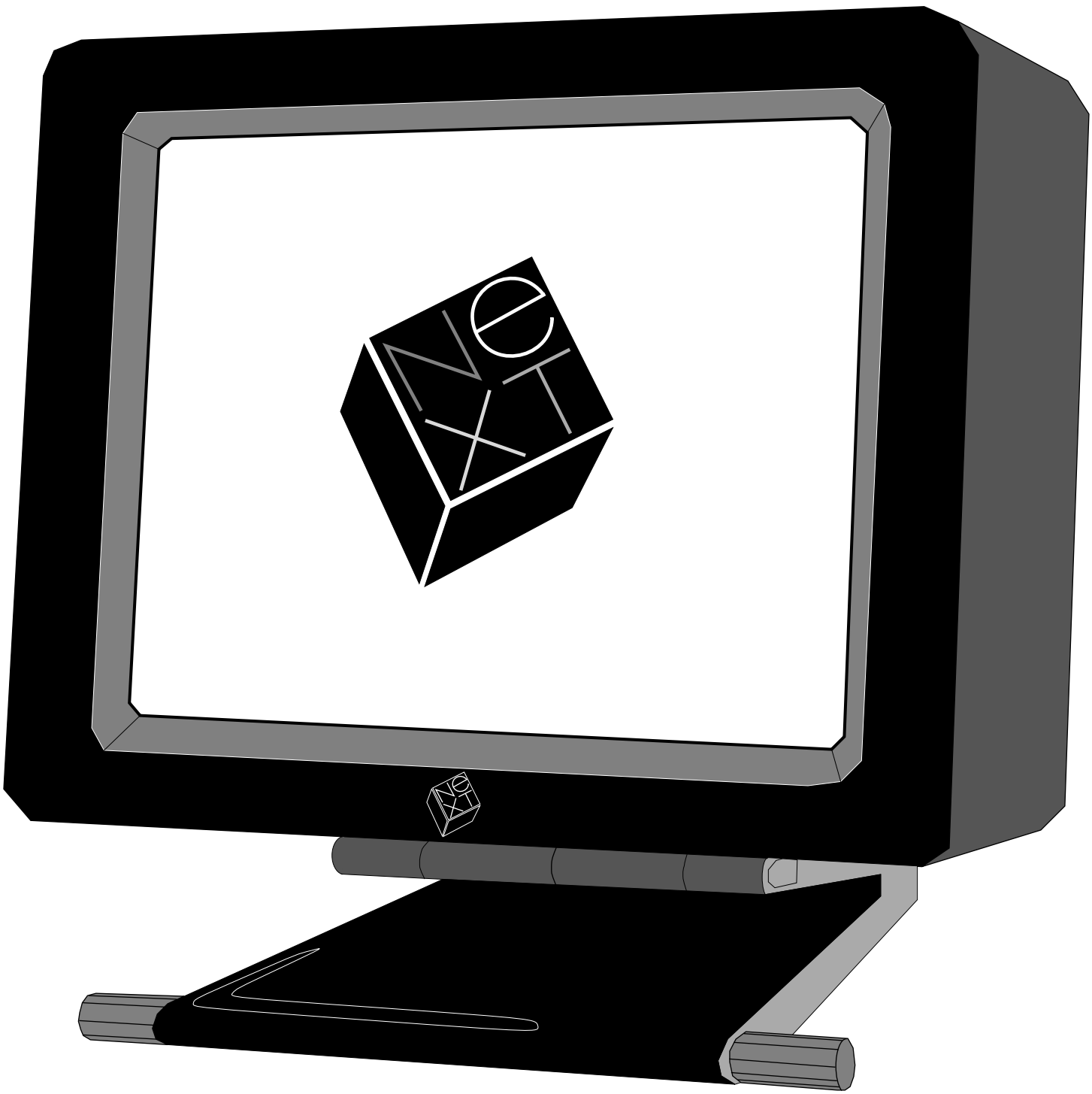
*rmNUG Newsletter Gets A Facelift!*

# rmNUG NeWS

April, 1991
$3.95



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The rmNUG NeWS is published monthly by the Rocky Mountain NeXT Users Group. Readers are encouraged to send their comments or contributions to: David Bowdish 73340.2146@compuserve.com

If you wish to submit an article or letter to the editor we ask that it be sent by email in the following format:

ASCII format, Headline words should be capitalized, No paragraph indents, No Tabs or side by side columns, Empty line between paragraphs, Make sure spelling is correct, especially names.

Any submissions of letters, artwork, articles, etc. will constitute implied permission for rmNUG to publish (in whole or in part) in print or electronically. Sorry, but with our budget we can only afford to offer our sincerest thanks for any contributions you may send. Special thanks to all who contributed to this publication.

## Computer Languages Productivity Award Goes to NeXTstep

*NeXT Press Release*

On February 12, 1991, NeXT went to an award ceremony put on by Computer Languages Magazine at the International Software Developers' Conference in Santa Clara.

The award category was "Integrated Development Environments." Other categories included such things as compilers, debuggers, CASE tools and "Special".

The nominees in the Integrated Development Environments category were:

Smalltalk V, ParcPlace Systems
MacApp, Apple Computer
Saber-C, Saber Software
NeXTstep 2.0 (Extended), NeXT

... and the winner was ...
NeXTstep 2.0!

## Color X

*Pensoft - Dany Guindi*

A lot of people have asked the status of co-Xist (tm) for the color machine, and I finally have something I can say... NeXT was kind enough to lend us a NeXTstation color to try it out, we took our binaries and executed them on the color machine and had a 2 bit greyscale X server running immediately. The NeXTstation color was also quite fast!

Needless to say, now we go into heavy development to get color X before we have to return the loaner!

## IMPACT Software Contest

*Daniel Hung*

During the Fall of 1990, IMPACT Software Publishing sponsored a software contest for the NeXT computer. The top prize of $1000 was then awarded to Dr. Michael J. Mezzino at the University of Houston - Clear Lake for his innovative PhaseScope program. (PhaseScope is featured in the Winter 1991 issue of "NeXT on Campus".)

We are subsequently sponsoring a second software contest this year with an extended software submission deadline of April 15, 1991. All programmers who have who have access to a NeXT computer are invited to develop and submit a NeXT program. (We will also be sponsoring a third software contest with a tentative submission deadline of October 15, 1991.)

The winner of the second contest will be announced on this net on April 25, 1991. The writer of the best submitted program will be awarded a $1000 prize and offered a contract to have the software published. In addition, IMPACT will offer a publishing contract for any other submitted program which shows creativity, originality, and marketability.

If the publishing contract is accepted, IMPACT will work with the writer to further develop the program and will then distribute and sell copies of the software for the writer for a flat fee ranging from $5 to $10. Thus, if a software price of $30 is agreed upon, then for each copy of the software sold by IMPACT, the writer will receive between $20 to $25 from IMPACT.

To submit a program, copy the executable codes onto a floppy disk and send the disk to:

IMPACT Software Publishing, Inc.
306 College Avenue
Ithaca, NY 14850

Or else, send a NeXT-mail with the program attached to mlee@cs.cornell.edu. In addition to the executable codes, please add a README file with a brief description of how to use the software and where to find additional documentation (if any).

IMPACT Software Publishing is an entrepreneurial company interested in publishing software written by creative independent programmers. IMPACT will bundle the top programs and distribute them using floppy disks, optical disks, and CD-ROMs. Copies of the top programs will be sold through a machine-independent software key access system.

## Mathematica Lecture Tour

*Mathmatica Press Release*

Stephen Wolfram, principal architect of Mathematica, will speak on "Mathematica 2.0 and the New Paradigm for Technical Computing."

Los Angeles, CA UCLA, Tues., March 5, 11 a.m., TBA CalTech, Tues., March 5, 4 p.m., Ramo Auditorium

San Diego, CA UCSD, Mon, March 4, Supercomputer Center Auditorium, 4 pm

San Francisco Bay Area, CA Stanford, Wed, March 6, Kresge Auditorium, 7:30 pm UC Berkeley, Thurs., March 7, Evans Hall, 5 pm

**Boulder, CO** Univ. of Colorado, Thurs., March 21, Duane Physics G 030, 2 pm

Atlanta, GA Georgia Tech, Mon, March 18, Student Center Ballroom, 3:30 pm

Chicago, IL Univ. of Chicago, Fri, March 15, TBA

Boston, MA MIT, Tues., March 12, Hall 10-250, 2:30 pm

College Park, MD Univ. of Maryland, Thurs., March 14, C & SS 2324, 10:30 am

Minneapolis, MN Univ of Minnesota, Thurs., March 28, Physics 150, 5 pm

Princeton, NJ Princeton University, Tues., March 26, McCosh Hall 10, 3 pm

New York City, NY Columbia University, Wed, March 13,Altschul Lecture Hall, 4:30 pm

New York State Rochester Institute of Tech, Tues., March 19, Ingle Aud., 9:30 am

Rensselear Polytechnic Institute, Tues., March 19, CC 318, 4:30 pm

North Carolina Research Triangle Univ of North Carolina, Mon, March 11, Peabody 104, 4 pm

Pittsburgh, PA Carnegie-Mellon Univ, Wed., March 20, Doherty Hall, Rm 2210, 4 pm

Houston, TX Univ of Houston-Clear Lake, Mon., March 25, Auditorium, 7 pm

Seattle, WA Univ of Washington, Fri., March 8, Kane Hall 130, 3:30 pm

Toronto, Canada Univ of Toronto, Wed, March 27, Sanford Fleming 1105, 4:10 pm

For more information, contact:

Wolfram Research, Inc.
100 Trade Center Drive
Champaign, IL 61820
217-398-0700
email: info@wri.com

## NeXT On Campus

*Jeff Wishnie*

The Winter 1991 issue of NeXT on Campus has just come off the presses and is enroute, via U.S. mail, to subscribers. An electronic version of the journal, in both Framemaker and PostScript file formats, has been sent to the nova.cc.purdue.edu anonymous FTP archive site.

For those of you unfamiliar with NeXT on Campus, here is a brief description: NeXT on Campus is a journal produced by the Higher Education Group at NeXT. The purpose of the publication is to highlight uses of NeXT computers in higher education (both teaching and research), to foster communication among educational users of NeXT technology, and to provide useful resources to educational users. The journal is published three times a year (January, April, and August). Hardcopy is distributed to approximately 40,000 people and an electronic version is placed at the public archive sites.

Jeff Wishnie
jwishnie@next.com
Technical Editor, NeXT on Campus
415 780-2753

## SAS

*Joe St. Sauver*

For all those of you who've been anxiously awaiting release of the SAS System for the NeXT, some news "from the front..."

*(1) SAS for the NeXT Announced*

Jim Goodnight, President of SAS Institute, officially announced during the SAS Users Group International (SUGI 16) Conference that the SAS System for the NeXT would be released as part of Family 4 (other SAS Family 4 members include IBM VSE, OS/2, Windows 3, AIX PS/2, SCO/UNIX for 386 and 486 machines, and Sequents).

Releases for Family 4 machines are supposed to be shipping by years end, although Goodnight said that Quality Assurance may delay those dates if the need arises. [Just to give you an idea of comparative timing, Family 1 releases (for the RS/6000, DECStation 5000, HP 9000/300, MIPS, Apollo, and DG Aviion) are scheduled to be shipped in March.]

*(2) SAS on the NeXT Demo'd (sort of)*

NeXT Inc. was showing their machines at the SAS Users Group Conference in New Orleans last week, but the couple of times I came by they were NOT running a copy of the SAS system -- the demonstrators seemed interested in showing everything BUT the current developmental release of SAS. :-( I suppose that's only to be expected in some ways given that the demo-ers weren't SAS disciples, but it was kind of disheartening to see SAS on Suns, SAS on Digital Equipment boxes, SAS on Data General boxes, SAS on this, SAS on that, only to see NeXT Mail on the cube (or something equally non-SAS-ish).

*(3) A Surprising Distribution Media Decision...*

A SAS Institute employee told me that SAS will be shipping SAS for the NeXT *NOT* on floppies, *NOT* on optical disks, but *ONLY* on CD ROM. (Yes, I know this sounds bizarre, but that's what I was told was planned by a SAS Institute employee who should DEFINITELY know what's going to happen...)

Those of you who're thinking about SAS for your machine may want to start finding a compatible CD ROM player you can borrow, I guess.

Joe St. Sauver
(JOE@OREGON.UOREGON.EDU or JOE@OREGON)
Statistical Programmer and Consultant
University of Oregon Computing Center

## FTP Access For The rmNUG NeWS

*David Hleb*

Issues of the rmNUG NeWS are now available via anonymous ftp from the following sites:

cs.ubc.ca:~ftp/next/rmNUG.
alumni.colorado.edu:~ftp/pub/rmNUG.
sonata.cc.purdue.edu:~ftp/pub/next/Newsletters/rmNUG.

## From the President

*David Hieb*

This month I have decided to elicit feedback from the users in the form of a User Survey. If you have not already received a survey in the mailbox or via email, please pick one up at the March meeting. This concise survey is intended to provide the rmNUG member/visitor with a chance to help guide the group into the most useful organization that it can be.

Please take a few minutes to tell us what you're thinking by filling out the survey and returning it to us. We appreciate your input and will try our best to utilize this information in future rmNUG plans.

thanks,
davehieb...

## From The Board

*Barb Dyker*

The executive committee met Feb 26th, 7pm, at rm326, Business Administration Building, University of Denver. All were in attendance (Dave Hieb, Karl Sierka, Jacob Gore, Dave Bowdish, Barb Dyker, Brad Green, Robert Gregory). The other two NeXT campus consultants also attended: Terry Tautz (CU), and Tom White (CSM).

Executive Committee meetings are held the last Tuesday of every month at 7pm and are open to all members. Meetings in odd numbered months are held at the University of Colorado, Boulder, Engineering Center, room ECCR1-14. Meetings in even numbered months are held at the University of Denver, Business Administration Building, Mountain Bell Conference Room 421.

*Old Business:* The topic of where to post meeting announcements to netnews was discussed. They are being posted to co.general, comp.sys.next, and du.general. No significant progress on incorporation or by-laws.

*General Meeting Locations:* The problem of trying to address members as far north as Fort Collins and Wyoming and as far south as Pueblo was discussed. Everyone agreed that we cannot hold the current general meetings at different places all over the front range because we would loose our current attendance - Denver, Boulder, Golden is bad enough. The idea of local divisions was discussed. Everyone thought this was a good idea to support other front range areas and provide umbrella services and organizational structure for them. Brad agreed to work on seeding groups, especially in the Fort Collins area, where there is significant interest. The type of meeting location was also discussed. Future meetings will be located, if possible, in areas that are large enough for more informal gathering as well as formal presentation space and have facilities for RGB projection.

*Survey:* Dave Hieb had drafted a questionnaire to distribute to our members to get feedback on rmNUG meetings and activities. Many modifications and additions were discussed and made. Everyone agreed that the survey should be distributed to all the people on our mailing list rather than just at the meetings, in order to get less biased responses.

*General Meeting Format/Content:* The current format and content of the general meetings was discussed since most felt it could use some improving. The chore seemed to be to please such diverse interests as best as possible: technical vs. non-technical, detail vs. demos. We also considered that the membership of the group would most likely grow more non-technical as NeXTs proliferate. The main suggestions addressed were: 1) make the announcements and other business discussion more limited in time and less formal (not everyone cares and it's all in the newsletter); 2) provide more time at the beginning of the meeting for informal gathering; 3) limit the presentation to one hour unless there is consensus to continue; 4) provide a format where we can in the future have presentations and informal gathering concurrently. The following format was suggested and agreed upon: 7-7:15pm Announcements and other business 7-8pm Informal gathering and discussions 8-9pm Formal presentation 9+ more informal gathering With respect to content, Jacob suggested a difference between "presentation" and "tutorial." We agreed that we need to make sure that technical "tutorials" start with a high level discussion of why the topic is of use to those who may not yet be familiar with it.

*Wolfram Research visit:* Wolfram Research will be at the University of Colorado, Boulder, for a presentation on March 21st at 2pm. This event is unrelated to rmNUG. Everyone was interested in how we could participate. Brad volunteered to contact the sponsors about our possible involvement.

*rmNUG Hub Node:* Barb had drafted a document that introduces rmNUG and includes the Terms & Conditions agreement and application for the hub node user accounts. After much debate, we agreed that either owning a NeXT or being employed by a NeXT owner would be a requirement of a member having access to the hub node. The reason is because the money for the project is provided by NeXT, Inc. and we need to not be in the business of providing network access to the general public. Barb suggested a $10 setup fee to offset costs of providing and setting up accounts and also to seed a fund for future additional equipment that may be needed for growth. Bob Gregory wanted the fee to be $25, Jacob and Dave Hieb wanted it to be $0. All others voted for $10, and the fee will stand at that. There are still no connect time charges, but we left the agreement open to allow for adding them if costs force us to do so in the future. Barb will get permission to use the text of the agreement from its source (done). Dave Bowdish will

look up a "hold harmless" clause to be included. An rmNUG node "etiquette" section needs to be added that Barb will draft. Most of the equipment is here. We should be ready for turning it on for the March meeting.

*What's NeXT:* This "media event" run by the same marketing group that did the "Mac Attack" will be held April 18th at University of Colorado, Boulder campus, during the day. We agreed that the rmNUG April general meeting should be held on the 17th (a week later than normal) to coincide with this event. Prior arrangements had been made to hold the April meeting at the Auraria Campus in Denver. Most agreed that we should not break that arrangement and it could even provide dual marketing interest for What's NeXT vendors to entice them to our meeting. Dave Hieb will work on getting vendors who will be at What's NeXT to demo and/or present at our April meeting.

*Newsletter:* Dave Bowdish presented a completely new format and layout for the rmNUG newsletter. The style is more along the lines of a magazine. Everyone liked the style. He suggested a method by which we could improve the printing quality of the newsletter if we expanded distribution to other users' groups (need volume to reduce cost/copy). Although he does not yet have all the information and interest to pull it off, everyone was enthusiastic about the new look and direction.

*Miscellaneous:* Barb suggested a PO Box for a permanent rmNUG address and some "For Deposit Only" bank check rubber stamp. The PO box would be useful and maybe even required for the incorporation. Most agreed with the suggestions. Barb will get the PO box and Jacob will get the stamps.

## The NeXT Educational Marketing Project

*Garrett Rice, NeXT Consultant*

In February of this year, NeXT Computer approved of a pilot marketing program at the University of Colorado which effectively turns NeXT's Higher Education marketing at Colorado over to a group of volunteer business students. This project, called the NeXT Educational Marketing Project, is under the supervision of Professor Margaret Wright of the CU Marketing Department, and Garrett Rice, a NeXT Campus Consultant.

The objective of this project is to leverage NeXT's resources in Higher Education while showing its commitment to education. NeXT feels that this project is unique in its ability to provide real world experience to participating students while expanding awareness of NeXT products in the University.

*Class Objectives*

The objectives of the NeXT Educational Marketing Project are three-fold. The students' first objective is to increase awareness of NeXT products at CU and specifically in the School of Business. Their second objective is to work with NeXT's on-campus reseller, The Buffalo Chip, to increase awareness of this sales outlet for NeXT products. Their third objective is to document their campaign and present their research discoveries and marketing accomplishments to representatives of NeXT Computer. Student and faculty participants input will have significant impact on NeXT's decision to expand this project.

*Class Structure*

The NeXT Educational Marketing Project (NEMP) volunteers have organized themselves into five functional teams: The Research, Creative, Media, Event, and Account Teams.

The Research team will gather pertinent market data for the marketing campaign. A pre-campaign survey of business students by this team has already netted 200 respondents.

The Creative team will be responsible for event themes, advertising motifs, class symbols, and other creative concepts. They will also be responsible for soliciting co-sponsorship. The name of the class marketing campaign is "What's NeXT?" and Pepsi has pledged five full page ads and free Diet Pepsi.

The Media team will be responsible for promotion: this includes print advertising, television coverage, radio spots, fliers, and endorsements. This team has shown significant progress in all these areas, including a promise by Channel 4 to cover our activities and advertise our event.

The Event team will be responsible for all implementation of campaign ideas. They have decided on April 18th as the date for a large NeXT show at the UMC. The event team has, with the assistance of rmNUG president Dave Hieb, had success in recruiting NeXT hardware and software vendors to this event.

The Account Team contains liaison's from the other four groups and is responsible for managing the activities and communications of the class.

*What's The Campaign?*

The students marketing campaign is shaping up in the following way: pre-event activities to increase interest and awareness of NeXT; Media advertising to increase awareness, campus-wide, of NeXT and the April 18 event; and the April 18th event itself. The pre-event activities are designed to target faculty and students of the Business School on an interpersonal level. Thirty faculty members, along with the Dean, Associate Dean, and the Undergraduate Dean of the Business School attended the NEMP class's Wine and Cheese gathering on Tuesday, March 5.

A similar event, targeting students, will be held the week of March 11. These events also serve the purpose of pre-dating the March 31 deadline for the free Lotus Improv offer (when you buy NeXT or upgrade). The advertising campaign will start in April with small, teaser ads promoting NeXT products and the "What's NeXT?" event. Full page ads will follow in the week preceding, and the week of, the "What's NeXT?" event on April 18. This is in combination with radio an d TV spots announcing the event. The "What's NeXT?" event will be held (tentatively) in the UMC grill, which has a flow-through of twenty-five thousand students a day.

The "What's NeXT?" event will feature all of the new NeXT products as well as software and hardware from NeXT's third-party vendors. Raffles, give-aways, and discounts will also be used to entice participants.

*rmNUG's Role*

Members of the Rocky Mountain NeXT User's Group are, first and foremost, invited to attend. The class would also welcome NeXT users who can answer technical questions beyond the scope of the class's marketing knowledge of NeXT products. The class would also like to have rmNUG members demonstrate software sent by vendors who are too small to attend the event in person. Adamation, for example, makes "Who's Calling?", an excellent business application. They are, however, too small to afford an expensive trip to Colorado. An rmNUG member demonstrating "Who's Calling?" (or another program) would be provided with a booth and all the benefits of a vendor participant. The class would also welcome any advice regarding NeXT software and hardware features at "What's NeXT?".

The NeXT Educational Marketing Project is a pilot project. We welcome not only your involvement, but also your opinions regarding its structure and implementation. Please contact Garrett Rice at 466-1986 with any comments. Don't forget to stop by April 18 and find out "What's NeXT?"

## Off The Net

*Compiled by David Bowdish*

This is a collection of various articles and messages that have been posted on Usenet and various BBS's.

### Downloading Postscript Fonts

From: jiro@shaman.com
Organization: Shaman Consulting

Does anyone know how to download PostScript fonts to a printer connected on the serial port? I asked this question a while back and got no answers, I wondered if anyone figured it out in the interim. My problem is that I have a Canon LBP-8 with a PostScript card and I can't get it to print local fonts.

Thanks to Jim Cornacchia (ultb!jmc3113@psuvax1.cs.psu.edu), I have the answer to the PostScript fonts downloading problem. The answer is very simple. Take the Font file in question: MyFont.ps or just MyFont (as it is usually found in the .font dictionary), you will have to make one editing adjustment to it:

Using vi, emacs, or Edit, open the file. The top will have a heading composed of a couple lines with % marks at the beginning. At the end of the last %-marked line and before the first line of PostScript program, insert this line: serverdict begin 0 exitserver

As Jim said, this will "cause the printer to exit the server loop and preserve the file." Then save this font under another name with a ps name to it (for example, a.ps). Then, from the shell type localhost> lpr a.ps

This will download the font to the printer. Then you can start using documents with that font in it and all will work. :-)

*Jiro Nakamura*
jiro@shaman.com
Shaman Consulting

### Fujitsu Formatting

>>> Here is a shareware disk formatting program for the NeXT. It was written specifically for the Fujitsu M226xS family of drives, but it should work.

*Thomas (Rory) Bolt*
rory@fps.com

>>2.0's /usr/etc/sdform, I don't think, will allow you to change "bytes/sector" parameter of SCSI disks. Rory's formatter claims to be able to do this. Going from 512 bytes/sector to 1024 bytes/sector will give you additional 40MB or so of storage. For this function alone, his program is worth it. The doc says it does more. [...rest deleted...]

>I tried the program, but was a little apprehensive about actually letting it format my 2263sa drive. In the technical manual from Fujitsu it says that the 2263sa revision in particular has a maximum configuration of 512 bytes/sector. Rory doesn't specify what revision his drive is. I'd advise a bit of warning before going against the manual's limits.

If you are not sure about what to do, call one of Fujitsu's support numbers:

800/828-6112
619/481-4004

We recently got two Fujitsu M2266SA from a local PC component supplier to use building two NeXTs into servers. The Fujitsu

documentation was back-ordered. Thus I used recent postings about jumper settings to set up the drives and to verify they worked.

After I finished my first testing of the drives, the supplier of the disk drives provided the above numbers. I called to find out what the jumpers I had changed were doing. The person who answered was helpful.

It turns out you can order these disks pre-formatted at 1024 bytes per sector. The "SA" designation is for 512 bytes per sector. The "SB" designation is for 1024 bytes per sector. Also, I was assured that a 512 byte per sector drive could be converted to 1024 bytes per sector by formatting.

The person I spoke with checked with Fujitsu testers and verified that they have not tested the M226xSx drives with NeXTs.

After reading all the recent posts about Fujitsu drives you might have concerns about formatting, configuring, etc. If in doubt about what you think you should do with your disk drives, call Fujitsu.

*Stan Osborne*
stan@toaster.SFSU.EDU

## Japanese NeXT

In Japan, Canon will release NeXTstep 2.0-J in May. It will be delivered with OD. For more detailed information, contact:

NeXT Marketing
div. of Canon, Japan
phone: +81-44-549-5295

*Noritake Yonezawa*
yonezawa@cs.uiuc.edu

Department of Computer Science
University of Illinois at Urbana-Champaign

## NeXT Joke

Why the curious capitalization in the word NeXT, i.e. what does the capital XT represent?

It means its successor will be NeAT. :-)

*Poster Unknown*

## NeXT Newsletters

**SCaNeWS**
The February issue of SCaNeWS is now available from: nova.cc.purdue.edu (/pub/next/Newsletter/SCaNeWS dir).

SCaNeWS is the newsletter of SCaN, the Southern California NeXT Users' Group. Please let us know your comments and if you'd like to submit an article for a future issue.

*Mike Mahoney*
mahoney@beach.csulb.edu

**Tao #7**
Tao #7 is now available from cs.orst.edu. After putting my nose to the grind stone for three months, I've finally completed my project and have had time to write another issue.

For those of you who don't know about Tao, it's a sort of NeXT tabloid - rumor mongering mill - bar gossip newsletter for the inquiring technical minds.

Robert Lin
<rlin@cs.ubc.ca>

***Editors Note:*** *The rmNUG Newsletter also is looking for articles that might be of interest to the NeXT community.*

## NeXT BBS's

Dear Nexten:

My list of NeXT-friendly BBSes and systems contained the wrong phone number for the LOA BBS. Here is the correct info:

System: LOA (Linotronic Owners Assoc.) BBS
Dialup number: (415) 841-6302

Also, here's info on a NeXT-friendly system in Texas, courtesy of Steven Staton:

System: deltos (Deltos Fleet Computing)
Dialup number: (214) 540-2629x4
Baud supported: 1200, 2400,9600 (V.32,V.42,HST)

Deltos Fleet Computing is a North Texas UUCP site that offers connections to other NeXT users from anywhere by invitation. Send e-mail to gtenext1!deltos!sstaton@bunny.gte.com or call 214-540-2301 to establish a UUCP feed. This is a not-for-profit feed running on an '040 NeXT system.

Yours,
*Seth Ross*
Seth_Ross@nextworld.com
seth@albion.sf.ca.us

## Stuart Upgrade

I have placed Stuart2.11 on the cs.orst.edu pub/next/submissions directory. This is a NextStep2.0 version of Stuart which fixes some bugs, both superficial and deep (very deep).

This is the Changes file from the distribution:

*Changes from Stuart2.0 to Stuart2.11*
Stuart2.1 is NextStep2.0-specific. It won't run under NextStep1.0. Most of the fixes I've incorporated don't apply to 1.0, so that's not a big loss.

I fixed the spacing problems with fonts other than Ohlfs-10, or so I believe. Now, things should be spaced exactly like old Terminal did.

The Find Panel has had a few bugs fixed, or at least they appear to be fixed. There were some problems where every once in awhile, it seemed that find wasn't finding stuff I knew was there. I don't notice it now, so maybe it's gone . . .

There were some major problems with the handling of subshell tty setup. This only affects certain circumstances, I'll admit, but it still was sad. I apparently wasn't setting up the controlling tty or process group for the subshell correctly. What I did worked under 1.0 (in fact, stuff seemed set up correctly for the most part), but has broken in some cases for me under 2.0. The main programs it affected were the programs run from the subshell - especially if those programs manipulated the controlling tty or the process group. It also accounts for certain instances when Stuart died for no apparent reason when the first emulation window opened was logged out of. I've now fixed it to Do The Right Thing, or so I hope. If you have problems with this please tell me.

The bold-faced characters in the Info Panel are now aligned correctly.

The fixes I made in the unreleased Stuart2.01 are in 2.11. These fixed an incorrect connection on the Preferences panels that could cause bus errors (and Stuart deaths), and a problem with scrolling regions that manifested when running vi on a remote, non-NeXT system.

I've hopefully fixed a bug which sometimes occurred when double-click-dragging below the bottom of the emulation buffer. The problem was that it would often take many tries to get the bug to occur. Now I cannot get it to occur at all. So, maybe it's gone. [This bug also manifests in Terminal, I've heard -scott]

I've added code to cause the windowserver not to do dead-key handling for Stuart (Thanks Garth!). This caused problems with Meta-a, Meta-n, and Meta-u. Possibly other keys. You lose the ability to use dead keys, of course. Since this is more than likely not something many people use, I don't imagine it will be a problem. If you have problems, contact me (and it will become a preference).

I've also verified that Stuart does not suffer from a certain bug which Terminal does have where cursor positioning at the right hand side of the screen sometimes gets messed up. This seems to happen especially under VMS, and is related to the automatic margins.

There might be other fixes. Who knows? But, overall there's little or no change (maybe 20 or 30 lines total). Lastly, the lax upgrade policy continues - all of my currently registered users are upgraded to 2.11 without charge.

Expect Stuart3.0 out sometime in March. Stuart3.0 is neat :-).

Later,

Scott Hess
scott@gac.edu
Independent NeXT Developer
GAC Undergrad

## Pascal to C Translator

*Conrad Geiger*

David Gillespie has just posted v 1.19 of his Pascal to C translator on csvax.cs.caltech.edu (pub/p2c-1.19.tar.Z). The new version compiles on a NeXT without modification.

It is also located in:
/pub/next/submissions of cs.orst.edu
sonata.cc.purdue.edu.

(Thanks to Roger Kirchner, of the University of Minnesota for this info.)

## Pegboard

*Conrad Geiger*

PegBoard is on the archives. It is both at:
sonata.cc.purdue.edu
cs.orst.edu, probably still in the submissions directory.

PegBoard puts a large window, indistinguishable from the backspace window, in the background. It lets you drag any icon onto the desktop (much like the mac does). You might want to do this, for instance, to move a file from the workspace to a window underneath. You might want to use it as a huge icon doc. You might not want to use it at all.

If you double click on an icon it launches it. If you command click, it removes it.

## From The Editor

*David J. Bowdish*

As you may have noticed, the rmNUG Newsletter has taken on a new look. We've decided to go with a more traditional magazine look.

Our issue date will be the month following the release of the Newsletter. While we have published an issue every month, their will not be an issue with a March date.

We've also gone with smaller typesize. This allows us to reduce the size of the printed copy and saving a few trees in the process. The Table of Contents has been moved to the inside front page, making it easier for the reader to see what is new in each issue.

We've also included a tag line that allows the reader to know who wrote the article. In the past, this was not important because over 90% of our issue's content came from two people. Today, we have far more contributors to the newsletter and we thought that they deserve recognition for their contributions.

We hope that you will find these future issues as interesting and informative as you have in the past. If you wish to contribute an article to our publication, the information is on the inside cover at the bottom of the page. We can always use another article!

Next month will be rmNUG's one year anniversity. In the past year we have seen our membership grow rapidly. In October we won the Golden Nugget Award and, hopefully, by next month we will have installed our own Internet node for the exclusive use of our rmNUG members.

In April, thanks to the efforts of rmNUG members Brad Green and Garrett Rice there will be the What's NeXT? exposition that will introduce NeXT to thousands of people. (See page 6)

In May, rmNUG hopes to have a booth at INFOCOM. The region's largest computer show. So in this final month of our first year as group. we should look back with pride at what we've accomplished in our first year. We should also look forward to what we will accomplish in the coming year. Congratulations rmNUG!

## February Meeting

*Barb Dyker*

The January meeting of rmNUG was held on the 13th at the University of Denver.

Karl Sierka presented a tutorial on GNU Emacs and the GNU debugger for programmers on the NeXT. GNU Emacs is an editor that provides extensive development environment features and is highly customizable (not to mention free). Emacs has a C "mode" for use in C programming, as well as many other modes for manipulating text based systems. It can be used in conjunction with the debugger in the edit-compile-debug cycle. Compiling can be done while in an Emacs editing window, and it can automatically place you in the file to edit given the errors reported by a compiler, greatly reducing the amount of time you spend switching contexts and remembering what the error message was from the other context.

## NeXT SHIPS 68040 COLOR WORKSTATION

*NeXT Press Release*

Redwood City, Calif., March 12, 1991

NeXT Computer, Inc. announced today that it has begun shipments of its $7,995 NeXTstation Color computers, on schedule.

NeXTstation Color uses 16 bits per pixel to achieve "true-color" images on its 17-inch color display. NeXTstation Color offers automatic color dithering, so that the computer can display 32-bit-per-pixel images in 16 bits per pixel. With this feature, most users will be unable to distinguish between the 16-bit image displayed on NeXTstation Color and a true 32-bit image.

"NeXTstation Color offers customers fast, 'true-color' Display PostScript on a large, megapixel display, for $7,995. This far surpasses the 8-bit, limited color on small screens offered by our competitors for the same price," said Steven P. Jobs, president and CEO of NeXT. "NeXTstation Color is the computer that will bring 'true-color' Display PostScript to the masses."

With a suggested retail price of $7,995, NeXTstation Color features 4,09 6 colors (12 bits) at any one time, plus 16 levels (4 bits) of transparency, displayed on its 1120 x 832 pixel, high-resolution 17-inch MegaPixel Color Display.

"With NeXTstation Color, NeXT brings much needed workstation-level performance to the emerging computer-based graphic arts market at an affordable price," said Sanjay Sakujah, president of Digital Prepress International.

NeXTstation Color, as with all NeXT computers, uses Display PostScript to draw on-screen as well as printed images, resulting in a much more powerful graphics platform for applications, especially publishing applications. With Display PostScript, which makes the full capability of PostScript available to all software developers for their display graphics, users of NeXTstation Color and all other NeXT computers gain more powerful and more WYSIWYG applications. In addition, all NeXT computers incorporate JPEG software, which compresses and decompresses still color images. This built-in feature allows users to store more and larger images on their hard disks, and to transmit images over networks without bogging them down.

Like all the other members of NeXT's product family, NeXTstation Color offers an unsurpassed range of capabilities as standard, such as the NeXTstep user interface and application development environment; the ability to run the same application software package, unmodified, on any NeXT workstation; true multitasking with the UNIX operating system; built-in high-performance Ethernet and TCP/IP networking, for sharing large color images over a network; built-in digital signal processing (DSP) capabilities; a 2.88 MB floppy drive and at least 105 MB of hard drive storage; and the unprecedented amount of system and bundled software under NeXT's system software, including NeXT Mail (multimedia electronic mail), integrated fax support and much more. NeXT's high-end, 32-bit color product, NeXTdimension, will ship in April.

## Latest Product Listing

*Conrad Geiger*

Here are the products that are shipping for NeXT as of February 28,1991:

### Business Productivity

*Adamation, Inc.*
**Who's Calling?**
Telephone tracking system with multiuser access, plus voice response; allows you to track calls, schedule meetings, keep yourself organized.
415-452-5252

*HSD Microcomputers, Inc.*
**OCR Servant-Limited Edition**
Optical Character Recognition software available to users only through the Services menu.
415-964-1400

*Informix*
**Wingz**
Spreadsheet with 3D graphics and powerful Hyperscript language.
415-926-6651
913-599-7330.

*Lighthouse Design*
**Diagram!**
A drawing package that makes creating org charts, labeled diagrams, etc. easy and which supports links to other NextStep apps.
1-800-366-2279
301-907-4621

*Lotus Development Corporation*
**Lotus Improv**
Next generation spreadsheet offering English formulas, multiple views on the data, linked tables, and presentation graphics.
617-577-8500

*Stained Glass Software*
**Calendoscope**
Networked day/week/month/year calendar for individuals and groups.
415-636-5100

*Visual Understanding Systems (VISUS)*
**PaperSight Lite 1.2**
A personal digital file cabinet.

**PaperSight 1.2**
A complete image management system which handles document scanning, viewing, organizing, searching, and archiving.
412-488-3600

*WordPerfect, Inc.*
**WordPerfect for NeXT**
The first true WYSIWYG version of this powerful, full-featured wordprocessor which dominates the PC word processing market.
801-225-5000

## Connectivity, Communications and Emulation

*Active Ingredients, Inc.*
**Communicae 2.0**
A communication package that includes both DEC VT220 and Tektronix 4010/4014 terminal emulation, and standard file transfer protocols.
617-576-2000.

*Cayman Systems, Inc.*
**GatorBox**
Intelligent LocalTalk (TM)-to-Ethernet gateway; connects NeXT and Mac networks.Also, GatorShare, software for file sharing between Macintosh and NeXT Computers and GatorMail-Q, for linking Macintosh QuickMail users with NeXT e-mail system.
617-494-1999

*Conextions, Inc.*
**3270Vision** and **3270Vision Coax**
3270 emulation via TCP/IP over ethernet or via coax.
508-475-5411

*Digital Instrumentation Technology, Inc.*
**FloppyWorks**
Software that enables floppy drives for NeXT to read and write 1.44 MB Macintosh disks and to translate data between the Mac and NeXT machines.
505-662-1459

*DataViz Inc.*
**MacLinkPlus/PC**
File transfer and translation between the NeXT and Macintosh environments.
203-268-0030

*Touch Communications, Inc.*
**WorldTalk/400**
Provides access to other mail systems (e.g. IBM Profs, DecTalk) via X.400 gateway support.
408-374-1680

*Transarc Corporation*
**AFS 3.0**
A distributed file system for large, multi-location networks; their are no local or user dependencies in the system.
412-338-4400

## Database and Information Management

*Imagine, Inc.*
**MediaStation 1.5**
Archival, retrieving and processing of multimedia information.
313-487-7117

*INGRES*
**INGRES Relational Database Management System (v 5.0)**
4GL, SQL and visual programming methods for relational database management.
415-748-3427

*Toltec Human Services*
**UNIX MUMPS Version 3.1**
Standard database and programming language for the interactive manipulation and storage of large volumes of medical and business data.
405-840-4254

*Virginia Tech Library System, Inc.*
**VTLS InfoStation 2.0**
A hypermedia information access and authoring system for electronic libraries.
1-800-HOT-VTLS
703-231-3605

## Mathematics and Statistics

*Halchin and Fleming*
**Orbit**
Tool for exploring the dynamical system of periodic orbits.

**Rubik Algebra**
Uses Rubik's cube as a tool for exploring elementary group theory.

**Spring**
Animates motion of a spring with an attached mass; for exploring differential equations.

**Groups**
Description of mathematical objects known as groups.
217-348-0917

*Triakis, Inc.*
**DAN-The Data Analyzer**
Interactive data analysis system with 2D plotting support.

**Math++**
C-language numerical analysis source code math library.
505-672-3160

*Wolfram Research, Inc.*
**Mathematica 1.2**
A comprehensive software application for mathematical computation, symbolic manipulation, graphing, and high level programming.
1-800-441-MATH
217-348-0917

## Medical

*(see also Toltec under Database)*

*Toltec Human Resources*
**TranScriber 1.0**
A NEXT network or NeXT to central service medical record transcription tool.
405-840-4254

## Publishing and Graphics

*(see also Lighthouse Design and WordPerfect under Business Productivity)*

*Adobe Systems Inc.*
**Adobe Type Library Plus Pack**
Contains 26 popular typefaces, (plus sample pages and keycap access charts for easy access through the Digital Librarian.)
800-344-8335

*Frame Technology Corp.*
**FrameMaker 2.0d**
Technical publishing software, including word processing, graphics, page layout, equation editing and book-building tools.
408-433-3311

*Media Logic, Inc.*
**TopDraw**
Page-based graphics software providing object-based graphics, text processing, continuous tone painting and page layout.
213-453-7744.

*RightBrain Software*
**TouchType**
A power tool designed expressly for typesetting at large sizes where every character is important.
415-851-1786

*Stone Design Corp.*
**TextArt**
Easy, intuitive access to the full range of text effects Display Postscript makes possible.
505-345-4800

*The Font Company*
**The Font Company Font Library**
Over 1500 PostScript Type 1 format typefaces.
602-998-7964

*T/Maker Company*
**Click Art**
Nearly 400 illustrations of Encapsulated PostScript EPS artwork.
415-962-0195

## Sound

*Metaresearch, Inc.*
**SoundWorks 2.0**
A powerful,.easy to use sound recording and editing program.
503-238-5728

## Tools and Languages

*Absoft Corp.*
**Absoft FORTRAN 77**
Object Oriented FORTRAN compiler; fully compatible w/ NeXT's Interface Builder toolkit, allows programmers to add a graphical i/f to any FORTRAN program.
313-853-0050

*Adobe Systems Inc.*
**DisplayTalk**
A development environment for Display PostScript programming.
800-344-8335

*Highland Software, Inc.*
**Flexible License Manager**
A package that allows a software application to be licensed on a concurrent usage basis rather than a per-computer basis.
415-493-8567

*Motorola, Inc.*
**Macro Cross Assembler (ASM96000)**
**Simulator Programs 9SIM56000 and SIM96000)**
Tools for DSP programmers. 512-891-2030.

*OASYS*
**OASYS Native Compilers**
**OASYS Optimizing 680x0 Cross Compliers**
**OASYS Optimizing 88000 Cross Compilers**
(C, C==, Fortran, Pascal available for each)
Highly optimized Fortran, Pascal., C and C++ compilers and cross compilers.
617-862-2002.

*Objective Technologies, Inc.*
**OT Palettes:2.0**
Custom palettes for IB. Smartfields, Chooser, MathPalette, and GraphPalette are currently available.
212-227-6767

*Visual Understanding Systems, Inc.*
**PaperSight Developers' Toolkit**
More than 70 code and data modules for image management.

**Visus Voice Commander Toolkit**
Advanced speaker-independent speech recognition toolkit.
412-488-3600

*Young Minds, Inc.*

**Makedisc**
CD-ROM formatting software for creating a CD-ROM disc image.
714-335-1350

## Peripherals

### *Data Acquisition and Sound*

*Ariel Corp*

**DM-N Digital Microphone**
High-fidelity stereo microphone with lab-quality data acquisition capabilities.

**QuintProcessor**
Five 27MHz DSP5001 ‘s on a single board for the cube. ProPort APAnalog I/) interface with 2 channels of 16 bit analog in and 20 bit analog out with programmable sample rates.
201-249-2900

*Dazzl, Inc.*

**Model 16/12 Analog to Digital Converter**
Data acquisition for 16 single ended or 8 differential channels; overall sampling rate of 200 kHz.
309-674-9317

*IOtech, Inc.*

**SCSI1488/N**
A SCSI-based IEEE interface plus software that lets a NeXT Computer control up to 14 IEEE instruments. The following require the SCSI 488/N:

**Serial488/4**
A 4 channel IEEE to serial converter.

**Digital488/80**
An 80 bit IEEE to digital I/O interface. DAC488PA digital to analog convertor in either 2 or 4 channel versions.

**ADC488 A/D Convertors**
Supports 16 single ended or 8 differential analog channels.
216-439-4091

*Metaresearch, Inc.*

**Digital Ears**
Audio input device and control software for entering and recording compact-disc quality sounds.

**Digital Eye**
Video input device and control software for capturing still and moving NTSC video images.
503-238-5728

*Singular Solutions*

**A/D64x**

Hardware and software for high-quality sound recording and capture.
818-792-9567

### *Fax and Data Modems*

*Abaton (Everex)*
**Interfax 24/96NX**
2400 baud data and 9600 baud fax modem
1-800-444-5321
415-683-2226

*Dove Computer Corporation*
**DoveFax**
9600 baud fax modem and 2400 baud data modem.
1-800-622-7627
919-763-7918

*Visual Understanding Systems, Inc.*
**Fax Modem VS-24**
9600 baud fax modem that can vector call to a fax machine if busy.
412-488-3600

### *Scanners and Printers*

*Abaton (Everex)*
**Scan 300 G/S**
An 8-bit scanner that scans halftones, line art, and grayscale images.
1-800-444-5321
415-683-2226

*AGFA Compugraphics Division*
**ProSet 9400**
A mid-range laser imagesetter that offers both true PostScript and PCL languages.

**ProSet 9800**
A high-speed laser imagesetter ideal for producing color separations.

**SelectSet-5000**
A fast and easy-to-operate color laser imagesetter.

**StudioSet- 2000**
A compact and versatile imagesetter that offers a variety of resolutions up to 2400 dpi.
(508) 658-5600

*Canon U.S.A., Inc.*
**IX-30F Image Scanner**
An 8-bit flatbed scanner with a maximum scan resolution of 300 dpi.
1-800-848-4123

*HSD Microcomputer, Inc.*
**Scan-X Professional**
An 8-bit grayscale, desktop flatbed scanner that supports resolutions of up to 1500 dpi.
415-964-1400

*Oce Graphics*
**OceColor**
An Adobe PostScript, color printer that uses the latest thermal transfer technology, and supports the full range of PANTONE colors.
1-800-545-5445
415-964-7900

*Visus, Inc.*

**Personal Page Scanner**
Up to 3 legal pages per minute scanner.

**Departmental Scanner**
Up to 11" by 17" at up to 12 pages per minute.

**Large Format Scanner**
Up to 24 by 60 inches, up to 400 dpi.

**Industrial Scanner**
up to 2000 dpi resolution, accurate to .002 of an inch over 24 inches.
412-488-3600

## Storage

*The Cube Route, Inc.*

**Cube Route Hard Drives**
Seagate Wren Hard Drives. 330MB, 660MB, 1 GB.
1-800-CUBE-RTE
617-344-6061

*Dayna Communications, Inc.*

**DaynaFile**
External disk drive that lets NeXT Computers read and write to MS-DOS and NeXT-formatted floppy disks.
801-531-0600

*Digital Instrumentation Technology, Inc.*

**Cube Floppy Plus**
External floppy that lest NeXT users read and write MS-DOS (720KB and 1.44 MB) disks, Mac (400K, 800K and 1.44MB) disks and UNIX disks.

**Cube Floppy 2.9**
External floppy that lest NeXT users read and write MS-DOS (720KB and 1.44 MB) disks, Mac (1.44MB) disks and (1.44 MB and 2.88MB) UNIX disks.
505-662-1459

*EMAC*

**Metro CD**
CD-ROM drive that also plays audio CD's. Metro DATP1.3 GB digital audio tape backup system.

**Metro Series Hard Drives**
in 170MB, 335MB and 670MB capacities.
1-800-821-0806, ext. 2155
415-683-2155.

*Epoch Systems, Incorporated*

**Epoch-1 InfiniteStorage Server**
Platform independent network server designed to handle the need for quick access times to large off-line storage.
508-836-4711

*Microtech International, Inc.*

**Eclipse 1.2T**
1 GB digital audio tape backup system.

**Eclipse 50R**
Removable hard drive. Eclipse CDPCD-ROM drive with dual SCSI ports and a universal input power supply.

**Eclipse Series Hard Disk Drives**
Ranging from 200MB to 1GB.
203-468-6223

*Personal Computer Peripherals Corporation*

**JETSTREAM**
A tape backup system capable of archiving up to 2.3 gigabytes of data per tape at speeds up to 14.4 megabytes/minute.
813 884 3092

*Pacific Micro*

**PM 1.44**
External SCSI floppy disk drive for data transfer between NeXT computers and both MS/DOS and Macintosh computers.

**PM-HDE**
External SCSI enclosure for 1 or 2 NeXT hard disk drives.
408-356-5001

*Peripheral Land, Inc.*

**PLI SuperFloppy 2.8**
External floppy that lest NeXT users read and write MS-DOS (720KB and 1.44 MB) disks and UNIX (1.44MB and 2.88MB) disks.

**PLI CD-ROM**
380 ms access time with Sony's newest mechanism.

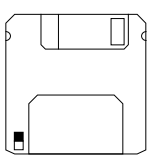
**PLI Infinity 40 Turbo**
Removable cartridges store up to 42 MB.

**PLI Turbo Drives**
Very fast 300MB and 600MB hard drives.
1-800-288-8754

## Other Peripherals

*Extron Electronics/RGB Systems, Inc.*

**RGB 111 and RGB 63/31 Scan Board**
Respectively a NeXT video interface and a NeXT video to "normal scan rate" converter.
800 633 9876
213 802 8804.

*Software Engineering Solutions*

**At the Beep**
Phone answering hardware and software.
(512)343-2828