Are you ready for the ADA?

Law enforcing rights of the disabled goes into effect Jan. 26

(Editor's Note: This summary of the effects of the Americans with Disabilities Act on colleges and universities is taken from a report by Atlanta consultant Ray Jones. It is intended only as an introduction and should not be relied on for legal advice. Consult with your institutional counsel for legally binding opinions. Copies of the act, Public Law 101-336, are available from the University of West Virginia Research and Training Center for $10 each. An accompanying commentary and reference is available also for $10. The act is available on PC disk on which word and topic searches can be run for $99. The center's address is: One Dunbar Plaza, Suite E, Dunbar, WV 25064. Phone (304) 766-7138, Fax (304) 766-7846.

Colleges and universities in the U.S. must begin offering a variety of telecommunication services to the handicapped when the Americans with Disabilities Act takes effect Jan. 26.

While the law passed both houses with little opposition and was signed into law with much fanfare by President Bush, there has been little notice of the wide ranging obligations the law places on government services such as education.

According to the U.S. Census Bureau's Disability Functional Limitation study, 7.7 million Americans have difficulty hearing what is said in a normal conversation, including 1.7 million who are deaf in both ears.

"Any department, agency, special purpose district or any other instrumentality of a state or local government" is covered by the law regardless of whether it receives federal funds.

The act mandates that "reasonable modifications" be made to "communications barriers" to enable people with disabilities to receive services or participate in programs or activity provided by a public entity.

(Please continue on page 7)

Alabama regulators take aim at campus phone services

Whether colleges and universities which resell toll telephone service in the state should be regulated by the Alabama Public Service Commission will be subject of a public hearing Jan. 22.

On Nov. 4 the commission ordered that colleges and universities telephone services would no longer be exempt from its regulation.

The hearing, to reconsider the order, was scheduled at the request of the Univ. of Alabama, Auburn Univ. and the Univ. of South Alabama, which argued that regulation would result in a decrease of services to affected consumers. Implementation of the orders was stayed, at the universities' request, pending the hearing. A prehearing conference was set for Jan. 8.

In its Nov. 4 order, the PSC noted "the growing tendencies of colleges and universities toward provision of total telecommunication services on campus." The commission has also received "numerous complaints" regarding university-provided telephone services, but did not specify the number or nature of any complaints, the order pointed out.

"We believe that all individuals utilizing college or university telecommunications services should have such services provided under the same regulations governing other telephone users in the state and be afforded the same process by which to address any complaints or concerns," the commissioners wrote.

Colleges and universities will have 60 days to file for application with the PSC to provide toll resale service if the order is upheld.
If aggregators must offer 10-XXX access

NATA asks that blocking services be mandatory for LECs

Any required unblocking of 10-XXX long distance dialing by hotel, motel, hospital, university or similar providers of telephone service should be deferred until adequate local exchange carrier blocking services are in place, the North American Telecom Association has argued in a filing with the FCC.

Aggregators who take reasonable precautions should not be held liable for fraudulent calling that results from allowing 10-XXX access, NATA urged the regulators. The FCC's order, requiring 10-XXX unblocking without requiring actions or measures to ensure aggregators are not exposed to undue risk of fraud, "fails to uphold the Telephone Operator Consumer Services Improvement Act of 1990, which directs the FCC to examine all the problems with fraud and all the potential solutions to these problems."

"The FCC appears to believe it has adequately addressed these risks by permitting selective blocking of only certain dialing sequences. Yet the record shows that the dialing sequences proposed by the FCC remain extremely vulnerable to fraud," NATA maintained.

"The FCC must require that LEC blocking services be provided, including a service blocking all direct-dial international 011+ and 10-XXX-011+ and domestic calls (l+ and 10-XXX+) and "No-PIC" service. All these services are feasible today."

Distance education programs, technology continue to mature

By Cynthia Boeke, Editor
Via Satellite Magazine

As the distance education industry matures, instructional programmers are focusing on improving the quality, scope and amount of programming. New technologies such as interactive video and compression have expanded possibilities.

Like their business television counterparts, distance education program providers suffer from a scarcity of occasional use Ku-band satellite time, particularly during school hours. Today's analog video signals require a whole or, at best, a half-transponder. Several broadcast-quality digital compression transmission systems are being developed that will allow four to 18 video channels per transponder. If wideband digital compression is adopted, the amount of occasional use satellite time will increase.

"The availability of the time slot that educational networks want to schedule in advance or on an on-demand basis is limited," confirms David Fiske, Vice President and General Manager of Satellite Services for GTE Spacenet. "With the advent of digital compression technologies, any given amount of transponder capacity will have a much greater video channel capacity, enabling us to create a larger pool of capacity. Currently, GTE Spacenet is testing a compression system at its McLean, VA, facility and plans to offer a new range of services some time next year.

Although the benefits of compression are promising, serious obstacles exist to the establishment of compression-based networks. Compression systems are still in the experimental stages, standards have yet to be set and new equipment will be expensive for networks with small budgets. Many experts believe that large networks that lease full-period transponders and provide multiple services have the most to gain from using wideband digital compression.

NTU

The National Technology University based in Ft. Collins, Colorado, leases two transponders to broadcast 18,000 of academic courses and non-credit seminars 24 hours a day. NTU's programming is drawn from 40 leading engineering schools and broadcast to engineers and technicians at 350
MESSAGE
FROM
THE PRESIDENT

Paula Loendorf,
University of
North Dakota

The middle of December – nearly half way through my year as ACUTA President – seems a good time to reflect upon ACUTA's progress over the past six months and look ahead to the next six.

To many members, the most important activity this year has been ACUTA's efforts in the regulatory arena, specifically battling the aggregator definition. Beyond that I think the planning effort for our third decade can result in significant changes for ACUTA. I am hopeful that our efforts on the aggregator issue have not overshadowed the importance of the planning process.

There has certainly been more emphasis in this newsletter and in the national trade press on our regulatory efforts. While this is good, the less heralded work of the Strategic Planning Committee will also have long-term effects on the well being of the Association and the professional development of its members.

A successful planning endeavor will prepare ACUTA to better help our member institutions deal with radically changing demographics and cope with the financial squeeze that has gripped our campuses. We must develop the programs and ideas that will enable our members to give students the kind of education they will need to make them successful citizens in the year 2000 and beyond.

Three focus group sessions have been conducted to provide the Strategic Planning Committee broad-based, indepth member opinion on ACUTA today. These focus sessions have been designed to discover what the membership expects from ACUTA for it to be effective in the future.

To ensure that the information gathered is unbiased and reflects a true cross-section of the membership, the 50 focus group participants were selected at random from the total membership across the continent.

For two days in Tucson before the January seminars, the Board of Directors and the Strategic Planning Committee will review the focus group results and begin drafting a long range plan for ACUTA. In the meantime as they plan and work, the Board and staff are keeping in mind relevant comments from the focus groups.

The long range plan will be distributed to the members before the Annual Conference in San Francisco, July 26-30. And part of the annual business meeting in San Francisco will be devoted to its review.

Several other committees are working on ACUTA initiatives this year. Publications Director Mike Grunder, Telecom Director at Yale Univ. and a Past President of ACUTA, has recruited Dave Barta, Univ. of Oregon; Mary Peck, Emory Univ., and Mark Nichols, Univ. of Chicago, to serve on the ACUTA Publications Committee.

Historically, ACUTA's main thrust has been to provide continuing education through national seminars and conferences as well as member networking. As the Association grows in membership, however, and institutional funding constraints have limited travel, more of our members cannot afford to attend these national events. The Board believes, therefore, that we must also deliver educational materials and programs directly to members' desks.

The Publications Committee, formed to do just that, is encouraging members to write articles or monographs on activities at their institutions or about telecommunications management and technology in general. The Committee is also considering other methods to increase the number of publications. I'll report on those as plans develop.

I hope that as you read various ACUTA publications you will follow up with a call or a note to the authors thanking them for sharing their experience and expertise. Too often, we take other members' writing for granted, but if publications have helped you in your work, please let the authors know that you appreciate their effort.

Also, if reading another's article inspires you to contribute an article about your institution please let Bill Robinson, the ACUTA Publications Editor at the headquarters, know your intention. He will be happy to assist you in developing the article.

The ACUTA 1991-92 Membership Directory contains our first effort at providing a database of member facilities and services. This should enhance members' ability to "network" with colleagues who have similar programs or equipment.

The database information was contributed by members who completed the survey form included with their membership renewal notices. If information from your institution changes during the year or was not included this year, please complete the change of information form in the directory and send it to the headquarters.

The more members who complete the survey, the better the staff can fulfill your requests for information and provide you with the referrals and contacts you need. The Directory and database will be reviewed continually to make sure that this reference is as useful and as up to date as possible.
Municipal cable carries data and voice as well as video

Merging technologies may mean crossfire of competition

While the Baby Bells and GTE have received the FCC’s blessing to test systems that can carry cable TV programming into homes via the phone network, a municipal utility company in Glasgow, Kentucky, is beta testing voice communications over its cable TV distribution system.

“Video dial tone,” which received a nod of approval from the FCC in October, would compete directly with cable television companies by delivering TV programming over broadband “telephone” lines. But imaginative cable TV providers have discovered that broadband media can enable them to leap the bounds of their traditional operations and offer voice communications in competition with the “phone” companies.

Broadband media can enable carriers to leap the bounds of their traditional operations.

If regulators do not put up barriers to maintain the old divisions of voice, data and video communications, broadband media could consolidate what were once separate technologies and networks. Such a merger may offer consumers wider service at less cost, in part because the infrastructure will require fewer personnel.

Leadership in the brave and leaner new world of communications would likely go to the operators who have the most imagination and take the earliest initiatives.

Such innovation is not new to Glasgow. Years ago the city fathers began bringing industry to the town after they purchased the local electric power company. With the utility under municipal ownership, Glasgow began purs-}

chasing electricity at lower rates from the Tennessee Valley Authority and reselling it at cost to industrial plants which the city recruited.

After cable television regulation was phased out and costs to subscribers jumped, the utility, known as the Electric Plant Board (EPB), decided it could serve the public interest by running television cable parallel to its power lines. The advent of competition has caused cable rates to plummet by nearly 50 percent while channel offerings have increased.

The EPB’s original intent was not to get in the cable TV business, however. A cable network was first proposed as an efficient means of collecting electric usage data, especially during peak periods, to improve load management.

The broadband media installed to collect data from electric meters in homes, businesses and industries, opened up a number of other possibilities. By offering TV programming over its network, EPB not only improved cablevision service and reduced its costs to citizens, it obtained an additional source of revenue to amortize the cost of purchasing and installing the network.

When EPB superintendent Billy Ray, who Paul Kirvan of Communications News hails as a “visionary,” realized that the utility could use the cable network for its internal voice communications, he saw yet another opportunity for the EPB to serve the public.

For the past year, the Glasgow EPB has been using a Personal eXchange™ (PX) system, made by First Pacific Networks of Sunnyvale, California, to segment broadband traffic on its cable network into voice, data and video.

When the Kentucky legislature mandated in the Education Reform Act of 1990 that a telephone be installed in every public school classroom, Ray suggested that these phones use the TV cable that already ran to each classroom in the Glasgow schools. Local educators are also using the network for electronic mail.

"The state is looking for ways to bring technology into our schools," says Ray. "We plan on showing them the way."

Expanding this voice network to serve 30 residences on an experimental basis was only a logical progression.

Glasgow is less than 30 miles from Bowling Green, home of Western Kentucky University. WKU is developing a campus extension in its neighboring city, and Ray has proposed that the university use EPB facilities for distance learning classes. If a broadband cable connects the two towns and schools, Ray would like to feed cable programming to WKU dormitories in Bowling Green.

These later proposals are only in the talking stage, but the innovations taking shape in a small town like Glasgow are a glimpse of the potential for telecommunications in the not too distant future.

Somewhere in the bureaucracies of the phone and cable companies, planners may be considering the feasibility of expanded and consolidated communications services carried by a broadband network. But in Glasgow, Kentucky, Billy Ray and the Electric Power Board have long since seized the initiative.
Enhance writer's professional standing

Monographs: opportunity to share knowledge

A new Publications Committee with a goal of expanding ACUTA's monograph publications has been formed.

Dave Barta, Univ. of Oregon; Marv Peck, Emory Univ., and Mark Nichols, Univ. of Chicago, are joining Publications Director Mike Grunder, Yale Univ., on the panel.

Grunder recently sent a letter of encouragement to ACUTA members who indicated in this year's member survey that they were interested in submitting a monograph for publication by the Association.

"There is a tremendous amount of valuable knowledge residing in our national membership, and one of ACUTA's primary objectives is to share that knowledge as widely as possible," Grunder pointed out.

"Monographs are single-topic pieces of general interest and usefulness to ACUTA members. Their length is between 5,000 and 10,000 words (about eight pages minimum, 15 to 20 maximum). Monographs should be 'vendor neutral' but the topics can be as broad and varied as is the telecommunications business.

"Upon acceptance and publication, ACUTA will pay the author a $100 honorarium for the monograph," he added.

To get started on a monograph, submit a brief but detailed outline to Bill Robinson, ACUTA Publications Editor, 250 W. Main Street, Lexington Financial Center, Suite 2420, Lexington, KY 40507-1739. Or you can fax the outline to Bill at (606) 252-5673.

Upon receipt, ACUTA's Publications Committee will review the outline and be in touch regarding acceptability or any suggested changes. Once the go-ahead is given, Bill and the Committee will work with the author on proof reading and the logistics associated with final publication.

Topics on which members said in the survey that they would like to see monographs published include:

- Telecommunications management
- Student services
- Telephone registration
- Disaster planning
- Telecommunications maintenance
- Cable and wiring
- Telephone MIG systems
- Payphone issues
- T1/T3 networking
- Video
- LAN/WAN/MAN
- PBX characteristics
- Cellular/mobile phones
- Cable television
- Basic data communications
- RFPs
- Centrex
- ISDN, SS7
- SONET

Any telecommunications topic, however, as applied to higher education, will be considered, Grunder added. "We hope as many members as possible will give this opportunity serious consideration," he urged. "If you would like to discuss this opportunity further please don't hesitate to call me or Bill."

At Loyola Marymount

Plastic raceway runs cable unobtrusively through older buildings

Most of the buildings on the Loyola Marymount University campus date from the 1920s and '30s. Many of the newer buildings have concrete walls. But the university recently wired its sprawling campus with a state of the art voice and data network without a lot of drilling, boring and chipping.

LMU and its contractor, Irish Communications, opted for nonmetallic, adhesive backed surface raceway distributed by the Wiremold Company. More than seven miles of the conduit were installed in 30 campus buildings ranging from dormitories, classroom and administrative buildings to the library.

Given the size of the job and the composition of our buildings, "surface raceway was the only way to go," says David Trump, LMU Vice President for Facilities Management.

Most of our buildings are of masonry or concrete block construction, Trump pointed out. "Channeling into walls to install wiring would have been virtually impossible, especially while classes were in session."

Main cable runs went through raceways 2.25 inches wide and 11/16 inch deep that can carry up to 13 6-pair telephone cables. To run two 6-pair cables through residence halls, a raceway less than one inch wide and one-half inch deep was used.

The raceways are ivory colored, and the PVC material is rigid and can be painted. "Installation, accomplished while classes were in session, went rapidly," Trump added. "The finished product looks good and seems resistant to abuse."

High-tech learning and research techniques are available to students in Loyola's venerable old buildings that have undergone a minimum of alteration."
Distance learning
(Continued from page 2)
downlinks scattered among 125 business organizations. Last year, NTU's revenues reached $14 million. NTU is in the process of implementing a compression system manufactured by Compression Labs of San Jose, California. "Compression is a major project," reports Doug Yeager, Vice President for Marketing. "It involves a proprietary system with control software and other system development, as well as a decoder for every receive site and an encoder for all university uplinks."

NTU is in the forefront of adopting the technology, he goes on, because it offers a substantial expansion of channel capacity, enhanced services and, downstream, the capability for multimedia. With digital compression and related software, he explains, NTU immediately will have higher quality video and audio signals and the ability to facsimile course documents on a data channel. In the long run, NTU will use compression to deliver courses to the desktop with new multimedia offerings.

"We see digital video as being fundamental to some really improved learning systems and instructional technology," says Yeager. "Where multimedia are brought together at a workstation and are used by the participants right when they need the educational module, they don't need to go down the hall or to another building."

BCSN

The Black College Satellite Network (BCSN) was begun in 1982, says director Mabel Phifer, "as a way to share courses and special event programs across the 105 historically black colleges and universities."

Although BCSN originally wanted to install an uplink and downlink on each campus, the cost was prohibitive. As an alternative, BCSN started with an uplink capability from its base in Washington, DC, put downlinks on the campuses, and provided remote uplinking vehicles, microwave feeds and other ad hoc services to transmit special programs from the schools.

BCSN also instituted on-campus workshops to help faculty, staff and administrators understand how to use the new technology and worked with schools to upgrade their communications facilities.

"We never wanted to be a network that generated and distributed courses to campuses," stresses Phifer. "We wanted courses to come from the campuses." As the colleges became more technically sophisticated, students grew more involved, additional equipment was distributed and campuses began to broadcast more programming.

With the help of a STAR schools grant in 1989, BCSN and its partners were able to provide equipment to public schools and offer more courses.

Last year, BCSN reached 425 schools and broadcast more than 1,000 hours of live programming. BCSN also provides network management and production services.

"We like to think of ourselves as a comprehensive telecommunications service," says Phifer. "We have a high education component, a K-12 component, a community education component and a church network. We also do a lot of special interest teleconferencing."

(Continued in next issue of Via Satellite Magazine.)

Chips will enable answering machines to rival voice mail

Answering-machine makers are gaining a new weapon to fend off an assault on their turf by the dispensers of voice mail technology.

The weapon - computer chips that can mimic voice mail services while replacing the tapes and monitors that make conventional answering machines troublesome.

The chips, also known as digital-signal processors, translate speech into the digital code of ones and zeros that computer chips understand. The manufacturers say their chips will allow phone makers to build answering machines that, among other things, are the size of a card deck and can offer voice mail boxes for a number of different users.

"This will offer the user a great deal more horsepower," says Phillip Gibson, manager of National Semiconductor's office-automation business.

Consumer oriented answering machines that use cassette tapes aren't as smart or fast as machines that employ chips alone. To call up a specific message from a tape, for instance, a consumer would have to wait for the tape to cycle through several messages. That makes it impractical to build a tape machine that lets several users call machines for their individual messages. What's more, the mechanical parts of the tape-based machine are prone to wear out and break. Several of the Bell operating companies have begun offering residential users voice mail for around $5 a month. Such systems can direct incoming phone messages to electronic mail boxes for as many as eight different family members. Some can forward messages to other phone numbers.

National Semiconductor says its new chip, an $18 device called the AM160, will soon go into answering machines that can store and forward messages. The chips combine functions that normally require four or more chips and will allow phone makers to build answering-machine functions into just about anything, such as telephone sets, even cellular phones. And the chips will deliver voice quality that matches that of tape machines.

Eventually, the chips will be able to recognize voices, Gibson says. You'll be able to call your machine and say, "Give me my messages."
Failure to remove architectural and communications barriers in existing facilities, where such removal is readily achievable, the law states, constitutes discrimination. Discrimination is determined by effect rather than intent, according to the U.S. Dept. of Justice, which is charged with enforcing the act.

The Justice Department has directed that public information be made available to people with impaired hearing or speech via a telecommunications system equally effective as that provided to voice telephone users. This requirement can be met by the use of telephone relay services which state governments have been ordered to provide.

Entities that have extensive telephone contact with the public, such as city halls, libraries and public aid offices, are encouraged by the department to install text telephones so that the disabled can have direct contact with them. If provision of phone service is an entity's major function, text telephones should be available.

[Telephones designed for use by hearing impaired persons were formerly called telecommunication devices for the deaf (TDDs). The Federal Communications Commission has directed, however, that such devices be referred to as text telephones (TTs).]

Emergency services – such as 911 – must provide direct access to individuals with speech or hearing impairments.

Public entities that offer an examination or course of education must modify their policies, procedures or practices or provide auxiliary aids and services so that individuals with disabilities have an equal opportunity to demonstrate his or her knowledge or ability.

Text communications capability must also be available in reception facilities for walk-in as well as scheduled guests. External phones that are required for entry to a facility must provide text communication.

In banks of public payphones, one in four must be a text telephone, but no less than one must be a text telephone. If an interior public payphone is provided in a stadium or arena, in a convention center or in a covered mall, at least one public text telephone must be provided in the facility.

In the hospitality and health care industries, four percent of a facility's first 100 rooms and two percent of the remainder must have text telephones. This seems also to apply to college and university residence hall rooms.

Under Title III of the act – pertaining to public accommodations by private entities – specifies that places of education are covered. Primary and secondary schools also are covered. Private enterprises, however, are not required to make telephone calls incident to their operations accessible by text telephones. Still, they must ensure effective communication for those with disabilities.

Title I of the act defines and prohibits discrimination against the disabled in employment. Telephones used for answering employment inquiries be accessible by text telephones.

All public entities must also do a self-evaluation of the compliance with the parts of the act which differ from the Rehabilitation Act of 1973. Organizations with 50 or more employees are required to designate an employee to coordinate their efforts to comply. The name, address and telephone number of this employee must be made available to any interested party. The number must also be accessible via text telephones.

A spokesman for the Kentucky Council for the Deaf has suggested that institutions form an advisory panel of their constituents who have disabilities. "They would be one of the best sources of information of how you can best serve those with disabilities."

On Dec. 7, the Kentucky Trial Lawyers Association held a workshop in Louisville for individuals with disabilities to advise them of their rights and the legal remedies provided by the law. While primary enforcement of the ADA rests with the justice department, citizens may file individual and class action suits to enforce compliance and collect damages from those guilty of practicing discrimination.

As institutions upgrade their infra-structures to comply with the ADA, they should be careful not to invest in old technology, advises Atlanta consultant Ray Jones of Information Access Systems. "The old 'telecommunications devices for the deaf' can put you in compliance with the law, but some of the new technology that exists and is on the way can do much more. While you're making an investment to provide services for people with disabilities, you can make those same dollars help upgrade other facets of your telecommunications infra-structure."

One reason there has been so little information available about the ADA, Jones says, is because there was not controversy associated with it. "When legislation is controversial, it comes under much scrutiny by the media. Both political parties as well as the Congress and the administration were in favor of this legislation, therefore, it has attracted little media attention.

"Here we are with the effective date of the legislation only days away, and hardly anyone knows what their obligations are," he commented. "But the implications for business, industry and education are far reaching."

Jones can be contacted at (404) 962-3517.
Party Line
Ruth Michalecki,
Univ. of Nebraska

This has been one very busy year - but for those of us involved in this business, being busy is nothing new. This is especially true with the design and implementation of Enhanced Call Processing functions. They are interesting to put together, but they do take a lot of time. Let me share one application with you that really made our department look good.

Enhanced Call Processing

This situation involved the Student Employment/Internship Center. As the name implies, this office is responsible for bringing prospective employers and students needing a job together. Employers would either call the office or mail their job openings to the Center. The Center would copy the job opening on a 3x5 card and post it on the "Help Wanted Board" in the Student Union. Students were constantly calling and asking for the listings, keeping the phone lines tied up. They would come to the Union and take the cards off the wall, call about the job, decide they didn't want it and simply toss the card away. The prospective employers didn't get much response to their requests, and they were not happy campers. We really had at least three problems:

- Students didn't have good access to job openings;
- Employers were not getting the responses they wanted, and
- Phone lines to the Center were constantly busy.

We held several meetings with the Center's staff and spent time in their office to learn as much as possible about their operation such as:

- What is the information;
- Where does it come from;
- What kind of format;
- How frequently does it change;
- Who are the callers;
- What do they ask, and so on.

Once we felt comfortable with our understanding of the Center's operation, we proceeded to develop a call processing application designed to enhance the Center's main function of assisting students find jobs and internships.

'Too Long' Can Be Fatal for an Application

Most call processing applications fail because they are too lengthy, making callers listen to a lot of information they are not interested in hearing. First of all, we realized our application would be big because we literally had dozens of job openings to advertise. Our first step then was to break the data down into acceptable lengths. This was accomplished by building job classifications, then listing the openings in their appropriate classifications, such as: Office/Clerical; Sales; Fast Food Service; Telemarketing; etc.

We provided a "script" to the Center so the jobs would be recorded in a brief, but fully descriptive narrative. Our first thought was to let prospective employers record job openings themselves. While this might happen in the future, the Center has been more comfortable with doing it so far.

Now when students inquire about job openings, they are greeted by a brief message thanking them for calling the Job Line. They are told how to go back and forth between menus, how to skip a listing that doesn't interest them, etc. The next thing they hear is: "For Office/Clerical work, press 1 now." There are eight job categories, but callers don't have to listen to them all before getting the category they want. Listings are automatically purged after one full week, unless we hear from the employer to leave the listing on for another week.

Needless to say, it has been an outstanding success. Students are getting employment information quickly, employers are getting lots of responses to their ads and the Center's phone lines are available once again.

Our next step is to provide direct access to employers from the voice processing system. When students hear about openings they are interested in, they will be able to touch "0" and be connected to an employer. It will add value to the system and will be helpful to the caller.

One thing we have learned in doing so many of these enhanced call processing applications is that you really need to understand the functionality of the department you are working with.

Another is that you will have to tweak the system a little after implementation to get it right. And third, once it is done correctly and is working, you will have people standing in line waiting their turns.

Keeping Track of Centrex

The National Centrex User Group (NCUG) had its annual conference in Minneapolis in October. With a membership of about 800, the group works to facilitate communications between Centrex users and the operating companies. As most Centrex users know, the service and capabilities of Centrex systems vary widely between operating companies and even between different central offices of the same operating company. This wide disparity of the systems and features can be frustrating to the users, especially those with multiple locations.

NCUG's objective is to narrow the wide gap between Centrex service offerings by working with operating companies, switch manufacturers and state public service commissions (PSCs) to make them aware of what the users really want.

I have served on the NCOG Board as Vice President of Education for several years. At the annual conference, I was given the additional responsibility of VP for Regulatory and Legislative Issues. Regulatory issues involving Centrex services are a different ball game. At

(Please continue on next page)
For K-12 math and science

The Annenberg/CPB Math and Science Project has released guidelines under which it will award approximately $10 million in 1992 to projects designed to accelerate reform of K-12 math and science education in the United States.

"Much is known today about how to strengthen math and science education," said Mara Mayor, director of the Annenberg/CPB Math and Science Project. "The problem confronting us is how to turn that knowledge into practice so that our children benefit."

To tackle that challenge, the Project will focus its funding in 1992 on the three critical groups of adults who must actually implement reform – the parents, the education policy makers and the teachers.

Around the country there are examples of exemplary math and science programs, Mayor explained, but there are exceptions. Typically, the adults responsible for making improvements happen – the parents, policy makers and teachers – do not fully comply:

• Why reform is needed to prepare our youngsters for life in the next century;
• What effective math and science programs consist of, and
• How they, personally, can make change occur in their own schools and communities.

To help speed the pace of reform, the Annenberg/CPB Math and Science Project will encourage efforts that target these three critical groups and build on the potential of the telecommunication and information technologies – including video and audio cassettes, broadcast and narrowcast television, computers, optical discs and electronic networks.

"The technologies can enlarge the reform effort," Mayor noted. "They can reach many people with information about how to improve math and science education, link interested individuals so they can share ideas, and make it possible to customize teaching resources to meet the specific needs of each teacher, school and community."

Telecommunication and informative technologies will be expected to play an important role in the five funding initiatives to be launched during 1992. Initiatives I, II, and III will support projects that target three distinct audiences – the general public (especially parents); education policy makers; and teachers – to help them move from an understanding of the importance of improving math and science education to actually taking the steps that will implement change. Proposals must be received by March 16, 1992, for initiative I with one award of up to $3 million anticipated by July 1, 1992. Proposals for initiatives II and III must be received by May 15, 1992, with several awards in each anticipated by Oct. 1, 1992.

Initiatives II and III will each have funding of $2.5 million available. Initiative IV will help build a substantial cadre of minority teachers who are recognized as leaders in math and science reform and experts in the role that technologies can play in implementing curricular improvements. Proposals must be received by March 16, 1992, with one award of up to $1.5 million anticipated by July 1, 1992.

Initiative V will support creative ideas that do not fit within the targeted categories but do further the Project's goal of widespread reform of math and science education.

Letters describing the project idea will be considered as they are submitted. The Annenberg/CPB Math and Science Project is a major new initiative to help all elementary and secondary students excel in math and science.

By encouraging the use of telecommunication and information technologies to accelerate the pace of change, the Project will be a significant new partner in the national effort to reform math and science education.

To receive the funding guidelines, call (202) 879-9658; or write The Annenberg/CPB Math and Science Project, Attn: Guidelines, 901 E Street, NW, Washington, DC 20004.

Party Line

(Continued from previous page)
times Centrex is offered as a form of non-regulated service and other times as a fully-regulated, tariffed service. As one can imagine, state PSCs play important roles in how Centrex is provisioned. We are also starting to see more and more involvement by state legislators in Centrex regulation.

Just keeping up with what each operating company calls their version of central office Centrex service is a challenge. Oh well, "A Rose By Any Other Name . . . ."

Happy Holidays. I hope to see some of you in Tucson.

ACUTA Calendar

• Spring Seminar •
Lexington, KY
April 26-29, 1992
HOTEL: The Radisson Plaza
TOPIC: Data Communications

• Fall Seminar •
Hilton Head, SC
Nov. 1-4, 1992
HOTEL: Hyatt Regency
TOPIC: Disaster Planning

• 21st Annual Conference •
San Francisco
July 26-30, 1992
HOTEL: The Hilton on Hilton Square
TOPICS: Management, Regulatory Issues; Professional Growth, Voice, Data and Video, User Groups, Regional Meetings

• Winter Seminar •
Tampa, FL
Jan. 10-13, 1993
HOTEL: Hyatt Regency West Shore
TOPIC: To be announced
The University of Pittsburgh has contracted with Telco Research of Nashville, Tennessee, to replace its old telemangement system with Telco's CCO SYSTEM. The new software system will integrate functions for cost allocation, network analysis, student billing, directory services and configuration management.

Southern Methodist University has signed a contract with InteCom of Dallas, Texas, for an Integrated Business Exchange (IBX) S/80 to replace the university's 10-year-old Dimension 2000. The 8,000 line system, that includes a high-speed LAN, will channel enhanced services to the entire campus community with access to all of SMU's computing and learning resources. Digital phones and asynchronous data will be provided to student residences as well as faculty and administrative offices.

Telecomm Solutions of Dallas, Texas, has released its "Guide to Intelligent Telephones and Call Processing Systems." Designed for use by hotels, motels and hospitals as well as colleges and universities, the guide contains information useful to anyone considering the installation of intelligent telephone products and systems, as well as consultants and providers of systems and services.

Electronic Micro Systems of Winston-Salem, NC, has announced that all of its elevator communications products have been redesigned to comply with the requirements of the Americans with Disabilities Act. EMS's emergency communications equipment for elevators includes vandal resistant handsfree phones, autodialers and digital identification consoles.

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ACUTA MEMBERSHIP RECRUITMENT CONTEST

QUALIFICATIONS

1. The contest will be held from December 1, 1991 through June 1, 1992.
2. Any college or university primary representative or associate member is eligible to participate in the contest.
3. Corporate affiliates (representatives and designated employees) are eligible to participate in the contest for special recognition in the ACUTA NEWS but are not eligible for prizes.
4. For every new institution, individual, or company joining ACUTA, the recruiting member will be credited points based on the following scale:
   - 5 points for each new institutional member
   - 2 points for each new associate member
   - 2 points for each new corporate affiliate
   - 2 points each for new members who attend the Tucson Winter Seminar
   - 2 points each for new members who attend the Lexington Spring Seminar
   - 2 points each for new members who attend the San Francisco Conference & Exposition (New members must register and pay fees by June 26, 1992.)
   - If necessary, refer to page 10 of the 1991/1992 ACUTA Membership Directory for the difference between an institutional member and an associate member.
5. Applications must be received by the ACUTA office from potential new members between December 1, 1991 and June 1, 1992. Payment of dues must be received by the ACUTA office by June 26, 1992 in order for points to be credited to participants.
6. You need not attend ACUTA's annual conference to win any of the prizes.
7. This offer does not apply to membership renewals. For this contest, a membership renewal is considered a member who has not renewed their membership from the 1990/1991 membership year.
8. Only one recruiter may receive points for a new member.
9. Only one prize will be given per person. In the event of a tie, a chance drawing will decide the winner.
10. Prizes will be awarded as follows:
   - Each participant's name will be submitted for a chance drawing. The more points a recruiter has, the more chances he/she has for the drawing. For example, a person who recruits one new institutional primary member (worth 5 points) would have their name entered 5 times for the drawings.
   - The first drawing from this pool of chances will be for a portable compact disc player (approximate value $200).
   - The second drawing will be for a VCR (approximate value of $300).
   - The third drawing will be for a stereo system (approximate value of $500).
   - After these drawings, a separate drawing will take place for those who have accumulated a minimum of twenty-five (25) points. Each qualifying recruiter's name will be entered one time for a chance to win ACUTA's "Triple Deuce." The "Triple Deuce" prize will include two (2) round trip Delta Airline tickets to anywhere in the continental United States that Delta flies, two (2) nights lodging at a major hotel, and $200 spending money.
   - And finally, the individual who accumulates the most points during the contest will be announced and receive a camcorder or a 27 inch color TV (approximate value $1000).
   - Everyone who accumulates any points will receive an ACUTA coffee mug.
11. ACUTA may modify the rules to this contest at anytime as deemed necessary.

PROCEDURES

1. Recruiters (current members) should contact potential new members via telephone, Bittel, fax etc.
2. Recruiters should request the ACUTA office send an application and general information to the potential new member who has been contacted. (Applications will not be sent to a recruiter for distribution.) New membership applications have been prepared and printed specifically for the contest.
3. ACUTA will document all calls from recruiters. Information will be maintained such as the date of call, the recruiter and the potential new member's name and address.
4. New members should return the completed application to the ACUTA office as soon as possible, but no later than June 1, 1992.
5. New member dues should be paid as soon as possible, but no later than June 25, 1992, in order to count toward the contest.
6. ACUTA will track applications and credit points to the respective recruiter.
7. ACUTA will have a membership recognition and awards night on Monday, July 27, 1992, at the 21st Annual Conference & Exposition in San Francisco at which time the drawings and awards will take place. Winners not present in San Francisco will be notified immediately after the conference.
The Value of Your Membership

I would like to inventory with you the benefits of institutional membership with ACUTA.

The Board and staff continually review and evaluate the services we provide in light of members expressed needs, the benefits and services provided by other higher education associations and the resources necessary to meet those needs. Valuable information has been gathered this past year as part of ACUTA's strategic planning effort. It is being assessed, and members will soon be seeing some positive results.

As for now let's look at present services and benefits:

- Member rates for conferences, seminars and workshops, a $125 savings on registration fees.
- Monthly newsletter with member written articles, industry updates, employment opportunities and other valuable information that you can use in your planning as well as with daily operations.
- Annual Membership Directory, now expanded to include listing of member information to include an institution's size and type as well as telecom facilities and services offered.
- Networking. You can pick up the phone anytime and talk to a member whose institution, services and facilities are similar to yours.
- Representation on federal regulatory issues. ACUTA has begun devoting a substantial amount of money as well as staff time to keeping members informed on regulatory matters and retaining a Washington, DC, law firm to fight unfavorable legislation and regulation.
- Information on vendors' products and services at events. Each of ACUTA's four annual events include an accompanying exhibition. Members are given ample time to inspect exhibits and converse with vendor personnel who specialize in serving the higher education market.
- Special rates on airline fares, car rentals and hotel rooms to save you money on travel.
- Monographs are published detailing projects and applications at member institutions.
- Audio tapes and course materials from seminars and conferences. If you cannot attend an event you can still hear the programs on tape and read speakers' handout materials.
- ACUTA InfoLine. By calling (214) 994-9024 people with questions about joining the Association or attending upcoming events can hear up-to-date announcements.
- A Membership Directory containing information on members' facilities and services, audio tapes of seminars and the InfoLine are new services that became available in the past six months.
- Other new services under consideration include:
  - Expanded workshop offerings. Previously, ACUTA workshops focused exclusively on "Introduction to Telecommunications."
  - Electronic Bulletin Board for members to share information and post questions for view anywhere in the U.S. or Canada.

- Additional publications. The Publications Committee is working to increase the output of useful publications. In 1992 you can look forward to such items as model requests for proposals (RFPs) and job descriptions.

When you add them all up, the benefits of ACUTA members come to a substantial total. Are you taking full advantage of your membership?

Listen to what these colleagues of yours have to say about the benefits they have realized from their participation in ACUTA.

"Ninty percent of what I know about telecommunications, I learned through ACUTA," Pat Billiter, Charles County (MD) Community College

"The knowledge that I gained through ACUTA helped me qualify for my present position," Steve Carnella, The University of Chicago.

"ACUTA helped me get up to speed, as quickly as possible on the issues and terminology of telecommunications," Don Carlos, The Claremont Colleges.

"Go ahead and block the next ACUTA conference out your calendar today," Mike Lane, Mississippi State University.

Cutting Costs

The economy continues to be of concern to everyone and certainly a consideration in your expenditure of funds for training and travel. I would like to offer a few suggestions that should save you some dollars when attending ACUTA events as well as announce a new service that will begin with the Spring 1992 Seminar in Lexington.

First – always plan ahead for airline reservations. ACUTA has a new contract with Delta Airlines for 1992-93 that discounts coach fares by 45 percent or five percent off the lowest fare. (Last year the discount was 40 percent.) Discount fares from Canada are limited to 35 percent by international trade agreements. ACUTA's

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From ACUTA Headquarters

(Continued from previous page)

official travel agency, Commonwealth Travel, (1-800-274-7135) can furnish you with additional information.

Second – our 1992 conference in San Francisco, July 26-30, will be held in the Hilton Hotel on Hilton Square which will be offering special conference room rates. Attendees who want to sacrifice a little convenience to save some money, however, may book rooms in a nearby hotel at even lower rates that ACUTA has negotiated.

The accommodations won’t be on par with those at the Hilton but, never-the-less, will be clean and comfortable. Our hotel room rates are consistently $10 or more below most hotels’ conference rates, because we negotiate directly with the hotels and do not rely on a third party. Those savings are passed directly to you, the attendees.

Third – if you initiate your travel on a Saturday, to take advantage of the “over Saturday night stay,” not only will your airfare be about 50 percent lower, (which more than offsets the cost of an additional night in a hotel room) you can take advantage of an additional day of “networking” with other attendees. Our analysis of the past two years shows that the number of people arriving on Saturdays has doubled from 30 to 60 percent. Most institutions’ administrators will agree that early arrival makes sense. It is a savings to the school and does not cause attendees to miss any additional work time at their institutions.

Fourth – take advantage of our early-registration discount of $50. You must register 30 days prior to an event to receive this discount. You would be surprised at the number of attendees – about 30 to 40 percent – who do not. This not only saves you money, but helps the ACUTA and hotel staffs better prepare to support event activities and keeps logistic and planning costs to a minimum.

Last – the new service that I spoke of, beginning with the 1992 Spring Seminar in Lexington, April 26-29, is coordinating requests for sharing hotel rooms. The Lexington brochure will ask that those who are interested in sharing hotel rooms indicate that on the registration form. The ACUTA office will maintain a list of these names and phone numbers and provide this information to those who request it. Hotel reservations, however, will have to be made by one of the room-sharing attendees.

If you maximize all of the above, you could cut your total travel cost for an event by about 20 to 40 percent.

I hope that this bit of information will enable you to save dollars that you can spend for something else, possibly even for attendance at an additional event or to send an extra staff member. 🤝

ACUTA Welcomes New Members

The following joined ACUTA from Nov. 22 to Dec. 31:

Region 1, Northeast
Robert A. Bussell, Bowdoin College (Maine)
Mary Cockroft, Emmanuel College (Mass.)
Col. Thomas J. Cawley, U.S. Military Academy, West Point

Region 2, Southeast
Donald V. Senecal, Medical College of Georgia
David Rolfe, Law School Admission Services (Conn.)

Region 3, Midwest
Pamela J. Chouinard, Loyola Univ., Chicago
Jennifer Kossow, Wittenberg Univ. (Ohio)
Terry Rockwell, Columbus State Community College (Ohio)

Region 4, West
Bill Telaak, Stanford Univ.
Ben Walton, Univ. of Redlands (Calif.)

Corporate Affiliates
BRONZE
EPIC USA, Inc.
COPPER
Booz-Allen & Hamilton
Boston Technology
Excalibur Cable Communications, Ltd.
Comdisco Corporation
GN Netcom, Inc.
Arcomm Fiber Systems
Applied Technologies International
Novatel Computer Systems Corp.