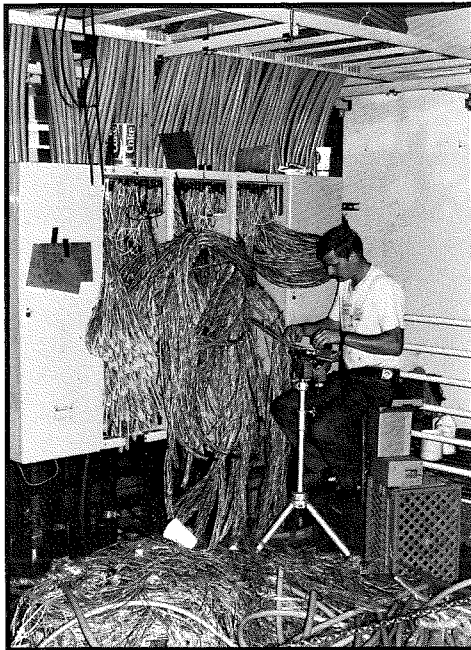


Telecom News

University Telecommunications
The University of Arizona

October 1989
Volume 1, Number 7



Major TIPS Milestone Reached.
On October 13, the last of more than 150,000 communications wires from campus buildings were connected to the UA's new switchroom.

TIPS Enters Final Stages: Telephone Service Order Freeze Announced

Only 63 shopping days until Christmas! And, only 102 days until the February 2 cutover to the UA's new 5ESS telephone switch. While February 2 may seem far off, the University Telecommunications department is busily and carefully implementing the final stages of the TIPS project.

And, one of these stages is quickly approaching—a freeze on all telephone service orders during the month of December and January. During the freeze period, all existing UA telephone services will be transferred to the new campus cable system and 5ESS switch.

The order freeze is necessary given the technical and physical complexity of transferring current telephone services to the new switch and cable system. As part of this transfer, a cable database will be built which will involve the

identification, inventorying, and assignment of over 150,000 wires that connect campus buildings to the new 5ESS switch. The freeze will also allow the testing of the various components of the 5ESS system.

Details concerning the freeze and how it will affect you are covered below. A timetable of upcoming TIPS activities is provided at the end of this article.

How Will the Freeze Affect Me?

If you want to add, move, or change a telephone, the University Telecommunications department must receive the completed telephone service order by 5 p.m. on December 1.

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Equipment and Maintenance Services Has Moved to the Computer Center Building

Need help installing or upgrading your PC? Have a terminal in need of repair? Does your department need a maintenance contract for its computer equipment? The Equipment and Maintenance Services group of the University Telecommunications department can take care of these needs and much more.

And, on October 12, Equipment and Maintenance Services moved to the Computer Center, Room 224, to serve the University from a more centrally located office. Equipment and Maintenance Services has moved from Building 47, 1301 E. 5th Street.

The phone number of Equipment and Maintenance Services, 621-5050, has not changed with this move.

Equipment and Maintenance Services offers these services to the University community:

- repair of microcomputers, terminals, and peripherals
- installation and upgrade of microcomputers
- authorized warranty service for Zenith and NeXT computers
- leasing and maintenance of pagers

- maintenance of computer equipment on a contract or time-and-materials basis

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Service Order Freeze, *continued from page 1*

An order is considered complete when the service request is placed on an Interdepartmental Billing Form (IBF). The IBF must be signed and approved by the authorizing department. If you have any questions about order processing requirements, please call Customer Services at 621-5100.

Orders received by December 1 will be installed in the current system as usual and included on the new system when it is activated.

What Services Will Be Affected by the Freeze?

Telecommunications services that will be affected and those that will not be affected by the freeze are listed below:

Services Affected by Freeze

- New telephone service (single-line, multi-line ECTS, Merlin, and Spirit sets)
- Changes in telephone features
- Moving of telephone lines
- Off-premise extension (OPX) service

Services Not Affected by Freeze

- Changes to caller ID number assignments
- 800 telephone service
- IDX connections (terminals and computer hosts)
- Point-to-point data equipment connections
- Ethernet connections
- Consulting and information services
- Engineering support for construction projects

If you have any questions concerning the services listed above, please call 621-TIPS (621-8477).

How Can I Prepare for the Freeze?

1. If you want to add, move, or change a telephone, place your order as soon as possible.
2. Whenever possible, order a single-line telephone set (also called POTS or Plain Old Telephone Set) rather than multi-line ECTS, Merlin, or Spirit sets. New installations or upgrades of the ECTS, Merlin, or Spirit sets require lead time for consulting, configuration options, vendor quotes, and installation coordination.
3. If you have a multi-line ECTS, Merlin, or Spirit set, postpone major changes or upgrades. ECTS sets will be replaced with new telephone sets. Therefore, it probably will be easier to learn how to use the ECTS replacement if you do not change the current setup.
4. If your department is moving in the next three months, please estimate your telephone requirements immediately. If it is a major relocation, move dates and estimates of service requirements may be difficult, but you can place your order on a best-guess or minimal-service-requirements basis. It may be advisable to have some phone lines installed for your new department location rather than be left with zero service because of the freeze.
5. If you are moving to a location outside the University main campus area and you want to have a 621 or 626 prefix, please place your order as soon as possible. This type of service request may require additional order lead time since it may involve the installation of an off-premise extension (OPX) circuit by the local phone company. Our service consultants can assist you in determining this when you place your order.

We would appreciate your help in telling others in your department about the service order freeze. We have notified Space Planning and Management and sent letters to customers with outstanding work requests. We have also sent a copy of the order freeze information and guidelines covered in this article to your TIPS Departmental Coordinator. If you need more copies, call 621-TIPS.

Upcoming TIPS Activities

A table of upcoming TIPS activities and their approximate dates is provided below. Specifics on these activities will be published in upcoming issues of this newsletter, the *Telecom Bulletin*, and memos to TIPS Departmental Coordinators. If you have any questions, contact your TIPS Departmental Coordinator or call the TIPS hotline at 621-TIPS, Monday through Friday, 9 a.m. to 4 p.m. Thank you for your continued help in making the TIPS project a success!

TIPS Schedule of Activities Oct '89 - June '90

Date	Activity
Oct/Nov	Testing of ECTS replacement sets
Oct/Dec	Identification of special circuits
Nov/Dec	ECTS user reviews
Nov/Jan	Testing of telephone sets and cables
Dec 1	Service order freeze date
Dec/Jan	Cable system completion
Jan	User training Parallel service of ECTS and replacement sets
Feb 2	System cutover
Feb/June	System acceptance testing Old cable removal



UA Network Connections— What Can They Do for You? Part II

In Part I that appeared in the September issue, we covered computer network basics and what you can do via campus network connections. In this part, we will discuss what you can do via campus connections to networks outside the UA.

The UA's connections to external networks make it possible for you to sit in your office, in front of your terminal or microcomputer, and access worldwide computing systems, information databases, libraries, and other resources that extend beyond those available on the UA campus. In addition, networks allow you to share ideas and collaborate on research projects with your colleagues around the world.

In our discussion of UA external network connections, we are going to talk about two networks: BITNET and the Internet. BITNET is an electronic communications network that connects educational and research institutions throughout the world. The Internet is a large collection of international, national and regional networks that link educational, government, military, and commercial organizations.

Because It's Time NETwork

"Using BITNET, I can correspond with my colleagues all over the world (essential for an academic) in much less time than ordinary slug mail," says David Owen, Associate Professor in the UA Philosophy department. "And if there is a problem with delivery, I get a message back from a postmaster in 24 hours, and can resend the message in just a few keystrokes."

While sending mail is one of the most common uses of BITNET, it is also possible to transfer files, send

interactive messages, and access server machines. Server machines are computers running special programs that allow you to request information on a wide variety of topics, to participate in discussion groups, and to obtain address information on other network users.

At the last counting, there were over 600 universities and research institutions connected to BITNET. BITNET also provides links to other networks in Canada, Europe, the Far East, and South America. You can access BITNET through CCIT's RVAX and ARIZVM1 computers.

The Internet

Although the Internet is a collection of networks, it actually functions as a single network. Computers connected to the Internet use the TCP/IP protocol software to communicate with each other. The TCP/IP protocol is commonly used on the UA extended ethernet, which provides access to the Internet.

"Our connection to the UA extended ethernet network and its connection to the Internet makes it possible for us to access supercomputing," says Rob Indik, Computer Software Specialist in the Mathematics department. Faculty and staff in the Math department are currently using the supercomputers at the Pittsburgh Supercomputing Center and at Los Alamos National Laboratory for research projects in non-linear optics, high-power laser modelling, problems in turbulence and fluid mechanics, and dynamical systems.

In addition to logging into remote systems, you can use the Internet to send electronic mail, transfer files, and transmit interactive messages to your colleagues throughout the world.

The following is a brief description of a few of the networks that you can access on the Internet.

ARPANet

Established in 1969 by the Defense Advanced Research Projects Agency (DARPA), ARPANet was the pioneer of national computing networks and was the original backbone network of the Internet. It was created so that defense contractors could share databases, graphics facilities, and other computing resources. The TCP/IP protocol was developed on the ARPANet and has since been widely adopted by networks at national, regional, and campus levels. ARPANet is currently being phased out and its computers are being connected to other networks on the Internet.

NSFNET

NSFNET is a backbone network that spans the country interconnecting supercomputer networks, mid-level networks (regional, state, or special interest), and campus networks. It was originally established to provide remote access to National Science Foundation (NSF) supercomputing centers (for example, the John von Neumann Center). The UA's main link to NSFNET is through WESTNET.

WESTNET

WESTNET is a southwestern regional network that connects universities in Arizona, Colorado, Idaho, New Mexico, Utah, and Wyoming. WESTNET is the UA's principal connection to NSFNET.

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JvNCnet

JvNCnet was initially established to optimize access to the John von Neumann Center supercomputer in Princeton, New Jersey, by members of the Consortium for Scientific Computing. JvNCnet now connects universities that are not consortium members and it is also linked to

NSFNET. Through this link, it is possible to access other networks connected to NSFNET.

Summing It Up




Networks facilitate the collaboration of educational institutions and bring together expertise from around the world. The UA's connection to

outside networks can provide you with the information and computing power that you need to do your job more efficiently.

If you'd like more information about UA network connections, call the University Telecommunications department at 621-TIPS (621-8477).

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Telecom News is published monthly by the University Telecommunications department at the University of Arizona. *Telecom News* includes articles about telephone services, data communications services, transmission facilities, and communications applications at the UA. *Telecom News* also provides updates on the Telecommunications Improvement Project Services (TIPS). Suggestions or inquiries are welcome. Please submit all suggestions or inquiries to *Telecom News*, University Telecommunications, Computer Center 73A, Rm. 131, or call 621-TIPS.

Publisher: Amelia Tynan
 Telecommunications Services

Editors: Terry Robinson, George Shelton,
 and Warren Van Nest

Telecom News

University of Arizona
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 Computer Center 73A, Rm. 131

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