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ACUTA eNews August 1995, Vol. 24, No. 8

ACUTA NEWS

Legislative update is General Session in Orlando
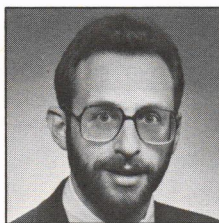
Attorney Jeff Linder

At ACUTA's Annual Conference on Wednesday, July 19, Jeff Linder, a partner in the law firm of Wiley, Rein, & Fiedling, presented a legislative and regulatory update focusing on recent developments in Congress and at the FCC. The presentation highlighted several topics:

Telecom reform legislation Congress continues to consider legislation that would restructure and deregulate major portions of the telecommunications industry. Under the bills, state restrictions on local competition would be preempted, telephone companies would be allowed to provide cable television service in their territories, and the Bell Operating Companies (BOCs) would be permitted to provide long distance service and to manufacture telecommunications equipment. The bills also deal with obscenity and indecency on the Internet and on television, seek to establish a new means of funding universal service, and address a wide range of other important issues.

Although the proposed legislation has several positive attributes, it also raises considerable risks that institutional users will pay more for local telephone service, at least in the short term. The Senate bill (S.652) passed 81-18 in June, and the House bill (H.R. 1555) is expected to come up for a vote shortly. At this point, the odds favor passage of a final bill and signature by the President before the end of October.

Hearing Aid Compatibility The FCC will soon propose new workplace hearing aid compatibility (HAC) rules to replace a suspended requirement that all workplace phones be HAC. The new rules would presume compliance by employers but require replacement of specific phones in certain circumstances. A detailed review of the rules is contained in the conference materials.

PBX/E911 compatibility The FCC likely will act on proposed rules to require PBXs to pass a calling party identifier, location identifier, and callback number on 911 calls some time in the fall. The rules likely will not require retrofitting of existing equipment.

PBX/Caller ID The FCC has asked for comment on whether PBXs and private payphones should be required to block passage of caller ID through *67 and unblock lines through *82.

Operator service issues The FCC's billed party preference proposals likely will not be adopted, given the massive associated costs. In other proposals, however, the FCC has suggested that aggregators be required automatically to connect emergency service calls to 911 attendants. In Congress, part of the telecom reform legislation would allow telephone companies to negotiate with premise owners who are deciding which IXC should handle traffic from public payphones—but would not disturb existing contracts.

Win $250!
See page 12 for details

INSIDE...

The old year ends...a new year begins. Outgoing President Randy Collett (on the left) officially passed the gavel to incoming President Dave O'Neill at the 24th Annual Conference in Orlando. Full coverage of the Conference will be featured in the September *ACUTA News.*

Board Report

'95–'96 Board begins new year

The ACUTA Board met after the Annual Conference in Orlando to begin our Silver Anniversary year. President Dave O'Neill from Washington State University welcomed returning Board members and Directors-at-Large. He introduced new Board member Anthony Tanzi from Brown University (Secretary/Treasurer) and Director-at-Large Marianne Landfair from Indiana University to their Board colleagues and Jeri Semer from ACUTA headquarters.

Other items on the agenda included:

- Strategic direction for the new year
- Confirmation of committee chair appointments
- Discussion of the appointment of a Director-at-Large
- ACUTA Silver Anniversary planning
- ACUTA Policy and Procedures Manual update
- Financial presentation by Executive Director Jeri Semer
- Discussion regarding consolidation of ACUTA's fiscal and operational years
- Orientation for new Board members
- Schedule of Board meetings and conference calls

Submitted by:
Anthony R. Tanzi, RCDD
Brown University
ACUTA Secretary/Treasurer

Welcome New Members

June 29 – August 1, 1995
Institutional Members

- Baltimore City Community College, Baltimore, MD. Geraldine Brooks, ph. 410/333-5419; Tier 3
- California State Univ., Stanislaus, Turlock, CA. Carl Coffey, ph. 209/667-3623; Tier 2
- Florida Atlantic Univ., Boca Raton, FL. George Poyer, ph. 407/367-3184; Tier 4
- Indiana Univ.–Purdue Univ., Fort Wayne, IN. Jennifer Meyers, ph. 219/481-6192; Tier 3
- Milwaukee School of Engineering, Milwaukee, WI. Jeffrey Gupta, ph. 414/277-4551; Tier 2
- Univ. of No. Carolina, Wilmington, NC. William Vereen, ph. 910/395-3555; Tier 3
- Volunteer State Comm. College, Gallatin, TN. Seth Sparkman, ph. 615/452-8600; Tier 2

Corporate Affiliates
COPPER LEVEL

- DYNACOM, Lawton, MI. Tim Beekman, 616/624-7123
- Pasha Publications, Arlington, VA. Beth McConnell, 703/816-8639

"314" Area Code to split

The Missouri Public Service Commission has decided to split the state's "314" area code and add a new "573" code rather than "overlaying" the new code. After holding a series of public hearings in May, the PSC decided that the St. Louis metropolitan area and nearby exchanges will retain the existing 314 area code. The new code will cover the remaining areas.

President's Message

Well, the 24th Annual Conference has come and gone. By all accounts it was one of the most successful ever. College and university members as well as Corporate Affiliates expressed with pleasure their satisfaction to staff and Board members alike. A great deal of credit goes to our professional staff in Lexington for making events like this possible. Great job, gang! Thanks. But as I sat at the table on the raised dais during the Wednesday night banquet preparing my psyche for my new role as President, and listened to the recognition given to the many volunteer contributions this past year, I couldn't help but find myself drifting back a number of years to my first Annual Conference.

I had just left a position within the computing environment and was now the newly appointed manager of University Telecommunications—a position I was well prepared for managerially, but poorly prepared for technologically. This newly discovered ACUTA group would surely be my salvation. I attended every session I could. The information was good; it was timely and professed by experience. Surely if I could just attend enough sessions at ACUTA seminars and conferences, I'd become knowledgeable and competent in my new position.

Little did I know then it would not be my avowed affinity and tenacity toward seminar and conference sessions that would be my salvation. Rather it would be my attendance at a single one-hour Association business meeting—not the profound dogma expounded by the less-than-mesmerizing orators (frankly the meeting was a snore), but a simple request broadcast to those of us in attendance from one of the Board members: "Those members interested in volunteering their assistance to the Association, please leave a business card with a Board member before leaving." Whatever possessed me to reach into my pocket and drop a card on the table before I left the room will forever remain a mystery. Normally I don't volunteer for anything. Doing so takes my precious personal time and besides, I most certainly don't want others to discover what little I do know, have authority over, or have difficulty with.

A number of weeks passed and I had nearly forgotten the "benign" business meeting when I received a telephone call from an ACUTA Board member. Somewhat surprised that such a person would call me, I discovered to my ego's delight that this individual was asking for my help. The Association was searching out a member in the state of Washington willing to act as the State Coordinator and I had, by leaving a card at the business meeting, expressed an interest in becoming more involved.

Not wanting to appear untrue to my word, I asked what would be expected of me. Just a few phone calls to my peers throughout the state during the year? I could do that. Besides, using the telephone, I wouldn't necessarily risk exposing what I didn't know, couldn't do, or was having trouble with.
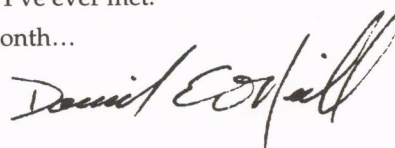
By the end of my first year as State Coordinator, not only had I spoken to all my peers within the state by telephone, I had visited each in their offices on their campuses. By the end of my second year as State Coordinator, I was openly sharing weaknesses and needs with each. What I discovered was that I was not alone. We all were confronted with similar concerns, shortcomings, and issues. By pooling our knowledge and experience openly, we all became a little more competent in providing services and direction to our institution. (And often discovered we weren't as bad off as we thought we were.)

Although I remained faithful to my promise to attend every seminar and conference session possible, and I did acquire a great deal of good information, it wasn't until after I had spent time as a volunteer that I began to really understand. I guess the moral to this story is that no matter how much knowledge you take from the sessions, it isn't until you give back a little of yourself that this knowledge becomes truly valuable.

Ascending through the ranks these past years, I've repeatedly made this discovery. The value of this Association lies in part with the quality information available to us all in seminar and conference sessions, but more significantly in the spirit of voluntarism that is the heart and true value of an ACUTA membership. Enhance the value of your membership. Talk to a Board member about volunteering.

I look forward to my year as President, working with an outstanding staff and most of all participating in an association of the best bunch of volunteers I've ever met.

'Til next month…

Daniel E. O'Neill
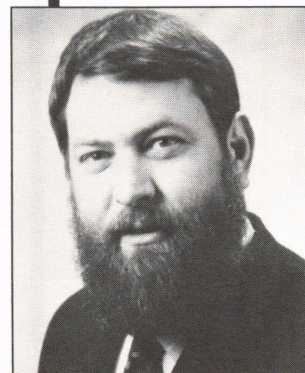
Dave O'Neill

Washington State University

ACUTA President

Fall Seminars

October 29–November 1, 1995

The Worthington Hotel

Fort Worth, Texas

"Strategic Planning & Budgeting for Telecom Infrastructure"

"The Telecom Department: R_x for Change"

Save $50

Register by September 29

Michigan State University uses ISDN technology to implement distance learning program

Bob LaRose
Associate Professor of Telecommunication
Michigan State University

The outreach mission of Michigan State University (MSU) mandates that the school constantly explore new ways to extend its research and educational facilities to more people and places across the state. To help meet that challenge, the University's Department of Telecommunication is imp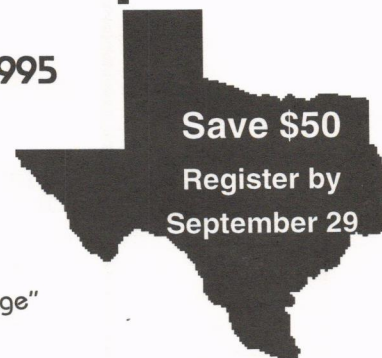lementing a distance learning program that relies on integrated services digital network (ISDN) technology provided by Ameritech over the public telephone network for the exchange of voice, data, and video traffic associated with distance learning.

MSU's ISDN basic rate interface (BRI) applications began as a modest experiment in 1988. Working with an internal grant from the University's Office of Academic Computing and Technology, the telecommunication department obtained early ISDN telephones and terminal adapters, and worked with Ameritech to run BRI lines from a local DMS-100 central office to the lab, to a few classrooms, and to faculty members' offices located in the Communications Arts and Sciences Building on the East Lansing campus.

The initial application created a laboratory help desk so that students in a computer lab could share screens and obtain help from faculty members, who were located in their offices. BRI lines were also being used to connect classrooms with campus local area networks (LANs) for in-class demonstrations and to deliver lectures.

Although these early uses of BRI were for on-campus, prototype applications, the exercises provided the department with practical experience that would later help in its efforts to extend applications out into the public network. With the recent completion of signaling system 7 (SS7) connections across Ameritech's Michigan network, the department is not only able to do that, but also can expand the range of its BRI network and distance learning applications to students throughout the state.

As a first step, the department is adding a Meridian 1 ISDN private branch exchange (PBX)

to its laboratory in the Communications Arts and Sciences building. The Meridian 1 will be connected by primary rate interface (PRI) to the Ameritech DMS-100 central office serving the University. From there it will be linked to the public network.

Phase One of the program will involve delivering a sequence of three courses (in the department's information technology and services program) from an East Lansing classroom to a remote classroom of telecommunication industry managers in the Detroit suburb of Southfield, nearly 100 miles away. Both sites will be outfitted with videoconferencing systems, complete with cameras, codecs, monitors, and speakerphones.

Two of the courses are lecture-based but rely heavily on the use of overhead graphics. So, after welcoming the class via voice and video image over the two BRU B-channels, the instructor will switch the feed on one B-channel from video to graphics, while the other B-channel remains dedicated to voice. As a result, as on-campus students follow the lecture, and view and discuss the visuals with the instructor, so too will their counterparts at Southfield.

The third course is laboratory-based, requiring students to participate in network design exercises using PC workstations. To accommodate this course, the department's information technology and services laboratory in East Lansing will link its twelve workstations with ISDN lines to the public network.

Some of the twelve workstations will be used by students at the East Lansing lab; the other workstations will be engaged remotely via screen-sharing software by six students using workstations at the Southfield facility. This arrangement allows the instructor back at the East Lansing lab to observe the Southfield students' work-in-progress in real time, and interact with the students as needed during network design exercises to lend assistance through a voice call and the screen-sharing capability.

Completed in the spring of 1995, Phase Two of the program allows individual students to access the lab remotely from their residence or office
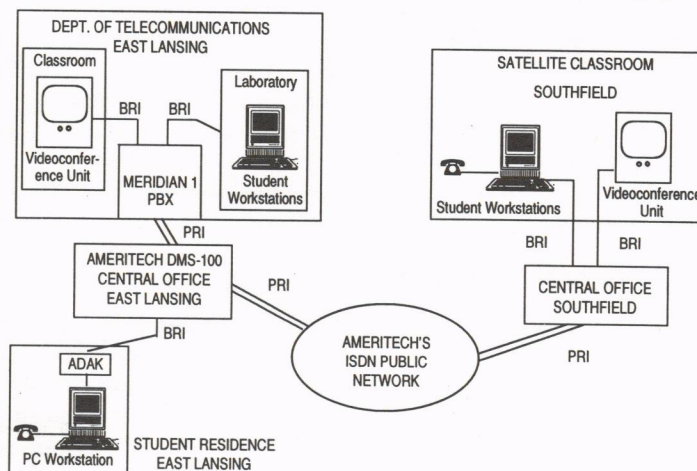
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desktops over the ISDN public network. A key that makes this application economically practical is a combination terminal adapter and NT-1 network termination unit developed by the ADAK Communications Corporation of Lansing. The $500 unit allows any analog telephone and PC modem to interface with the network over a BRI line. The department will make the units available "on loan" to students who simply plug their PC, analog telephone, and BRI line into the unit in order to access the lab's resources from their home or office.

Essential to the department's distance learning initiative is keeping costs to a minimum while getting maximum benefit from the investment. ISDN will allow for such cost-effective access to distance learning solutions at MSU—effectively extending resources to existing students, while bringing new students into the school's telecommunication program.

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Publications available

Additional copies of ACUTA's 131-page book *Campus Telecommunications Systems: Managing Change* and a series of monographs published by ACUTA are available for purchase. Monograph titles include:

- ACUTA: A Case for Change (1992)
- Buying a Telecommunications Switch (1991)
- College & University Telecommunications Marketing (1992)
- Data Communications for Voice Professionals (1994)
- Distance Education: Interactive Video Classroom (1993)
- Enhanced 911 Service in a PBX Using U S West PS/ALI Service (1995)
- Major Project Management: The Yale Telecommunications Project (1990)
- Telecommunications Disaster Avoidance & Recovery (1994)
- Telefacsimile Communications in Higher Education (1993)

The price of the book is $15 (members)/$25 (nonmembers) plus $2 shipping/handling per book. Monographs are $5 members/$10 nonmembers. To order, contact Kellie Bowman, Membership Services Coordinator, at 606/278-3338 or e-mail kbowman@acuta.org.

It's coming!

September *ACUTA News*

will provide special coverage of the

24th Annual Conference

Book Review

Contract Services for Higher Education

447 pages; published by Peterson's Guides, Inc., Princeton, NJ. $89.95 (800) 338-3282.

Looking for a comprehensive source of information on all types of contract and outsourcing services? A new book from Peterson's is a good place to start, with basic information about some 2,000 service providers.

Most entries provide a company profile including name, address, contact, phone, what services they offer, number of employees, clients served, and more. They're divided into categories such as Administrative Services; Computer Facilities/Information Systems/Services; Plant Services; and a dozen others, then subdivided further to more specific topics. So, if you wanted to find someone to outsource the touchtone telephone registration and grade reporting to, you could look in this book's table of contents under Administrative Services and be directed to good information about three different companies.

In addition, an index lists all the companies alphabetically with the contact name and information at the back as well as an index to companies by state. The book ends with an alphabetical list of schools in North America and their business officers and phone numbers.

While this softcover volume is certainly a handy reference to have around if you anticipate outsourcing some services, it is not a complete listing. (We found a number of companies not listed in Peterson's guide that were in the Guide to Products and Services section of this year's ACUTA Directory.) Still, the $90 cost will be quickly recovered in time saved.

ACUTA thanks Peterson's for furnishing a review copy of this book.

Toll fraud and telecom statistics

According to the latest statistics from the FCC, 0.7 million households were added to the U.S. telephone system between November, 1993 and November, 1994. Census Bureau figures for 1994 indicate that 93.8% of all households in the U.S. have a telephone. That's a decrease from the November, 1993 survey of 0.4% in the proportion of households subscribing to telephone service.

Meanwhile, back at the office, *Telecom & Network Security Review* (March, 1995) says telabuse exceeds the cost of toll fraud. How? Employees use the outgoing WATS lines of their employer to call friends and relatives. They have "900" and "976"calls billed to the employer. And some employees even give the company's remote access security codes to their friends and relatives. What's the cost to business? About $3.375 billion for 1995, or 6% of all long distance.
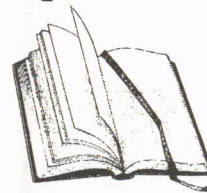
Disaster Recovery of Telephone Switches
Part I: Before the Loss

Ken Greenough, Ph. D.
Restoration Technologies, Inc.

The Challenge—Before the Loss

Today's campus operations have become very dependent upon telecommunications technologies. The development of these technologies presents a new challenge to all those responsible for the use and maintenance of telephone switches. When disaster strikes in the form of fire and flood, telephone assets may be in serious jeopardy. A timely and coordinated physical recovery plan can make the difference between a manageable, short term suspension of operations and a devastating interruption. The timely application of innovative state-of-the-art electronic equipment restoration services will often limit and mitigate both property damage and business interruption losses. Case histories have proven that over 80% of smoke- and water-exposed telephone equipment can be successfully restored to a pre-loss condition, typically at less than 25% of the comparable replacement cost. A restoration process carried out by dedicated specialists with a well defined sense of urgency can be completed in several days, while replacement of smoke- and water-exposed equipment can take several months and involve expensive, time-consuming re-engineering.

> The advent of centralized telephone switch centers controlling large segments of a school or corporation's business and administration operations presents a risk of catastrophic interruption…

Protection of the facility

The advent of centralized telephone switch centers controlling large segments of a school or corporation's business and administration operations presents a risk of catastrophic interruption for even the smallest of fires or water-exposure losses in the vicinity of the center. As a first defense, most modern telephone switch centers have installed sophisticated fire detection and suppression systems to limit contamination and damage from fire losses. However, installation of an off-the-shelf fire suppression system without on-site engineering to adapt the system to a particular user's need may compromise the protection the system offers. For example, total dependence on a single halon gas fire suppression without a backup sprinkler system, or use of sprinkler systems without means to de-energize electronic equipment before the water hits increases equipment vulnerability to fire or water damage. Wet electronic equipment can be recovered if cleaned and dried before re-energizing. However, electrically energized equipment exposed to water may require extensive repair and retesting if recovery is an option.

The engineering evaluation of fire control systems must take facility design and structure into account as well. Dedicated HVAC systems provide positive control of the center's environment and limit the introduction of external contamination from fires and smoke in adjacent areas. Use of a common building HVAC system requires use of duct located fire baffles and sprinkler heads to ensure the integrity of the environment in the event of a fire in outlying areas. Fabrication of the center with flame retardant floor, wall, and ceiling materials adds to the stability of the environment in case of fire. Finally, separating areas with a higher fire risk potential (i.e. chemical storage, heavy equipment) from the switch center, as obvious as it seems, is not always the case in many major telephone switch installations and should also be considered in selecting the switch location.

Backup capability

Backup of incoming electrical power with diesel generators and/or battery-backed uninterrupted power supplies (UPS) protects against the unscheduled power outages accompanying most losses. Continued operation of the HVAC system may be of prime importance to maintain a stable environment for the moisture- and heat-sensitive switch equipment. Power line protection is also necessary to protect against lightening strikes and power company generated voltage surges. Access to auxiliary and dehumidification equipment to remove excess moisture from water-exposed switch equipment is a prudent safeguard since most corrosion processes can be minimized by reducing ambient humidity below 50%Rh. Auxiliary data transmission and communication lines and systems backed up by a UPS further affords safeguards against interruptions during and after a loss. Special arrangements can also be made with common carriers and power companies before a power loss to provide for emergency backup services.

(Continued from previous page)

Pre-loss assessment and recovery services

Motivation for telecommunications managers to perform a pre-loss assessment of their "territory" along the lines discussed above is self-evident.

This activity should go hand-in-hand with the overall corporate level Disaster Recovery planning activity. The telecommunications manager is in a unique position to provide an inventory listing of all the telephone equipment by area of use within the school. This asset inventory should include equipment type and description, manufacturer, model and serial numbers, date of purchase, replacement value in today's dollars, and unique equipment configurational requirements. All custom and purchased software is included as part of the assets inventory listing. A similar listing of backup equipment available for purchase or lease to support a disaster recovery plan should be provided. Original equipment vendor warranties and maintenance service policies should also be identified and maintained. Likewise, third-party repair, recertification, and maintenance services to backup or replace those original equipment vendors who are unable to provide these post-loss services should be noted. A similar listing of companies that recover and restore smoke- and/or water-damaged telephone equipment is an important addition to the telecommunications disaster recovery plan.

The private business sector offers a range of disaster recovery services that include:

- Corrosion control and cleanup of smoke- and water-exposed telephone equipment
- Recertification and renewal of maintenance service policies for restored equipment
- Environmental stabilization and moisture control
- Detection, analysis and removal of toxic and hazardous materials
- Cleanup of dedicated telephone equipment facilities.

There are credible full-service companies that offer the majority of these support services in one integrated disaster recovery program. Some also provide pre-loss risk identification and asset assessment and preservation consulting services. Campuses with large commitments to telecommunications activities would do well to identify and consider such a plan before a loss occurs.

Part II: After the Loss (Coming in the October *ACUTA News*)

Technology improves security at Loyola

How is technology serving a higher purpose and making parents and students feel more secure on the campus of Loyola University of New Orleans? With a new personal alarm device—a beeper that can be attached to a belt loop, key chain, or other convenient location and used to summon help in an emergency.

"It looks like a car alarm," says Sonny Potter, Crime Prevention Officer at Loyola. "When you depress a button, it sends a signal through on-site transmitters to two computer screens in the campus Office of Public Safety. One screen shows the location of the signalling device, and one shows an actual photo of the person to whom that device is registered and provides personal data including a physical description, necessary medical information, and emergency phone numbers."

With transmitters strategically placed on buildings, light posts, and other selected sites, students are protected across 90% of the campus. Potter says they would like to install transmitters along St. Charles Ave., a prime, four-block walk between the Law School and the main campus.

"We just completed the pilot program in the spring," says Potter. "So far we haven't had any actual emergencies. One problem we have is that the kids put everything in their bookbags. That means the beeper isn't handy if they need it. It also results in false alarms, like when one student's boyfriend picked up the beeper and said, 'Hey, what's this?' as he pushed the button. All of a sudden, he was surrounded by officers. The false alarms seem to indicate it will really work when it has to."

ACUTA Events Calendar

Fall Seminar
Fort Worth, TX
Oct. 29–Nov.1, 1995

Topics:
- Strategic Planning & Budgeting for Telecom Infrastructure
- The Telecom Dept. R_x for Change

Winter Seminar
Phoenix, AZ
Jan. 21–24, 1996

Spring Seminar
Seattle, WA
March 31–April 3, 1996

25th ANNUAL CONFERENCE

Chicago, IL
July 14–18, 1996

DC at a glance

Whitney Johnson
Northern Michigan University

Congressional activity now seems to be in the House. The leadership is working to create a "less regulatory telecom reform measure" according to *Telecommunications Reports* (7/3/95). All interested groups are at work trying to get the changes they want made to the bill before the final floor vote. The House bill is HR 1555, the proposed "Communications Act of 1995." The Senate bill, S 652, has language in it making the FCC responsible for controlling access to pornography and "smut" by young Internet users. A separate bill is being considered that will prohibit FCC regulation of Internet. This is just one example of the changes being proposed. FCC Chairman Hundt has projected "that the agency would require about 200 new employees to implement the provisions contained in the House measure" (TR, 6/26/95).

The rules governing video dial-tone (VDT) are much more flexible in the current version of H 1555 than the FCC is using. Several house members have written to the FCC supporting greater flexibility. An article in the June 1995 issue of *Public Communications Magazine* reminds us that "telecommunications reform legislation has been introduced in Congress five times since 1984. It was derailed each time, most recently by conflicts between the interexchange carriers (IXCs) and the local exchange companies (LECs)." The article goes on to say that if Congress did not meet its goal of passing telecom legislation by July 4, 1995, "the general opinion of industry experts is that…it is unlikely that a telecom bill will be passed by this Congress." (Congress did not meet the stated goal. We can all wait and see who is right and what happens.)

Slamming is the practice of changing your long distance carrier without your permission. The *411 Newsletter* of June 19, 1995 describes slamming problems encountered by the *Los Angeles Daily News*. The paper changed from carrier A to carrier B due to significantly better rates. As soon as carrier A found it had been dropped, it "slammed" the paper's 100 lines. As soon as the problem was corrected and carrier B was in use again carrier A did it again. The paper has been billed for over $2,000 in fees by the LEC. Carriers A and B are major long distance carriers. The large rate difference has also been a problem. "The FCC has ruled that you are only liable for the cost of the service that your original carrier would have charged; plus, the FCC says that if it continues to get slamming complaints, it will consider waiving all your liability for any charges incurred with the slamming carrier."

SPREE stands for "Sprint calling freedom". Sprint will be putting $30 million worth of prepaid calling cards in General Mills cereals this summer. These are aimed at college students, among others, and each card will be good for five minutes of free long distance calling within the United States. In May Chrysler sent out MCI prepaid calling cards worth $20 each and recipients had to test drive a car to get them activated. Interesting schemes that may impact ACUTA member institutions' long distance revenue…and how many more are there?

Don't forget your dues!

A reminder from ACUTA's Business Manager, Eleanor Smith, that some members have not paid their dues for 1995-96. Original invoices indicating a due date of July 1 were mailed in May, and second invoices have been mailed to those members who have not yet responded.

One of the useful tools furnished by ACUTA is the membership directory. In order to have your listing included in the directory for '95–'96, your dues must be received in the ACUTA office by September 30.

From publications to professional development to peer networking, ACUTA membership has proven its value to telecommunications professionals for 24 years. ACUTA is the only association dedicated to helping you do a better job in meeting the telecommunications needs of your campus.

If you have questions about your membership status, contact Eleanor Smith or Kellie Bowman at (606) 278-3338.

Legislative update…

ISDN pricing The FCC has been asked by dozens of commenters to apply only one subscriber line charge to each ISDN facility—instead of the two (for BRI) or 23 (for PRI) currently required by its rules.

800 pay-per-call The Commission has granted an ACUTA request to clarify that information providers cannot bill to the originating number on 10XXX+0 calls. Final rules are expected soon on other 800 pay-per-call issues.

Number shortage Fifteen new "interchangeable" area codes are being implemented in 1995, and numerous other area codes will become exhausted in the near future. In addition, 800 toll-free numbers likely will be exhausted in early 1996, and the replacement code (888) probably will not be available until mid-March.

Editor's note: Our thanks to Jeff Linder for providing this summary. Audio tapes of this presentation as well as other Conference sessions are available. Contact Kellie or Shannon at 606/278-3338 to get an order form faxed to you. You may order tapes direct from The Hour Recording Company at 813/323-1851.

Lafayette alumni get electronic connection

Lafayette College graduates can now communicate with the College using a special "Alumni Advantage" package developed in partnership with CompuServe. Participants get the standard CompuServe services plus a free section of Lafayette-related categories: alumni, student, sports, and cultural events; discussion group; campus calendar and ticket information; special-interest articles; job classifieds. The package was designed by engineering students; CompuServe provides the technology. Contact: Autumn Leciston, lecistoa@lafvax.lafayette.edu

ACUTA rep at Lafayette College is Bruce Ferretti.

Berkeley tests Internet-based nutrition seminar

George Chang at the University of California/Berkeley is designing nutrition seminars around Internet usegroups: students surf the UseNet newsgroups for interesting nutrition-related topics, and meet once a week to discuss findings in person and formulate informed reactions. Their posted responses are available worldwide. The concept is being tested in an informal non-credit session this summer and is planned for two credit seminars in the fall. Contact: George Chang, changlab@nature.berkeley.edu

Virginia Penikis is ACUTA rep at UC/Berkeley

Univ. of Tennessee reorganizes with "Information Infrastructure"

On July 1, the University of Tennessee's Division of Computing and Telecommunications became the Division of Information Infrastructure, in one of the largest reorganizations in the University's history. The name reflects the focus of a new client/server-based distributed computing environment with four major units: academic technology, computing and administrative systems, network services, and telephone services. [UTCC Newsletter, May 1995]

UCLA introduces Bruin Online

Faced with an explosion in demand for services, with student accounts growing from 4,000 to more than 12,000 last year, UCLA's Office of Academic Computing has introduced a user-friendly network dialup and e-mail service, Bruin nLine. The client/server system enhances access to all campus network services and provides online documentation and tutorials and software updates. [UCLA Perspective, Spring '95]

UCLA's ACUTA rep is Janice Bundy.

Fort Hays roundtable encourages instructional use of Web

Although students and faculty at Fort Hays University use the Web, deans and directors have not been as active. A hands-on session this year showed leaders model uses of the Internet for classroom and distance education, and stirred enthusiasm. Computing and Telecommunications Center staff are now planning a teaching, learning, and technology (TLT) roundtable, following the AAHE model, to involve university relations and admissions staff, librarians, faculty, and deans and department heads in developing a campuswide plan for design and use of the Web. Contact: David Schmidt, teds@fhsuvm.fhsu.edu.

ACUTA rep at Fort Hays State Univ. is Keith Faulkner.

Campus tours on the Internet

"More than 600 four-year colleges in the United States have Web pages on the Internet, providing such things as course catalogs, faculty directories, admissions information, maps of campuses, and even recordings of fight songs," reports *The Chronicle of Higher Education* (5/26/95).

According to Mike Conlon, a research associate professor of statistics at the University of Florida who is quoted in the same article, "It is now being recognized that the Web can be an official information channel."

An excellent example of what can be done is the University of Washington's home page. See it at: http://www.washington.edu. According to *Windows on Computing,* University of Washington's impressive quarterly publication, "The UW home page is the campus community's front door to the Web. Highlights include an almost live campus view of Mt. Rainier (or, depending on the weather, some of Seattle's finest rain), and links to a tool box of UW resources, official UW information, an impressive collection of departmental home pages, and popular resources beyond the UW."

In the first five weeks of 1995, the UW home page was viewed over 25,000 times.

SUNY Albany brings ethernet to residence halls

SUNY Albany will make 550 ethernet connections available this fall to residential students in five networked residence halls. The University has already installed port-per-pillow data wiring to all dorm buildings; the cabling infrastructure will eventually afford all 6,000+ residential students direct access to online services. Contact: resnet@albany.edu.

ACUTA rep at SUNY Albany is Gary Pelton.

Thanks to CAUSE's electronically delivered Campuswatch for some of the articles on this page.

21st Century Technology

Some find new technology virtually sickening

Business Week (7/10/95) reports that complaints over LSD-like cybersickness "flashbacks" are on the rise, and researchers now think they know what causes them. Simulator sickness occurs when virtual reality creates audio and visual illusions of motion but lacks other physical clues, such as inertia, that the brain expects to encounter. To resolve the conflict the brain opens new neural pathways, which can result in flashbacks hours or even days after the simulation is over. "This is a totally new phenomenon. It may bring new kinds of emotional disturbances and mental illnesses," says McGill University psychologist, who warns, "There could be some big lawsuits looming."

Many machines, one language

From *Information Week* (7/24/95): The Salutation Consortium, a group of 23 information technology firms including IBM, Kodak, and Xerox, has prepared draft specifications that would allow devices such as copiers, phones, printers, personal digital assistants, and computers to communicate with each other. For example, with this interface, a fax machine could look up a fax number in an electronic address book on a server. "The protocol identifies what information a device has. They're laying the groundwork for applications to be developed in about two years," says a Dataquest analyst quoted in the article.

Universal PC

According to *The Wall Street Journal* (6/21/95), Panda Project Inc., a small company founded by some folks formerly affiliated with IBM, has introduced a "universal" PC. Called the Archistrat System, the machines can be transformed into different models or upgraded by snapping in new components. Panda's CEO says it's "a system that's designed with the future in mind." The machines will cost about 20% more than traditional computers, a small cost to those frustrated by machines that are out-of-date the minute they're unpacked.

Monitoring vital signs in flight

In-flight medical emergencies just got safer. The *New York Times* (6/28/95) reports that British Airways' new in-flight information and entertainment system will use a telemedicine satellite link to measure a passenger's temperature, pulse, blood pressure, oxygen saturation, and heart activity, and then transmit those measurements to physicians on the ground for monitoring.

Do not open 'till 2495 A.D.

Need to store some information for the next 5,000 years? *Information Week* (7/24/95) says researchers at Los Alamos National Laboratory have developed a data storage technique that uses an ion beam to inscribe data in a space the size of 500 atoms and then saves it for up to 5,000 years. The technique has been used to store the equivalent of 12,000 diskettes (or 180 CD-ROMs) onto a 1-inch long pin of stainless steel.

Take the Internet to DMV Exit

Investor's Business Daily (6/27/95) quotes Oracle CEO Larry Ellison saying, "Spending half a day at the DMV is not a good use of one's time." Ellison recently spent hours in line at the California Department of Motor Vehicles to renew his license, then went back to the other members of Gov. Pete Wilson's Information Technology Council with a recommendation that the state use Oracle's database software to allow residents to file address changes, etc. via the Internet.

Stiff penalties for high tech crime

According to *Investor's Business Daily* (6/27/95), Government may be cracking down on high-tech crime. If legislation introduced recently by Sen. Jon Kyl (R-AZ) and Sen. Patrick Leahy (D-VT) passes, it would be a felony for a hacker to intentionally damage a computer. Even threatening to crash a computer would be a criminal offense. Pennsylvania, meanwhile, has made the fraudulent use of a cellular phone a felony punishable by up to seven years in prison.

Grid-less ATM switches

From *Business Week* (7/3/95) via EDUPAGE: High-speed asynchronous transfer mode switches that can handle voice, video, and data simultaneously may be getting much cheaper in the near future. The current "crossbar," or grid, design requires a computer chip at every junction point of input lines and output lines. By changing the design, MMC Networks Inc. thinks it can lower the cost of the switches by 90%. MMC's design has all the input lines channeling their bits into a large pool of shared memory, with the computer telling the output lines to pick up their messages at specific digital addresses. Previous designers have been reluctant to use this approach, but MMC says it's developed a way to make it both reliable and cost-effective.

From ACUTA Headquarters

"Emeritus Affiliate Membership" offered to retired members

As retirement approaches, many ACUTA members look forward to opportunities for more time with family and friends, travel, the chance to pursue new interests, and perhaps even a second career. Unfortunately, until now, retirement has also brought an end to your ACUTA membership and the network of ACUTA colleagues and friends you have grown close to over the years. And unfortunately for ACUTA, we lose the potential benefit of your experience and service as a Committee member or volunteer.

Now, there is another option for continuing your ACUTA membership after retirement. Emeritus Affiliate Membership was created especially for individuals who have retired from a higher education institution or telecommunications company eligible for membership in the Association. If you are no longer receiving a salary from the field of telecommunications, and were a member of ACUTA prior to your retirement, you qualify!

Emeritus Affiliate members receive many of the benefits of membership, including the following:

A listing in the ACUTA Membership Directory, and a copy of the Directory

* A subscription to the *ACUTA News* (12 issues per year)
* Eligibility to serve on ACUTA committees and task forces
* A copy of each monograph published during the year
* Access to the ACUTA resource library and member network, including the ACUTA Home Page on the World Wide Web
* Opportunity to attend the Seminars and Annual Conference at a reduced rate (equal to the "Social Registration" fee)

Dues for Emeritus Affiliate Membership are only $72.50, half of the Tier One membership dues.

ACUTA recognizes the contributions of our retired members to the field of higher education telecommunications, and we want you to remain a valuable part of our network. We hope that you will want to retain the many professional and personal contacts resulting from your ACUTA membership.

For more information about Emeritus Affiliate Membership, contact Kellie Bowman at the ACUTA office.

Jeri A. Semer

ACUTA Executive Director

How to reach the ACUTA staff

The ACUTA office is a hub for the Association, facilitating the networking that is one of the greatest benefits of membership and serving the diversity of needs of our members. If we may assist you in any way, please call our central number (606/278-3338) or send an individual e-mail. The staff is always ready to help!

Jeri Semer, Executive Director
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L. Kevin Adkins, Telecom Resources Manager
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Pat Scott, Publications Editor
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Eleanor Smith, Business Manager
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Special request from the 25th Anniversary Committee

The 25th Anniversary Committee needs your help! Our silver anniversary, January – December 1996, will be a celebration of how the Association has reponded to the changing needs of its members over the years. How has your job changed? What regulatory or technological events were catalysts? How have the needs and expectations of your customers, the availability of funds, the skills required of your staff changed? What has been the impact of re-organization and new management philosophies? How have you grown professionally—how has ACUTA helped?

There must be many stories that need to be told, many memories to be shared. There may even be a photograph or two that we would all like to see!

If you don't have time to write an article yourself, we can help put the words together. But we need to act now to have a variety of interesting items ready January 1. Contact Committee Chair, Mal Reader (403/220-3880) or Pat Scott (606/278-3338).

ACUTA is your association…share your experiences… join in the celebration!

• BULLETIN BOARD •

Editor's Notes...

Does the ACUTA network really work? Just ask **Judith Coleman** of the **Univ. of New Mexico**. Judith called the ACUTA office recently looking for information on telemedicine. We sent her to John Meickle at Yale who spoke with her at length himself before sending her to his local expert. Or ask **Riny Ledgerwood, San Diego State,** who read the Distance Learning article in the April newsletter and called the office for a list of what schools were doing what in distance ed already. It works!...Food for thought: *Computerworld* (6/5/95) ran a story on a study by **Univ. of Penn.'s Wharton School of Business** that says information systems professionals who want a bigger paycheck may want to pay more attention to their home life. The study says, "professional workers who earlier in life ranked a good marriage and raising a family as their top goals tend to have higher salaries later in their careers." So the willingness to make a strong commitment to a relationship carries over to the workplace? Well, maybe so. Time for a group hug at home?...Keep in touch: pscott@acuta.org or (606) 278-3338.

KUDOS

Congrats to **Margery Mayer,** President of ACUTA corporate affiliate **TeleConsultants, Inc.,** who was elected one of Northern California's delegates to the White House Conference on Small Business. The objective of the Conference was for the small business community to make its views known to the Clinton Administration and Congress and to increase awareness of the role of small businesses in the U.S. today. Mayer is also on the faculty of the **San Francisco State Univ.** Telecommunications Extended Education Program.

Position Available

Network Manager

Metropolitan Community College

Responsibilities: Provides leadership, management, & hands-on technical support for all hardware components connected to the college networks & external network connections; implements & updates College Network Plan; responsible for functional mgmt., procedural analysis, & long-range planning of multi-location college network systems & telecommunications, including voice, data & video; manages technical personnel in design, installation, repair, maintenance, & support of voice, data, video, & network systems. Reports to Dean of Info. Technology Svcs.

Qualifications: B.A. + 2 years prof. networking & telecom exp. Prefer 2 yrs. full-time mgmt. & supervision of data communications/networking; demonstrated exp. analyzing, troubleshooting, & planning complex college-wide networks; college/univ. telecom & networking exp., inc. 2 yrs. prof. level exp. with TCP/IP and/or IPX based networks; tech. knowledge of wide range of hardware & software (Mac & DOS).

Contact: Send letter of application & resumé to Human Resources Office, Metropolitan Comm. College, P. O. Box 3777, Omaha, NE 68103-0777. Application form will be mailed upon receipt of letter and resumé. Review of apps will continue until appointment is made. AA/EOE

Can you help?

Jerry Burns at the **Univ. of Rochester** is interested in hearing from anyone who has any information on or experience with the outsourcing of a university telecommunications department. If you would like to share your experience, contact Jerry Burns by phone at 716/275-1125 or e-mail gwbu@utd.rochester.edu.

ACUTA Directory Update

Is the information for your listing in the current directory accurate? If not, and if you did not indicate changes on the dues invoice you recently received, **please copy, complete, and mail this to the ACUTA office or fax it to 606/278-3268.**

Institution/Company _____

Primary Rep _____

Address _____

City _____ State ____ Zip ____

Phone _____

Fax _____

E-mail _____

logo goes here

Win $250!

25th Anniversary Logo Contest

The search is on for a logo to identify 1996 as ACUTA's 25th Anniversary year, with a contest open to all ACUTA members. Send your original design for a symbol we can use on stationery, publications, merchandise, etc. to commemorate our first quarter-century. Entries may be line drawings, computer art, or napkin doodles. First prize: $250!

Submit your entry to ACUTA at 152 W. Zandale, Ste. 200, Lexington, KY 40503-2486 by **Sept. 1, 1995.** Winner will be selected by the Anniversary Committee (chaired by Mal Reader, Univ. of Calgary) and announced in the October *ACUTA News.* For more information, contact Mal Reader at 403/220-3880 or Pat Scott at the ACUTA office (606/278-3338).