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Westmont coordinator reports

**10-XXX appeal is challenged**

AT&T has challenged ACUTA’s petition for reconsideration of the FCC’s decision requiring telephone traffic aggregators to provide 10-XXX access to long distance (LD) carriers and operator service providers (OSPs).

The phone company also filed its own petition for reconsideration, seeking exemption of common carriers from the requirement to provide 800 or 950 access to their networks.

In addition, AT&T has asked the FCC to monitor aggregators’ compliance with the access rules by requiring them to report by Jan. 31, 1992, which locations they intend to unblock and when. The company suggests that a wide variety of detailed information be submitted for those locations which will not be unblocked until the end of the six-year transition period.

Acting on behalf of the higher education community, ACUTA has countered AT&T’s request for reconsideration and offered rebuttal to the phone giant’s challenge of ACUTA’s reconsideration petition. ACUTA is also contesting AT&T’s suggestion that (Please turn to page 2).

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**Westmont coordinator reports**

ACUTA-generated ideas to save member school thousands of dollars

Steve Turner, Telecom Coordinator at Westmont College in California, came back from the ACUTA Spring Seminar in Hawaii with one idea that will save his institution approximately $34,000 each year for the foreseeable future.

From what he learned by attending ACUTA’s conference and two of three 1991 seminars, Turner estimates that Westmont’s telecom operations has reduced its continuing telecommunication costs by as much as $100,000.

In addition, Turner has been able to match some of the “Strategic Applications of Telecommunications” discussed in Honolulu — by both vendors and presenters — to the long term needs of his college.

All this has been good news for the small, non-denominational school in Montecito near Santa Barbara, because enrollment this semester is down by about 50 students. The lost tuition income has forced budget cuts in all departments, but Turner’s department was able to exceed the cuts expected by his administration without laying off any employees.

And by preparing to wire the campus for high-speed data and

(Please turn to page 6)
Because 10-XXX cannot be made available immediately, the FCC is requiring all LD carriers and OSNs to make their networks accessible via 800 or 950 numbers by March 16, 1992. AT&T, the only major network not offering 800 or 950 access, is asking for permission to rely on the 10-XXX method alone.

Aggregator equipment incapable of processing 10-XXX codes is only one reason that the "equal access" method cannot be put into effect immediately. Some local exchange companies have equipment that cannot process 10-XXX dialing, but the FCC is not requiring them to replace or modify their equipment.

ACUTA and its supporters have based their request for exemption on the financial burden the 10-XXX transition would force on institutions of higher education, many of which already face fiscal difficulties. The costs of the technical transition -- in some cases more than $450,000 -- would be compounded by the additional risks of fraud which 10-XXX would open up. The inexpensive option of 800 and 950 access would meet all the requirements of the Operator Services Act and not create new opportunities for fraudulent users. In addition, the interests of AT&T, as the primary beneficiary of the 10-XXX system, are outweighed by the public interest in higher education.

AT&T insists these claims "are neither new nor correct," having been raised and rejected in the initial rule-making proceedings. The six-years allowed for major modifications will make them more palatable, it maintains. "At the vast majority of locations," AT&T asserts, "the actual cost of compliance... will be only a few hundred dollars."

The telephone company offered no supporting evidence for this claim. ACUTA noted in its rebuttal. As long as a college or university's costs do not exceed $15 per line per month, that institution will be required to unblock 10-XXX access within 18 months, even if its overall cost is in excess of $450,000. Institutions whose cost will exceed $15 per line will have to replace otherwise perfectly good equipment by April 17, 1997.

The AT&T petition did not counter a letter from the company -- attached to ACUTA's petition -- advising the University of New Hampshire that AT&T has not yet devised a way to convert the university's AT&T System 85 switch to accommodate 10-XXX dialing. "The PBX 10-XXX issue has been a problem for some time, and one that is not easily resolved in our present product line," AT&T informed the university.

Toll fraud need not result from 10-XXX compliance, the AT&T petition continued. The company reported that fraud actually decreased when it unblocked 10-XXX at 30,000 of its payphone locations. Ancillary toll restrictors in addition to central office call screening and blocking can adequately protect against fraud, it asserted.

ACUTA countered that "AT&T's reliance on these post-PBX..."
MESSAGE FROM THE PRESIDENT

Paula Loendorf, University of North Dakota

Another month, another President's Message. When I became President in July, one of my concerns was whether I would have enough ACUTA business to report to the members in this article every month. Even though we do not have ACUTA events or educational programs on a monthly basis, there are many other activities that keep the staff, Board and committee members busy. It makes my task of writing this column much easier because there is so much that I can report to you.

Between November 23-26, Executive Director Del Combs and I will be attending the Council of Higher Education Management Associations (CHEMA) fall meeting in Orlando. As its name implies, CHEMA consists of management organizations such as ACUTA involved in higher education. Some of the 30 other members are NACUBO, CAUSE, EDUCOM, NACS, NACAS, SCUP, CUPA, NAEB, and NACUPS. I'd tell you what all those initials mean, but I don't believe there is room to do so in this column.

NACUBO coordinates CHEMA activities and chairs the meetings. The members share information and ideas on various aspects of association management such as member recruitment, legislative issues, elections, retreatment, annual conference attendance, alternative income potential, services to members, codes of ethics, leadership retention, and inter-association collaboration with regard to educational programs and professional development. Through joint discussions we try to avoid re-inventing the wheel by utilizing ideas that have been developed elsewhere when they seem applicable to ACUTA.

Planning Effort Progresses

Since August, ACUTA has been involved in a major planning effort for its third decade. As I reported in the October newsletter, the Strategic Planning Committee is obtaining member input through focus groups. What, you may ask, are focus groups? Basically, they are non-directive, group interviews guided by a facilitator. They have proven to be an effective way to obtain qualitative information from individuals whose specific opinions and perspectives are important to the planning process. The group discusses a series of predetermined questions or issues designed to gather information about the session's key objectives.

These objectives as developed by the Strategic Planning Committee and our planning firm, Glenn H. Tecker Consultants, may be to establish or validate hypotheses, determine alternative strategies, assess the current situation or the future, or assess member needs. This research also allows the development of information about unanticipated issues that are identified as significant by participants during discussion.

Focus Groups Continue

In attempting to involve a cross-section of ACUTA members in the focus groups, we have selected participants based on the following criteria: individuals from large, medium and small public and private institutions; individuals who have attended ACUTA events; individuals who have not attended ACUTA events; individuals with a telecommunications background; individuals with little or no telecommunications background but with telecommunications responsibilities; and individuals from diverse geographical locations. To encourage unbiased, full participation by participants, no Board or staff members are involved in the focus group sessions.

The first focus group session with 15 members was held in Denver immediately before the seminar. A second group of 13 met on October 23 on the campus of Villanova University hosted by Don Hoover, Villanova's Telecommunications Manager and ACUTA's Northeast Region Director. On November 1, the third group met on the Oakbrook campus of DePaul University hosted by Beth Kalov, Telecommunications Manager at DePaul's main campus in Chicago.

The Strategic Planning Committee approved the second and third groups because of the worthwhile information received from the first group. Using information from focus groups, it appears that a full, in-depth, written membership survey will not be necessary to complete the planning process. Results from the focus groups will be utilized during a two-day planning conference of the ACUTA Board, the Strategic Planning Committee and three ACUTA staff members immediately before the January seminar in Tucson. The Committee intends to have a draft plan by April, 1992, and a final plan to be shared with the membership in July, 1992.

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Video network gives Maine new education infrastructure

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Election Changes

Last November, ACUTA conducted its first election of Region Directors by announcing the call for nominations in February rather than November with the terms of office beginning at the close of the annual conference, when Executive Officers’ terms become effective, rather than June 1. The Board and the Strategic Planning Committee are also reviewing the entire election process with a goal of recommending any changes in time for the 1993 elections.

President’s column

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Electoral Changes

Last November, ACUTA conducted its first election of Regional Directors by announcing the call for nominations in February rather than November with the terms of office beginning at the close of the annual conference, when Executive Officers’ terms become effective, rather than June 1. The Board and the Strategic Planning Committee are also reviewing the entire election process with a goal of recommending any changes in time for the 1993 elections.

Roberts, director of finance at NTU. “Technology is changing so fast that every university can’t expect to have an expert in every field.”

Plugging In

Nor can schools expect to reach all students in traditional ways. Back in Maine, Belinda Pendleton sits in her niece’s apartment on the island of North Haven, an hour’s ferry ride from the mainland, and talks about her soaring aspirations. Ms. Pendleton, 41 and divorced, was born here and has rarely strayed. “You get on this island — you can’t explain it — you want to stay,” she says. Years back, she graduated from the island’s only school, but always figured her determination to remain here precluded college. Then, two years ago, college came to her: North Haven became a link in the University of Maine’s network. After Ms. Pendleton earned a B in her first televised course — philosophy — her professor sent her a note, saying: “You’re going to make yourself known someday.”

It was all she needed. Next spring, Ms. Pendleton will earn a two-year associate degree without having ever stepped off her beloved, sea-swept island. Then she expects to press ahead for a teaching degree. North Haven has a hard time keeping teachers, she explains. “A lot of people can’t stand the isolation.”

Video Age 101

No one formally tabulates distance-education enrollment at the college level, but several authorities in the field estimate the number to be in the high six figures nationwide. Most large universities and community colleges now offer some credit for course work at a distance, though entire degrees are less common. Instruction may be produced in-house and broadcast “live” or pulled off a satellite or computer, or packaged as prerecorded video “telecourses,” such as those available through the Annenberg/Corporation for Public Broadcasting Project. Used at 2,000 U.S. colleges, Annenberg courses

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Distance learning

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are also offered for credit on cable and public television. (Please see July 1991 issue of the ACUTA News.)

At bottom, distance-learning embodies a populist vision of higher education. Steve Ehrmann, program officer for interactive technology at Annenberg/CPR, describes the transformation:

"Colleges traditionally have been bounded by a wall with a narrow gate. You allow relatively few people in at high cost, keep them all in one place at one time, make them share finite resources and faculty, and when they leave, their education stops. But today's students can't participate in education organized that way."

That's because adult part-time students now account for nearly half of all college enrollments, and are expected to total 60 percent by the end of the decade. This new majority, typically employed and in need of retraining, can't move to a dorm for four years. Distance education allows them to sandwich classes in at work or at odd hours.

Correspondence courses—the most rudimentary form of distance education—have been around since the late 1800s. But today, learning from afar has become a multimedia experience. And while detractors insist distance education is still a poor substitute for face-to-face contact, "it's moving into the mainstream of how education is conducted in the U.S.," says Gary Miller, associate vice president for instructional development at the University of Maryland's University College, where last year over 5,000 students studied for credit at a distance.

The University of Maine's venture was designed to pull the state out of an educational morass. In 1985, Maine ranked last among the states in adult participation in higher education and 47th in the percentage of high-school graduates who continue their schooling. Two-thirds of the population also lived beyond a reasonable commuting distance from any of the seven university campuses. So the university decided to go where the students were.

**Expanded Reach**

The Augusta campus was selected as the hub for a new, adult-education institution, dubbed the Community College of Maine. In the fall of 1989, the Community College began offering courses over the fiber-optic and microwave network that transmits video, audio and data to all campuses and 77 remote sites, mostly public schools. This fall, 3,912 students are registered for about 35 Interactive TV, or "ITV," courses; about half of the students are pursuing two-year general-studies degrees. The school soon expects to offer a bachelor's degree.

In the space of three years, 85 percent of the state's population has been brought within a 15-minute drive of a remote "campus."

"Maine literally created a whole new infrastructure for education without investing in a single new building," says Linda Roberts, senior associate at the Congressional Office of Technology Assessment in Washington. In fact, the $7.3 million in state and federal funds needed to build the system is about what it cost the university to build a new dormitory at its Orono campus.

There have been growing pains. Transmission glitches remain a frustration. The workload for the faculty, drawn from the university system, has at times been overwhelming. Not only are ITV classes larger, but the new media demand new teaching techniques. As compensation, those who volunteer for ITV get double pay for each remote course they teach.

**Inner Sanctum**

Some instructors worried that their jobs would become redundant once their lectures had been videotaped. (In fact, staffing has increased as enrollment rose.) Others hated the notion that administrators could eavesdrop electronically.

"Classrooms have always been private places for instructors," says Robert Woodbury, the university's chancellor. "So it can be unsettling when you haven't the faintest idea who's watching you teach."

Quality concerns also arose, even though ITV students receive the same lectures, homework and tests as those on campus. The loss of face-to-face interaction with students troubles faculty most. Barry Farber, an accounting professor, says calls from remote points sometimes stack up, causing delays in responding to questions. While he believes the system has a lot of potential, he adds: "I'm not sure we've reached a satisfactory level of interactivity yet."

The doubts have eased somewhat, as studies have shown that ITV students as a group consistently perform as well as on-campus students on tests. High motivation and small class size in the remote sites are cited as possible reasons. "It's the ultimate small-college experience," says Kevin Drumm, director of Off-campus Education at Augusta.

Technology itself also seems to play a part. Students can review taped lectures if they miss a class. Computer conferencing, available for the first time this fall, should encourage cooperative learning and sharpen writing skills. Pamela MacBrayne, executive director of the distance education program, says an array of technologies helps reach students with a variety of learning styles, not just the "auditory" learners who flourish in the traditional lecture classroom.

**Hello? Who's There?**

Teachers, meanwhile, are laboring to overcome the impersonality of ITV. Some ask students to send in photos so they can attach faces to distant voices. Mr. Klivans corresponds with students via fax, telephone and postcard. He also keeps the class posted on his own life; one running gag involves his wife's exploits with their new inflatable boat.

Mr. Klivans says the challenge of working with ITV has given him reason to stay in teaching. Adds Ms. MacBrayne: "ITV tends to attract the better faculty, the risk-takers who are willing to work harder to adapt and restructure."

The university at large is changing to accommodate its distant students. The 1.5 million volumes in its seven-campus library system have been listed in a single data base accessible from each remote site—or from students' homes with

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ACUTA ideas

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distance learning capabilities, Turner is developing a way for Westmont to expand without giving up its priceless, but hemmed-in location on the Pacific shore.

Needless to say, in the eyes of Westmont’s administration, Turner and his department have grown in stature.

“Attending the Hawaii seminar changed my career,” Turner exclaims. “Not only have I saved the college a lot of money on a continuing basis and established profitable relationships with two vendors, I gained an entirely different view of what I was doing for the college and what I needed to be doing.”

Also in Hawaii, Turner concluded an answer supervision arrangement with his long-distance vendor – MCI. “I was able to accomplish a lot by dealing with MCI’s national university service representatives.”

Before instituting answer supervision, Westmont was losing an average of 12 percent of its revenue from long-distance resale to students. Previously, the college’s “billing meter” on long-distance calls did not start “ticking” until after the line had been open for 30 to 45 seconds, or for however long the timing device was set.

The result for the bottom line, however, was a double whammy. Not only was 12 percent of billing revenue being lost, the college still had to pay the carrier for that “unbilled” time, bringing the actual loss to 24 percent.

Answer supervision also helps keep customers happy, Turner notes, because it prevents inadvertent charges for unanswered calls from showing up on billing statements. To avoid such charges on international calls, for example, an interval of up to 55 seconds between the dialing of the last digit and the beginning of billing time may be necessary. Located on the Pacific rim, Westmont has a relatively high number of international students. “You stand to lose the biggest margin on the most expensive calls,” he remarks.

Before joining Westmont as its Telecom Coordinator, Turner worked for a long distance resale vendor. “From that experience I learned to be always on the lookout for better rates and ways to improve my network connections,” he explains.

Despite the profitable agreement obtained with MCI, Turner says he was actually “a bit frightened when I left Hawaii. Not only was I on information overload, but I saw that I had a big jump to make – from being almost exclusively a telecom network person to being a data communications person as well.

I accomplished a lot dealing with vendors’ national higher education representatives.

“After hearing Jerry McDowell’s presentation in Honolulu, I suddenly realized that I was not prepared for the direction the world was going and the direction in which I needed to be going to keep my college competitive.

“Looking through my notes after the seminar and reviewing all that I needed to learn and accomplish, many of the topics were really foreign to me. But now I find that most of them have become an integral part of the work that I do each day and are central to the projects we have in the planning pipeline,” he says enthusiastically.

“For example, before going to Hawaii I hadn’t the slightest clue that a fiber backbone would be crucial to Westmont’s future,” Turner explains. Located in an exclusive residential community, Westmont can’t expand its campus beyond its present 1,200 student capacity. That forces the school to charge a tuition higher than most other private, Christian colleges, limiting its competitiveness. If enrollment is down, as it is this year, the college budget is really squeezed. A distance learning program, however, would allow Westmont to offer expanded learning opportunities without giving up its priceless location.

“Jerry McDowell clarified the need for a fiber backbone to support distance learning. That was a revolutionary thought to me,” says Turner. “In addition, I could see how a fiber backbone would help improve academic computing, support present and future automated library services and enhance our student resell program.”

Interaction with another vendor in Hawaii has helped enable Turner to become a fiber-qualified technician so he can do his own fiber installation, at a substantial savings to the college.

Anixter Brothers’ Dave Stanley referred Turner to the firm’s west coast fiber expert, Geno Acosta, who introduced him to a new 3M Company product that simplifies fiber termination and splicing. For only $800, Westmont purchased 3M’s “hot melt” fiber termination and splicing kit from Anixter. Acosta also provided hands-on instruction and referred Turner to an AT&T workshop that proved helpful.

Before the hot-melt method was available, epoxy resins had to be mixed and applied to bond fiber. Then an instrument that cost several thousand dollars was necessary to test the terminations. With the hot melt kit, a linking device that contains the bonding resins is heated in a small oven. Then the polished ends of fiber cable are inserted into the connector. The resins bond to the cable as they cool. The edges still need to be polished a bit, and a “cleaver” that costs $200 is also required, but “that is basically all there is to it,” says Turner. If, on occasion, the expensive testing device is needed, Anixter has agreed to lend one for Turner’s use.

So far this year, Turner has been plotting the layout for the

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ACUTA ideas

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backbone, estimating the amount of fiber to be installed and projecting the changes that will be required in his switch room. The first stretch of fiber that Turner will install will be a link between the business department’s AS/400 and academic computing’s RS 6000, both IBM machines.

The interaction that ACUTA facilitates between college telecom professionals and vendors who specialize in the higher education market is a catalyst that can lead to some highly profitable exchanges, says Turner. "You learn about tools that are available and programs that can be developed which previously you knew nothing about."

At the Annual Conference in St. Louis, Turner was able to share some of his new-found knowledge with a colleague from another school. "Her carrier was Sprint, but she did not know that Sprint could also provide operator services. The consolidation of long distance and operator services simplified her operation and saved her college some money," he related.

While in St. Louis, Turner was also able to expand upon his relationship with MCI and make it even more profitable.

MCI’s Vnet is a virtual private network which allows customers to create their own network within the MCI network using switched or dedicated access, or a combination of both. Special pricing and term discounts are available to institutions.

"With Vnet, we’ve cut our long distance bill by nearly a third," Turner notes with pride.

We cut our long distance bill by nearly a third. Each call now averages six cents a minute.

These changes have allowed Westmont to drop an extra long distance carrier as well as eliminate a T1 line and one of the trunk groups that were subscribed to by the contractor who installed the college’s switch just prior to Turner’s arrival on campus. "All that is saving us about $24,000 annually," he adds. "We also have been able to reduce our least-cost routing from 14 levels to three and speed up the phone system switch. Call screening from GTE is also saving money for the college. Overall, the reduced costs may exceed $100,000. In addition, people on campus think of us as a real phone company now," he says.

Turner had devised a five-year plan for Westmont’s telecom operation before he attended the Hawaii seminar and St. Louis conference. "With technology changing so rapidly, I can see that three years is about as far as you can look ahead," he says. His strategic plan now covers two years and the content is radically different from his old plan.

- Instead of upgrading campus cable facilities, the college is preparing for a fiber backbone.
- The telecom department now plans to manage as well as provide the networking facilities for all data, video and voice services on campus. "Previously, I hadn’t thought of myself as knowledgeable enough to manage LANs for data communications," he notes.

"Now, nine months after Hawaii, my thinking and the direction in which I am planning to take this department has changed dramatically.

"It’s exhilarating to know that we’re playing a pivotal role in the direction the college will take in the next 10 to 15 years, even helping to determine whether the college will prosper into the next century."

Distance learning

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a modem. Users can check a book out electronically and receive it by mail in a few days.

Using a two-year, $300,000 Annenberg grant, course work is being redesigned as well. For the biology lab he will teach next year, associate professor Don Nabers plans to give ITV students fetal pig specimens that they can dissect at home while watching a video demonstration.

ITV registration is up 12 percent this fall from a year ago, and the majority of the students are repeat customers like Melody Lee York. Until recently, Ms. York, a 34-year-old mother of two, was like many rural women in Maine who are bypassed by the educational system. Married at 14, she says her former husband "swept me off my feet and out of school." Though she never attended high school, she passed the equivalency exam for her diploma without taking a single course. She next earned a two-year associate degree in photography at the Community College’s Thomaston center near her home. She’s now working on her B.A., and is aiming for a master’s degree in photojournalism.

"I can’t believe the doors that have opened," she says. Between classes, Ms. York works as a counselor at the Thomaston center and runs her own commercial photography business – all while juggling Girl Scouts and 4-H on the side. As the first in her family to attend college, her example has inspired several relatives to return to school as well.

The ITV system has a wide array of users outside the university. It is beaming calculus and Russian to small high schools that couldn’t otherwise offer those subjects. And its teleconferencing potential is knitting together Maine’s dispersed population. Statewide legislative hearings, law school reunions and corporate conferences were among the 40-plus hours of ITV meetings held last year, along with scores of training seminars for workers who need periodic recertification.

"We can reach 2,000 day-care workers simultaneously with one hour of training a week," says George Connick, president of the University of Maine at Augusta. "We don’t have to move people anymore – we just move signals. These are the superhighways of the 21st century."

(Reprinted with permission from The Wall Street Journal.)
Phone/video technology gets first regulatory nod

The Federal Communications Commission in October said it will encourage telephone companies to introduce new video technology. The result, according to The Wall Street Journal, could be the shattering of the monopolies held by local cable television companies.

The technology envisioned by the FCC, called video dial tone, would use telephone wires, preferably optical-fiber, to carry video programming and other information services, the newspaper explained.

Under one scenario sketched by FCC officials, consumers would turn on their television sets to find a menu of services, including TV shows, movies, sports and news, that are carried over phone lines. The programming would probably include many shows already carried by cable or broadcast over the air. One of the choices on that menu would be a package of programs and services offered by the local phone company itself. Consumers then would use a remote control to select the services they want.

The agency voted 4-0 to begin an inquiry to decide how best to regulate telephone video service, something which FCC Chairman Alfred Sikes has long favored, and asked for industry comment. The technology would be “an easy-to-use, telephone-based way for consumers to see multiple, competing video services,” said Robert Pepper, chief of the FCC’s office of plans and policy.

The implications of the technology cut across several industries, the Journal pointed out. Telephone companies, for the first time, could become effective competitors to local cable-TV companies. And the phone companies and other communications companies would be encouraged to develop fiber-optic or other transmission technology capable of carrying multiple programming. The FCC said it hopes to put out rules in about a year.

Telephone companies are now barred by law from providing cable-TV programming. But the FCC has ruled that the ban doesn’t apply to long distance phone companies. The commission also is proposing to reinterpret its cable-TV rules to allow local phone companies to offer video programming owned by other companies and exempt the phone companies and video programmers from having to pay cable-franchise fees, the newspaper added. Additionally, the FCC is expected to recommend that Congress drop its ban against telephone companies’ directly owning and providing video services.

“You’d have an alternate, competitive way to get cable-TV programming,” said Richard Firestone, Chief of the FCC’s Common-Carrier Bureau.

“Unlike many new technologies, where regulation lags behind technology,” the Journal report said, “the FCC clearly is ahead of the phone companies’ political and business agendas.”

Along with trying to promote telephone video services, the Journal also reported, the FCC, by a 5-0 vote, also approved a proposal to support so-called personal communications services, which use experimental hand-held phones for mobile communications.

The agency said it would provide transmission channels for these services next year. The FCC has awarded about 45 experimental licenses to companies that are running trials of the technology, according to the Journal report.

Small colleges in Minnesota pool their purchasing power

After years of purchasing telecommunications services individually, several small, independent Minnesota colleges have consolidated their efforts, and all are benefiting.

After an initial meeting in the summer of 1990, St. Olaf, Carleton and Gustavus Adolphus colleges agreed that they should invite surrounding colleges to participate in future discussion of common interests. The goal initially was to establish a users group in which Minnesota colleges could discuss concerns particular to higher education.

Considering the time and energy necessary to run a telecommunications department efficiently, the smaller colleges believed that they could benefit from pooling their resources.

Within 30 days of that first discussion, more than 10 colleges sent representatives to a meeting at Carleton College that resulted in the founding of CUTMUG (College and University Telecom Managers User Group). That session, like most subsequent CUTMUG meetings, focused on student resale opportunities, voice mail and the writing of proposals for switches. All the programs are presented and hosted by member colleges.

One year later, more than 20 colleges are attending meetings held once each quarter. Although designed primarily for smaller, independent colleges, anyone is welcome to join.

CUTMUG’s first successful venture has been a long distance resale program tailored to the specific needs of several small colleges in one package. Since St. Olaf, Carleton and Gustavus Adolphus all three subscribed to U.S. Sprint service, it seemed only logical that they could reduce their rates by pooling their usage. With advice and encouragement from Sprint, the three started a long distance calling program during the summer of 1990. By the following summer, 12 colleges were participating. Sprint views the consortium as one large customer with each participant, regardless of size, enjoying the same, low rate.

A group plan for operator services has also been devised. If you are interested in learning more about CUTMUG, its long distance program and how it can benefit your institution, contact Craig Dunton, Director of Telecom, St. Olaf College, (507) 663-3041, FAX (507) 663-3549.
**Why don't you write and let us know how you're doing?**

Share your experiences from this semester with your ACUTA colleagues in the ACUTA News. Every new school year has its surprises. How have you handled yours? A number of ACUTA members were implementing new services or new equipment this year. Let us know how they're doing. You don't have to write a dissertation. Just sit down and jot us a note. A proof will be sent or faxed back to you before publication. Write: Bill Robinson, ACUTA Publications Editor, Lexington Financial Center, Suite 2420, Lexington, KY 40507-1739, or send fax to (606) 252-5673.

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**High court says Bells can begin info services**

The U.S. Supreme Court cleared the way Oct. 30 for the regional Bell telephone companies to enter the news, computer data and information business, according to a Wall Street Journal report.

The justices denied a request by newspaper publishers and others in the information field to block temporarily a lower court opinion that the Bell companies have the right to expand their information-services businesses.

The publishers and their allies had asked the high court earlier in the month to issue a stay of Federal Judge Harold Greene's July 25 ruling that freed the Bell companies to enter information businesses from which they had been barred, the newspaper explained.

The regional Bell companies applauded the decision and said they're now free to begin offering information services. Bell Atlantic said it is developing services to aid the elderly and improve videotext, the Journal added.

Cathleen Black, President of the American Newspaper Publishers Association, called on Congress to pass legislation blocking the regional Bells from the information field and "strangling competition."

Judge Greene, who said he felt compelled by appellate court decisions to rule in favor of the Bell companies, had stayed his own order, pending appeal. But an intermediate Federal Appeals Court had lifted his stay, prompting the publishers to petition the Supreme Court.

The intermediate Appeals Court, in a 3-0 ruling, had dissolved the stay issued by Judge Greene, contending there wasn't "sufficient evidence of probability" that the Appeals Court will rule against the Bell companies when it renders its opinion on the merits of the publishers' appeal.

Judge Greene oversees the 1982 court decree that broke up the Bell system.

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**ACUTA Calendar**

- **Winter Seminar**
  - Tucson, AZ
  - Jan. 8-11, 1992
  - HOTEL: The Westin La Paloma
  - TOPIC: (separate, concurrent programs)
    - Managing Telecom Resources
    - Distance Learning/Teleconferencing: Technology and Applications

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

- **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

- **Fall Seminar**
  - Hilton Head, SC
  - Nov. 1-4, 1992
  - HOTEL: Hyatt Regency
  - TOPIC: Disaster Planning
North America is running out of area codes

The proliferation of fax machines, cellular phones and computer modems, as well as PBXs that assign separate numbers to each phone in its system, has nearly exhausted the supply of telephone numbers in some area codes.

The crunch is really on in area code 212, including Manhattan and the Bronx, as well as in area code 213, covering Los Angeles.

Even in relatively less populous states such as North Carolina and Alabama, long distance callers must dial an area code even for calls within their own area. This is the case in 23 area codes at present.

In the past when an area ran out of available numbers, it was split, based on geography. Today, however, there are only three unallocated area codes to spare in North America - 210, 810 and 910. And the telecommunications community must make do with those until July 1995, when a new numbering plan takes effect.

Under the present system, every three-digit area code must have a "0" or a "1" for its middle digit. This informs computer-driven phone switches that a long distance call is being placed.

Changing the system may be costly and frustrating, according to a New York Times News Service story, requiring some callers to dial 11 rather than 7 digits, even to call next door. Further confusion could result because toll calls may have to be dialed differently even within the same area code.

Bellcore’s interchangeable area code plan will add 640 area codes to the current supply of 152. These new codes would allow a potential of 900 million numbers, compared to the 250 million limit for those now in use. There are 792 available three-digit prefixes in each area code, each allowing up to 10,000 numbers.

The plan also will create overlapping area codes. In January rather than carve Manhattan into two areas each with its own code, New York Telephone will add a second area code, 917, to overlap Manhattan's existing 212 dialing code.

Initially, the 917 code will be assigned to new numbers for cellular phones, pagers and New York Telephone's internal operations. But officials say they might eventually assign numbers with the new area code to computer users as well as regular telephone customers.

Such a model, with one geographic region having a pool of two or more area codes would ultimately require callers to dial 11 digits for both local and long distance calls.

Only three area codes remain to be assigned.

For example, a Manhattan resident with a 212 area code may have a next door neighbor in the 917 area. A third neighbor could have yet another area code.

Bellcore officials prefer a standard nationwide 11-digit dialing sequence to avoid different dialing procedures in different parts of the country.

"People are going to get used to 10-digit numbers," according to Ron Conners, the Bellcore district administrator in charge of the North American numbering plan. "Psychological studies have shown that people don't care what they have to dial, as long as it's consistent."

Bellcore cannot enforce standards but can only recommend changes to individual state public utility commissions. And a number of alternatives to the Bellcore plan are being proposed. No serious consideration is being given, however, to the idea of combing some lightly used area codes to free up numbers for more congested areas.

Some industry people are backing an idea that would increase the local dialing sequence to eight digits, rather than seven. Several small telephone companies have suggested shifting to four-digit area codes.

"Like lambs to the slaughter, telephone users are being led on a course that will have far worse implications than what most of us see at the moment," says David C. Henney of Whidbey Telephone Company in Langley, Washington.

He is proposing four-digit area codes, which he calls a simpler alternative to the Bellcore plan. It would require fewer changes in telephone switching systems. And the numbers would be easier for customers to remember, he adds.

Bellcore officials say that their plan is the most efficient and inexpensive method of coping with the proliferation of telephone numbers and that their plan will last well into the next century.

They also say that the proposed alternatives would probably cause more confusion or would be more expensive because every telephone customer would have a new number. Such a system would force every business in the country to change stationery and business cards, among other adjustments.

Some telecommunications analysts also say the existing pool of phone numbers is poorly managed.

"Large blocks of numbers can be warehoused by corporations or organizations to provide for future growth," according to Eli Noam, a telecommunications expert at Columbia University. "As an economist, I think that is a wasteful practice."

Forcing North American phone customers to change their dialing habits is likely to make them the targets of some good-natured ribbing, Bellcore executives admit. But they do not expect anything like the anti-digit dialing movement that greeted the transition from traditionally named exchanges such as Plaza or Pennsylvania in many urban areas in the 1950s.
ground information on past issues and how they were handled, which has helped us, so far, avoid some pitfalls in our journey through the Washington maze.

Although this has aided in our efforts thus far, the progress that we have made to date must be attributed to the overall support of this initiative by our President, Paula Loendorf; the guidance of the Legislative and Regulatory Affairs Committee Chair, Randy Collett, and the knowledgeable and timely response of the committee members in evaluating strategy and filings, identifying informational needs and then generating survey information and analysis.

The effort and dedication of the committee members - Whitney Johnson, Northern Michigan Univ.; Harry Kyle, Oklahoma State Univ.; Ferrell Mallory, Brigham Young Univ.; Ruth Michalecki, Univ. of Nebraska; Tony Mordosky, Millersville Univ., and Bill Robinson, ACUTA staff - even if we are unsuccessful in the 10-XXX and aggregator appeals - are commendable and have represented ACUTA in an extremely professional manner.

Rest assured that, if nothing else, our association and the name ACUTA, is now well known in the business, legal and political arenas of Washington, DC.

Choosing from the 'Short List'
(See last month's column for beginning.)

Continuing from last month's column on seminar and conference planning, we had narrowed the cities to a "short list" and gathered pertinent information for a final selection.

The most important consideration for a city is that it have a hotel (preferably three or more) to meet ACUTA's tentative space and function specifications for that particular year, plus a little extra for unexpected growth in attendees. If a city has only one or two suitable facilities, they may not be very competitive in bidding for the conference.

Case in point: Recently a California city with one facility that meets our requirements had been our first choice. However, a lack of local hotel competition and an abundance of business would have resulted in ACUTA's costs, including attendee room rates, running as much as 40 percent higher than usual.

The second most important concern is the adaptability of the hotel space and flexibility of the hotel staff. During site inspection of the hotel, the Director of Sales is given a copy of ACUTA's requirements and an explanation of ACUTA's purpose, type of members, as well as ACUTA's prior hotels and future hotels. (The Director of Sales will verify our history through an Illinois organization that collects meeting information on all groups.)

At this point, the Director of Sales reviews the available dates for our conference or seminar. Frequently our first choice of a particular week (we normally have about a three-week window, except for January, but that's another story in itself) is not available. On occasion, even with planning as far as five years ahead, a hotel will not have any available dates during our three-week window.

A proposal by the hotel will follow in about two or three weeks. From this proposal and the information previously collected, a tentative priority of hotel facilities is established and initial negotiations begin. (We won't begin the next negotiations, however, until I have listened to all of Roger Dawson's tapes on "Power Negotiating.")

Info Services Off to a Fast Start

This is a good point to shift gears. You probably have already read the article on page nine. In August I predicted a major court battle over information services. I don't remember when an issue ever got to the Supreme Court so fast and acted on so quickly.

In Indianapolis every spring they say, "Gentlemen, start your engines." It seems that this year the court might be saying to the publishing giants, "Gentlemen, stop your presses."
Positions Available

Director, Telecommunications
Univ. of Illinois at Chicago

Responsibilities: Overall planning, implementations, operation of telecom network, identify resource requirements; direct campus-wide planning effort for voice/data networks.

Qualifications: Bachelor’s degree, 10 years’ exp. in mgt., planning functions related to voice/data communications.

Salary: Commensurate with experience and training.

To apply: Submit resume, salary history, brief letter summarizing achievements/potential to: James Harr, Telecom Manager, M/C 500, University of Illinois at Chicago, 1140 S. Paulina, Chicago, IL 60612.

ACUTA and its member institutions are equal opportunity employers.

ACUTA Welcomes New Members
The following joined ACUTA from Oct. 1 to Oct. 25.

Region 3 (Midwest)
Alfred B. Squire, Univ. of Cincinnati
Robert Einhorn, Lincoln Univ. (MO)

Region 5 (Canada)
John Sherwood, Dalhousie Univ. (NS)

Corporate Affiliates
COPPER
Pegasus Information Systems

Director of Communications
University of Cincinnati

Responsibilities: Plan, direct, coordinate admin., financial oper. of Communications Dept.; prepare long/short-term plans; manage voice, data, video networks; oversee mainframe oper., field oper., switch mgt., related hardware/software needs.

Qualifications: B.S. in computer science/related field or equivalent combo of education and exp.; 5 to 7 years exp. in managing tech and/or service unit; extensive knowledge of digital data trans.; considerable exp. in large project mgmt. Prefer exp. in integration of voice/data/video trans. in large organization, university.

Review of applications begins Nov. 1, continue until filed.

To Apply: Send cover letter, resume, three references to: Office of Professional Recruitment, Univ. of Cincinnati, 3333 Vine St., M/C 5066, Cincinnati, OH 45221.

Manager, Data Services
Mississippi State University

Responsibilities: Manage computer and personnel resources, develop/support accounting/managerial systems for telecom, selected other campus depts., coordinate campus debit card, access control and student ID systems, installs/supports end-user equipment (terminals, printers, modems, data collection devices, etc.)

Qualifications: B.S. in computer science, management info systems or related field, 5 years as programmer/systems. Prefer supervisory exp. in data processing, work exp. with IBM AS/400 or System 38, personal computer applications, LANs and telecom.

Salary: Competitive, commensurate with qualifications, experience.

Review of applications begins Dec. 6, continue until filed.

To Apply: Send cover letter, resume to Michael K. Lane, Dir. of Telecom., P.O. Box 6090, Mississippi State, MS 39762-6090.