ACUTA Newsletters

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Technology Advancement

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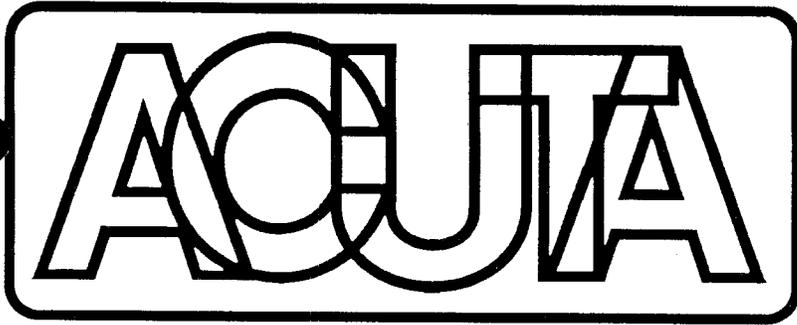
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Read about ACUTA's WISE Program on page 11
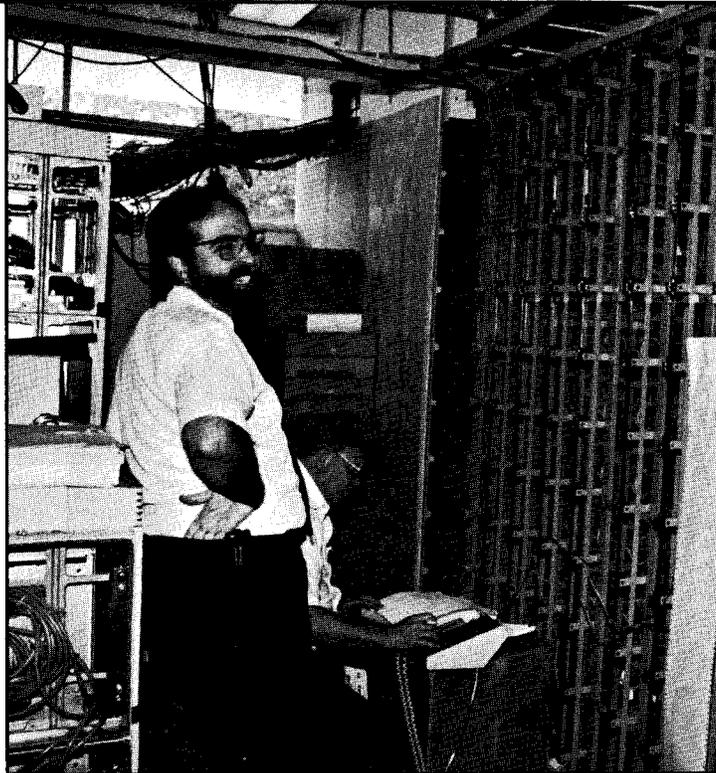
NEWS

Association of College & University Telecommunications Administrators

THE VOICE OF TELECOMMUNICATIONS IN HIGHER EDUCATION   MAY 1992

Clark Stafford, BellSouth Project Manager, stands by as UNLV Repair Technician Al Ernest prepares to make a test call during cutover of the university's upgraded phone system. (Story begins below.)

Top telecom job requires person of many talents

WANTED: Renaissance man or woman to lead college or university into the 21st century with cutting-edge communications technology.

Telecom salary survey, page 7

You won't see the above ad in the *ACUTA News* or *The Chronicle of Higher Education.* But despite the grandiloquent language, it still comes close to describing what colleges and universities are looking for when they hire a telecommunications administrator.

UNLV revamps telecom system by upgrading switch, adding RPEs

When Lauren Dean joined the University of Nevada Las Vegas as Director of Management Services in 1989, the phone system consisted entirely of copper cable and a 13-year-old SL-1X from Northern Telecom.

"I spent most of my day back then fielding trouble reports," recalls Program Assistant Joyce Jones, who has worked in UNLV's Telecom Department since 1985.

Student residence halls were on a separate and outdated Focus

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FCC awards $6 per month, per phone
Payphones to get 'dial-around' compensation

On April 9, the Federal Communications Commission ordered that independent public payphone (IPP) owners on an interim basis be immediately compensated $6 per month, per phone for allowing customers access to their preferred long distance carrier via 10-XXX, 950, and 800 access code numbers.

IPP owners will be compensated through a direct billing arrangement with the long distance carriers. LD carriers with annual toll revenues exceeding $100 million will contribute to the compensation fund via a formula based on their share of the long distance market. For billing validation purposes, the order also requires that once each quarter local exchange carriers must provide long distance carriers with a list of each line assigned to an IPP.

Although the commission said a per-call compensation mechanism would be more equitable, the technology to track the number of access code calls made at IPPs does not yet exist within the payphone system or local exchange network.

Nominations sought for three ACUTA offices

By F. William Orrick
Washington Univ. in St. Louis
ACUTA Immediate Past President

At the 1992 Annual Conference in San Francisco, all primary representatives of member institutions with dues currently paid will be eligible to vote on a slate of officers to serve on the ACUTA Board of Directors for the coming year.

There will be three "automatic" changes of responsibilities, as provided in the ACUTA Bylaws, with elections for three positions.

AUTOMATIC

Paula Loendorf, University of Arizona, the incumbent President, will become the Immediate Past President and will assume all the duties and responsibilities of that office.

Coley Burton, Univ. of Missouri, the incumbent Executive Vice President, will become President, assuming all duties and responsibilities associated with chairing the ACUTA Board of Directors and the Executive Committee.

Patricia Searles, Cornell University, the incumbent Vice President, will accede to Executive Vice President, assuming the duties of that office, and continue the succession process by becoming President in 1993.

SUBJECT TO BALLOT

Vice President – to be elected from a slate of nominees assembled by the Nominating Committee and finalized with any nominations that may be received prior to the San Francisco business meeting.

Secretary – The incumbent Secretary, David O'Neill, has served one term in that office. The Bylaws allow a maximum of two consecutive years in that office, but a second year is not mandatory. Therefore, nominations will be accepted for Secretary.

Treasurer – Howard Lowell, Colorado State University, has served two years as Treasurer and, according to the Bylaws, cannot be elected to a third consecutive term. Accordingly, a new Treasurer will be elected from a slate of nominees assembled by the Nominating Committee and finalized with any nominations received prior to the San Francisco business meeting.

NOMINATIONS

All ACUTA members may submit nominations for the offices of Vice President, Secretary and Treasurer. Before placing a name in nomination, however, please be reasonably sure that the person you are nominating is willing to accept the responsibilities that accompany the office.

The individual should be aware of the considerable commitment, particularly in terms of the time required to carry out the responsibilities of the office.

The individual's institution also should be prepared to support such a commitment.

Upon receipt of each nomination, I will contact the nominee personally in this regard to confirm the nominator's findings. All nominations must be received by 5 p.m. EDT July 10, 1992, so that the nominating committee can confirm the nominees' commitment to serve.

Because there will not be enough time to confirm a nominee's commitment to a responsibility, nominations cannot be accepted from the floor at the business meeting.

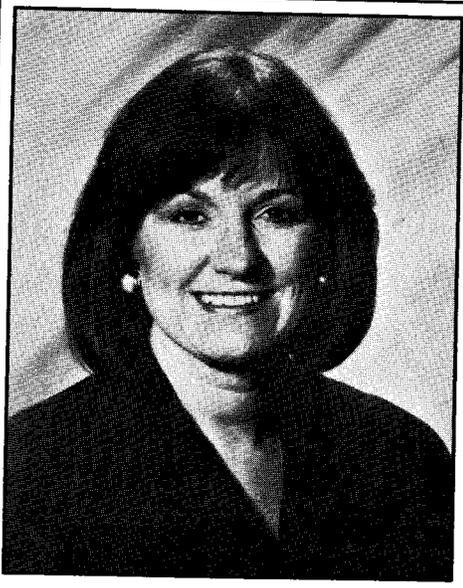Please send all nominations to:

F. William Orrick, Chair
ACUTA Nominating Committee
Director of Telecom Services
Washington Univ. in St. Louis
Campus Box 1217
One Brookings Drive
St. Louis, MO 63130
FAX: (314) 935-8595

MESSAGE FROM THE PRESIDENT

Paula Loendorf, University of Arizona

They are saying that I "hit the ground running" here at the University of Arizona. (Maybe the track shoes I was wearing when I arrived had something to do with their perception.)

It *is* an especially busy time, because budgets must be drawn up for the coming year. While budget preparation is a challenge even in good times, this year the university must reduce its overall budget by as much as 11 percent.

Several months ago, ACUTA announced a membership drive and contest to recruit new members. Prizes will be awarded at the annual conference in San Francisco to those who recruit the most members. Thus far, however, the response of members to the contest has been disappointing. The staff tells me that only 20 people have requested membership applications to give to prospects. And only two new members have been signed up so far!

I have been trying to understand why there has been so little interest in the contest. I can think of only three reasons for this puzzling response:

1) Members are too busy to become involved in the efforts. Perhaps you are struggling so hard with budget cuts yourself that it's all you can do to keep your own head "above water."

2) Members don't believe that ACUTA should increase its membership. You don't want to disturb our present, "cozy" relationship.

3) Too many members believe that "someone else" will do it.

For whatever reason, I am sorry that so very few of you seem to be participating. If the present pace continues, some people are going to receive some rather nice prizes – a portable CD player, a VCR, a stereo system and two tickets to anywhere Delta Airlines flies in the United States, plus some destination expenses – for doing relatively very little work.

The Board of Directors initiated the drive because we frequently have heard many members comment that "ACUTA should increase its membership."

An enlarged membership would produce several benefits for the organization:

• Additional opportunities for information sharing and peer networking

• More institutions could take advantage of the savings and efficiencies they could learn about from ACUTA programs and interaction with other members

• ACUTA would attract more support from the vendor community

• Higher education would have greater influence with industry in the development of services and equipment, and

• ACUTA would have more clout in any legislative or regulatory issues that might affect us.

I realize that most of you are pulled in several directions already, and it is difficult to refocus, make phone calls and "sell" the benefits of ACUTA membership. If you do, however, you might win a prize. In fact, you just might win two tickets to anywhere Delta Airlines flies in the U.S. Then you would have a free vacation to recover from all the stresses of your job!

So, I encourage you to get involved and try to find a new member or two.

The membership contest runs until June 26. Keep it in mind as Spring term comes to a close. ♪

Legislation would require phone equipment be receptive to legal wiretaps

The Bush administration is circulating a proposal in Congress that would force telephone companies to install state-of-the-art technology to accommodate court-ordered wiretaps. And it would authorize the Federal Communications Commission to grant telephone companies rate increases to defray the cost. The bill would prohibit telephone companies and private exchanges – including college and university PBXs – from using equipment that could not be monitored by FCC-approved methods.

New telephone technologies – such as digital voice transmission and fiber optics – render traditional wiretapping methods useless for monitoring conversations, making it difficult for law enforcement agencies to implement court-approved wiretaps. Police no longer can go to a switching center and simply put wiretap equipment on designated lines.

The FBI has already asked Congress for $26.6 million in the 1993 fiscal year to help finance a five-year research effort to help keep pace with changes in telephone technology.

Portions of the rulemaking proceedings that would follow passage of the legislation would be closed to the public to protect the security of law enforcement agencies' eavesdropping techniques. ♪

Duke devises plan for 'safe' 10-XXX access

By James B. Dronsfield
Director, Southeast (Region 1)
Duke University

The Operator Services Act of 1990 created a set of requirements that triggered Duke University Telecommunications to study the impact and ramifications of providing services to many of our constituents including visitors, medical center patients and students.

Duke was one of the early submitters of protests concerning the definition of "aggregator," especially the FCC's interpretation that residential students were considered – like patrons in hotels and passengers in airline terminals – to be transient, unrelated users of telecommunications services at a college or university.

From a practical viewpoint, however, we attempted to comply with the regulations while continuing to support ACUTA in its appeal seeking relief for colleges and universities from some of the more rigorous of the regulatory burdens.

Working with GTE South – the local telco – we made certain that our 84 pay stations on campus were unblocked and properly labeled to indicate that AT&T was the pre-subscribed operator service provider and long distance carrier. The labels also emphasized, as required, that all other carriers and providers with equal access rights in the Durham exchange could be reached by dialing their 800, 950 or 10-XXX code.

In addition to AT&T, there are 12 other carriers that can be reached via 10-XXX codes from the local exchange. GTE complied fully with the requirement to provide instructions on the face plates of all pay stations. And we have not noticed any diminution of pay station 0+ commission since the notices were put in place.

During the summer of 1991, we attached stickers on all 1,100 of the patient phones in Duke Medical Center and the 3,200 student residence hall rooms. The stickers, provided by AT&T, were put in place by temporary summer employees.

Our Housing Department was concerned about where and how the stickers would be placed. Fortunately, more than 90 percent of our RJ-11 dormitory outlets are mounted on walls 54 inches above the floor. A special leveling device was used so that stickers were uniformly placed above the wall-mounted jacks neatly and visibly. All were in place before the beginning of Fall term, and the Housing Department was pleased with the results.

Duke Telecom has never blocked 950 or 800 access to alternate carriers or operator service providers, but our facilities were not prepared to offer the 10-XXX access that was set to become mandatory on March 16, 1992.

Early in the Fall of 1991, we began to review our options for providing 10-XXX access through our AT&T #5ESS generic 6 switch. From one perspective, we are fortunate to own our own central office switch and have considerable flexibility in translation and programming of digits to be sent down on trunking facilities to GTE. We had already had seventy-two 0+ trunks terminating through GTE facilities to AT&T operator services equipment.

The challenge was to provide 10-XXX to all 13 approved equal access carriers through our dialing plan and trunking facilities. The leadership for devising a solution came from two senior members of our central office staff, Carroll Berkley and Jack Shivers.

With a #5EES central office switch, many observers might conclude that it would be relatively easy to reprogram and allow 0+ dialing. But it is important to note that Duke does not have feature group D signalling from the LEC. For tariff purposes, GTE considers us a PBX. That made the problem more difficult but not insurmountable.

Several lines were set up to test various call patterns to determine the best method for providing 10-XXX access. We wanted to open only certain lines (e.g., students' and patients') without disturbing the calling capability of our administrative and faculty lines.

Each line offering 10-XXX service, our researchers determined, would need a new preferred inter-exchange-carrier (PIC) code for access to

> **Each line offering 10-XXX service would need a new preferred inter-exchange-carrier (PIC) code.**

a separate group of trunks. (Examples of the types of calls are shown on the attached charts.) This meant that each of the 3,200 student lines and the 1,100 patient lines would have to be pulled up individually on a recent-change terminal accessing the #5 switch. Several programming changes also would have to be inserted in the data base.

While this was a relatively simple procedure, each transaction did require approximately five minutes of on-line real time, or about 360 total worker hours. A temporary employee was brought in to the central office to perform repair desk duties while translation specialists undertook this work, dovetailing it with the ongoing workload without incurring overtime. The entire project was completed in about six weeks and was fully in place by the FCC-mandated date of March 16. (On March 13, the FCC issued a "stay" holding up the requirement until several appeals, including ACUTA's, were settled.)

By specializing our routing tables, all 10-288-0+ calls originating from our patient or student lines will be routed automatically to the 72 trunks designated to

AT&T 'early development site' opens at Eastern Kentucky

Eastern Kentucky University has been selected by AT&T/NCR as an "early deployment site" for state-of-the-art computer equipment and software.

On April 9, AT&T/NCR executives and EKU officials announced the opening of a Technology Development and Delivery Center on the EKU campus in Richmond, KY. The center will serve as a training and demonstration site for new equipment from AT&T/NCR and other high-technology manufacturers.

EKU will serve as an initial test site for AT&T/NCR's advanced computer equipment and software and "assist in exploring the range of communications and applications opportunities presented through open-systems based computers," according to John Brim, Vice President for Medical, Educational and Governmental Marketing for Dayton, Ohio-based NCR.

"We view EKU's posture toward leading technologies as key to our industry and academic partnership," he said.

"AT&T/NCR believes that a focus toward emerging technologies, as demonstrated in EKU's Technology Development and Delivery Center, will produce practical applications to improve performance within higher education, elementary and secondary schools as well as in industrial facilities throughout Kentucky."

Noting that six computer classes for faculty and staff are already being taught in the technology center, EKU President Hanly Funderburke said that every sector of the university will benefit from AT&T's investment.

"The EKU Honors Program as well as its widely recognized programs in allied health and nursing, business and education will be enhanced by this partnership with AT&T/NCR," he added.

In addition to funding the "early development site" for technology that opened this spring, the AT&T Foundation donated $1.1 million in computer equipment and software last fall for use by EKU's College of Education and its Model Laboratory School. (See October 1991 *ACUTA News*.)

From left are: Denise Nillson, with NCR, Dayton, Ohio; Jim Keith, EKU Director of Communication Services; Kevin Wallace, EKU Systems Analyst, and John Grim, NCR Vice President for Medical, Educational and Governmental Marketing, Dayton, Ohio.

'Dial-around' compensation

"The industry's struggle to correct the glaring inequity of being forced to carry dial-around calls for free is at last bearing fruit," Richard Dewitt, Chairman of the American Public Communications Council, said. "We are gratified by the FCC's action, and we assume that the Commission's reference to 'immediate' compensation means there will be no more delays." The amount of compensation ordered, however, was "substantially lower than what is warranted by the record," he added.

APCC had asked that IPPs be paid interim compensation on an equal footing with the local exchange telephone companies, "which the record shows earn an average of $18.50 per phone per month on access code charges." Dewitt also expressed concern that in response to questions from Commissioners Marshall and Dugan on how to create the incentive to move to a per call mechanism, FCC Common Carrier Bureau Chief Richard Firestone did not indicate any specific timetable for moving to per call compensation.

"We are disappointed that the FCC did not order concrete steps be taken to build an adequate incentive structure that would move the industry towards per-call compensation," Dewitt emphasized. APCC had earlier proposed that the Commission build in an escalator arrangement through which the per-phone amount would be increased for each technology milestone or deadline missed.

With approximately 225,000 IPPs in the marketplace, the $6 per-phone, per-month formula translates into annual compensation of $16.2 million.

Telecom Director

(Continued from page 1)

If translated into computer jargon, the ad might read: Seek leader with multi-tasking abilities in an academic environment.

In spite of the recessionary economy, several colleges and universities are looking to hire or have recently hired a telecommunications manager.

Whether large or small, public or private, the job descriptions call for someone who understands data and often video transport as well as voice communications.

And while knowledge of technology that is changing, literally everyday, is essential, the telecom administrator must also be a deft manager of personnel and budgets.

In addition, the skills of a construction and maintenance supervisor are often required. All this must be done in an atmosphere where every professor considers himself an expert and budget constraints tighten every year.

East Tennessee State University in Johnson City has been it's own telephone company for only about six years. And its existing cable system is more of a patchwork than a network, says Ginger Hawk, head of the committee conducting a search for a new telecom director.

But the university has some ambitious plans.

Participants sought for San Francisco panel

HELP WANTED: One or two additional participants for a panel discussion of "Alternate Methods of Equal Access," to be presented at the ACUTA Annual Conference in San Francisco. If you have a "success" story about providing access to alternate carriers, please call Linda Lewis, Creighton Univ., at (402) 280-2253, or Randy Collett, Central Missouri State Univ., at (816) 543-4999. ✄

A fiber optic backbone going in place will carry voice, data and video. There will still be twisted pair in use on campus for the foreseeable future, but all the cable plant will be the responsibility of the new telecom director. The fiber will form a Token Ring link of the IBM and VAX mainframes of academic and administrative computing as well as a new InteCom switch for voice communications. The network will also carry cable television to dormitory rooms. Students will also have the option of subscribing to voice mail.

The university is acting as its own general contractor, so the new telecom director will have to supervise the work of subcontractors. Responsibility for cable plant gives the telecom director a pivotal role in campus, and whoever holds the position must be able to serve the combined needs of the campus community, says Hawk. The person who will be responsible for transport must be able to work in common purpose with the other technology centers on campus who will be sharing the network.

Some of the 55 applicants for the position had to be ruled out when their work history did not show they could work in harmony with their colleagues in other information technology areas, Hawk noted.

The telecom director reports to the Vice President for Information Services who sits on the university's Presidents Council. "That is an indication of the importance that the university attaches to communications," Hawk noted.

ETSU's search has taken on a global dimension because some of the applicants, including one of the three finalists to be interviewed, are stationed overseas with the U.S. military.

Five years of telecom management experience, preferably in an institution of higher education, is a prerequisite for the position. Hawk was surprised to find that several otherwise qualified candidates could not

be considered because they did not have bachelors' degrees. The university will not consider someone for such a key role as Telecommunications Director without a college degree.

With its relatively small, traditional campus, Ithaca College in New York state is not big enough for a wide area network, remarks Ed Fuller, Director of Information Technology. "But our local area networks must serve high-speed applications," he adds. Academics and office automation drive most campus applications, he explains.

Fuller had made a contract offer and was negotiating details with a new Director of Technical Services in late April. The position vacancy was announced in the December *ACUTA News.*

Ithaca is another example of transport falling under the purview of the voice communications manager. The Director of Technical Services, who is responsible for voice and data communications, reports to Director of Information Technology as do the Directors of Academic and Administrative Computing. The Director of Tech Services is responsible for the telephone switch as well as the networks. One task waiting for the new director will be negotiating a long distance student resale contract.

Some of the college's buildings are several decades old, and a project to upgrade and expand the campus communications infrastructure is about half complete, according to Fuller. Another goal is to put a PC with graphic interface on the desk of every administrator. The Director of Tech Services will be involved completion of both these projects.

In contrast to Ithaca, the University of California at San Francisco does not have a contiguous campus. Its buildings, including a medical college, are scattered about the city. What might be a wide area voice and data network for other institutions is
(Continued on next page)

Duke devises 'safe' 10-XXX access plan

(Continued from page 4)

carry all operator-assisted or 0+ AT&T traffic. Since we already have a 0+ Hospitality Commission Program with AT&T, these additional 10-288 calls will fall under the commission program and will generate additional revenue for Duke TelCom.

We have recently negotiated 0+ a contract with MCI as a secondary carrier so that 10-222-0+ calls going over our five

other designated trunks will be commissioned. We are in the process of negotiating a similar agreement with Sprint for 10-333-0+ calls. We plan no special arrangements for the smaller equal-access carriers, – other than allowing their 10-XXX-0+ calls to proceed through the special trunks – because we expect the traffic generated to be minimal.

In summary, Duke University has accomplished full compliance with the mandates of the Operator Services Act by providing pathways for calls to all approved carrier networks. And we believe we have closed all loopholes that will minimize any calling fraud or misdirected billing. ✄

Median salary for telecom directors: $46,736

The median salary for a Director of Telecommunications at smaller institutions in the United States – with budgets of $9.1 million or less – rose nearly 17 percent this year to $26,078, up from $22,328, according to a survey by the College and University Personnel Association (CUPA).

The healthy boost in salaries at the smaller schools helped push the overall median salary for the chief telecom administrators up almost four percent to $46,736 from the previous year's $45,000.

Salary medians in upper three of the four categories tracked by CUPA declined slightly, however.

At colleges and universities with budgets of $9.1 to $19.4 million, the median was $32,328, down from $33,000.

At schools with budgets between $19.4 and $53 million, the median was $38,004, down from $38,100.

In the top category, institutions with budgets exceeding $48.9 million, the median salary for Telecommunications Directors was $51,431, down from $51,816.

Computer Center Directors at all schools had a salary median of $47,230 up just 1.5 percent from

Institutional Budget	$9.1 m or less	$9.1 million to $19.4 million	$19.4 million to $53 million	$53 million or more	All Institutions
POSITION					
Dir. of Telecom.	$26,078	$32,328	$38,004	$51,431	$46,736
Dir. of Comp. Ctr.	32,215	38,580	48,000	62,589	47,230
Assoc. Dir. Comp Ctr.	30,395	33,500	42,886	59,435	45,662
Chief Info Sys Officer	35,191	44,692	57,256	74,052	57,872
Systems Analyst I	29,213	30,473	35,784	43,273	38,892
Systems Analyst II	24,000	24,900	29,000	34,897	32,064
Data Base Admin.	23,284	32,012	37,512	48,240	43,700
Program Analyst I	26,903	28,059	32,348	36.191	32,684
Program Analyst II	23,805	24,786	27,000	27,744	26,832

the previous year's $46,503.

The median salary for Chief Information System Officers at all schools was $57,872, up five percent from 1991-92's $54,994.

(A report of the previous year's survey was published in the July 1991 *ACUTA News*.)

Salary information for most classifications of administrative personnel was solicited from approximately 3,400 institutions of higher education with 1,438, or 42 percent, responding. In the case of Telecommunications Directors, 309 schools provided salary information for the survey.

To ensure confidentiality, responses were received and tabulated by the staff of the Brookings Institution and reported to CUPA.

The names of responding institutions were published in an appendix to the survey.

The responses were also broken down into a variety of categories including:
* Enrollment
* Institutional Budget
* Affiliation – Public/Private/Religious
* Doctoral granting institutions
* General, baccalaureate inst.
* Comprehensive institutions
* Two-year institutions

For copies of the survey or supplemental reports, contact CUPA, 1233 20th St., NW, Suite 503, Washington, DC 20036. Ph. (202) 429-0311, ext. 3. ♪

Telecom Director

(Continued from previous page)
literally a metropolitan area network for UC San Francisco.

The university is considering installation of a new switch and has a request for information out to vendors. "We would prefer to hire someone with experience in completing a cutover," says Brenda Bangert, who is leading the search for a Communications Services Director. "Although I don't know why someone who has done it before would want to go through it again," she jests. One of the first duties of the new director will be to send out a request for proposals for a new switch.

The university may continue to rely on the local Bell network for communications between widely separated buildings, she notes. (The announcement of this position can be found on the back page of this newsletter.)

The Ohio State University did not search off campus for someone to head the Division of Telecommunications when Dino Pezzutti retired recently. Three years ago, when Assistant Telecom Director Dwayne Bennett left to head telecommunications at Florida State University, the university sought a new assistant with the potential to step into Pezzutti's position after his retirement. Gregory Ashe, who left a position with United Telephone to become assistant director, then had three years with Pezzutti as his mentor before getting total responsibility for telecommunications.

Unfortunately for Ashe, the university is now "being forced to do more with less." That means he has no assistant to lean on. He does have five managers and one LAN consultant who report to him, however. The entire telecom staff totals 60 people.

Telecommunications is one of six areas overseen by Assistant Vice President for University Systems Larry Buell. The other five are Information Services, Management Services, Resource Management, Multi-Media and Applications Development. The top three of these positions will draw roughly equivalent salaries. Variations in pay are due to length of tenure, size of budget, number of staff and amount technical knowledge required.

In a large-scale environment such as Ohio State, Buell rates the ability to manage personnel and finance above technical knowledge and skills. "The Director can get technical advice from a programmer or engineer," he points out. "But the top manager must be a decision maker who can get the most out of a budget. Human resources are the most valuable, however, and getting individuals to work together and fulfill their potential is a manager's greatest challenge." ♪

UNLV revamps system

(Continued from page 1)

switch. Most of the cable had been underground for decades and was drenched each year during the two-month rainy season. (Yes, Virginia, it does rain in Las Vegas.) Line static was a constant problem. Fiber optic cabling had been installed on campus in 1986 to carry data and video traffic, but it could not be used for voice because the old switch could not accommodate fiber.

Originally designed for 1,500 lines, the campus phone system was a patchwork of additions and alteration installed over the years to keep up with the demands of a growing populations of students, faculty and administrators. In 1991 alone, UNLV faced the need for an additional 1,000 lines. But it was all the staff could do just to keep up with the 80 to 100 trouble calls that came in daily.

Dean augmented her management team with Phil Agee, who came to UNLV in 1990 as Telecom Operations Manager. At that point, the system – which had been expanding at an annual rate of 15 percent – could be stretched no further. Improvisation – no matter how clever – could not add a single new feature, regardless of the need.

With the exception of dormitory phones, all calls features and analysis were processed through the main switch. If the system became overloaded – which it often did – calls were delayed. Interfacing with Touchtone systems was difficult. The system also could not support such contemporary telecom services and media as voice mail, fiber optics, ISDN or a management information system.

After a comprehensive review of needs and resources, Dean and her team came up with four possible solutions.

1) Have the local telco provide Centrex service. The estimated cost of Centrex over the coming five years was more than $2.5 million.

2) Completely rework the cable plant. This would require digging up most of the campus, since everything would have to terminate at one site. It would also require more floor space – space that would have to be taken from the Graduate School or the Registrar's offices. And room for additional cabling would be limited.

3) Use remote peripheral equipment (RPE) over T1 copper circuits. This would free up lines, but the number of "clean" copper pairs was severely limited. Problems associated with adding new services – such as voice mail and data transmission, which the university desperately needed – would remain unsolved.

4) upgrade the existing SL-1 and use RPEs over the fiber optic backbone that was already in place.

"If we upgraded the SL-1 and used RPEs along the fiber optic backbone, the system could expand to accommodate growth, yet eliminate the secondary switches at distant locations," Dean points out. "And with a system-wide data base, system management would be simplified."

"We eliminated secondary switches by installing RPEs and upgrading our old SL-1."

The advantages of fiber optic cable also made Option 4 the most attractive. "It has practically unlimited bandwidth, it's impervious to water damage and it was already in place."

In the Spring of 1991, BellSouth Communications Systems submitted the winning response to UNLV's request for proposals (RFP). The Roanoke, VA-based operation was awarded a three-phase contract to upgrade the existing switch to a 2,300 line Meridian One-Option 71 and to install RPEs at three locations – the residential life center, a major classroom/office building (Beam Hall) and the new Health Sciences building, then under construction.

The new system had to be up ;and running by August 1991 – in time for the return of students for the fall semester. "The university's installation schedule and required cost-performance ratios presented quite a challenge, says Peter Plotzker, BellSouth Account Executive. "But the knowledge and professionalism of Lauren Dean and her staff made our job of identifying the most cost-effective solutions much easier."

One of the earliest decisions was to replace the secondary PBX that served the dormitories. The RFP installed there would now allow students to dial only four digits to reach the rest of campus, instead of the full seven digits required under the old system. The second RPE connected Beam Hall to the main switch and a third, cutover in March, brought the Health Sciences building on line. Serving the classroom/office building and the Residential Life Center with RPEs freed up 5,200 cable pairs alone.

The new network and switching system were the foundation on which to build many much-needed services.

Voice mail was at the top of the priority list. One faculty group had previously devised a piecemeal system using dedicated lines and answering machines to simulate voice mail. With the addition to campus of such high-tech research facilities as the National Supercomputing Center for Energy and the Environment, a campus-wide voice mail system was crucial need. BellSouth installed a 20-port Meridian Mail system, providing 54 hours of storage and serving 1,500 faculty and administrative extensions. The university plans to offer voice mail services to students in the not-too-distant future.

The Thomas and Mack Center, UNLV's 19,000-seat arena where the Runnin' Rebels basketball team plays, has seen a tremendous improvement in operations since adding voice mail and an automatic call distributor (ACD). Before the upgrade, multiple phones were individually manned by staff who provided information on upcoming events, sold tickets and handled various caller concerns. It was a tremendous task that tied up lines and incurred heavy costs, primarily because of the number of personnel required.

Now, all calls are answered by an automated attendant/voice mail system which directs callers to select the desired transaction from the keypad of a Touchtone phone. For example, for information on upcoming concerts, the caller can press 2; for athletic events it's 3.

This has greatly reduced the time callers spend on "hold," and has decreased administrative costs, since a staff person no longer must personally handle each step of every call. More importantly, the system can handle a much heavier volume and do it accurately.

The Telecom Dept. anticipated a maximum of 1,500 users for the new voice mail system. But in just three months, it had 2,000 regular users and had reached capacity. "UNLV has a virtual forest of trees on its voice mail system," remarks BellSouth Project Manager Clark Stafford. The system has worked so well for the Thomas and Mack Center that the Performing Arts Center is going to acquire one.

Now, Lauren Dean can spend her day managing the university's telecom network rather than having it manage all of her time. To make Joyce Jones' job easier, BellSouth equipped the upgraded PBX with a variety of system management modules, including Meridian Manager.

The PC-based software facilitates maintenance and changes in both traffic and station administration.

"I now average only 10 to 15 trouble calls per day, and that includes everything from non-working phones to cable and line problems," says Jones. "I can add new phones, install new features, and adjust pick-up groups with just the touch of a few computer keys." Before the upgrade, it took about 20 minutes for each transaction and weeks of training were required to learn the more complex procedures.

UNLV's facilities are spread over 335 acres. More than 19,000 students are served by over 600 faculty who provide instruction in graduate and undergraduate studies.

The Southern Nevada office of the Desert Research Institute is connected to university communications through ISDN over fiber-optic cable. "Taken altogether, what this system has provided is a new strategic asset for the university," explains Dean. "It complements the world-renowned reputation of UNLV's Hotel College. It positions us for expansions in curriculum, graduate programs and specialized program.

"But probably most important, it simply makes campus communications for everyone." ♪

AT&T's first quarter reflects trend

Interconnects making money despite lag in equipment sales

Despite decreasing PBX and flat key system sales, and a recessionary economy, the 1991 revenue of inter-connects or independent communications distributors rose 11.5 per-cent over the previous year, according to the *1992 Interconnect Industry Review* released March 25 by the North American Telecommunications Association (NATA). Strong gains in moves, adds and changes, and the sale of voice processing, mobile systems, used equipment, and data processing hardware compensated for a weak showing in new system sales, allowing for overall growth, according to the study.

Consistent with the findings of NATA's 1991 survey, AT&T's first quarter 1992 earnings were up 17 percent from a year earlier, despite declining equipment sales. According to The Wall Street Journal, operating profit in the quarter was $1.44, a nine percent increase from a year ago.

AT&T's long distance traffic was up eight percent from the previous year, generating an additional 3.2 percent in revenue.

Financial services, helped mainly by AT&T's Universal Card, shot up by 32 percent. The company said the credit card unit would be profitable by mid-year, about four months ahead of schedule.

Product sales were down 6.3 percent. The biggest decline was seen at NCR, which posted a 16 percent revenue drop. AT&T attributed the poor showing to a computer industry slump, weak overseas sales and the shutdown of AT&T's former computer business. Similarly, telephone network equipment sales fell seven percent in the quarter.

The telecommunications and computer giant has also begun a new method of revenue reporting, which in the past had been trimmed to reflect payments to local phone companies for completing long-distance calls from the AT&T network, according to the paper.

Major findings of the NATA report for the telecommunications industry at large include:

• Annual revenue for voice processing grew 127 percent from 1990 to 1991 and has enjoyed an average growth of 90 percent since 1959.

• New PBX sales generated 5.6 percent of total interconnect sales in 1991, a 4.5 percent decrease from 1989's 13.1 percent of total sales.

• Moves, adds, and changes produced the highest gross profit margin, 60.4 percent, of all interconnect product and service offerings.

The 1992 *Interconnect Industry Review* contains a full analysis of customer premises equipment (CPE) distributor revenue, expenses, gross profit margins, employment, new system pricing trends, and peripheral equipment, as well as offering 1992 forecasts.

Copies of the *1992 Interconnect Industry Review* are available from NATA, $38 for NATA members, $53 for non-members. For information or to order, call (800) 535-6282, ext. 260, or (202) 296-9800, ext. 260. ♪

International fraud forces Bell Canada to limit credit card use from payphones

Bell Canada, the country's largest telephone company, is banning the use of calling cards for international calls placed from pay phones. The reason: Bell Canada has been losing $77.3 million annually through calling card fraud. For every $10 (Canadian) the company was making in revenue, it was losing $500 because of fraud. ♪

SL-1 higher education user group to meet June 1-4

Northern Telecom's SL-1 higher education user group will meet in Anaheim, CA, June 1-4. ♪

Meeting Planner keeps ACUTA events on track

When ACUTA members are enjoying the 21st Annual Conference in San Francisco this July, the person behind the scenes making the last-minute adjustments that keep a myriad of activities running smoothly, will also have her mind 12 months in the future, making mental notes about the 22nd Annual Conference in Nashville.

In fact, even before she coordinates the final preparations of the ACUTA office staff for the San Francisco Conference, ACUTA Meeting Planner Lisa M. Cheshire will already have several arrangements in place for the following year's conference. A few months prior to the event, she will make a site inspection to meet face to face with hotel staff and plan meeting space, meals and accommodation arrangements. Except for site selection and program planning, Cheshire has a central role in almost every facet of a successful ACUTA event.

Just keeping up with the conference's 35 speakers and panelists is a challenge. Each will need a letter of agreement. Travel arrangements will have to be verified. Session handouts will have to be printed then distributed at the appropriate time and place. Necessary audio visual equipment must be secured. Biographical sketches will be needed for introductions. Afterwards, evaluations by attendees must be tabulated and the results passed along to the speakers.

These are just a sampling of the myriad details that make a successful meeting. "A detail may seem small in itself," Cheshire explains, "but the sum of the details equals an event. Making the most economical choice for each detail adds up to an event that stays on budget," she points out.

For example, after a conference or seminar is underway, not everyone will get up each day to have breakfast. And everyone will not stay for the closing luncheon. There is an art to predicting how much food will be needed for a meal without having too much. The meeting planner must accurately predict the meal count, including special dietary needs, so that everyone who shows up will be properly served. And that is the number for which the association will be charged, whether the meals are eaten or not.

The ACUTA event is usually not the only one in town. To ensure that every ACUTA attendee can reserve a room at the Association's discount rate, a block of rooms must be held. If ACUTA attendees
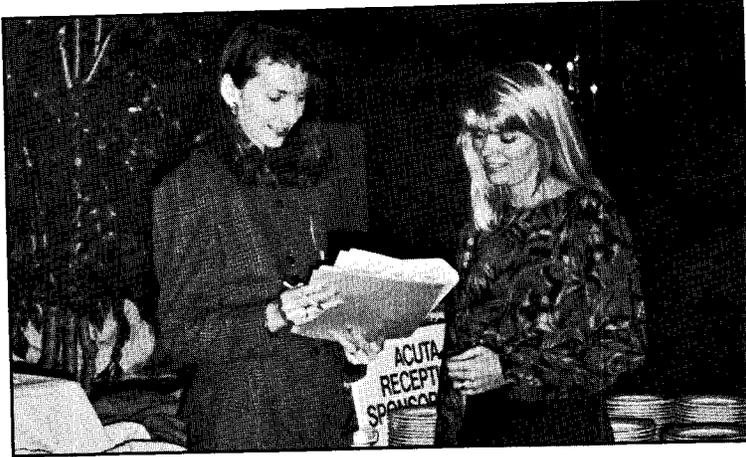
ACUTA Meeting Planner Lisa M. Cheshire (left) goes over last-minute details of the Lexington Seminar with Susan Ayers, Convention Services Coordinator for the Radisson Plaza Hotel.

don't claim most of the block in time, the Association will be charged extra for the event meeting space. Each week, as an event approaches, Cheshire must monitor the number of registrations made with the ACUTA office and compare them with the number of reservations made with the hotel. "The rate at which registrations come can give us a good idea of how many attendees we will have. We pass this along to the hotel, because hotel reservations are not always in line with meeting registrations."

Getting bids from outside providers, rather than using a hotel service, takes staff time, but it ends up saving money, Cheshire explains. Most convention hotels offer audio-visual, security, temporary clerical help and other meeting services "in house." While these services are usually reliable and convenient, they are frequently more expensive. By using off-site vendors, ACUTA can save money. "But we also run a risk of poor service," she adds. "Finding an agency that can provide high-quality, reliable service at a lower cost is a big part of my job." To do this, she must take extra steps to check references and conduct interviews to be confident that she has made a good selection.

In addition to her meeting planning responsibilities, Cheshire provides logistical support for ACUTA's 12 standing and ad hoc committees as well as the Board of Directors. This includes preparing agendas, setting up conference calls or meeting sites and coordinating travel arrangements. Maintaining ACUTA's Policy and Procedures Manual is among the duties she will assume for the Board in the near future.

Cheshire, a Louisville native, graduated from Transylvania University in Lexington. As a student she worked as an intern for the Kentucky Commission on Women and helped plan a national meeting hosted by the Commission.

After graduation, she went to work for the Council of State Governments, where she gained more association and meeting planning experience. Like ACUTA, CSG is a national organization based in Lexington.

Before joining ACUTA in 1989, Lisa served as Assistant Director of the Kentucky Agriculture Development Foundation. The programs sponsored by the Foundation where taken up by the state government. The Foundation's Chairman, Brereton Jones, is now Governor of Kentucky. ♪

ACUTA Member,

If you're as wise as you should be, you'll give a hoot about ACUTA's new

WISE

Welcome Information Support Education

Program for new members.

As everyone knows, the greatest value of ACUTA membership is the personal contacts you make with other members. Through these contacts you become a part of – and your participation expands – a peer network for sharing information and experiences.

In some cases, however, getting to be comfortably involved with such a dynamic networking group often takes an extended period of time, and the benefits, therefore, are not realized as soon as they could be. This is reflected sometimes in the informal feedback we receive from new members and in the critique sheets turned in after events.

Accordingly, ACUTA's Executive Director, Del Combs, has announced a new program that "matches up" new members with long-time members who have attended several seminars and/or conferences.

"The new program," Combs proclaims, "is designed to make new college and university members feel **Welcome** in the association and to give them direct contact with a more experienced (and wiser!) member from a similar type institution during their first two years of membership."

The program will also provide new members with **Information** on ACUTA programs and the value of peer networking as well as first-

hand knowledge of the telecom activities on the older members' campuses. The assigned older (and wiser) member will offer **Support** by making periodic calls to the new member – and being available to respond – when assistance is needed during that first two years. By that time, the new member will have had ample time and opportunity to establish his or her own peer network.

And last, the **Educational** process will be re-enforced by assuring that new members have a personal contact at all ACUTA seminars and conferences that they attend during their first two years.

The opportunity to be part of this program is also extended to all current new members who have not attended an ACUTA seminar and/or conference, Combs added.

"Here's how it will work and what you will do if you volunteer to participate in the program."

1) Call the ACUTA office, ask for Kellie Bowman, and tell her you would like to volunteer for ACUTA's **WISE** Program to assist new members.

2) Your name will be placed on a categorized list according to the size and type of school, e.g., private, enrollment 2,000 to 5,000; public, enrollment 12,000 to 18,000, etc.

3) When a new member's appli-

cation is accepted, they will be assigned a **WISE** partner with similar job function at a school of similar size and type.

4) Both individuals will be advised by letter of the assignment. The letter will state the purpose of the program and include a short list of the volunteer's responsibilities.

The actions required of the volunteer are as follows:

a) Call the new ACUTA member within 10 days and personally **Welcome** them to our organization. (They also will receive the customary official letter of welcome from the Membership Director.) Arrange a time for both to talk by phone for 15 to 30 minutes at a later date, preferably within 30 days.

b) During the pre-arranged telephone conversation, the volunteer should provide lots of **Information** about ACUTA and the volunteer's own telecom department. Since the two institutions are of similar size and type, you should have several common issues and topics for discussion of mutual benefit.

c) The volunteer should offer to provide **Support** as may be needed by the new member. In addition to responding to any requests from the new member, the volunteer will call the new member every two or three months to keep the lines of

Northeast Region meeting set for June 9-10 in Syracuse

Members from ACUTA's nine-state Northeast Region are invited to attend a regional meeting June 9-10 at the Marriott Hotel in Syracuse, NY.

Hosted by New York State Coordinator Linda Bogden-Stubbs of the SUNY Health Sciences Center and led by Region 1 Director Don Hoover of Villanova University, the two day meeting will feature presentations by ACUTA members and corporate affiliates on a broad range of topics.

The meeting will get underway at noon on Tuesday, June 9, and conclude with lunch at noon the following day.

On Tuesday afternoon, attendees will hear presentations on:
• *Campus Conduit: Two Approaches* by Tony Mordosky of Millersville University and Don Hoover of Villanova Univ.
• *Cost Containment: Local and Long Distance* by Nancy Gallagher of Saint Anselm College
• *Satellite Communications: New York Network* by Linda Bodgen-Stubbs of SUNY
• *Regulatory Update/Future ACUTA Events* by Pat Searles, ACUTA Vice President, of Cornell University.

An evening reception will follow.

After breakfast on Wednesday morning, presentations will include:
• *Americans with Disabilities Act* by a Bell Operating Company Representative.
• *Education/Telecom Usage for the Multi-Impaired Student* by Patricia Kirk of Perkins School for the Blind
• *Fiber Optics: Uses, Types, Installation, Costs* by an AT&T representative

Region Director Don Hoover will conduct a meeting for institutional members from the region followed prior to lunch and closing remarks.

Registration for the meeting is $50 for members and affiliates, $75 for non-members. Registration includes breakfast and lunch on Wednesday. Checks or official purchase orders should be mailed to the ACUTA office.

For more information or to obtain a registration form, contact: Kellie

WISE Program

(Continue from page 11)
communication open. Of special interest here is the fact that two-way communication and the educational process will also benefit the volunteer.

d) In concert with accomplishing the first three actions, the volunteer can solidify the new member's Educational benefits by ensuring that the new member has someone to greet them at the seminars and conference that the new member decides to attend.

So, I am asking the older and "wiser" members to call Kellie at (606) 252-2882 and volunteer.

New members who have not attended a seminar or conference yet, we welcome you to call Kellie to be matched up with a partner. The ACUTA staff will automatically get future new members involved. ✍

Bowman, ACUTA Membership Services Coordinator, 250 W. Main, Suite 2420, Lexington, KY 40507.

Discount hotel room rate for the meeting is $61. For hotel reservations, call (800) 782-9847 or (315) 432-0200. The cutoff date for discount rate reservations is May 26. The address is: Marriott Syracuse, 6302 Carrier Parkway, East Syracuse, NY 13057.

ACUTA's Region 1 (Northeast) includes the states of Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island and Vermont. ✍

ACUTA Welcomes New Members

The following joined ACUTA between March 20 and April 16.

Region 1 (Northeast)
Daniel Oliveira, CNVR Higher Education Center (Connecticut)

Corporate Affiliates
COPPER
BC Tel (British Columbia)
AT&T Network Systems/
Transportation Business Unit
Bitek Inc
Illinois Bell Telephone