: clari.biz.market
→ Usenet: clari.biz.market.amex
→ Usenet: clari.biz.market.dow
→ Usenet: clari.biz.market.ny
→ Usenet: clari.biz.market.otc
→ Usenet: clari.biz.market.report

Closing quotes
→ Usenet: Gopher lobo.rhms.colorado.edu
→ Choose: -> Other Information Services -> Stock Market Closing Quotes

Stock Market report
→ Internet: telnet a2i.rahul.net
Login: guest

Investments

Investment newsgroups
→ Usenet: clari.biz.invest
→ Usenet: misc.invest

Real Estate investments
→ Usenet: misc.invest.real-estate

Management and Marketing

International Market Insight (IMI) Reports
→ Internet: Gopher infopath.ucsd.edu
→ Choose: -> News & Services -> Economic -> International Market

Management archives
→ Internet: Gopher chimera.sph.umn.edu

Multilevel marketing
→ salt.business.multi-level

Small Business

Entrepreneurs
→ Usenet: misc.entrepreneurs

Games & Sport

Fantasy, Role-Playing

Advanced D&D
→ Internet: FTP ccosun.caltech.edu
Path: /pub/adnd/

Role-playing Gopher
→ Internet: Gopher.micro.umn.edu
→ Choose: -> Fun & games -> Games -> Fantasy Role-Playing Games

Role-playing archives
→ Internet: Gopher teetot.acusd.edu
→ Choose: -> Everything -> Entertainment & Food -> Role-Playing

Online Games

Backgammon server
→ Internet: telnet ouzo.rog.rwth-aachen.de 8765
Login: guest

Chess servers
→ Internet: telnet bentley.daimi.aau.dk 5000
Login: your name
→ Internet: telnet ics.uoknor.edu 5000
Login: your name
→ FidoNet: CHESS_UK

Copper Diku
→ Internet: telnet copper.denver.colorado.edu 4000

Deeper Trouble
→ Internet: telnet alk.iesd.auc.dk 4242

Nemesis MUD
→ Internet: telnet dszenger9.informatik.tu-muenchen.de 2000

Nightfall MUD
→ Internet: telnet nova.tat.physik.uni-tuebingen.de 4242 4242

Tsunami
→ Internet: telnet castor.acs.oakland.edu 2777

Zen MOO
A telnet site for those who know (or want to) the sound of one hand clapping.
You can meditate to your heart's content, but make sure you stay completely silent.
→ Internet: telnet cheshire.oxy.edu 7777

MUD Web Sites
→ WWW: http://www.cis.upenn.edu/~lwl/mudinfo.html

Card Games

Magic: the gathering
→ Usenet: rec.games.trading_cards.announce
→ Usenet: rec.games.trading_cards.jyhad
→ Usenet: rec.games.trading_cards.magic.misc
→ Usenet: rec.games.trading_cards.magic.rules
→ Usenet: rec.games.trading_cards.magic.strategy
→ Usenet: rec.games.trading_cards.marketplace

PC and Video Games

Anime video games
→ Internet: FTP romulus.rutgers.edu
Path: /pub/anime/misc/Anime-games

Atari archive
→ Internet: FTP atari.archive.umich.edu
Path: /atari/

Big Bop 2
(breakout style game for DOS)
→ Internet: FTP wuarchive.wustl.edu
Path: /pub/msdos_uploads/ games/bigbop2.zip

Doom
→ Usenet: rec.games.computer.doom.announce
→ Usenet: rec.games.computer.doom.editing
→ Usenet: rec.games.computer.doom.help
→ Usenet: rec.games.computer.doom.misc
→ Usenet: rec.games.computer.doom.playing

Flight simulators
Some documents relating to the various flight simulation hardware and software available, as well as scenery for specific software and texts on flight simulation theory.
→ Internet: FTP onion.rain.com
Path: /pub/falcon3/
→ Internet: FTP ftp.iup.edu
Path: /flight-sim/
→ Internet: FTP ftp.ulowell.edu
Path: /msdos/Games/FltSim/

Wolfenstein 3D extra levels
If you're still hooked on the game of Wolfenstein 3D, *despite the fact that* Doom *has superseded it, download 59 brand new levels from the ever-useful Washington University Archives. So that's what American university students do all day!*
→ Internet: FTP wuarchive.wustl.edu
Path: /pub/msdos_uploads/games/w3d_cc1.zip
→ FidoNet: DOOM

Consoles
→ FidoNet: CONSOLES

Nomic
Nomic is a game where you make up all the rules. the game features in this nesgroup will be the largest ever played in the history of Nomic games throughout the ages!
→ Usenet: alt.games.nomic

Sport

r.a.s Racer archive
(F1, Indycar & NASCAR information, pictures, news etc.):
→ WWW: http://www.eng.hawaii.edu/Contribs/carina/ra.home.page.html

F1 Motor Racing:
→ WWW: http://www.abekrd.co.uk/Users/steven/f1/f1.html

Team Lotus F1 home page:
→ WWW: ftp://ftp.netcom.com/pub/lotus-cars/WWW/TeamLotus.html

Internet Squash Players Asscoiation:
→ WWW: http://www.ncl.ac.uk/~npb/

Hobbies & Pastimes

Arts and Crafts

Beadworking
→ Usenet: alt.beadworld

Craftworks
→ Usenet: rec.crafts.misc

Modelling
Get modelling (not on the catwalk though...)
→ Usenet: alt.models
→ Usenet: rec.models.railroad
→ Usenet: rec.models.rockets
→ Usenet: rec.models.scale

Textile crafts
→ Usenet: rec.crafts.textiles

Collectibles and Hobbies

Collecting
→ Usenet: rec.collecting

Ham radio callbooks
Telnet access to amateur radio callbooks.
→ Internet: telnet callsign.cs.buffalo.edu 2000
→ Internet: telnet ham.njit.edu 2000

Juggling
If you like to throw balls or chainsaws in the air, check out this archive site. There's a large collection of information, including FAQ lists, news from the juggling world, animations and specialist juggling programs.
→ Internet: FTP moocow.cogsci.indiana.edu
Path: pub/juggling/

Food, Wine and Cooking

Food and drink
Ever get peckish, and just can't decide what to make? Ever have two measures left in each of sixteen different bottles in your drinks cabinet? Well, if the answer's "yes", the Internet could have been made for people like you, with a wide variety of food and drink related resources being available. Try out some of the following:
→ Internet: Gopher wiretap.spies.com
→ Choose: -> Wiretap Online Library -> Articles -> Food and Drink

→ Internet: FTP ftp.uu.net
Path: /doc/literary/obi/HM.recipes/TheRecipes
Path: /doc/literary/obi/Recipes
Path: /doc/literary/obi/Usenet.Cookbook
→ Internet: FTP ocf.berkeley.edu
Path: /pub/Library/Recreation/big-drink-list
Path: /pub/Library/Recreation/Booze_cookbook
→ Usenet: alt.beer
→ Usenet: alt.food
→ Usenet: alt.gourmand
→ Usenet: alt.spam
→ Usenet: rec.food.cooking
→ Usenet: rec.food.drink
→ Usenet: rec.food.recipes

Homebrewing
If you're new to homebrewing, or if you're just looking for a couple of tips from the experts, check out the following sites:
→ Internet: FTP mthvax.cs.miami.edu
Path: /pub/homebrew/
→ Internet: FTP nic.funet.fi
Path: /pub/culture/beer/
→ Usenet: alt.beer

Gardening

Bonsai trees
Soil data, suppliers, images, etc.
→ Internet: FTP bonsai.pass.wayne.edu
Path: /pub/Information/
Path: /pub/GIFS/

Gardener's assistant PC program
→ Internet: FTP wuarchive.wustl.edu
Path: /systems/ibmpc/msdos/database/gardener.zip

Gardens and plants newsgroup
→ Usenet: rec.gardens

Genealogy

Genealogy newsgroup
→ Usenet: alt.genealogy

Kids and Teens

Kids' newsletters
→ Internet: FTP nigel.msen.com
Path: /pub/newsletters/Kids/

Kidlink
→ Internet: Gopher kids.ccit.duq.edu
Choose: KIDART Computer Art Gallery

Parents and teens newsgroup
→ Usenet: alt.parents-teens

Young people's newsgroup
→ Usenet: alt.kids-talk

Photography

California Museum of Photography
Take a look at the online exhibition of the California Museum of Photography, and download some of the pictures on display.
→ Internet: Gopher galaxy.ucr.edu
→ Choose: -> Campus Events -> California Museum of Photography -> Network Exhibitions

For information relating to photography including techniques, chemistry formulae check out the Panix Public Access Unix Gopher.
→ Internet: Gopher gopher.panix.com
→ Choose: -> Photography Database
→ FidoNet: PHOTOGRAPHY

A nice image from the Hubble space telescope courtesy of panix.com

Net Games

Unlock the mysteries of Myst with the help of a special Web page dedicated to a solution for the game.

Net Games is a new book featuring more than 1,500 places where you can play games, find opponents, learn tricks and cheats, and talk about online gaming. A multimedia demo of the book is available for Windows (NetGames.EXE, 1,134K) or Apple Mac (NetGames_030.sea.bin and NetGames_040.sea.bin, both 860K) by anonymous FTP from:

ftp://ftp.ypn.com/pub/demo/[file name]

The demo can also be downloaded from the Windows Fun Forum (GO WINFUN for netgam.exe) or Mac Fun Forum (GO MACFUN for netgam.sea) on CompuServe. Send any queries to **editors@ypn.com** Or, if you're a frustrated fan of the hit adventure, *Myst*, try:

http://www.astro.washington.edu/ingram/myst/index.html

for some soothing hints and tips that don't give too much away, too soon.

Kids' Stuff

Travel through a digital dinosaur museum from Chicago.

Give your kids an excuse to bunk up your phone bill even more, by introducing them to the Net through a selection of 'educational *yet* entertaining' Web pages:
'Waking in Jerusalem' by Sharon Katz is an online picture book for kids aged 3-7 years old, which can be found at:

http://www.digimark.net/iatech/books

Although sweetly drawn, these pages show the inadequacies of the Net as a multimedia tool. If your books really must be hi-tec, buy one on CD.

Another area, which is an interesting novelty, but is also a demonstration of low-tec beating hi-tec, is Carlos' Coloring Book which can be found at the URL:

http://robot0.ge.uiuc.edu/~carlosp/color/

You colour in section by section, by clicking on a colour, then on the picture. Of course, this information takes an age to get processed, so impatient little people may soon get bored.
Something much more exciting is the Chicago Field Museum of Natural History's exhibition, DNA to Dinosaurs. The virtual, online exhibition includes 3D graphics, animations and sound. The URL is:

http://www.bvis.uic.edu/museum

online

Leisure & Travel

Automobiles

Car stereos
Don't know your woofer crossover from your sunvisor-mounted monitor tweeters? Unsure of whether or not to wire the door speakers straight to the car battery? Check out the newsgroup for people who think 200+200 watts is just about right.
→ Usenet: rec.audio.car

Driving newsgroups
Get on the road to nowhere...
→ Usenet: rec.autos
→ Usenet: rec.autos.driving

High performance cars
→ Usenet: alt.autos.rod-n-custom
→ Usenet: alt.hotrod
→ Usenet: rec.autos.rod-n-custom Motorsport
→ Usenet: rec.autos.sport
→ FidoNet: GRAND_PRIX

Volkswagen names
A list of some the obscure names people have given to their Volkswagens.Well, we warned you.
→ Internet: FTP ftp.spies.com Path: /Library/Document/names.vw

'Personals'

Erotica
→ Usenet: alt.binaries.multimedia .erotica

Personals groups
→ Usenet: alt.personals
→ Usenet: alt.personals.ads
→ Usenet: alt.personals.aliens
→ Usenet: alt.personals.bondage
→ Usenet: alt.personals.misc
→ Usenet: alt.personals.poly
→ Usenet: uk.personals

Singles groups
→ Usenet: soc.singles
→ Usenet: uk.singles

Lovelink
→ WWW: http://www.gold.net/lovelink

Wired personals
→ WWW: http://www.hotwired.com /Coin/Clasfd/Pers/index.html.

Matchmaking database
→ Email: perfect@match.com *put in message* 'send form'

The Virtual Meet Market
→ WWW: http://www.wwa.com:1111/

HIV Positive Dating Services
→ WWW:http://cyberzine.org/html /LGBADS/HIVDate/dating.html

The Dating Agency
→ WWW:http://www.easynet.co.uk /pages/cafe/date.html

Urban Desires
→ WWW: http://desires.com/

Chat

Chatsubo
How cyber are you? Have you gone so far as to have your modem hardwired directly into your cerebral cortex? Check out the discussion amongst people who think doing so wouldn't be at all unreasonable.
→ Usenet: alt.cyberpunk.chatsubo

Cyberpunk and future culture
If you imagine you're living your life in a William Gibson novel, this could be the archive site for you.
→ Internet: FTP quartz.rutgers.edu Path: /pub/cyberculture/

Hotel California
An interesting place to telnet to and just sorta, you know, hang out.
→ Internet: sachs.cs.colostate.edu 2525

The Well
The Well plans to open its MUSE (Multi User Simulated Environment) to the Interent community. Users can enter virtual worlds as well as participate in live conversations.
→ WWW: http://www.well.com /Conferences/foo/

Web sites
→ WWW: WebWorld, http:// sailfish.peregrine.com/WebWorld/ welcome.html

Motorbikes

DoD
A selection of bike-related FAQs, and a good selection of bike images and technical info. There's also info relating to the bike group "Denizens of Doom".
→ Internet: FTP cerritos.edu Path: /DOD/

General
→ FidoNet: MOTORBIKES

New Age

Kriya Yoga
This is just the introduction you need if you are seeking info on the original Kriya Yoga practice and the keys of the Kriya path.
→ Internet: FTP ftp.spies.com Path: /Library/Article/Religion/ kriya.yog

Massage
Discover the techniques for using your bare hands to turn someone into a pile of jelly. Find out about oils and stuff, and the therapeutic effects of massage. Just right for relieving the back-pain caused by sitting at your computer surfing the Net for hour after hour.
→ Usenet: alt.backrubs

New Age music
Grow a pony tail. Eat macrobiotic rice and tofu. Get into New age music, and discuss such important performers as Enya and Steven Halpern. (Who? – Ed.)
→ Usenet: alt.music.enya
→ Usenet: rec.music.gaffa
→ Usenet: rec.music.newage

Travel Services

Hitchhiker's Guide to the Big Apple
→ Internet: Gopher quartz.rutgers.edu
→ Choose: -> NYC – The Net-Person's Guide to New York City

International travel health advice
→ Internet: telnet selway.umt.edu Login: health

Travel stories
→ Internet: Gopher wiretap.spies.com
→ Choose: -> Wiretap Online Library -> Articles -> Journeys and Travel

Tourism offices
→ Internet: FTP quartz.rutgers.edu Path: /pub/misc/tourist-info-offices

Travel Info.
→ Internet: FTP ftp.cc.umanitoba.ca Path: /pub/rec-travel/

Paris, France
Information on the city of Paris.
→ WWW: http://meteora.ucsd.edu:80/ ~norman/paris/

Mail Order

Trinity Systems
You no longer need to fight your way through the crowds for your computer goodies, this UK company supplies PC and Mac utilities, games and CDs.
→ WWW: http://www.demon.co.uk/ trinity/home.html

Internet book shop
→ WWW: http://www.demon.co.uk/ bookshop/

Internet Florist
→ WWW: http://mkn.co.uk/HELP+ FLOWER\INFO

CD Now mail order
→ WWW: http://cdnow.com

Internet Shopping Network
→ WWW: http://www.internet.net/

Future Fantasy Bookstore
→ WWW: http://www.commerce. digital.com/palo-alto/

Public Affairs & Media

Civil Rights & Liberties

American civil rights archives
→ Internet: Gopher wiretap.spies.com
→ Choose: -> Wiretap Online Library -> Articles -> Civil Rights & Liberties

Freedom of Information Act (US)
→ Internet: Gopher wiretap.spies.com
→ Choose: -> Government Docs -> Citizen's Guide to Using the FOIA

Journalism
Use the power of WAIS to access the indexes of over 10,000 published journals, magazines and periodicals.
→ Internet: WAIS journalism.periodicals
→ Usenet: alt.internet.media.coverage
→ FidoNet: BCAST_RADIO
→ WWW: http://www.bbcnc.org.uk

Law

LawNet
Offers an online will writing service
→ WWW: http://mkn.co.uk/HELP +LAWNET

Local Communities: info and Advice

Scottish Highlands and Islands Server
→ WWW: http://nsa.bt.co.uk/nsa.html

Melbourne Freenet & Vicnet
→ WWW: http://ghmac.lib.rmit.edu.au /COM.HTM

The Civic Network
→ WWW: http://www.civic.net:2401/

Local Economy Trading Scheme (LETS)
→ WWW: http://www.u-net.com/gmlets /home.html

Channel Island home page
→ WWW: http://zippy.business.co.uk/

Vancouver Regional Freenet
→ WWW: http://freenet.vancouver.bc.ca/

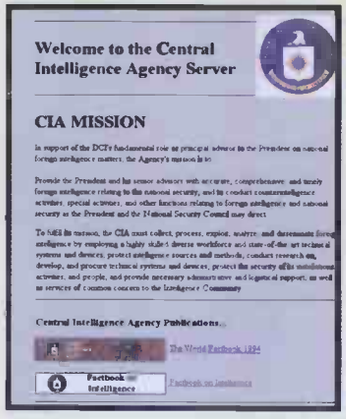
Former Soviet Union sources
→ WWW: http://sahara.bu.edu:4021 /EE_CIS_NIS/CE_NIS_FSU.HTML

Pointer to lists of worldwide communities
→ WWW: http://herald.usask.ca/~scottp /freewww.html

US Government info.

Government Documents at the Internet Wiretap
→ Internet: Gopher wiretap.spies.com
→ Choose: -> Government Docs

US Goverment Gophers
→ Internet: Gopher stis.nsf.gov
→ Choose: Other US Government Gopher Server



Military

NATO handbook
→ Internet: FTP ftp.spies.com Path: /Gov/NATA-HB/

Weaponry
If you're training to be a Gun-nut, and you haven't got the nerve to go out and buy 'Gun-Lovers monthly', download all the information you need from this appropriately named archive site. As well as downloading digitised images of guns, you can find out about important things like speed-reloading, and "personal defence".
→ Internet: FTP flubber.cs.umd.edu Path: /rec/

News Services

Electronic Newstand
A commercial service that provides a wide variety of interesting information and magazine articles provided by a selection of US and world publishers. Topics covered include the arts, food and drink, business, politics, science, sport and travel.
→ Internet: Gopher gopher.internet.com 2100

HOTT (Hot off the Tree)
This is a weekly publication that contains excerpts from just-published information technology articles.
→ Internet: telnet melvyl.ucop.edu
Login: your terminal type e.g. VT100
At prompt: show hott

USA Today
→ Internet: Gopher gopher.msu.edu
→ Choose: -> News & Weather -> Electronic Newspapers -> USA Today
→ Internet: telnet freenet-in-a.cwru.edu
→ Internet: telnet freenet-in-b.cwru.edu
→ Internet: telnet freenet-in-c.cwru.edu
Login: visitor

Electronic Telegraph
→ WWW: http://www.telegraph.co.uk

Politics

The White House
This isthe email address for Bill Clinton. Why don't you just drop him a line just to let him know that someone out there likes him? Or something!
→ Email: president@whitehouse.gov

Japanese Prime Minister's office
Want to see how the other side of the world runs its affairs?
→ WWW: http://www.kantei.go.jp/

Whitehouse Web page
→ WWW: http://www.whitehouse.gov

UK Open Government
→ WWW: http://www.open.gov.uk/

Birmingham City Council
→ WWW: http://birmingham.gov.uk

Women and Gender Issues

Women in biology newsgroup
→ Usenet: bionet.women-in-bio

Women in Science and Engineering Network (WISENET)
→ Usenet: info.wisenet

(Also check out the alt.feminism newsgroups.)

Zines

Phrack
→ Internet: FTP ftp.netsys.com
Path: /pub/phrack/

Online zines
→ WWW: http://www.acns.nwu.edu/ezines

Toxic Custard Workshop
→ Internet: FTP ftp.cs.widenet.edu
Path: /pub/tcwf/

Unplastic News
→ Internet: FTP etext.archive.umich.edu
Path: /pub/Zines/Unplastic_News

Zine Collections
→ Internet: Gopher gopher.cic.net
→ Choose: -> Electronic Serials

Zines at the Wiretap
→ Internet: Gopher wiretap.spies.com
→ Choose: -> Wiretap Online Library -> Technical Information -> Zines

UWI's Cultural Playground
For all aspects of modern culture, from cyberspace to cult music try this.
→ WWW: http://kzsu.stanford.edu/uwi.html

HotWired
→ WWW: http:// www.wired.com

Nature Science & Technology

Aviation

Aircraft
Lots of pictures of aircraft doing what they do best, as well as the usual mixed bag of images of just about everything.
→ Internet: FTP ftp.cstp.umkc.edu
Path: /images/jpg/

Aviation archives
→ Internet: FTP rascal.ics.utexas.edu
Path: /misc/av/

Aviation newsgroups
→ Usenet: rec.aviation.misc
→ Usenet: rec.aviation.soaring *(gliders)*
→ Usenet: rec.travel.air

Biology

Biology Announcments
→ Usenet: bionet.announce

Bioinformatics resource Gopher
→ Internet: dna.cedb.uwf.edu

You've Got A Friend

Find out how to save the Earth from FoE's World Wide Web pages.

Friends of the Earth has just launched 'FoEnet' – an online information service which includes pictures, maps and text. Access to FoEnet is through the WWW page:

`http://www.foe.co.uk/CAT`

This page is a link to pages of news and information on environmental and green issues. You can find out what's new in the world of Friends of the Earth, where to go for further information resources, details of campaigns conducted by Friends of the Earth and details of how to join the campaign group. There's even a section advertising IT jobs with Friends of the Earth, so you can earn some money with a clear conscience.

Laugh? I nearly disconnected myself!

I think people are starting to take this 'cow' business too seriously.

It's a funny old world, particularly for people who spend so much of their time and creative energies making pictures of our bovine and ovine friends out of punctuation marks. But fear not, this queer band have now been quite safely isolated in two sites:
One of these is the whacky Web page, LaughWeb, which can be found at the URL:

`http://www.misty.com/laughweb/`

The other is the newsgroup:

`alt.humor.best-of-usenet`

These sites are carefully controlled environments where cow obsessives are slowly being weaned onto more sophisticated styles of humour, such as Light Bulb and Blonde Girl jokes. If you feel you have a problem, don't be afraid, dial up now and discover you are not alone. Thank you.

online

General biology discussion
→ Usenet: bionet.general

Genetics
Thinking of doing your own gene-replacement therapy? Well then, you'll need as much gene-sequence information as you can get, and the National Institute of Health Gopher is the place to get it. As well as the gene-sequence data, there's access to a number of databases that would be of interest to you if you're a molecular biologist, or home-DNA enthusiast.
→ **Internet:** Gopher helix.nih.gov
→ Choose: -> Molecular Biology Database
→ **Internet:** telnet genbank.bio.net
Login: genbank
Password: 4nigms

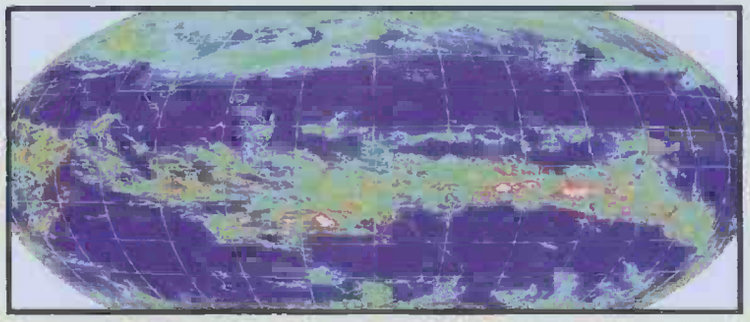
Protein and DNA
If you're interested in anything to do with Protein (not beefburgers), the experimental Protein Data Bank Gopher provides a convenient place to get the data you need.
→ **Internet:** Gopher pdb.pdb.bnl.gov

therefore owned by the American Government. It's a user-friendly menu-driven environmental data resource, providing you with the information you need.
→ **Internet:** telnet envnet.gsfc.nasa.gov

Environmental Services Data Directory
→ **Internet:** telnet esdim1.nodc.noaa.gov
→ **Login:** noaadir

Greendisk
→ **Internet:** Gopher info.umd.edu
→ Choose: -> Educational Resources -> The Reading Room -> Environment -> GreenDisk

FoEnet
→ **WWW:** http://www.foe.co.uk/CAT



Earth Sciences

Earth science data directory
→ **Internet:** Gopher scilibx.ucsc.edu
→ Choose: -> The Researcher -> Science and Engineering -> Earth and Marine Sciences -> USGS Earth Science Data Directory

Smithsonian Natural History Gopher
This Gopher provides a means of access to the resources of the Smithsonian Museum via the Internet. It has a wide variety of information that would be useful to anyone interested in Natural History.
→ **Internet:** Gopher nmnhgoph.si.edu

Engineering

IEEE Gopher
This Gopher provides access to a wealth of information on all aspects of computing, electronics and engineering. Periodicals and newsletters produced by the IEEE are available, as well as data on all of the standards decided on by the IEEE.
→ **Internet:** Gopher info.computer.org

Robotics
→ **Internet:** FTP ftp.cs.yale.edu
Path: /pub/nisp/

General
→ **FidoNet:** BOFFINS

Environment

Environet
This is another service run by the Goddard Space Flight Centre, and is

British Trees
Information on forestry and conservation
→ WWW: http://www.u-net.com/trees/

UK Chemistry
→ **WWW:** http://www.u-net.com/ukchem/

Fringe Science

How to build a flying saucer
→ Internet: FTP ftp.spies.com
Path: /Library/Fringe/Ufo/build.ufo

Paranormal happenings
If you're interested in things that go bump in the night, or if you're interested in ridiculing people who believe in such things, check out these newsgroups and documents: The Truth is Out There (allegedly).
→ **Usenet:** alt.out-of-body
→ **Usenet:** alt.paranormal
→ **Usenet:** alt.skeptic
→ **FidoNet:** ALIEN_UFO

Paranormal stories
→ **Internet:** Gopher wiretap.spies.com
→ Choose: -> Fringes of Reason -> Occult and Paranormal

UFO reports
→ **Usenet:** alt.ufo.reports

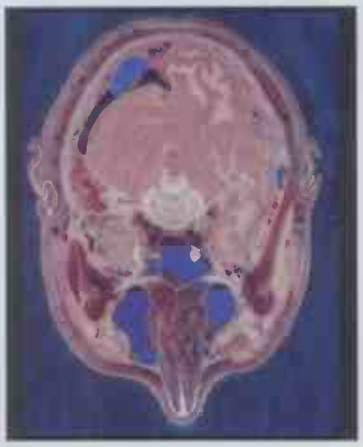
Health

Brighton Health Care NHS Trust
→ **WWW:** http://www.pavilion.co.uk/HealthServices/BrightonHealthCare/

Dietary information
The Healthline Gopher Service is a guide to what's in what you're eating, plus guides to healthy eating and information about cholesterol, fat and calories.
→ **Internet:** Gopher selway.umt.edu 700
→ Choose: -> General Health Information -> Dietary Information
→ **Usenet:** misc.health.alternative

Exercise Information
Another one for the overweight-after-a-holiday crowd, this newsgroup has all the information you need to help get into shape.
→ **Usenet:** misc.fitness

National Library of Medicine
→ WWW: http://nearnet/gnn.com/med12.html



Nutrition Newsgroup
→ **Usenet:** sci.med.nutrition

Nursing
If you're interested in any aspect of nursing, check out the Nightingale Gopher. It includes text from nursing publications, and a host of research, practice and other nursing resources.
→ **Internet:** Gopher nightingale.con.utk.edu

Maths and Physics

International System of Units
A definitive list of all the SI units, with details of conversion factors between SI and SI units. Additionally, there is a list of the fundamental constants and definitions of the elemental units themselves. What more could you want?
→ **Internet:** Gopher wiretap.spies.com
→ Choose: -> Wiretap Online Library -> Assorted Documents -> International System of Units

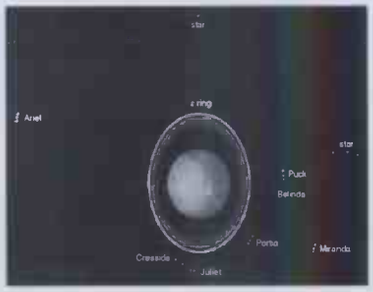
Physics journal
→ **WWW:** http://xxx.lanl.gov/

Physics gopher
The Physics gopher at the University of Chicago provides access to a great deal of physics-related information, on such topics as general relativity, quantum cosmology, and high energy particle physics.
→ **Internet:** Gopher granta.uchicago.edu

Theoretical physics preprint
A selection of papers on such topics as quantum cosmology, high energy physics and fundamental particles.
→ **Internet:** FTP xxx.lanl.gov
Path: /gr-qc/
Path: /help-th/

Science

Online periodic table
At the speed current particle physics and chemistry is changing, you're never going to be sure which element has the highest atomic number, but never fear, you can be as up-to-date as possible with the online periodic table.
→ **Internet:** telnet camms2.caos.kun.nl 2034



Space and Astronomy

European Southern Observatory BBS
This is a BBS system for people interested, or actually involved in the European Southern Observatory. There are discussion groups and varied information available in connection with the Observatory, and telescopes and astronomy in general.
→ **Internet:** telnet bbhost.hq.eso.org
Login: esobb

NASA information
The Goddard space flight centre is a popular resource for news, information and images relating to NASA and most other aspects of space exploration.
→ **Internet:** FTP toybox.gsfc.nasa.gov
Path: /pub/images/
→ **Internet:** Gopher gopher.gsfc.nasa.gov

Shoemaker-Levy and other Jupiter-related stuff
Images and data pertaining to the Shoemaker-Levy Jupiter collision. They also have a lot of other images, including excerpts from the newsgroup alt.fractals.pictures
→ **Internet:** FTP csus.edu
Path: /pub/jupiter/

FidoNet echoes
→ **FidoNet:** ASTRONOMY
→ **FidoNet:** ASTRONOMY.026
→ **FidoNet:** SPACE

The Apollo 11 moon landing
(Buzz Aldrin Home Page)
→ WWW: http://uptime.com:2350/

The Weather

American National Weather service
This site can supply data relating to avalanches, floods and other weather anomalies. You can download snow-coverage maps, to check where or where not to go.
→ **Internet:** FTP snow.nohrsc.nws.gov
Path: /pub/bbs/

Weather satellite images
If you're interested in the weather, get more clued up than Bill Giles by downloading up-to-date weather satellite images from the Met's server at the University of Edinburgh. Images are available in real black and white and infra-red formats. Other weather related data is also available.
→ **Internet:** FTP cumulus.met.ed.ac.uk
Path: /images/jpeg//images/gif/

Reference

European History

History database
- Internet: telnet clus1.ulcc.ac.uk
  Login: ihr-uk

Holocaust Online Exhibit
- Internet: Gopher gaia.sci-ed.fit.edu
- Choose: -> Subject Area Resources -> Educational TV -> Holocaust Online Exhibit

Geo and Demography

CIA world factbook
- Internet: Gopher wiretap.spies.com
- Choose: -> Electronic Books -> CIA World Factbook

European postal code list
- Internet: FTP nic.funet.fi
  Path: /pub/doc/mail/stamps/

Geography server
- Internet: telnet martini.eecs.umich.edu 3000

History

History archives
- Internet: FTP byrd.mu.wvnet.edu
  Path: /pub/history/

History database
- Internet: telnet ukanaix.cc.ukans.edu
  Login: history

Treaties and international covenants
One of the areas of the Wiretap Online Library contains a large selection of US and international laws, treaties and other assorted legal and historical documents, including the Geneva Convention Treaty, The International Law of the Sea and the treaty on the Non-proliferation of Nuclear Weapons.
- Internet: Gopher wiretap.spies.com
  Path: -> Government Docs (US & World)

Vietnam War
For all Missing In Action freaks out there, try this:
- Internet: Gopher wiretap.spies.com
- Choose: -> Government Docs (US & World) -> US Historical Documents -> Vietnam Era Documents

Libraries

Eureka
- Internet: telnet eureka-Info.stanford.edu

Hytelnet
- Internet: telnet access.usask.ca

Public Access Catalogues
- Internet: Gopher world.std.com
- Choose: -> OBI The Online Book Initiative -> The Online Books -> Access

Wiretap Online Library
- Internet: Gopher wiretap.spies.com
- Choose: -> Wiretap Online Library

Virtual Library
- WWW: http:// info.cern.ch/hypertext/datasources/bysubject/overview.html

Kid's Web
- WWW: http://www.npac.syr.edu/textbook/kidsweb/
- Email: kidsweb@npac.syr.edu

K-12 education page at
- WWW: http://k12.cnidr.org/

General
For a list of many Internet libraries, check out the following:
- Internet: FTP nic.cerf.net
  Path: internet/resources/library_catalog

Philosophy

Ethics
- Internet: Email listserv@vm1.nodak.edu. In message body, type: subscribe biommed-l <Your full name>

Logic
- Usenet: sci.logic

Feminist philosophy
- Internet: Email listserv@cfrvm.cfr.usf.edu. In message body, type: sub swip-l <Your full name>

Hegelian philosophy
- Internet: Email listserv@villvm.bitnet. In message body, type: subscribe hegel <Your full name>

Philosophy of David Hume
- Internet: Email listserv@wmvm11.cc.wm.edu. In message body, type: subscribe hume-l <Your full name>

Metaphysics
- Usenet: sci.philosophy.meta

General
- Internet: Email listserv@liverpool.ac.uk. In message body, type: subscribe philos-l <Your full name>
- FidoNet: PHIL

Reference Books

Washington University Archive
- Internet: FTP wuarchive.wustl.edu
  Path: /doc/

Roget's Thesaurus
- Internet: FTP mcrnext.cso.uiuc.edu
  Path: /pub/etext/etext91/roget13a.txt
- Internet: WAIS roget-thesaurus.src

Webster's Dictionary Server
- Internet: telnet chemm.ucsd.edu
  Path: webster

Education Sites

Trinity College, Dublin home page
- WWW: http://www.tcd.ie

Samaritans

The Samaritans
If you're in need of counselling, try calling the Samaritans.
- WWW: jo@samaritans.org

Quotations

Michael Moncur's Quotations Page
- WWW: http://www.xmission.com:80/~mgm/quotes/
- Internet: FTP ftp://xmission.com/pub/users/mgm

online

internet AND COMMS TODAY

the Directory

DISCLAIMER

This list is for your information only. *Internet and Comms Today* and Paragon Publishing cannot be held responsible for the contents of the sites, their worthiness or current status. If any of the addresses are incorrect or no longer operating, please inform us as soon as possible.

direct@itoday.demon.co.uk

Notice

Do you know of any good World Wide Web sites, FidoNet echoes, information networks or Usenet groups that you think deserve to be included in the directory? If you do, please let us know so we can tell everyone else about them! Please give us as much information as possible about the sites, and tell us why you think they are so noteworthy.

This Directory will be updated every issue to allow sufficient time to elapse for contributions to be included. If you have any sites you think should be included here, please send them to the email address below, to arrive before March 16th.

If you miss that date, do not worry – your submissions will be kept for the next update after that. The email addresss for sending submissions or alterations to is:

newsites@itoday.demon.co.uk

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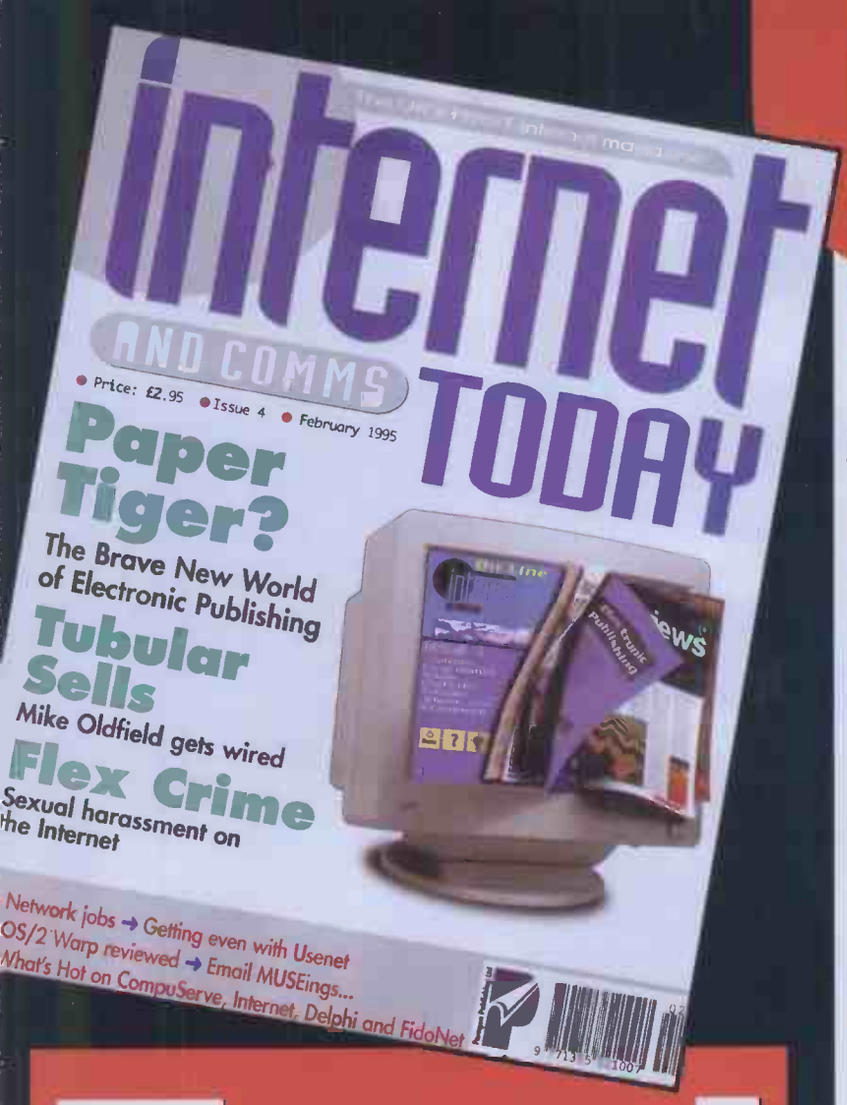

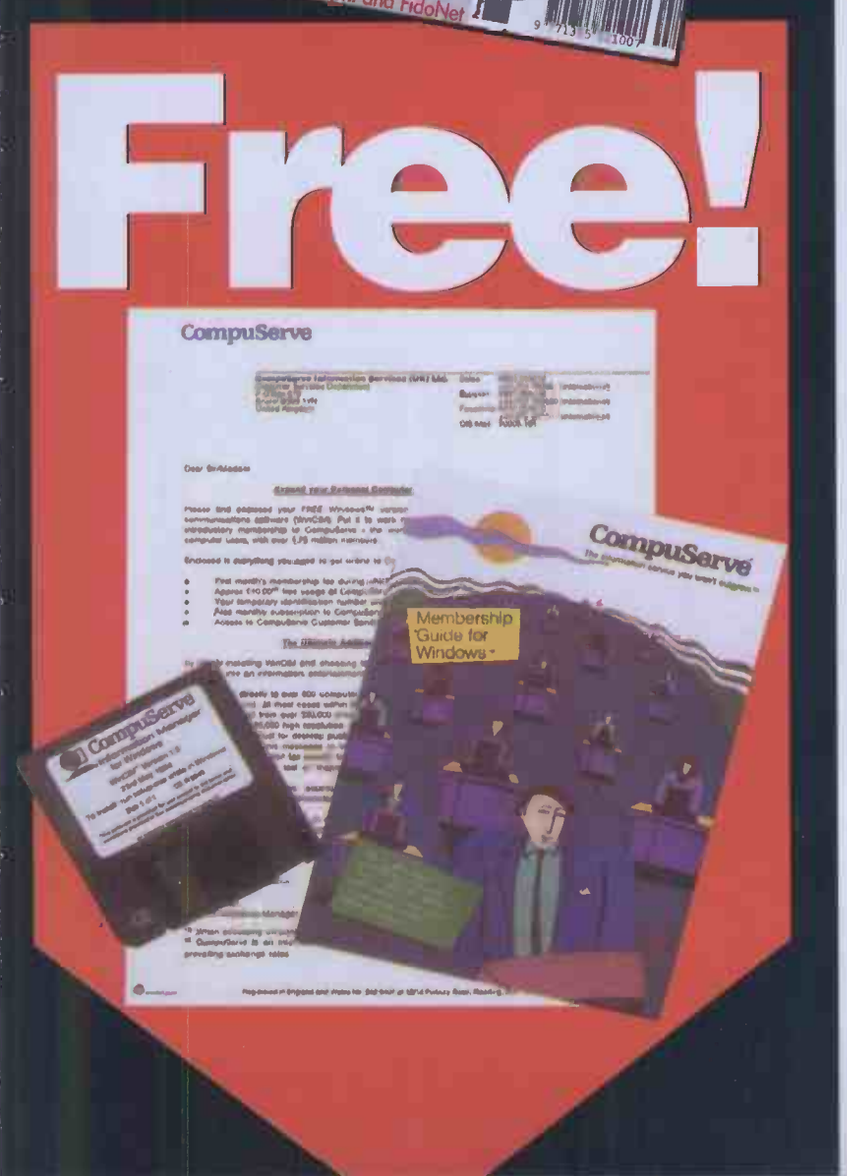

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NB: Expiry date for this offer: is 31st March 1995

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internet AND COMMS TODAY

Things get better and better! Not only is this page being written three days BEFORE our deadline, but we even know what's going to be in the next issue! Wonders will never cease, so check this out...

next month

We hope you'll agree that this month's issue really was something different, so to celebrate the fact, we return to our more usual format with lots of stuff about how great the Net is (well, we are an Internet magazine after all).

• All you ever wanted to know about this ISDN thing but were afraid to find out about (after reading 'Miller Light' this month), including:

- **Why get it?**
- **How much does it cost?**
- **Where you get it from**

• Net Addicts – are a few people becoming dangerously obsessed with the online world? We have the full details.

• Fascism Gets Wired – how the extreme right wing wants to make sure you only use the Net for what they approve of

• Cutting the Cost of Modem Calls – it can be an expensive business this Internet affair. Steve Gold returns to guide you gently through the ways of cutting those online costs.

• Education and the Internet – schools are starting to realise the massive advantages the Net offers to educators. We find out what they are doing.

No doubt about it, it's another great issue from the UK's best-selling Internet mag. Catch us on March 2!

Internet and Comms Today – a lot more than just a pretty face – on sale March 2!

internet AND COMMS Online TODAY

We're pleased to be able to announce our Web site Up And Running once again, so apologies to those recently unable to link to it. This month: Some good stuff (again)...

→ We can accept email to 74431,1155 (CompuServe) and 2:443/13.4 (FidoNet). Failing everything, why not phone (01202) 299900, fax (01202) 299955, or write to: *Internet and Comms Today*, Paragon Publishing, Durham House, Old Christchurch Road, Bournemouth BH1 1NF.

After a brief stint of forced absence, our World Wide Web site is now (hopefully) up and running again.

To access our pages, please point your Web Browser to look at http://www.glp.net/customers/ict/ict.html and all will be revealed!

The Web Pages complement the magazine by providing instant access to all the sites mentioned in every issue, as well as providing the latest news and gossip: and the occasional surprise as well (well, it is John Kennedy who creates the thing, so that's hardly, er, surprising).

This month we will be including a virtual art exhibition as well as some pointers to pages you simply won't believe.

Also this month, you can now find the latest news, courtesy of the Newsbytes newsfeed service.

Newsbytes is one of the best-known newsfeed services for the computing field, supplying us with some of our news as well as commercial service providers like Compuserve, and we'll be bringing you all the latest gossip, Internet news and reviews from them.

Our Directory listings pages are also currently being converted for Internet and Comms Today Online so you'll soon be able to surf the Net without having to squint at all those weird Net addresses that nobody ever types in correctly first time anyway.

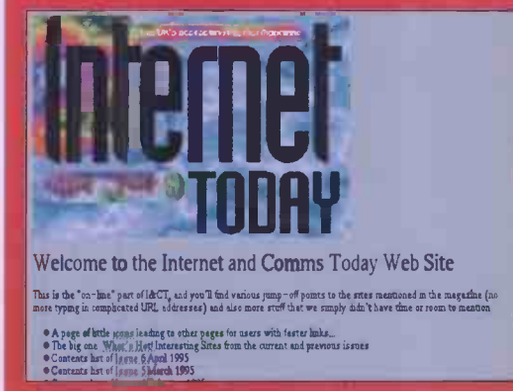
Join us now online for the one of the best Web Site you'll ever visit! And that must be true because we say it! OK, OK...

Catch us online on IRC, usually at irc.colorado.edu on port 6667, usually on Saturday afternoons at about 3pm UK time, so feel free to hassle us relentlessly with appropriate stuff.

Internet and Comms Today World Wide Web

If you access our Web page (http://www.gpl.net/customers/ict/ict.html), you should see the following:

→ Our Home Page! Scroll through the options and see what we can offer you online.



Issue 5

→ If you'd like to see what the magazine offers, we give you a brief overview of articles contained within.

The team

→ Meet your handsome, intelligent, witty and debonair team of millionaire playboys. Or something.

What's hot

→ Fancy linking to some of the areas we've described in the magazine? Try our very own What's Hot page – it's bound to become a vital part of your Infonauting.

Editorial

→ And if you want to read about what sort of magazine we'll be trying to bring to you, who better to ask than our editor? (Oh, all right then...)

I&CT contact addresses

If you want to get in touch with the team, try the following:

→ **Nick Merritt** – nickm@itoday.demon.co.uk
→ **John Kennedy** – paragon@cix.compulink.co.uk
→ **The Zookeeper** – zoo@itoday.demon.co.uk
→ **Colin Turner** – cturner@nowster.demon.co.uk, 2:333/13.0 FidoNet
→ **Darren Irvine** – darsy@plasma.thegap.com
→ **Jonathan Miller** – jonathan@delphi.com
→ **Jack Schofield** – jack@cix.compulink.co.uk
→ **Steve Gold** – 76004.3451@compuserve.com

Editorial departments:

→ **letters** – letters@itoday.demon.co.uk (please note that submission of material to this email address with be taken as permission to publish your letter in the magazine, unless you specifically ask not to.)
→ **news** – news@itoday.demon.co.uk
→ **advertising** – ads@itoday.demon.co.uk
→ **subscriptions** – itsubs@itoday.demon.co.uk
→ **BBS list** – bbswatch@itoday.demon.co.uk
→ **Directory sites** – direct@itoday.demon.co.uk
→ **help desk** – techhelp@itoday.demon.co.uk
→ **submissions** – submissions@itoday.demon.co.uk

2+2= tutorial

Become a Webbed Wonder! – Part One

Webweaver John Kennedy takes a comprehensive look at designing your own Web pages in part one of this HTML tutorial.

If you have ever used the World Wide Web in any shape or form, you'll have come across documents stored in a format called 'HTML'. HTML stands for 'HyperText Mark-up Language', and it forms the very core of the World Wide Web, easily the most interesting and glossy part of the Internet.

The HyperText part of HTML is pretty easy to understand – particular words or images are highlighted, either by underlining them or displaying them in a different colour. When the user selects one of these words, usually by clicking on it with a mouse, the browser software looks up the link associated with the word. This can trigger the loading and display of an entirely new page, or simply shift the current display up or down.

HTML documents are plain text files, but the pages that can be displayed using them are different from normal character-by-character comms software appearing on a terminal – as different as structured clip art is from bitmapped clip art.

HTML files are best viewed with a specially written 'browser' such as Mosaic or NetScape Mosaic (for more details on the Web and browsing software see I&CT issue 3). The same HTML page may look different depending upon which browser program is being used, although they will all create broadly similar displays.

Here is how it works: the browser software fetches the page from the remote site and has a quick look through it. It then renders the page on the computer's display, using fonts in various sizes and styles, adds highlights to the hypertext links and – of course – downloads and renders any graphics which might be included.

Graphics can be included in two ways: in-line graphics, and non in-line graphics. The in-line images are the title pages, 'click me' buttons and the little coloured blobs scattered around the page. They may, or may not, be hyperlinks themselves. If they are, they usually have a coloured line drawn around them.

When using a slow Internet link (which to many people means less than a few hundred megabits a second, but to most of us less than a 28.8K modem link) it is sometimes a good idea to ask the browser not to display any images, and instead draw a default image. This speeds up complicated pages, but of course doesn't look as pretty.

Default images are invariable stored in GIF format, which provides a neat, non-machine specific (and currently controversial) way of compacting 256 colour pictures. The browsing program will cache as many of these images as it can, which means you can flip back to previous pages and not have to download the images yet again. The number of images (and in fact whole pages) which can be cached depends on the amount of memory you have free on your system.

Images which are not in-lined appear as separate files ("Click here for a picture of MediaSource HQ") and in this case the image will only be downloaded when the user clicks on the relevant link.

Images like this are usually stored in JPEG format and, although this is by no means compulsory, it is common as the pictures are usually quite large (which is why they have been made optional in the first place).

JPEG format provides the best way of compressing large pictures with a lot of detail, at the expense of more time being required for decompression and viewing.

Using exactly the same system as the linked file approach, it's possible to link animations (usually MPEG or QuickTime) and sound effects and tunes.

Most browsers don't know how to display or play anything other than GIF files. Instead most systems depend on external programs for viewing other things. For example, IBM-PC systems usually rely on LView being present to display JPEGS. After a while of browsing you should amass a large number of these third party viewing programs.

DIY HTML

Creating your own HTML pages is getting easier and easier. In fact, it's now possible to create pages without understanding anything about the underlying HTML code, with programs such as Words for Windows, which can generate the relevant markers automatically.

Although this is extremely convenient, especially if you need to translate documents which already exist in the form of word processor files, it's usually better to attempt native HTML coding to start with. This will let you grasp what is and isn't possible from the very beginning.

To start, you'll need a few pieces of software. First of all, you'll need a fully functioning HTML browser. On the PC and Mac (and UNIX boxes) NetScape Mosaic is currently the best. Amiga owners can use AMosaic, and even Archimedes owners can get involved with their own WebBrowser.

You'll also need a good text editor, or any way of generating ASCII text files. A word processor can be used, but only if there is an option to save plain ASCII text with absolutely no extra codes for selection fonts or styles.

Finally, if you want to include your own graphics in your documents you'll need some way of generating GIF images. Which program you use depends on which computer platform you are using, but you will almost certainly find a public domain or shareware GIF creator if you look hard enough.

These are all the tools you need, now we are ready to make our first pages. Remember that you don't need to be online to use a Mosaic-style browser program. With your modem switched off, you can still run the program and load and display HTML pages from your own hard disk. This makes editing and viewing pages dead easy: and it won't cost you a penny in online charges either.

Some systems require that a TCP/IP client is running before Mosaic will work properly, but there is no reason why the TCP/IP client needs to be connected to the Internet – it simply needs to be running in the background. I've used Amiga, Mac and IBM-PC versions of Mosaic all offline to create the snapshots used to illustrate this article.

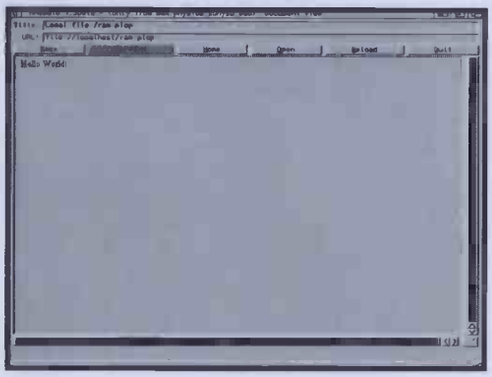
STEP 1 – Starting a Page

Using your text editor, create a file which contains the following text. The angle brackets are 'greater than' and 'less than' signs, and the text inside is not displayed. Instead, it is a special HTML code (or 'tag') which the browser acts on. In this case, it's simply a reminder of the type of document which is being displayed.

```
<html>

Hello World!

</html>
```

Save this file somewhere obvious with a filename like 'test.html'. On the PC you'll probably need to save it as 'test.htm' thanks to MS-DOS naming conventions.

Now start your Web browser. One of the menu options will be 'Load Local Page', 'Load File' or words to that effect. Find the test file, and load it. If all goes well, you should get a display that looks something like this:



Hardly exciting, but a good start. Edit the text file again, and alter it to read:

```
<html>

Hello World!
Hello World!

</html>
```

Save it, and re-load it into the browser. There should be a button marked RELOAD which will save you using the load requestor again.

This is the first point to note: although you took a new line in your text document, HTML won't take a new line. The only way to force it to take a break is to insert the line break tag
 ('less than' sign, br, 'greater than' sign), like this:

```
Hello World!<br>
Hello World!
```

Remember this if you need to space out your document. If you want more space, use <p>, the paragraph break code.

STEP 2 – Styles

HTML gives you a lot of control over how your text appears on-screen. You can alter the size of the letters, and also how they are displayed: bold, italic or underlined (or any combination of these).

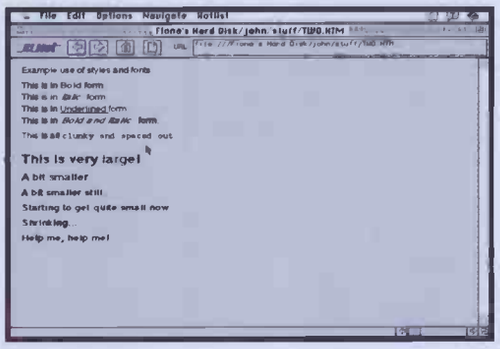
To choose the style you enclose the text you wish to alter within two special HTML codes. The codes are as follows:

Style Summary part 1

<h1>	Text size 1 (huge)	</h1>
<h2>	Text size 2	</h2>
<h3>	Text size 3 (med.)	</h3>
<h4>	Text size 4	</h4>
<h5>	Text size 5	</h5>
<h6>	Text size 6 (small)	</h6>
	Bold text	
	Italic text	
<u>	Underline text	</u>
<tt>	Typewriter font	</tt>

The use of the slash '/' is always used in HTML to 'switch off' a particular option. Here is a comprehensive example of the different styles. Enter it into a text file, save it and load it into your browser. Then experiment to make your own combinations. Remember the <p> to take a new line.

```
<html>
Example use of styles and fonts <p>

This is in <b> Bold </b> form. <br>
This is in <i> Italic </i> form. <br>
This is in <u> Underlined </u> form. <br>
This is in <b><i>Bold and Italic </i></b>
form. <p>
This is all <tt> clunky and spaced out
</tt> <br>

<h1> This is very large! </h1>
<h2> A bit smaller </h2>
<h3> A bit smaller still... </h3>
<h4> Starting to get quite small now
</h4>
<h5> Shrinking... </h5>
<h6> Help me, help me! </h6>

</html>
```



→ Different browsers cope with style differently, but all make a good stab at highlighting text for you.

A few points to watch out for: some browsers can't cope with lots of styles on at once, and get confused. Underline is not supported very often. Many browsers take a new line after a change in font size, which is why there is no <br> in the second batch of sentences.

STEP 3 – More styles

There are plenty more HTML tags to help you clean up and organise your pages. One of the easiest to use and yet most effective is <hr> which draws a horizontal line right across the screen. This can be used to provide a sensible break in the text, or separate secondary information from primary news.

If you want to add emphasis to text, there are two options and but what they actually do depends on your browser.

If you have some text already written and spaced out properly, the <pre> tag will try and preserve its appearance.

Style Summary part 2

<hr> Draw a horizontal line

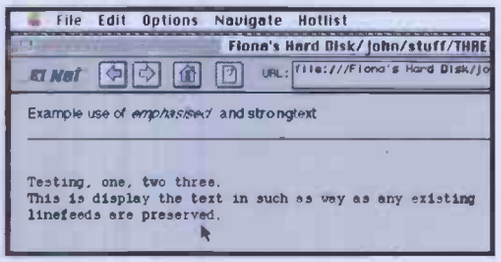
** Add emphasis to text **

** Even more emphasis! **

<pre> Don't format the text </pre>

Here's an example HTML page to demonstrate the codes:

```
<html>
Example use of <em>emphasised</em>
and <strong>strong</strong> text <p>

<hr>

<pre>
Testing, one, two three.
This is to display the text in such a way
as to preserve any existing linefeeds.
</pre>

</html>
```



→ Some browsers will merely use italics and bold in their place, and some won't copy with spacing well either, by the looks of it...

STEP 4 - Lists

A lot of the information presented in Web pages takes the form of lists, and so HTML has evolved some good tags to make both putting them together and displaying them relatively straightforward.

There are two types of lists, ordered and un-ordered. The difference is that the former includes automatic inclusion of a numbering scheme and the latter adds little blobs.

It's also possible to nest lists if you want (that is, start and complete a subsequent list inside another list), which is a terrific way of organising your information in an easy to digest form.

List Codes

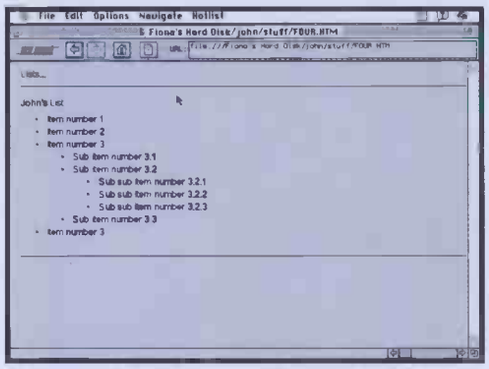
	Un-ordered list	
	Ordered list	
	An item in a list	

```
<html>

Lists...

<hr>
```

John's List

```
<ul>
<li> Item number 1
<li> Item number 2
<li> Item number 3
    <ul>
    <li> Sub Item number 3.1
    <li> Sub item number 3.2
        <ul>
        <li> Sub sub item number 3.2.1
        <li> Sub sub item number 3.2.2
        <li> Sub sub item number 3.2.3
    </ul>
    <li> Sub item number 3.3
    </ul>
<li> Item number 3
</ul>
<hr>
</html>
```

Please note that the spacing in the example is ignored by the HTML system: it's purely something I did to make creating the list a little bit easier. The WWW Browser will probably indent the list in a similar way, and if un-ordered will display different shapes depending on how deep the nesting of the list.



→ The 'nested' lists are indented automatically by the browser software. Different browsers cope with the indentation and symbols used in their own ways...

STEP 5 - Images

Without a doubt, pictures are what makes the World Wide Web so appealing. It's not quite television on demand yet, but it's a start. Even tiny images can add a whole new dimension to a Web page, and they are very easy to add.

The HTML tag <IMG...> is used to add images, and for compatibility reasons they must be stored in GIF format. Images of 8 pixels by 8 pixels or less will appear roughly the same height as a character, and can therefore be used as 'blobs' at the start of text.

Larger images can be used as page titles and, as we'll see, it's also possible have images as links, so adding video-recorder style arrow buttons is possible too.

To add a graphic to a document, include a tag like this:

```
<html>
Here is a picture.. <p>

<img src="picture.gif">
</html>
```

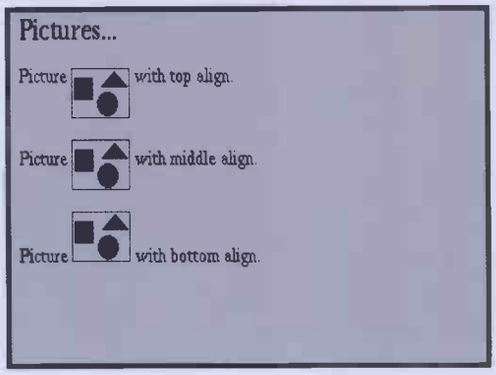
...where your image is called "picture.gif". You may want to include a more descriptive pathname, as the above assumes the picture is situated in the current directory, i.e. in the same location as the page itself. However, this may not always be the case.

Using the 'align=' tag, you can define where any nearby text goes. This is easier to experiment with than explain, so create a picture, save it, then use your text editor to make a HTML document like this and try it out:

```
<html>

<h2>Pictures...</h2> <p>

Picture <IMG SRC="picture2.gif"
align=top > with top align. <p> <p>
Picture <IMG SRC="picture2.gif"
align=middle > with middle align. <p>
<p> Picture <IMG SRC="picture2.gif"
align=bottom > with bottom align. <p>
<p>

</html>
```

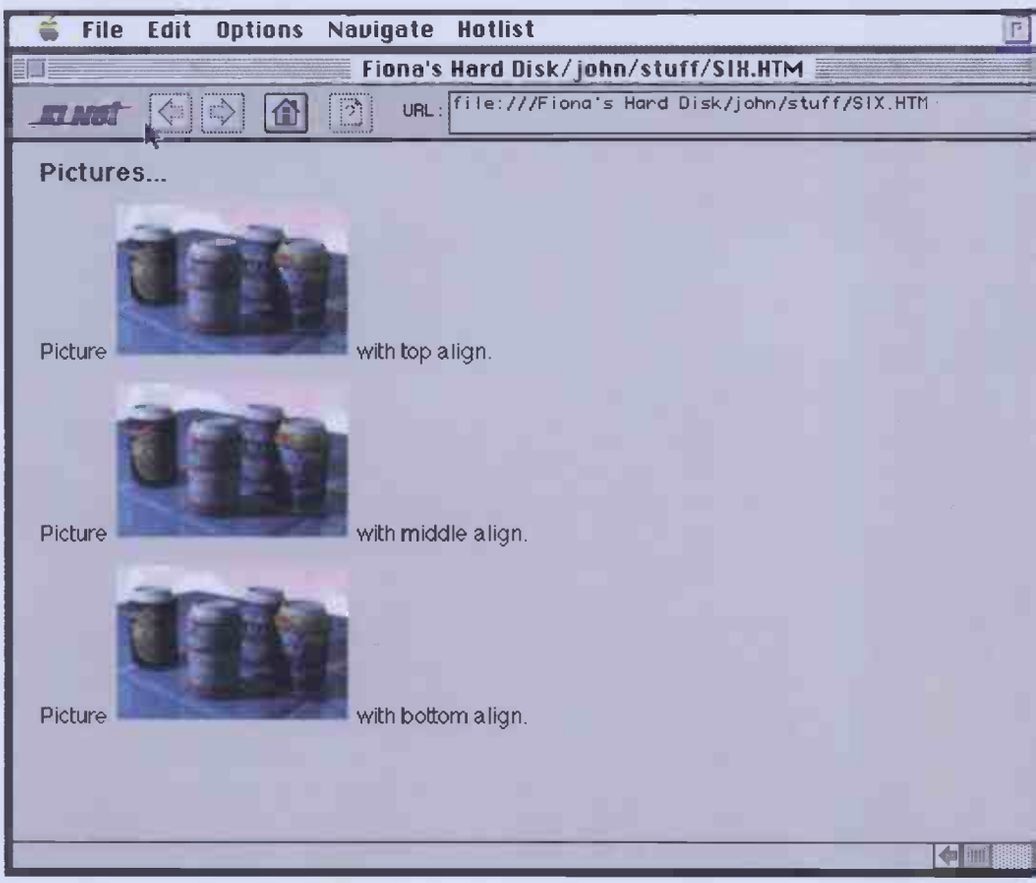
→ Using the 'align' field in the SRC tag allows text to be located following images.

→ If the pictures cannot be found, or if the 'do not load' option is on, you will see a default image displayed in their place.



If you want to create a link to a picture, rather than include the pictures as 'in-line graphics' then you'll need to read the next section.

→ All browsers will display GIFs, although detailed 256 colour images can cause problems. In these cases, a secondary image viewer and JPEG files are probably the best course of action.



STEP 6 - Links

Without links, the hypertext markup language would be nothing more than a rather pointless page description language. Links are what put the 'hyper' into HTML, and they are surprisingly simple to make. The key is the <a> tag, which can be used for a variety of different purposes.

The easiest link is one to another location in the same file. This sounds a bit daft, but if your page is extremely long and the reader needs to scroll it up and down, a hyper-link to the correct place will speed things up very nicely indeed.

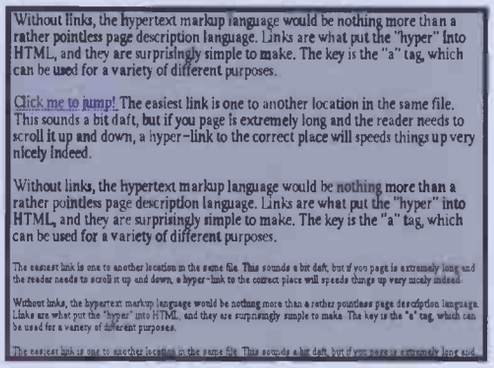
A suitable 'anchor' point is created like this:

```
<a name="target"> Link to me! </a>
```

and to insert a jump to the linked word, you include tags like this:

```
<a href="#target"> Click me to jump! </a>
```

The hash ('#') is crucial, as it tells the browser that the hypertext reference ('href') link is local only. The text between the <a> tags is highlighted in a different colour (usually blue or red) indicating that something special happens when it's clicked on.



➜ Links can exist within the same document. In this case, clicking on the "click me" jumps to a place further down the same page. This makes organising long pages a lot easier.

If there was no hash mark, then the browser would look for a new page to load on the local server. Look at this example:

```
<a href="menu.html"> Click here for
menu </a> <p>
<a href="index.html"> Click here for
index </a> <p>
```

This will create two links. Clicking on the first will instruct the browser to load the previous page entitled "menu.html". In this way you can index and cross reference the pages you create. You can also link in graphics, like this:

```
<a href="menu.html"> <img
scr="menu.gif"> </a> Click here for
menu <p>
<a href="index.html"> <img
scr="index.gif"> </a> Click here for
index <p>
```

With an art program you could create two small symbols or icons for the Menu and Index, and save them in GIF format, ready to use. Notice that we also add some text, just so users with graphics switched off don't lose out.

Links to other sites are made possible by the URL – Universal Resource Locator – a standard way of specifying another site and page to load. Here's an example link:

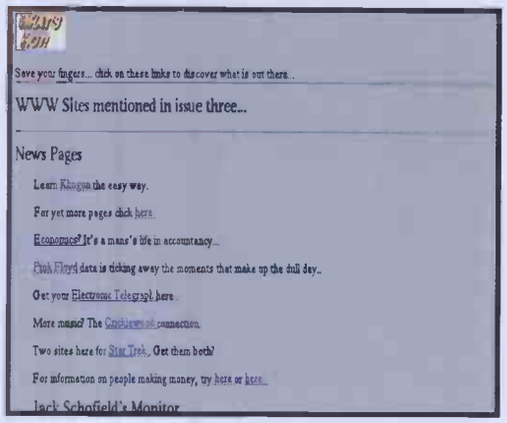
```
<a href="http://www.bbcnc.org.uk">
Click for Auntie! </a>
```

The URL is the "http://..." part, which in this case links with another HTML World Wide Web site. This is the form most used, which allows you to link your pages with others across the world, and indeed for them to include yours in their systems.

However, URLs can take other forms. Here are a few taken from I&CT's own home pages:

```
<a
href="gopher://actlab.rtf.utexas.edu">
actlab.rtf.utexas.edu </a>
```

```
<a href="telnet://archie.doc.ic.ac.uk">
GreatBritain</a>
<a href="ftp://src.doc.ic.ac.uk"> The
SunSITE Europe centre</a>
```



➜ Each item of blue text on this page is a link to another site, made in exactly the way detailed here. Notice the shaded horizontal lines by the way: they are actually GIF images thrown in for effect.

Obviously if your browser isn't connected to the Internet, using these links in your pages won't achieve much.

If you use the Web a lot, you can use the codes in your own documents to create an awesomely powerful personal 'homepage', with instant links to all your favourite sites.

If you are writing pages which are going onto the Web, then you will want to include links like these to your other favourite sites.

Next month we'll take a look at more HTML magic, and also find out where you can put your pages onto the Web for free.

Tips for good page design

➜ Remember, if other users are to see what you produce, make your pages as clean and well organised as possible.

➜ Take a good look at existing pages for ideas. Rip 'em off mercilessly – it's called 'design'.

➜ Go easy on graphics if your system if going to be used by users with modem-based dial-up access. If you really want to include pictures, fine: but consider creating a text-only option as well.

➜ Don't use all the text style options simply because you can. Restrict yourself as much as possible.

➜ If making use of small graphic images to help organise lists or form page breaks, try to use the same image several times rather then use a different picture every page. As the browser caches the pictures, if it has already been loaded once, subsequent pages will load and display a lot more quickly.

➜ When using pictures, try and calculate the grey colour used as a default backdrop by your Browser software. This grey can then be used in the pictures themselves and will appear 'transparent' if used properly.

➜ Standard HTML does not include commands for centering text or positioning graphics, although the NetScape extensions to HTML do. See the NetScape homepage for more details.

➜ Look closely at other HTML pages. All browsers have a menu option for saving the current page in HTML format. Capture it to disk, and then take it apart in a text editor to see how it works.

Web Sites that tell you all about the Web!

➜ The University of Washington Web Developers Page:
www.uwtc.washington.edu/Computing/WWW/UWWeb.html

Links to sites holding dedicated HTML editors:
akebono.stanford.edu/yahoo/Computers/World_Wide_Web/HTML_Editors

The NetScape Home page has links to some excellent Web pages, including an interactive tutorial on making HTML pages:
www.mcom.com

The book 'The Mosaic Navigator - The Essential Guide to the Internet Interface' by Paul Gilster (published by John Wiley and Sons, ISBN 0-471-11336-0) is a good guide to configuring Mosaic on the Mac and PC to operate with various external viewers, as well as a good general guide to Webbing.

Note: We've grabbed pictures from various different Web browsers so you can see what other platforms look like. They all use exactly the same HTML format, and all display GIF graphics.

2+2= tutorial

Setting up your own Bulletin Board

part 2

Forward-thinking Colin Turner introduces would-be Sysops to RemoteAccess, the PC-based BBS package.

The most important thing about setting up your own BBS is to remember that your system will need to run unattended for long periods of time. So, you should also try to plan ahead for future expansion. RemoteAccess has its own system directory, in common with most PC packages. For example, you may have chosen to make a directory

C:\RA

In a single node system, RemoteAccess runs from within this directory and uses this directory to dump its **exit files**. Multi-node systems, however, will have a directory for each node, to prevent exit files overwriting each other, amongst other things. For example, on my system I would have the following directories:

Z:\RA
Z:\RA\NODE1
Z:\RA\NODE2
Z:\RA\NODE3

There is still a main RemoteAccess directory, used to hold all the executable files. This time however, each node has its own directory to run inside. In my case the NODE1 and NODE2 directories are for real 'live' nodes, whereas NODE3 is entirely for my own local logons across my network. The network is also the reason for the odd drive letter, Z. Imagine setting up a two node BBS. You may do it by multi-tasking the nodes, but the option of running each node on its own machine can be attractive, too.

Clearly, your BBS hard disk won't usually be Drive C from both machines, and most network software will allow you to map it to drive M or another letter so it can be accessed from all the network machines in this way. So, you can setup on a fake drive letter using the SUBST command ahead of time if you plan to build a network in the future. For example:

SUBST Z: C:

would do the trick in this case.
In any case, you are now ready to configure your new BBS. Extract the contents of the RemoteAccess archive into the main RemoteAccess directory, and you may wish to set an environment variable built into RemoteAccess:

SET RA=Z:\RA

or wherever your main RemoteAccess directory is held. This will be used by the main RemoteAccess executables as well as many third party programs. It is best to insert this configuration into your AUTOEXEC.BAT file, or your BBS batch file.
Now run RACONFIG. This is a tool supplied with RemoteAccess to make configuration extremely easy. Firstly setup all the pathnames you will need. Go to the System menu at the top of the screen, and then select the Paths option, (by using the cursor keys and return).

If you follow the instructions in the following boxes you should be almost all the way to a working system. Next time we'll discuss what to do before actually opening up for customers!

Menus & Textfiles

You will need to produce some menus to give your BBS the structure that will make it your own. The RemoteAccess archive contains another archive called SAMPLE.ARJ. Extract this into the Menus directory you have already made in your main RemoteAccess directory. Now run RACONFIG again and go to the Menus option available on the Manager menu. This will allow

Contact Details

You can always get in touch with me at:
FidoNet : 2:443/13.0 or 2:443/14.0
Data/Fax : 01247-274919
01247-273172
Both lines support speeds up to 28,800 bps, and are available 24 hours a day.

Internet: ct@thog.centron.com

Message Areas

After you've considered what sort of message areas you want to carry on your board, you should divide them into several groups. Then enter these groups into the 'Msg Groups' sub section of the Manager menu. It's a good idea to write down the group names and numbers on a separate sheet of paper. Now we can enter in the details of the message areas themselves. Going through the most important fields :

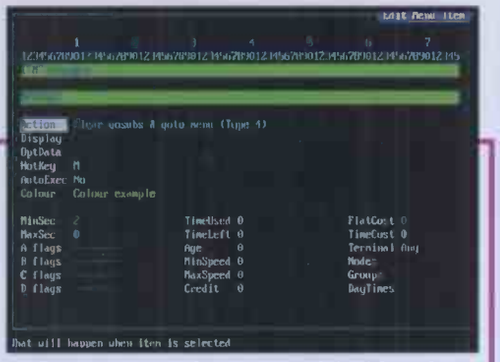
Name This is only the name you wish to call the conference on your board and NOT the echo tag.
Origin We should already have setup a default origin, change it if you feel the need.

Next, you can see we have fine control over who can read and write to the message area. Sysop security refers to the level which allows the user to use special Sysop functions while reading mail in that area.

Type

Local For areas which don't leave the BBS, or EchoMail or NetMail.
Status This dictates whether messages are private, public or a mixture. Private messages can only be read by the sender or originator (or a user with Sysop security for that area).
Days old etc. These fields are used by RAMSG to purge the message base. I strongly recommend that you handle all message area purging using your mail processor.
AKA Choose the right Network address for the echo. For example, don't use your Fido AKA for a ChatNet echo.
Area Type There are two supported types.

you to edit the menus for all the languages you have setup. You can use this to examine the example menus we have just extracted. In the screenshot you can see the MAINMENU menu. RemoteAccess provides an enormous amount of details which will dictate who each menu option is available to, and on what node etc. To set up a really top quality BBS, you will have to read the chapter describing all the various menu codes carefully.

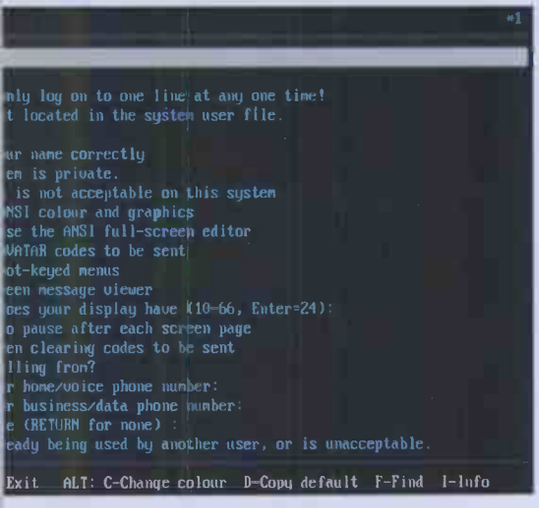


RemoteAccess has a powerful, although quirky, menu editor built into RACONFIG.

Language Support

Many of the comms programs used in the UK were written on the continent. For this reason, many have built-in support for several languages. In your RemoteAccess archive you may find a file called ENGLISH.RAL This contains many of the program's standard responses, which you can edit to form new RAL files.

Of course, it is essential that you setup at least one language. To do this, go to the language subsection of the Manager menu. Hit Return on the blank slot to enter in a new language file. You can see how I've filled in the details in the screenshot. The Filename provides the path to the .RAL file. Choose different paths to setup completely different menus for different languages. This trick is often used to provide different styles of English menus on the same BBS.



You can edit the default language text to your personal style.

Hudson, and JAM. The Hudson message base is a small collection of large files. All the message base text is held in a single file. Message areas are stored in Board numbers, ranging from 1 - 200. Each area must have its own board number, and these must carefully match a board number for that area set up in your mail processor if you are using one. Hudson bases are extremely limited in the number of messages they can contain. JAM message bases keep four files for each message area. In this case you must specify a stem name for all these files. This should be a path ending in a filename without an extension. For example :

Z:\RA\MSGBASE\BUY

would produce the required message base files for BUY in the MSGBASE directory.

Paths & Filenames

System The system directory should be the main one, not a node directory.

Menus This is where your menus will be stored, they give your BBS a flavour of its own.

Textfiles This directory will contain certain text files, like logon and logoff screens.

MsgBase You may already have a Hudson message base if you are running a mailer, if you have, make this the path to that base, otherwise, place it in your RA directory.

File Base This is the place where the file database for your files will be stored, most people also use it as a root directory for storing files in, but this is not essential.

File Attach This directory is used to hold files which users send to each other by attaching them to messages. You can also use this folder to hold files you send to particular users.

Nodelist Again, you may already have a Nodelist directory for your mailer, if you have, use it, otherwise you probably won't need one at all, as a Nodelist is entirely used by mailers for netmails.

CD-ROM To prevent a file handle being open on a CD-ROM for the whole duration of a file transfer, any files being downloaded from a CD are first transferred to a hard disk.

Semaphore This is used to communicate with other applications. The semaphore directory should be the same for all programs. If you are using the shareware versions of both RemoteAccess and FrontDoor you may have to place this in the FrontDoor directory, as only the commercial version of FD allows you to place the semaphore directory elsewhere. This directory is extremely important for most multi node systems, and could be on a RAM disk for optimum speed.

Rearchive This directory is used by RAFILE to use as workspace when it is rearchiving a file in a different format.

System log When no path is used, as for RemoteAccess.LOG, this will make the log file in the current directory. I prefer to keep all my log files in the one directory however, and so I'd recommend Z:\LOGS\RA.LOG for a single node system, or Z:\LOGS\RA*N.LOG for a multinode system (RemoteAccess interprets *N as the active node number).

Security & Flags

You should consider which users should have access to each area of your BBS. To this end RemoteAccess provides two systems :

1. Security

Every user on your BBS will have a security level. Think about how you can classify your users.

Security	User Type
10	A guest user
11	Unregistered users, you should make this the starting security for new users
15	Registered users
30	Regular users who help with file uploads
45	Users who have contributed old equipment to the BBS
60	International callers (maybe they get extra time for their trouble)
90	Sysops

For each security level you should set up an entry in the limits file (go to limits on the Manager menu). This will establish which security levels get the most online time etc. You can also set different **download ratios** for each level.

Give high security users access to your best file areas to thank them for their contributions.

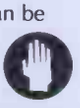
2. Flags

RemoteAccess has a set of 32 flags for each user of the form A1, A2, ->, A8, B1, B2, -> D8. You can allocate these for almost anything you like. Here are some of the flags I use for my users:

B1	Echomail access
B2	Netmail access
C3	Users with this flag set are points on my system.

The B1 and B2 flags are set to true for registered users on my BBS, and without them the user cannot post into the appropriate type of message area. So if a user misbehaves, I have a quick way of removing his access to message areas.
Every single menu item in RemoteAccess can be finely tuned to only work for users with or without particular flags and with particular security levels. This also applies to message areas, file areas, and even languages.

There is a small menu with which you can configure some defaults for new users. It's important that you set the security level. Notice that setting this level to 0 for new users can be used to produce a private BBS. That is, users can only be made manually by the Sysop.



Jargon

exit file This is usually a simple text file used to pass information about the user's account, time left, etc., backwards and forwards between the BBS and external door programs.

download ratio This dictates how many files users may download for each file they upload. Often the user is credited at the start with one upload.

2+2= tutorial

The Secret Life of... Internet Relay Chat

Impatient with email are you? Darren Irvine looks at interaction with go-faster stripes – the Internet Relay Chat or IRC.

Just what is Internet Relay Chat?

Internet Relay Chat (more commonly referred to by its acronym – IRC) was a program originally written by a Finnish programmer named Jarkko Oikarinen in 1988. Since its humble beginnings in Finland, its use has spread to just about every country in the world that has Internet access. Jarkko originally intended IRC to be a sort of expanded replacement for the Unix 'Talk' command, which allows two users anywhere on the Internet to converse in real time, rather than having to exchange email messages. IRC can appear daunting to new users, as it seems to be riddled with jargon not found anywhere else on the Internet, and it seems to work in a way completely alien to users familiar with the non-real time nature of email. However, it's really quite simple once you actually try using it, and even the most technophobic of users can soon find themselves getting to grips with chatting to people all over the globe.

IRC has developed into something much more useful than Talk ever was. It is a real-time, multi-user conferencing system that allows people all over the world to meet in what is known as a 'channel' and chat as if they were all in the same room. Each channel usually has a specific topic of conversation, from channels for specific languages or nationalities ('#ireland' and '#espanol') to the ever-popular '#hottub' which is supposed to be a sort of world-wide virtual jacuzzi, where like-minded people can get together and talk about the sorts of things that people talk about in hot-tubs.

Each channel name is preceded by a hash (#) sign, just to let you know that the name actually does represent a channel, rather than the nickname of an IRC user. That's another thing some people find odd about IRC – everyone uses a nickname rather than their real names. One problem arising out of this is that nicknames can tend to be more common than real full names, and unfortunately, there is no hard and fast way of copyrighting a nickname. So, if you come across someone on IRC already using your nickname, you'll just have to grin and bear it – if you regularly want to use the same channel you'll just have to use a different name. Many IRC people seem to become deranged when it comes to this subject, so it's best to remember that it's only a name - it won't actually make a difference what name you use or how you spell it.

Are you being served?

IRC works in the usual Internet manner of Client-Server. This is the same principle as is behind the operation of such things as Gopher and the World Wide Web. Not to get too technical, the basic idea is that a program called an IRC Server runs on a machine somewhere on the Internet. This handles the routing of IRC connections and messages between any users attached to this machine and between it and all the other IRC Servers across the Internet. Users who want to use IRC themselves run an IRC Client program on their own computers. This software connects to the software running on the Server, and acts as a front end to IRC, accepting the user's input and displaying messages that are relayed from the Server to which the user is connected. IRC Client software is available on the Public Domain for most popular makes of computer, and the only other thing that you will need is a real-time (i.e. SLIP or PPP) connection to the Internet. It is also possible to use Telnet to connect to a public access machine on the Internet which is itself running IRC client software, if you cannot find a client for your machine. In some cases these telnet sites are actually running on the same machine as the IRC server itself, in which case the two programs communicate directly rather than across the Internet. However, using IRC in this way is not nearly as efficient as using it in a full client-server way, and should be avoided unless absolutely necessary.

→ This sort of in-depth and meaningful discussion goes on all the time on IRC.

A typical scenario might be as follows: An IRC user in Denver, Colorado runs IRC client software on his home PC and makes a connection to an IRC server at a nearby university. This server is connected in turn to all the other IRC servers across the world. A user in Bangor, Northern Ireland (and hey, it might even be me) runs an IRC client on their Amiga, and

Where to get IRC Client Software

Platform	FTP Site	Path
Amiga	src.doc.ic.ac.uk	/pub/aminet/comms/tcp/grapevine*
	Maccs-ftp.bu.edu	/irc/clients/macintosh
	mrcnext.cso.uiuc.edu	/pub/info-mac/comm/tcp
	ftp.funet.fi	/pub/unix/irc/mac
	ftp.ira.uka.de	/pub/systems/mac
MSDOS	cs-ftp.bu.edu	/irc/clients/pc/msdos
	ftp.funet.fi	/pub/unix/irc/msdos
OS/2	cs-ftp.bu.edu	/irc/clients/pc/os2
	hobbes.nmsu.edu	/os2/2_x/network
UNIX	cs-ftp.bu.edu	/irc/clients
	ftp.acsu.buffalo.edu	/pub/irc
	ftp.funet.fi	/pub/unix/irc
	coombs.ans.edu.au	/pub/irc
	slopoke.mlb.semi.harris.com	/pub/irc
VMS	cs-ftp.bu.edu	/irc/clients/vms
	coombs.anu.edu.au	/pub/irc/vmsirc
	ftp.funet.fi	/pub/unix/irc/vms
Windows	cs-ftp.bu.edu	/irc/clients/pc/windows
	ftp.demon.co.uk	/pub/ibmpc/winsock/apps/wsirc
X11	catless.net.ac.uk	/pub
	harbor.ecn.purdue.edu	/pub/tcl/code

connects via a POP in Belfast to a server somewhere in the south of England. Thus, the two users, separated by thousands of miles, can chat in (almost) real-time as if their respective computers were physically linked, each for the price of a local phone call. The more financially astute amongst you (i.e. the tightest) will have already mentally extended this local phone call thought and realised that if you have free Internet access (for example at University) you will be able to chat to anyone else, similarly endowed, anywhere in the world, for nothing.

Getting Started with IRC

The first thing you will need to do is to get hold of some IRC client software for your particular computer platform. As usual with Internet-related software, it is available on the Internet itself via anonymous ftp. The table below shows some of the Internet sites where you can get the software you need.

The second thing that you will need to consider is which IRC server to use for your connection to the rest of the IRC world. You can actually use any server, even if it is on the other side of the world. However, it makes more sense to use a server which is closer to you geographically. This minimises the network traffic involved in your connection, making things run a lot more smoothly. Other than that, there is no real reason to choose one server over another – although some servers are operated by one Internet access provider or another specifically for their own customers, and these servers tend to require passwords. A list of servers that you can use is shown in the table below.

Getting IRC software up and running is usually fairly simple, and since the only setup parameters required are usually your nickname and the address of the server that you want to use, it should only really be a matter of downloading and unarchiving the programs. In future issues, we may take a look at some of the individual IRC client programs, but for now, remember that if you really get stuck, you can use Telnet to a public access IRC site.

Once you get connected to a server, the best thing to do is just to have a look around a few channels, rather than worrying about some of the more obscure commands.

Normally, anything that you type on an IRC command line is taken as a message, and echoed to the channel you are on. To distinguish IRC commands from these messages, they are all preceded by a forward slash. The most basic command that you need to know is /JOIN [channel]. You should replace '[channel]' with the name of the IRC channel that you are interested in (remember to precede it with a hash (#) sign) for example:

/JOIN #hottub

After issuing this command, you will be connected to the 'hottub' channel, and any lines that you type (that don't start with a slash) will be sent to that channel. Your client software will also display any messages sent by any other users anywhere in the world who happen to be connected to #hottub.

Another command which may come in useful is '/NAMES'. This will return a list of all the channels that are accessible from the server to which you are attached. Note that there could be hundreds of these, and so, to avoid wasting time watching countless channel names scroll up your screen, you can limit the channels displayed to those with a certain number of active users by adding a '-min' qualifier. For example:

/NAMES -min 20

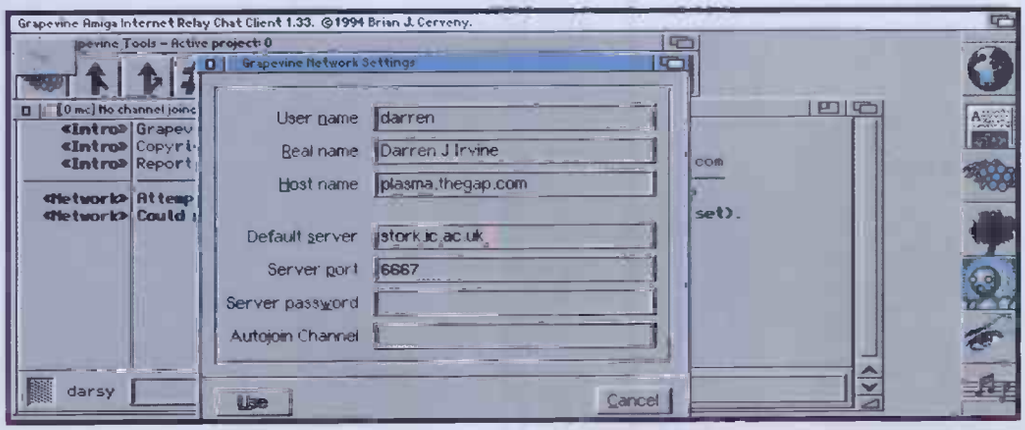
will list only those channels that have at least twenty users.

Many GUI-based IRC client programs (such as Grapevine which I use on the Amiga) have dedicated gadgets for performing standard functions like '/JOIN' and '/NAMES', and if your software has features like this you'll probably find them easier to use than remembering all the individual IRC commands. However, if you are using a more basic client, or if you just get stuck, there is a command '/HELP' which, funnily enough, will provide you with online help for all the IRC commands. Some clients even have a specific help button or menu item so that you don't even have to remember this much. Over the next couple of months we'll have a much closer look at the functioning of IRC, so that you can get the absolute best from it. For now though, you should have enough information to get you started, and so there's no reason why you shouldn't just get connected and start Internet Relay Chatting.

IRC Servers

Location	Server
UK	serv.eng.abdn.ac.uk
	sun4.bham.ac.uk
	shrug.dur.ac.uk
	stork.doc.ic.ac.uk
	supercomputer.swan.ac.uk
	fennel.compnews.co.uk
	dismayl.demon.co.uk
Europe	irc.funet.fi
	cismhp.univ-lyon1.fr
	irc.ethz.ch
	irc.nada.kth.se
	sokrates.informatik.uni-kl.de
	bim.itc.univie.ac.at
USA	irc.bu.edu
	irc.colorado.edu
	tramp.cc.utexas.edu
Canada	irc.mcgill.ca
Australia	jello.qabc.uq.oz.au
Japan	endo.wide.ad.jp

→ These few parameters are all you will need to set up to get your IRC client running. Of course the method of setting them up will depend on the software you are running. This is Grapevine for the Amiga.



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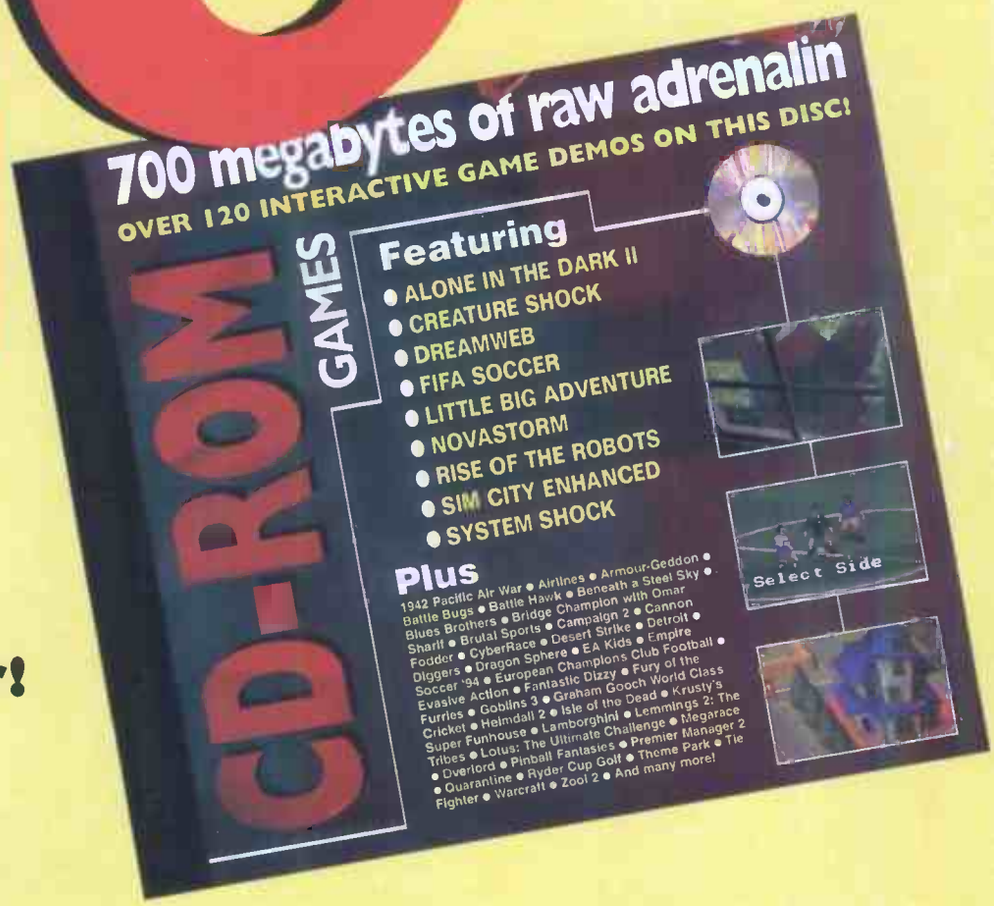

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Darren Irvine puts on his 'special' tank-top and has a look at some of your more technical problems and queries.

DESK

HELP

Terminal problem

Q Although not strictly to do with The Internet, I have a problem with our office Unix Internet which I hope you can help me with. We have a number of PCs running SCO Unix 3.2V4 in various locations around our building, networked together into our own private internet using TCP/IP. We routinely use the rlogin command to work on different machines remotely. Our problem arises because we use a variety of different terminals, from Digital VT420s through ICL terminals to various emulators on DOS PCs. The problem is caused by the fact that rlogin sometimes fails to pass across the Unix TERM environment variable correctly to the remote system. This can cause problems when running some terminal-type dependant software, without resorting to tedious manual reconfiguring of the terminal setup parameters. Have you any idea of how to sort this one out? Thanks in advance.

➜ **Gordon Millner, gormil@bailly.south.co**

➜ *This is a fairly common problem with SCO TCP/IP systems, and so is fairly easy to answer. What is required is for you to make a slight change to each of the user's configuration files. The actual change needed will depend on which shell your users are using. Since you haven't said, I'll list some of the most common:*

*For users using **'sh'**, edit **'.profile'** and change a line like:*
***eval 'tset -m ansi:ansi -m :\?ansi -e -s -Q'** to:*
eval 'tset -m ansi:ansi -m :\?$TERM -e -s -Q'
*For **'ksh'** users, edit **'.profile'** and change:*
***eval 'tset -m ansi:ansi -m $TERM:\?$ (TERM,-ansi) -r -s -Q'** to:*
eval 'tset -m ansi:ansi -m :\?$(TERM:-ansi) -r -s -Q'
*And finally, for **'csh'** users, edit **'.cshrc'** and change:*
term = ('tset -m ansi:ansi -m :?ansi -r -S -Q') to:
term = ('tset -m ansi:ansi -m :?$TERM -r -S -Q')

Double trouble

Q For obscure historical reasons, in the office at work we have two completely separate computer network systems. One is a Novell network using thin wire Ethernet cable, and the other one is a 3com network using twisted pair cables. Since my PC has an Ethernet card which has sockets for both these types of connection, I thought that I would be able to use my PC as a workstation on both networks, simply by connecting to both. However, when I plug both cables in, I am unable to connect to either network. Normally I use the Novell network with no problems, but plugging in the twisted pair connector loses my connection to the original Novell server. Can you give me any idea where I might be going wrong, or point me in the direction of a set-up program or utility that I can use to correct this problem.

➜ **H. Lawson, London**

➜ *Oh dear. What you are trying to do is set up your PC as a router between the two networks – something which usually requires a dedicated box, rather than a normal workstation. If you really need the ability to connect to both networks, you will need to install two separate Ethernet cards in your PC, each configured for each of your office networks, and each set to use different IRQ / DMA settings etc. But my advice would be that the whole operation wouldn't be worth the hassle that you would have to go through to get it all working correctly.*

D for Daemon

Q I'm fairly new to this Internet game, but I think that I've picked up most of the basic principles behind the operation of things like email, telnetting and ftping. However, I've been reading a few technical books recently in the hope of trying to improve my knowledge about things like TCP/IP, SLIP and PPP. Many of the books use terms without explaining them, and seem to assume that the reader already knows the whole thing! One of the most annoying things is that I've come across references to things that are like 'normal' Internet commands, but have a letter 'd' at the end of them – like ftpd, telnetd smtpd etc., etc., etc. What is this all about – is it just a different name used for the same thing on different systems, or am I way off the track? I've also seen something called 'tftp'. Is this along the same lines, or is it completely separate from normal ftp?

➜ **Josh Hayles, josh@bwick.edvx.edu**

➜ *The 'd' in names such as ftpd, telnetd and the rest refers to the fact that these are the names of 'daemon' programs. These are programs that run (almost always as a background process) on a network server and 'watch out' for network traffic that is connected with their particular area of responsibility. For instance, 'ftpd' running on a server keeps a watch out for any ftp connection or transfer requests and grants or denies them according to a pre-defined set of parameters. Similarly, 'smtpd' running on a server controls any responses by the server to smtp (simple mail transfer protocol) commands. The names without the 'd' refer to the program that runs on either the server itself or a remote machine and acts as the actual user interface for the area concerned i.e. running a program called 'ftp' lets you carry out File Transfer Protocol instructions.*

TFTP stands for Trivial File Transfer Protocol and is a somewhat simplified version of the more usual ftp, which doesn't require the use of a username and password. This makes it a fairly obvious security loop-hole, and so it is very rarely used nowadays.

Turning Japanese

Q I'm running X windows with Linux on my PC. I'm also studying Japanese at college, and I want to know if there is a program available for X windows that will allow me to log on to Japanese bulletin boards and display Kanji characters correctly.

➜ **S. Inglis, London**

➜ *The only program that I know of that will do what you need is called Kterm and is freely available on the Internet via anonymous ftp. The only problem is that it is available as C source code only, and so you will*

have to be able to build C programs on your system if you want to run it. If you feel up to the job, get the source code from this site:

FTP: bash.cc.jeio.ac.jp
path: /pub/mirror/X11-contrib/kterm

Mercury mix-up

Q I wonder if you and the team can come up with an answer to this one – have any of you heard of problems getting high speed connections over a Mercury line? I have had severe difficulties in getting my modem to connect in UK & Euro calls to v34 & Zyx flagged nodes. Calling direct over BT lines to the same destinations seems to be no problem. Is there anything that is obviously different about the nature of BT and Mercury lines for high speed data transfer?

→ Andy Turner, Bangor

→ Mercury, in their less than infinite wisdom, seem to have seen fit to put a small beep on the line upon a successful connection. When the answering modem hears this (and if it's a fax-compatible modem), it thinks your calling modem is a fax machine and, as a consequence, you get a poor connection speed. Of course, many V.34 modems are up to date enough to have adaptive fax as standard, and so wouldn't suffer from this problem. Phone Mercury and ask them to remove the beep – you may find this solves your problem. Be warned, however, that lines to some countries seem to allow only slow connections using Mercury no matter what – until recently I couldn't get any connection over 4,800 to Denmark!

X-Files

Q I have several questions for you, all related to similar themes. Firstly, I want to know if it is possible for me to run X-Windows on my Amiga 1200. Secondly, I want to know if it will then be possible to use the Amiga to link in with the DECnet network that I use at work. Thirdly, (and most importantly), I need to know if I will have to pay much to get this all working! Basically I want to be able to take my Amiga to work and impress the PC people running basic terminal emulation in Windows using DEC Pathworks, but I don't actually want to have to shell out any money to do so! I know this is a bit of a tall order, but I know plenty of good software is available for nothing on the Internet, I just don't know where to find it.

→ Alice Jefferies,
alice@hortnet.gsd.co.uk

→ With this sort of question, the answer is always going to be "Yes and No". A full colour X-Windows client called X11R4 for the Amiga is available from GfxBase Inc. They also have available versions of XVIEW, OpenLook, Motif, programmers' toolkits, and Berkeley sockets library. This will run over a serial link or Ethernet card. Since you're looking to do things on the cheap the serial option is probably the one you'll go for. Of course, this is a commercial program but, especially for scroungers like yourself, there is a demo version available from any of the Aminet mirror sites – try:

FTP: src.doc.ic.ac.uk
path: /pub/aminet/gfx/X11

This X windows software also supports and complements a product called TSSNET-DECnet which actually lets you set up your Amiga as a phase-IV DECnet end node – let's just see the PC crowd try to better that, then!

TSSnet is available from Thunder Ridge Inc., and allows you to run normal VAX sessions and DECWINDOWS applications on your Amiga Workbench. The relevant addresses for these companies are available in the documentation that comes with the demo version of the X windows software.

Learning MIME

Q As a follow-up to reading your recent article concerning MIME in email, I would be grateful if you could point me in the right direction to find up-to-date information as to what data types are currently supported by the MIME standard. This would be of immense benefit to me, as I am currently attempting to configure my system to be fully MIME compliant. Also, is there somewhere that I can obtain samples of MIME encoded mail messages?

→ Roger Truesdale,
roj@truerom.justc.co

→ The latest list of registered MIME types is available by anonymous ftp from the following address and path:

FTP: isi.edu
path: /in-notes/media-types/media-types

A number of sample MIME documents are available from the following ftp site:

FTP: thumper.bellcore.com
path: /pub/nsb/samples/

Fax facts

Q Can you tell me if it is possible to send a fax directly from the Internet? A friend of mine suggested that there might even be a free service to do this, although it would be of such benefit to me that I wouldn't even mind paying a small fee for its use.

→ Armand Heasley,
ah@sceptre.rtcd.edu

→ There are, in fact, many ways in which fax messages can be sent using Internet email. There is even at least one way to receive faxes and have them sent to you as an email message.

This whole area is a bit too complex to go into in 'Helpdesk', but I'll point you in the direction of a document which will outline how to go about using Internet fax. If you want to use anonymous ftp, try one of the following sites and paths:

FTP: rtfm.mit.edu
path: /pub/usenet/news.answers/internet-services/fax-faq *or*
FTP: ftp.eff.org
path: /pub/Net_info/Technical/net-fax.faq

You can also get hold of the document using Gopher at this address:

gopher: gopher.eff.org
choose: 11-> Net_info-> Technical-> net-fax.faq

FAQ:

Frequently Asked Questions

Quite a few people have asked for a list of port numbers used by the standard commands such as ftp and telnet, so here is a fairly comprehensive list of port mappings that you are likely to come across:

SERVICEPORT	NUMBER	PROTOCOL
echo	7	TCP/UDP
discard	9	TCP/UDP
daytime	13	TCP/UDP
quote	17	TCP/UDP
chargen	19	TCP/UDP
ftp-data	20	TCP
ftp	21	TCP
telnet	23	TCP
smtp	25	TCP
time	37	TCP/UDP
tftp	69	UDP
finger	79	TCP
portmap	111	TCP/UDP
exec	512	TCP
login	513	TCP
shell	514	TCP
printer	515	TCP
who	513	UDP
syslog	514	UDP
talk	517	UDP
ntalk	518	UDP
route	520	UDP
Xserver	6000	TCP

***TCP** - Transmission Control Protocol*
***UDP** - User Datagram Protocol*

I'm rather new to the Internet scene and I am having trouble with these Net addresses. I understand email addresses but things like Netscape, FTP and gopher seem to do it differently. Could you please explain the differences to me?

If you see an address that looks like this: http://www.gpl.net/customers/ict/ict.html, you can know that it's a World Wide Web address. So if you enter it into the 'Open Location' box in Netscape (or Mosaic etc.), you will be taken to a Web page. The 'http' part tells us that it's a Web document, the 'www.gpl.net' is the name of a computer somewhere on the Net (in this case, it's located in Northern Ireland) and the rest is a Unix pathname. Unlike DOS, Unix's pathname is delineated by / (forward slashes) as opposed to DOS's \ (back slash). Finally, the ict.html is just the name of the Web page itself.

If it's a gopher address, then it will start with gopher://, and an FTP address starts with ftp://

Inbox

This month, the letters page becomes a hotline for the Net citizens' charter, as I&CT readers lash out against Government-imposed cones on the information superhighway

The end of the inforoad?

Dear I&CT,

Your editorial concerning BT hit the nail on the head. When I heard on the news of the Government's refusal to give BT a licence to build the fibre optic ISH network infrastructure, I felt sick and angry. The Government's excuses don't hold water; for example United Artists are an enormous company and a reasonable match for competition with BT any day.

Anyway, good and healthy competion demands that different systems be allowed to compete! Whichever is the better system naturally gains the greater market share, forcing its competitors to adopt newer or better systems in an attempt to retain or recapture their share of the market.

If we didn't have this type of competition we would all still be swinging around in trees banging rocks together. Unfair competition would occur if BT prevented other companies from using the same technology as them, but as far as I know this isn't the case. I don't think any one is preventing cable TV companies from using fibre optics, they have just decided that for them their alternatives are the most cost-effective path/gamble to take. However, BT's competitors are being given an unfair advantage by this Government preventing BT from entering the market with their chosen technology which BT believe will provide a better and more cost-effective system.

However, the majority of us know that this Government only pays lip service to the concepts of 'fairness' and 'competition' and then only when it suits. Perhaps, as Tory government history dictates, we should again be looking for a few well-greased palms and major shareholders of cable TV companies within the Government and the civil service to find the real reasons for what, on the face of it, is a decison of monumental incompetence.

→**Dr. M. Hosey**
mark_h@zebedee.phys.strath.ac.uk

One for the Ed

Dear I&CT,

Firstly, thank you to Nick Merritt for an excellent editorial titled "Cones on the Information Superhighway". It was very well written, in language that can be understood by all areas of society, and got to the heart of the problem.

So what next ?

The action that the Government has taken will not only damage Britain technologically and economically, but it will damage us, the users. This may sound very selfish (mainly because it *is* very selfish) but I'm thinking of numero uno. Do I want to continue paying a high price in telephone calls for being connected ? Do I want to spend half my time waiting for the data to be downloaded ? Of course not.

I believe that it is time for the Internet community in the UK to voice their opinion to the Government in an effort to change what has occured. This must be started by the computing media and taken up by their readers. Methods of action should include writing to your local MP, explaining why the Goverment is wrong. Those in the community who have the technical knowledge should question the decision using the full force of their knowledge and experience.

Many people will display abject apathy, saying "it won't do any good". They are wrong. My other hobby is motorcycling. Over the last few years a European Minister, Martin Bangemann, wanted to impose a Europe-wide limit of 100 bhp for motorcycles. This law nearly went through, but for the efforts of the

Quids in

Dear I&CT,

I am writing to congratulate you, along with the many others who have already, on an excellent magazine, and hope that it continues from strength to strength.

What with so many magazines on the Internet available today, and comparatively few Internet users, it can only be a matter of time before there will only be a few select Internet mags left. I, for one, have tried the rest, but I&CT provides good coverage on the Amiga, which is a thriving group on the Internet (just check the demon.ip.support.amiga group!).

I have only one major complaint and that concerns the number of pages in an issue. At present, for the 98 pages, the reader has to pay three pounds, and, despite the enjoyment of the magazine, it doesn't take too long before I&CT is read from cover to cover. I know that the magazine is glossy, bold and full of colour, but surely some of this can be sacrificed for more pages?

I enjoy the articles written by Steve Gold on computer security and hacking and hope that there will be more stimulating features along similar lines.

Any chance of an article on IRC, an aspect that I have recently discovered and am enjoying immensely?

Anyway, keep up the good work!

→**Paul Tang**

→*It's our hope that the size of the magazine will increase shortly. We're sorry the mag is expensive – if it was up to us lot on the editorial floor, the 'information would be free' so to speak! Watch this space...*

motorcycling population – led by the motorcycling media. It was ONLY due to the pressure brought to bear by the average man and woman in the street that aborted the law.

I ask I&CT specifically, and the Internet media in general, to do the same and bring the UK Internet community together to fight for a fibre optic 'superhighway'.

→**Rich Peaker**
richard@brambles.demon.co.uk

→***Nick says:*** *That Editorial has created a massive response. Most of the letters I have received express the same strong feelings as the ones above. It's good to see that so many people do actually care about the technological future of this country, which is more than can be said for the bunch of fools currently running the place.*

Submissions to the Dept. of Trade and Industry and to Brussels are currently being made on the basis of the Editorial, so if you share the views expressed in it, or above, please write to: Michael Heseltine, President of the Board of Trade, House of Commons, London SW1A 0AA.

The ten thousand year Reich

Dear I&CT,

Great magazine, guys, but perhaps a little presumptuous in how forward-thinking you really are? The copyright notice on page 5 of the February 1995 issue says © 19955 !!!

→**Killian C McCourt**
killian@kmcc.demon.co.uk

→*Presumptuous! Gasp! So we plan long-term! What's wrong with that? (Somebody get that damn keyboard fixed...)*

Focus pocus

Dear I&CT,

I think the view of the UK Information Superhighway in your Feb 1995 Editorial is slightly out of focus. Let me give you some background about myself so you know where I'm coming from. Many years ago I completed a BT apprenticeship, and spent several years after that working as a Business Systems Leased-Line Engineer. Now I live in Los Angeles, and have my own 24-hour Internet connection coming to my house. It costs me about $100 per month all-in, with a 28.8 modem and a free local call, and I run WWW, FTP and mail servers for several commercial domains.

All this is in addition to 60-something cable TV channels. I'm now a multimedia/Internet consultant to Hollywood. So I'm fortunate, and have some extra insight to the US scene.

Firstly, BT are not the saviours of the Net in any shape or form. They are just another evil empire seeking world domination, but I'll get to them in a minute. The UK Government may be full of bozos, but it has always had a policy of restricting the flow of information amongst the ordinary population. There is no pretence in the UK that information is free. Instead there are plenty of examples of the control and manipulation of information by HM's Government. This has become very firmly established in British culture and is a throwback to the attitudes prevalent even before the two World Wars.

Consequently, any empowering device, such as the Information Superhighway, is ultimately going to be seen as a threat. This is real because the rules of society are changing in the US, and they will soon be reflected in the UK (have you noticed yet?). My point here is where is Hansard on the Internet? Where is UK law and legislation on the Internet? Where are the High Court decisions? Where are the real Treasury figures? Where are the local Council minutes? Where is the information that makes a difference to our daily lives? Where is the information that makes our vote really worth something? <flame off> :-)

The other reason BT's offer hasn't been taken up is because of the massive US investment. All the cable TV trials in the UK are essentially R&D ventures. The US market is huge compared to the UK, so each US cable company wants to iron the bugs out of their system before facing the American public. The UK's interactive TV trials may be complete flops, or end up using the wrong hardware standard. They can find out problems in Britain without losing too many billions of dollars (!). Either way, it's possible that not all of the UK will evolve to one standard as it is today with PAL.

Fibre or copper? I want fibre. It's expensive compared to copper. Copper can adequately supply the bandwidth needed for bi-directional digital video into the home. Reports that cable TV can't provide real-time video are... er... incorrect.

→**Simon Higgs**
SimonHiggs@eworld.com

→***Nick says:*** *I don't disagree with you but the thrust of my article was not really about giving BT a free ride, but about the lack of any government policy. The Government's lack of foresight is shown up in the way they are treating BT.*

Your point about the UK just being an R&D test-bed for the American cable system is interesting but doesn't completely explain their enthusiasm for investing large sums of money. The cable companies took a big knock in the eighties, yet they are still coming back for more.

Besides, in the USA, the cable companies are screaming ahead at full speed anyway, and are not waiting for the results of the UK experiment. TCI have said that they'll get the 'superhighway' completed by the end of 1996 (so they say) and Time-Warner are investing a lot of money in interactive TV trials in Orlando.

You're right that copper wire can supply the necessary bandwidth for two-way interactive TV. But a true superhighway will need higher bandwidth than that – to allow multiple two-way signals to come down a cable line. The odds are that there will be more than one TV (or whatever the device is) connected to a house's cable line in the future, and each TV is going to need to be able to display an independent signal, something not currently available with copper wire.

Sex crime

Dear I&CT,

I've enjoyed Jonathan Miller's columns so far, until Issue 4. Jonathan gives us an intelligent opinion on why the male:female ratio on the Net is so biased. He talks about men who react with "the finesse of a big-bottomed brickie" to the arrival of women online, and mentions that so-called geeks know little about women. Wake up, Jonathan! Read the last line in your opening paragraph : "There is a shortage of babes in cyberspace." No woman I know, online or not, likes to be called a babe! It's an outdated sexist term, and you've just lumped yourself in with the sexist geeks. I appreciate you may well have been joking, but big-bottomed brickies probably feel they're being funny, too.

→**Frank Charlton**
frank@tachyon.demon.co.uk

→*Perhaps you're right. That's the trouble with throwaway lines – sometimes they boomerang back and hit you in the face...*

Male models?

Dear I&CT,

Paraphrased from I&CT February 1995, page 17:

"I picked up a copy of Wired recently to find pictures on pages 4 & 5 of the contributors. Unless the pictures lied, not a single woman was involved in the creation of Wired, except to make the coffee. We'd better start involving women at all levels."

I was saddened when I picked up issue 2 of I&CT to find it dominated by white, middle class males. I sincerely hope that Sara Edlington is not just the 'token woman'.

So, just what are *you* doing to redress this imbalance?

→**Paul Harris**
peej@bluridge.demon.co.uk

→*OK, you've got us. Except that you haven't. Sara Edlington is most definitely not a 'token woman' – we employed Sara because she happens to be a damn fine journalist. She writes regularly for the mag now, as we hope you'll notice.*

The vast majority of this magazine is freelance-based, so we take features on the basis of a phonecall, whether from a man or a woman. It's a sad fact that the majority of Internet users are white, middle-class males, so it's natural that most Net journalists will come from this group. The way to redress this balance is to campaign to make the Net a more woman-friendly place. We have tried to do this in articles such as Sara's piece on sexual harrassment on the Net. But the real solution to a blokes-only Net lies beyond Netiquette, in the hands of educators, employers and governments. But don't worry, it looks like women are taking over in business and education and it won't be long before the roles are reversed on the Net, too.

– Kirsten Foster, Production Editor, and woman.

One Mac mind

Dear I&CT,

I just picked up your second issue on the news-stand in Madison, Wisconsin, USA (sadly, your first issue was never available here), and am writing to let you know what a great magazine you are putting out. Almost makes me want to pack up my Mac and modem and move to the UK <g>.

While there are many fine computer magazines published in the US, most of them (except the three published specifically for Mac types) tend to forget about us Mac users and focus on the more ubiquitous PCs. I was heartened to see that IT&C seems to strive for more balanced coverage.

I look forward to reading your next issue, and the one after that, and the one after that... I hope that your magazine is a smashing success.

→**Barb Reinhold**
Barbara888@aol.com

→*Well, we had to throw in just one more congratulatory letter, you know.*

Found out!

Dear I&CT,

Yes, very clever. What are you going to do once you get to issue 22 (or so, depending on if you put spaces in or not and use the full title or not)?

I refer, of course, for those readers who haven't yet spotted it, to the letters I-N-T-E that appear at the bottom of the spines of first four issues.

→**Peter Murray**
petermurray@delphi.com

→*So, we're optimists :-)*

Hacked off

Dear I&CT,

After reading the letter from, quite sensibly, <anon>, I felt I had to write and voice a bit of an opinion on the matter.

"I am not new to the Internet, and have had quite a bit of experience with most areas."

Experience, maybe, but as far as good attitude and Netiquette go, he/she has none whatsoever. As far as I am concerned, any so-called, 'Experienced' user of the Net who uses words like CyberShite and probably froods around 'NetSurfing' and hanging about with 'CyberGurus/NetGurus', does not deserve to have a connection. It's people like this who completely turn the Internet into the media hype it so clearly isn't. If this guy has been using it for so long then, like myself, he should not promote the commercial trash it is turning into. I even heard someone call it the 'Matrix', sheesh.

Don't get me wrong, I am not one of these die-hard guys who sits at the end of their Unix box running nothing but Command Line programs to access the Net, I love using the decent Windows interfaces for these programs, but I can see something turning very sour, and very bad magazines (of which yours is NOT one, it's an excellent read) and very bad TV articles *no names here*, are not helping its image.

I didn't read the article he mentioned, but with regards to the Phone Phreaking, he almost seems proud of it. Even more of a reason for this person not to be on the Net. Unless he has a direct connection, then do you really think that right now he may be defrauding the Phone Company and probably getting a close to free connection. This guy is not cool if he's a criminal.

I realise I am going to get flamed to hell, probably, for this but some things have to be said and for every 'CyberWiz' and 'WebMaster' out there, there are a few real people who use it, staying on this planet.

Still, on a lighter note, congratulations on a 'real' magazine at last which contains some useful information and is presented how you want it, i.e. "Ok, _this_ does *this*". Keep it up, I'll look forward to future issues.

→**Chris Caines.**
70004,4523@compuserve.com

→*Thanks for the comments. God forbid media hype – sometimes we wonder if we're part of it – forgive us if we are.*

The Phreaking guy was expressing his opinion, which he is entitled to do. As far as being proud of it is concerned, well, it's fair enough to be proud of something you do well. It's just a pity it has to be this particular activity he excels at.

But let's not get too hyped up about phreaks and hackers. They are a tiny minority of Net users, and the sooner the Press realises this, the better.

No more hacking

Dear IC&T,

Firstly, congratulations on your journal; on the whole you have achieved a good balance of information, education and speculation.

My personal belief is that the Internet could be of immense value in bringing people together and sharing knowlege and experiences.

However, the maximum potential of this medium will only be realised if legislation to control it is minimal and intelligent. This can only be expected if the Net is seen to be self-regulating, responsible and non-threatening to the general public.

Why then have you dedicated three pages of issue 3 to the celebration of trespass, voyeurism and vandalism? (41,42 & 43)

The mentality of someone who delights in breaking into private property, rifling through personal correspondence and the minutae of other people's existence, causing damage that costs money and time to rectify, is well documented and generally perceived as seriously sad. We all have protection in law from these people, and take additional precautions (locks, alarms and general vigilance).

These people are no different to software thieves, industrial saboteurs and the burglars that defecate on your carpet, and your journal should be setting an example by extolling the virtues of world co-operation and mutual understanding, instead of hero-worshipping those who can only reinforce the general public's view of comms enthusiasts as embittered misfits to be shunned and derided.

I hope this article has not done the damage I believe it could...

Keep up the GOOD work,

→**Paul Wilson**
paulw@saxon.seuk.com

→***Nick says:*** *The point of features like that is to talk about people's experiences of the Net, or the comms scene. Their activities can be harmful and irresponsible, but they happen. My policy is to be non-judgemental about the articles we run, to the extent they appear uncut and uncensored (mostly – I don't want to break any laws).*

That's not to say I don't have opinions about this (I tend to agree with you) – however, I have my place in the mag to express them (my Editorial) and I don't think I have the right to interfere with somebody else's story.

Didn't you find the article interesting? I did. And I learned something. Didn't you? Even if you only learned that hackers are irresponsible misfits, surely that was a good enough reason for running it?

A suggestion

Dear I&CT,

I have bought all the new Internet magazines available and must congratulate you on being up there in the top three ;-)

I&CT is now in its fourth issue and seems to be settling down to a consistently well balanced mixture of tutorial and information. If I had one suggestion on how to improve the magazine, it would perhaps be to show more of what can be achieved through the Net. A good way to do this would be to showcase a different person every issue and demonstrate how that person could use the Net to enhance their particular job or area of study.

I am sure there are a lot of people out there who, like myself, have moved beyond the "how to get connected" phase and the initial novelty and excitement has passed. A pratical demonstration of actually using the Net would breath some life back into the whole experience.

An interesting read – please keep it up.

→**Chris Bentley**
Christopher@chrisben.demon.co.uk

→*Many thanks for the comments. We are more-or-less doing what you suggest but we don't want to lock ourselves into a strict format too much. Essentially, we'll run a feature on anything Net-related that interests us.*

However, we are considering doing more features on the way particular people use the Net, but we'd prefer people who use the Net for interesting reasons and not just for dry, technical stuff.

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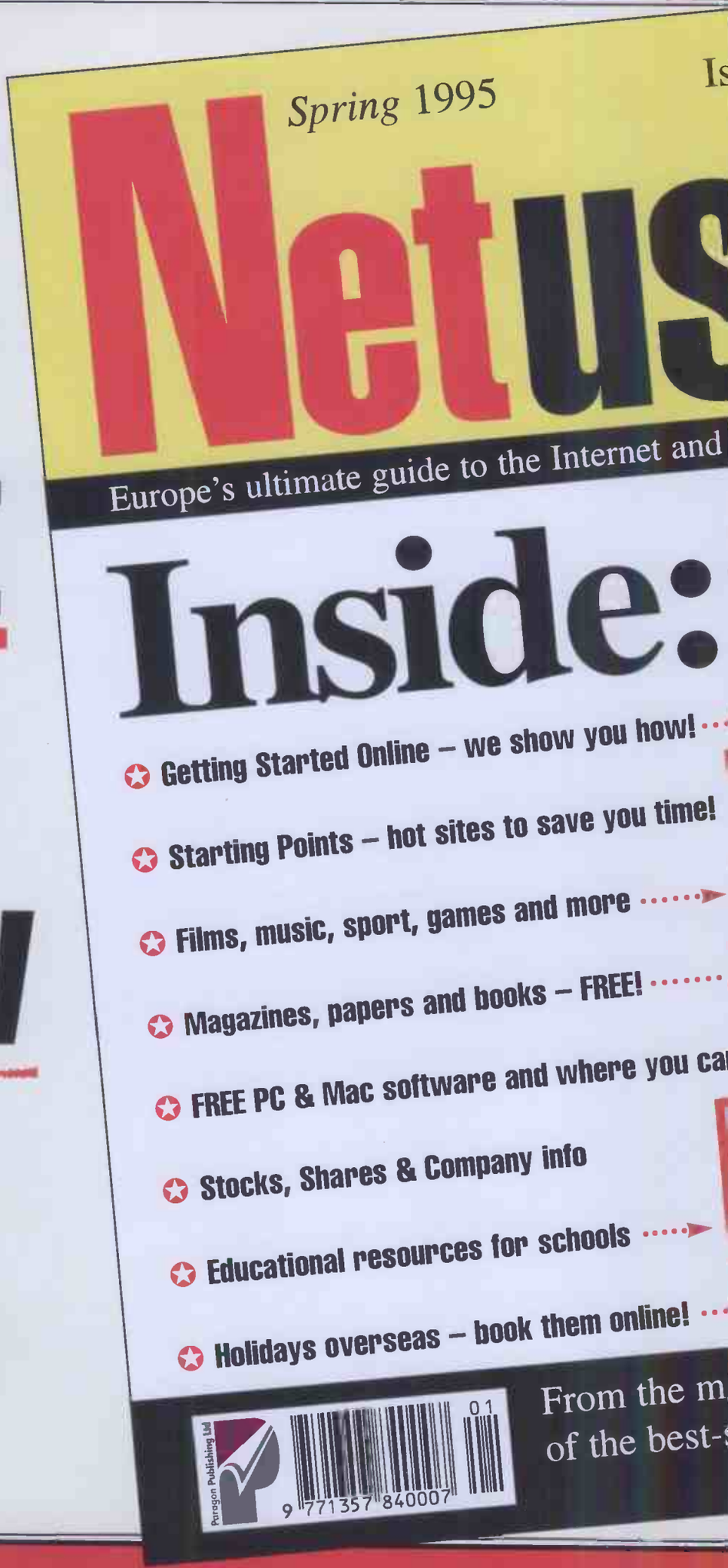

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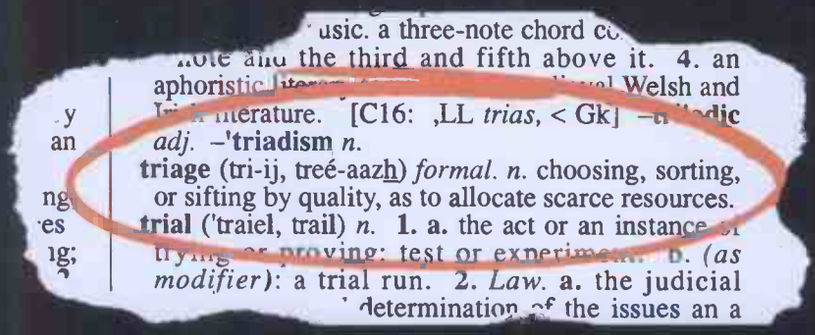

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Crowthorne, Berkshire
RG11 7AQ
Telephone: (01344) 762616
Facsimile: (01344) 762573
E-Mail : 100315.1740@compuserve.com

The Network and Communications Recruitment Services Specialists

Let's Talk

ELECTRONICS DIVISION

Our Electronics Division specialise in the provision of technically trained staff whose expertise range from Prototype design through to production and manufacture.

Uniquely placed, We operate extensively within the Communications arena. Our database of contractors and portfolio of Clients are providers of Cellular, Radio and Satellite services World Wide.

By using our network of contacts we are involved in some of the most exciting and technically challenging projects throughout the UK and Europe. We are keen to develop relationships with new clients and contractors alike.

Listed below is a sample of the types of skills and assignments available from Orion Contracts.

ANALOGUE DESIGNER
CMOS design - Phase locked loop systems.

DIGITAL DESIGNER
ASIC design - experience of Mentor V8 and Quicksim essential.

RF DESIGNER
To design circuits and systems up to 2Ghz, experience of CT2 or GSM an advantage.

TEST ENGINEER
To fault find and repair to component level of prototype boards.

MICROWAVE ENGINEER
To develop a VHF PLL system for 28Ghz BT microwave link.

Contact: Steve Hancock or Guy Weekly

SOFTWARE

In keeping with Orion Contracts policy of targeting specific niche markets our Software division is focused towards two distinct areas:

Communications
Designers, implementors and testers within real-time and embedded software arenas, and biased towards the communications market sector.

New Technologies
Software Engineers and Application Developers versed in the "New Technologies" arena on PCs. This centres around contract staff skilled in Microsoft's latest development environments, for a host of communications, multi-media and commercial clients.

Current Assignments include:

Software Engineers Experience of C under VMS required for a real-time telecomms development. 3-6 months, Thames Valley

Software Engineer Experience of C and ISDN required for datacoms development. Knowledge of the U Interface desirable. Thames Valley

DSP Engineer Extensive experience developing firmware in low level C and Assembler for telecomms applications. 6 months +

Analyst Programmer Visual Basic and MS Access experience. Opportunity to learn Visual C++. 3 months +, Herts

Software Engineers Experience of Visual Basic Windows required. Windows NT/Microsoft SQL desirable. 3 positions to start as soon as possible.

Programmer Windows 95/NT with API and C/C++ experience. Home Counties

Contact: Bob Brown or Jo Brown

NETWORKING

Within this division Orion Contracts supply staff to the Voice and data comms, PC Support and Help Desk areas. So if your skills lie within these boundaries, or as a client, you wish to recruit contractors, please contact me at the number below. Included here is a list of the types of vacancy we have had recently, as a guide.

BENCH ENGINEER
Required to fault find and repair to component level on WAN/LAN and PCs.

NETWORKING ENGINEER
Design and Planning of Wide Area Networks. BS5750 environment X25, TCP/IP

PC/NETWORK SUPPORT
MS Office, Mail, Novell, excellent Interpersonal skills.

PC SUPPORT
MS Office, Mail, AT&T gateway preferred.

PC SUPPORT
MS Office, CC Mail, UNIX desirable.

UNIX ADMINISTRATION
Experience of Telecoms (Switching) essential, able to work under pressure.

AIX SYSTEMS ADMINISTRATION
Exposure to IBM MVS systems a distinct advantage.

NETVIEW 6000
Opportunity for roll out of Netview 6000, installation/documentation.

DB2 SUPPORT
On going requirement for Operation Analyst, MVS, DB2, JCL

DX SWITCHES
Continuing requirement for contractors able to install and programme DX switches. Supervisory experience useful.

EPOS
Support specialist required with experience of IBM4680 systems - Broad based PC background useful.

Contact: Ian Cook

ORION CONTRACTS
Technical Assignments

ORION CONTRACTS
THE COURTYARD, MERLIN CENTRE, GATEHOUSE CLOSE, AYLESBURY, BUCKS HP19 3DP
PHONE: 01296 393636 FAX: 01296 395 436 E-Mail: 100124,3157@compuserve.com

log off

the electric Zoo

You can reach the Zookeeper via zoo@itoday.demon.co.uk.

The Zookeeper gets paranoid this month. This is news?

When the Editor of this magnificent magazine told me that the theme of this issue was "hate and paranoia" on the Internet, naturally my interest was aroused.

Let's face it, there's a lot of hate and paranoia about at the moment – wars, interest in the paranormal, doom-laden prophecies and the rest – all the traditional millennial kinds of thing. When a nun in shades and wearing lipstick pops up on the News at Ten to tell the world that the Shoemaker-Levy Jupiter strike is a message from God warning us that we should keep a better eye on Earth, you know things are getting a bit wild.

I'm convinced the sudden interest in the Internet is part of the same process. As anybody who's spent any significant amount of time lodged on the alt* newsgroups on Usenet will know, the place is crawling with paranoid nutcases. The explosion of newsgroups is like the proliferation of splinter groups, each with its own agenda, prima donnas and fundamentalists.

alt.alien-visitors is a good example of this. Flying saucer nuts have always been a bit crazy – anybody who could name several quintillion dollars worth of super-advanced astronautical engineering after a small round dinner plate is clearly not a person you'd want in charge of anything really imaginative.

There's been a recent battle on alt.alien-visitors about disbelievers in the cause, the general view seeming to be that if you don't believe in little green men, you must, at the very least, be some kind of madman. An alternative view says that no, those people aren't madmen, they are actually Government disinformation agents who have been planted in the newsgroup to help preserve the massive worldwide conspiracy that is preventing the truth about UFOs coming out.

I have to confess a certain attraction for that point of view, believing as I do that if the role of Governments is to mess up as many people's lives as possible, then it's hardly surprising they're starting on the aliens as well.

There's a smaller group of people who don't hang with either theory, though, because they are, in fact, aliens themselves.

They're dead easy to spot because they like to announce their presence with "I am an alien" posts. I've done some further investigation into this curious phenomenon and have discovered that a strange breeding experiment, started way back in the 1970s, has created legions of frightening subnormal 20 year old creatures who are completely unable to relate to human society in the usual way.

Other people will have no truck with these ideas – they are the sensible ones, the ones who firmly believe that it is likely there is life out in the Universe but, due to the distances involved, the aliens probably haven't got here yet.

When they do though, it will be to help us – to ward off annihilation by a hostile alien species, to prevent a giant asteroid colliding with Earth or to stop global warming detaching the polar ice sheet from its bedrock and flooding the planet.

Another scientific discovery by my research staff has uncovered the fact that most of these people also watch EastEnders three times a week, which might account for something.

I don't know if you've noticed the massive increase in interest in astrology currently. OK, so astrology is rubbish, but even so, I still can't figure out how the bizarre Mystic Meg got her job on the National Lottery 'show'. Perhaps there are some things people aren't meant to know after all.

alt.astrology is the Internet's contribution to this millennial fun – the current topic of conversation is the discovery by a couple of scientists of a '13th' sign of the Zodiac. Personally I reckon it's nothing more than a gigantic gag by a bunch of guys whose research grants haven't gone through yet. Astrologers have a notoriously bad sense of humour (*you* try telling them astrology is a joke), so how better to wind them up than by telling them every prediction they've made for the last 5,000 years has been wrong, and better still, the number 13 is the cause of the problem.

The interest in the paranormal in general always peaks around the turn of a century – the turn of the C19th saw interest in fourth dimensions, worries about Haley's Comet and so on, so in this communications age, it's not surprising to see the same concerns cropping up on the Net. On a good day, we can take comfort in **alt.conspiracy**, **alt.disasters**, **alt.elvis.sighting**, **alt.folklore**, **alt.horror**, **alt.hypnosis**, **alt.lies**, **alt.life.afterlife**, **alt.mindcontrol**, **alt.misanthropy**, **alt.out-of-body**, **alt.pagan**, **alt.paranet**, **alt.paranormal**, **alt.prophecies.nostradamus**, **alt.revolution.counter**, **alt.satanism**, **alt.tarot** and **alt.vigilantes**.

This is especially interesting when you consider the University background of most Net users. But then half of all graduates are supposed to be unable to spell, read or count to three without the aid of half a ton of computing equipment.

Being a paranoid sort myself, I have to take pleasure in so much material of this kind being so readily available. After all, the other most entertaining way of dealing with paranoids is to lock five of them in a room and secretly give four of them a knife, making sure, of course, that you falsely tell them that the fifth has a gun. Quite fun to watch, so I'm told...

Pentium MPCs. Are they a gamble?

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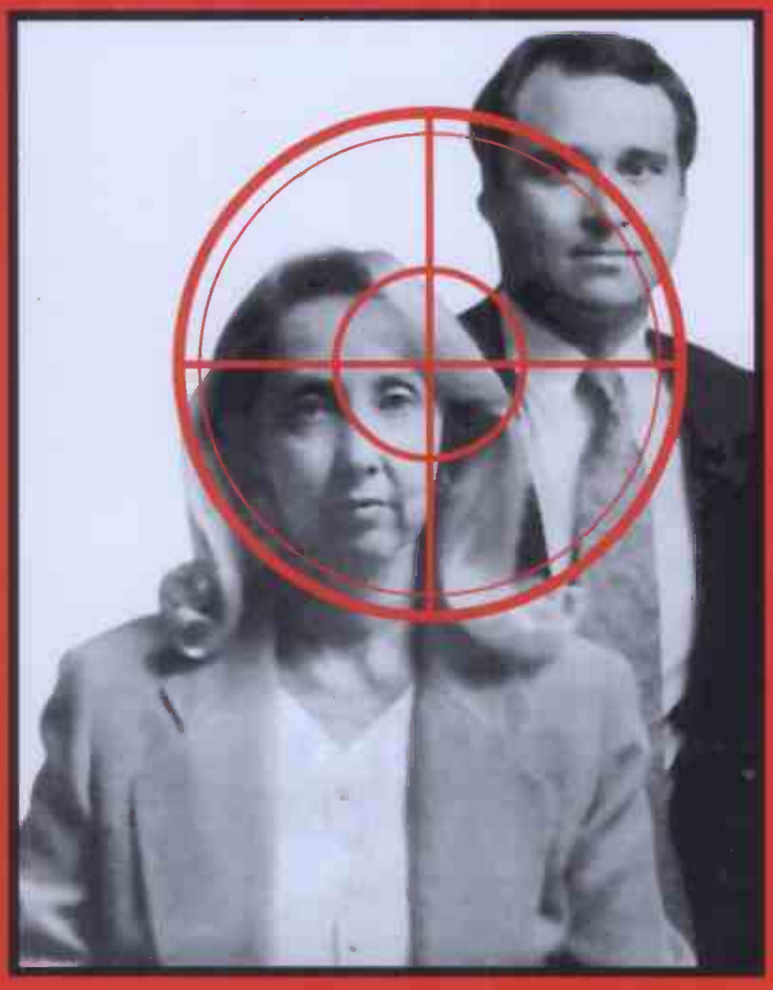

Paragon Publishing
Durham House
124 Old Christchurch Road
Bournemouth BH1 1NF
Tel: 01202 299900
Fax: 01202 299955
email: Paragon@itoday.demon.co.uk