THIS MONTH: 300 San Francisco Bay Area BBSs

October 1993

BOARDWATCH MAGAZINE

Guide to Online Information Services and Electronic Bulletin Boards

Wildcat! Makes The Internet Connection

Hayes Enlists BBS Community for V.Fast Class Modems

MUDS on the INTERNET

Adventure and Chat on a Global Basis

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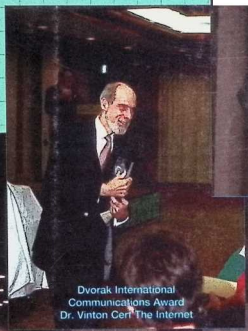

Dvorak International Communications Award
Dr. Vinton Cerf The Internet

Dvorak Lifetime Achievement Award
Dennis G. Hayes

REPORT ON THE ONE BBSCON

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ONE BBSCON - *IT HAPPENED*

by Jack Rickard

The **Online Networking Exposition and BBS Convention** was in fact held August 25-29th at the **Broadmoor Hotel** in Colorado Springs, Colorado. Nearly **2,000 BBS operators** and similarly inclined parties attended the event, and having played a part in hosting it, I'll still say it in print - it absolutely took your breath away (in a couple of ways actually given the 6,000 ft altitude).

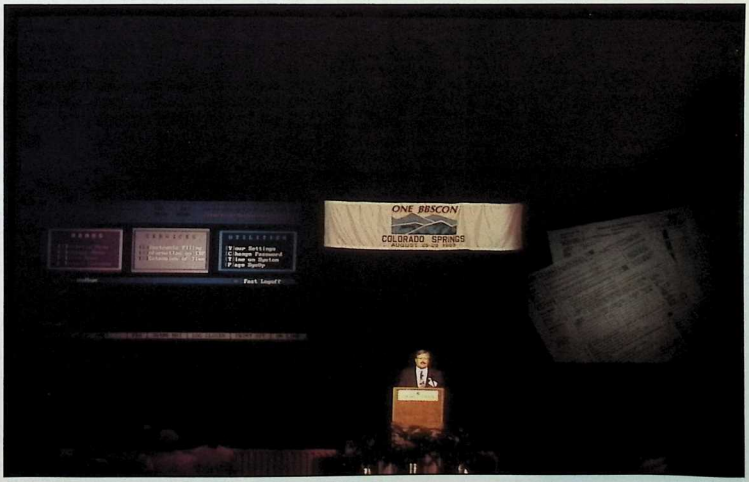
Despite having barely closed my eyes during the whole four days, I didn't see all of it nor really get a good idea of what was going on. There were so many "deals" being cut in so many corners so fast, I had the vague impression I was missing most of it the whole time. And given all the schmoozing and gabbing, I did rather a poor job of what I normally do best, digging out the good stuff and writing about it. What we DID see there would more likely make one of **John C. Dvorak's** "fat books with disks" than it would a magazine article, but we're going to try to piece one together out of notes jotted on the backs of business cards.

As to technology, there were three things that jumped out a bit at the convention. **Graphics**, the **Internet** connection, and some rather surprising efforts to **bypass telcos** to deliver data. There were some new faces, and some awards events that caused a bit of a stir. We'll try to break this down into pieces, Gbut it has to be a little shallow to get it all in.

GRAPHICS

The big winner from the '92 convention was **Remote Imaging Protocol** or **RIP**. In the past year, most of the BBS software developers and two major terminal programs have incorporated some semblance of RIP into their products. The three gents from **TeleGrafix Communications, Inc.** that developed RIP received one of the John C. Dvorak Awards for **Excellence in Telecommunications Technology** held on Friday evening in Broadmoor West.

RIP itself was represented by a booth with the boys from **TeleGrafix**. It was a bit disappointing in that the much heralded **RIP II** specification, which was to include photo-realistic JPEG images, just wasn't ready. They showed a videotape of what it

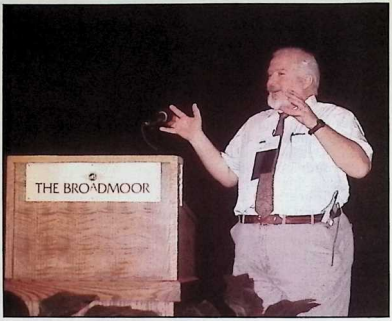


Phil Becker - ONE, Inc., Addresses Opening Session of ONE BBSCON

correction in a pretty handsome way. It's here, it works, and it will knock your eyes out. Technologically, I would claim this RoboBoard stuff is about a light year ahead of RIP, but because RIP is so easy to implement, the other BBS developers are unlikely to even give RoboBoard FX a good looking over. For those with an ear to hear and eye to doing things right, **DON'T OVERLOOK THIS PRODUCT**! It wouldn't be the first superior technology to lose the standards wars in computerville, but it would be a shame - again.

The other protocol that refuses to die is **NAPLPS. Colonel Dave Hughes** has been working with some Russian programmers for nearly a year on a terminal program called **TROIKA**. He showed up with the stuff in a box ready to sell (pretty nice looking box actually) and it looks a lot like it works in places. Particularly interesting, TROIKA will actually automatically **UUENCODE** and **UUDECODE** graphics for transmission over the Internet. Unlike RIP, NAPLPS is quite device independent and more favorably, supports international character sets very well. JPEG and mouse are the weak areas, and Colonel Dave says it's "in there" or will be soon. MOST INTERESTINGLY, the Troika booth was gaining a LOT of attention from the **PRODIGY** people who showed up at ***ONE BBSCON*** in force. Why? Well, Prodigy is quite NAPLPS based, but rumor has it that they are making some SERIOUS moves at opening up their connection. They are already beta testing their own **Prodigy Mail Manager** for offline Prodigy mail. But rumor has it they may be wanting to get some third party action going for utilities to deal with Prodigy - possibly even to the point of publishing a specification in a controlled fashion. Their two million callers, even after the dip in users from their new pricing scheme, is not an inconsequential portion of the online world. It all had Colonel Dave holding pretty enthusiastic close order drill over at the Troika booth. The other group that seemed quite interested in this product was the education sector.

A final graphics mention has to go to **Durand Communications**. These people have married graphics with the database function for **Galacticomm's Major BBS** in a way that has to be admired. You can create a database with associated photo-realistic images that shows what the future is going to look like online. Currently, they are tied to a single platform, and it's not inconsequential to set something like this up. It all pinches and rubs in places, but it's clearly where we are going. Very impressive.



Jim Warren, keynote speaker on "Cooperative Competition."

Opening Session crowd at ONE BBSCON - Slightly under 2,000.

THE INTERNET

Bernard Aboba and **Tim Pozar** put together the **Internet Track** for ***ONE BBSCON*** this year and it was a big improvement over last year. This is a track that is almost impossible to do. Half the audience isn't sure what the Internet is, and the other half wants to talk about "time to live" fields in the **TCP/IP** specification for packet headers. But these two did a valiant job in trying to pull it all together and it worked.

Part of why it worked was product. Technologically, the BBS community is MUCH closer to making the connection than we had thought. For UUCP connection to the Internet, it's almost over. **Roy Pereira** of **Merlin Systems** demonstrated his PCB-UUCP for PCBoard systems. **Mustang Software** actually announced their wcUUCP product for Wildcat! at the show - and showed it. They ARE **mustang.com** now and you can get the product immediately at **$99**. **Galacticomm** announced that **Chris Ambler** of

FSUUCP fame was redoing their **UUCICO** portion of their UUCP connection for Major BBS, and Major BBS operators would no longer have to use the relatively expensive **UULINK** software in addition to the Galacticomm package. We of course showed our **PIMP** product for TBBS and fuschia fedoras festooned the festivities furiously if at times frivolously far and wide. Generally, the UUCP battle is over. Virtually any BBS system in the world technically CAN now exchange mail with the Internet domain name e-mail system. Finding a UUCP host continues to be a bit of a task, but **Guy Cook** of **Colorado Supernet** and **Arthur Britto** of **Holonet** were on hand to assure attendees that it could be done - signing a few up in the process.

The big news was full IP connectivity for the Internet. At the **eSoft** booth, quite a crowd gathered to watch TBBS operators telnet and ftp in circles into and out of various bulletin boards through a little machine they call the **TBBS Internet Protocol Server**. This is basically a heavily hammered version of **Phil Karn's KA9Q** in a 486 machine that acts as a terminal server. It was not lost on most that the TIPS box was connected with serial cables to the TBBS machine, and would probably work about as well with any BBS on the floor. The bad news, it was not a product, but a demonstration of what the BBS/Internet connection would look like. According to developer **Phil Becker**, no product until spring '94 at the earliest.

Brad Clements from **MurkWurks** was also on hand for several sessions. This nearly brilliant young programmer has been fussing around with **Novell NLM** programs and has done some impressive stuff with an FTP server for Novell that has caused a stir in some areas. But the BBS world is relatively new to him. He still showed up with a program that basically constitutes a TCP/IP fossil driver for communications programs and bulletin boards. We hope that the 90% of attendees who hadn't the faintest clue what he was talking about did not dissuade him from pursuing this product. We predict within a year EVERYONE will know. It's a SOFTWARE solution to connect bulletin boards to the TCP/IP Internet for telnet and ftp that LOOKS like an ordinary fossil comm port to BBS or terminal software. Basically, the no dollars and no cents way to connect ANY fossil compatible BBS to the Internet REALLY via Novell. It has the potential to change the online world, and as usual, nobody gets it at first. I'm not sure I do either in any detail, but after all this time rooting around BBSland, I can smell it when I'm in the room with one. You DID read about it here in ***Boardwatch*** first if anyone asks. More on this product in future issues.

Dr. Vinton Cerf
President, The Internet Society

Dr. Vinton Cerf, president of the **Internet Society**, arrived Friday and attended a private lunch with software developers trying to connect bulletin boards to the Internet. They were all a little uneasy as to whether they SHOULD be connecting bulletin boards to the Internet. Cerf was about five years ahead of them by the time the main course arrived describing how they could all have coordinated worldwide file directories, tunnel information back and forth, and so on with a vision that left them gasping for air. There's a reason why this gentleman is widely known as the father of the Internet.

Following lunch he delivered a session on the **Past and Future History of the Internet** to about 500 attendees that again set people back in their chairs. We learned that by December, 1993, there will be over 2 million ping-able hosts on some **46,000** registered IP networks in **22,000** registered domains strewn across some 91 countries. As of June, 1991, it is NOT primarily academic use, but actually that was the crossover point where commercial applications exceeded academic use. Over **137** countries are now reachable via the Internet domain name e-mail system via UUCP, and the **NSFNet** backbone is now carrying some **7 TERABYTES** of traffic per month. The Internet overall is growing at a rate of **12% per MONTH**. As a humorous aside, he noted that if the current growth rates could be maintained, the number of Internet users and the number of people living on the planet would cross sometime early in the year 2001.

Most impressively, Dr. Cerf not only welcomed the participation of electronic bulletin boards, but described them as a needed interface for the Internet and more specifically as the **Gutenberg press** of the '90s - every man's electronic publishing machine. With regards to the inevitable mix of cultures, he quoted **Dr. David Farber** as originating the operative mixed metaphor for Internetworking - "Necessity is the mother of strange bedfellows." Most of the attendees to this session stumbled from the room to face an world somehow altered in the space of an hour.

Final note on Internet stuff. **Sparky**

Herring, author of the QWK file format for offline mail, marshalled developers in a series of technical meetings to define a kinder and gentler **.QWK** specification to allow more flexible communication, and specifically one that will work with Internet file and mail in more cogent fashion. It will happen. He informs us a formal specification will be done this time, released some time in October. We agreed to publish the full specification in all gory detail in Boardwatch as soon as it is available. Non-technoids can always read the letters to the editor section. It's what we do.

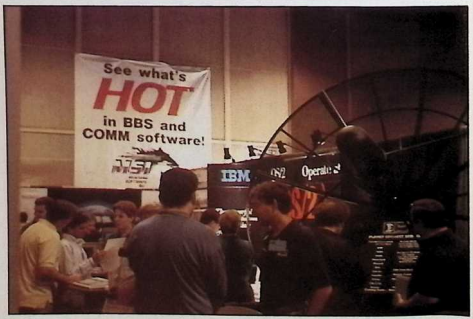
BYPASS TECHNOLOGIES

The quantity of data that has to make the trip to a bulletin board carrying **FidoNet** echomail, **Usenet Newsgroups**, and a few other services has reached the point where you can leave a couple of **14,400 bps** modems connected ALL the time just pumping data into the BBS. 50 MB newsgroup feeds are becoming common. This swelling mountain of bytes is causing some economic distress and the demand for mail just seems insatiable. A lot of the show seemed to revolve around this.

The modem manufacturers had part of the answer. **Dennis C. Hayes** was having secret meetings all over the hotel with BBS operators over their V.FC 28.8 kbps modems which were also on display at an outstanding Hayes booth. Hayes actually sent the card tables to Interop and brought their good display booth to ***ONE BBSCON***. It worked. BBS operators couldn't get enough of it and eight major BBS operators, three major FidoNet mail hubs, and three BBS software developers signed on to the V.FC ship immediately. **Zoom Telephonics** countered with an incredible **$99** deal on their **V.Fast** modems. Despite the fact that the modems won't ship for another 60 days, rumor has it that they sold over **500 units** in two days on the vendor floor. **ZyXel** was there in force talking about cellular modems and Practical Peripherals, **Digicomm** and **Boca Research** were all cutting deals of the year with BBS operators that clearly came equipped to swap cash for bits-per-second. Boca had some surprising values in multi-port serial cards including a 6 port at **$49** and a 16-port at **$249** with 16550s built in. They moved a bunch of them at those prices.

ISDN had a good shot. Saturday afternoon, **Dennis Hayes** delivered a "state of the ISDN address" to good effect, followed by back to back sessions delivered by **Northern Telecom** and **AT&T**. The **RBOCS** got a good thrashing for not moving fast enough, but overall, the impression was that ISDN could actually happen in our lifetimes to give bulletin boards a 64 kbps connection. Hayes was selling their ISDN adapter to BBS operators for **$450** - less than half the list price. Tales of free ISDN installation in Tennessee, where about 20 boards are already using it, had those in non-ISDN available areas in mourning.

But the areas drawing the most interest didn't use telephone lines at all. A last minute session by **Terry Easton** on **Interactive Video Data Service** packed a room to capacity. This is a new technology where the FCC intends to issue two licenses each to **722** markets over the next year. It is wireless, two way, and licensed like low power TV stations. In fact, it was originally designed as Interactive TV. Easton put forth the thesis that bulletin boards and



"Sure, OS/2 runs satellites - it's in there!"

online services could use this to bypass the local telephone companies altogether.

Two vendors were showing satellite connections. We've covered **PageSat's Usenet Newsgroup** offering in recent issues. But **Joe Overholt's Planet Systems Inc.** booth was buried under a pile of sweaty bodies. Overholt, who actually made his fortune with his own form of home-shopping network on television, is dabbling in data delivery by satellite. Notably, he has some technology to do **19,200** bps delivery, as opposed to **9600 bps**, and he intends to put EVERYTHING up he can find - including FidoNet backbone echomail traffic, shareware files, Usenet Newsgroups, weather, news, stock prices, - the works. There's some hitches of course, none the least of which is FidoNet organizationally getting over the shock of doing this (which several high level FidoNetters seemed quite willing to do actually). And the program he's designing seems to center around dish/receiver equipment in the **$600-$700** range with a **$30** or so per month subscription charge. We would know a LOT more about this had we been able to get within 50 feet of his booth. We think you'll hear a lot more about THIS company in future ***Boardwatch's*** as well.

Andrew Milner (left) - Remote Access

NEW FACES

The ***ONE BBSCON*** flushed out some strange new faces. Not the least of which was **Andrew Milner** and the **Remote Access BBS** program. Milner had spent the last several years in Luxembourg and has actually developed an impressive following in Europe for this shareware BBS package. Here in the U.S., despite the fact that a significant percentage of bulletin boards in some areas use this very flexible BBS package, there really wasn't any place in the U.S. to talk to anyone with this product. In the past year, Milner has hooked up with a group called **Wantree Development**, and they are deadly serious about bringing Remote Access to commercial product status and making it a contender. From what we could see, they were making all the right moves with a beautiful booth display, very professional product packaging, and some seriously right answers to all the usual questions. Remote Access was originally patterned after **Adam Hudson's QuickBBS**, but has matured significantly in the past few years to become one of the most flexible and configurable BBS packages available for the price. Remote Access made quite an impression at ***ONE BBSCON***.

And Milner is serious about a renewed assualt on the U.S. market. He is moving from Luxembourg to Tampa Florida this month, and was making the rounds at ***ONE BBSCON*** in superb style.

Another new face at ***ONE BBSCON*** was **Synchronet**. They sported a dirigible on the show floor that was quite visible and the subject of continual comment.

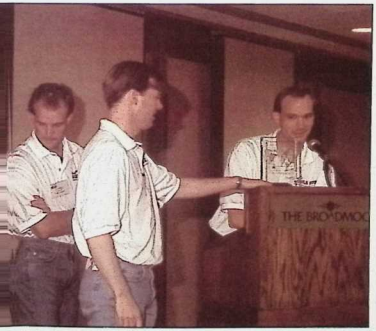
Berkeley Software Design was a new face as well with a UNIX operating system for PCs they were selling for under **$400** at the show, to pretty good effect. **MMB Development** was showing their **UNIX TEAMate BBS** but not drawing much of a crowd, - odd because they are probably the best equipped

National Online Media Association Meeting
"Now after we egg Washington, we're going to sell our boards to the japanese..."

BBS Success Roundtable
(left to right) Dan Linton - Software Creations, Greg Ryan - EXEC-PC,
Norm Henke - PC Ohio, Andy Keeves - Executive Network

Greg Pearson
Dvorak Award Winner
Microcom/MNP

"It doesn't say Hayes until I say it says Hayes."



Aquila BBS
Dvorak Award Winner
(l-r) Steve Williams, Kent Behrens, Kevin Behrens

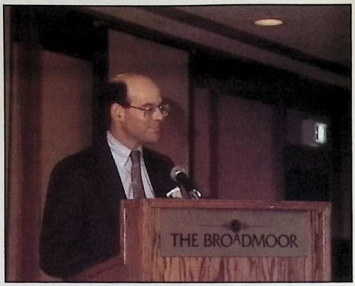
Dan Linton, Software Creations BBS.
1st Place Boardwatch 100
Readers' Choice Contest

package to put a BBS on the Internet with full IP connection if you have to do so now.

Wayne Gregori with **SFNet** was on the floor with models of his RJ-11 table - a terminal program built into a table with coinbox that allows people to swap quarters for time online. Gregori has about 15 of these tables in operation in San Francisco coffee houses, and each one chums about **$500** per month in quarters. Gregori thought he would manufacture the terminals and get other systems to put similar community nets into play across the country. The tables were quite attractive, vandal resistant, and had all the software and hardware to work in a coin operated fashion already done. The booth drew a continuous crowd, but apparently no one wanted to carry one of these home on the airplane. We'll have to check on progress here in a followup report.

ODD BUT SMILING DUCKS

There were several companies popular at ***ONE BBSCON*** for no immediately apparent reason, but to good success. **Dave Whittle** represented **IBM** with an OS/2 booth. He caused a bit of a stir the first day by announcing that any ***ONE BBSCON*** attendee that would agree to put an OS/2 discussion/support area on their BBS could take home a copy of the new **OS/2 version 2.1** gratis. We don't know the final count, but at the end of the FIRST day he had passed out some **300** copies. And it seems to have worked, the messaging networks have been abuzz since the show over how to get OS/2 to do various things with existing BBS software packages. OS/2 holds some significant potential as a BBS platform, especially given the ALMOST SECRET IBM TCP/IP package for OS/2 that rumor has it works and works well. OS/2 with TCP/IP could support multiple lines AND a top flight Internet IP connection more or less effortlessly. But few developers have expressed much interest in it as yet. Post ***ONE BBSCON***, this may change significantly. And it could be a way for the new kids to break in. Rumored to be interested - both **RoboBoard** and **Remote Access**.



Ross Seider - Dvorak Award Winner
Outstanding Hardware Contribution
Motorola Codex - V.Fast

Another odd but smiling duck at ***ONE BBSCON*** was **MCI**. They are dabbling in the concept of a kind of Friends and Family long distance telephone program for BBS and were seriously discussing 8-cent-per-minute long distance rates for bulletin board connections (**$4.80** per hour). If this caught on, it could seriously alter the online topography. Given that over a third of callers are regularly dialing long distance to get on the BBS of choice, and the fact that data calls average over three times the length of voice calls, it starts to make sense. The LD carrier that decodes all this could score a significant coup. MCI wasn't really selling, looked more like a pretty serious fact finding mission.

The oddest thing was to watch all the forward surveillance teams at work. Nearly half a dozen people wandered around studiously trying to look like they didn't work for Microsoft. Not a clue what they were looking for, but they were as systematic as a drill team. It didn't appear that a piece of literature escaped their sweep. Interesting to see what comes of that.

Owen Greeson - Dvorak Award Winner
Crosstalk/Carbon Copy

FINAL MENTIONS

Ward Christensen, developer of the first BBS software package for personal computers appeared at both the opening session Thursday morning and his own session on how the first BBS began, to the delight of all attending.

DVORAK AWARDS

John C. Dvorak is an internationally known columnist and co-author with **Nick Anis** of the best selling book software package ***Dvorak's Guide to PC Telecommunications***. **Zoom Telephonics** is one of the leading manufacturers of modems fax-modems, and other telecommunica-

modems, and other telecommunications products for personal computers. At ***ONE BBSCON '92*** they teamed up to introduce the **Dvorak Awards for Telecommunications** to recognize some of the pioneers in PC communications.

At ***ONE BBSCON '93***, they presented their second annual series of awards to a standing room only crowd of enthusiasts. John C. Dvorak introduced each award recipient.

DENNIS C. HAYES

President, Hayes Microcomputer Products, Inc.
Lifetime Achievement Award

Dennis C. Hayes founded **Hayes Microcomputer Products, Inc.**, in 1978 at the age of 28. When he started the company, he already had more than ten years of experience working with large and small computer systems, telecommunications, and electronic product development.

Hayes is best known for redefining the way modems work. Hayes was the first company to bring modems out of the technical environment and into everyday offices by making software control the modem with the Hayes Standard AT Command Set.

Today Hayes Microcomputer Products, Inc. is a leading worldwide supplier of computer communications hardware and software products. Focusing on global availability, the company designs its products to meet the requirements of more than sixty countries. In addition, Hayes continues to maintain its leadership by entering new markets such as LAN's, ISDN, and facsimile.

A native of South Carolina, Dennis Hayes is active in many industry organizations. He is Founding Chairman of the Georgia High Tech Alliance, the Governor's Advisory Council on Science and Technology development and the Georgia Center for Advanced Telecommunications Technology. He is also the Georgia representative to the federal Lab Consortium. Mr. Hayes accepted the award in person.
Hayes Microcomputer Products, P.O. Box 105203, Atlanta, GA 30348
Tel:(404)840-9200

INTERNET

Outstanding
International Connectivity

In 1973, the **US. Defense Advanced Research Projects Agency (DARPA)** initiated a research program to investigate techniques and technologies for interlinking packet networks of various kinds. The objective was to develop communications transparently across multiple, linked packet networks. This was called the Internetting project and the system of networks which emerged from the research was known as the **"Internet"**. The system of protocols which was developed over the course of this research effort became known as the TCP/IP Protocol Suite, after the two initial protocols developed: **Transmission Control Protocol** (TCP) and **Internet Protocol** (IP).

In 1986, the **National Science Foundation** (NSF) initiated the development of the **NSFNET** which, today, provides a major backbone communication service for the Internet. With its 45 megabit per second facilities, the NSFNET carries on the order of 12 billion packets per month between the networks it links. In Europe, major international backbones such as **NORDUNET** and others provide connectivity to over one hundred thousand computers on a large number of networks.

The Internet Society is an international professional membership organization devoted to the evolution and propagation of the Internet computer communications technology. It sponsors conferences, publishes newsletters and other material and manages the process by which Internet Standards are set by the **Internet Architecture Board** and **Internet Engineering and Research Task Forces**. The Society seeks to facilitate the development of new applications for the global Internet network of networks and to educate the public in its use. Dr. Vinton Cerf, President of the Internet Society, accepted the award on behalf of the Internet Society.
Internet Society, 1895 Preston White Drive, Reston, VA 22091
Tel: **(703)648-9888**, Email: **ISOC@nri.reston.va.us**

MOTOROLA CODEX

Outstanding Hardware Contribution - V.Fast Technology

Motorola Codex, a part of the Information Systems Group of Motorola Inc., is a leading supplier of network products and integrated network solutions. The company operates in 52 countries through its 11 international subsidiaries and an established distributor organization. Offerings include network management systems, T1/E1 switches, Frame Relay products, X.25 PADs and switches, multiplexers, DSU/CSUs, modems, LAN internetworking devices and professional services, Motorola Codex provides the wireline communications capability of Motorola Inc.

In 1992 Motorola introduced V.fast technology to the marketplace. Although the standard has not been fully accepted by the CCITT, many believe it will become the accepted standard within the next 6 months. Many companies are beginning to develop a new family of V.fast class modems capable of uncompressed data speeds of 19.2Kbps, 24Kbps, and 28.8Kbps.

Motorola is one of the world's leading providers of wireless communications and electronic equipment, systems, components and services for worldwide markets. Products include two-way radios, cellular telephones, pagers, and personal communications systems. Sales in 1992 were $13.3 billion. The award was accepted by Ross Seider of Motorola Codex.
Motorola Codex, Inc., 575 West St., Mansfield, MA Tel:(508)261-4000

JOHN MARKOFF
THE NEW YORK TIMES

Outstanding Reporting in Telecommunications

John Markoff joined **The New York Times** in March of 1988 as a reporter for Business Day. He writes about computers and technology issues. He came to the Times from the San Francisco Examiner where he worked for three years.

Mr. Markoff has written about the field of technology since 1977. From 1984 to 1985, he was West Coast editor for Byte Magazine and from 1981 to 1983, he was a reporter for

InfoWorld. From 1983 to 1985 he wrote a personal computer column for the San Jose Mercury News. In 1988 he received the Software Publishers Association's award for best news reporting.

Mr. Markoff is the co-author of ***The High Cost of High Tech***, published in 1985 by Harper & Row. More recently he co-authored ***Cyberpunk: Outlaws and Hackers on the Computer Frontier*** (Simon & Schuster, 1991)

MICROCOM - GREGORY PEARSON AND MNP10 CELLULAR MODEM TECHNOLOGY

Outstanding Software/Firmware Contribution

Gregory Pearson is the Senior Vice President of Technology Management for **Microcom Systems, Inc.** He is also the developer of the error-correction and data compression technique known as **Microcom Networking Protocol (MNP)**. The protocol's design allows a broad range of services to be implemented, while maintaining compatibility among modems with different classes of MNP. For example, a modem capable of MNP Class 5 and V.42bis data compression can talk to a modem that lacks MNP data compression.

Since it's original definition in 1982 with the introduction of MNP1, MNP has evolved through nine levels of enhancements. In 1985 Microcom introduced MNP5 Data Compression. Microcom introduced **MNP10** in 1990, which is considered the defacto standard for compensating for harsh line conditions similar to those conditions found in cellular technology. Mr. Pearson accepted the award in person. Microcom, Inc., 500 River Ridge Drive, Norwood, MA 02062 Tel: **(617) 551-1000** BBS: **(617)762-5134**

COMPUSERVE

Outstanding On-line Information Service

Established in 1979, the **CompuServe Information Service** provides its world-wide membership of 1.4 million with more than 1,700 databases and services to meet both business and personal interests. CompuServe can be accessed by any modem equipped personal computer utilizing the CompuServe Information Manager graphical interface or any general communications software. Compu-Serve was the first consumer on-line information service to offer 9600 bits per second (bps) nationwide. This fall, CompuServe will begin to roll out **14.4 kilo bits** per second (Kbps) access in selected cities.

In addition to the CompuServe Information Service, CompuServe Incorporated provides frame relay, wide and local area networking services, business information services and software to major corporation and government agencies worldwide. CompuServe, 5000 Arlington Centre Blvd, Columbus, OH 43220 Tel: **(614)457-8600**

AQUILA BBS

Outstanding BBS Organization, Features, and Design

Aquila has grown into a professional, high quality, on-line service. Being the first to work with new technology, Aquila has tested and research many new products over the past several years. New modems, drives, networks, ISDN interfaces, satellite feeds and many types of software are only some of the technology the team at Aquila has tested.

The Aquila team is no stranger to long hours, beta software, hardware incompatibilities and all the other trials of a major on-line service. The ultimate test cam to the team on June 1993 when Aquila BBS was the target of a major lightning bolt that took out the entire system. With major support from all the loyal users, sleepless nights of testing, sorting and reconfiguring, Aquila BBS was back on-line and in full operation within 30 days.

Having faced the major milestones of growing a small hobby BBS system to a full time on-line service, the Aquila team is now one of the industry leaders, sporting 8 gigs of on-line storage, 42 access lines, ISDN Digital access, over 60,000 of the latest shareware files, personal Internet mail boxes, thousands of Internet news groups via satellite feeds and many very pleased BBS subscribers. AQUILA BBS, Inc., 1700 N. Farnsworth Ave., Aurora, IL 60505 Tel: **(708)820-0480** BBS: **(708)820-8344**

J. OWEN GREESON

Outstanding Ongoing Software Contributions

J. Owen Greeson is a telecommunications pioneer who was influential in fostering the growth of PC telecommunications and remote PC operation products. Owen was closely involved with the success of **Crosstalk** and **Carbon Copy**. Both products remain in wide use today.

Mr. Greeson was Vice President of sales and marketing and an equity participant at **Automated Design Systems**, developers of Microsoft Windows-based **LAN** utilities. Mr. Greeson remains on the board of **ADS** and continues as an investor and an adviser. Mr. Greeson established the sales and distribution network for ADS.

From 1986 to 1989, he was Vice President of sales and marketing and an equity participant at **Meridian** technology, where he led the team that established Carbon Copy Plus as the industry leader in remote control software. Under Mr. Greeson's leadership, Carbon Copy gained a 60% market share before it was sold to **Microcom, Inc.** in 1989.

From 1982 to 1986 Mr. Greeson was the founding Vice President of Microstuf, where he helped establish Crosstalk as an industry standard for data communications, which was later sold to DCA. Mr. Greeson accepted the award in person. 6135 Barfield Road, Atlanta, GA 30328 Tel: **(404)257-9485**

DNIS - DATA PORT NETWORK INFORMATION SYSTEM

Outstanding BBS Gateway To Multiple Information Services

The **DNIS** bulletin board is an excellent example of a low cost feature-rich community bulletin board system serving the resort community of Palm Springs, CA. Unique features of DNIS include

extraordinary customization of high speed information exchange services such as United Press International, stock market quotes, reports from major brokerage firms, Business News, TechWire and many others.

DNIS information service also offers over 35 electronic news and magazine publications like ***Boardwatch***, ***USA Today Decisionline***, ***EEEK Bits***, and many others. DNIS connects daily with over 15 mail networks worldwide like **RelayNet**, **Global Link**, and many others including **Internet** and **Usenet**. DNIS has a California wide 800 access number option for it's California members. By 1994 DNIS plans to expand its PCBoard system to over 12 lines, with 13 gigabytes and also install a dedicated 56Kbps line for DNIS' Internet gateway for FTP and Telenet access.

TELEGRAFIX COMMUNICATIONS, INC.

Outstanding Advanced BBS Graphics Standard

Telegrafix Communications Inc. has revolutionized the telecommunications industry by creating the **RIPscrip (Remote Imaging Protocol)** graphics standard RIPscrip allows users to see color graphics while on-line. Finally, there is a way to integrate high-resolution graphics without the need for highly specialized software and the huge overhead of most graphical environments. What's extraordinary about RIPscrip graphics is its seamless integration into ordinary terminal and BBS programs, allowing users to operate with programs and features they are already accustomed to. A complete GUI environment with pull down and popup menus, windows, icons, buttons and dialog boxes can now be used by the on-line community. In addition to developing the RIPscrip graphics standard, TeleGrafix Communi-cations offers a complete line of RIPscrip graphics development and conversion programs. TeleGrafix Communications, Inc., 16458 Bolsa Chica #15, Huntington Beach, CA 92649. Tel: **(714)379-2131**

TIM STRYKER - CONSENSUS SYSTEMS INC.

Outstanding Social/Politica Contribution Online

Tim Stryker, President of **Consensus Systems Inc.**, and the author of **Galacticomm Inc.** BBS package The Major BBS, has worked for the past three years on behalf of the concept of electronic democracy, promoting the concept through his book ***Think A Little: Evolutionary Perspectives on the Future of Civilization*** and is currently developing online software to implement concepts of electronic democracy and consensus building through Consensus Systems, Inc., 12351 NW 2nd St., Plantation, FL 33325; **(305)370-7850.**

BOARDWATCH AWARDS

The Boardwatch 100 Reader's Choice Awards were presented at 1:00 PM on Thursday at ***ONE BBSCON***. The list of 100 bulletin boards receiving the most ballots in the 1993 contest was made available and the top 10 systems were introduced and presented with a crystal pyramid award noting their achievement. **Greg Ryan**, of second place **Exec-PC**, publicly congratulated **Dan Linton** of **Software Creations BBS**, this year's top winner, in a very gracious gesture. With **20,200** ballots cast, barely 30 votes separated the first and second place awards this year.

The names and addresses of each voter was printed on equal sized paper slips and a drawing was held of six modem winners from among the balloteers.

ZYXEL MODEM

Munira Brooks of **ZyXEL USA** drew the first two names and acknowledged each would receive one of their top of the line modems. The two ZyXEL winners were:

Shuhaw Lue, 2840 Gravitt Road, Duluth, GA 30136 who cast a ballot on behalf of **Shareware South BBS.**

David Williams, 209 Carl Street, San Francisco, CA 94117 who voted for **The Lost Isle of Melnibone BBS.**

HAYES MODEM

Randy Cooper, marketing representative for **Hayes Microcomputer Products, Inc.**, drew two names of the contest winners who will each receive a Hayes Optima 144 modem. The two drawn were:

Steve Silverman, 5405 Alice Lane, Albuquerque, NM 87110 for his ballot on behalf of **Albuquerque ROS BBS.**

Rob R. MacGregor, 4208 Montreal Ave., Prince Georgia, VA 23875 for his ballot for **Blue Ridge Express BBS.**

U.S. ROBOTICS MODEM

U.S. Robotics was apparently unable to attend the ceremony and our own **Gary Funk** drew two names for receipt of the U.S. Robotics Courier Dual Standard modems.

Quentin Dodd, 53572 Kershner Lane, Elkhart, IN 46514 for his ballot on behalf of **After Five BBS.**

Mark A. Stevens, 12 Walker Drive, Bloomington, IL 61701 for his ballot on behalf of **Executive Network BBS.**

Finally, in a surprise presentation, **Jim Harrer** of **Mustang Software, Inc.**, presented **Jack Rickard** (that's me) with a **Golden Target Award**, a truly lovely brass bulls-eye plaque, apparently for standing in the middle and allowing everyone to take three shots for a dollar. Just doing my job ma'am.

JACK & PHIL BARBECUE

By Saturday afternoon all hands seemed to be deep into "information overload" and a subset of 500 attendees retired to the **Jack and Phil Barbecue at Rotten Log Hollow**. This was a particularly strange event for a number of reasons. It was nearly a fifteen minute bus ride up the mountain and away from the main frenzy of action. It was an optional event at $50 per head. And no one knew precisely why they would want to go to such a thing in the first place. But about 500 signed up.

After considerable rain during the week, the weather was a concern. But on cue, the skies opened up beautifully around 5:00 PM Saturday. And on arrival the magic became clear. An open area with shelters and picnic tables, there was in fact pretty good grilled steaks and chicken, hot buttered corn, salad, beans, biscuits, and the trimmings waiting in a western style outdoor cookout.

But that wasn't what made it work. The Colorado sunset provided a perfect backdrop for dinner, but the real magic was a kind of backoff on info-frenzy. An outcrop provided a dramatic view of the valley below, and as the sun set, a bonfire was lit and a country band played tunes in the background. The moon came out on one of those perfect Colorado high-mountain evenings. The reaction was a kind of group relaxation response. After three days (four for some early arrivals) of intense business card swapping and deal cutting, about 500 attendees danced, soaked up the view, or sat around the campfire talking about decidely non-technical subjects and just plain winding down. Almost no one missed the point. By the time the last buses returned to the Broadmoor at 1:00 AM, an informal survey indicated four software companies, five major bulletin boards, and two hardware manufacturers were babbling seriously about relocating their entire operations to Colorado. And a dozen attendees from Europe had formed a cabal to launch ***TWO BBSCON*** in Europe. (TWO BBSCON, PO Box 206, FL-9486 Schaanwald, Liechtenstein, Europe, **41-75-3736677** voice; **41-75-3736660** fax; **41-75-3736680** BBS; **twobbs@osis.li** Internet)

Bottom line - a good time was had by all. Next year - **Atlanta**.