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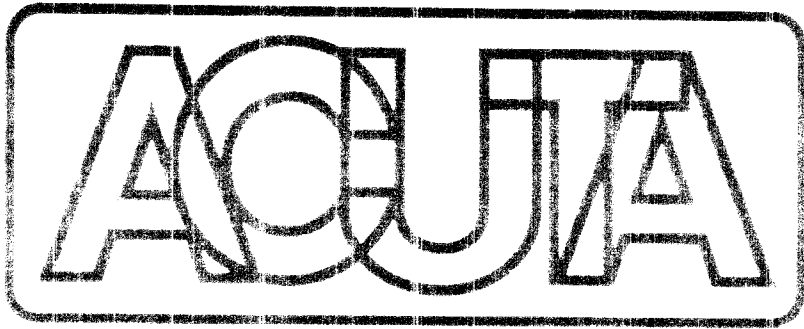
Universities are aggregators, FCC rules

Lisa Wata-nabe, Systems Analyst with the state of Hawaii, demonstrates how citizens, students or state employ-ees may access the information network that links the major islands that make up the state. (See story on page 5.)
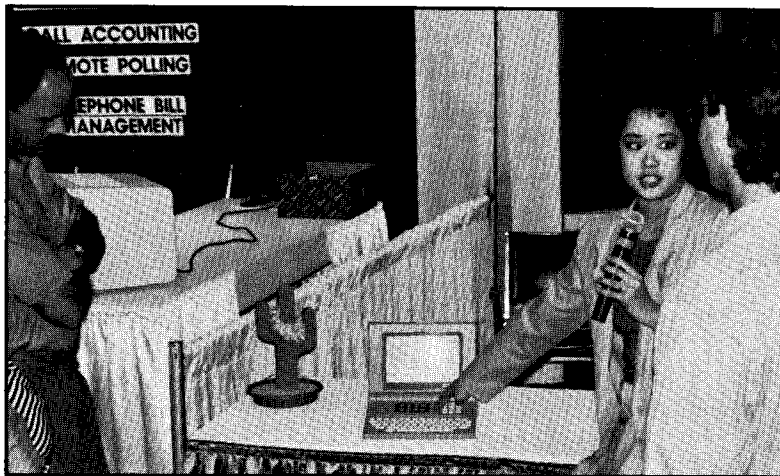
"Hospitals and universities are clearly within the scope of the definition 'aggregator'," the U.S. Federal Communications Commission said in a ruling released April 15.

Under the Operator Services ACT of 1990, universities which offer phone services may not block calls to "800" or "950" numbers.

The ruling takes effect May 24, thirty days after its publication in the Federal Register April 23.

Applications depend on network support

"Technology has truly changed the way the world does business," consultant Jerry McDowell reminded college telecom administrators at ACUTA's Spring Seminar April 5-9 in Honolulu.

"In 1975, 9600 bits per second transmission was *fast.* Today we talk in terms of *gigabits* per second, technology is turning over every two years."

Spring Seminar Report

Many new approaches to the unique problems of higher education are coming from telecommunications, but each brings extra challenges to the campus telecom network and its manager, he noted. Advanced applications of

Connecting 10 colleges and universities

N. Dakota linked by interactive video

By Paula Loendorf
ACUTA Exective Vice President
University of North Dakota

Dickinson State University is 340 miles from the University of North Dakota in Grand Forks, but an instructor at UND can see, hear and talk with students in a class at DSU. And those students at DSU can see, hear and talk with teachers at Grand Forks almost as easily as if they shared a classroom in Dickinson.

North Dakota, a rural state of approximately 700,000 students, recently linked its state college and university campuses with the first phase of a state-wide interactive video education and conferencing system. The Interactive Video Network (IVN) con-

nects the state's two larger universities – UND and North Dakota State – with eight smaller public colleges and universities as well as the state capitol.

Given the wide array of possibilities – full-motion video, compressed video, microwave, ITFS, satellite uplink or regular broadcast public television – selecting the appropriate technology was not easy.

Preliminary discussions with faculty, however, revealed that they preferred a network that allowed both students and teachers to see and hear each other. Compressed video technology with T-1 links, seemed best able to meet those expectations.

Fortunately, when decision
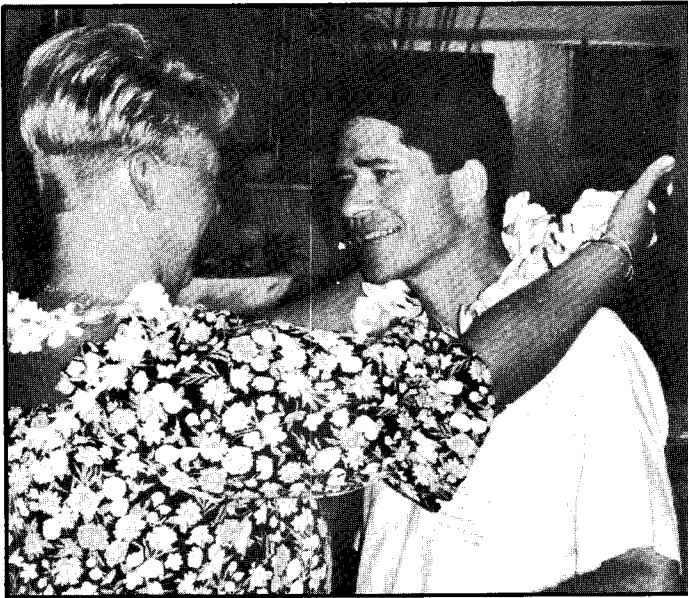
Dotty Orrick, wife of ACUTA President Bill Orrick, welcomes Kim Longdin-Prisk, the Association's only member from New Zealand, to the Spring Seminar in Honolulu by placing a lei around his neck at the opening reception. Kim is Secretary of the Telecom Committee at the University of Auckland. His six hour flight from New Zealand was shorter than some attendees' from eastern North America.

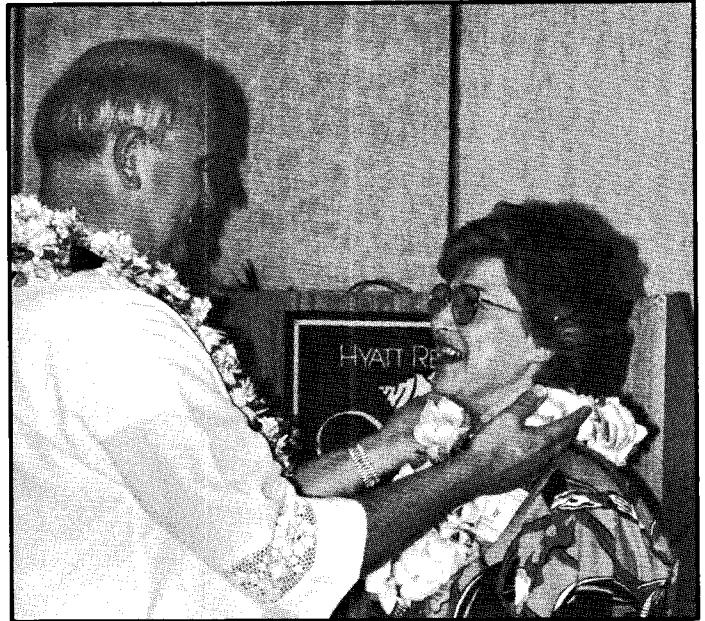*ACUTA President Bill Orrick presents a lei of flowers, the traditional symbol of Hawaiian welcome, to Beverly Blackwell, Manager of Telecommunications at the University of Missouri-Columbia. Each attendee received a lei from the President or his wife as they entered the seminar's opening reception.*

MCI to host golf outing at St. Louis conference

MCI will host ACUTA's second annual golf outing on Sunday Morning, July 7, at Quail Creek Country Club in St. Louis. The event will kickoff the Association's 20th Annual Conference.

Prizes will be awarded to winners in the four-person scramble event.

Transportation and lunch also will be provided by MCI. Shuttles will leave from the Adam's Mark Hotel at 8 a.m.

To register, please call Carol Bleisch at MCI in St. Louis at (800) 688-9439 by June 14. You must be registered for the ACUTA Conference with the ACUTA office in Lexington, Ky., prior to registering with MCI for the golf outing.

Greens fees and riding carts for college and university attendees will be paid for by MCI. Vendors will be responsible for their fees which will be $35.50.

Clubs and shoes are available to rent at your own cost. Please advise Carol when registering if you need to rent these, and she will make the reservations.

Due to limited availability, college and university attendees will have registration priority. Vendors who are ACUTA affiliates and fully registered to attend conference sessions will have priority over vendors who are registered for exhibiting privileges at the conference only.

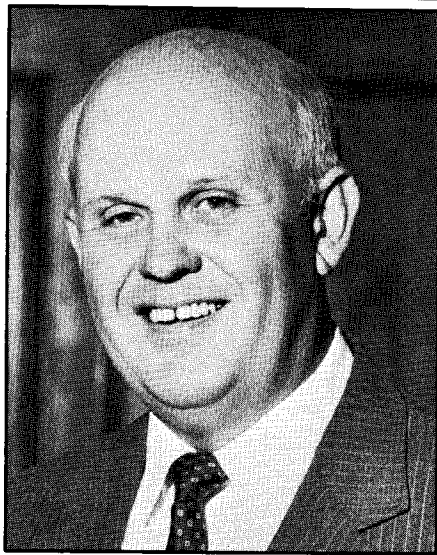MCI will mail golf registration confirmation letters by June 25, 1991. ♪

MESSAGE FROM THE PRESIDENT

F. William Orrick, Washington University in St. Louis

This spring and past winter I've been drawing on every scrap of knowledge I've gained from my experience with ACUTA. That's because we are in the midst of a total restructuring of our tele-communications system here at Washington University in St. Louis.

From preparing RFPs and evaluating responses to oversee-ing installations, I've "flashed back" to countless conversations with members and presentations by speakers as this enormous project has progressed.

Joe Massey of JTM Associates has orchestrated this project and I've learned an enormous amount from the process alone.

Remember to grab every oppor-tunity ACUTA offers and stuff every bit of knowledge into your head that you can. Believe me, the day will come when you will use all of it and wished you had grabbed for more.

The changes here include the installation of Southwestern Bell's Custom Plexar central office switching equipment with a newly acquired DMS-100 from Northern Telecom. This new hardware plus supplemental cable, along with a new TMIS from TSI, will enable us to ex-pand from providing service primarily to administration and faculty to offering a wide range of services to the student popula-tion.

Not only will our students have convenient basic services, they will have discount long distance, voice mail and other voice proc-essing features at their disposal.

In the middle of the night between last Monday and Tues-day, we moved my office to a new location three miles away. We are no longer near the center of campus, but we haven't been shoved aside. The telecommuni-cations office is now in the uni-versity's central administration building. It will be interesting to see how well we can serve our students from this distance.

All contracts were awarded on competitive bids, but I was pleased to find that every suc-cessful bidder was an ACUTA affiliate.

Cutover for the new system is set for Aug. 3. Until then and far beyond, you can bet I'll still be going back to that storehouse of knowledge I filled courtesy of ACUTA over the years.

I have a new phone number and address as a result of the changes. To reach me by phone, dial (314) 889-4599. My fax number remains the same, (314) 726-8595. The new address is Campus Mail Box 1217, Wash-ington University in St. Louis, St. Louis, MO 63130.

I could not escape the turmoil on campus even while attending ACUTA's Spring Seminar in Honolulu. We kept the cables and satellites busy calling back and forth from the mid-Pacific to mid-America.

Attention to duties back home still did not distract me from the Spring Seminar program or the tropical ambience of Hawaii. A program and speaker have to be very good to compete with the attractions of Waikiki Beach. But, Jerry McDowell was up to the challenge. His comprehensive overview of the demands that future applications in higher education will make on telecom-munications managers and infrastructure broadened every-one's horizons.

Speaking of horizons, words are hardly adequate to describe the beauty of sunsets and moonrises over the South Pacific which we enjoyed in our all too brief time in Hawaii.

The telecommunications switch at Washington U. is not the only new item to arrive in St. Louis this spring. Just last week, the Belle of St. Louis, the newest river boat on the Mississippi, arrived here at its home port. This giant, graceful vessel has all the charm of 19th century design yet all the safety and conven-iences of 20th century construc-tion and technology. Having around 1,000 people from ACUTA's 20th Annual Conference on board for a dinner cruise and Dixie Land entertainment on Monday night, July 8, should be an experience we all will long remember.

The conference is shaping up well. In accordance with your interests, we have added empha-sis on regulatory issues as well as some dynamic speakers who can help us all with personal development and interpersonal communications. Dotty and I look forward to hosting you all in St. Louis. ♪
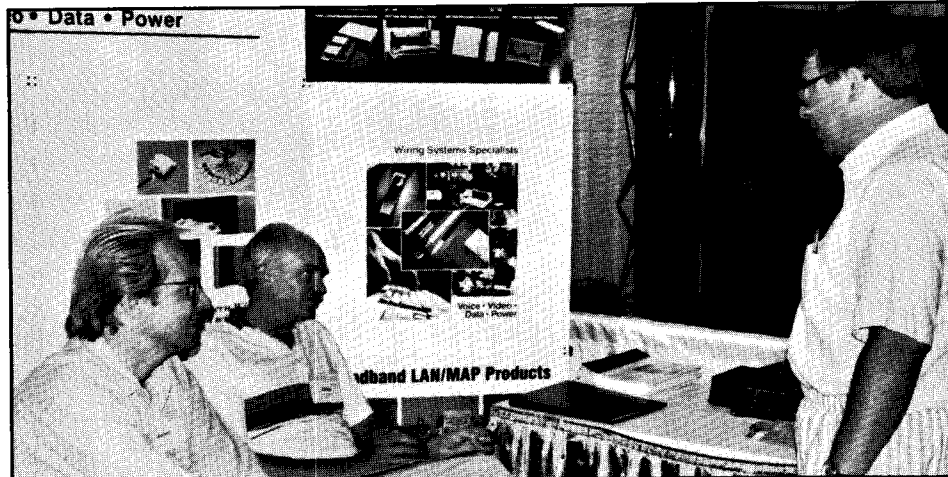
Robert Aylward, Manager of Telecom at the University of Wyoming, and John Kingland, Director of Telecom at Iowa State University, listen as John Pryma, Vice President of New Technology for Anixter Bros. explains some recently-released fiber-to-the-desktop connectivity. The technology was exhibited for the first time at an ACUTA event during the Spring Seminar in Honolulu.

Seminar report

(Continued from page 1)
telecommunications in the higher education environment can work only as well as the network which supports them.

"You as the telecommunications administrator must get involved with the planning process on your campus," McDowell admonished. If your administration does not have you involved, take the initiative and point out to campus leaders what can happen if the basics of wire, cable and switching get left out of an otherwise elegant plan for applying new technology to teaching and research.

Cable distribution, for example, is one of the most important issues in campus communications, McDowell pointed out. "But as important as it is, distribution of cable often fails to get proper attention from campus planners. The campus telecom administrator can document – up front – what can happen if someone knowledgeable in telecommunications is not included in the decision making."

Get people from all branches of the institution – administration, faculty and students – involved in your telecommunications planning, he urged. "We must change the way people look at us."

One way in which the telecom administrator can help is to point out how many things can be done with existing technology, the consultant from California continued.

"A variety of media – from broadband coax to multi-mode fiber – can suffice for many applications. Broadband coax – with its many capabilities – probably allows the greatest use for the investment," he pointed out. "Expanded bandwidth has allowed separation of voice and data without the need for an integrated carrier. And cost of bandwidth is falling."

Since telecommunications technology can increase the efficiency of campus operations, be ready to show how your great idea can help pay for itself, he added.

Bringing computing power to every desktop on the campus should be the goal of every telecom manager in higher education, McDowell advised. Desktop users should be able to access multiple applications, including printing, on-line. Dial-in access for information, including assignments and grades, can be a great help to students and teachers without rebuilding the campus infra-structure.

"Having a technology or an application available doesn't mean people want it or will use it. Involve your client base in the selection of equipment features. Have a program for teaching users and provide prompt user assistance," he urged.

"People have an implicit trust in the telephone, but they fear a computer. Become an educator. Learn how to teach the workings of technology so that it doesn't intimidate or threaten potential users. One-on-one training sessions are most effective. Don't expect your subjects to know

ACUTA Calendar

• 20th Annual Conference •
St. Louis, MO
July 7-11, 1991

HOTEL: The Adam's Mark

TOPIC: Management, Regulatory Issues, Professional Growth, Voice, Data and Video

• Fall Seminar •
Denver, CO
Sept. 15-18, 1991

HOTEL: Hyatt Denver

TOPIC: Student Services

• Winter Seminar •
Tucson, AZ
Jan. 9-11, 1992

HOTEL: The Westin La Paloma

TOPIC: To be announced

• Spring Seminar •
Lexington, KY
April 26-29, 1992

HOTEL: Radisson Plaza

TOPIC: To be announced

Observing as Lisa Watanabe demonstrates the HAWAIIAN information network (from left) are Ronnie Moss of Ricks College, Riny Ledgerwood of San Diego State, Christine Mulvey of Marist College and Steven Turner of Westmont College.

Telecommunications pull islands together, propel state into future

Although they were settled many ages ago, the islands of Hawaii were never united politically until King Kamehameha the Great obtained cannons from the British navy and compelled unity in the early 19th century.

Ties between the community of islands remain strong, but today the government relies on telecommunications rather than artillery to forge inter-island bonds.

The six major islands are bound together by a voice and data backbone known as the **HA**waii **W**ide **A**rea Integrated Information **A**ccess **N**etwork, or HAWAIIAN.

This public information network facilitates the flow of information between government agencies and citizens scattered along the island chain, Dr. Norman Okamura explained to attendees of ACUTA's spring seminar in Honolulu. The network enables state government to work more efficiently and provide enhanced service to the public.

HAWAIIAN also is envisioned as the first stage of a long-range strategy to develop the state as a center of the information industry, he added.

Hawaii's state universities and public school system are key players in the network, Okamura pointed out. The university develops databases for use by both the public and private sectors. These are marketed to users on the U.S. mainland as well as other Pacific rim countries. The public school system, as well as colleges and universities, have the advantage of using the network for learning and research applications.

One of the leading purposes and initial applications of HAWAIIAN was to provide toll-free, or Fair Access, telephone service from neighbor islands to state offices. Citizens also may get on-line reports from the state legislature by logging-in to the network's ACCESS application. There are audio-tex and video-tex gateways for on-line database access.

Video conference centers on each island linked by Hawaiian serve a variety of public and state government functions.

State government has established Hawaii INC to encourage and help develop the islands' information industry. Situated near the center of the Pacific, Hawaii's geography makes it potentially the focal point for information transfer in a hemisphere of accelerating vitality.

Inter-island communications are relayed via a series of digital microwave transmitters. Twenty eight T-1 circuits that carry 1.544 Mbs connect Oahu (home of the state capital) with the islands of Maui, Kauai, Lania, Molokai and Hawaii (the "big" island). Intra-island transmission is carried over a fiber optic backbone that connects locations on each island with state office buildings.

The muti-vendor system includes equipment from:

Harris-Farinon (digital microwave), Fujitsu America (fiber optics, network control center), Unisys (packet-switching, videotex services), Doelz (remote line concentration), GTE Hawaiian Tel (voice switching), Midwest Communications (general contractor), Compression Labs (video codec) and Shure Inc. (microphones). ♪

Dakota IVN

time came, we had the benefit of knowledge obtained through ACUTA. The association's "network" provided both formal and informal opportunities to discuss the various options.

From years of being active in ACUTA and networking with other members, I was able to rely on the experiences of others who had set up video networks. This proved invaluable in establishing IVN for North Dakota.

The project began when University of North Dakota President Thomas Clifford asked me to explore bringing video technology to the university. Initially, the Telecommunications Department at UND, which I direct, funded a study to evaluate the need for a state-wide video communications systems and consider what options would suit higher education in the state.


When decision time came, we had the benefit of knowledge obtained through ACUTA.

It was soon apparent that other units of state government could benefit from a video network. The public television network as well as local telephone companies and cooperatives also saw the advantages such a system could offer. And vendors naturally were interested in supplying the state with the best technology available.

These interested parties each began taking their case to the state legislature. I was among those invited to testify before legislative committees which conducted hearings on the proposals. After thorough debate, the legislature voted funds for the higher education system to join secondary and elementary schools in implementing a network.

Prior to the appropriation of these funds, the U.S. Dept. of Agriculture had funded the Rural

North Dakota Interactive Video Network (IVN)
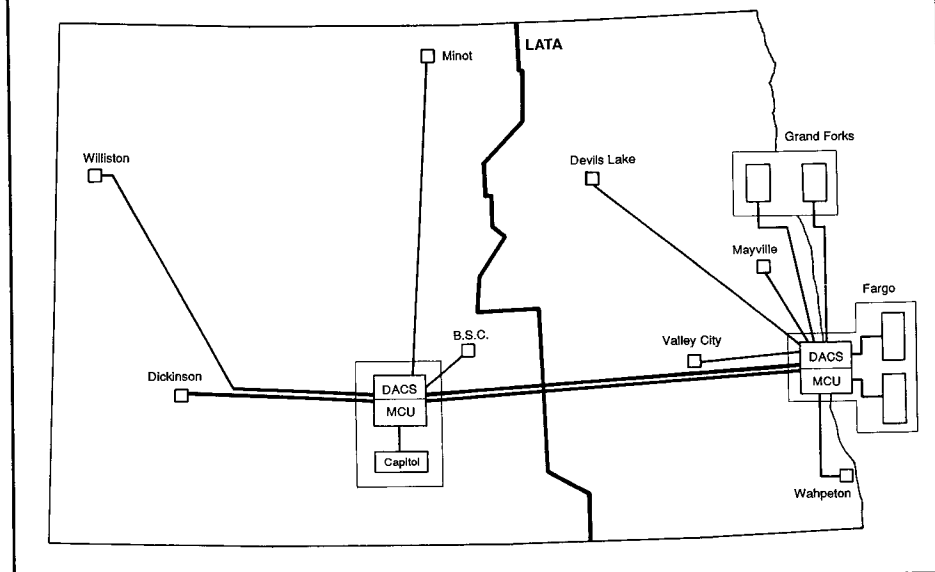
Health Project, a cooperative venture with UND and North Dakota State University to offer nursing, social work and medical technology degrees in selected North Dakota communities via telecommunications.

The project, established in large part through the efforts of North Dakota Sen. Quentin Burdick, enabled students to take courses without having to leave their homes for an extended residence on campus. This new supply of health care professionals has been helping to ease the shortage of qualified medical personnel in many rural communities.

To whet their appetites by showing potential users what could be done with existing technology, US West set up a four-month demonstration of full-motion (DS-3) video using fiber optic cable. This demonstration, which took place prior to action by the legislature, undoubtedly had a positive influence on the funding process.

The demonstration connected four eastern North Dakota cities – Grand Forks (University of North Dakota), Fargo (North Dakota State), Jamestown (North Dakota State Hospital) and Carrington (the Extension Service Experiment Station). US West provided the codecs and the use of their transmission lines at no

charge. Classroom equipment came from the Rural Health Project.

The demonstration sparked enough interest for 120 classes and meetings to be held during the four months.

While public interest was clearly demonstrated, the costs of DS-3 technology – because of the bandwidth required – was simply not feasible. From Coley Burton, ACUTA Vice President, I learned about the advantages of compressed video, which the University of Missouri had implemented for its network.

The demonstration sparked enough interest for 120 classes and meetings.

The Rural Health Project technical committee invited Coley to serve as a consultant and discuss how North Dakota might use such a system. Coley spent a day with the committee outlining a plan and estimating costs of a state-wide compressed video (T-1) network for North Dakota. The costs proved to be considerably lower than those estimated for DS-3 or full-motion video.

While transmission equipment (codecs) for DS-3 cost only 20 percent of that required for T-1,

Where do good phone books go when they die?

When their new telephone directories arrived this winter, many environmentally conscious citizens across North America were dismayed to learn that paper recyclers were not interested in their old phone books.

One ACUTA member institution, however, has found a taker for its old phone books, while another is exploring alternatives for phone book disposal.

The University of Guelph, in the province of Ontario, recently got some notice – from *Ripley's Believe It or Not!* – for its recycling program.

Guelph is testing shreaded phone books for use as bedding in the stalls of cattle, sheep, pigs and chicken in place of straw and wood shavings, traditional livestock bedding materials.

The project is one of four funded by Bell of Canada at Canadian universities. The company hopes to find an environmentally sound use for discarded directories. In Quebec and Ontario alone, 42,000 tons of phone books go into landfills every year.

Recent tests have yielded favorable results, says Prof. Jock Buchanan-Smith, Dept. of Animal and Poultry Science at Guelph. Key factors in the tests are water absorption, ammonia levels (when incubated with manure) and biodegradability.

Disposal of newsprint inks runs the risks of heavy metal contamination, but no data so far have indicated any danger. The tests also are measuring how much paper livestock might ingest and comparing the costs of phone books versus straw or wood shavings.

I'VE GOT THIS SUDDEN URGE TO PHONE HOME!'

GUELPH

San Diego State University, which had been unable to find a phone book recycler in the past because of the glue used in the bindings, this year found a taker. Some digging by Beda Johnson, an employee in the university's Media Technology Service, turned up with San Diego Fibre, a firm which accepts phone books, newspapers, magazines, brochures, colored and white paper, junk mail and even NCR forms!

The company converts the waste into roofing paper.

A temporary employee was hired to deliver the new books and pick up the old ones for recycling. Distribution of the directories took longer, because each delivery had to be followed by a trip to the recycling bin. Campus support was excellent, reports Riny Ledgerwood, Manager of Telecom Services at SDSU. Memos were sent encouraging those who still had old phone books to discard them in the recycling bin. Customer response was quite favorable and many people brought other acceptable items for recycling.

With more than 10,000 phone books – 6,000 Pac Bell and 4,100 campus directories – and other waste paper collected, the 10-foot-tall trash bin was filled to overflowing. Campus custodians, who formerly collected the bulky phone books, had their collective load lightened by seven tons.

Outside of locating a recycler, two of the project's most difficult challenges were getting the 10-foot-tall trash bin delivered to campus and persuading the university to allocate space for it in a parking lot from March 16 to April 12.

Does SDSU plan to do this again next year? "Definitely," exclaims Ledgerwood. ♪

Bede Johnson, Bobbie Laird and Riny Ledgerwood of San Diego State University give the heave-ho to old phone books being collected on their campus for recycling.

PARTY LINE

Ruth Michalecki
Director of Telecommunications
University of Nebraska

Recently I celebrated another birthday. My five year-old granddaughter (the apple of my eye) was overheard telling one of her little friends: "My Grandma still has birthdays, but she stays the same age." That's a nice trick I've managed to accomplish some way, and I don't intend to change!

On the week of my birthday, the local newspaper happened to reprint the following article. The author is unknown, but since it fits a few of us in ACUTA, I thought you might get as big a kick out of it as I did.

Born Before 1945!

We are survivors! Consider the changes we have witnessed.

We were born before television, before penicillin, before polio shots, frozen foods, Xerox, plastic contact lenses, Frisbees and The Pill.

We were before radar, credit cards, split atoms, laser beams and ballpoint pins; before panty hose, dishwashers, clothes dryers, electric blankets, air conditioners, drip-dry clothes – and before man walked on the moon.

We got married first and then lived together – how quaint can you be?

In our time, closets were for clothes, not for "coming out of." Bunnies were small rabbits and rabbits were not Volkswagens. Designer jeans were scheming girls named Jean or Jeanne, and having a meaningful relationship meant getting along with your cousins.

We thought fast food was what you ate during Lent and outer space was the back of the Riviera Theater. We were before house-husbands, gay rights, computer dating, dual careers and commuter marriages. We were before day-care centers, group therapy and nursing homes. We never heard of FM radio, tape decks or compact disks; yogurt, word processors or even electric typewriters, and never ever saw guys wearing earrings.

For us, time sharing meant togetherness – not computers or condominiums; a "chip" meant a piece of wood, hardware meant hardware, and software wasn't even a word!

In 1940, "Made in Japan" meant junk, and "making out" referred to how well you did on your exam. Pizzas, MacDonalds and instant coffee were unheard of. We hit the scene when there were 5 and 10 cent stores – where you bought things for a nickel or a dime. For one nickel you could ride the streetcar, make a phone call, buy a Pepsi or enough stamps to mail one letter and two post cards. You could buy a new Chevy coupe for $600, but who could afford one – a pity since gas was 11 cents per gallon.

In our day, cigarette smoking was fashionable, GRASS was mowed, COKE was a soft drink and POT was something you cooked in. ROCK MUSIC was a grandma's lullaby, and AIDS were helpers in the principal's office.

We were certainly not before difference between the sexes was discovered, but were surely before sex change; we made do with what we had.

And we were the last generation that was so dumb as to think you needed to have a husband to have a baby!

No wonder we are so confused and there is such a generation gap . . . . but we survived . . . . what better reason to celebrate!

Hope you got as many laughs from it as I did. I intend to make certain my little granddaughter gets a copy of the article when she gets a lot older. Of course, she will have a whole world of her generation's "before" episodes.

Telecom in Tempe

I recently returned from Tempe, Arizona, where I visited the Arizona State University Telecommunications Department. Darel Exchbach is the Executive Director of Telecom at ASU, and between Darel and his staff, they do one terrific job. They have AT&T's Definity G-2 switch with about 12,000 stations. And they have just installed voice processing. They also provide student services and are responsible for voice/data/video communications (transmissions media, installation and maintenance). ASU is a beautiful campus, and it is growing, with several new buildings under construction on the main campus. Like many of us, Darel has a small staff, but they are dedicated, service-oriented professionals. Most important, they are very well thought of on campus.

Thanks ASU for your hospitality!

Check These Out

If you haven't already done so, contact your long distance provider and ask about commissions on "0- (zero minus/non-sent paid)" calls placed from your campus. It is well worth your time to look into this. At the same time, ask them about discounted international calling and about TSSA. If you are not taking advantage of these offerings, you don't know what you are missing.

Scanning Students

We are now almost one full school year into using scanning technology at the University of Nebraska-Lincoln to register students for long distance service.

The student fills in the appropriate letters and digits for their social security number and name, housing colors the boxes indicating residence hall and room number; this data is merged with the student registration file and with our telemanage-

Inter activevideo reduces wide-open spaces of N. Dakota

total transmission costs for T-1 still came to only 25 percent of total costs for DS-3. Because transmission costs were on-going and equipment purchases were a one-time expense, our limited funding made compressed video the obvious choice.

The meeting with Coley was followed by a major consulting study performed at the request of the state Educational Telecommunications Council. This study also concluded that compressed video was the most feasible option. And it came up with ways in which elementary and secondary schools could eventually become part of the network.

The Classrooms

Each classroom on the IVN includes cameras and television monitors, as well as microphones and an audio system. A VCR, slide projector, visual presenter and fax machine are also standard equipment. A console at the front of the room is designed so the instructor can control the equipment or have a technician do so. Ease of use was a priority in design of the console. Semi-

nars are held regularly to teach effective video education techniques.

The Network

Through a competitive bidding process, Compression Labs Inc. (CLI) was selected as vendor for the codecs and multi-point control units (MCU). CLI Rembrant codecs capable of transmitting from 384 Kbps (1/4 T1) have been installed. After new CCITT standards are published, however, these codecs will be upgraded to the new Rembrant II/30 model which transmits from 56 Kpbs to 1.54 Mbps.

The multipoint control unit is a switch that allows several sites to participate in the same conference. There are three methods to select which site is seen through the system – voice, chair and lecture. The voice control switches the video signal to the site where someone is talking. During the initial months of operation, voice control has been the only switching method available.

Chair control allows the instructor to relinquish control of the video to another site on

command. Lecture control – a variation of chair control – allows the instructor to view any other class, without its knowledge, while everyone still sees the instructor.

Because North Dakota has two LATAs, the network was configured with two switching hubs – one in the western LATA at Bismarck and one in the eastern LATA at Fargo. The switches, or MCUs, may work independently or in tandem to make several combinations of connections possible. All 13 sites can participate in one activity or several multi-site sessions may occur simultaneously.

Initially, only two T-1 lines will cross the LATA connecting the Fargo and Bismarck MCUs. This limits the system to only two simultaneous video conferences that include sites in both the eastern and western halves of the state. However, several sites in both east and west may participate in the same conference.

Two digital access cross-connect switches (DACS) will be installed in 1991 as part of the

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ment system's inventory file to provide the telephone number in the assigned room and hall.

The computer then assigns an authorization number to the student and a "burst-pack" is printed by the computer. The burst-pack contains the auth code, policy and rules, handy telephone numbers, academic calendar, etc. The data base is then downloaded to our telemanagement system which "ties" the auth code to the telephone number in the DMS-100 data base. The auth code can then be used only with the telephone number assigned to the student.

As some of you know, we are using the "station-discrete" authorization feature of the Northern Telecom DMS-100.

All of this activity has taken place automatically. Our staff has not been involved in any manual effort up to this point. Once the burst-packs are printed, they are delivered to the residence halls for distribution. The burst-packs are printed in resi-

dence-hall/room-number order, so we don't have to sort them manually.

When we implemented this automated process last fall, we were really concerned. If it worked, it would save us hours and hours of very labor-intensive work. If it didn't, we would have a king-size problem trying to issue auth codes to 9,500 students at the last minute.

Fortunately, it worked very well, and our students were given their burst-pack along with their room key cards as they moved into the residence halls. They could make a long distance call as soon as they got to their rooms, if they wanted.

If anyone would like a sample burst-pack or the form the students fill out to apply for long distance, let me know. We have been really pleased with this automated process and so has our housing office.

I hope everyone had a good time in Hawaii – I'm sorry that I didn't get to go. However, I will see you in St. Louis this summer and in my column next month. ♪

Nominations for ACUTA officers due June 17

By Mike Grunder, Chair
Nominating Committee

During the 1991 Annual Conference in St. Louis, all primary representatives of member institutions with dues currently paid shall be eligible to vote on a slate of officers to serve on the Board of Directors of ACUTA for the coming year.

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

AUTOMATIC

F. William Orrick, Washington University in St. Louis, the incumbent President will become the Immediate Past President and will assume all the duties and responsibilities of that office.

Paula Loendorf, University of North Dakota, the incumbent Executive Vice President, will become President, assuming all duties and responsibilities associated with chairing the ACUTA Board of Directors.

Coleman Burton, University of Missouri, the incumbent Vice President, will accede to Executive Vice President, assuming the duties of that office.

SUBJECT TO BALLOT

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

Secretary – The incumbent Secretary, Patricia Searles, Cornell University, is completing her second term in that office, and according to the Bylaws, cannot be elected to a third consecutive term. Accordingly, a new Secretary will be elected from a slate of nominees assembled by the Nominating Committee and finalized with any nominations received prior to the St. Louis business meeting.

Treasurer – Howard Lowell, Colorado State University, has served one year as Treasurer. The Bylaws allow a maximum of two consecutive years in that office, but a second year is not mandatory. Therefore, nominations will be accepted for treasurer.

NOMINATIONS

All ACUTA members may submit nominations for the offices of Vice President, Secretary and Treasurer. Before placing a name in nomination, however, please be reasonably sure that the person you are nominating is willing to accept the responsibilities that accompany the office. The individual should be aware of the considerable commitment, particularly in terms of the time required to carry out the responsibilities of the office. The individual's institution also should support such a commitment.

Upon receipt of each nomination, I will contact the nominee personally in this regard to confirm the nominator's findings. All nominations must be received by 5 p.m. EDT June 17, 1991, so that the nominating committee can confirm the nominees' commitment to serve.

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

Please send all nominations to:
Mike Grunder, Chair
ACUTA Nominating Committee
Yale University
Director of Telecommunications
P.O. Box 4568
New Haven, CT 06520
FAX: (203) 432-7419

Interactive video reduces N. Dakota distances

second phase of this project. One DACS will be installed in each LATA in front of the MCUs. A DACS is essentially a T-1 switch which will connect different combinations of sites to the MCU for different conferences. In addition, two sites may be directly connected point-to-point through the DACS without using the MCU, thus freeing space on the MCU for multipoint conferences.

Since its inception in August, 1990, IVN has been so well received that several additional sites are being planned for the network.

The state capitol in Bismarck installed equipment in early 1991 and the UND Medical School intends to install equipment at two additional facilities. Elementary and secondary school consortiums are also developing with an eye toward becoming nodes on the network.

Video technology is extremely well-suited to states like North Dakota which are sparsely populated and where the principal towns are hundreds of miles apart. North Dakota state institutions and agencies are continually asked to be more cost-effective.

Video technology allows sharing of resources, reduces travel time and dollars spent, and helps residents feel less remote. ♪

Next workshop is set for Atlanta, Oct. 23-25

ACUTA's introductory workshop, "Understanding Telecommunications," will next be offered Oct. 23-25 in Atlanta, GA. For information, contact Lisa McLemore, Lexington Financial Center, Suite 2420, Lexington, KY 40507. Phone (606) 252-2882.

Universities are aggregators FCC declares

(Continued from page 1)

Rules concerning the 1-0-XXX equal access issues are being considered in a separate proceeding (CC Docket 91-35) which the Commission should conclude this spring.

To justify this ruling (CC Docket 90-313), the Commission cited the report of the Senate committee that recommended the measure. "Aggregators include hotels and motels, hospitals, universities, airports, gas stations, pay telephone owners and others," the panel wrote when the legislation was sent to the floor for final consideration.

The definition in the Act itself defines an aggregator as "any person that, in the ordinary course of its operations, makes telephones available to the public or to transient users of its premises, for interstate telephone calls using a provider of operator services."

Definitions were interpreted "broadly," the Commission explained, to ensure compliance with the Operator Services Act. The goals of the Act, the Commission pointed out, are "availability of consumer information and consumer choice."

While rejecting the most respondents' reasoning for exemptions, the Commission admitted that some clarification of the aggregator definition was in order.

"Each entity that exercises control over telephone equipment, whether through ownership of the equipment, control of

access or some other means, will be responsible as an 'aggregator'" under the Act and FCC rules.

The ACT requires ggregators to:
• Ensure that their phones do not block calls to "800" or "950" numbers;
• Not charge more for access calls than for calls placed using a presubscribed operator service provider, and
• Post required information at or near their telephones.

"A university that allows students complete freedom in choosing their own interexchange carriers," as an apartment landlord would, does not come "within the scope of the definition," the Commission added in a footnote.

In cases where one party owns the telephone and another owns the premise and can control access to the equipment, both shall have joint responsibility as aggregators to comply with the Act.

The only exception to the aggregator definition that the Commission granted was for correctional institutions that provide inmate-only phones. The "exceptional circumstances" of prisons warrant their exclusion from the regulation, the Commission found. Inmates involuntarily detained did not fit the description of "transient" users, the regulators agreed.

Telephones which prisons provide for the public, for example in waiting rooms, are covered under the aggregator regulation.

Universities generally argued that "they are users of communications services and not sellers of such services," the Commission wrote. "They believe that their students are long-term residential users and should not be grouped with hotel patrons, travelers or hospital patients."

In a footnote, the Commission acknowledged ACUTA as well as NACUBO, the college and university business officers' association, and the University of Missouri, as representative of com-

mentors on behalf of universities.

Hospitals had argued that they are not common carriers and, therefore, not subject to the Commission's jurisdiction.

Agencies of the federal government had argued that they should not be covered by terms of the Act, but these requests were denied, as were all others except those of correctional institutions.

The Commission noted that it had previously found that government entities are subject to its jurisdiction. When Congress has sought to exclude government agencies from regulations, it has done so explicitly. And while the term "person" in the Act is defined to include certain entities, "there is no indication that the examples are all-inclusive and that entities not specifically mentioned are to be included."

Operator service providers are required to "ensure that telephones presubscribed to an OSP not block "800" and "950" access calls. And OSPs must withhold compensation to aggregators it reasonably believes are blocking access in violation of the rules.

OSPs in "equal access areas" also are prohibited from charging for unanswered calls. In areas without equal access, OSPs may not "knowingly" bill for unanswered calls, because answer supervision is not available.

The FCC may impose substantial forfeitures for willful or repeated violations of the Act. OSPs found to be in violation may subject to penalties up to $100,000 for each violation or each day of continuing violation. Offending aggregators, may be subject to penalties up to $10,000 for each violation or each day of continuing violation.

"This Commission will not hesitate to use our forfeiture authority against violators of our rules," the agency warned.

Beverly R. Brown, Manager of Voice Communications at George Mason University in the Washington, D.C., suburb of Fairfax, Va., reports that an FCC attorney

Spring Seminar report

(Continued from page 4)

anything when they start."

Of especial importance, he added, "be careful not to raise expectations and then disappoint your users."

Standardization is another important area that often does not get the attention it deserves from the administrators best able to make decisions, said McDowell. "Don't leave standards up to the engineers," he warned. Standards have been evolving – slowly. But the emergence of local area networks has necessitated standards. Inter-networking products are the hottest items on the market today. At present, Ethernet and Token Ring are the two main technologies.

After you see something demonstrated on a trade show floor or at a vendor's facility, then ask to see it in action on a campus or at a business, in the same type environment in which you plan to use it, he recommended.

Attendees who submitted critiques of the seminar gave it an overall rating of 7.94 of a possible 10. Location, not surprisingly got the highest score, 9.18. Speaker Jerry McDowell received an 8.47 for his knowledge of the subject and a 7.87 overall rating.

Dr. Norman Okamura's presentation about the state of Hawaii's network linking schools, universities and public libraries on most islands with a voice data network and the major islands with a video teleconferencing system won an 8.93 ranking. (Please see story on page 5.)

FCC rules universities are 'clearly' aggregators

(Continued from page 11)

visited her campus in early April to "survey" telecom policy and practices. He also discussed the Commission's upcoming rulings and how they might affect the university.

George Mason does not block "800" or "950" access, but as a Centrex user the university does not have complete control over its equipment.

She also had questions of how the new rules which do not allow OSPs to charge for unanswered calls would affect her situation. George Mason is required to purchase its long distance service through a state government pool, and the state system charges participating institutions for all unanswered calls. The schools then pass the charge along to the user, whether it be an individual or university department. ♪

Massey to give repeat session in St. Louis

Joe Massey of JTM Associates will present both sessions of Telecom Department Staffing and Management – 2:30 p.m. Tuesday and 10:30 a.m. Wednesday – at ACUTA's 20th Annual Conference, July 7-11 in St. Louis. Because of an editing error, a different speaker is listed in the pre-conference brochure for the Wednesday session. ♪

Ninety three percent of respondents would like to have seen greater number and more elaborate exhibits by vendors. The cost of taking an exhibit to such a distant location reduced the number of exhibit and the range of equipment. But more than half of the respondents gave the exhibits an eight or nine rating.

Hotel rooms at the Hyatt Regency Waikiki ranked almost as high as the location with a 9.14. Hotel facilities overall got an 8.87, but hotel food did less well at 6.47. ♪

Audio tapes of Hawaii seminar are available

The proceedings of ACUTA's Spring Seminar in Honolulu, featuring Jerry McDowell on "Strategic Applications of Telecommunications in Higher Education" are available on 10-cassettes for $65 plus shipping.

To obtain a set, call Eleanor Smith, ACUTA Business Manager, at (606) 252-2882. ♪

ACUTA welcomes new members

The following joined ACUTA between March 16 and April 17:

Region 1, Northeast
Paul Nagy, Communications Sciences Inc.
Stuart Tuchband, Washington and Jefferson College (Penn.)

Region 2, Southeast
Mark Cole, Equinox Systems Inc.
Jake Robinson, Telephone Brokers Inc.

Region 3, Midwest
Leslie Goerzen, Bethel College (Kan.)
Otis Mills, Texas Southern University
Lorne Parker, Parker Consulting
Jean Reisner, Rosary College (Ill.)

Region 4, West
Michael Glaser, Holme, Roberts & Owen

Region 5, Canada
Steven Wriston, Univ. of Saskatchewan