

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

ACUTA Newsletters

ACUTA: Association for College and University
Technology Advancement

2-1995

ACUTA eNews February 1995, Vol. 24, No. 2

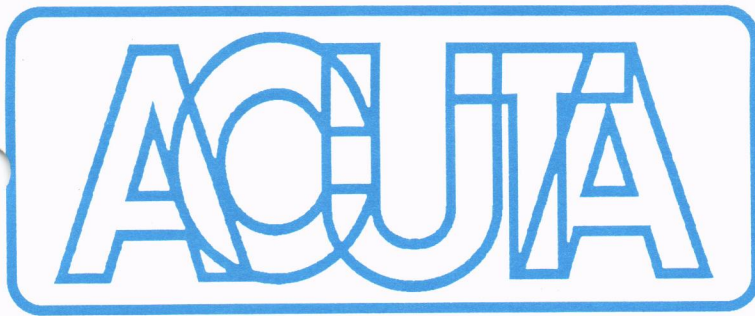
Follow this and additional works at: <http://digitalcommons.unl.edu/acutanews>



Part of the [Higher Education Commons](#), and the [Operations Research, Systems Engineering and Industrial Engineering Commons](#)

"ACUTA eNews February 1995, Vol. 24, No. 2" (1995). *ACUTA Newsletters*. 221.
<http://digitalcommons.unl.edu/acutanews/221>

This Article is brought to you for free and open access by the ACUTA: Association for College and University Technology Advancement at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in ACUTA Newsletters by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.



THE VOICE OF
TELECOMMUNICATIONS
IN HIGHER EDUCATION

NEWS

Association of College & University Telecommunications Administrators

February 1995

Winter Seminar looks at campus networks

A timely topic, expert coverage, high quality peer presentations, and a beautiful location: All the components of a successful event were present for ACUTA's Winter Seminar in Maui. Almost 100 telecom professionals met in Hawaii January 17-21 for an overview of networking today and a vision of the networks of tomorrow.

ACUTA President Randy Collett welcomed attendees, who came from 28 states plus Canada and Australia, remarking that "Our traditional students aren't so traditional any more. Our non-traditional students are increasing in numbers... Obviously we need to expand the product we're selling as a university beyond the traditional boundaries."

Explaining how to lead campuses into the 21st century as they expand beyond the walls was a formidable task for Lillian Goleniewski and Ray Horak of the LIDO Organization, but a challenge they were well prepared to meet. Program Chair Jan Weller introduced the two principal speakers, who spent the next three days living up to their reputation as experts in the field of networking.

The task, as Horak and Goleniewski defined it, was to look at life on the information highway from a big-picture standpoint; to define the applications as well as the underlying technologies; and to apply that information to the world of education, looking at technology reforms that will allow educational reforms to take place.

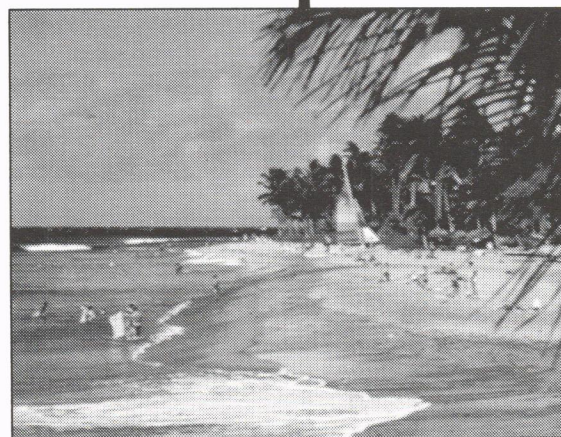
They began with a summary of where we've been—the Information Age. "We consider this to be a knowledge-oriented society," said Goleniewski. "But the coming age, dubbed the Interactive Age or the Creative Age because individuals have control over access to information and how to use it in the learning process, has these characteristics: We may expect a continued proliferation of computer devices although they have begun to change in complexion as convergence powers have combined numerous devices into one. Increased communications capabilities will require tremendous amounts of bandwidth and the flexibility that

fiber optics have provided us.

"We see 40-60% of the entire labor force worldwide being actively involved in information technologies, using computer resources and their brains to perform their job function.... With scientific knowledge growing at a rate of about 50% per year already, we are in an era of lifelong learning," Goleniewski continued.

Citing the tremendous growth in the number of information receptacles, such as voice mail, e-mail, pagers, and fax, she stressed the increasing levels of connectivity that will be mandated. "The expansion of LANs that must accommodate not just one-to-one but many-to-many and the increased demand for interconnectivity is going to require much more dynamic public switched infrastructure. We will see more and more individuals working out of their homes, as well as a high degree of concentration on the consumer and powering that consumer in the home environment."

In the Interactive Age, Goleniewski continued, we will see such changes as global data highways with a tremendous capacity to support visual and multimedia communications. The smarter infrastructure will impact all aspects of our lives: work, entertainment, social, and education. To illustrate, she described two imaginative applications: Doc-in-a box and Smellaphone. Technology will allow the dissemination of information to people in the format they most easily assimilate—not just visual, but inclusive of other senses as well, with an emphasis on personal interactivity and individual control.



INSIDE...

- 2 Board report
- 3 President's message
- 4 ACUTA hires Computer Services Administrator
- 5 Peer presentations at Maui
- 7 DC at a glance
- 11 From ACUTA Headquarters

See "Horak and Goleniewski" on page 6

ACUTA Board plans Strategic Planning meeting

A Strategic Planning meeting involving ACUTA Board members, committee Chairs, and some members of the Lexington staff will be held April 7 and 8 prior to the spring seminar in Kansas City. The purpose of the meeting will be to review the member needs assessment survey final report, governance structure transition, document accomplishments to date versus plan, and identify areas where changes and updates to the plan are required.

Other items on the agenda included:

- Maui seminar update
- FY '95-'96 budget development calendar
- Emeritus Membership policy
- Electronic access project status
- Lexington office software project
- Computer services position recruitment
- Proposed IRS regulations
- ACUTA investment portfolio review
- Bylaws and Policy/Procedure Manual revision
- Project Mandarin consortium conference
- FAX-on-demand service
- Update on selection of appointed Director-at-Large
- Member needs assessment final report

Submitted by
Dr. James Cross, Michigan Tech
ACUTA Secretary/Treasurer

Is Government losing sight of value of associations?

Increasingly, associations are under pressure from Congress and in many state legislatures. The very foundation of associations—their nonprofit status and the privileges that go with it—is eroding as the government's need to increase revenues grows. Efforts to balance the budget have driven Congress to chip away at associations through a lobbying tax, unrelated business income taxes, sales and use taxes, increased postal charges, and an adverse redefinition of what constitutes a "member."

Government seems to have forgotten how, since colonial days, associations have bridged the gap between the public and private sectors by:

- **Setting standards and codes of ethics.** Two-thirds of all associations set and enforce standards which not only protect consumers, but also instill a high level of confidence in the use of standardized products and services.
- **Retraining America's workforce.** Through the many specialized seminars, courses, and conferences, 90% of all associations have education at the core of their mission.
- **Conducting research.** Gathering statistical data on their industry or profession is a valuable service for which Congress has come to rely heavily on associations.

ACUTA Executive Director Jeri Semer, an active member of ASAE, feels that "associations are uniquely positioned to provide services and benefits that neither industry nor government is capable of furnishing. Membership in a well-conceived association like ACUTA is an excellent value, but like many opportunities, the benefits multiply when you become more involved."

ACUTA encourages you to serve our association and let it serve you!

This information courtesy of ASAE.

Association of College and University Telecommunications Administrators ACUTA NEWS, Volume 24, No. 2

PRESIDENT: Randal Collett, Central Missouri State University

PRESIDENT ELECT: David E. O'Neill, Washington State University

SECRETARY/TREASURER: Dr. James S. Cross, Michigan Technological University

IMMEDIATE PAST PRESIDENT: Patricia Searles, Cornell University

DIRECTORS-AT-LARGE: Buck Bayliff, Wake Forest Univ.; Linda Bogden-Stubbs, SUNY Health Science Center; Bruce McCormack, Brock Univ.; Anthony J. Mordosky, Millersville Univ.

COMMITTEE CHAIRS: *Legislative/Regulatory*—Ferrell Mallory, Brigham Young Univ.; *Marketing*—Maureen Trimm, Stanford Univ.; *Membership*—Margaret Milone, Kent State Univ.; *Program/Education*—Jan Weller, Univ. of Kansas; *Publications*—Mark Kuchefski, Indiana University, Bloomington; *Vendor Liaison*—Mike Ashton, Univ. of Western Ontario

EXECUTIVE DIRECTOR: Jeri A. Semer, CAE • BUSINESS MANAGER: Eleanor Smith • COMPUTER SERVICES ADMINISTRATOR: Aaron Fuehrer • MEETING PLANNER: Lisa Cheshire • MEMBERSHIP SERVICES COORDINATOR: Kellie Bowman
PUBLICATIONS EDITOR: Pat Scott • TELECOMMUNICATIONS RESOURCES MANAGER: L. Kevin Adkins

The opinions expressed in this publication are those of the writers and are not necessarily the opinions of their institution or company. ACUTA as an association does not express an opinion or endorse products or services. ACUTA News is published 12 times per year by the Association of College and University Telecommunications Administrators, a nonprofit association for institutions of higher education, represented by telecommunications managers and staff. Subscriptions: \$45 a year, \$4 per issue. Please send material for ACUTA News to Pat Scott, ACUTA, 152 W. Zandale Dr., Suite 200, Lexington, Kentucky 40503-2486; telephone (606) 278-3338; fax (606) 278-3268. Copyright ©1995 ACUTA



ACUTA News is printed on 15% post consumer waste recycled paper.

President's Message

Recall last month's column, and the fun I had brainstorming about where technology may perhaps change the delivery of this thing we call "education."

This month, I guess the constant coverage of the wrangling in Washington over telecommunications policy has me brooding a little.

No doubt you've already seen lots of coverage about this year's telecommunications legislation. Newspapers, industry press, and the *Wall Street Journal* aside, I happened to catch about a half hour on C-Span one night where Rep. Brooks (R-TX) and Rep. Bliley (R-VA) were testifying before a Senate subcommittee about their plans for telecom legislation during this session.

Sources tell me that this year's legislation will resemble what passed through the House last year with only five dissenting votes. There are still some details to be worked out over some portions of the bill, however.

I'm told that the remaining battles will be fought over whether competition for this local loop occurs in a planned, scheduled "sequence" of events, or whether there will be a "flash" cutover. From what I've read, I think it's safe to conclude that some battlelines have been drawn.

The Regional Bell Operating Companies (RBOCs) have been adamant in their demands for a flash cutover. At some point, they want the immediate ability to provide InterLATA long distance, manufacturing, and cable TV in exchange for open local loop competition. Because they believe that some competition already exists, this seems to be a "non-negotiable."

Long distance carriers are equally adamant about a sequenced cutover. They believe that instant access to InterLATA long distance, manufacturing, and cable TV without some demonstrated "openness" will give the RBOCs an unfair competitive advantage. A key element of their argument is that access charges, as implemented today, would serve to subsidize their eventual competitors.

There are also political ramifications. It has been said that politics makes for strange bedfellows. Telecommunications legislation is no exception.

The U. S. Telephone Association (USTA) is a strong advocate of the RBOCs' position for a flash cutover to open competition. The Republican side of the aisle seems to be leaning that way as well, and some think Sen. Bob Dole would like to use this issue to gather support for his anticipated Presidential bid. Oddly, the President of the USTA, Roy Neel, is a former aide to then Senator, now Vice President, Al Gore.

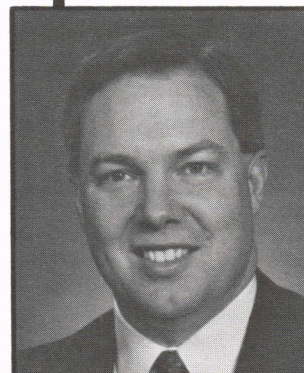
We've also read recently that the Competitive Long Distance Coalition (in short, the long distance players) hired long time Republican Howard Baker to further their position of a sequenced cutover. And guess who supports sequencing? Democrats, and Vice President Gore!

Having spent so much time and effort with the confounding aggregator issue, I'm probably too cynical about all this. I guess we should face the fact that we're really just bit players in this legislative drama. Yet, I just can't overcome this personal belief that the folks who will need things that colleges and universities will deliver (like distance learning) in absolutely the worst way will probably be the last to get them.

Who are those people? And why will they be last? Generally speaking, they're residents of our more rural communities. Don't get me wrong; many rural communities have more advanced local services than some metro areas. The barrier, as I see it, will be ever justifying the delivery of interexchange bandwidth that we presently need for things like interactive distance learning to communities with few access lines.

There's something else. I'm concerned about the future of those small, rural communities. Part of me wants to believe that technological advances, coupled with quality-of-life advantages, may be a last opportunity for survival. But I can't shake the nagging doubt that the results of telecommunications legislation may lead to even further isolation of the people who need us the most.

Believe me, as someone with a real emotional attachment to life in rural America, I find this more than troublesome.



Randy Collett

ACUTA President

The Video Highway: Can We Get There from Here?

First voice, then data, now...video.

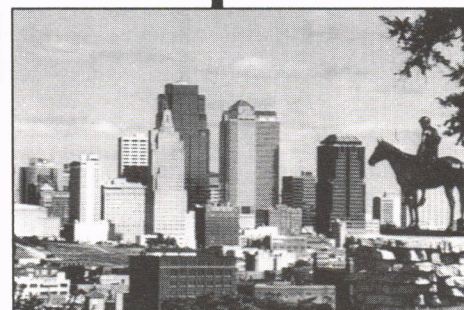
This dual-track Spring Seminar (Technical and Management tracks) will focus on technology definitions, implementation requirements, application of the technology in higher education, and the fundamental cultural changes required to accept the new paradigms.

Spring Seminars

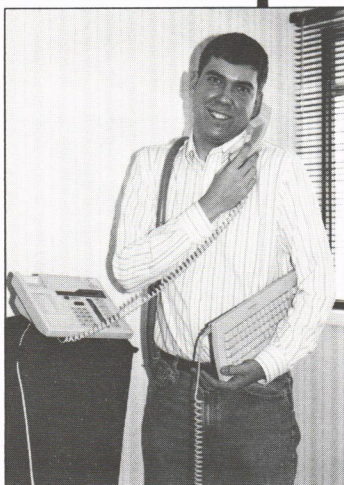
Kansas City, Missouri

April 9-12

Hyatt Regency



ACUTA hires Computer Services Administrator



With a cable over his shoulder, a keyboard under his arm, and the phone at his ear, Aaron is ready to help ACUTA serve you better!

ACUTA welcomes Aaron D. Fuehrer who joins the staff in the new role of Computer Services Administrator.

Aaron received his BBA in Computer Information Systems from Eastern Kentucky University. While at ECU, he acquired valuable skills as a network administrator overseeing and maintaining an AT&T StarLAN network system that linked both laboratory and office areas. His responsibilities included installing software, maintaining client links, and mapping the network for proper security access.

Other positions since then have allowed him to expand his knowledge of computer network technology and improve his skills so that those who rely on him are confident they're in good hands.

Most recently, Aaron served as Network Administrator at a local computer services company. He also has experience in the non-profit sector as a consultant for the Council of State Governments with responsibility for the establishment of their bulletin board system.

Aaron comes to ACUTA highly recommended with references citing his commitment to quality service and his personal integrity and enthusiasm.

Aaron's primary responsibility at ACUTA will be the establishment and maintenance of the new on-line bulletin board system which is scheduled to be operational by next summer. "ACUTA is committed to providing electronic access to the Association's information resources in 1995," says Jeri Semer, Executive Director. "I am confident that, with Aaron's knowledge and experience in computer networking, we will attain this goal and expand the services we offer ACUTA members."

Aaron has lived in Richmond for 7 years, coming to Kentucky from Indiana. His wife Roberta is a nurse at Cardinal Hill Hospital. They enjoy the outdoors, and indulge in frequent walks through some of central Kentucky's outstanding parks.

We know Aaron will be an asset to ACUTA and hope you will take time to get acquainted in the months ahead. Aaron's first ACUTA event will be the Spring Seminar in Kansas City in April, but you can reach him anytime at (606) 278-3338 or e-mail afuer00@ukcc.uky.edu.

30,000 Gallons of water turn office into oatmeal

You may be protected from mother nature's floods. But what about a manmade one? Insurance brokerage Sedgwick James' telecom manager Maryann Peischl thought so, but that didn't help when 30,000 gallons of water poured out of a faulty fire sprinkler, soaking everything from the sixth floor to ground level. The flood knocked out her telecommunications, but thanks to some quick adjustments and outstanding vendor support, the phones were back up in two business days.

The flood occurred on a Saturday and was discovered on Sunday morning by someone who came in to work. By that time, the water was seven inches deep in some areas and the collapsed ceiling tiles made it look like everything was covered with oatmeal. As a result, the phones on all six floors were shorted out, the LAN was down, and all the jacks were already corroding.

By the time all the managers got in later on Sunday, however, Peischl had already notified all of her vendors, disconnected the water-logged phones, and started bringing her Northern Telecom SL-1 back up. As individual phones shorted out, when enough of them went down, the cards in the PBX also went down, and eventually a whole shelf.

On Monday, cleaning crews came in to vacuum up all the water and clean up the "oatmeal." When that was done, Peischl's maintenance provider, GTE, came in to install new cable and jacks. Southern Telco Supply—a new vendor referred to Peischl on Monday—was able to get

all the replacement phones Peischl needed that same day.

To keep operations going, Peischl set up extra phones in conference rooms and in any spare space on floors above the affected areas. Her whole restoration process almost collapsed, however, when a whole shelf on her PBX crashed a second time because employees came in Monday morning and started plugging their shorted-out phones back in.

But by bringing the system back on line card by card, and with the quick work by GTE and Southern Telco Supply, all phones were up by Tuesday afternoon. Lessons learned:

1. Lock in vendor support. Peischl lucked out finding Southern Telco Supply. They hadn't been their vendor before the incident. They are now, though.
2. Keep a diagram of where all your phones are connected on each shelf in your PBX. Peischl didn't have a diagram, and it slowed her restoral process down.
3. Plan for a disaster and tell employees what to do in a disaster before a disaster. Had Sedgwick James' employees known not to plug in their phones when they got in Monday, Peischl's PBX wouldn't have crashed for the second time.
4. Make sure you have an alarm that will notify you of system failures. If the PBX, voice mail or the LAN had an alarm feature that would have notified someone when they went down, the damage might have been less than the \$2 million it did cost.

Reprinted by permission of 411 Newsletter, 11300 Rockville Pike, Ste. 1100, Rockville, MD 20852.

Member presentations outstanding in Maui

Presentations by ACUTA members are a vital part of the program at each ACUTA event. Those who have implemented new technology and are willing to share their experiences with others greatly enhance the value of the event. ACUTA salutes the presenters at the Winter Seminar for their outstanding contribution.

Hawaii Education and Research Network

Phillip Bossert, President, HERN

David Lassner, Dir. of Info.Tech., Univ. of Hawaii

The National Science Foundation recently awarded grants to two out of 800 applicants. Bossert and Lassner were awarded one of those grants for their project called HERN, the Hawaii Education and Research Network.

Project participants include the University of Hawaii, Hawaii State Department of Education, East West Center, and a conglomeration of the three of those with some advisors called HANK.

All of those entities were involved in building networks, so it seemed logical to "cooperate and do some strategic planning to coordinate resources and hop rides where appropriate."

Bossert and Lassner described for attendees the networks in place, the cooperative efforts of K-12 through University level participants, and how cable TV works with state institutional networks. Presently, their statewide Ethernet WAN is segmented out with about 20 schools up and working and plans to have 60 up by summer.

"Right now," Bossert remarked, "it's only the schools that are getting the drop, but ...our goal is to be able to deliver two-way interactive video among all of our sites in order to weave all of our campuses into a seamless web delivering higher ed services where each one of these locations is an entry point into our system. The next step is getting this out into the home via cable TV...or whatever technology is available."

Some of the questions they identified included:

- How do you construct a reliable statewide Internet access network for up to 300,000 users?
- What issues will be associated with dial-up access?
- To what extent should we be building things ourselves? What can and should be shared?

Bossert and Lassner demonstrated that Hawaii is clearly significant not just as a vacation paradise; it is earning a high-tech reputation as well.

Serving Beyond the Campus Walls: Using Wireless Technology

Jon Rickman, Northwest Missouri State Univ.

Northwest Missouri State is poised as a technological diamond in the higher education rough. In addition to offering the usual advantages of a small campus (5,000 FTE) and a rural setting,

NMSU is becoming a standard bearer as an electronic campus.

Looking at some of the reasons for extending their campus, Rickman described the components that make NMSU attractive to prospective students: voice mailboxes for each student; some 3,000 computer stations with 7,000 accounts; Internet for all; online library, self-enrollment, transcripts, bulletin boards, and maps; electronic balloting for student elections. In addition, video on demand is provided in the form of an analog jukebox throughout the campus.

Their facility includes six satellite dishes, one of which is digital. They offer four channels on which tapes can be remotely controlled by telephones and a VCR loaded with what's needed. Presently, 112 classrooms are wired for video.

"We know these are the services that K-12 educators want a piece of, and we are trying to deliver. In 1986 we let students from about 20 schools hook up to our library and search our system, and we deliver books to them. Schools that had 4,000 books all of a sudden had about 40,000 books available.

"The information-poor were missing out on monies that were going to the big cities. We saw technology as a way to bring about educational equity, and wireless as an appropriate choice for our situation," Rickman explained. "Wireless has one big advantage: Once you've installed it, you don't pay any more for the transmission."

Rickman described how grants have helped build, among other improvements, "a WAN server of a VAX cluster with about 35,000,000 connects to that server over the years since 1987.

"Spread spectrum has lots of possibilities for colleges and universities," Rickman continued. "If you like cordless/cellular telephone, you'll like wireless computing. Spread spectrum at 2.4 is great for a community LAN in a small community. Within a ten-mile diameter we're able to serve, with four antennas off the top of our administration building, the high school, middle school, elementary school, public library, hospital, and we're going to consider faculty homes and fraternities. With a \$600 attachment to the notebook they will be able to access 2.4 meg Ethernet. With their notebook and four-inch antenna, they can log in anywhere on campus."

As NMSU considers future applications—teacher education, professional interaction, teacher collaboration, tutoring—Rickman concluded with a little advice. "Don't discount wireless. As telecom managers we all need a bag of tricks. More and more you have to pull something out of there to make something work for your situation. Give wireless a chance—it's fast, quick, and it makes customers happy."

Horak and Goleniewski

Continued from page 1

Asking what should get the attention of the telecom administrator on campus from such visions of the future, Ms. Goleniewski answered her own question: "Its role in the connectivity scheme. Entire communities are looking to the university as a provider; an incredible rush of institutions from all sectors are looking for connectivity."

The starting point, she indicated, is to describe the type of applications driving the requirement for a whole new set of technologies in the infrastructure. The broadband generation represents basically a change-out—it is not an environment where we are upgrading existing facilities; it requires new approaches to switching, new types of transport systems, and to some extent new approaches to signalling. We will see a fundamental shift in the overall infrastructure from a physical as well as a functional standpoint.

Horak and Goleniewski not only elaborated on the vision for the future; they also covered the nuts and bolts technologies that are taking us into the 21st century, such as fast packet switching. "X.25 packet switching handles packet switching at about 10,000 packets per second. When we talk about fast packet switching we're looking at 50,000-100,000 packets per second to ultimately billions of packets per second that we hope to achieve with something like ATM," Goleniewski remarked.

Horak continued the presentation with a discussion of local loop technologies, SLC-96™ digital transmission technique; HSDL, High-speed Subscriber Data Line technology; and ADSL, Asymmetrical Digital Subscriber Line, which offers a lot of potential in a convergence scenario where it's necessary to provide a great deal of bandwidth to a large number of users.

Then Goleniewski offered an in-depth examination of SONET technology describing it as "fundamental as a major infrastructure. SONET represents a family of transmission standards for achieving compatibility of fiber optic transport products and also achieving compatibility with the existing digital hierarchies. Since the beginning of time with telecom we have struggled with multiple standards for transport. [Someone needed to] come up with one unified standard that everyone in the world would agree upon.

"Today across the multiple and diverse types of fiber networks we really can't do end-to-end control, monitoring, and management because we lose that information in having to adjust for the basic differences in transmission parameters. But since this is not going to happen overnight,

whatever we do, the SONET standard has to account for how it can handle the existing t-carrier, e-carrier, and Japanese hierarchies."

Identifying this as a key point, she continued, "For the provider it reduces the overhead associated with multiplexing by about a factor of 10, which should result in much easier provisioning and therefore lower costs associated with provisioning digital capability. It also offers much more flexibility in terms of accessing bandwidth as you need it within a geographical area."

Describing the major impact of SONET, Goleniewski told the audience, "You get tremendous speeds, and the fiber equipment is standardized which means you can have interconnectivity between different carriers or vendors and that allows end-to-end monitoring. Also, we are able to accommodate the existing digital speeds over the SONET pipe."

Horak delivered the portion of the program dealing with Frame Relay, which he defined as conversational communications service provided by a sub-network for high speed bursty data. He outlined its capabilities and characteristics and gave some examples of frame relay networks. Then he moved to SMDS, the first cell transmission technology that was developed. Designed for service to relatively small geographical areas, applications tend to be data applications such as LAN-to-LAN, data archival, ubiquitous data connectivity, and more.

Goleniewski then discussed ATM, characterizing it as a "very high bandwidth, fast packet switching and multiplexing technique that allows for seamless end-to-end transmission of voice, data, image, and video traffic; finally, an infrastructure that allows us to integrate all of the different information streams onto one common platform." She went on to describe the attributes and advantages of ATM, characterizing the traffic as speed and media independent, with scalable switching capability, independent of distance and protocol.

When Horak took the lead again, attendees learned more about Advanced Intelligent Networks with some excellent practical applications and examples of technologies now in place, such as the statewide fiber optic network in Iowa, distance learning applications shown on videotape, and the Ball State University example of the use of campus video in training teachers.

Horak and Goleniewski's powerful, fast-paced presentation included a staggering quantity of information which gave many attendees a new perspective on the future of telecommunications. Punctuating the vision with real-life examples, the two presenters clearly illustrated how network technology will expand campuses beyond the walls.

Tapes and handouts from the Winter Seminar are available from the ACUTA office.

Call Kellie Bowman
(606) 278-3338
for details.

Telecom bills fill Congressional calendar

The new year is only one month old and at least nine bills of some interest to ACUTA members have already entered either the House or Senate. Some of these may never surface, and others will be worth watching:

- HR 112: *Electronic Anti-stalking Act of 1995* Would amend the Communications Act to include harassment by use of communications over a modem.
- HR 181: Would re-establish the White House Office of Telecommunications.
- HR 185: Would take mobile radio service away from people engaged in drug trafficking.
- HR 361: *Omnibus Export Administration Act* Would not require a license or authorization to export and/or re-export telecommunications equipment to a list of foreign countries.
- HR 411: *Antitrust & Communications Reform Act* Has only a couple of changes from the bill passed by the House last year as HR 3626.
- HR 424: Would allow for the awarding of grants to carry out telemedicine demonstration projects in rural places.
- HR 426: Would establish a National Commission on Telemedicine.
- HR 514: Would repeal s.310(b) of the Communications Act revoking restrictions on foreign ownership of common carrier radio licenses.
- S 164: *Comprehensive One-Call Notification Act* Would require all states to establish a one-call system so that anyone digging a hole could make one call and avoid damaging buried utilities.

January 9 was a busy day for those interested in telecommunications legislation, with meetings scheduled by both Vice President Gore and Senator Pressler (R, SD). In his meeting, the Vice President announced that "elected and appointed officials responsible for telecommunications policy reform at all levels of government have agreed to 11 objectives that will guide their future regulatory and policy efforts," according to a story in *Telecommunications Report* (Jan. 16).

These 11 items are included in a press release issued by his office. They were discussed in the meeting on the 9th with "elected officials and senior officials from federal, state, and local government..." This group is referred to in *Telecommunications Reports* (Jan. 9) as "the Clinton administration's highly touted 'Federal-State-Local Telecom Summit.'"

Most of the discussion was behind closed doors, but TR representatives were able to determine that the 11 objectives had not been agreed upon and that the administration is now "expected to redraft the policy objectives and

additional principles, and to seek further comment from summit participants." (TR, Jan. 16) Mr. Gore is quoted in the article as saying that the regional holding companies (RHCs) are "viewed as delaying the game when they could be partners in negotiating the rules of the game. And the interexchange carriers (IXCs)...in effect are demanding that the footnotes to the rule book be written before the game can begin." He also "assailed cable TV service companies, arguing that 'some of them would like to bring the game to a halt before it even starts.'"

In the other meeting, Sen. Pressler, as chairman of the Senate Commerce, Science, and Transportation Committee, proposed the "Telecommunications Competition and Deregulation Act of 1995." Drafting of the act was not yet complete, but a 45-page outline of Republican proposals for Senate telecommunications legislation began circulating in Washington late last week, according to *Telecommunications Reports* (Jan. 16). Some think that the RHCs and the local exchange carriers (LECs) come out a lot better than they did last year. It is expected that the bill will be officially entered in the Senate early in February and most hope that it will be passed by the 4th of July. One person noted that if the bill is not passed by mid to late summer, we will not see it again until 1997 since 1996 is an election year. There is no doubt that all ACUTA members will need to watch this one.

Once again, you are encouraged to look up the local office of your senator and/or representative and get acquainted with those who work there. You can at least get copies of legislation and be a lot better informed.

NOTE: Does anyone in Arizona know a former Mountain Bell/U.S. West employee by the name of Matt Salmon who is a new member of the House? It may be worthwhile to have someone in the House who understands telecommunications.

Jeri Semer recertifies as CAE

ACUTA Executive Director Jeri A. Semer was one of 360 individuals recertified as a Certified Association Executive (CAE) with the American Society of Association Executives (ASAE) for 1995.

Prior to certification, applicants are rated on their experience and accomplishments in association management and must successfully complete a comprehensive, one-day examination, which tests general knowledge of the association management profession. To maintain certification, an association executive must accumulate professional credits each three years based on their involvement in association management continuing education and the profession.

ASAE is an individual membership society made up of more than 22,000 association executives and suppliers. Its members manage leading trade associations and professional societies across the country and also represent suppliers of products and services to the association community.

Whitney Johnson

Northern Michigan University

Maui presentations

Continued from page 5

Bridging Islands: Educational Equity through Telecommunications

Chris Gentsch, Maui Community College

Steve George, Maui Community College

As Telecom and Media Center Director and Computing Coordinator at Maui Community College, Chris Gentsch and Steve George respectively have a mission easily stated but difficult to accomplish: Provide higher education for the entire county. What complicates this mission is the fact that Maui county comprises three islands in the middle of the Pacific.

According to Gentsch, they asked themselves a decade or more ago if it was fair for people who live in remote parts of the islands not to have access to education. Their answer was no.

Some available facilities (such as an abandoned school on the island of Lanai) formed the basis of their first activities, but delivering courses live to these areas was very limited. Small enrollments couldn't justify costs, and only limited offerings could be provided. Working toward a degree was realistically impossible.

Initial efforts such as VCRs and videotapes and leased telecourses worked for small groups. Then in 1984 they received a grant to put in a satellite to supplement what was available and allow them to tie in to cable companies. Since geography means nightmares for cable people, they used microwave to get head end signals to remote sites.

Tapes were sent on a weekly basis, programmed into machines, and thus served these communities on a week delay but on a cable channel and parallel to regular campus programming.

They discovered valuable uses for this technology, including public meetings, informational programming, and a weather channel; but there's only so much you can do with one-way non-interactive education. They had to look at how to have interactive communications.

According to Gentsch, "While it seemed logical to turn to the telcos in the '80s, that was not reality. So we looked at putting in our own system. We took some grant money and found some local financial help. This led to the two-way, interactive system we called SkyBridge, which allowed students at outreach sites to have direct two-way access to the classroom back at the main campus. Faculty can originate from remote sites as well.

Finally, we were able to offer degree programs in remote areas. This was a milestone."

SkyBridge is now the basis for many outreach programs which have opened up possibilities for Maui Community College. Significant income comes from the private sector and government agencies as MCC charges for using the system. The Hawaii Interactive Television System (HITS), a two-way analog system, offers four outbound video channels and two return channels from each of the major receiving sites.

With some 800 students taking part in distance ed classes, George described the four basic computing needs that were defined:

- 1 *Faculty and student access* from wherever they were to the central computer, central server, and the Internet.
- 2 *Simple user interface* Simplicity, they recognized, minimizes training, which is an expense. And it also encourages use of e-mail and the Internet.
- 3 *Communications applications* In addition to e-mail, MCC's system provides an electronic forum as well as a full-screen editor and a simple Internet navigation technique.
- 4 *Training and support* MCC provides training videos and online help.

Gentsch and George ended their presentation by joining SkyBridge in operation.

The Growth and Richness of the Internet

Robert Aylward, MCI

Robert Aylward presented attendees an overview of the Internet which he suggested is largely responsible for the phenomenal transition in communication we are witnessing today. "For the first time, we can communicate globally, and there are dramatic implications for the future as we see the World Wide Web—the infrastructure for the Internet—go into the home.

"Presently," Aylward told his audience, "there are 4-5 million hosts on the Internet, and that number grows at a rate of 2,500 hosts per day. That means new research sites and new experts are available to anyone on the Internet. In a way, each user is like a cell of an Internet organism. It's kind of alive, and cells come and go. This also makes it hard to control or regulate."

Forecasters predict explosive growth now that commercial domains have surpassed education, and so we see the exacerbation of the bandwidth issue with demand exceeding the demand on voice telephone networks in three years. Campuses need to plan now for that kind of access.

See "Aylward ..." on page 9

ACUTA Events Calendar

Spring Seminar
Kansas City, MO
April 9-12

The Video Highway:
Can We Get There
from Here?

**24th ANNUAL
CONFERENCE**
Orlando, FL
July 16-20

Fall Seminar
Fort Worth, TX
Oct. 29-Nov. 1
• Strategic Planning &
Budgeting for Telecom
Infrastructure
• The Telecomm Dept:
Rx for Change

Winter Seminar
Phoenix, AZ
Jan. 21-24

Topic to be
announced

Oklahoma State Univ. prof uses gopher to share class notes, information

Bob Rawding, visiting professor of human anatomy in Oklahoma State University's zoology department, recently started posting class notes and course information on the school's Gopher server. The process is easy on him—he can scan or type notes and post them from his home computer in Norman, Oklahoma, through a local call to OSU's campus in Oklahoma City—and effective for students, who come to class with a common ground to work from and use the notes as a resource all semester. Both report effective student/teacher interaction and appreciation.

OSU's ACUTA rep is Harry Kyle.

Univ. of Alabama/Huntsville SIS undergoing major conversion

The current Student Information System at the University of Alabama in Huntsville was developed and written in-house in the early 1980s. The entire system is now being reengineered as an integrated unit, moving to relational databases with applications on a DEC Alpha AXP 7000, using Digital's DECForms software for screen management. The new system is scheduled to reach the testing phase in late February and to run parallel with the current system for the summer semester. Contact: Malcolm Rice, ricem@email.uah.edu

Patricia Moore is Univ. of Alabama's ACUTA rep.

Aylward...

Continued from page 8

Every major company now has a home page, so 24 hours a day you can go in and search databases, for instance, to learn which driver you need, download it, and never wait for disks or info.

Growth, he continued, is due to cheaper computers, cheaper access, and user friendly formats. However, some issues will need resolution: Copyright and intellectual property rights, data encryption, privacy, and regulation. In the regulation arena, Aylward compared the Internet to a neighborhood without a police department, calling it a frontier culture, hostile to authority. He also cited the need for firewalls to protect sensitive information.

"So what does the future hold?" Aylward asked. "You ain't seen nothing yet. Students will know the Internet before they come, and they'll expect high capacity access and instant assistance online in the form of registration, financial aid, and more.

"Our theme for this event was 'Beyond the Walls.' I suggest to you there are no walls."

Maricopa Community Colleges to begin major technology expansion

Last November, at a time when all other ballot initiatives failed, Phoenix-area voters approved a \$385.8-million bond request from the Maricopa Community Colleges to upgrade and expand physical facilities. Upgraded technology was a major component of the request: \$87 million was approved for computing and communications for the next seven years to replace all existing technology, expand student labs, and implement new learner-centered systems.

Jan Baltzer is Maricopa's ACUTA representative.

U of Minnesota to coordinate project linking 60 counties

Community access to the information superhighway will soon be available in 60 Minnesota counties through a project called Access Minnesota, designed to narrow the gap between technology haves and have-nots. The project, initiated by the University of Minnesota, Minnesota Extension Services, and the Minnesota Department of Administration on behalf of a partnership of state organizations, will be backed by a \$425,000 grant from the National Telecommunications and Information Administration. As the lead participant in the project the University will draw on the resources of a Gopher software team which is developing new applications for easy access to information servers.

ACUTA representative at U of M is Steve Cawley.

Hartwick College delivers class rosters via e-mail

As of December, faculty at Hartwick College in Oneonta, NY, receive their class rosters by e-mail. The lists are generated on Hartwick's administrative system and are automatically sent to professors' accounts—as are drop/add updates. A recent refinement of the in-house system streamlines tracking of student no-shows: the registrar's office sends e-mail rosters of students who pre-registered for courses but fail to check in at registration to professors, asking whether the students have turned up. The process, which used to take two hours of work plus a day for mail delivery, can be completed in a few minutes. Contact: Ric Chrislip, senior programmer analyst, chrislipr@hartwick.edu

Hartwick College's ACUTA rep is Ellen Falduto.

Thanks to CAUSE's electronically delivered Campuswatch for information on this page.

21st Century Technology

Defense against hackers

According to the *St. Petersburg Times* (1/4/95), a British teenager tapped into sensitive U.S. government computers and monitored secret communications on the North Korean nuclear crisis last spring. The 16-year-old browsed several defense computers over a seven-month period, and was finally caught by special U.S. investigators when he left his terminal online to a U.S. defense computer overnight. He was arrested by British police, and prosecutors will decide this month whether he can be charged.

Meanwhile, the Computer Emergency Response Team at Carnegie Mellon warns (in the *Chronicle of Higher Education* 1/6/95) that hack attacks are on the rise, usually perpetrated through exploitation of a flaw in the Network File System. For information on how to remedy the situation, FTP to info.cert.org, go to the directory./pub/cert_advisories and look for CERT Advisory CA-94:15.NFS.Vulnerabilities.

What language barrier?

A new word processor by Accent Software Intl. allows the user to type in any of 30 languages, across five language groups (with the keyboard automatically adapting), in any version of Windows. Linguistic tools, such as the dictionary, thesaurus, and spell checker also adapt each time a different language is specified. The software includes a 62,000 word online dictionary that translates into English, Spanish, Italian, German and French. (From *Multilingual Computing*, vol. 5 issue 2, via Edupage)

Beep for a cop

Why do students at Loyola University of New Orleans feel more secure on campus now? A new product called Secure System. According to a story in the *St. Petersburg Times* (1/2/95), using a transmitter the size of a matchbox, students can signal for help from anywhere on the campus. Campus police are able to pinpoint the location of the distress signal and pull up a computerized photograph of the caller, along with his or her medical history. Installation can cost anywhere from \$300,000 to \$800,000, but the company will do it for free if enough students are willing to pay the \$75 per semester for the service.

WWW access to legislation

As reported in the *New York Times* (1/6/95), the Library of Congress unveiled the new Web "Thomas" (after Thomas Jefferson) as a way to allow people to use the Internet to call up the full text of any bill introduced in Congress since 1992. Its URL is <http://thomas.loc.gov>.

Classrooms are low-tech

Results of the annual University of Southern California National Survey of Desktop Computing in Higher Education show that only a small percentage of college courses use technology to enhance or supplement instruction. Similarly, according to The Heller Report (Jan. '95), an Association of American Publishers survey shows only 2% of college professors reporting that their assignments require the use of software, and only 9% of courses use e-mail for instructor-student communications.

Ohio Library Network reports five-year success story

The Ohio Library and Information Network (OhioLINK) has released a 5-year progress report that documents exceptional growth for the system, making it one of the largest state catalog and circulation networks in the U.S. User population tops 500,000 students, faculty, and staff at 41 campuses. The system's central union catalog has more than 5 million titles, and 26 research databases are online. Now fully operational is a service which allows users to request items online from anywhere in the system while searching the central catalog, and receive them within 48 hours. Contact: info@ohiolink.edu

Toddler-proof keyboards

Do you guide your child into techno-literacy or preserve your expensive home computer? Maybe both with a keyboard specially designed for the preschool user that plugs right into your CPU and keeps peanut butter and jelly off your function keys. Letters on My First Keyboard are arranged alphabetically. Brightly colored keys beep when they're tapped. "Our research tells us that kids don't begin to learn touch-type until third grade," says Kidtech's VP Marketing in a story in the *Tampa Tribune* (1/10/95).

Tech managers out of the loop

Quoted in *Information Week* (1/16/95), a research analyst at a consulting firm says Technology managers increasingly are finding themselves left out of key decision making, often due to "the lack of responsiveness on the part of the CIO and the technology arm..." The story says to reverse this trend, CIOs need to avoid the tendency to overlook the general business practices, and must stake out their role as the company's technology visionary. But pursuing technology for technology's sake is a mistake, says Eli Lilly's VP of information technology. Rather, tech managers should focus on the business and how information technology can help meet certain goals, such as reducing costs.

From ACUTA Headquarters

Volunteer Leaders Reap Rewards

Later this month, each institutional member will be receiving a "Call for Nominations for the '95-'96 ACUTA Board of Directors." The Nominating Committee, chaired by Pat Searles, Immediate Past President, will be asking for your nominations for various leadership positions within the association.

My message this month is that your volunteer involvement with ACUTA is essential to the continued success of this association. Through the nomination and election process, as well as other opportunities for volunteer involvement, we ensure that the needs and desires of ACUTA members will continue to shape the goals and programs of your association.

In an age when we are all busier than ever with the demands of work and family, it is sometimes easy to assign involvement in professional associations a low priority. We can barely keep up with increased workloads resulting from downsizing or reorganization, and just staying informed of changing technologies and new information seems like a full time job! And "quality time" with family and friends is a necessity to bring balance to our lives.

With all of these competing demands, it is understandable that we may succumb to the thought that, "someone else will do it," or "I'm already getting what I need from ACUTA." Or even, "There are nearly 2,000 other ACUTA members out there—let them lead the association this year." However, can you imagine the situation if everyone felt the same way?

Volunteer leaders—whether they be officers, directors, or committee members—are responsible for ACUTA's record of growth and success. Through their efforts, we have evolved into the single voice of telecommunications in higher education. ACUTA and its members have gained the respect of higher education and telecommunications associations throughout the world, and we have become a credible voice for our industry in the regulatory arena. We have developed respected and successful educational

programs, and have become the single best information resource on telecom in higher education. Without our volunteers, none of this would have been possible.

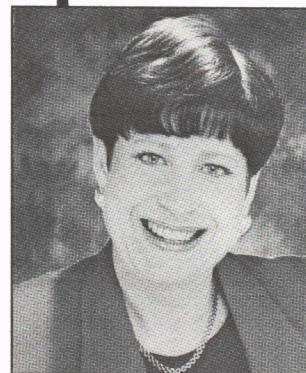
However, volunteering for ACUTA is far from a one-way street. Ask colleagues who have served as officers or directors, or participated on a committee, and they will tell you they have gained a great deal from the experience. Here are just a few of the benefits of volunteering for ACUTA:

- Development of skills in leadership, strategic planning, public speaking, group dynamics, and other areas that benefit you as a manager.
- Development of a network of colleagues and friends who stand ready to assist with information, advice, and expertise when you are facing a particular challenge at work.
- Early access to information on trends in telecommunications and higher education through discussion at ACUTA Board and Committee meetings, to help you anticipate trends and be ready for the implications for your institution.
- Early and in-depth information about regulatory changes, enabling you to alert your organization and be prepared to react. (Examples: E911, Hearing Aid Compatibility, Billed Party Preference.)
- The chance to expand your knowledge in technical and management areas, through close association with Board and Committee members (school representatives, consultants, and vendor representatives) who have the expertise you need.

Each of these will benefit not only you, but your employer as well.

When you receive the Call for Nominations, I urge you to consider nominating someone you feel could contribute to the association. Or even ask a colleague if they would be willing to nominate you for an open position. If you have questions about serving as a volunteer leader, you are welcome to call Pat Searles at Cornell, at 607-255-5525. If you don't feel you can make the commitment to serve as an Officer or Director, there will be many committee positions available for '95-'96. We encourage you to notify Pat or Dave O'Neill, who will be the '95-'96 President, at 509-335-0411 of your interest.

With your participation, ACUTA will be assured of continued success as we enter our 25th year!



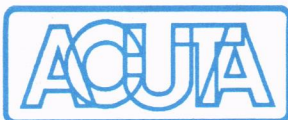
Jeri A.
Semer

ACUTA
Executive
Director

ACUTA Office

152 W. Zandale, Ste. 200
Lexington, KY 40503
Phone (606) 278-3338
Fax (606) 278-3268

Jeri Semer, Executive Director	jasem00@ukcc.uky.edu
Kevin Adkins, Telecom Resources Manager	ladki00@ukcc.uky.edu
Kellie Bowman, Membership Services Coordinator	kbowm00@ukcc.uky.edu
Lisa Cheshire, Meeting Planner	lches00@ukcc.uky.edu
Aaron Fuehrer, Computer Services Administrator	aaron00@ukcc.uky.edu
Pat Scott, Publications Editor	pscot00@ukcc.uky.edu
Eleanor Smith, Business Manager	esmit00@ukcc.uky.edu



Association of College & University
Telecommunications Administrators
152 W. Zandale Dr., Suite 200
Lexington, KY 40503-2486

NONPROFIT ORG.
U.S. POSTAGE
PAID
LEXINGTON, KY
PERMIT NO. 481

• BULLETIN BOARD •



Editor's Notes...

Oops! Last month I said you could sample a new electronic newsletter with an e-mail message to a given address. **M. J. Stahl (Univ. of Texas)** contacted me when it didn't work for him. Sure enough, I got a "No local user" reply, too. Sorry; I'll let you know if I get a better address.... **Coming soon:** '94-'95 **Membership Directory** will be mailed by the third week in February. Don't miss the new Guide to Products & Services! ACUTA's first book, **Campus Telecommunications Systems**, will be mailed in February also.... Pat Scott, (606) 278-3338; e-mail pscot00@ukcc.uky.edu.

Position Available

Telecom Operations Manager The College of William & Mary

Responsibilities: Serve as Telecom Operations Mgr. & manage daily operations in Telecom Dept., with particular emphasis on development of staff. Supervise & train technical staff, troubleshoot communications systems, research technical requirements & design system configurations, assist in planning system expansions, & other related duties.

Requirements: BS in Engineering, Telecom, Info Sys., or related field, or equivalent combination of exp. & training. Demonstrated expertise in managing PBXs & LANs; ability to negotiate with vendors; working knowledge of communications standards; ability to design networks; demonstrated supervisory ability. Strong interpersonal & communication skills; progressively resp. exp. in support of networking software, eqpt., & staff.

Minimum Salary: \$41,841 plus benefits

Send resumé to: Office of Personnel Services, College of William & Mary, P.O. Box 8795, Williamsburg, VA 23187-8795 before 5 p.m. March 4, 1995.

EO/AAU Members of underrepresented groups (inc. people of color, persons w/ disabilities, Vietnam vets, & women) encouraged to apply.

Position Available

Network Manager

Northwestern Technologies Group A Joint Venture of Northwestern Univ. & Northwestern Memorial Hospital

Responsibilities:

- Lead a team assembled from computing & communications units that support the operating & effective functioning of a multi-campus FDDI backbone network.
- Interface with regional & national network control centers & service providers.
- Plan, design, analyze, & evaluate complex data & voice networks.
- Research future communications & networking solutions

Qualifications:

- B.S. degree (M.S. preferred) in telecom, computer science or engineering
- 3-5 yrs mgmt. exp. including staff development, long- & short-term planning, & constructing business cases for new technologies

To Apply: Submit resumé to Northwestern Technologies Group via e-mail to: ntghr@new.edu, or by mail to: Human Resource Administration, Dept. 1806, Northwestern Univ., 720 University Place, Evanston, IL 60208-1142

Equal Opportunity/Affirmative Action Employer
Employment eligibility required upon hire



Can you help?

• **Jim Hudson**, Director of Admin. Services at **Furman Univ.**, would like to hear from other schools that publish a student directory with photographs. E-mail Jim at hudson_jim@furman@furman.edu or phone (803) 294-2216.

• **Virginia Commonwealth Univ.** is planning to produce their first telephone/voice mail etiquette booklet. They would like copies of policies or procedures in force at other universities. They would also like a copy of your school's telephone directory as they restructure their own. Mail to Lisa Alexander, VCU, P. O. Box 980208, Richmond, VA 23298. Ph. (804)828-4331

Position Available

Vice Provost for Info. Resources Lehigh University

Responsibilities: Provide strategic planning, coordination, & leadership for Univ. Libraries, Academic Computing, Admin. Computing, & Telecomm. Integrate information systems, resources, & services in support of instruction, research, & administration.

Requirements: 7-10 yrs. increasingly responsible mgmt experience; adv. degree in relevant field; knowledge of libraries, computing centers, & telecom services with expertise in at least one area.

To Apply: Send resumé & letter of application to: Prof. Barbara Traister, Chair, Search Comm., c/o Fairchild Martindale Library, Lehigh University, 8A East Packer Ave., Bethlehem, PA 18015-3170. LU may be viewed electronically through the World Wide Web: <http://www.lehigh.edu>

EO/AAE

ACUTA seeks fax services

ACUTA is considering offering a "fax on demand" service, to provide 24-hour access to frequently requested documents. We are seeking to implement a menu-driven service, allowing callers to listen to a table of contents and request a document which would be automatically faxed to the number input by the caller.

We are also seeking a more economical source of broadcast fax services, which we use once or twice a month to inform our members of urgent news. In order to provide this service, we need a vendor who can accept our fax lists via modem from our Macintosh computer, and deliver faxes at evening rates with a maximum two-day advance notice.

If your institution is equipped to provide either of these services, and you are interested in contracting with ACUTA, contact Jeri Semer, Exec. Director, 606/278-3338; e-mail jase00@ukcc.uky.edu.

Found: Lady's Watch

After the boat trip at the Maui Seminar, Jayme Inman of MCI found a lady's watch left by one of our members. If you lost a watch, call Jayme and identify it. (703) 506-6280