Welcome to Computing at the U of O

Welcome to campus and a new year of computing! This promises to be an eventful year in computing at the U of O. As you will see in the articles in this issue of *Computing News*, a number of new facilities and services will be introduced this year.

For those of you who are new to the University, this newsletter will bring you brief notes on a variety of computing topics during the academic year. Copies are sent to all faculty, staff, and GTF's, and are available at the Computing Center. If you are not on one of the above campus mailing lists and want to receive *Computing News*, contact the newsletter editor for a subscription form.

If you are new to computing at the U of O, stop by the Computing Center's Documents Room (described in this issue in "Documents Room Services") or the Consulting Office across the hall. They contain a wealth of information designed to help you use our resources, which include DEC 1091 and IBM 4341 mainframes, three micro labs, a Microcomputer Support Lab, public-access terminals, documentation, software, and short courses.

You will find additional public-access computing facilities available through the Business School (x5095) and the EMU Computer Lounge (x4353). Check with your department, too, since several academic departments provide additional computing resources for their own faculty, staff, and students.

New Network to Link Northwest

Several researchers in the Northwest have received National Science Foundation funds to establish a regional network connecting universities in Washington, Oregon, Alaska, Montana, Idaho, and North Dakota. Our connection to this network, known as NorthWestNet, is expected to be completed sometime during fall term.

NorthWestNet will allow high speed mail and file exchanges with researchers in the Northwest and those on national research networks such as NSFnet and ARPAnet. It will also provide access to supercomputing facilities at Boeing and the San Diego Supercomputer Center. Local benefits of NorthWestNet will be fully realized when the new campus network is in place (see "Campus-Wide Network Plans" on page 2). Faculty will eventually be able to send material to NorthWestNet sites directly from terminals and micros connected to the campus network.

Questions about NorthWestNet can be directed to JQ Johnson, University Computing's new Director of Network Services, at x4394.

New Computer System on the Way

During the summer, a VAX 8800, bid by Digital Equipment Corporation, was chosen as the new computer for central academic computing. The contract between DEC and the State of Oregon is being finalized in September as this newsletter goes to press. While all the details are not available, the new system will include

- a VAX 8800, with about 100 megabytes of memory and close to 5000 megabytes of disk storage

- the VMS operating system

- several 6250/1600 bpi tape drives

- several VAXstation 2000 workstations with a MicroVax server, connected via Ethernet

By comparison, the current DEC 1091 has 1 million words of memory (equivalent to approximately 4 megabytes), and the IBM 4341 has 8 megabytes. The DEC has 1056 megabytes of disk storage; the IBM, 4810 megabytes. The VAX 8800 will process about 12.2 million instructions per second, compared to approximately 1.5 million for the DEC and .7 million for the IBM.

The VAX is expected to arrive sometime during fall term, possibly as early as October, but is unlikely to be available for general use until winter term. The Academic Computing Advisory Committee, chaired by Vice-Provost for Academic Administration Larry Fincher, will be making recommendations on how to introduce the new system and determine charges for its use.

The VAX is expected to eventually replace all of the functionality of the DEC and handle part of the load on the IBM. In the future, the DEC's Xerox 2700 laser printer and Zeta-8 plotter will be connected to the VAX. Software on the VAX will include

- full-screen editing capabilities,

- mail and conferencing systems,

- programming languages (C, FORTRAN, COBOL, and ASSEMBLER),

- database capabilities (ACCENT R), and

- statistical packages (SAS, SPSSX, BMDP, etc.).

Watch the online DEC and CMS news, and future issues of *Computing News* for further details.

Computing Reorganization

Director of Network Services Arrives

When University Computing was reorganized last May, three separate computing directorships were created. Gordon Ashby became Director of Computing Facilities; Joanne Hugi, Director of Computing Services. In June, Larry Fincher, Vice-Provost for Academic Administration, announced that J.Q. Johnson had been appointed to fill the third position, Director of Network Services.

"JQ," as he likes to be called, assumed his new position on September 1. He comes to the U of O from Cornell University, where he was Director of Computing Facilities for the Department of Computer Science for three years.

During the next few months, JQ expects to spend most of his time on the planning, installation, and maintenance of the campus-wide network (see "Campus-Wide Network Plans" below), and on coordinating U of O access to state and national networks. He is also interested in providing increased support for decentralized computing on campus.

Computing Services Changes

Also effective September 1, Patrick Holleran became Assistant Director of Computing Services. The Computing Services staff has been reorganized, but will continue to provide assistance in the following areas:

- programming
- microcomputers
- statistical computing
- information systems
- documentation
- consulting

For information, or to obtain services, call x4402 or x4394.

Computing Center Renovations

New Elevator

The south entrance to the Computing Center has been blocked since July to allow for the addition of an elevator to serve the second floor of the building. Now Consulting (Room 207) and the Documents Room (205) will be accessible to all! Construction should be completed in October.

New Consulting/Micro Support Lab Facilities

The Microcomputer Support Lab (MSL) is being moved upstairs, adjacent to the Consulting Office. This move will provide a much-needed expansion of the MSL and an integration of the general and microcomputer consulting services. Both facilities will be closed until the needed renovations are completed.

Consulting and the MSL will reopen in October with expanded hours and space and a single phone number, x4402. New services planned for the MSL include

- Apple LaserWriter printing (formerly available in the Documents Room),
- file transfers between several types of computers and file formats, and
- restoration of information on damaged diskettes.

Watch for news of the grand reopening in late October.

Terminal Room Moves

As use of the mainframes via microcomputers has increased, traffic in the Center's public-access terminal room has decreased. The terminals have been removed from Room 202 to make way for the new Microcomputer Support Lab. Room 105 (the former MSL) now houses 10 public-access terminals. This new terminal facility will not be large enough to accommodate classes needing a terminal room for instruction.

Campus-Wide Network Plans

Planning is well under way for a new campus-wide high speed network. The network is being partially funded by a U.S. Department of Education grant awarded to the U of O last spring. Over the summer, an outside consultant completed a conceptual plan for the network. Decisions on details of the design and the technology to be used will be made this term, in consultation with the Ad-hoc Campus Network Consultation Committee.

This Ethernet-type network will provide high speed connections from micros and workstations to

- campus-wide electronic mail facilities,
- the University's central computing resources,
- departmental resources such as printers, file servers, databases, and minicomputers, and
- national networks, including BITNET, UUCP, and the new NorthWestNet (see "New Network to Link Northwest" on page 1).

For terminal users, the network will eventually provide an alternative to the Gandalf switch and the existing LAN/1.
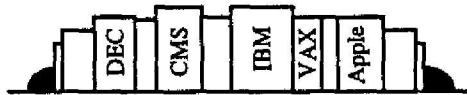
The inter-building backbone of the network, as well as connections to some departments, will be acquired with the DOE grant. JQ Johnson, Director of Network Services, hopes that installation will begin sometime fall term. Departments interested in installing their own Ethernets may obtain assistance in developing plans to connect to the network. Contact JQ at x4394 for further information.

Education Program Offerings

The Computing Center's free short course program usually provides introductions to the operating systems, editors, and statistical packages on our mainframes each quarter. However, due to the impending arrival of the new system (see "New Computer System on the Way" earlier in this issue), regular classes will not be offered this term. Two single-session special classes

- SAS/PC, and

- Introduction to Computing Services

will be offered the first week in October. Fliers describing these courses have been sent to faculty, staff, and GTF's, and are available at the Computing Center's reception areas (Rooms 108 and 250).

Documents Room Services

New Computing Center users may be surprised to learn of the services offered by our Documents Room, located in room 205. The Documents Room collection includes the following materials, many of which are not available elsewhere on campus:

- several hundred books on all aspects of computing

- manuals and locally prepared write-ups for the Center's mainframe systems and for supported software

- over 100 periodicals, many on microcomputers

- a reference collection of literature indexes, hardware and software directories and software reviews

- over 200 newsletters from educational computing organizations and microcomputer user groups

- public-domain software for IBM PC and Apple Macintosh microcomputers, which can be freely copied

Anyone is welcome to use our collection and borrow items. Books and newsletters may be borrowed for one week. Public-domain software and back issues of periodicals may be checked out for two days at a time.

Please call 686-4406 if you have any questions ... or, better yet, drop by for a visit! We are open

Monday - Friday, 9:30 am - 5:00 pm

with reduced hours between academic terms. - *Betsy Shaw*

Communicate Electronically

New people on campus may be particularly interested in the electronic mail and communication facilities available online on the DEC and IBM mainframes:

- Mail - see the "Network Mail and File Exchange" write-up for information on the DEC and CMS mail capabilities and access to international networks such as BITNET and UUCP.

- Calendar - the University News Bureau maintains the University's calendar of events in the DEC's CAL program. Type **help cal** for information.

- Conferencing - see the *Faculty Forum Handbook* for an introduction to the FF conferencing system on the DEC. Faculty may also join the BB conferencing system, which is like FF but is restricted to microcomputer topics. Type **help bb** on the DEC for information.

The written documentation mentioned above is available for sale or perusal in the Computing Center's Documents Room (205).

IBM 4341 NOTES

Back Up Your IBM Files

Files stored on disk on the IBM's VS1 and CMS systems are copied onto tape regularly by Computing Center staff. This backup procedure, which is intended for disaster recovery, normally takes place between 7 and 9 am. Starting October 12, the schedule will be:

Mon. & Thurs. VSKP01,VSPK02,VMPK01,VMPK04

Tues. & Fri.   VSPK03,VMPK02,VMPK05

Wed. & Sat.   VSPK04,VMPK03,VMPK06

VS1 jobs are not run during VS1 backup sessions. If you are using CMS while your disk area is being backed up, your files may not be recoverable.

Individual files and disk areas that have been backed up can be restored, but the process is difficult, and can be costly. For important disk files and those that are changed frequently, we recommend that you provide your own backups. On CMS, use the TAPE DUMP facility, described in the *IBM 4341 User's Guide*. On VS1, use the appropriate IBM utility (IEBGENER, IEHCOPY, etc.)

Magnetic tapes are **not** backed up, so be sure to keep duplicate copies of all your important tapes. You can use the SAS TAPECOPY procedure to easily duplicate most IBM tapes.

MICRO SCOPE

Apple Software Updates Available

Apple Computer has recently announced new versions of four software products:

- MacWrite, version 4.6, uses an accurately scaled LaserWriter ruler, arrow keys, and more.
- MacDraw, version 1.9.5, is faster, offers true text representation and other fixes, and includes new features, such as additional command keys.
- MacProject, version 1.2, supports color and has several bugs fixed.
- MacTerminal, version 2.2, has new keyboard support.

All of the above now support AppleShare FileServer software. MacWrite will not work on 128K Macs; otherwise, all of the above are compatible with all Macintosh CPUs.

Disks containing the new versions of these programs are available in the public-domain library, which you'll find in the Computing Center's Documents Room (205). If you want to check out and copy them, bring in your original software disks for verification.

System Software 5.0

Version 5.0 of the Macintosh System Software is now available. New features in this version include

- Multifinder - lets you open multiple applications concurrently, and print LaserWriter documents or perform other background processing while working on another application.
- Apple File Exchange - lets you transfer and translate documents between your Mac and MS-DOS 5.25" disks or ProDOS 3.5" disks, either directly or via a communications link.

The new version comes on four 800K disks. Disk copies of the software alone will be available in October in the Documents Room's public-domain library. You may check them out if you bring in your original system disk for verification. If you want to purchase the 4-disk update package with manuals, you can do so for $32 through the Microcomputer Purchase Plan (see "New Microcomputer Purchase Plan Options," next).

If you purchase a Macintosh Plus, SE, or II between August 11 and November 15, 1987, the update package is free. Pick up a coupon for it from the Computing Center's Microcomputer Support Lab (Room 202).

HyperCard

Apple's new tool for creating, managing, and associating information on the Macintosh is now available. Bring your original system disk to the Documents Room (205) if you want to checkout Hypercard and copy it. Or, you can purchase the software with documentation for $29 through the Microcomputer Purchase Plan (see below).

New Microcomputer Purchase Plan Options

The Microcomputer Purchase Plan allows U of O faculty, staff, students, and departments to purchase microcomputer products at a significant discount from vendors who have signed agreements with the Oregon State System of Higher Education (OSSHE). Hardware, accessories, and software from IBM and Apple are currently available through the plan. Later this fall, Zenith products will also be available.

Changes in product availability that occurred over the summer are highlighted below. For details of the plan, pick up instructions and price lists at the Computing Center's Documents Room (205) or Microcomputer Support Lab (room 202, reopening in October), or at the U of O Bookstore's Electronics Department or new EMU Computer Store.

Apple

Over the summer, several new products were added to the Apple plan, including the Imagewriter LQ and the System Software Version 5.0 (see the previous article). HyperCard software is now bundled with all Macs. The Macintosh 512K Enhanced has been dropped from the plan, and prices have decreased for some items. People with Mac II orders pending will be happy to know that color monitors are now being shipped.

IBM

New IBM products covered by the plan include the Personal System/2, Models 25, 60, and 80. Model 25 is the addition to the Personal System/2 line recently announced by IBM. Models 60 and 80 were not previously available to individuals through the plan.

Watch for the

Microcomputer Support Lab's

Grand Reopening

Room 202 of the Computing Center
in October