

Don't Forget =

New Modem Numbers In Effect

This is a reminder that new UOnet modem numbers went into effect on January 27. The old numbers (346-4391, -4393, and -3565) have been removed from service and have been replaced by two modem pool numbers, 346-2150 and 346-5975. You should use the first pool number (346-2150) *unless* you have:

- a 300- or 14400-bps modem
- a modem that supports V.32bis or V.42bis
- a problem using this number

The second pool has been set up to handle overflow requests, and to provide special features not available in the first pool (i.e., 300- and 14400-bps capability and 4-times data compression).

The table below summarizes the changes:

Phone no.	Modem type	Range
346-2150	V.32 and MNP5	1200-9600 bps
346-5975	V.32bis and V.42bis	300-14400 bps

If you have any problems using the new modem pools, please report them to Network Services (e-mail address NETHELP@NS, phone 346-4395).



DIALOG Now Available on the Internet

Users of DIALOG Information Services databases can now access DIALOG via UOnet and the Internet. To access DIALOG, simply establish a connection to UOnet, telnet to DIALOG.COM, and log in.

If you need assistance in using Telnet or connecting to DIALOG, call Network Services at 346-4395.

Micro Repairs to Slow Down in March

From March 16th through the 29th, Computing Center technicians will be heavily involved in reconfiguring microcomputer labs on campus. Consequently, they will not be able to immediately tend to microcomputer repair requests. Users who rely on the Center's repair service should expect a slower turnaround time than usual during this period. Operations should return to normal April 1.

New Library Service Lets You Locate Journal Articles Online

Thanks to a recent addition to JANUS, the Knight Library's online catalog, authorized library users can now locate articles in scholarly journals and selected general interest magazines and newspapers without leaving their desks. The library staff recently added a large periodicals index (the Expanded Academic Index, or EAI), to Janus' database, enabling desktop searches from any home or office terminal that can access UOnet, the campus network, or the VAXcluster.

EAI is a truly interdisciplinary resource, covering more than a million citations from over 960 journals representing the humanities, social sciences and non-technical general sciences. Nearly half of the journals have been indexed since 1989; most of the remainder, since 1987. The database is updated monthly, ensuring access to the latest information.

To access JANUS and EAI, you must first connect to UOnet. (If you need instructions on connecting to UOnet, see the Computing Center's free handout, "UOnet Terminal Services," available in the Center Documents Room.) When you see the UOnet> prompt, connect to JANUS and type *library* in response to the "login:" prompt, i.e.:

```
UOnet> c janus
:
login: library
```

Next you'll be asked to specify what kind of terminal you're using. Choose the letter that best describes your terminal or workstation (normally *v*, for VT100-compatible terminals or microcomputers emulating one). After you confirm your choice, JANUS' top-level menu is displayed, listing different categories

of library materials. To search for periodicals references, select *c* (*CONNECT to another database*), then choose *1* (*Expanded Academic Index*) to begin your search. Regular JANUS users will find that EAI features the same friendly type of menu system.

When you're finished with an EAI session, return to Janus' top-level menu screen by typing *r* (*RETURN...*), then *h* (*hang up*) to leave JANUS and return to UOnet.

(If you have set up scripts to automate your log-in process and JANUS access, you will need to rewrite them to access EAI as described above.)

For help with JANUS, call the Knight Library reference desk (extension 6-3053) or the Library Systems Office (extension 6-3049).

Note: Due to licensing restrictions, both the "library" login response and EAI are for the exclusive use of UO faculty, staff, and students.

WHAT'S NEW??

...In the Documents Room

There's something for everyone in the latest shipment of books, journals, and reference materials to arrive in the Computing Center Documents Room (205). New arrivals include

- a wide selection of UNIX books, including the acclaimed *New Hacker's Dictionary*
- several new periodicals, including *Aldus*, *LAN Technology*, and *Network Computing*
- announcements of computing workshops, seminars, and training sessions
- a current list of online bibliographic databases covering holdings at other college and university libraries, available for both reference and checkout

For a complete list of all the new reading materials, pick up a copy of the handout, "What's New...in the Documents Room?", available in the Documents Room's wall rack.

Update Your Mac Network Software

With network software changing at a rapid pace, chances are many networked Macs on campus are using outdated network software. To keep networked Mac users up to date, *Computing News* will be publishing a quarterly list of the versions of network software recommended by the Computing Center's Network Services group. Current *minimum* network software recommendations for Macs connected to UOnet are outlined below:

Macs Running System 6:

- AppleShare Workstation
- Responder
- LaserWriter drivers from System 6.0.8 or 7.0

Macs Directly Connected to Ethernet:

- EtherTalk Phase2

...In the Public Domain

The Computing Center recently increased its public domain software holdings and other microcomputing aids with new products for Mac and PC users alike. Here's a taste of the new offerings:

Macintosh Public Domain (System 7 Volume, via UOnet)-

- new printer drivers for StyleWriter and PersonalWriter LS
- for System 7 users only...
 - System 7 tune-up
 - Aliasing assortment
 - an 8 24 GC upgrade that resolves the System 7 compatibility problem
 - new Extensions manager

Be sure to read the *Read Me* files accompanying all new software. And watch for the newest version of the Boston Computer Society's CD-Rom collection of System 7-compatible public domain and shareware software, arriving soon.

PC-SIG Public Domain (via Zeus server on Novell network) -

- PC-SIG Edition 10 public domain software and shareware
- new foreign language editors
- the latest McAfee virus detection software

PC Laserprinting - The Center has added a new DOS laserprinting service. The fee for printing is 20¢ per page.

PC Backup Utility Giveaway - The Center still has some copies of Central Point's PC Backup Utility to give away. This utility comes with both documentation and license. UO departments may request as many copies as they can use. Individual students, faculty, or staff members should bring a blank disk (either 3 1/2" or 5 1/4") with them to Room 202 to exchange for a copy of the utility.

Need Help? If you cannot access to a public domain collection from your Mac or PC, you may reserve time to copy the software using one of the networked machines in the Computing Center's Microcomputer Support Center (Room 202). Call 346-4412 to make an appointment or get more details on new software and services.

All Macs Running System 6 or System 7:

- MacTCP version 1.1 ("MacTCP" and "MacTCP Prep" files)
 - For Mac Pluses running System 7 only, MacTCP 1.01
- NCSA Telnet version 2.4.10 ("telnet.mactcp" and "config.tel" files)
- Eudora version 1.2.2uo ("Eudora" application)
- Fetch version 2.0.6 ("Fetch" application and "Fetch Help" file)

You'll find the appropriate versions of all of this software on the CC Public Domain file server. If you need assistance installing it, contact your local Mac support person or call the Computing Center's Microcomputer Support Center at 346-4412.

Physics Professor Brings Heavens Down to Earth

From the time he was a teenager growing up in the Pacific Northwest, Greg Bothun knew that he wanted to spend his life exploring the natural world. Early hiking and backpacking expeditions in Washington and Oregon's great outdoors fostered a life-long respect for, and curiosity about, the world we live in.

His quest led him to pursue the natural sciences at the University of Washington, where he earned both undergraduate and graduate degrees. At first, Bothun gravitated toward geological studies, but he soon turned to astronomy because it offered the greatest opportunity for unlimited exploration.

Now an Associate Professor of Physics at the University of Oregon, Bothun is continuing to research the

origins of mass and structure in the universe, a project he embarked on over a decade ago in concert with colleagues at Cal Tech and Harvard. Supported by grants from the National Science Foundation and NASA, his research focuses on unraveling the mystery of "dark," or "missing" matter—the mass that makes up 90 or 99 percent of the universe but can't be seen because it emits no light.

Although his explorations regularly take him as far afield as Chile and Australia, "where the best observational equipment is located," the bulk of his research is done at his desk. Bothun is seeking to "unmask" dark matter through the use of computer image processing. From the keyboard of his Sun SPARC IPX workstation, Bothun can "grab" images gathered by digital light detectors (CCDs)

on the back of powerful observatory telescopes. He uses his computer to process and distill this data into optical images whose forms and colors are clues to calculating a galaxy's distance from the earth.

To check his computations, Bothun compares them with data from radio telescopes, which track the radio waves resulting from galactic gas emissions. These radio waves allow astronomers to calculate how fast a galaxy rotates, which in turn enables precise predictions as to how bright it ought to be. Between these two sources of information, the predicted image and the computerized optical image, a more complete picture of the universe emerges... Or should emerge. Bothun admits that thus far, astronomers have only discovered that the universe "is a lot more complicated than we thought it was 10 years ago. We don't really understand yet

what is going on."

Such technical explorations of the universe may seem too esoteric for the common man, but Bothun's vision is to "bring astronomical discoveries to the masses," and he recently submitted a proposal by that name to the National Science Foundation. In the last two years, computer technology has finally caught up with sophisticated data-gathering devices, making it theoretically possible for anyone to tap into the latest astronomical discoveries from a networked computer.

Bothun's idea is to develop a network of small telescopes and inexpensive CCDs at local sites, thus enabling the public to perform hands-on observations with the same equipment used at the observatories. In addition, the public would have periodic access to larger-format CCDs on the Pine Mountain telescope at a few central sites (such as the Oregon Museum of Science and Industry in Portland, and the Sunriver Nature Center in Bend). Because these digitized images of the universe may be written to floppy disks, diskettes, or video tape, participants could take away celestial images to study at home.

Through such a program, Bothun hopes to raise general awareness that "the real nature of science (is) a discovery process" rather than a mere "collection of facts." Nowhere is this process of exploration more evident than in astronomy, where the unraveling of one mystery reveals ten more. As Bothun puts it, "Astronomy is great because you never run out of things to discover."

MAGINE

Apple TV Series Airs

During Winter and Spring Terms, Macintosh enthusiasts and academic professionals will once again have an opportunity to expand their horizons with the 1992 edition of the Apple Education TV series, "Imagine." The series began on January 23 with the program *Innovations in Technology*, and continues with four monthly installments. All are being aired live in the Television Studio of the Knight Library's Instructional Media Center. Each installment airs from 10 - 11 am on the dates noted below:

Thursday, February 20 - Computers Are Changing the Way We Learn

Demonstrates the impact of technology in the classroom. Explores developments such as software "textbooks," tools for collaborative learning and writing, and other instructional enhancements.

Thursday, March 19 - Macintosh Solutions for Math and Science

Shows how Macintosh computers are being used to help students visualize abstract mathematical and scientific concepts, and to stimulate their enthusiasm for these subjects.

Thursday, April 16 - Multimedia in Language and Literacy

A look at how the Macintosh combines sound, graphics, and video to help people learn new languages and enhance their reading and writing skills.

Thursday, May 21 - Client/Server Architecture & Information Access and Analysis

Demonstrates how campuses are integrating Macintosh computers with a wide variety of host databases, applications, and computer platforms to circulate vital information electronically.

Videotapes of these programs will be kept on reserve through Spring Term at the front desk of the Instructional Media Center, where they will be available for on-site viewing. If you have further questions, you may call Polly Helm at 346-1945.

Winter Workshops Continue

Computing Center workshops are continuing through Winter Term, with some additions by popular demand. *Unless otherwise noted, pre-registration is required for these courses. To pre-register, call 346-1700.*

Pick up a flyer at either of the Center's reception counters for brief descriptions of the workshops. If you have further questions, call Howard Loewinger at 346-1718.

Introduction to the Macintosh - 185 Computing Center (Drop-in)

Monday, February 10 3 - 5 pm

Sending Mail & Files Off-Site - 245 Computing Center

Thursday, February 13 2 - 3:30 pm

Introduction to HyperCard 2.0 - 175 Computing Center

Repeated twice: Monday, February 17 & 24 3 - 5 pm

Repeated by popular demand:

Accessing & Using Network Resources - 245 Computing Center

Friday, February 7 1:30 - 3:30 pm

Introduction to Electronic Mail (Eudora) - 329 Chiles Business Center (3rd Floor, Mac Lab)

Thursday, February 20 2 - 3:30 pm

SUN DAY

See the latest in Sun technology! On **Wednesday, February 12**, Dan Lacey, the local Sun representative, will be on hand to display and discuss current trends in Sun computing, including—

- The SS IPX and SS2 • “CD ware” with graphics, statistical, imaging, and publishing applications
- Sun's multi-processing server line
- integration with Mac, PC, VAX, and others
- a review of Solaris
- an overview of Sun's Graphics direction

**Room 245 Computing Center
10 am - 3 pm**

VNEWS Developments...

Displaying Subscribed Newsgroups Only

VNEWS users can now create a listing of just those newsgroups to which they've subscribed by typing the command

d/s

in response to any VNEWS prompt. A wildcard specification may be added to the command to further curtail the listing to those subscribed newsgroups whose names have a common component. For example, if you typed

d/s or.*

you'd generate a list of all the newsgroups you've subscribed to that begin with the prefix OR. Such displays include the number and status of each newsgroup named, the estimated number range of available articles, and the number range of articles you've read, e.g.,

```
594 or.politics      A S P   107   149
1:                   49
```

Status letters (A, S, and P/M) indicate that the newsgroup is active (A), you subscribed to it (S), and you can post directly to it (P), or it has a moderator (M). A dash (-) in the first and second status positions implies the opposite status (e.g., newsgroup is inactive or not subscribed). The above example indicates that articles 107 through 149 of newsgroup OR.POLITICS (currently, newsgroup number 594) are available for reading, and that you've already read articles 1 through 49.

STAT CORNER

New MAPLE V for Macs Released

Waterloo Maple Software recently announced a new release of their symbolic mathematics package, Maple V, for Macintoshes. Maple V can be run on smaller Macs, such as those with only 2mb of RAM and 7mb of disk space. Versions of Maple V are available for Macs with and without a floating point coprocessor.

For more information, you can call Waterloo Maple directly at 519-747-2372, or write them at

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Waterloo, Ontario, Canada, N2L 3L3

Waterloo's e-mail address is
wmsi@daisy.uwaterloo.ca

- Joe St Sauver

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